12700 Rolling Rd
Job. No: 25-0032

2700 Rolling Rd Dr, Miami, FL 33156, USA

STRUCTURAL CALCULATION

FELIX DAYAN GUERRA
LICENSE
No. 93172
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Felix D Guerra

Digitally signed by Felix D Guerra
DN: c=US, o=D and SG Engineering Group INC, dnQualifier=A01410D000001BC8654B17001 4FB03, cn=Felix D Guerra
Date: 2025.03.15 17:51:37 -04'00'
Adobe Acrobat version: 2024.003.20180

Prepared By:
Felix Dayan Guerra, PE
Lic. No. 93172

DESIGN CRITERIA:

Calculations based on:

1. Florida Building Code 8th Edition 2023
2. Minimum Design Loads for Buildings and Other Structures ASCE 7-22
3. Building Code Requirements for Structural Concrete ACI 318-19
4. American Institute of Steel Construction AISC 360-16
5. Aluminum Design Manual 2020
6. Specifications for the Design of Cold-Formed Stainless Steel Structural Members SEI/ASCE8-02

CALCULATION INDEX:

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VI.	Miscellaneous	117-144

Total Pages = 144

CALCULATION STATEMENT:

To the best of my knowledge, ability, belief and professional judgment, I hereby attest that the manual calculations and computer-generated calculations are in compliance with the existing governing codes.

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DN: c=US, o=D and SG Engineering Group INC, dnQualifier=A01410D0000018CB6543B170016F805, cn=Felix D Guerra
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Adobe Acrobat version: 2024.003.20180

Prepared By:
Felix Dayan Guerra, PE
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WIND LOAD ANALYSIS

Job. No.: **Date:**

Component and Cladding Wind Pressures for
Enclosed, Partially Enclosed, & Partially Open Buildings with h ≤ 60 ft.
ASCE 7-22 Chapter 30 - Directional Procedure - Part 1
(Flat Roof with θ ≤ 7°, Gable/Hip Roof with 0° < θ ≤ 45°, Monoslope Roof 0° < θ ≤ 30° Only)

Component & Cladding Inputs:			
Wind Speed	**V**	175	mph
Directionality Factor	**Kd**	0.85	
Topografic Factor	**Kzt**	1.00	
Exposure Category	-	C	
Int. Press. Coeff.	**+/- GCpi**	0.18	
Building Width	**B**	22.00	ft.
Building Length	**L**	26.67	ft.
Mean Roof Height	**h**	14.50	ft.
Roof Type	**-**	FLAT	
Roof Angle	**θ**	0.0	deg.
Parapet@Per. ≥ 3 ft. ?	**-**	YES	ft.

$$q_z = 0.00256 K_z K_{zt} K_e V^2 (\text{lb/ft}^2);\ V,\ \text{mi/h}$$

$$p = q_h K_d [(GC_p) - (GC_{pi})] (\text{lb/ft}^2)$$

Exposure:	B	C	D
Kh:	0.575	0.849	1.030
qh (psf):	45.06	66.55	80.77

qh =	66.55	psf

0.1(B,L)	2.20	ft
0.4h	5.80	ft
0.8h	11.60	ft
0.04(B,L)	0.88	ft
3'	3.00	ft
a =	**3.00**	ft.

Wall Zones:

Zone:	A_e (ft^2):	Fig. 30.3-1 GCp:	**LRFD: (psf)**	**ASD: (psf)**
4	10.0	0.90	**61.10**	**36.66**
		-0.99	**-66.19**	**-39.71**
5	10.0	0.90	**61.10**	**36.66**
		-1.26	**-81.46**	**-48.88**
4	20.0	0.85	**58.39**	**35.03**
		-0.94	**-63.48**	**-38.09**
5	20.0	0.85	**58.39**	**35.03**
		-1.16	**-76.05**	**-45.63**
4	50.0	0.79	**54.81**	**32.89**
		-0.88	**-59.90**	**-35.94**
5	50.0	0.79	**54.81**	**32.89**
		-1.04	**-68.89**	**-41.33**
4	100.0	0.74	**52.10**	**31.26**
		-0.83	**-57.20**	**-34.32**
5	100.0	0.74	**52.10**	**31.26**
		-0.94	**-63.48**	**-38.09**

Roof Zones:

Zone:	Ae (ft2):	Fig. 30.3-2A GCp:	**LRFD: (psf)**	**ASD: (psf)**
1'	10.0	-0.90	**-61.10**	**-36.66**
1	10.0	-1.70	**-106.35**	**-63.81**
2	10.0	-2.30	**-140.29**	**-84.18**
3	10.0	-2.30	**-140.29**	**-84.18**
1'	20.0	-0.90	**-61.10**	**-36.66**
1	20.0	-1.58	**-99.33**	**-59.60**
2	20.0	-2.14	**-131.27**	**-78.76**
3	20.0	-2.14	**-131.27**	**-78.76**
1'	50.0	-0.90	**-61.10**	**-36.66**
1	50.0	-1.41	**-90.06**	**-54.04**
2	50.0	-1.93	**-119.35**	**-71.61**
3	50.0	-1.93	**-119.35**	**-71.61**
1'	100.0	-0.90	**-61.10**	**-36.66**
1	100.0	-1.29	**-83.04**	**-49.83**
2	100.0	-1.77	**-110.33**	**-66.20**
3	100.0	-1.77	**-110.33**	**-66.20**

Roof Zones (Overhang):

Zone:	Ae (ft2):	Fig. 30.3-2A GCp:	**LRFD: (psf)**	**ASD: (psf)**
1'H	10.0	-1.70	**-106.35**	**-63.81**
1H	10.0	-1.70	**-106.35**	**-63.81**
2H	10.0	-2.30	**-140.29**	**-84.18**
3H	10.0	-3.20	**-191.21**	**-114.72**
1'H	20.0	-1.67	**-104.65**	**-62.79**
1H	20.0	-1.67	**-104.65**	**-62.79**
2H	20.0	-2.09	**-128.27**	**-76.96**
3H	20.0	-2.83	**-170.16**	**-102.09**
1'H	50.0	-1.63	**-102.40**	**-61.44**
1H	50.0	-1.63	**-102.40**	**-61.44**
2H	50.0	-1.81	**-112.37**	**-67.42**
3H	50.0	-2.34	**-142.33**	**-85.40**
1'H	100.0	-1.60	**-100.69**	**-60.42**
1H	100.0	-1.60	**-100.69**	**-60.42**
2H	100.0	-1.59	**-100.34**	**-60.20**
3H	100.0	-1.96	**-121.29**	**-72.77**

Job. No.: **Date:**

Component and Cladding Wind Pressures for
Enclosed, Partially Enclosed, & Partially Open Buildings with h ≤ 60 ft.
ASCE 7-22 Chapter 30 - Directional Procedure - Part 1
(Flat Roof with θ ≤ 7°, Gable/Hip Roof with 0° < θ ≤ 45°, Monoslope Roof 0° < θ ≤ 30° Only)

Component & Cladding Inputs:			
Wind Speed	**V**	175	mph
Directionality Factor	**Kd**	0.85	
Topografic Factor	**Kzt**	1.00	
Exposure Category	-	C	
Int. Press. Coeff.	**+/- GCpi**	0.18	
Building Width	**B**	102.33	ft.
Building Length	**L**	120.00	ft.
Mean Roof Height	**h**	27.00	ft.
Roof Type	**-**	FLAT	
Roof Angle	**θ**	0.0	deg.
Parapet@Per. ≥ 3 ft. ?	**-**	YES	ft.

$$q_z = 0.00256 K_z K_{zt} K_e V^2 (\text{lb/ft}^2);\ V, \text{mi/h}$$

$$p = q_h K_d [(GC_p) - (GC_{pi})] (\text{lb/ft}^2)$$

Exposure:	B	C	D
Kh:	0.680	0.961	1.141
qh (psf):	53.30	75.32	89.46

qh =	75.32	psf

0.1(B,L)	10.23	ft
0.4h	10.80	ft
0.8h	21.60	ft
0.04(B,L)	4.09	ft
3'	3.00	ft
a =	**10.23**	ft.

Wall Zones:

Zone:	A_e (ft^2):	Fig. 30.3-1 GCp:	**LRFD: (psf)**	**ASD: (psf)**
4	10.0	0.90	**69.14**	**41.49**
		-0.99	**-74.91**	**-44.94**
5	10.0	0.90	**69.14**	**41.49**
		-1.26	**-92.19**	**-55.31**
4	20.0	0.85	**66.08**	**39.65**
		-0.94	**-71.84**	**-43.11**
5	20.0	0.85	**66.08**	**39.65**
		-1.16	**-86.06**	**-51.64**
4	50.0	0.79	**62.03**	**37.22**
		-0.88	**-67.79**	**-40.68**
5	50.0	0.79	**62.03**	**37.22**
		-1.04	**-77.97**	**-46.78**
4	100.0	0.74	**58.97**	**35.38**
		-0.83	**-64.73**	**-38.84**
5	100.0	0.74	**58.97**	**35.38**
		-0.94	**-71.84**	**-43.10**

Roof Zones:

Zone:	Ae (ft2):	Fig. 30.3-2A GCp:	**LRFD: (psf)**	**ASD: (psf)**
1'	10.0	-0.90	**-69.14**	**-41.49**
1	10.0	-1.70	**-120.36**	**-72.22**
2	10.0	-2.30	**-158.77**	**-95.26**
3	10.0	-2.30	**-158.77**	**-95.26**
1'	20.0	-0.90	**-69.14**	**-41.49**
1	20.0	-1.58	**-112.42**	**-67.45**
2	20.0	-2.14	**-148.56**	**-89.14**
3	20.0	-2.14	**-148.56**	**-89.14**
1'	50.0	-0.90	**-69.14**	**-41.49**
1	50.0	-1.41	**-101.92**	**-61.15**
2	50.0	-1.93	**-135.07**	**-81.04**
3	50.0	-1.93	**-135.07**	**-81.04**
1'	100.0	-0.90	**-69.14**	**-41.49**
1	100.0	-1.29	**-93.98**	**-56.39**
2	100.0	-1.77	**-124.86**	**-74.92**
3	100.0	-1.77	**-124.86**	**-74.92**

Roof Zones (Overhang):

Zone:	Ae (ft2):	Fig. 30.3-2A GCp:	**LRFD: (psf)**	**ASD: (psf)**
1'H	10.0	-1.70	**-120.36**	**-72.22**
1H	10.0	-1.70	**-120.36**	**-72.22**
2H	10.0	-2.30	**-158.77**	**-95.26**
3H	10.0	-3.20	**-216.39**	**-129.84**
1'H	20.0	-1.67	**-118.43**	**-71.06**
1H	20.0	-1.67	**-118.43**	**-71.06**
2H	20.0	-2.09	**-145.16**	**-87.10**
3H	20.0	-2.83	**-192.57**	**-115.54**
1'H	50.0	-1.63	**-115.89**	**-69.53**
1H	50.0	-1.63	**-115.89**	**-69.53**
2H	50.0	-1.81	**-127.17**	**-76.30**
3H	50.0	-2.34	**-161.08**	**-96.65**
1'H	100.0	-1.60	**-113.96**	**-68.37**
1H	100.0	-1.60	**-113.96**	**-68.37**
2H	100.0	-1.59	**-113.55**	**-68.13**
3H	100.0	-1.96	**-137.26**	**-82.36**

Job. No.:					Date:

MWFRS Pressures (including Parapet) & Base Shear for
Enclosed, Partially Enclosed, & Partially Open Buildings of All Heights
ASCE 7-22 Chapter 27 - Directional Procedure - Part 1
(Flat, Gable, Hip, Monoslope or Mansard Roofs Only)

Note: Enter "B" parallel to Ridge.

Ridge	L (Y-Dim.)

B (X-Dim.)

$$q_z = 0.00256 K_z K_{zt} K_e V^2 (\text{lb/ft}^2);\ V, \text{mi/h}$$

$$p = q K_d G C_p - q_i K_d (G C_{pi})$$

Main Building (MWFRS) Inputs:			
Wind Speed	**V**	175	mph
Directionality Factor	**Kd**	0.85	
Topografic Factor	**Kzt**	1.00	
Exposure Category	-	C	
Ground Elev. (Above Sea Level)	**ze**	0.00	ft.
Ground Elevation Factor	**Ke**	1.00	
Gust Factor	**G**	0.85	
Internal Pressure Coeff.	**+/- GCpi**	0.18	
Building Width	**B**	128.67	ft.
Building Length	**L**	102.33	ft.
Mean Roof Height	**h**	25.00	ft.
Roof Angle	**θ**	0.00	deg.

Exposure:	**B**	**C**	**D**
Kh	0.665	0.945	1.126
qz-15' (psf)	44.69	66.64	80.75
qh (psf)	52.14	74.11	88.27
pW-15' (psf) (+GCpi)	17.85	27.18	33.17
pW-15' (psf) (-GCpi)	33.81	49.86	60.18
pW-h (psf) (+GCpi)	22.16	31.50	37.52
pW-h (psf) (-GCpi)	38.11	54.17	64.53
pL-X (psf) (+GCpi)	-24.87	-35.35	-42.11
pL-X (psf) (-GCpi)	-8.92	-12.68	-15.10
pL-Y (psf) (+GCpi)	-26.81	-38.11	-45.39
pL-Y (psf) (-GCpi)	-10.86	-15.43	-18.38
Sidewall (psf) (+GCpi)	-34.35	-48.82	-58.15
Sidewall (psf) (-GCpi)	-18.39	-26.14	-31.14
Wind Direction:	**X-Dir.**	**Y-Dir.**	
L/B Ratio:	1.26	0.80	
Windward Wall Cp:	0.80	0.80	
Leeward Wall Cp:	-0.45	-0.50	
Sidewall Cp:	-0.70	-0.70	

MWRFS Wall Pressures:		**LRFD:**	**ASD:**	
Windward Pressure (+) at Z=h	Min.	31.50	18.90	psf
	Max.	54.17	32.50	psf
Windward Pressure (+) at Z=15'	Min.	27.18	16.31	psf
	Max.	49.86	29.91	psf
Leeward Y-Dir. Pressure (-)	Min.	-15.43	-9.26	psf
	Max.	-38.11	-22.87	psf
Leeward X-Dir. Pressure (-)	Min.	-12.68	-7.61	psf
	Max.	-35.35	-21.21	psf
Sidewall Pressure (-)	Min.	-26.14	-15.69	psf
	Max.	-48.82	-29.29	psf

Building Base Shear:		
Porosity Ratio (A_o/A_g) - X-Dir.	0.00	
Porosity Ratio (A_o/A_g) - Y-Dir.	0.00	
Solidity Ratio - X-Direction	1.00	
Solidity Ratio - Y-Ditection	1.00	
No. of Windward Facades - X-Dir.	1.00	
No. of Leeward Facades - X-Dir.	1.00	
No. of Windward Facades - Y-Dir.	1.00	
No. of Leeward Facades - Y-Dir.	1.00	
X-Dir. Max. Windward Shear:	129.8	k
X-Dir. Min. Leeward Shear:	32.4	k
X-Dir. Min. Windward Shear:	71.7	k
X-Dir. Max. Leeward Shear:	90.4	k
Y-Dir. Max. Windward Shear:	163.2	k
Y-Dir. Min. Leeward Shear:	49.6	k
Y-Dir. Min. Windward Shear:	90.2	k
Y-Dir. Max. Leeward Shear:	122.6	k
Total Bldg. X-Dir. Base Shear (LRFD)	162.2	k
Total Bldg. Y-Dir. Base Shear (LRFD)	212.8	k

Parapet MWFRS Pressures & Base Shear:			
Parapet Hght. above Roof	-	0.00	ft.
Top of Parapet Height		25.00	ft.
Windward Factor		1.50	
Leeward Factor		-1.0	
Comb. Net Coefficient	**GCpn**	2.50	
Windward Pressure		94.49	psf
Leeward Pressure		62.99	psf
Total Parapet Pressure		157.48	psf
Parapet MWFRS Equiv. Px		157.48	psf
Parapet MWRFS Equiv. Py		157.48	psf
X-Dir. Windward Parapet Shear:		0.0	k
X-Dir. Leeward Parapet Shear:		0.0	k
Y-Dir. Windward Parapet Shear:		0.0	k
Y-Dir. Leeward Parapet Shear:		0.0	k
Parapet X-Dir. Base Shear (LRFD)		0.0	k
Parapet Y-Dir. Base Shear (LRFD)		0.0	k

Total MWFRS Bldg. + MWFRS Parapet Shears:		
X-Dir. Base Shear (LRFD)	**162.2**	k
Y-Dir. Base Shear (LRFD)	**212.8**	k

MWFRS Roof Pressures:

Wind Parallel to Ridge →

	A1	A2	A3	A4
	1279.13 ft^2	1279.13 ft^2	2558.25 ft^2	8050.30 ft^2
RF	0.80	0.80	0.80	0.80
	0 to h/2	**h/2 to h**	**h to 2h**	**> 2h**
	12.50'	12.50'	25.00'	78.67'
	GCp: -0.90	GCp: -0.90	GCp: -0.50	GCp: -0.30
LRFD:	**-54.43 psf**	**-54.43 psf**	**-34.27 psf**	**-24.19 psf**
ASD:	**-32.66 psf**	**-32.66 psf**	**-20.56 psf**	**-14.51 psf**

51.17'

51.17'

Ridge

102.33'

128.67'

	A1	A2	A3	A4
	1608.38 ft^2	1608.38 ft^2	3216.75 ft^2	6733.30 ft^2
RF	0.80	0.80	0.80	0.80

> 2h	52.33'	GCp: -0.30	LRFD: **-24.19 psf**	ASD: **-14.51 psf**
h to 2h	25.00'	GCp: -0.50	LRFD: **-34.27 psf**	ASD: **-20.56 psf**
h/2 to h	12.50'	GCp: -0.90	LRFD: **-54.43 psf**	ASD: **-32.66 psf**
0 to h/2	12.50'	GCp: -0.90	LRFD: **-54.43 psf**	ASD: **-32.66 psf**

Ridge

102.33'

128.67

Wind Normal to Ridge ↑

STRENGTH MODEL REPORT

ETABS - FEM Model Stiffness, Mass and P-Delta Inputs:

Reinforced Concrete Member Cracking Criteria:

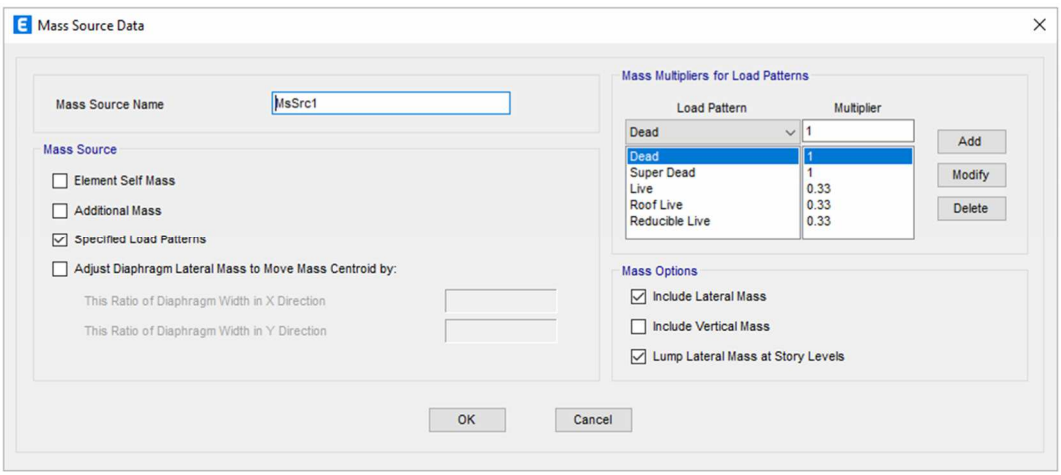
Strength (LRFD Design) Model, per ACI 318-19 Section 6.6.3.1.2:

- Columns..... 0.5Ig
- Shear walls (in-plane and out-of-plane)..... 0.5Ig
- Beams..... 0.5Ig
- Slabs (in-plane and out-of-plane)..... 0.5Ig

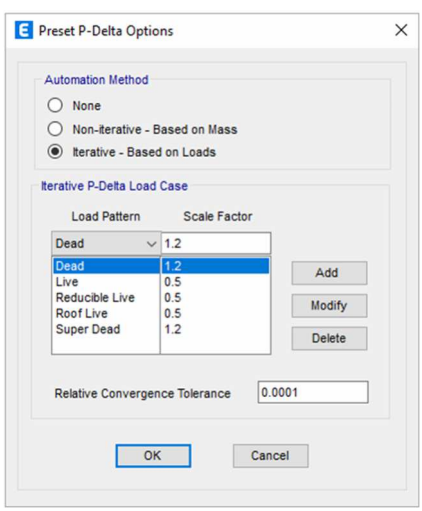
Service (Drift) Model, per ACI 318-19 Section 6.6.3.2.2:

- Columns..... 0.7Ig
- Shear walls (in-plane and out-of-plane)..... 0.7Ig
- Beams..... 0.7Ig
- Slabs (in-plane and out-of-plane)..... 0.7Ig

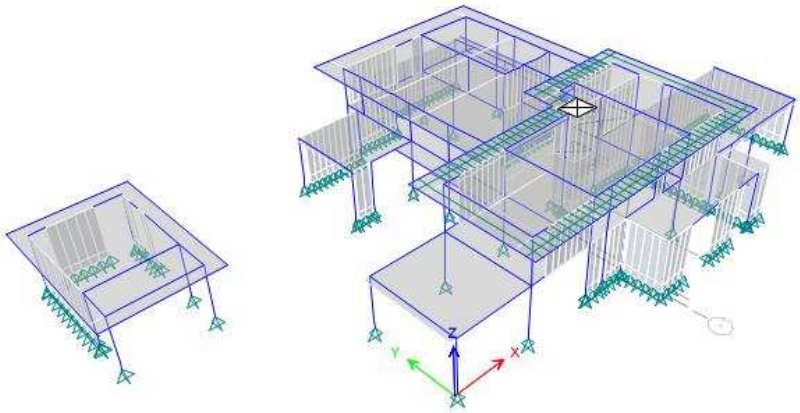
Mass Source Data:



Second Order Analysis: P-Delta Inputs (ACI 318-19 Sections 6.7 & 6.9):



ETABS®



12700 Rolling Rd

Model File: Templete$_{Basic}$ Loads, Revision 0

1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

1.1 Story Data

Table 1.1 - Story Definitions

Tower	Name	Height ft	Master Story	Similar To	Splice Story	Splice Height ft	Color
T1	upper roof	1.5	No	None	No		Red
T1	Roof	11	No	None	No		Red
T1	Second Floor	12.5	No	None	No		Yellow
T1	ground floor	2	No	None	No		Blue

1.2 Grid Data

Table 1.2 - Grid Definitions - General

Tower	Name	Type	Ux ft	Uy ft	Rz deg	Story Range	User Top Story	User Bottom Story	Bubble Size in	Color
T1	AG1	Cartesian	0	0	0	Default			60	Gray6

