



# MARTINEZ TRUSS CO., INC.

9280 NW SOUTH RIVER DR. - MEDLEY, FL 33166

Office: (305)883-6261

Fax: (305)885-2925

info@MartinezTruss.com

Order #: 24070306

## Customer Information

Name:

LT SYNERGY HOMES, LLC

Address:

11823 SW 233RD TER

City, State, Zip:

Princeton, FL 33032

## Job Information

Name:

7725 RES.

Address:

7725 S.W. 114th ST.

City, State, Zip:

Pinecrest, FL 33156

Building Code: FBC 8th Ed. 2023

### Roof Loading:

TC LL: 30 psf

TC DL: 15 psf

BC LL: 0 psf

BC DL: 10 psf

### Wind Loading:

Wind Standard: ASCE 7-22

Wind Speed: 175

WindLoadType: MWFRS & C&C

Wind Usage: Residential - CAT II

## Project Engineer of Record

This cover sheet provided as per Florida Statute 61G15-31.003 in lieu of signing and sealing each individual sheet. An Index sheet of truss designs is attached which is numbered and with the identification and date of each drawing.

### Engineer of Truss Design Package

JOSE MARTINEZ

FL Reg. Eng. No 031509

24 EAST 5th St. #1D

HALEAH, FL 33010

|                                                        |                                             |
|--------------------------------------------------------|---------------------------------------------|
| <input checked="" type="checkbox"/> NO EXEMPTION TAKEN | <input type="checkbox"/> REVISED & RESUBMIT |
| <input type="checkbox"/> MAKE CORRECTIONS NOTED        | <input type="checkbox"/> REJECTED           |

Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with requirements of the drawings and specifications. The check is only for review or compliance with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for: confirming and correcting all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of other trades and performing his work in a safe and satisfactory manner.

By GN Date JULY 2024

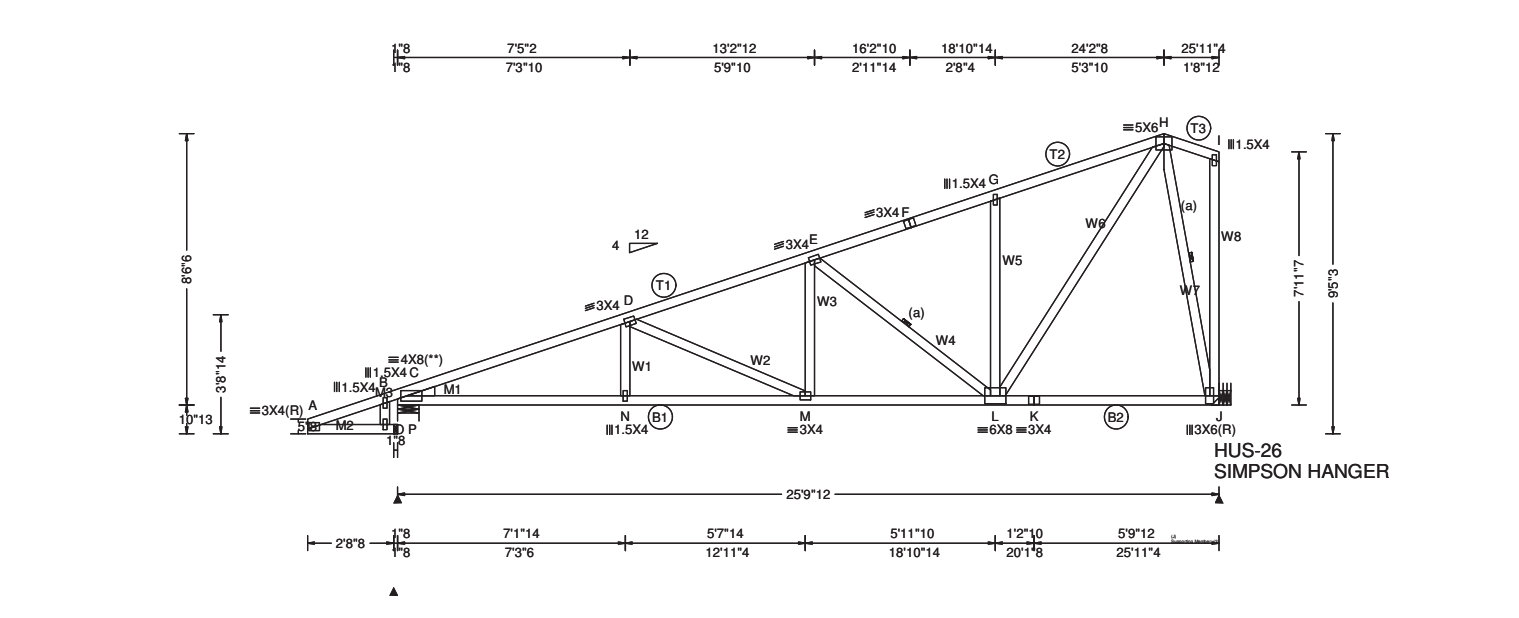
Nodal Structures, Inc.

| #  | SEQN   | Item Desc | Date      |
|----|--------|-----------|-----------|
| 1  | 206499 | 1T        | 7/24/2024 |
| 2  | 139353 | 1TA       | 7/24/2024 |
| 3  | 139363 | 1MH23     | 7/24/2024 |
| 4  | 139313 | 1MH23A    | 7/24/2024 |
| 5  | 206502 | 1MH21     | 7/24/2024 |
| 6  | 139300 | 1MH21A    | 7/24/2024 |
| 7  | 206505 | 1MH20     | 7/24/2024 |
| 8  | 139369 | 1MH19     | 7/24/2024 |
| 9  | 139297 | 1MH19A    | 7/24/2024 |
| 10 | 206508 | 1MH18     | 7/24/2024 |
| 11 | 139294 | 1MH17     | 7/24/2024 |
| 12 | 139381 | 1MH17P    | 7/24/2024 |
| 13 | 206511 | 1MH16     | 7/24/2024 |
| 14 | 138824 | 1MH15     | 7/24/2024 |
| 15 | 139375 | 1MH15P    | 7/24/2024 |
| 16 | 206514 | 1MH14     | 7/24/2024 |
| 17 | 206517 | 1MH13     | 7/24/2024 |
| 18 | 139347 | 1MH13P    | 7/24/2024 |
| 19 | 206522 | 1MH12     | 7/24/2024 |
| 20 | 206525 | 1MH11     | 7/24/2024 |
| 21 | 139331 | 1MH11P    | 7/24/2024 |
| 22 | 206528 | 1MH10     | 7/24/2024 |
| 23 | 206531 | 1MH9      | 7/24/2024 |
| 24 | 139328 | 1MH9P     | 7/24/2024 |
| 25 | 206534 | 1MH8      | 7/24/2024 |
| 26 | 139569 | 1MH7G     | 7/24/2024 |

| #  | SEQN   | Item Desc | Date      |
|----|--------|-----------|-----------|
| 27 | 139575 | 1MH7GP    | 7/24/2024 |
| 28 | 139578 | 1MH6G     | 7/24/2024 |
| 29 | 206537 | 1M        | 7/24/2024 |
| 30 | 206540 | 1MA       | 7/24/2024 |
| 31 | 206546 | 2T        | 7/24/2024 |
| 32 | 206549 | 2H15      | 7/24/2024 |
| 33 | 206552 | 2H13      | 7/24/2024 |
| 34 | 206561 | 2H11      | 7/24/2024 |
| 35 | 206564 | 2H11P     | 7/24/2024 |
| 36 | 206567 | 2H9       | 7/24/2024 |
| 37 | 206570 | 2H9P      | 7/24/2024 |
| 38 | 139581 | 2H7G      | 7/24/2024 |
| 39 | 139584 | 2H7GP     | 7/24/2024 |
| 40 | 204239 | 3T        | 7/24/2024 |
| 41 | 204245 | 3H13      | 7/24/2024 |
| 42 | 204236 | 3H13A     | 7/24/2024 |
| 43 | 204248 | 3H11      | 7/24/2024 |
| 44 | 204251 | 3H11A     | 7/24/2024 |
| 45 | 204256 | 3H9       | 7/24/2024 |
| 46 | 204264 | 3H9A      | 7/24/2024 |
| 47 | 204272 | 3H7       | 7/24/2024 |
| 48 | 139642 | 3H7G      | 7/24/2024 |
| 49 | 204357 | 3H5G      | 7/24/2024 |
| 50 | 206573 | 4MH9      | 7/24/2024 |
| 51 | 206576 | 4MH7      | 7/24/2024 |
| 52 | 206579 | 4MH5      | 7/24/2024 |

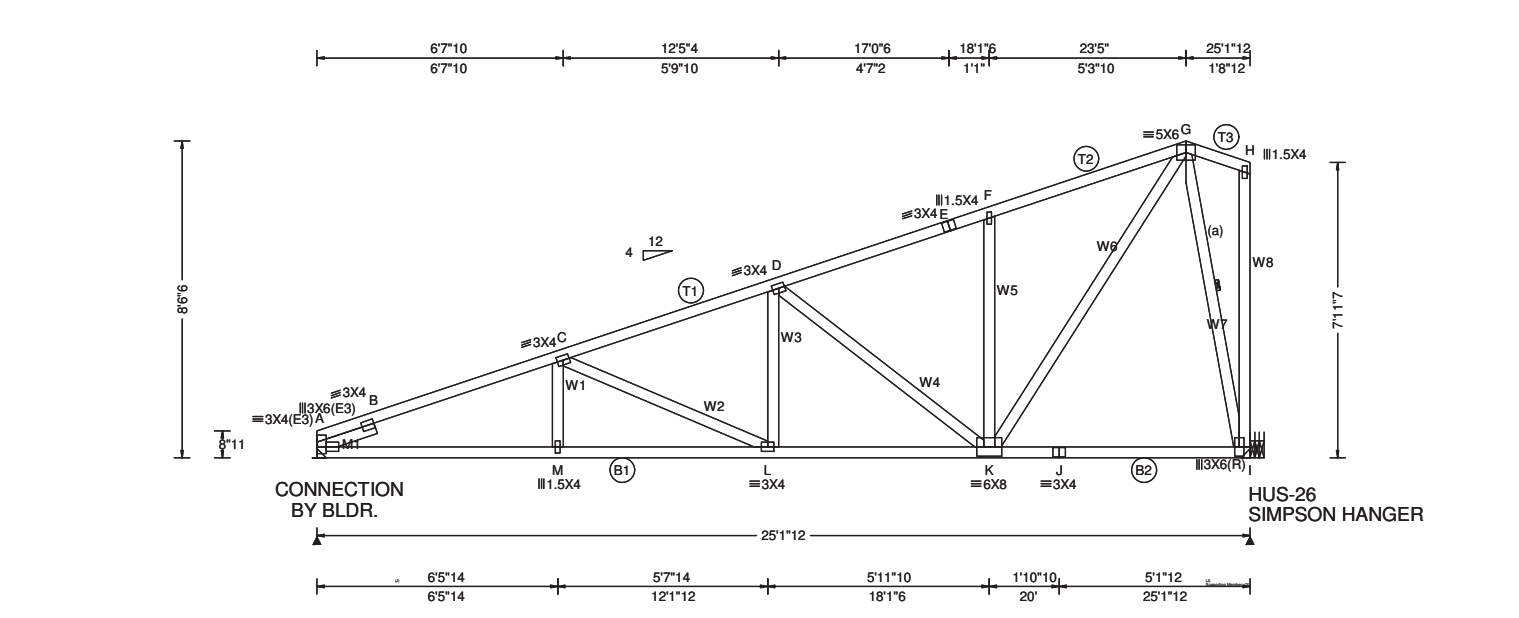
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| 53 | 139607 | 4MH3G     | 7/24/2024 |
| 54 | 206582 | 4MH9A     | 7/24/2024 |
| 55 | 139482 | 4MH7A     | 7/24/2024 |
| 56 | 204749 | 4MH5A     | 7/24/2024 |
| 57 | 139612 | 4MH3AG    | 7/24/2024 |
| 58 | 206585 | 5T        | 7/24/2024 |
| 59 | 204323 | 5TA       | 7/24/2024 |
| 60 | 204335 | 5TB       | 7/24/2024 |
| 61 | 204360 | 5TC       | 7/24/2024 |
| 62 | 203649 | 6T        | 7/24/2024 |
| 63 | 203654 | 6TA       | 7/24/2024 |
| 64 | 206588 | 6TP       | 7/24/2024 |
| 65 | 206591 | 6TAP      | 7/24/2024 |
| 66 | 206594 | 6H9P      | 7/24/2024 |
| 67 | 139592 | 6H7GP     | 7/24/2024 |
| 68 | 139598 | 6H7AGP    | 7/24/2024 |
| 69 | 139507 | 7T        | 7/24/2024 |
| 70 | 206599 | 7TA       | 7/24/2024 |
| 71 | 139513 | 7TB       | 7/24/2024 |
| 72 | 139601 | 7H7GP     | 7/24/2024 |
| 73 | 206602 | 8T        | 7/24/2024 |
| 74 | 139604 | 8H7G      | 7/24/2024 |
| 75 | 139618 | 9FRTG     | 7/24/2024 |
| 76 | 139615 | 9FRTAG    | 7/24/2024 |
| 77 | 204780 | 9FRTBG    | 7/24/2024 |
| 78 | 139621 | 9MH21G    | 7/24/2024 |

| #   | SEQN   | Item Desc | Date      | # | SEQN | Item Desc | Date | # | SEQN | Item Desc | Date |
|-----|--------|-----------|-----------|---|------|-----------|------|---|------|-----------|------|
| 79  | 139627 | 9MH21AG   | 7/24/2024 |   |      |           |      |   |      |           |      |
| 80  | 139630 | 9MG       | 7/24/2024 |   |      |           |      |   |      |           |      |
| 81  | 139633 | 10MG      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 82  | 139639 | 11MH5G    | 7/24/2024 |   |      |           |      |   |      |           |      |
| 83  | 139516 | 12M3G     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 84  | 204744 | 12M3AG    | 7/24/2024 |   |      |           |      |   |      |           |      |
| 85  | 206605 | CJ7       | 7/24/2024 |   |      |           |      |   |      |           |      |
| 86  | 139545 | CJ7A      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 87  | 139548 | CJ7B      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 88  | 139551 | CJ7P      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 89  | 206608 | CJ7AP     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 90  | 206611 | CJ7BP     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 91  | 206614 | CJ7CP     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 92  | 204019 | CJ6       | 7/24/2024 |   |      |           |      |   |      |           |      |
| 93  | 204016 | CJ38      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 94  | 204013 | CJ3       | 7/24/2024 |   |      |           |      |   |      |           |      |
| 95  | 203777 | J7        | 7/24/2024 |   |      |           |      |   |      |           |      |
| 96  | 203734 | J7BP      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 97  | 206649 | J7B       | 7/24/2024 |   |      |           |      |   |      |           |      |
| 98  | 203709 | J7P       | 7/24/2024 |   |      |           |      |   |      |           |      |
| 99  | 203715 | J7AP      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 100 | 203878 | J7G       | 7/24/2024 |   |      |           |      |   |      |           |      |
| 101 | 203870 | J6        | 7/24/2024 |   |      |           |      |   |      |           |      |
| 102 | 203780 | JB5AP     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 103 | 203783 | JB5A      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 104 | 203786 | JB5B      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 105 | 203799 | JB5C      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 106 | 203805 | JB5D      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 107 | 203808 | JB5P      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 108 | 203811 | JB5BP     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 109 | 203814 | JB3       | 7/24/2024 |   |      |           |      |   |      |           |      |
| 110 | 203817 | JB3A      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 111 | 203820 | JB3B      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 112 | 203831 | JB3C      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 113 | 203837 | JB3P      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 114 | 203851 | JB3AP     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 115 | 203845 | JB3BP     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 116 | 203848 | JB1       | 7/24/2024 |   |      |           |      |   |      |           |      |
| 117 | 203856 | JB1A      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 118 | 203864 | JB1B      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 119 | 203867 | JB1C      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 120 | 139525 | VMH18     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 121 | 139528 | VMH16     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 122 | 139531 | VMH14     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 123 | 204037 | VMH12     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 124 | 204040 | VMH11     | 7/24/2024 |   |      |           |      |   |      |           |      |
| 125 | 204043 | VMH4      | 7/24/2024 |   |      |           |      |   |      |           |      |
| 126 | 204046 | VM4       | 7/24/2024 |   |      |           |      |   |      |           |      |
| 127 | 204049 | VM2       | 7/24/2024 |   |      |           |      |   |      |           |      |



|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
|-----------------------------------------------------------------------------------------------------------------------|--------|----------------------|----------------|-------------------------------------|-------------|--------------------------|-----------------------|----------------------------------|-----|-----------------------------------------------|-----|-----------------------------------------------|---------------|-----------|-------------|-------|------|------|
| <b>Loading Criteria</b> (psf)                                                                                         |        | <b>Wind Criteria</b> |                | <b>Snow Criteria</b> (Pg,Pf in PSF) |             | <b>Defl/CSI Criteria</b> |                       | <b>▲ Maximum Reactions (lbs)</b> |     |                                               |     |                                               |               |           |             |       |      |      |
| TCLL:                                                                                                                 | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                              | Ct: NA      | CAT: NA                  | PP Deflection in      | loc L/defl                       | L/# | Gravity                                       |     | Non-Gravity                                   |               |           |             |       |      |      |
| TCDL:                                                                                                                 | 15.00  | Speed:               | 175 mph        | Pf: NA                              |             | Ce: NA                   | VERT(LL):             | 0.165                            | D   | 999                                           | 360 | Loc                                           | R+            | / R-      | / Rh        | / Rw  | / U  | / RL |
| BCLL:                                                                                                                 | 0.00   | Enclosure:           | Closed         | Lu: NA                              | Cs: NA      |                          | VERT(CL):             | 0.286                            | D   | 999                                           | 240 | P                                             | -             | /-        | /274        | /-    | /-   | /276 |
| BCDL:                                                                                                                 | 10.00  | Risk Category:       | II             | Snow Duration:                      | NA          |                          | HORZ(LL):             | 0.046                            | J   | -                                             | -   | B                                             | 1697          | /-        | /274        | /1099 | /549 | /387 |
| Des Ld:                                                                                                               | 55.00  | EXP: C               | Kzt: NA        |                                     |             |                          | HORZ(TL):             | 0.081                            | J   | -                                             | -   | J                                             | 1531          | /-        | /-          | /939  | /497 | /-   |
| NCBCLL:                                                                                                               | 10.00  | Mean Height:         | 16.05 ft       | Building Code:                      |             |                          | Creep Factor:         | 2.0                              |     |                                               |     | Wind reactions based on C&C                   |               |           |             |       |      |      |
| Soffit:                                                                                                               | 2.00   | TCDL:                | 6.0 psf        | FBC 8th Ed.                         | 2023 Res.   | HVHZ                     | Max TC CSI:           | 0.697                            |     |                                               |     | P                                             | Brg Wid = 1.5 | Min Req = | -           |       |      |      |
| Load Duration:                                                                                                        | 1.25   | BCDL:                | 6.0 psf        | TPI Std:                            | 2014        |                          | Max BC CSI:           | 0.914                            |     |                                               |     | B                                             | Brg Wid = 8.0 | Min Req = | 2.0 (Truss) |       |      |      |
| Spacing:                                                                                                              | 24.0 " | MWFRS Parallel Dist: | h to 2h        | Rep Fac:                            | Yes         |                          | Max Web CSI:          | 0.895                            |     |                                               |     | J                                             | Brg Wid = -   | Min Req = | -           |       |      |      |
|                                                                                                                       |        | C&C Dist a:          | 3.00 ft        | FT/RT:                              | 20(0)/10(0) |                          | Mfg Specified Camber: |                                  |     |                                               |     | Bearing B is a rigid surface.                 |               |           |             |       |      |      |
|                                                                                                                       |        | Loc. from endwall:   | not in 9.00 ft | Plate Type(s):                      |             |                          |                       |                                  |     |                                               |     | <b>Maximum Top Chord Forces Per Ply (lbs)</b> |               |           |             |       |      |      |
|                                                                                                                       |        | GCpi:                | 0.18           | WAVE                                |             |                          |                       |                                  |     |                                               |     | Chords                                        | Tens.Comp.    | Chords    | Tens.       | Comp. |      |      |
|                                                                                                                       |        | Wind Duration:       | 1.60           |                                     |             |                          | VIEW Ver:             | 23.02.01A.1204.18                |     |                                               |     |                                               |               |           |             |       |      |      |
| <b>Lumber</b>                                                                                                         |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| Top chord: 2x4 SP #2;                                                                                                 |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| Bot chord: 2x4 SP #2;                                                                                                 |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| Webs: 2x4 SP #2;                                                                                                      |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| <b>Bracing</b>                                                                                                        |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| (a) Continuous lateral restraint equally spaced on member.                                                            |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| <b>Plating Notes</b>                                                                                                  |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| (**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements. |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| <b>Loading</b>                                                                                                        |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance.          |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| <b>Wind</b>                                                                                                           |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| Member design based on both MWFRS and C&C.                                                                            |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| Right end vertical not exposed to wind pressure.                                                                      |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| Wind loading based on both gable and hip roof types.                                                                  |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| <b>Additional Notes</b>                                                                                               |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| The maximum horizontal reaction is 274#                                                                               |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
| ***** BEARING ANALOG MODIFIED! *****                                                                                  |        |                      |                |                                     |             |                          |                       |                                  |     |                                               |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | <b>Maximum Bot Chord Forces Per Ply (lbs)</b> |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | Chords Tens.Comp. Chords Tens. Comp.          |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | C - N 2875 -977 L - K 278 -98                 |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | N - M 2871 -980 K - J 278 -98                 |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | M - L 2079 -701                               |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | <b>Maximum Web Forces Per Ply (lbs)</b>       |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | Webs Tens.Comp. Webs Tens. Comp.              |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | A - O 232 -273 E - L 394 -1093                |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | B - O 56 -7 G - L 305 -550                    |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | O - P 237 -276 L - H 1740 -545                |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | N - D 221 0 H - J 477 -1354                   |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | D - M 305 -849 I - J 63 -77                   |     |                                               |               |           |             |       |      |      |
|                                                                                                                       |        |                      |                |                                     |             |                          |                       |                                  |     | M - E 461 -71                                 |     |                                               |               |           |             |       |      |      |

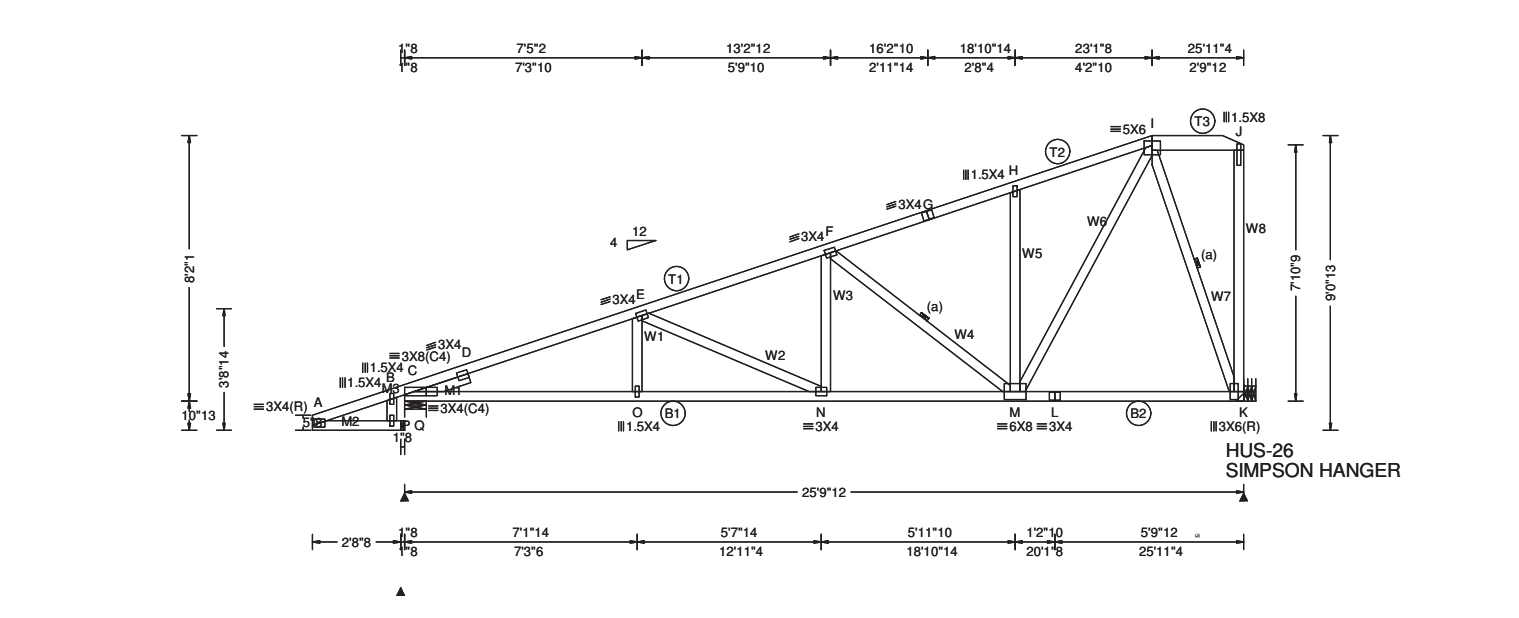
**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.  
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.  
For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcacomponents.com](http://sbcacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria          | ▲ Maximum Reactions (lbs) |    |      |      |      |     |      |
|------------------------|-----------------------------------|------------------------------|----------------------------|---------------------------|----|------|------|------|-----|------|
|                        | TCLL: 30.00                       | Wind Std: ASCE 7-22          | Pg: NA Ct: NA CAT: NA      | Gravity Non-Gravity       |    |      |      |      |     |      |
|                        | TCDL: 15.00                       | Speed: 175 mph               | Pf: NA Ce: NA              | Loc                       | R+ | / R- | / Rh | / Rw | / U | / RL |
|                        | BCLL: 0.00                        | Enclosure: Closed            | Lu: NA Cs: NA              |                           |    |      |      |      |     |      |
|                        | BCDL: 10.00                       | Risk Category: II            | Snow Duration: NA          |                           |    |      |      |      |     |      |
|                        | Des Ld: 55.00                     | EXP: C Kzt: NA               |                            |                           |    |      |      |      |     |      |
|                        | NCBCLL: 10.00                     | Mean Height: 16.63 ft        | Building Code:             |                           |    |      |      |      |     |      |
|                        | Soffit: 2.00                      | TCDL: 6.0 psf                | FBC 8th Ed. 2023 Res. HVHZ |                           |    |      |      |      |     |      |
|                        | Load Duration: 1.25               | BCDL: 6.0 psf                | TPI Std: 2014              |                           |    |      |      |      |     |      |
|                        | Spacing: 24.0 "                   | MWFRS Parallel Dist: h to 2h | Rep Fac: Yes               |                           |    |      |      |      |     |      |
|                        | C&C Dist a: 3.00 ft               | FT/RT:20(0)/10(0)            |                            |                           |    |      |      |      |     |      |
|                        | Loc. from endwall: not in 9.00 ft | Plate Type(s):               |                            |                           |    |      |      |      |     |      |
|                        | GCpi: 0.18                        |                              |                            |                           |    |      |      |      |     |      |
|                        | Wind Duration: 1.60               | WAVE                         |                            |                           |    |      |      |      |     |      |
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| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Slider: 2x4 SP #2; block length = 1.654' | <b>Bracing</b><br>(a) Continuous lateral restraint equally spaced on member. | <b>Hangers / Ties</b><br>(J) Hanger Support Required, by others | <b>Loading</b><br>Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance. | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types. | <b>Maximum Bot Chord Forces Per Ply (lbs)</b> <table><tr><th>Chords</th><th colspan="2">Tens.Comp.</th><th>Chords</th><th colspan="2">Tens. Comp.</th></tr><tr><td>A - M</td><td>2715</td><td>-1011</td><td>K - J</td><td>272</td><td>-102</td></tr><tr><td>M - L</td><td>2711</td><td>-1014</td><td>J - I</td><td>272</td><td>-102</td></tr><tr><td>L - K</td><td>1998</td><td>-727</td><td></td><td></td><td></td></tr></table><br><b>Maximum Web Forces Per Ply (lbs)</b> <table><tr><th>Webs</th><th colspan="2">Tens.Comp.</th><th>Webs</th><th colspan="2">Tens. Comp.</th></tr><tr><td>M - C</td><td>217</td><td>0</td><td>F - K</td><td>320</td><td>-547</td></tr><tr><td>C - L</td><td>314</td><td>-764</td><td>K - G</td><td>1693</td><td>-569</td></tr><tr><td>L - D</td><td>412</td><td>-72</td><td>G - I</td><td>499</td><td>-1325</td></tr><tr><td>D - K</td><td>402</td><td>-1029</td><td>H - I</td><td>63</td><td>-77</td></tr></table> | Chords | Tens.Comp. |  | Chords | Tens. Comp. |  | A - M | 2715 | -1011 | K - J | 272 | -102 | M - L | 2711 | -1014 | J - I | 272 | -102 | L - K | 1998 | -727 |  |  |  | Webs | Tens.Comp. |  | Webs | Tens. Comp. |  | M - C | 217 | 0 | F - K | 320 | -547 | C - L | 314 | -764 | K - G | 1693 | -569 | L - D | 412 | -72 | G - I | 499 | -1325 | D - K | 402 | -1029 | H - I | 63 | -77 |
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| A - M                                                                                                                              | 2715                                                                         | -1011                                                           | K - J                                                                                                                          | 272                                                                                                                                                                   | -102                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |        |            |  |        |             |  |       |      |       |       |     |      |       |      |       |       |     |      |       |      |      |  |  |  |      |            |  |      |             |  |       |     |   |       |     |      |       |     |      |       |      |      |       |     |     |       |     |       |       |     |       |       |    |     |
| M - L                                                                                                                              | 2711                                                                         | -1014                                                           | J - I                                                                                                                          | 272                                                                                                                                                                   | -102                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |        |            |  |        |             |  |       |      |       |       |     |      |       |      |       |       |     |      |       |      |      |  |  |  |      |            |  |      |             |  |       |     |   |       |     |      |       |     |      |       |      |      |       |     |     |       |     |       |       |     |       |       |    |     |
| L - K                                                                                                                              | 1998                                                                         | -727                                                            |                                                                                                                                |                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |            |  |        |             |  |       |      |       |       |     |      |       |      |       |       |     |      |       |      |      |  |  |  |      |            |  |      |             |  |       |     |   |       |     |      |       |     |      |       |      |      |       |     |     |       |     |       |       |     |       |       |    |     |
| Webs                                                                                                                               | Tens.Comp.                                                                   |                                                                 | Webs                                                                                                                           | Tens. Comp.                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |            |  |        |             |  |       |      |       |       |     |      |       |      |       |       |     |      |       |      |      |  |  |  |      |            |  |      |             |  |       |     |   |       |     |      |       |     |      |       |      |      |       |     |     |       |     |       |       |     |       |       |    |     |
| M - C                                                                                                                              | 217                                                                          | 0                                                               | F - K                                                                                                                          | 320                                                                                                                                                                   | -547                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |        |            |  |        |             |  |       |      |       |       |     |      |       |      |       |       |     |      |       |      |      |  |  |  |      |            |  |      |             |  |       |     |   |       |     |      |       |     |      |       |      |      |       |     |     |       |     |       |       |     |       |       |    |     |
| C - L                                                                                                                              | 314                                                                          | -764                                                            | K - G                                                                                                                          | 1693                                                                                                                                                                  | -569                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |        |            |  |        |             |  |       |      |       |       |     |      |       |      |       |       |     |      |       |      |      |  |  |  |      |            |  |      |             |  |       |     |   |       |     |      |       |     |      |       |      |      |       |     |     |       |     |       |       |     |       |       |    |     |
| L - D                                                                                                                              | 412                                                                          | -72                                                             | G - I                                                                                                                          | 499                                                                                                                                                                   | -1325                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        |            |  |        |             |  |       |      |       |       |     |      |       |      |       |       |     |      |       |      |      |  |  |  |      |            |  |      |             |  |       |     |   |       |     |      |       |     |      |       |      |      |       |     |     |       |     |       |       |     |       |       |    |     |
| D - K                                                                                                                              | 402                                                                          | -1029                                                           | H - I                                                                                                                          | 63                                                                                                                                                                    | -77                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |            |  |        |             |  |       |      |       |       |     |      |       |      |       |       |     |      |       |      |      |  |  |  |      |            |  |      |             |  |       |     |   |       |     |      |       |     |      |       |      |      |       |     |     |       |     |       |       |     |       |       |    |     |

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                 | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |               |      |                       |             |      |      |  |
|------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|---------------|------|-----------------------|-------------|------|------|--|
|                        |                                   |                                                                                                                              |                                 | Gravity                                |               |      | Non-Gravity           |             |      |      |  |
|                        |                                   |                                                                                                                              |                                 | Loc                                    | R+            | / R- | / Rh                  | / Rw        | / U  | / RL |  |
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                        | PP Deflection in loc L/defl L/# | Q                                      | -             | /-   | /243                  | /-          | /-   | /240 |  |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                | VERT(LL): 0.136 E 999 360       | C                                      | 1696          | /-   | /243                  | /1087       | /554 | /456 |  |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                                                                                                                | VERT(CL): 0.244 E 999 240       | K                                      | 1396          | /-   | /-                    | /713        | /592 | /-   |  |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                            | HORZ(LL): 0.042 K - -           | Wind reactions based on C&C            |               |      |                       |             |      |      |  |
|                        | EXP: C Kzt: NA                    |                                                                                                                              | HORZ(TL): 0.077 K - -           | Q                                      | Brg Wid = 1.5 |      | Min Req = -           |             |      |      |  |
| Des Ld: 55.00          | Mean Height: 15.87 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0               | C                                      | Brg Wid = 8.0 |      | Min Req = 2.0 (Truss) |             |      |      |  |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                                                                                                              | Max TC CSI: 0.678               | K                                      | Brg Wid = -   |      | Min Req = -           |             |      |      |  |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                              | Max BC CSI: 0.748               | Bearing C is a rigid surface.          |               |      |                       |             |      |      |  |
| Load Duration: 1.25    | MWFRS Parallel Dist: h to 2h      |                                                                                                                              | Max Web CSI: 0.660              | Maximum Top Chord Forces Per Ply (lbs) |               |      |                       |             |      |      |  |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               |                                                                                                                              | Mfg Specified Camber:           | Chords                                 | Tens.Comp.    |      | Chords                | Tens. Comp. |      |      |  |
|                        | Loc. from endwall: not in 9.00 ft |                                                                                                                              |                                 |                                        |               |      |                       |             |      |      |  |
|                        | GCpi: 0.18                        |                                                                                                                              |                                 |                                        |               |      |                       |             |      |      |  |
|                        | Wind Duration: 1.60               |                                                                                                                              | VIEW Ver: 23.02.01A.1204.18     |                                        |               |      |                       |             |      |      |  |

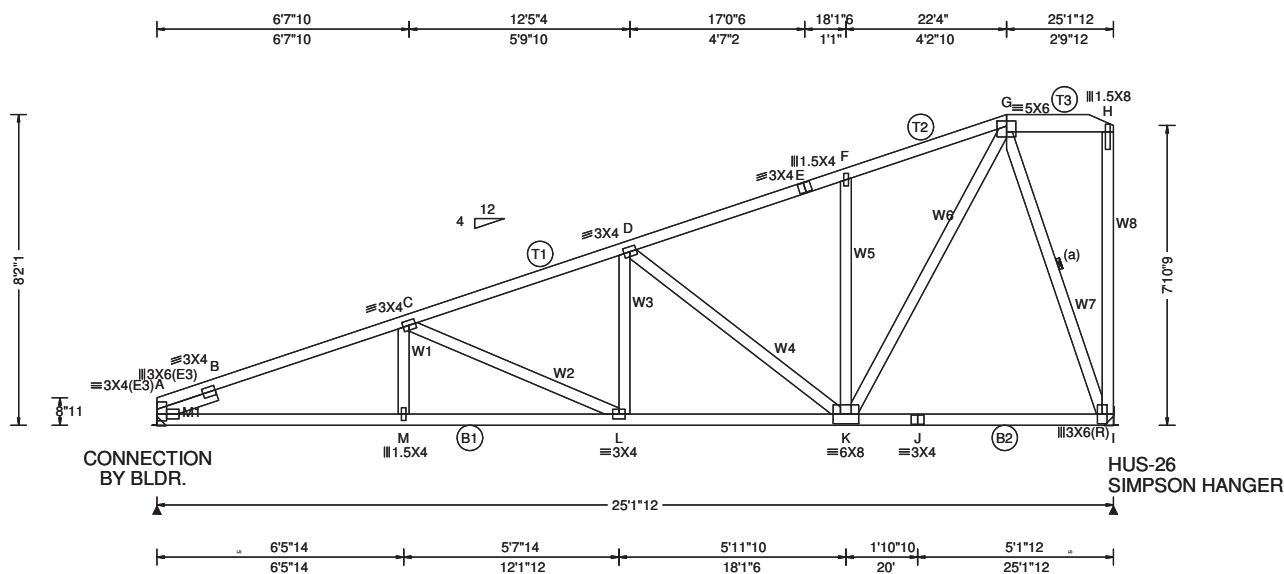
**Lumber**  
Top chord: 2x4 SP #2; T3 2x6 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Slider: 2x4 SP #2; block length = 1.750'  
Lt Level Return: 2x4 SP #2;

**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 243#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                 |  |  | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs)              |            |             |             |             |       |      |
|------------------------|--|-----------------------------------|--|----------------------------------------------|--|--|---------------------------------|--|----------------------------------------|------------|-------------|-------------|-------------|-------|------|
|                        |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                        |  |  | PP Deflection in loc L/defl L/# |  | Gravity                                |            |             | Non-Gravity |             |       |      |
| TCLL: 30.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                |  |  | VERT(LL): 0.121 C 999 360       |  | Loc                                    | R+         | / R-        | / Rh        | / Rw        | / U   | / RL |
| TCDL: 15.00            |  | Enclosure: Closed                 |  |                                              |  |  | VERT(CL): 0.222 C 999 240       |  | A                                      | 1382       | -           | -           | /855        | /359  | /430 |
| BCLL: 0.00             |  | Risk Category: II                 |  | Lu: NA Cs: NA                                |  |  | HORZ(LL): 0.039 I - -           |  | I                                      | 1380       | -           | -           | /707        | /619  | -    |
| BCDL: 10.00            |  | EXP: C Kzt: NA                    |  | Snow Duration: NA                            |  |  | HORZ(TL): 0.072 I - -           |  | Wind reactions based on C&C            |            |             |             |             |       |      |
| Des Ld: 55.00          |  | Mean Height: 16.45 ft             |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ |  |  | Creep Factor: 2.0               |  | A                                      |            | Brg Wid = - |             | Min Req = - |       |      |
| NCBCLL: 10.00          |  | TCDL: 6.0 psf                     |  |                                              |  |  | Max TC CSI: 0.723               |  | I                                      |            | Brg Wid = - |             | Min Req = - |       |      |
| Soffit: 2.00           |  | BCDL: 6.0 psf                     |  | TPI Std: 2014                                |  |  | Max BC CSI: 0.747               |  | Maximum Top Chord Forces Per Ply (lbs) |            |             |             |             |       |      |
| Load Duration: 1.25    |  | MWFRS Parallel Dist: h to 2h      |  | Rep Fac: Yes                                 |  |  | Max Web CSI: 0.995              |  | Chords                                 | Tens.Comp. |             | Chords      | Tens. Comp. |       |      |
| Spacing: 24.0 "        |  | C&C Dist a: 3.00 ft               |  | FT/RT:20(0)/10(0)                            |  |  | Mfg Specified Camber:           |  | A - B                                  | 788        | -2992       | E - F       | 328         | -1142 |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | Plate Type(s):                               |  |  | VIEW Ver: 23.02.01A.1204.18     |  | B - C                                  | 717        | -2897       | F - G       | 433         | -1257 |      |
|                        |  | GCpi: 0.18                        |  | WAVE                                         |  |  |                                 |  | C - D                                  | 554        | -2177       | G - H       | 3           | -4    |      |
|                        |  | Wind Duration: 1.60               |  |                                              |  |  |                                 |  |                                        |            |             |             |             |       |      |

Lumber

Top chord: 2x4 SP #2; T3 2x6 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Slider: 2x4 SP #2; block length = 1.654'

Bracing

(a) Continuous lateral restraint equally spaced on member.

Wind

Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

D - E

324 - 1272

Maximum Bot Chord Forces Per Ply (lbs)

| Chords | Tens.Comp.  | Chords | Tens. | Comp. |
|--------|-------------|--------|-------|-------|
| A - M  | 2675 - 1036 | K - J  | 430   | - 197 |
| M - L  | 2671 - 1039 | J - I  | 430   | - 197 |
| L - K  | 1963 - 756  |        |       |       |

Maximum Web Forces Per Ply (lbs)

| Webs  | Tens.Comp. | Webs  | Tens. | Comp.  |
|-------|------------|-------|-------|--------|
| M - C | 217 0      | F - K | 280   | - 476  |
| C - L | 308 - 757  | K - G | 1467  | - 502  |
| L - D | 430 - 69   | G - I | 577   | - 1265 |
| D - K | 408 - 1067 | H - I | 110   | - 133  |

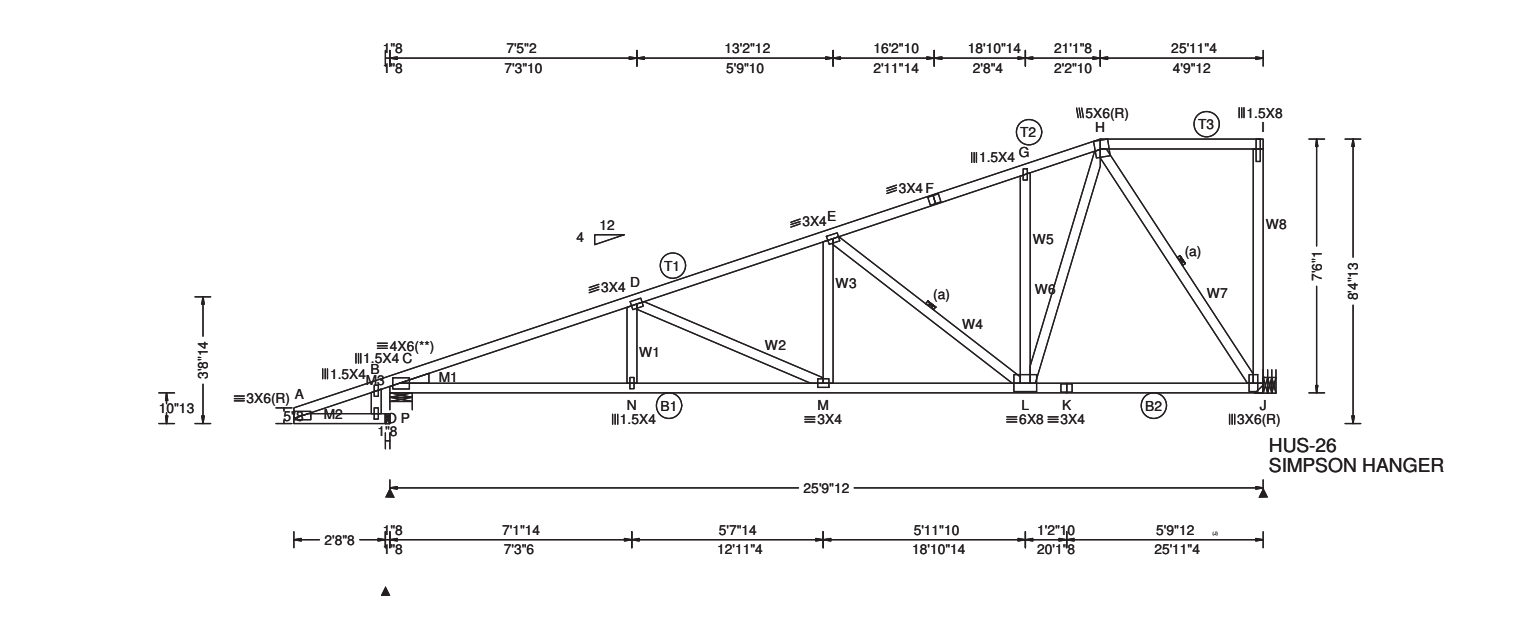
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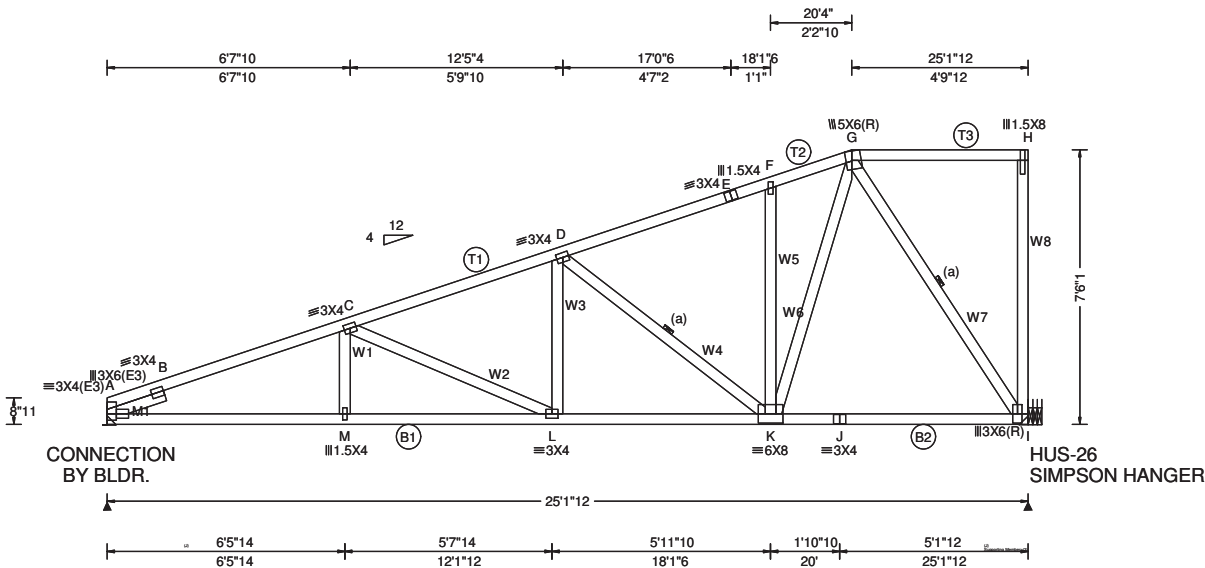


| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF) |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |               |      |                       |             |      |      |
|------------------------|--|-----------------------------------|--|------------------------------|--|--|---------------------------------|--|--|----------------------------------------|---------------|------|-----------------------|-------------|------|------|
|                        |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |               |      | Non-Gravity           |             |      |      |
| TCLL: 30.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                |  |  | VERT(LL): 0.154 D 999 360       |  |  | Loc                                    | R+            | / R- | / Rh                  | / Rw        | / U  | / RL |
| TCDL: 15.00            |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                |  |  | VERT(CL): 0.276 D 999 240       |  |  | P                                      | -             | /-   | /271                  | /-          | /-   | /276 |
| BCLL: 0.00             |  | Risk Category: II                 |  | Snow Duration: NA            |  |  | HORZ(LL): 0.047 J - -           |  |  | B                                      | 1683          | /-   | /271                  | /1043       | /580 | /354 |
| BCDL: 10.00            |  | EXP: C Kzt: NA                    |  |                              |  |  | HORZ(TL): 0.085 J - -           |  |  | J                                      | 1409          | /-   | /-                    | /729        | /795 | /-   |
| Des Ld: 55.00          |  | Mean Height: 15.53 ft             |  | Building Code:               |  |  | Creep Factor: 2.0               |  |  | Wind reactions based on C&C            |               |      |                       |             |      |      |
| NCBCLL: 10.00          |  | TCDL: 6.0 psf                     |  | FBC 8th Ed. 2023 Res. HVHZ   |  |  | Max TC CSI: 0.691               |  |  | P                                      | Brg Wid = 1.5 |      | Min Req = -           |             |      |      |
| Soffit: 2.00           |  | BCDL: 6.0 psf                     |  | TPI Std: 2014                |  |  | Max BC CSI: 0.894               |  |  | B                                      | Brg Wid = 8.0 |      | Min Req = 2.0 (Truss) |             |      |      |
| Load Duration: 1.25    |  | MWFRS Parallel Dist: h to 2h      |  | Rep Fac: Yes                 |  |  | Max Web CSI: 0.578              |  |  | J                                      | Brg Wid = -   |      | Min Req = -           |             |      |      |
| Spacing: 24.0 "        |  | C&C Dist a: 3.00 ft               |  | FT/RT:20(0)/10(0)            |  |  | Mfg Specified Camber:           |  |  | Bearing B is a rigid surface.          |               |      |                       |             |      |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | Plate Type(s):               |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |               |      |                       |             |      |      |
|                        |  | GCpi: 0.18                        |  | WAVE                         |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | Chords                                 | Tens.Comp.    |      | Chords                | Tens. Comp. |      |      |
|                        |  | Wind Duration: 1.60               |  |                              |  |  |                                 |  |  |                                        |               |      |                       |             |      |      |

|                                                                                                                                        |                                                                              |                                                                                                                                               |                                                                                                                                                                       |                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2; | <b>Bracing</b><br>(a) Continuous lateral restraint equally spaced on member. | <b>Plating Notes</b><br>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements. | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types. | <b>Additional Notes</b><br>The maximum horizontal reaction is 271#<br>***** BEARING ANALOG MODIFIED! ***** |
|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|

|                                               |            |        |             |
|-----------------------------------------------|------------|--------|-------------|
| <b>Maximum Bot Chord Forces Per Ply (lbs)</b> |            |        |             |
| Chords                                        | Tens.Comp. | Chords | Tens. Comp. |
| C - N                                         | 2832 -1055 | L - K  | 758 -358    |
| N - M                                         | 2828 -1058 | K - J  | 758 -358    |
| M - L                                         | 2046 -794  |        |             |
| <b>Maximum Web Forces Per Ply (lbs)</b>       |            |        |             |
| Webs                                          | Tens.Comp. | Webs   | Tens. Comp. |
| A - O                                         | 234 -274   | E - L  | 403 -1142   |
| B - O                                         | 56 -7      | G - L  | 228 -413    |
| O - P                                         | 239 -276   | L - H  | 1333 -405   |
| N - D                                         | 221 0      | H - J  | 644 -1364   |
| D - M                                         | 288 -836   | I - J  | 293 -216    |
| M - E                                         | 477 -65    |        |             |

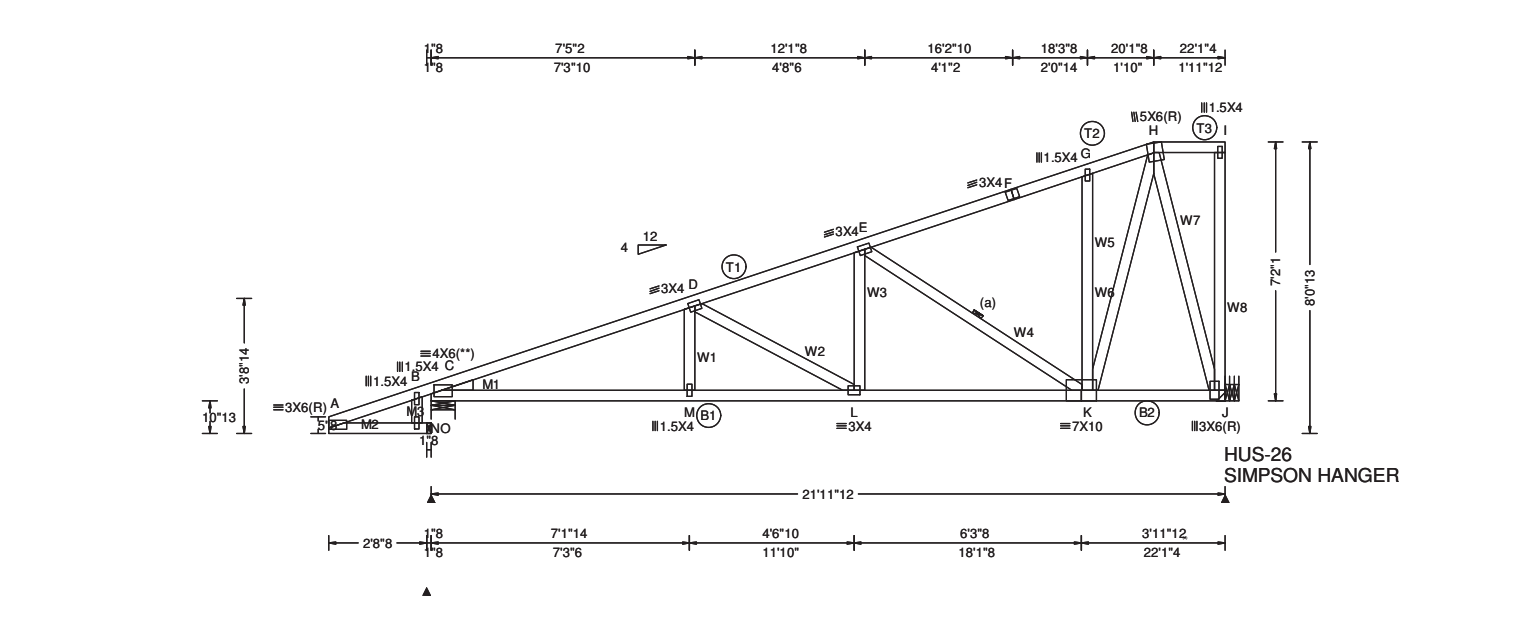
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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |        |         | Defl/CSI Criteria     |                   | ▲ Maximum Reactions (lbs)              |             |             |             |             |       |       |
|------------------------|--------|----------------------|----------------|------------------------------|--------|---------|-----------------------|-------------------|----------------------------------------|-------------|-------------|-------------|-------------|-------|-------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA | CAT: NA | PP Deflection in      | loc L/defl L/#    | Gravity                                |             |             | Non-Gravity |             |       |       |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |        | Ce: NA  | VERT(LL):             | 0.120 C 999 360   | Loc                                    | R+          | / R-        | / Rh        | / Rw        | / U   | / RL  |
| BCLL:                  | 0.00   | Enclosure:           | Closed         | Lu: NA                       | Cs: NA |         | VERT(CL):             | 0.220 C 999 240   | A                                      | 1382        | - / -       | - / -       | /818        | /393  | /390  |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA     |         | HORZ(LL):             | 0.041 I - -       | I                                      | 1380        | - / -       | - / -       | /716        | /819  | - / - |
|                        |        | EXP:                 | C Kzt: NA      |                              |        |         | HORZ(TL):             | 0.076 I - -       | Wind reactions based on C&C            |             |             |             |             |       |       |
| Des Ld:                | 55.00  | Mean Height:         | 16.12 ft       |                              |        |         | Creep Factor:         | 2.0               | A                                      | Brg Wid = - | Min Req = - |             |             |       |       |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        |                              |        |         | Max TC CSI:           | 0.716             | I                                      | Brg Wid = - | Min Req = - |             |             |       |       |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        |                              |        |         | Max BC CSI:           | 0.747             | Maximum Top Chord Forces Per Ply (lbs) |             |             |             |             |       |       |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | h to 2h        |                              |        |         | Max Web CSI:          | 0.520             | Chords                                 | Tens.Comp.  |             | Chords      | Tens. Comp. |       |       |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        |                              |        |         | Mfg Specified Camber: |                   | A - B                                  | 854         | -2993       | E - F       | 432         | -1137 |       |
|                        |        | Loc. from endwall:   | not in 9.00 ft |                              |        |         | VIEW Ver:             | 23.02.01A.1204.18 | B - C                                  | 809         | -2896       | F - G       | 515         | -1235 |       |
|                        |        | GCpi:                | 0.18           |                              |        |         |                       |                   | C - D                                  | 656         | -2179       | G - H       | 0           | 0     |       |
|                        |        | Wind Duration:       | 1.60           |                              |        |         |                       |                   |                                        |             |             |             |             |       |       |

| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Slider: 2x4 SP #2; block length = 1.654'                                                                                                                                                                                                                                                                                           | <b>Bracing</b><br>(a) Continuous lateral restraint equally spaced on member. | <b>Hangers / Ties</b><br>(J) Hanger Support Required, by others | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Rafter end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types. |        |            |        |             |       |            |       |          |       |            |       |           |       |           |       |           |       |           |       |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------|--------|-------------|-------|------------|-------|----------|-------|------------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|----------|
| <b>Maximum Bot Chord Forces Per Ply (lbs)</b> <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>A - M</td><td>2674 -1082</td><td>K - J</td><td>739 -369</td></tr><tr><td>M - L</td><td>2670 -1085</td><td>J - I</td><td>739 -369</td></tr><tr><td>L - K</td><td>1966 -815</td><td></td><td></td></tr></table>                                                                     |                                                                              |                                                                 |                                                                                                                                                                        | Chords | Tens.Comp. | Chords | Tens. Comp. | A - M | 2674 -1082 | K - J | 739 -369 | M - L | 2670 -1085 | J - I | 739 -369  | L - K | 1966 -815 |       |           |       |           |       |          |
| Chords                                                                                                                                                                                                                                                                                                                                                                                                                       | Tens.Comp.                                                                   | Chords                                                          | Tens. Comp.                                                                                                                                                            |        |            |        |             |       |            |       |          |       |            |       |           |       |           |       |           |       |           |       |          |
| A - M                                                                                                                                                                                                                                                                                                                                                                                                                        | 2674 -1082                                                                   | K - J                                                           | 739 -369                                                                                                                                                               |        |            |        |             |       |            |       |          |       |            |       |           |       |           |       |           |       |           |       |          |
| M - L                                                                                                                                                                                                                                                                                                                                                                                                                        | 2670 -1085                                                                   | J - I                                                           | 739 -369                                                                                                                                                               |        |            |        |             |       |            |       |          |       |            |       |           |       |           |       |           |       |           |       |          |
| L - K                                                                                                                                                                                                                                                                                                                                                                                                                        | 1966 -815                                                                    |                                                                 |                                                                                                                                                                        |        |            |        |             |       |            |       |          |       |            |       |           |       |           |       |           |       |           |       |          |
| <b>Maximum Web Forces Per Ply (lbs)</b> <table><tr><th>Webs</th><th>Tens.Comp.</th><th>Webs</th><th>Tens. Comp.</th></tr><tr><td>M - C</td><td>218 0</td><td>F - K</td><td>240 -410</td></tr><tr><td>C - L</td><td>294 -753</td><td>K - G</td><td>1292 -422</td></tr><tr><td>L - D</td><td>428 -64</td><td>G - I</td><td>665 -1331</td></tr><tr><td>D - K</td><td>409 -1079</td><td>H - I</td><td>299 -216</td></tr></table> |                                                                              |                                                                 |                                                                                                                                                                        | Webs   | Tens.Comp. | Webs   | Tens. Comp. | M - C | 218 0      | F - K | 240 -410 | C - L | 294 -753   | K - G | 1292 -422 | L - D | 428 -64   | G - I | 665 -1331 | D - K | 409 -1079 | H - I | 299 -216 |
| Webs                                                                                                                                                                                                                                                                                                                                                                                                                         | Tens.Comp.                                                                   | Webs                                                            | Tens. Comp.                                                                                                                                                            |        |            |        |             |       |            |       |          |       |            |       |           |       |           |       |           |       |           |       |          |
| M - C                                                                                                                                                                                                                                                                                                                                                                                                                        | 218 0                                                                        | F - K                                                           | 240 -410                                                                                                                                                               |        |            |        |             |       |            |       |          |       |            |       |           |       |           |       |           |       |           |       |          |
| C - L                                                                                                                                                                                                                                                                                                                                                                                                                        | 294 -753                                                                     | K - G                                                           | 1292 -422                                                                                                                                                              |        |            |        |             |       |            |       |          |       |            |       |           |       |           |       |           |       |           |       |          |
| L - D                                                                                                                                                                                                                                                                                                                                                                                                                        | 428 -64                                                                      | G - I                                                           | 665 -1331                                                                                                                                                              |        |            |        |             |       |            |       |          |       |            |       |           |       |           |       |           |       |           |       |          |
| D - K                                                                                                                                                                                                                                                                                                                                                                                                                        | 409 -1079                                                                    | H - I                                                           | 299 -216                                                                                                                                                               |        |            |        |             |       |            |       |          |       |            |       |           |       |           |       |           |       |           |       |          |

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |       |           |             |                   |       |      |
|------------------------|-----------------------------------|------------------------------|---------------------------------|----------------------------------------|-------|-----------|-------------|-------------------|-------|------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# | Gravity                                |       |           | Non-Gravity |                   |       |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                | VERT(LL): 0.106 D 999 360       | Loc                                    | R+    | / R-      | / Rh        | / Rw              | / U   | / RL |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                | VERT(CL): 0.188 D 999 240       | O                                      | -     | /-        | /255        | /-                | /-    | /261 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA            | HORZ(LL): 0.032 J - -           | B                                      | 1474  | /-        | /255        | /953              | /616  | /399 |
|                        | EXP: C Kzt: NA                    |                              | HORZ(TL): 0.058 J - -           | J                                      | 1196  | /-        | /-          | /633              | /658  | /-   |
| Des Ld: 55.00          | Mean Height: 15.37 ft             |                              | Creep Factor: 2.0               | Wind reactions based on C&C            |       |           |             |                   |       |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     | Building Code:               | Max TC CSI: 0.620               | O                                      | Brg   | Wid = 1.5 | Min         | Req = -           |       |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ   | Max BC CSI: 0.628               | B                                      | Brg   | Wid = 8.0 | Min         | Req = 1.7 (Truss) |       |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h to 2h      | TPI Std: 2014                | Max Web CSI: 0.995              | J                                      | Brg   | Wid = -   | Min         | Req = -           |       |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               | Rep Fac: Yes                 | Mfg Specified Camber:           | Bearing B is a rigid surface.          |       |           |             |                   |       |      |
|                        | Loc. from endwall: not in 9.00 ft | FT/RT:20(0)/10(0)            |                                 | Maximum Top Chord Forces Per Ply (lbs) |       |           |             |                   |       |      |
|                        | GCpi: 0.18                        | Plate Type(s):               |                                 | Chords                                 | Tens. | Comp.     | Chords      | Tens.             | Comp. |      |
|                        | Wind Duration: 1.60               | WAVE                         | VIEW Ver: 23.02.01A.1204.18     |                                        |       |           |             |                   |       |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

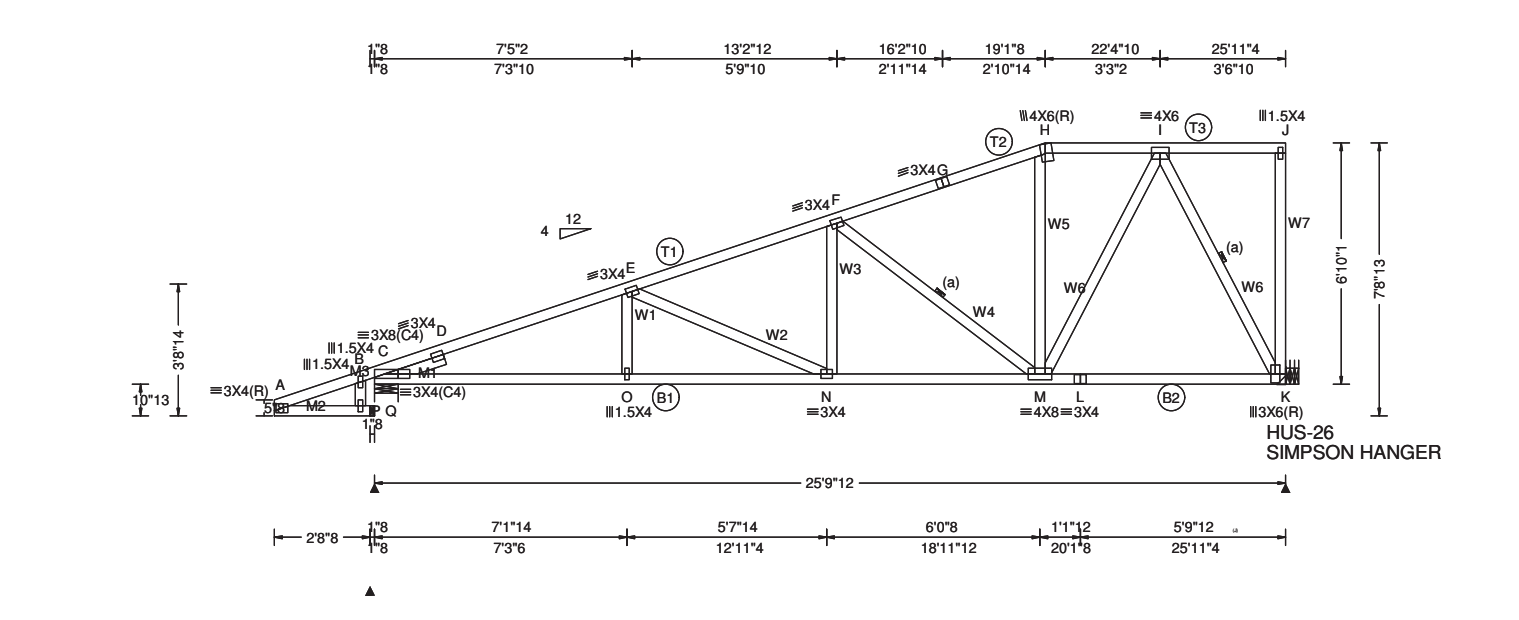
**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 255#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                 | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |            |           |             |                   |      |      |
|------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|------------|-----------|-------------|-------------------|------|------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                        | PP Deflection in loc L/defl L/# | Gravity                                |            |           | Non-Gravity |                   |      |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                | VERT(LL): 0.133 E 999 360       | Loc                                    | R+         | / R-      | / Rh        | / Rw              | / U  | / RL |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                                                                                                                | VERT(CL): 0.238 E 999 240       | Q                                      | -          | /-        | /243        | /-                | /-   | /238 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                            | HORZ(LL): 0.044 K - -           | C                                      | 1696       | /-        | /243        | /1010             | /627 | /372 |
|                        | EXP: C Kzt: NA                    |                                                                                                                              | HORZ(TL): 0.080 K - -           | K                                      | 1396       | /-        | /-          | /710              | /895 | /-   |
| Des Ld: 55.00          | Mean Height: 15.20 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0               | Wind reactions based on C&C            |            |           |             |                   |      |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                                                                                                              | Max TC CSI: 0.668               | Q                                      | Brg        | Wid = 1.5 | Min         | Req = -           |      |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                              | Max BC CSI: 0.745               | C                                      | Brg        | Wid = 8.0 | Min         | Req = 2.0 (Truss) |      |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h to 2h      |                                                                                                                              | Max Web CSI: 0.549              | K                                      | Brg        | Wid = -   | Min         | Req = -           |      |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               |                                                                                                                              | Mfg Specified Camber:           | Bearing C is a rigid surface.          |            |           |             |                   |      |      |
|                        | Loc. from endwall: not in 9.00 ft |                                                                                                                              |                                 | Maximum Top Chord Forces Per Ply (lbs) |            |           |             |                   |      |      |
|                        | GCpi: 0.18                        |                                                                                                                              |                                 | Chords                                 | Tens.Comp. | Chords    | Tens.       | Comp.             |      |      |
|                        | Wind Duration: 1.60               |                                                                                                                              | VIEW Ver: 23.02.01A.1204.18     |                                        |            |           |             |                   |      |      |

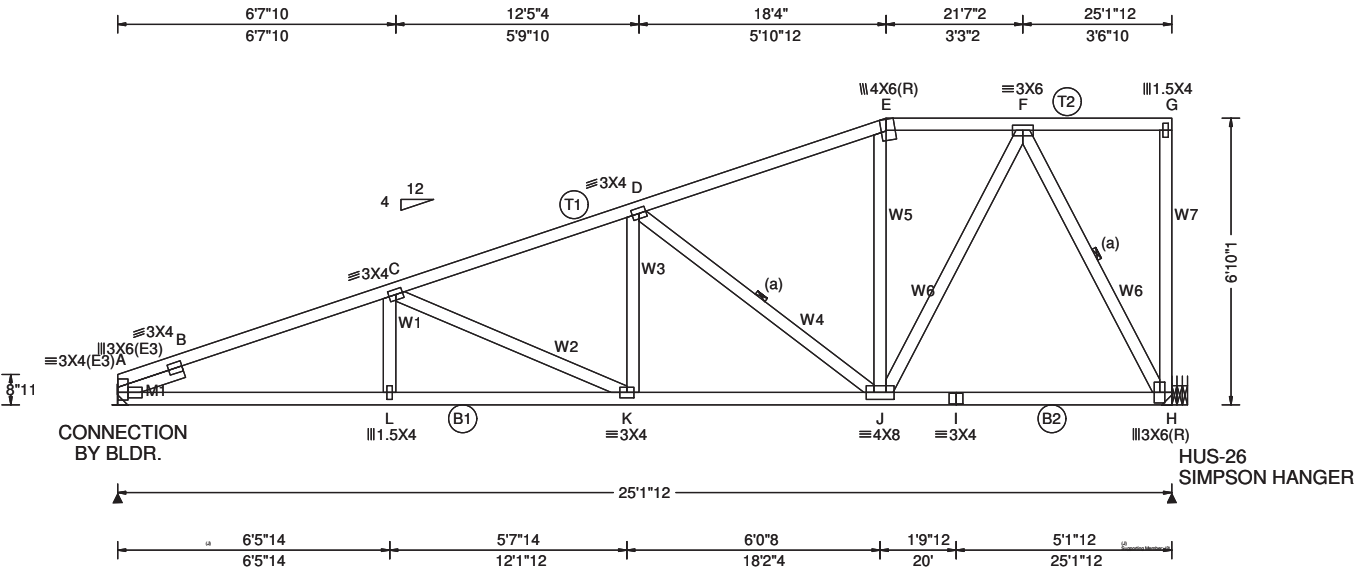
**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Slider: 2x4 SP #2; block length = 1.750'  
Lt Level Return: 2x4 SP #2;

**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 243#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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| Loading Criteria (psf) |        | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF) |        |         | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |            |             |             |             |      |      |  |
|------------------------|--------|-----------------------------------|--|------------------------------|--------|---------|---------------------------------|--|--|----------------------------------------|------------|-------------|-------------|-------------|------|------|--|
| TCLL:                  | 30.00  | Wind Std: ASCE 7-22               |  | Pg: NA                       | Ct: NA | CAT: NA | PP Deflection in loc L/defl L/# |  |  | Gravity                                |            |             | Non-Gravity |             |      |      |  |
| TCDL:                  | 15.00  | Speed: 175 mph                    |  | Pf: NA                       |        | Ce: NA  | VERT(LL): 0.118 C 999 360       |  |  | Loc                                    | R+         | / R-        | / Rh        | / Rw        | / U  | / RL |  |
| BCLL:                  | 0.00   | Enclosure: Closed                 |  | Lu: NA                       | Cs: NA |         | VERT(CL): 0.217 C 999 240       |  |  | A                                      | 1383       | /-          | /-          | /761        | /436 | /350 |  |
| BCDL:                  | 10.00  | Risk Category: II                 |  | Snow Duration: NA            |        |         | HORZ(LL): 0.041 H - -           |  |  | H                                      | 1383       | /-          | /-          | /705        | /926 | /-   |  |
|                        |        | EXP: C Kzt: NA                    |  |                              |        |         | HORZ(TL): 0.075 H - -           |  |  | Wind reactions based on C&C            |            |             |             |             |      |      |  |
| Des Ld:                | 55.00  | Mean Height: 15.78 ft             |  | Building Code:               |        |         | Creep Factor: 2.0               |  |  | A                                      |            | Brg Wid = - |             | Min Req = - |      |      |  |
| NCBCLL:                | 10.00  | TCDL: 6.0 psf                     |  | FBC 8th Ed. 2023 Res. HVHZ   |        |         | Max TC CSI: 0.703               |  |  | H                                      |            | Brg Wid = - |             | Min Req = - |      |      |  |
| Soffit:                | 2.00   | BCDL: 6.0 psf                     |  | TPI Std: 2014                |        |         | Max BC CSI: 0.748               |  |  | Maximum Top Chord Forces Per Ply (lbs) |            |             |             |             |      |      |  |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: h to 2h      |  | Rep Fac: Yes                 |        |         | Max Web CSI: 0.515              |  |  | Chords                                 | Tens.Comp. |             | Chords      | Tens. Comp. |      |      |  |
| Spacing:               | 24.0 " | C&C Dist a: 3.00 ft               |  | FT/RT:20(0)/10(0)            |        |         | Mfg Specified Camber:           |  |  | A - B                                  | 940 -2997  |             | D - E       | 564 -1256   |      |      |  |
|                        |        | Loc. from endwall: not in 9.00 ft |  | Plate Type(s):               |        |         | VIEW Ver: 23.02.01A.1204.18     |  |  | B - C                                  | 927 -2898  |             | E - F       | 582 -1106   |      |      |  |
|                        |        | GCpi: 0.18                        |  |                              |        |         |                                 |  |  | C - D                                  | 787 -2186  |             | F - G       | 0 0         |      |      |  |
|                        |        | Wind Duration: 1.60               |  | WAVE                         |        |         |                                 |  |  |                                        |            |             |             |             |      |      |  |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Slider: 2x4 SP #2; block length = 1.654'

**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Hangers / Ties**  
(J) Hanger Support Required, by others

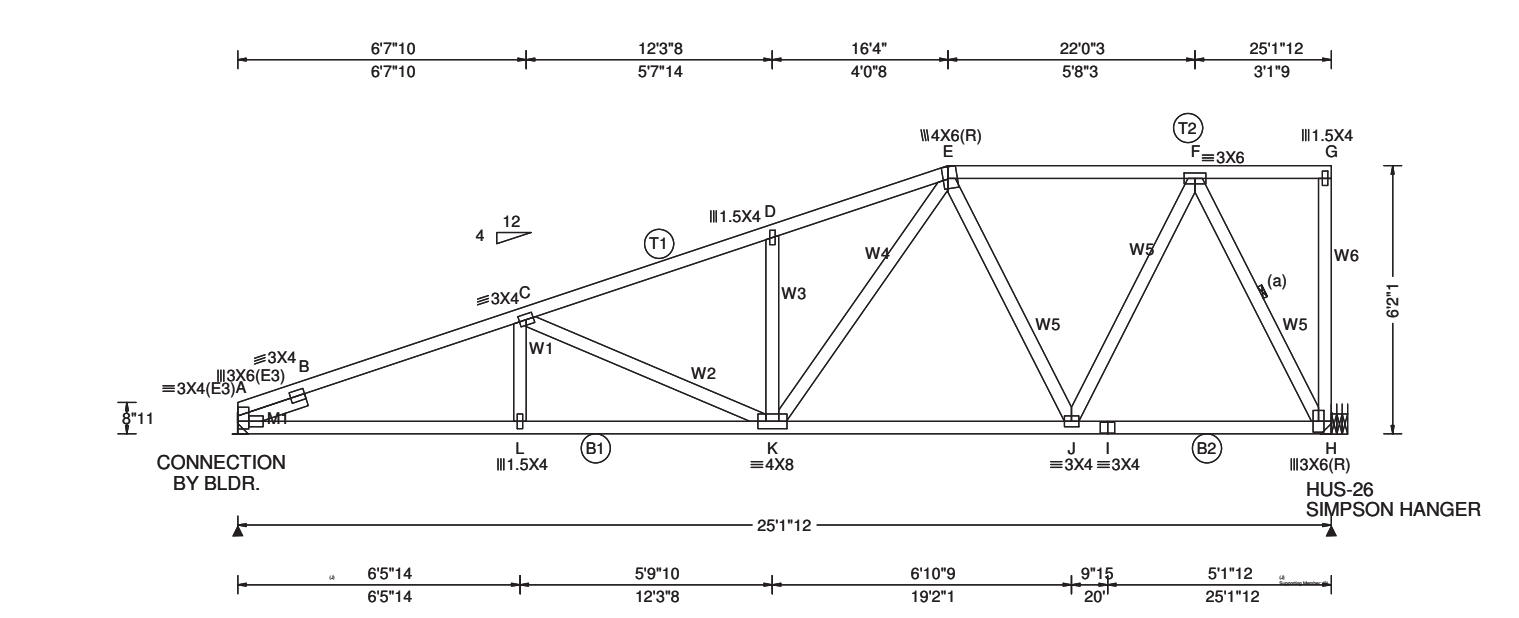
**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

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The drawing illustrates a roof truss system with the following details:

- Members:**
  - Top Chord:  $\equiv 3X4$  (from A to D),  $\equiv 3X4$  (from D to F),  $\equiv 3X4$  (from F to GH).
  - Bottom Chord:  $\equiv 3X6(R)$  (from A to N).
  - Vertical Members:  $\equiv 1.5X4$  (W1, from D to K),  $\equiv 3X4$  (W2, from J to D),  $\equiv 3X4$  (W3, from J to F),  $\equiv 1.5X4$  (W4, from N to F),  $\equiv 1.5X4$  (W5, from GH to N).
  - Diagonal Members:  $\equiv 4X6(**)$  (C to B),  $\equiv 3X4$  (F to N).
- Joints:**
  - Top Joints: A, B, C, D, E, F, GH.
  - Bottom Joints: K, J, N.
- Dimensions:**
  - Horizontal Dimensions (Top):**
    - A to B:  $7'5''2$  /  $7'3''10$
    - B to C:  $12'1''8$  /  $4'8''6$
    - C to D:  $14'3''14$  /  $2'2''6$
    - D to E:  $18'5''4$  /  $4'1''6$
    - E to F:  $18'7''8$  /  $2'4''$
  - Horizontal Dimensions (Bottom):**
    - A to K:  $2'8''8$  /  $4'8''$
    - K to J:  $7'1''14$  /  $7'3''6$
    - J to N:  $4'6''10$  /  $1'1''10$
    - N to GH:  $6'3''12$  /  $18'1''12$
    - GH to End:  $5'1''12$  /  $18'7''8$
  - Vertical Dimensions:**
    - Left:  $10'13$  (from A to top of A),  $3'8''14$  (from top of A to top of B).
    - Right:  $6'8''1$  (from N to top of GH),  $7'4''13$  (from bottom of N to top of GH).
  - Other Notes:**
    - A slope indicator shows a 4 vertical rise for 12 horizontal run.
    - A section line (a-a) is shown passing through the truss.