Table 1.3 - Grid Definitions - Grid Lines

Name	Grid Line Type	ID	Ordinate ft	Angle deg	X1 ft	Y1 ft	X2 ft	Y2 ft	Bubble Location	Visible
AG1	General (Cartesian)	1			-41.0954	88.8408	-41.0954	43.3408	Start	Yes
AG1	General (Cartesian)	2			-19.7621	0	-19.7621	90	End	Yes
AG1	General (Cartesian)	3			2.2379	0	2.2379	25	End	Yes
AG1	General (Cartesian)	4			41.7379	90	41.7379	-15.4926	Start	Yes
AG1	General (Cartesian)	5			54.4046	10	54.4046	-16.3259	End	Yes
AG1	General (Cartesian)	6			58.4046	90	58.4046	69.5074	Start	Yes
AG1	General (Cartesian)	7			75.7379	1.6741	75.7379	52.3408	End	Yes
AG1	General (Cartesian)	8			89.4046	90	89.4046	39.5074	Start	Yes
AG1	General (Cartesian)	9			90.7379	30	90.7379	-17.4092	Start	Yes
AG1	General (Cartesian)	10			128.7379	1.6741	128.7379	26.6741	End	Yes
AG1	General (Cartesian)	3'			22.9046	1.6741	22.9046	90	End	Yes
AG1	General (Cartesian)	6'			68.7379	52.3408	68.7379	90	End	Yes
AG1	General (Cartesian)	7'			86.1546	35.1741	86.1546	90	End	Yes
AG1	General (Cartesian)	A			20	92.0074	95	92.0074	End	Yes
AG1	General (Cartesian)	A'			0	88.8408	-50	88.8408	End	Yes
AG1	General (Cartesian)	B			20	84.0074	95	84.0074	End	Yes
AG1	General (Cartesian)	C			20	79.6741	95	79.6741	End	Yes
AG1	General (Cartesian)	C'			0	63.1741	-50	63.1741	End	Yes
AG1	General (Cartesian)	D			20	58.5074	95	58.5074	End	Yes
AG1	General (Cartesian)	D'			0	53.5074	-50	53.5074	End	Yes
AG1	General (Cartesian)	E			41.7379	52.3408	94.7379	52.3408	End	Yes
AG1	General (Cartesian)	F			20	35.1741	95	35.1741	End	Yes
AG1	General (Cartesian)	F'			41.7379	30.3408	95.1546	30.3408	End	Yes
AG1	General (Cartesian)	G			2.2379	26.6741	133.2379	26.6741	End	Yes
AG1	General (Cartesian)	G'			63.2379	23.8408	132.8213	23.8408	End	Yes
AG1	General (Cartesian)	H			0	1.6741	134.4046	1.6741	End	Yes
AG1	General (Cartesian)	J			20	-9.6592	101.6546	-9.6592	End	Yes
AG1	General (Cartesian)	6A			63.2379	30.3408	63.2379	21.6741	End	Yes
AG1	General (Cartesian)	6B			70.2379	30.0074	70.2379	22.0074	End	Yes

1.3 Point Coordinates

Table 1.4 - Point Bays

Label	Is Auto Point	X ft	Y ft	DZBelow ft
1	No	68.7379	65.5074	0
2	No	128.7379	3.0076	0
3	No	41.4046	80.0074	0
4	No	41.7379	30.3408	0
5	No	63.2379	30.3408	0
6	No	90.6667	38.1667	0
7	No	58.0713	84.3408	0
8	No	58.0713	92.3408	0
9	No	91.7379	92.3408	0
10	No	41.7379	29.6741	0
11	No	41.7379	65.5074	0
12	No	36.4046	-3.6592	0
13	No	36.4046	52.3408	0
14	No	75.7379	30.3408	0
15	No	128.7379	25.9582	0
16	No	63.2379	29.6741	0
17	No	63.2379	26.6741	0
18	No	36.4046	65.5074	0
19	No	96.0713	0.3408	0
20	No	96.0713	-9.9926	0
21	No	86.1546	65.5074	0
22	No	17.7379	26.6741	0
23	No	75.2379	1.6741	0
25	No	22.9046	14.1741	0
26	No	41.7379	14.1741	0
27	No	-44.4287	92.33	0
28	No	-16.4287	92.33	0
29	No	-16.4287	50.0074	0
30	No	-44.4287	50.0074	0
31	No	-37.3454	88.8408	0
32	No	68.7379	52.3408	0
33	No	85.8213	52.3408	0
34	No	17.7379	14.1741	0
35	No	54.4046	-9.6592	0
36	No	91.7379	35.4241	0
37	No	70.2379	30.3408	0
38	No	63.2379	27.1741	0
39	No	63.2379	30.0074	0
40	No	40.9046	79.6741	0
41	No	70.2379	23.8408	0
42	No	58.7379	92.0074	0
43	No	88.0713	92.0074	0
44	No	28.0713	58.5074	0
45	No	23.7379	58.5074	0
46	No	62.9046	-9.6592	0
47	No	73.4046	-9.6592	0
48	No	90.7379	22.7574	0
49	No	90.7379	-9.3259	0
50	No	54.0713	1.6741	0
51	No	42.0713	1.6741	0
52	No	128.0713	26.6741	0
53	No	95.0713	26.6741	0
54	No	91.0713	35.1741	0
55	No	75.7379	35.1741	0
56	No	75.7379	26.6741	0

Label	Is Auto Point	X ft	Y ft	DZBelow ft
57	No	42.9879	84.0074	0
58	No	69.2379	84.0074	0
59	No	63.2379	26.1741	0
60	No	-41.0954	63.6741	0
61	No	-41.0954	88.3408	0
62	No	-26.4287	88.8408	0
64	No	58.7379	84.0074	0
65	No	82.0713	-9.6592	0
66	No	76.2379	35.1741	0
67	No	54.4046	0.8408	0
68	No	90.7379	0.3408	0
69	No	-19.7621	88.3476	0
70	No	58.4046	84.3408	0
71	No	58.4046	91.5074	0
72	No	108.0713	1.6741	0
73	No	86.1546	52.3408	0
74	No	89.4046	52.3408	0
75	No	41.7379	1.6741	0
76	No	22.9046	1.6741	0
77	No	41.7379	45.0074	0
78	No	97.5713	1.6741	0
79	No	86.1546	47.1741	0
80	No	-41.0954	63.1741	0
81	No	-19.7621	63.1741	0
82	No	41.7379	58.5074	0
83	No	68.2379	84.0074	0
84	No	54.4046	1.6741	0
85	No	68.7379	71.5074	0
86	No	41.0713	1.6741	0
87	No	58.4046	92.0074	0
88	No	2.2379	26.6741	0
89	No	89.4046	92.0074	0
90	No	76.2379	26.6741	0
91	No	86.1546	40.5074	0
92	No	90.7379	26.6741	0
93	No	-19.7621	88.8408	0
94	No	-41.0954	88.8408	0
95	No	-41.0954	53.5074	0
96	No	-19.7621	53.5074	0
97	No	128.7379	26.6741	0
98	No	128.7379	1.6741	0
99	No	22.9046	79.6741	0
100	No	28.9046	58.5074	0
101	No	22.9046	58.5074	0
102	No	22.9046	26.6741	0
103	No	17.7379	31.6741	0
104	No	17.7379	-3.6592	0
105	No	96.0713	-3.6592	0
106	No	96.0713	40.6741	0
107	Yes	57.2561	15.9468	0
108	No	67.2379	30.3408	0
109	No	36.4046	89.6741	0
110	No	36.4046	31.6741	0
111	No	70.0713	52.3408	0
112	No	90.7379	19.6741	0
113	No	90.7379	18.6741	0

Label	Is Auto Point	X ft	Y ft	DZBelow ft
114	No	27.4046	1.6741	0
115	No	90.7379	2.9241	0
116	No	90.7379	0.4241	0
117	No	59.5713	84.0074	0
118	No	65.0713	84.0074	0
119	No	96.0713	37.9241	0
120	No	57.9046	84.0074	0
121	No	41.2379	79.6741	0
122	No	90.7379	16.3408	0
123	No	75.7379	1.6741	0
124	No	41.7379	64.8408	0
125	No	89.4046	65.1741	0
126	No	68.2252	84.0074	0
127	No	41.7379	77.0908	0
128	No	41.7379	84.0074	0
129	No	90.7379	19.1741	0
130	No	90.7379	17.3408	0
131	No	86.4879	52.3408	0
132	No	64.7379	1.6741	0
133	No	47.4046	1.6741	0
134	No	-19.7621	84.3408	0
135	No	-19.7621	81.3408	0
136	No	-19.7621	77.4241	0
137	No	75.7379	52.3408	0
138	No	41.7379	26.6741	0
139	No	89.4046	71.3408	0
140	No	90.7379	16.8408	0
141	No	41.4046	26.6741	0
142	No	27.4046	26.6741	0
143	No	89.0713	52.3408	0
144	No	2.2379	1.6741	0
145	No	90.7379	35.1741	0
146	No	63.2379	23.8408	0
147	No	70.2379	30.0074	0
148	No	41.7379	79.6741	0
149	No	58.4046	84.0074	0
150	No	90.7379	1.6741	0
151	No	89.7379	26.6741	0
152	No	63.2379	37.9241	0
153	No	69.2379	92.0074	0
154	No	68.7379	92.0074	0
155	No	68.7379	84.0074	0
156	No	89.4046	84.0074	0
157	No	68.2379	92.0074	0
158	No	86.1546	84.0074	0
159	No	93.4046	40.6741	0
160	No	86.1546	65.1741	0
161	No	86.1546	71.3408	0
162	No	90.7379	-9.6592	0
163	No	91.2365	-9.6592	0
164	No	96.0713	-9.6592	0
165	No	86.1546	35.1741	0
166	No	76.2379	52.3408	0
167	No	69.2379	52.3408	0
168	No	75.2379	52.3408	0
169	No	48.5713	1.6741	0

Label	Is Auto Point	X ft	Y ft	DZBelow ft
171	No	46.2379	1.6741	0
172	No	129.4046	0.3408	0
173	No	68.0646	1.6741	0
174	No	65.2235	1.6741	0
175	No	76.26	1.6741	0
176	No	90.3389	1.6741	0
177	No	67.5328	1.6741	0
178	No	90.7379	-9.9926	0
179	No	0.7379	1.6741	0
180	No	129.4046	1.6741	0
181	No	-41.0954	66.1408	0
182	No	67.2379	35.1741	0
183	No	0.7379	26.6741	0
184	No	36.4046	26.6741	0
185	No	36.4046	1.6741	0
186	No	-41.0954	68.6074	0
187	No	-41.0954	71.0741	0
188	No	129.4046	26.6741	0
189	No	-41.0954	73.5408	0
190	No	-41.0954	76.0074	0
191	No	36.4046	58.5074	0
192	No	22.0713	58.5074	0
193	No	91.7379	52.3408	0
194	No	-41.0954	78.4741	0
195	No	-41.0954	80.9408	0
196	No	58.4046	92.3408	0
197	No	-41.0954	83.4074	0
198	No	22.0713	79.6741	0
199	No	24.9046	79.6741	0
200	No	41.7379	35.1741	0
201	No	41.7379	52.3408	0
202	No	-19.7621	92.33	0
203	No	-41.0954	85.8741	0
204	No	-44.4287	53.5074	0
205	No	-19.7621	86.3442	0
206	No	90.7379	84.1741	0
207	No	90.7379	89.6741	0
208	No	41.7379	89.6741	0
209	No	70.2379	38.1741	0
210	No	75.7379	38.1741	0
211	No	-19.7621	79.3824	0
212	No	86.1546	89.6741	0
213	No	54.4046	-1.2592	0
214	No	91.7379	26.6741	0
215	No	54.4046	-3.3592	0
216	No	54.4046	-5.4592	0
217	No	54.4046	-7.5592	0
218	No	58.4046	86.7296	0
219	No	58.4046	89.1185	0
220	No	90.7379	14.1046	0
221	No	90.7379	11.8685	0
222	No	90.7379	9.6324	0
223	No	90.7379	7.3963	0
224	Yes	61.5292	58.3853	0
225	No	67.2379	38.1741	0
226	Yes	64.7137	36.3074	0

Label	Is Auto Point	X ft	Y ft	DZBelow ft
227	Yes	56.9046	18.5074	0
228	No	93.4046	-3.6592	0
229	No	17.7379	-0.9926	0
230	No	96.0713	-0.9926	0
231	No	90.7379	5.1602	0
232	No	17.7379	1.6741	0
233	No	41.0302	26.6741	0
234	No	90.7379	-2.0134	0
235	No	90.7379	-4.4509	0
236	No	90.7379	-6.8884	0
237	No	128.7379	5.3027	0
238	No	128.7379	7.5977	0
239	No	128.7379	9.8928	0
240	No	128.7379	12.1879	0
241	No	128.7379	14.4829	0
242	No	128.7379	16.778	0
243	No	128.7379	19.073	0
244	No	128.7379	21.3681	0
245	No	128.7379	23.6632	0
246	No	71.1213	92.0074	0
247	No	73.0046	92.0074	0
248	No	74.8879	92.0074	0
249	No	76.7713	92.0074	0
250	No	78.6546	92.0074	0
251	No	80.5379	92.0074	0
252	No	82.4213	92.0074	0
253	No	84.3046	92.0074	0
254	No	86.1879	92.0074	0
255	No	61.1129	92.0074	0
256	No	63.4879	92.0074	0
257	No	65.8629	92.0074	0
258	No	-35.1621	88.8408	0
259	No	-32.9787	88.8408	0
260	No	-30.7954	88.8408	0
261	No	-28.6121	88.8408	0
262	No	43.8305	84.0074	0
263	No	45.5898	84.0074	0
264	No	47.349	84.0074	0
265	No	49.1083	84.0074	0
266	No	50.8676	84.0074	0
267	No	52.6268	84.0074	0
268	No	54.3861	84.0074	0
269	No	56.1453	84.0074	0
270	No	20.3213	26.6741	0
271	No	20.3213	1.6741	0
272	No	20.3213	31.6741	0
273	No	90.7379	40.6741	0
274	No	17.7379	29.1741	0
275	Yes	56.9046	43.0074	0
276	No	63.2379	29.1741	0
277	No	63.2379	40.6741	0
278	No	70.2379	32.7574	0
279	No	63.2379	31.6741	0
280	Yes	65.0713	41.1741	0
281	No	41.7379	31.6741	0
283	No	70.2379	35.1741	0

Label	Is Auto Point	X ft	Y ft	DZBelow ft
284	No	96.0713	35.1741	0
285	No	70.2379	40.6741	0
286	No	26.7194	79.6741	0
287	No	28.5342	79.6741	0
288	No	30.349	79.6741	0
289	No	32.1639	79.6741	0
290	No	33.9787	79.6741	0
291	No	35.7935	79.6741	0
292	No	37.6083	79.6741	0
293	No	39.4231	79.6741	0
294	No	25.9046	58.5074	0
295	No	88.6129	35.1741	0
296	No	84.1713	35.1741	0
297	No	82.1879	35.1741	0
298	No	80.2046	35.1741	0
299	No	78.2213	35.1741	0
300	No	125.8713	26.6741	0
301	No	123.6713	26.6741	0
302	No	121.4713	26.6741	0
303	No	119.2713	26.6741	0
304	No	117.0713	26.6741	0
305	No	114.8713	26.6741	0
306	No	112.6713	26.6741	0
307	No	110.4713	26.6741	0
308	No	108.2713	26.6741	0
309	No	106.0713	26.6741	0
310	No	103.8713	26.6741	0
311	No	101.6713	26.6741	0
312	No	99.4713	26.6741	0
313	No	97.2713	26.6741	0
314	No	78.1665	26.6741	0
315	No	80.0951	26.6741	0
316	No	82.0237	26.6741	0
317	No	83.9522	26.6741	0
318	No	85.8808	26.6741	0
319	No	87.8094	26.6741	0
320	No	78.2713	1.6741	0
321	No	80.2825	1.6741	0
322	No	82.2938	1.6741	0
323	No	84.3051	1.6741	0
324	No	86.3164	1.6741	0
325	No	88.3276	1.6741	0
326	No	39.1189	1.6741	0
327	No	37.1665	1.6741	0
328	No	35.2141	1.6741	0
329	No	33.2617	1.6741	0
330	No	31.3094	1.6741	0
331	No	29.357	1.6741	0
332	No	52.2379	1.6741	0
333	No	50.4046	1.6741	0
334	No	44.1546	1.6741	0
335	No	93.6539	-9.6592	0
336	No	79.9046	-9.6592	0
337	No	77.7379	-9.6592	0
338	No	75.5713	-9.6592	0
339	No	56.5296	-9.6592	0

Label	Is Auto Point	X ft	Y ft	DZBelow ft
340	No	58.6546	-9.6592	0
341	No	60.7796	-9.6592	0
342	No	63.2379	35.1741	0
343	No	70.2379	1.6741	0
344	No	70.2379	-3.6592	0
345	No	39.7379	26.6741	0
346	No	38.0713	26.6741	0
347	No	34.6046	26.6741	0
348	No	32.8046	26.6741	0
349	No	31.0046	26.6741	0
350	No	29.2046	26.6741	0
351	No	71.7935	52.3408	0
352	No	73.5157	52.3408	0
353	No	78.1546	52.3408	0
354	No	80.0713	52.3408	0
355	No	81.9879	52.3408	0
356	No	83.9046	52.3408	0
357	No	87.7796	52.3408	0
358	No	67.9046	30.3408	0
359	No	65.5713	30.3408	0
360	No	63.2379	32.7574	0
361	No	66.7379	40.6741	0
362	No	66.7379	30.3408	0
363	No	71.2379	35.1741	0
364	No	71.2379	40.6741	0
365	No	73.2379	35.1741	0
366	No	70.2379	26.6741	0
397	No	73.2379	40.6741	0
398	No	75.2379	35.1741	0
399	No	75.2379	40.6741	0
400	No	77.2379	35.1741	0
401	No	77.2379	40.6741	0
402	No	79.2379	35.1741	0
403	No	79.2379	40.6741	0
404	No	81.2379	35.1741	0
405	No	81.2379	40.6741	0
406	No	83.2379	35.1741	0
407	No	83.2379	40.6741	0
408	No	85.2379	35.1741	0
409	No	85.2379	40.6741	0
410	No	87.2379	35.1741	0
411	No	87.2379	40.6741	0
412	No	89.2379	35.1741	0
413	No	89.2379	40.6741	0
415	No	91.2379	40.6741	0
416	No	23.9046	26.6741	0
417	No	23.9046	1.6741	0
418	No	23.9046	-3.6592	0
419	No	23.9046	31.6741	0
420	No	25.9046	26.6741	0
421	No	25.9046	31.6741	0
422	No	27.9046	26.6741	0
423	No	27.9046	31.6741	0
424	No	29.9046	26.6741	0
425	No	29.9046	31.6741	0
426	No	31.9046	26.6741	0

Label	Is Auto Point	X ft	Y ft	DZBelow ft
427	No	31.9046	31.6741	0
428	No	33.9046	26.6741	0
429	No	33.9046	31.6741	0
430	No	35.9046	26.6741	0
431	No	35.9046	31.6741	0
432	No	37.9046	26.6741	0
433	No	37.9046	31.6741	0
434	No	39.9046	26.6741	0
435	No	39.9046	31.6741	0
436	No	41.9046	26.6741	0
437	No	41.9046	31.6741	0
438	No	43.9046	26.6741	0
439	No	43.9046	31.6741	0
440	No	45.9046	26.6741	0
441	No	45.9046	31.6741	0
442	No	47.9046	26.6741	0
443	No	47.9046	31.6741	0
444	No	65.5713	23.8408	0
445	No	67.9046	23.8408	0
446	No	63.2379	28.1741	0
447	No	63.2379	26.0074	0
448	No	49.9046	26.6741	0
449	No	49.9046	31.6741	0
450	No	51.9046	26.6741	0
451	No	51.9046	31.6741	0
452	No	53.9046	26.6741	0
453	No	53.9046	31.6741	0
454	No	55.9046	26.6741	0
455	No	55.9046	31.6741	0
456	No	57.9046	26.6741	0
457	No	57.9046	31.6741	0
458	No	59.9046	26.6741	0
459	No	59.9046	31.6741	0
460	No	61.9046	26.6741	0
461	No	61.9046	31.6741	0
462	No	25.9046	1.6741	0
463	No	25.9046	-3.6592	0
464	No	27.9046	1.6741	0
465	No	27.9046	-3.6592	0
466	No	29.9046	1.6741	0
467	No	29.9046	-3.6592	0
468	No	31.9046	1.6741	0
469	No	31.9046	-3.6592	0
470	No	33.9046	1.6741	0
471	No	33.9046	-3.6592	0
472	No	35.9046	1.6741	0
473	No	35.9046	-3.6592	0
474	No	37.9046	1.6741	0
475	No	37.9046	-3.6592	0
476	No	39.9046	1.6741	0
477	No	39.9046	-3.6592	0
478	No	41.9046	1.6741	0
479	No	41.9046	-3.6592	0
480	No	43.9046	1.6741	0
481	No	43.9046	-3.6592	0
482	No	45.9046	1.6741	0

Label	Is Auto Point	X ft	Y ft	DZBelow ft
483	No	45.9046	-3.6592	0
484	No	47.9046	1.6741	0
485	No	47.9046	-3.6592	0
486	No	49.9046	1.6741	0
487	No	49.9046	-3.6592	0
488	No	51.9046	1.6741	0
489	No	51.9046	-3.6592	0
490	No	53.9046	1.6741	0
491	No	53.9046	-3.6592	0
492	No	55.9046	1.6741	0
493	No	55.9046	-3.6592	0
494	No	57.9046	1.6741	0
495	No	57.9046	-3.6592	0
496	No	59.9046	1.6741	0
497	No	59.9046	-3.6592	0
498	No	61.9046	1.6741	0
499	No	61.9046	-3.6592	0
500	No	63.9046	1.6741	0
501	No	63.9046	-3.6592	0
502	No	65.9046	1.6741	0
503	No	65.9046	-3.6592	0
504	No	67.9046	1.6741	0
505	No	67.9046	-3.6592	0
506	No	69.9046	1.6741	0
507	No	69.9046	-3.6592	0
508	No	71.9046	1.6741	0
509	No	71.9046	-3.6592	0
510	No	73.9046	1.6741	0
511	No	73.9046	-3.6592	0
512	No	75.9046	1.6741	0
513	No	75.9046	-3.6592	0
514	No	77.9046	1.6741	0
515	No	77.9046	-3.6592	0
516	No	79.9046	1.6741	0
517	No	79.9046	-3.6592	0
518	No	81.9046	1.6741	0
519	No	81.9046	-3.6592	0
520	No	83.9046	1.6741	0
521	No	83.9046	-3.6592	0
522	No	85.9046	1.6741	0
523	No	85.9046	-3.6592	0
524	No	87.9046	1.6741	0
525	No	87.9046	-3.6592	0
526	No	89.9046	1.6741	0
527	No	89.9046	-3.6592	0
528	No	21.9046	1.6741	0
529	No	21.9046	-3.6592	0
530	No	19.9046	1.6741	0
531	No	19.9046	-3.6592	0
532	No	17.9046	1.6741	0
533	No	17.9046	-3.6592	0
535	Yes	56.9046	18.5074	0
536	Yes	56.9046	43.0074	0
537	Yes	65.0713	41.1741	0
538	Yes	56.9046	18.5074	0
539	Yes	56.9046	43.0074	0

Label	Is Auto Point	X ft	Y ft	DZBelow ft
540	Yes	65.0713	41.1741	0
541	Yes	56.9046	18.5074	0
542	Yes	56.9046	43.0074	0
543	Yes	65.0713	41.1741	0
544	Yes	56.9046	18.5074	0
545	Yes	56.9046	43.0074	0
546	Yes	65.0713	41.1741	0
547	Yes	56.9046	18.5074	0
548	Yes	56.9046	43.0074	0
549	Yes	65.0713	41.1741	0
550	Yes	56.9046	18.5074	0
551	Yes	56.9046	43.0074	0
552	Yes	65.0713	41.1741	0
553	Yes	56.9046	18.5074	0
554	Yes	56.9046	43.0074	0
555	Yes	65.0713	41.1741	0
556	Yes	56.9046	18.5074	0
557	Yes	56.9046	43.0074	0
558	Yes	65.0713	41.1741	0
559	Yes	56.9046	18.5074	0
560	Yes	56.9046	43.0074	0
561	Yes	65.0713	41.1741	0
562	Yes	56.9046	18.5074	0
563	Yes	56.9046	43.0074	0
564	Yes	65.0713	41.1741	0
565	Yes	56.9046	18.5074	0
566	Yes	56.9046	43.0074	0
567	Yes	65.0713	41.1741	0

2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

2.1 Materials

Table 2.1 - Material Properties - General

Material	Type	SymType	Grade	Color	Notes
4000Psi	Concrete	Isotropic	Unknown	Blue	
A416Gr270	Tendon	Uniaxial	Unknown	Magenta	
A615Gr60	Rebar	Uniaxial	Unknown	Cyan	
A992Fy50	Steel	Isotropic	Unknown	Yellow	
M2000Psi	Masonry	Isotropic	fcm 2000 psi	Green	
Other	Other	Isotropic	Unknown	Yellow	

2.2 Frame Sections

Table 2.2 - Frame Section Property Definitions - Summary (Part 1 of 4)

Name	Material	Shape	Color	Area in2	J in4	I33 in4	I22 in4	I23 in4	IMajor in4	IMinor in4
B-12X16	4000Psi	Concrete Rectangular	Magenta	192	4999.14	4096	2304	0		
B-12X24 (4)	4000Psi	Concrete Rectangular	Yellow	288	9500.62	13824	3456	0		
B-16X28 (4)	4000Psi	Concrete Rectangular	Cyan	448	24618.62	29269.33	9557.33	0		
B-20X24 (4)	4000Psi	Concrete Rectangular	Red	480	31961.08	23040	16000	0		
B-24X24 (4)	4000Psi	Concrete Rectangular	Yellow	576	46742.39	27648	27648	0		
B-8X16 (4)	4000Psi	Concrete Rectangular	Cyan	128	1876.67	2730.67	682.67	0		
B-8X19.25 (4)	4000Psi	Concrete Rectangular	Gray8Dark	154	2429.95	4755.55	821.33	0		
B-8X21 (4)	4000Psi	Concrete Rectangular	Blue	168	2728.44	6174	896	0		
B-8X22 (4)	4000Psi	Concrete Rectangular	Gray8Dark	176	2899.04	7098.67	938.67	0		
B-8x24 (4)	4000Psi	Concrete Rectangular	Cyan	192	3240.89	9216	1024	0		
B-8X28.5 (4)	4000Psi	Concrete Rectangular	Red	228	4009.79	15432.75	1216	0		
B-8x30 (4)	4000Psi	Concrete Rectangular	Red	240	4265.95	18000	1280	0		
B-8X34 (4)	4000Psi	Concrete Rectangular	Cyan	272	4949.6	26202.67	1450.67	0		
B-8X42 (4)	4000Psi	Concrete Rectangular	Green	336	6316.79	49392	1792	0		
B-8X44 (4)	4000Psi	Concrete Rectangular	Gray8Dark	352	6658.37	56789.33	1877.33	0		
B-8X52 (4)	4000Psi	Concrete Rectangular	Magenta	416	8025.81	93738.67	2218.67	0		
C-12x12 (4)	4000Psi	Concrete Rectangular	Gray8Dark	144	2921.4	1728	1728	0		
C-12X20 (4)	4000Psi	Concrete Rectangular	Gray8Dark	240	7223.67	8000	2880	0		
C-12X72 (4)	4000Psi	Concrete Rectangular	Cyan	864	37166.36	373248	10368	0		
C-16x16 (4)	4000Psi	Concrete Rectangular	Red	256	9233.06	5461.33	5461.33	0		
C-16X32 (4)	4000Psi	Concrete Rectangular	Magenta	512	30026.66	10922.67	43690.67	0		
C-20X48 (4)	4000Psi	Concrete Rectangular	Blue	960	94592.18	184320	32000	0		
C-28X32 (4)	4000Psi	Concrete Rectangular	Cyan	896	112161.69	58538.67	76458.67	0		
C-8x12 (4)	4000Psi	Concrete Rectangular	Magenta	96	1205.11	512	1152	0		
C-8x16 (4)	4000Psi	Concrete Rectangular	Yellow	128	1876.67	682.67	2730.67	0		
C-8X20 (4)	4000Psi	Concrete Rectangular	Magenta	160	2557.9	5333.33	853.33	0		
C-8X24 (4)	4000Psi	Concrete Rectangular	Blue	192	3240.89	9216	1024	0		
C-8X26 (4)	4000Psi	Concrete Rectangular	Yellow	208	3582.29	11717.33	1109.33	0		
C-8X28 (4)	4000Psi	Concrete Rectangular	Green	224	3924.35	14634.67	1194.67	0		
C-8X30 (4)	4000Psi	Concrete Rectangular	Magenta	240	4265.95	18000	1280	0		
C-8X32 (4)	4000Psi	Concrete Rectangular	Blue	256	4608.18	21845.33	1365.33	0		
C-8X36 (4)	4000Psi	Concrete Rectangular	Red	288	5291.19	31104	1536	0		
C-8X48 (4)	4000Psi	Concrete Rectangular	Magenta	384	7341.5	73728	2048	0		
HSS4X4X1/2	A992Fy50	Steel Tube	Cyan	6.02	21	11.9	11.9	0		
HSS4X4X3/8	A992Fy50	Steel Tube	Cyan	4.78	17.5	10.3	10.3	0		
HSS6X3X1/4	A992Fy50	Steel Tube	Blue	3.84	14.2	17	5.7	0		
HSS6X4X1/2	A992Fy50	Steel Tube	Magenta	7.88	40.3	34	17.8	0		
HSS7X5X1/2	A992Fy50	Steel Tube	Yellow	9.74	75.8	60.6	35.6	0		

Name	Material	Shape	Color	Area in2	J in4	I33 in4	I22 in4	I23 in4	IMajor in4	IMinor in4
HSS7X7X1/4	A992Fy50	Steel Tube	Blue	6.17	73.5	46.5	46.5	0		
HSS9X5X1/2	A992Fy50	Steel Tube	Red	11.6	109	115	45.2	0		
NullLine$_{User}$	Other	Concrete Rectangular	Gray8Dark	1	0.14	0.08	0.08	0		

Table 2.2 - Frame Section Property Definitions - Summary (Part 2 of 4)

Name	MajorAngle deg	As2 in2	As3 in2	S33Pos in3	S33Neg in3	S22Pos in3	S22Neg in3	Z33 in3	Z22 in3	R33 in	R22 in
B-12X16		160	160	512	512	384	384	768	576	4.6188	3.4641
B-12X24 (4)		240	240	1152	1152	576	576	1728	864	6.9282	3.4641
B-16X28 (4)		373.33	373.33	2090.67	2090.67	1194.67	1194.67	3136	1792	8.0829	4.6188
B-20X24 (4)		400	400	1920	1920	1600	1600	2880	2400	6.9282	5.7735
B-24X24 (4)		480	480	2304	2304	2304	2304	3456	3456	6.9282	6.9282
B-8X16 (4)		106.67	106.67	341.33	341.33	170.67	170.67	512	256	4.6188	2.3094
B-8X19.25 (4)		128.33	128.33	494.08	494.08	205.33	205.33	741.13	308	5.557	2.3094
B-8X21 (4)		140	140	588	588	224	224	882	336	6.0622	2.3094
B-8X22 (4)		146.67	146.67	645.33	645.33	234.67	234.67	968	352	6.3509	2.3094
B-8x24 (4)		160	160	768	768	256	256	1152	384	6.9282	2.3094
B-8X28.5 (4)		190	190	1083	1083	304	304	1624.5	456	8.2272	2.3094
B-8x30 (4)		200	200	1200	1200	320	320	1800	480	8.6603	2.3094
B-8X34 (4)		226.67	226.67	1541.33	1541.33	362.67	362.67	2312	544	9.815	2.3094
B-8X42 (4)		280	280	2352	2352	448	448	3528	672	12.1244	2.3094
B-8X44 (4)		293.33	293.33	2581.33	2581.33	469.33	469.33	3872	704	12.7017	2.3094
B-8X52 (4)		346.67	346.67	3605.33	3605.33	554.67	554.67	5408	832	15.0111	2.3094
C-12x12 (4)		120	120	288	288	288	288	432	432	3.4641	3.4641
C-12X20 (4)		200	200	800	800	480	480	1200	720	5.7735	3.4641
C-12X72 (4)		720	720	10368	10368	1728	1728	15552	2592	20.7846	3.4641
C-16x16 (4)		213.33	213.33	682.67	682.67	682.67	682.67	1024	1024	4.6188	4.6188
C-16X32 (4)		426.67	426.67	1365.33	1365.33	2730.67	2730.67	2048	4096	4.6188	9.2376
C-20X48 (4)		800	800	7680	7680	3200	3200	11520	4800	13.8564	5.7735
C-28X32 (4)		746.67	746.67	4181.33	4181.33	4778.67	4778.67	6272	7168	8.0829	9.2376
C-8x12 (4)		80	80	128	128	192	192	192	288	2.3094	3.4641
C-8x16 (4)		106.67	106.67	170.67	170.67	341.33	341.33	256	512	2.3094	4.6188
C-8X20 (4)		133.33	133.33	533.33	533.33	213.33	213.33	800	320	5.7735	2.3094
C-8X24 (4)		160	160	768	768	256	256	1152	384	6.9282	2.3094
C-8X26 (4)		173.33	173.33	901.33	901.33	277.33	277.33	1352	416	7.5056	2.3094
C-8X28 (4)		186.67	186.67	1045.33	1045.33	298.67	298.67	1568	448	8.0829	2.3094
C-8X30 (4)		200	200	1200	1200	320	320	1800	480	8.6603	2.3094
C-8X32 (4)		213.33	213.33	1365.33	1365.33	341.33	341.33	2048	512	9.2376	2.3094
C-8X36 (4)		240	240	1728	1728	384	384	2592	576	10.3923	2.3094
C-8X48 (4)		320	320	3072	3072	512	512	4608	768	13.8564	2.3094
HSS4X4X1/2		3.72	3.72	5.95	5.95	5.95	5.95	7.7	7.7	1.406	1.406
HSS4X4X3/8		2.79	2.79	5.15	5.15	5.15	5.15	6.39	6.39	1.4679	1.4679
HSS6X3X1/4		2.8	1.4	5.67	5.67	3.8	3.8	7.19	4.41	2.1041	1.2183
HSS6X4X1/2		5.58	3.72	11.33	11.33	8.9	8.9	14.6	11	2.0772	1.503
HSS7X5X1/2		6.51	4.65	17.31	17.31	14.24	14.24	21.9	17.3	2.4943	1.9118
HSS7X7X1/4		3.26	3.26	13.29	13.29	13.29	13.29	15.5	15.5	2.7453	2.7453
HSS9X5X1/2		8.37	4.65	25.56	25.56	18.08	18.08	32.5	21.5	3.1486	1.974
NullLine$_{User}$		0.83	0.83	0.17	0.17	0.17	0.17	0.25	0.25	0.2887	0.2887

Table 2.2 - Frame Section Property Definitions - Summary (Part 3 of 4)

Name	Cw in6	Fillet Radius in	CG Offset 3 in	CG Offset 2 in	PNA Offset 3 in	PNA Offset 2 in	SC Offset 3 in	SC Offset 2 in	Area Modifier	As2 Modifier	As3 Modifier
B-12X16			0	0	0	0			1	1	1

Name	Cw in6	Fillet Radius in	CG Offset 3 in	CG Offset 2 in	PNA Offset 3 in	PNA Offset 2 in	SC Offset 3 in	SC Offset 2 in	Area Modifier	As2 Modifier	As3 Modifier
B-12X24 (4)			0	0	0	0			1	1	1
B-16X28 (4)			0	0	0	0			1	1	1
B-20X24 (4)			0	0	0	0			1	1	1
B-24X24 (4)			0	0	0	0			1	1	1
B-8X16 (4)			0	0	0	0			1	1	1
B-8X19.25 (4)			0	0	0	0			1	1	1
B-8X21 (4)			0	0	0	0			1	1	1
B-8X22 (4)			0	0	0	0			1	1	1
B-8x24 (4)			0	0	0	0			1	1	1
B-8X28.5 (4)			0	0	0	0			1	1	1
B-8x30 (4)			0	0	0	0			1	1	1
B-8X34 (4)			0	0	0	0			1	1	1
B-8X42 (4)			0	0	0	0			1	1	1
B-8X44 (4)			0	0	0	0			1	1	1
B-8X52 (4)			0	0	0	0			1	1	1
C-12x12 (4)			0	0	0	0			1	1	1
C-12X20 (4)			0	0	0	0			1	1	1
C-12X72 (4)			0	0	0	0			1	1	1
C-16x16 (4)			0	0	0	0			1	1	1
C-16X32 (4)			0	0	0	0			1	1	1
C-20X48 (4)			0	0	0	0			1	1	1
C-28X32 (4)			0	0	0	0			1	1	1
C-8x12 (4)			0	0	0	0			1	1	1
C-8x16 (4)			0	0	0	0			1	1	1
C-8X20 (4)			0	0	0	0			1	1	1
C-8X24 (4)			0	0	0	0			1	1	1
C-8X26 (4)			0	0	0	0			1	1	1
C-8X28 (4)			0	0	0	0			1	1	1
C-8X30 (4)			0	0	0	0			1	1	1
C-8X32 (4)			0	0	0	0			1	1	1
C-8X36 (4)			0	0	0	0			1	1	1
C-8X48 (4)			0	0	0	0			1	1	1
HSS4X4X1/2			0	0	0	0.0002			1	1	1
HSS4X4X3/8			0	0	0	0			1	1	1
HSS6X3X1/4			0	0	0	0			1	1	1
HSS6X4X1/2			0	0	0	0			1	1	1
HSS7X5X1/2			0	0	0	0			1	1	1
HSS7X7X1/4			0	0	0	0.0002			1	1	1
HSS9X5X1/2			0	0	0	0			1	1	1
$NullLine_{User}$			0	0	0	0			1	1	1

Table 2.2 - Frame Section Property Definitions - Summary (Part 4 of 4)

Name	J Modifier	I33 Modifier	I22 Modifier	Mass Modifier	Weight Modifier
B-12X16	1	1	1	1	1
B-12X24 (4)	1	1	1	1	1
B-16X28 (4)	1	1	1	1	1
B-20X24 (4)	1	1	1	1	1
B-24X24 (4)	1	1	1	1	1
B-8X16 (4)	1	1	1	1	1
B-8X19.25 (4)	1	1	1	1	1
B-8X21 (4)	1	1	1	1	1
B-8X22 (4)	1	1	1	1	1

Name	J Modifier	I33 Modifier	I22 Modifier	Mass Modifier	Weight Modifier
B-8x24 (4)	1	1	1	1	1
B-8X28.5 (4)	1	1	1	1	1
B-8x30 (4)	1	1	1	1	1
B-8X34 (4)	1	1	1	1	1
B-8X42 (4)	1	1	1	1	1
B-8X44 (4)	1	1	1	1	1
B-8X52 (4)	1	1	1	1	1
C-12x12 (4)	1	1	1	1	1
C-12X20 (4)	1	1	1	1	1
C-12X72 (4)	1	1	1	1	1
C-16x16 (4)	1	1	1	1	1
C-16X32 (4)	1	1	1	1	1
C-20X48 (4)	1	1	1	1	1
C-28X32 (4)	1	1	1	1	1
C-8x12 (4)	1	1	1	1	1
C-8x16 (4)	1	1	1	1	1
C-8X20 (4)	1	1	1	1	1
C-8X24 (4)	1	1	1	1	1
C-8X26 (4)	1	1	1	1	1
C-8X28 (4)	1	1	1	1	1
C-8X30 (4)	1	1	1	1	1
C-8X32 (4)	1	1	1	1	1
C-8X36 (4)	1	1	1	1	1
C-8X48 (4)	1	1	1	1	1
HSS4X4X1/2	1	1	1	1	1
HSS4X4X3/8	1	1	1	1	1
HSS6X3X1/4	1	1	1	1	1
HSS6X4X1/2	1	1	1	1	1
HSS7X5X1/2	1	1	1	1	1
HSS7X7X1/4	1	1	1	1	1
HSS9X5X1/2	1	1	1	1	1
$NullLine_{User}$	1	1	1	1	1

2.3 Shell Sections

Table 2.3 - Area Section Property Definitions - Summary

Name	Type	Element Type	Material	Total Thickness in	Deck Material	Deck Depth in
Concrete Joist	Slab	Membrane	4000Psi	4		
MW 8 (2.0)	Wall	Shell-Thin	M2000Psi	8		
Slab 6 (4)	Slab	Shell-Thin	4000Psi	6		
Slab 7 (4)	Slab	Shell-Thin	4000Psi	7		
Slab 8 (4)	Slab	Shell-Thin	4000Psi	8		
SW 12 (4)	Wall	Shell-Thin	4000Psi	12		
SW 8 (4)	Wall	Shell-Thin	4000Psi	8		

3 Loads

This chapter provides loading information as applied to the model.

3.1 Load Patterns

Table 3.1 - Load Pattern Definitions

Name	Is Auto Load	Type	Self Weight Multiplier	Auto Load
~LLRF	Yes	Other	0	
Dead	No	Dead	1	
Flood	No	Other	0	
Live	No	Live	0	
Reducible Live	No	Reducible Live	0	
Roof Live	No	Roof Live	0	
Super Dead	No	Super Dead	0	
Wind	No	Wind	0	ASCE 7-22
Wind(1/12)	Yes	Wind	0	ASCE 7-22
Wind(10/12)	Yes	Wind	0	ASCE 7-22
Wind(11/12)	Yes	Wind	0	ASCE 7-22
Wind(12/12)	Yes	Wind	0	ASCE 7-22
Wind(2/12)	Yes	Wind	0	ASCE 7-22
Wind(3/12)	Yes	Wind	0	ASCE 7-22
Wind(4/12)	Yes	Wind	0	ASCE 7-22
Wind(5/12)	Yes	Wind	0	ASCE 7-22
Wind(6/12)	Yes	Wind	0	ASCE 7-22
Wind(7/12)	Yes	Wind	0	ASCE 7-22
Wind(8/12)	Yes	Wind	0	ASCE 7-22
Wind(9/12)	Yes	Wind	0	ASCE 7-22

3.2 Auto Wind Loading

ASCE 7-22 Auto Wind Load Calculation

This calculation presents the automatically generated lateral wind loads for load pattern Wind according to ASCE 7-22, as calculated by ETABS.

Exposure Parameters

Exposure From = Diaphragms

Exposure Category = C

Wind Direction = 0 degrees

Basic Wind Speed, V [ASCE 26.5.1]

Windward Coefficient, $C_{px,wind}$ [ASCE 27.4.1]

Leeward Coefficient, $C_{px,lee}$ [ASCE 27.4.1]

V=175 mph

Windward Coefficient, $C_{py,wind}$ [ASCE 27.4.1]

Leeward Coefficient, $C_{py,lee}$ [ASCE 27.4.1]

Wind Case = Create All

Top Story = upper roof

Bottom Story = Base

Include Parapet = Yes, Parapet Height = 5.5

Factors and Coefficients

Gradient Height, z_g [ASCE Table 26.9-1]

Emperical Exponent, α [ASCE Table 26.9-1]

Velocity Pressure Exposure Coefficient, K_z; [ASCE Table 27.3-1]

Kz=2.01(<z>/<zg>)$^{<<2>/<\alpha>>}$ for 15ft ≤ z ≤ $<z_{g>}$

Kz=2.01(<15>/<zg>)$^{<<2>/<\alpha>>}$ for z < 15ft

$z_{g=900}$

Topographical Factor, K_{zt} [ASCE 26.8.2]

Directionality Factor, K_d [ASCE 26.6]

Gust Effect Factor, G [ASCE 26.9]

Lateral Loading

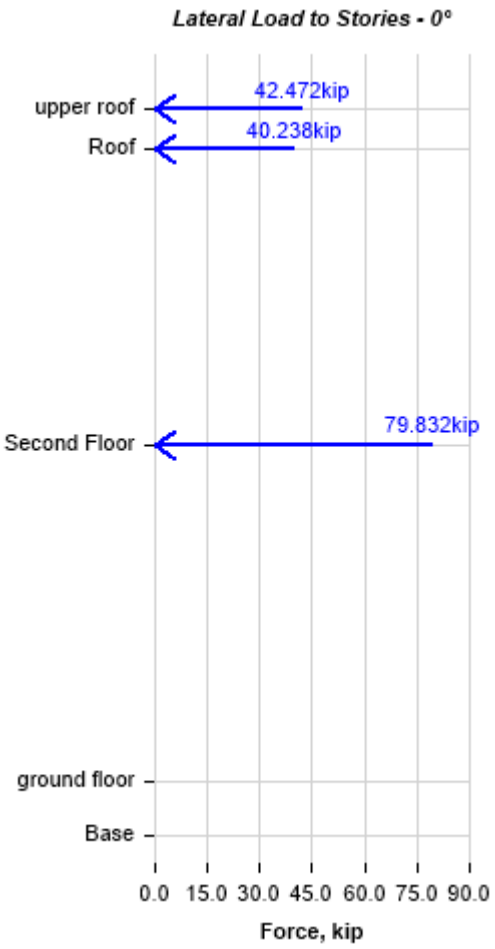
Velocity Pressure, q_z [ASCE 27.3.2 Eq. 27.3-1]