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                     | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |             |       |             |             |       |      |
|------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|-------------|-------|-------------|-------------|-------|------|
|                        |                                   |                                                                                                                                  |                                 | Gravity                                |             |       | Non-Gravity |             |       |      |
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                            | PP Deflection in loc L/defl L/# | Loc                                    | R+          | / R-  | / Rh        | / Rw        | / U   | / RL |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                    | VERT(LL): 0.120 C 999 360       | A                                      | 1383        | -/-   | -/-         | /723        | /491  | /311 |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                                                                                                                    | VERT(CL): 0.219 C 999 240       | H                                      | 1383        | -/-   | -/-         | /695        | /1020 | -/-  |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                                | HORZ(LL): 0.039 H - -           | Wind reactions based on C&C            |             |       |             |             |       |      |
|                        | EXP: C Kzt: NA                    |                                                                                                                                  | HORZ(TL): 0.071 H - -           | A                                      | Brg Wid = - |       | Min Req = - |             |       |      |
| Des Ld: 55.00          | Mean Height: 15.45 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br><br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0               | H                                      | Brg Wid = - |       | Min Req = - |             |       |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                                                                                                                  | Max TC CSI: 0.751               |                                        |             |       |             |             |       |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                                  | Max BC CSI: 0.748               |                                        |             |       |             |             |       |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h to 2h      |                                                                                                                                  | Max Web CSI: 0.541              |                                        |             |       |             |             |       |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               |                                                                                                                                  | Mfg Specified Camber:           |                                        |             |       |             |             |       |      |
|                        | Loc. from endwall: not in 9.00 ft |                                                                                                                                  |                                 | Maximum Top Chord Forces Per Ply (lbs) |             |       |             |             |       |      |
|                        | GCpi: 0.18                        |                                                                                                                                  |                                 | Chords                                 | Tens.Comp.  |       | Chords      | Tens. Comp. |       |      |
|                        | Wind Duration: 1.60               |                                                                                                                                  | VIEW Ver: 23.02.01A.1204.18     | A - B                                  | 1069        | -2994 | D - E       | 1012        | -2134 |      |
|                        |                                   |                                                                                                                                  |                                 | B - C                                  | 1080        | -2902 | E - F       | 646         | -1056 |      |
|                        |                                   |                                                                                                                                  |                                 | C - D                                  | 934         | -2165 | F - G       | 0           | 0     |      |

|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       |                                        |            |       |        |             |       |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------|-------|--------|-------------|-------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Slider: 2x4 SP #2; block length = 1.654' | <b>Bracing</b><br>(a) Continuous lateral restraint equally spaced on member. | <b>Hangers / Ties</b><br>(J) Hanger Support Required, by others | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types. | Maximum Bot Chord Forces Per Ply (lbs) |            |       |        |             |       |
|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       | Chords                                 | Tens.Comp. |       | Chords | Tens. Comp. |       |
|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       | A - L                                  | 2681       | -1257 | J - I  | 673         | -506  |
|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       | L - K                                  | 2677       | -1260 | I - H  | 673         | -506  |
|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       | K - J                                  | 1367       | -828  |        |             |       |
|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       | Maximum Web Forces Per Ply (lbs)       |            |       |        |             |       |
|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       | Webs                                   | Tens.Comp. |       | Webs   | Tens. Comp. |       |
|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       | L - C                                  | 210        | 0     | E - J  | 419         | -716  |
|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       | C - K                                  | 284        | -775  | J - F  | 878         | -321  |
|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       | D - K                                  | 204        | -423  | F - H  | 1077        | -1432 |
|                                                                                                                                    |                                                                              |                                                                 |                                                                                                                                                                       | K - E                                  | 1061       | -303  | G - H  | 96          | -73   |

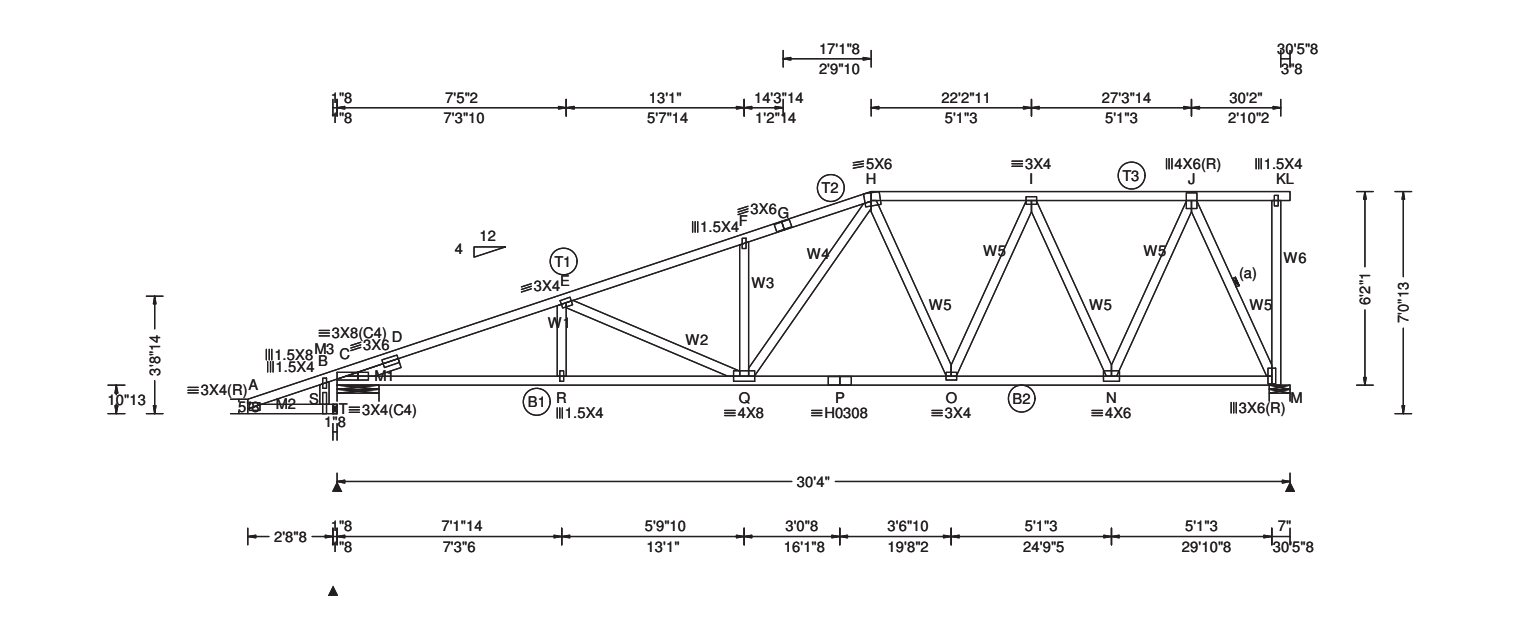
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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |             |         | Defl/CSI Criteria     |                   |           | ▲ Maximum Reactions (lbs)              |                |                         |             |             |       |      |
|------------------------|--------|----------------------|----------------|------------------------------|-------------|---------|-----------------------|-------------------|-----------|----------------------------------------|----------------|-------------------------|-------------|-------------|-------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA      | CAT: NA | PP Deflection in      | loc L/defl        | L/#       | Gravity                                |                |                         | Non-Gravity |             |       |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |             | Ce: NA  | VERT(LL):             | 0.217             | Q 999 360 | Loc                                    | R+             | / R-                    | / Rh        | / Rw        | / U   | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Part. Enc.     | Lu: NA                       | Cs: NA      |         | VERT(CL):             | 0.327             | F 999 240 | T                                      | -              | /-                      | /175        | /-          | /-    | /476 |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA          |         | HORZ(LL):             | -0.112            | D - -     | C                                      | 1938           | /-                      | /-          | /1905       | /1416 | /-   |
|                        |        | EXP:                 | C Kzt: NA      |                              |             |         | HORZ(TL):             | 0.133             | D - -     | M                                      | 1639           | /-                      | /176        | /1319       | /1814 | /665 |
| Des Ld:                | 55.00  | Mean Height:         | 15.00 ft       |                              |             |         | Creep Factor:         | 2.0               |           | Wind reactions based on C&C            |                |                         |             |             |       |      |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        | Building Code:               |             |         | Max TC CSI:           | 0.799             |           | T                                      | Brg Wid = 1.5  | Min Req = -             |             |             |       |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        | FBC 8th Ed. 2023 Res.        | HVHZ        |         | Max BC CSI:           | 0.829             |           | C                                      | Brg Wid = 16.0 | Min Req = 2.3 (Truss)   |             |             |       |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | h to 2h        | TPI Std:                     | 2014        |         | Max Web CSI:          | 0.851             |           | M                                      | Brg Wid = 8.0  | Min Req = 1.5 (Support) |             |             |       |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.03 ft        | Rep Fac:                     | Yes         |         | Mfg Specified Camber: |                   |           | Bearings C & M are a rigid surface.    |                |                         |             |             |       |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft | FT/RT:                       | 20(0)/10(0) |         |                       |                   |           | Maximum Top Chord Forces Per Ply (lbs) |                |                         |             |             |       |      |
|                        |        | GCpi:                | 0.55           | Plate Type(s):               |             |         |                       |                   |           | Chords                                 | Tens.Comp.     |                         | Chords      | Tens. Comp. |       |      |
|                        |        | Wind Duration:       | 1.60           | WAVE, HS                     |             |         | VIEW Ver:             | 23.02.01A.1204.18 |           |                                        |                |                         |             |             |       |      |

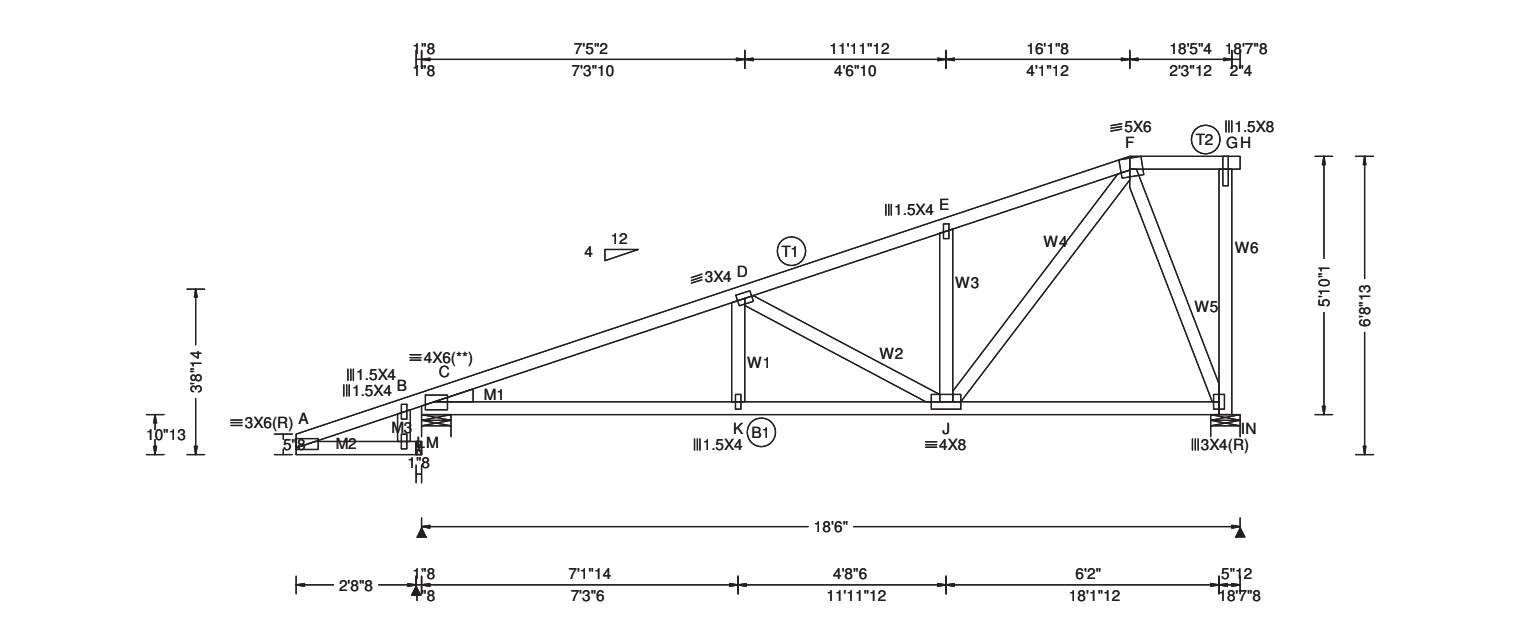
**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #1; B2 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Slider: 2x4 SP #2; block length = 1.750'  
Lt Level Return: 2x4 SP #2;

**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.  
Left bottom chord exposed to wind.

**Additional Notes**  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)               |      |      |      |      |      |      |
|------------------------|--|-----------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|-----------------------------------------|------|------|------|------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity Non-Gravity                     |      |      |      |      |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): 0.067 K 999 360       |  |  | Loc                                     | R+   | / R- | / Rh | / Rw | / U  | / RL |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): 0.117 K 999 240       |  |  | M                                       | -    | /-   | /246 | /-   | /-   | /288 |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): 0.018 I - -           |  |  | B                                       | 1275 | /-   | /246 | /818 | /680 | /356 |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.033 I - -           |  |  | N                                       | 1003 | /-   | /-   | /521 | /717 | /-   |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | Wind reactions based on C&C             |      |      |      |      |      |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max TC CSI: 0.589               |  |  | M Brg Wid = 1.5 Min Req = -             |      |      |      |      |      |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max BC CSI: 0.535               |  |  | B Brg Wid = 8.0 Min Req = 1.5 (Truss)   |      |      |      |      |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h to 2h      |  | Max Web CSI: 0.554                                                                                                           |  |  | Mfg Specified Camber:           |  |  | N Brg Wid = 8.0 Min Req = 1.5 (Support) |      |      |      |      |      |      |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                              |  |  |                                 |  |  | Bearings B & I are a rigid surface.     |      |      |      |      |      |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  |                                                                                                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs)  |      |      |      |      |      |      |
|                        |  | GCpi: 0.18                        |  |                                                                                                                              |  |  |                                 |  |  | Chords Tens.Comp. Chords Tens. Comp.    |      |      |      |      |      |      |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                              |  |  |                                 |  |  |                                         |      |      |      |      |      |      |

**Lumber**

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**

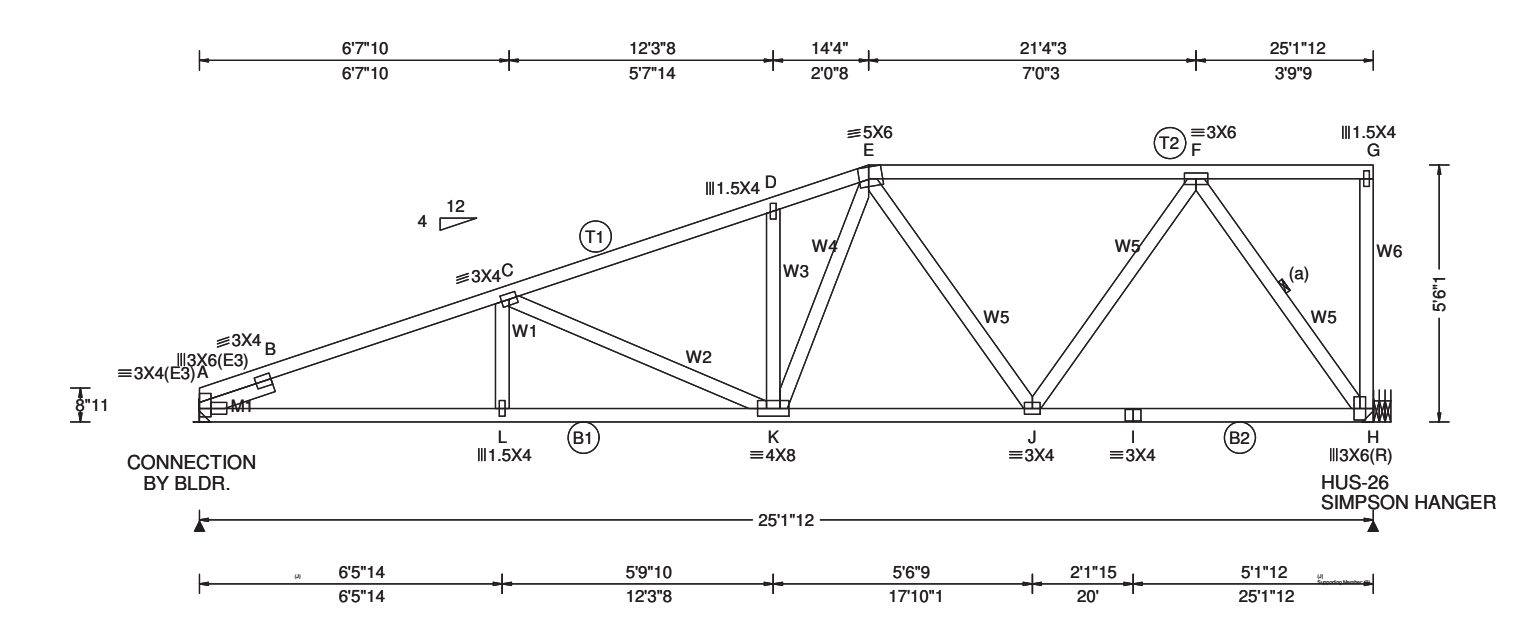
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**

Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**

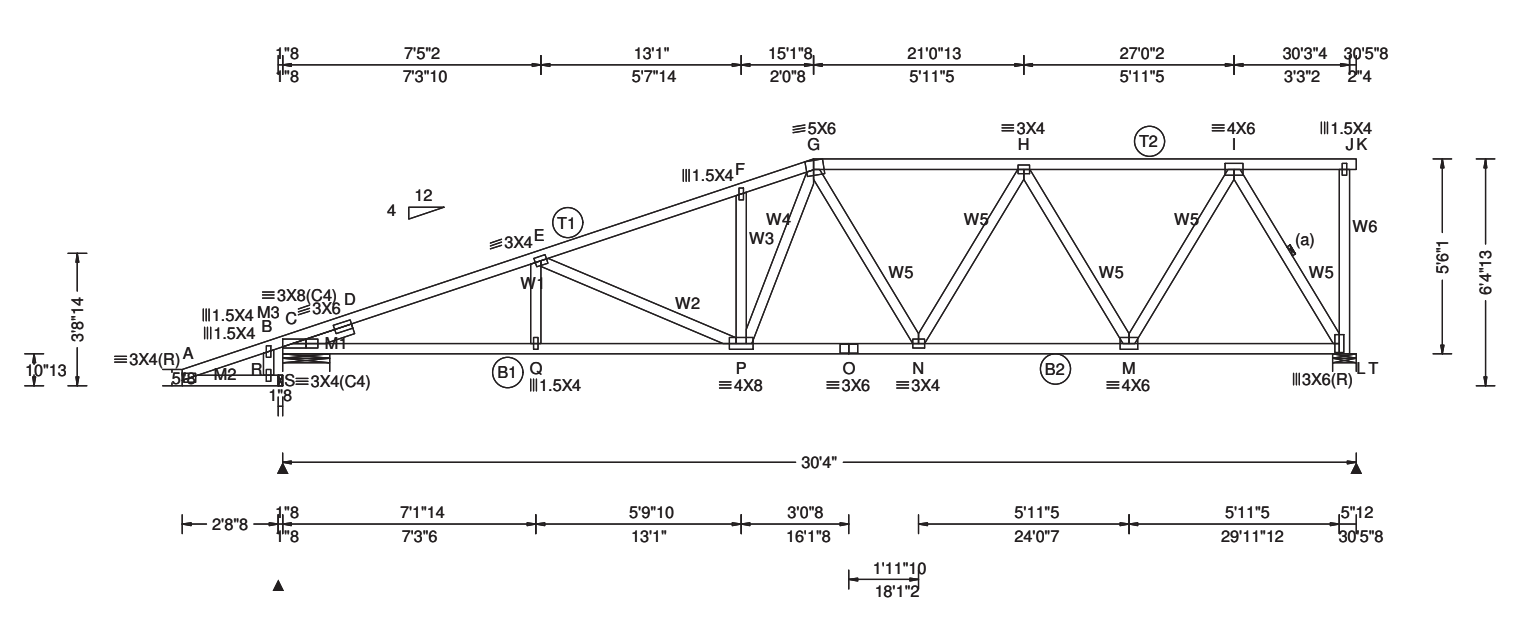
The maximum horizontal reaction is 246#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*



| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                     | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |             |       |             |             |       |      |
|------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|-------------|-------|-------------|-------------|-------|------|
|                        |                                   |                                                                                                                                  |                                 | Gravity                                |             |       | Non-Gravity |             |       |      |
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                            | PP Deflection in loc L/defl L/# | Loc                                    | R+          | / R-  | / Rh        | / Rw        | / U   | / RL |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                    | VERT(LL): 0.118 C 999 360       | A                                      | 1383        | /-    | /-          | /720        | /556  | /271 |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                                                                                                                    | VERT(CL): 0.217 C 999 240       | H                                      | 1383        | /-    | /-          | /685        | /1087 | /-   |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                                | HORZ(LL): 0.041 H - -           | Wind reactions based on C&C            |             |       |             |             |       |      |
|                        | EXP: C Kzt: NA                    |                                                                                                                                  | HORZ(TL): 0.075 H - -           | A                                      | Brg Wid = - |       | Min Req = - |             |       |      |
| Des Ld: 55.00          | Mean Height: 15.12 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br><br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0               | H                                      | Brg Wid = - |       | Min Req = - |             |       |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                                                                                                                  | Max TC CSI: 0.892               | Maximum Top Chord Forces Per Ply (lbs) |             |       |             |             |       |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                                  | Max BC CSI: 0.742               | Chords                                 | Tens.Comp.  |       | Chords      | Tens. Comp. |       |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h to 2h      |                                                                                                                                  | Max Web CSI: 0.548              | A - B                                  | 1243        | -2991 | D - E       | 1149 -2079  |       |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               |                                                                                                                                  | Mfg Specified Camber:           | B - C                                  | 1253        | -2906 | E - F       | 891 -1342   |       |      |
|                        | Loc. from endwall: not in 9.00 ft |                                                                                                                                  |                                 | C - D                                  | 1126        | -2155 | F - G       | 0 0         |       |      |
|                        | GCpi: 0.18                        |                                                                                                                                  |                                 |                                        |             |       |             |             |       |      |
|                        | Wind Duration: 1.60               |                                                                                                                                  | VIEW Ver: 23.02.01A.1204.18     |                                        |             |       |             |             |       |      |

|                                                                                                                                                                                                               |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Slider: 2x4 SP #2; block length = 1.654'                                                                            |  |  |  |  |  |
| <b>Bracing</b><br>(a) Continuous lateral restraint equally spaced on member.                                                                                                                                  |  |  |  |  |  |
| <b>Hangers / Ties</b><br>(J) Hanger Support Required, by others                                                                                                                                               |  |  |  |  |  |
| <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.                                         |  |  |  |  |  |
| <b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - L 2685 -1381 J - I 903 -741<br>L - K 2681 -1384 I - H 903 -741<br>K - J 1679 -1104                               |  |  |  |  |  |
| <b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>L - C 223 0 E - J 381 -604<br>C - K 265 -792 J - F 787 -269<br>D - K 146 -351 F - H 1258 -1533<br>K - E 764 -194 G - H 115 -84 |  |  |  |  |  |

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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |        |         | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs)              |                |                         |             |       |       |      |
|------------------------|--------|----------------------|----------------|------------------------------|--------|---------|---------------------------------|--|----------------------------------------|----------------|-------------------------|-------------|-------|-------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA | CAT: NA | PP Deflection in loc L/defl L/# |  | Gravity                                |                |                         | Non-Gravity |       |       |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |        | Ce: NA  | VERT(LL): 0.181 F 999 360       |  | Loc                                    | R+             | / R-                    | / Rh        | / Rw  | / U   | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Part. Enc.     | Lu: NA                       | Cs: NA |         | VERT(CL): 0.327 F 999 240       |  | S                                      | -              | /-                      | /171        | /-    | /-    | /269 |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration: NA            |        |         | HORZ(LL): -0.064 I - -          |  | C                                      | 1944           | /-                      | /-          | /1504 | /1144 | /-   |
|                        |        | EXP:                 | C Kzt: NA      |                              |        |         | HORZ(TL): 0.115 I - -           |  | T                                      | 1635           | /-                      | /171        | /1181 | /1646 | /488 |
| Des Ld:                | 55.00  | Mean Height:         | 15.00 ft       |                              |        |         | Creep Factor: 2.0               |  | Wind reactions based on C&C            |                |                         |             |       |       |      |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        | Building Code:               |        |         | Max TC CSI: 0.985               |  | S                                      | Brg Wid = 1.5  | Min Req = -             |             |       |       |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        | FBC 8th Ed. 2023 Res. HVHZ   |        |         | Max BC CSI: 0.827               |  | C                                      | Brg Wid = 16.0 | Min Req = 2.3 (Truss)   |             |       |       |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | h to 2h        | TPI Std: 2014                |        |         | Max Web CSI: 0.655              |  | T                                      | Brg Wid = 8.0  | Min Req = 1.5 (Support) |             |       |       |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.03 ft        | Rep Fac: Yes                 |        |         | Mfg Specified Camber:           |  | Bearings C & L are a rigid surface.    |                |                         |             |       |       |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft | FT/RT:20(0)/10(0)            |        |         |                                 |  | Maximum Top Chord Forces Per Ply (lbs) |                |                         |             |       |       |      |
|                        |        | GCpi:                | 0.55           | Plate Type(s):               |        |         |                                 |  | Chords                                 | Tens.Comp.     | Chords                  | Tens. Comp. |       |       |      |
|                        |        | Wind Duration:       | 1.60           | WAVE                         |        |         | VIEW Ver: 23.02.01A.1204.18     |  |                                        |                |                         |             |       |       |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #1; B2 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Slider: 2x4 SP #2; block length = 1.750'  
Lt Level Return: 2x4 SP #2;

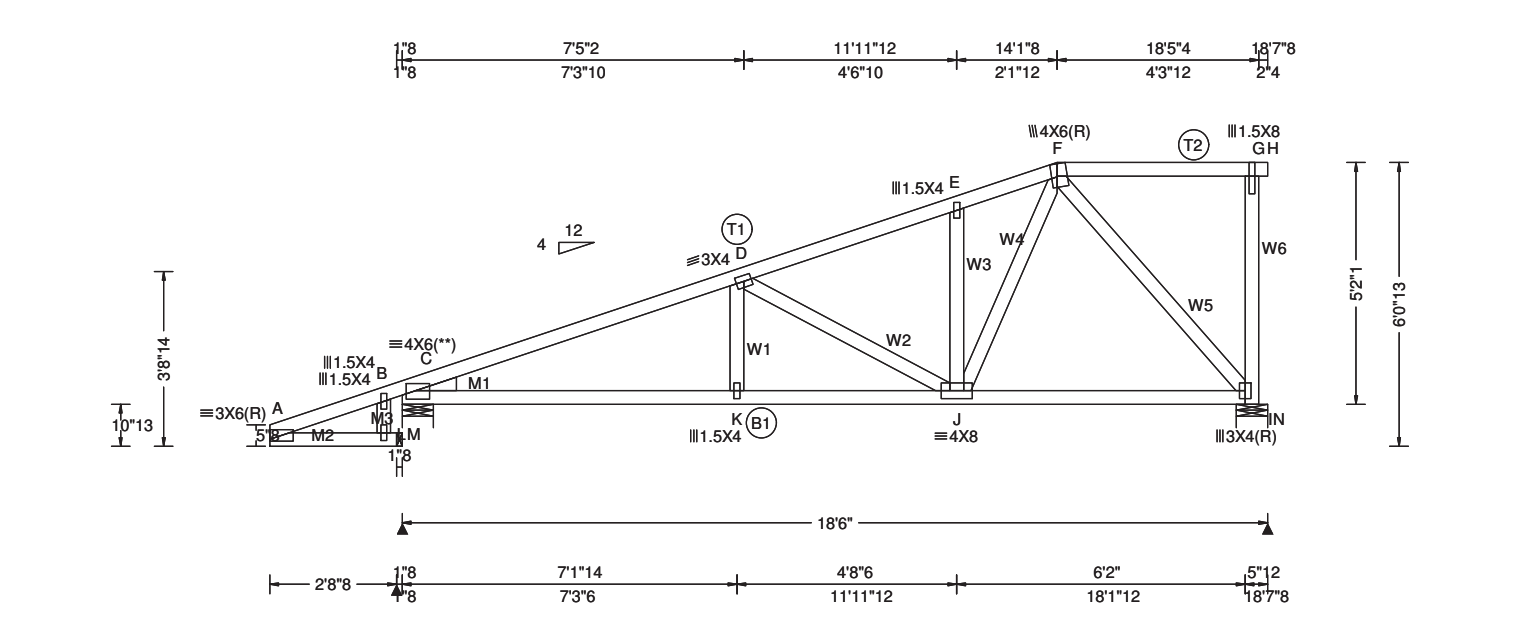
**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
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**Maximum Top Chord Forces Per Ply (lbs)**  
Chords Tens.Comp. Chords Tens. Comp.  
A - B 249 -203 F - G 2257 -2805  
B - C 261 -195 G - H 1968 -2203  
C - D 2356 -3642 H - I 1417 -1518  
D - E 2311 -3507 I - J 0 0  
E - F 2160 -2856 J - K 0 0  
**Maximum Bot Chord Forces Per Ply (lbs)**  
Chords Tens.Comp. Chords Tens. Comp.  
C - Q 6503 -3975 O - N 2346 -1564  
Q - P 3251 -1992 N - M 2049 -1468  
P - O 2346 -1564 M - L 955 -577  
**Maximum Web Forces Per Ply (lbs)**  
Webs Tens.Comp. Webs Tens. Comp.  
A - R 229 -261 G - N 219 -361  
B - R 44 -7 N - H 477 -147  
R - S 236 -269 H - M 1045 -1025  
Q - E 173 0 M - I 1187 -947  
E - P 412 -701 I - L 1786 -1752  
F - P 289 -370 J - L 157 -105  
P - G 837 -406



| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                 | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |            |           |             |                     |      |      |
|------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|------------|-----------|-------------|---------------------|------|------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                        | PP Deflection in loc L/defl L/# | Gravity                                |            |           | Non-Gravity |                     |      |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                | VERT(LL): 0.065 K 999 360       | Loc                                    | R+         | / R-      | / Rh        | / Rw                | / U  | / RL |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                                                                                                                | VERT(CL): 0.115 K 999 240       | M                                      | -          | /-        | /247        | /-                  | /-   | /295 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                            | HORZ(LL): 0.020 I - -           | B                                      | 1275       | /-        | /247        | /790                | /722 | /298 |
|                        | EXP: C Kzt: NA                    |                                                                                                                              | HORZ(TL): 0.036 I - -           | N                                      | 1004       | /-        | /-          | /507                | /833 | /-   |
| Des Ld: 55.00          | Mean Height: 15.00 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0               | Wind reactions based on C&C            |            |           |             |                     |      |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                                                                                                              | Max TC CSI: 0.595               | M                                      | Brg        | Wid = 1.5 | Min         | Req = -             |      |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                              | Max BC CSI: 0.534               | B                                      | Brg        | Wid = 8.0 | Min         | Req = 1.5 (Truss)   |      |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h to 2h      |                                                                                                                              | Max Web CSI: 0.712              | N                                      | Brg        | Wid = 8.0 | Min         | Req = 1.5 (Support) |      |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               |                                                                                                                              | Mfg Specified Camber:           | Bearings B & I are a rigid surface.    |            |           |             |                     |      |      |
|                        | Loc. from endwall: not in 9.00 ft |                                                                                                                              |                                 | Maximum Top Chord Forces Per Ply (lbs) |            |           |             |                     |      |      |
|                        | GCpi: 0.18                        |                                                                                                                              |                                 | Chords                                 | Tens.Comp. |           | Chords      | Tens. Comp.         |      |      |
|                        | Wind Duration: 1.60               |                                                                                                                              | VIEW Ver: 23.02.01A.1204.18     |                                        |            |           |             |                     |      |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 247#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

**Maximum Top Chord Forces Per Ply (lbs)**  
Chords Tens.Comp. Chords Tens. Comp.

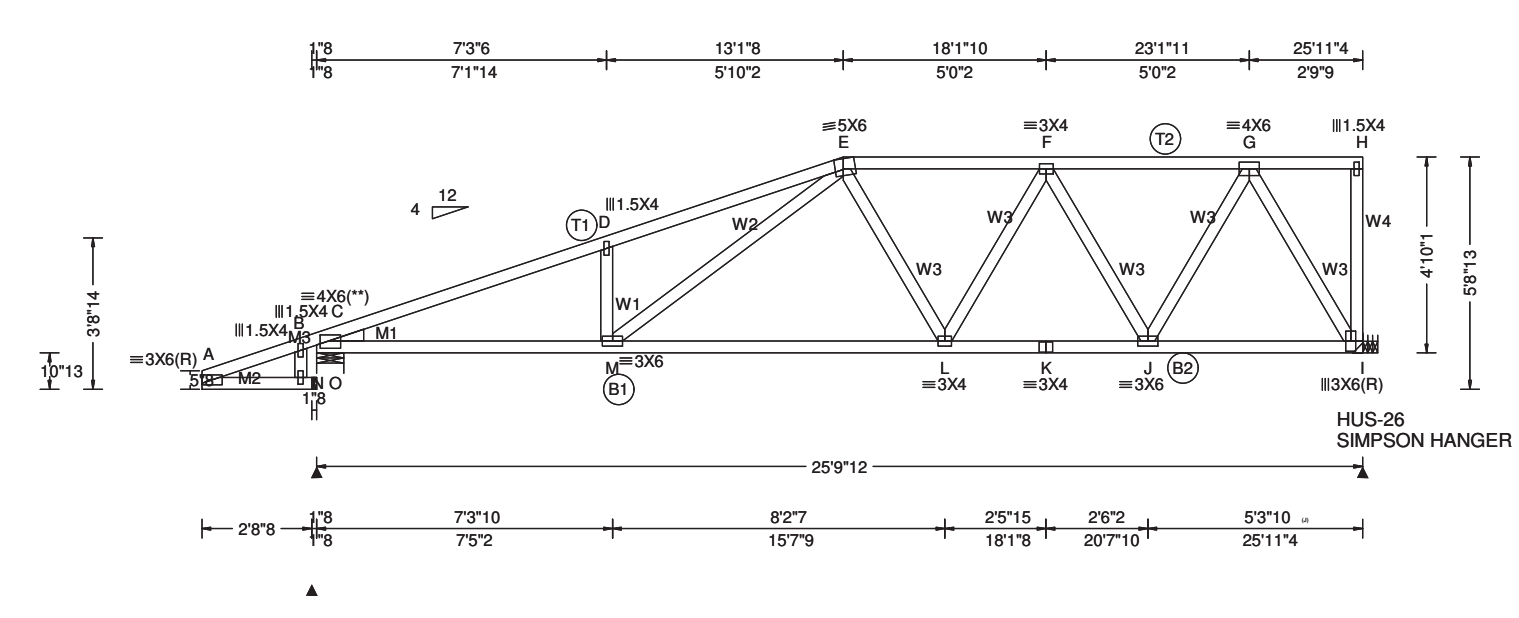
A - B 286 -258 E - F 657 -1122  
B - C 313 -261 F - G 0 0  
C - D 839 -1910 G - H 0 0  
D - E 575 -1159

**Maximum Bot Chord Forces Per Ply (lbs)**  
Chords Tens.Comp. Chords Tens. Comp.

C - K 1731 -1032 J - I 658 -467  
K - J 1727 -1034

**Maximum Web Forces Per Ply (lbs)**  
Webs Tens.Comp. Webs Tens. Comp.

A - L 289 -247 E - J 242 -304  
B - L 53 -13 J - F 906 -423  
L - M 295 -248 F - I 705 -993  
K - D 201 0 G - I 333 -211  
D - J 454 -807



| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF) |  |  | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs)              |  |         |  |      |  |               |  |
|------------------------|--|-----------------------------------|--|------------------------------|--|--|---------------------------------|--|----------------------------------------|--|---------|--|------|--|---------------|--|
|                        |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA        |  |  | PP Deflection in loc L/defl L/# |  | Gravity Non-Gravity                    |  |         |  |      |  |               |  |
|                        |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                |  |  | VERT(LL): 0.162 D 999 360       |  | Loc                                    |  | R+ / R- |  | / Rh |  | / Rw / U / RL |  |
|                        |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                |  |  | VERT(C/L): 0.290 D 999 240      |  | O                                      |  | -       |  | /-   |  | /281 /-       |  |
|                        |  | Risk Category: II                 |  | Snow Duration: NA            |  |  | HORZ(LL): 0.045 I - -           |  | B                                      |  | 1682    |  | /-   |  | /281 /990     |  |
|                        |  | EXP: C Kzt: NA                    |  |                              |  |  | HORZ(TL): 0.080 I - -           |  | I                                      |  | 1410    |  | /-   |  | /688 /1176    |  |
|                        |  | Mean Height: 15.00 ft             |  |                              |  |  | Creep Factor: 2.0               |  | Wind reactions based on C&C            |  |         |  |      |  |               |  |
|                        |  | TCDL: 6.0 psf                     |  | Building Code:               |  |  | Max TC CSI: 0.686               |  | O Brg Wid = 1.5 Min Req = -            |  |         |  |      |  |               |  |
|                        |  | BCDL: 6.0 psf                     |  | FBC 8th Ed. 2023 Res. HVHZ   |  |  | Max BC CSI: 0.860               |  | B Brg Wid = 8.0 Min Req = 2.0 (Truss)  |  |         |  |      |  |               |  |
|                        |  | MWFRS Parallel Dist: h to 2h      |  | TPI Std: 2014                |  |  | Max Web CSI: 0.724              |  | I Brg Wid = - Min Req = -              |  |         |  |      |  |               |  |
|                        |  | C&C Dist a: 3.00 ft               |  | Rep Fac: Yes                 |  |  | Mfg Specified Camber:           |  | Bearing B is a rigid surface.          |  |         |  |      |  |               |  |
|                        |  | Loc. from endwall: not in 9.00 ft |  | FT/RT:20(0)/10(0)            |  |  | VIEW Ver: 23.02.01A.1204.18     |  | Maximum Top Chord Forces Per Ply (lbs) |  |         |  |      |  |               |  |
|                        |  | GCpi: 0.18                        |  | Plate Type(s):               |  |  |                                 |  | Chords Tens.Comp. Chords Tens. Comp.   |  |         |  |      |  |               |  |
|                        |  | Wind Duration: 1.60               |  | WAVE                         |  |  |                                 |  |                                        |  |         |  |      |  |               |  |

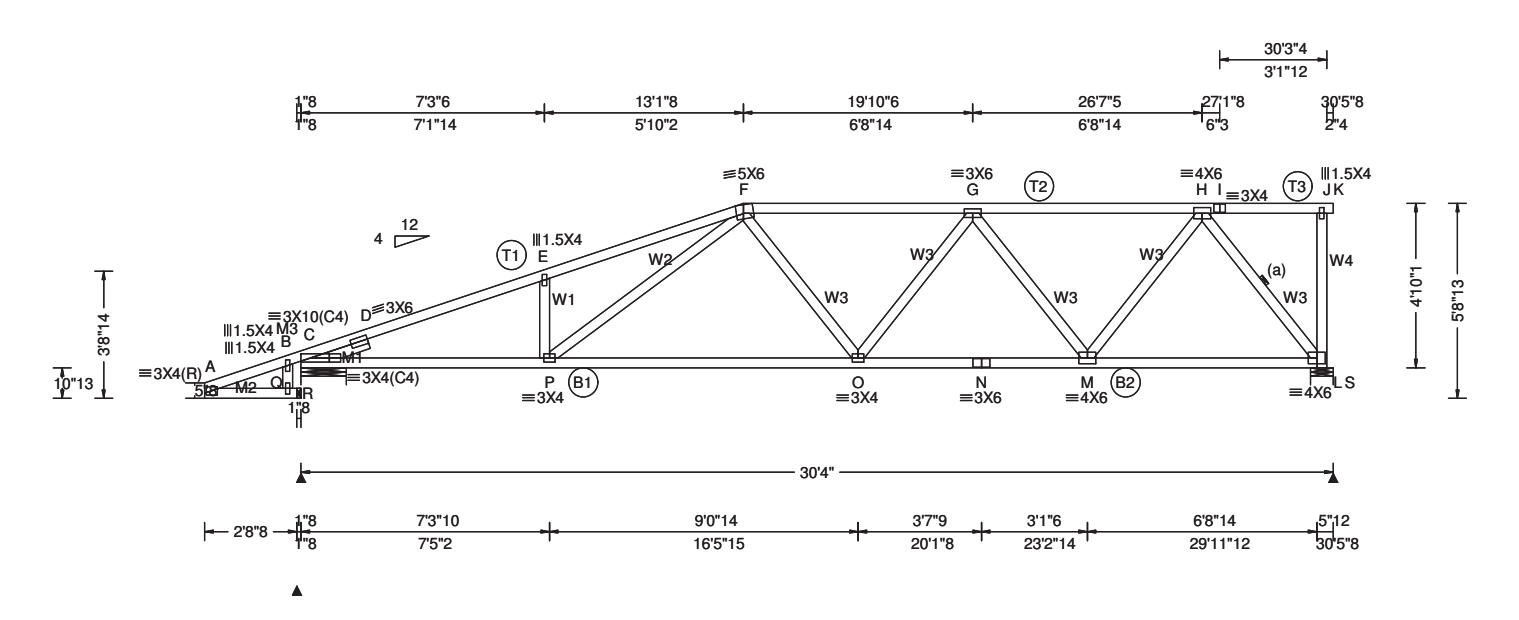
**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 281#  
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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                 | Defl/CSI Criteria                      | ▲ Maximum Reactions (lbs)           |            |            |             |                     |             |       |
|------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------|------------|------------|-------------|---------------------|-------------|-------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                        | PP Deflection in loc L/defl L/#        | Gravity                             |            |            | Non-Gravity |                     |             |       |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                | VERT(LL): 0.137 P 999 360              | Loc                                 | R+         | / R-       | / Rh        | / Rw                | / U         | / RL  |
| BCLL: 0.00             | Enclosure: Part. Enc.             | Lu: NA Cs: NA                                                                                                                | VERT(CL): 0.245 P 999 240              | R                                   | -          | /-         | /276        | /-                  | /-          | /264  |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                            | HORZ(LL): -0.027 H - -                 | C                                   | 1929       | /-         | /2580       | /1489               | /1225       | /1879 |
|                        | EXP: C Kzt: NA                    |                                                                                                                              | HORZ(TL): 0.049 H - -                  | S                                   | 1649       | /-         | /2356       | /1181               | /1703       | /2173 |
| Des Ld: 55.00          | Mean Height: 15.00 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0                      | Wind reactions based on C&C         |            |            |             |                     |             |       |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                                                                                                              | Max TC CSI: 0.924                      | R                                   | Brg        | Wid = 1.5  | Min         | Req = -             |             |       |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                              | Max BC CSI: 0.567                      | C                                   | Brg        | Wid = 16.0 | Min         | Req = 2.3 (Truss)   |             |       |
| Load Duration: 1.25    | MWFRS Parallel Dist: h to 2h      |                                                                                                                              | Max Web CSI: 0.586                     | S                                   | Brg        | Wid = 8.0  | Min         | Req = 1.5 (Support) |             |       |
| Spacing: 24.0 "        | C&C Dist a: 3.03 ft               |                                                                                                                              | Mfg Specified Camber:                  | Bearings C & L are a rigid surface. |            |            |             |                     |             |       |
|                        | Loc. from endwall: not in 9.00 ft |                                                                                                                              | Maximum Top Chord Forces Per Ply (lbs) |                                     |            |            |             |                     |             |       |
|                        | GCpi: 0.55                        |                                                                                                                              | Chords                                 |                                     | Tens.Comp. |            | Chords      |                     | Tens. Comp. |       |
|                        | Wind Duration: 1.60               |                                                                                                                              | VIEW Ver: 23.02.01A.1204.18            |                                     |            |            |             |                     |             |       |

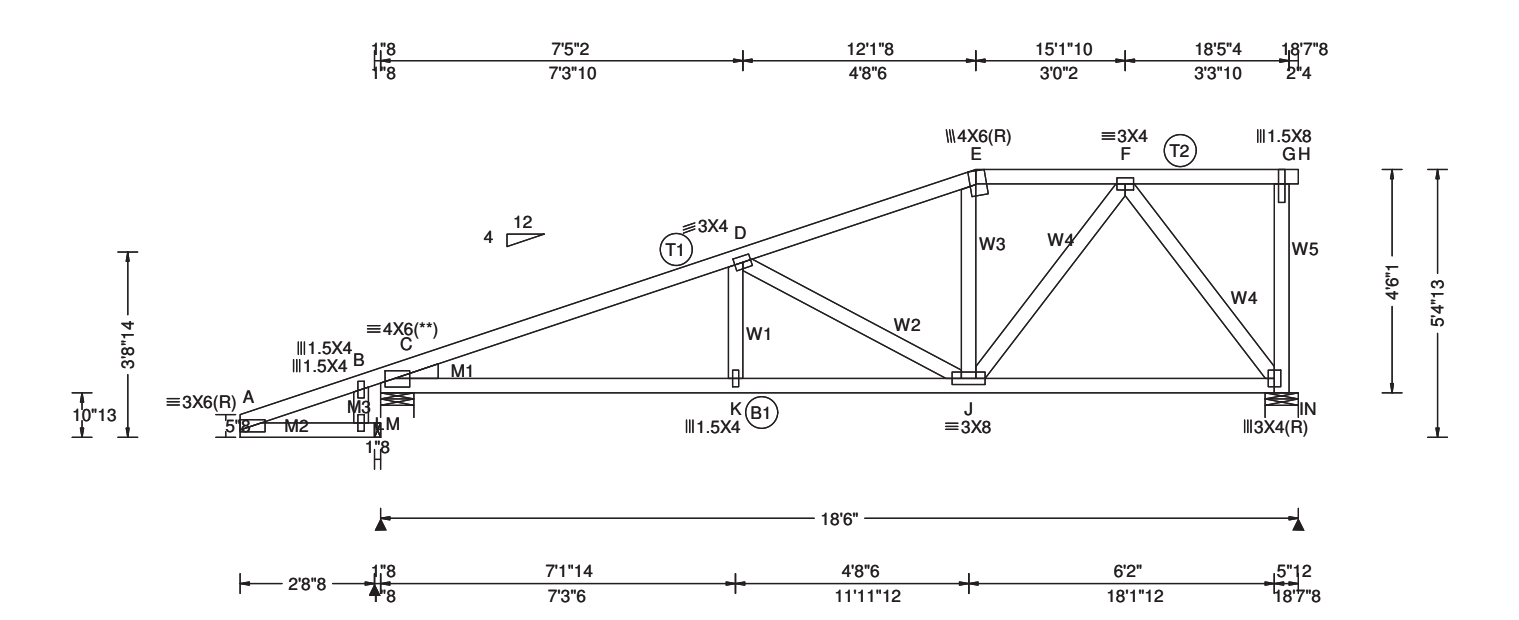
**Lumber**  
Top chord: 2x4 SP #2; T2 2x4 SP #1;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Slider: 2x4 SP #2; block length = 1.750'  
Lt Level Return: 2x4 SP #2;

**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.  
Left bottom chord exposed to wind.

**Additional Notes**  
The maximum horizontal reaction is 2580#  
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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |               |      |                         |             |      |      |
|------------------------|-----------------------------------|------------------------------|---------------------------------|----------------------------------------|---------------|------|-------------------------|-------------|------|------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# | Gravity                                |               |      | Non-Gravity             |             |      |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                | VERT(LL): 0.064 K 999 360       | Loc                                    | R+            | / R- | / Rh                    | / Rw        | / U  | / RL |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                | VERT(CL): 0.112 K 999 240       | M                                      | -             | /-   | /248                    | /-          | /-   | /302 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA            | HORZ(LL): 0.020 I - -           | B                                      | 1275          | /-   | /248                    | /787        | /780 | /241 |
|                        | EXP: C Kzt: NA                    |                              | HORZ(TL): 0.036 I - -           | N                                      | 1004          | /-   | /-                      | /496        | /933 | /-   |
| Des Ld: 55.00          | Mean Height: 15.00 ft             |                              | Creep Factor: 2.0               | Wind reactions based on C&C            |               |      |                         |             |      |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     | Building Code:               | Max TC CSI: 0.558               | M                                      | Brq Wid = 1.5 |      | Min Req = -             |             |      |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ   | Max BC CSI: 0.534               | B                                      | Brq Wid = 8.0 |      | Min Req = 1.5 (Truss)   |             |      |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h to 2h      | TPI Std: 2014                | Max Web CSI: 0.498              | N                                      | Brq Wid = 8.0 |      | Min Req = 1.5 (Support) |             |      |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               | Rep Fac: Yes                 | Mfg Specified Camber:           | Bearings B & I are a rigid surface.    |               |      |                         |             |      |      |
|                        | Loc. from endwall: not in 9.00 ft | FT/RT:20(0)/10(0)            |                                 | Maximum Top Chord Forces Per Ply (lbs) |               |      |                         |             |      |      |
|                        | GCpi: 0.18                        | Plate Type(s):               |                                 | Chords                                 | Tens.Comp.    |      | Chords                  | Tens. Comp. |      |      |
|                        | Wind Duration: 1.60               | WAVE                         | VIEW Ver: 23.02.01A.1204.18     |                                        |               |      |                         |             |      |      |

**Lumber**

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**

(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**

Member design based on both MWFRS and C&C.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

**Additional Notes**

The maximum horizontal reaction is 248#

\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

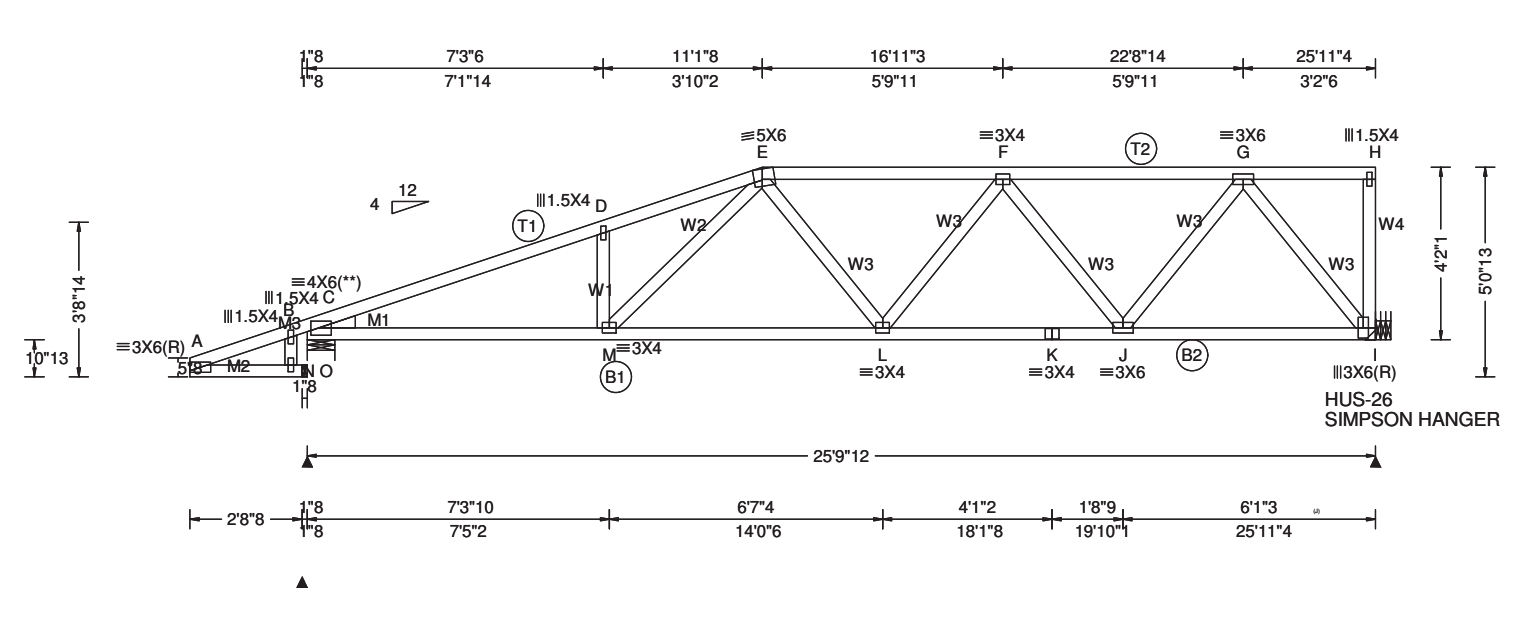
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For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCEA: [sbcecomponents.com](http://sbcecomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) |        |         | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |               |                       |             |             |       |      |
|------------------------|-----------------------------------|------------------------------|--------|---------|---------------------------------|----------------------------------------|---------------|-----------------------|-------------|-------------|-------|------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA                       | Ct: NA | CAT: NA | PP Deflection in loc L/defl L/# | Gravity                                |               |                       | Non-Gravity |             |       |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA                       |        | Ce: NA  | VERT(LL): 0.154 M 999 360       | Loc                                    | R+            | / R-                  | / Rh        | / Rw        | / U   | / RL |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA                       | Cs: NA |         | VERT(CL): 0.275 M 999 240       | O                                      | -             | /-                    | /270        | /-          | /-    | /272 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA            |        |         | HORZ(LL): 0.048 I - -           | B                                      | 1683          | /-                    | /270        | /984        | /902  | /239 |
|                        | EXP: C Kzt: NA                    |                              |        |         | HORZ(TL): 0.087 I - -           | I                                      | 1409          | /-                    | /-          | /680        | /1224 | /-   |
| Des Ld: 55.00          | Mean Height: 15.00 ft             | Building Code:               |        |         | Creep Factor: 2.0               | Wind reactions based on C&C            |               |                       |             |             |       |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ   |        |         | Max TC CSI: 0.846               | O                                      | Brg Wid = 1.5 | Min Req = -           |             |             |       |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     | TPI Std: 2014                |        |         | Max BC CSI: 0.824               | B                                      | Brg Wid = 8.0 | Min Req = 2.0 (Truss) |             |             |       |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h/2 to h     | Rep Fac: Yes                 |        |         | Max Web CSI: 0.694              | I                                      | Brg Wid = -   | Min Req = -           |             |             |       |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               | FT/RT:20(0)/10(0)            |        |         | Mfg Specified Camber:           | Bearing B is a rigid surface.          |               |                       |             |             |       |      |
|                        | Loc. from endwall: not in 9.00 ft | Plate Type(s):               |        |         |                                 | Maximum Top Chord Forces Per Ply (lbs) |               |                       |             |             |       |      |
|                        | GCpi: 0.18                        |                              |        |         |                                 | Chords                                 | Tens.Comp.    |                       | Chords      | Tens. Comp. |       |      |
|                        | Wind Duration: 1.60               | WAVE                         |        |         | VIEW Ver: 23.02.01A.1204.18     |                                        |               |                       |             |             |       |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

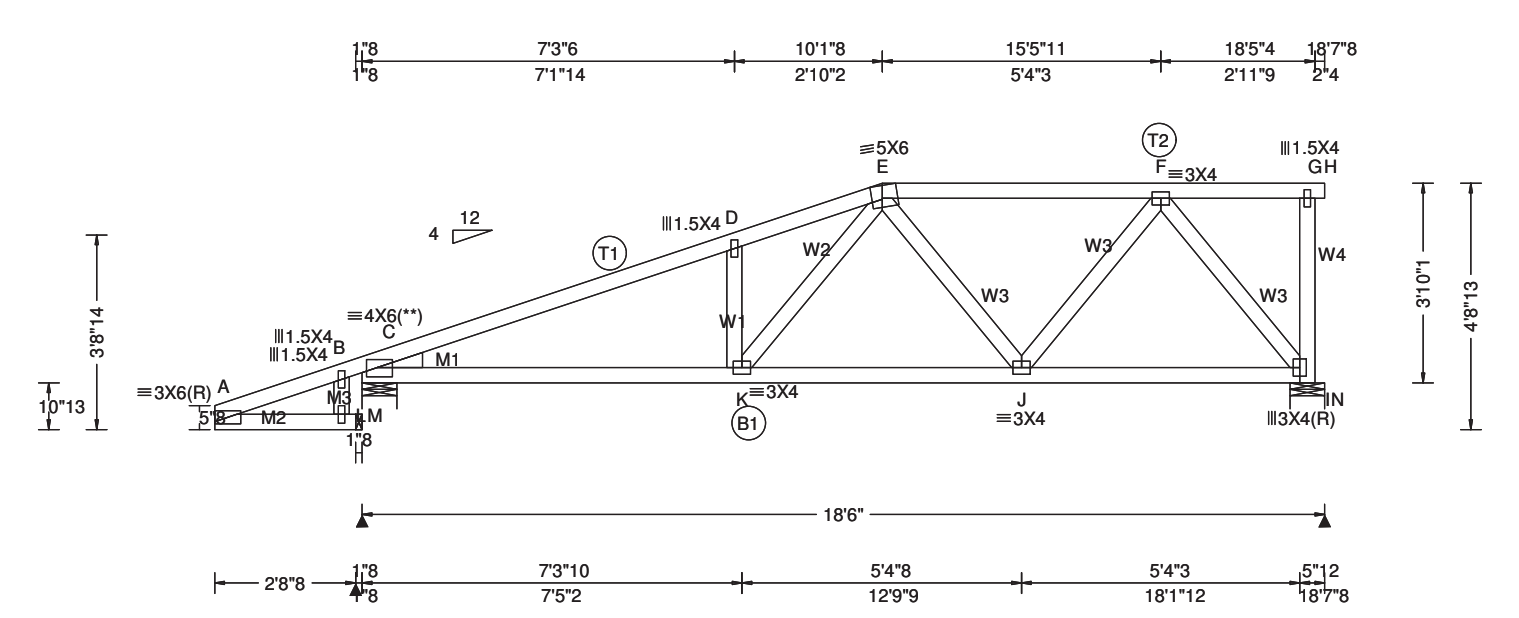
**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 270#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                 | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |            |           |                       |                         |       |      |
|------------------------|-----------------------------------|----------------------------------------------|---------------------------------|----------------------------------------|------------|-----------|-----------------------|-------------------------|-------|------|
|                        |                                   |                                              |                                 | Gravity                                |            |           | Non-Gravity           |                         |       |      |
|                        |                                   |                                              |                                 | Loc                                    | R+         | / R-      | / Rh                  | / Rw                    | / U   | / RL |
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                        | PP Deflection in loc L/defl L/# | M                                      | -          | /-        | /247                  | /-                      | /-    | /307 |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                | VERT(LL): 0.064 D 999 360       | B                                      | 1275       | /-        | /247                  | /782                    | /854  | /230 |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                                | VERT(CL): 0.111 D 999 240       | N                                      | 1004       | /-        | /-                    | /486                    | /1059 | /-   |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                            | HORZ(LL): 0.019 I - -           | Wind reactions based on C&C            |            |           |                       |                         |       |      |
|                        | EXP: C Kzt: NA                    |                                              | HORZ(TL): 0.034 I - -           | M                                      | Brg        | Wid = 1.5 | Min Req = -           |                         |       |      |
| Des Ld: 55.00          | Mean Height: 15.00 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ | Creep Factor: 2.0               | B                                      | Brg        | Wid = 8.0 | Min Req = 1.5 (Truss) |                         |       |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                              | TPI Std: 2014                   | Max TC CSI: 0.654                      | N          | Brg       | Wid = 8.0             | Min Req = 1.5 (Support) |       |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     | Rep Fac: Yes                                 | Max BC CSI: 0.533               | Bearings B & I are a rigid surface.    |            |           |                       |                         |       |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h/2 to h     | FT/RT:20(0)/10(0)                            | Max Web CSI: 0.407              | Maximum Top Chord Forces Per Ply (lbs) |            |           |                       |                         |       |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               | Plate Type(s):                               | Mfg Specified Camber:           | Chords                                 | Tens.Comp. | Chords    | Tens. Comp.           |                         |       |      |
|                        | Loc. from endwall: not in 9.00 ft | WAVE                                         | VIEW Ver: 23.02.01A.1204.18     |                                        |            |           |                       |                         |       |      |
|                        | GCpi: 0.18                        |                                              |                                 |                                        |            |           |                       |                         |       |      |
|                        | Wind Duration: 1.60               |                                              |                                 |                                        |            |           |                       |                         |       |      |

**Lumber**

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**

(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**

Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**

The maximum horizontal reaction is 247#  
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**▲ Maximum Reactions (lbs)**

| Gravity |      |      | Non-Gravity |      |          |      |
|---------|------|------|-------------|------|----------|------|
| Loc     | R+   | / R- | / Rh        | / Rw | / U / RL |      |
| M       | -    | /-   | /247        | /-   | /-       | /307 |
| B       | 1275 | /-   | /247        | /782 | /854     | /230 |
| N       | 1004 | /-   | /-          | /486 | /1059    | /-   |

Wind reactions based on C&C  
M Brg Wid = 1.5 Min Req = -  
B Brg Wid = 8.0 Min Req = 1.5 (Truss)  
N Brg Wid = 8.0 Min Req = 1.5 (Support)  
Bearings B & I are a rigid surface.

**Maximum Top Chord Forces Per Ply (lbs)**

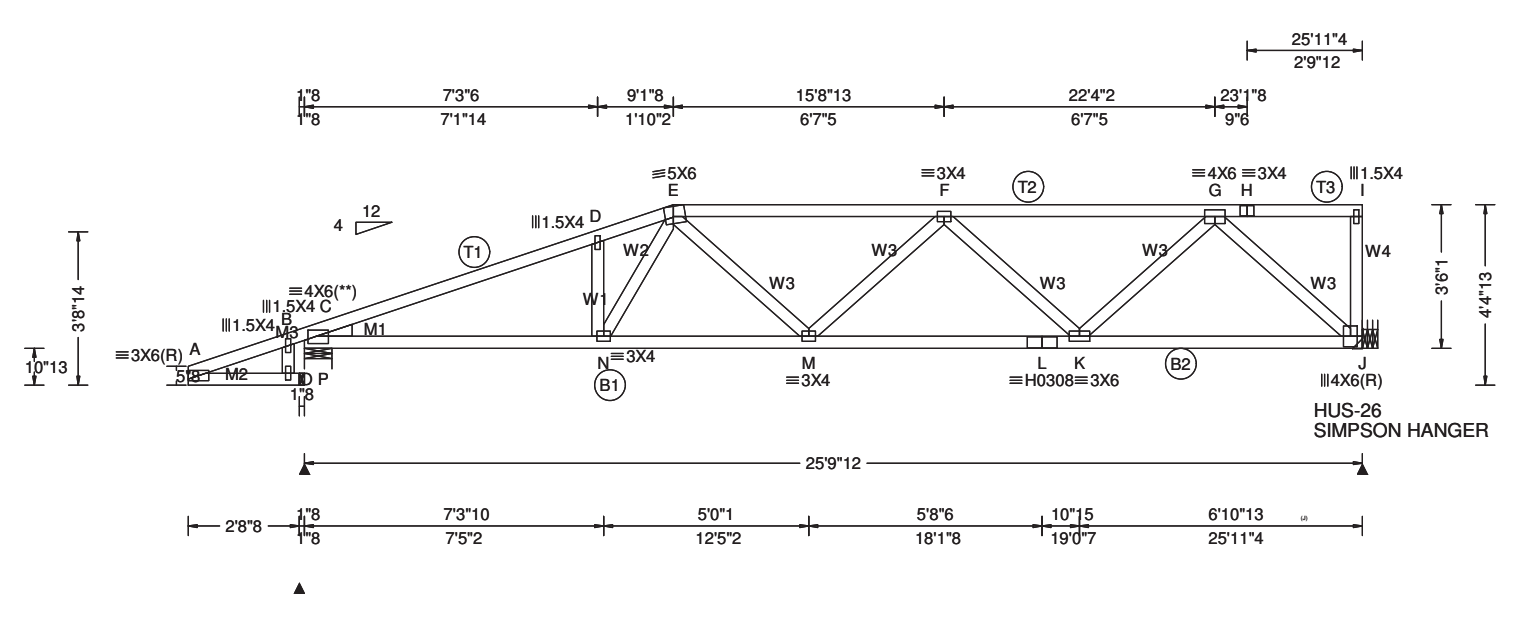
| Chords | Tens.Comp.  | Chords | Tens. Comp. |
|--------|-------------|--------|-------------|
| A - B  | 286 - 268   | E - F  | 970 - 1053  |
| B - C  | 313 - 273   | F - G  | 0 - 5       |
| C - D  | 1316 - 1907 | G - H  | 0 - 0       |
| D - E  | 1406 - 1839 |        |             |

**Maximum Bot Chord Forces Per Ply (lbs)**

| Chords | Tens.Comp.  | Chords | Tens. Comp. |
|--------|-------------|--------|-------------|
| C - K  | 1728 - 1407 | J - I  | 734 - 792   |
| K - J  | 1282 - 1199 |        |             |

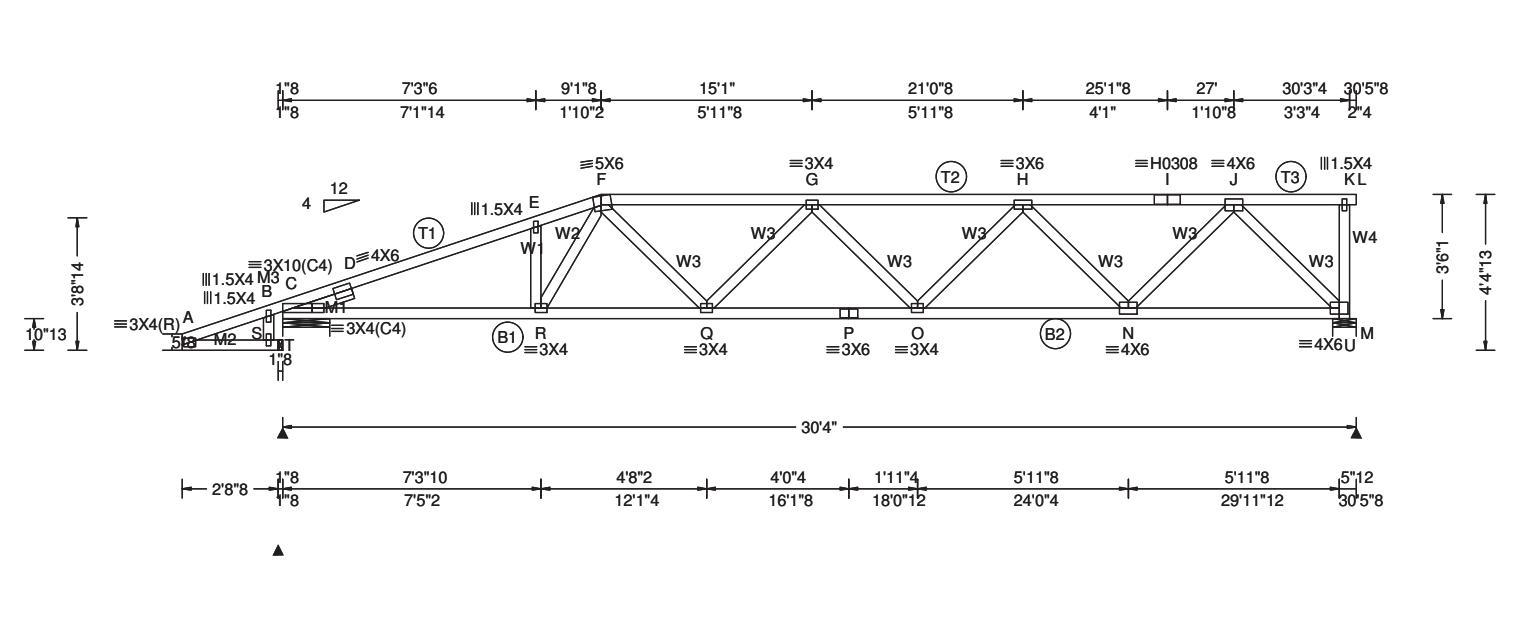
**Maximum Web Forces Per Ply (lbs)**

| Webs  | Tens.Comp. | Webs  | Tens. Comp. |
|-------|------------|-------|-------------|
| A - L | 300 - 247  | E - J | 381 - 380   |
| B - L | 53 - 14    | J - F | 528 - 295   |
| L - M | 307 - 247  | F - I | 1234 - 1139 |
| D - K | 321 - 422  | G - I | 136 - 87    |
| K - E | 684 - 304  |       |             |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            |                                               |                                               |                                     |             |       |       |       |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------|----------------|-------------------------------------|--------|----------------------------|-----------------------------------------------|-----------------------------------------------|-------------------------------------|-------------|-------|-------|-------|--------|
| <b>Loading Criteria</b> (psf)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |       | <b>Wind Criteria</b> |                | <b>Snow Criteria</b> (Pg,Pf in PSF) |        | <b>Defl/CSI Criteria</b>   |                                               | <b>▲ Maximum Reactions (lbs)</b>              |                                     |             |       |       |       |        |
| TCLL:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 30.00 | Wind Std:            | ASCE 7-22      | Pg: NA                              | Ct: NA | CAT: NA                    | PP Deflection in loc L/defl L/#               | Gravity                                       |                                     | Non-Gravity |       |       |       |        |
| TCDL:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 15.00 | Speed:               | 175 mph        | Pf: NA                              |        | Ce: NA                     | VERT(LL): 0.167 M 999 360                     | Loc                                           | R+ / R-                             | / Rh        | / Rw  | / U   | / RL  |        |
| BCLL:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.00  | Enclosure:           | Closed         | Lu: NA                              | Cs: NA |                            | VERT(CL): 0.299 M 999 240                     | P                                             | -                                   | /-          | /263  | /-    | /-    | /278   |
| BCDL:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 10.00 | Risk Category:       | II             | Snow Duration: NA                   |        |                            | HORZ(LL): 0.054 J - -                         | B                                             | 1683                                | /-          | /263  | /976  | /996  | /224   |
| Des Ld:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 55.00 | EXP: C               | Kzt: NA        |                                     |        |                            | HORZ(TL): 0.097 J - -                         | J                                             | 1408                                | /-          | /-    | /673  | /1263 | /-     |
| NCBCLL:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10.00 | Mean Height:         | 15.00 ft       |                                     |        | Building Code:             | Creep Factor: 2.0                             | Wind reactions based on C&C                   |                                     |             |       |       |       |        |
| Soffit:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2.00  | TCDL:                | 6.0 psf        |                                     |        | FBC 8th Ed. 2023 Res. HVHZ | Max TC CSI: 0.766                             | P                                             | Brg Wid = 1.5 Min Req = -           |             |       |       |       |        |
| Load Duration:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1.25  | BCDL:                | 6.0 psf        |                                     |        | TPI Std: 2014              | Max BC CSI: 0.864                             | B                                             | Brg Wid = 8.0 Min Req = 2.0 (Truss) |             |       |       |       |        |
| Spacing: 24.0 "                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       | MWFRS Parallel Dist: | h/2 to h       |                                     |        | Rep Fac: Yes               | Max Web CSI: 0.728                            | J                                             | Brg Wid = - Min Req = -             |             |       |       |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       | C&C Dist a:          | 3.00 ft        |                                     |        | FT/RT:20(0)/10(0)          | Mfg Specified Camber:                         | Bearing B is a rigid surface.                 |                                     |             |       |       |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       | Loc. from endwall:   | not in 9.00 ft |                                     |        | Plate Type(s):             |                                               | <b>Maximum Top Chord Forces Per Ply (lbs)</b> |                                     |             |       |       |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       | GCpi:                | 0.18           |                                     |        | WAVE, HS                   | VIEW Ver: 23.02.01A.1204.18                   | Chords                                        | Tens.Comp.                          | Chords      | Tens. | Comp. |       |        |
| <b>Lumber</b><br>Top chord: 2x4 SP #2; T2 2x4 SP #1;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;<br><br><b>Plating Notes</b><br>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.<br><br><b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>The maximum horizontal reaction is 263#<br>***** BEARING ANALOG MODIFIED! ***** |       |                      |                |                                     |        |                            | A - B                                         | 299                                           | -239                                | E - F       | 2171  | -2745 |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            | B - C                                         | 328                                           | -245                                | F - G       | 1801  | -2175 |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            | C - D                                         | 2017                                          | -3053                               | G - H       | 0     | -11   |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            | D - E                                         | 2053                                          | -2957                               | H - I       | 0     | -11   |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            | <b>Maximum Bot Chord Forces Per Ply (lbs)</b> |                                               |                                     |             |       |       |       | Chords |
| C - N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2807  | -2006                | L - K          | 2791                                | -2407  |                            |                                               |                                               |                                     |             |       |       |       |        |
| N - M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2574  | -1992                | K - J          | 1405                                | -1303  |                            |                                               |                                               |                                     |             |       |       |       |        |
| <b>Maximum Web Forces Per Ply (lbs)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |                      |                |                                     |        |                            | M - L                                         | 2791                                          | -2407                               |             |       |       |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            | Webs                                          | Tens.Comp.                                    | Webs                                | Tens.       | Comp. |       |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            | A - O                                         | 269                                           | -262                                | M - F       | 444   | -67   |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            | B - O                                         | 55                                            | -11                                 | F - K       | 878   | -860  |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            | O - P                                         | 278                                           | -264                                | K - G       | 1074  | -738  |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            | D - N                                         | 228                                           | -440                                | G - J       | 1747  | -1874 |       |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                      |                |                                     |        |                            | N - E                                         | 670                                           | -172                                | I - J       | 131   | -100  |       |        |
| E - M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 243   | -369                 |                |                                     |        |                            |                                               |                                               |                                     |             |       |       |       |        |

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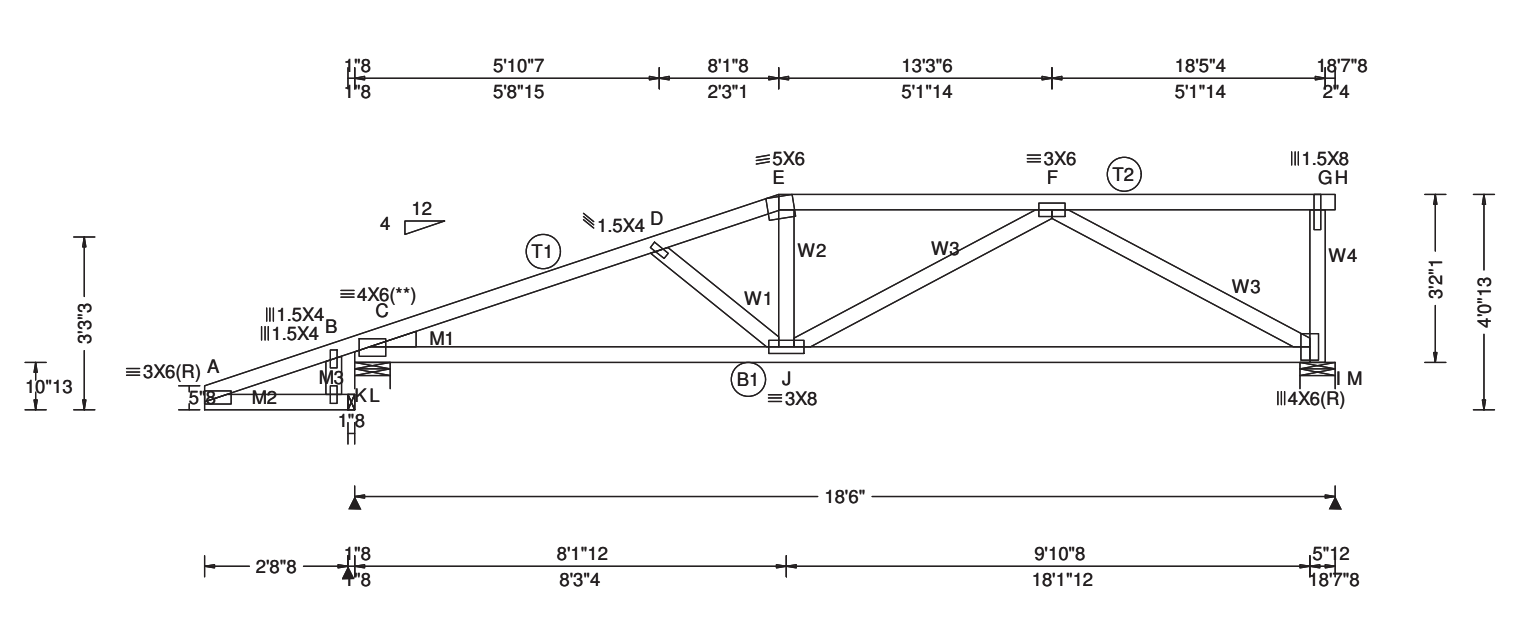
| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                     | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |                |                         |             |       |       |       |
|------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|----------------|-------------------------|-------------|-------|-------|-------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                            | PP Deflection in loc L/defl L/# | Gravity                                |                |                         | Non-Gravity |       |       |       |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                    | VERT(LL): -0.155 G 999 360      | Loc                                    | R+             | / R-                    | / Rh        | / Rw  | / U   | / RL  |
| BCLL: 0.00             | Enclosure: Part. Enc.             | Lu: NA Cs: NA                                                                                                                    | VERT(CL): 0.267 G 999 240       | T                                      | -              | /-                      | /268        | /-    | /-    | /275  |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                                | HORZ(LL): 0.032 K - -           | C                                      | 1930           | /-                      | /3136       | /1477 | /1428 | /2800 |
|                        | EXP: C Kzt: NA                    |                                                                                                                                  | HORZ(TL): 0.054 K - -           | U                                      | 1648           | /-                      | /2928       | /1163 | /1779 | /2999 |
| Des Ld: 55.00          | Mean Height: 15.00 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE, HS | Creep Factor: 2.0               | Wind reactions based on C&C            |                |                         |             |       |       |       |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                                                                                                                  | Max TC CSI: 0.908               | T                                      | Brg Wid = 1.5  | Min Req = -             |             |       |       |       |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                                  | Max BC CSI: 0.356               | C                                      | Brg Wid = 16.0 | Min Req = 2.3 (Truss)   |             |       |       |       |
| Load Duration: 1.25    | MWFRS Parallel Dist: h/2 to h     |                                                                                                                                  | Max Web CSI: 0.751              | U                                      | Brg Wid = 8.0  | Min Req = 1.5 (Support) |             |       |       |       |
| Spacing: 24.0 "        | C&C Dist a: 3.03 ft               |                                                                                                                                  | Mfg Specified Camber:           | Bearings C & M are a rigid surface.    |                |                         |             |       |       |       |
|                        | Loc. from endwall: not in 9.00 ft |                                                                                                                                  |                                 | Maximum Top Chord Forces Per Ply (lbs) |                |                         |             |       |       |       |
|                        | GCpi: 0.55                        |                                                                                                                                  |                                 | Chords                                 | Tens.Comp.     | Chords                  | Tens.       | Comp. |       |       |
|                        | Wind Duration: 1.60               |                                                                                                                                  | VIEW Ver: 23.02.01A.1204.18     | C                                      | F              | G                       | H           | I     | J     | K     |

|                                                                                                                                                                                               |                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2; T2 2x4 SP #1;<br>Bot chord: 2x4 SP #1; B2 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Slider: 2x4 SP #2; block length = 1.750'<br>Lt Level Return: 2x4 SP #2; | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.<br>Left bottom chord exposed to wind. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                             |                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Additional Notes</b><br>The maximum horizontal reaction is 3136#<br>***** BEARING ANALOG MODIFIED! ***** | <b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>C - R 815 -513 P - O 937 -1035<br>R - Q 257 -161 O - N 392 -615<br>Q - P 937 -1035 N - M 1318 -1397 |
|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>A - S 265 -263 G - O 428 -325<br>B - S 52 -10 O - H 479 -326<br>S - T 275 -268 H - N 1397 -1221<br>E - R 339 -441 N - J 1406 -1286<br>R - F 600 -276 J - M 2354 -2136<br>F - Q 605 -715 K - M 155 -103<br>Q - G 782 -438 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |               |      |                         |             |       |      |
|------------------------|-----------------------------------|------------------------------|---------------------------------|----------------------------------------|---------------|------|-------------------------|-------------|-------|------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# | Gravity                                |               |      | Non-Gravity             |             |       |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                | VERT(LL): 0.076 J 999 360       | Loc                                    | R+            | / R- | / Rh                    | / Rw        | / U   | / RL |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                | VERT(CL): 0.134 J 999 240       | L                                      | -             | /-   | /273                    | /-          | /-    | /328 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA            | HORZ(LL): -0.027 I - -          | B                                      | 1272          | /-   | /273                    | /774        | /941  | /222 |
|                        | EXP: C Kzt: NA                    |                              | HORZ(TL): 0.045 I - -           | M                                      | 1007          | /-   | /-                      | /480        | /1103 | /-   |
| Des Ld: 55.00          | Mean Height: 15.00 ft             |                              | Creep Factor: 2.0               | Wind reactions based on C&C            |               |      |                         |             |       |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     | Building Code:               | Max TC CSI: 0.819               | L                                      | Brg Wid = 1.5 |      | Min Req = -             |             |       |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ   | Max BC CSI: 0.986               | B                                      | Brg Wid = 8.0 |      | Min Req = 1.5 (Truss)   |             |       |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h/2 to h     | TPI Std: 2014                | Max Web CSI: 0.864              | M                                      | Brg Wid = 8.0 |      | Min Req = 1.5 (Support) |             |       |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               | Rep Fac: Yes                 | Mfg Specified Camber:           | Bearings B & I are a rigid surface.    |               |      |                         |             |       |      |
|                        | Loc. from endwall: not in 9.00 ft | FT/RT:20(0)/10(0)            |                                 | Maximum Top Chord Forces Per Ply (lbs) |               |      |                         |             |       |      |
|                        | GCpi: 0.18                        | Plate Type(s):               |                                 | Chords                                 | Tens.Comp.    |      | Chords                  | Tens. Comp. |       |      |
|                        | Wind Duration: 1.60               | WAVE                         | VIEW Ver: 23.02.01A.1204.18     |                                        |               |      |                         |             |       |      |

**Lumber**

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**

(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**

Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**

The maximum horizontal reaction is 273#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

**Maximum Top Chord Forces Per Ply (lbs)**

|        |            |       |        |             |       |
|--------|------------|-------|--------|-------------|-------|
| Chords | Tens.Comp. |       | Chords | Tens. Comp. |       |
| A - B  | 308        | -286  | E - F  | 1453        | -1620 |
| B - C  | 338        | -293  | F - G  | 8           | -37   |
| C - D  | 1586       | -2015 | G - H  | 0           | 0     |
| D - E  | 1477       | -1726 |        |             |       |

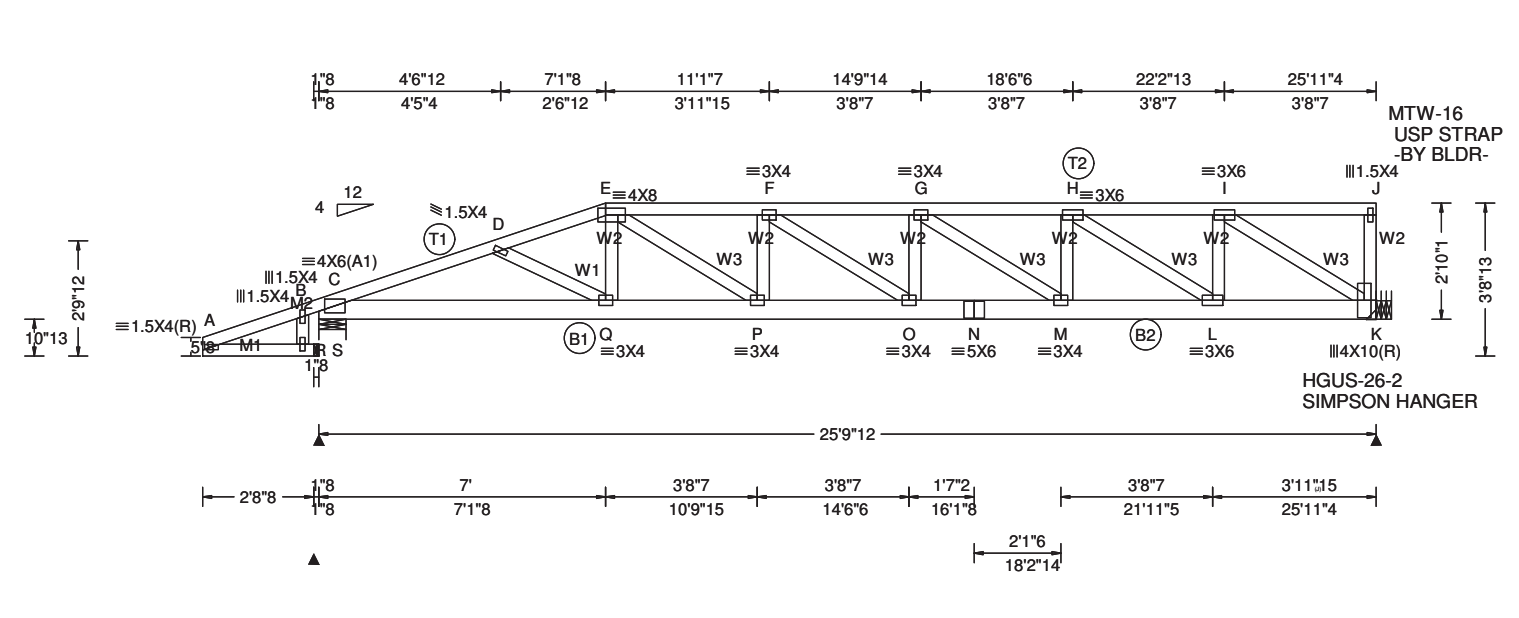
**Maximum Bot Chord Forces Per Ply (lbs)**

|        |            |       |        |             |       |
|--------|------------|-------|--------|-------------|-------|
| Chords | Tens.Comp. |       | Chords | Tens. Comp. |       |
| C - J  | 1842       | -1626 | J - I  | 1308        | -1483 |

**Maximum Web Forces Per Ply (lbs)**

|       |            |      |       |             |       |
|-------|------------|------|-------|-------------|-------|
| Webs  | Tens.Comp. |      | Webs  | Tens. Comp. |       |
| A - K | 320        | -275 | E - J | 254         | -28   |
| B - K | 56         | -16  | J - F | 525         | -11   |
| K - L | 328        | -278 | F - I | 1689        | -1466 |
| D - J | 231        | -366 | G - I | 325         | -207  |

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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |                   |         | Defl/CSI Criteria     |            |                             | ▲ Maximum Reactions (lbs)              |               |                       |             |             |       |      |
|------------------------|--------|----------------------|----------------|------------------------------|-------------------|---------|-----------------------|------------|-----------------------------|----------------------------------------|---------------|-----------------------|-------------|-------------|-------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA            | CAT: NA | PP Deflection in      | loc L/defl | L/#                         | Gravity                                |               |                       | Non-Gravity |             |       |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |                   | Ce: NA  | VERT(LL):             | 0.221 F    | 999 360                     | Loc                                    | R+            | / R-                  | / Rh        | / Rw        | / U   | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Closed         | Lu: NA                       | Cs: NA            |         | VERT(CL):             | 0.377 F    | 816 240                     | S                                      | -             | /-                    | /240        | /-          | /-    | /86  |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA                |         | HORZ(LL):             | 0.046 K    | - -                         | B                                      | 2935          | /-                    | /240        | /-          | /1360 | /86  |
|                        |        | EXP: C               | Kzt: NA        |                              |                   |         | HORZ(TL):             | 0.078 K    | - -                         | K                                      | 2026          | /-                    | /-          | /-          | /2359 | /-   |
| Des Ld:                | 55.00  | Mean Height:         | 15.00 ft       | Building Code:               |                   |         | Creep Factor:         | 2.0        |                             | Wind reactions based on MWFRS          |               |                       |             |             |       |      |
| NCBCLL:                | 0.00   | TCDL:                | 6.0 psf        | FBC 8th Ed. 2023 Res.        | HVHZ              |         | Max TC CSI:           | 0.560      |                             | S                                      | Brg Wid = 1.5 | Min Req = -           |             |             |       |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        | TPI Std:                     | 2014              |         | Max BC CSI:           | 0.760      |                             | B                                      | Brg Wid = 8.0 | Min Req = 1.7 (Truss) |             |             |       |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | 0 to h/2       | Rep Fac:                     | Varies by Ld Case |         | Max Web CSI:          | 0.372      |                             | K                                      | Brg Wid = -   | Min Req = -           |             |             |       |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        | FT/RT:                       | 20(0)/10(0)       |         | Mfg Specified Camber: |            |                             | Bearing B is a rigid surface.          |               |                       |             |             |       |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft | Plate Type(s):               |                   |         |                       |            |                             | Maximum Top Chord Forces Per Ply (lbs) |               |                       |             |             |       |      |
|                        |        | GCpi:                | 0.18           |                              |                   |         |                       |            |                             | Chords                                 | Tens.Comp.    |                       | Chords      | Tens. Comp. |       |      |
|                        |        | Wind Duration:       | 1.60           | WAVE                         |                   |         |                       |            | VIEW Ver: 23.02.01A.1204.18 |                                        |               |                       |             |             |       |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x6 SP #2;  
Webs: 2x4 SP #2;  
Lt Level Return: 2x4 SP #2;

**Nailnote**  
Nail Schedule:0.128"x3", min. nails  
Top Chord: 1 Row @12.00" o.c.  
Bot Chord: 1 Row @12.00" o.c.  
Webs : 1 Row @ 4" o.c.  
Use equal spacing between rows and stagger nails in each row to avoid splitting.

**Special Loads**  
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC: From 90 plf at -2.83 to 90 plf at 7.00  
TC: From 45 plf at 7.00 to 45 plf at 25.81  
BC: From 20 plf at 0.00 to 20 plf at 7.01  
BC: From 10 plf at 7.01 to 10 plf at 25.81  
PLB: From 4 plf at -2.79 to 4 plf at -0.17  
TC: 249 lb Conc. Load at 7.01, 9.06, 11.06, 13.06, 15.06, 17.06, 18.85  
TC: 105 lb Conc. Load at 20.85, 22.85, 24.85  
BC: 622 lb Conc. Load at 7.01  
BC: 118 lb Conc. Load at 9.06, 11.06, 13.06, 15.06, 17.06, 18.85  
BC: -159 lb Conc. Load at 20.85, 22.85, 24.85

**Wind**  
Wind loads and reactions based on MWFRS.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 240#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

**Maximum Reactions (lbs)**

| Gravity |         | Non-Gravity |      |     |       |     |
|---------|---------|-------------|------|-----|-------|-----|
| Loc     | R+ / R- | / Rh        | / Rw | / U | / RL  |     |
| S       | -       | /-          | /240 | /-  | /-    | /86 |
| B       | 2935    | /-          | /240 | /-  | /1360 | /86 |
| K       | 2026    | /-          | /-   | /-  | /2359 | /-  |

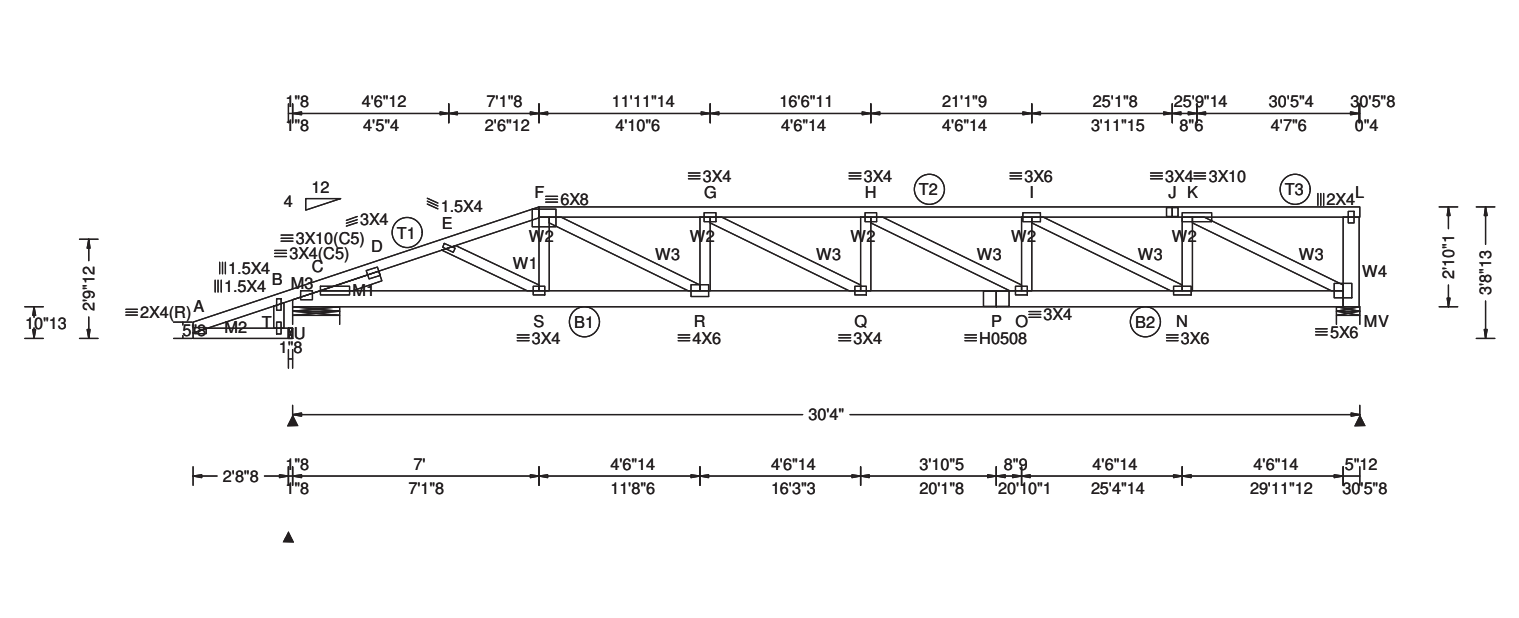
Wind reactions based on MWFRS  
S Brg Wid = 1.5 Min Req = -  
B Brg Wid = 8.0 Min Req = 1.7 (Truss)  
K Brg Wid = - Min Req = -  
Bearing B is a rigid surface.

| Maximum Top Chord Forces Per Ply (lbs) |            | Chords |             | Tens. Comp. |  |
|----------------------------------------|------------|--------|-------------|-------------|--|
| Chords                                 | Tens.Comp. | Chords | Tens. Comp. |             |  |
| A - B                                  | 140 -57    | F - G  | 1993 -3668  |             |  |
| B - C                                  | 153 -61    | G - H  | 1877 -2939  |             |  |
| C - D                                  | 1579 -3336 | H - I  | 1470 -1580  |             |  |
| D - E                                  | 1542 -3273 | I - J  | 7 -5        |             |  |
| E - F                                  | 1874 -3745 |        |             |             |  |

| Maximum Bot Chord Forces Per Ply (lbs) |            | Chords |             | Tens. Comp. |  |
|----------------------------------------|------------|--------|-------------|-------------|--|
| Chords                                 | Tens.Comp. | Chords | Tens. Comp. |             |  |
| C - Q                                  | 3117 -1473 | N - M  | 3645 -2005  |             |  |
| Q - P                                  | 3103 -1461 | M - L  | 2865 -1865  |             |  |
| P - O                                  | 3775 -1905 | L - K  | 1487 -1373  |             |  |
| O - N                                  | 3645 -2005 |        |             |             |  |

| Maximum Web Forces Per Ply (lbs) |            | Webs  |             | Tens. Comp. |  |
|----------------------------------|------------|-------|-------------|-------------|--|
| Webs                             | Tens.Comp. | Webs  | Tens. Comp. |             |  |
| A - R                            | 44 -118    | O - G | 196 0       |             |  |
| B - R                            | 15 -3      | G - M | 158 -871    |             |  |
| R - S                            | 43 -120    | M - H | 628 -103    |             |  |
| D - Q                            | 14 -152    | H - L | 487 -1585   |             |  |
| E - Q                            | 268 -15    | L - I | 790 -825    |             |  |
| E - P                            | 771 -496   | I - K | 1640 -1780  |             |  |
| P - F                            | 263 -250   | J - K | 39 -76      |             |  |
| F - O                            | 0 -131     |       |             |             |  |

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |                                       |      |             |             |          |    |
|------------------------|-----------------------------------|------------------------------|---------------------------------|----------------------------------------|---------------------------------------|------|-------------|-------------|----------|----|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# | Gravity                                |                                       |      | Non-Gravity |             |          |    |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                | VERT(LL): -0.470 Q 739 360      | Loc                                    | R+                                    | / R- | / Rh        | / Rw        | / U / RL |    |
| BCLL: 0.00             | Enclosure: Part. Enc.             | Lu: NA Cs: NA                | VERT(CL): 0.533 Q 652 240       | U                                      | -                                     | /-   | /0          | /-          | /-       | /0 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA            | HORZ(LL): 0.090 L - -           | B                                      | 3443                                  | /-   | /-          | /-          | /3030    | /- |
| Des Ld: 55.00          | EXP: C Kzt: NA                    |                              | HORZ(TL): 0.115 L - -           | V                                      | 3120                                  | /-   | /-          | /-          | /2972    | /- |
| NCBCLL: 0.00           | Mean Height: 15.00 ft             | Building Code:               | Creep Factor: 2.0               | C                                      | /-168                                 |      |             |             |          |    |
| Soffit: 2.00           | TCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ   | Max TC CSI: 0.952               | Wind reactions based on MWFRS          |                                       |      |             |             |          |    |
| Load Duration: 1.25    | BCDL: 6.0 psf                     | TPI Std: 2014                | Max BC CSI: 0.863               | U                                      | Brg Wid = 1.5 Min Req = -             |      |             |             |          |    |
| Spacing: 24.0 "        | MWFRS Parallel Dist: 0 to h/2     | Rep Fac: No                  | Max Web CSI: 0.673              | B                                      | Brg Wid = 16.0 Min Req = 1.5 (Truss)  |      |             |             |          |    |
|                        | C&C Dist a: 3.03 ft               | FT/RT:20(0)/10(0)            | Mfg Specified Camber:           | V                                      | Brg Wid = 8.0 Min Req = 1.5 (Support) |      |             |             |          |    |
|                        | Loc. from endwall: not in 9.00 ft | Plate Type(s):               |                                 | Bearings B & V are a rigid surface.    |                                       |      |             |             |          |    |
|                        | GCpi: 0.55                        | WAVE, HS                     | VIEW Ver: 23.02.01A.1204.18     | Maximum Top Chord Forces Per Ply (lbs) |                                       |      |             |             |          |    |
|                        | Wind Duration: 1.60               |                              |                                 | Chords                                 | Tens.Comp.                            |      | Chords      | Tens. Comp. |          |    |

**Lumber**  
Top chord: 2x4 SP #2; T1 2x4 SP #1;  
Bot chord: 2x6 SP M-26; B2 2x6 SP #2;  
Webs: 2x4 SP #2; W4 2x6 SP #2;  
Lt Slider: 2x4 SP #2; block length = 1.750'  
Lt Level Return: 2x4 SP #2;

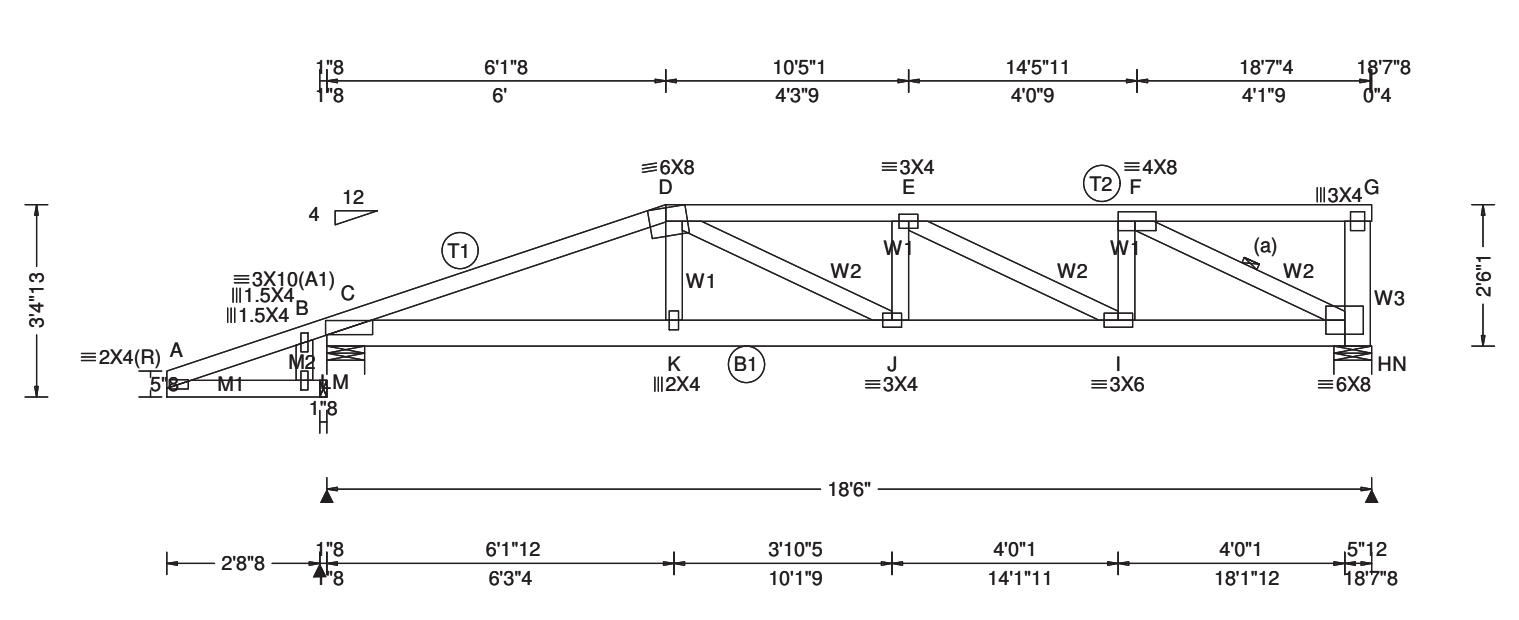
**Nailnote**  
Nail Schedule:0.128"x3", min. nails  
Top Chord: 1 Row @11.25" o.c.  
Bot Chord: 1 Row @12.00" o.c.  
Webs : 1 Row @ 4" o.c.  
Use equal spacing between rows and stagger nails  
in each row to avoid splitting.

**Special Loads**  
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC: From 90 plf at -2.83 to 90 plf at 7.00  
TC: From 45 plf at 7.00 to 45 plf at 30.33  
BC: From 20 plf at 0.00 to 20 plf at 7.01  
BC: From 10 plf at 7.01 to 10 plf at 29.85  
PLB: From 4 plf at -2.79 to 4 plf at -0.17  
TC: 230 lb Conc. Load at 7.01, 9.06,11.06,13.06  
15.06,17.06,19.06,21.06,23.06,25.06,27.06,29.06  
BC: 479 lb Conc. Load at 7.01  
BC: 93 lb Conc. Load at 9.06,11.06,13.06,15.06  
17.06,19.06,21.06,23.06,25.06,27.06,29.06

**Wind**  
Wind loads and reactions based on MWFRS.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

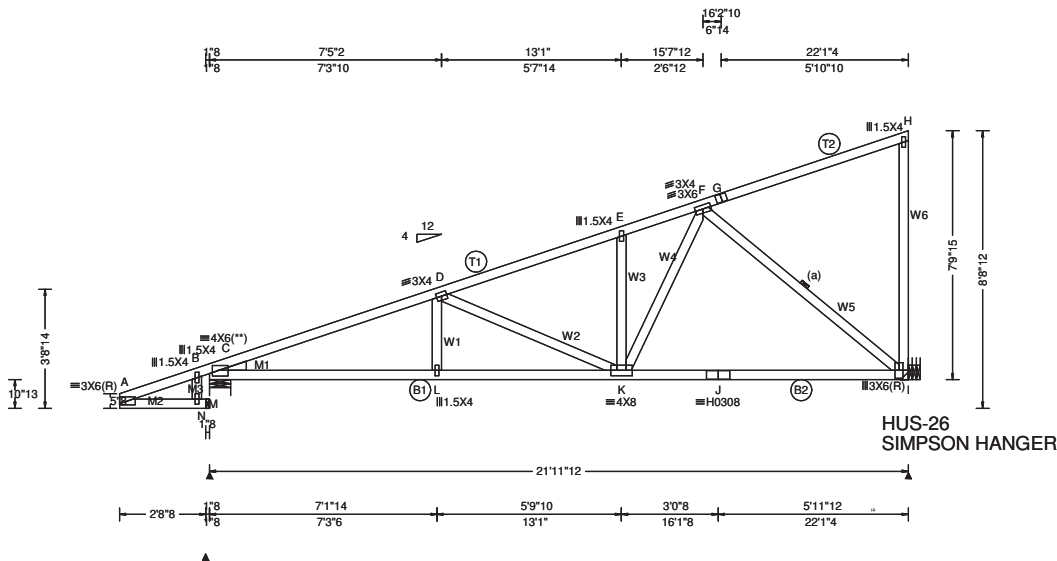
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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |                   |         | Defl/CSI Criteria     |            |                             | ▲ Maximum Reactions (lbs)              |               |                         |             |       |          |      |
|------------------------|--------|----------------------|----------------|------------------------------|-------------------|---------|-----------------------|------------|-----------------------------|----------------------------------------|---------------|-------------------------|-------------|-------|----------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA            | CAT: NA | PP Deflection in      | loc L/defl | L/#                         | Gravity                                |               |                         | Non-Gravity |       |          |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |                   | Ce: NA  | VERT(LL):             | 0.156      | J 999 360                   | Loc                                    | R+            | / R-                    | / Rh        | / Rw  | / U / RL |      |
| BCLL:                  | 0.00   | Enclosure:           | Closed         |                              | Na: NA            | Cs: NA  | VERT(CL):             | 0.282      | J 779 240                   | M                                      | -             | /-                      | /243        | /-    | /-       | /110 |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA                |         | HORZ(LL):             | 0.028      | H - -                       | B                                      | 2124          | /-                      | /243        | /-    | /827     | /110 |
|                        |        | EXP:                 | C Kzt: NA      |                              |                   |         | HORZ(TL):             | 0.051      | H - -                       | N                                      | 2013          | /-                      | /-          | /-    | /739     | /-   |
| Des Ld:                | 55.00  | Mean Height:         | 15.00 ft       |                              |                   |         | Creep Factor:         | 2.0        |                             | Wind reactions based on MWFRS          |               |                         |             |       |          |      |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        | Building Code:               |                   |         | Max TC CSI:           | 0.791      |                             | M                                      | Brg Wid = 1.5 | Min Req = -             |             |       |          |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        | FBC 8th Ed. 2023 Res.        | HVHZ              |         | Max BC CSI:           | 0.369      |                             | B                                      | Brg Wid = 8.0 | Min Req = 1.8 (Truss)   |             |       |          |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | 0 to h/2       | TPI Std:                     | 2014              |         | Max Web CSI:          | 0.482      |                             | N                                      | Brg Wid = 8.0 | Min Req = 1.5 (Support) |             |       |          |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        | Rep Fac:                     | Varies by Ld Case |         | Mfg Specified Camber: |            |                             | Bearings B & N are a rigid surface.    |               |                         |             |       |          |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft | FT/RT:                       | 20(0)/10(0)       |         |                       |            |                             | Maximum Top Chord Forces Per Ply (lbs) |               |                         |             |       |          |      |
|                        |        | GCpi:                | 0.18           | Plate Type(s):               |                   |         |                       |            |                             | Chords                                 | Tens.Comp.    | Chords                  | Tens.       | Comp. |          |      |
|                        |        | Wind Duration:       | 1.60           | WAVE                         |                   |         |                       |            | VIEW Ver: 23.02.01A.1204.18 |                                        |               |                         |             |       |          |      |

|                                                                                                                                    |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x6 SP M-26;<br>Webs: 2x4 SP #2; W3 2x6 SP #2;<br>Lt Level Return: 2x4 SP #2; | <b>Bracing</b><br>(a) Continuous lateral restraint equally spaced on member. | <b>Special Loads</b><br>----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)<br>TC: From 90 plf at -2.83 to 90 plf at 6.00<br>TC: From 45 plf at 6.00 to 45 plf at 18.50<br>BC: From 20 plf at 0.00 to 20 plf at 5.96<br>BC: From 10 plf at 5.96 to 10 plf at 18.02<br>PLB: From 4 plf at -2.79 to 4 plf at -0.17<br>TC: 217 lb Conc. Load at 5.96<br>TC: 220 lb Conc. Load at 7.15, 9.15, 11.15, 13.15<br>15.15, 17.15<br>BC: 367 lb Conc. Load at 5.96<br>BC: 106 lb Conc. Load at 7.15, 9.15, 11.15, 13.15<br>15.15, 17.15<br><br><b>Wind</b><br>Wind loads and reactions based on MWFRS.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>The maximum horizontal reaction is 243#<br>***** BEARING ANALOG MODIFIED! ***** |  |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

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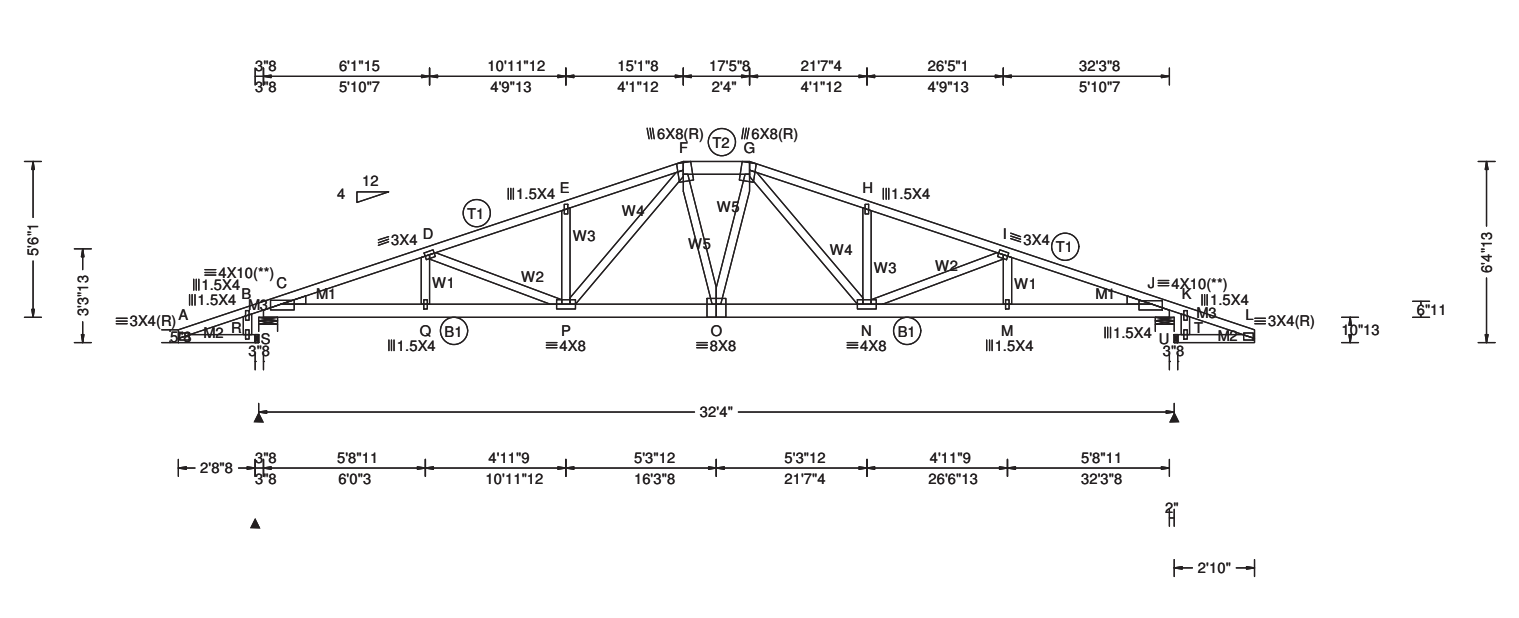


|                                                                                                                       |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |
|-----------------------------------------------------------------------------------------------------------------------|--------|----------------------|----------------|-------------------------------------|----------------|--------------------------|----|----------------------------------|-----------------------|-----------------------------------------------|-----------------------------------------------|------------|-------------|--------|-------------|-------|------|
| <b>Loading Criteria</b> (psf)                                                                                         |        | <b>Wind Criteria</b> |                | <b>Snow Criteria</b> (Pg,Pf in PSF) |                | <b>Defl/CSI Criteria</b> |    | <b>▲ Maximum Reactions (lbs)</b> |                       |                                               |                                               |            |             |        |             |       |      |
| TCLL:                                                                                                                 | 30.00  | Wind Std:            | ASCE 7-22      | Pg:                                 | NA             | Ct:                      | NA | CAT:                             | NA                    | Gravity                                       |                                               |            | Non-Gravity |        |             |       |      |
| TCDL:                                                                                                                 | 15.00  | Speed:               | 175 mph        | Pf:                                 | NA             |                          |    | Ce:                              | NA                    | Loc                                           | R+                                            | / R-       | / Rh        | / Rw   | / U         | / RL  |      |
| BCLL:                                                                                                                 | 0.00   | Enclosure:           | Closed         | Lu:                                 | NA             | Cs:                      | NA |                                  |                       | N                                             | -                                             | /-         | /257        | /-     | /-          | /267  |      |
| BCDL:                                                                                                                 | 10.00  | Risk Category:       | II             | Snow Duration:                      | NA             |                          |    |                                  |                       |                                               | B                                             | 1498       | /-          | /257   | /961        | /599  | /434 |
| Des Ld:                                                                                                               | 55.00  | EXP:                 | C              | Kzt:                                | NA             |                          |    |                                  |                       |                                               | I                                             | 1263       | /-          | /-     | /805        | /526  | /-   |
| NCBCLL:                                                                                                               | 10.00  | Mean Height:         | 15.69 ft       |                                     |                |                          |    |                                  |                       |                                               | Wind reactions based on C&C                   |            |             |        |             |       |      |
| Soffit:                                                                                                               | 2.00   | TCDL:                | 6.0 psf        | Building Code:                      |                |                          |    |                                  | Creep Factor:         | 2.0                                           | N Brg Wid = 1.5 Min Req = -                   |            |             |        |             |       |      |
| Load Duration:                                                                                                        | 1.25   | BCDL:                | 6.0 psf        | FBC 8th Ed.                         | 2023 Res. HVHZ |                          |    |                                  | Max TC CSI:           | 0.839                                         | B Brg Wid = 8.0 Min Req = 1.8 (Truss)         |            |             |        |             |       |      |
| Spacing:                                                                                                              | 24.0 " | MWFRS Parallel Dist: | h to 2h        | TPI Std:                            | 2014           |                          |    |                                  | Max BC CSI:           | 0.787                                         | I Brg Wid = - Min Req = -                     |            |             |        |             |       |      |
|                                                                                                                       |        | C&C Dist a:          | 3.00 ft        | Rep Fac:                            | Yes            |                          |    |                                  | Max Web CSI:          | 0.596                                         | Bearing B is a rigid surface.                 |            |             |        |             |       |      |
|                                                                                                                       |        | Loc. from endwall:   | not in 9.00 ft | FT/RT:                              | 20(0)/10(0)    |                          |    |                                  | Mfg Specified Camber: |                                               | <b>Maximum Top Chord Forces Per Ply (lbs)</b> |            |             |        |             |       |      |
|                                                                                                                       |        | GCpi:                | 0.18           | Plate Type(s):                      |                |                          |    |                                  |                       |                                               | Chords                                        | Tens.Comp. |             | Chords | Tens. Comp. |       |      |
|                                                                                                                       |        | Wind Duration:       | 1.60           | WAVE, HS                            |                |                          |    |                                  | VIEW Ver:             | 23.02.01A.1204.18                             | A - B                                         | 294        | -233        | E - F  | 454         | -1639 |      |
| <b>Lumber</b>                                                                                                         |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |
| Top chord: 2x4 SP #2;                                                                                                 |        |                      |                |                                     |                |                          |    |                                  |                       | B - C 323 -235 F - G 6 -109                   |                                               |            |             |        |             |       |      |
| Bot chord: 2x4 SP #1;                                                                                                 |        |                      |                |                                     |                |                          |    |                                  |                       | C - D 675 -2546 G - H 76 -91                  |                                               |            |             |        |             |       |      |
| Webs: 2x4 SP #2;                                                                                                      |        |                      |                |                                     |                |                          |    |                                  |                       | D - E 391 -1722                               |                                               |            |             |        |             |       |      |
| Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;                                                                       |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |
| <b>Bracing</b>                                                                                                        |        |                      |                |                                     |                |                          |    |                                  |                       | <b>Maximum Bot Chord Forces Per Ply (lbs)</b> |                                               |            |             |        |             |       |      |
| (a) Continuous lateral restraint equally spaced on member.                                                            |        |                      |                |                                     |                |                          |    |                                  |                       | Chords Tens.Comp. Chords Tens. Comp.          |                                               |            |             |        |             |       |      |
|                                                                                                                       |        |                      |                |                                     |                |                          |    |                                  |                       | C - L 2334 -1020 K - J 1124 -495              |                                               |            |             |        |             |       |      |
|                                                                                                                       |        |                      |                |                                     |                |                          |    |                                  |                       | L - K 2332 -1023 J - I 1124 -495              |                                               |            |             |        |             |       |      |
| <b>Plating Notes</b>                                                                                                  |        |                      |                |                                     |                |                          |    |                                  |                       | <b>Maximum Web Forces Per Ply (lbs)</b>       |                                               |            |             |        |             |       |      |
| (**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements. |        |                      |                |                                     |                |                          |    |                                  |                       | Webs Tens.Comp. Webs Tens. Comp.              |                                               |            |             |        |             |       |      |
|                                                                                                                       |        |                      |                |                                     |                |                          |    |                                  |                       | A - M 262 -262 E - K 173 -258                 |                                               |            |             |        |             |       |      |
|                                                                                                                       |        |                      |                |                                     |                |                          |    |                                  |                       | B - M 55 -10 K - F 992 -276                   |                                               |            |             |        |             |       |      |
|                                                                                                                       |        |                      |                |                                     |                |                          |    |                                  |                       | M - N 267 -263 F - I 642 -1457                |                                               |            |             |        |             |       |      |
|                                                                                                                       |        |                      |                |                                     |                |                          |    |                                  |                       | L - D 182 0 H - I 162 -242                    |                                               |            |             |        |             |       |      |
|                                                                                                                       |        |                      |                |                                     |                |                          |    |                                  |                       | D - K 449 -863                                |                                               |            |             |        |             |       |      |
| <b>Wind</b>                                                                                                           |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |
| Member design based on both MWFRS and C&C.                                                                            |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |
| Right end vertical not exposed to wind pressure.                                                                      |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |
| Wind loading based on both gable and hip roof types.                                                                  |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |
| Left bottom chord exposed to wind.                                                                                    |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |
| <b>Additional Notes</b>                                                                                               |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |
| The maximum horizontal reaction is 257#                                                                               |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |
| ***** BEARING ANALOG MODIFIED! *****                                                                                  |        |                      |                |                                     |                |                          |    |                                  |                       |                                               |                                               |            |             |        |             |       |      |

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)             |
|------------------------|-----------------------------------|------------------------------|---------------------------------|---------------------------------------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# | Gravity Non-Gravity                   |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                | VERT(LL): 0.247 O 999 360       | Loc R+ / R- / Rh / Rw / U / RL        |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                | VERT(CL): 0.442 O 861 240       | S - - /- /255 /- /- /289              |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA            | HORZ(LL): 0.057 J - -           | B 2019 /- /264 /1197 /748 /308        |
| Des Ld: 55.00          | EXP: C Kzt: NA                    | Building Code:               | HORZ(TL): 0.102 J - -           | K 2033 /- /- /1169 /751 /-            |
| NCBCLL: 10.00          | Mean Height: 23.03 ft             | FBC 8th Ed. 2023 Res. HVHZ   | Creep Factor: 2.0               | T - - /- /54 /- /- /446               |
| Soffit: 2.00           | TCDL: 6.0 psf                     | TPI Std: 2014                | Max TC CSI: 0.907               | Wind reactions based on C&C           |
| Load Duration: 1.25    | BCDL: 6.0 psf                     | Rep Fac: Yes                 | Max BC CSI: 0.869               | S Brg Wid = 1.5 Min Req = -           |
| Spacing: 24.0 "        | MWFRS Parallel Dist: h/2 to h     | FT/RT:20(0)/10(0)            | Max Web CSI: 0.293              | B Brg Wid = 8.0 Min Req = 2.4 (Truss) |
|                        | C&C Dist a: 3.23 ft               | Plate Type(s):               | Mfg Specified Camber:           | K Brg Wid = 8.0 Min Req = 2.4 (Truss) |
|                        | Loc. from endwall: not in 9.00 ft | WAVE                         | VIEW Ver: 23.02.01A.1204.18     | T Brg Wid = 1.5 Min Req = -           |
|                        | GCpi: 0.18                        |                              |                                 | Bearings B & J are a rigid surface.   |
|                        | Wind Duration: 1.60               |                              |                                 |                                       |

|                                                                                                                                                                                                             |                                                                                                                                               |                                                                                                                   |                                                                                                            |                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2; T2 2x6 SP #2;<br>Bot chord: 2x6 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x4 SP #2;Rt Wedge: 2x4 SP #2;<br>Lt Level Return: 2x4 SP #2;<br>Rt Level Return: 2x4 SP #2; | <b>Plating Notes</b><br>(**) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements. | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types. | <b>Additional Notes</b><br>The maximum horizontal reaction is 264#<br>***** BEARING ANALOG MODIFIED! ***** | <b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 292 -197 G - H 1439 -3480<br>B - C 325 -197 H - I 1340 -3495<br>C - D 1461 -3952 I - J 1439 -3840<br>D - E 1344 -3517 J - K 518 -422<br>E - F 1443 -3500 K - L 454 -386<br>F - G 1191 -2685 | <b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>C - Q 3720 -1294 O - N 2703 -984<br>Q - P 3724 -1300 N - M 3618 -1203<br>P - O 2707 -1019 M - J 3611 -1198 | <b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>A - R 222 -285 O - G 183 -95<br>B - R 57 -6 G - N 919 -395<br>R - S 228 -289 N - H 268 -404<br>Q - D 125 -91 N - I 219 -359<br>D - P 237 -453 I - M 146 -134<br>E - P 267 -401 T - U 410 -446<br>P - F 944 -400 U - K 163 -114<br>F - O 177 -96 U - L 409 -451 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!

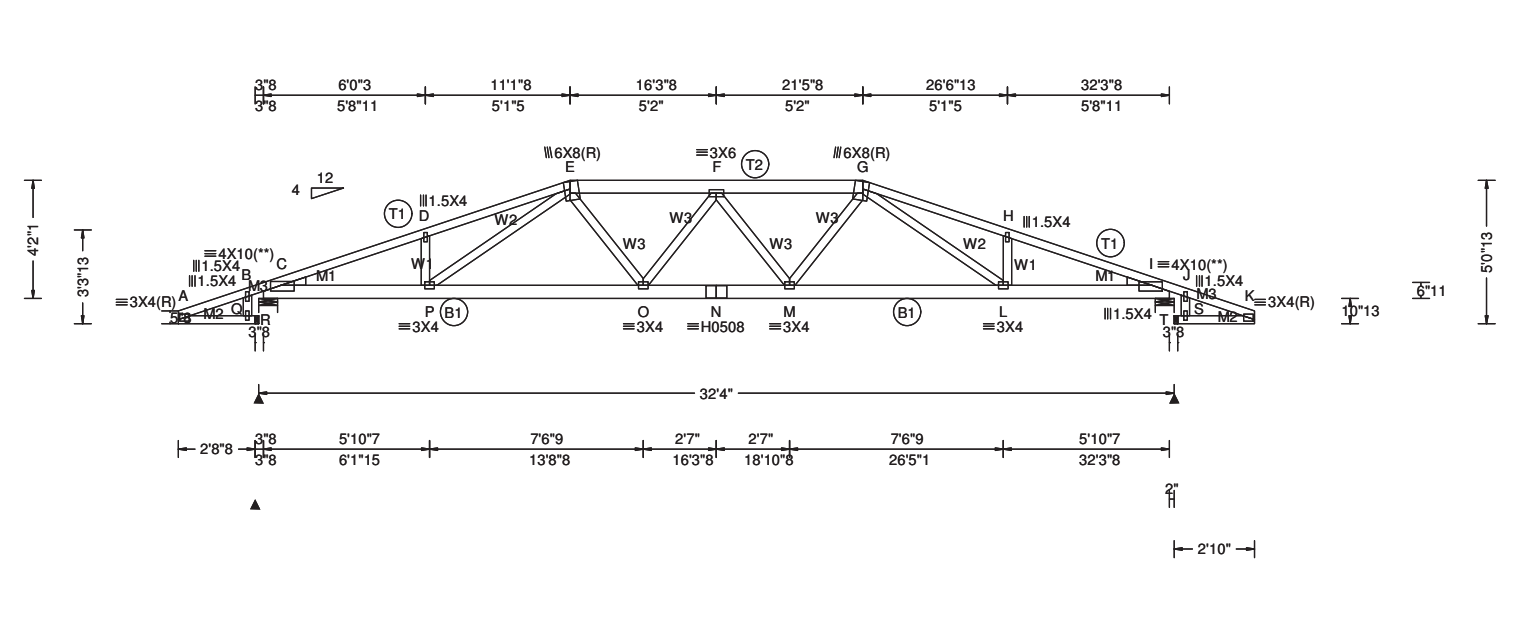
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCEA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCEA: [sbceacomponents.com](http://sbceacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)





| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                     |  |  | Defl/CSI Criteria                   |  |  | ▲ Maximum Reactions (lbs)              |           |      |                   |           |       |         |    |      |
|------------------------|--|-----------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|--|--|-------------------------------------|--|--|----------------------------------------|-----------|------|-------------------|-----------|-------|---------|----|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                            |  |  | PP Deflection in loc L/defl L/#     |  |  | Gravity                                |           |      | Non-Gravity       |           |       |         |    |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                    |  |  | VERT(LL): 0.262 F 999 360           |  |  | Loc                                    | R+        | / R- | / Rh              | / Rw      | / U   | / RL    |    |      |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                    |  |  | VERT(CL): 0.469 F 811 240           |  |  | R                                      | -         | /-   | /256              | /-        | /-    | /290    |    |      |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                                |  |  | HORZ(LL): 0.060 I - -               |  |  | B                                      | 2019      | /-   | /268              | /1080     | /1039 | /297    |    |      |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE, HS |  |  | HORZ(TL): 0.107 I - -               |  |  | J                                      | 2034      | /-   | /-                | /1176     | /1046 | /-      |    |      |
| NCBCLL: 10.00          |  | Mean Height: 22.37 ft             |  |                                                                                                                                  |  |  | Creep Factor: 2.0                   |  |  | S                                      |           |      | -                 | /-        | /57   | /-      | /- | /438 |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                                  |  |  | Max TC CSI: 0.928                   |  |  | Wind reactions based on C&C            |           |      |                   |           |       |         |    |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                                  |  |  | Max BC CSI: 0.891                   |  |  | R                                      |           |      | Brg               | Wid = 1.5 | Min   | Req = - |    |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h to 2h      |  | Max Web CSI: 0.146                                                                                                               |  |  | B                                   |  |  | Brg                                    | Wid = 8.0 | Min  | Req = 2.4 (Truss) |           |       |         |    |      |
|                        |  | C&C Dist a: 3.23 ft               |  | Mfg Specified Camber:                                                                                                            |  |  | J                                   |  |  | Brg                                    | Wid = 8.0 | Min  | Req = 2.4 (Truss) |           |       |         |    |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | VIEW Ver: 23.02.01A.1204.18                                                                                                      |  |  | S                                   |  |  | Brg                                    | Wid = 1.5 | Min  | Req = -           |           |       |         |    |      |
|                        |  | GCpi: 0.18                        |  |                                                                                                                                  |  |  | Bearings B & I are a rigid surface. |  |  |                                        |           |      |                   |           |       |         |    |      |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                                  |  |  |                                     |  |  | Maximum Top Chord Forces Per Ply (lbs) |           |      |                   |           |       |         |    |      |

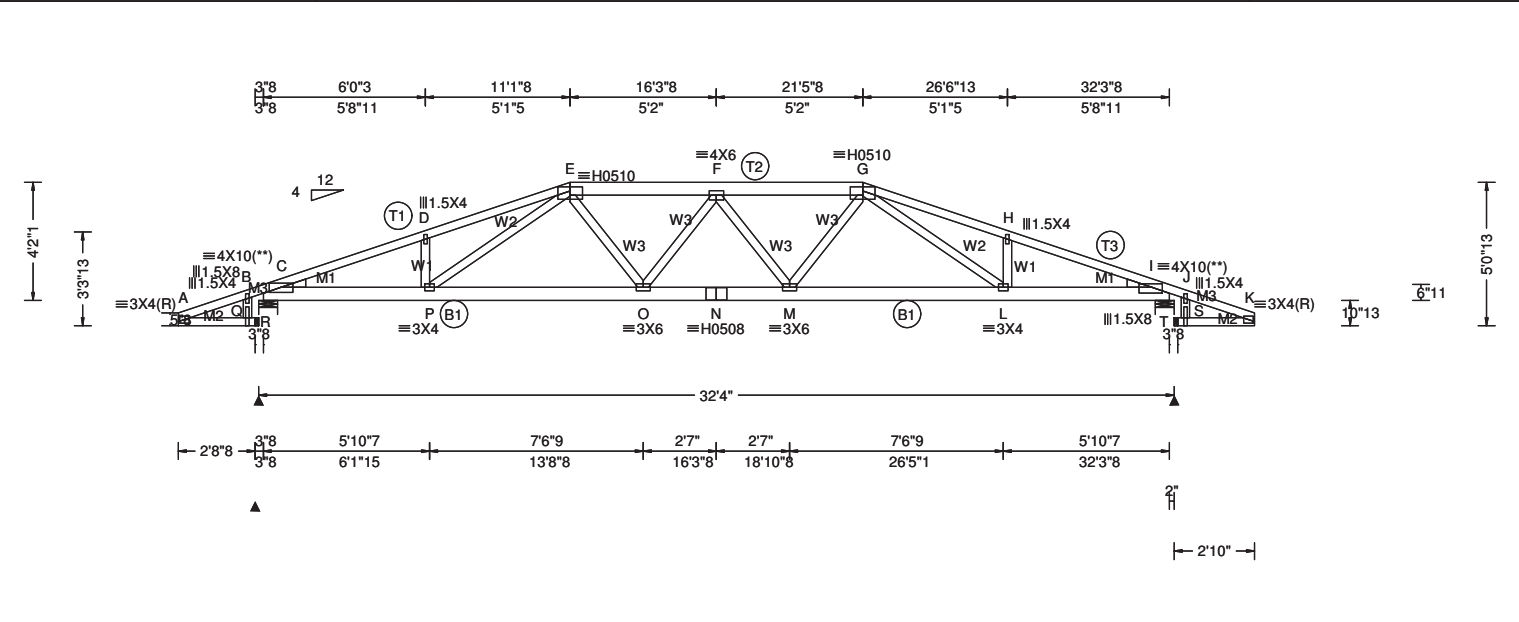
**Lumber**  
Top chord: 2x4 SP #2; T2 2x6 SP #2;  
Bot chord: 2x6 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Rt Wedge: 2x4 SP #2;  
Lt Level Return: 2x4 SP #2;  
Rt Level Return: 2x4 SP #2;

**Plating Notes**  
(\*\*) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 268#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |        |         | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs)              |               |      |                       |       |       |      |
|------------------------|--------|----------------------|----------------|------------------------------|--------|---------|---------------------------------|--|----------------------------------------|---------------|------|-----------------------|-------|-------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA | CAT: NA | PP Deflection in loc L/defl L/# |  | Gravity                                |               |      | Non-Gravity           |       |       |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |        | Ce: NA  | VERT(LL): -0.269 F 999 360      |  | Loc                                    | R+            | / R- | / Rh                  | / Rw  | / U   | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Part. Enc.     | Lu: NA                       | Cs: NA |         | VERT(CL): 0.455 F 835 240       |  | R                                      | -             | /-   | /257                  | /-    | /-    | /543 |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration: NA            |        |         | HORZ(LL): 0.063 I - -           |  | B                                      | 2018          | /-   | /280                  | /1881 | /1844 | /682 |
|                        |        | EXP:                 | C Kzt: NA      |                              |        |         | HORZ(TL): 0.107 I - -           |  | J                                      | 2034          | /-   | /-                    | /1293 | /1699 | /-   |
| Des Ld:                | 55.00  | Mean Height:         | 22.37 ft       |                              |        |         | Creep Factor: 2.0               |  | S                                      | -             | /-   | /72                   | /-    | /-    | /483 |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        | Building Code:               |        |         | Max TC CSI: 0.955               |  | Wind reactions based on C&C            |               |      |                       |       |       |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        | FBC 8th Ed. 2023 Res. HVHZ   |        |         | Max BC CSI: 0.890               |  | R                                      | Brg Wid = 1.5 |      | Min Req = -           |       |       |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | h/2 to h       | TPI Std: 2014                |        |         | Max Web CSI: 0.341              |  | B                                      | Brg Wid = 8.0 |      | Min Req = 2.4 (Truss) |       |       |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.23 ft        | Rep Fac: Yes                 |        |         | Mfg Specified Camber:           |  | J                                      | Brg Wid = 8.0 |      | Min Req = 2.4 (Truss) |       |       |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft | FT/RT:20(0)/10(0)            |        |         | VIEW Ver: 23.02.01A.1204.18     |  | S                                      | Brg Wid = 1.5 |      | Min Req = -           |       |       |      |
|                        |        | GCpi:                | 0.55           | Plate Type(s):               |        |         |                                 |  | Bearings B & I are a rigid surface.    |               |      |                       |       |       |      |
|                        |        | Wind Duration:       | 1.60           | WAVE, HS                     |        |         |                                 |  | Maximum Top Chord Forces Per Ply (lbs) |               |      |                       |       |       |      |

| <b>Lumber</b><br>Top chord: 2x4 SP #2; T2 2x6 SP #2;<br>T3 2x4 SP #1;<br>Bot chord: 2x6 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x4 SP #2;Rt Wedge: 2x4 SP #2;<br>Lt Level Return: 2x4 SP #2;<br>Rt Level Return: 2x4 SP #2;                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Plating Notes</b><br>(**) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements. | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types.<br>Left bottom chord exposed to wind. | <b>Additional Notes</b><br>The maximum horizontal reaction is 280#<br>***** BEARING ANALOG MODIFIED! ***** |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------|------------|--------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-----------|-------|-------------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|
| <b>Maximum Top Chord Forces Per Ply (lbs)</b> <table><thead><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr></thead><tbody><tr><td>A - B</td><td>550 - 467</td><td>F - G</td><td>4009 - 3524</td></tr><tr><td>B - C</td><td>631 - 519</td><td>G - H</td><td>3971 - 3825</td></tr><tr><td>C - D</td><td>3814 - 3985</td><td>H - I</td><td>3882 - 3872</td></tr><tr><td>D - E</td><td>3895 - 3942</td><td>I - J</td><td>574 - 469</td></tr><tr><td>E - F</td><td>3954 - 3534</td><td>J - K</td><td>501 - 425</td></tr></tbody></table>                                                                                                                             |                                                                                                                                               |                                                                                                                                                         |                                                                                                            | Chords | Tens.Comp. | Chords | Tens. Comp. | A - B | 550 - 467   | F - G | 4009 - 3524 | B - C | 631 - 519   | G - H | 3971 - 3825 | C - D | 3814 - 3985 | H - I | 3882 - 3872 | D - E | 3895 - 3942 | I - J | 574 - 469 | E - F | 3954 - 3534 | J - K | 501 - 425 |       |           |       |           |       |           |       |           |
| Chords                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Tens.Comp.                                                                                                                                    | Chords                                                                                                                                                  | Tens. Comp.                                                                                                |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| A - B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 550 - 467                                                                                                                                     | F - G                                                                                                                                                   | 4009 - 3524                                                                                                |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| B - C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 631 - 519                                                                                                                                     | G - H                                                                                                                                                   | 3971 - 3825                                                                                                |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| C - D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3814 - 3985                                                                                                                                   | H - I                                                                                                                                                   | 3882 - 3872                                                                                                |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| D - E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3895 - 3942                                                                                                                                   | I - J                                                                                                                                                   | 574 - 469                                                                                                  |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| E - F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3954 - 3534                                                                                                                                   | J - K                                                                                                                                                   | 501 - 425                                                                                                  |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| <b>Maximum Bot Chord Forces Per Ply (lbs)</b> <table><thead><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr></thead><tbody><tr><td>C - P</td><td>3721 - 3191</td><td>N - M</td><td>3701 - 3667</td></tr><tr><td>P - O</td><td>3256 - 2976</td><td>M - L</td><td>3231 - 3082</td></tr><tr><td>O - N</td><td>3701 - 3667</td><td>L - I</td><td>3609 - 3295</td></tr></tbody></table>                                                                                                                                                                                                                                                                               |                                                                                                                                               |                                                                                                                                                         |                                                                                                            | Chords | Tens.Comp. | Chords | Tens. Comp. | C - P | 3721 - 3191 | N - M | 3701 - 3667 | P - O | 3256 - 2976 | M - L | 3231 - 3082 | O - N | 3701 - 3667 | L - I | 3609 - 3295 |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| Chords                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Tens.Comp.                                                                                                                                    | Chords                                                                                                                                                  | Tens. Comp.                                                                                                |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| C - P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3721 - 3191                                                                                                                                   | N - M                                                                                                                                                   | 3701 - 3667                                                                                                |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| P - O                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3256 - 2976                                                                                                                                   | M - L                                                                                                                                                   | 3231 - 3082                                                                                                |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| O - N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3701 - 3667                                                                                                                                   | L - I                                                                                                                                                   | 3609 - 3295                                                                                                |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| <b>Maximum Web Forces Per Ply (lbs)</b> <table><thead><tr><th>Webs</th><th>Tens.Comp.</th><th>Webs</th><th>Tens. Comp.</th></tr></thead><tbody><tr><td>A - Q</td><td>489 - 549</td><td>F - M</td><td>559 - 308</td></tr><tr><td>B - Q</td><td>211 - 165</td><td>M - G</td><td>911 - 938</td></tr><tr><td>Q - R</td><td>487 - 543</td><td>G - L</td><td>602 - 380</td></tr><tr><td>D - P</td><td>427 - 444</td><td>L - H</td><td>425 - 447</td></tr><tr><td>P - E</td><td>646 - 405</td><td>S - T</td><td>437 - 483</td></tr><tr><td>E - O</td><td>756 - 998</td><td>T - J</td><td>205 - 155</td></tr><tr><td>O - F</td><td>553 - 292</td><td>T - K</td><td>443 - 495</td></tr></tbody></table> |                                                                                                                                               |                                                                                                                                                         |                                                                                                            | Webs   | Tens.Comp. | Webs   | Tens. Comp. | A - Q | 489 - 549   | F - M | 559 - 308   | B - Q | 211 - 165   | M - G | 911 - 938   | Q - R | 487 - 543   | G - L | 602 - 380   | D - P | 427 - 444   | L - H | 425 - 447 | P - E | 646 - 405   | S - T | 437 - 483 | E - O | 756 - 998 | T - J | 205 - 155 | O - F | 553 - 292 | T - K | 443 - 495 |
| Webs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Tens.Comp.                                                                                                                                    | Webs                                                                                                                                                    | Tens. Comp.                                                                                                |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| A - Q                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 489 - 549                                                                                                                                     | F - M                                                                                                                                                   | 559 - 308                                                                                                  |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| B - Q                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 211 - 165                                                                                                                                     | M - G                                                                                                                                                   | 911 - 938                                                                                                  |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| Q - R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 487 - 543                                                                                                                                     | G - L                                                                                                                                                   | 602 - 380                                                                                                  |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| D - P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 427 - 444                                                                                                                                     | L - H                                                                                                                                                   | 425 - 447                                                                                                  |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| P - E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 646 - 405                                                                                                                                     | S - T                                                                                                                                                   | 437 - 483                                                                                                  |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| E - O                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 756 - 998                                                                                                                                     | T - J                                                                                                                                                   | 205 - 155                                                                                                  |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |
| O - F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 553 - 292                                                                                                                                     | T - K                                                                                                                                                   | 443 - 495                                                                                                  |        |            |        |             |       |             |       |             |       |             |       |             |       |             |       |             |       |             |       |           |       |             |       |           |       |           |       |           |       |           |       |           |

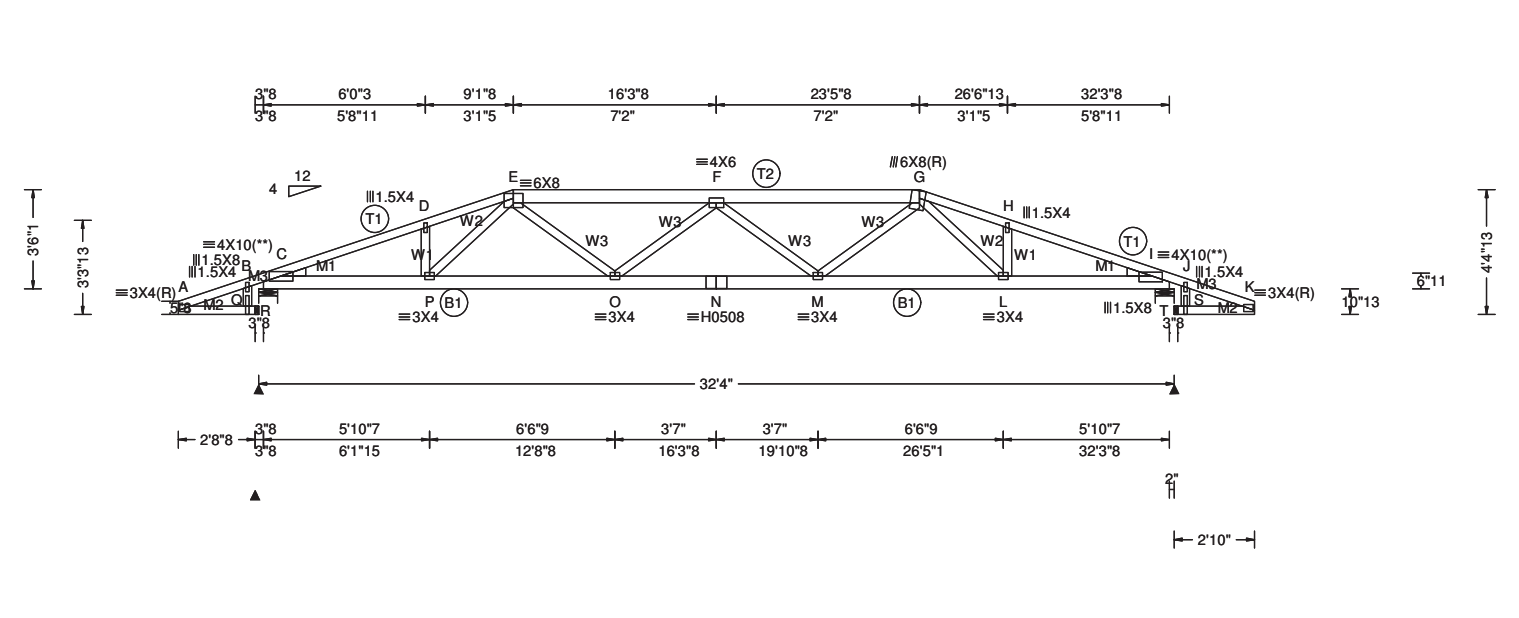
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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF) |  |  | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs)              |               |      |                       |       |       |      |
|------------------------|--|-----------------------------------|--|------------------------------|--|--|---------------------------------|--|----------------------------------------|---------------|------|-----------------------|-------|-------|------|
|                        |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA        |  |  | PP Deflection in loc L/defl L/# |  | Gravity                                |               |      | Non-Gravity           |       |       |      |
| TCLL: 30.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                |  |  | VERT(LL): 0.297 F 999 360       |  | Loc                                    | R+            | / R- | / Rh                  | / Rw  | / U   | / RL |
| TCDL: 15.00            |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                |  |  | VERT(CL): 0.533 F 713 240       |  | R                                      | -             | /-   | /252                  | /-    | /-    | /287 |
| BCLL: 0.00             |  | Risk Category: II                 |  | Snow Duration: NA            |  |  | HORZ(LL): 0.064 I - -           |  | B                                      | 2018          | /-   | /275                  | /1092 | /1181 | /313 |
| BCDL: 10.00            |  | EXP: C Kzt: NA                    |  |                              |  |  | HORZ(TL): 0.115 I - -           |  | J                                      | 2034          | /-   | /-                    | /1188 | /1190 | /-   |
| Des Ld: 55.00          |  | Mean Height: 22.03 ft             |  | Building Code:               |  |  | Creep Factor: 2.0               |  | S                                      | -             | /-   | /71                   | /-    | /-    | /428 |
| NCBCLL: 10.00          |  | TCDL: 6.0 psf                     |  | FBC 8th Ed. 2023 Res. HVHZ   |  |  | Max TC CSI: 0.972               |  | Wind reactions based on C&C            |               |      |                       |       |       |      |
| Soffit: 2.00           |  | BCDL: 6.0 psf                     |  | TPI Std: 2014                |  |  | Max BC CSI: 0.854               |  | R                                      | Brg Wid = 1.5 |      | Min Req = -           |       |       |      |
| Load Duration: 1.25    |  | MWFRS Parallel Dist: h to 2h      |  | Rep Fac: Yes                 |  |  | Max Web CSI: 0.278              |  | B                                      | Brg Wid = 8.0 |      | Min Req = 2.4 (Truss) |       |       |      |
| Spacing: 24.0 "        |  | C&C Dist a: 3.23 ft               |  | FT/RT:20(0)/10(0)            |  |  | Mfg Specified Camber:           |  | J                                      | Brg Wid = 8.0 |      | Min Req = 2.4 (Truss) |       |       |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | Plate Type(s):               |  |  |                                 |  | S                                      | Brg Wid = 1.5 |      | Min Req = -           |       |       |      |
|                        |  | GCpi: 0.18                        |  | WAVE, HS                     |  |  | VIEW Ver: 23.02.01A.1204.18     |  | Bearings B & I are a rigid surface.    |               |      |                       |       |       |      |
|                        |  | Wind Duration: 1.60               |  |                              |  |  |                                 |  | Maximum Top Chord Forces Per Ply (lbs) |               |      |                       |       |       |      |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                 |            |        |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------|--------|-------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2; T2 2x6 SP #2;<br>Bot chord: 2x6 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x4 SP #2;Rt Wedge: 2x4 SP #2;<br>Lt Level Return: 2x4 SP #2;<br>Rt Level Return: 2x4 SP #2;<br><br><b>Plating Notes</b><br>(**) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.<br><br><b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>The maximum horizontal reaction is 275#<br>***** BEARING ANALOG MODIFIED! ***** | <b>▲ Maximum Top Chord Forces Per Ply (lbs)</b> |            |        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Chords                                          | Tens.Comp. | Chords | Tens. Comp. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A - B                                           | 290 -185   | F - G  | 3152 -4112  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | B - C                                           | 323 -184   | G - H  | 2620 -3753  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | C - D                                           | 2626 -3951 | H - I  | 2585 -3832  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | D - E                                           | 2663 -3875 | I - J  | 500 -389    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | E - F                                           | 3150 -4127 | J - K  | 439 -357    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Maximum Bot Chord Forces Per Ply (lbs)</b>   |            |        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Chords                                          | Tens.Comp. | Chords | Tens. Comp. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | C - P                                           | 3683 -2412 | N - M  | 4569 -3497  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | P - O                                           | 3491 -2496 | M - L  | 3444 -2330  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | O - N                                           | 4569 -3497 | L - I  | 3567 -2201  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Maximum Web Forces Per Ply (lbs)</b>         |            |        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Webs                                            | Tens.Comp. | Webs   | Tens. Comp. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A - Q                                           | 209 -283   | F - M  | 811 -598    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | B - Q                                           | 57 -4      | M - G  | 883 -724    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Q - R                                           | 214 -287   | G - L  | 585 -142    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | D - P                                           | 163 -262   | L - H  | 162 -263    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | P - E                                           | 573 -148   | S - T  | 376 -428    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | E - O                                           | 847 -701   | T - J  | 160 -110    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | O - F                                           | 801 -580   | T - K  | 377 -434    |

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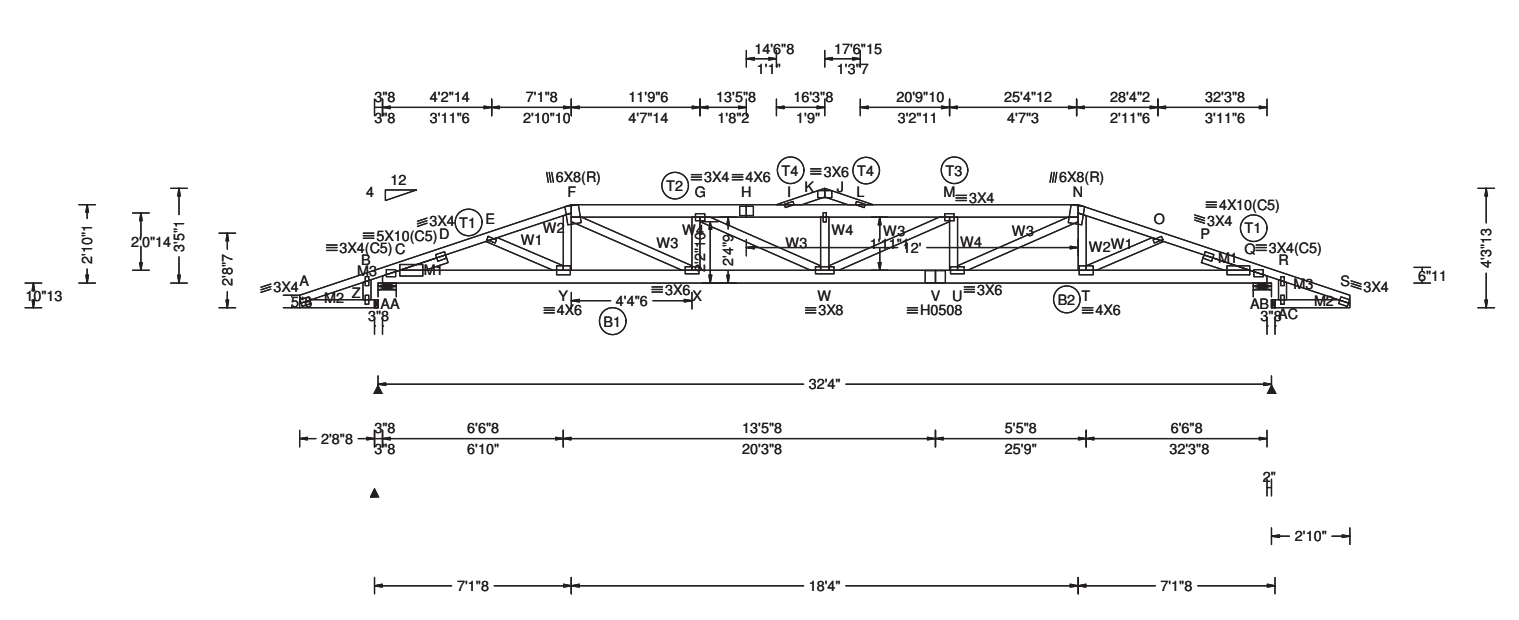
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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                 |  |  | Defl/CSI Criteria                   |  |  | ▲ Maximum Reactions (lbs)              |      |    |             |      |       |      |
|------------------------|--|-----------------------------------|--|----------------------------------------------|--|--|-------------------------------------|--|--|----------------------------------------|------|----|-------------|------|-------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                        |  |  | PP Deflection in loc L/defl L/#     |  |  | Gravity                                |      |    | Non-Gravity |      |       |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                |  |  | VERT(LL): 0.354 I 999 360           |  |  | Loc                                    | R+   | R- | / Rh        | / Rw | / U   | / RL |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                |  |  | VERT(CL): 0.641 I 588 240           |  |  | AA                                     | -    | /- | /259        | /-   | /-    | /107 |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                            |  |  | HORZ(LL): 0.053 F - -               |  |  | B                                      | 4092 | /- | /247        | /-   | /1890 | /112 |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ |  |  | HORZ(TL): 0.096 F - -               |  |  | R                                      | 4110 | -  | /-          | /-   | /1899 | /-   |
| NCBCLL: 0.00           |  | Mean Height: 21.99 ft             |  |                                              |  |  | Creep Factor: 2.0                   |  |  | Wind reactions based on MWFRS          |      |    |             |      |       |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  | TPI Std: 2014                                |  |  | Max TC CSI: 0.728                   |  |  | AB                                     | -    | /- | /146        | /-   | /-    | /4   |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  | Rep Fac: Varies by Ld Case                   |  |  | Max BC CSI: 0.419                   |  |  | AA Brg Wid = 1.5 Min Req = -           |      |    |             |      |       |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2     |  | FT/RT:20(0)/10(0)                            |  |  | Max Web CSI: 0.246                  |  |  | B Brg Wid = 8.0 Min Req = 1.7 (Truss)  |      |    |             |      |       |      |
|                        |  | C&C Dist a: 3.23 ft               |  | Plate Type(s):                               |  |  | Mfg Specified Camber:               |  |  | R Brg Wid = 8.0 Min Req = 1.7 (Truss)  |      |    |             |      |       |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | WAVE, HS                                     |  |  | VIEW Ver: 23.02.01A.1204.18         |  |  | AB Brg Wid = 1.5 Min Req = -           |      |    |             |      |       |      |
|                        |  | GCpi: 0.18                        |  |                                              |  |  | Bearings B & Q are a rigid surface. |  |  |                                        |      |    |             |      |       |      |
|                        |  | Wind Duration: 1.60               |  |                                              |  |  |                                     |  |  | Maximum Top Chord Forces Per Ply (lbs) |      |    |             |      |       |      |

**Lumber**

Top chord: 2x4 SP #2; T2,T3 2x6 SP #2;  
Bot chord: 2x6 SP M-26;  
Webs: 2x4 SP #2;  
Lt Slider: 2x4 SP #2; block length = 1.750'  
Rt Slider: 2x4 SP #2; block length = 1.750'  
Lt Level Return: 2x4 SP #2;  
Rt Level Return: 2x4 SP #2;

**Nailnote**

Nail Schedule:0.128"x3", min. nails  
Top Chord: 1 Row @12.00" o.c.  
Bot Chord: 1 Row @11.00" o.c.  
Webs : 1 Row @ 4" o.c.  
Use equal spacing between rows and stagger nails in each row to avoid splitting.

**Special Loads**

----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC: From 90 plf at -3.00 to 90 plf at 35.00  
BC: From 20 plf at 0.00 to 20 plf at 32.00  
PLB: From 4 plf at -2.96 to 4 plf at -0.33  
PLB: From 4 plf at 32.33 to 4 plf at 34.96  
BC: 505 lb Conc. Load at 6.79,25.21  
BC: 1571 lb Conc. Load at 7.19,24.81

**Plating Notes**

All plates are 1.5X4 except as noted.

**Wind**

Wind loads and reactions based on MWFRS.  
Wind loading based on both gable and hip roof types.

**Additional Notes**

The maximum horizontal reaction is 259#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

**Maximum Top Chord Forces Per Ply (lbs)**

| Chords | Tens.Comp. | Chords | Tens. Comp. |
|--------|------------|--------|-------------|
| A - B  | 148 -72    | J - L  | 94 -163     |
| B - C  | 165 -79    | K - L  | 2446 -5484  |
| C - D  | 2106 -4701 | L - M  | 2531 -5637  |
| D - E  | 2076 -4654 | M - N  | 2430 -5439  |
| E - F  | 2129 -4845 | N - O  | 2107 -4797  |
| F - G  | 2438 -5458 | O - P  | 2042 -4579  |
| G - H  | 2531 -5637 | P - Q  | 2071 -4623  |
| H - I  | 2531 -5637 | Q - R  | 82 -36      |
| I - J  | 94 -163    | R - S  | 75 -52      |
| I - K  | 2446 -5484 |        |             |

**Maximum Bot Chord Forces Per Ply (lbs)**

| Chords | Tens.Comp. | Chords | Tens. Comp. |
|--------|------------|--------|-------------|
| C - Y  | 4260 -1928 | V - U  | 5405 -2452  |
| Y - X  | 4449 -1988 | U - T  | 4411 -1971  |
| X - W  | 5423 -2460 | T - Q  | 4181 -1892  |
| W - V  | 5405 -2452 |        |             |

**Maximum Web Forces Per Ply (lbs)**

| Webs  | Tens.Comp. | Webs  | Tens. Comp. |
|-------|------------|-------|-------------|
| A - Z | 55 -127    | W - M | 244 -86     |
| B - Z | 16 -4      | M - U | 210 -352    |
| Z -AA | 54 -130    | U - N | 1091 -521   |
| E - Y | 322 -106   | N - T | 724 -250    |
| Y - F | 761 -267   | T - O | 364 -125    |
| F - X | 1068 -511  | AB-AC | 73 -42      |
| X - G | 207 -348   | AC- R | 7 -4        |
| G - W | 232 -77    | AC- S | 59 -47      |
| K - W | 133 -189   |       |             |

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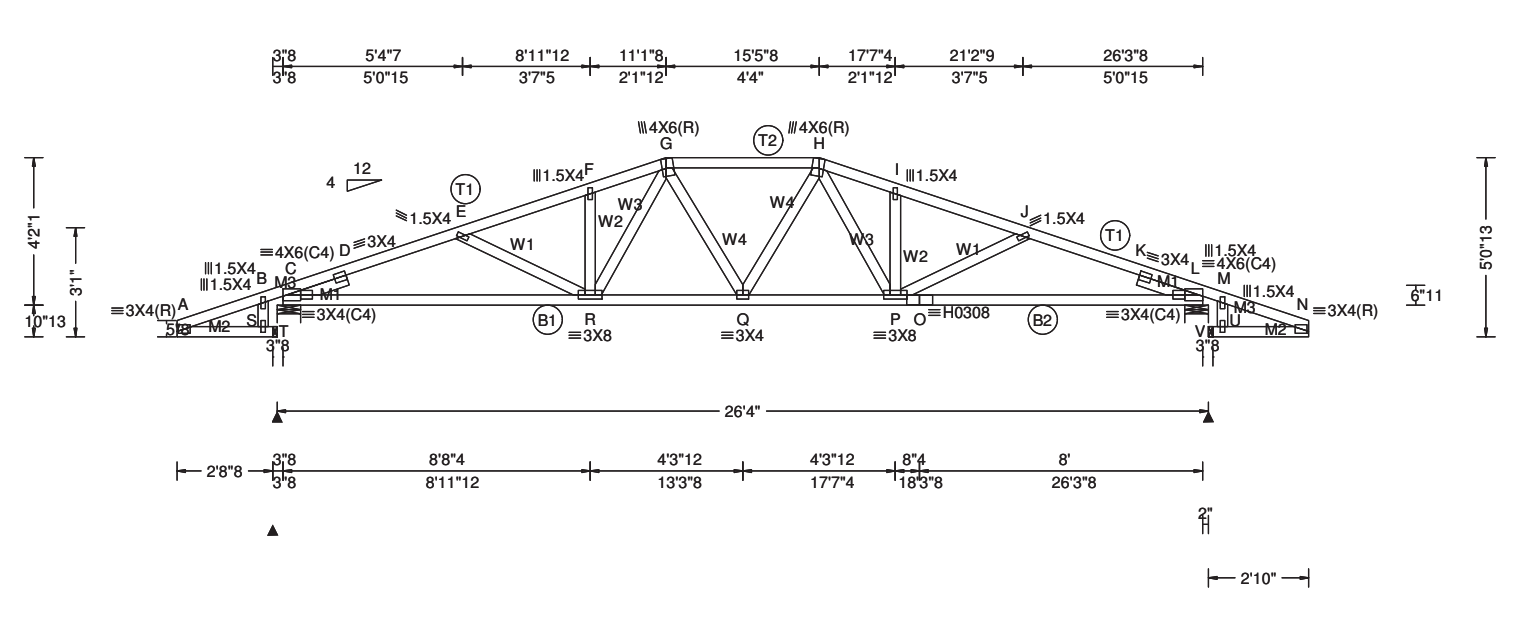




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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |               |      |                       |       |      |      |
|------------------------|--|-----------------------------------|--|----------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|---------------|------|-----------------------|-------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |               |      | Non-Gravity           |       |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                |  |  | VERT(LL): 0.172 Q 999 360       |  |  | Loc                                    | R+            | / R- | / Rh                  | / Rw  | / U  | / RL |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                |  |  | VERT(CL): 0.306 Q 999 240       |  |  | T                                      | -             | /-   | /259                  | /-    | /-   | /284 |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                            |  |  | HORZ(LL): 0.055 L - -           |  |  | C                                      | 1689          | /-   | /269                  | /935  | /773 | /321 |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ |  |  | HORZ(TL): 0.099 L - -           |  |  | L                                      | 1705          | /-   | /-                    | /1024 | /778 | /-   |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                              |  |  | Creep Factor: 2.0               |  |  | U                                      |               |      | -                     | /-    | /63  | /-   |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  | TPI Std: 2014                                |  |  | Max TC CSI: 0.727               |  |  | Wind reactions based on C&C            |               |      |                       |       |      |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  | Rep Fac: Yes                                 |  |  | Max BC CSI: 0.914               |  |  | T                                      | Brg Wid = 1.5 |      | Min Req = -           |       |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h to 2h      |  | FT/RT:20(0)/10(0)                            |  |  | Max Web CSI: 0.332              |  |  | C                                      | Brg Wid = 8.0 |      | Min Req = 2.0 (Truss) |       |      |      |
|                        |  | C&C Dist a: 3.00 ft               |  | Plate Type(s):                               |  |  | Mfg Specified Camber:           |  |  | L                                      | Brg Wid = 8.0 |      | Min Req = 2.0 (Truss) |       |      |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | WAVE, HS                                     |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | U                                      | Brg Wid = 1.5 |      | Min Req = -           |       |      |      |
|                        |  | GCpi: 0.18                        |  |                                              |  |  |                                 |  |  | Bearings C & L are a rigid surface.    |               |      |                       |       |      |      |
|                        |  | Wind Duration: 1.60               |  |                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |               |      |                       |       |      |      |

| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Slider: 2x4 SP #2; block length = 1.750'<br>Rt Slider: 2x4 SP #2; block length = 1.750'<br>Lt Level Return: 2x4 SP #2;<br>Rt Level Return: 2x4 SP #2; | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types. | <b>Additional Notes</b><br>The maximum horizontal reaction is 269#<br>***** BEARING ANALOG MODIFIED! ***** | <b>Maximum Top Chord Forces Per Ply (lbs)</b> <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>A - B</td><td>296 -217</td><td>H - I</td><td>1372 -2600</td></tr><tr><td>B - C</td><td>302 -206</td><td>I - J</td><td>1314 -2618</td></tr><tr><td>C - D</td><td>1468 -3185</td><td>J - K</td><td>1392 -2885</td></tr><tr><td>D - E</td><td>1401 -2976</td><td>K - L</td><td>1507 -3139</td></tr><tr><td>E - F</td><td>1310 -2653</td><td>L - M</td><td>458 -362</td></tr><tr><td>F - G</td><td>1367 -2628</td><td>M - N</td><td>437 -352</td></tr><tr><td>G - H</td><td>1259 -2205</td><td></td><td></td></tr></table><br><b>Maximum Bot Chord Forces Per Ply (lbs)</b> <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>C - R</td><td>2804 -1339</td><td>P - O</td><td>2700 -1223</td></tr><tr><td>R - Q</td><td>2234 -1141</td><td>O - L</td><td>2703 -1222</td></tr><tr><td>Q - P</td><td>2220 -1098</td><td></td><td></td></tr></table><br><b>Maximum Web Forces Per Ply (lbs)</b> <table><tr><th>Webs</th><th>Tens.Comp.</th><th>Webs</th><th>Tens. Comp.</th></tr><tr><td>A - S</td><td>245 -280</td><td>Q - H</td><td>112 -57</td></tr><tr><td>B - S</td><td>57 -8</td><td>H - P</td><td>536 -120</td></tr><tr><td>S - T</td><td>251 -284</td><td>P - I</td><td>166 -280</td></tr><tr><td>E - R</td><td>188 -329</td><td>P - J</td><td>190 -247</td></tr><tr><td>F - R</td><td>161 -262</td><td>U - V</td><td>377 -430</td></tr><tr><td>R - G</td><td>566 -123</td><td>V - M</td><td>154 -103</td></tr><tr><td>G - Q</td><td>103 -64</td><td>V - N</td><td>374 -434</td></tr></table> | Chords | Tens.Comp. | Chords | Tens. Comp. | A - B | 296 -217 | H - I | 1372 -2600 | B - C | 302 -206 | I - J | 1314 -2618 | C - D | 1468 -3185 | J - K | 1392 -2885 | D - E | 1401 -2976 | K - L | 1507 -3139 | E - F | 1310 -2653 | L - M | 458 -362 | F - G | 1367 -2628 | M - N | 437 -352 | G - H | 1259 -2205 |  |  | Chords | Tens.Comp. | Chords | Tens. Comp. | C - R | 2804 -1339 | P - O | 2700 -1223 | R - Q | 2234 -1141 | O - L | 2703 -1222 | Q - P | 2220 -1098 |  |  | Webs | Tens.Comp. | Webs | Tens. Comp. | A - S | 245 -280 | Q - H | 112 -57 | B - S | 57 -8 | H - P | 536 -120 | S - T | 251 -284 | P - I | 166 -280 | E - R | 188 -329 | P - J | 190 -247 | F - R | 161 -262 | U - V | 377 -430 | R - G | 566 -123 | V - M | 154 -103 | G - Q | 103 -64 | V - N | 374 -434 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------|--------|-------------|-------|----------|-------|------------|-------|----------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|----------|-------|------------|-------|----------|-------|------------|--|--|--------|------------|--------|-------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|--|--|------|------------|------|-------------|-------|----------|-------|---------|-------|-------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|---------|-------|----------|
| Chords                                                                                                                                                                                                                                          | Tens.Comp.                                                                                                        | Chords                                                                                                     | Tens. Comp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| A - B                                                                                                                                                                                                                                           | 296 -217                                                                                                          | H - I                                                                                                      | 1372 -2600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| B - C                                                                                                                                                                                                                                           | 302 -206                                                                                                          | I - J                                                                                                      | 1314 -2618                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| C - D                                                                                                                                                                                                                                           | 1468 -3185                                                                                                        | J - K                                                                                                      | 1392 -2885                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| D - E                                                                                                                                                                                                                                           | 1401 -2976                                                                                                        | K - L                                                                                                      | 1507 -3139                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| E - F                                                                                                                                                                                                                                           | 1310 -2653                                                                                                        | L - M                                                                                                      | 458 -362                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| F - G                                                                                                                                                                                                                                           | 1367 -2628                                                                                                        | M - N                                                                                                      | 437 -352                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| G - H                                                                                                                                                                                                                                           | 1259 -2205                                                                                                        |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| Chords                                                                                                                                                                                                                                          | Tens.Comp.                                                                                                        | Chords                                                                                                     | Tens. Comp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| C - R                                                                                                                                                                                                                                           | 2804 -1339                                                                                                        | P - O                                                                                                      | 2700 -1223                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| R - Q                                                                                                                                                                                                                                           | 2234 -1141                                                                                                        | O - L                                                                                                      | 2703 -1222                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| Q - P                                                                                                                                                                                                                                           | 2220 -1098                                                                                                        |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| Webs                                                                                                                                                                                                                                            | Tens.Comp.                                                                                                        | Webs                                                                                                       | Tens. Comp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| A - S                                                                                                                                                                                                                                           | 245 -280                                                                                                          | Q - H                                                                                                      | 112 -57                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| B - S                                                                                                                                                                                                                                           | 57 -8                                                                                                             | H - P                                                                                                      | 536 -120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| S - T                                                                                                                                                                                                                                           | 251 -284                                                                                                          | P - I                                                                                                      | 166 -280                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| E - R                                                                                                                                                                                                                                           | 188 -329                                                                                                          | P - J                                                                                                      | 190 -247                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| F - R                                                                                                                                                                                                                                           | 161 -262                                                                                                          | U - V                                                                                                      | 377 -430                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| R - G                                                                                                                                                                                                                                           | 566 -123                                                                                                          | V - M                                                                                                      | 154 -103                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |
| G - Q                                                                                                                                                                                                                                           | 103 -64                                                                                                           | V - N                                                                                                      | 374 -434                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |            |        |             |       |          |       |            |       |          |       |            |       |            |       |            |       |            |       |            |       |            |       |          |       |            |       |          |       |            |  |  |        |            |        |             |       |            |       |            |       |            |       |            |       |            |  |  |      |            |      |             |       |          |       |         |       |       |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |       |         |       |          |

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!

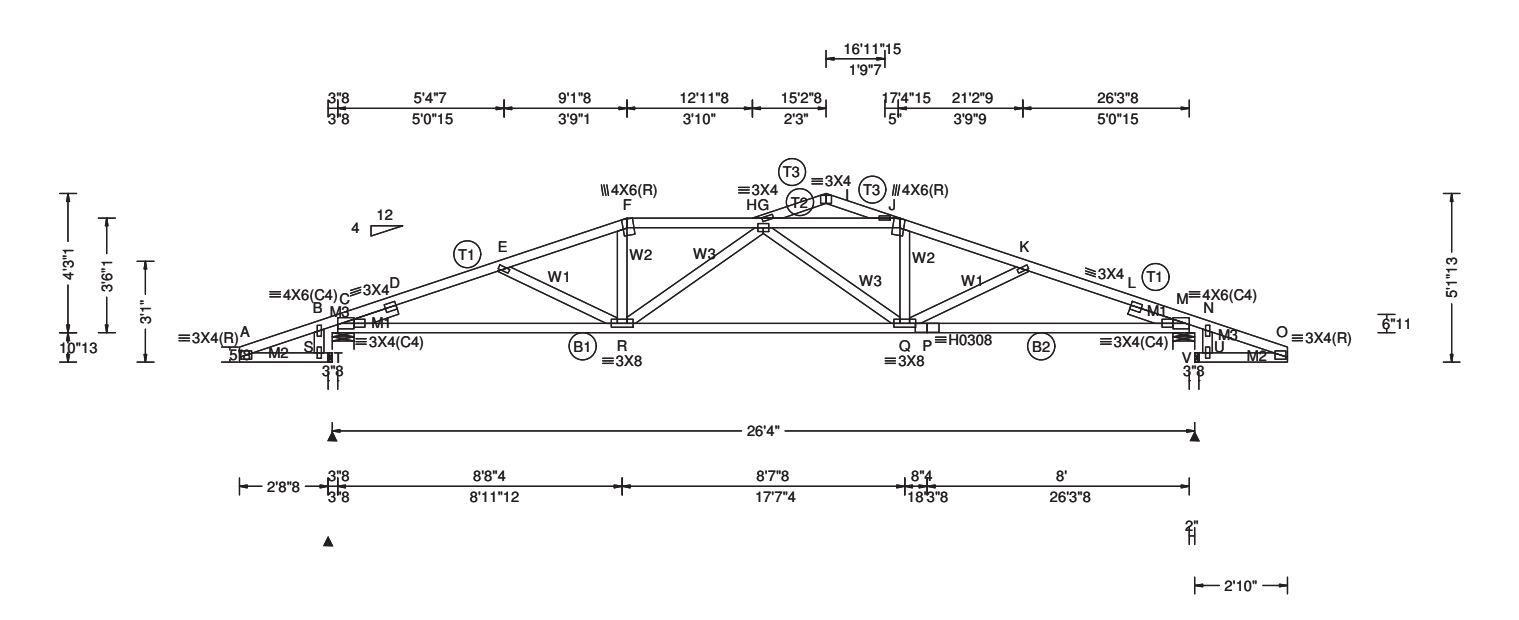
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCEA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCEA: [sbcecomponents.com](http://sbcecomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)





| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                 |  |  | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs)              |               |    |                       |       |      |      |
|------------------------|--|-----------------------------------|--|----------------------------------------------|--|--|---------------------------------|--|----------------------------------------|---------------|----|-----------------------|-------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                        |  |  | PP Deflection in loc L/defl L/# |  | Gravity                                |               |    | Non-Gravity           |       |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                |  |  | VERT(LL): 0.190 G 999 360       |  | Loc                                    | R+            | R- | / Rh                  | / Rw  | / U  | / RL |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                |  |  | VERT(CL): 0.338 G 904 240       |  | T                                      | -             | /- | /262                  | /-    | /-   | /287 |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                            |  |  | HORZ(LL): 0.059 M - -           |  | C                                      | 1689          | /- | /272                  | /930  | /787 | /322 |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ |  |  | HORZ(TL): 0.106 M - -           |  | M                                      | 1705          | /- | /-                    | /1019 | /709 | /-   |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                              |  |  | Creep Factor: 2.0               |  | U                                      |               | -  | /-                    | /62   | /-   | /-   |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  | TPI Std: 2014                                |  |  | Max TC CSI: 0.711               |  | Wind reactions based on C&C            |               |    |                       |       |      |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  | Rep Fac: Yes                                 |  |  | Max BC CSI: 0.898               |  | T                                      | Brg Wid = 1.5 |    | Min Req = -           |       |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h to 2h      |  | FT/RT:20(0)/10(0)                            |  |  | Max Web CSI: 0.337              |  | C                                      | Brg Wid = 8.0 |    | Min Req = 2.0 (Truss) |       |      |      |
|                        |  | C&C Dist a: 3.00 ft               |  | Plate Type(s):                               |  |  | Mfg Specified Camber:           |  | M                                      | Brg Wid = 8.0 |    | Min Req = 2.0 (Truss) |       |      |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | WAVE, HS                                     |  |  | VIEW Ver: 23.02.01A.1204.18     |  | U                                      | Brg Wid = 1.5 |    | Min Req = -           |       |      |      |
|                        |  | GCpi: 0.18                        |  |                                              |  |  |                                 |  | Bearings C & M are a rigid surface.    |               |    |                       |       |      |      |
|                        |  | Wind Duration: 1.60               |  |                                              |  |  |                                 |  | Maximum Top Chord Forces Per Ply (lbs) |               |    |                       |       |      |      |

| Lumber                                                                                                                                                                                                                         | Maximum Top Chord Forces Per Ply (lbs) |            |        |             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------|--------|-------------|
|                                                                                                                                                                                                                                | Chords                                 | Tens.Comp. | Chords | Tens. Comp. |
| Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Slider: 2x4 SP #2; block length = 1.750'<br>Rt Slider: 2x4 SP #2; block length = 1.750'<br>Lt Level Return: 2x4 SP #2;<br>Rt Level Return: 2x4 SP #2; | A - B                                  | 298 -214   | H - J  | 971 -2080   |
|                                                                                                                                                                                                                                | B - C                                  | 305 -202   | I - J  | 218 -335    |
|                                                                                                                                                                                                                                | C - D                                  | 1496 -3196 | J - K  | 1199 -2615  |
|                                                                                                                                                                                                                                | D - E                                  | 1403 -2985 | K - L  | 1298 -2905  |
|                                                                                                                                                                                                                                | E - F                                  | 1319 -2673 | L - M  | 1404 -3130  |
|                                                                                                                                                                                                                                | F - G                                  | 1285 -2470 | M - N  | 459 -363    |
|                                                                                                                                                                                                                                | G - H                                  | 1155 -2377 | N - O  | 438 -353    |
|                                                                                                                                                                                                                                | H - I                                  | 222 -341   |        |             |
|                                                                                                                                                                                                                                |                                        |            |        |             |
|                                                                                                                                                                                                                                |                                        |            |        |             |

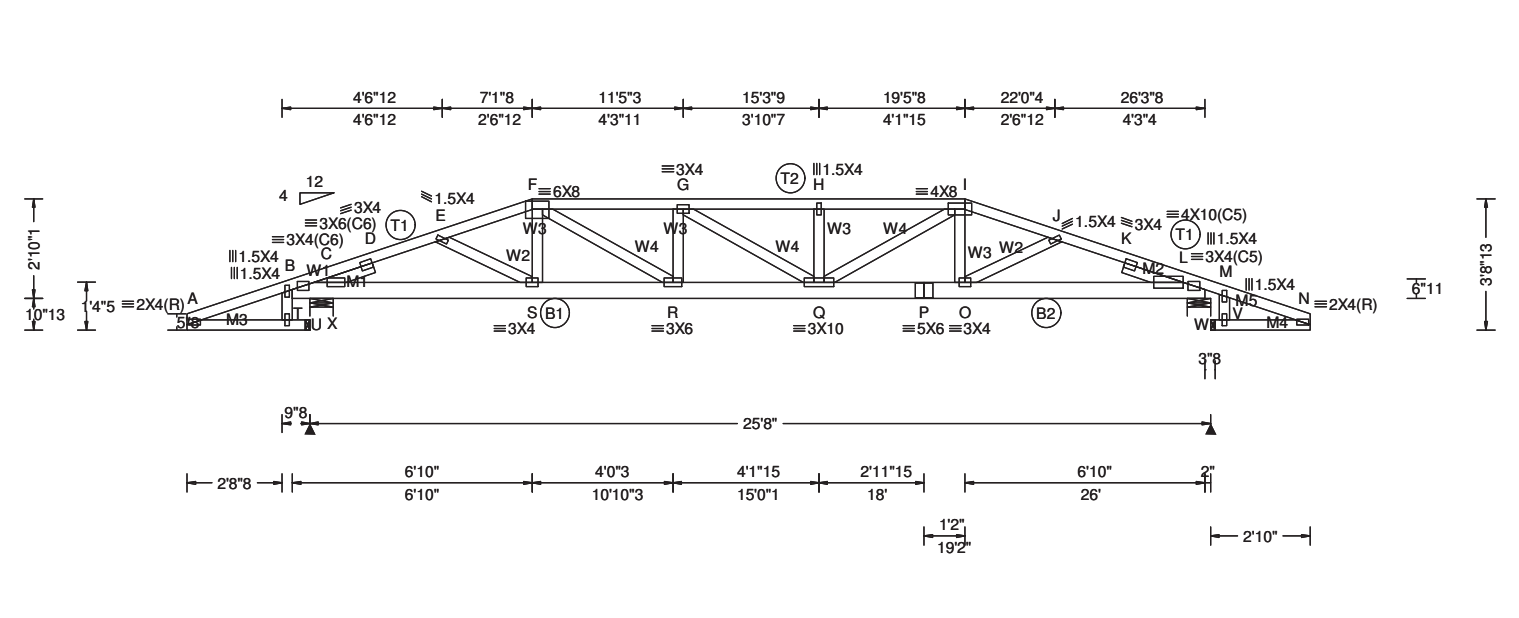
| Plating Notes                         | Maximum Bot Chord Forces Per Ply (lbs) |            |        |             |
|---------------------------------------|----------------------------------------|------------|--------|-------------|
|                                       | Chords                                 | Tens.Comp. | Chords | Tens. Comp. |
| All plates are 1.5X4 except as noted. | C - R                                  | 2807 -1337 | Q - P  | 2716 -1075  |
|                                       | R - Q                                  | 2719 -1247 | P - M  | 2718 -1075  |

| Wind                                                                                               | Maximum Web Forces Per Ply (lbs) |            |       |             |
|----------------------------------------------------------------------------------------------------|----------------------------------|------------|-------|-------------|
|                                                                                                    | Webs                             | Tens.Comp. | Webs  | Tens. Comp. |
| Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types. | A - S                            | 241 -283   | G - Q | 433 -378    |
|                                                                                                    | B - S                            | 57 -8      | J - Q | 476 -201    |
|                                                                                                    | S - T                            | 247 -287   | Q - K | 210 -280    |
|                                                                                                    | E - R                            | 202 -313   | U - V | 378 -431    |
|                                                                                                    | R - F                            | 434 -56    | V - N | 154 -103    |
|                                                                                                    | R - G                            | 224 -267   | V - O | 374 -435    |
|                                                                                                    |                                  |            |       |             |

| Additional Notes                                                                | Maximum Top Chord Forces Per Ply (lbs) |            |        |             |
|---------------------------------------------------------------------------------|----------------------------------------|------------|--------|-------------|
|                                                                                 | Chords                                 | Tens.Comp. | Chords | Tens. Comp. |
| The maximum horizontal reaction is 272#<br>***** BEARING ANALOG MODIFIED! ***** | A - B                                  | 298 -214   | H - J  | 971 -2080   |
|                                                                                 | B - C                                  | 305 -202   | I - J  | 218 -335    |
|                                                                                 | C - D                                  | 1496 -3196 | J - K  | 1199 -2615  |
|                                                                                 | D - E                                  | 1403 -2985 | K - L  | 1298 -2905  |
|                                                                                 | E - F                                  | 1319 -2673 | L - M  | 1404 -3130  |
|                                                                                 | F - G                                  | 1285 -2470 | M - N  | 459 -363    |
|                                                                                 | G - H                                  | 1155 -2377 | N - O  | 438 -353    |

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| Loading Criteria (psf)                                                                                                                             | Wind Criteria                                                                                                                                                                                                                                                                                  | Snow Criteria (Pg,Pf in PSF)                                                                                                                                                                                                   | Defl/CSI Criteria                                                                                                                                                                                                                                                                                | ▲ Maximum Reactions (lbs)                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TCLL: 30.00<br>TCDL: 15.00<br>BCLL: 0.00<br>BCDL: 10.00<br>Des Ld: 55.00<br>NCBCLL: 0.00<br>Soffit: 2.00<br>Load Duration: 1.25<br>Spacing: 24.0 " | Wind Std: ASCE 7-22<br>Speed: 175 mph<br>Enclosure: Closed<br>Risk Category: II<br>EXP: C Kzt: NA<br>Mean Height: 15.00 ft<br>TCDL: 6.0 psf<br>BCDL: 6.0 psf<br>MWFRS Parallel Dist: 0 to h/2<br>C&C Dist a: 3.00 ft<br>Loc. from endwall: not in 4.50 ft<br>GCpi: 0.18<br>Wind Duration: 1.60 | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Varies by Ld Case<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.234 H 999 360<br>VERT(CL): 0.422 H 707 240<br>HORZ(LL): 0.038 F - -<br>HORZ(TL): 0.070 F - -<br><br>Creep Factor: 2.0<br>Max TC CSI: 0.844<br>Max BC CSI: 0.332<br>Max Web CSI: 0.270<br>Mfg Specified Camber:<br><br>VIEW Ver: 23.02.01A.1204.18 | Gravity Non-Gravity<br>Loc R+ / R- / Rh / Rw / U / RL<br>U - - / - /281 /- /- /144<br>X 3561 /- /272 /- /1592 /117<br>M 3328 /- /- /- /1371 /-<br>V - - / - /253 /- /- /26<br><br>Wind reactions based on MWFRS<br>U Brg Wid = 1.5 Min Req = -<br>X Brg Wid = 8.0 Min Req = 1.5 (Truss)<br>M Brg Wid = 8.0 Min Req = 1.5 (Truss)<br>V Brg Wid = 1.5 Min Req = -<br>Bearings X & L are a rigid surface. |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x6 SP M-26;<br>Webs: 2x4 SP #2;<br>Lt Slider: 2x4 SP #2; block length = 1.745'<br>Rt Slider: 2x4 SP #2; block length = 1.750'<br>Lt Level Return: 2x4 SP #2;<br>Rt Level Return: 2x4 SP #2;                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Wind</b><br>Wind loads and reactions based on MWFRS.<br>Left end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>The maximum horizontal reaction is 281#<br>***** BEARING ANALOG MODIFIED! ***** | <b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>B - D 672 -1575 H - I 1820 -4400<br>A - B 168 -86 I - J 1482 -3655<br>D - E 1538 -3402 J - K 1470 -3595<br>E - F 1602 -3564 K - L 1492 -3635<br>F - G 1877 -4412 L - M 160 -34<br>G - H 1819 -4399 M - N 145 -32                             |
| <b>Nailnote</b><br>Nail Schedule:0.128"x3", min. nails<br>Top Chord: 1 Row @11.25" o.c.<br>Bot Chord: 1 Row @12.00" o.c.<br>Webs : 1 Row @ 4" o.c.<br>Use equal spacing between rows and stagger nails in each row to avoid splitting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                      | <b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>B - C 1632 -709 Q - P 3468 -1418<br>C - S 3143 -1432 P - O 3468 -1418<br>S - R 3393 -1537 O - L 3350 -1380<br>R - Q 4456 -1913                                                                                                               |
| <b>Special Loads</b><br>----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)<br>TC: From 90 plf at -3.00 to 90 plf at 6.83<br>TC: From 45 plf at 6.83 to 45 plf at 19.17<br>TC: From 90 plf at 19.17 to 90 plf at 29.00<br>BC: From 20 plf at 0.00 to 20 plf at 6.84<br>BC: From 10 plf at 6.84 to 10 plf at 19.16<br>BC: From 20 plf at 19.16 to 20 plf at 26.00<br>PLB: From 4 plf at -2.96 to 4 plf at -0.04<br>PLB: From 4 plf at 26.33 to 4 plf at 28.96<br>TC: 619 lb Conc. Load at 6.84<br>TC: 249 lb Conc. Load at 8.90,10.90,12.90,13.10<br>15.10,17.10,19.16<br>BC: 488 lb Conc. Load at 6.84<br>BC: 118 lb Conc. Load at 8.90,10.90,12.90,13.10<br>15.10,17.10<br>BC: 622 lb Conc. Load at 19.16 |                                                                                                                                                                                                                                                                                      | <b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>A - T 72 -142 G - Q 96 -67<br>T - U 72 -141 H - Q 240 -389<br>B - T 20 -3 Q - I 1082 -482<br>C - D 903 -1900 I - O 253 -24<br>E - S 297 -125 O - J 139 -92<br>F - S 65 -72 V - W 13 -127<br>F - R 1194 -413 W - M 15 0<br>R - G 202 -378 W - N 16 -124 |

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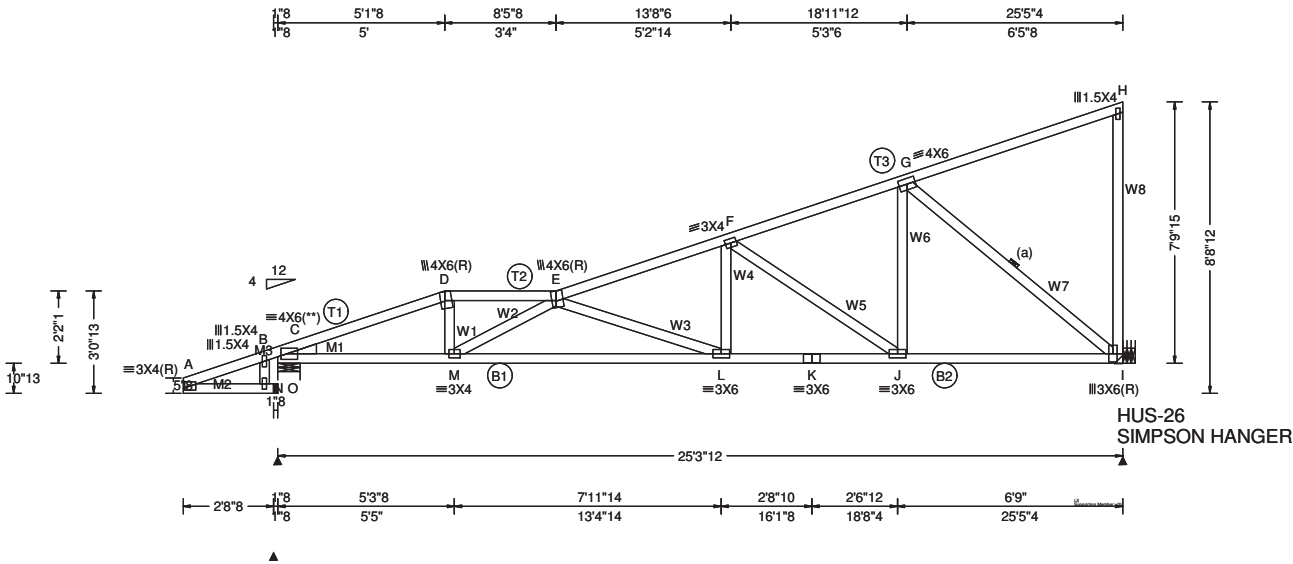
Structural drawing of a roof truss system. The drawing shows a cross-section of the roof with various truss members, girders, and supports. Key components include:

- Top Chord Members:** T1, T2, T3, T4
- Bottom Chord Members:** B1, B2
- Vertical Web Members:** W1, W2, W3, W4, W5
- Diagonal Web Members:** D1, D2
- Supports:** A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T
- Dimensions:**
  - Roof Height: 43'1"
  - Truss Depth: 22'1"
  - Overall Width: 26'4"
- Material Specifications and Section Numbers:**
  - Top Chord: 4X10(B1), 4X8, 4X6(A1)
  - Bottom Chord: 2X4(R), 3X4, 3X6, 3X8
  - Vertical Web: 5X6 GF, 5X6, 4X8, 4X6
  - Diagonal Web: 4X10(B1), 4X8, 4X6

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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |             |         | Defl/CSI Criteria     |                   |     | ▲ Maximum Reactions (lbs) |     |                                        |               |                       |             |      |      |      |
|------------------------|--------|----------------------|----------------|------------------------------|-------------|---------|-----------------------|-------------------|-----|---------------------------|-----|----------------------------------------|---------------|-----------------------|-------------|------|------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA      | CAT: NA | PP Deflection in      | loc L/defl        | L/# | Gravity                   |     |                                        | Non-Gravity   |                       |             |      |      |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |             | Ce: NA  | VERT(LL):             | 0.222             | E   | 999                       | 360 | Loc                                    | R+            | / R-                  | / Rh        | / Rw | / U  | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Closed         | Lu: NA                       | Cs: NA      |         | VERT(CL):             | 0.400             | E   | 755                       | 240 | O                                      | -             | /-                    | /272        | /-   | /-   | /278 |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA          |         | HORZ(LL):             | -0.061            | H   | -                         | -   | B                                      | 1655          | /-                    | /272        | /972 | /743 | /403 |
|                        |        | EXP:                 | C Kzt: NA      |                              |             |         | HORZ(TL):             | 0.110             | H   | -                         | -   | I                                      | 1382          | /-                    | /-          | /807 | /546 | /-   |
| Des Ld:                | 55.00  | Mean Height:         | 15.69 ft       |                              |             |         | Creep Factor:         | 2.0               |     |                           |     | Wind reactions based on C&C            |               |                       |             |      |      |      |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        | Building Code:               |             |         | Max TC CSI:           | 0.890             |     |                           |     | O                                      | Brg Wid = 1.5 | Min Req = -           |             |      |      |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        | FBC 8th Ed. 2023 Res.        | HVHZ        |         | Max BC CSI:           | 0.810             |     |                           |     | B                                      | Brg Wid = 8.0 | Min Req = 2.0 (Truss) |             |      |      |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | > 2h           | TPI Std:                     | 2014        |         | Max Web CSI:          | 0.945             |     |                           |     | I                                      | Brg Wid = -   | Min Req = -           |             |      |      |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        | Rep Fac:                     | Yes         |         | Mfg Specified Camber: |                   |     |                           |     | Bearing B is a rigid surface.          |               |                       |             |      |      |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft | FT/RT:                       | 20(0)/10(0) |         |                       |                   |     |                           |     | Maximum Top Chord Forces Per Ply (lbs) |               |                       |             |      |      |      |
|                        |        | GCpi:                | 0.18           | Plate Type(s):               |             |         |                       |                   |     |                           |     | Chords                                 | Tens.Comp.    | Chords                | Tens. Comp. |      |      |      |
|                        |        | Wind Duration:       | 1.60           | WAVE                         |             |         |                       |                   |     |                           |     |                                        |               |                       |             |      |      |      |
|                        |        |                      |                |                              |             |         | VIEW Ver:             | 23.02.01A.1204.18 |     |                           |     |                                        |               |                       |             |      |      |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #1; B2 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

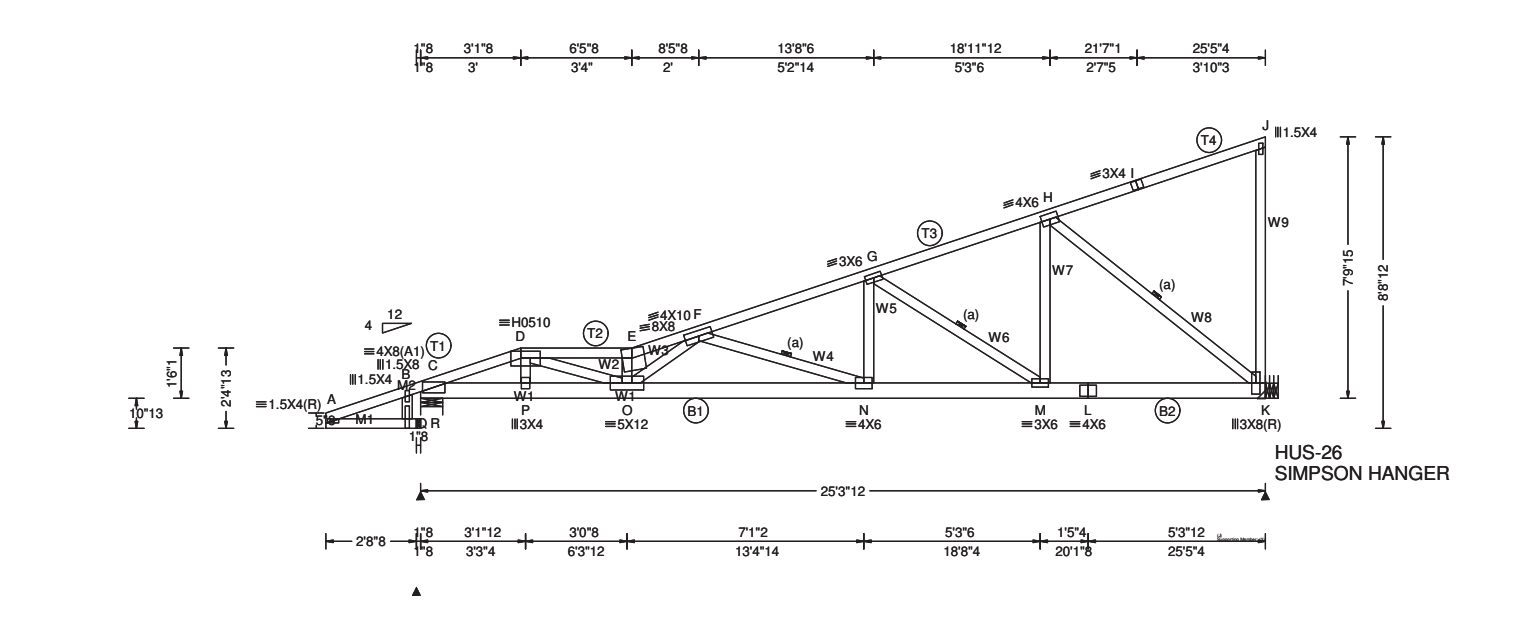
**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