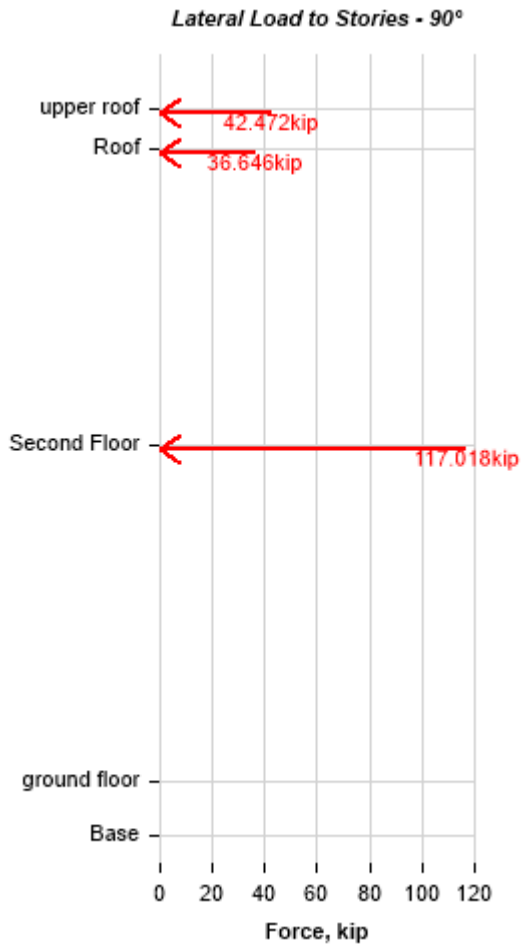
<qz>=0.00256<Kz><Kzt><Kd><V$^{2>}$

Design Wind Pressure, p [ASCE 27.4.2 Eq. 27.4-2]

p=qG<Cp,wind>+<qh><(G<$C_{p,lee>)}$>

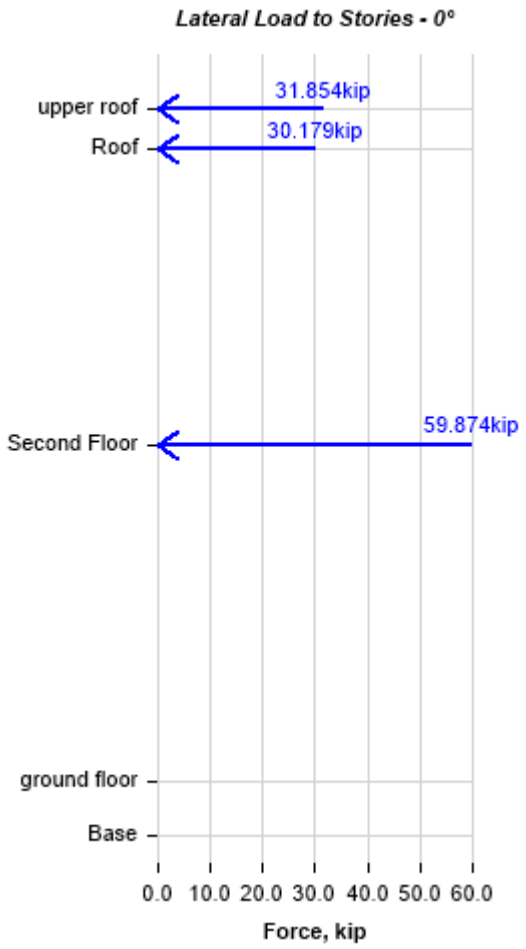
Applied Story Forces



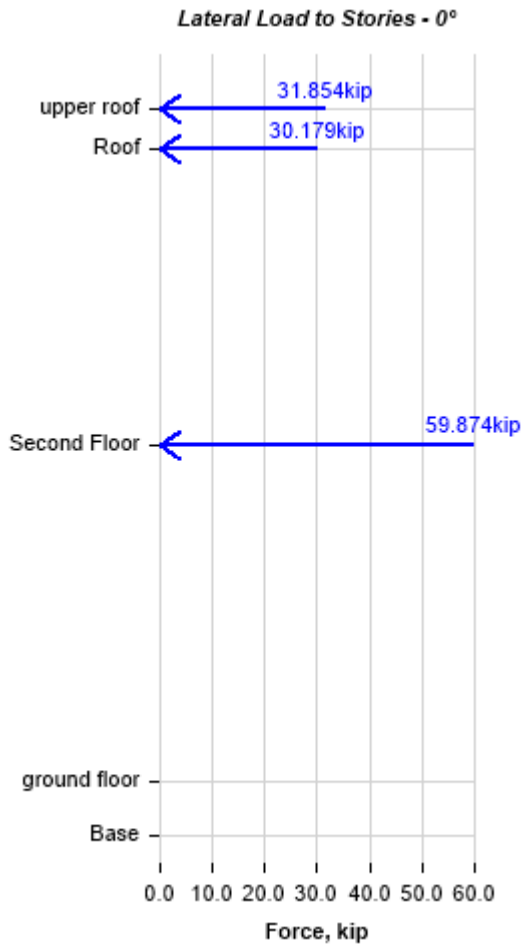


Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	42.472	0
Roof	23.5	40.238	0
Second Floor	12.5	79.832	0
ground floor	0	0	0
Base	-2	0	0

Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	0	42.472
Roof	23.5	0	36.646
Second Floor	12.5	0	117.018
ground floor	0	0	0
Base	-2	0	0

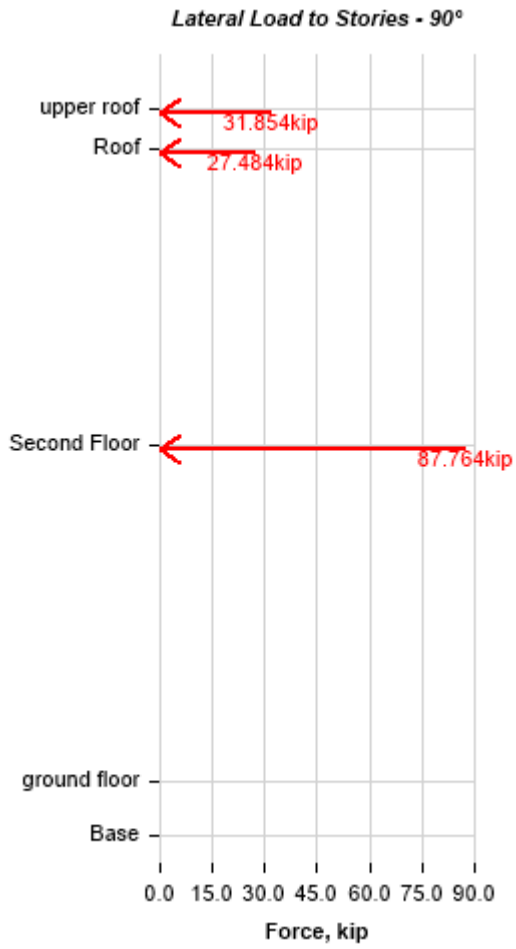


Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	31.854	0
Roof	23.5	30.179	0
Second Floor	12.5	59.874	0
ground floor	0	0	0
Base	-2	0	0

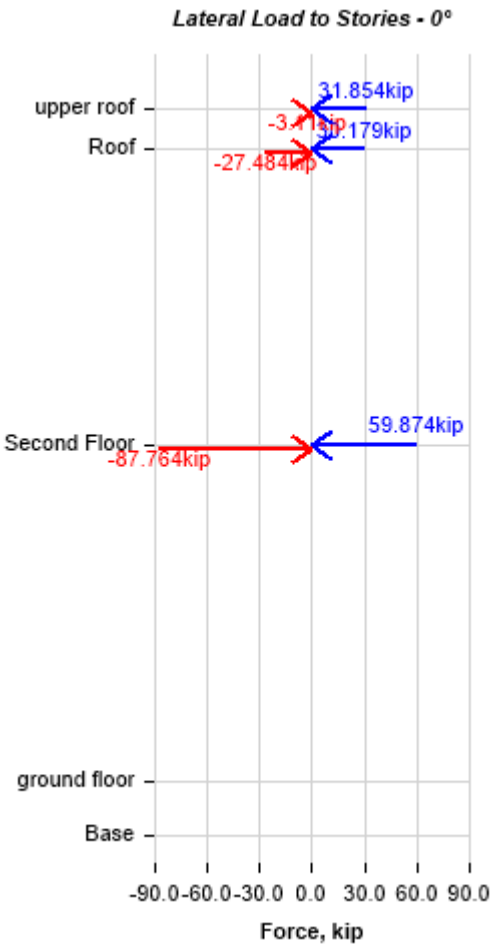


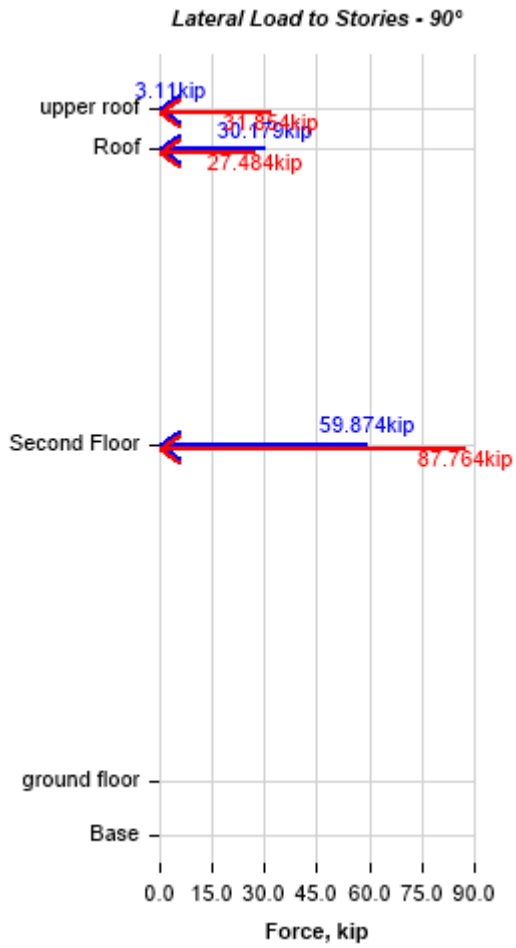
Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	31.854	0
Roof	23.5	30.179	0
Second Floor	12.5	59.874	0
ground floor	0	0	0
Base	-2	0	0

Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	0	31.854
Roof	23.5	0	27.484
Second Floor	12.5	0	87.764
ground floor	0	0	0
Base	-2	0	0



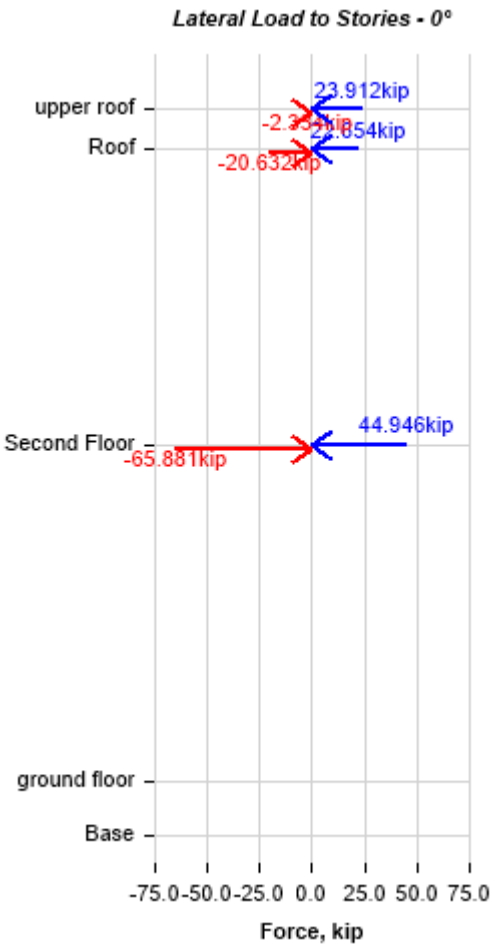
Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	0	31.854
Roof	23.5	0	27.484
Second Floor	12.5	0	87.764
ground floor	0	0	0
Base	-2	0	0

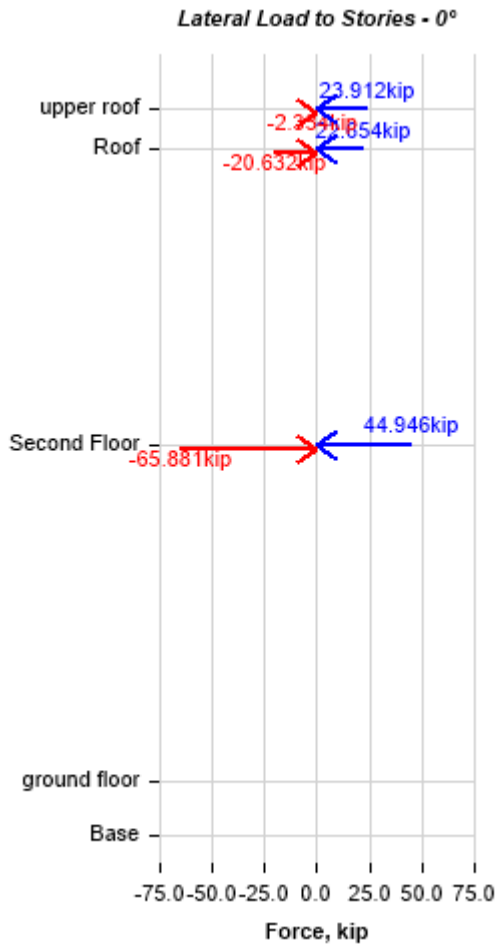




Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	31.854	-3.11
Roof	23.5	30.179	-27.484
Second Floor	12.5	59.874	-87.764
ground floor	0	0	0
Base	-2	0	0

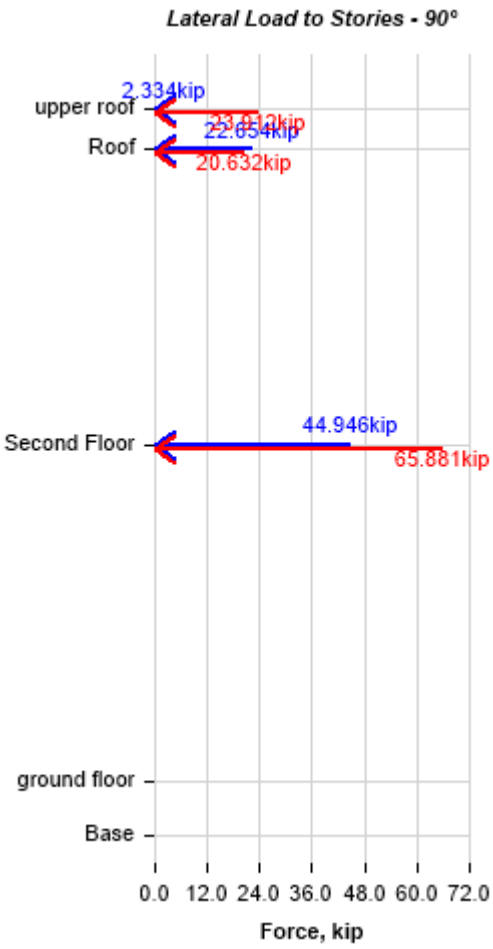
Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	3.11	31.854
Roof	23.5	30.179	27.484
Second Floor	12.5	59.874	87.764
ground floor	0	0	0
Base	-2	0	0



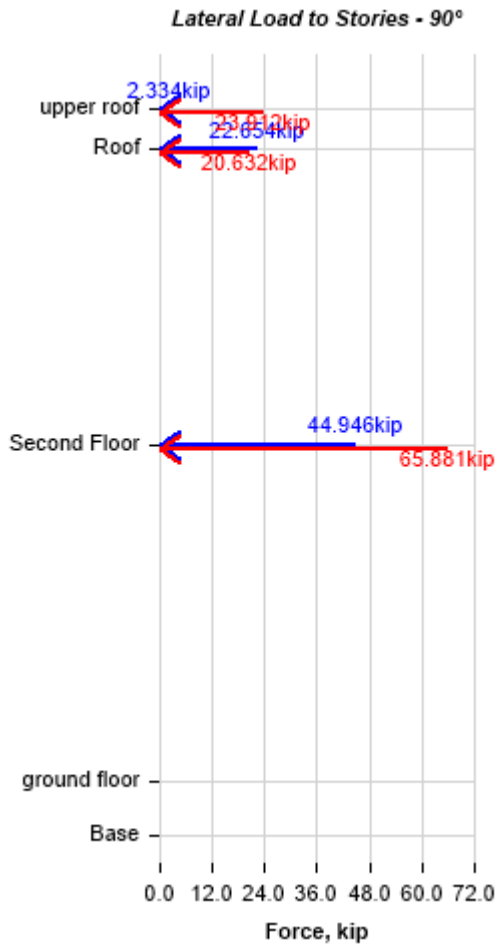


Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	23.912	-2.334
Roof	23.5	22.654	-20.632
Second Floor	12.5	44.946	-65.881
ground floor	0	0	0
Base	-2	0	0

Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	23.912	-2.334
Roof	23.5	22.654	-20.632
Second Floor	12.5	44.946	-65.881
ground floor	0	0	0
Base	-2	0	0



Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	2.334	23.912
Roof	23.5	22.654	20.632
Second Floor	12.5	44.946	65.881
ground floor	0	0	0
Base	-2	0	0



Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
upper roof	25	2.334	23.912
Roof	23.5	22.654	20.632
Second Floor	12.5	44.946	65.881
ground floor	0	0	0
Base	-2	0	0

3.3 Load Combinations

Table 3.3 - Load Combination Definitions

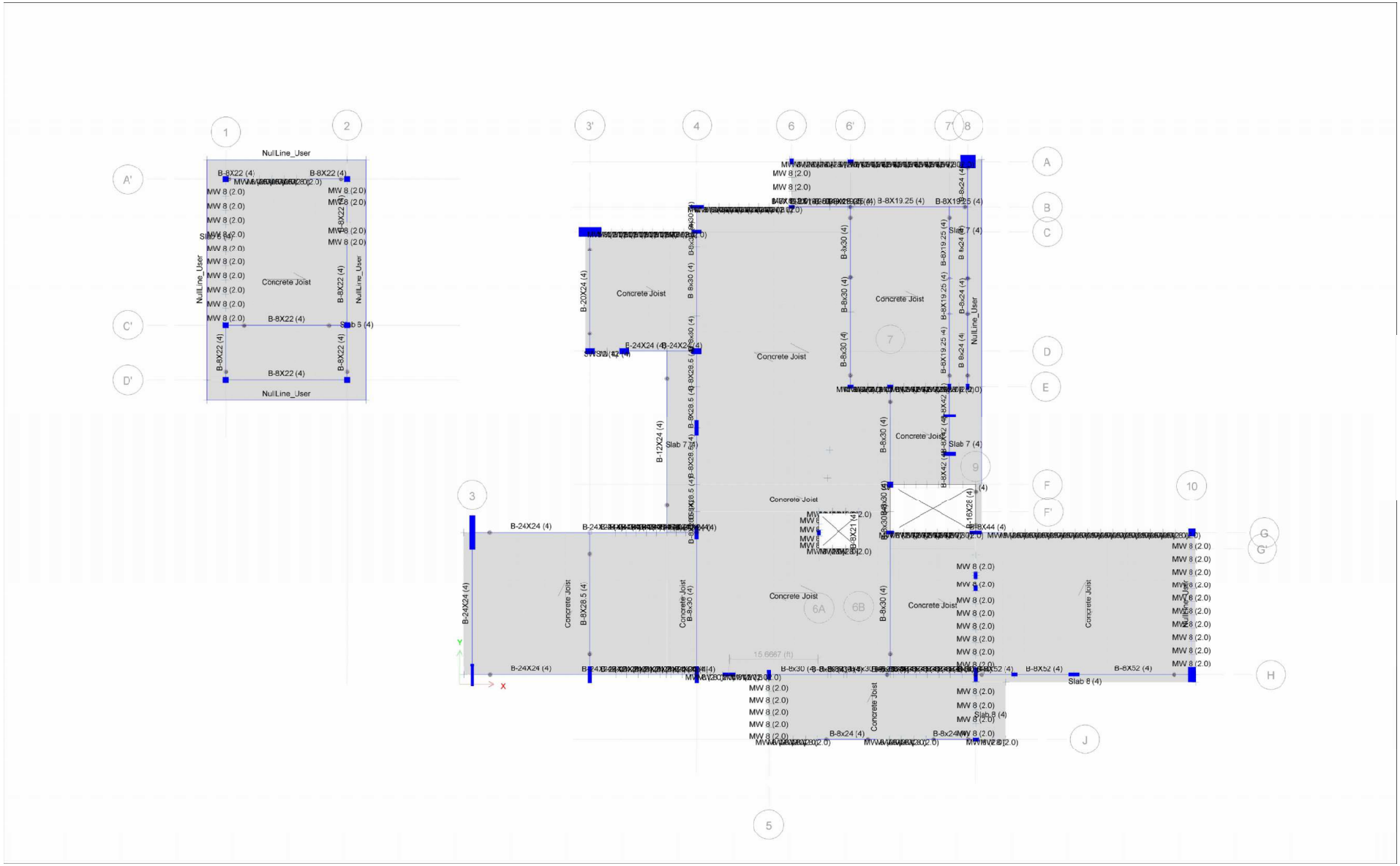
Name	Type	Is Auto	Load Name	Mode	SF	Notes
ASD1 D	Linear Add	No	Dead		1	
ASD2 D+L	Linear Add	No	Dead		1	
ASD2 D+L			Live		1	
ASD2 D+L			Reducible Live		1	
ASD3 D+Lr	Linear Add	No	Dead		1	
ASD3 D+Lr			Roof Live		1	
ASD4 D+0.75L+0.75Lr	Linear Add	No	Dead		1	
ASD4 D+0.75L+0.75Lr			Live		0.75	
ASD4 D+0.75L+0.75Lr			Roof Live		0.75	
ASD4 D+0.75L+0.75Lr			Reducible Live		0.75	
ASD5a-1 D+0.6W	Linear Add	No	Dead		1	
ASD5a-1 D+0.6W			Wind		0.6	
ASD5a-2 D-0.6W	Linear Add	No	Dead		1	
ASD5a-2 D-0.6W			Wind		-0.6	
ASD5b-1 D+0.75Fa+0.6W	Linear Add	No	Dead		1	
ASD5b-1 D+0.75Fa+0.6W			Flood		0.75	
ASD5b-1 D+0.75Fa+0.6W			Wind		0.6	
ASD5b-2 D+0.75Fa-0.6W	Linear Add	No	Dead		1	
ASD5b-2 D+0.75Fa-0.6W			Flood		0.75	
ASD5b-2 D+0.75Fa-0.6W			Wind		-0.6	
ASD6a-1 D+0.75L+0.75Lr+0.45W	Linear Add	No	Dead		1	
ASD6a-1 D+0.75L+0.75Lr+0.45W			Live		0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W			Roof Live		0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W			Wind		0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W			Reducible Live		0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W	Linear Add	No	Dead		1	
ASD6a-2 D+0.75L+0.75Lr-0.45W			Live		0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W			Roof Live		0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W			Wind		-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W			Reducible Live		0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W	Linear Add	No	Dead		1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W			Live		0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W			Roof Live		0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W			Flood		0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W			Wind		0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W			Reducible Live		0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W	Linear Add	No	Dead		1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W			Live		0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W			Roof Live		0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W			Flood		0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W			Wind		-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W			Reducible Live		0.75	
ASD7a-1 0.6D+0.6W	Linear Add	No	Dead		0.6	
ASD7a-1 0.6D+0.6W			Wind		0.6	
ASD7a-2 0.6D-0.6W	Linear Add	No	Dead		0.6	
ASD7a-2 0.6D-0.6W			Wind		-0.6	
ASD7b-1 0.6D+0.75Fa+0.6W	Linear Add	No	Dead		0.6	
ASD7b-1 0.6D+0.75Fa+0.6W			Flood		0.75	
ASD7b-1 0.6D+0.75Fa+0.6W			Wind		0.6	
ASD7b-2 0.6D+0.75Fa-0.6W	Linear Add	No	Dead		0.6	