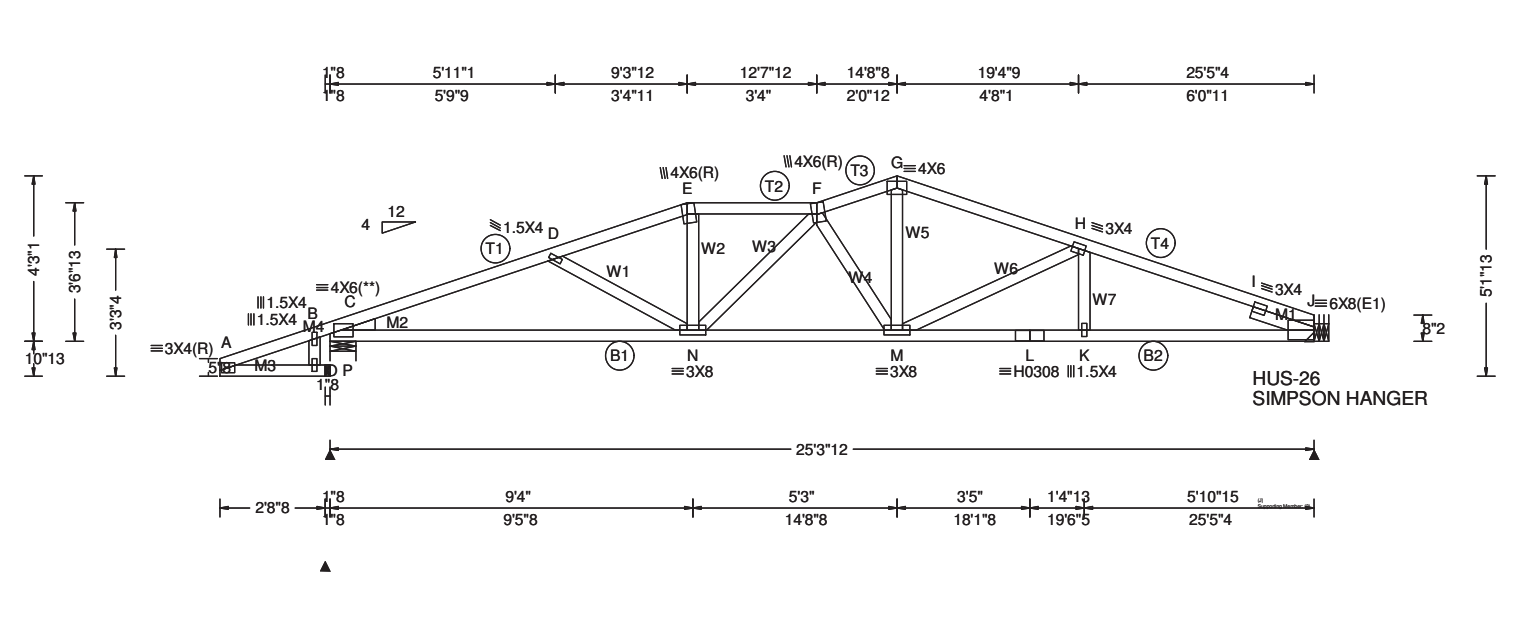
**Additional Notes**  
The maximum horizontal reaction is 272#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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|                                                                                                                 |                                   |                                     |                                 |                                               |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------|---------------------------------|-----------------------------------------------|
| <b>Loading Criteria</b> (psf)                                                                                   | <b>Wind Criteria</b>              | <b>Snow Criteria</b> (Pg,Pf in PSF) | <b>Defl/CSI Criteria</b>        | <b>▲ Maximum Reactions (lbs)</b>              |
| TCLL: 30.00                                                                                                     | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA               | PP Deflection in loc L/defl L/# | Gravity Non-Gravity                           |
| TCDL: 15.00                                                                                                     | Speed: 175 mph                    | Pf: NA Ce: NA                       | VERT(LL): 0.301 E 999 360       | Loc R+ / R- / Rh / Rw / U / RL                |
| BCLL: 0.00                                                                                                      | Enclosure: Closed                 | Lu: NA Cs: NA                       | VERT(CL): 0.554 E 545 240       | R - /-279 /- /54 /- /-                        |
| BCDL: 10.00                                                                                                     | Risk Category: II                 | Snow Duration: NA                   | HORZ(LL): -0.115 J - -          | B 2667 /- /- /- /872 /-                       |
| Des Ld: 55.00                                                                                                   | EXP: C Kzt: NA                    |                                     | HORZ(TL): 0.209 J - -           | K 1484 /- /- /- /540 /-                       |
| NCBCLL: 10.00                                                                                                   | Mean Height: 15.69 ft             | Building Code:                      | Creep Factor: 2.0               | Wind reactions based on MWFRS                 |
| Soffit: 2.00                                                                                                    | TCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ          | Max TC CSI: 0.935               | R Brg Wid = 1.5 Min Req = -                   |
| Load Duration: 1.25                                                                                             | BCDL: 6.0 psf                     | TPI Std: 2014                       | Max BC CSI: 0.468               | B Brg Wid = 8.0 Min Req = 2.2 (Truss)         |
| Spacing: 24.0 "                                                                                                 | MWFRS Parallel Dist: 0 to h/2     | Rep Fac: Varies by Ld Case          | Max Web CSI: 0.596              | K Brg Wid = - Min Req = -                     |
|                                                                                                                 | C&C Dist a: 3.00 ft               | FT/RT:20(0)/10(0)                   | Mfg Specified Camber:           | Bearing B is a rigid surface.                 |
|                                                                                                                 | Loc. from endwall: not in 9.00 ft | Plate Type(s):                      |                                 | <b>Maximum Top Chord Forces Per Ply (lbs)</b> |
|                                                                                                                 | GCpi: 0.18                        |                                     |                                 | Chords Tens.Comp. Chords Tens. Comp.          |
|                                                                                                                 | Wind Duration: 1.60               | WAVE, HS                            | VIEW Ver: 23.02.01A.1204.18     |                                               |
| <b>Lumber</b>                                                                                                   |                                   |                                     |                                 |                                               |
| Top chord: 2x4 SP #1; T4 2x4 SP #2;                                                                             |                                   |                                     |                                 |                                               |
| Bot chord: 2x6 SP M-26;                                                                                         |                                   |                                     |                                 |                                               |
| Webs: 2x4 SP #2;                                                                                                |                                   |                                     |                                 |                                               |
| Lt Level Return: 2x4 SP #2;                                                                                     |                                   |                                     |                                 |                                               |
| <b>Bracing</b>                                                                                                  |                                   |                                     |                                 |                                               |
| (a) Continuous lateral restraint equally spaced on member.                                                      |                                   |                                     |                                 |                                               |
| <b>Special Loads</b>                                                                                            |                                   |                                     |                                 |                                               |
| ----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)                                                              |                                   |                                     |                                 |                                               |
| TC: From 90 plf at -2.83 to 90 plf at 25.31                                                                     |                                   |                                     |                                 |                                               |
| BC: From 20 plf at 0.00 to 20 plf at 2.96                                                                       |                                   |                                     |                                 |                                               |
| BC: From 10 plf at 2.96 to 10 plf at 3.27                                                                       |                                   |                                     |                                 |                                               |
| BC: From 20 plf at 3.27 to 20 plf at 25.31                                                                      |                                   |                                     |                                 |                                               |
| PLB: From 4 plf at -2.79 to 4 plf at -0.17                                                                      |                                   |                                     |                                 |                                               |
| TC: 53 lb Conc. Load at 2.96                                                                                    |                                   |                                     |                                 |                                               |
| BC: 62 lb Conc. Load at 2.96                                                                                    |                                   |                                     |                                 |                                               |
| BC: 772 lb Conc. Load at 3.27                                                                                   |                                   |                                     |                                 |                                               |
| <b>Wind</b>                                                                                                     |                                   |                                     |                                 |                                               |
| Wind loads and reactions based on MWFRS.                                                                        |                                   |                                     |                                 |                                               |
| Right end vertical not exposed to wind pressure.                                                                |                                   |                                     |                                 |                                               |
| Wind loading based on both gable and hip roof types.                                                            |                                   |                                     |                                 |                                               |
| <b>Additional Notes</b>                                                                                         |                                   |                                     |                                 |                                               |
| Negative reaction(s) of -279# MAX. from a non-wind load case requires uplift connection. See Maximum Reactions. |                                   |                                     |                                 |                                               |
|                                                                                                                 |                                   |                                     |                                 | <b>Maximum Bot Chord Forces Per Ply (lbs)</b> |
|                                                                                                                 |                                   |                                     |                                 | Chords Tens.Comp. Chords Tens. Comp.          |
|                                                                                                                 |                                   |                                     |                                 | C - P 4661 -1316 N - M 2880 -1006             |
|                                                                                                                 |                                   |                                     |                                 | P - O 4737 -1321 M - L 1460 -529              |
|                                                                                                                 |                                   |                                     |                                 | O - N 5111 -1742 L - K 1460 -529              |
|                                                                                                                 |                                   |                                     |                                 | <b>Maximum Web Forces Per Ply (lbs)</b>       |
|                                                                                                                 |                                   |                                     |                                 | Webs Tens.Comp. Webs Tens. Comp.              |
|                                                                                                                 |                                   |                                     |                                 | A - Q 11 -29 F - N 764 -2294                  |
|                                                                                                                 |                                   |                                     |                                 | B - Q 319 -58 N - G 1006 -236                 |
|                                                                                                                 |                                   |                                     |                                 | Q - R 0 0 G - M 568 -1672                     |
|                                                                                                                 |                                   |                                     |                                 | D - P 588 -32 M - H 1062 -250                 |
|                                                                                                                 |                                   |                                     |                                 | D - O 2226 -849 H - K 681 -1881               |
|                                                                                                                 |                                   |                                     |                                 | O - E 809 -2428 J - K 135 -235                |
|                                                                                                                 |                                   |                                     |                                 | O - F 2583 -633                               |

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |               |       |                       |             |       |      |
|------------------------|-----------------------------------|------------------------------|---------------------------------|----------------------------------------|---------------|-------|-----------------------|-------------|-------|------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# | Gravity                                |               |       | Non-Gravity           |             |       |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                | VERT(LL): 0.189 F 999 360       | Loc                                    | R+            | / R-  | / Rh                  | / Rw        | / U   | / RL |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                | VERT(CL): 0.341 F 887 240       | P                                      | -             | /-    | /255                  | /-          | /-    | /282 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA            | HORZ(LL): 0.058 J - -           | B                                      | 1655          | /-    | /255                  | /913        | /799  | /198 |
|                        | EXP: C Kzt: NA                    |                              | HORZ(TL): 0.105 J - -           | J                                      | 1382          | /-    | /-                    | /711        | /576  | /-   |
| Des Ld: 55.00          | Mean Height: 15.00 ft             |                              | Creep Factor: 2.0               | Wind reactions based on C&C            |               |       |                       |             |       |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     | Building Code:               | Max TC CSI: 0.635               | P                                      | Brg Wid = 1.5 |       | Min Req = -           |             |       |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ   | Max BC CSI: 0.906               | B                                      | Brg Wid = 8.0 |       | Min Req = 2.0 (Truss) |             |       |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: > 2h         | TPI Std: 2014                | Max Web CSI: 0.313              | J                                      | Brg Wid = -   |       | Min Req = -           |             |       |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               | Rep Fac: Yes                 | Mfg Specified Camber:           | Bearing B is a rigid surface.          |               |       |                       |             |       |      |
|                        | Loc. from endwall: not in 9.00 ft | FT/RT:20(0)/10(0)            |                                 | Maximum Top Chord Forces Per Ply (lbs) |               |       |                       |             |       |      |
|                        | GCpi: 0.18                        | Plate Type(s):               |                                 | Chords                                 | Tens.Comp.    |       | Chords                | Tens. Comp. |       |      |
|                        | Wind Duration: 1.60               | WAVE, HS                     | VIEW Ver: 23.02.01A.1204.18     | A - B                                  | 292           | -243  | F - G                 | 1263        | -2313 |      |
|                        |                                   |                              |                                 | B - C                                  | 321           | -249  | G - H                 | 1243        | -2372 |      |
|                        |                                   |                              |                                 | C - D                                  | 1476          | -3035 | H - I                 | 1349        | -2970 |      |
|                        |                                   |                              |                                 | D - E                                  | 1371          | -2644 | I - J                 | 1338        | -3022 |      |
|                        |                                   |                              |                                 | Maximum Bot Chord Forces Per Ply (lbs) |               |       |                       |             |       |      |
|                        |                                   |                              |                                 | Chords                                 | Tens.Comp.    |       | Chords                | Tens. Comp. |       |      |
|                        |                                   |                              |                                 | C - N                                  | 2803          | -1348 | L - K                 | 2750        | -1210 |      |
|                        |                                   |                              |                                 | N - M                                  | 2646          | -1314 | K - J                 | 2754        | -1207 |      |
|                        |                                   |                              |                                 | M - L                                  | 2750          | -1210 |                       |             |       |      |
|                        |                                   |                              |                                 | Maximum Web Forces Per Ply (lbs)       |               |       |                       |             |       |      |
|                        |                                   |                              |                                 | Webs                                   | Tens.Comp.    |       | Webs                  | Tens. Comp. |       |      |
|                        |                                   |                              |                                 | A - O                                  | 273           | -256  | N - F                 | 207         | -234  |      |
|                        |                                   |                              |                                 | B - O                                  | 54            | -11   | F - M                 | 615         | -876  |      |
|                        |                                   |                              |                                 | O - P                                  | 282           | -258  | G - M                 | 1129        | -580  |      |
|                        |                                   |                              |                                 | D - N                                  | 215           | -394  | M - H                 | 232         | -640  |      |
|                        |                                   |                              |                                 | E - N                                  | 489           | -118  | H - K                 | 186         | 0     |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Rt Slider: 2x4 SP #2; block length = 1.672'  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

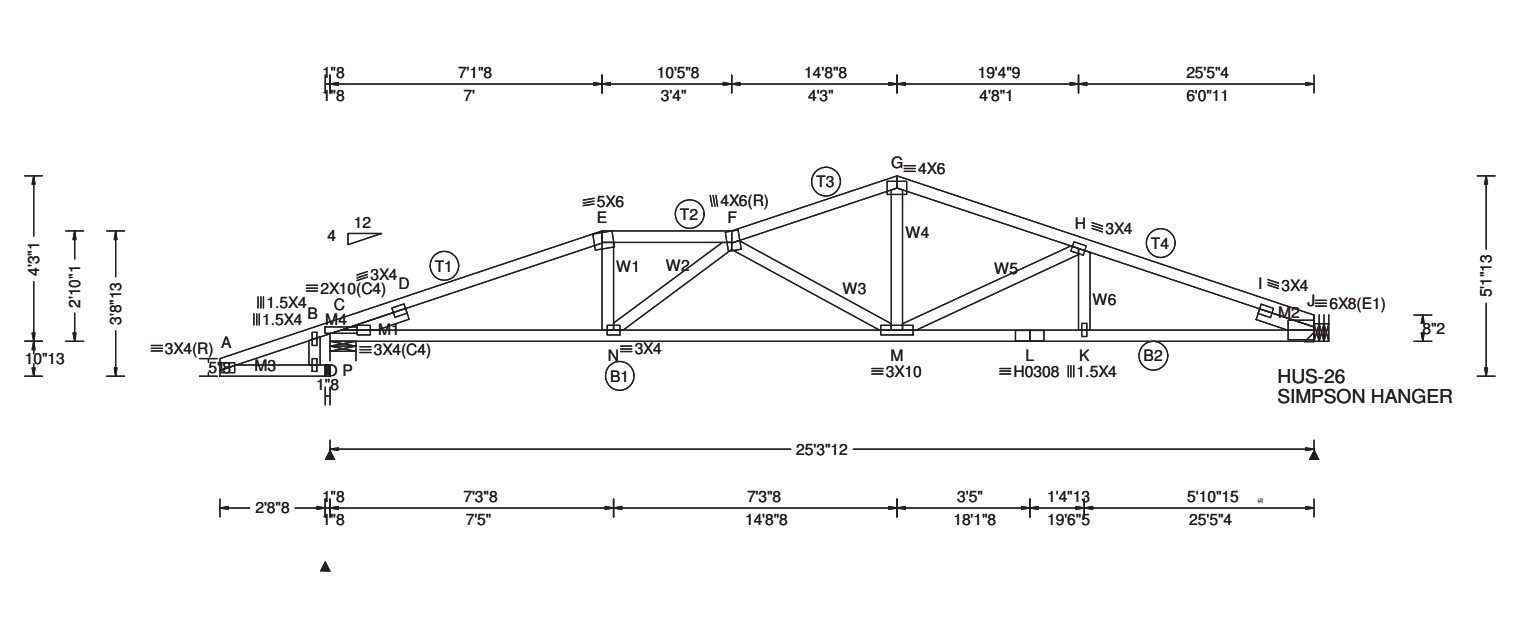
**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 255#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

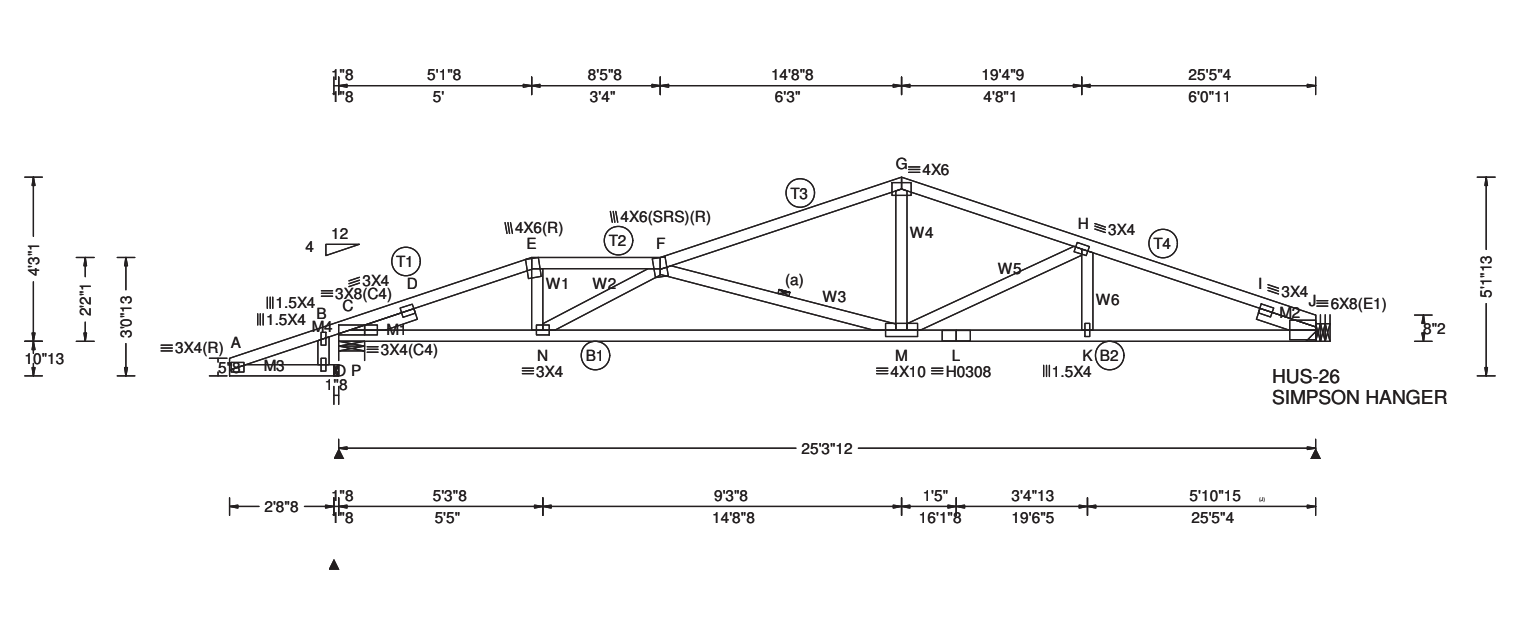
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VIEW Ver: 23.02.01A.1204.18



| <b>Loading Criteria</b> (psf)                        | <b>Wind Criteria</b>              | <b>Snow Criteria</b> (Pg,Pf in PSF) | <b>Defl/CSI Criteria</b>        | <b>▲ Maximum Reactions (lbs)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
|------------------------------------------------------|-----------------------------------|-------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------|--------|-------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|----|------|------|------|------|---|------|----|----|------|------|----|
| TCLL: 30.00                                          | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA               | PP Deflection in loc L/defl L/# | <table><tr><th colspan="3">Gravity</th><th colspan="3">Non-Gravity</th></tr><tr><th>Loc</th><th>R+</th><th>/ R-</th><th>/ Rh</th><th>/ Rw</th><th>/ U</th><th>/ RL</th></tr><tr><td>P</td><td>-</td><td>/-</td><td>/235</td><td>/-</td><td>/-</td><td>/234</td></tr><tr><td>C</td><td>1670</td><td>/-</td><td>/235</td><td>/917</td><td>/810</td><td>/185</td></tr><tr><td>J</td><td>1367</td><td>/-</td><td>/-</td><td>/743</td><td>/517</td><td>/-</td></tr></table> | Gravity |            |        | Non-Gravity |       |            | Loc   | R+         | / R-  | / Rh       | / Rw  | / U        | / RL  | P          | -     | /-         | /235  | /-         | /-    | /234       | C     | 1670       | /- | /235 | /917 | /810 | /185 | J | 1367 | /- | /- | /743 | /517 | /- |
| Gravity                                              |                                   |                                     | Non-Gravity                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Loc                                                  | R+                                | / R-                                | / Rh                            | / Rw                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | / U     | / RL       |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| P                                                    | -                                 | /-                                  | /235                            | /-                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | /-      | /234       |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| C                                                    | 1670                              | /-                                  | /235                            | /917                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | /810    | /185       |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| J                                                    | 1367                              | /-                                  | /-                              | /743                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | /517    | /-         |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| TCDL: 15.00                                          | Speed: 175 mph                    | Pf: NA Ce: NA                       | VERT(LL): 0.193 F 999 360       | Wind reactions based on C&C                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| BCLL: 0.00                                           | Enclosure: Closed                 | Lu: NA Cs: NA                       | VERT(CL): 0.348 F 861 240       | P Brg Wid = 1.5 Min Req = -                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| BCDL: 10.00                                          | Risk Category: II                 | Snow Duration: NA                   | HORZ(LL): 0.058 J - -           | C Brg Wid = 8.0 Min Req = 2.0 (Truss)                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Des Ld: 55.00                                        | EXP: C Kzt: NA                    |                                     | HORZ(TL): 0.105 J - -           | J Brg Wid = - Min Req = -                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| NCBCLL: 10.00                                        | Mean Height: 15.00 ft             | Building Code:                      | Creep Factor: 2.0               | Bearing C is a rigid surface.                                                                                                                                                                                                                                                                                                                                                                                                                                          |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Soffit: 2.00                                         | TCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ          | Max TC CSI: 0.672               | <b>Maximum Top Chord Forces Per Ply (lbs)</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Load Duration: 1.25                                  | BCDL: 6.0 psf                     | TPI Std: 2014                       | Max BC CSI: 0.843               | <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>A - B</td><td>276 -203</td><td>F - G</td><td>1085 -2329</td></tr><tr><td>B - C</td><td>278 -189</td><td>G - H</td><td>1070 -2347</td></tr><tr><td>C - D</td><td>1562 -3200</td><td>H - I</td><td>1195 -2931</td></tr><tr><td>D - E</td><td>1420 -2893</td><td>I - J</td><td>1185 -2979</td></tr><tr><td>E - F</td><td>1410 -2727</td><td></td><td></td></tr></table>      | Chords  | Tens.Comp. | Chords | Tens. Comp. | A - B | 276 -203   | F - G | 1085 -2329 | B - C | 278 -189   | G - H | 1070 -2347 | C - D | 1562 -3200 | H - I | 1195 -2931 | D - E | 1420 -2893 | I - J | 1185 -2979 | E - F | 1410 -2727 |    |      |      |      |      |   |      |    |    |      |      |    |
| Chords                                               | Tens.Comp.                        | Chords                              | Tens. Comp.                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| A - B                                                | 276 -203                          | F - G                               | 1085 -2329                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| B - C                                                | 278 -189                          | G - H                               | 1070 -2347                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| C - D                                                | 1562 -3200                        | H - I                               | 1195 -2931                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| D - E                                                | 1420 -2893                        | I - J                               | 1185 -2979                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| E - F                                                | 1410 -2727                        |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Spacing: 24.0 "                                      | MWFRS Parallel Dist: > 2h         | Rep Fac: Yes                        | Max Web CSI: 0.523              | <b>Maximum Bot Chord Forces Per Ply (lbs)</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
|                                                      | C&C Dist a: 3.00 ft               | FT/RT:20(0)/10(0)                   | Mfg Specified Camber:           | <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>C - N</td><td>2671 -1283</td><td>L - K</td><td>2709 -1065</td></tr><tr><td>N - M</td><td>3196 -1494</td><td>K - J</td><td>2712 -1062</td></tr><tr><td>M - L</td><td>2709 -1065</td><td></td><td></td></tr></table>                                                                                                                                                        | Chords  | Tens.Comp. | Chords | Tens. Comp. | C - N | 2671 -1283 | L - K | 2709 -1065 | N - M | 3196 -1494 | K - J | 2712 -1062 | M - L | 2709 -1065 |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Chords                                               | Tens.Comp.                        | Chords                              | Tens. Comp.                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| C - N                                                | 2671 -1283                        | L - K                               | 2709 -1065                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| N - M                                                | 3196 -1494                        | K - J                               | 2712 -1062                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| M - L                                                | 2709 -1065                        |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
|                                                      | Loc. from endwall: not in 9.00 ft | Plate Type(s):                      | VIEW Ver: 23.02.01A.1204.18     | <b>Maximum Web Forces Per Ply (lbs)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
|                                                      | GCpi: 0.18                        | WAVE, HS                            |                                 | <table><tr><th>Webs</th><th>Tens.Comp.</th><th>Webs</th><th>Tens. Comp.</th></tr><tr><td>A - O</td><td>229 -232</td><td>F - M</td><td>810 -1208</td></tr><tr><td>B - O</td><td>51 -7</td><td>G - M</td><td>1028 -450</td></tr><tr><td>O - P</td><td>234 -235</td><td>M - H</td><td>253 -616</td></tr><tr><td>E - N</td><td>501 -111</td><td>H - K</td><td>164 0</td></tr><tr><td>N - F</td><td>361 -623</td><td></td><td></td></tr></table>                            | Webs    | Tens.Comp. | Webs   | Tens. Comp. | A - O | 229 -232   | F - M | 810 -1208  | B - O | 51 -7      | G - M | 1028 -450  | O - P | 234 -235   | M - H | 253 -616   | E - N | 501 -111   | H - K | 164 0      | N - F | 361 -623   |    |      |      |      |      |   |      |    |    |      |      |    |
| Webs                                                 | Tens.Comp.                        | Webs                                | Tens. Comp.                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| A - O                                                | 229 -232                          | F - M                               | 810 -1208                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| B - O                                                | 51 -7                             | G - M                               | 1028 -450                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| O - P                                                | 234 -235                          | M - H                               | 253 -616                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| E - N                                                | 501 -111                          | H - K                               | 164 0                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| N - F                                                | 361 -623                          |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
|                                                      | Wind Duration: 1.60               |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| <b>Lumber</b>                                        |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Top chord: 2x4 SP #2;                                |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Bot chord: 2x4 SP #2;                                |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Webs: 2x4 SP #2;                                     |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Lt Slider: 2x4 SP #2; block length = 1.750'          |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Rt Slider: 2x4 SP #2; block length = 1.500'          |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Lt Level Return: 2x4 SP #2;                          |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| <b>Wind</b>                                          |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Member design based on both MWFRS and C&C.           |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| Wind loading based on both gable and hip roof types. |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| <b>Additional Notes</b>                              |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| The maximum horizontal reaction is 235#              |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |
| ***** BEARING ANALOG MODIFIED! *****                 |                                   |                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |            |        |             |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |       |            |    |      |      |      |      |   |      |    |    |      |      |    |

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCEA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.  
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.  
For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCEA: [sbccomponents.com](http://sbccomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                     |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |             |            |             |        |      |             |  |
|------------------------|--|-----------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|-------------|------------|-------------|--------|------|-------------|--|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                            |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |             |            | Non-Gravity |        |      |             |  |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                    |  |  | VERT(LL): 0.229 F 999 360       |  |  | Loc                                    | R+          | / R-       | / Rh        | / Rw   | / U  | / RL        |  |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                    |  |  | VERT(CL): 0.415 F 723 240       |  |  | P                                      | -           | /-         | /246        | /-     | /-   | /245        |  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                                |  |  | HORZ(LL): 0.058 J - -           |  |  | C                                      | 1668        | /-         | /246        | /914   | /830 | /172        |  |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE, HS |  |  | HORZ(TL): 0.106 J - -           |  |  | J                                      | 1369        | /-         | /-          | /780   | /496 | /-          |  |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                                                                                                                  |  |  | Creep Factor: 2.0               |  |  | Wind reactions based on C&C            |             |            |             |        |      |             |  |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                                  |  |  | Max TC CSI: 0.862               |  |  | P Brg Wid = 1.5 Min Req = -            |             |            |             |        |      |             |  |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                                  |  |  | Max BC CSI: 0.803               |  |  | C Brg Wid = 8.0 Min Req = 2.0 (Truss)  |             |            |             |        |      |             |  |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: > 2h         |  | Max Web CSI: 0.401                                                                                                               |  |  | Mfg Specified Camber:           |  |  | J                                      | Brg Wid = - |            | Min Req = - |        |      |             |  |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                                  |  |  |                                 |  |  | Bearing C is a rigid surface.          |             |            |             |        |      |             |  |
|                        |  | Loc. from endwall: not in 9.00 ft |  |                                                                                                                                  |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |             |            |             |        |      |             |  |
|                        |  | GCpi: 0.18                        |  |                                                                                                                                  |  |  |                                 |  |  | Chords                                 |             | Tens.Comp. |             | Chords |      | Tens. Comp. |  |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                                  |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | A - B                                  |             | 285 -193   |             | F - G  |      | 1018 -2407  |  |

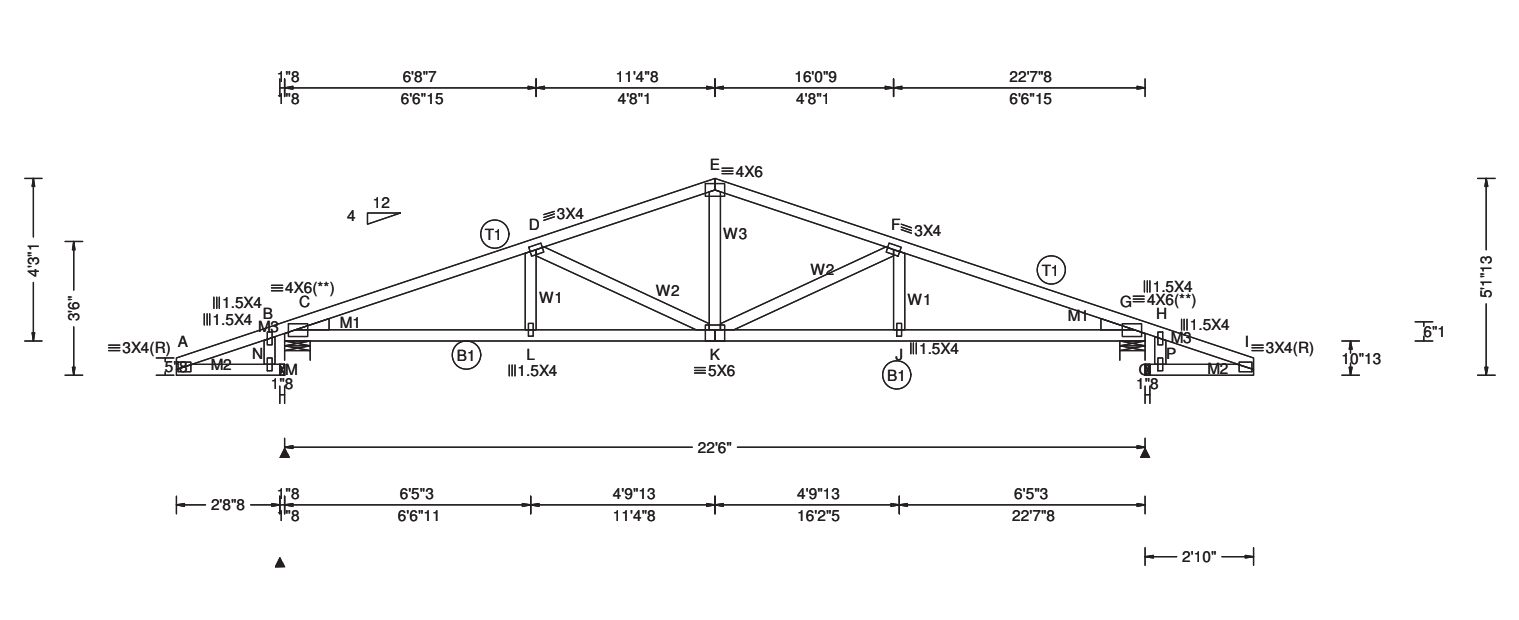
**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #1; B2 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Slider: 2x4 SP #2; block length = 1.750'  
Rt Slider: 2x4 SP #2; block length = 1.544'  
Lt Level Return: 2x4 SP #2;

**Bracing**  
(a) Continuous lateral restraint equally spaced on member.

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 246#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |                       |    |               |             |      |      |    |      |
|------------------------|--|-----------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|-----------------------|----|---------------|-------------|------|------|----|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |                       |    | Non-Gravity   |             |      |      |    |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): 0.148 K 999 360       |  |  | Loc                                    | R+                    | R- | / Rh          | / Rw        | / U  | / RL |    |      |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): 0.261 K 999 240       |  |  | N                                      | -                     | /- | /264          | /-          | /-   | /281 |    |      |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): 0.051 G - -           |  |  | B                                      | 1481                  | /- | /251          | /993        | /683 | /305 |    |      |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.090 G - -           |  |  | H                                      | 1497                  | /- | /-            | /970        | /687 | /-   |    |      |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | O                                      |                       |    | -             | /-          | /85  | /-   | /- | /421 |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max TC CSI: 0.681               |  |  | Wind reactions based on C&C            |                       |    |               |             |      |      |    |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max BC CSI: 0.916               |  |  | N                                      |                       |    | Brg Wid = 1.5 | Min Req = - |      |      |    |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: > 2h         |  | Max Web CSI: 0.332                                                                                                           |  |  | B                               |  |  | Brg Wid = 8.0                          | Min Req = 1.7 (Truss) |    |               |             |      |      |    |      |
|                        |  | C&C Dist a: 3.00 ft               |  | Mfg Specified Camber:                                                                                                        |  |  | H                               |  |  | Brg Wid = 8.0                          | Min Req = 1.8 (Truss) |    |               |             |      |      |    |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | VIEW Ver: 23.02.01A.1204.18                                                                                                  |  |  | O                               |  |  | Brg Wid = 1.5                          | Min Req = -           |    |               |             |      |      |    |      |
|                        |  | GCpi: 0.18                        |  |                                                                                                                              |  |  |                                 |  |  | Bearings B & G are a rigid surface.    |                       |    |               |             |      |      |    |      |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |                       |    |               |             |      |      |    |      |

Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Rt Wedge: 2x4 SP #2;  
Lt Level Return: 2x4 SP #2;  
Rt Level Return: 2x4 SP #2;

Plating Notes

(\*\*) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

Wind

Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

Additional Notes

The maximum horizontal reaction is 264#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

Chords

Tens.Comp.

A - B

300 -227

B - C

329 -229

C - D

978 -2537

D - E

821 -1881

Chords

Tens. Comp.

E - F

815 -1879

F - G

978 -2479

G - H

487 -366

H - I

430 -335

Maximum Bot Chord Forces Per Ply (lbs)

Chords

Tens.Comp.

C - L

2414 -952

L - K

2412 -956

Chords

Tens. Comp.

K - J

2353 -892

J - G

2354 -888

Maximum Web Forces Per Ply (lbs)

Webs

Tens.Comp.

A - M

255 -278

B - M

56 -9

M - N

261 -281

L - D

183 0

D - K

321 -679

E - K

720 -228

Webs

Tens. Comp.

K - F

314 -613

F - J

171 0

O - P

356 -421

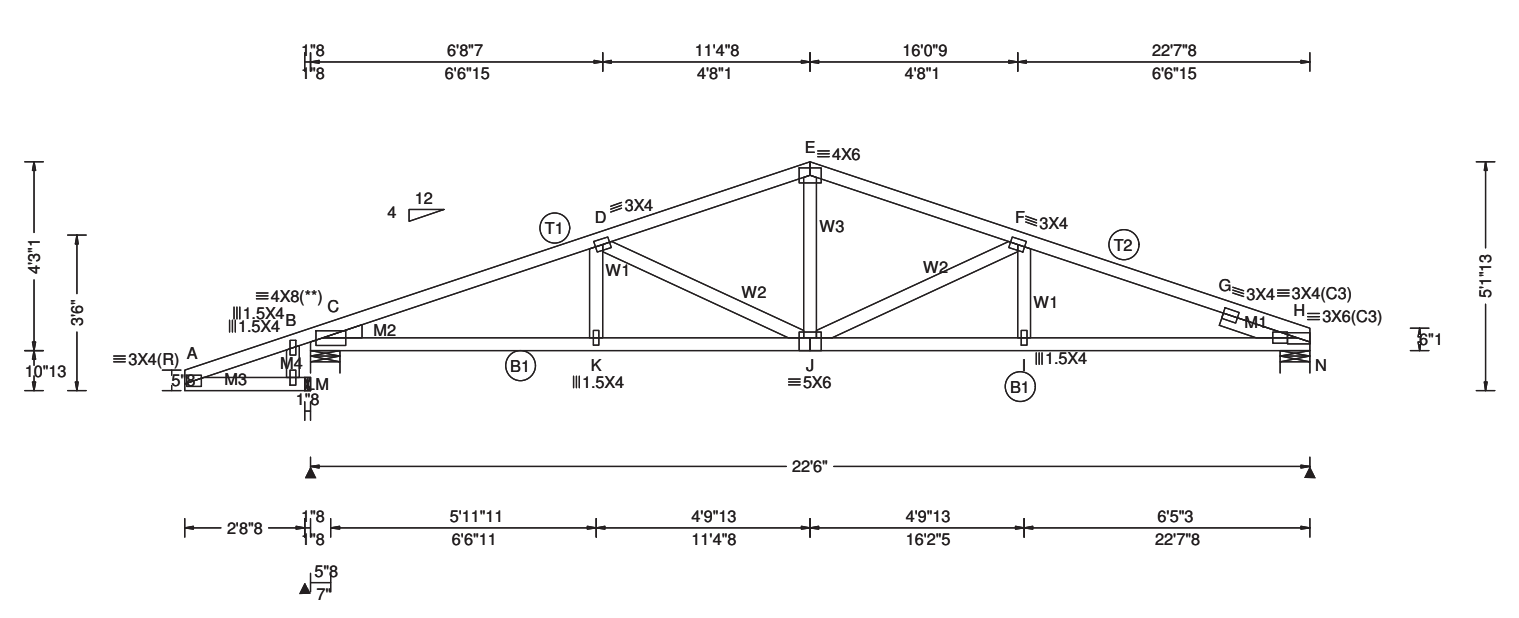
P - H

153 -101

P - I

354 -426

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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |  |         |  |      |  |               |  |
|------------------------|--|-----------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|--|---------|--|------|--|---------------|--|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity Non-Gravity                    |  |         |  |      |  |               |  |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): 0.128 J 999 360       |  |  | Loc                                    |  | R+ / R- |  | / Rh |  | / Rw / U / RL |  |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): 0.230 J 999 240       |  |  | M                                      |  | -       |  | -/   |  | /266          |  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): 0.044 H - -           |  |  | B                                      |  | 1485    |  | -/   |  | /266          |  |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.079 H - -           |  |  | N                                      |  | 1242    |  | -/   |  | -/            |  |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | Wind reactions based on C&C            |  |         |  |      |  |               |  |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max TC CSI: 0.582               |  |  | M Brg Wid = 1.5 Min Req = -            |  |         |  |      |  |               |  |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max BC CSI: 0.750               |  |  | B Brg Wid = 8.0 Min Req = 1.8 (Truss)  |  |         |  |      |  |               |  |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: > 2h         |  | Max Web CSI: 0.351                                                                                                           |  |  | Mfg Specified Camber:           |  |  | N Brg Wid = 8.0 Min Req = 1.5 (Truss)  |  |         |  |      |  |               |  |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                              |  |  |                                 |  |  | Bearings B & H are a rigid surface.    |  |         |  |      |  |               |  |
|                        |  | Loc. from endwall: not in 9.00 ft |  |                                                                                                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |  |         |  |      |  |               |  |
|                        |  | GCpi: 0.18                        |  |                                                                                                                              |  |  |                                 |  |  | Chords Tens.Comp. Chords Tens. Comp.   |  |         |  |      |  |               |  |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                              |  |  |                                 |  |  | VIEW Ver: 23.02.01A.1204.18            |  |         |  |      |  |               |  |

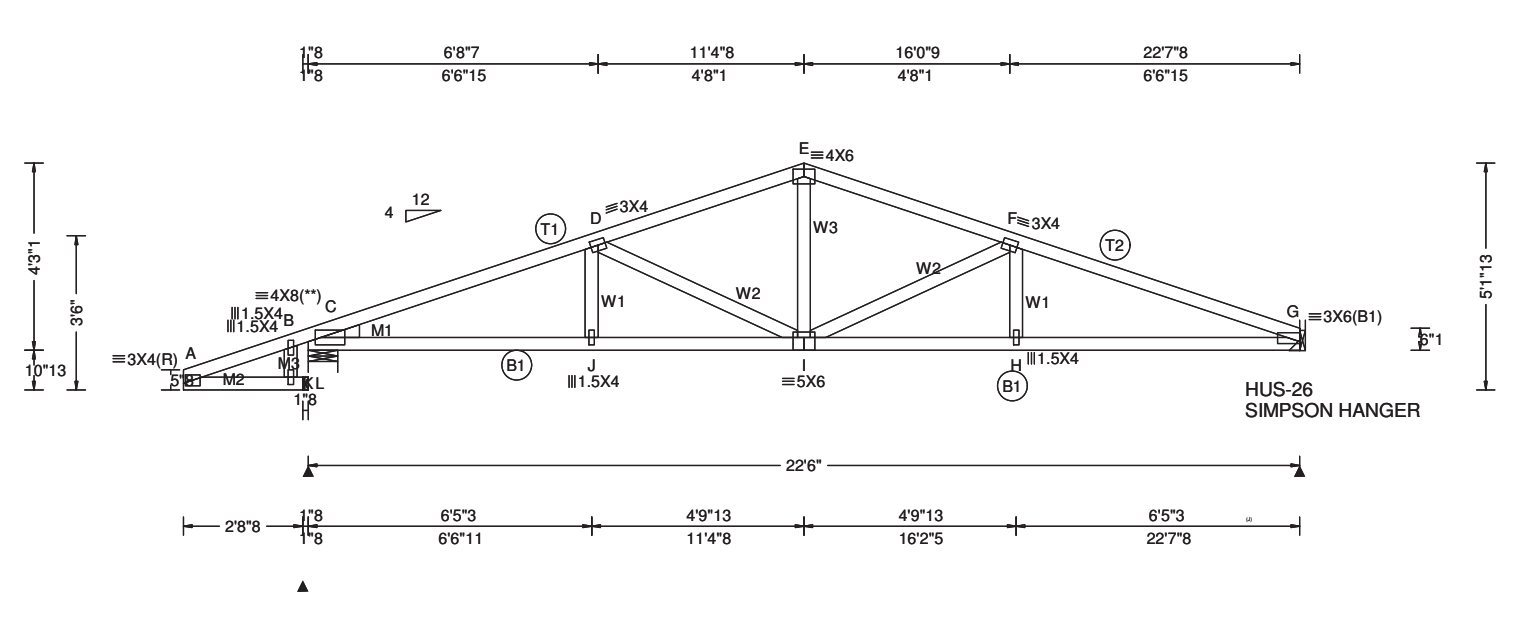
**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Rt Slider: 2x4 SP #2; block length = 1.750'  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 266#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)                     |               |                       |             |      |      |      |
|------------------------|-----------------------------------|------------------------------|---------------------------------|-----------------------------------------------|---------------|-----------------------|-------------|------|------|------|
|                        |                                   |                              |                                 | Gravity                                       |               |                       | Non-Gravity |      |      |      |
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# | Loc                                           | R+            | / R-                  | / Rh        | / Rw | / U  | / RL |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                | VERT(LL): 0.149 I 999 360       | L                                             | -             | /-                    | /264        | /-   | /-   | /264 |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                | VERT(CL): 0.268 I 996 240       | B                                             | 1495          | /-                    | /264        | /999 | /693 | /190 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA            | HORZ(LL): 0.049 G - -           | G                                             | 1233          | /-                    | /-          | /803 | /465 | /-   |
| Des Ld: 55.00          | EXP: C Kzt: NA                    |                              | HORZ(TL): 0.088 G - -           | Wind reactions based on C&C                   |               |                       |             |      |      |      |
| NCBCLL: 10.00          | Mean Height: 15.00 ft             | Building Code:               | Creep Factor: 2.0               | L                                             | Brg Wid = 1.5 | Min Req = -           |             |      |      |      |
| Soffit: 2.00           | TCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ   | Max TC CSI: 0.743               | B                                             | Brg Wid = 8.0 | Min Req = 1.8 (Truss) |             |      |      |      |
| Load Duration: 1.25    | BCDL: 6.0 psf                     | TPI Std: 2014                | Max BC CSI: 0.963               | G                                             | Brg Wid = -   | Min Req = -           |             |      |      |      |
| Spacing: 24.0 "        | MWFRS Parallel Dist: > 2h         | Rep Fac: Yes                 | Max Web CSI: 0.349              | Bearing B is a rigid surface.                 |               |                       |             |      |      |      |
|                        | C&C Dist a: 3.00 ft               | FT/RT:20(0)/10(0)            | Mfg Specified Camber:           | <b>Maximum Top Chord Forces Per Ply (lbs)</b> |               |                       |             |      |      |      |
|                        | Loc. from endwall: not in 9.00 ft | Plate Type(s):               |                                 | Chords                                        | Tens.Comp.    | Chords                | Tens. Comp. |      |      |      |
|                        | GCpi: 0.18                        | WAVE                         | VIEW Ver: 23.02.01A.1204.18     |                                               |               |                       |             |      |      |      |
|                        | Wind Duration: 1.60               |                              |                                 |                                               |               |                       |             |      |      |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

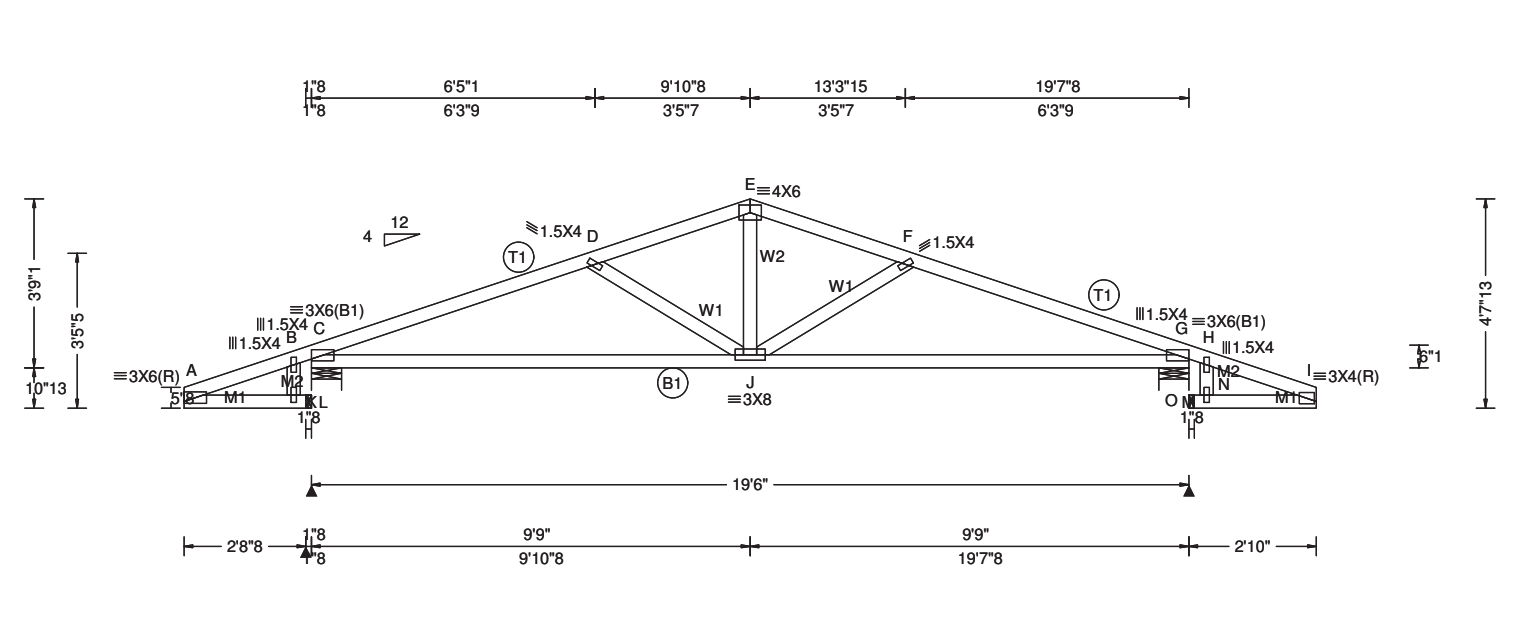
**Additional Notes**  
The maximum horizontal reaction is 264#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

The drawing illustrates a roof truss system with the following components and dimensions:

- Top Chords:**
  - Left chord:  $\equiv 3 \times 6$  (B1)
  - Right chord:  $\equiv 5 \times 6$  (G1) (I)
- Vertical Members:**
  - W1: Vertical members at joints B and D.
  - W2: Vertical members at joints C and F.
  - W3: Vertical member at joint G.
- Diagonal Members:**
  - T1: Diagonal member from joint B to joint C.
  - T2: Diagonal member from joint D to joint E.
- Horizontal Members:**
  - H: Horizontal member at joint B.
  - G: Horizontal member at joint G.
  - F: Horizontal member at joint F.
  - M1: Horizontal member at joint E.
- Connections:**
  - Joint A:  $\equiv 3 \times 6$  (B1) to  $\equiv 5 \times 6$  (G1) (I).
  - Joint B:  $\equiv 3 \times 6$  (B1) to  $\equiv 5 \times 6$  (G1) (I).
  - Joint C:  $\equiv 3 \times 6$  (B1) to  $\equiv 5 \times 6$  (G1) (I).
  - Joint D:  $\equiv 3 \times 6$  (B1) to  $\equiv 5 \times 6$  (G1) (I).
  - Joint E:  $\equiv 3 \times 6$  (B1) to  $\equiv 5 \times 6$  (G1) (I).
- Dimensions:**
  - Overall width: 21'11"12
  - Overall height: 4'3"1
  - Horizontal segments (top): 6'6"15, 11'3"4"8"1, 15'11"14"8"1, 21'11"126"0"11
  - Horizontal segments (bottom): 6'5"36"5"3, 4'9"1311"3", 4'9"1316"0"13, 5'10"1521'11"12
- Labels:**
  - HUS-26 SIMPSON HANGER
  - B1, B2, G1, M1
  - T1, T2
  - W1, W2, W3
  - H, G, F, M1

| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Rt Stub Wedge: 2x4 SP #2;                                             | <b>Maximum Bot Chord Forces Per Ply (lbs)</b> <table><tr><th>Chords</th><th>Tens.</th><th>Comp.</th><th>Chords</th><th>Tens.</th><th>Comp.</th></tr><tr><td>A - H</td><td>2353</td><td>-941</td><td>G - F</td><td>2258</td><td>-885</td></tr><tr><td>H - G</td><td>2351</td><td>-945</td><td>F - E</td><td>2261</td><td>-882</td></tr></table>                                                        | Chords | Tens.  | Comp. | Chords | Tens. | Comp. | A - H | 2353 | -941 | G - F | 2258 | -885 | H - G | 2351 | -945 | F - E | 2261 | -882 |       |     |      |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|-------|--------|-------|-------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|-----|------|--|--|--|
| Chords                                                                                                                                                       | Tens.                                                                                                                                                                                                                                                                                                                                                                                                 | Comp.  | Chords | Tens. | Comp.  |       |       |       |      |      |       |      |      |       |      |      |       |      |      |       |     |      |  |  |  |
| A - H                                                                                                                                                        | 2353                                                                                                                                                                                                                                                                                                                                                                                                  | -941   | G - F  | 2258  | -885   |       |       |       |      |      |       |      |      |       |      |      |       |      |      |       |     |      |  |  |  |
| H - G                                                                                                                                                        | 2351                                                                                                                                                                                                                                                                                                                                                                                                  | -945   | F - E  | 2261  | -882   |       |       |       |      |      |       |      |      |       |      |      |       |      |      |       |     |      |  |  |  |
| <b>Plating Notes</b><br>(I) - plates so marked were sized using 0% Fabrication Tolerance, 0 degrees Rotational Tolerance, and/or zero Positioning Tolerance. | <b>Maximum Web Forces Per Ply (lbs)</b> <table><tr><th>Webs</th><th>Tens.</th><th>Comp.</th><th>Webs</th><th>Tens.</th><th>Comp.</th></tr><tr><td>H - B</td><td>197</td><td>0</td><td>G - D</td><td>322</td><td>-615</td></tr><tr><td>B - G</td><td>363</td><td>-719</td><td>D - F</td><td>171</td><td>0</td></tr><tr><td>C - G</td><td>735</td><td>-257</td><td></td><td></td><td></td></tr></table> | Webs   | Tens.  | Comp. | Webs   | Tens. | Comp. | H - B | 197  | 0    | G - D | 322  | -615 | B - G | 363  | -719 | D - F | 171  | 0    | C - G | 735 | -257 |  |  |  |
| Webs                                                                                                                                                         | Tens.                                                                                                                                                                                                                                                                                                                                                                                                 | Comp.  | Webs   | Tens. | Comp.  |       |       |       |      |      |       |      |      |       |      |      |       |      |      |       |     |      |  |  |  |
| H - B                                                                                                                                                        | 197                                                                                                                                                                                                                                                                                                                                                                                                   | 0      | G - D  | 322   | -615   |       |       |       |      |      |       |      |      |       |      |      |       |      |      |       |     |      |  |  |  |
| B - G                                                                                                                                                        | 363                                                                                                                                                                                                                                                                                                                                                                                                   | -719   | D - F  | 171   | 0      |       |       |       |      |      |       |      |      |       |      |      |       |      |      |       |     |      |  |  |  |
| C - G                                                                                                                                                        | 735                                                                                                                                                                                                                                                                                                                                                                                                   | -257   |        |       |        |       |       |       |      |      |       |      |      |       |      |      |       |      |      |       |     |      |  |  |  |
| <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types.                                            |                                                                                                                                                                                                                                                                                                                                                                                                       |        |        |       |        |       |       |       |      |      |       |      |      |       |      |      |       |      |      |       |     |      |  |  |  |

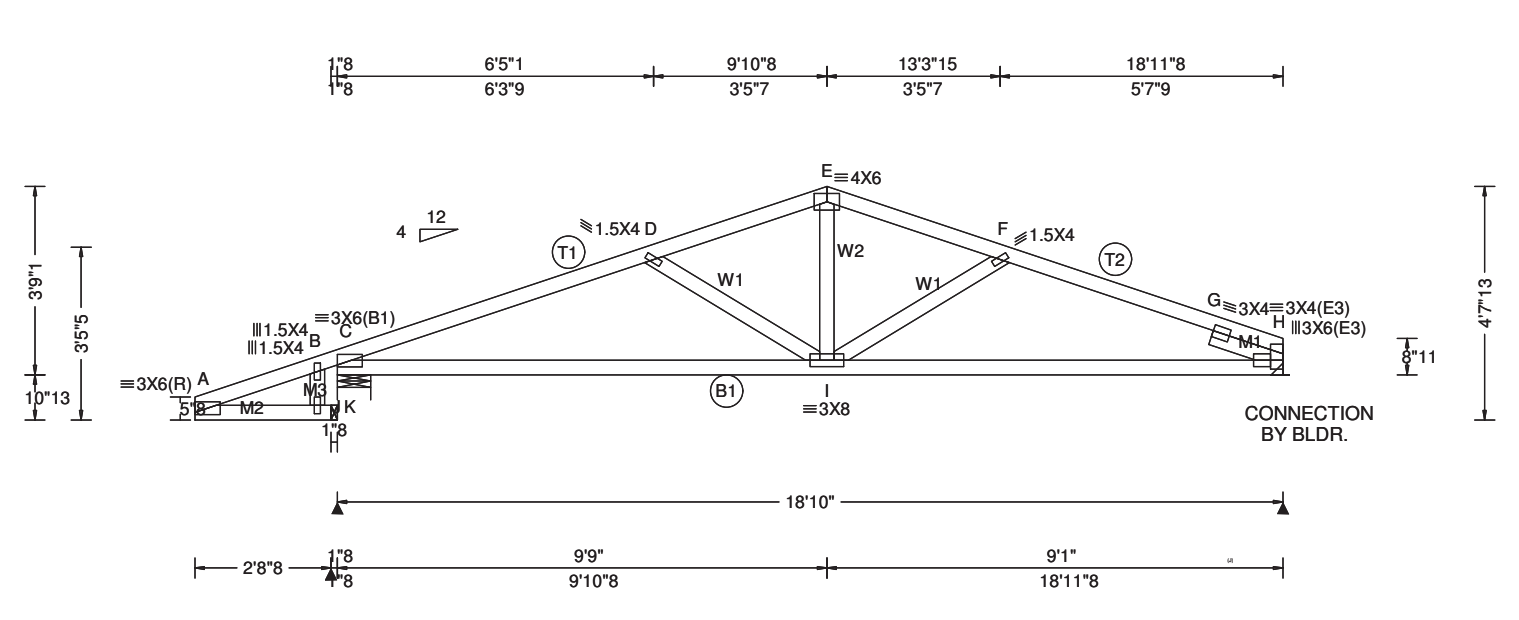
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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                 |  |  | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs)              |               |      |                       |      |      |      |
|------------------------|--|-----------------------------------|--|----------------------------------------------|--|--|---------------------------------|--|----------------------------------------|---------------|------|-----------------------|------|------|------|
|                        |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                        |  |  | PP Deflection in loc L/defl L/# |  | Gravity                                |               |      | Non-Gravity           |      |      |      |
|                        |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                |  |  | VERT(LL): 0.123 J 999 360       |  | Loc                                    | R+            | / R- | / Rh                  | / Rw | / U  | / RL |
|                        |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                |  |  | VERT(CL): 0.216 J 999 240       |  | L                                      | -             | /-   | /256                  | /-   | /-   | /299 |
|                        |  | Risk Category: II                 |  | Snow Duration: NA                            |  |  | HORZ(LL): 0.044 G - -           |  | C                                      | 1317          | /-   | /232                  | /887 | /737 | /303 |
|                        |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ |  |  | HORZ(TL): 0.078 G - -           |  | O                                      | 1331          | /-   | /-                    | /862 | /743 | /-   |
|                        |  | Mean Height: 15.00 ft             |  |                                              |  |  | Creep Factor: 2.0               |  | M                                      |               |      | -                     | /-   | /114 | /-   |
|                        |  | TCDL: 6.0 psf                     |  | TPI Std: 2014                                |  |  | Max TC CSI: 0.903               |  | Wind reactions based on C&C            |               |      |                       |      |      |      |
|                        |  | BCDL: 6.0 psf                     |  | Rep Fac: Yes                                 |  |  | Max BC CSI: 0.886               |  | L                                      | Brg Wid = 1.5 |      | Min Req = -           |      |      |      |
|                        |  | MWFRS Parallel Dist: h to 2h      |  | FT/RT:20(0)/10(0)                            |  |  | Max Web CSI: 0.157              |  | C                                      | Brg Wid = 8.0 |      | Min Req = 1.6 (Truss) |      |      |      |
|                        |  | C&C Dist a: 3.00 ft               |  | Plate Type(s):                               |  |  | Mfg Specified Camber:           |  | O                                      | Brg Wid = 8.0 |      | Min Req = 1.6 (Truss) |      |      |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | WAVE                                         |  |  | VIEW Ver: 23.02.01A.1204.18     |  | M                                      | Brg Wid = 1.5 |      | Min Req = -           |      |      |      |
|                        |  | GCpi: 0.18                        |  |                                              |  |  |                                 |  | Bearings C & G are a rigid surface.    |               |      |                       |      |      |      |
|                        |  | Wind Duration: 1.60               |  |                                              |  |  |                                 |  | Maximum Top Chord Forces Per Ply (lbs) |               |      |                       |      |      |      |

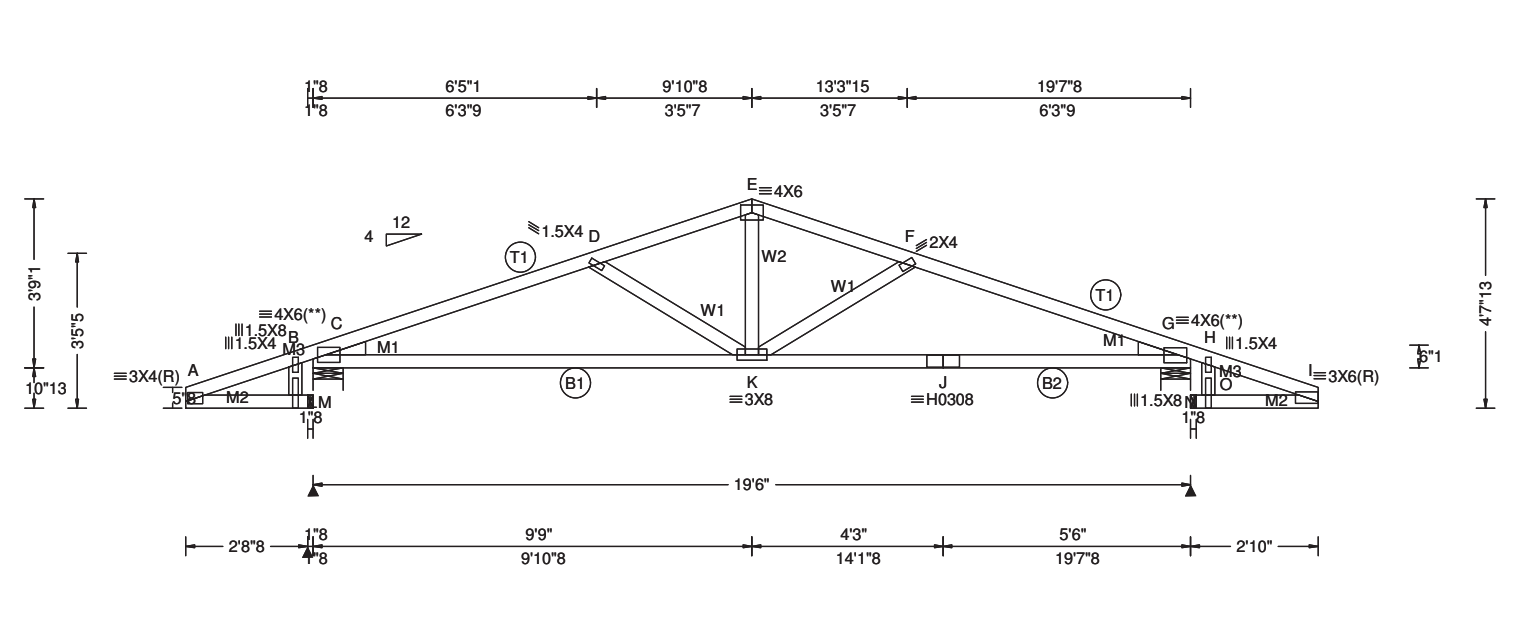
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Level Return: 2x4 SP #2;<br>Rt Level Return: 2x4 SP #2; | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types. | <b>Additional Notes</b><br>The maximum horizontal reaction is 256#<br>***** BEARING ANALOG MODIFIED! ***** | <b>Maximum Top Chord Forces Per Ply (lbs)</b> <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>A - B</td><td>294 -260</td><td>E - F</td><td>790 -1589</td></tr><tr><td>B - C</td><td>322 -265</td><td>F - G</td><td>1028 -2049</td></tr><tr><td>C - D</td><td>1026 -2077</td><td>G - H</td><td>498 -371</td></tr><tr><td>D - E</td><td>800 -1593</td><td>H - I</td><td>439 -339</td></tr></table><br><b>Maximum Bot Chord Forces Per Ply (lbs)</b> <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>C - J</td><td>1995 -1013</td><td>J - G</td><td>1959 -948</td></tr></table><br><b>Maximum Web Forces Per Ply (lbs)</b> <table><tr><th>Webs</th><th>Tens.Comp.</th><th>Webs</th><th>Tens. Comp.</th></tr><tr><td>A - K</td><td>292 -269</td><td>J - F</td><td>412 -466</td></tr><tr><td>B - K</td><td>55 -13</td><td>M - N</td><td>361 -432</td></tr><tr><td>K - L</td><td>299 -272</td><td>N - H</td><td>154 -102</td></tr><tr><td>D - J</td><td>422 -508</td><td>N - I</td><td>359 -436</td></tr><tr><td>E - J</td><td>695 -274</td><td></td><td></td></tr></table> | Chords | Tens.Comp. | Chords | Tens. Comp. | A - B | 294 -260 | E - F | 790 -1589 | B - C | 322 -265 | F - G | 1028 -2049 | C - D | 1026 -2077 | G - H | 498 -371 | D - E | 800 -1593 | H - I | 439 -339 | Chords | Tens.Comp. | Chords | Tens. Comp. | C - J | 1995 -1013 | J - G | 1959 -948 | Webs | Tens.Comp. | Webs | Tens. Comp. | A - K | 292 -269 | J - F | 412 -466 | B - K | 55 -13 | M - N | 361 -432 | K - L | 299 -272 | N - H | 154 -102 | D - J | 422 -508 | N - I | 359 -436 | E - J | 695 -274 |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------|--------|-------------|-------|----------|-------|-----------|-------|----------|-------|------------|-------|------------|-------|----------|-------|-----------|-------|----------|--------|------------|--------|-------------|-------|------------|-------|-----------|------|------------|------|-------------|-------|----------|-------|----------|-------|--------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|--|--|
| Chords                                                                                                                                            | Tens.Comp.                                                                                                        | Chords                                                                                                     | Tens. Comp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| A - B                                                                                                                                             | 294 -260                                                                                                          | E - F                                                                                                      | 790 -1589                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| B - C                                                                                                                                             | 322 -265                                                                                                          | F - G                                                                                                      | 1028 -2049                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| C - D                                                                                                                                             | 1026 -2077                                                                                                        | G - H                                                                                                      | 498 -371                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| D - E                                                                                                                                             | 800 -1593                                                                                                         | H - I                                                                                                      | 439 -339                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| Chords                                                                                                                                            | Tens.Comp.                                                                                                        | Chords                                                                                                     | Tens. Comp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| C - J                                                                                                                                             | 1995 -1013                                                                                                        | J - G                                                                                                      | 1959 -948                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| Webs                                                                                                                                              | Tens.Comp.                                                                                                        | Webs                                                                                                       | Tens. Comp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| A - K                                                                                                                                             | 292 -269                                                                                                          | J - F                                                                                                      | 412 -466                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| B - K                                                                                                                                             | 55 -13                                                                                                            | M - N                                                                                                      | 361 -432                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| K - L                                                                                                                                             | 299 -272                                                                                                          | N - H                                                                                                      | 154 -102                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| D - J                                                                                                                                             | 422 -508                                                                                                          | N - I                                                                                                      | 359 -436                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |
| E - J                                                                                                                                             | 695 -274                                                                                                          |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        |            |        |             |       |          |       |           |       |          |       |            |       |            |       |          |       |           |       |          |        |            |        |             |       |            |       |           |      |            |      |             |       |          |       |          |       |        |       |          |       |          |       |          |       |          |       |          |       |          |  |  |

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCEA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.  
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.  
For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCEA: [sbccomponents.com](http://sbccomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



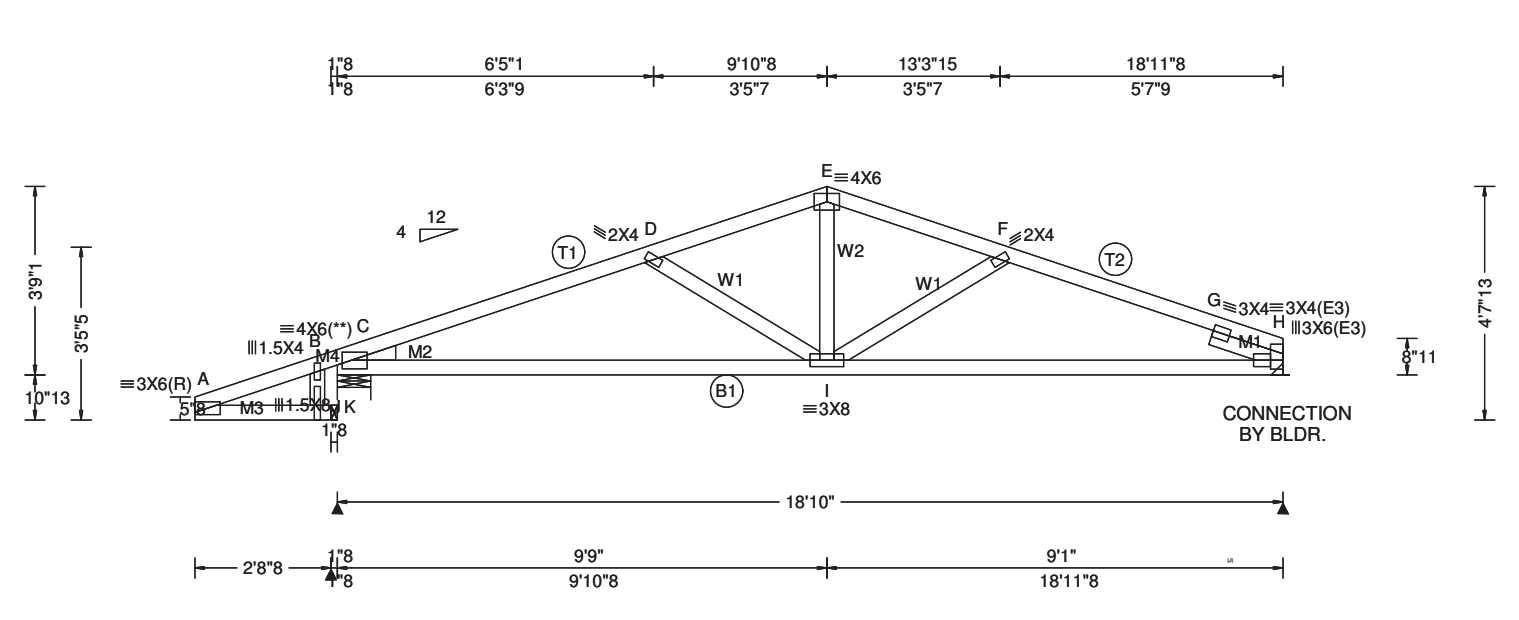
| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                 | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |               |                       |             |      |      |      |
|------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|---------------|-----------------------|-------------|------|------|------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                        | PP Deflection in loc L/defl L/# | Gravity                                |               |                       | Non-Gravity |      |      |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                | VERT(LL): 0.096 D 999 360       | Loc                                    | R+            | / R-                  | / Rh        | / Rw | / U  | / RL |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                                                                                                                | VERT(CL): 0.169 D 999 240       | K                                      | -             | /-                    | /260        | /-   | /-   | /313 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                            | HORZ(LL): 0.031 H - -           | C                                      | 1301          | /-                    | /260        | /874 | /762 | /222 |
|                        | EXP: C Kzt: NA                    |                                                                                                                              | HORZ(TL): 0.056 H - -           | H                                      | 1023          | /-                    | /-          | /666 | /497 | /-   |
| Des Ld: 55.00          | Mean Height: 15.00 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0               | Wind reactions based on C&C            |               |                       |             |      |      |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                                                                                                              | Max TC CSI: 0.745               | K                                      | Brg Wid = 1.5 | Min Req = -           |             |      |      |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                              | Max BC CSI: 0.898               | C                                      | Brg Wid = 8.0 | Min Req = 1.5 (Truss) |             |      |      |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h to 2h      |                                                                                                                              | Max Web CSI: 0.320              | H                                      | Brg Wid = -   | Min Req = -           |             |      |      |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               |                                                                                                                              | Mfg Specified Camber:           | Bearing C is a rigid surface.          |               |                       |             |      |      |      |
|                        | Loc. from endwall: not in 9.00 ft |                                                                                                                              |                                 | Maximum Top Chord Forces Per Ply (lbs) |               |                       |             |      |      |      |
|                        | GCpi: 0.18                        |                                                                                                                              |                                 | Chords                                 | Tens.Comp.    | Chords                | Tens. Comp. |      |      |      |
|                        | Wind Duration: 1.60               |                                                                                                                              | VIEW Ver: 23.02.01A.1204.18     |                                        |               |                       |             |      |      |      |

|                                                                                                                                                                   |                                                                                                                   |                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Rt Slider: 2x4 SP #2; block length = 1.500'<br>Lt Level Return: 2x4 SP #2; | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types. | <b>Additional Notes</b><br>The maximum horizontal reaction is 260#<br>***** BEARING ANALOG MODIFIED! ***** |
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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                     |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |                       |      |               |             |       |      |    |      |
|------------------------|--|-----------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|-----------------------|------|---------------|-------------|-------|------|----|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                            |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |                       |      | Non-Gravity   |             |       |      |    |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                    |  |  | VERT(LL): 0.096 K 999 360       |  |  | Loc                                    | R+                    | / R- | / Rh          | / Rw        | / U   | / RL |    |      |
| BCLL: 0.00             |  | Enclosure: Part. Enc.             |  | Lu: NA Cs: NA                                                                                                                    |  |  | VERT(CL): 0.169 K 999 240       |  |  | M                                      | 96                    | /-84 | /237          | /107        | /180  | /447 |    |      |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                                |  |  | HORZ(LL): 0.030 G - -           |  |  | B                                      | 1266                  | /-   | /218          | /1321       | /1329 | /470 |    |      |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE, HS |  |  | HORZ(TL): 0.053 G - -           |  |  | H                                      | 1329                  | /-   | /-            | /811        | /1027 | /-   |    |      |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                                                                                                                  |  |  | Creep Factor: 2.0               |  |  | N                                      |                       |      | -             | /-          | /130  | /-   | /- | /444 |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                                  |  |  | Max TC CSI: 0.671               |  |  | Wind reactions based on C&C            |                       |      |               |             |       |      |    |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                                  |  |  | Max BC CSI: 0.982               |  |  | M                                      |                       |      | Brg Wid = 1.5 | Min Req = - |       |      |    |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h/2 to h     |  | Max Web CSI: 0.185                                                                                                               |  |  | B                               |  |  | Brg Wid = 8.0                          | Min Req = 1.6 (Truss) |      |               |             |       |      |    |      |
|                        |  | C&C Dist a: 3.00 ft               |  | Mfg Specified Camber:                                                                                                            |  |  | H                               |  |  | Brg Wid = 8.0                          | Min Req = 1.6 (Truss) |      |               |             |       |      |    |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | VIEW Ver: 23.02.01A.1204.18                                                                                                      |  |  | N                               |  |  | Brg Wid = 1.5                          | Min Req = -           |      |               |             |       |      |    |      |
|                        |  | GCpi: 0.55                        |  |                                                                                                                                  |  |  |                                 |  |  | Bearings B & G are a rigid surface.    |                       |      |               |             |       |      |    |      |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                                  |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |                       |      |               |             |       |      |    |      |

|                                                                                                                                                                                               |                                                                                                                                               |                                                                                                                                                         |                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #1;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x4 SP #2;Rt Wedge: 2x4 SP #2;<br>Lt Level Return: 2x4 SP #2;<br>Rt Level Return: 2x4 SP #2; | <b>Plating Notes</b><br>(**) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements. | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types.<br>Left bottom chord exposed to wind. | <b>Additional Notes</b><br>The maximum horizontal reaction is 237#<br>***** BEARING ANALOG MODIFIED! ***** |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|



| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |             |         | Defl/CSI Criteria     |                             | ▲ Maximum Reactions (lbs)              |            |           |             |             |       |      |
|------------------------|--------|----------------------|----------------|------------------------------|-------------|---------|-----------------------|-----------------------------|----------------------------------------|------------|-----------|-------------|-------------|-------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA      | CAT: NA | PP Deflection in      | loc L/defl L/#              | Gravity                                |            |           | Non-Gravity |             |       |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |             | Ce: NA  | VERT(LL):             | 0.083 I 999 360             | Loc                                    | R+         | / R-      | / Rh        | / Rw        | / U   | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Part. Enc.     | Lu: NA                       | Cs: NA      |         | VERT(CL):             | 0.147 I 999 240             | K                                      | -          | /-        | /243        | /-          | /-    | /338 |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA          |         | HORZ(LL):             | 0.028 H - -                 | B                                      | 1302       | /-        | /243        | /1088       | /1000 | /252 |
|                        |        | EXP:                 | C Kzt: NA      |                              |             |         | HORZ(TL):             | 0.051 H - -                 | H                                      | 1022       | /-        | /-          | /827        | /731  | /-   |
| Des Ld:                | 55.00  | Mean Height:         | 15.00 ft       | Building Code:               |             |         | Creep Factor:         | 2.0                         | Wind reactions based on C&C            |            |           |             |             |       |      |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        | FBC 8th Ed. 2023 Res.        | HVHZ        |         | Max TC CSI:           | 0.620                       | K                                      | Brg        | Wid = 1.5 | Min Req =   | -           |       |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        | TPI Std:                     | 2014        |         | Max BC CSI:           | 0.865                       | B                                      | Brg        | Wid = 8.0 | Min Req =   | 1.5 (Truss) |       |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | h to 2h        | Rep Fac:                     | Yes         |         | Max Web CSI:          | 0.447                       | H                                      | Brg        | Wid = -   | Min Req =   | -           |       |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        | FT/RT:                       | 20(0)/10(0) |         | Mfg Specified Camber: |                             | Bearing B is a rigid surface.          |            |           |             |             |       |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft | Plate Type(s):               |             |         |                       |                             | Maximum Top Chord Forces Per Ply (lbs) |            |           |             |             |       |      |
|                        |        | GCpi:                | 0.55           |                              |             |         |                       |                             | Chords                                 | Tens.Comp. | Chords    | Tens. Comp. |             |       |      |
|                        |        | Wind Duration:       | 1.60           | WAVE                         |             |         |                       | VIEW Ver: 23.02.01A.1204.18 |                                        |            |           |             |             |       |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Rt Slider: 2x4 SP #2; block length = 1.500'  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 243#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

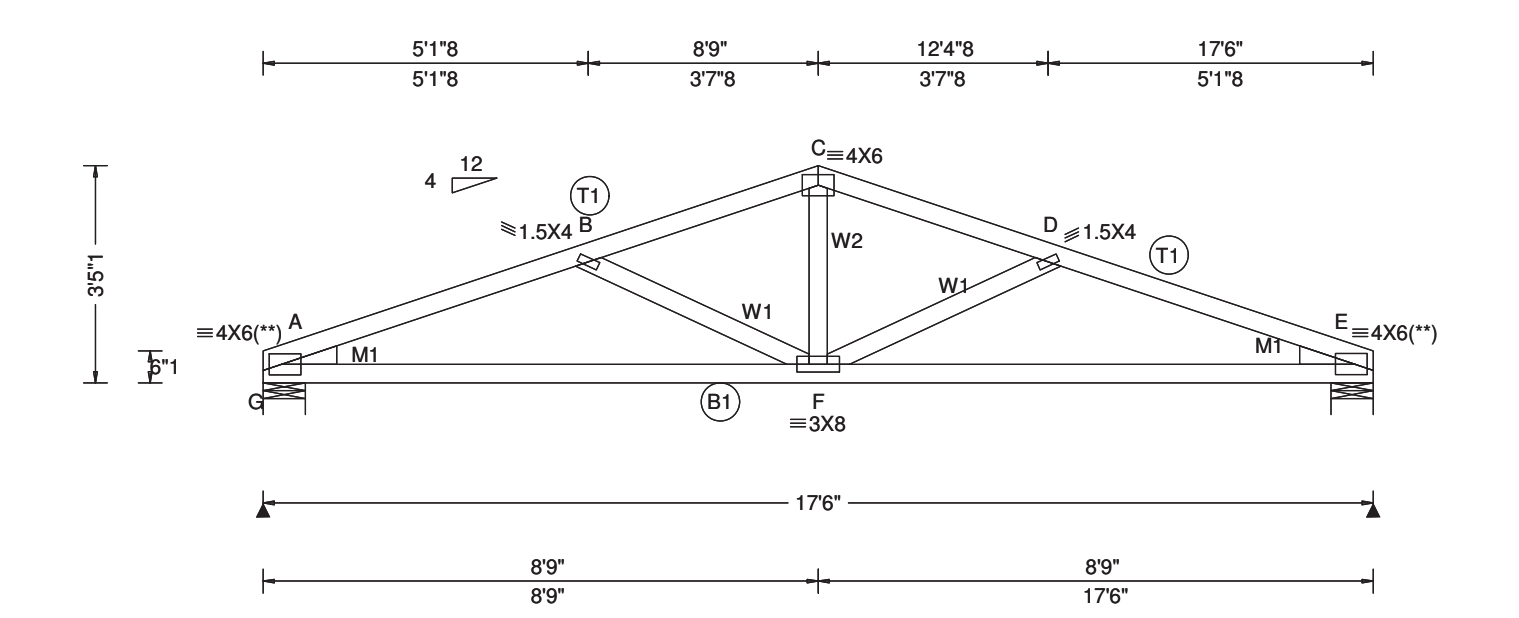
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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |             |        |             |      |      |      |
|------------------------|--|-----------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|-------------|--------|-------------|------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |             |        | Non-Gravity |      |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): 0.074 F 999 360       |  |  | Loc                                    | R+          | / R-   | / Rh        | / Rw | / U  | / RL |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): 0.137 F 999 240       |  |  | G 962                                  | /-          | /-     |             | /626 | /575 | /85  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): 0.024 E - -           |  |  | E 963                                  | /-          | /-     |             | /626 | /575 | /-   |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.044 E - -           |  |  | Wind reactions based on C&C            |             |        |             |      |      |      |
| NCBCLL: 10.00          |  | Mean Height: 22.46 ft             |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | G Brg Wid = 8.0 Min Req = 1.5 (Truss)  |             |        |             |      |      |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max TC CSI: 0.403               |  |  | E Brg Wid = 8.0 Min Req = 1.5 (Truss)  |             |        |             |      |      |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max BC CSI: 0.678               |  |  | Bearings G & E are a rigid surface.    |             |        |             |      |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h/2 to h     |  |                                                                                                                              |  |  | Max Web CSI: 0.138              |  |  | Maximum Top Chord Forces Per Ply (lbs) |             |        |             |      |      |      |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                              |  |  | Mfg Specified Camber:           |  |  | Chords                                 | Tens.Comp.  | Chords | Tens. Comp. |      |      |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  |                                                                                                                              |  |  |                                 |  |  | A - B                                  | 1249 - 1918 | C - D  | 970 - 1487  |      |      |      |
|                        |  | GCpi: 0.18                        |  |                                                                                                                              |  |  |                                 |  |  | B - C                                  | 971 - 1487  | D - E  | 1251 - 1918 |      |      |      |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                              |  |  |                                 |  |  |                                        |             |        |             |      |      |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Rt Wedge: 2x4 SP #2;

**Plating Notes**  
(\*\*) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

**Maximum Bot Chord Forces Per Ply (lbs)**

| Chords | Tens.Comp.  | Chords | Tens. Comp. |
|--------|-------------|--------|-------------|
| A - F  | 1765 - 1116 | F - E  | 1765 - 1089 |

**Maximum Web Forces Per Ply (lbs)**

| Webs  | Tens.Comp. | Webs  | Tens. Comp. |
|-------|------------|-------|-------------|
| B - F | 446 - 456  | F - D | 447 - 456   |
| C - F | 578 - 272  |       |             |

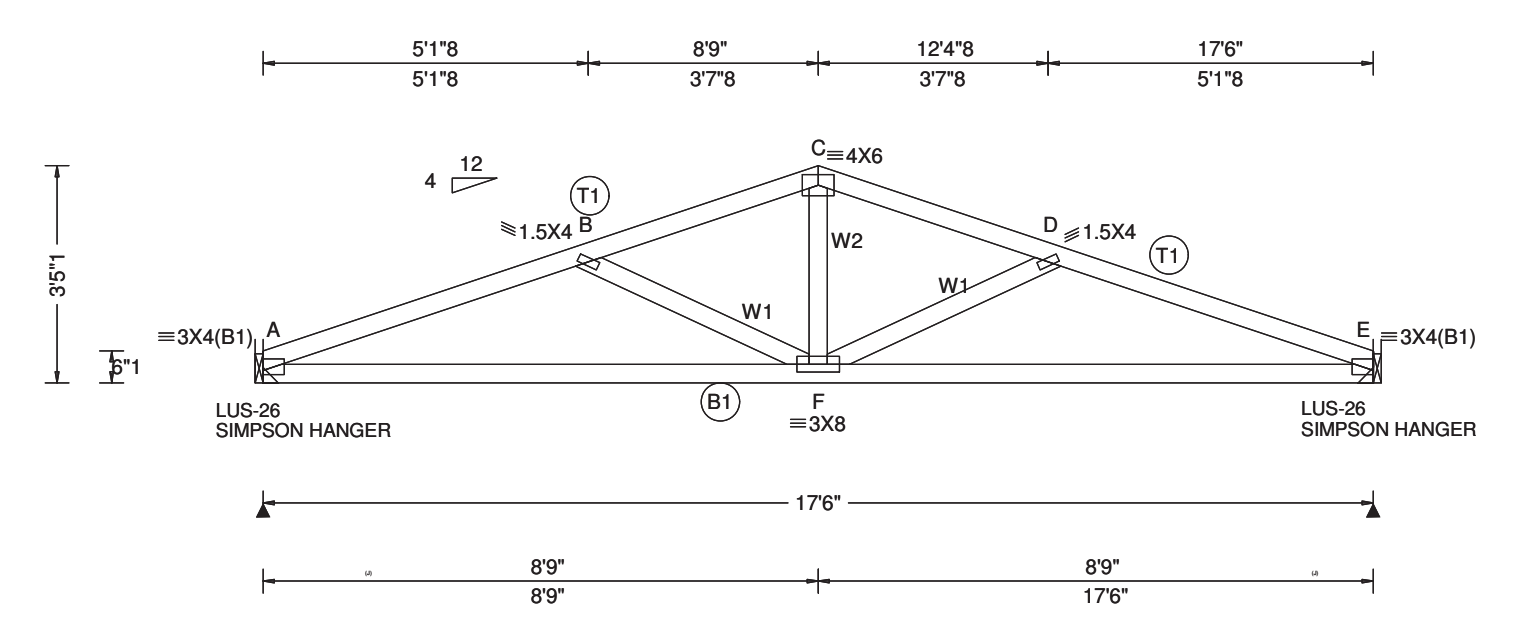
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| Loading Criteria (psf)                                                                                                                                      | Wind Criteria                                                                                                                                                                                                                                                                                  | Snow Criteria (Pg,Pf in PSF)                                                                                                                                                                                     | Defl/CSI Criteria                                                                                                                                                                                                                                                                                | ▲ Maximum Reactions (lbs)                             |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--|--|--|--|--|
| TCLL: 30.00<br>TCDL: 15.00<br>BCLL: 0.00<br>BCDL: 10.00<br><br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 2.00<br><br>Load Duration: 1.25<br>Spacing: 24.0 " | Wind Std: ASCE 7-22<br>Speed: 175 mph<br>Enclosure: Closed<br>Risk Category: II<br>EXP: C Kzt: NA<br>Mean Height: 22.46 ft<br>TCDL: 6.0 psf<br>BCDL: 6.0 psf<br>MWFRS Parallel Dist: h/2 to h<br>C&C Dist a: 3.00 ft<br>Loc. from endwall: not in 9.00 ft<br>GCpi: 0.18<br>Wind Duration: 1.60 | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.090 F 999 360<br>VERT(CL): 0.164 F 999 240<br>HORZ(LL): 0.030 E - -<br>HORZ(TL): 0.054 E - -<br><br>Creep Factor: 2.0<br>Max TC CSI: 0.536<br>Max BC CSI: 0.743<br>Max Web CSI: 0.141<br>Mfg Specified Camber:<br><br>VIEW Ver: 23.02.01A.1204.18 | Gravity Non-Gravity<br>Loc R+ / R- / Rh / Rw / U / RL |  |  |  |  |  |
|                                                                                                                                                             | A 962 /- /- /626 /575 /85<br>E 962 /- /- /626 /575 /-                                                                                                                                                                                                                                          |                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                  |                                                       |  |  |  |  |  |
|                                                                                                                                                             | Wind reactions based on C&C<br>A Brg Wid = - Min Req = -<br>E Brg Wid = - Min Req = -                                                                                                                                                                                                          |                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                  |                                                       |  |  |  |  |  |
|                                                                                                                                                             | Maximum Top Chord Forces Per Ply (lbs)<br>Chords Tens.Comp. Chords Tens. Comp.                                                                                                                                                                                                                 |                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                  |                                                       |  |  |  |  |  |
|                                                                                                                                                             | A - B 1263 - 1950 C - D 958 - 1486<br>B - C 959 - 1486 D - E 1265 - 1950                                                                                                                                                                                                                       |                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                  |                                                       |  |  |  |  |  |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;

**Hangers / Ties**  
(J) Hanger Support Required, by others

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

**Maximum Bot Chord Forces Per Ply (lbs)**

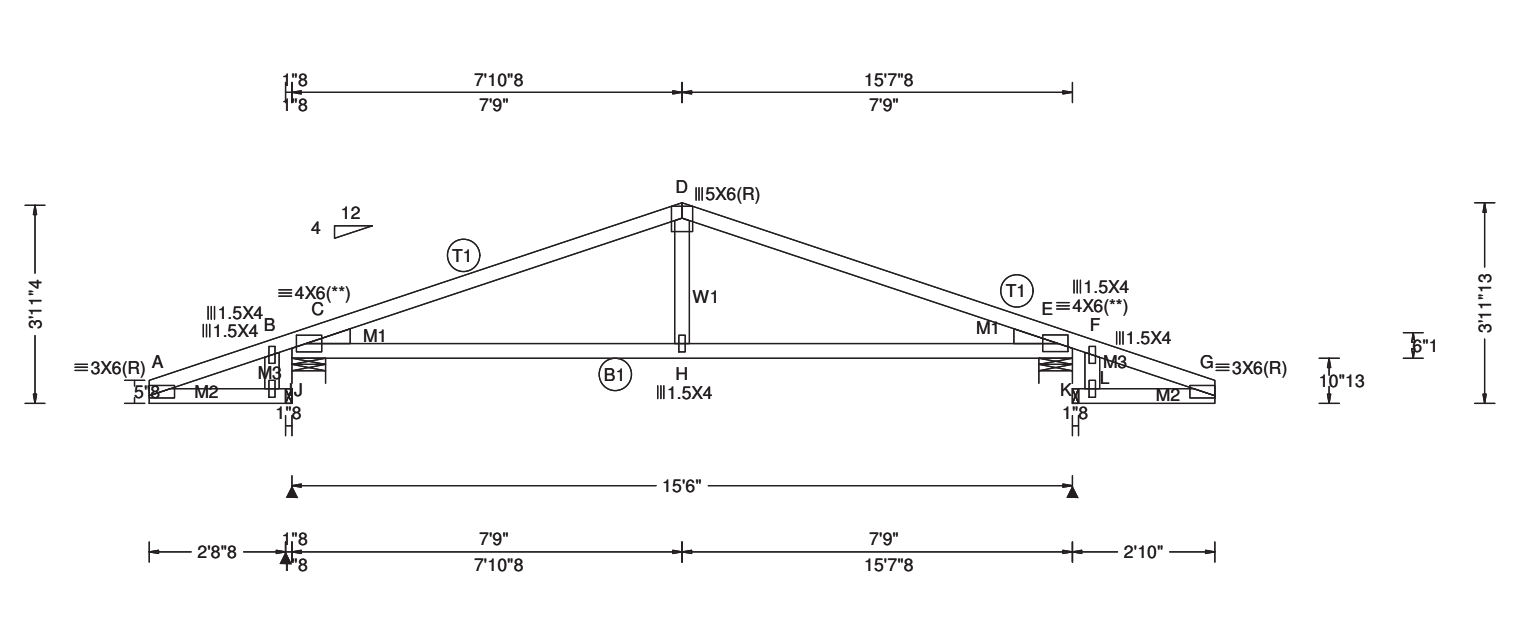
| Chords | Tens.Comp.  | Chords | Tens. Comp. |
|--------|-------------|--------|-------------|
| A - F  | 1775 - 1136 | F - E  | 1775 - 1109 |

**Maximum Web Forces Per Ply (lbs)**

| Webs  | Tens.Comp. | Webs  | Tens. Comp. |
|-------|------------|-------|-------------|
| B - F | 484 - 467  | F - D | 484 - 467   |
| C - F | 578 - 276  |       |             |

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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs)              |  |                             |  |      |  |             |  |      |  |
|------------------------|--|-----------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|----------------------------------------|--|-----------------------------|--|------|--|-------------|--|------|--|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  | Gravity                                |  |                             |  |      |  |             |  |      |  |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): 0.042 H 999 360       |  | Loc                                    |  | R+ / R-                     |  | / Rh |  | Non-Gravity |  |      |  |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): 0.072 H 999 240       |  | J                                      |  | -                           |  | -/   |  | /233        |  |      |  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): 0.015 E - -           |  | B                                      |  | 1100                        |  | -/   |  | /209        |  |      |  |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.026 E - -           |  | F                                      |  | 1108                        |  | -/   |  | /736        |  |      |  |
| NCBCLL: 10.00          |  | Mean Height: 15.32 ft             |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  | Max TC CSI: 0.693                      |  | K                           |  | -    |  | -/          |  | /125 |  |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max BC CSI: 0.577               |  | Max Web CSI: 0.068                     |  | Wind reactions based on C&C |  |      |  |             |  |      |  |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                              |  |  | MWFRRS Parallel Dist: h/2 to h  |  | Mfg Specified Camber:                  |  | J Brg Wid = 1.5 Min Req = - |  |      |  |             |  |      |  |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h/2 to h     |  |                                                                                                                              |  |  | VIEW Ver: 23.02.01A.1204.18     |  | B Brg Wid = 8.0 Min Req = 1.5 (Truss)  |  |                             |  |      |  |             |  |      |  |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                              |  |  |                                 |  | F Brg Wid = 8.0 Min Req = 1.5 (Truss)  |  |                             |  |      |  |             |  |      |  |
|                        |  | Loc. from endwall: not in 9.00 ft |  |                                                                                                                              |  |  |                                 |  | K Brg Wid = 1.5 Min Req = -            |  |                             |  |      |  |             |  |      |  |
|                        |  | GCpi: 0.18                        |  |                                                                                                                              |  |  |                                 |  | Bearings B & E are a rigid surface.    |  |                             |  |      |  |             |  |      |  |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                              |  |  |                                 |  | Maximum Top Chord Forces Per Ply (lbs) |  |                             |  |      |  |             |  |      |  |

Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Rt Wedge: 2x4 SP #2;  
Lt Level Return: 2x4 SP #2;  
Rt Level Return: 2x4 SP #2;

Plating Notes

(\*\*) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

Wind

Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

Additional Notes

The maximum horizontal reaction is 233#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

ChordsTens.Comp.