Loads

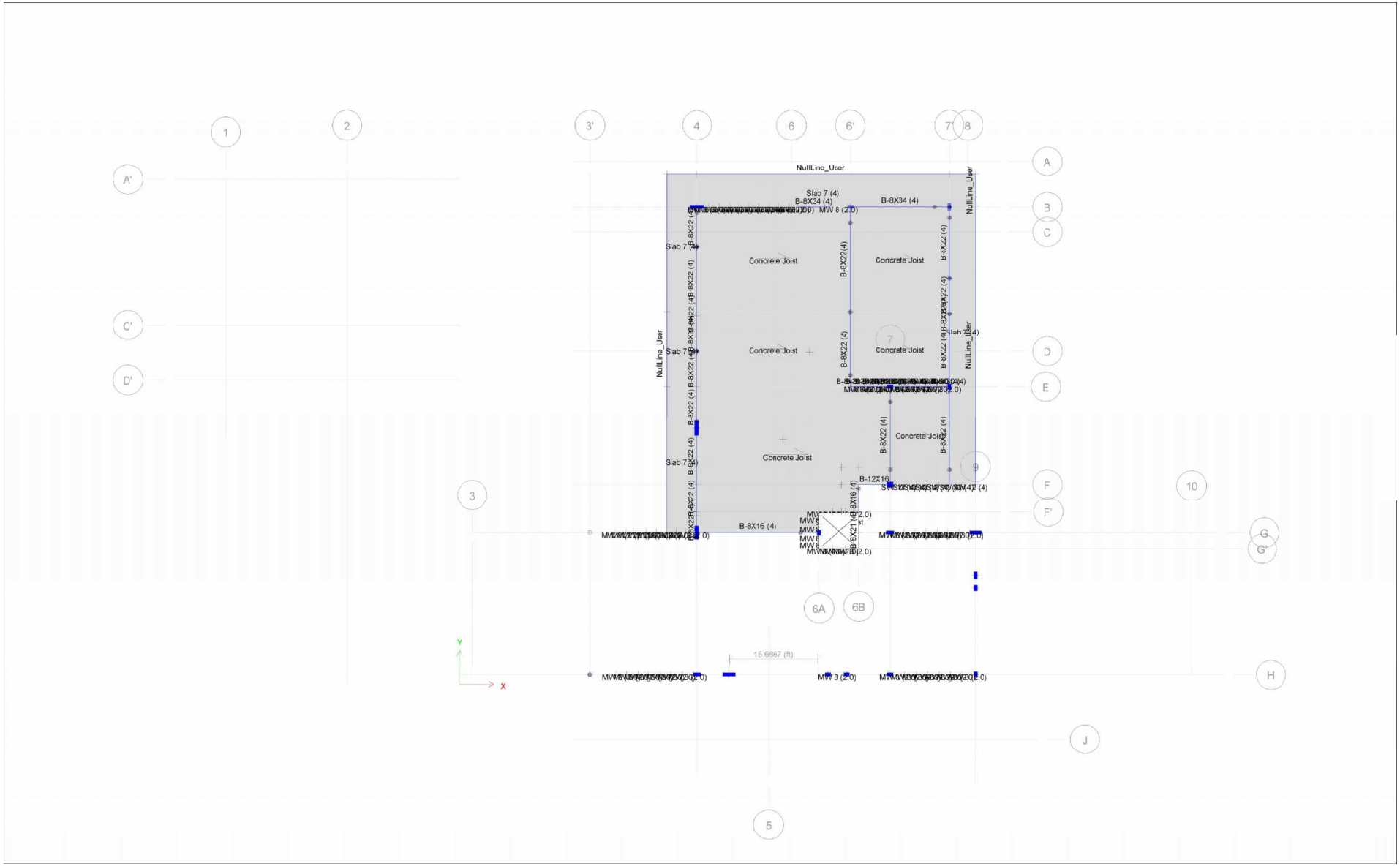
Name	Type	Is Auto	Load Name	Mode	SF	Notes
ASD7b-2 0.6D+0.75Fa-0.6W			Flood		0.75	
ASD7b-2 0.6D+0.75Fa-0.6W			Wind		-0.6	
ASD8 (Alt) D+L-0.78W	Linear Add	No	Dead		1	
ASD8 (Alt) D+L-0.78W			Live		1	
ASD8 (Alt) D+L-0.78W			Wind		-0.78	
ASD8 (Alt) D+L+0.78W	Linear Add	No	Dead		1	
ASD8 (Alt) D+L+0.78W			Live		1	
ASD8 (Alt) D+L+0.78W			Wind		0.78	
$ASDEnv_{WindOnly}$	Envelope	No	Wind		0.6	
ASD Envelope	Envelope	No	ASD1 D		1	
ASD Envelope			ASD2 D+L		1	
ASD Envelope			ASD3 D+Lr		1	
ASD Envelope			ASD4 D+0.75L+0.75Lr		1	
ASD Envelope			ASD5a-1 D+0.6W		1	
ASD Envelope			ASD5a-2 D-0.6W		1	
ASD Envelope			ASD6a-1 D+0.75L+0.75Lr+0.45W		1	
ASD Envelope			ASD6a-2 D+0.75L+0.75Lr-0.45W		1	
ASD Envelope			ASD7a-1 0.6D+0.6W		1	
ASD Envelope			ASD7a-2 0.6D-0.6W		1	
ASD Envelope			ASD5b-1 D+0.75Fa+0.6W		1	
ASD Envelope			ASD5b-2 D+0.75Fa-0.6W		1	
ASD Envelope			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W		1	
ASD Envelope			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W		1	
ASD Envelope			ASD7b-1 0.6D+0.75Fa+0.6W		1	
ASD Envelope			ASD7b-2 0.6D+0.75Fa-0.6W		1	
ASD Envelope			ASD8 (Alt) D+L+0.78W		1	
ASD Envelope			ASD8 (Alt) D+L-0.78W		1	
LRFD1 1.4D	Linear Add	No	Dead		1.4	
LRFD2 1.2D+1.6L+0.5Lr	Linear Add	No	Dead		1.2	
LRFD2 1.2D+1.6L+0.5Lr			Live		1.6	
LRFD2 1.2D+1.6L+0.5Lr			Roof Live		0.5	
LRFD2 1.2D+1.6L+0.5Lr			Reducible Live		1.6	
LRFD3 1.2D+1.0L+1.6Lr	Linear Add	No	Dead		1.2	
LRFD3 1.2D+1.0L+1.6Lr			Live		1	
LRFD3 1.2D+1.0L+1.6Lr			Roof Live		1.6	
LRFD3 1.2D+1.0L+1.6Lr			Reducible Live		1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W	Linear Add	No	Dead		1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W			Live		1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W			Roof Live		0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W			Wind		1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W			Reducible Live		1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W	Linear Add	No	Dead		1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W			Live		1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W			Roof Live		0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W			Wind		-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W			Reducible Live		1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W	Linear Add	No	Dead		1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W			Live		1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W			Roof Live		0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W			Flood		1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W			Wind		0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W			Reducible Live		1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W	Linear Add	No	Dead		1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W			Live		1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W			Roof Live		0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W			Flood		1	

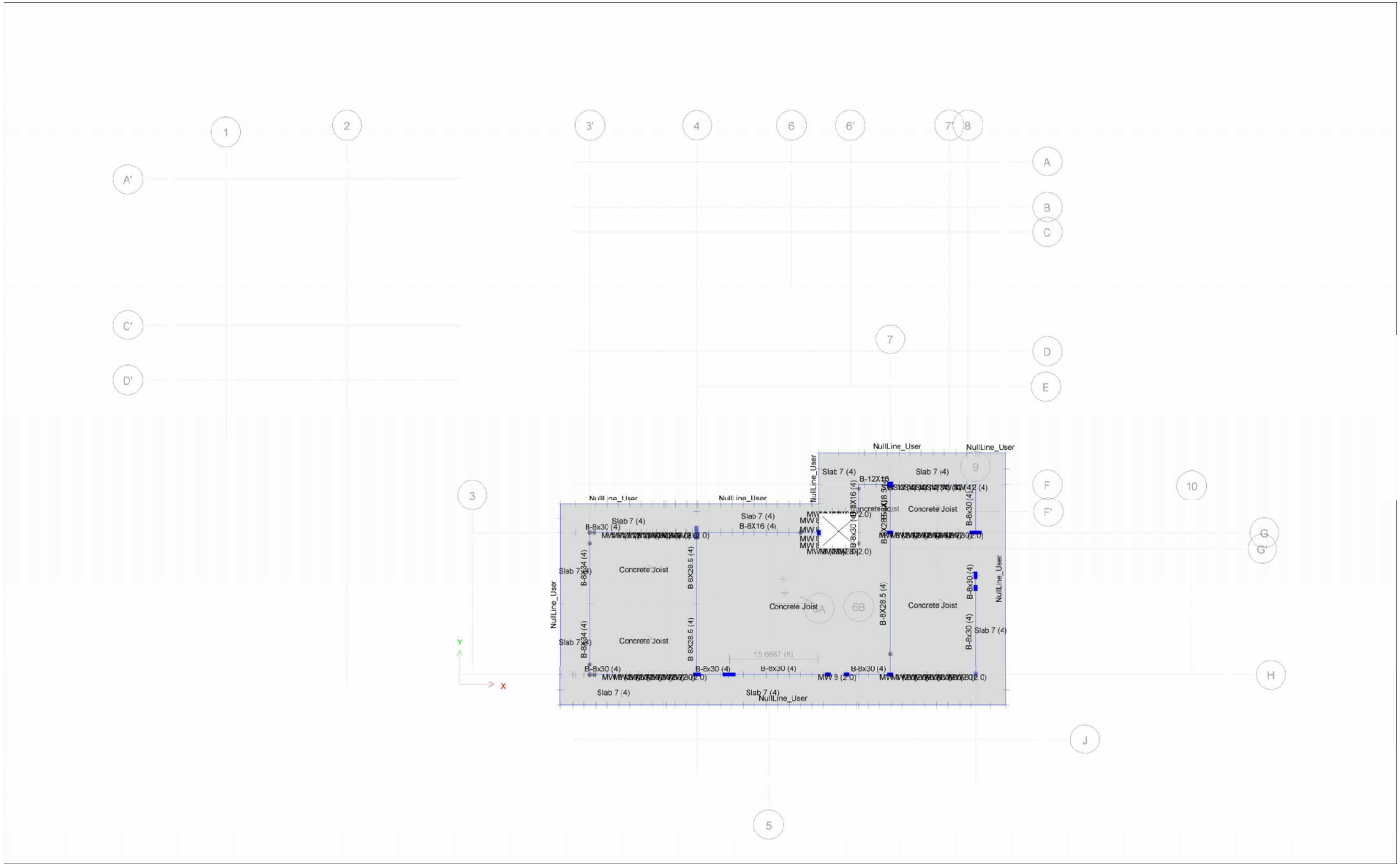
Loads

Name	Type	Is Auto	Load Name	Mode	SF	Notes
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W			Wind		-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W			Reducible Live		1	
LRFD6a-1 0.9D+1.0W	Linear Add	No	Dead		0.9	
LRFD6a-1 0.9D+1.0W			Wind		1	
LRFD6a-2 0.9D-1.0W	Linear Add	No	Dead		0.9	
LRFD6a-2 0.9D-1.0W			Wind		-1	
LRFD6b-1 0.9D+1.0Fa+0.5W	Linear Add	No	Dead		0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W			Flood		1	
LRFD6b-1 0.9D+1.0Fa+0.5W			Wind		0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W	Linear Add	No	Dead		0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W			Flood		1	
LRFD6b-2 0.9D+1.0Fa-0.5W			Wind		-0.5	
$LRFDEnv_{WindOnly}$	Envelope	No	Wind		1	
LRFD Envelope	Envelope	No	LRFD1 1.4D		1	
LRFD Envelope			LRFD2 1.2D+1.6L+0.5Lr		1	
LRFD Envelope			LRFD3 1.2D+1.0L+1.6Lr		1	
LRFD Envelope			LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W		1	
LRFD Envelope			LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W		1	
LRFD Envelope			LRFD6a-1 0.9D+1.0W		1	
LRFD Envelope			LRFD6a-2 0.9D-1.0W		1	
LRFD Envelope			LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W		1	
LRFD Envelope			LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W		1	
LRFD Envelope			LRFD6b-1 0.9D+1.0Fa+0.5W		1	
LRFD Envelope			LRFD6b-2 0.9D+1.0Fa-0.5W		1	



Plan View - Second Floor - Z = 12.5 (ft)


NullLine_User
Slab 7 (4)
B-8X34 (4)
MW 8 (2.0)
Concrete Joist
B-8X22 (4)
B-12X16
B-8X16 (4)
15.6667 (ft)
1
2
3'
4
6
6'
7
8
A
B
C
D
E
F
F'
G
G'
H
J
A'
C'
D'
3
5
6A
6B
9
10
Y
X



Plan View - upper roof - Z = 25 (ft)

ETABS 22.1.0

25-0032 12700 Rolling Rd Etabs 20.3.0 V04.EDB

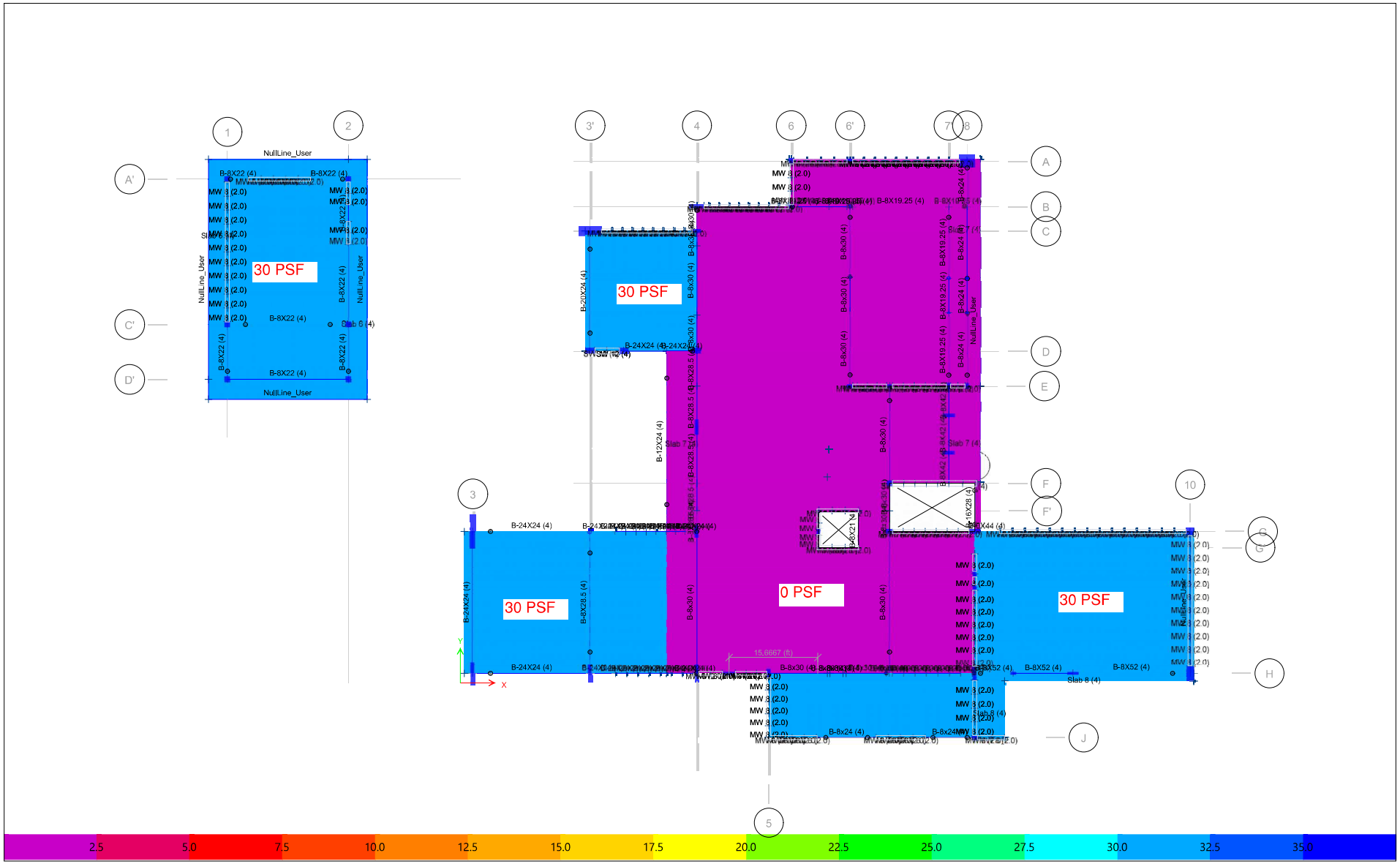
Plan View - Second Floor - Z = 12.5 (ft) Surface Loads Gravity (Super Dead) [lb/ft²]

ETABS 22.1.0

25-0032 12700 Rolling Rd Etabs 20.3.0 V04.EDB

Plan View - Second Floor - Z = 12.5 (ft) Surface Loads Gravity (Live) [lb/ft²]

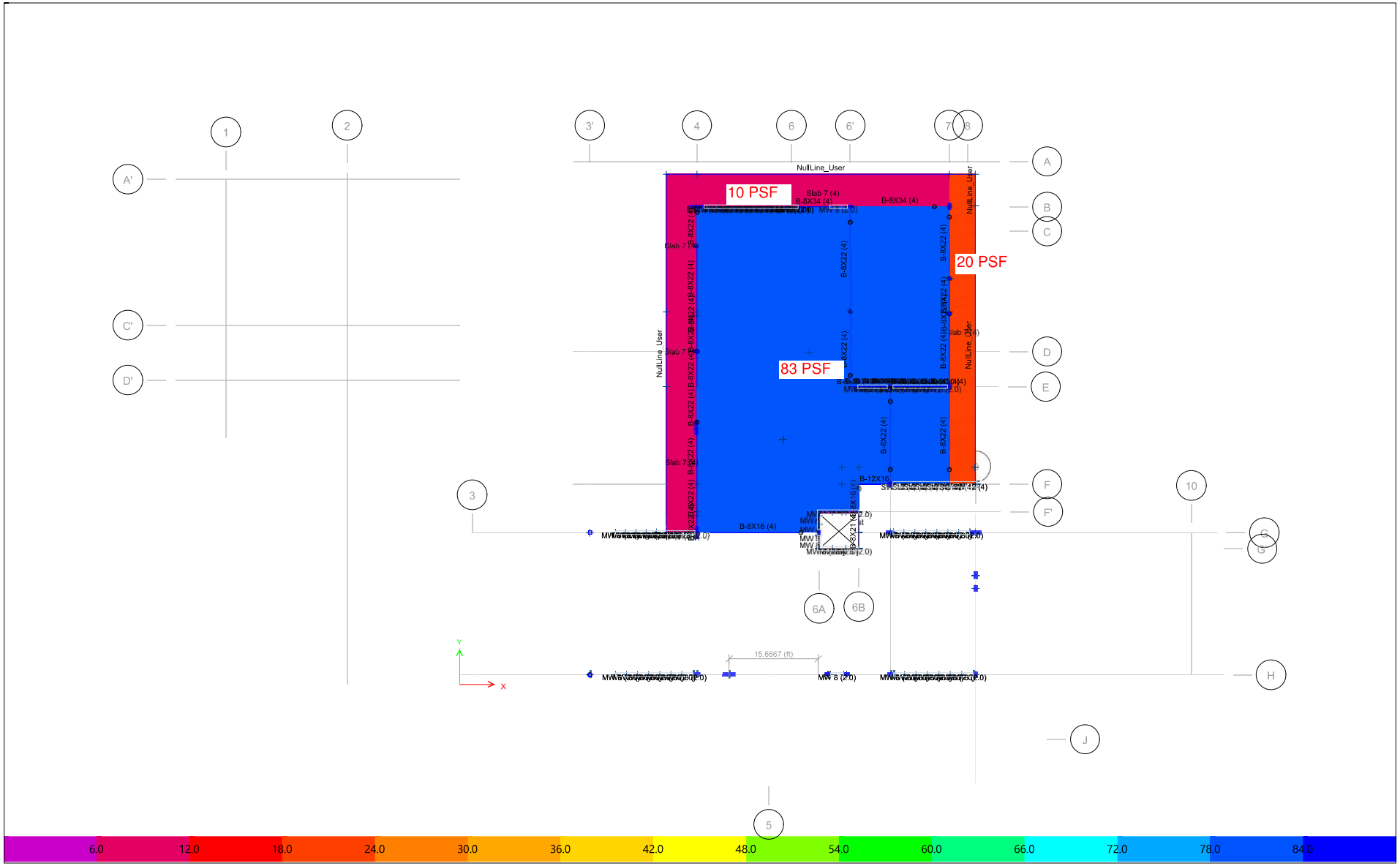
ETABS 22.1.0



25-0032 12700 Rolling Rd Etabs 20.3.0 V04.EDB

Plan View - Second Floor - Z = 12.5 (ft) Surface Loads Gravity (Roof Live) [lb/ft²]

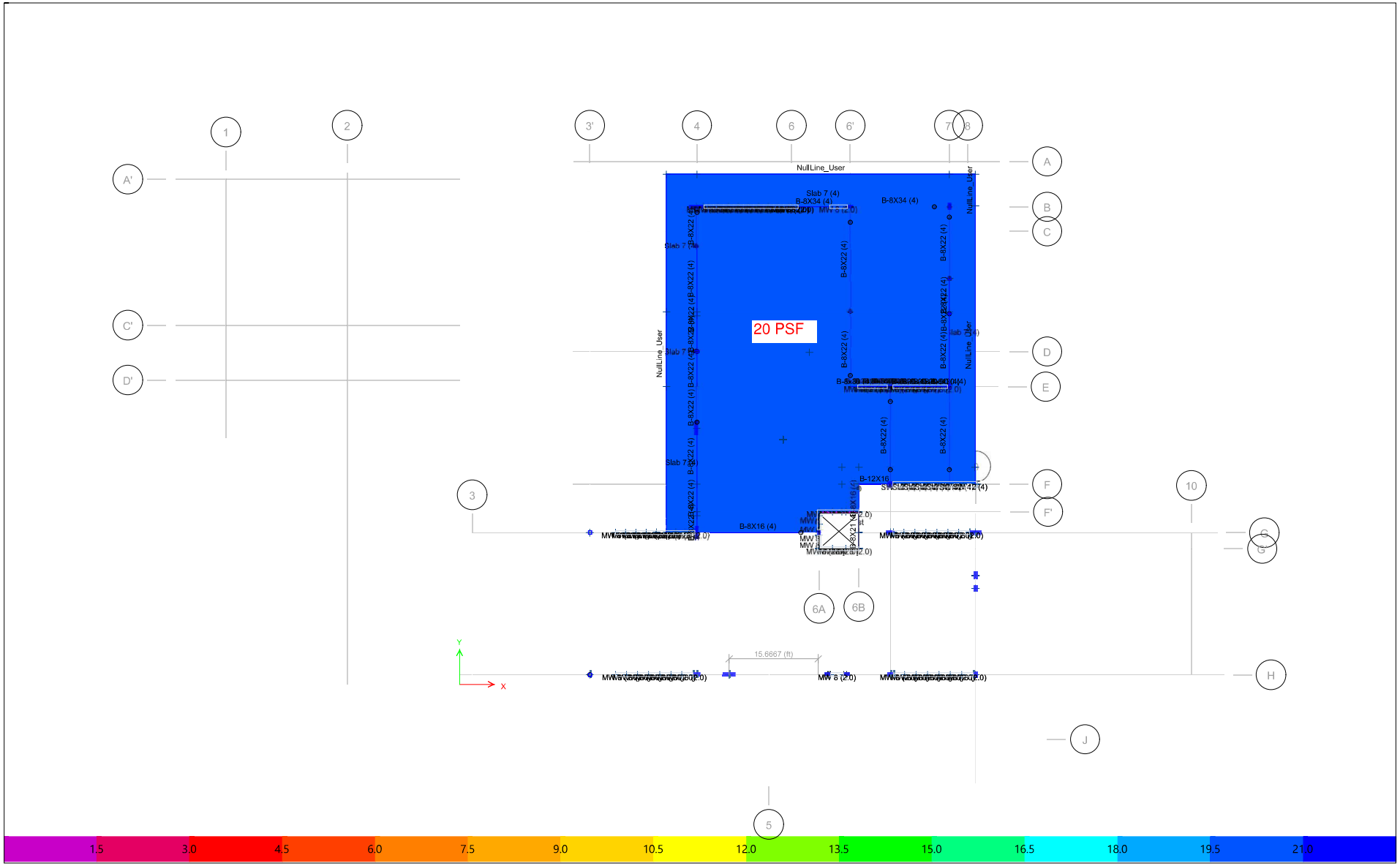
ETABS 22.1.0



25-0032 12700 Rolling Rd Etabs 20.3.0 V04.EDB

Plan View - Roof - Z = 23.5 (ft) Surface Loads Gravity (Super Dead) [lb/ft²]

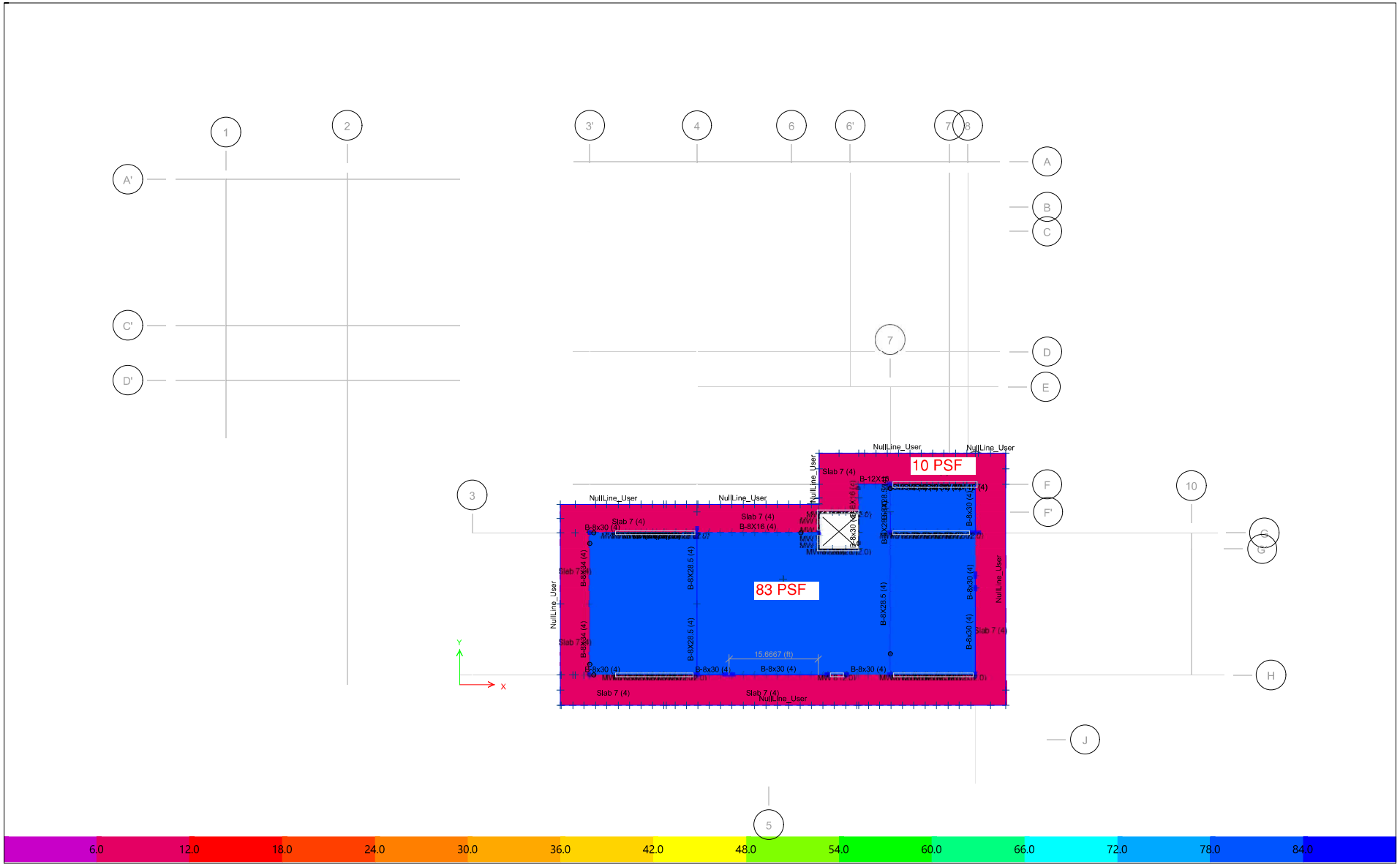
ETABS 22.1.0



25-0032 12700 Rolling Rd Etabs 20.3.0 V04.EDB

Plan View - Roof - Z = 23.5 (ft) Surface Loads Gravity (Roof Live) [lb/ft²]

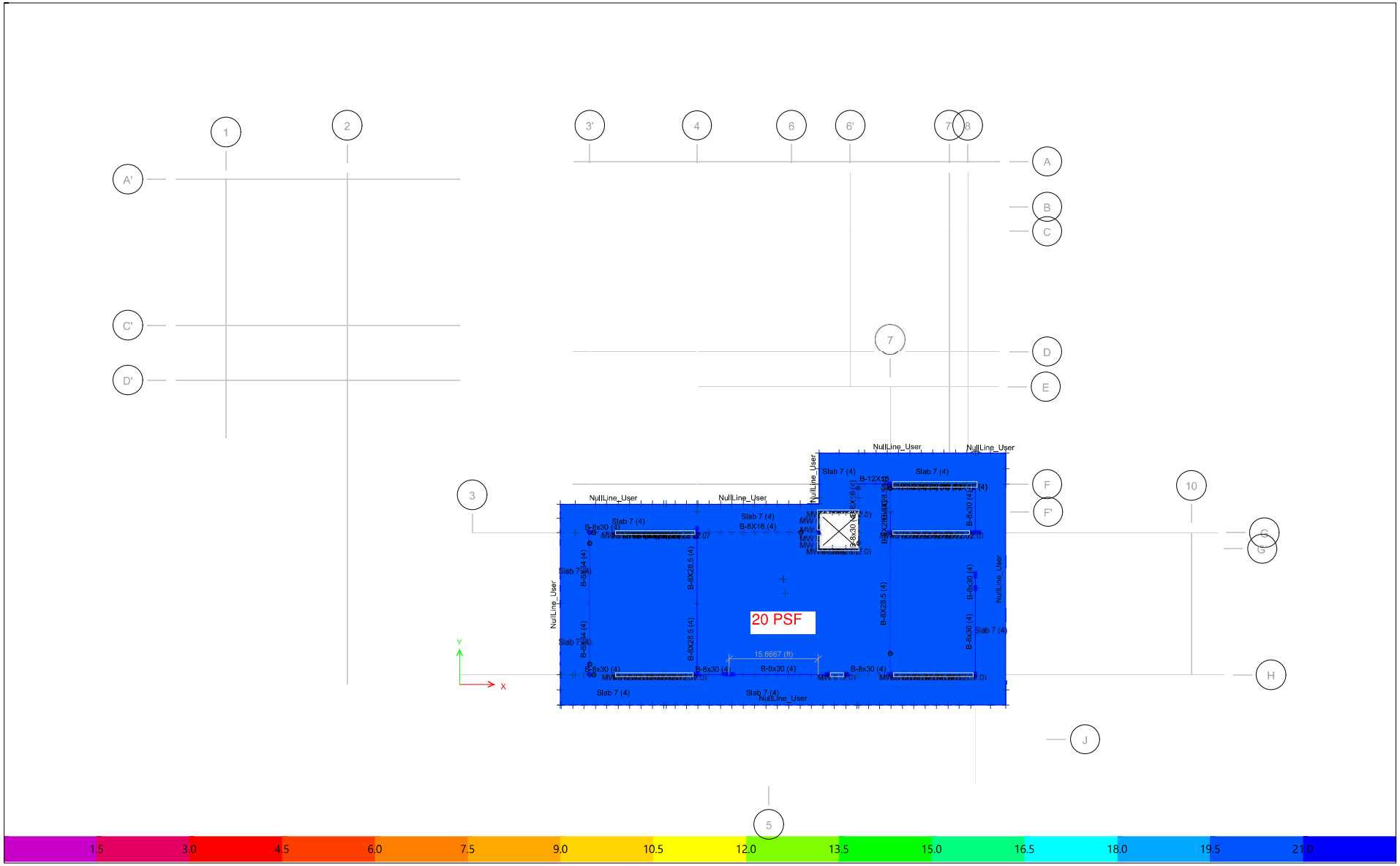
ETABS 22.1.0



25-0032 12700 Rolling Rd Etabs 20.3.0 V04.EDB

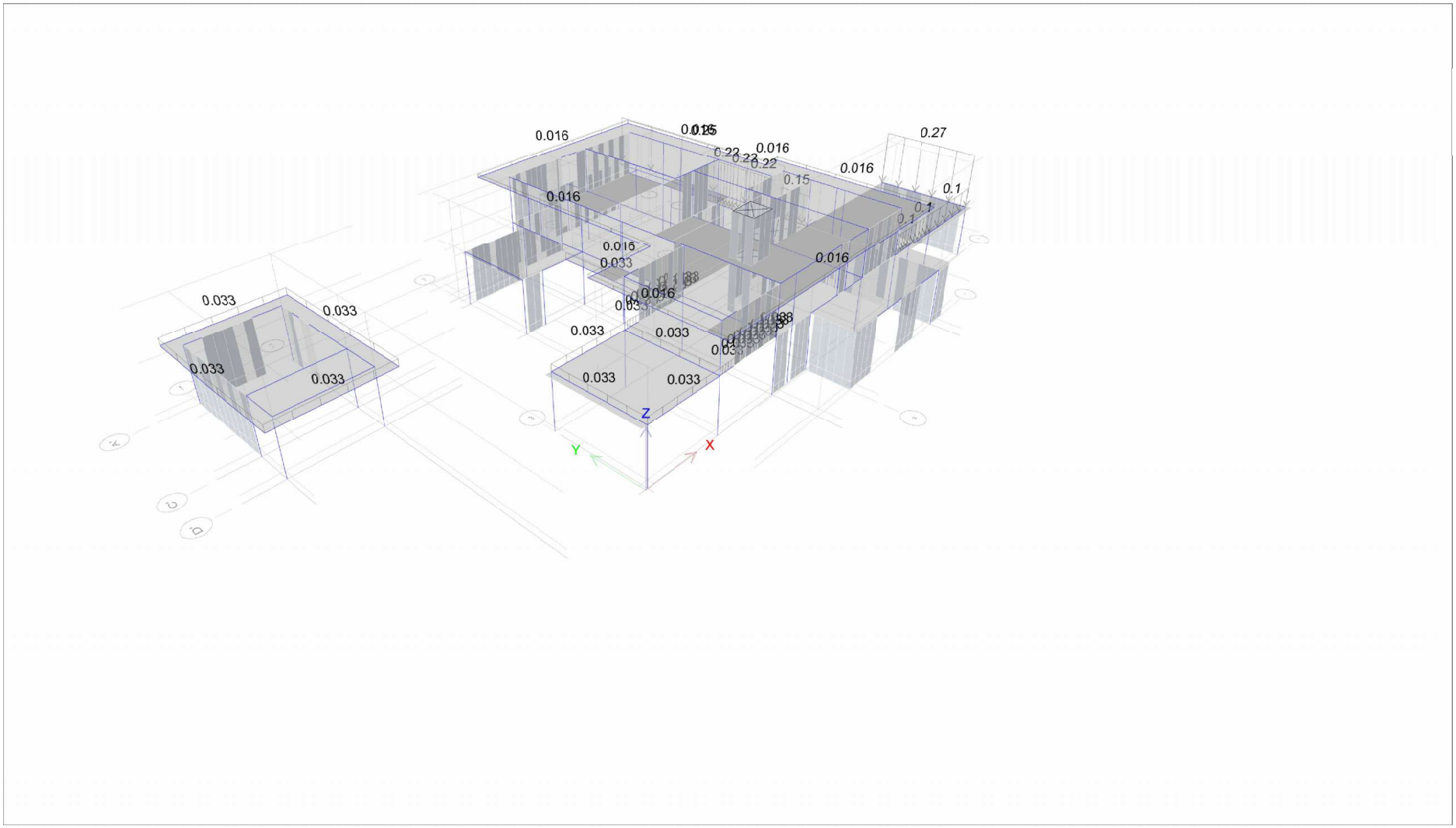
Plan View - upper roof - Z = 25 (ft) Surface Loads Gravity (Super Dead) [lb/ft²]

ETABS 22.1.0



25-0032 12700 Rolling Rd Etabs 20.3.0 V04.EDB

Plan View - upper roof - Z = 25 (ft) Surface Loads Gravity (Roof Live) [lb/ft²]


0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.27
0.1
0.1
0.1
0.15
0.22
0.22
0.22
0.033
0.033
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0.033
0.033
0.033
0.033
0.033
0.033
Z
Y
X

SLAB DESIGN

STRUCTURAL PRESTRESSED INDUSTRIES, INC.

11405 NW 138th Street, Medley, Florida 33178
TEL (305) 556-6699 FAX (305) 556-9696 *www.spimiami.com*

FOR SPANS AND LOADS NOT SHOWN
IN TABLES CONTACT SPI ENGINEERING

CAMBER IS INHERENT TO PRESTRESSED MEMBERS. HEAVY LOADING AND LONG SPANS MAY RESULT IN HIGHER CAMBERS. CONTACT SPI WITH ANY CAMBER CONCERNS.

8" PRESTRESSED KEYSTONE JOISTS 3" COMPOSITE SLAB f'c=3000psi

Spcg	Design	Span (ft)														
		18	19	20	21	22	23	24	25	26	27	28	30	32	34	Sys. Wt. (psf)
2'-6"	A	170	150	130	115	100	90	80	70	55						57
	B			150	135	120	105	95	85	75	65	55	45			
	C							130	110	90	70	65	60	50		
	D							200	180	165	155	140	115	95	65	

Spcg	Design	Span (ft)														
		18	19	20	21	22	23	24	25	26	27	28	30	32	34	Sys. Wt. (psf)
3'-6"	A	120	105	90	80	70	60	45								51
	B		120	105	90	80	70	60	45							
	C							95	85	75	65	55	45			
	D								130	120	110	105	85	75	55	

Spcg	Design	Span (ft)														
		18	19	20	21	22	23	24	25	26	27	28	29	30	32	Sys. Wt. (psf)
4'-6"	A	90	80	70	60	50										48
	B	105	90	75	65	60	50	45								
	C			100	90	80	70	65	60	55	50	45				
	D				145	135	125	115	105	95	85	80	70	65	50	

8" PRESTRESSED KEYSTONE JOISTS 4" (Min.) COMPOSITE SLAB f'c=4000psi

Spcg	Design	Span (ft)														
		18	19	20	21	22	23	24	25	26	27	28	29	30	31	Sys. Wt. (psf)
5'-6"	A	70	60	50												59
	B	90	80	70	60	50										
	C	120	110	100	90	80	70	60	50							
	D	155	145	135	125	115	105	95	85	80	75	70	65	60	50	

Spcg	Design	Span (ft)														
		14	15	16	17	18	19	20	21	22	23	24	26	28	30	Sys. Wt. (psf)
6'-6"	A	70	65	60	55	50	45									57
	B	90	85	80	75	70	60	50	45							
	C	105	100	95	90	85	75	65	55	45						
	D	140	135	130	125	120	115	110	100	90	80	70	60	55	45	

These tables provide allowable superimposed service loads (in psf) on the composite system based on the following assumptions:

1- Prestressed Concrete: f'c=6000 psi

2- 20 psf of the allowable superimposed service load is considered dead load on the composite system

3- Loads are based on ACI 318-02

4- Loads in the shaded boxes are controlled by serviceability (i.e. initial camber, permissible deflections). SPI recommends changing to a 4" thick slab with f'c=4000 psi min.

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12" PRESTRESSED KEYSTONE JOISTS 3" COMPOSITE SLAB f'c=3000psi

Spcg	Design	Span (ft)																			
		27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Sys. Wt. (psf)
2'-6"	A	125	115	105	95	85	75	65	60	55	45										66
	B	170	165	160	140	130	120	110	100	90	80	75	65	60	55	50	45				
	C			180	170	160	150	135	120	110	100	90	85	75	70	65	55	50	45		
	D					200	190	185	170	160	150	130	115	105	95	85	80	75	65	45	

Spcg	Design	Span (ft)																			
		27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Sys. Wt. (psf)
3'-6"	A	95	85	75	65	60	55	45													57
	B		135	125	115	105	95	85	75	70	65	60	55	45							
	C				160	150	140	120	110	95	85	75	65	55	50	45					
	D				190	170	150	140	130	125	110	100	90	80	70	60	50	45			
	E				200	180	160	150	140	135	125	115	105	95	85	70	60	50	45		

Spcg	Design	Span (ft)																			
		21	22	23	24	25	26	27	28	29	30	32	33	34	35	36	37	38	39	40	Sys. Wt. (psf)
4'-6"	A	95	90	85	80	75	70	65	55	45											53
	B	180	165	155	140	130	120	110	105	95	85	75	65	55	45						
	C		200	195	190	180	165	150	135	120	105	90	80	70	65	60	55	50	45		
	D						200	190	180	170	160	150	135	120	105	90	80	70	60	50	
	E							195	185	175	165	155	140	125	110	95	85	75	60	50	

12" PRESTRESSED KEYSTONE JOISTS 4" (Min.) COMPOSITE SLAB f'c=4000psi

Spcg	Design	Span (ft)																			
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	Sys. Wt. (psf)
5'-6"	A	75	65	55	45																63
	B	150	140	130	120	110	100	90	80	70	60										
	C		180	170	160	150	140	130	120	110	100	90	80	70	60	55	50				
	D				200	180	160	150	140	130	120	110	100	90	80	70	60	55	45		
	E					190	170	155	145	135	125	115	105	95	85	75	65	60	55	45	

Spcg	Design	Span (ft)																			
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	Sys. Wt. (psf)
6'-6"	A	60	50																		61
	B	95	85	75	65	55															
	C	115	95	85	80	75	70	65	60	55	45										
	D	140	125	115	110	105	100	95	90	85	80	75	70	65	60	55	45				
	E	150	135	125	120	115	110	105	100	95	90	85	80	75	70	65	60	55	45		

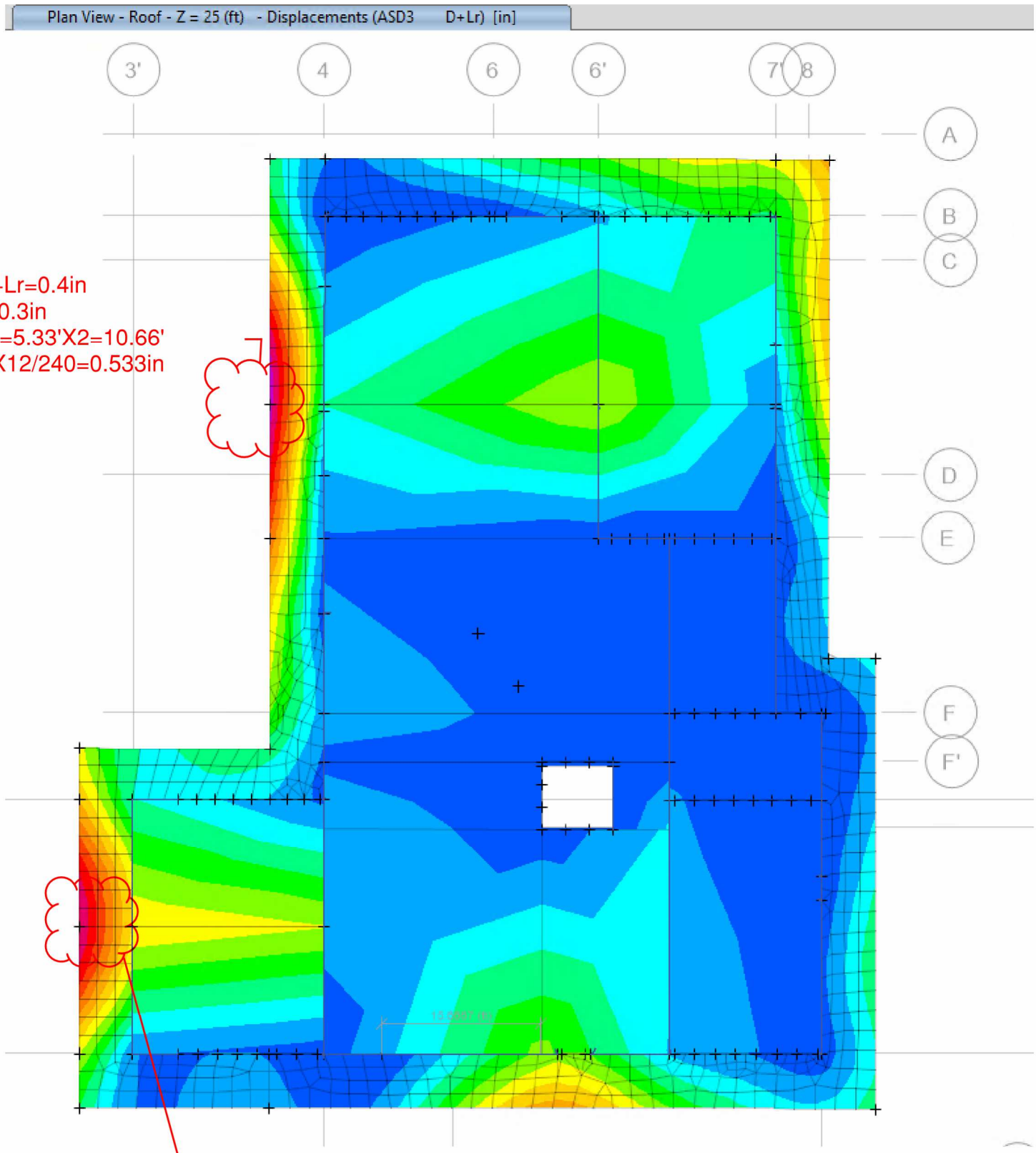
These tables provide allowable superimposed service loads (in psf) on the composite system based on the following assumptions:

1- Prestressed Concrete: f'c=6000 psi

2- 20 psf of the allowable superimposed service load is considered dead load on the composite system

3- Loads are based on ACI 318-02

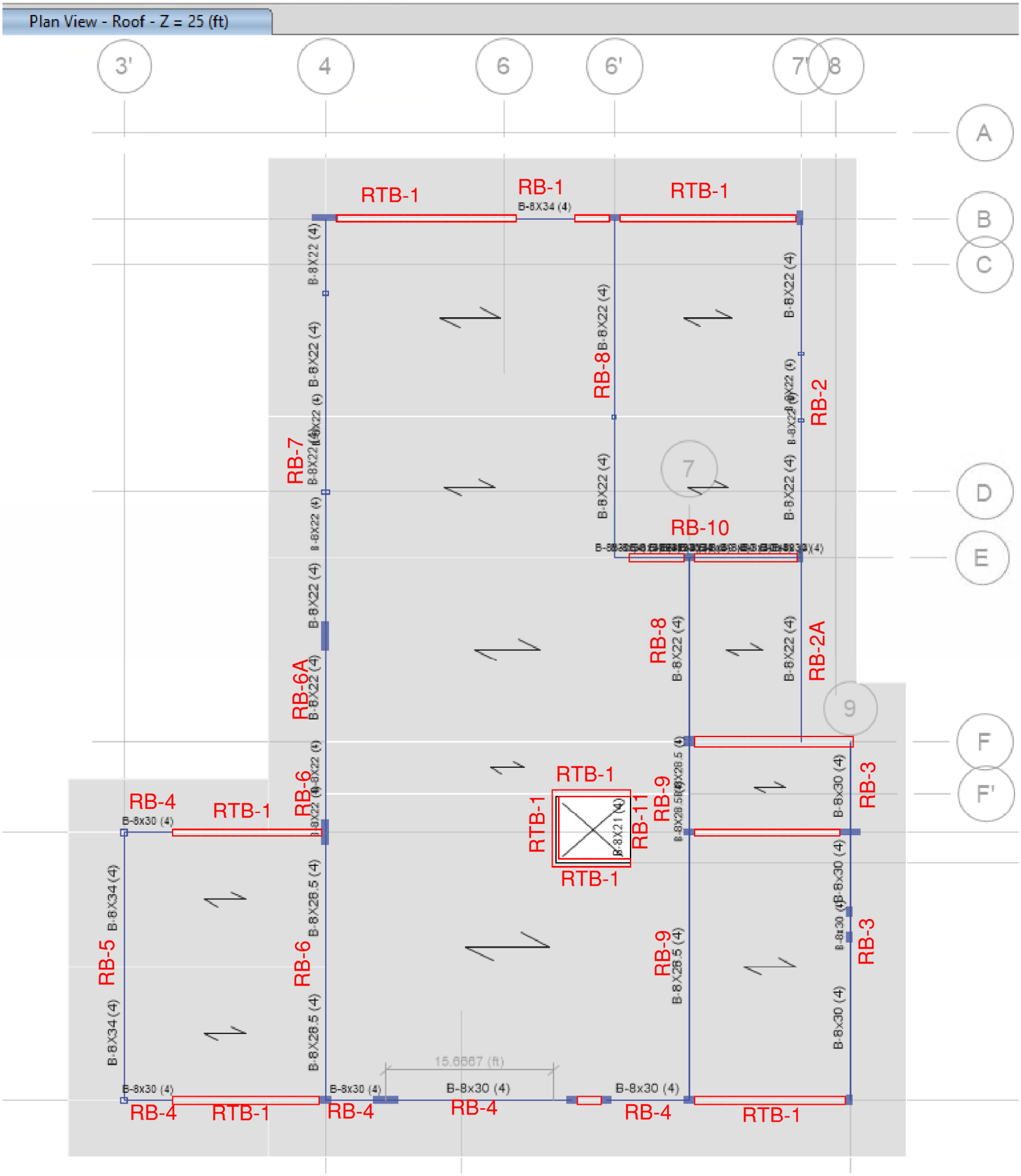
4- Loads in the shaded boxes are controlled by serviceability (i.e. initial camber, permissible deflections). SPI recommends changing to a 4" thick slab with f'c=4000 psi min.