A - B274-282

B - C300-287

C - D874-1381

ChordsTens. Comp.

D - E859-1383

E - F478-384

F - G422-351

Maximum Bot Chord Forces Per Ply (lbs)

ChordsTens.Comp.

C - H1352-827

Maximum Web Forces Per Ply (lbs)

WebsTens.Comp.

A - I316-239

B - I52-15

I - J322-238

D - H3030

WebsTens. Comp.

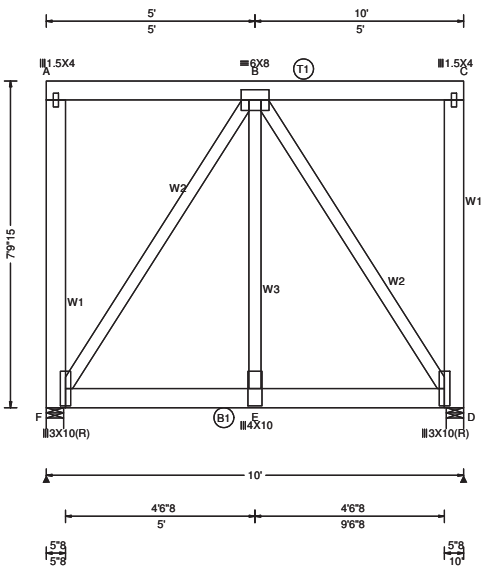
K - L375-411

L - F152-103

L - G372-417

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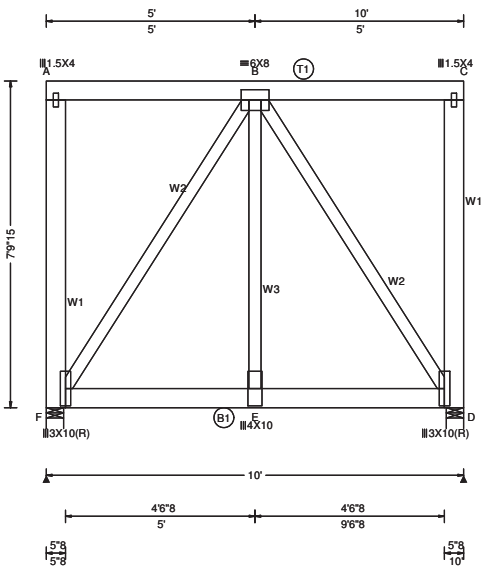




| Loading Criteria (psf) |  | Wind Criteria                      |  | Snow Criteria (Pg,Pf in PSF) |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)               |      |      |             |      |       |      |
|------------------------|--|------------------------------------|--|------------------------------|--|--|---------------------------------|--|--|-----------------------------------------|------|------|-------------|------|-------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22                |  | Pg: NA Ct: NA CAT: NA        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                 |      |      | Non-Gravity |      |       |      |
| TCDL: 15.00            |  | Speed: 175 mph                     |  | Pf: NA Ce: NA                |  |  | VERT(LL): 0.034 E 999 360       |  |  | Loc                                     | R+   | / R- | / Rh        | / Rw | / U   | / RL |
| BCLL: 0.00             |  | Enclosure: Closed                  |  | Lu: NA Cs: NA                |  |  | VERT(CL): 0.062 E 999 240       |  |  | F                                       | 7096 | /-   | /-          | /-   | /1799 | /-   |
| BCDL: 10.00            |  | Risk Category: II                  |  | Snow Duration: NA            |  |  | HORZ(LL): 0.004 D - -           |  |  | D                                       | 6610 | /-   | /-          | /-   | /1573 | /-   |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                     |  | Building Code:               |  |  | Creep Factor: 2.0               |  |  | Wind reactions based on MWFRS           |      |      |             |      |       |      |
| NCBCLL: 0.00           |  | Mean Height: 19.83 ft              |  | FBC 8th Ed. 2023 Res. HVHZ   |  |  | Max TC CSI: 0.053               |  |  | F Brg Wid = 5.0 Min Req = 1.5 (Support) |      |      |             |      |       |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                      |  | TPI Std: 2014                |  |  | Max BC CSI: 0.415               |  |  | D Brg Wid = 5.0 Min Req = 1.5 (Support) |      |      |             |      |       |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                      |  | Rep Fac: Yes                 |  |  | Max Web CSI: 0.588              |  |  | Bearings F & D are a rigid surface.     |      |      |             |      |       |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2      |  | FT/RT:20(0)/10(0)            |  |  | Mfg Specified Camber:           |  |  | Maximum Top Chord Forces Per Ply (lbs)  |      |      |             |      |       |      |
|                        |  | C&C Dist a: 3.00 ft                |  | Plate Type(s):               |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | Chords Tens.Comp. Chords Tens. Comp.    |      |      |             |      |       |      |
|                        |  | Loc. from endwall: not in 25.00 ft |  | WAVE                         |  |  |                                 |  |  | A - B 0 0 B - C 0 0                     |      |      |             |      |       |      |
|                        |  | GCpi: 0.18                         |  |                              |  |  |                                 |  |  |                                         |      |      |             |      |       |      |
|                        |  | Wind Duration: 1.60                |  |                              |  |  |                                 |  |  |                                         |      |      |             |      |       |      |

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| Loading Criteria (psf) |  | Wind Criteria                      |  | Snow Criteria (Pg,Pf in PSF) |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)               |      |      |             |      |       |      |
|------------------------|--|------------------------------------|--|------------------------------|--|--|---------------------------------|--|--|-----------------------------------------|------|------|-------------|------|-------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22                |  | Pg: NA Ct: NA CAT: NA        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                 |      |      | Non-Gravity |      |       |      |
| TCDL: 15.00            |  | Speed: 175 mph                     |  | Pf: NA Ce: NA                |  |  | VERT(LL): 0.039 E 999 360       |  |  | Loc                                     | R+   | / R- | / Rh        | / Rw | / U   | / RL |
| BCLL: 0.00             |  | Enclosure: Closed                  |  | Lu: NA Cs: NA                |  |  | VERT(CL): 0.072 E 999 240       |  |  | F                                       | 7319 | -/-  | -/-         | -/-  | /1801 | -/-  |
| BCDL: 10.00            |  | Risk Category: II                  |  | Snow Duration: NA            |  |  | HORZ(LL): 0.004 D - -           |  |  | D                                       | 7390 | -/-  | -/-         | -/-  | /1769 | -/-  |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                     |  | Building Code:               |  |  | Creep Factor: 2.0               |  |  | Wind reactions based on MWFRS           |      |      |             |      |       |      |
| NCBCLL: 0.00           |  | Mean Height: 19.83 ft              |  | FBC 8th Ed. 2023 Res. HVHZ   |  |  | Max TC CSI: 0.060               |  |  | F Brg Wid = 5.0 Min Req = 1.5 (Support) |      |      |             |      |       |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                      |  | TPI Std: 2014                |  |  | Max BC CSI: 0.485               |  |  | D Brg Wid = 5.0 Min Req = 1.5 (Support) |      |      |             |      |       |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                      |  | Rep Fac: Yes                 |  |  | Max Web CSI: 0.682              |  |  | Bearings F & D are a rigid surface.     |      |      |             |      |       |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2      |  | FT/RT:20(0)/10(0)            |  |  | Mfg Specified Camber:           |  |  | Maximum Top Chord Forces Per Ply (lbs)  |      |      |             |      |       |      |
|                        |  | C&C Dist a: 3.00 ft                |  | Plate Type(s):               |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | Chords Tens.Comp. Chords Tens. Comp.    |      |      |             |      |       |      |
|                        |  | Loc. from endwall: not in 25.00 ft |  | WAVE                         |  |  |                                 |  |  | A - B 0 0 B - C 0 0                     |      |      |             |      |       |      |
|                        |  | GCpi: 0.18                         |  |                              |  |  |                                 |  |  |                                         |      |      |             |      |       |      |
|                        |  | Wind Duration: 1.60                |  |                              |  |  |                                 |  |  |                                         |      |      |             |      |       |      |

**Lumber**  
Top chord: 2x6 SP #2;  
Bot chord: 2x6 SP M-26;  
Webs: 2x4 SP #2; W1 2x6 SP #2;

**Nailnote**  
Nail Schedule:0.128"x3", min. nails  
Top Chord: 1 Row @12.00" o.c.  
Bot Chord: 2 Rows @ 2.00" o.c. (Each Row)  
Webs : 1 Row @ 4" o.c.  
Repeat nailing as each layer is applied. Use equal spacing between rows and stagger nails in each row to avoid splitting.

**Special Loads**  
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC: From 45 plf at 0.00 to 45 plf at 10.00  
BC: From 10 plf at 0.46 to 10 plf at 9.54  
BC: 1502 lb Conc. Load at 0.81, 2.81, 4.81, 6.81 8.81  
BC: 1382 lb Conc. Load at 1.69  
BC: 1484 lb Conc. Load at 3.69  
BC: 1268 lb Conc. Load at 5.19  
BC: 1263 lb Conc. Load at 7.19, 9.19

**Purlins**  
The TC of this truss shall be braced with attached spans at 24" oc in lieu of structural sheathing.

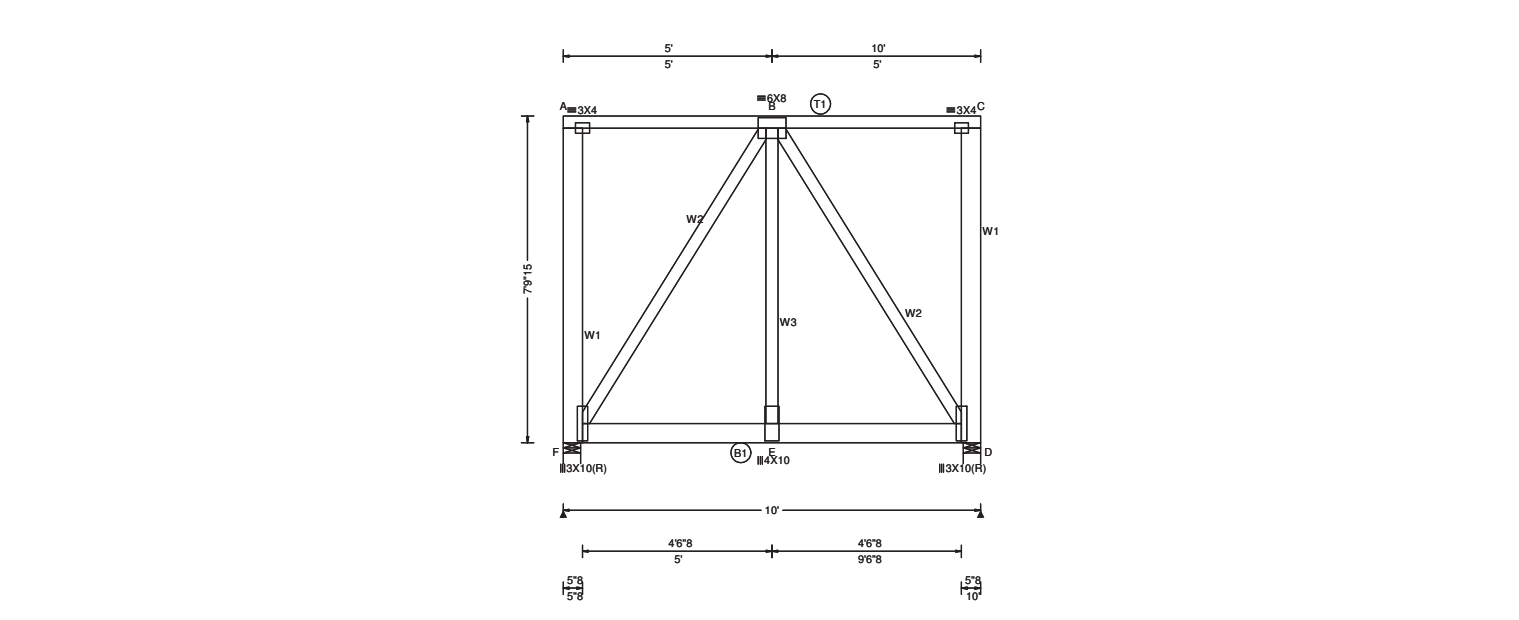
**Wind**  
Wind loads and reactions based on MWFRS.  
End verticals not exposed to wind pressure.

**Additional Notes**  
Truss must be installed as shown with top chord up.

| Maximum Bot Chord Forces Per Ply (lbs) |            |      |        |             |      |
|----------------------------------------|------------|------|--------|-------------|------|
| Chords                                 | Tens.Comp. |      | Chords | Tens. Comp. |      |
| F - E                                  | 1046       | -259 | E - D  | 1046        | -259 |

| Maximum Web Forces Per Ply (lbs) |            |       |       |             |       |
|----------------------------------|------------|-------|-------|-------------|-------|
| Webs                             | Tens.Comp. |       | Webs  | Tens. Comp. |       |
| A - F                            | 23         | -42   | B - D | 462         | -1864 |
| F - B                            | 462        | -1864 | C - D | 23          | -42   |
| B - E                            | 3019       | -707  |       |             |       |

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCEA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.  
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.  
For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCEA: [sbcecomponents.com](http://sbcecomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



| Loading Criteria (psf) | Wind Criteria                      | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)               |
|------------------------|------------------------------------|------------------------------|---------------------------------|-----------------------------------------|
| TCLL: 30.00            | Wind Std: ASCE 7-22                | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# | Gravity Non-Gravity                     |
| TCDL: 15.00            | Speed: 175 mph                     | Pf: NA Ce: NA                | VERT(LL): 0.035 E 999 360       | Loc R+ / R- / Rh / Rw / U / RL          |
| BCLL: 0.00             | Enclosure: Closed                  | Lu: NA Cs: NA                | VERT(CL): 0.065 E 999 240       |                                         |
| BCDL: 10.00            | Risk Category: II                  | Snow Duration: NA            | HORZ(LL): 0.004 D - -           | F 6868 /- /- /- /1637 /-                |
| Des Ld: 55.00          | EXP: C Kzt: NA                     |                              | HORZ(TL): 0.007 D - -           | D 6819 /- /- /- /1631 /-                |
| NCBCLL: 0.00           | Mean Height: 19.83 ft              | Building Code:               | Creep Factor: 2.0               | Wind reactions based on MWFRS           |
| Soffit: 2.00           | TCDL: 6.0 psf                      | FBC 8th Ed. 2023 Res. HVHZ   | Max TC CSI: 0.079               | F Brg Wid = 5.0 Min Req = 1.5 (Support) |
| Load Duration: 1.25    | BCDL: 6.0 psf                      | TPI Std: 2014                | Max BC CSI: 0.441               | D Brg Wid = 5.0 Min Req = 1.5 (Support) |
| Spacing: 24.0 "        | MWFRS Parallel Dist: 0 to h/2      | Rep Fac: Yes                 | Max Web CSI: 0.611              | Bearings F & D are a rigid surface.     |
|                        | C&C Dist a: 3.00 ft                | FT/RT:20(0)/10(0)            | Mfg Specified Camber:           | Maximum Top Chord Forces Per Ply (lbs)  |
|                        | Loc. from endwall: not in 25.00 ft | Plate Type(s):               |                                 | Chords Tens.Comp. Chords Tens. Comp.    |
|                        | GCpi: 0.18                         | WAVE                         | VIEW Ver: 23.02.01A.1204.18     | A - B 0 0 B - C 0 0                     |
|                        | Wind Duration: 1.60                |                              |                                 |                                         |

|                                                                                                                                                                                                                                                                                             |                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x6 SP M-26;<br>Webs: 2x4 SP #2; W1 2x6 SP #2;                                                                                                                                                                                         | <b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>F - E 937 -223 E - D 937 -223                                         |
| <b>Nailnote</b><br>Nail Schedule:0.128"x3", min. nails<br>Top Chord: 1 Row @12.00" o.c.<br>Bot Chord: 2 Rows @ 2.50" o.c. (Each Row)<br>Webs : 1 Row @ 4" o.c.<br>Repeat nailing as each layer is applied. Use equal spacing between rows and stagger nails in each row to avoid splitting. | <b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>A - F 20 -32 B - D 401 -1682<br>F - B 401 -1682 C - D 20 -32<br>B - E 2707 -604 |
| <b>Special Loads</b><br>----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)<br>TC: From 45 plf at 0.00 to 45 plf at 10.00<br>BC: From 10 plf at 0.46 to 10 plf at 9.54<br>BC: 1446 lb Conc. Load at 0.81, 2.81, 4.81, 6.81 8.81<br>BC: 1184 lb Conc. Load at 1.19, 3.19, 5.19, 7.19 9.19     |                                                                                                                                                                |
| <b>Purlins</b><br>The TC of this truss shall be braced with attached spans at 24" oc in lieu of structural sheathing.                                                                                                                                                                       |                                                                                                                                                                |
| <b>Wind</b><br>Wind loads and reactions based on MWFRS.<br>End verticals not exposed to wind pressure.                                                                                                                                                                                      |                                                                                                                                                                |
| <b>Additional Notes</b><br>Truss must be installed as shown with top chord up.                                                                                                                                                                                                              |                                                                                                                                                                |

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!

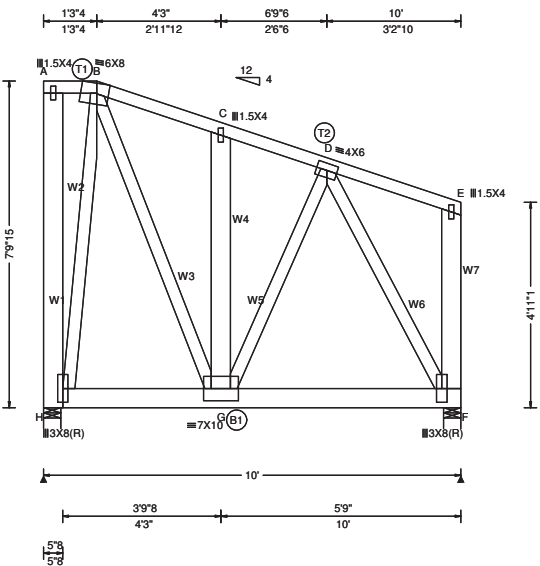
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcacomponents.com](http://sbcacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)





| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |        |         | Defl/CSI Criteria     |            |     | ▲ Maximum Reactions (lbs) |     |                                        |               |               |           |       |       |       |
|------------------------|--------|----------------------|----------------|------------------------------|--------|---------|-----------------------|------------|-----|---------------------------|-----|----------------------------------------|---------------|---------------|-----------|-------|-------|-------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA | CAT: NA | PP Deflection in      | loc L/defl | L/# | Gravity                   |     |                                        | Non-Gravity   |               |           |       |       |       |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |        | Ce: NA  | VERT(LL):             | 0.028      | G   | 999                       | 360 | Loc                                    | R+            | / R-          | / Rh      | / Rw  | / U   | / RL  |
| BCLL:                  | 0.00   | Enclosure:           | Closed         | Lu: NA                       | Cs: NA |         | VERT(CL):             | 0.051      | G   | 999                       | 240 | H                                      | 6590          | - / -         | - / -     | - / - | /1823 | - / - |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA     |         | HORZ(LL):             | -0.011     | C   | -                         | -   | F                                      | 6231          | - / -         | - / -     | - / - | /1716 | - / - |
|                        |        | EXP:                 | C Kzt: NA      |                              |        |         | HORZ(TL):             | 0.020      | C   | -                         | -   | Wind reactions based on MWFRS          |               |               |           |       |       |       |
| Des Ld:                | 55.00  | Mean Height:         | 18.38 ft       |                              |        |         | Creep Factor:         | 2.0        |     |                           |     | H                                      | Brg Wid = 5.0 | Min Req = 1.5 | (Support) |       |       |       |
| NCBCLL:                | 0.00   | TCDL:                | 6.0 psf        |                              |        |         | Max TC CSI:           | 0.098      |     |                           |     | F                                      | Brg Wid = 5.0 | Min Req = 1.7 | (Truss)   |       |       |       |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        |                              |        |         | Max BC CSI:           | 0.516      |     |                           |     | Bearings H & F are a rigid surface.    |               |               |           |       |       |       |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | 0 to h/2       |                              |        |         | Max Web CSI:          | 0.504      |     |                           |     | Maximum Top Chord Forces Per Ply (lbs) |               |               |           |       |       |       |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        |                              |        |         | Mfg Specified Camber: |            |     |                           |     | Chords                                 | Tens.Comp.    | Chords        | Tens.     | Comp. |       |       |
|                        |        | Loc. from endwall:   | not in 9.00 ft |                              |        |         |                       |            |     |                           |     | A - B                                  | 0             | 0             | C - D     | 337   | -1198 |       |
|                        |        | GCpi:                | 0.18           |                              |        |         |                       |            |     |                           |     | B - C                                  | 336           | -1192         | D - E     | 9     | -6    |       |
|                        |        | Wind Duration:       | 1.60           |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |               |           |       |       |       |

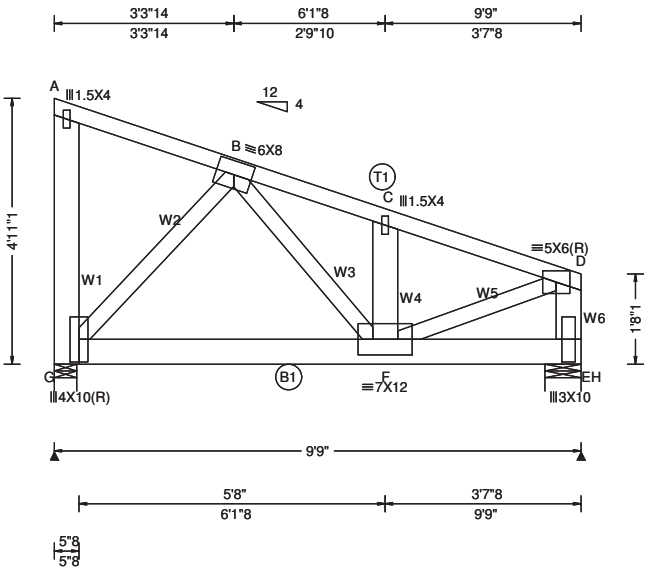
**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x6 SP M-26;  
Webs: 2x4 SP #2; W1,W4,W7 2x6 SP #2;

**Nailnote**  
Nail Schedule:0.128"x3", min. nails  
Top Chord: 1 Row @12.00" o.c.  
Bot Chord: 2 Rows @ 2.50" o.c. (Each Row)  
Webs : 1 Row @ 4" o.c.  
Repeat nailing as each layer is applied. Use equal spacing between rows and stagger nails in each row to avoid splitting.

**Special Loads**  
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC: From 90 plf at 0.00 to 90 plf at 1.27  
TC: From 45 plf at 1.27 to 45 plf at 10.00  
BC: From 10 plf at 0.46 to 10 plf at 10.00  
BC: 1263 lb Conc. Load at 0.81  
BC: 1380 lb Conc. Load at 2.19  
BC: 1202 lb Conc. Load at 2.81  
BC: 1383 lb Conc. Load at 4.19, 6.19, 8.19  
BC: 1488 lb Conc. Load at 4.31  
BC: 1369 lb Conc. Load at 6.31  
BC: 1367 lb Conc. Load at 8.31

**Wind**  
Wind loads and reactions based on MWFRS.  
End verticals not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |        |         | Defl/CSI Criteria     |            |     | ▲ Maximum Reactions (lbs) |     |                                        |               |        |       |               |           |      |
|------------------------|--------|----------------------|----------------|------------------------------|--------|---------|-----------------------|------------|-----|---------------------------|-----|----------------------------------------|---------------|--------|-------|---------------|-----------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA | CAT: NA | PP Deflection in      | loc L/defl | L/# | Gravity                   |     |                                        | Non-Gravity   |        |       |               |           |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |        | Ce: NA  | VERT(LL):             | 0.040      | F   | 999                       | 360 | Loc                                    | R+            | / R-   | / Rh  | / Rw          | / U       | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Closed         | Lu: NA                       | Cs: NA |         | VERT(CL):             | 0.073      | F   | 999                       | 240 | G                                      | 7999          | -/-    | -/-   | -/-           | /2941     | -/-  |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA     |         | HORZ(LL):             | 0.018      | A   | -                         | -   | H                                      | 5758          | -/-    | -/-   | -/-           | /2753     | -/-  |
|                        |        | EXP:                 | C Kzt: NA      |                              |        |         | HORZ(TL):             | 0.033      | A   | -                         | -   | Wind reactions based on MWFRS          |               |        |       |               |           |      |
| Des Ld:                | 55.00  | Mean Height:         | 15.30 ft       |                              |        |         | Creep Factor:         | 2.0        |     |                           |     | G                                      | Brg Wid = 5.0 |        |       | Min Req = 1.5 | (Support) |      |
| NCBCLL:                | 0.00   | TCDL:                | 6.0 psf        |                              |        |         | Max TC CSI:           | 0.277      |     |                           |     | H                                      | Brg Wid = 8.0 |        |       | Min Req = 1.6 | (Truss)   |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        |                              |        |         | Max BC CSI:           | 0.651      |     |                           |     | Bearings G & H are a rigid surface.    |               |        |       |               |           |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | 0 to h/2       |                              |        |         | Max Web CSI:          | 0.640      |     |                           |     | Maximum Top Chord Forces Per Ply (lbs) |               |        |       |               |           |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        |                              |        |         | Mfg Specified Camber: |            |     |                           |     | Chords                                 | Tens.Comp.    | Chords | Tens. | Comp.         |           |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft |                              |        |         |                       |            |     |                           |     | A - B                                  | 6             | - 11   | C - D | 1381          | -2888     |      |
|                        |        | GCpi:                | 0.18           |                              |        |         |                       |            |     |                           |     | B - C                                  | 1368          | -2861  |       |               |           |      |
|                        |        | Wind Duration:       | 1.60           |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |
|                        |        |                      |                |                              |        |         |                       |            |     |                           |     |                                        |               |        |       |               |           |      |

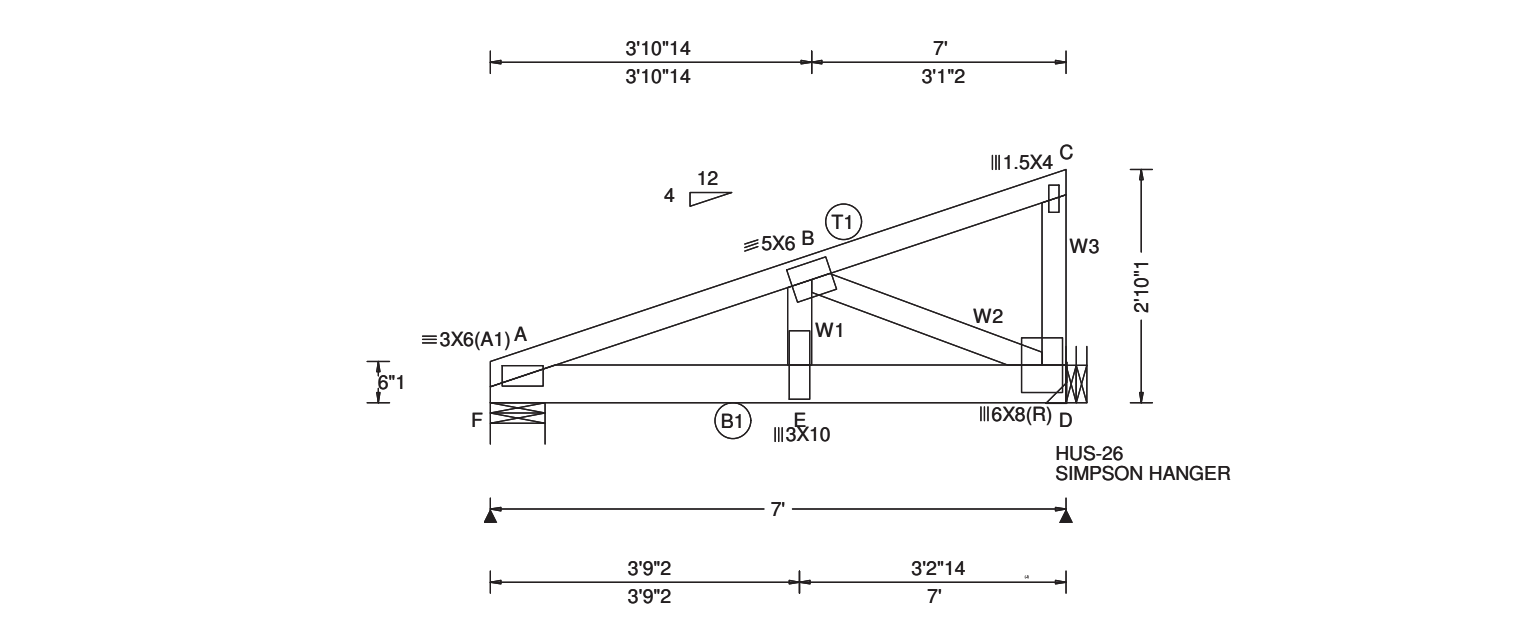
**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x6 SP M-26;  
Webs: 2x6 SP #2; W2,W3,W5 2x4 SP #2;

**Nailnote**  
Nail Schedule:0.128"x3", min. nails  
Top Chord: 1 Row @ 7.50" o.c.  
Bot Chord: 2 Rows @ 2.50" o.c. (Each Row)  
Webs : 1 Row @ 4" o.c.  
Repeat nailing as each layer is applied. Use equal spacing between rows and stagger nails in each row to avoid splitting.

**Special Loads**  
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC: From 45 plf at 0.00 to 45 plf at 6.13  
TC: From 90 plf at 6.13 to 90 plf at 9.75  
BC: From 10 plf at 0.46 to 10 plf at 9.75  
TC: 1411 lb Conc. Load at 0.19  
BC: 1382 lb Conc. Load at 0.50  
BC: 1409 lb Conc. Load at 2.19, 4.19  
BC: 1367 lb Conc. Load at 2.69  
BC: 1369 lb Conc. Load at 4.69  
BC: 2026 lb Conc. Load at 6.13  
BC: 1488 lb Conc. Load at 6.69  
BC: 1202 lb Conc. Load at 8.19

**Wind**  
Wind loads and reactions based on MWFRS.  
End verticals not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

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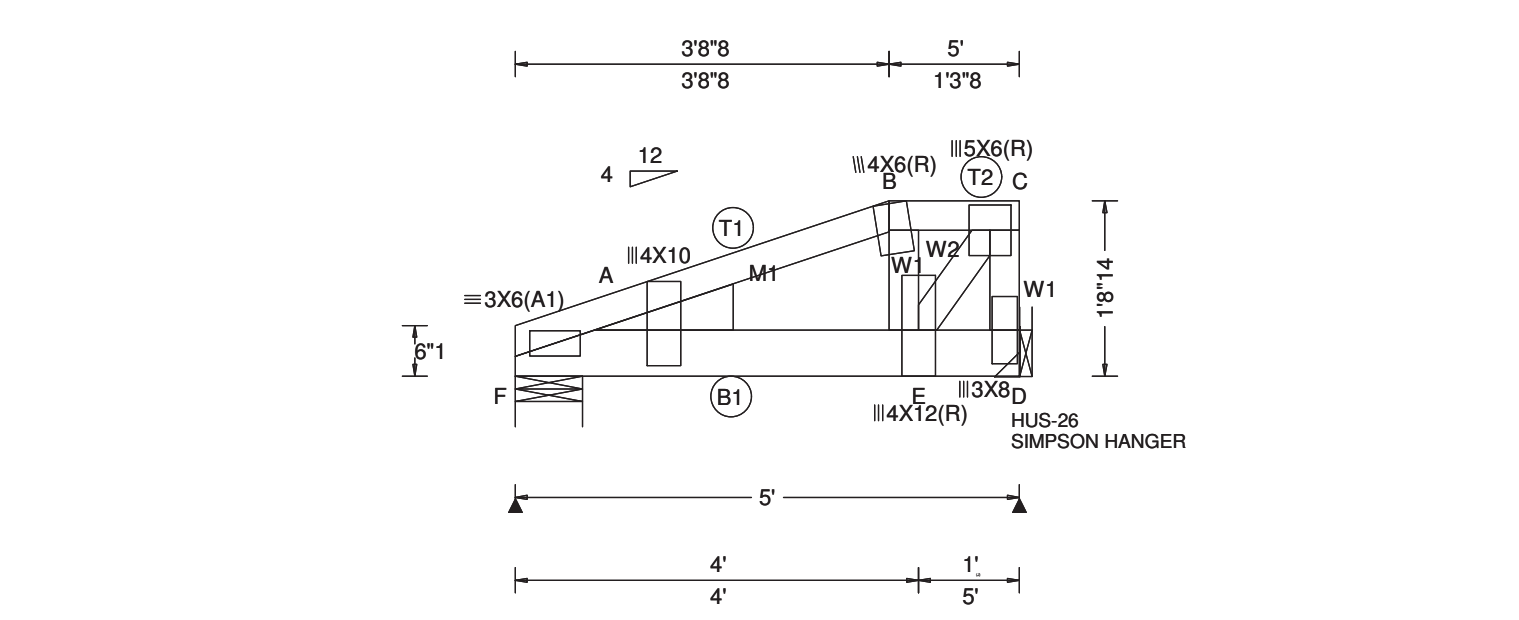
| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF) |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |      |            |             |        |      |             |  |
|------------------------|--|-----------------------------------|--|------------------------------|--|--|---------------------------------|--|--|----------------------------------------|------|------------|-------------|--------|------|-------------|--|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |      |            | Non-Gravity |        |      |             |  |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                |  |  | VERT(LL): 0.036 E 999 360       |  |  | Loc                                    | R+   | / R-       | / Rh        | / Rw   | / U  | / RL        |  |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                |  |  | VERT(CL): 0.065 E 999 240       |  |  | F                                      | 2016 | /-         | /-          | /-     | /805 | /-          |  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA            |  |  | HORZ(LL): -0.009 C - -          |  |  | D                                      | 1571 | /-         | /-          | /-     | /645 | /-          |  |
|                        |  | EXP: C Kzt: NA                    |  |                              |  |  | HORZ(TL): 0.016 C - -           |  |  | Wind reactions based on MWFRS          |      |            |             |        |      |             |  |
| Des Ld: 55.00          |  | Mean Height: 22.17 ft             |  |                              |  |  | Creep Factor: 2.0               |  |  | F Brg Wid = 8.0 Min Req = 2.4 (Truss)  |      |            |             |        |      |             |  |
| NCBCLL: 10.00          |  | TCDL: 6.0 psf                     |  | Building Code:               |  |  | Max TC CSI: 0.432               |  |  | D Brg Wid = - Min Req = -              |      |            |             |        |      |             |  |
| Soffit: 2.00           |  | BCDL: 6.0 psf                     |  | FBC 8th Ed. 2023 Res. HVHZ   |  |  | Max BC CSI: 0.992               |  |  | Bearing F is a rigid surface.          |      |            |             |        |      |             |  |
| Load Duration: 1.25    |  | MWFRS Parallel Dist: 0 to h/2     |  | TPI Std: 2014                |  |  | Max Web CSI: 0.569              |  |  | Maximum Top Chord Forces Per Ply (lbs) |      |            |             |        |      |             |  |
| Spacing: 24.0 "        |  | C&C Dist a: 3.00 ft               |  | Rep Fac: Varies by Ld Case   |  |  | Mfg Specified Camber:           |  |  | Chords                                 |      | Tens.Comp. |             | Chords |      | Tens. Comp. |  |
|                        |  | Loc. from endwall: not in 9.00 ft |  | FT/RT:20(0)/10(0)            |  |  |                                 |  |  |                                        |      |            |             |        |      |             |  |
|                        |  | GCpi: 0.18                        |  | Plate Type(s):               |  |  |                                 |  |  |                                        |      |            |             |        |      |             |  |
|                        |  | Wind Duration: 1.60               |  | WAVE                         |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  |                                        |      |            |             |        |      |             |  |

| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x6 SP #2;<br>Webs: 2x4 SP #2;                                                                                                                               | <b>Maximum Bot Chord Forces Per Ply (lbs)</b><br><table><tr><th>Chords</th><th>Tens.</th><th>Comp.</th><th>Chords</th><th>Tens.</th><th>Comp.</th></tr><tr><td>A - E</td><td>2700</td><td>- 1074</td><td>E - D</td><td>2579</td><td>- 1034</td></tr></table>                                                                 | Chords | Tens.  | Comp. | Chords | Tens. | Comp. | A - E | 2700 | - 1074 | E - D | 2579 | - 1034 |       |      |        |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|-------|--------|-------|-------|-------|------|--------|-------|------|--------|-------|------|--------|--|--|--|
| Chords                                                                                                                                                                                                            | Tens.                                                                                                                                                                                                                                                                                                                        | Comp.  | Chords | Tens. | Comp.  |       |       |       |      |        |       |      |        |       |      |        |  |  |  |
| A - E                                                                                                                                                                                                             | 2700                                                                                                                                                                                                                                                                                                                         | - 1074 | E - D  | 2579  | - 1034 |       |       |       |      |        |       |      |        |       |      |        |  |  |  |
| <b>Special Loads</b><br>----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)<br>TC: From 90 plf at 0.00 to 90 plf at 7.00<br>BC: From 10 plf at 0.00 to 10 plf at 7.00<br>BC: 962 lb Conc. Load at 1.06, 3.06, 5.06 | <b>Maximum Web Forces Per Ply (lbs)</b><br><table><tr><th>Webs</th><th>Tens.</th><th>Comp.</th><th>Webs</th><th>Tens.</th><th>Comp.</th></tr><tr><td>E - B</td><td>1715</td><td>- 571</td><td>C - D</td><td>87</td><td>- 121</td></tr><tr><td>B - D</td><td>1127</td><td>- 2814</td><td></td><td></td><td></td></tr></table> | Webs   | Tens.  | Comp. | Webs   | Tens. | Comp. | E - B | 1715 | - 571  | C - D | 87   | - 121  | B - D | 1127 | - 2814 |  |  |  |
| Webs                                                                                                                                                                                                              | Tens.                                                                                                                                                                                                                                                                                                                        | Comp.  | Webs   | Tens. | Comp.  |       |       |       |      |        |       |      |        |       |      |        |  |  |  |
| E - B                                                                                                                                                                                                             | 1715                                                                                                                                                                                                                                                                                                                         | - 571  | C - D  | 87    | - 121  |       |       |       |      |        |       |      |        |       |      |        |  |  |  |
| B - D                                                                                                                                                                                                             | 1127                                                                                                                                                                                                                                                                                                                         | - 2814 |        |       |        |       |       |       |      |        |       |      |        |       |      |        |  |  |  |

**Hangers / Ties**  
(J) Hanger Support Required, by others

**Wind**  
Wind loads and reactions based on MWFRS.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

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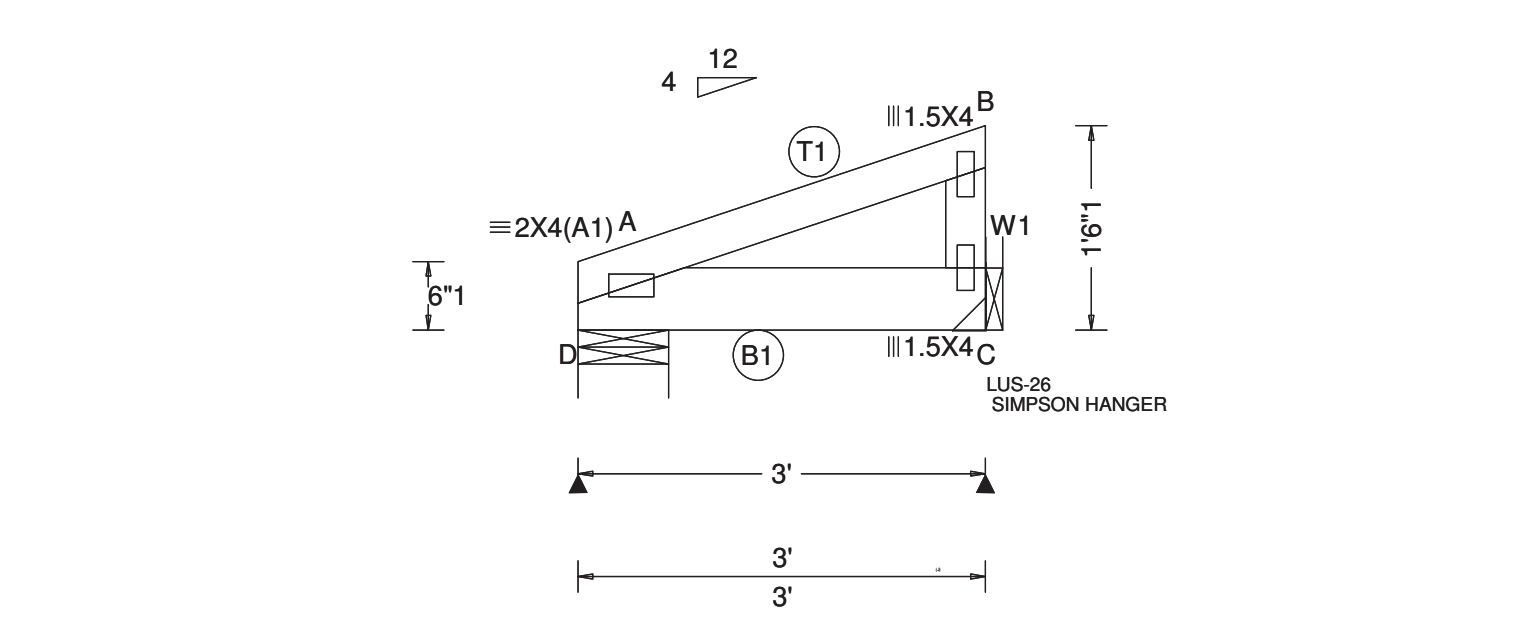


| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |        |                       | Defl/CSI Criteria |            |     | ▲ Maximum Reactions (lbs) |                   |                                        |                                     |        |       |       |      |      |
|------------------------|--------|----------------------|----------------|------------------------------|--------|-----------------------|-------------------|------------|-----|---------------------------|-------------------|----------------------------------------|-------------------------------------|--------|-------|-------|------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA | CAT: NA               | PP Deflection in  | loc L/defl | L/# | Gravity                   |                   |                                        | Non-Gravity                         |        |       |       |      |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |        | Ce: NA                | VERT(LL):         | 0.041      | A   | 999                       | 360               | Loc                                    | R+                                  | / R-   | / Rh  | / Rw  | / U  | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Closed         | Lu: NA                       | Cs: NA |                       | VERT(CL):         | 0.074      | A   | 782                       | 240               | F                                      | 1831                                | /-     | /-    | /-    | /405 | /-   |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA     |                       | HORZ(LL):         | 0.012      | A   | -                         | -                 | D                                      | 1427                                | /-     | /-    | /-    | /360 | /-   |
|                        |        | EXP:                 | C Kzt: NA      |                              |        |                       | HORZ(TL):         | 0.022      | A   | -                         | -                 | Wind reactions based on MWFRS          |                                     |        |       |       |      |      |
| Des Ld:                | 55.00  | Mean Height:         | 15.00 ft       |                              |        |                       | Creep Factor:     | 2.0        |     |                           |                   | F                                      | Brg Wid = 8.0 Min Req = 1.5 (Truss) |        |       |       |      |      |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        |                              |        | Building Code:        |                   |            |     |                           |                   | D                                      | Brg Wid = - Min Req = -             |        |       |       |      |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        |                              |        | FBC 8th Ed. 2023 Res. | HVHZ              |            |     |                           |                   | Bearing F is a rigid surface.          |                                     |        |       |       |      |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | 0 to h/2       |                              |        | TPI Std:              | 2014              |            |     | Max TC CSI:               | 0.464             | Maximum Top Chord Forces Per Ply (lbs) |                                     |        |       |       |      |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        |                              |        | Rep Fac:              | Varies by Ld Case |            |     | Max BC CSI:               | 0.442             | Chords                                 | Tens.Comp.                          | Chords | Tens. | Comp. |      |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft |                              |        | FT/RT:                | 20(0)/10(0)       |            |     | Max Web CSI:              | 0.541             |                                        |                                     |        |       |       |      |      |
|                        |        | GCpi:                | 0.18           |                              |        | Plate Type(s):        |                   |            |     | Mfg Specified Camber:     |                   |                                        |                                     |        |       |       |      |      |
|                        |        | Wind Duration:       | 1.60           |                              |        | WAVE                  |                   |            |     | VIEW Ver:                 | 23.02.01A.1204.18 |                                        |                                     |        |       |       |      |      |

|                                                                                                                                                                      |                                               |  |            |  |        |  |             |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--|------------|--|--------|--|-------------|--|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x6 SP M-26;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x6 SP #2;                                                        | <b>Maximum Bot Chord Forces Per Ply (lbs)</b> |  |            |  |        |  |             |  |
|                                                                                                                                                                      | Chords                                        |  | Tens.Comp. |  | Chords |  | Tens. Comp. |  |
|                                                                                                                                                                      | A - E                                         |  | 1444 - 342 |  | E - D  |  | 8 - 2       |  |
| <b>Special Loads</b><br>----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)<br>TC: From 90 plf at 0.00 to 90 plf at 5.00<br>BC: From 10 plf at 0.00 to 10 plf at 5.00 | <b>Maximum Web Forces Per Ply (lbs)</b>       |  |            |  |        |  |             |  |
|                                                                                                                                                                      | Webs                                          |  | Tens.Comp. |  | Webs   |  | Tens. Comp. |  |
|                                                                                                                                                                      | B - E                                         |  | 103 - 104  |  | C - D  |  | 449 - 1915  |  |
|                                                                                                                                                                      | E - C                                         |  | 2394 - 538 |  |        |  |             |  |

**Wind**  
Wind loads and reactions based on MWFRS.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

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| Loading Criteria (psf)            | Wind Criteria | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs) |     |      |             |  |  |
|-----------------------------------|---------------|------------------------------|---------------------------------|---------------------------|-----|------|-------------|--|--|
|                                   |               |                              |                                 | Gravity                   |     |      | Non-Gravity |  |  |
| Loc                               | R+            | / R-                         | / Rh                            | / Rw                      | / U | / RL |             |  |  |
| TCLL:                             | 30.00         |                              |                                 |                           |     |      |             |  |  |
| TCDL:                             | 15.00         |                              |                                 |                           |     |      |             |  |  |
| BCLL:                             | 0.00          |                              |                                 |                           |     |      |             |  |  |
| BCDL:                             | 10.00         |                              |                                 |                           |     |      |             |  |  |
| Des Ld:                           | 55.00         |                              |                                 |                           |     |      |             |  |  |
| NCBCLL:                           | 10.00         |                              |                                 |                           |     |      |             |  |  |
| Soffit:                           | 2.00          |                              |                                 |                           |     |      |             |  |  |
| Load Duration:                    | 1.25          |                              |                                 |                           |     |      |             |  |  |
| Spacing:                          | 24.0 "        |                              |                                 |                           |     |      |             |  |  |
| Wind Std:                         | ASCE 7-22     | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# |                           |     |      |             |  |  |
| Speed:                            | 175 mph       | Pf: NA Ce: NA                | VERT(LL): NA                    |                           |     |      |             |  |  |
| Enclosure:                        | Closed        | Lu: NA Cs: NA                | HORZ(LL): 0.006 A - -           |                           |     |      |             |  |  |
| Risk Category:                    | II            | Snow Duration: NA            | HORZ(TL): 0.011 A - -           |                           |     |      |             |  |  |
| EXP: C Kzt: NA                    |               |                              | Creep Factor: 2.0               |                           |     |      |             |  |  |
| Mean Height: 15.00 ft             |               |                              | Max TC CSI: 0.405               |                           |     |      |             |  |  |
| TCDL: 6.0 psf                     |               |                              | Max BC CSI: 0.861               |                           |     |      |             |  |  |
| BCDL: 6.0 psf                     |               |                              | Max Web CSI: 0.044              |                           |     |      |             |  |  |
| MWFRS Parallel Dist: 0 to h/2     |               |                              | Mfg Specified Camber:           |                           |     |      |             |  |  |
| C&C Dist a: 3.00 ft               |               |                              | VIEW Ver: 23.02.01A.1204.18     |                           |     |      |             |  |  |
| Loc. from endwall: not in 4.50 ft |               |                              |                                 |                           |     |      |             |  |  |
| GCpi: 0.18                        |               |                              |                                 |                           |     |      |             |  |  |
| Wind Duration: 1.60               |               |                              |                                 |                           |     |      |             |  |  |
|                                   |               |                              |                                 |                           |     |      |             |  |  |

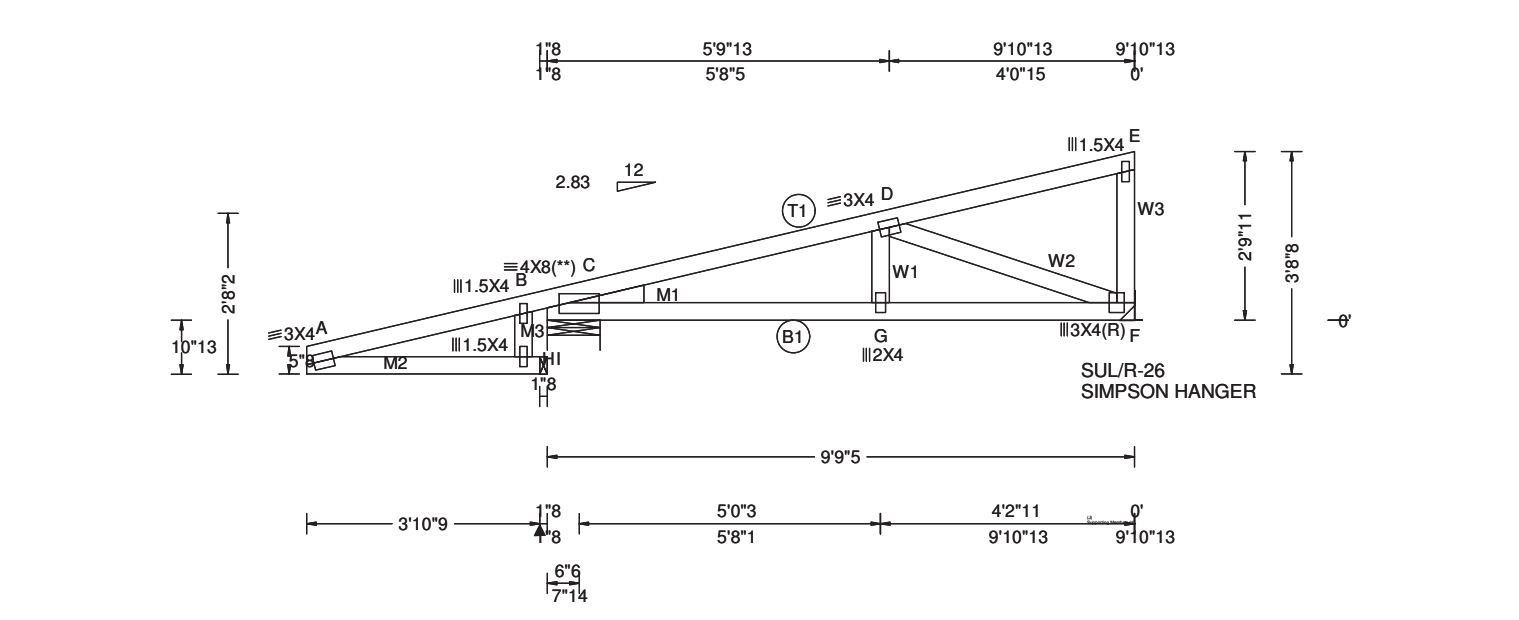
|                                                                                     |                                                                                                                                                                                                        |                                                                                                                                                                     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x6 SP #2;<br>Webs: 2x4 SP #2; | <b>Special Loads</b><br>----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)<br>TC: From 90 plf at 0.00 to 90 plf at 3.00<br>BC: From 20 plf at 0.00 to 20 plf at 3.00<br>BC: 1240 lb Conc. Load at 1.56 | <b>Wind</b><br>Wind loads and reactions based on MWFRS.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types. |
| <b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp.<br>A - C 33 -7   |                                                                                                                                                                                                        |                                                                                                                                                                     |
| <b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp.<br>B - C 62 -159         |                                                                                                                                                                                                        |                                                                                                                                                                     |

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The diagram shows a structural frame with the following details:

- Members:**
  - Top chord:  $\equiv 2X4(A1)$
  - Bottom chord:  $\equiv 1.5X4$
  - Left vertical member:  $\equiv 6'' \times 1$
  - Right vertical member:  $\equiv 1.5X4$
  - Diagonal bracing:  $T1$  (top),  $B1$  (bottom)
  - Wall connection:  $W1$
- Dimensions:**
  - Horizontal distance from left support to right support:  $3'$
  - Vertical height at left end:  $6'' \times 1$
  - Vertical height at right end:  $1'6'' \times 1$
- Labels:**
  - $A$ : Top-left corner joint.
  - $B$ : Top-right corner joint.
  - $C$ : Bottom-right corner joint.
  - $D$ : Bottom-left corner joint.
- Notes:** A note at the top center indicates a slope or ratio of  $4$  over  $12$ .

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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |                   |         | Defl/CSI Criteria     |                   | ▲ Maximum Reactions (lbs) |     |                                        |                |                       |        |             |      |      |
|------------------------|--------|----------------------|----------------|------------------------------|-------------------|---------|-----------------------|-------------------|---------------------------|-----|----------------------------------------|----------------|-----------------------|--------|-------------|------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA            | CAT: NA | PP Deflection in      | loc L/defl L/#    | Gravity                   |     |                                        | Non-Gravity    |                       |        |             |      |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |                   | Ce: NA  | VERT(LL):             | 0.031 G           | 999                       | 360 | Loc                                    | R+             | / R-                  | / Rh   | / Rw        | / U  | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Closed         | Lu: NA                       | Cs: NA            |         | VERT(CL):             | 0.055 G           | 999                       | 240 | I                                      | -              | /-                    | /229   | /-          | /-   | /101 |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA                |         | HORZ(LL):             | 0.008 F           | -                         | -   | B                                      | 515            | /-                    | /229   | /-          | /405 | /101 |
|                        |        | EXP:                 | C Kzt: NA      |                              |                   |         | HORZ(TL):             | 0.014 F           | -                         | -   | F                                      | 505            | /-                    | /-     | /-          | /199 | /-   |
| Des Ld:                | 55.00  | Mean Height:         | 21.68 ft       |                              |                   |         | Creep Factor:         | 2.0               |                           |     | Wind reactions based on MWFRS          |                |                       |        |             |      |      |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        | Building Code:               |                   |         | Max TC CSI:           | 0.232             |                           |     | I                                      | Brg Wid = 1.5  | Min Req = -           |        |             |      |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        | FBC 8th Ed. 2023 Res.        | HVHZ              |         | Max BC CSI:           | 0.829             |                           |     | B                                      | Brg Wid = 10.6 | Min Req = 1.5 (Truss) |        |             |      |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | 0 to h/2       | TPI Std:                     | 2014              |         | Max Web CSI:          | 0.322             |                           |     | F                                      | Brg Wid = -    | Min Req = -           |        |             |      |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        | Rep Fac:                     | Varies by Ld Case |         | Mfg Specified Camber: |                   |                           |     | Bearing B is a rigid surface.          |                |                       |        |             |      |      |
|                        |        | Loc. from endwall:   | not in 4.50 ft | FT/RT:                       | 20(0)/10(0)       |         |                       |                   |                           |     | Maximum Top Chord Forces Per Ply (lbs) |                |                       |        |             |      |      |
|                        |        | GCpi:                | 0.18           | Plate Type(s):               |                   |         |                       |                   |                           |     | Chords                                 | Tens.Comp.     |                       | Chords | Tens. Comp. |      |      |
|                        |        | Wind Duration:       | 1.60           | WAVE                         |                   |         |                       |                   |                           |     |                                        |                |                       |        |             |      |      |
|                        |        |                      |                |                              |                   |         | VIEW Ver:             | 23.02.01A.1204.18 |                           |     |                                        |                |                       |        |             |      |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #1;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

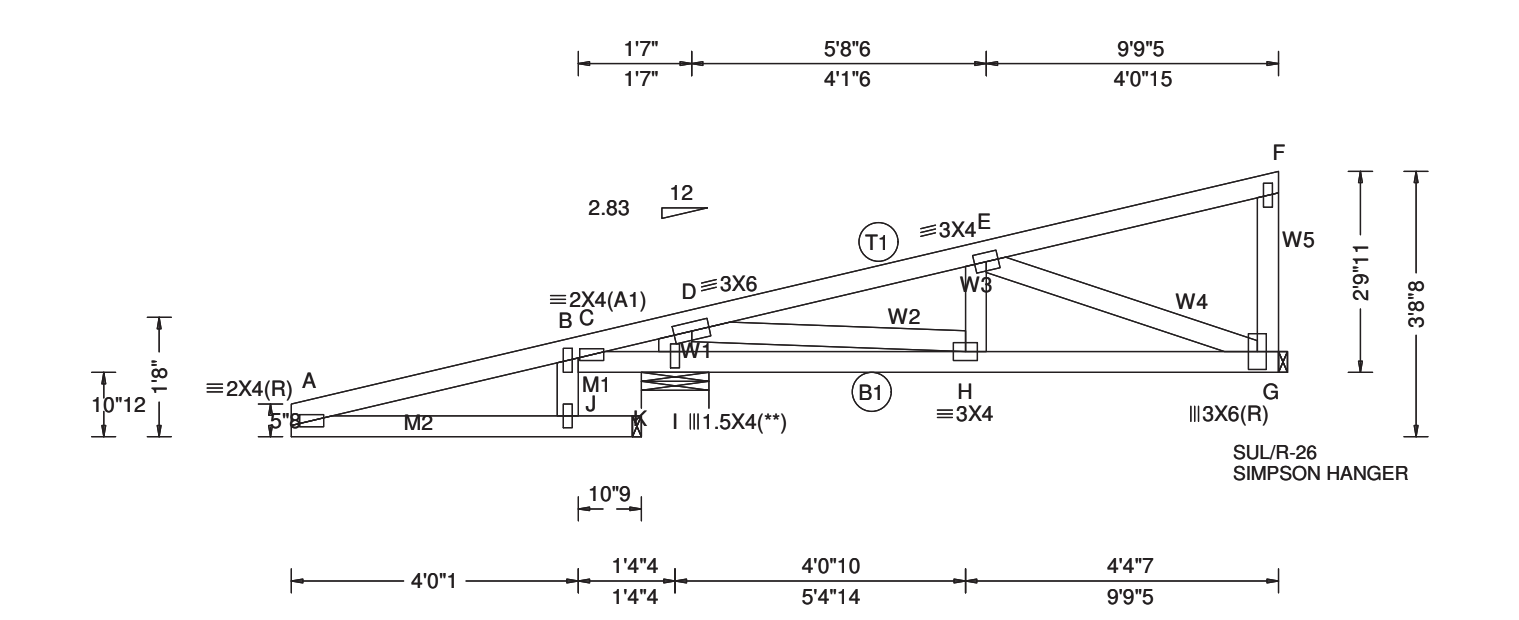
**Special Loads**  
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC: From 1 plf at -4.07 to 90 plf at 0.00  
TC: From 2 plf at 0.00 to 2 plf at 9.77  
BC: From 2 plf at 0.00 to 2 plf at 9.77  
PLB: From 4 plf at -3.97 to 4 plf at -0.17  
TC: -27 lb Conc. Load at 1.41  
TC: 191 lb Conc. Load at 4.24  
TC: 349 lb Conc. Load at 7.07  
BC: 7 lb Conc. Load at 1.41  
BC: 91 lb Conc. Load at 4.24  
BC: 166 lb Conc. Load at 7.07

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Wind loads and reactions based on MWFRS.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 229#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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| Loading Criteria (psf) | Wind Criteria  | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs) |     |      |             |  |  |
|------------------------|----------------|------------------------------|---------------------------------|---------------------------|-----|------|-------------|--|--|
|                        |                |                              |                                 | Gravity                   |     |      | Non-Gravity |  |  |
| Loc                    | R+             | / R-                         | / Rh                            | / Rw                      | / U | / RL |             |  |  |
| TCLL:                  | 30.00          |                              |                                 |                           |     |      |             |  |  |
| TCDL:                  | 15.00          |                              |                                 |                           |     |      |             |  |  |
| BCLL:                  | 0.00           |                              |                                 |                           |     |      |             |  |  |
| BCDL:                  | 10.00          |                              |                                 |                           |     |      |             |  |  |
| Des Ld:                | 55.00          |                              |                                 |                           |     |      |             |  |  |
| NCBCLL:                | 10.00          |                              |                                 |                           |     |      |             |  |  |
| Soffit:                | 2.00           |                              |                                 |                           |     |      |             |  |  |
| Load Duration:         | 1.25           |                              |                                 |                           |     |      |             |  |  |
| Spacing:               | 24.0 "         |                              |                                 |                           |     |      |             |  |  |
| Wind Std:              | ASCE 7-22      | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# |                           |     |      |             |  |  |
| Speed:                 | 175 mph        | Pf: NA Ce: NA                | VERT(LL): -0.021 H 999 360      |                           |     |      |             |  |  |
| Enclosure:             | Closed         | Lu: NA Cs: NA                | VERT(LL): 0.026 H 999 240       |                           |     |      |             |  |  |
| Risk Category:         | II             | Snow Duration: NA            | HORZ(LL): -0.005 F - -          |                           |     |      |             |  |  |
| EXP: C Kzt: NA         |                |                              | HORZ(TL): 0.009 F - -           |                           |     |      |             |  |  |
| Mean Height:           | 15.00 ft       |                              | Creep Factor: 2.0               |                           |     |      |             |  |  |
| TCDL:                  | 6.0 psf        | Building Code:               | Max TC CSI: 0.481               |                           |     |      |             |  |  |
| BCDL:                  | 6.0 psf        | FBC 8th Ed. 2023 Res. HVHZ   | Max BC CSI: 0.506               |                           |     |      |             |  |  |
| MWFRS Parallel Dist:   | 0 to h/2       | TPI Std: 2014                | Max Web CSI: 0.223              |                           |     |      |             |  |  |
| C&C Dist a:            | 3.00 ft        | Rep Fac: Varies by Ld Case   | Mfg Specified Camber:           |                           |     |      |             |  |  |
| Loc. from endwall:     | not in 4.50 ft | FT/RT:20(0)/10(0)            | VIEW Ver: 23.02.01A.1204.18     |                           |     |      |             |  |  |
| GCpi:                  | 0.18           | Plate Type(s):               |                                 |                           |     |      |             |  |  |
| Wind Duration:         | 1.60           | WAVE                         |                                 |                           |     |      |             |  |  |

**Lumber**

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2; W1 2x6 SP #2;  
Lt Level Return: 2x4 SP #2;

**Special Loads**

----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

|      |                      |          |          |           |       |
|------|----------------------|----------|----------|-----------|-------|
| TC:  | From                 | 1 plf at | -4.07 to | 90 plf at | 0.00  |
| TC:  | From                 | 2 plf at | 0.00 to  | 2 plf at  | 9.77  |
| BC:  | From                 | 2 plf at | 0.00 to  | 2 plf at  | 9.77  |
| PLB: | From                 | 4 plf at | -3.97 to | 4 plf at  | -0.04 |
| TC:  | -27 lb Conc. Load at | 1.41     |          |           |       |
| TC:  | 136 lb Conc. Load at | 4.24     |          |           |       |
| TC:  | 289 lb Conc. Load at | 7.07     |          |           |       |
| BC:  | 7 lb Conc. Load at   | 1.41     |          |           |       |
| BC:  | 39 lb Conc. Load at  | 4.24     |          |           |       |
| BC:  | 168 lb Conc. Load at | 7.07     |          |           |       |

**Plating Notes**

All plates are 1.5X4 except as noted.

(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Loading**

Gable end supports 8" max rake overhang. Top chord must not be cut or notched.

**Wind**

Wind loads and reactions based on MWFRS.

End verticals not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

**Additional Notes**

The maximum horizontal reaction is 211#

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**▲ Maximum Reactions (lbs)**

| Loc | R+  | / R- | / Rh | / Rw | / U  | / RL |
|-----|-----|------|------|------|------|------|
| K   | -   | /-   | /211 | /-   | /-   | /86  |
| I   | 554 | /-   | /211 | /-   | /591 | /86  |
| G   | 370 | /-   | /-   | /-   | /274 | /-   |

Wind reactions based on MWFRS

K Brg Wid = 1.5 Min Req = -

I Brg Wid = 11.3 Min Req = 1.5 (Truss)

G Brg Wid = 1.5 Min Req = -

Bearing I is a rigid surface.

**Maximum Top Chord Forces Per Ply (lbs)**

| Chords | Tens.Comp. | Chords | Tens. Comp. |
|--------|------------|--------|-------------|
| A - B  | 240 -103   | D - E  | 629 -689    |
| B - C  | 187 -75    | E - F  | 36 -64      |
| C - D  | 536 -190   |        |             |

**Maximum Bot Chord Forces Per Ply (lbs)**

| Chords | Tens.Comp. | Chords | Tens. Comp. |
|--------|------------|--------|-------------|
| C - I  | 67 -307    | H - G  | 655 -584    |
| I - H  | 0 -366     |        |             |

**Maximum Web Forces Per Ply (lbs)**

| Webs  | Tens.Comp. | Webs  | Tens. Comp. |
|-------|------------|-------|-------------|
| A - J | 86 -210    | H - E | 88 -94      |
| J - K | 86 -211    | E - G | 618 -687    |
| I - D | 480 -462   | F - G | 31 -73      |
| D - H | 960 -602   |       |             |

**Maximum Gable Forces Per Ply (lbs)**

| Gables | Tens.Comp. |
|--------|------------|
| B - J  | 55 -2      |

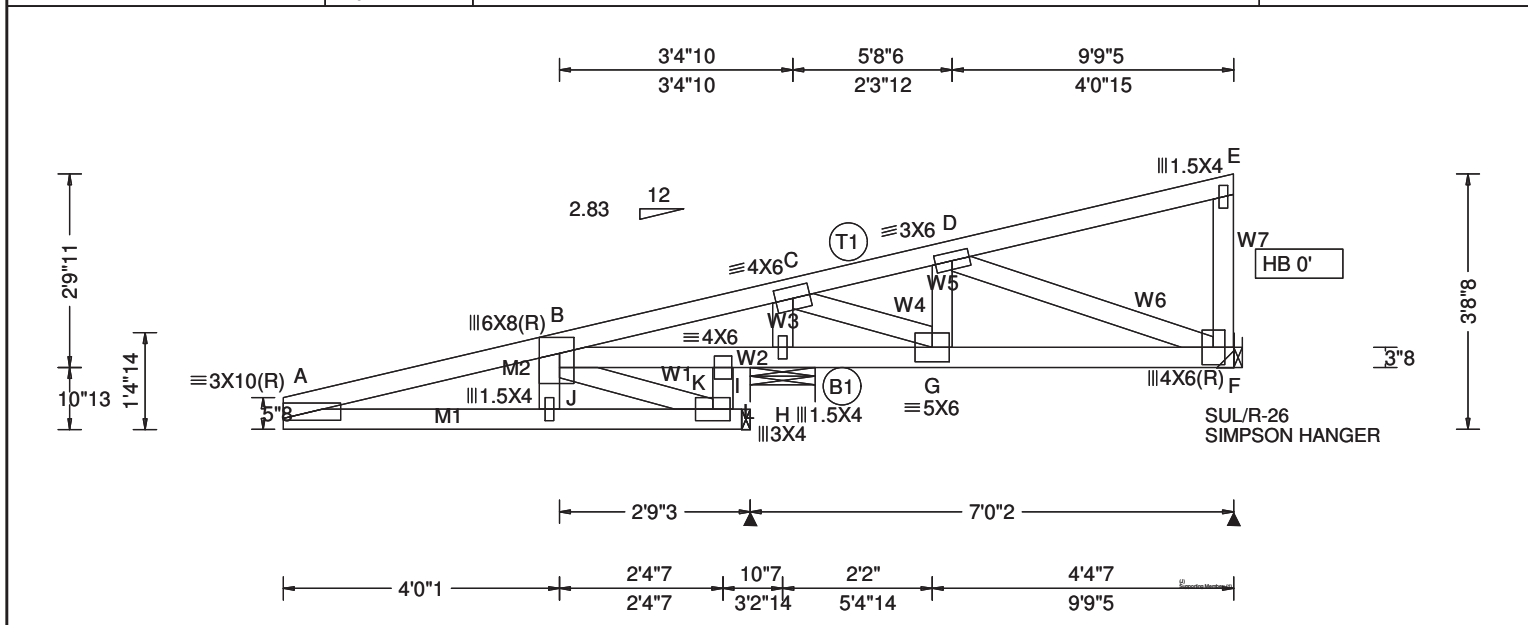
**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!

**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcacomponents.com](http://sbcacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



| Loading Criteria (psf)                                                                                                                                  | Wind Criteria                                                                                                                                                                                                                                                                                  | Snow Criteria (Pg,Pf in PSF)                                                                                                                                                                                                   | Defl/CSI Criteria                                                                                                                                                                                                                                                                               | ▲ Maximum Reactions (lbs)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--|-------------|--|-----|---------|------|---------------|---|------|-------|-------------|---|---------|-------|---------------|---|-----------|----|------------|--------|------------|--------|-------------|-------|------------|-------|-----------|-------|------------|-------|--------|--------|------------|--------|-------------|-------|-----------|-------|------------|-------|-----------|-------|-----------|------|------------|------|-------------|-------|------------|-------|-----------|-------|----------|-------|-----------|-------|------------|-------|----------|-------|-----------|-------|-----------|-------|----------|-------|--------|-------|------------|--|--|
| TCLL: 30.00<br>TCDL: 15.00<br>BCLL: 0.00<br>BCDL: 10.00<br><br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 2.00<br>Load Duration: 1.25<br>Spacing: 24.0 " | Wind Std: ASCE 7-22<br>Speed: 175 mph<br>Enclosure: Closed<br>Risk Category: II<br>EXP: C Kzt: NA<br>Mean Height: 15.18 ft<br>TCDL: 6.0 psf<br>BCDL: 6.0 psf<br>MWFRS Parallel Dist: 0 to h/2<br>C&C Dist a: 3.00 ft<br>Loc. from endwall: not in 9.00 ft<br>GCpi: 0.18<br>Wind Duration: 1.60 | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Varies by Ld Case<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.035 I 91 360<br>VERT(CL): 0.067 I 47 240<br>HORZ(LL): -0.012 C - -<br>HORZ(TL): 0.023 C - -<br><br>Creep Factor: 2.0<br>Max TC CSI: 0.696<br>Max BC CSI: 0.869<br>Max Web CSI: 0.381<br>Mfg Specified Camber:<br><br>VIEW Ver: 23.02.01A.1204.18 | <table><tr><th colspan="2">Gravity</th><th colspan="2">Non-Gravity</th></tr><tr><th>Loc</th><th>R+ / R-</th><th>/ Rh</th><th>/ Rw / U / RL</th></tr><tr><td>L</td><td>- /-</td><td>/4350</td><td>/- /- /1898</td></tr><tr><td>I</td><td>1814 /-</td><td>/4350</td><td>/- /823 /1898</td></tr><tr><td>F</td><td>139 /-333</td><td>/-</td><td>/195 /- /-</td></tr></table> <p>Wind reactions based on MWFRS<br/>L Brg Wid = 1.5 Min Req = -<br/>I Brg Wid = 11.3 Min Req = 2.1 (Truss)<br/>F Brg Wid = - Min Req = -<br/>Bearing I is a rigid surface.</p> <p><b>Maximum Top Chord Forces Per Ply (lbs)</b></p> <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>A - B</td><td>2808 -1214</td><td>C - D</td><td>1244 -574</td></tr><tr><td>B - C</td><td>2954 -1263</td><td>D - E</td><td>10 -22</td></tr></table> <p><b>Maximum Bot Chord Forces Per Ply (lbs)</b></p> <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>B - I</td><td>1348 -617</td><td>H - G</td><td>1162 -2730</td></tr><tr><td>I - H</td><td>1487 -676</td><td>G - F</td><td>491 -1085</td></tr></table> <p><b>Maximum Web Forces Per Ply (lbs)</b></p> <table><tr><th>Webs</th><th>Tens.Comp.</th><th>Webs</th><th>Tens. Comp.</th></tr><tr><td>A - J</td><td>1164 -2702</td><td>H - C</td><td>535 -1188</td></tr><tr><td>J - B</td><td>291 -104</td><td>C - G</td><td>1690 -676</td></tr><tr><td>J - K</td><td>1231 -2868</td><td>G - D</td><td>382 -761</td></tr><tr><td>B - K</td><td>670 -1482</td><td>D - F</td><td>1163 -524</td></tr><tr><td>K - I</td><td>720 -311</td><td>E - F</td><td>11 -53</td></tr><tr><td>K - L</td><td>1898 -4350</td><td></td><td></td></tr></table> | Gravity |  | Non-Gravity |  | Loc | R+ / R- | / Rh | / Rw / U / RL | L | - /- | /4350 | /- /- /1898 | I | 1814 /- | /4350 | /- /823 /1898 | F | 139 /-333 | /- | /195 /- /- | Chords | Tens.Comp. | Chords | Tens. Comp. | A - B | 2808 -1214 | C - D | 1244 -574 | B - C | 2954 -1263 | D - E | 10 -22 | Chords | Tens.Comp. | Chords | Tens. Comp. | B - I | 1348 -617 | H - G | 1162 -2730 | I - H | 1487 -676 | G - F | 491 -1085 | Webs | Tens.Comp. | Webs | Tens. Comp. | A - J | 1164 -2702 | H - C | 535 -1188 | J - B | 291 -104 | C - G | 1690 -676 | J - K | 1231 -2868 | G - D | 382 -761 | B - K | 670 -1482 | D - F | 1163 -524 | K - I | 720 -311 | E - F | 11 -53 | K - L | 1898 -4350 |  |  |
| Gravity                                                                                                                                                 |                                                                                                                                                                                                                                                                                                | Non-Gravity                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| Loc                                                                                                                                                     | R+ / R-                                                                                                                                                                                                                                                                                        | / Rh                                                                                                                                                                                                                           | / Rw / U / RL                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| L                                                                                                                                                       | - /-                                                                                                                                                                                                                                                                                           | /4350                                                                                                                                                                                                                          | /- /- /1898                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| I                                                                                                                                                       | 1814 /-                                                                                                                                                                                                                                                                                        | /4350                                                                                                                                                                                                                          | /- /823 /1898                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| F                                                                                                                                                       | 139 /-333                                                                                                                                                                                                                                                                                      | /-                                                                                                                                                                                                                             | /195 /- /-                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| Chords                                                                                                                                                  | Tens.Comp.                                                                                                                                                                                                                                                                                     | Chords                                                                                                                                                                                                                         | Tens. Comp.                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| A - B                                                                                                                                                   | 2808 -1214                                                                                                                                                                                                                                                                                     | C - D                                                                                                                                                                                                                          | 1244 -574                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| B - C                                                                                                                                                   | 2954 -1263                                                                                                                                                                                                                                                                                     | D - E                                                                                                                                                                                                                          | 10 -22                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| Chords                                                                                                                                                  | Tens.Comp.                                                                                                                                                                                                                                                                                     | Chords                                                                                                                                                                                                                         | Tens. Comp.                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| B - I                                                                                                                                                   | 1348 -617                                                                                                                                                                                                                                                                                      | H - G                                                                                                                                                                                                                          | 1162 -2730                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| I - H                                                                                                                                                   | 1487 -676                                                                                                                                                                                                                                                                                      | G - F                                                                                                                                                                                                                          | 491 -1085                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| Webs                                                                                                                                                    | Tens.Comp.                                                                                                                                                                                                                                                                                     | Webs                                                                                                                                                                                                                           | Tens. Comp.                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| A - J                                                                                                                                                   | 1164 -2702                                                                                                                                                                                                                                                                                     | H - C                                                                                                                                                                                                                          | 535 -1188                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| J - B                                                                                                                                                   | 291 -104                                                                                                                                                                                                                                                                                       | C - G                                                                                                                                                                                                                          | 1690 -676                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| J - K                                                                                                                                                   | 1231 -2868                                                                                                                                                                                                                                                                                     | G - D                                                                                                                                                                                                                          | 382 -761                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| B - K                                                                                                                                                   | 670 -1482                                                                                                                                                                                                                                                                                      | D - F                                                                                                                                                                                                                          | 1163 -524                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| K - I                                                                                                                                                   | 720 -311                                                                                                                                                                                                                                                                                       | E - F                                                                                                                                                                                                                          | 11 -53                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |
| K - L                                                                                                                                                   | 1898 -4350                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |  |             |  |     |         |      |               |   |      |       |             |   |         |       |               |   |           |    |            |        |            |        |             |       |            |       |           |       |            |       |        |        |            |        |             |       |           |       |            |       |           |       |           |      |            |      |             |       |            |       |           |       |          |       |           |       |            |       |          |       |           |       |           |       |          |       |        |       |            |  |  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
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| <p><b>Lumber</b></p> <p>Top chord: 2x4 SP #1;<br/>Bot chord: 2x4 SP #2;<br/>Webs: 2x4 SP #2;<br/>Lt Level Return: 2x4 SP #2;</p> <p><b>Special Loads</b></p> <p>----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)</p> <p>TC: From 1 plf at -4.07 to 90 plf at 0.00<br/>TC: From 2 plf at 0.00 to 2 plf at 9.77<br/>BC: From 20 plf at 0.00 to 20 plf at 2.64<br/>BC: From 20 plf at 2.64 to 2 plf at 9.78<br/>PLB: From 4 plf at -3.97 to 4 plf at -0.04</p> <p>TC: 819 lb Conc. Load at -3.68<br/>TC: 99 lb Conc. Load at 1.41<br/>TC: -26 lb Conc. Load at 4.24<br/>TC: 92 lb Conc. Load at 7.07<br/>BC: 74 lb Conc. Load at 1.41<br/>BC: -25 lb Conc. Load at 4.24<br/>BC: 38 lb Conc. Load at 7.07</p> <p><b>Wind</b></p> <p>Wind loads and reactions based on MWFRS.<br/>Right end vertical not exposed to wind pressure.<br/>Wind loading based on both gable and hip roof types.</p> <p><b>Additional Notes</b></p> <p>Negative reaction(s) of -333# MAX. from a non-wind load case requires uplift connection. See Maximum Reactions.<br/>The maximum horizontal reaction is 4350#<br/>***** BEARING ANALOG MODIFIED! *****</p> |  |
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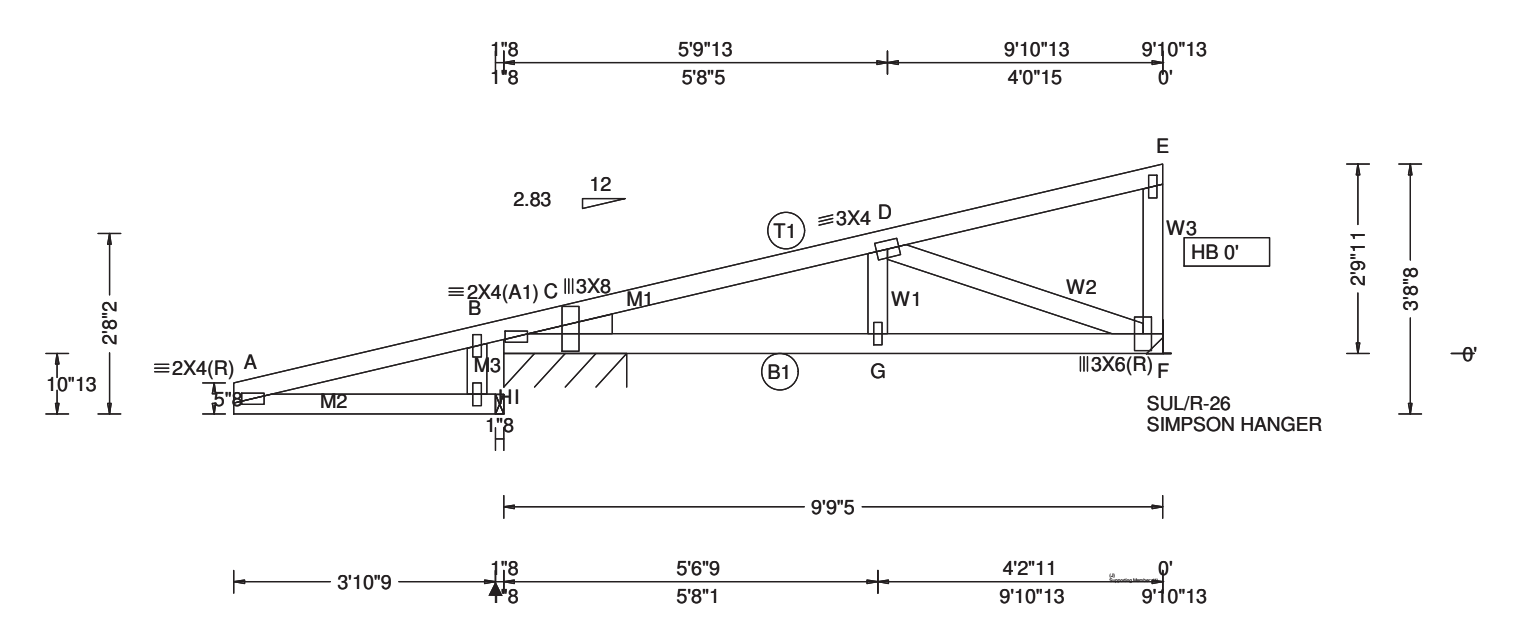
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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                               |  |  | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs), or *PLF     |                |             |      |      |      |      |
|------------------------|--|-----------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|----------------------------------------|----------------|-------------|------|------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                                      |  |  | PP Deflection in loc L/defl L/# |  | Gravity Non-Gravity                    |                |             |      |      |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                              |  |  | VERT(LL): -0.043 G 999 360      |  | Loc                                    | R+             | / R-        | / Rh | / Rw | / U  | / RL |
| BCLL: 0.00             |  | Enclosure: Part. Enc.             |  | Lu: NA Cs: NA                                                                                                                              |  |  | VERT(CL): 0.043 G 999 240       |  | I                                      | -              | /-          | /-   | /-   | /-   | /-   |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                                          |  |  | HORZ(LL): 0.080 E - -           |  | B*                                     | 275            | /-          | /-   | /-   | /289 | /-   |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Varies by Ld Case<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.120 E - -           |  | F                                      | 386            | /-          | /-   | /-   | /403 | /-   |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                                                                                                                            |  |  | Creep Factor: 2.0               |  | C /-220                                |                |             |      |      |      |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                                            |  |  | Max TC CSI: 0.620               |  | Wind reactions based on MWFRS          |                |             |      |      |      |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                                            |  |  | Max BC CSI: 0.437               |  | I Brg Wid = 1.5 Min Req = -            |                |             |      |      |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2     |  |                                                                                                                                            |  |  | Max Web CSI: 0.250              |  | B                                      | Brg Wid = 21.9 | Min Req = - |      |      |      |      |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                                            |  |  | Mfg Specified Camber:           |  | F                                      | Brg Wid = -    | Min Req = - |      |      |      |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  |                                                                                                                                            |  |  |                                 |  | Bearing B is a rigid surface.          |                |             |      |      |      |      |
|                        |  | GCpi: 0.55                        |  |                                                                                                                                            |  |  |                                 |  | Maximum Top Chord Forces Per Ply (lbs) |                |             |      |      |      |      |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                                            |  |  | VIEW Ver: 23.02.01A.1204.18     |  | Chords Tens.Comp. Chords Tens. Comp.   |                |             |      |      |      |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

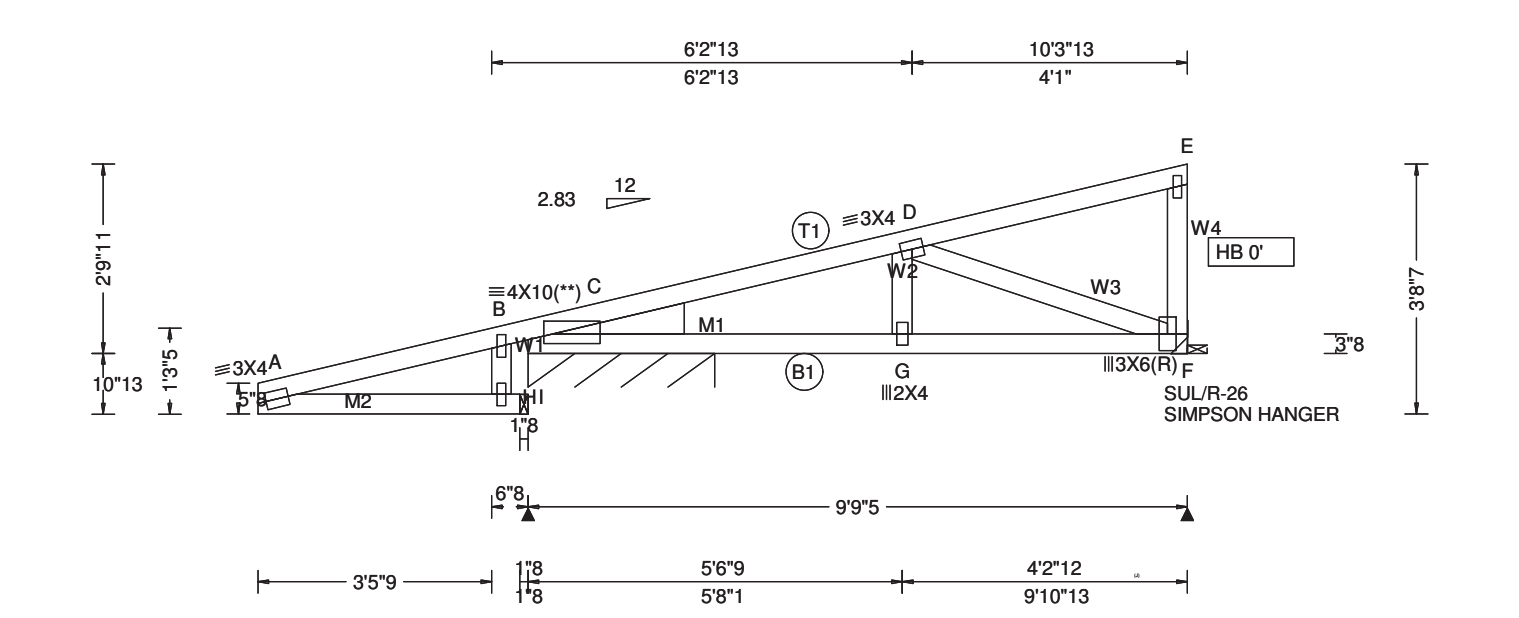
**Special Loads**  
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC: From 1 plf at -4.07 to 90 plf at 0.00  
TC: From 2 plf at 0.00 to 2 plf at 9.77  
BC: From 2 plf at 0.00 to 2 plf at 9.77  
PLB: From 4 plf at -3.97 to 4 plf at -0.17  
TC: -27 lb Conc. Load at 1.41  
TC: 128 lb Conc. Load at 4.24  
TC: 268 lb Conc. Load at 7.07  
BC: 7 lb Conc. Load at 1.41  
BC: 60 lb Conc. Load at 4.24  
BC: 125 lb Conc. Load at 7.07

**Plating Notes**  
All plates are 1.5X4 except as noted.

**Wind**  
Wind loads and reactions based on MWFRS.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

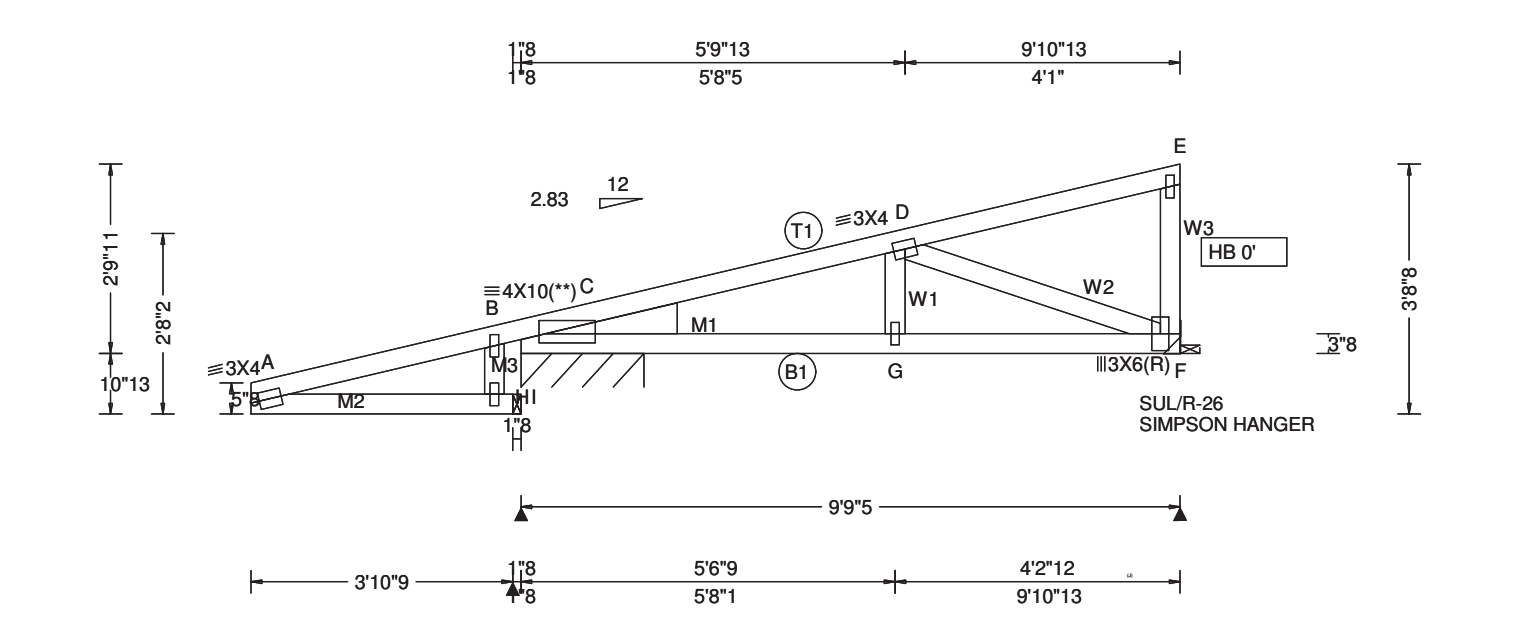
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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |        |                       | Defl/CSI Criteria |                | ▲ Maximum Reactions (lbs), or *=PLF |     |                                        |                |             |       |       |      |      |
|------------------------|--------|----------------------|----------------|------------------------------|--------|-----------------------|-------------------|----------------|-------------------------------------|-----|----------------------------------------|----------------|-------------|-------|-------|------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA | CAT: NA               | PP Deflection in  | loc L/defl L/# | Gravity                             |     |                                        | Non-Gravity    |             |       |       |      |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |        | Ce: NA                | VERT(LL):         | -0.046 G       | 999                                 | 360 | Loc                                    | R+             | / R-        | / Rh  | / Rw  | / U  | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Part. Enc.     | Lu: NA                       | Cs: NA |                       | VERT(CL):         | 0.040 G        | 999                                 | 240 | I                                      | -              | /-          | /223  | /-    | /-   | /188 |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA     |                       | HORZ(LL):         | -0.010 F       | -                                   | -   | B*                                     | 188            | /-          | /80   | /-    | /231 | /68  |
|                        |        | EXP:                 | C Kzt: NA      |                              |        |                       | HORZ(TL):         | 0.010 F        | -                                   | -   | F                                      | 419            | /-          | /-    | /-    | /501 | /-   |
| Des Ld:                | 55.00  | Mean Height:         | 21.68 ft       |                              |        |                       | Creep Factor:     | 2.0            |                                     |     | Wind reactions based on MWFRS          |                |             |       |       |      |      |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        |                              |        | Building Code:        |                   |                |                                     |     | I                                      | Brg Wid = 1.5  | Min Req = - |       |       |      |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        |                              |        | FBC 8th Ed. 2023 Res. | HVHZ              |                |                                     |     | B                                      | Brg Wid = 33.2 | Min Req = - |       |       |      |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | 0 to h/2       |                              |        | TPI Std:              | 2014              |                |                                     |     | F                                      | Brg Wid = -    | Min Req = - |       |       |      |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        |                              |        | Rep Fac:              | Varies by Ld Case |                |                                     |     | Bearing B is a rigid surface.          |                |             |       |       |      |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft |                              |        | FT/RT:                | 20(0)/10(0)       |                |                                     |     | Maximum Top Chord Forces Per Ply (lbs) |                |             |       |       |      |      |
|                        |        | GCpi:                | 0.55           |                              |        | Plate Type(s):        |                   |                |                                     |     | Chords                                 | Tens.Comp.     | Chords      | Tens. | Comp. |      |      |
|                        |        | Wind Duration:       | 1.60           |                              |        | WAVE                  |                   |                |                                     |     | VIEW Ver: 23.02.01A.1204.18            |                |             |       |       |      |      |

|                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x6 SP #2;Lt Level Return: 2x4 SP #2; | <b>Special Loads</b><br>----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)<br>TC: From 1 plf at -4.07 to 90 plf at 0.00<br>TC: From 2 plf at 0.00 to 2 plf at 9.77<br>BC: From 2 plf at 0.00 to 2 plf at 9.78<br>PLB: From 4 plf at -3.97 to 4 plf at -0.17<br>TC: -27 lb Conc. Load at 1.41<br>TC: 159 lb Conc. Load at 4.24<br>TC: 307 lb Conc. Load at 7.07<br>BC: 7 lb Conc. Load at 1.41<br>BC: 55 lb Conc. Load at 4.24<br>BC: 131 lb Conc. Load at 7.07 | <b>Plating Notes</b><br>All plates are 1.5X4 except as noted.<br><br>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.<br><br><b>Wind</b><br>Wind loads and reactions based on MWFRS.<br>End verticals not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>The maximum horizontal reaction is 223#<br>***** BEARING ANALOG MODIFIED! ***** | <b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 236 -204 C - D 994 -835<br>B - C 262 -225 D - E 14 -23<br><br><b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>C - G 812 -1018 G - F 771 -918<br><br><b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>A - H 178 -212 G - D 499 -602<br>B - H 24 -10 D - F 963 -809<br>H - I 188 -223 E - F 7 -55 |
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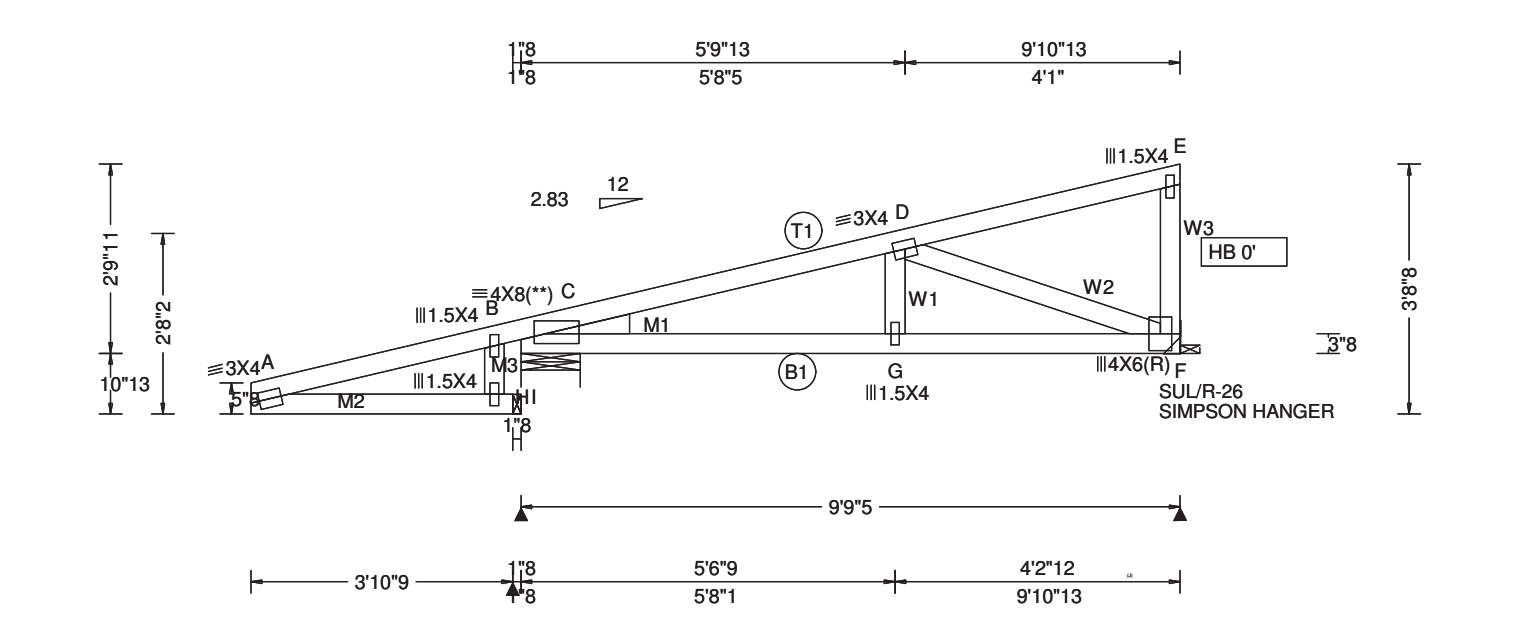
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| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |                   | Defl/CSI Criteria |                                 | ▲ Maximum Reactions (lbs), or *PLF     |                |      |             |       |      |       |
|------------------------|--------|----------------------|----------------|------------------------------|-------------------|-------------------|---------------------------------|----------------------------------------|----------------|------|-------------|-------|------|-------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA            | CAT: NA           | PP Deflection in loc L/defl L/# | Gravity                                |                |      | Non-Gravity |       |      |       |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |                   | Ce: NA            | VERT(LL): -0.045 G              | Loc                                    | R+             | / R- | / Rh        | / Rw  | / U  | / RL  |
| BCLL:                  | 0.00   | Enclosure:           | Part. Enc.     | Lu: NA                       | Cs: NA            |                   | VERT(CL): 0.044 G               | I                                      | -              | /-   | /216        | /-    | /-   | /141  |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA                |                   | HORZ(LL): -0.011 F              | B*                                     | 277            | /-   | /119        | /-    | /316 | /78   |
|                        |        | EXP:                 | C Kzt: NA      |                              |                   |                   | HORZ(TL): 0.011 F               | F                                      | 442            | /-   | /-          | /-    | /480 | /-    |
| Des Ld:                | 55.00  | Mean Height:         | 15.00 ft       |                              |                   |                   | Creep Factor:                   | Wind reactions based on MWFRS          |                |      |             |       |      |       |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        | Building Code:               |                   |                   | Max TC CSI:                     | I                                      | Brg Wid = 1.5  |      | Min Req = - |       |      |       |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        | FBC 8th Ed. 2023 Res.        | HVHZ              |                   | Max BC CSI:                     | B                                      | Brg Wid = 21.9 |      | Min Req = - |       |      |       |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | 0 to h/2       | TPI Std:                     | 2014              |                   | Max Web CSI:                    | F                                      | Brg Wid = -    |      | Min Req = - |       |      |       |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        | Rep Fac:                     | Varies by Ld Case |                   | Mfg Specified Camber:           | Bearing B is a rigid surface.          |                |      |             |       |      |       |
|                        |        | Loc. from endwall:   | not in 9.00 ft | FT/RT:                       | 20(0)/10(0)       |                   |                                 | Maximum Top Chord Forces Per Ply (lbs) |                |      |             |       |      |       |
|                        |        | GCpi:                | 0.55           | Plate Type(s):               |                   |                   |                                 | Chords                                 | Tens.Comp.     |      | Chords      | Tens. |      | Comp. |
|                        |        | Wind Duration:       | 1.60           | WAVE                         |                   |                   | VIEW Ver:                       | 23.02.01A.1204.18                      |                |      |             |       |      |       |

|                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x6 SP #2;Lt Level Return: 2x4 SP #2; | <b>Special Loads</b><br>----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)<br>TC: From 1 plf at -4.07 to 90 plf at 0.00<br>TC: From 2 plf at 0.00 to 2 plf at 9.77<br>BC: From 2 plf at 0.00 to 2 plf at 9.78<br>PLB: From 4 plf at -3.97 to 4 plf at -0.17<br>TC: -27 lb Conc. Load at 1.41<br>TC: 160 lb Conc. Load at 4.24<br>TC: 308 lb Conc. Load at 7.07<br>BC: 7 lb Conc. Load at 1.41<br>BC: 76 lb Conc. Load at 4.24<br>BC: 146 lb Conc. Load at 7.07 | <b>Plating Notes</b><br>All plates are 1.5X4 except as noted.<br>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.<br><br><b>Wind</b><br>Wind loads and reactions based on MWFRS.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>The maximum horizontal reaction is 216#<br>***** BEARING ANALOG MODIFIED! ***** | <b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 231 -156 C - D 949 -886<br>B - C 256 -171 D - E 67 -67<br><br><b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>C - G 853 -917 G - F 842 -900<br><br><b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>A - H 135 -206 G - D 168 -221<br>B - H 23 -7 D - F 946 -886<br>H - I 141 -216 E - F 78 -80 |
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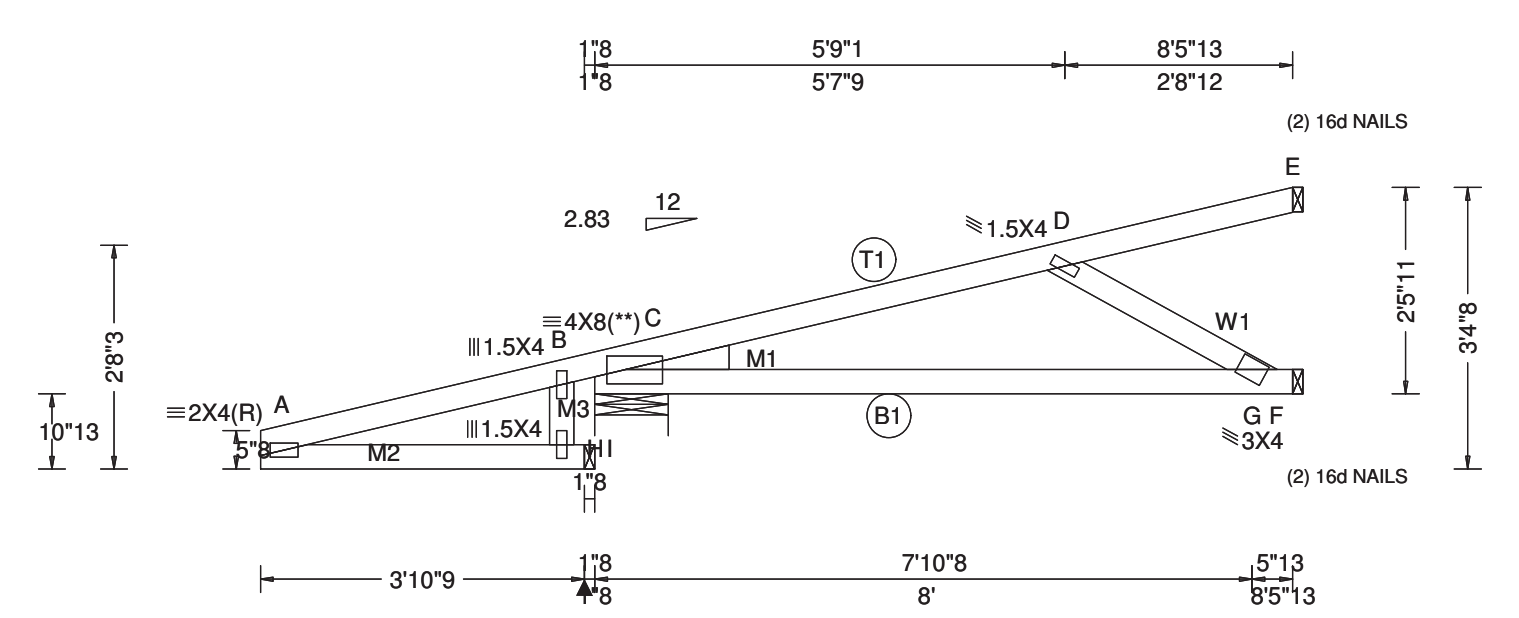
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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                               | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |                |            |                       |        |      |             |  |
|------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|----------------|------------|-----------------------|--------|------|-------------|--|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                                      | PP Deflection in loc L/defl L/# | Gravity                                |                |            | Non-Gravity           |        |      |             |  |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                              | VERT(LL): -0.058 G 999 360      | Loc                                    | R+             | / R-       | / Rh                  | / Rw   | / U  | / RL        |  |
| BCLL: 0.00             | Enclosure: Part. Enc.             | Lu: NA Cs: NA                                                                                                                              | VERT(CL): 0.056 G 999 240       | I                                      | -              | /-         | /229                  | /-     | /-   | /135        |  |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                                          | HORZ(LL): -0.016 F - -          | B                                      | 515            | /-         | /229                  | /-     | /627 | /135        |  |
|                        | EXP: C Kzt: NA                    |                                                                                                                                            | HORZ(TL): 0.016 F - -           | F                                      | 505            | /-         | /-                    | /-     | /572 | /-          |  |
| Des Ld: 55.00          | Mean Height: 15.00 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Varies by Ld Case<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0               | Wind reactions based on MWFRS          |                |            |                       |        |      |             |  |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                                                                                                                            | Max TC CSI: 0.615               | I                                      | Brg Wid = 1.5  |            | Min Req = -           |        |      |             |  |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                                            | Max BC CSI: 0.588               | B                                      | Brg Wid = 10.6 |            | Min Req = 1.5 (Truss) |        |      |             |  |
| Load Duration: 1.25    | MWFRS Parallel Dist: 0 to h/2     |                                                                                                                                            | Max Web CSI: 0.329              | F                                      | Brg Wid = -    |            | Min Req = -           |        |      |             |  |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               |                                                                                                                                            | Mfg Specified Camber:           | Bearing B is a rigid surface.          |                |            |                       |        |      |             |  |
|                        | Loc. from endwall: not in 9.00 ft |                                                                                                                                            |                                 | Maximum Top Chord Forces Per Ply (lbs) |                |            |                       |        |      |             |  |
|                        | GCpi: 0.55                        |                                                                                                                                            |                                 | Chords                                 |                | Tens.Comp. |                       | Chords |      | Tens. Comp. |  |
|                        | Wind Duration: 1.60               |                                                                                                                                            | VIEW Ver: 23.02.01A.1204.18     | A - B                                  |                | 242 -151   |                       | C - D  |      | 444 -1010   |  |
|                        |                                   |                                                                                                                                            |                                 | B - C                                  |                | 268 -165   |                       | D - E  |      | 80 -75      |  |
|                        |                                   |                                                                                                                                            |                                 |                                        |                |            |                       |        |      |             |  |
|                        |                                   |                                                                                                                                            |                                 | Maximum Bot Chord Forces Per Ply (lbs) |                |            |                       |        |      |             |  |
|                        |                                   |                                                                                                                                            |                                 | Chords                                 |                | Tens.Comp. |                       | Chords |      | Tens. Comp. |  |
|                        |                                   |                                                                                                                                            |                                 | C - G                                  |                | 974 -1108  |                       | G - F  |      | 1447 -1010  |  |
|                        |                                   |                                                                                                                                            |                                 |                                        |                |            |                       |        |      |             |  |
|                        |                                   |                                                                                                                                            |                                 | Maximum Web Forces Per Ply (lbs)       |                |            |                       |        |      |             |  |
|                        |                                   |                                                                                                                                            |                                 | Webs                                   |                | Tens.Comp. |                       | Webs   |      | Tens. Comp. |  |
|                        |                                   |                                                                                                                                            |                                 | A - H                                  |                | 129 -217   |                       | G - D  |      | 1447 -1010  |  |
|                        |                                   |                                                                                                                                            |                                 | B - H                                  |                | 24 -6      |                       | D - F  |      | 80 -75      |  |
|                        |                                   |                                                                                                                                            |                                 | H - I                                  |                | 135 -229   |                       | F - E  |      | 92 -93      |  |
|                        |                                   |                                                                                                                                            |                                 |                                        |                |            |                       |        |      |             |  |

|                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2; | <b>Special Loads</b><br>----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)<br>TC: From 1 plf at -4.07 to 90 plf at 0.00<br>TC: From 2 plf at 0.00 to 2 plf at 9.77<br>BC: From 2 plf at 0.00 to 2 plf at 9.78<br>PLB: From 4 plf at -3.97 to 4 plf at -0.17<br>TC: -27 lb Conc. Load at 1.41<br>TC: 191 lb Conc. Load at 4.24<br>TC: 349 lb Conc. Load at 7.07<br>BC: 7 lb Conc. Load at 1.41<br>BC: 91 lb Conc. Load at 4.24<br>BC: 166 lb Conc. Load at 7.07 | <b>Plating Notes</b><br>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.<br><br><b>Wind</b><br>Wind loads and reactions based on MWFRS.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>The maximum horizontal reaction is 229#<br>***** BEARING ANALOG MODIFIED! ***** | <b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 242 -151 C - D 1145 -1013<br>B - C 268 -165 D - E 80 -75<br><br><b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>C - G 974 -1108 G - F 962 -1090<br><br><b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>A - H 129 -217 G - D 193 -257<br>B - H 24 -6 D - F 1146 -1012<br>H - I 135 -229 F - E 92 -93 |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                               | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |                |            |                       |        |      |             |  |
|------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|----------------|------------|-----------------------|--------|------|-------------|--|
|                        |                                   |                                                                                                                                            |                                 | Gravity                                |                |            | Non-Gravity           |        |      |             |  |
|                        |                                   |                                                                                                                                            |                                 | Loc                                    | R+             | / R-       | / Rh                  | / Rw   | / U  | / RL        |  |
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                                      | PP Deflection in loc L/defl L/# |                                        |                |            |                       |        |      |             |  |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                              | VERT(LL): -0.031 C 999 360      |                                        |                |            |                       |        |      |             |  |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                                                                                                                              | VERT(CL): 0.080 C 999 240       | I                                      | -              | /-         | /194                  | /-     | /-   | /40         |  |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                                          | HORZ(LL): -0.009 C - -          | B                                      | 447            | /-         | /194                  | /-     | /339 | /40         |  |
|                        | EXP: C Kzt: NA                    |                                                                                                                                            | HORZ(TL): 0.025 C - -           | F                                      | 367            | /-         | /-                    | /-     | /162 | /-          |  |
| Des Ld: 55.00          | Mean Height: 15.00 ft             |                                                                                                                                            | Creep Factor: 2.0               | E                                      | 217            | /-         | /-                    | /-     | /73  | /-          |  |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Varies by Ld Case<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Max TC CSI: 0.695               | Wind reactions based on MWFRS          |                |            |                       |        |      |             |  |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                                            | Max BC CSI: 0.528               | I                                      | Brg Wid = 1.5  |            | Min Req = -           |        |      |             |  |
| Load Duration: 1.25    | MWFRS Parallel Dist: 0 to h/2     |                                                                                                                                            | Max Web CSI: 0.141              | B                                      | Brg Wid = 10.6 |            | Min Req = 1.5 (Truss) |        |      |             |  |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               |                                                                                                                                            | Mfg Specified Camber:           | F                                      | Brg Wid = 1.5  |            | Min Req = -           |        |      |             |  |
|                        | Loc. from endwall: not in 4.50 ft |                                                                                                                                            |                                 | E                                      | Brg Wid = 1.5  |            | Min Req = -           |        |      |             |  |
|                        | GCpi: 0.18                        |                                                                                                                                            |                                 | Bearing B is a rigid surface.          |                |            |                       |        |      |             |  |
|                        | Wind Duration: 1.60               |                                                                                                                                            | VIEW Ver: 23.02.01A.1204.18     | Maximum Top Chord Forces Per Ply (lbs) |                |            |                       |        |      |             |  |
|                        |                                   |                                                                                                                                            |                                 | Chords                                 |                | Tens.Comp. |                       | Chords |      | Tens. Comp. |  |
|                        |                                   |                                                                                                                                            |                                 | A - B                                  |                | 213 -58    |                       | C - D  |      | 278 -633    |  |
|                        |                                   |                                                                                                                                            |                                 | B - C                                  |                | 235 -61    |                       | D - E  |      | 50 -70      |  |
|                        |                                   |                                                                                                                                            |                                 | C - G                                  |                | 601 -270   |                       | G - F  |      | 0 0         |  |
|                        |                                   |                                                                                                                                            |                                 | B - H                                  |                | 22 0       |                       | D - G  |      | 320 -717    |  |
|                        |                                   |                                                                                                                                            |                                 | Webs                                   |                | Tens.Comp. |                       | Webs   |      | Tens. Comp. |  |
|                        |                                   |                                                                                                                                            |                                 | A - H                                  |                | 42 -187    |                       | H - I  |      | 40 -194     |  |
|                        |                                   |                                                                                                                                            |                                 | B - H                                  |                | 22 0       |                       | D - G  |      | 320 -717    |  |
|                        |                                   |                                                                                                                                            |                                 | Maximum Web Forces Per Ply (lbs)       |                |            |                       |        |      |             |  |
|                        |                                   |                                                                                                                                            |                                 | Webs                                   |                | Tens.Comp. |                       | Webs   |      | Tens. Comp. |  |
|                        |                                   |                                                                                                                                            |                                 | A - H                                  |                | 42 -187    |                       | H - I  |      | 40 -194     |  |
|                        |                                   |                                                                                                                                            |                                 | B - H                                  |                | 22 0       |                       | D - G  |      | 320 -717    |  |

**Lumber**

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Special Loads**

----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

|           |                      |          |           |       |
|-----------|----------------------|----------|-----------|-------|
| TC: From  | 1 plf at             | -4.07 to | 90 plf at | 0.00  |
| TC: From  | 2 plf at             | 0.00 to  | 2 plf at  | 8.36  |
| BC: From  | 2 plf at             | 0.00 to  | 2 plf at  | 8.36  |
| PLB: From | 4 plf at             | -3.97 to | 4 plf at  | -0.17 |
| TC:       | -27 lb Conc. Load at | 1.41     |           |       |
| TC:       | 191 lb Conc. Load at | 4.24     |           |       |
| TC:       | 349 lb Conc. Load at | 7.07     |           |       |
| BC:       | 7 lb Conc. Load at   | 1.41     |           |       |
| BC:       | 91 lb Conc. Load at  | 4.24     |           |       |
| BC:       | 166 lb Conc. Load at | 7.07     |           |       |

**Plating Notes**

(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**

Wind loads and reactions based on MWFRS.  
Wind loading based on both gable and hip roof types.

**Additional Notes**

\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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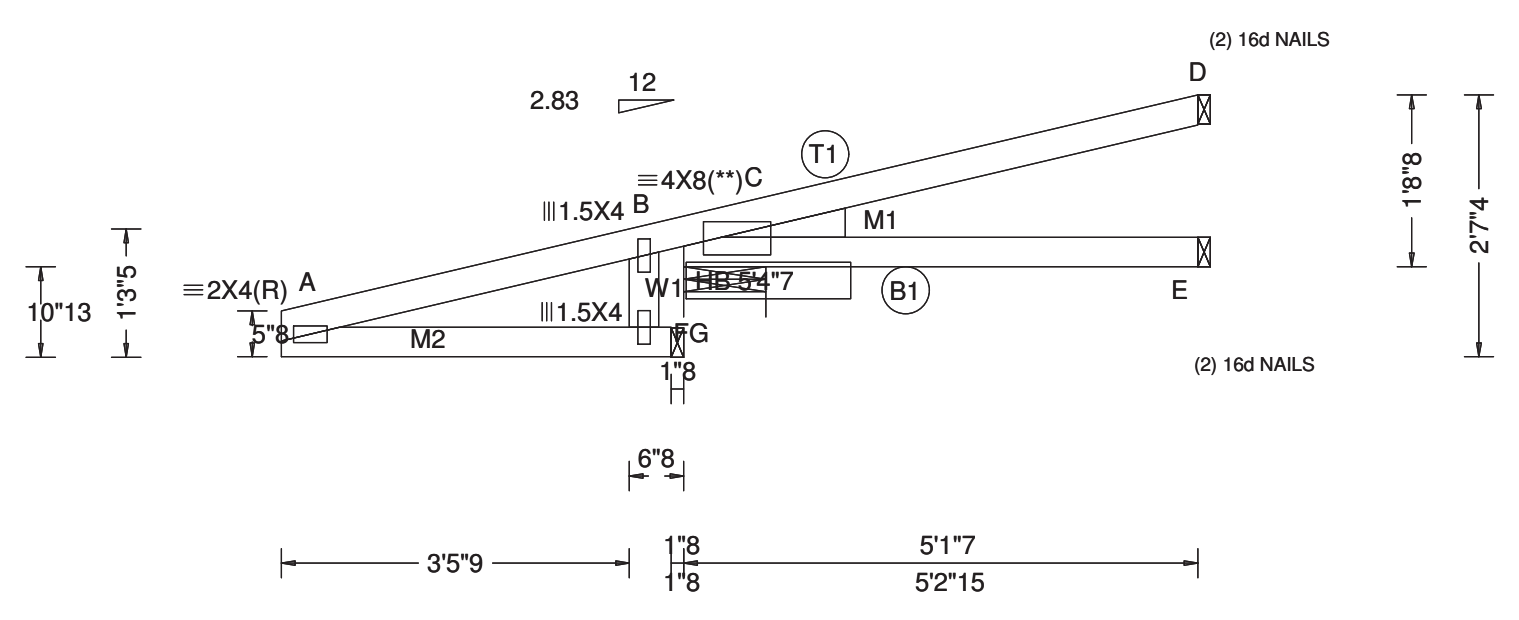
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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                               |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |               |             |             |      |      |      |
|------------------------|--|-----------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|---------------|-------------|-------------|------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                                      |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |               |             | Non-Gravity |      |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                              |  |  | VERT(LL): -0.028 C 999 360      |  |  | Loc                                    | R+            | / R-        | / Rh        | / Rw | / U  | / RL |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                              |  |  | VERT(CL): 0.035 C 999 240       |  |  | G                                      | -             | /-          | /191        | /-   | /-   | /43  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                                          |  |  | HORZ(LL): -0.009 C - -          |  |  | B                                      | 336           | /-          | /191        | /-   | /263 | /43  |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Varies by Ld Case<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.011 C - -           |  |  | E                                      | 82            | /-          | /-          | /-   | /20  | /-   |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                                                                                                                            |  |  | Creep Factor: 2.0               |  |  | Wind reactions based on MWFRS          |               |             |             |      |      |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                                            |  |  | Max TC CSI: 0.473               |  |  | G Brg Wid = 1.5 Min Req = -            |               |             |             |      |      |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                                            |  |  | Max BC CSI: 0.199               |  |  | B Brg Wid = 9.8 Min Req = 1.5 (Truss)  |               |             |             |      |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2     |  |                                                                                                                                            |  |  | Max Web CSI: 0.020              |  |  | E                                      | Brg Wid = 1.5 | Min Req = - |             |      |      |      |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                                            |  |  | Mfg Specified Camber:           |  |  | D                                      | Brg Wid = 1.5 | Min Req = - |             |      |      |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  |                                                                                                                                            |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | Bearing B is a rigid surface.          |               |             |             |      |      |      |
|                        |  | GCpi: 0.18                        |  |                                                                                                                                            |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |               |             |             |      |      |      |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                                            |  |  |                                 |  |  |                                        |               |             |             |      |      |      |

Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

Special Loads

----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From 1 plf at -4.08 to 90 plf at 0.00  
TC: From 2 plf at 0.00 to 2 plf at 5.12  
BC: From 2 plf at 0.00 to 2 plf at 5.12  
PLB: From 4 plf at -3.97 to 4 plf at -0.17  
TC: -27 lb Conc. Load at 1.41  
TC: 191 lb Conc. Load at 4.24  
BC: 7 lb Conc. Load at 1.41  
BC: 91 lb Conc. Load at 4.24

Plating Notes

(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

Wind

Wind loads and reactions based on MWFRS.  
Left end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

Additional Notes

\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

Maximum Top Chord Forces Per Ply (lbs)

| Chords | Tens.Comp. | Chords | Tens. Comp. |
|--------|------------|--------|-------------|
| A - B  | 211 -61    | C - D  | 48 -22      |
| B - C  | 232 -64    |        |             |

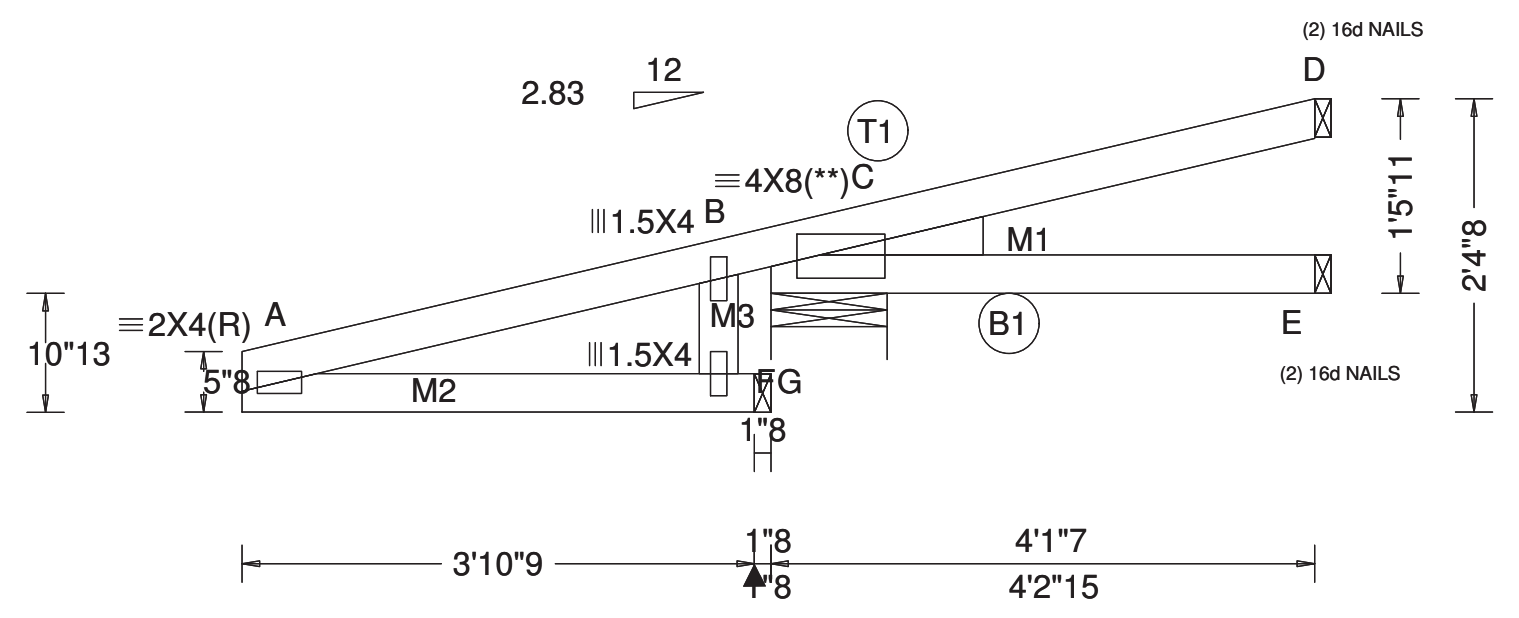
Maximum Bot Chord Forces Per Ply (lbs)

| Chords | Tens.Comp. |
|--------|------------|
| C - E  | 0 0        |

Maximum Web Forces Per Ply (lbs)

| Webs  | Tens.Comp. | Webs  | Tens. Comp. |
|-------|------------|-------|-------------|
| A - F | 45 -184    | F - G | 43 -191     |
| B - F | 21 0       |       |             |

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                               | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |     |            |             |                   |      |      |
|------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|-----|------------|-------------|-------------------|------|------|
|                        |                                   |                                                                                                                                            |                                 | Gravity                                |     |            | Non-Gravity |                   |      |      |
|                        |                                   |                                                                                                                                            |                                 | Loc                                    | R+  | / R-       | / Rh        | / Rw              | / U  | / RL |
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                                      | PP Deflection in loc L/defl L/# |                                        |     |            |             |                   |      |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                              | VERT(LL): NA                    | G                                      | -   | /-         | /207        | /-                | /-   | /76  |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                                                                                                                              | VERT(CL): NA                    | B                                      | 300 | /-         | /207        | /-                | /184 | /76  |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                                          | HORZ(LL): -0.002 C - -          | E                                      | 62  | /-3        | /-          | /-                | /8   | /-   |
|                        | EXP: C Kzt: NA                    |                                                                                                                                            | HORZ(TL): 0.005 C - -           | D                                      | 53  | /-1        | /-          | /-                | /8   | /-   |
| Des Ld: 55.00          | Mean Height: 15.00 ft             | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Varies by Ld Case<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0               | Wind reactions based on MWFRS          |     |            |             |                   |      |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     |                                                                                                                                            | Max TC CSI: 0.198               | G                                      | Brg | Wid = 1.5  | Min         | Req = -           |      |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     |                                                                                                                                            | Max BC CSI: 0.113               | B                                      | Brg | Wid = 10.6 | Min         | Req = 1.5 (Truss) |      |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: 0 to h/2     |                                                                                                                                            | Max Web CSI: 0.000              | E                                      | Brg | Wid = 1.5  | Min         | Req = -           |      |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               |                                                                                                                                            | Mfg Specified Camber:           | D                                      | Brg | Wid = 1.5  | Min         | Req = -           |      |      |
|                        | Loc. from endwall: not in 4.50 ft |                                                                                                                                            |                                 | Bearing B is a rigid surface.          |     |            |             |                   |      |      |
|                        | GCpi: 0.18                        |                                                                                                                                            |                                 | Maximum Top Chord Forces Per Ply (lbs) |     |            |             |                   |      |      |
|                        | Wind Duration: 1.60               |                                                                                                                                            | VIEW Ver: 23.02.01A.1204.18     |                                        |     |            |             |                   |      |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Special Loads**  
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC: From 1 plf at -4.07 to 90 plf at 0.00  
TC: From 2 plf at 0.00 to 2 plf at 4.12  
BC: From 2 plf at 0.00 to 2 plf at 4.12  
PLB: From 4 plf at -3.97 to 4 plf at -0.17  
TC: 22 lb Conc. Load at 1.41  
BC: 20 lb Conc. Load at 1.41

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Wind loads and reactions based on MWFRS.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
The maximum horizontal reaction is 207#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.  
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.  
For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbccomponents.com; ICC: iccsafe.org; AWC: awc.org

|                                                                                                                                               |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Lt Wedge: 2x4 SP #2; Lt Level Return: 2x4 SP #2;                           |  |
| <b>Plating Notes</b><br>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements. |  |
| <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types.                             |  |
| <b>Additional Notes</b>                                                                                                                       |  |

| Chords | Tens.Comp. | Chords | Tens. Comp. |
|--------|------------|--------|-------------|
| A - B  | 227 -294   | C - D  | 79 -137     |
| B - C  | 247 -288   |        |             |

**Maximum Bot Chord Forces Per Ply (lbs)**

| Chords | Tens.Comp. |
|--------|------------|
| C - E  | 0 0        |

**Maximum Web Forces Per Ply (lbs)**

| Webs  | Tens.Comp. | Webs  | Tens. Comp. |
|-------|------------|-------|-------------|
| A - F | 328 -209   | F - G | 323 -213    |
| B - F | 45 -16     |       |             |

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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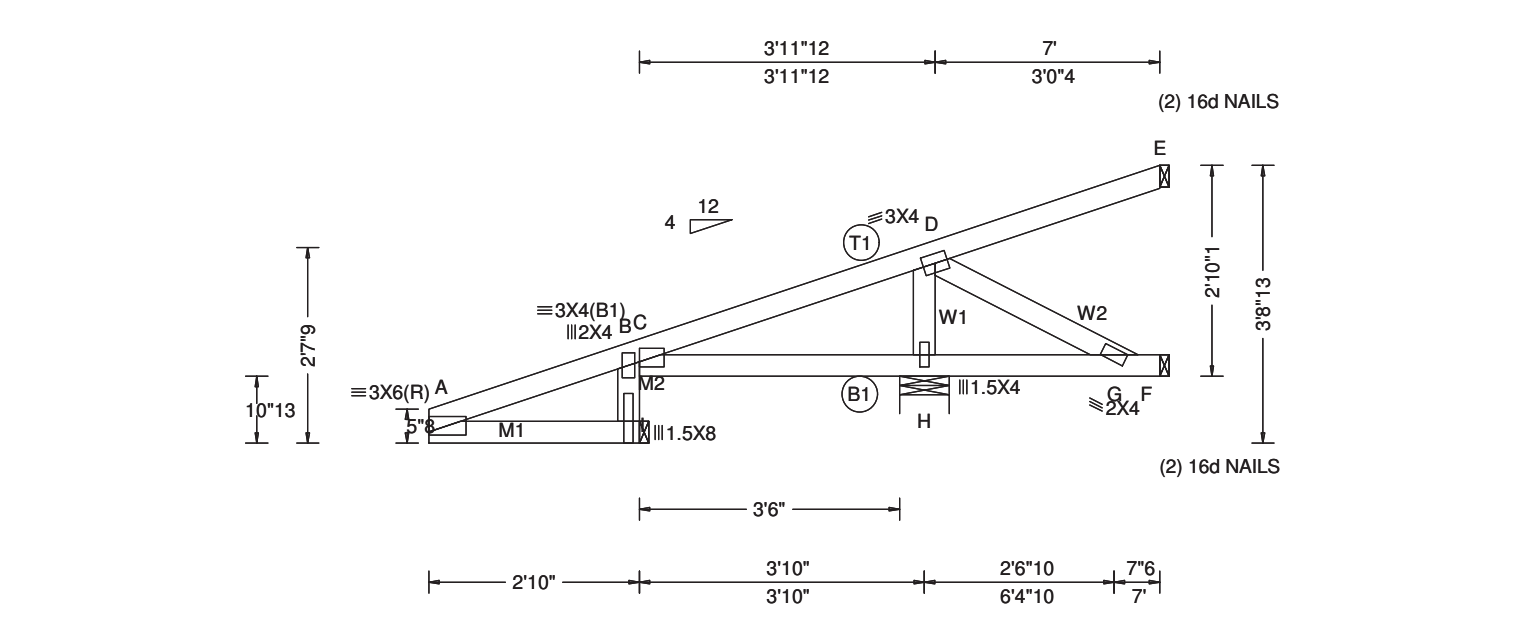
For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpiinst.org](http://tpiinst.org); SBCA: [sbccomponents.com](http://sbccomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)

The diagram illustrates a roof truss system with the following components and dimensions:

- Members:**
  - Top chord:  $\equiv 3X6(R)$  A-E
  - Bottom chord:  $\equiv 3X6(R)$  A-F
  - Vertical member:  $\equiv 4X6(**)$  C
  - Diagonal member:  $\equiv 1.5X4$  B
  - Diagonal member:  $\equiv 1.5X4$  D
  - Diagonal member:  $\equiv 1.5X4$  G
  - Vertical member:  $\equiv 1.5X4$  I
  - Vertical member:  $\equiv 1.5X4$  M3
  - Vertical member:  $\equiv 1.5X4$  W1
- Joints:** A, B, C, D, E, F, G, I, M1, M2, M3.
- Dimensions:**
  - Horizontal dimensions (top):  $1'8''$ ,  $4'1'2''$ ,  $7'1'8''$ ; total  $3'11'10''$  and  $3'0'6''$ .
  - Horizontal dimensions (bottom):  $2'8'8''$ ,  $1'8''$ ,  $5'2'13''$ ,  $1'9'3''$ ; total  $5'4'5''$  and  $7'1'8''$ .
  - Vertical dimensions (left):  $10'13''$ ,  $28'1''$ .
  - Vertical dimensions (right):  $2'10'1''$ ,  $3'8'13''$ .
  - Other dimensions:  $5'8''$ ,  $1'8''$ ,  $1'8''$ .
- Notes:**
  - (2) 16d NAILS (at joints E and F)
  - 4  $\frac{12}{4}$  (slope indicator)

|                                                                                                                        |  |
|------------------------------------------------------------------------------------------------------------------------|--|
| <b>Lumber</b>                                                                                                          |  |
| Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Wedge: 2x4 SP #2; Lt Level Return: 2x4 SP #2; |  |
| <b>Plating Notes</b>                                                                                                   |  |
| (**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.  |  |
| <b>Wind</b>                                                                                                            |  |
| Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types.                     |  |
| <b>Additional Notes</b>                                                                                                |  |
| The maximum horizontal reaction is 204#<br>***** BEARING ANALOG MODIFIED! *****                                        |  |

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 Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.  
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 For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpiinst.org](http://tpiinst.org); SBCA: [sbccomponents.com](http://sbccomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)

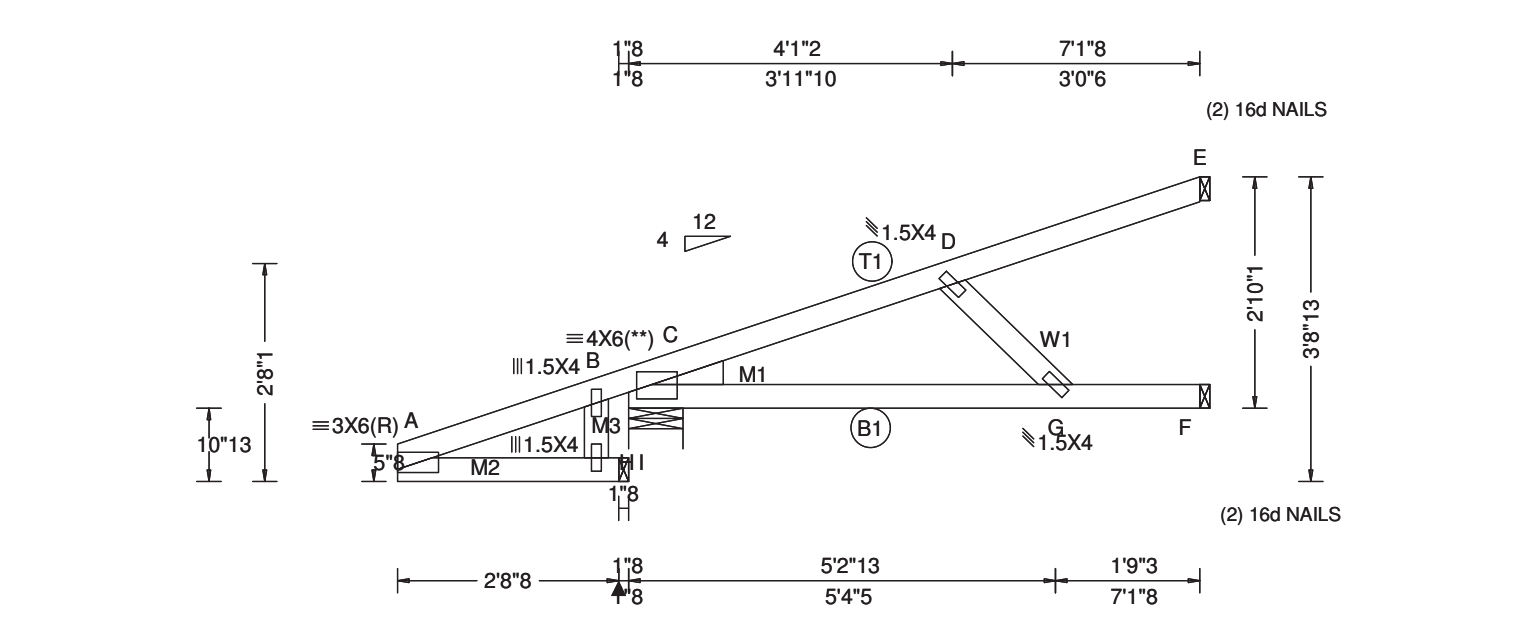


| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |               |             |             |      |      |      |
|------------------------|--|-----------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|---------------|-------------|-------------|------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |               |             | Non-Gravity |      |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): -0.002 C 999 360      |  |  | Loc                                    | R+            | / R-        | / Rh        | / Rw | / U  | / RL |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): 0.003 C 999 240       |  |  | I                                      | 442           | /-          | /179        | /467 | /763 | /661 |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): -0.001 C - -          |  |  | H                                      | 483           | /-          | /150        | /322 | /455 | /365 |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.002 C - -           |  |  | F                                      | 22            | /0          | /39         | /40  | /34  | /98  |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | Wind reactions based on C&C            |               |             |             |      |      |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max TC CSI: 0.302               |  |  | I Brg Wid = 1.5 Min Req = -            |               |             |             |      |      |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max BC CSI: 0.117               |  |  | H Brg Wid = 8.0 Min Req = 1.5 (Truss)  |               |             |             |      |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h to 2h      |  | Max Web CSI: 0.087                                                                                                           |  |  | Mfg Specified Camber:           |  |  | F                                      | Brg Wid = 1.5 | Min Req = - |             |      |      |      |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                              |  |  |                                 |  |  | E                                      | Brg Wid = 1.5 | Min Req = - |             |      |      |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  |                                                                                                                              |  |  |                                 |  |  | Bearing H is a rigid surface.          |               |             |             |      |      |      |
|                        |  | GCpi: 0.18                        |  |                                                                                                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |               |             |             |      |      |      |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                              |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  |                                        |               |             |             |      |      |      |

| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br>Lt Level Return: 2x4 SP #2; | <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types. | <b>Additional Notes</b><br>***** BEARING ANALOG MODIFIED! ***** | <b>Maximum Top Chord Forces Per Ply (lbs)</b> <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>A - B</td><td>423 -595</td><td>C - D</td><td>126 -214</td></tr><tr><td>B - C</td><td>404 -506</td><td>D - E</td><td>36 -72</td></tr></table><br><b>Maximum Bot Chord Forces Per Ply (lbs)</b> <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>C - H</td><td>340 -344</td><td>G - F</td><td>98 -45</td></tr><tr><td>H - G</td><td>11 -24</td><td></td><td></td></tr></table><br><b>Maximum Web Forces Per Ply (lbs)</b> <table><tr><th>Webs</th><th>Tens.Comp.</th><th>Webs</th><th>Tens. Comp.</th></tr><tr><td>A - I</td><td>627 -410</td><td>H - D</td><td>496 -405</td></tr><tr><td>B - I</td><td>625 -419</td><td>D - G</td><td>142 -65</td></tr></table> | Chords | Tens.Comp. | Chords | Tens. Comp. | A - B | 423 -595 | C - D | 126 -214 | B - C | 404 -506 | D - E | 36 -72 | Chords | Tens.Comp. | Chords | Tens. Comp. | C - H | 340 -344 | G - F | 98 -45 | H - G | 11 -24 |  |  | Webs | Tens.Comp. | Webs | Tens. Comp. | A - I | 627 -410 | H - D | 496 -405 | B - I | 625 -419 | D - G | 142 -65 |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------|--------|-------------|-------|----------|-------|----------|-------|----------|-------|--------|--------|------------|--------|-------------|-------|----------|-------|--------|-------|--------|--|--|------|------------|------|-------------|-------|----------|-------|----------|-------|----------|-------|---------|
| Chords                                                                                                             | Tens.Comp.                                                                                                        | Chords                                                          | Tens. Comp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |            |        |             |       |          |       |          |       |          |       |        |        |            |        |             |       |          |       |        |       |        |  |  |      |            |      |             |       |          |       |          |       |          |       |         |
| A - B                                                                                                              | 423 -595                                                                                                          | C - D                                                           | 126 -214                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |            |        |             |       |          |       |          |       |          |       |        |        |            |        |             |       |          |       |        |       |        |  |  |      |            |      |             |       |          |       |          |       |          |       |         |
| B - C                                                                                                              | 404 -506                                                                                                          | D - E                                                           | 36 -72                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |            |        |             |       |          |       |          |       |          |       |        |        |            |        |             |       |          |       |        |       |        |  |  |      |            |      |             |       |          |       |          |       |          |       |         |
| Chords                                                                                                             | Tens.Comp.                                                                                                        | Chords                                                          | Tens. Comp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |            |        |             |       |          |       |          |       |          |       |        |        |            |        |             |       |          |       |        |       |        |  |  |      |            |      |             |       |          |       |          |       |          |       |         |
| C - H                                                                                                              | 340 -344                                                                                                          | G - F                                                           | 98 -45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |            |        |             |       |          |       |          |       |          |       |        |        |            |        |             |       |          |       |        |       |        |  |  |      |            |      |             |       |          |       |          |       |          |       |         |
| H - G                                                                                                              | 11 -24                                                                                                            |                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |            |        |             |       |          |       |          |       |          |       |        |        |            |        |             |       |          |       |        |       |        |  |  |      |            |      |             |       |          |       |          |       |          |       |         |
| Webs                                                                                                               | Tens.Comp.                                                                                                        | Webs                                                            | Tens. Comp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |            |        |             |       |          |       |          |       |          |       |        |        |            |        |             |       |          |       |        |       |        |  |  |      |            |      |             |       |          |       |          |       |          |       |         |
| A - I                                                                                                              | 627 -410                                                                                                          | H - D                                                           | 496 -405                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |            |        |             |       |          |       |          |       |          |       |        |        |            |        |             |       |          |       |        |       |        |  |  |      |            |      |             |       |          |       |          |       |          |       |         |
| B - I                                                                                                              | 625 -419                                                                                                          | D - G                                                           | 142 -65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |            |        |             |       |          |       |          |       |          |       |        |        |            |        |             |       |          |       |        |       |        |  |  |      |            |      |             |       |          |       |          |       |          |       |         |







| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                               |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |               |    |               |               |                       |             |      |    |
|------------------------|--|-----------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|---------------|----|---------------|---------------|-----------------------|-------------|------|----|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                                      |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |               |    | Non-Gravity   |               |                       |             |      |    |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                              |  |  | VERT(LL): -0.109 G 753 360      |  |  | Loc                                    | R+            | R- | / Rh          | / Rw          | / U                   | / RL        |      |    |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                              |  |  | VERT(CL): 0.183 G 450 240       |  |  | I                                      | -             | /- | /604          | /-            | /-                    | /423        |      |    |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                                          |  |  | HORZ(LL): -0.031 D - -          |  |  | B                                      | 852           | /- | /604          | /480          | /815                  | /311        |      |    |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Varies by Ld Case<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.052 D - -           |  |  | F                                      | 185           | /- | /0            | /141          | /179                  | /0          |      |    |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                                                                                                                            |  |  | Creep Factor: 2.0               |  |  | E                                      |               |    | 155           | /-            | /-                    | /97         | /213 | /- |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                                            |  |  | Max TC CSI: 0.563               |  |  | Wind reactions based on C&C            |               |    | I             | Brg Wid = 1.5 |                       | Min Req = - |      |    |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                                            |  |  | Max BC CSI: 0.682               |  |  | B                                      |               |    | Brg Wid = 8.0 |               | Min Req = 1.5 (Truss) |             |      |    |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h/2 to h     |  | Max Web CSI: 0.153                                                                                                                         |  |  | Mfg Specified Camber:           |  |  | F                                      | Brg Wid = 1.5 |    | Min Req = -   |               |                       |             |      |    |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                                            |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | E                                      | Brg Wid = 1.5 |    | Min Req = -   |               |                       |             |      |    |
|                        |  | Loc. from endwall: not in 9.00 ft |  |                                                                                                                                            |  |  |                                 |  |  | Bearing B is a rigid surface.          |               |    |               |               |                       |             |      |    |
|                        |  | GCpi: 0.18                        |  |                                                                                                                                            |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |               |    |               |               |                       |             |      |    |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                                            |  |  |                                 |  |  |                                        |               |    |               |               |                       |             |      |    |

Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

Special Loads

----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From 90 plf at -2.83 to 90 plf at 7.00  
BC: From 20 plf at 0.00 to 20 plf at 7.00  
PLB: From 4 plf at -2.79 to 4 plf at -0.17  
TC: 165 lb Conc. Load at -2.58

Plating Notes

(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

Wind

Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

Additional Notes

The maximum horizontal reaction is 604#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

Chords

Tens.Comp.

Chords

Tens. Comp.

A - B

665 -377

C - D

132 -253

B - C

704 -383

D - E

49 -80

Maximum Bot Chord Forces Per Ply (lbs)

Chords

Tens.Comp.

Chords

Tens. Comp.

C - G

201 -302

G - F

0 0

Maximum Web Forces Per Ply (lbs)

Webs

Tens.Comp.

Webs

Tens. Comp.

A - H

420 -601

H - I

423 -604

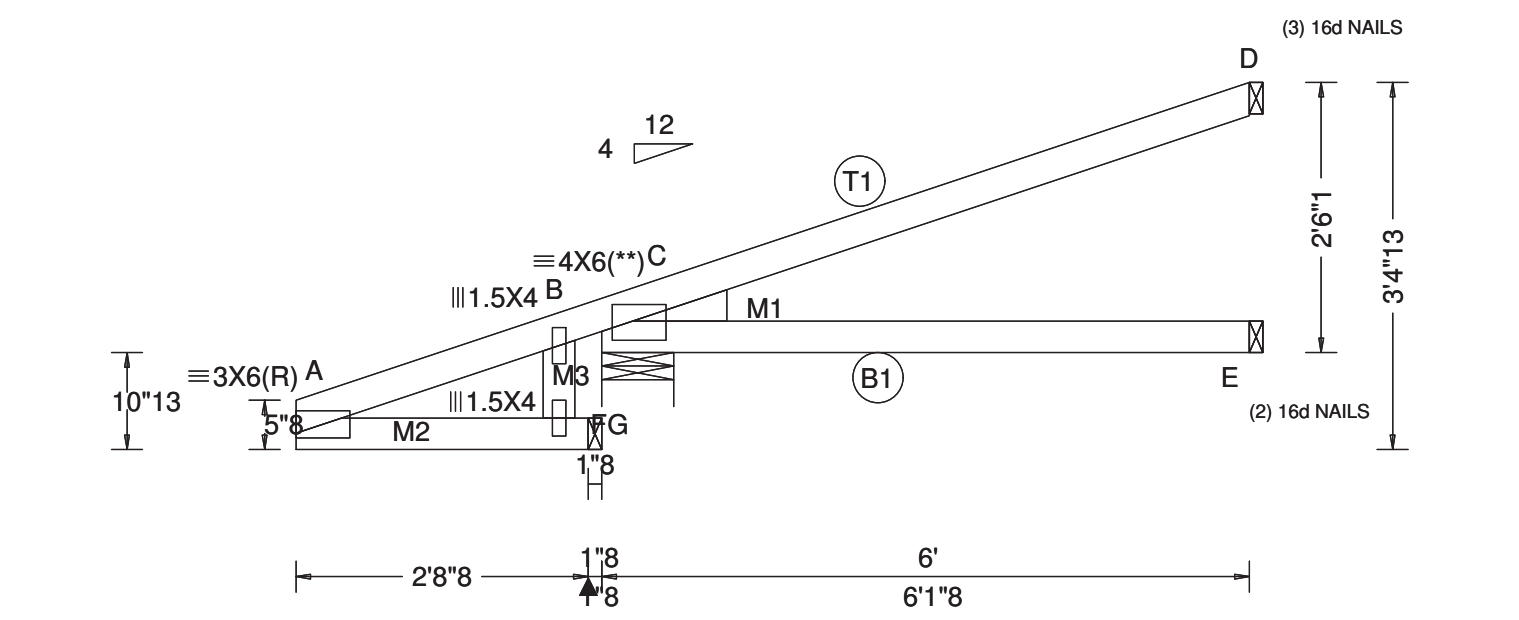
B - H

65 -31

D - G

425 -269

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| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |     |           |             |                   |      |      |
|------------------------|-----------------------------------|------------------------------|---------------------------------|----------------------------------------|-----|-----------|-------------|-------------------|------|------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA        | PP Deflection in loc L/defl L/# | Gravity                                |     |           | Non-Gravity |                   |      |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                | VERT(LL): NA                    | Loc                                    | R+  | / R-      | / Rh        | / Rw              | / U  | / RL |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                | VERT(CL): NA                    | G                                      | -   | /-        | /214        | /-                | /-   | /417 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA            | HORZ(LL): -0.021 C - -          | B                                      | 631 | /-        | /214        | /454              | /839 | /231 |
|                        | EXP: C Kzt: NA                    |                              | HORZ(TL): 0.032 C - -           | E                                      | 101 | /-        | /-          | /67               | /17  | /-   |
| Des Ld: 55.00          | Mean Height: 15.00 ft             |                              | Creep Factor: 2.0               | D                                      | 212 | /-        | /-          | /132              | /327 | /-   |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     | Building Code:               | Max TC CSI: 0.690               | Wind reactions based on C&C            |     |           |             |                   |      |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ   | Max BC CSI: 0.349               | G                                      | Brg | Wid = 1.5 | Min         | Req = -           |      |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: h/2 to h     | TPI Std: 2014                | Max Web CSI: 0.000              | B                                      | Brg | Wid = 8.0 | Min         | Req = 1.5 (Truss) |      |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               | Rep Fac: Yes                 | Mfg Specified Camber:           | E                                      | Brg | Wid = 1.5 | Min         | Req = -           |      |      |
|                        | Loc. from endwall: not in 9.00 ft | FT/RT:20(0)/10(0)            |                                 | D                                      | Brg | Wid = 1.5 | Min         | Req = -           |      |      |
|                        | GCpi: 0.18                        | Plate Type(s):               |                                 | Bearing B is a rigid surface.          |     |           |             |                   |      |      |
|                        | Wind Duration: 1.60               | WAVE                         | VIEW Ver: 23.02.01A.1204.18     | Maximum Top Chord Forces Per Ply (lbs) |     |           |             |                   |      |      |

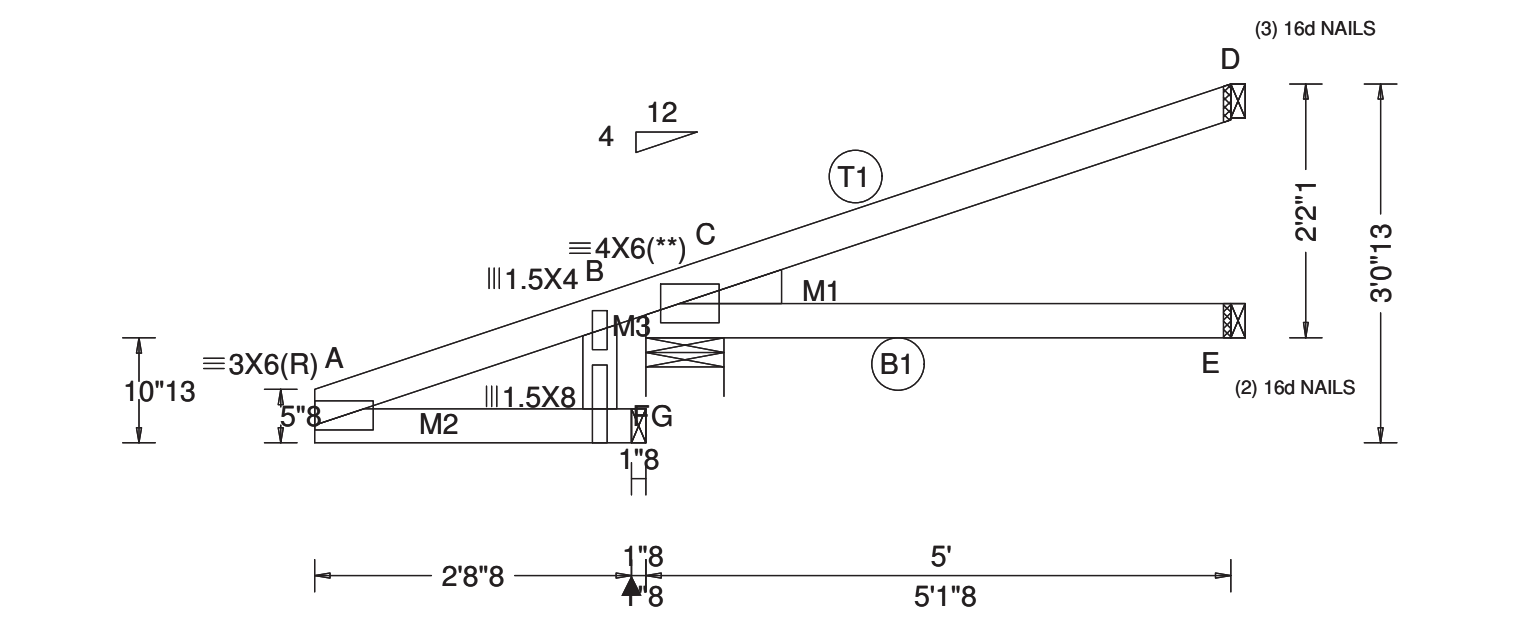
**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

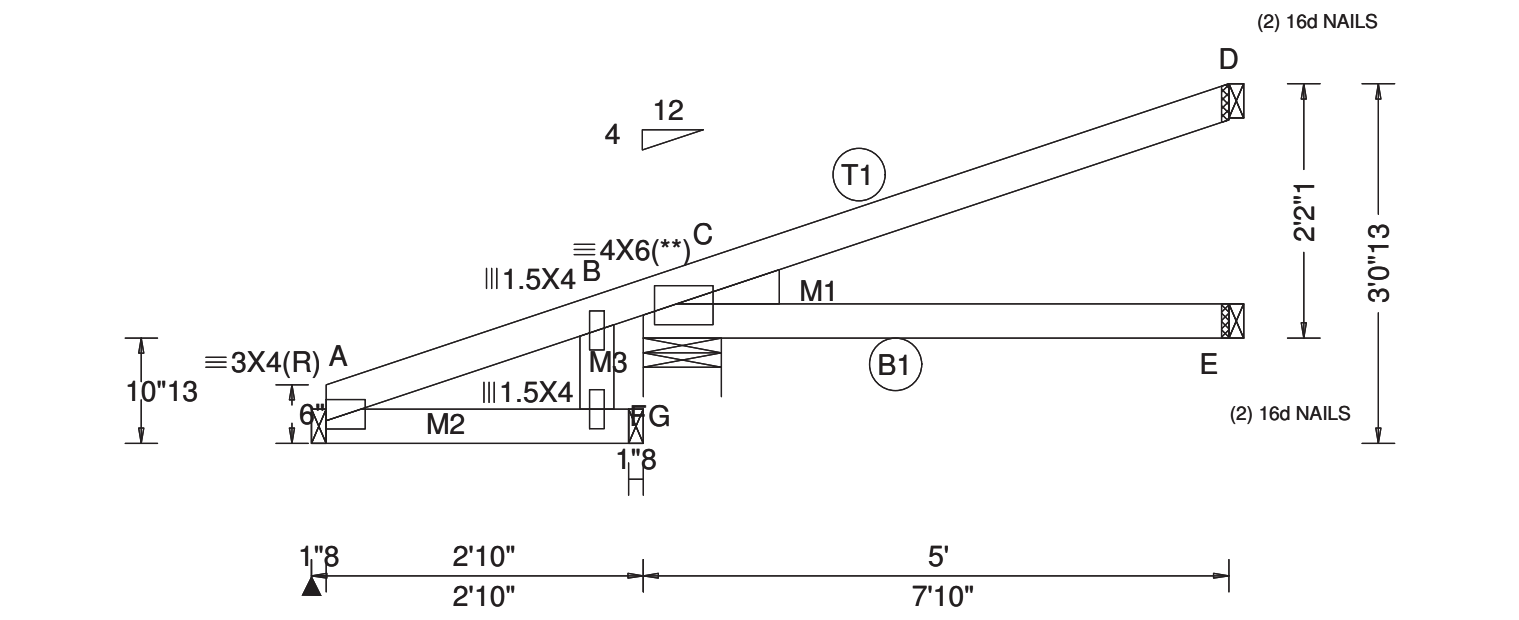
**Additional Notes**  
The maximum horizontal reaction is 214#  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |  |                       |  |               |  |  |
|------------------------|--|-----------------------------------|--|----------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|--|-----------------------|--|---------------|--|--|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity Non-Gravity                    |  |                       |  |               |  |  |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                |  |  | VERT(LL): NA                    |  |  | Loc R+ / R-                            |  | / Rh                  |  | / Rw / U / RL |  |  |
| BCLL: 0.00             |  | Enclosure: Part. Enc.             |  | Lu: NA Cs: NA                                |  |  | VERT(CL): NA                    |  |  | G - /-                                 |  | /240 /-               |  | /814          |  |  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                            |  |  | HORZ(LL): -0.019 C - -          |  |  | B 572 /-                               |  | /240 /767             |  | /1362 /543    |  |  |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ |  |  | HORZ(TL): 0.020 C - -           |  |  | E 83 /-                                |  | /187                  |  | /203 /-       |  |  |
| NCBCLL: 10.00          |  | Mean Height: 21.37 ft             |  |                                              |  |  | Creep Factor: 2.0               |  |  | D 174 /-                               |  | /135                  |  | /361 /-       |  |  |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  | TPI Std: 2014                                |  |  | Max TC CSI: 0.606               |  |  | Wind reactions based on C&C            |  |                       |  |               |  |  |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  | Rep Fac: Yes                                 |  |  | Max BC CSI: 0.376               |  |  | G Brg Wid = 1.5                        |  | Min Req = -           |  |               |  |  |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2     |  | FT/RT:20(0)/10(0)                            |  |  | Max Web CSI: 0.000              |  |  | B Brg Wid = 8.0                        |  | Min Req = 1.5 (Truss) |  |               |  |  |
|                        |  | C&C Dist a: 3.00 ft               |  | Plate Type(s):                               |  |  | Mfg Specified Camber:           |  |  | E Brg Wid = 1.5                        |  | Min Req = -           |  |               |  |  |
|                        |  | Loc. from endwall: not in 4.50 ft |  | WAVE                                         |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | D Brg Wid = 1.5                        |  | Min Req = -           |  |               |  |  |
|                        |  | GCpi: 0.55                        |  |                                              |  |  |                                 |  |  | Bearing B is a rigid surface.          |  |                       |  |               |  |  |
|                        |  | Wind Duration: 1.60               |  |                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |  |                       |  |               |  |  |

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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)                                                                                                                                                                        |     |       |      |             |      |      |      |    |
|------------------------|--|-----------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|------|-------------|------|------|------|----|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                                                                                                                                                                          |     |       |      | Non-Gravity |      |      |      |    |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): NA                    |  |  | Loc                                                                                                                                                                                              | R+  | / R-  | / Rh | / Rw        | / U  | / RL |      |    |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): NA                    |  |  | A                                                                                                                                                                                                | 98  | /-112 | /-   | /12         | /-   | /-   |      |    |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): -0.010 C - -          |  |  | G                                                                                                                                                                                                | -   | /-    | /268 | /-          | /-   | /220 |      |    |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.016 C - -           |  |  | B                                                                                                                                                                                                | 563 | /-    | /268 | /376        | /541 | /104 |      |    |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | E                                                                                                                                                                                                |     |       | 82   | /-          | /-   | /50  | /12  | /- |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max TC CSI: 0.389               |  |  | D                                                                                                                                                                                                |     |       | 171  | /-          | /-   | /104 | /236 | /- |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max BC CSI: 0.229               |  |  | Wind reactions based on C&C<br>A Brg Wid = 1.5 Min Req = -<br>G Brg Wid = 1.5 Min Req = -<br>B Brg Wid = 8.0 Min Req = 1.5 (Truss)<br>E Brg Wid = 1.5 Min Req = -<br>D Brg Wid = 1.5 Min Req = - |     |       |      |             |      |      |      |    |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2     |  | Max Web CSI: 0.000                                                                                                           |  |  |                                 |  |  |                                                                                                                                                                                                  |     |       |      |             |      |      |      |    |
|                        |  | C&C Dist a: 3.00 ft               |  | Mfg Specified Camber:                                                                                                        |  |  |                                 |  |  |                                                                                                                                                                                                  |     |       |      |             |      |      |      |    |
|                        |  | Loc. from endwall: not in 4.50 ft |  | VIEW Ver: 23.02.01A.1204.18                                                                                                  |  |  |                                 |  |  |                                                                                                                                                                                                  |     |       |      |             |      |      |      |    |
|                        |  | GCpi: 0.18                        |  |                                                                                                                              |  |  |                                 |  |  |                                                                                                                                                                                                  |     |       |      |             |      |      |      |    |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                              |  |  |                                 |  |  |                                                                                                                                                                                                  |     |       |      |             |      |      |      |    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b>Lumber</b></p> <p>Top chord: 2x4 SP #2;<br/>Bot chord: 2x4 SP #2;<br/>Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;</p> <p><b>Plating Notes</b></p> <p>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.</p> <p><b>Wind</b></p> <p>Member design based on both MWFRS and C&amp;C.<br/>Wind loading based on both gable and hip roof types.</p> <p><b>Additional Notes</b></p> <p>The maximum horizontal reaction is 268#<br/>Shim all supports to solid bearing.<br/>***** BEARING ANALOG MODIFIED! *****</p> |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

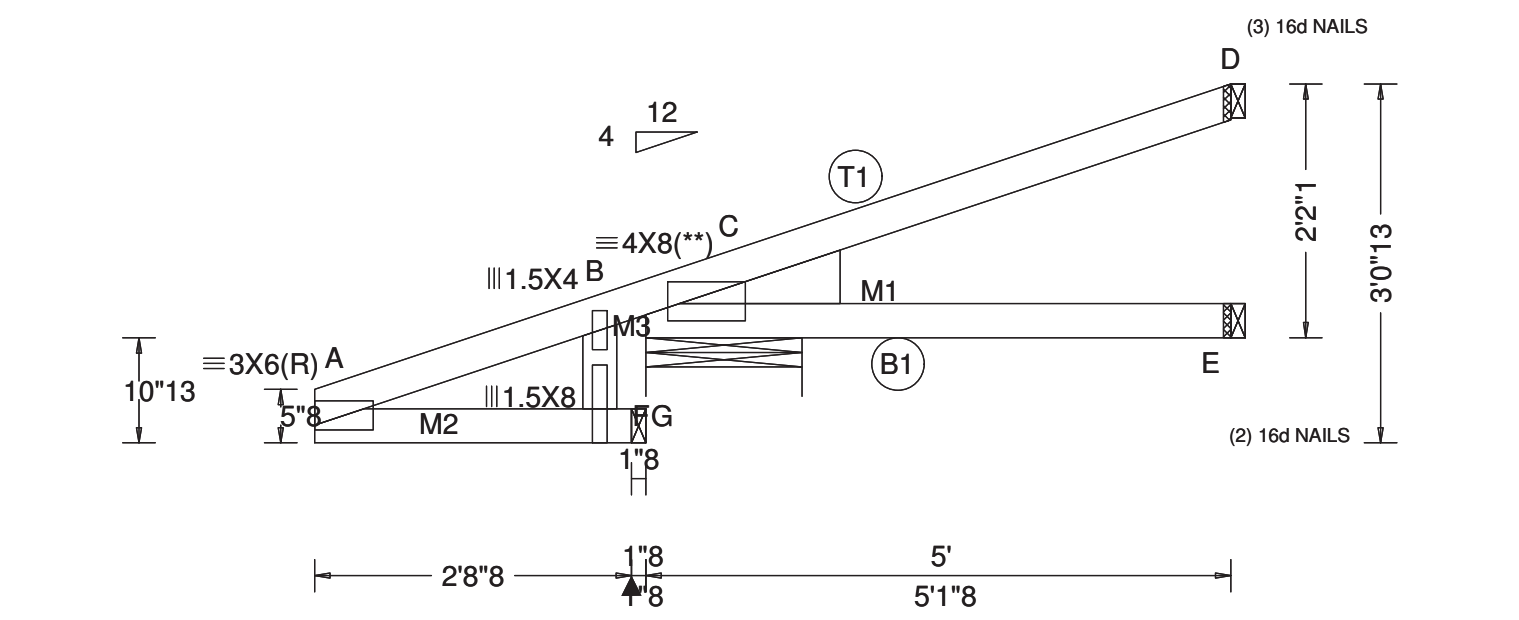


The elevation view shows a roof truss system with the following details:

- Roof Slope:** 4 vertical, 12 horizontal.
- Top Chord:** Labeled  $\equiv 3 \times 4 (B1)$  and  $\equiv 1.5 \times 8 (**)$ . It is connected to a vertical member  $\equiv 4 \times 6 (R) A$  at the left end and a vertical member  $\equiv 2 \times 4 G$  at the right end. A diagonal member  $\equiv 1.5 \times 8$  is shown near the right end.
- Bottom Chord:** Labeled  $\equiv 1.5 \times 8$  and  $\equiv 2 \times 4 G$ .
- Vertical Members:**  $\equiv 4 \times 6 (R) A$  at the left end,  $\equiv 2 \times 4 G$  at the right end, and a central vertical member  $\equiv 1.5 \times 8$ .
- Connections:**
  - Top chord to vertical member at left: (2) 16d NAILS.
  - Top chord to vertical member at right: (2) 16d NAILS.
  - Top chord to diagonal member: (2) 16d NAILS.
  - Bottom chord to vertical member at right: (2) 16d NAILS.
- Dimensions:**
  - Horizontal dimensions: 1'0"13, 2'10"14, 5', 1'0"13, 1'10"1, 2'1"2.
  - Vertical dimensions: 10"13, 18"4, 2'2"1, 3'0"13.
  - Other dimensions: 8", 2'10", 11", 11", 3'4"8, 4'3"8, 8"8, 5'.

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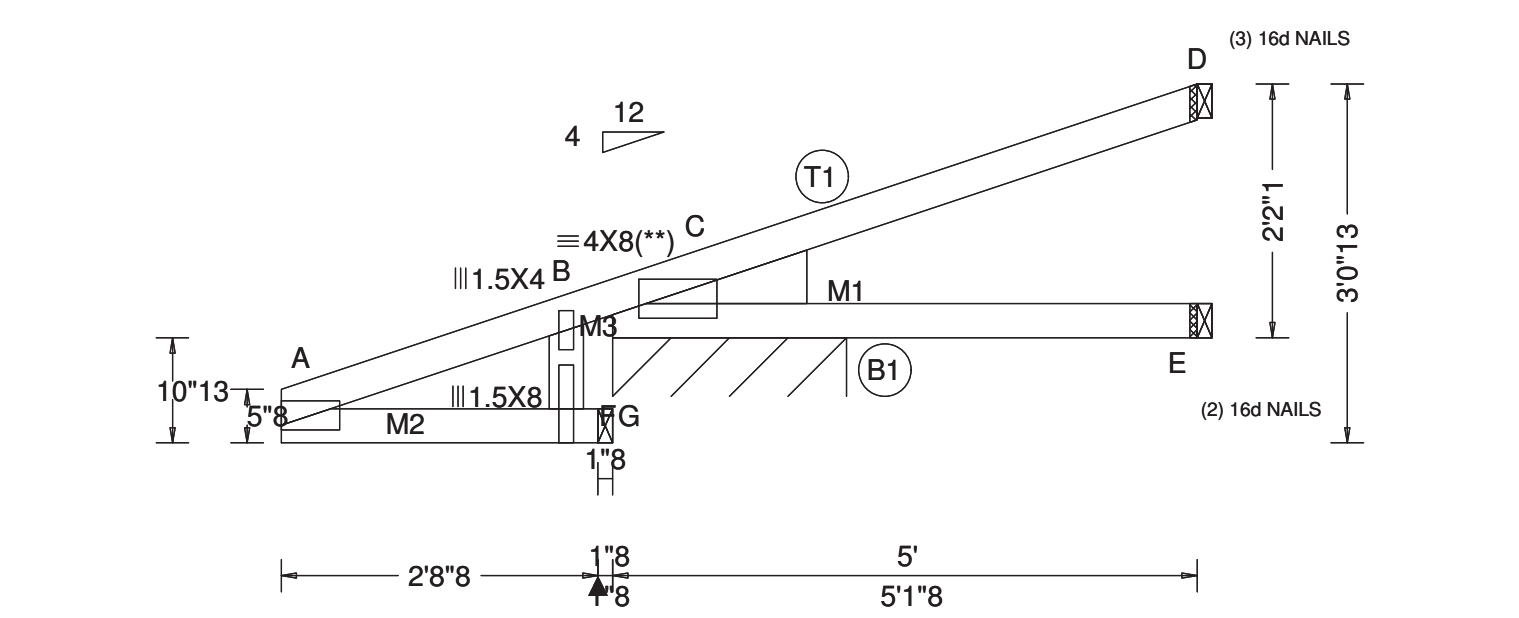




| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |  |         |  |      |  |               |  |  |
|------------------------|--|-----------------------------------|--|----------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|--|---------|--|------|--|---------------|--|--|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity Non-Gravity                    |  |         |  |      |  |               |  |  |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                |  |  | VERT(LL): NA                    |  |  | Loc                                    |  | R+ / R- |  | / Rh |  | / Rw / U / RL |  |  |
| BCLL: 0.00             |  | Enclosure: Part. Enc.             |  | Lu: NA Cs: NA                                |  |  | VERT(CL): NA                    |  |  | G - - /- /265 - /- /873                |  |         |  |      |  |               |  |  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                            |  |  | HORZ(LL): 0.003 C - -           |  |  | B 628 - /- /265 /780 /1341 /555        |  |         |  |      |  |               |  |  |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ |  |  | HORZ(TL): 0.003 C - -           |  |  | E 62 - /- /- /150 /146 - /-            |  |         |  |      |  |               |  |  |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                              |  |  | Creep Factor: 2.0               |  |  | D 134 - /- /- /107 /268 - /-           |  |         |  |      |  |               |  |  |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  | TPI Std: 2014                                |  |  | Max TC CSI: 0.391               |  |  | Wind reactions based on C&C            |  |         |  |      |  |               |  |  |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  | Rep Fac: Yes                                 |  |  | Max BC CSI: 0.198               |  |  | G Brg Wid = 1.5 Min Req = -            |  |         |  |      |  |               |  |  |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h/2 to h     |  | FT/RT:20(0)/10(0)                            |  |  | Max Web CSI: 0.000              |  |  | B Brg Wid = 16.0 Min Req = 1.5 (Truss) |  |         |  |      |  |               |  |  |
|                        |  | C&C Dist a: 3.00 ft               |  | Plate Type(s):                               |  |  | Mfg Specified Camber:           |  |  | E Brg Wid = 1.5 Min Req = -            |  |         |  |      |  |               |  |  |
|                        |  | Loc. from endwall: not in 4.50 ft |  | WAVE                                         |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | D Brg Wid = 1.5 Min Req = -            |  |         |  |      |  |               |  |  |
|                        |  | GCpi: 0.55                        |  |                                              |  |  |                                 |  |  | Bearing B is a rigid surface.          |  |         |  |      |  |               |  |  |
|                        |  | Wind Duration: 1.60               |  |                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |  |         |  |      |  |               |  |  |

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| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                 |  |  | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs), or *=PLF    |     |            |             |      |      |      |
|------------------------|--|-----------------------------------|--|----------------------------------------------|--|--|---------------------------------|--|----------------------------------------|-----|------------|-------------|------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                        |  |  | PP Deflection in loc L/defl L/# |  | Gravity                                |     |            | Non-Gravity |      |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                |  |  | VERT(LL): NA                    |  | Loc                                    | R+  | / R-       | / Rh        | / Rw | / U  | / RL |
| BCLL: 0.00             |  | Enclosure: Part. Enc.             |  | Lu: NA Cs: NA                                |  |  | VERT(CL): NA                    |  | G                                      | -   | /-         | /266        | /-   | /-   | /955 |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                            |  |  | HORZ(LL): 0.003 C - -           |  | B*                                     | 324 | /-         | /133        | /409 | /747 | /299 |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ |  |  | HORZ(TL): 0.004 C - -           |  | E                                      | 48  | /-         | /-          | /142 | /134 | /-   |
| NCBCLL: 10.00          |  | Mean Height: 21.37 ft             |  |                                              |  |  | Creep Factor: 2.0               |  | D                                      | 132 | /-         | /-          | /112 | /287 | /-   |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  | TPI Std: 2014                                |  |  | Max TC CSI: 0.391               |  | Wind reactions based on C&C            |     |            |             |      |      |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  | Rep Fac: Yes                                 |  |  | Max BC CSI: 0.192               |  | G                                      | Brg | Wid = 1.5  | Min Req = - |      |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2     |  | FT/RT:20(0)/10(0)                            |  |  | Max Web CSI: 0.000              |  | B                                      | Brg | Wid = 24.0 | Min Req = - |      |      |      |
|                        |  | C&C Dist a: 3.00 ft               |  | Plate Type(s):                               |  |  | Mfg Specified Camber:           |  | E                                      | Brg | Wid = 1.5  | Min Req = - |      |      |      |
|                        |  | Loc. from endwall: not in 4.50 ft |  | WAVE                                         |  |  | VIEW Ver: 23.02.01A.1204.18     |  | D                                      | Brg | Wid = 1.5  | Min Req = - |      |      |      |
|                        |  | GCpi: 0.55                        |  |                                              |  |  |                                 |  | Bearing B is a rigid surface.          |     |            |             |      |      |      |
|                        |  | Wind Duration: 1.60               |  |                                              |  |  |                                 |  | Maximum Top Chord Forces Per Ply (lbs) |     |            |             |      |      |      |

|                                                                                                                                                                                         |                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Lt Wedge: 2x6 SP #2;Lt Level Return: 2x4 SP #2;                                                                      | <b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 563 -892 C - D 42 -116<br>B - C 643 -979 |
| <b>Plating Notes</b><br>All plates are 3X6(R) except as noted.<br>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements. | <b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp.<br>C - E 0 0                                                         |
| <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types.<br>Left bottom chord exposed to wind.                                 | <b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>A - F 950 -563 F - G 955 -558<br>B - F 211 -239          |
| <b>Additional Notes</b><br>The maximum horizontal reaction is 266#<br>Shim all supports to solid bearing.                                                                               |                                                                                                                                         |

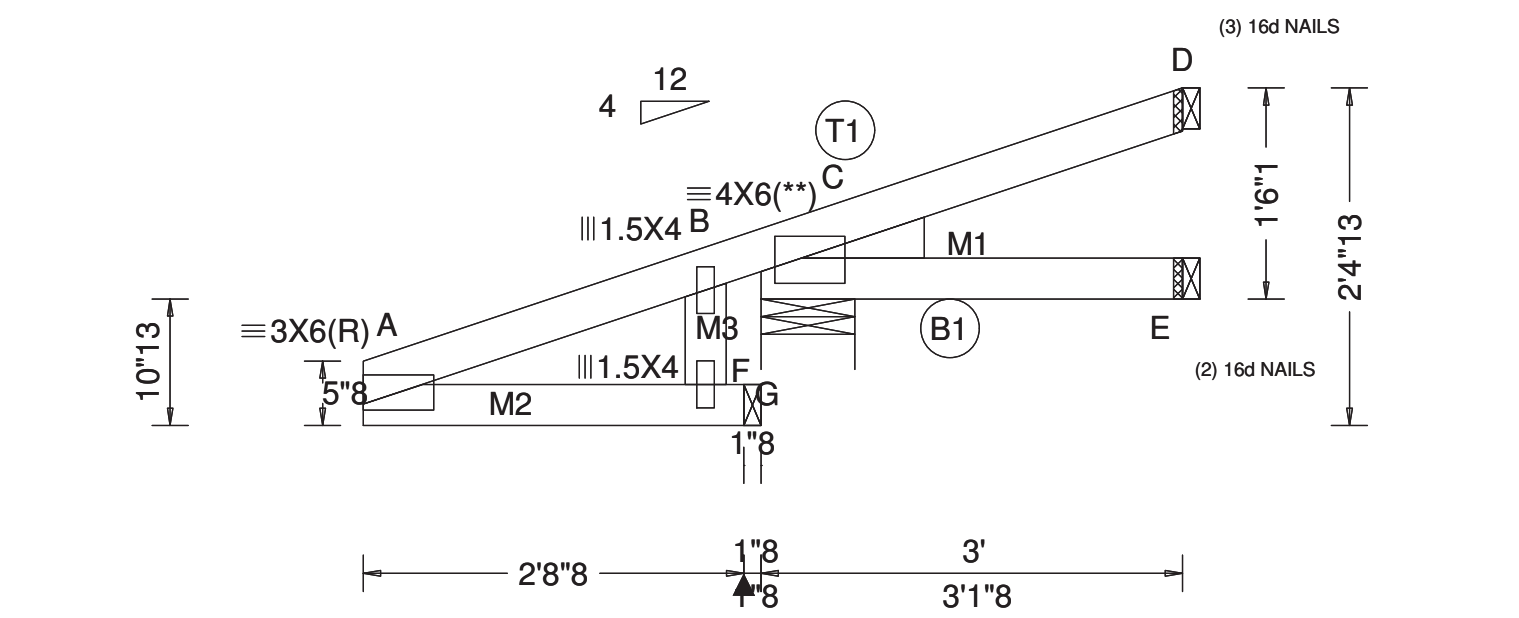
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**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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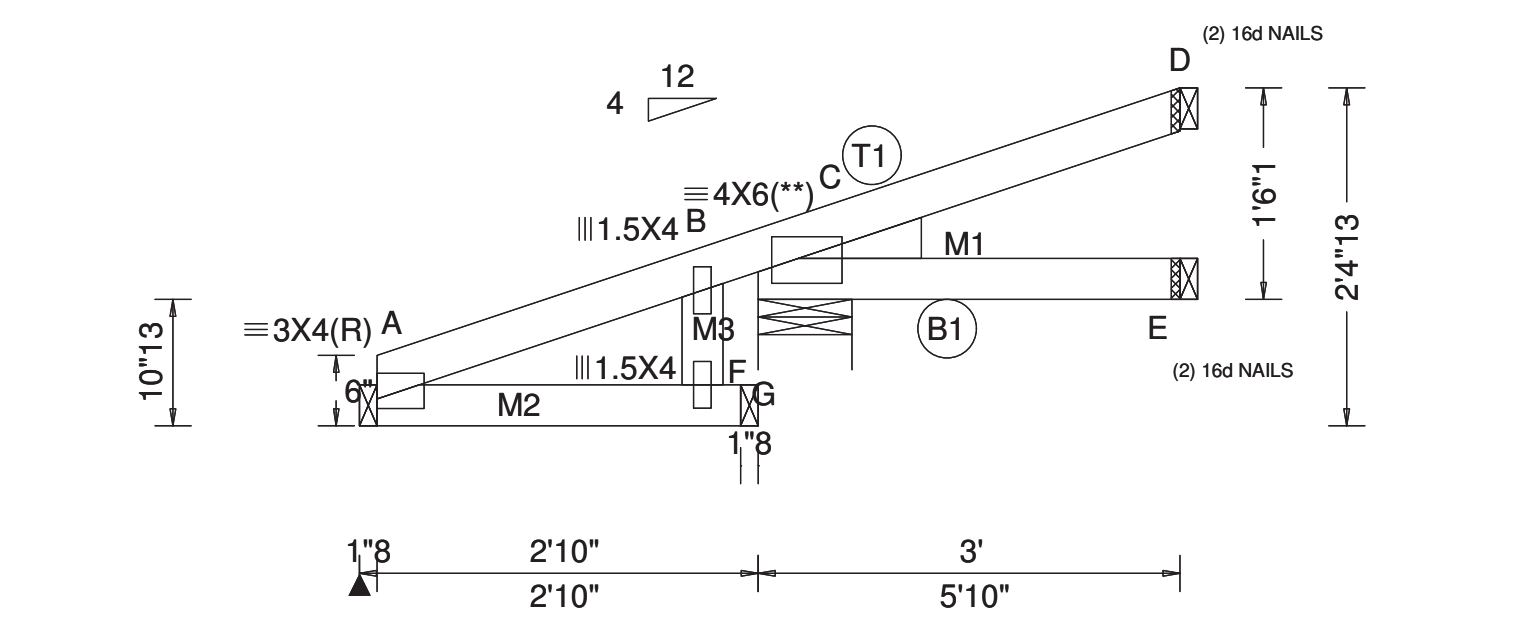


| Loading Criteria (psf) |  | Wind Criteria                 |  | Snow Criteria (Pg,Pf in PSF)                 |  |  | Defl/CSI Criteria               |  | ▲ Maximum Reactions (lbs)              |     |      |             |      |      |      |
|------------------------|--|-------------------------------|--|----------------------------------------------|--|--|---------------------------------|--|----------------------------------------|-----|------|-------------|------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22           |  | Pg: NA Ct: NA CAT: NA                        |  |  | PP Deflection in loc L/defl L/# |  | Gravity                                |     |      | Non-Gravity |      |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                |  | Pf: NA Ce: NA                                |  |  | VERT(LL): NA                    |  | Loc                                    | R+  | / R- | / Rh        | / Rw | / U  | / RL |
| BCLL: 0.00             |  | Enclosure: Closed             |  | Lu: NA Cs: NA                                |  |  | VERT(CL): NA                    |  | G                                      | -   | /-   | /266        | /-   | /-   | /698 |
| BCDL: 10.00            |  | Risk Category: II             |  | Snow Duration: NA                            |  |  | HORZ(LL): -0.004 C - -          |  | B                                      | 465 | /-   | /266        | /374 | /937 | /301 |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ |  |  | HORZ(TL): 0.004 C - -           |  | E                                      | 45  | /-   | /-          | /41  | /37  | /-   |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft         |  |                                              |  |  | Creep Factor: 2.0               |  | Wind reactions based on C&C            |     |      |             |      |      |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                 |  | TPI Std: 2014                                |  |  | Max TC CSI: 0.350               |  | D                                      | 96  | /-   | /-          | /66  | /265 | /-   |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                 |  | Rep Fac: Yes                                 |  |  | Max BC CSI: 0.131               |  | Brg Wid = 1.5 Min Req = -              |     |      |             |      |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2 |  | FT/RT:20(0)/10(0)                            |  |  | Max Web CSI: 0.000              |  | Brg Wid = 8.0 Min Req = 1.5 (Truss)    |     |      |             |      |      |      |
|                        |  | C&C Dist a: 3.00 ft           |  | Plate Type(s):                               |  |  | Mfg Specified Camber:           |  | Brg Wid = 1.5 Min Req = -              |     |      |             |      |      |      |
|                        |  | Loc. from endwall: Any        |  | WAVE                                         |  |  | VIEW Ver: 23.02.01A.1204.18     |  | Brg Wid = 1.5 Min Req = -              |     |      |             |      |      |      |
|                        |  | GCpi: 0.18                    |  |                                              |  |  |                                 |  | Bearing B is a rigid surface.          |     |      |             |      |      |      |
|                        |  | Wind Duration: 1.60           |  |                                              |  |  |                                 |  | Maximum Top Chord Forces Per Ply (lbs) |     |      |             |      |      |      |

|                                                                                                                                               |                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;                            | <b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 302 -618 C - D 30 -91<br>B - C 332 -644 |
| <b>Plating Notes</b><br>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements. | <b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp.<br>C - E 0 0                                                        |
| <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types.                             | <b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>A - F 684 -273 F - G 698 -276<br>B - F 56 -53           |