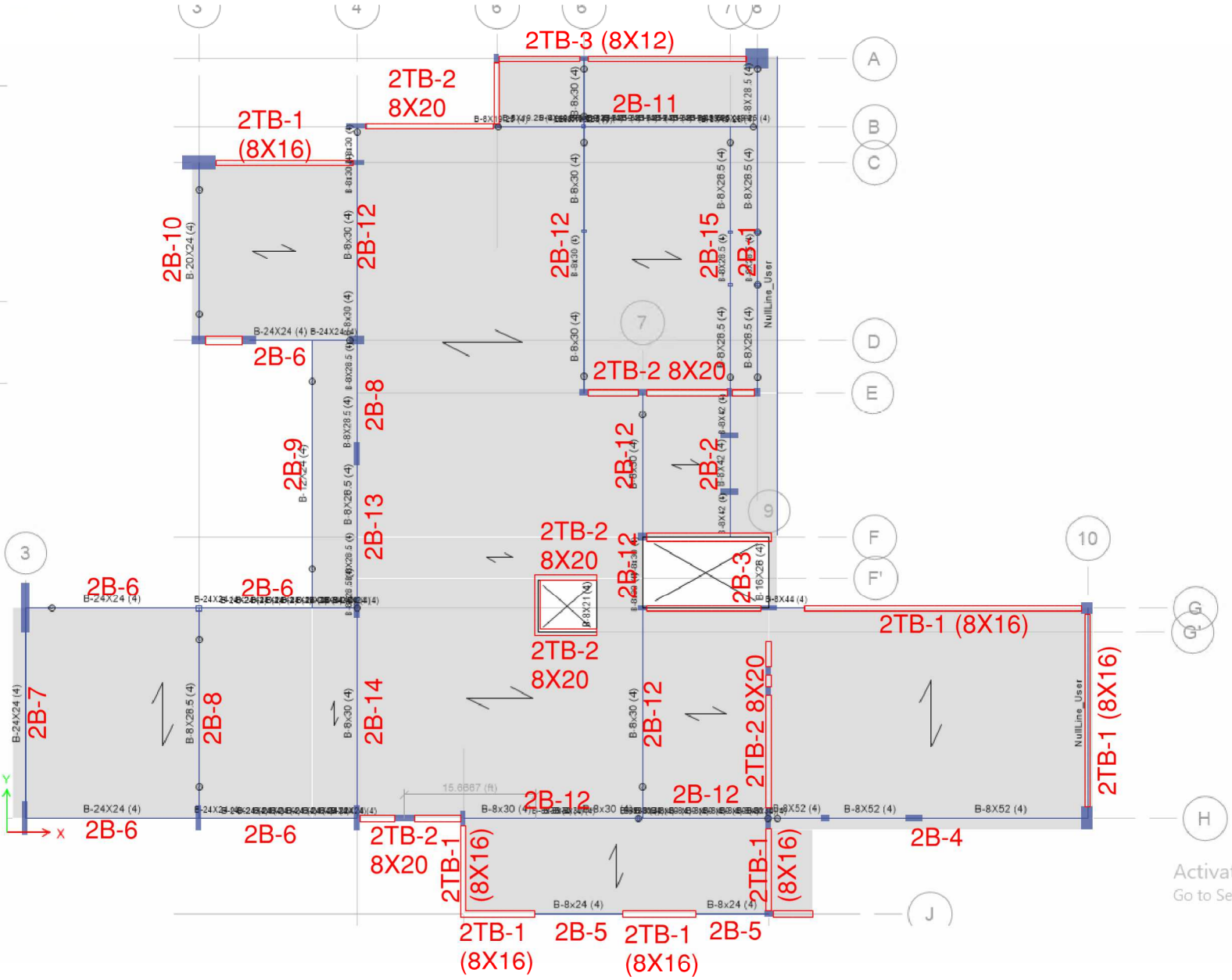


Dead +Lr=0.4in
Dead=0.3in
Length=5.33'X2=10.66'
10.66'X12/240=0.533in

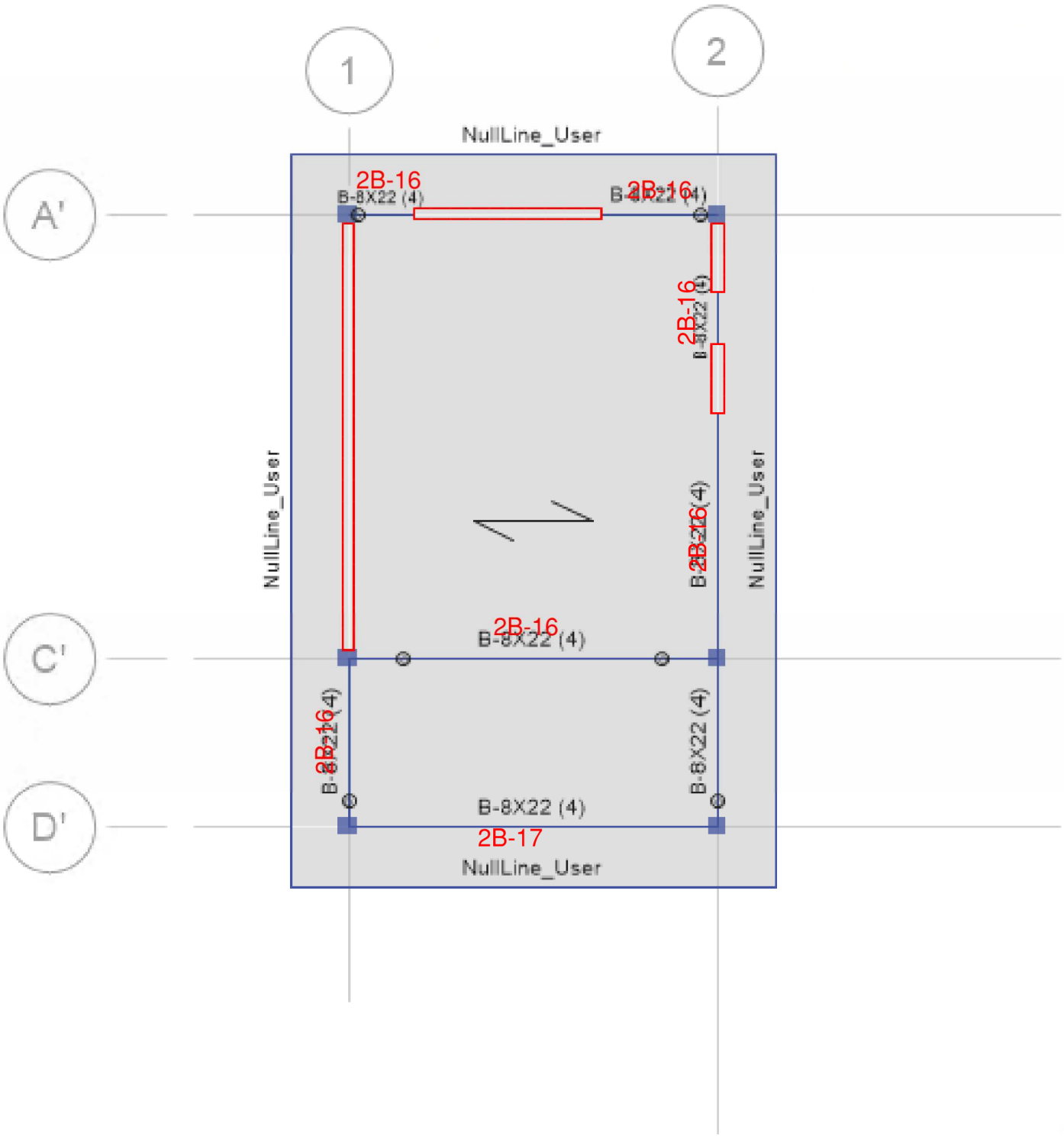
Dead +Lr=0.56-0.34=0.22in
Dead=0.48-0.3=0.18in
Long=5.33'X2=10.66'
10.66'X12/240=0.533in
ok

BEAM DESIGN


Plan View - Roof - Z = 25 (ft)
3'
4
6
6'
7'
8
A
B
C
D
E
F
F'
7
9
RTB-1
RB-1
B-8X34 (4)
RTB-1
RB-8
B-8X22 (4)
RB-2
RB-7
RB-10
RB-8
RB-2A
RB-6A
RB-6
RTB-1
RB-9
RB-3
RB-11
RB-4
RTB-1
B-8x30 (4)
RB-5
B-8X34 (4)
B-8X28.5 (4)
15.6667 (ft)
B-8x30 (4)
RB-4
RTB-1


2TB-3 (8X12)
2TB-2
8X20
2B-11
2TB-1
(8X16)
2B-10
2B-12
2B-12
2B-15
2B-1
2B-6
2TB-2 8X20
2B-8
2B-9
2B-12
2B-2
2B-13
2TB-2
8X20
2B-12
2B-3
2B-6
2B-6
2TB-1 (8X16)
2TB-2
8X20
2B-7
2B-8
2B-14
2B-12
2TB-2 8X20
2TB-1 (8X16)
2B-12
2B-12
2B-6
2B-6
2TB-2
8X20
2TB-1
(8X16)
2TB-1
(8X16)
2B-4
2TB-1
(8X16)
2B-5
2TB-1
(8X16)
2B-5

Plan View - Second Floor - Z = 12.5 (ft) Section Properties

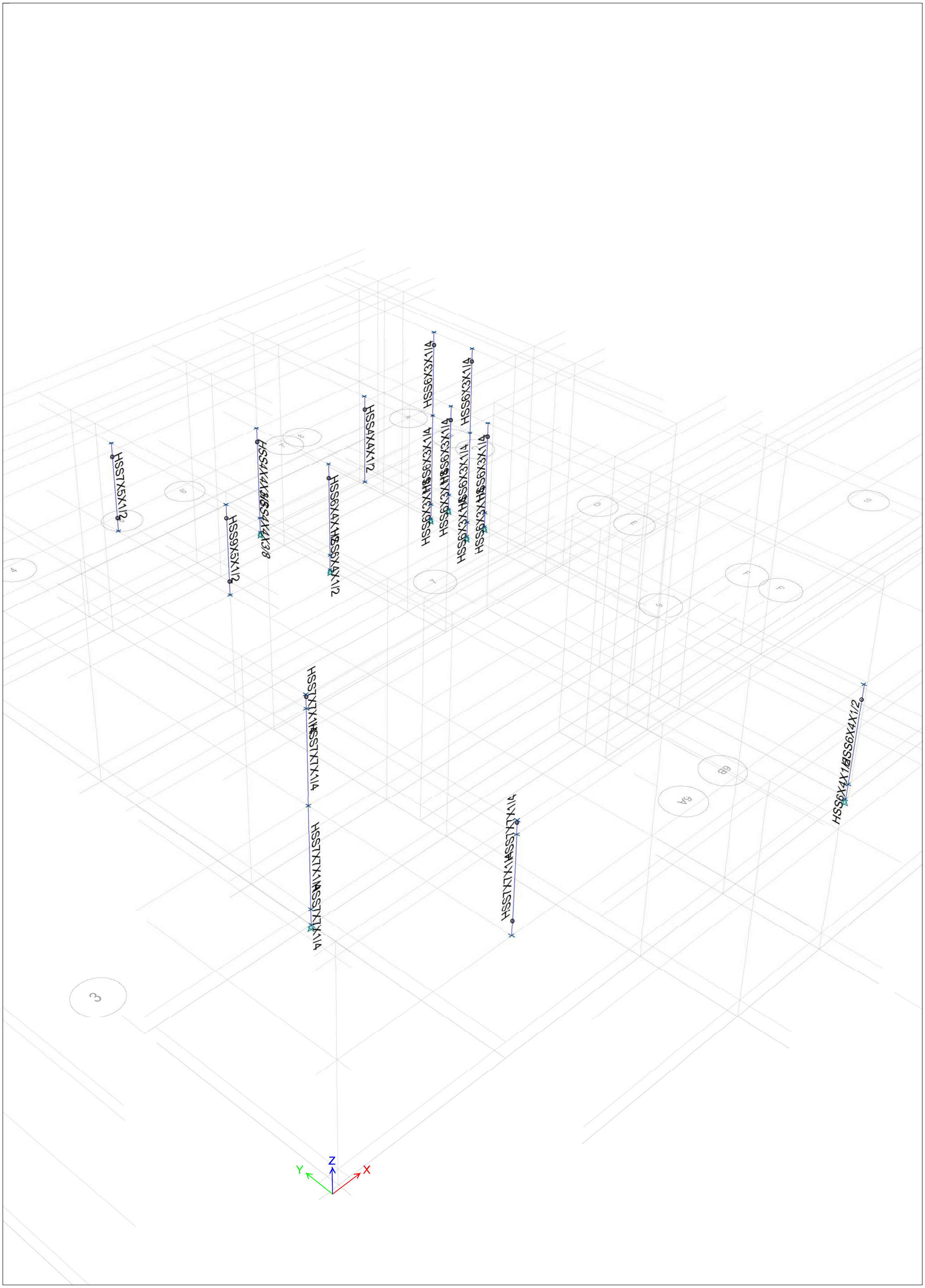


Job. No.: **Date:**

Beam Reinforcement Processing

							LONGITUDINAL BARS																STIRRUPS: SHEAR+TORSION REINF.										
							BOTTOM BARS					TOP BARS					FACE BARS																
Beam Label	Gridline Ref.	Level	Section Size b (in.)	Section Size h (in.)	L (ft.)	f'c (ksi)	$As_{,req}$ in^2	Min. No. of Bars	Final No. of Bars	Bar No.	Quant. Check	$As_{,req}$ in^2	Min No. of Bars	Final No. of Bars	Bar No.	Quant. Check	$Asl_{,req}$ in^2	Min. No. of Bars	Final No. of Bars	Bar No.	Quant. Check	B, T & F Check	Req. A_{sh} in^2/ft	Tu>Tth? Y or N	Perimeter p_h (in)	No. of Legs	Bar No.	Req. Spacing @ Ends (in. o.c.)	ACI 314 Max. Spacing (in. o.c.)	Sugg. Spacing @ Ends (in. o.c.)	Stirrup Quant.	Final Spacing @ Ends (in. o.c.)	Quant. Check
RB-1	B	R	8	34	5.5	4	0.84	3	(4)	#5	O.K.	0.84	3	(4)	#5	O.K.	0.00	0	(2)	#5	O.K.	O.K.	0.0000	N	70.0	2	#3	0.00		12.0		12.0	O.K.
RB-2	7'	R	8	22	12.67	4	0.52	2	(2)	#6	O.K.	0.63	2	(2)	#6	O.K.	0.71	2	(2)	#5	O.K.	O.K.	0.3700	N	46.0	2	#3	7.14	9.5	7.1	(9)	7.0	O.K.
RB-2A	7'/E-F	R	8	22	17.17	4	0.56	2	(2)	#6	O.K.	0.64	2	(4)	#6	O.K.	0.71	2	(2)	#5	O.K.	O.K.	0.3500	Y	46.0	2	#3	7.54	5.8	5.7	(15)	5.0	O.K.
RB-3	9&H	R	8	30	15.17	4	0.73	3	(4)	#5	O.K.	0.73	3	(4)	#5	O.K.	1.02	2	(2)	#5	O.K.	O.K.	0.3960	Y	62.0	2	#3	6.67	7.8	6.6	(12)	6.0	O.K.
RB-4	G&H	R	8	30	17.33	4	1.40	4	(4)	#6	O.K.	1.40	4	(4)	#6	O.K.	0.98	2	(2)	#5	O.K.	O.K.	0.2400	N	62.0	2	#3	11.00	13.5	11.0	(8)	11.0	O.K.
RB-5	3'	R	8	34	25	4	1.57	6	(6)	#5	O.K.	0.88	3	(4)	#5	O.K.	1.15	2	(2)	#5	O.K.	O.K.	0.2600	N	70.0	2	#3	10.15	15.5	10.1	(11)	10.0	O.K.
RB-6	4/G-H	R	8	28.5	25	4	1.34	4	(4)	#6	O.K.	1.30	3	(6)	#6	O.K.	0.62	1	(2)	#5	O.K.	O.K.	0.2600	N	59.0	2	#3	10.15	12.8	10.1	(11)	10.0	O.K.
RB-7	4/F-B	R	8	22	15	4	1.03	4	(4)	#5	O.K.	1.03	4	(4)	#5	O.K.	0.71	2	(2)	#5	O.K.	O.K.	0.4600	Y	46.0	2	#3	5.74	4.8	4.7	(16)	4.0	O.K.
RB-8	6'	R	8	22	18.5	4	1.28	3	(4)	#6	O.K.	0.52	2	(4)	#5	O.K.	0.00	0	()	#5	O.K.	O.K.	0.2300	N	46.0	2	#3	11.48	9.5	9.5	(10)	9.0	O.K.
RB-9	7	R	8	28.5	25	4	1.39	5	(6)	#5	O.K.	1.42	5	(6)	#5	O.K.	0.91	2	(2)	#5	O.K.	O.K.	0.2200	N	59.0	2	#3	12.00	12.8	12.0		12.0	O.K.
RB-10	E	R	8	30	15.75	4	0.73	3	(4)	#5	O.K.	0.73	3	(4)	#5	O.K.	1.00	2	(2)	#5	O.K.	O.K.	0.2200	N	62.0	2	#3	12.00	13.5	12.0		12.0	O.K.
2B-1	8	2	8	24	20.67	4	1.34	4	(4)	#6	O.K.	1.34	4	(4)	#6	O.K.	0.82	2	(2)	#5	O.K.	O.K.	0.2700	N	50.0	2	#3	9.78	10.5	9.7	(11)	9.0	O.K.
2B-2	7'/E-F	2	8	42	6.67	4	1.06	4	(6)	#5	O.K.	1.06	4	(6)	#5	O.K.	1.42	3	(4)	#5	O.K.	O.K.	0.1300	N	86.0	2	#3	20.31	19.5	19.5	(4)	12.0	O.K.
2B-3	9	2	16	26	8.5	4	1.36	4	(4)	#6	O.K.	1.36	4	(4)	#6	O.K.	0.00	0	(2)	#5	O.K.	O.K.	0.0000	N	70.0	2	#3	0.00		12.0		12.0	O.K.
2B-4	H/9-10	2	8	52	20.67	4	1.32	3	(4)	#6	O.K.	1.32	3	(4)	#6	O.K.	1.71	3	(4)	#5	O.K.	O.K.	0.1100	N	106.0	2	#3	24.00	24.0	24.0	(8)	12.0	O.K.
2B-5	J	2	8	24	10.5	4	0.58	2	(2)	#5	O.K.	0.58	2	(2)	#5	O.K.	0.00	0	()	#5	O.K.	O.K.	0.0000	N	50.0	2	#3	0.00		12.0		12.0	O.K.
2B-6	H/3-4	2	24	24	20.67	4	1.72	4	(6)	#6	O.K.	1.72	4	(6)	#6	O.K.	2.22	3	(4)	#6	O.K.	O.K.	0.3500	Y	82.0	3	#3	11.31	10.3	10.2	(13)	7.0	O.K.
2B-7	3	2	24	24	25	4	1.72	4	(4)	#6	O.K.	1.72	4	(4)	#6	O.K.	0.00	0	()	#5	O.K.	O.K.	0.0000	N	82.0	2	#3	0.00		12.0		12.0	O.K.
2B-8	3'	2	8	28.5	25	4	0.89	3	(4)	#5	O.K.	0.89	3	(4)	#5	O.K.	0.00	0	(2)	#5	O.K.	O.K.	0.0000	N	59.0	2	#3	0.00		12.0		12.0	O.K.
2B-9	3''	2	12	24	32	4	0.93	3	(3)	#6	O.K.	0.86	2	(3)	#6	O.K.	1.27	2	(2)	#6	O.K.	O.K.	0.5300	N	58.0	2	#3	4.98	10.5	4.9	(33)	4.0	O.K.
2B-10	3'/C-D	2	20	24	21.17	4	1.43	5	(5)	#5	O.K.	1.43	5	(5)	#5	O.K.	0.00	0	()	#5	O.K.	O.K.	0.2000	N	74.0	2	#3	13.20	10.5	10.5	(10)	10.0	O.K.
2B-11	B	2	8	19.25	20.67	4	1.10	3	(4)	#6	O.K.	1.10	3	(4)	#6	O.K.	0.66	2	(2)	#5	O.K.	O.K.	0.6800	N	40.5	2	#4	7.06	4.1	4.0	(22)	4.0	O.K.
2B-12	4/B-D	2	8	30	19.17	4	2.41	5	(6)	#7	O.K.	0.94	3	(4)	#6	O.K.	1.02	2	(2)	#5	O.K.	O.K.	0.6000	N	62.0	2	#3	4.40	6.8	4.4	(20)	4.0	O.K.
2B-13	4/D-G	2	8	28.5	18.33	4	1.02	4	(4)	#5	O.K.	1.02	4	(4)	#5	O.K.	0.85	2	(2)	#5	O.K.	O.K.	0.0800	N	59.0	2	#3	33.00	12.8	12.7	(8)	12.0	O.K.
2B-14	4/G-H	2	8	30	25	4	0.74	3	(4)	#5	O.K.	0.74	3	(4)	#5	O.K.	0.00	0	(2)	#5	O.K.	O.K.	0.4700	Y	62.0	2	#3	5.62	6.8	5.6	(21)	5.0	O.K.
2B-15	7'	2	8	19.25	12.67	4	0.89	3	(4)	#5	O.K.	0.89	3	(4)	#5	O.K.	0.66	2	(2)	#5	O.K.	O.K.	0.2600	N	40.5	2	#3	10.15	8.1	8.1	(8)	8.0	O.K.
2B-16	ELEV	2	8	21	6.5	4	0.50	2	(2)	#5	O.K.	0.50	2	(2)	#5	O.K.	0.00	0	()	#	O.K.	O.K.	0.0000	N	44.0	2	#3	0.00		12.0		12.0	O.K.
2B-15	A'	2	8	22	21.33	4	0.68	2	(2)	#6	O.K.	0.68	2	(2)	#6	O.K.	0.77	2	(2)	#5	O.K.	O.K.	0.4000	Y	46.0	2	#3	6.60	5.8	5.7	(18)	5.0	O.K.
2B-16	D'	2	8	22	21.33	4	0.59	2	(2)	#6	O.K.	0.59	2	(2)	#6	O.K.	0.75	2	(2)	#5	O.K.	O.K.	0.3100	Y	46.0	2	#3	8.52	5.8	5.7	(18)	5.0	O.K.