**Additional Notes**  
The maximum horizontal reaction is 266#  
Shim all supports to solid bearing.

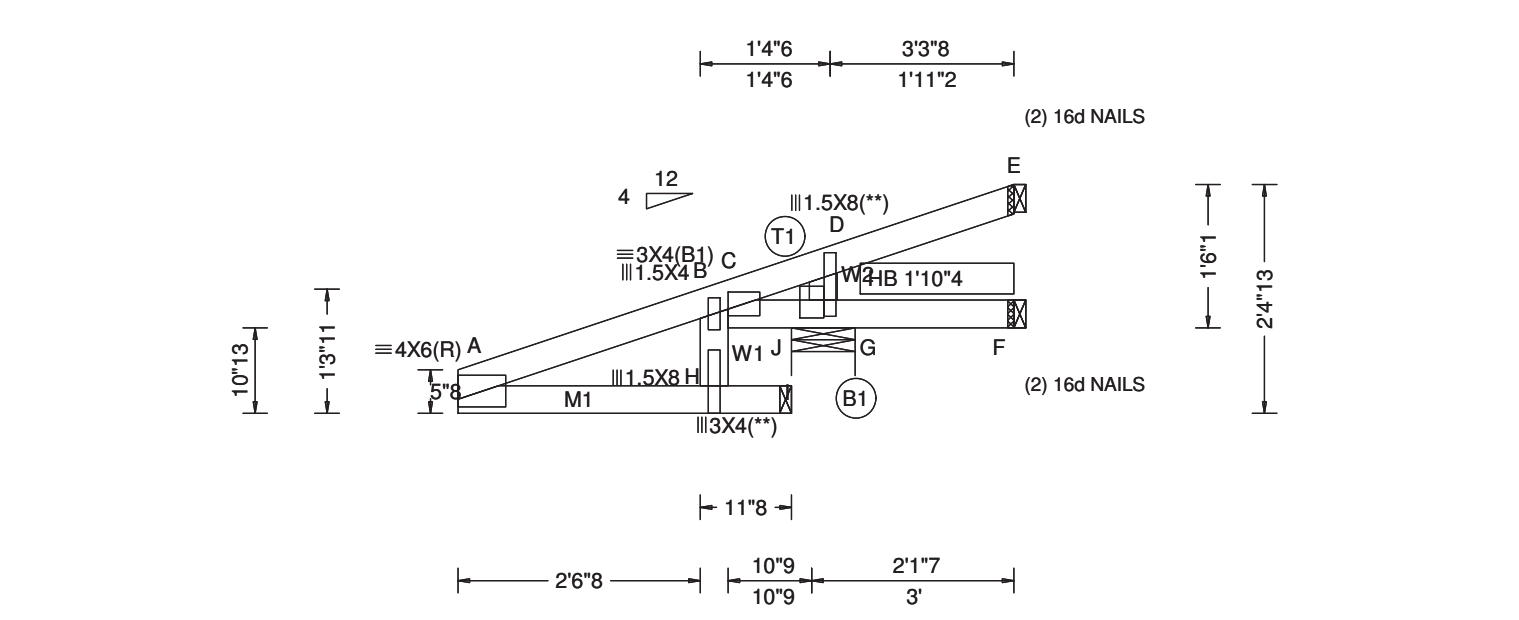
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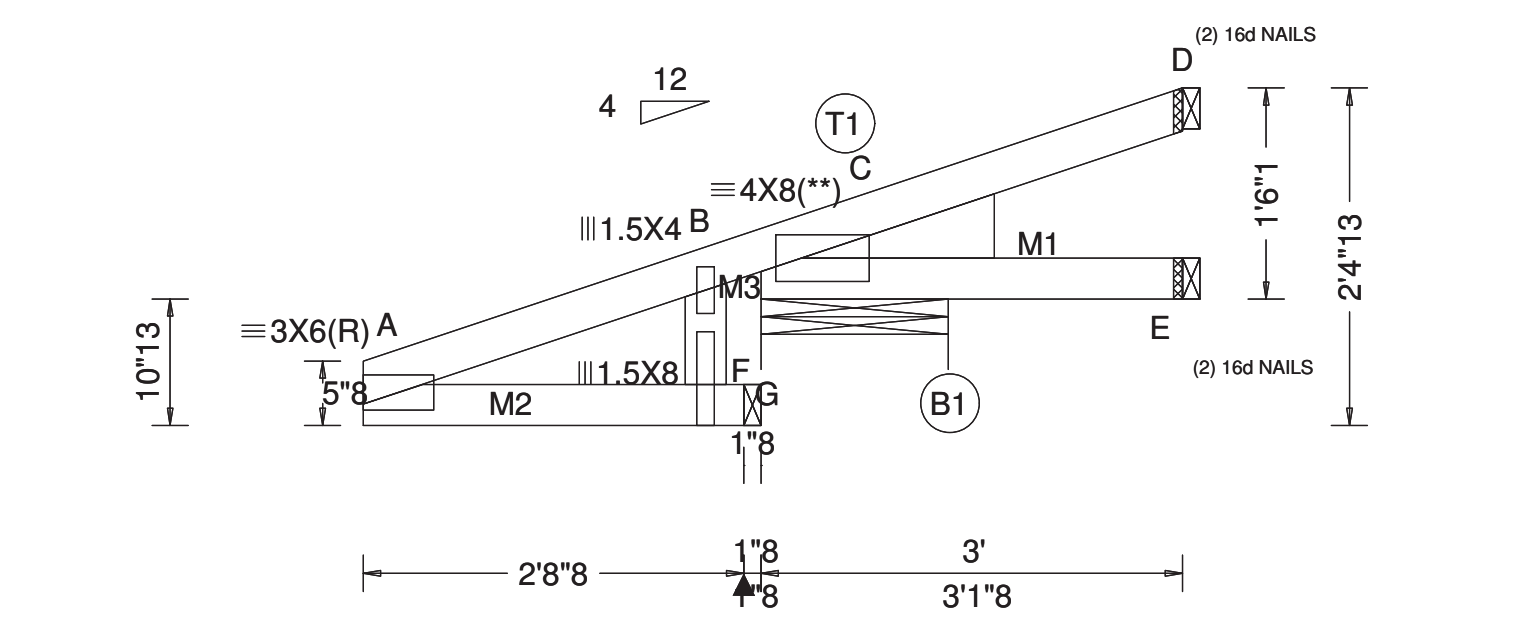
| Loading Criteria (psf) |  | Wind Criteria                 |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)                                                                                                                                                                        |     |      |             |      |      |      |      |    |
|------------------------|--|-------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|-------------|------|------|------|------|----|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22           |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                                                                                                                                                                          |     |      | Non-Gravity |      |      |      |      |    |
| TCDL: 15.00            |  | Speed: 175 mph                |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): NA                    |  |  | Loc                                                                                                                                                                                              | R+  | / R- | / Rh        | / Rw | / U  | / RL |      |    |
| BCLL: 0.00             |  | Enclosure: Closed             |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): NA                    |  |  | A                                                                                                                                                                                                | 152 | /-   | /-          | /99  | /224 | /-   |      |    |
| BCDL: 10.00            |  | Risk Category: II             |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): -0.004 C - -          |  |  | G                                                                                                                                                                                                | -   | /-   | /113        | /-   | /-   | /70  |      |    |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.004 C - -           |  |  | B                                                                                                                                                                                                | 314 | /-   | /113        | /211 | /479 | /426 |      |    |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft         |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | E                                                                                                                                                                                                |     |      | 48          | /-   | /-   | /31  | /31  | /- |
| Soffit: 2.00           |  | TCDL: 6.0 psf                 |  |                                                                                                                              |  |  | Max TC CSI: 0.217               |  |  | D                                                                                                                                                                                                |     |      | 97          | /-   | /-   | /58  | /199 | /- |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                 |  |                                                                                                                              |  |  | Max BC CSI: 0.115               |  |  | Wind reactions based on C&C<br>A Brg Wid = 1.5 Min Req = -<br>G Brg Wid = 1.5 Min Req = -<br>B Brg Wid = 8.0 Min Req = 1.5 (Truss)<br>E Brg Wid = 1.5 Min Req = -<br>D Brg Wid = 1.5 Min Req = - |     |      |             |      |      |      |      |    |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2 |  | Max Web CSI: 0.000                                                                                                           |  |  |                                 |  |  |                                                                                                                                                                                                  |     |      |             |      |      |      |      |    |
|                        |  | C&C Dist a: 3.00 ft           |  | Mfg Specified Camber:                                                                                                        |  |  |                                 |  |  |                                                                                                                                                                                                  |     |      |             |      |      |      |      |    |
|                        |  | Loc. from endwall: Any        |  | VIEW Ver: 23.02.01A.1204.18                                                                                                  |  |  |                                 |  |  |                                                                                                                                                                                                  |     |      |             |      |      |      |      |    |
|                        |  | GCpi: 0.18                    |  |                                                                                                                              |  |  |                                 |  |  |                                                                                                                                                                                                  |     |      |             |      |      |      |      |    |
|                        |  | Wind Duration: 1.60           |  |                                                                                                                              |  |  |                                 |  |  |                                                                                                                                                                                                  |     |      |             |      |      |      |      |    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b>Lumber</b></p> <p>Top chord: 2x4 SP #2;<br/>Bot chord: 2x4 SP #2;<br/>Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;</p> <p><b>Plating Notes</b></p> <p>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.</p> <p><b>Wind</b></p> <p>Member design based on both MWFRS and C&amp;C.<br/>Wind loading based on both gable and hip roof types.</p> <p><b>Additional Notes</b></p> <p>Shim all supports to solid bearing.<br/>***** BEARING ANALOG MODIFIED! *****</p> |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|





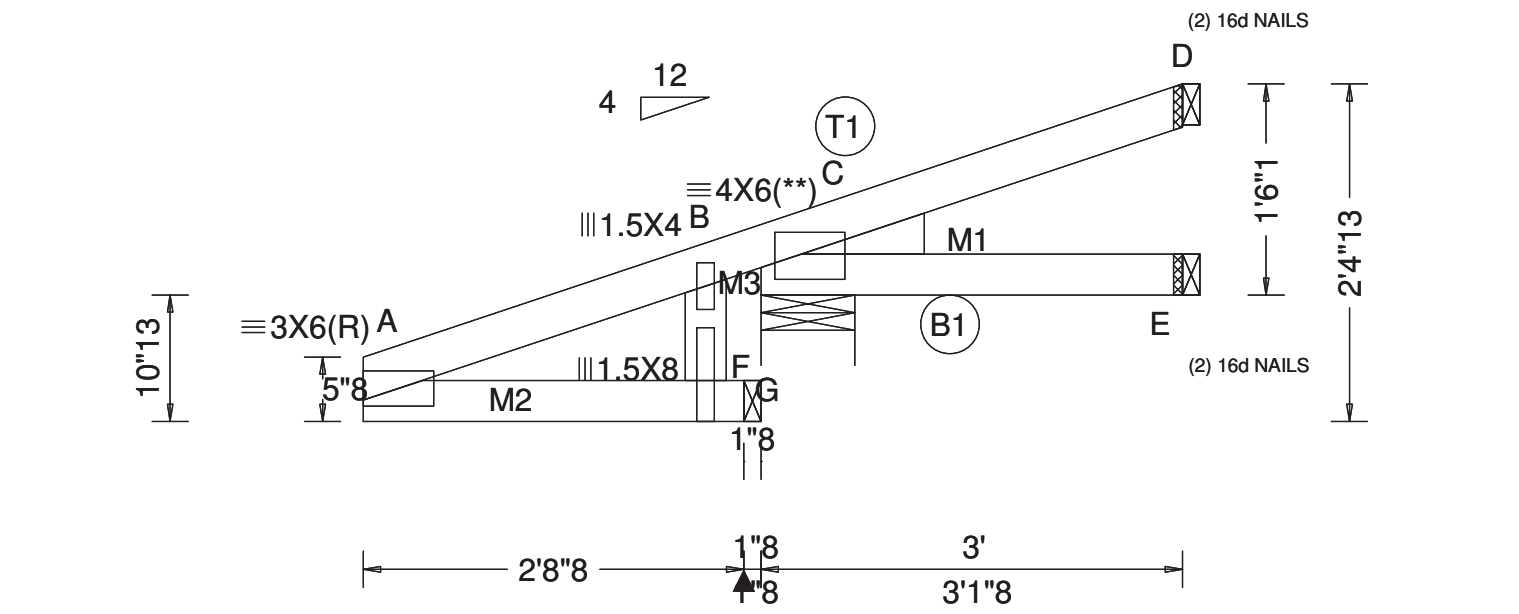
| Loading Criteria (psf) |  | Wind Criteria                 |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |               |             |             |      |       |       |
|------------------------|--|-------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|---------------|-------------|-------------|------|-------|-------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22           |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |               |             | Non-Gravity |      |       |       |
| TCDL: 15.00            |  | Speed: 175 mph                |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): -0.132 B 75 360       |  |  | Loc                                    | R+            | / R-        | / Rh        | / Rw | / U   | / RL  |
| BCLL: 0.00             |  | Enclosure: Closed             |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): -0.144 B 68 240       |  |  | I                                      | -             | /-          | /361        | /-   | /-    | /1228 |
| BCDL: 10.00            |  | Risk Category: II             |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): 0.053 E - -           |  |  | J                                      | 680           | /-          | /361        | /871 | /1780 | /831  |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.056 E - -           |  |  | F                                      | -             | /-81        | /-          | /292 | /140  | /-    |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft         |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | Wind reactions based on C&C            |               |             |             |      |       |       |
| Soffit: 2.00           |  | TCDL: 6.0 psf                 |  |                                                                                                                              |  |  | Max TC CSI: 0.828               |  |  | I Brg Wid = 1.5 Min Req = -            |               |             |             |      |       |       |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                 |  |                                                                                                                              |  |  | Max BC CSI: 0.776               |  |  | J Brg Wid = 8.0 Min Req = 1.5 (Truss)  |               |             |             |      |       |       |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2 |  | Max Web CSI: 0.250                                                                                                           |  |  | Mfg Specified Camber:           |  |  | F                                      | Brg Wid = 1.5 | Min Req = - |             |      |       |       |
|                        |  | C&C Dist a: 3.00 ft           |  |                                                                                                                              |  |  |                                 |  |  | E                                      | Brg Wid = 1.5 | Min Req = - |             |      |       |       |
|                        |  | Loc. from endwall: Any        |  |                                                                                                                              |  |  |                                 |  |  | Bearing J is a rigid surface.          |               |             |             |      |       |       |
|                        |  | GCpi: 0.18                    |  |                                                                                                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |               |             |             |      |       |       |
|                        |  | Wind Duration: 1.60           |  |                                                                                                                              |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  |                                        |               |             |             |      |       |       |



| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |  |         |  |      |  |               |  |  |
|------------------------|--|-----------------------------------|--|----------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|--|---------|--|------|--|---------------|--|--|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity Non-Gravity                    |  |         |  |      |  |               |  |  |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                |  |  | VERT(LL): NA                    |  |  | Loc                                    |  | R+ / R- |  | / Rh |  | / Rw / U / RL |  |  |
| BCLL: 0.00             |  | Enclosure: Part. Enc.             |  | Lu: NA Cs: NA                                |  |  | VERT(CL): NA                    |  |  | G - - /- /265 - /- /879                |  |         |  |      |  |               |  |  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                            |  |  | HORZ(LL): 0.003 C - -           |  |  | B 494 - /- /265 /671 /1135 /597        |  |         |  |      |  |               |  |  |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ |  |  | HORZ(TL): 0.003 C - -           |  |  | E 30 - /- - /56 /62 - /-               |  |         |  |      |  |               |  |  |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                                              |  |  | Creep Factor: 2.0               |  |  | D 64 - /- - /50 /156 - /-              |  |         |  |      |  |               |  |  |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  | TPI Std: 2014                                |  |  | Max TC CSI: 0.367               |  |  | Wind reactions based on C&C            |  |         |  |      |  |               |  |  |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  | Rep Fac: Yes                                 |  |  | Max BC CSI: 0.084               |  |  | G Brg Wid = 1.5 Min Req = -            |  |         |  |      |  |               |  |  |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2     |  | FT/RT:20(0)/10(0)                            |  |  | Max Web CSI: 0.000              |  |  | B Brg Wid = 16.0 Min Req = 1.5 (Truss) |  |         |  |      |  |               |  |  |
|                        |  | C&C Dist a: 3.00 ft               |  | Plate Type(s):                               |  |  | Mfg Specified Camber:           |  |  | E Brg Wid = 1.5 Min Req = -            |  |         |  |      |  |               |  |  |
|                        |  | Loc. from endwall: not in 4.50 ft |  | WAVE                                         |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | D Brg Wid = 1.5 Min Req = -            |  |         |  |      |  |               |  |  |
|                        |  | GCpi: 0.55                        |  |                                              |  |  |                                 |  |  | Bearing B is a rigid surface.          |  |         |  |      |  |               |  |  |
|                        |  | Wind Duration: 1.60               |  |                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |  |         |  |      |  |               |  |  |

|                                                                                                                                                         |                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Lt Wedge: 2x6 SP #2;Lt Level Return: 2x4 SP #2;                                      | <b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 539 -821 C - D 20 -59<br>B - C 615 -900 |
| <b>Plating Notes</b><br>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.           | <b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp.<br>C - E 0 0                                                        |
| <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types.<br>Left bottom chord exposed to wind. | <b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>A - F 874 -538 F - G 879 -534<br>B - F 200 -220         |

**Additional Notes**  
The maximum horizontal reaction is 265#  
Shim all supports to solid bearing.



| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF) |        |         | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |               |                       |             |      |       |      |
|------------------------|-----------------------------------|------------------------------|--------|---------|---------------------------------|----------------------------------------|---------------|-----------------------|-------------|------|-------|------|
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA                       | Ct: NA | CAT: NA | PP Deflection in loc L/defl L/# | Gravity                                |               |                       | Non-Gravity |      |       |      |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA                       |        | Ce: NA  | VERT(LL): NA                    | Loc                                    | R+            | / R-                  | / Rh        | / Rw | / U   | / RL |
| BCLL: 0.00             | Enclosure: Part. Enc.             | Lu: NA                       | Cs: NA |         | VERT(CL): NA                    | G                                      | -             | /-                    | /266        | /-   | /-    | /867 |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA            |        |         | HORZ(LL): 0.003 C - -           | B                                      | 465           | /-                    | /266        | /667 | /1111 | /585 |
|                        | EXP: C Kzt: NA                    |                              |        |         | HORZ(TL): 0.003 C - -           | E                                      | 45            | /-                    | /-          | /77  | /80   | /-   |
| Des Ld: 55.00          | Mean Height: 15.00 ft             |                              |        |         | Creep Factor: 2.0               | D                                      | 96            | /-                    | /-          | /73  | /220  | /-   |
| NCBCLL: 10.00          | TCDL: 6.0 psf                     | Building Code:               |        |         | Max TC CSI: 0.390               | Wind reactions based on C&C            |               |                       |             |      |       |      |
| Soffit: 2.00           | BCDL: 6.0 psf                     | FBC 8th Ed. 2023 Res. HVHZ   |        |         | Max BC CSI: 0.115               | G                                      | Brg Wid = 1.5 | Min Req = -           |             |      |       |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: 0 to h/2     | TPI Std: 2014                |        |         | Max Web CSI: 0.000              | B                                      | Brg Wid = 8.0 | Min Req = 1.5 (Truss) |             |      |       |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft               | Rep Fac: Yes                 |        |         | Mfg Specified Camber:           | E                                      | Brg Wid = 1.5 | Min Req = -           |             |      |       |      |
|                        | Loc. from endwall: not in 4.50 ft | FT/RT:20(0)/10(0)            |        |         |                                 | D                                      | Brg Wid = 1.5 | Min Req = -           |             |      |       |      |
|                        | GCpi: 0.55                        | Plate Type(s):               |        |         |                                 | Bearing B is a rigid surface.          |               |                       |             |      |       |      |
|                        | Wind Duration: 1.60               | WAVE                         |        |         | VIEW Ver: 23.02.01A.1204.18     | Maximum Top Chord Forces Per Ply (lbs) |               |                       |             |      |       |      |

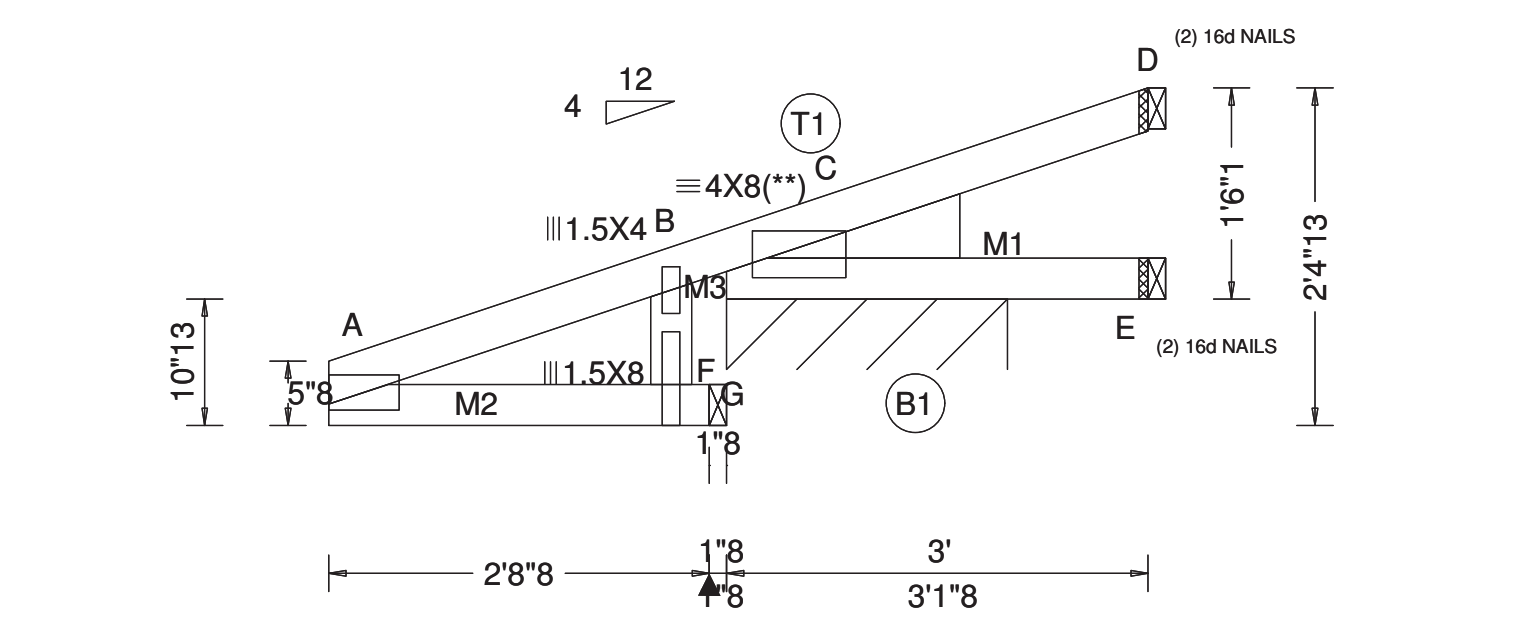
**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Lt Wedge: 2x4 SP #2;Lt Level Return: 2x4 SP #2;

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.  
Left bottom chord exposed to wind.

**Additional Notes**  
The maximum horizontal reaction is 266#  
Shim all supports to solid bearing.  
\*\*\*\*\* BEARING ANALOG MODIFIED! \*\*\*\*\*

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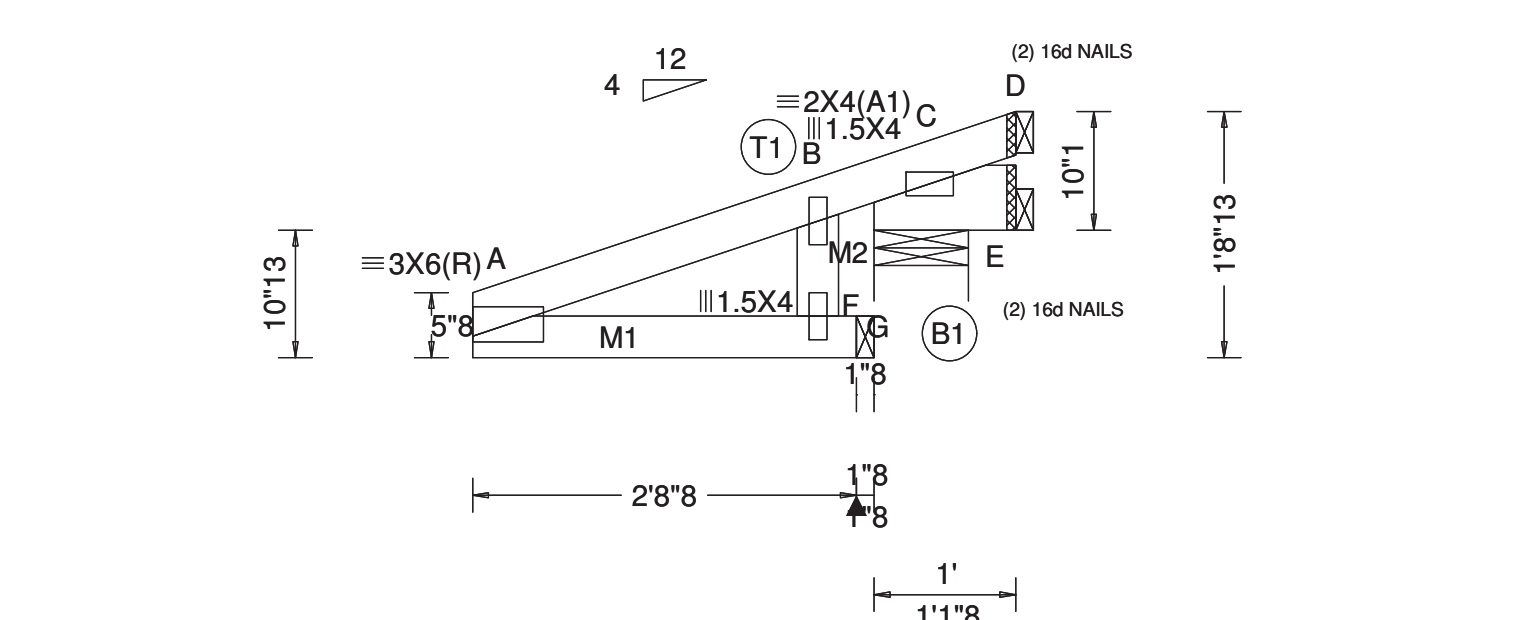


| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs), or *PLF     |                |      |      |             |      |      |
|------------------------|--|-----------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|----------------|------|------|-------------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |                |      |      |             |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): NA                    |  |  | Non-Gravity                            |                |      |      |             |      |      |
| BCLL: 0.00             |  | Enclosure: Part. Enc.             |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): NA                    |  |  | Loc                                    | R+             | / R- | / Rh | / Rw        | / U  | / RL |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): 0.003 C - -           |  |  | G                                      | -              | /-   | /265 | /-          | /-   | /947 |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.003 C - -           |  |  | B*                                     | 258            | /-   | /132 | /347        | /626 | /323 |
| NCBCLL: 10.00          |  | Mean Height: 21.03 ft             |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | E                                      | 9              | /-5  | /-   | /54         | /55  | /-   |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max TC CSI: 0.392               |  |  | D                                      | 63             | /-   | /-   | /51         | /167 | /-   |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max BC CSI: 0.088               |  |  | Wind reactions based on C&C            |                |      |      |             |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2     |  | Max Web CSI: 0.000                                                                                                           |  |  | Mfg Specified Camber:           |  |  | G                                      | Brg Wid = 1.5  |      |      | Min Req = - |      |      |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                              |  |  |                                 |  |  | B                                      | Brg Wid = 24.0 |      |      | Min Req = - |      |      |
|                        |  | Loc. from endwall: not in 4.50 ft |  |                                                                                                                              |  |  |                                 |  |  | E                                      | Brg Wid = 1.5  |      |      | Min Req = - |      |      |
|                        |  | GCpi: 0.55                        |  |                                                                                                                              |  |  |                                 |  |  | D                                      | Brg Wid = 1.5  |      |      | Min Req = - |      |      |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                              |  |  |                                 |  |  | Bearing B is a rigid surface.          |                |      |      |             |      |      |
|                        |  |                                   |  |                                                                                                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |                |      |      |             |      |      |
|                        |  |                                   |  |                                                                                                                              |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  |                                        |                |      |      |             |      |      |

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| Loading Criteria (psf) | Wind Criteria                 | Snow Criteria (Pg,Pf in PSF)                                                                                                 | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs)              |               |                       |             |      |       |      |
|------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|---------------|-----------------------|-------------|------|-------|------|
|                        |                               |                                                                                                                              |                                 | Gravity                                |               |                       | Non-Gravity |      |       |      |
|                        |                               |                                                                                                                              |                                 | Loc                                    | R+            | / R-                  | / Rh        | / Rw | / U   | / RL |
| TCLL: 30.00            | Wind Std: ASCE 7-22           | Pg: NA Ct: NA CAT: NA                                                                                                        | PP Deflection in loc L/defl L/# |                                        |               |                       |             |      |       |      |
| TCDL: 15.00            | Speed: 175 mph                | Pf: NA Ce: NA                                                                                                                | VERT(LL): NA                    | G                                      | -             | /-                    | /260        | /-   | /-    | /699 |
| BCLL: 0.00             | Enclosure: Part. Enc.         | Lu: NA Cs: NA                                                                                                                | VERT(CL): NA                    | B                                      | 425           | /-                    | /260        | /400 | /1081 | /425 |
| BCDL: 10.00            | Risk Category: II             | Snow Duration: NA                                                                                                            | HORZ(LL): 0.001 E - -           | E                                      | 3             | /-23                  | /-          | /90  | /33   | /-   |
|                        | EXP: C Kzt: NA                |                                                                                                                              | HORZ(TL): 0.001 E - -           | D                                      | -             | /-42                  | /-          | /134 | /56   | /-   |
| Des Ld: 55.00          | Mean Height: 15.00 ft         | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0               | Wind reactions based on C&C            |               |                       |             |      |       |      |
| NCBCLL: 10.00          | TCDL: 6.0 psf                 |                                                                                                                              | Max TC CSI: 0.338               | G                                      | Brg Wid = 1.5 | Min Req = -           |             |      |       |      |
| Soffit: 2.00           | BCDL: 6.0 psf                 |                                                                                                                              | Max BC CSI: 0.027               | B                                      | Brg Wid = 8.0 | Min Req = 1.5 (Truss) |             |      |       |      |
| Load Duration: 1.25    | MWFRS Parallel Dist: 0 to h/2 |                                                                                                                              | Max Web CSI: 0.000              | E                                      | Brg Wid = 1.5 | Min Req = -           |             |      |       |      |
| Spacing: 24.0 "        | C&C Dist a: 3.00 ft           |                                                                                                                              | Mfg Specified Camber:           | D                                      | Brg Wid = 1.5 | Min Req = -           |             |      |       |      |
|                        | Loc. from endwall: Any        |                                                                                                                              |                                 | Bearing B is a rigid surface.          |               |                       |             |      |       |      |
|                        | GCpi: 0.55                    |                                                                                                                              |                                 | Maximum Top Chord Forces Per Ply (lbs) |               |                       |             |      |       |      |
|                        | Wind Duration: 1.60           |                                                                                                                              | VIEW Ver: 23.02.01A.1204.18     |                                        |               |                       |             |      |       |      |

|                                                                                                                                                                                                                                                                                                                                                                                  |                                               |            |        |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------|--------|-------------|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x6 SP #2;<br>Lt Level Return: 2x4 SP #2;<br><br><b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>The maximum horizontal reaction is 260#<br>Shim all supports to solid bearing.<br>***** BEARING ANALOG MODIFIED! ***** | <b>Maximum Top Chord Forces Per Ply (lbs)</b> |            |        |             |
|                                                                                                                                                                                                                                                                                                                                                                                  | Chords                                        | Tens.Comp. | Chords | Tens. Comp. |
|                                                                                                                                                                                                                                                                                                                                                                                  | A - B                                         | 297 - 619  | C - D  | 42 - 21     |
|                                                                                                                                                                                                                                                                                                                                                                                  | B - C                                         | 326 - 645  |        |             |
|                                                                                                                                                                                                                                                                                                                                                                                  | <b>Maximum Bot Chord Forces Per Ply (lbs)</b> |            |        |             |
|                                                                                                                                                                                                                                                                                                                                                                                  | Chords                                        | Tens.Comp. |        |             |
|                                                                                                                                                                                                                                                                                                                                                                                  | C - E                                         | 0 0        |        |             |
|                                                                                                                                                                                                                                                                                                                                                                                  | <b>Maximum Web Forces Per Ply (lbs)</b>       |            |        |             |
|                                                                                                                                                                                                                                                                                                                                                                                  | Webs                                          | Tens.Comp. | Webs   | Tens. Comp. |
|                                                                                                                                                                                                                                                                                                                                                                                  | A - F                                         | 685 - 271  | F - G  | 699 - 273   |
|                                                                                                                                                                                                                                                                                                                                                                                  | B - F                                         | 56 - 53    |        |             |

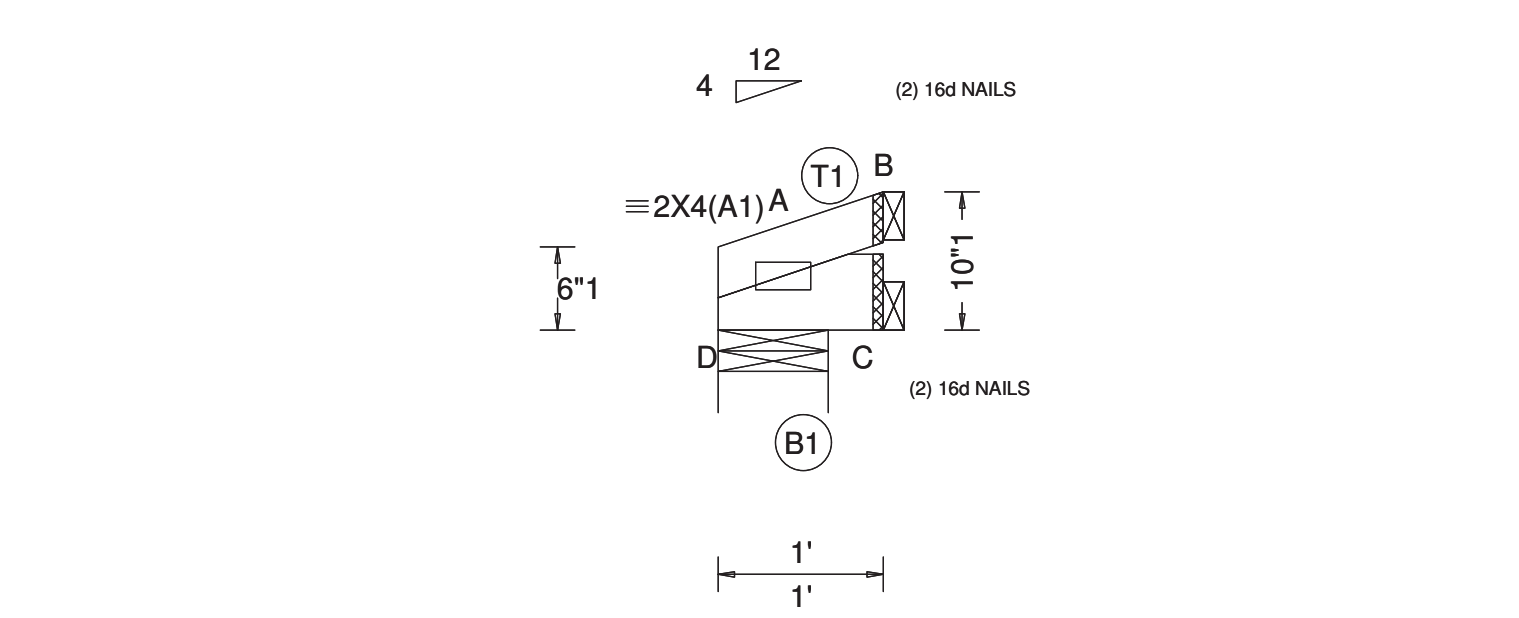
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The diagram illustrates a roof truss system with the following components and dimensions:

- Members:**
  - Top Chord:** Labeled  $\equiv 3X4(B1)$  and  $\equiv 1.5X4$ .
  - Bottom Chord:** Labeled  $\equiv 3X6(R) A$  and  $\equiv 1.5X4$ .
  - Vertical Members:** Labeled  $\equiv 1.5X4$  and  $\equiv 1.5X4$ .
  - Diagonal Members:** Labeled  $\equiv 1.5X4$  and  $\equiv 1.5X4$ .
- Joints:** Labeled A, B, C, D, E, F, G.
- Dimensions:**
  - Horizontal Dimensions:**
    - From support to first vertical member:  $1'3''8$ .
    - Between vertical members:  $2'6''8$ .
    - From second vertical member to end:  $1'$ .
    - Total horizontal span:  $3'10''$ .
  - Vertical Dimensions:**
    - From support to top chord:  $10''13$ .
    - From top chord to bottom chord:  $1'3''11$ .
    - From bottom chord to ground:  $6''$ .
    - From top chord to roof peak:  $10''1$ .
    - From roof peak to ground:  $1'8''13$ .
- Other Labels:**
  - T1:** A circle containing the text "T1".
  - W1(B1):** A circle containing the text "W1(B1)".
  - (2) 16d NAILS:** Indicated at joints D and E.
  - 4 12:** A triangle with "4" on the left and "12" on the right.
  - M1:** A label near the bottom chord.

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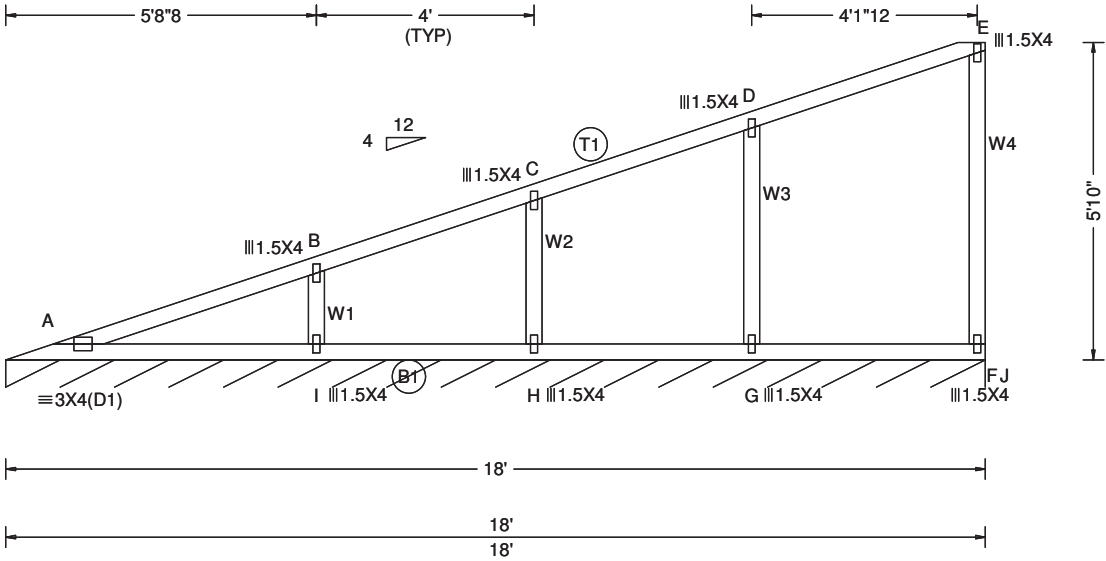


| Loading Criteria (psf) |  | Wind Criteria                 |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs)              |    |      |             |      |      |      |
|------------------------|--|-------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|----|------|-------------|------|------|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22           |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |    |      | Non-Gravity |      |      |      |
| TCDL: 15.00            |  | Speed: 175 mph                |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): NA                    |  |  | Loc                                    | R+ | / R- | / Rh        | / Rw | / U  | / RL |
| BCLL: 0.00             |  | Enclosure: Closed             |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): NA                    |  |  | D                                      | 64 | /-   | /-          | /39  | /102 | /82  |
| BCDL: 10.00            |  | Risk Category: II             |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): -0.000 C - -          |  |  | C                                      | 21 | /-   | /-          | /16  | /43  | /-   |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.000 C - -           |  |  | B                                      | 25 | /-   | /-          | /16  | /76  | /-   |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft         |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | Wind reactions based on C&C            |    |      |             |      |      |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                 |  |                                                                                                                              |  |  | Max TC CSI: 0.027               |  |  | D Brg Wid = 8.0 Min Req = 1.5 (Truss)  |    |      |             |      |      |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                 |  |                                                                                                                              |  |  | Max BC CSI: 0.006               |  |  | C Brg Wid = 1.5 Min Req = -            |    |      |             |      |      |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: 0 to h/2 |  | Max Web CSI: 0.000                                                                                                           |  |  | Mfg Specified Camber:           |  |  | B Brg Wid = 1.5 Min Req = -            |    |      |             |      |      |      |
|                        |  | C&C Dist a: 3.00 ft           |  |                                                                                                                              |  |  |                                 |  |  | Bearing D is a rigid surface.          |    |      |             |      |      |      |
|                        |  | Loc. from endwall: Any        |  |                                                                                                                              |  |  |                                 |  |  | Maximum Top Chord Forces Per Ply (lbs) |    |      |             |      |      |      |
|                        |  | GCpi: 0.18                    |  |                                                                                                                              |  |  |                                 |  |  | Chords Tens.Comp.                      |    |      |             |      |      |      |
|                        |  | Wind Duration: 1.60           |  |                                                                                                                              |  |  |                                 |  |  |                                        |    |      |             |      |      |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x6 SP #2;

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

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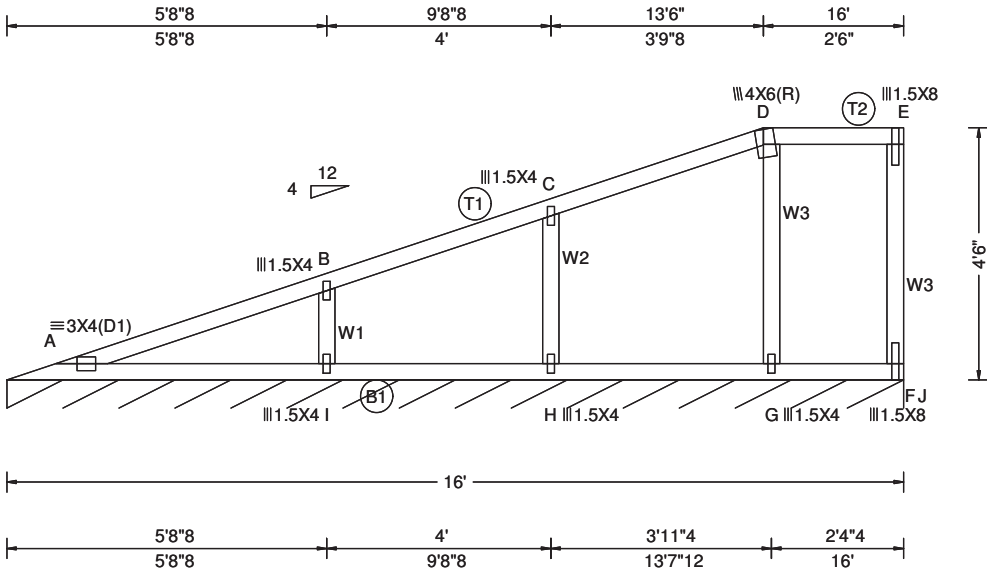


| Loading Criteria (psf) |        | Wind Criteria        |                | Snow Criteria (Pg,Pf in PSF) |             |         | Defl/CSI Criteria     |            |                             | ▲ Maximum Reactions (lbs), or *PLF     |                           |      |       |             |             |      |
|------------------------|--------|----------------------|----------------|------------------------------|-------------|---------|-----------------------|------------|-----------------------------|----------------------------------------|---------------------------|------|-------|-------------|-------------|------|
| TCLL:                  | 30.00  | Wind Std:            | ASCE 7-22      | Pg: NA                       | Ct: NA      | CAT: NA | PP Deflection in      | loc L/defl | L/#                         | Gravity                                |                           |      |       | Non-Gravity |             |      |
| TCDL:                  | 15.00  | Speed:               | 175 mph        | Pf: NA                       |             | Ce: NA  | VERT(LL):             | 0.045      | A 999 360                   | Loc                                    | R+                        | / R- | / Rh  | / Rw        | / U         | / RL |
| BCLL:                  | 0.00   | Enclosure:           | Closed         | Lu: NA                       | Cs: NA      |         | VERT(CL):             | 0.083      | A 999 240                   | J*                                     | 110                       | /-   | /-    | /68         | /48         | /24  |
| BCDL:                  | 10.00  | Risk Category:       | II             | Snow Duration:               | NA          |         | HORZ(LL):             | -0.010     | A - -                       | Wind reactions based on C&C            |                           |      |       |             |             |      |
|                        |        | EXP:                 | C Kzt: NA      |                              |             |         | HORZ(TL):             | 0.014      | A - -                       | J                                      | Brg Wid = 216 Min Req = - |      |       |             |             |      |
| Des Ld:                | 55.00  | Mean Height:         | 16.40 ft       |                              |             |         | Creep Factor:         | 2.0        |                             | Bearing A is a rigid surface.          |                           |      |       |             |             |      |
| NCBCLL:                | 10.00  | TCDL:                | 6.0 psf        | Building Code:               |             |         | Max TC CSI:           | 0.525      |                             | Maximum Top Chord Forces Per Ply (lbs) |                           |      |       |             |             |      |
| Soffit:                | 2.00   | BCDL:                | 6.0 psf        | FBC 8th Ed. 2023 Res.        | HVHZ        |         | Max BC CSI:           | 0.317      |                             | Chords                                 | Tens.Comp.                |      |       | Chords      | Tens. Comp. |      |
| Load Duration:         | 1.25   | MWFRS Parallel Dist: | h to 2h        | TPI Std:                     | 2014        |         | Max Web CSI:          | 0.142      |                             | A - B                                  | 116                       | -379 | C - D | 61          | -169        |      |
| Spacing:               | 24.0 " | C&C Dist a:          | 3.00 ft        | Rep Fac:                     | Yes         |         | Mfg Specified Camber: |            |                             | B - C                                  | 78                        | -267 | D - E | 48          | -75         |      |
|                        |        | Loc. from endwall:   | not in 9.00 ft | FT/RT:                       | 20(0)/10(0) |         |                       |            |                             | Maximum Bot Chord Forces Per Ply (lbs) |                           |      |       |             |             |      |
|                        |        | GCpi:                | 0.18           | Plate Type(s):               |             |         |                       |            |                             |                                        |                           |      |       |             |             |      |
|                        |        | Wind Duration:       | 1.60           | WAVE                         |             |         |                       |            |                             |                                        |                           |      |       |             |             |      |
|                        |        |                      |                |                              |             |         |                       |            | VIEW Ver: 23.02.01A.1204.18 |                                        |                           |      |       |             |             |      |

| Lumber                                                             | Wind                                                                                                                                                   |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2; | Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types. |

Additional Notes

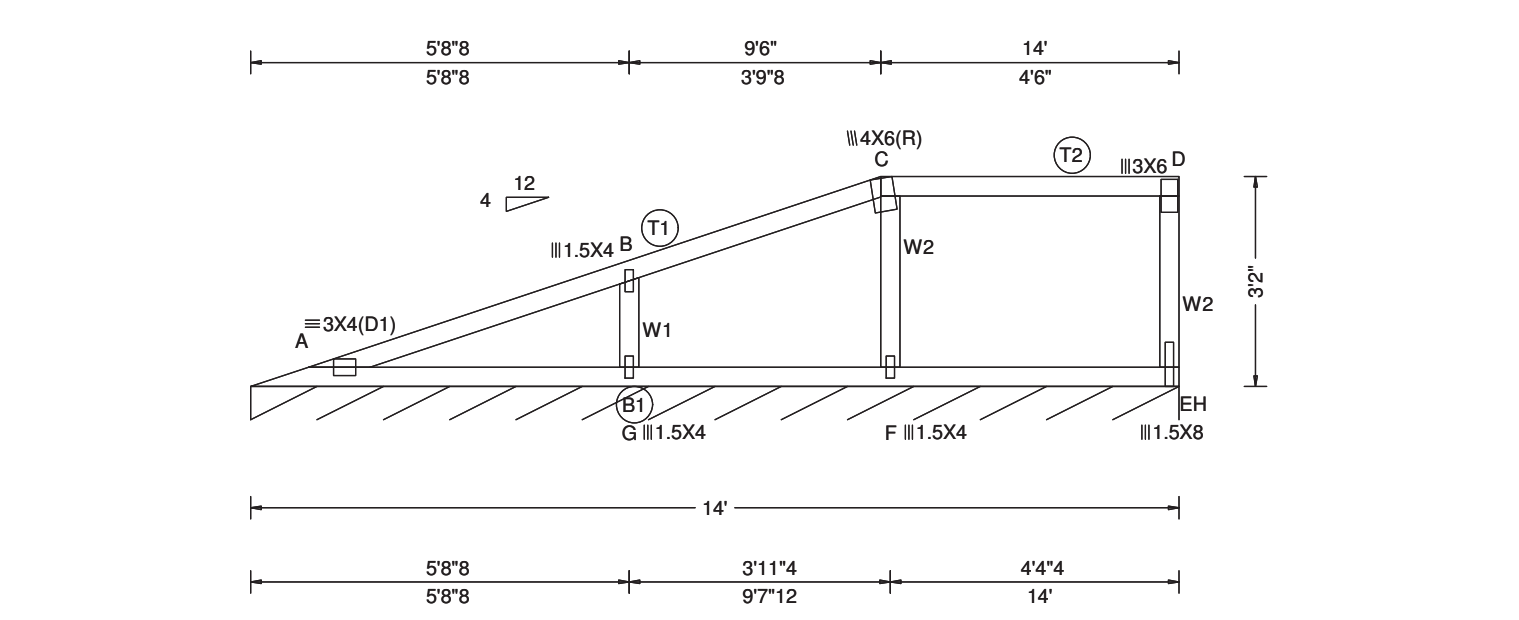
See DWG VAL180220723 for valley details.



| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF)                                                                                                 |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs), or *PLF     |     |      |      |      |     |      |
|------------------------|--|-----------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--|----------------------------------------|-----|------|------|------|-----|------|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA                                                                                                        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity Non-Gravity                    |     |      |      |      |     |      |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                                                                                                                |  |  | VERT(LL): 0.046 A 999 360       |  |  | Loc                                    | R+  | / R- | / Rh | / Rw | / U | / RL |
| BCLL: 0.00             |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                                                                                                                |  |  | VERT(CL): 0.085 A 999 240       |  |  | J*                                     | 110 | /-   | /-   | /55  | /69 | /22  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA                                                                                                            |  |  | HORZ(LL): -0.009 A - -          |  |  | Wind reactions based on C&C            |     |      |      |      |     |      |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE |  |  | HORZ(TL): 0.014 A - -           |  |  | J Brg Wid = 192 Min Req = -            |     |      |      |      |     |      |
| NCBCLL: 10.00          |  | Mean Height: 16.40 ft             |  |                                                                                                                              |  |  | Creep Factor: 2.0               |  |  | Bearing A is a rigid surface.          |     |      |      |      |     |      |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max TC CSI: 0.506               |  |  | Maximum Top Chord Forces Per Ply (lbs) |     |      |      |      |     |      |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  |                                                                                                                              |  |  | Max BC CSI: 0.322               |  |  | Chords Tens.Comp. Chords Tens. Comp.   |     |      |      |      |     |      |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h to 2h      |  |                                                                                                                              |  |  | Max Web CSI: 0.079              |  |  | A - B 93 -285 C - D 36 -74             |     |      |      |      |     |      |
|                        |  | C&C Dist a: 3.00 ft               |  |                                                                                                                              |  |  | Mfg Specified Camber:           |  |  | B - C 56 -164 D - E 0 0                |     |      |      |      |     |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  |                                                                                                                              |  |  |                                 |  |  | Maximum Bot Chord Forces Per Ply (lbs) |     |      |      |      |     |      |
|                        |  | GCpi: 0.18                        |  |                                                                                                                              |  |  |                                 |  |  |                                        |     |      |      |      |     |      |
|                        |  | Wind Duration: 1.60               |  |                                                                                                                              |  |  |                                 |  |  |                                        |     |      |      |      |     |      |

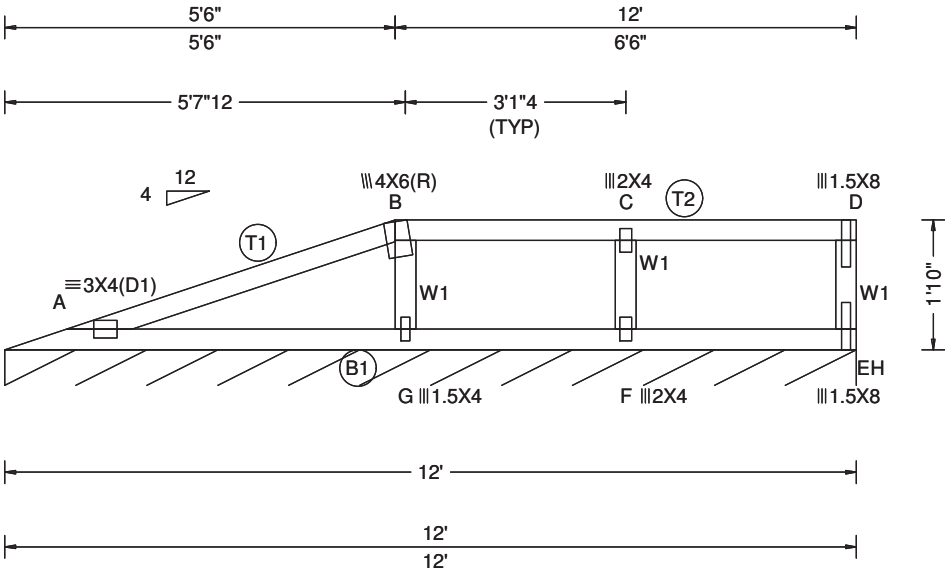
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;                                                                                   | <table><tr><th>Chords</th><th>Tens.Comp.</th><th>Chords</th><th>Tens. Comp.</th></tr><tr><td>A - I</td><td>329 - 80</td><td>H - G</td><td>345 - 87</td></tr><tr><td>I - H</td><td>339 - 85</td><td>G - F</td><td>356 - 83</td></tr></table>                                                               | Chords                           | Tens.Comp.  | Chords | Tens. Comp. | A - I | 329 - 80   | H - G | 345 - 87    | I - H | 339 - 85  | G - F | 356 - 83  |       |           |       |           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------|--------|-------------|-------|------------|-------|-------------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|
| Chords                                                                                                                                                                | Tens.Comp.                                                                                                                                                                                                                                                                                                | Chords                           | Tens. Comp. |        |             |       |            |       |             |       |           |       |           |       |           |       |           |
| A - I                                                                                                                                                                 | 329 - 80                                                                                                                                                                                                                                                                                                  | H - G                            | 345 - 87    |        |             |       |            |       |             |       |           |       |           |       |           |       |           |
| I - H                                                                                                                                                                 | 339 - 85                                                                                                                                                                                                                                                                                                  | G - F                            | 356 - 83    |        |             |       |            |       |             |       |           |       |           |       |           |       |           |
| <b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types. | <table><tr><th colspan="4">Maximum Web Forces Per Ply (lbs)</th></tr><tr><th>Webs</th><th>Tens.Comp.</th><th>Webs</th><th>Tens. Comp.</th></tr><tr><td>B - I</td><td>365 - 446</td><td>D - G</td><td>316 - 251</td></tr><tr><td>C - H</td><td>347 - 364</td><td>E - F</td><td>192 - 112</td></tr></table> | Maximum Web Forces Per Ply (lbs) |             |        |             | Webs  | Tens.Comp. | Webs  | Tens. Comp. | B - I | 365 - 446 | D - G | 316 - 251 | C - H | 347 - 364 | E - F | 192 - 112 |
| Maximum Web Forces Per Ply (lbs)                                                                                                                                      |                                                                                                                                                                                                                                                                                                           |                                  |             |        |             |       |            |       |             |       |           |       |           |       |           |       |           |
| Webs                                                                                                                                                                  | Tens.Comp.                                                                                                                                                                                                                                                                                                | Webs                             | Tens. Comp. |        |             |       |            |       |             |       |           |       |           |       |           |       |           |
| B - I                                                                                                                                                                 | 365 - 446                                                                                                                                                                                                                                                                                                 | D - G                            | 316 - 251   |        |             |       |            |       |             |       |           |       |           |       |           |       |           |
| C - H                                                                                                                                                                 | 347 - 364                                                                                                                                                                                                                                                                                                 | E - F                            | 192 - 112   |        |             |       |            |       |             |       |           |       |           |       |           |       |           |
| <b>Additional Notes</b><br>See DWG VAL180220723 for valley details.                                                                                                   |                                                                                                                                                                                                                                                                                                           |                                  |             |        |             |       |            |       |             |       |           |       |           |       |           |       |           |

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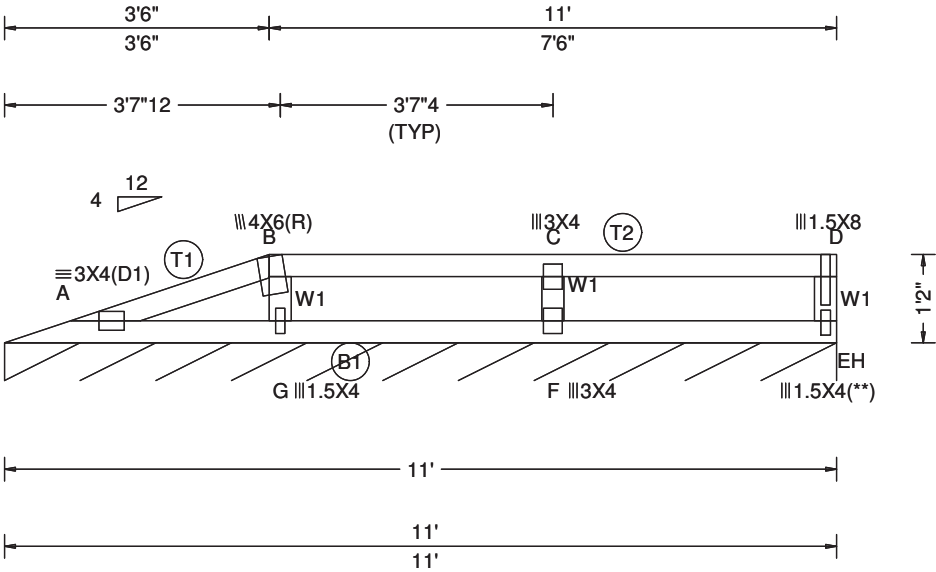
| Loading Criteria (psf)                                                                                                                              | Wind Criteria                                                                                                                                                                                                                                                                                 | Snow Criteria (Pg,Pf in PSF)                                                                                                                                                                                     | Defl/CSI Criteria                                                                                                                                                                                                                                                                             | ▲ Maximum Reactions (lbs), or *PLF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TCLL: 30.00<br>TCDL: 15.00<br>BCLL: 0.00<br>BCDL: 10.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 2.00<br>Load Duration: 1.25<br>Spacing: 24.0 " | Wind Std: ASCE 7-22<br>Speed: 175 mph<br>Enclosure: Closed<br>Risk Category: II<br>EXP: C Kzt: NA<br>Mean Height: 16.40 ft<br>TCDL: 6.0 psf<br>BCDL: 6.0 psf<br>MWFRS Parallel Dist: h to 2h<br>C&C Dist a: 3.00 ft<br>Loc. from endwall: not in 9.00 ft<br>GCpi: 0.18<br>Wind Duration: 1.60 | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.045 A 999 360<br>VERT(CR): 0.082 A 999 240<br>HORZ(LL): -0.008 A - -<br>HORZ(TL): 0.014 A - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.703<br>Max BC CSI: 0.314<br>Max Web CSI: 0.176<br>Mfg Specified Camber:<br><br>VIEW Ver: 23.02.01A.1204.18 | Gravity<br>Loc R+ / R- / Rh / Rw / U / RL<br>H* 110 /- /- /54 /89 /19<br>Wind reactions based on C&C<br>H Brg Wid = 168 Min Req = -<br>Bearing A is a rigid surface.<br><br>Maximum Top Chord Forces Per Ply (lbs)<br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 91 -155 C - D 20 -12<br>B - C 46 -102<br><br>Maximum Bot Chord Forces Per Ply (lbs)<br>Chords Tens.Comp. Chords Tens. Comp.<br>A - G 208 -80 F - E 245 -73<br>G - F 221 -85<br><br>Maximum Web Forces Per Ply (lbs)<br>Webs Tens.Comp. Webs Tens. Comp.<br>B - G 451 -483 D - E 378 -209<br>C - F 466 -303 |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;  
  
**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.  
  
**Additional Notes**  
See DWG VAL180220723 for valley details.



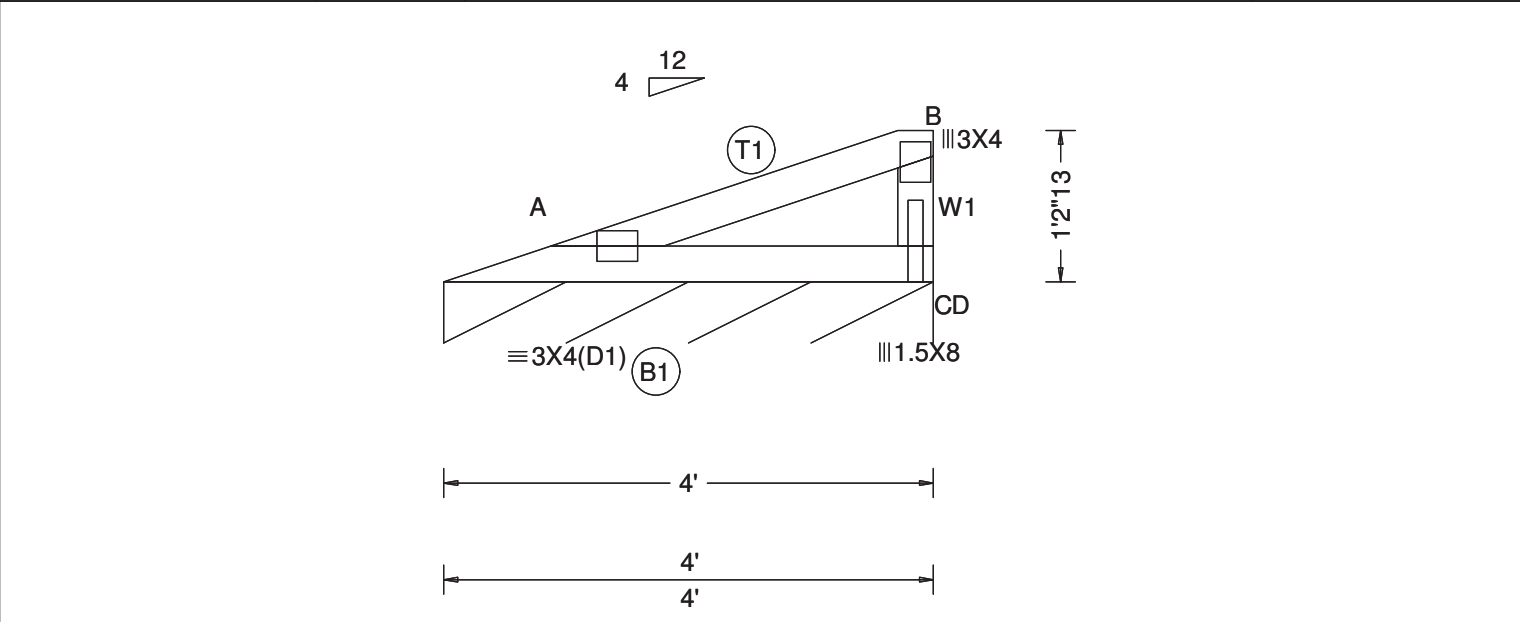
|                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Loading Criteria</b> (psf)<br>TCLL: 30.00<br>TCDL: 15.00<br>BCLL: 0.00<br>BCDL: 10.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 2.00<br>Load Duration: 1.25<br>Spacing: 24.0 "                                                                                                                                                        | <b>Wind Criteria</b><br>Wind Std: ASCE 7-22<br>Speed: 175 mph<br>Enclosure: Closed<br>Risk Category: II<br>EXP: C Kzt: NA<br>Mean Height: 16.40 ft<br>TCDL: 6.0 psf<br>BCDL: 6.0 psf<br>MWFRS Parallel Dist: h to 2h<br>C&C Dist a: 3.00 ft<br>Loc. from endwall: not in 9.00 ft<br>GCpi: 0.18<br>Wind Duration: 1.60 | <b>Snow Criteria</b> (Pg,Pf in PSF)<br>Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | <b>Defl/CSI Criteria</b><br>PP Deflection in loc L/defl L/#<br>VERT(LL): 0.056 A 999 360<br>VERT(CL): 0.104 A 999 240<br>HORZ(LL): -0.012 A - -<br>HORZ(TL): 0.018 A - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.489<br>Max BC CSI: 0.415<br>Max Web CSI: 0.121<br>Mfg Specified Camber:<br><br>VIEW Ver: 23.02.01A.1204.18 | <b>▲ Maximum Reactions (lbs), or *PLF</b><br>Gravity<br>Loc R+ / R- / Rh / Rw / U / RL<br>Non-Gravity<br>H* 110 /- /- /52 /123 /16<br>Wind reactions based on C&C<br>H Brg Wid = 144 Min Req = -<br>Bearing A is a rigid surface.<br><br><b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 49 -77 C - D 9 -1<br>B - C 9 -2<br><br><b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - G 138 -48 F - E 182 -38<br>G - F 182 -38<br><br><b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>B - G 464 -295 D - E 218 -112<br>C - F 689 -361 |
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br><br><b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>See DWG VAL180220723 for valley details. |                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcacomponents.com](http://sbcacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



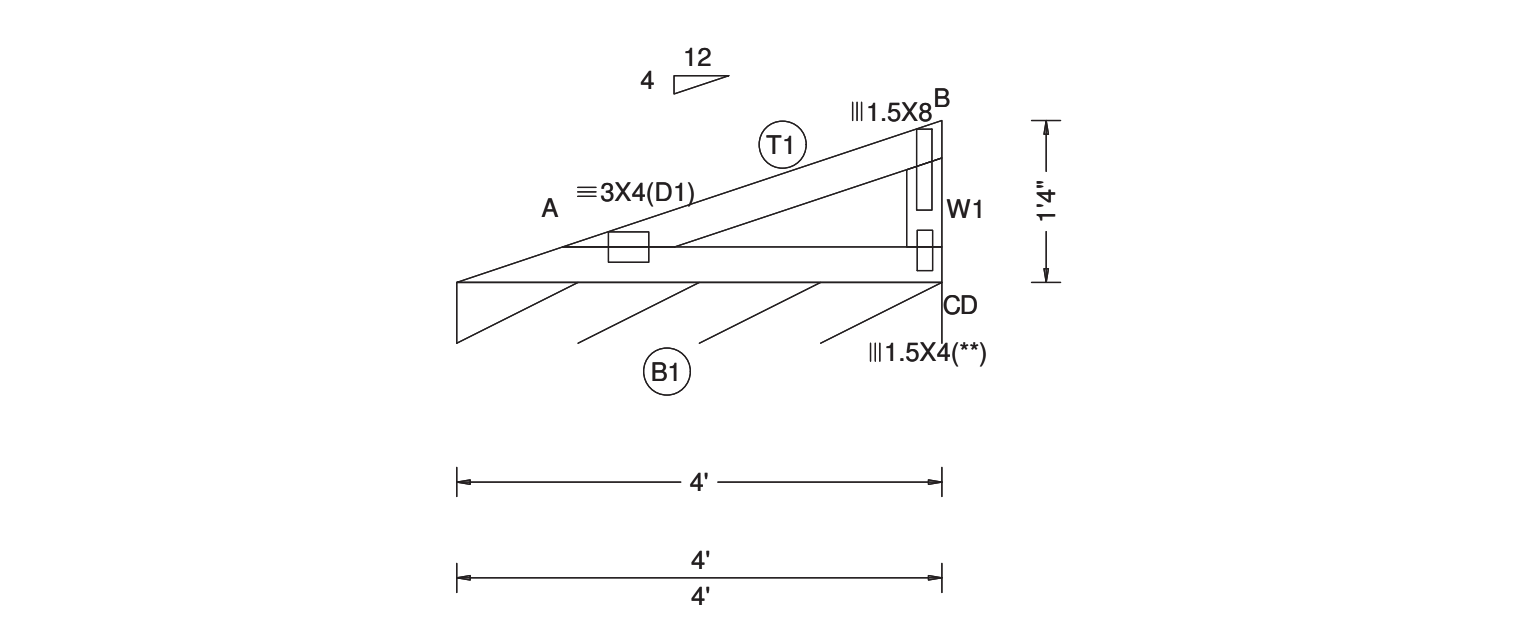
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Loading Criteria</b> (psf)<br>TCLL: 30.00<br>TCDL: 15.00<br>BCLL: 0.00<br>BCDL: 10.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 2.00<br>Load Duration: 1.25<br>Spacing: 24.0 "                                                                                                                                                                                                                                                                                                             | <b>Wind Criteria</b><br>Wind Std: ASCE 7-22<br>Speed: 175 mph<br>Enclosure: Closed<br>Risk Category: II<br>EXP: C Kzt: NA<br>Mean Height: 16.40 ft<br>TCDL: 6.0 psf<br>BCDL: 6.0 psf<br>MWFRS Parallel Dist: h to 2h<br>C&C Dist a: 3.00 ft<br>Loc. from endwall: not in 9.00 ft<br>GCpi: 0.18<br>Wind Duration: 1.60 | <b>Snow Criteria</b> (Pg,Pf in PSF)<br>Pg: NA Ct: NA CAT: NA<br>Pf: NA Cs: NA Ce: NA<br>Lu: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | <b>Defl/CSI Criteria</b><br>PP Deflection in loc L/defl L/#<br>VERT(LL): -0.013 A 999 360<br>VERT(CL): 0.022 A 999 240<br>HORZ(LL): -0.003 A - -<br>HORZ(TL): 0.004 D - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.448<br>Max BC CSI: 0.166<br>Max Web CSI: 0.145<br>Mfg Specified Camber:<br><br>VIEW Ver: 23.02.01A.1204.18 | <b>▲ Maximum Reactions (lbs), or *=PLF</b><br>Gravity<br>Loc R+ / R- / Rh / Rw / U / RL<br>Non-Gravity<br>H* 110 /- /- /51 /139 /11<br>Wind reactions based on C&C<br>H Brg Wid = 132 Min Req = -<br>Bearing A is a rigid surface.<br><br><b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 63 -66 C - D 22 -12<br>B - C 22 -12<br><br><b>Maximum Bot Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - G 49 -62 F - E 98 -35<br>G - F 98 -35<br><br><b>Maximum Web Forces Per Ply (lbs)</b><br>Webs Tens.Comp. Webs Tens. Comp.<br>B - G 389 -228 D - E 259 -131<br>C - F 820 -416 |
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br><br><b>Plating Notes</b><br>(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.<br><br><b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>See DWG VAL180220723 for valley details. |                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBICA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.  
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.  
For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBICA: [sbcacomponents.com](http://sbcacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF) |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs), or *=PLF    |  |  |               |  |  |  |
|------------------------|--|-----------------------------------|--|------------------------------|--|--|---------------------------------|--|--|----------------------------------------|--|--|---------------|--|--|--|
| TCLL: 30.00            |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                |  |  | Non-Gravity   |  |  |  |
| TCDL: 15.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                |  |  | VERT(LL): NA                    |  |  | Loc R+ / R- / Rh                       |  |  | / Rw / U / RL |  |  |  |
| BCDL: 0.00             |  | Enclosure: Part. Enc.             |  | Lu: NA Cs: NA                |  |  | VERT(CL): NA                    |  |  | D* 110 /- /- /68                       |  |  | /129 /50      |  |  |  |
| BCDL: 10.00            |  | Risk Category: II                 |  | Snow Duration: NA            |  |  | HORZ(LL): -0.007 A - -          |  |  | Wind reactions based on C&C            |  |  |               |  |  |  |
| Des Ld: 55.00          |  | EXP: C Kzt: NA                    |  |                              |  |  | HORZ(TL): 0.008 A - -           |  |  | D Brg Wid = 48.0 Min Req = -           |  |  |               |  |  |  |
| NCBCLL: 10.00          |  | Mean Height: 15.00 ft             |  |                              |  |  | Creep Factor: 2.0               |  |  | Bearing A is a rigid surface.          |  |  |               |  |  |  |
| Soffit: 2.00           |  | TCDL: 6.0 psf                     |  | Building Code:               |  |  | Max TC CSI: 0.336               |  |  | Maximum Top Chord Forces Per Ply (lbs) |  |  |               |  |  |  |
| Load Duration: 1.25    |  | BCDL: 6.0 psf                     |  | FBC 8th Ed. 2023 Res. HVHZ   |  |  | Max BC CSI: 0.330               |  |  | Chords Tens.Comp.                      |  |  |               |  |  |  |
| Spacing: 24.0 "        |  | MWFRS Parallel Dist: h to 2h      |  | TPI Std: 2014                |  |  | Max Web CSI: 0.084              |  |  | A - B 23 -51                           |  |  |               |  |  |  |
|                        |  | C&C Dist a: 3.00 ft               |  | Rep Fac: Yes                 |  |  | Mfg Specified Camber:           |  |  | Maximum Bot Chord Forces Per Ply (lbs) |  |  |               |  |  |  |
|                        |  | Loc. from endwall: not in 9.00 ft |  | FT/RT:20(0)/10(0)            |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  | Chords Tens.Comp.                      |  |  |               |  |  |  |
|                        |  | GCpi: 0.55                        |  | Plate Type(s):               |  |  |                                 |  |  |                                        |  |  |               |  |  |  |
|                        |  | Wind Duration: 1.60               |  | WAVE                         |  |  |                                 |  |  |                                        |  |  |               |  |  |  |

|                                                                                                                                                                                                                                                                                                                                             |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Lumber</b><br>Top chord: 2x4 SP #2;<br>Bot chord: 2x4 SP #2;<br>Webs: 2x4 SP #2;<br><br><b>Wind</b><br>Member design based on both MWFRS and C&C.<br>Right end vertical not exposed to wind pressure.<br>Wind loading based on both gable and hip roof types.<br><br><b>Additional Notes</b><br>See DWG VAL180220723 for valley details. |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|



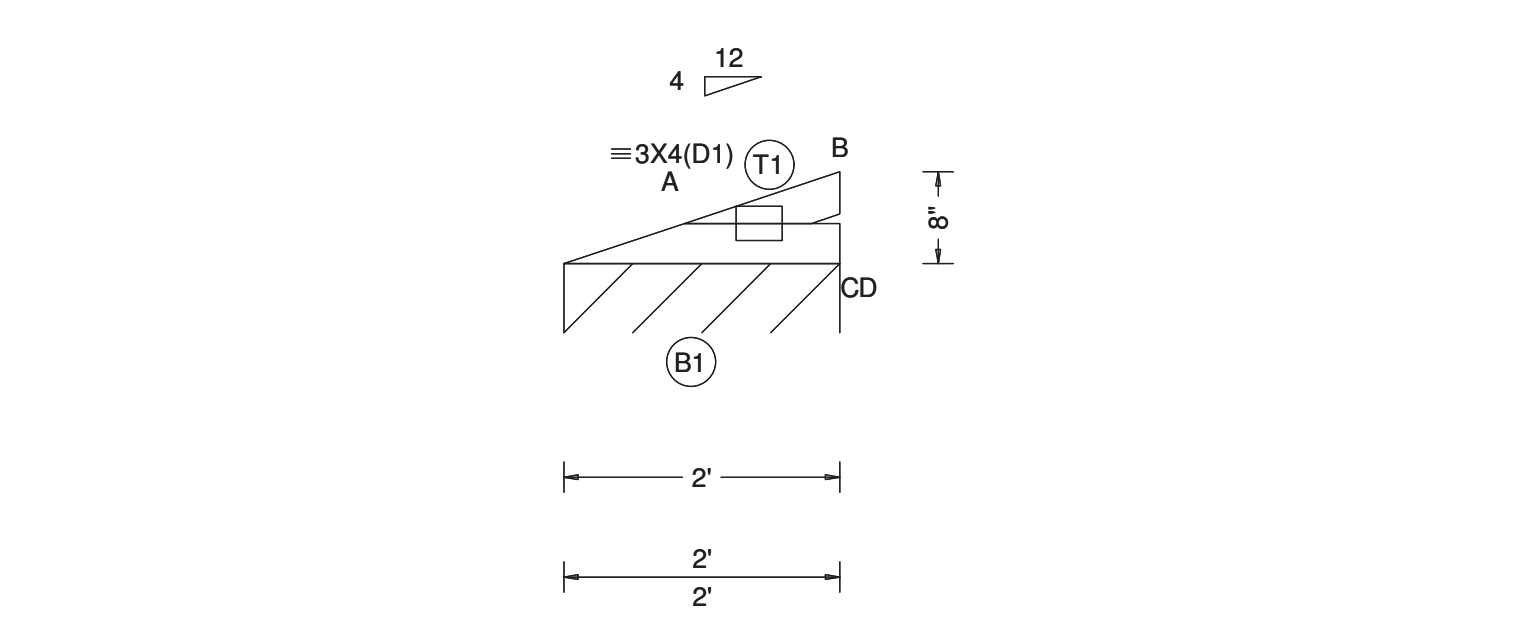
| Loading Criteria (psf) |  | Wind Criteria                     |  | Snow Criteria (Pg,Pf in PSF) |  |  | Defl/CSI Criteria               |  |  | ▲ Maximum Reactions (lbs), or *=PLF           |    |      |             |      |     |      |
|------------------------|--|-----------------------------------|--|------------------------------|--|--|---------------------------------|--|--|-----------------------------------------------|----|------|-------------|------|-----|------|
|                        |  | Wind Std: ASCE 7-22               |  | Pg: NA Ct: NA CAT: NA        |  |  | PP Deflection in loc L/defl L/# |  |  | Gravity                                       |    |      | Non-Gravity |      |     |      |
| TCLL: 30.00            |  | Speed: 175 mph                    |  | Pf: NA Ce: NA                |  |  | VERT(LL): NA                    |  |  | Loc                                           | R+ | / R- | / Rh        | / Rw | / U | / RL |
| TCDL: 15.00            |  | Enclosure: Closed                 |  | Lu: NA Cs: NA                |  |  | VERT(CL): NA                    |  |  |                                               |    |      |             |      |     |      |
| BCLL: 0.00             |  | Risk Category: II                 |  | Snow Duration: NA            |  |  | HORZ(LL): -0.007 A - -          |  |  | D* 110 /- /- /60 /134 /52                     |    |      |             |      |     |      |
| BCDL: 10.00            |  | EXP: C Kzt: NA                    |  |                              |  |  | HORZ(TL): 0.008 A - -           |  |  | Wind reactions based on C&C                   |    |      |             |      |     |      |
| Des Ld: 55.00          |  | Mean Height: 22.19 ft             |  |                              |  |  | Creep Factor: 2.0               |  |  | D Brg Wid = 48.0 Min Req = -                  |    |      |             |      |     |      |
| NCBCLL: 10.00          |  | TCDL: 6.0 psf                     |  | Building Code:               |  |  | Max TC CSI: 0.323               |  |  | Bearing A is a rigid surface.                 |    |      |             |      |     |      |
| Soffit: 2.00           |  | BCDL: 6.0 psf                     |  | FBC 8th Ed. 2023 Res. HVHZ   |  |  | Max BC CSI: 0.320               |  |  | <b>Maximum Top Chord Forces Per Ply (lbs)</b> |    |      |             |      |     |      |
| Load Duration: 1.25    |  | MWFRS Parallel Dist: > 2h         |  | TPI Std: 2014                |  |  | Max Web CSI: 0.090              |  |  | <u>Chords Tens.Comp.</u>                      |    |      |             |      |     |      |
| Spacing: 24.0 "        |  | C&C Dist a: 3.00 ft               |  | Rep Fac: Yes                 |  |  | Mfg Specified Camber:           |  |  | A - B 23 -65                                  |    |      |             |      |     |      |
|                        |  | Loc. from endwall: not in 9.00 ft |  | FT/RT:20(0)/10(0)            |  |  |                                 |  |  | <b>Maximum Bot Chord Forces Per Ply (lbs)</b> |    |      |             |      |     |      |
|                        |  | GCpi: 0.18                        |  | Plate Type(s):               |  |  |                                 |  |  | <u>Chords Tens.Comp.</u>                      |    |      |             |      |     |      |
|                        |  | Wind Duration: 1.60               |  | WAVE                         |  |  | VIEW Ver: 23.02.01A.1204.18     |  |  |                                               |    |      |             |      |     |      |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #2;

**Plating Notes**  
(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

**Wind**  
Member design based on both MWFRS and C&C.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
See DWG VAL180220723 for valley details.



| Loading Criteria (psf) | Wind Criteria                     | Snow Criteria (Pg,Pf in PSF)                                                                                                 | Defl/CSI Criteria               | ▲ Maximum Reactions (lbs), or *≠PLF    |        |     |             |     |     |     |  |  |
|------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|--------|-----|-------------|-----|-----|-----|--|--|
|                        |                                   |                                                                                                                              |                                 | Gravity                                |        |     | Non-Gravity |     |     |     |  |  |
|                        | Loc                               | R+                                                                                                                           | / R-                            | / Rh                                   | / Rw   | / U | / RL        |     |     |     |  |  |
| TCLL: 30.00            | Wind Std: ASCE 7-22               | Pg: NA Ct: NA CAT: NA                                                                                                        | PP Deflection in loc L/defl L/# | VERT(LL): -0.001 C 999 360             | D* 110 | /-  | /-          | /47 | /75 | /32 |  |  |
| TCDL: 15.00            | Speed: 175 mph                    | Pf: NA Ce: NA                                                                                                                | VERT(CL): 0.002 C 999 240       | Wind reactions based on C&C            |        |     |             |     |     |     |  |  |
| BCLL: 0.00             | Enclosure: Closed                 | Lu: NA Cs: NA                                                                                                                | HORZ(LL): -0.000 C - -          | D Brg Wid = 24.0 Min Req = -           |        |     |             |     |     |     |  |  |
| BCDL: 10.00            | Risk Category: II                 | Snow Duration: NA                                                                                                            | HORZ(TL): 0.000 C - -           | Bearing A is a rigid surface.          |        |     |             |     |     |     |  |  |
| Des Ld: 55.00          | EXP: C Kzt: NA                    | Building Code:<br>FBC 8th Ed. 2023 Res. HVHZ<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT:20(0)/10(0)<br>Plate Type(s):<br>WAVE | Creep Factor: 2.0               | Maximum Top Chord Forces Per Ply (lbs) |        |     |             |     |     |     |  |  |
| NCBCLL: 10.00          | Mean Height: 15.00 ft             |                                                                                                                              | Max TC CSI: 0.038               | Chords Tens.Comp.                      |        |     |             |     |     |     |  |  |
| Soffit: 2.00           | TCDL: 6.0 psf                     |                                                                                                                              | Max BC CSI: 0.064               | A - B 0 -7                             |        |     |             |     |     |     |  |  |
| Load Duration: 1.25    | BCDL: 6.0 psf                     |                                                                                                                              | Max Web CSI: 0.000              | Maximum Bot Chord Forces Per Ply (lbs) |        |     |             |     |     |     |  |  |
| Spacing: 24.0 "        | MWFRS Parallel Dist: 0 to h/2     |                                                                                                                              | Mfg Specified Camber:           | Chords Tens.Comp.                      |        |     |             |     |     |     |  |  |
|                        | C&C Dist a: 3.00 ft               |                                                                                                                              | VIEW Ver: 23.02.01A.1204.18     |                                        |        |     |             |     |     |     |  |  |
|                        | Loc. from endwall: not in 4.50 ft |                                                                                                                              |                                 |                                        |        |     |             |     |     |     |  |  |
|                        | GCpi: 0.18                        |                                                                                                                              |                                 |                                        |        |     |             |     |     |     |  |  |
|                        | Wind Duration: 1.60               |                                                                                                                              |                                 |                                        |        |     |             |     |     |     |  |  |

**Lumber**  
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;

**Wind**  
Member design based on both MWFRS and C&C.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
See DWG VAL180220723 for valley details.

# ICC-ES Evaluation Report

ESR-2552

Reissued March 2024

This report also contains:

- LABC Supplement

Subject to renewal March 2025

- FBC Supplement

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|                                                                                                                                                                                      |                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                    |                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <p><b>DIVISION: 06 00 00—</b><br/><b>WOOD, PLASTICS AND</b><br/><b>COMPOSITES</b></p> <p><b>Section: 06 05 23—</b><br/><b>Wood, Plastic, and</b><br/><b>Composite Fastenings</b></p> | <p><b>REPORT HOLDER:</b><br/><b>SIMPSON STRONG-TIE</b><br/><b>COMPANY INC.</b></p>  | <p><b>EVALUATION SUBJECT:</b><br/><b>SIMPSON STRONG-TIE®</b><br/><b>FACE-MOUNT</b><br/><b>HANGERS FOR SAWN</b><br/><b>LUMBER, STRUCTURAL</b><br/><b>COMPOSITE LUMBER</b><br/><b>(SCL), PREFABRICATED</b><br/><b>WOOD I-JOISTS AND</b><br/><b>GLULAM BEAMS</b><br/><b>(ENGINEERED WOOD</b><br/><b>PRODUCTS)</b></p> |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

## 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, and 2012 [International Building Code® \(IBC\)](#)
- 2021, 2018, 2015, and 2012 [International Residential Code® \(IRC\)](#)

For evaluation for compliance with codes adopted by the [Los Angeles Department of Building and Safety \(LADBS\)](#), see [ESR-2552 LABC and LARC Supplement](#).

Property evaluated:

- Structural

## 2.0 USES

The Simpson Strong-Tie® face-mount hangers described in this report are used as wood framing connectors in wood construction in accordance with Section [2304.10.4](#) of the 2021 IBC, [2304.10.3](#) of the 2018 and 2015 IBC and Section [2304.9.3](#) of the 2012 IBC. The face-mount hangers may also be used in structures regulated under the IRC when an engineered design is submitted in accordance with Section [R301.1.3](#) of the IRC.

## 3.0 DESCRIPTION

### 3.1 General:

With the exception of the CBH, ACBH, SCBH and HSKP Hangers Series, the Simpson Strong-Tie face-mount hangers described in this report are U-shaped hangers that have prepunched holes for the installation of nails or Simpson Strong-Drive SDS screws, depending on the hanger model, into the face of the supporting wood header or beam or ledger. The CBH Hanger is used in pairs and is a die-formed steel plate with a welded stud and prepunched holes for the installation of Simpson Strong-Drive SDS screws. The ACBH hanger is used in pairs and is manufactured in one piece from aluminum with predrilled holes for the installation of Simpson Strong-Drive SDCF screws. The SCBH hanger is used in pairs and is manufactured in one piece from steel with predrilled holes for the installation of Simpson Strong-Drive SDCF screws. The HSKP hanger has a horizontal bearing plate to support the joist/beam and includes prepunched holes in its back plate for the installation of Simpson Strong-Drive SDCF screws into the face of the supporting wood Column.

**3.1.1 LU Series Hangers:** The LU series hangers are formed from No. 20 gage galvanized steel. See [Table 1](#) for hanger dimensions, required fasteners, and allowable loads; and [Figure 1](#) for a drawing of a typical LU series hanger.

**3.1.2 LUCZ Series Hangers:** The LUCZ hangers have concealed flanges to allow for installation near the end of a supporting member such as a ledger or header. The hangers are formed from No. 18 gage galvanized steel coated with a G185 zinc coating. See [Table 2](#) and [Figure 2](#) for hanger dimensions, required fastener schedule, allowable loads and a typical installation detail.

**3.1.3 U Hangers:** The U series hangers are formed from No. 16 gage galvanized steel. The hangers are face-nailed to the supporting wood header, and nailed to the supported solid sawn lumber, structural composite lumber or prefabricated wood I-joists with web stiffeners to accept the required size and number of joist nails shown in [Table 3](#). See [Table 3](#) for the U series hanger model numbers, hanger dimensions, required fasteners, and allowable loads. See [Figure 3](#) for a drawing of a typical U series joist hanger.

**3.1.4 HU and HUC Series Hangers:** The HU and HUC series hangers are formed from No. 14 gage galvanized steel, and are face-nailed to the supporting wood header/beam and nailed to the solid sawn lumber, supported structural composite lumber or prefabricated wood I-joists with web stiffeners. HU hangers having a seat width (*W*) equal to or greater than  $2\frac{9}{16}$  inches (65 mm) are available with concealed flanges and are specified with the model designation HUC. See [Table 4](#) for hanger model numbers, hanger dimensions, required fasteners and allowable loads based on the nailing. The HU and HUC hangers have triangular and round holes in both the U-shaped portion supporting the wood joist and in the flanges attached to the supporting wood header/beam. The allowable loads are achieved by filling all holes (both the round and triangular) with size of nails shown in [Table 4](#). See [Figures 4A](#) and [4B](#) for drawings of typical HU and HUC hangers, and [Figure 4C](#) shows a typical installation of an HU hanger supporting a prefabricated wood I-joist with approved web stiffeners.

**3.1.5 HUCQ Series Hangers:** The HUCQ series hangers are formed from No. 14 gage galvanized steel and are used to support glulam beams or other approved wood members. Other approved wood members must be laterally supported at the ends in accordance with Section [2308.4.6](#) of the IBC and Section [R502.7](#) of the IRC. The hangers have prepunched holes for the installation of Simpson Strong-Drive SDS series wood screws (SDS). See [Table 5](#) for the HUCQ series model numbers, hanger dimensions, required fasteners and allowable loads. See [Figure 5](#) for a drawing of the HUCQ series hanger.

**3.1.6 LUS Series Hangers:** The LUS series hangers are formed from No. 18 gage galvanized steel. The hangers have prepunched holes for the installation of nails that are driven at a 45-degree angle through the joist and into the header, which is described as double shear nailing in the installation instructions. See [Table 6](#) for the hanger dimensions, required fasteners, and allowable loads; and [Figure 6](#) for a drawing of a typical LUS series hanger.

**3.1.7 MUS Joist Hanger:** The MUS series hangers are formed from No. 18 gage galvanized steel. The U-shaped portion of the hangers has prepunched holes for the installation of joist nails that are driven at an angle through the joist and into the header, which is described as double shear nailing in the installation instructions. See [Table 7](#) for the hanger dimensions, required fasteners, and allowable loads; [Figure 7](#) for a drawing of a typical MUS series hanger.

**3.1.8 HUS Series Hangers:** The HUS hangers having a seat width, *W*, of  $3\frac{9}{16}$  inches (90 mm) are formed from No. 14 gage galvanized steel. The HUS1.81/10 hanger with a seat width, *W*, of  $1\frac{13}{16}$  inches (46 mm) is formed from No. 16 gage galvanized steel. The hangers have prepunched holes for the installation of nails that are driven at a 45-degree angle through the joist and into the header, which is described as double shear nailing in the installation instructions. See [Table 8](#) for HUS series hanger models, hanger dimensions, required fasteners, and allowable loads. See [Figure 8](#) for a drawing of a typical HUS hanger.

**3.1.9 HHUS Series Hangers:** The HHUS series hangers are formed from No. 14 gage galvanized steel. The hangers have pre-punched holes for the installation of nails that are driven at a 45 degree angle through the joist and into the header, which is described as double shear nailing in the installation instructions. See [Table 9](#) for the hanger model numbers, hanger dimensions, required fasteners, and allowable loads. See [Figure 9](#) for a drawing of a typical HHUS hanger.

**3.1.10 HGUS Series Hangers:** The HGUS series hangers are formed from No. 12 gage galvanized steel and are used to support glulam beams or other approved wood members. Other approved wood members must be laterally supported at the ends in accordance with Section [2308.4.6](#) of the IBC and Section [R502.7](#) of the

IRC. The hangers have prepunched holes for the installation of nails that are driven at a 45-degree angle through the joist and into the header, which is described as double shear nailing in the installation instructions. See [Table 10](#) for the HGUS series hanger model numbers, hanger dimensions, required fasteners and allowable loads. See [Figure 10](#) for a drawing of a typical HGUS hanger.

**3.1.11 HTU Series Hangers:** The HTU hangers are designed to support trusses installed with full or partial heel heights and gaps between the truss and the supporting girders of up to, but not exceeding,  $\frac{1}{2}$  inch (12.7 mm), as shown in [Tables 11A](#) and [11C](#), and  $\frac{1}{8}$  inch (3.2 mm) as shown in [Table 11B](#). Minimum and maximum nailing options are given in [Tables 11A](#), [11B](#), and [11C](#) to address varying heel heights and support conditions. The HTU hangers are formed from No. 16 gage galvanized steel. See [Table 11A](#) and [Figures 11A](#) and [11B](#) for hanger dimensions, required fastener schedule, allowable loads and an installation detail for installations in which the gap between the truss and the supporting girders is less than or equal to  $\frac{1}{2}$  inch (12.7 mm). See [Table 11B](#) and [Figures 11A](#) and [11B](#) for hanger dimensions, required fastener schedule, allowable loads and an installation detail for installations in which the gap between the truss and the supporting girders is less than or equal to  $\frac{1}{8}$  inch (3.2 mm). See [Table 11C](#) and [Figures 11A](#) and [11C](#) for hanger dimensions, required fastener schedule, allowable loads and an installation detail for installations in which the minimum allowable number of nails is driven into the supporting girder, and the gap between the truss and supporting girder is less than or equal to  $\frac{1}{2}$  inch (12.7 mm).

**3.1.12 LGU, MGU, HGU and HHGU Series Hangers:** The LGU and MGU series hangers are formed from No. 10 gage galvanized steel; HGU series hangers are formed from No. 7 gage galvanized steel; and HHGU series hangers are formed from No. 3 gage steel. The LGU, MGU, HGU and HHGU series hangers are used to support glulam beams or other approved wood members. Other approved wood members must be laterally supported at the ends in accordance with Section 2308.4.6 of the IBC and Section R502.7 of the IRC. The hangers have pre-punched holes for the installation of Simpson Strong-Drive SDS series wood screws (SDS). See [Table 12](#) for the LGU, MGU, HGU and HHGU series model numbers, hanger dimensions, required fasteners and allowable loads. See [Figure 12](#) for a drawing of the HHGU series hanger and a typical installation detail.

**3.1.13 SUR/L Series Hangers:** The SUR/L series hangers are formed from No. 16 gage galvanized steel. The SUR and SUL hangers are identical except they are skewed at 45 degrees to the right (SUR) and the left (SUL), respectively. See [Table 13](#) for hanger models, hanger dimensions, required fasteners, and allowable loads. See [Figure 13A](#) for a drawing of a typical SUL hanger and [Figure 13B](#) for a typical SUR hanger installation.

**3.1.14 HSUR/L Series Hangers:** The HSUR/L series hangers are formed from No. 14 gage galvanized steel. The HSUR and HSUL hangers are identical except they are skewed at 45 degrees to the right (HSUR) and the left (HSUL), respectively, and are designed to support prefabricated wood I-joists having approved web stiffeners, and structural composite lumber (SCL). See [Table 14](#) for the hanger model numbers, hanger dimensions, required fasteners, and allowable loads. See [Figure 14A](#) for a drawing of a typical HSUR hanger, and [Figure 14B](#) for a typical HSUR hanger installation.

**3.1.15 IUS Series Hangers:** The IUS series hangers are formed from No. 18 gage galvanized steel and are used exclusively to support prefabricated wood I-joists to a supporting wood member. See [Table 15A](#) for the IUS series hanger model numbers, hanger dimensions, and required fasteners; and [Table 15B](#) for allowable loads. See [Figures 15A](#), [15B](#), and [15C](#) for drawings of a typical IUS hanger and a typical IUS hanger installation.

**3.1.16 MIU Series Joist Hangers:** The MIU series hangers are formed from No. 16 gage galvanized steel and are used to support prefabricated wood I-joists or other approved wood members. Other approved wood members must be laterally supported at the ends in accordance with Section 2308.4.6 of the IBC and Section R502.7 of the IRC. See [Table 16](#) for the MIU series hanger model numbers, hanger dimensions, required fasteners, and allowable loads. See [Figure 16A](#) for a drawing of a typical MIU hanger and [Figure 16B](#) for a drawing of a typical MIU hanger installation.

**3.1.17 DU, DHU and DHUTF Series Hangers:** The DU, DHU and DHUTF series hangers are face-mount and top-flange hangers that are formed from either No. 14 gage or No. 12 gage galvanized steel. They are designed to transfer joist floor loads to a wood stud wall through two layers of  $\frac{5}{8}$ -inch-thick (15.9 mm) gypsum board complying with [ASTM C1396](#), and are installed using a combination of nails and Simpson Strong-Drive SDS series wood screws (SDS), which are addressed in [ESR-2236](#). These hangers are installed after the two layers of  $\frac{5}{8}$ " Type X gypsum board is installed and fastened using, at a minimum, the fastener schedule in

Item 14.1-5 in IBC Table 721.1(2). See [Table 17A](#) for hanger dimensions and allowable loads. See [Table 17B](#) for fastener schedule. See [Figure 17](#) for a drawing of the DU, DHU and DHUTF hangers and a typical installation.

**3.1.18 CBH Series Hangers:** The CBH series hangers are face-mounted and installed in inverted pairs. They are formed from No. 3 gage steel. They are used to support glulam beams or other approved wood members and are installed using Simpson Strong-Drive SDS series wood screws (SDS), which are addressed in [ESR-2236](#). See [Table 18A](#) & [18B](#) for hanger dimensions, fastener schedules and allowable loads. See [Figure 18](#) for a drawing of the CBH hangers and a typical installation.

**3.1.19 ACBH and SCBH Series Hangers:** The ACBH series hangers are aluminum and the SCBH series hangers are steel. The ACBH and SCBH series hangers are face-mounted and installed in inverted pairs. They are used to support glulam beams and are installed using Simpson Strong-Drive SDCF series wood screws, which are addressed in [ESR-3046](#). See [Table 19](#) for hanger dimensions, fastener schedules and allowable loads. See [Figure 19](#) for drawings of the ACBH and SCBH hangers and a typical installation.

**3.1.20 HSKP Series Hangers:** The HSKP series hangers are factory welded with a No. 3 gage steel back plate, 1/2" steel bearing plate and a No. 3 gage steel (for HSKP5.75x14.5 and HSKP5.75x17.0) or 3/8" steel (for HSKP5.75x19.5) knife plate. The HSKP is installed using Simpson Strong-Drive SDCF series wood screws, which are addressed in [ESR-3046](#). See [Table 20](#) for model numbers, hanger dimensions, fasteners schedules, allowable loads and installation instructions. See [Figure 20](#) for hanger drawings, typical installation and bearing area requirements for the carried members.

## 3.2 Materials:

**3.2.1 Hanger Material:** All hangers described in this report, with the exception of the CBH, ACBH, SCBH, HSKP, HTU, HGUS and HHGU series hangers, are manufactured from galvanized steel complying with [ASTM A653](#), SS designation, Grade 33, with a minimum yield strength,  $F_y$ , of 33,000 psi (227 MPa) and a minimum tensile strength,  $F_u$ , of 45,000 psi (310 MPa).

The HTU and HGUS series hangers are manufactured from galvanized steel complying with ASTM A653, SS designation, Grade 40, with a minimum yield strength,  $F_y$ , of 40,000 psi (276 MPa) and a minimum tensile strength,  $F_u$ , of 55,000 psi (379 MPa).

The HHGU and CBH series hangers are manufactured from nongalvanized steel complying with [ASTM A1011](#) SS, Grade 33, with a minimum yield strength,  $F_y$ , of 33,000 psi (227 MPa) and a minimum tensile strength,  $F_u$ , of 52,000 psi (358 MPa).

The stud of the CBH hangers is manufactured from nongalvanized steel complying with ASTM A108 Grade 1018 with a minimum yield strength,  $F_y$ , of 70,000 psi (483 MPa) and a minimum tensile strength,  $F_u$ , of 80,000 psi (552 MPa).

The ACBH series hangers are manufactured from ASTM B221 6061-T6 aluminum with a minimum yield strength,  $F_y$ , of 40,000 psi (276 MPa) and a minimum tensile strength,  $F_u$ , of 45,000 psi (310 MPa).

The SCBH series hangers are manufactured from nongalvanized steel complying with ASTM A572, Grade 50 with minimum yield strength,  $F_y$ , of 50,000 psi (345 MPa) and a minimum tensile strength,  $F_u$ , of 65,000 psi (448 MPa).

The HSKP series hanger is manufactured from three components: a back plate, a bearing plate and a knife plate. The HSKP back plate and knife plate are manufactured from nongalvanized steel complying with [ASTM A1011](#) SS, Grade 33, with a minimum yield strength,  $F_y$ , of 33,000 psi (227 MPa) and a minimum tensile strength,  $F_u$ , of 52,000 psi (358 MPa). The HSKP bearing plate is manufactured from nongalvanized steel complying with ASTM A572, Grade 50, with a minimum yield strength,  $F_y$ , of 50,000 psi (345 MPa) and a minimum tensile strength,  $F_u$ , of 65,000 psi (448 MPa).

**Exception:** The HSKP5.75x19.5 knife plate component is manufactured from nongalvanized steel complying with [ASTM A36](#) with a minimum yield strength,  $F_y$ , of 36,000 psi (248 MPa) and a minimum tensile strength,  $F_u$ , of 58,000 psi (400 MPa).

Base-metal thicknesses for the hangers in this report are as follows:

| NOMINAL THICKNESS<br>(gauge No. or inch) | MINIMUM BASE-METAL<br>THICKNESS (inch) |
|------------------------------------------|----------------------------------------|
| 1/2"                                     | 0.4900                                 |
| 3/8"                                     | 0.3650                                 |
| No. 3                                    | 0.2285                                 |
| No. 7                                    | 0.1715                                 |
| No. 10                                   | 0.1275                                 |
| No. 12                                   | 0.0975                                 |
| No. 14                                   | 0.0685                                 |
| No. 16                                   | 0.0555                                 |
| No. 18                                   | 0.0444                                 |
| No. 20                                   | 0.0335                                 |

For SI: 1 inch = 25.4 mm.

The thickness of the installed pairs of CBH, ACBH, and SCBH series hangers are shown in the applicable figures in this report.

With the exception of the CBH and SCBH hangers, the galvanized zinc coating for the steel hangers in Section 3.1 conforms to [ASTM A924](#) and ASTM A653 with a G90 designation. Some models of these hangers (designated with a model number ending with Z) are available with a G185 zinc coating specification in accordance with ASTM A653. Some models (designated with a model number ending with HDG) are available with a hot-dip galvanization, also known as “batch” galvanization, in accordance with [ASTM A123](#), with a minimum specified coating weight of 2.0 ounces of zinc per square foot of surface area (600 g/m<sup>2</sup>), total for both sides. With the exception of the LUCZ, model numbers in this report do not include the Z or HDG ending, but the information shown applies.

The CBH series hanger product is available with an electrogalvanized finish in accordance with ASTM B633 or with a hot-dip galvanized finish in accordance with ASTM A123 (designated with a model number ending with HDG). The SCBH series hanger product has an electrogalvanized finish in accordance with ASTM B633.

The lumber treater or holder of this report (Simpson Strong-Tie Company) should be contacted for recommendations on minimum corrosion resistance of steel connectors in contact with the specific proprietary preservative treated or fire retardant treated lumber.

**3.2.2 Wood:** Wood headers/beams and columns to which the connectors are fastened must be either sawn lumber, structural glued-laminated timber, or engineered lumber having a minimum specific gravity of 0.50 (minimum equivalent specific gravity of 0.50 for engineered lumber), and having a maximum moisture content of 19 percent (16 percent for engineered lumber) except as noted in Section 4.1. The thickness of the supporting wood member (header) must be equal to or greater than the length of the fasteners specified in the tables in this report, or as required by wood member design, whichever is greater.

Supported wood members that are prefabricated wood I-joists or SCL must be addressed in a current evaluation report, which will specify the allowable shear capacity and allowable reactions at supports for the proprietary engineered wood lumber. When required, web stiffeners for prefabricated wood I-joists must comply with specifications noted in the applicable evaluation report for the I-joists. The hangers described in this evaluation report may support I-joists having a current ICC-ES evaluation report. The evaluation report for the prefabricated wood I-joist must specify a minimum bearing length that is equal to or less than the hanger bearing length. When the hangers are used to support prefabricated wood I-joists, joist end reactions must not exceed the allowable joist end reaction per the I-joist manufacturer’s code report. For installation with engineered wood members, minimum allowable fastener spacing and end and edge distances, as specified in the applicable evaluation report for the engineered wood product, must be met.

**3.2.3 Fasteners:** Nails used for hangers described in this report must comply with [ASTM F1667](#) and have the following minimum fastener dimensions and bending yield strengths ( $F_{yb}$ ):

| FASTENERS | SHANK DIAMETER (inches) | NAIL LENGTH (inches) | $F_{yb}$ (psi) |
|-----------|-------------------------|----------------------|----------------|
| 10d × 1½  | 0.148                   | 1½                   | 90,000         |
| 10d       | 0.148                   | 3                    | 90,000         |
| 16d × 2½  | 0.162                   | 2½                   | 90,000         |
| 16d       | 0.162                   | 3½                   | 90,000         |

For SI: 1 inch = 25.4 mm, 1 psi = 6.895 kPa.

Unless otherwise indicated, fasteners listed in this report as 10d and 16d are 10d common and 16d common nails, respectively.

Some of the hangers and concealed beam hangers (CBH) described in this report are attached to the wood members using Simpson Strong-Drive SDS series wood screws addressed in ESR-2236. Other concealed beam hangers (ACBH and SCBH) and HSKP hangers described in this report are attached to wood members using SDCF Strong-Drive wood screws addressed in [ESR-3046](#).

Fasteners used in contact with preservative treated or fire retardant treated lumber must comply with Section [2304.10.6](#) of the 2021 IBC, Section [2304.10.5](#) of the 2018 and 2015 IBC, Section [2304.9.5](#) of the 2012, and applicable sections of the IRC. The chemical treatment manufacturer or this report holder (Simpson Strong-Tie Company) should be contacted for recommendations on minimum corrosion resistance of fasteners and connection capacities of fasteners used with the specific proprietary preservative treated or fire retardant treated lumber.

## 4.0 DESIGN AND INSTALLATION

### 4.1 Design:

The tabulated allowable loads shown in this report are based on allowable stress design (ASD) and include the load duration factor,  $C_D$ , corresponding with the applicable loads in accordance with the NDS.

Tabulated allowable loads apply to products connected to wood used under dry conditions and where sustained temperatures are 100°F (37.8°C) or less. When products are installed to wood having a moisture content greater than 19 percent (16 percent for engineered wood products), or where wet service is expected, the allowable loads must be adjusted by the wet service factor,  $C_M$ , specified in the NDS. When connectors are installed in wood that will experience sustained exposure to temperatures exceeding 100°F (37.8°C), the allowable loads in this report must be adjusted by the temperature factor,  $C_t$ , specified in the NDS.

Connected wood members must be analyzed for load-carrying capacity at the connection in accordance with the NDS and the applicable evaluation report for engineered wood products.

### 4.2 Installation:

Installation of the connectors must be in accordance with this evaluation report and the manufacturer's published installation instructions. In the event of a conflict between this report and the manufacturer's published installation instructions, this report governs.

## 5.0 CONDITIONS OF USE:

The Simpson Strong-Tie face-mount hangers described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The connectors must be manufactured, identified and installed in accordance with this report and the manufacturer's published installation instructions. A copy of the instructions must be available at the jobsite at all times during installation.
- 5.2 Calculations showing compliance with this report must be submitted to the code official. The calculations must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.3 Adjustment factors noted in Section 4.1 and the applicable codes must be considered, where applicable.
- 5.4 Connected wood members and fasteners must comply, respectively, with Sections 3.2.2 and 3.2.3 of this report.

- 5.5 Use of connectors with preservative or fire retardant treated lumber must be in accordance with Section 3.2.1 of this report. Use of fasteners with preservative treated or fire retardant treated lumber must be in accordance with Section 3.2.3 of this report.
- 5.6 The face mount hangers are manufactured under a quality control program with inspections by ICC-ES.

## 6.0 EVIDENCE SUBMITTED

- 6.1 Data in accordance with the [ICC-ES Acceptance Criteria for Joist Hangers and Similar Devices \(AC13\)](#), dated October 2018 (editorially revised December 2020).
- 6.2 Tests and calculations in accordance with the [ICC-ES Acceptance Criteria for Dowel-Type Threaded Fasteners used in Wood \(AC233\)](#), dated June 2023.

## 7.0 IDENTIFICATION

- 7.1 The products described in this report are identified with a die-stamp or an adhesive label indicating the name of the manufacturer (Simpson Strong-Tie) the model number, and the number of an index evaluation report ([ESR-2523](#)) that is used as an identifier for the products addressed in this report.
- 7.2 The report holder's contact information is the following:

**SIMPSON STRONG-TIE COMPANY INC.**  
**5956 WEST LAS POSITAS BOULEVARD**  
**PLEASANTON, CALIFORNIA 94588**  
**(800) 999-5099**  
[www.strongtie.com](http://www.strongtie.com)  
[jellis@strongtie.com](mailto:jellis@strongtie.com)

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES  
Section: 06 05 23—Wood, Plastic, and Composite Fastenings

**REPORT HOLDER:**

SIMPSON STRONG-TIE COMPANY INC.

**EVALUATION SUBJECT:**

SIMPSON STRONG-TIE® FACE-MOUNT HANGERS FOR SAWN LUMBER, STRUCTURAL COMPOSITE LUMBER (SCL), PREFABRICATED WOOD I-JOISTS AND GLULAM BEAMS (ENGINEERED WOOD PRODUCTS)

**1.0 REPORT PURPOSE AND SCOPE****Purpose:**

The purpose of this evaluation report supplement is to indicate that Simpson Strong-Tie® face-mount hangers for sawn lumber, structural composite lumber (SCL), prefabricated wood I-joists and glulam beams (engineered wood products), described in ICC-ES evaluation report [ESR-2552](#), have also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

**Applicable code editions:**

- 2023 *City of Los Angeles Building Code* (LABC)
- 2023 *City of Los Angeles Residential Code* (LARC)

**2.0 CONCLUSIONS**

The Simpson Strong-Tie® face mount hangers for sawn lumber, structural composite lumber (SCL), prefabricated wood I-joists and glulam beams (engineered wood products), described in Sections 2.0 through 7.0 of the evaluation report [ESR-2552](#), comply with the LABC Chapter 23, and the LARC, and are subjected to the conditions of use described in this supplement.

**3.0 CONDITIONS OF USE**

The Simpson Strong-Tie® face mount hangers for sawn lumber, structural composite lumber (SCL), prefabricated wood I-joists and glulam beams (engineered wood products), described in this evaluation report supplement, must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-2552](#).
- The design, installation, conditions of use and identification are in accordance with the 2021 *International Building Code*® (2021 IBC) provisions noted in the evaluation report [ESR-2552](#).
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, as applicable.
- The supported end of a joist or beam must be within 1/4-inch from the supporting member.
- Solid blocking must be required for all joist hangers supporting roof joists having one end twisted more than one-half degree per foot of length relative to the other end, except as specifically noted in the evaluation report.
- Under the LARC, an engineered design in accordance with LARC Section R301.1.3 must be submitted.

This supplement expires concurrently with the evaluation report, reissued March 2024.

# ICC-ES Evaluation Report

# ESR-2552 FBC Supplement

Reissued March 2024

This report is subject to renewal March 2025.

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**DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES**  
**Section: 06 05 23—Wood, Plastic, and Composite Fastenings**

## REPORT HOLDER:

**SIMPSON STRONG-TIE COMPANY INC.**

## EVALUATION SUBJECT:

**SIMPSON STRONG-TIE® FACE-MOUNT HANGERS FOR SAWN LUMBER, STRUCTURAL COMPOSITE LUMBER (SCL), PREFABRICATED WOOD I-JOISTS AND GLULAM BEAMS (ENGINEERED WOOD PRODUCTS)**

## 1.0 REPORT PURPOSE AND SCOPE

### Purpose:

The purpose of this evaluation report supplement is to indicate that the Simpson Strong-Tie® face-mount hangers, described in ICC-ES evaluation report ESR-2552, have also been evaluated for compliance with the codes noted below.

### Applicable code editions:

- 2023 *Florida Building Code—Building*
- 2023 *Florida Building Code—Residential*

## 2.0 CONCLUSIONS

The Simpson Strong-Tie® face-mount hangers, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-2552, comply with the *Florida Building Code—Building*, and the *Florida Building Code—Residential*, provided the design requirements are determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-2552 for the 2021 *International Building Code*® meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable.

Use of the Simpson Strong-Tie® face-mount hangers has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building*, and the *Florida Building Code—Residential* with the following condition:

- a. For connections subject to uplift, the connection must be designed for no less than 700 pounds (3114 N).

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the evaluation report, reissued March 2024.

TABLE 10—ALLOWABLE LOADS FOR THE HGUS SERIES JOIST HANGERS

| MODEL NO.   | DIMENSIONS <sup>1</sup><br>(Inches) |                                  |   | FASTENERS <sup>2</sup><br>(Quantity-Type) |                    | ALLOWABLE LOADS <sup>3,5,6</sup> (lbs) |                      |                       |                       |
|-------------|-------------------------------------|----------------------------------|---|-------------------------------------------|--------------------|----------------------------------------|----------------------|-----------------------|-----------------------|
|             |                                     |                                  |   |                                           |                    | Uplift <sup>4</sup>                    | Download             |                       |                       |
|             | W                                   | H                                | B | Header                                    | Joist <sup>3</sup> | C <sub>D</sub> = 1.6                   | C <sub>D</sub> = 1.0 | C <sub>D</sub> = 1.15 | C <sub>D</sub> = 1.25 |
| HGUS26      | 1 <sup>5</sup> / <sub>8</sub>       | 5 <sup>3</sup> / <sub>8</sub>    | 5 | 20-16d                                    | 8-16d              | 1,040                                  | 4,355                | 4,875                 | 5,230                 |
| HGUS28      | 1 <sup>5</sup> / <sub>8</sub>       | 7 <sup>1</sup> / <sub>8</sub>    | 5 | 36-16d                                    | 12-16d             | 1,650                                  | 7,275                | 7,275                 | 7,275                 |
| HGUS210     | 1 <sup>5</sup> / <sub>8</sub>       | 9 <sup>1</sup> / <sub>8</sub>    | 5 | 46-16d                                    | 16-16d             | 2,090                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS2.75/10 | 2 <sup>3</sup> / <sub>4</sub>       | 8 <sup>7</sup> / <sub>8</sub>    | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS2.75/12 | 2 <sup>3</sup> / <sub>4</sub>       | 10 <sup>7</sup> / <sub>8</sub>   | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,050                | 13,545                |
| HGUS2.75/14 | 2 <sup>3</sup> / <sub>4</sub>       | 12 <sup>7</sup> / <sub>8</sub>   | 4 | 66-16d                                    | 22-16d             | 5,360                                  | 12,900               | 13,700                | 14,240                |
| HGUS3.25/10 | 3 <sup>1</sup> / <sub>4</sub>       | 8 <sup>5</sup> / <sub>8</sub>    | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS3.25/12 | 3 <sup>1</sup> / <sub>4</sub>       | 10 <sup>5</sup> / <sub>8</sub>   | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,330                | 14,290                |
| HGUS26-2    | 3 <sup>7</sup> / <sub>16</sub>      | 5 <sup>7</sup> / <sub>16</sub>   | 4 | 20-16d                                    | 8-16d              | 2,155                                  | 4,355                | 4,875                 | 5,230                 |
| HGUS28-2    | 3 <sup>7</sup> / <sub>16</sub>      | 7 <sup>3</sup> / <sub>16</sub>   | 4 | 36-16d                                    | 12-16d             | 3,235                                  | 7,460                | 7,460                 | 7,460                 |
| HGUS210-2   | 3 <sup>7</sup> / <sub>16</sub>      | 9 <sup>3</sup> / <sub>16</sub>   | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS46      | 3 <sup>5</sup> / <sub>8</sub>       | 5 <sup>5</sup> / <sub>16</sub>   | 4 | 20-16d                                    | 8-16d              | 2,155                                  | 4,355                | 4,875                 | 5,230                 |
| HGUS48      | 3 <sup>5</sup> / <sub>8</sub>       | 7 <sup>1</sup> / <sub>16</sub>   | 4 | 36-16d                                    | 12-16d             | 3,235                                  | 7,460                | 7,460                 | 7,460                 |
| HGUS410     | 3 <sup>5</sup> / <sub>8</sub>       | 9 <sup>1</sup> / <sub>16</sub>   | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS412     | 3 <sup>5</sup> / <sub>8</sub>       | 10 <sup>7</sup> / <sub>16</sub>  | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,330                | 14,290                |
| HGUS414     | 3 <sup>5</sup> / <sub>8</sub>       | 12 <sup>7</sup> / <sub>16</sub>  | 4 | 66-16d                                    | 22-16d             | 5,360                                  | 13,860               | 14,350                | 14,350                |
| HGUS26-3    | 4 <sup>15</sup> / <sub>16</sub>     | 5 <sup>7</sup> / <sub>16</sub>   | 4 | 20-16d                                    | 8-16d              | 2,155                                  | 4,355                | 4,875                 | 5,230                 |
| HGUS28-3    | 4 <sup>15</sup> / <sub>16</sub>     | 7 <sup>3</sup> / <sub>16</sub>   | 4 | 36-16d                                    | 12-16d             | 3,235                                  | 7,460                | 7,460                 | 7,460                 |
| HGUS210-3   | 4 <sup>15</sup> / <sub>16</sub>     | 9 <sup>3</sup> / <sub>16</sub>   | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS212-3   | 4 <sup>15</sup> / <sub>16</sub>     | 10 <sup>3</sup> / <sub>4</sub>   | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,330                | 14,290                |
| HGUS214-3   | 4 <sup>15</sup> / <sub>16</sub>     | 12 <sup>3</sup> / <sub>4</sub>   | 4 | 66-16d                                    | 22-16d             | 5,360                                  | 13,860               | 14,350                | 14,350                |
| HGUS5.25/10 | 5 <sup>1</sup> / <sub>4</sub>       | 9 <sup>1</sup> / <sub>16</sub>   | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS5.25/12 | 5 <sup>1</sup> / <sub>4</sub>       | 10 <sup>5</sup> / <sub>8</sub>   | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,330                | 14,290                |
| HGUS5.5/8   | 5 <sup>1</sup> / <sub>2</sub>       | 6 <sup>15</sup> / <sub>16</sub>  | 4 | 36-16d                                    | 12-16d             | 3,235                                  | 7,460                | 7,460                 | 7,460                 |
| HGUS5.5/10  | 5 <sup>1</sup> / <sub>2</sub>       | 8 <sup>15</sup> / <sub>16</sub>  | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS5.5/12  | 5 <sup>1</sup> / <sub>2</sub>       | 10 <sup>1</sup> / <sub>2</sub>   | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,330                | 14,290                |
| HGUS5.5/14  | 5 <sup>1</sup> / <sub>2</sub>       | 12 <sup>1</sup> / <sub>2</sub>   | 4 | 66-16d                                    | 22-16d             | 5,515                                  | 9,695                | 9,695                 | 9,695                 |
| HGUS5.62/10 | 5 <sup>5</sup> / <sub>8</sub>       | 8 <sup>7</sup> / <sub>8</sub>    | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS5.62/12 | 5 <sup>5</sup> / <sub>8</sub>       | 10 <sup>7</sup> / <sub>16</sub>  | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,330                | 14,290                |
| HGUS5.62/14 | 55/8                                | 12 <sup>7</sup> / <sub>16</sub>  | 4 | 66-16d                                    | 22-16d             | 5,515                                  | 9,695                | 9,695                 | 9,695                 |
| HGUS26-4    | 6 <sup>9</sup> / <sub>16</sub>      | 5 <sup>7</sup> / <sub>16</sub>   | 4 | 20-16d                                    | 8-16d              | 2,155                                  | 4,355                | 4,875                 | 5,230                 |
| HGUS28-4    | 6 <sup>9</sup> / <sub>16</sub>      | 7 <sup>3</sup> / <sub>16</sub>   | 4 | 36-16d                                    | 12-16d             | 3,235                                  | 7,460                | 7,460                 | 7,460                 |
| HGUS210-4   | 6 <sup>9</sup> / <sub>16</sub>      | 9 <sup>3</sup> / <sub>16</sub>   | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS212-4   | 6 <sup>9</sup> / <sub>16</sub>      | 10 <sup>9</sup> / <sub>16</sub>  | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,330                | 14,290                |
| HGUS214-4   | 6 <sup>9</sup> / <sub>16</sub>      | 12 <sup>9</sup> / <sub>16</sub>  | 4 | 66-16d                                    | 22-16d             | 5,360                                  | 13,735               | 14,360                | 14,360                |
| HGUS6.88/10 | 6 <sup>7</sup> / <sub>8</sub>       | 8 <sup>13</sup> / <sub>16</sub>  | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS6.88/12 | 6 <sup>7</sup> / <sub>8</sub>       | 10 <sup>13</sup> / <sub>16</sub> | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,330                | 14,290                |
| HGUS6.88/14 | 6 <sup>7</sup> / <sub>8</sub>       | 12 <sup>13</sup> / <sub>16</sub> | 4 | 66-16d                                    | 22-16d             | 5,515                                  | 9,695                | 9,695                 | 9,695                 |
| HGUS7.25/8  | 7 <sup>1</sup> / <sub>4</sub>       | 7 <sup>1</sup> / <sub>4</sub>    | 4 | 36-16d                                    | 12-16d             | 3,235                                  | 7,460                | 7,460                 | 7,460                 |
| HGUS7.25/10 | 7 <sup>1</sup> / <sub>4</sub>       | 8 <sup>5</sup> / <sub>8</sub>    | 4 | 46-16d                                    | 16-16d             | 4,095                                  | 9,100                | 9,100                 | 9,100                 |
| HGUS7.25/12 | 7 <sup>1</sup> / <sub>4</sub>       | 10 <sup>5</sup> / <sub>8</sub>   | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,330                | 14,290                |
| HGUS7.25/14 | 7 <sup>1</sup> / <sub>4</sub>       | 12 <sup>5</sup> / <sub>8</sub>   | 4 | 66-16d                                    | 22-16d             | 5,515                                  | 9,695                | 9,695                 | 9,695                 |
| HGUS7.37/10 | 7 <sup>3</sup> / <sub>8</sub>       | 8 <sup>9</sup> / <sub>16</sub>   | 4 | 46-16d                                    | 16-16d             | 4,065                                  | 9,095                | 9,095                 | 9,095                 |
| HGUS7.37/12 | 7 <sup>3</sup> / <sub>8</sub>       | 10 <sup>9</sup> / <sub>16</sub>  | 4 | 56-16d                                    | 20-16d             | 5,205                                  | 11,915               | 13,330                | 14,290                |
| HGUS7.37/14 | 7 <sup>3</sup> / <sub>8</sub>       | 12 <sup>9</sup> / <sub>16</sub>  | 4 | 66-16d                                    | 22-16d             | 5,515                                  | 13,735               | 14,360                | 14,360                |

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>Refer to Figure 10 (this page) for definitions of hanger nomenclature (W, H, B).

<sup>2</sup>Refer to Section 3.2.3 of this report for nail sizes and required minimum physical properties.

<sup>3</sup>Tabulated allowable loads must be selected based on duration of load as permitted by the applicable building code.

<sup>4</sup>Joist nails must be driven at a 45 degree angle through the joist into the header/beam (double shear nailing) to achieve tabulated loads.

<sup>5</sup>Allowable uplift loads have been increased for wind or earthquake loading with no further increase allowed. The allowable uplift loads must be reduced when other load durations govern.

<sup>6</sup>HGUS series hangers provide torsional resistance, which is defined as the moment of not less than 75 pounds (334 N) times the depth of the joist at which the lateral movement of the top or bottom of the joist with respect to the vertical position of the joist is 0.125" (3.2 mm). The height, H, of the joist hanger must be at least 60 percent of the height of the joist unless additional lateral restraint is provided, as designed by others.

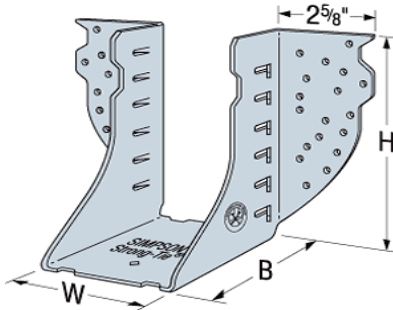


FIGURE 10—HGUS SERIES JOIST HANGER

TABLE 8—ALLOWABLE LOADS FOR THE HUS AND HUSC SERIES HANGERS

| MODEL NO.  | DIMENSIONS <sup>1</sup><br>(inches) |                                 |   | COMMON NAILS <sup>2</sup><br>(Quantity-Type) |                    | ALLOWABLE LOADS <sup>3,4,7</sup><br>(lbf) |                      |                       |                       |
|------------|-------------------------------------|---------------------------------|---|----------------------------------------------|--------------------|-------------------------------------------|----------------------|-----------------------|-----------------------|
|            | W                                   | H                               | B | Header                                       | Joist <sup>5</sup> | Uplift <sup>6</sup>                       | Download             |                       |                       |
|            |                                     |                                 |   |                                              |                    | C <sub>D</sub> = 1.6                      | C <sub>D</sub> = 1.0 | C <sub>D</sub> = 1.15 | C <sub>D</sub> = 1.25 |
| HUS26      | 1 <sup>5</sup> / <sub>8</sub>       | 5 <sup>3</sup> / <sub>8</sub>   | 3 | 14-16d                                       | 6-16d              | 1,320                                     | 2,735                | 3095                  | 3230                  |
| HUS28      | 1 <sup>5</sup> / <sub>8</sub>       | 7 <sup>1</sup> / <sub>16</sub>  | 3 | 22-16d                                       | 8-16d              | 1,760                                     | 4095                 | 4095                  | 4095                  |
| HUS210     | 1 <sup>5</sup> / <sub>8</sub>       | 9 <sup>1</sup> / <sub>16</sub>  | 3 | 30-16d                                       | 10-16d             | 2,635                                     | 5,450                | 5,795                 | 5,830                 |
| HUS1.81/10 | 1 <sup>13</sup> / <sub>16</sub>     | 8 <sup>7</sup> / <sub>8</sub>   | 3 | 30-16d                                       | 10-16d             | 2,675                                     | 5,510                | 5,830                 | 5,830                 |
| HUS46      | 3 <sup>9</sup> / <sub>16</sub>      | 4 <sup>5</sup> / <sub>16</sub>  | 2 | 4-16d                                        | 4-16d              | 1,165                                     | 1,090                | 1,225                 | 1,320                 |
| HUS48      | 3 <sup>9</sup> / <sub>16</sub>      | 6 <sup>15</sup> / <sub>16</sub> | 2 | 6-16d                                        | 6-16d              | 1,320                                     | 1,630                | 1,840                 | 1,980                 |
| HUS410     | 3 <sup>9</sup> / <sub>16</sub>      | 8 <sup>15</sup> / <sub>16</sub> | 2 | 8-16d                                        | 8-16d              | 3,265                                     | 2,175                | 2,455                 | 2,640                 |
| HUS412     | 3 <sup>9</sup> / <sub>16</sub>      | 10 <sup>3</sup> / <sub>4</sub>  | 2 | 10-16d                                       | 10-16d             | 3,435                                     | 2,720                | 3,070                 | 3,300                 |
| HUS26-2    | 3 <sup>1</sup> / <sub>8</sub>       | 5 <sup>3</sup> / <sub>16</sub>  | 2 | 4-16d                                        | 4-16d              | 1,165                                     | 1,090                | 1,225                 | 1,320                 |
| HUS28-2    | 3 <sup>1</sup> / <sub>8</sub>       | 7 <sup>3</sup> / <sub>16</sub>  | 2 | 6-16d                                        | 6-16d              | 1,320                                     | 1,630                | 1,840                 | 1,980                 |
| HUS210-2   | 3 <sup>1</sup> / <sub>8</sub>       | 9 <sup>3</sup> / <sub>16</sub>  | 2 | 8-16d                                        | 8-16d              | 3,285                                     | 2,175                | 2,455                 | 2,640                 |
| HUS212-2   | 3 <sup>1</sup> / <sub>8</sub>       | 11                              | 2 | 10-16d                                       | 10-16d             | 3,435                                     | 2,720                | 3,070                 | 3,300                 |

For **SI**: 1 inch = 25.4 mm, 1 pound = 4.45 N.

<sup>1</sup>Refer to Figure 8 (this page) for definitions of hanger nomenclature (W, H, B).

<sup>2</sup>Refer to Section 3.2.3 of this report for nail sizes and required minimum physical properties.

<sup>3</sup>Tabulated allowable loads must be selected based on duration of load as permitted by the applicable building code.

<sup>4</sup>HUS series hangers provide torsional resistance, which is defined as a moment of not less than 75 pounds (334 N) times the depth of the joist at which the lateral movement of the top or bottom of the joist with respect to the vertical position of the joist is 0.125 inch (3.2 mm). The height, H, of the joist hanger must be at least 60 percent of the height of the joist unless additional lateral restraint is provided, as designed by others.

<sup>5</sup>Joist nails must be driven at a 45 degree angle through the joist into the header/beam (double shear nailing) to achieve the tabulated loads.

<sup>6</sup>Allowable uplift loads have been increased for wind or earthquake loading with no further increase is allowed. The allowable uplift loads must be reduced when other load durations govern.

<sup>7</sup>HUS series hangers with widths (W) equal to or greater than 3<sup>9</sup>/<sub>16</sub> inches (90 mm) are available with header flanges turned in (concealed) and are identified with the model designation HUSC#.

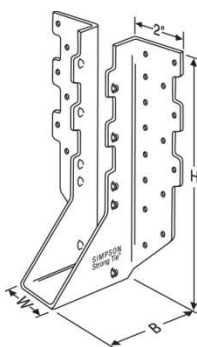


FIGURE 8—HUS SERIES HANGER (See Table 8)

TABLE 6 ALLOWABLE LOADS FOR THE LUS SERIES JOIST HANGERS

| MODEL NO. | DIMENSIONS <sup>1</sup><br>(inches) |          |       | COMMON NAILS <sup>2</sup><br>(Quantity-Type) |                    | ALLOWABLE LOADS <sup>3,4</sup><br>(lbf) |                      |                       |                       |
|-----------|-------------------------------------|----------|-------|----------------------------------------------|--------------------|-----------------------------------------|----------------------|-----------------------|-----------------------|
|           | W                                   | H        | B     | Header                                       | Joist <sup>5</sup> | Uplift <sup>6</sup>                     | Download             |                       |                       |
|           |                                     |          |       |                                              |                    | C <sub>D</sub> = 1.6                    | C <sub>D</sub> = 1.0 | C <sub>D</sub> = 1.15 | C <sub>D</sub> = 1.25 |
| LUS24     | 1 9/16                              | 3 1/8    | 1 3/4 | 4-10d                                        | 2-10d              | 435                                     | 670                  | 765                   | 820                   |
| LUS26     | 1 9/16                              | 4 3/4    | 1 3/4 | 4-10d                                        | 4-10d              | 1,165                                   | 865                  | 990                   | 1,060                 |
| LUS28     | 1 9/16                              | 6 5/8    | 1 3/4 | 6-10d                                        | 4-10d              | 1,165                                   | 1,100                | 1,260                 | 1,350                 |
| LUS210    | 1 9/16                              | 7 13/16  | 1 3/4 | 8-10d                                        | 4-10d              | 1,165                                   | 1,335                | 1,530                 | 1,640                 |
| LUS36     | 2 9/16                              | 5 1/4    | 2     | 4-16d                                        | 4-16d              | 1,060                                   | 1,030                | 1,170                 | 1,265                 |
| LUS310    | 2 9/16                              | 7 9/32   | 2     | 6-16d                                        | 4-16d              | 1,070                                   | 1,315                | 1,490                 | 1,610                 |
| LUS24-2   | 3 1/8                               | 3 1/8    | 2     | 4-16d                                        | 2-16d              | 410                                     | 800                  | 905                   | 980                   |
| LUS26-2   | 3 1/8                               | 4 15/16  | 2     | 4-16d                                        | 4-16d              | 1,060                                   | 1,030                | 1,170                 | 1,265                 |
| LUS28-2   | 3 1/8                               | 7        | 2     | 6-16d                                        | 4-16d              | 1,060                                   | 1,315                | 1,490                 | 1,610                 |
| LUS210-2  | 3 1/8                               | 8 15/16  | 2     | 8-16d                                        | 6-16d              | 1,445                                   | 1,830                | 2,075                 | 2,245                 |
| LUS214-2  | 3 1/8                               | 10 15/16 | 2     | 10-16d                                       | 6-16d              | 1,445                                   | 2,110                | 2,395                 | 2,590                 |
| LUS44     | 3 9/16                              | 3        | 2     | 4-16d                                        | 2-16d              | 410                                     | 800                  | 905                   | 980                   |
| LUS46     | 3 9/16                              | 4 3/4    | 2     | 4-16d                                        | 4-16d              | 1,060                                   | 1,030                | 1,170                 | 1,265                 |
| LUS48     | 3 9/16                              | 6 3/4    | 2     | 6-16d                                        | 4-16d              | 1,060                                   | 1,315                | 1,490                 | 1,610                 |
| LUS410    | 3 9/16                              | 8 3/4    | 2     | 8-16d                                        | 6-16d              | 1,445                                   | 1,830                | 2,075                 | 2,245                 |
| LUS414    | 3 9/16                              | 10 3/4   | 2     | 10-16d                                       | 6-16d              | 1,445                                   | 2,110                | 2,395                 | 2,590                 |
| LUS26-3   | 4 5/8                               | 4 1/8    | 2     | 4-16d                                        | 4-16d              | 1,060                                   | 1,030                | 1,170                 | 1,265                 |
| LUS28-3   | 4 5/8                               | 6 1/4    | 2     | 6-16d                                        | 4-16d              | 1,060                                   | 1,315                | 1,490                 | 1,610                 |
| LUS210-3  | 4 5/8                               | 8 13/16  | 2     | 8-16d                                        | 6-16d              | 1,445                                   | 1,830                | 2,075                 | 2,245                 |

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>Refer to Figure 6 (this page) for definitions of hanger nomenclature (W, H, B).

<sup>2</sup>Refer to Section 3.2.3 of this report for nail sizes and required minimum physical properties.

<sup>3</sup>Tabulated allowable loads must be selected based on duration of load as permitted by the applicable building code.

<sup>4</sup>LUS Series hangers provide torsional resistance, which is defined as a moment of not less than 75 pounds (334 N) times the depth of the joist at which the lateral movement of the top or bottom of the joist with respect to the vertical position of the joist is 0.125 inch (3.2 mm). The height, H, of the joist hanger must be at least 60 percent of the height of the joist unless additional lateral restraint is provided, as designed by others.

<sup>5</sup>Joist nails must be driven at a 45 degree angle through the joist into the header/beam (double shear nailing) to achieve the tabulated loads.

<sup>6</sup>Allowable uplift loads have been increased for wind or earthquake loading with no further increase is allowed. The allowable uplift loads must be reduced when other load durations govern.

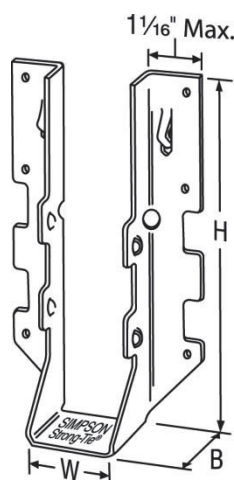


FIGURE 6—LUS SERIES HANGER  
(See Table 6)

TABLE 7—NAILING SCHEDULES, DIMENSIONS AND ALLOWABLE LOADS FOR HTW, LTW AND MTW TWIST STRAP TIES<sup>5</sup>

| STOCK NUMBER | STEEL GAGE | STRAP DIMENSIONS (in.) |    |         |         | FASTENER SCHEDULE |                   | ALLOWABLE UPLIFT LOAD <sup>1,2</sup><br>C <sub>D</sub> = 1.6 (lbs) |                                   |
|--------------|------------|------------------------|----|---------|---------|-------------------|-------------------|--------------------------------------------------------------------|-----------------------------------|
|              |            | W                      | L  | L1      | L2      | Qty <sup>3</sup>  | Type <sup>4</sup> | Stud-to-rim joist installation                                     | Truss-to-top – plate installation |
| HTW16        | 14         | 1 1/4                  | 16 | 5 1/8   | 5 1/8   | 16                | 10d x 1 1/2       | 1,115                                                              | 1,355                             |
|              |            |                        |    |         |         | 16                | 10d common        | 1,300                                                              | 1,355                             |
| HTW20        | 14         | 1 1/4                  | 20 | 7 1/8   | 7 1/8   | 24                | 10d x 1 1/2       | 1,555                                                              | 1,355                             |
|              |            |                        |    |         |         | 20                | 10d common        | 1,355                                                              | 1,355                             |
| HTW24        | 14         | 1 1/4                  | 24 | 9 1/8   | 9 1/8   | 24                | 10d x 1 1/2       | 1,555                                                              | 1,355                             |
|              |            |                        |    |         |         | 20                | 10d common        | 1,355                                                              | 1,355                             |
| HTW28        | 14         | 1 1/4                  | 28 | 11 1/8  | 11 1/8  | 24                | 10d x 1 1/2       | 1,555                                                              | 1,355                             |
|              |            |                        |    |         |         | 20                | 10d common        | 1,355                                                              | 1,355                             |
| HTW30        | 14         | 1 1/4                  | 30 | 7       | 17 1/4  | 24                | 10d x 1 1/2       | 1,555                                                              | 1,355                             |
|              |            |                        |    |         |         | 20                | 10d common        | 1,355                                                              | 1,355                             |
| HTW30C       | 14         | 1 1/4                  | 30 | 12 1/8  | 12 1/8  | 24                | 10d x 1 1/2       | 1,555                                                              | 1,355                             |
|              |            |                        |    |         |         | 20                | 10d common        | 1,355                                                              | 1,355                             |
| LTW12        | 18         | 1 1/4                  | 12 | 4 1/2   | 4 1/2   | 12                | 10d x 1 1/2       | 770                                                                | 625                               |
|              |            |                        |    |         |         | 12                | 10d common        | 770                                                                | 625                               |
| LTW16        | 18         | 1 1/4                  | 16 | 6 1/2   | 6 1/2   | 12                | 10d x 1 1/2       | 770                                                                | 625                               |
|              |            |                        |    |         |         | 12                | 10d common        | 770                                                                | 625                               |
| LTW18        | 18         | 1 1/4                  | 18 | 7 1/2   | 7 1/2   | 12                | 10d x 1 1/2       | 770                                                                | 625                               |
|              |            |                        |    |         |         | 12                | 10d common        | 770                                                                | 625                               |
| LTW20        | 18         | 1 1/4                  | 20 | 8 1/2   | 8 1/2   | 12                | 10d x 1 1/2       | 770                                                                | 625                               |
|              |            |                        |    |         |         | 12                | 10d common        | 770                                                                | 625                               |
| MTW12        | 16         | 1 1/4                  | 12 | 4 1/2   | 4 1/2   | 14                | 10d x 1 1/2       | 1,185                                                              | 965                               |
|              |            |                        |    |         |         | 14                | 10d common        | 1,185                                                              | 965                               |
| MTW16        | 16         | 1 1/4                  | 16 | 6 1/2   | 6 1/2   | 14                | 10d x 1 1/2       | 1,185                                                              | 965                               |
|              |            |                        |    |         |         | 14                | 10d common        | 1,185                                                              | 965                               |
| MTW18        | 16         | 1 1/4                  | 18 | 7 1/2   | 7 1/2   | 14                | 10d x 1 1/2       | 1,185                                                              | 965                               |
|              |            |                        |    |         |         | 14                | 10d common        | 1,185                                                              | 965                               |
| MTW20        | 16         | 1 1/4                  | 20 | 8 1/2   | 8 1/2   | 14                | 10d x 1 1/2       | 1,185                                                              | 965                               |
|              |            |                        |    |         |         | 14                | 10d common        | 1,185                                                              | 965                               |
| MTW24C       | 16         | 1 1/4                  | 24 | 10 7/16 | 10 7/16 | 14                | 10d x 1 1/2       | 1,185                                                              | 965                               |
|              |            |                        |    |         |         | 14                | 10d common        | 1,185                                                              | 965                               |
| MTW28C       | 16         | 1 1/4                  | 28 | 12 7/16 | 12 7/16 | 14                | 10d x 1 1/2       | 1,185                                                              | 965                               |
|              |            |                        |    |         |         | 14                | 10d common        | 1,185                                                              | 965                               |
| MTW30C       | 16         | 1 1/4                  | 30 | 13 7/16 | 13 7/16 | 14                | 10d x 1 1/2       | 1,185                                                              | 965                               |
|              |            |                        |    |         |         | 14                | 10d common        | 1,185                                                              | 965                               |
| MTW30        | 16         | 1 1/4                  | 30 | 8 5/16  | 18 9/16 | 14                | 10d x 1 1/2       | 1,185                                                              | 965                               |
|              |            |                        |    |         |         | 14                | 10d common        | 1,185                                                              | 965                               |

For SI: 1 inch = 25.4 mm, 1 lb = 4.45 N.

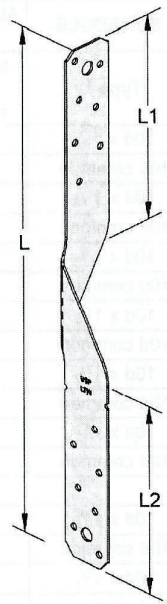
<sup>1</sup>Allowable uplift loads have been adjusted for a load duration factor, C<sub>D</sub>, of 1.60, corresponding to a ten-minute load duration (i.e., wind or earthquake loading), in accordance with the NDS. The allowable loads do not apply to loads of other durations, and are not permitted to be adjusted for other load durations. See Section 4.1 for additional design requirements.

<sup>2</sup>Allowable uplift loads shown are for installations in sawn lumber or structural composite lumber complying with Section 3.26.2.

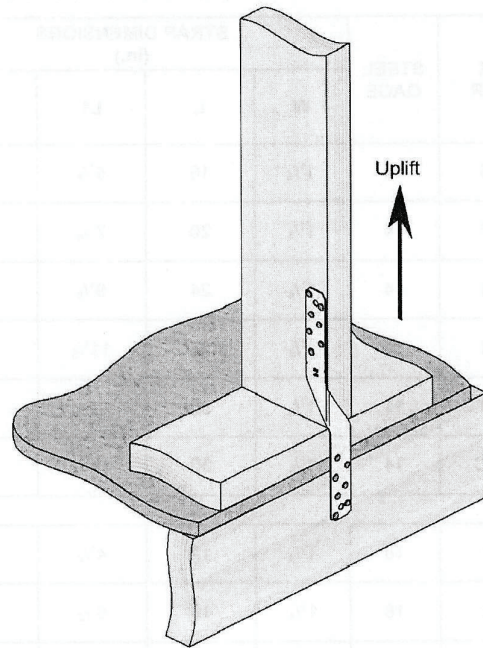
<sup>3</sup>Listed fastener quantity is the total required for the connection, with half the tabulated quantity at each end.

<sup>4</sup>See Section 3.26.3 for required nail dimensions and mechanical properties. HTW, LTW and MTW twist strap ties may be installed with either 10d x 1 1/2 or 10d common nails.

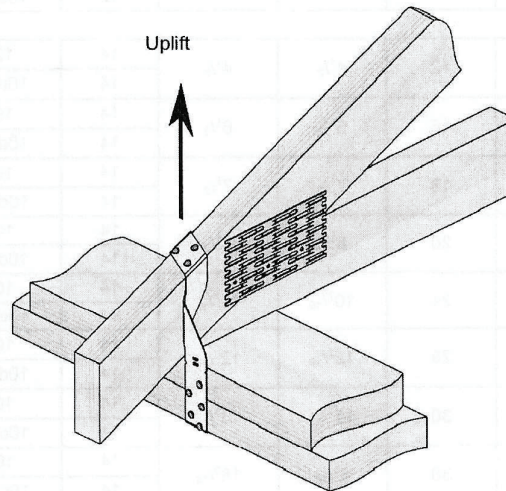
<sup>5</sup>Some illustrations for the twist straps show connection that could cause cross-grain tension or bending of the wood during loading if not reinforced sufficiently. In such cases, mechanical reinforcement should be considered.



LTW/MTW/HTW



Typical LTW/MTW/HTW  
Stud-To-Rim Joist Installation



Typical LTW/MTW/HTW  
Truss-To-Top Plate Installation

FIGURE 7—DIMENSIONS AND INSTALLATION OF LTW, MTW AND HTW TWIST STRAP TIES

TABLE 13—ALLOWABLE LOADS FOR THE SUR/SUL SERIES JOIST HANGERS

| MODEL NO.    | DIMENSIONS <sup>1</sup><br>(inches) |                                 |                                |                                |                                | FASTENERS<br>(Quantity-Type) |                                        | ALLOWABLE LOADS <sup>2,6,7</sup> (lbs) |                     |                      |                      |
|--------------|-------------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|------------------------------|----------------------------------------|----------------------------------------|---------------------|----------------------|----------------------|
|              | W                                   | H                               | B                              | A <sub>1</sub>                 | A <sub>2</sub>                 | Header                       | Joist                                  | Uplift <sup>5</sup>                    | Download            |                      |                      |
|              |                                     |                                 |                                |                                |                                |                              |                                        | C <sub>D</sub> =1.6                    | C <sub>D</sub> =1.0 | C <sub>D</sub> =1.15 | C <sub>D</sub> =1.25 |
| SUR/L24      | 1 <sup>9</sup> / <sub>16</sub>      | 3 <sup>1</sup> / <sub>16</sub>  | 2                              | 1 <sup>1</sup> / <sub>8</sub>  | 1 <sup>1</sup> / <sub>4</sub>  | 4-16d                        | 4-10d x 1 <sup>1</sup> / <sub>2</sub>  | 395                                    | 575                 | 650                  | 705                  |
| SUR/L26      | 1 <sup>9</sup> / <sub>16</sub>      | 5                               | 2                              | 1 <sup>1</sup> / <sub>8</sub>  | 1 <sup>5</sup> / <sub>16</sub> | 6-16d                        | 6-10d x 1 <sup>1</sup> / <sub>2</sub>  | 675                                    | 865                 | 980                  | 1,055                |
| SUR/L210     | 1 <sup>9</sup> / <sub>16</sub>      | 8                               | 2                              | 1 <sup>1</sup> / <sub>8</sub>  | 1 <sup>5</sup> / <sub>16</sub> | 10-16d                       | 10-10d x 1 <sup>1</sup> / <sub>2</sub> | 1,445                                  | 1,440               | 1,635                | 1,760                |
| SUR/L214     | 1 <sup>9</sup> / <sub>16</sub>      | 10                              | 2                              | 1 <sup>1</sup> / <sub>8</sub>  | 1 <sup>5</sup> / <sub>16</sub> | 12-16d                       | 12-10d x 1 <sup>1</sup> / <sub>2</sub> | 1,890                                  | 1,730               | 1,960                | 2,115                |
| SUR/L1.81/9  | 1 <sup>13</sup> / <sub>16</sub>     | 9                               | 3                              | 1 <sup>5</sup> / <sub>8</sub>  | 2 <sup>5</sup> / <sub>16</sub> | 12-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3,4</sup>                     | 1,730               | 1,955                | 1,955                |
| SUR/L1.81/11 | 1 <sup>13</sup> / <sub>16</sub>     | 11                              | 3                              | 1 <sup>5</sup> / <sub>8</sub>  | 2 <sup>5</sup> / <sub>16</sub> | 16-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3,4</sup>                     | 2,300               | 2,560                | 2,560                |
| SUR/L1.81/14 | 1 <sup>13</sup> / <sub>16</sub>     | 13 <sup>3</sup> / <sub>4</sub>  | 3                              | 1 <sup>5</sup> / <sub>8</sub>  | 2 <sup>5</sup> / <sub>16</sub> | 20-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3,4</sup>                     | 2,560               | 2,560                | 2,560                |
| SUR/L2.06/9  | 2 <sup>1</sup> / <sub>16</sub>      | 9 <sup>1</sup> / <sub>16</sub>  | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>5</sup> / <sub>8</sub>  | 2 <sup>1</sup> / <sub>8</sub>  | 14-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,015               | 2,285                | 2,465                |
| SUR/L2.06/11 | 2 <sup>1</sup> / <sub>16</sub>      | 11 <sup>1</sup> / <sub>4</sub>  | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>5</sup> / <sub>8</sub>  | 2 <sup>1</sup> / <sub>8</sub>  | 16-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,300               | 2,610                | 2,665                |
| SUR/L2.06/14 | 2 <sup>1</sup> / <sub>16</sub>      | 13 <sup>5</sup> / <sub>8</sub>  | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>5</sup> / <sub>8</sub>  | 2 <sup>1</sup> / <sub>8</sub>  | 18-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,590               | 2,665                | 2,665                |
| SUR/L2.1/9   | 2 <sup>1</sup> / <sub>8</sub>       | 9 <sup>1</sup> / <sub>16</sub>  | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>9</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>8</sub>  | 14-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,015               | 2,285                | 2,465                |
| SUR/L2.1/11  | 2 <sup>1</sup> / <sub>8</sub>       | 11 <sup>3</sup> / <sub>16</sub> | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>9</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>8</sub>  | 16-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,300               | 2,610                | 2,665                |
| SUR/L2.1/14  | 2 <sup>1</sup> / <sub>8</sub>       | 13 <sup>9</sup> / <sub>16</sub> | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>9</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>8</sub>  | 18-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,590               | 2,665                | 2,665                |
| SUR/L2.37/9  | 2 <sup>3</sup> / <sub>8</sub>       | 8 <sup>15</sup> / <sub>16</sub> | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>5</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>8</sub>  | 14-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,015               | 2,285                | 2,465                |
| SUR/L2.37/11 | 2 <sup>3</sup> / <sub>8</sub>       | 11 <sup>3</sup> / <sub>16</sub> | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>5</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>8</sub>  | 16-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,300               | 2,610                | 2,665                |
| SUR/L2.37/14 | 2 <sup>3</sup> / <sub>8</sub>       | 13 <sup>7</sup> / <sub>16</sub> | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>5</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>8</sub>  | 18-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,590               | 2,665                | 2,665                |
| SUR/L2.56/9  | 2 <sup>9</sup> / <sub>16</sub>      | 8 <sup>13</sup> / <sub>16</sub> | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>8</sub>  | 2 <sup>1</sup> / <sub>8</sub>  | 14-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,015               | 2,285                | 2,465                |
| SUR/L2.56/11 | 2 <sup>9</sup> / <sub>16</sub>      | 11 <sup>3</sup> / <sub>16</sub> | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>8</sub>  | 2 <sup>1</sup> / <sub>8</sub>  | 16-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,300               | 2,615                | 2,665                |
| SUR/L2.56/14 | 2 <sup>9</sup> / <sub>16</sub>      | 13 <sup>5</sup> / <sub>16</sub> | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>8</sub>  | 2 <sup>1</sup> / <sub>8</sub>  | 18-16d                       | 2-10d x 1 <sup>1</sup> / <sub>2</sub>  | 210 <sup>3</sup>                       | 2,590               | 2,665                | 2,665                |
| SUR/L26-2    | 3 <sup>1</sup> / <sub>8</sub>       | 4 <sup>15</sup> / <sub>16</sub> | 2 <sup>5</sup> / <sub>8</sub>  | 1 <sup>1</sup> / <sub>2</sub>  | 2 <sup>3</sup> / <sub>8</sub>  | 8-16d                        | 4-16d x 2 <sup>1</sup> / <sub>2</sub>  | 725                                    | 1,150               | 1,305                | 1,325                |
| SUR/L210-2   | 3 <sup>1</sup> / <sub>8</sub>       | 8 <sup>1</sup> / <sub>16</sub>  | 2 <sup>5</sup> / <sub>8</sub>  | 1 <sup>7</sup> / <sub>16</sub> | 2 <sup>3</sup> / <sub>8</sub>  | 14-16d                       | 6-16d x 2 <sup>1</sup> / <sub>2</sub>  | 1,160                                  | 2,015               | 2,285                | 2,345                |
| SUR/L214-2   | 3 <sup>1</sup> / <sub>8</sub>       | 12 <sup>1</sup> / <sub>16</sub> | 2 <sup>7</sup> / <sub>16</sub> | 1 <sup>7</sup> / <sub>16</sub> | 2 <sup>3</sup> / <sub>8</sub>  | 18-16d                       | 8-16d x 2 <sup>1</sup> / <sub>2</sub>  | 1,505                                  | 2,345               | 2,345                | 2,345                |
| SUR/L46      | 3 <sup>9</sup> / <sub>16</sub>      | 4 <sup>3</sup> / <sub>4</sub>   | 2 <sup>5</sup> / <sub>8</sub>  | 1                              | 2 <sup>3</sup> / <sub>8</sub>  | 8-16d                        | 4-16d                                  | 730                                    | 1,150               | 1,305                | 1,325                |
| SUR/L410     | 3 <sup>9</sup> / <sub>16</sub>      | 8 <sup>1</sup> / <sub>2</sub>   | 2 <sup>5</sup> / <sub>8</sub>  | 1                              | 2 <sup>3</sup> / <sub>8</sub>  | 14-16d                       | 6-16d                                  | 1,160                                  | 2,015               | 2,285                | 2,345                |
| SUR/L414     | 3 <sup>9</sup> / <sub>16</sub>      | 12 <sup>1</sup> / <sub>2</sub>  | 2 <sup>5</sup> / <sub>8</sub>  | 1                              | 2 <sup>3</sup> / <sub>8</sub>  | 18-16d                       | 8-16d                                  | 1,490                                  | 2,345               | 2,345                | 2,345                |

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>Refer to Figure 13a (this page) for definitions of hanger nomenclature (W, H, B, A<sub>1</sub>, A<sub>2</sub>).

<sup>2</sup>Tabulated allowable loads must be selected based on duration of load as permitted by the applicable building code.

<sup>3</sup>Optional triangle holes may be filled (requires web stiffeners for I-joist) for additional uplift resistance. When a total of six 10d x 1<sup>1</sup>/<sub>2</sub>-inch-long nails are installed into the joist for 9- and 11-inch models, an uplift value of 825 lbs may be used. When a total of eight 10d x 1<sup>1</sup>/<sub>2</sub>" nails are installed into the joist for 14-inch models, an uplift value of 1,190 lbs may be used.

<sup>4</sup>Uplift value based on use of solid sawn lumber or LVL joist member. When using an I-joist as the joist member, allowable uplift must be taken as 140 lbs.

<sup>5</sup>The uplift loads have been increased for wind or earthquake loading with no further increase allowed. The allowable uplift loads must be reduced when other load durations govern.

<sup>6</sup>SUR/L series hangers provide torsional resistance, which is defined as a moment of not less than 75 pounds (334 N) times the depth of the joist at which the lateral movement of the top or bottom of the joist with respect to its vertical position is 0.125 inch (3.2 mm). The height (H) of the hanger must be at least 60 percent of the height of the joist unless additional lateral restraint is provided, as designed by others.

<sup>7</sup>The 2-2x and a 4x SUR/L models are available with the A<sub>2</sub> flanges concealed and are specified with the model designation SUR/LC

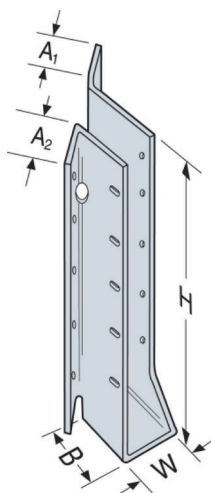


FIGURE 13A—SUL SERIES JOIST HANGER

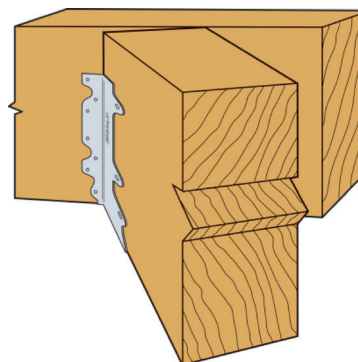


FIGURE 13B—TYPICAL SUR HANGER INSTALLATION

## Valley Detail - ASCE 7-16: 180 mph, 30' Mean Height, Partially Enclosed, Exp. C, Kzt=1.00

Top Chord 2x4 SP #2N, SPF #1/#2, DF-L #2 or better.  
Bot Chord 2x4 SP #2N or SPF #1/#2 or better.  
Webs 2x4 SP #3, SPF #1/#2, DF-L #2 or better.

\*\*\* Attach each valley to every supporting truss with:  
535# connection or with (1) Simpson H2.5A or equivalent connector for  
ASCE 7-16 180 mph. 30' Mean Height, Part. Enc.  
Building, Exp. C, Wind TC DL=5 psf, Kzt = 1.00  
Or  
ASCE 7-16 160 mph. 30' Mean Height, Part. Enc.  
Building, Exp. D, Wind TC DL=5 psf, Kzt = 1.00

Bottom chord may be square or pitched cut as shown.

Valleys short enough to be cut as solid triangular members from a single 2x6, or larger as required, shall be permitted in lieu of fabricating from separate 2x4 members.

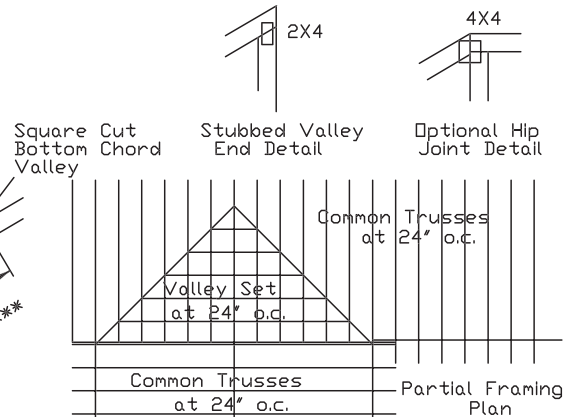
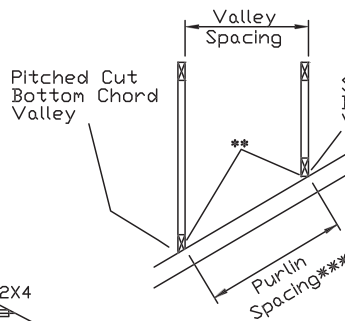
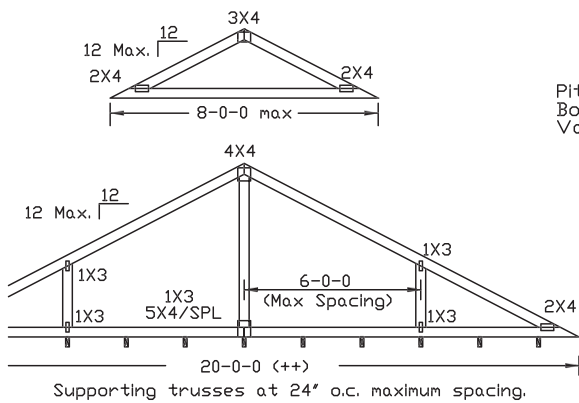
All plates shown are Alpine Wave Plates.

Unless specified otherwise on engineer's sealed design, for vertical valley webs taller than 7-9' apply 2x4 'T' reinforcement, 80% length of web, same species and grade or better, attached with 10d box (0.128" x 3.0") nails at 6" o.c. In lieu of 'T' reinforcement, 2x4 Continuous Lateral Restraint applied at mid-length of web is permitted with diagonal bracing as shown in DRWG BRCLBANC1014.

Top chord of truss beneath valley set must be braced with:  
properly attached, rated sheathing applied prior to valley truss installation.  
Or  
Purlins at 24" o.c. or as otherwise specified on engineer's sealed design  
Or  
By valley trusses used in lieu of purlin spacing as specified on Engineer's sealed design.

\*\*\* Note that the purlin spacing for bracing the top chord of the truss beneath the valley is measured along the slope of the top chord.

++ Larger spans may be built as long as the vertical height does not exceed 14'-0".



155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025

**WARNING: READ AND FOLLOW ALL NOTES ON THIS DRAWING**  
**IMPORTANT: FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.**  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI Building Component Safety Information, by TPI and SBCA for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7 or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-2 for standard plate positions.  
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation & bracing of trusses.  
A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec2.  
For more information see this job's general notes page and these web sites:  
ALPINE: [www.alphetw.com](http://www.alphetw.com); TPI: [www.tpinet.org](http://www.tpinet.org); SBCA: [www.sbcacomponents.com](http://www.sbcacomponents.com); ICC: [www.iccsafe.org](http://www.iccsafe.org)

|          |           |      |       |      |               |
|----------|-----------|------|-------|------|---------------|
| TC LL    | 30        | 30   | 40PSF | REF  | VALLEY DETAIL |
| TC DL    | 20        | 15   | 7PSF  | DATE | 01/26/2018    |
| BC DL    | 10        | 10   | 10PSF | DRWG | VAL180160118  |
| BC LL    | 0         | 0    | 0PSF  |      |               |
| TOT. LD. | 60        | 55   | 57PSF |      |               |
| DUR.FAC. | 1.25/1.33 | 1.15 | 1.15  |      |               |
| SPACING  | 24.0'     |      |       |      |               |

## GENERAL NOTES

Trusses are not marked in any way to identify the frequency or location of temporary lateral restraint and diagonal bracing. Follow the recommendations for handling, installing and temporary restraining and bracing of trusses. Refer to **BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses\*\*\*** for more detailed information.

Truss Design Drawings may specify locations of permanent lateral restraint or reinforcement for individual truss members. Refer to the **BCSI-B3\*\*\*** for more information. All other permanent bracing design is the responsibility of the building designer.

## NOTAS GENERALES

Los trusses no están marcados de ningún modo que identifique la frecuencia o localización de restricción lateral y arrioste diagonal temporales. Use las recomendaciones de manejo, instalación, restricción y arrioste temporal de los trusses. Vea el folleto **BCSI - Guía de Buena Práctica para el Manejo, Instalación, Restricción y Arrioste de los Trusses de Madera Conectados con Placas de Metal\*\*\*** para información más detallada.

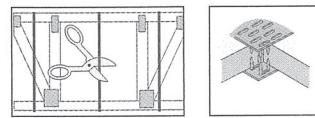
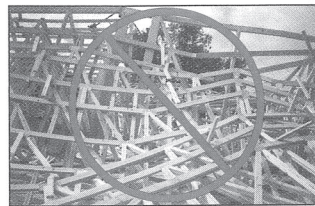
Los dibujos de diseño de los trusses pueden especificar las localizaciones de restricción lateral permanente o refuerzo en los miembros individuales del truss. Vea la hoja resumen **BCSI-B3\*\*\*** para más información. El resto de los diseños de arriostres permanentes son la responsabilidad del diseñador del edificio.

**WARNING!** The consequences of improper handling, erecting, installing, restraining and bracing can result in a collapse of the structure, or worse, serious personal injury or death.

**¡ADVERTENCIA!** El resultado de un manejo, levantamiento, instalación, restricción y arrioste incorrecto puede ser la caída de la estructura o aún peor, heridos o muertos.

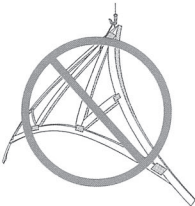
**CAUTION!** Banding and truss plates have sharp edges. Wear gloves when handling and safety glasses when cutting banding.

**¡CAUTELA!** Chapas de metal tienen bordes afilados. Lleve guantes y lentes protectores cuando corte las ataduras.



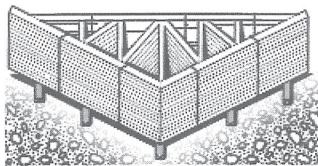
## HANDLING — MANEJO

**NOTICE** Avoid lateral bending. Evite la flexión lateral.



**NOTICE** The contractor is responsible for properly receiving, unloading and storing the trusses at the jobsite. Unload trusses to smooth surface to prevent damage.

El contratista tiene la responsabilidad de recibir, descargar y almacenar adecuadamente los trusses en la obra. Descargue los trusses en la tierra lisa para prevenir el daño.



Trusses may be unloaded directly on the ground at the time of delivery or stored temporarily in contact with the ground after delivery. If trusses are to be stored horizontally for more than one week, place blocking of sufficient height beneath the stack of trusses at 8' (2.4 m) to 10' (3 m) on-center (o.c.).

Los trusses pueden ser descargados directamente en el suelo en aquel momento de entrega o almacenados temporalmente en contacto con el suelo después de entrega. Si los trusses estarán guardados horizontalmente para más de una semana, ponga bloqueando de altura suficiente detrás de la pila de los trusses a 8 hasta 10 pies en centro (o.c.).

For trusses stored for more than one week, cover bundles to protect from the environment.

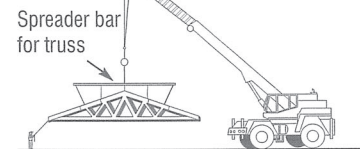
Para trusses guardados por más de una semana, cubra los paquetes para protegerlos del ambiente.

Refer to **BCSI\*\*\*** for more detailed information pertaining to handling and jobsite storage of trusses.

Vea el folleto **BCSI\*\*\*** para información más detallada sobre el manejo y almacenado de los trusses en área de trabajo.

**CAUTION!** Use special care in windy weather or near power lines and airports.

**¡CAUTELA!** Utilice cuidado especial en días ventosos o cerca de cables eléctricos o de aeropuertos.



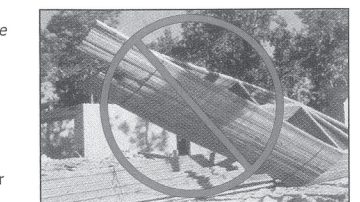
Use proper rigging and hoisting equipment.

Use equipo apropiado para levantar e improvisar.



**DO NOT** store unbraced bundles upright.

**NO** almacene verticalmente los trusses sueltos.



**DO NOT** store on uneven ground.

**NO** almacene en tierra desigual.



## HOISTING AND PLACEMENT OF TRUSS BUNDLES

## RECOMENDACIONES PARA LEVANTAR PAQUETES DE TRUSSES

**DO NOT** overload the crane.

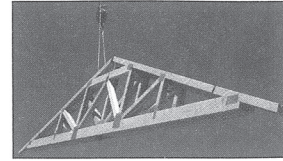
**NO** sobrecargue la grúa.

**NEVER** use banding to lift a bundle.

**NUNCA** use las ataduras para levantar un paquete.

A single lift point may be used for bundles of top chord pitch trusses up to 45' (13.7 m) and parallel chord trusses of 30' (9.1 m) or less. Use at least two lift points for bundles with trusses up to 60' (18.3 m). Use at least 3 lift points for bundles with trusses greater than 60' (18.3 m).

Puede usar un solo lugar de levantar para paquetes de trusses de la cuerda superior hasta 45' y trusses de cuerdas paralelas de 30' o menos. Puede usar dos puntos de levantar para paquetes más de 60 pies. Use por lo menos tres puntos de levantar para paquetes más de 60 pies.



**WARNING!** Do not over load supporting structure with truss bundle.

**¡ADVERTENCIA!** No sobrecargue la estructura apoyada con el paquete de trusses.

Place truss bundles in stable position.

Puse paquetes de trusses en una posición estable.

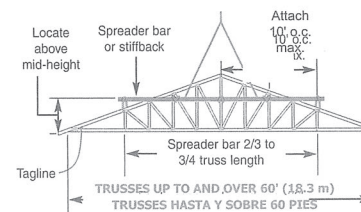
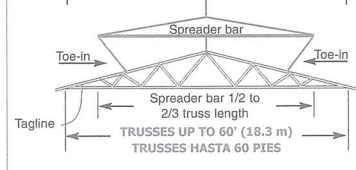
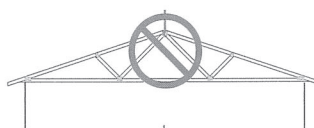
MECHANICAL HOISTING RECOMMENDATIONS FOR SINGLE TRUSSES  
RECOMENDACIONES PARA LEVANTAR TRUSSES INDIVIDUALES

Hold each truss in position with the erection equipment until top chord temporary lateral restraint is installed and the truss is fastened to the bearing points.

Sostenga cada truss en posición con equipo de grúa hasta que la restricción lateral temporal de la cuerda superior esté instalado y el truss está asegurado en los soportes.

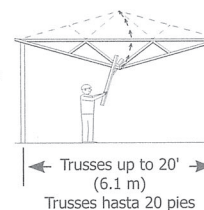
**NOTICE** Using a single pick-point at the peak can damage the truss.

El uso de un solo lugar en el pico para levantar puede hacer daño al truss.

INSTALLATION OF SINGLE TRUSSES BY HAND  
RECOMENDACIONES DE LEVANTAMIENTO DE TRUSSES INDIVIDUALES POR LA MANO

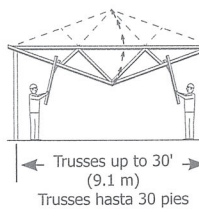
Trusses 20' (6.1 m) or less, support near peak.

Soporte cerca al pico los trusses de 20 pies o menos.



Trusses 30' (9.1 m) or less, support at quarter points.

Soporte de los cuartos de tramo los trusses de 30 pies o menos.

TEMPORARY RESTRAINT & BRACING  
RESTRICCIÓN Y ARRIOSTRE TEMPORAL

**NOTICE** Refer to **BCSI-B2\*\*\*** for more information.

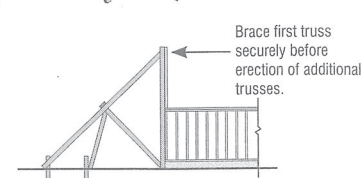
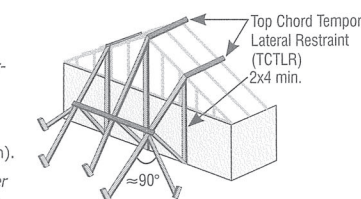
Vea el resumen **BCSI-B2\*\*\*** para más información.

Locate ground braces for first truss directly in line with all rows of top chord temporary lateral restraint (see table in the next column).

Coloque los arriostres de tierra para el primer truss directamente en línea con cada una de las filas de restricción lateral temporal de la cuerda superior (vea la tabla en la próxima columna).



**DO NOT** walk on unbraced trusses. **NO** camine en trusses sueltos.



STALLING, RESTRAINING AND BRACING OF TRUSSES

Please always consult a Registered Design Professional.

B1

STEPS TO SETTING TRUSSES

LAS MEDIDAS DE LA INSTALACIÓN DE LOS TRUSSES

- 1) Install ground bracing. 2) Set first truss and attach securely to ground bracing. 3) Set next 4 trusses with short member temporary lateral restraint (see below). 4) Install top chord diagonal bracing (see below). 5) Install web member plane diagonal bracing to stabilize the first five trusses (see below). 6) Install bottom chord temporary lateral restraint and diagonal bracing (see below). 7) Repeat process on groups of four trusses until all trusses are set.

- 1) Instale los arriostres de tierra. 2) Instale el primero truss y ate seguramente al arriostre de tierra. 3) Instale los próximos 4 trusses con restricción lateral temporal de miembro corto (vea abajo). 4) Instale el arriostre diagonal de la cuerda superior (vea abajo). 5) Instale arriostre diagonal para los planos de los miembros secundarios para estabilizar los primeros cinco trusses (vea abajo). 6) Instale la restricción lateral temporal y arriostre diagonal para la cuerda inferior (vea abajo). 7) Repita este procedimiento en grupos de cuatro trusses hasta que todos los trusses estén instalados.

NOTICE Refer to BCSI-B2\*\*\* for more information.

Vea el resumen BCSI-B2\*\*\* para más información.

RESTRAINT/BRACING FOR ALL PLANES OF TRUSSES

RESTRICCIÓN/ARRIOSTRE PARA TODOS PLANOS DE TRUSSES

- This restraint & bracing method is for all trusses except 3x2 and 4x2 parallel chord trusses (PCTs). See top of next column for temporary restraint and bracing of PCTs.

Este método de restricción y arriostre es para todo trusses excepto trusses de cuerdas paralelas (PCTs) 3x2 y 4x2. Vea la parte superior de la columna para la restricción y arriostre temporal de PCTs.

1) TOP CHORD — CUERDA SUPERIOR

| Truss Span<br>Longitud de Tramo | Top Chord Temporary Lateral Restraint (TCTLR) Spacing<br>Espaciamiento del Arriostre Temporal de la Cuerda Superior |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Up to 30' (9.1 m)               | 10' (3 m) o.c. max.                                                                                                 |
| 30' (9.1 m) – 45' (13.7 m)      | 8' (2.4 m) o.c. max.                                                                                                |
| 45' (13.7 m) – 60' (18.3 m)     | 6' (1.8 m) o.c. max.                                                                                                |
| 60' (18.3 m) – 80' (24.4 m)*    | 4' (1.2 m) o.c. max.                                                                                                |

\*Consult a Registered Design Professional for trusses longer than 60' (18.3 m).

\*Consulte a un Profesional Registrado de Diseño para trusses más de 60 pies.

- See BCSI-B2\*\*\* for TCTLR options. Vea el BCSI-B2\*\*\* para las opciones de TCTLR.

NOTICE Refer to BCSI-B3\*\*\* for Gable End Frame restraint/bracing/reinforcement information.

Para información sobre restricción/arriostre/refuerzo para Armazones Hastiales vea el resumen BCSI-B3\*\*\*

Note: Ground bracing not shown for clarity.

2) WEB MEMBER PLANE — PLANO DE LOS MIEMBROS SECUNDARIOS

NOTICE

LATERAL RESTRAINT & DIAGONAL BRACING ARE VERY IMPORTANT

LA RESTRICCIÓN LATERAL Y EL ARRIOSTRE DIAGONAL SON MUY IMPORTANTES!

10' (3 m) - 15' (4.6 m) max. Same spacing as bottom chord lateral restraint

3) BOTTOM CHORD — CUERDA INFERIOR

Lateral Restraints - 2x4x12' or greater lapped over two trusses.

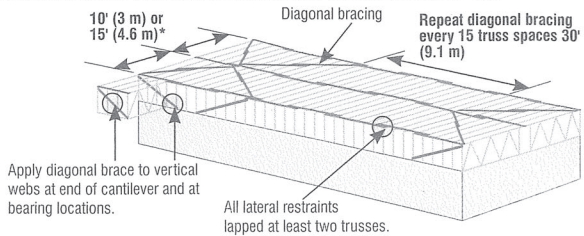
10' (3 m) - 15' (4.6 m) max.

RESTRAINT & BRACING FOR 3x2 AND 4x2 PARALLEL CHORD TRUSSES

RESTRICCIÓN Y ARRIOSTRE PARA TRUSSES DE CUERDAS PARALELAS 3X2 Y 4X2

NOTICE Refer to BCSI-B7\*\*\* for more information.

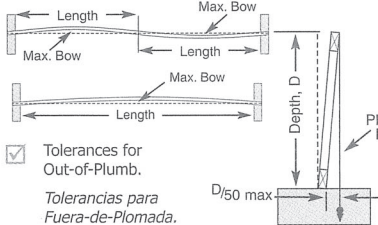
Vea el resumen BCSI-B7\*\*\* para más información.



\*Top chord temporary lateral restraint spacing shall be 10' (3 m) o.c. max. for 3x2 chords and 15' (4.6 m) o.c. for 4x2 chords.

INSTALLING — INSTALACIÓN

- Tolerances for Out-of-Plane. Tolerancias para Fuera-de-Plano.



- Tolerances for Out-of-Plumb. Tolerancias para Fuera-de-Plomada.

| Out-of-Plumb |          | Out-of-Plane |              |
|--------------|----------|--------------|--------------|
| D/50         | D (ft.)  | Max. Bow     | Truss Length |
| 1/4"         | 1'       | 3/4"         | 12.5'        |
| (6 mm)       | (0.3 m)  | (19 mm)      | (3.8 m)      |
| 1/2"         | 2'       | 7/8"         | 14.6'        |
| (13 mm)      | (0.6 m)  | (22 mm)      | (4.5 m)      |
| 3/4"         | 3'       | 1"           | 16.7'        |
| (19 mm)      | (0.9 m)  | (25 mm)      | (5.1 m)      |
| 1"           | 4'       | 1-1/8"       | 18.8'        |
| (25 mm)      | (1.2 m)  | (29 mm)      | (5.7 m)      |
| 1-1/4"       | 5'       | 1-1/4"       | 20.8'        |
| (32 mm)      | (1.5 m)  | (32 mm)      | (6.3 m)      |
| 1-1/2"       | 6'       | 1-3/8"       | 22.9'        |
| (38 mm)      | (1.8 m)  | (35 mm)      | (7.0 m)      |
| 1-3/4"       | 7'       | 1-1/2"       | 25.0'        |
| (45 mm)      | (2.1 m)  | (38 mm)      | (7.6 m)      |
| 2"           | ≥8'      | 1-3/4"       | 29.2'        |
| (51 mm)      | (≥2.4 m) | (45 mm)      | (8.9 m)      |
|              |          | 2"           | ≥33.3'       |
|              |          | (51 mm)      | (10.1 m)     |

CONSTRUCTION LOADING CARGA DE CONSTRUCCIÓN

- DO NOT proceed with construction until all lateral restraint and bracing is securely and properly in place. NO proceda con la construcción hasta que todas las restricciones laterales y los arriostres estén colocados en forma apropiada y segura.
- DO NOT exceed maximum stack heights. Refer to BCSI-B4\*\*\* for more information. NO exceda las alturas máximas de montón. Vea el resumen BCSI-B4\*\*\* para más información.



- NEVER stack materials near a peak or at mid-span. NUNCA amontone los materiales cerca de un pico.

- Place loads over as many trusses as possible. Coloque las cargas sobre tantos trusses como sea posible.
- Position loads over load bearing walls. Coloque las cargas sobre las paredes soportantes.

ALTERATIONS — ALTERACIONES

- NOTICE Refer to BCSI-B5.\*\*\* Vea el resumen BCSI-B5.\*\*\*

- DO NOT cut, alter, or drill any structural member of a truss unless specifically permitted by the truss design drawing. NO corte, altere o perforo ningún miembro estructural de un truss, a menos que esté específicamente permitido en el dibujo del diseño del truss.

NOTICE Trusses that have been overloaded during construction or altered without the Truss Manufacturer's prior approval may render the Truss Manufacturer's limited warranty null and void. Trusses que se han sobrecargado durante la construcción o han sido alterados sin la autorización previa del Fabricante de Trusses, pueden hacer nulo y sin efecto la garantía limitada del Fabricante de Trusses.

\*\*\*Contact the Component Manufacturer for more information or consult a Registered Design Professional for assistance. To view a non-printing PDF of this document, visit [www.sbcindustry.com/b1](http://www.sbcindustry.com/b1).

NOTE: The truss manufacturer and truss designer rely on the presumption that the contractor and crane operator (if applicable) are professionals with the capability to undertake the work they have agreed to do on any given project. If the contractor believes it needs assistance in any aspect of the construction project, it should seek assistance from a competent party. The methods and procedures outlined in this document are intended to ensure that the overall construction techniques employed will put the trusses into place SAFELY. These recommendations for handling, installing, restraining and bracing trusses are based upon the collective experience of leading personnel involved with truss design, manufacture and installation, but must, due to the nature of responsibilities involved, be presented only as a GUIDE for use by a qualified building designer or contractor. It is not intended that these recommendations be interpreted as superior to the building designer's design specification for handling, installing, restraining and bracing trusses and it does not preclude the use of other equivalent methods for restraining/bracing and providing stability for the walls, columns, floors, roofs and all the interrelated structural building components as determined by the contractor. Thus, SBCA and TPI expressly disclaim any responsibility for damages arising from the use, application, or reliance on the recommendations and information contained herein.



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PARA EL MANEJO, INSTALACIÓN, RESTRICCIÓN Y ARRIOSTRE DE LOS TRUSSES manente complejo. Por favor, siempre consulte a un Profesional Registrado de Diseño.

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