COLUMN DESIGN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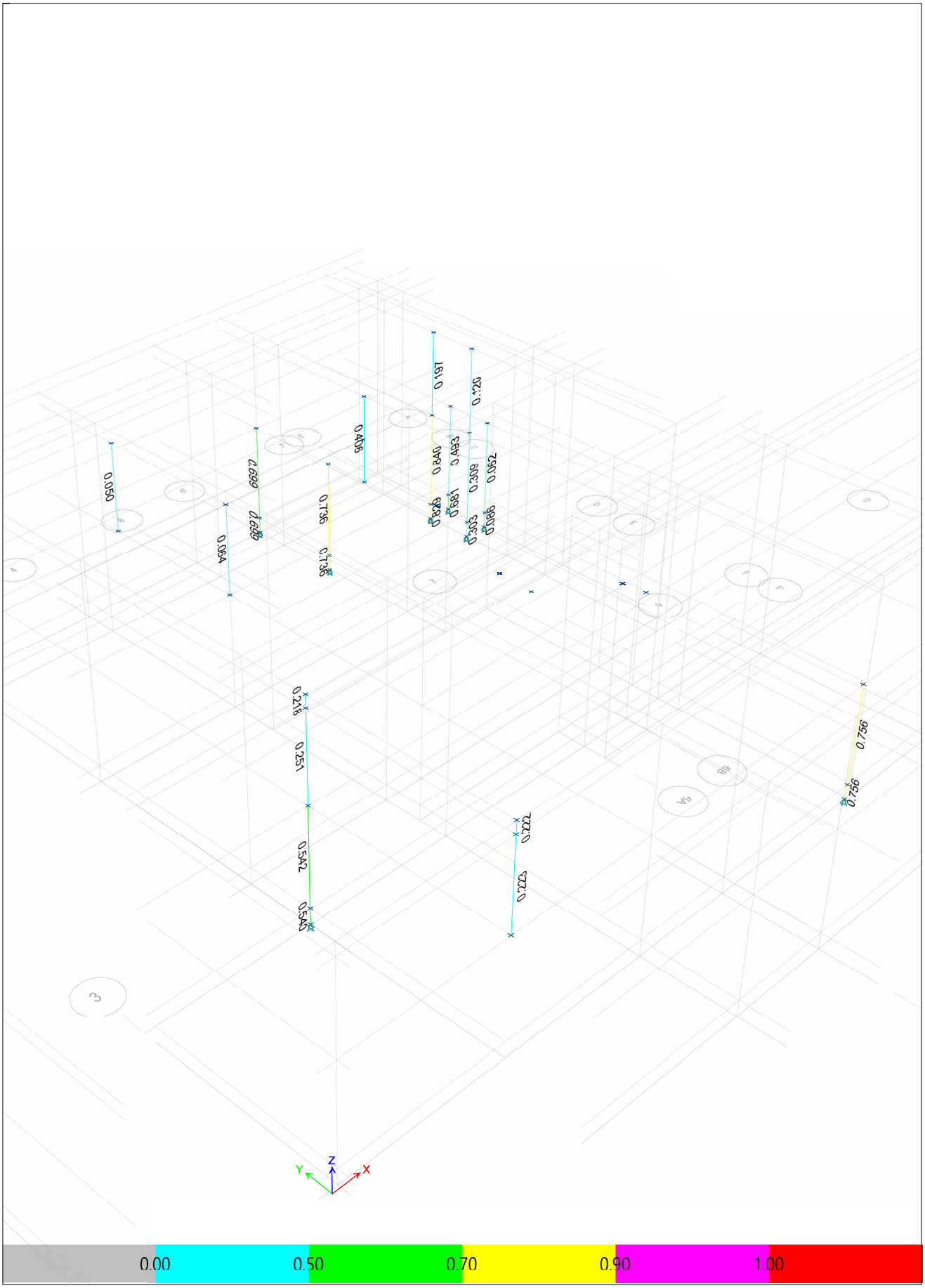
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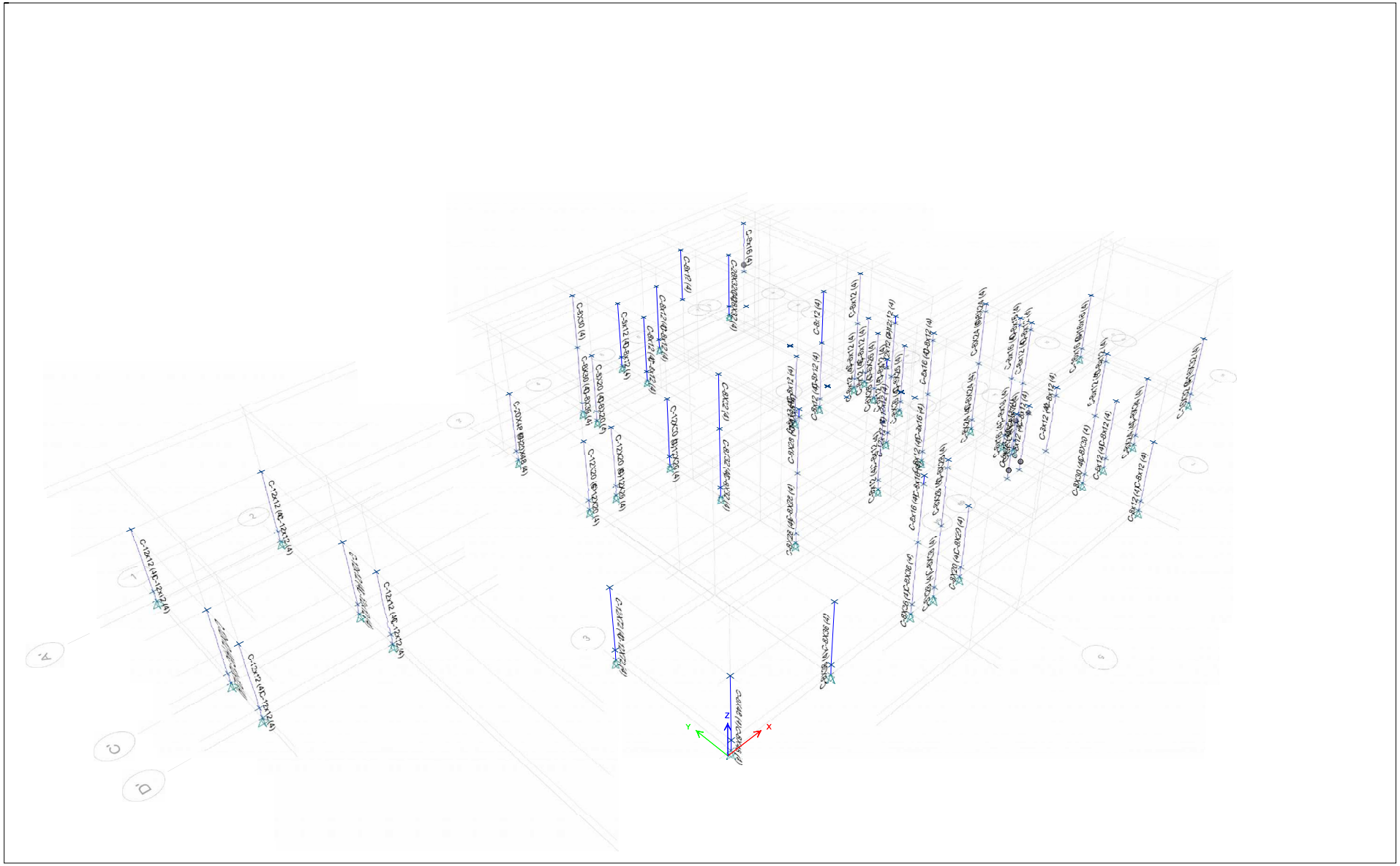
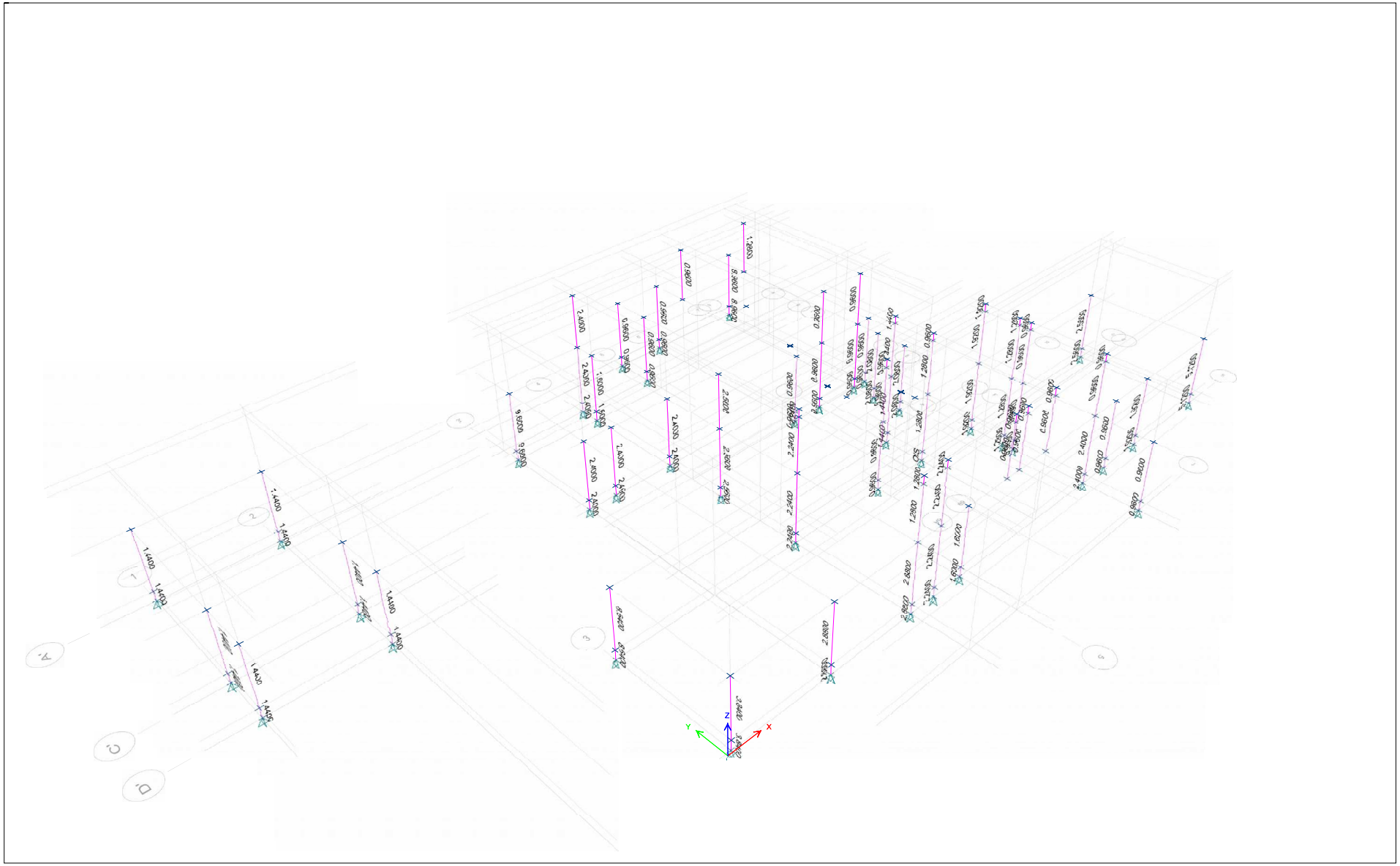


3-D View



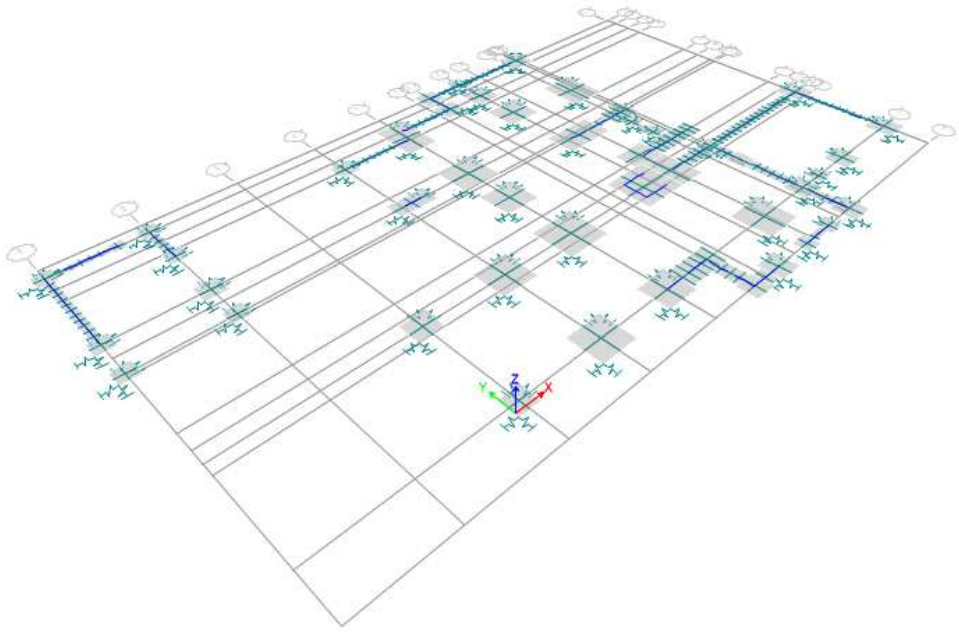
3-D View Longitudinal Reinforcing (ACI 318-19)

Job. No.: **Date:**

Column Reinforcement Processing																						
					VERTICAL BARS								TIES/SHEAR REINF.									
Col. No.	Level	Section Size		f'c (ksi)	As_{req}	Min. No.	Final No.	Vert.	Quant.	%	Min. Steel	# of Mech.	Req. A_{sh}	Shear Dir.	No. of	Horz.	Size	Req. Spacing	ACI 314 Min.	Suggested	Final Spacing	Check
		b (in.)	h (in.)		in^2	of Bars	of Bars	Bar No.	Check	Steel	Check	Splices	in^2/ft	b or h	Legs	Bar No.	Check	(in. o.c.)	Tie Spacing	Spacing (in. o.c.)	(in. o.c.)	Sprng.
C1		20	48	4	9.60	22	(22)	#6	O.K.	1.01	O.K.	0	0.0000	h	2	#4	O.K.	0.00	12.0	12.0	12.0	O.K.
C2		28	32	4	8.96	21	(21)	#6	O.K.	1.03	O.K.	0	0.0000	h	2	#3	O.K.	0.00	12.0	12.0	12.0	O.K.
C3		8	26	4	2.08	7	(8)	#5	O.K.	1.19	O.K.	0	0.0000	h	2	#3	O.K.	0.00	8.0	8.0	8.0	O.K.
C4		16	16	4	2.56	6	(6)	#6	O.K.	1.03	O.K.	0	0.0000	h	2	#3	O.K.	0.00	12.0	12.0	12.0	O.K.
C5				4	7.52	18	(18)	#6	O.K.	#####	#DIV/0!	#DIV/0!	0.0000	h	2	#3	O.K.	0.00	12.0	12.0	12.0	O.K.
C6		8	48	4	3.84	13	(14)	#5	O.K.	1.13	O.K.	0	0.0000	h	2	#3	O.K.	0.00	8.0	8.0	8.0	O.K.
C7		12	72	4	8.64	20	(20)	#6	O.K.	1.02	O.K.	0	0.0000	h	2	#3	O.K.	0.00	12.0	12.0	12.0	O.K.
C8		8	32	4	2.56	9	(10)	#5	O.K.	1.21	O.K.	0	0.0000	h	2	#3	O.K.	0.00	8.0	8.0	8.0	O.K.
C9		12	20	4	2.40	8	(8)	#5	O.K.	1.03	O.K.	0	0.0000	h	2	#3	O.K.	0.00	10.0	10.0	10.0	O.K.
C10		12	12	4	1.44	5	(6)	#5	O.K.	1.29	O.K.	0	0.0000	h	2	#3	O.K.	0.00	10.0	10.0	10.0	O.K.
TC1		8	20	4	1.60	6	(6)	#5	O.K.	1.16	O.K.	0	0.0000	h	2	#3	O.K.	0.00	8.0	8.0	8.0	O.K.
TC2				4	3.04	10	(10)	#5	O.K.	#####	#DIV/0!	#DIV/0!	0.0000	h	2	#3	O.K.	0.00	10.0	10.0	10.0	O.K.
TC3		8	12	4	0.96	4	(4)	#5	O.K.	1.29	O.K.	0	0.0000	h	2	#3	O.K.	0.00	8.0	8.0	8.0	O.K.
TC4		8	24	4	1.92	5	(6)	#6	O.K.	1.38	O.K.	0	0.0000	h	2	#3	O.K.	0.00	8.0	8.0	8.0	O.K.
TC5		8	36	4	2.88	10	(10)	#5	O.K.	1.08	O.K.	0	0.0000	h	2	#3	O.K.	0.00	8.0	8.0	8.0	O.K.
TC6		8	28	4	2.24	8	(8)	#5	O.K.	1.11	O.K.	0	0.0000	h	2	#3	O.K.	0.00	8.0	8.0	8.0	O.K.
TC7		8	16	4	1.28	3	(4)	#6	O.K.	1.38	O.K.	0	0.0000	h	2	#3	O.K.	0.00	8.0	8.0	8.0	O.K.

FOUNDATION MODEL REPORT

SAFE®



25-0032 Rolling Rd

TempleteBasic Loads

Model File: 25-0032 12700 Rolling Rd Etabs 20.3.0 V03V2016, Revision

1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

1.1 Grid Data

Table 1.1 - Grid Definitions - General

Name	Type	Ux ft	Uy ft	Rz deg	Datum Name	Story Name Above	Story Name Below	Model Datum ft	Story Height Above ft	Story Height Below ft	Bubble Size in	Color
GLOBAL	Cartesian	0	0	0	Base	Story1		0	12		60	10461087

Table 1.2 - Grid Definitions - Grid Lines

Name	Grid Line Type	ID	Ordinate ft	Bubble Location	Visible
GLOBAL	X (Cartesian)	1	-41.0954	End	Yes
GLOBAL	X (Cartesian)	2	-19.7621	End	Yes
GLOBAL	X (Cartesian)	3	2.2379	End	Yes
GLOBAL	X (Cartesian)	3'	22.9046	End	Yes
GLOBAL	X (Cartesian)	4	41.7379	End	Yes
GLOBAL	X (Cartesian)	5	54.4046	End	Yes
GLOBAL	X (Cartesian)	6	58.4046	End	Yes
GLOBAL	X (Cartesian)	6'	68.7379	End	Yes
GLOBAL	X (Cartesian)	7	75.7379	End	Yes
GLOBAL	X (Cartesian)	7'	86.1546	End	Yes
GLOBAL	X (Cartesian)	8	89.4046	End	Yes
GLOBAL	X (Cartesian)	9	90.7379	End	Yes
GLOBAL	X (Cartesian)	10	128.7379	End	Yes
GLOBAL	Y (Cartesian)	J	-9.6592	End	Yes
GLOBAL	Y (Cartesian)	H	1.6741	End	Yes
GLOBAL	Y (Cartesian)	G'	23.8408	End	Yes
GLOBAL	Y (Cartesian)	G	26.6741	End	Yes
GLOBAL	Y (Cartesian)	F'	30.3408	End	Yes
GLOBAL	Y (Cartesian)	F	35.1741	End	Yes
GLOBAL	Y (Cartesian)	E	52.3408	End	Yes
GLOBAL	Y (Cartesian)	D'	53.5074	End	Yes
GLOBAL	Y (Cartesian)	D	58.5074	End	Yes
GLOBAL	Y (Cartesian)	C'	63.1741	End	Yes
GLOBAL	Y (Cartesian)	C	79.6741	End	Yes
GLOBAL	Y (Cartesian)	B	84.0074	End	Yes
GLOBAL	Y (Cartesian)	A'	88.8408	End	Yes
GLOBAL	Y (Cartesian)	A	92.0074	End	Yes

2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

2.1 Materials

Table 2.1 - Material Properties - General

Material	Type	SymType	Grade	Color	Notes
4000Psi	Concrete	Isotropic	Unknown	Blue	Normalweight f'c = 4 ksi added 7/22/2018 3:18:26 PM
A416Gr270	Tendon	Uniaxial	Unknown	Magenta	ASTM A416 Grade 270 added 7/22/2018 3:18:26 PM
A615Gr60	Rebar	Uniaxial	Unknown	Cyan	ASTM A615 Grade 60 added 7/22/2018 3:18:26 PM
MAT1	Concrete	Isotropic	Unknown	Blue	Normalweight f'c = 4 ksi added 7/22/2018 3:18:26 PM
MAT2	Concrete	Isotropic	Unknown	Blue	Normalweight f'c = 4 ksi added 7/22/2018 3:18:26 PM

2.2 Frame Sections

Table 2.2 - Frame Section Property Definitions - Summary (Part 1 of 3)

Name	Material	Shape	Color	Area in2	J in4	I33 in4	I22 in4	I23 in4	As2 in2	As3 in2
MW 8 (2.0)-W	MAT1	Concrete Rectangular	Gray8Dark	192	3240.89	9216	1024	0	160	160
SW 12 (4)-W	MAT2	Concrete Rectangular	Blue	288	9500.62	13824	3456	0	240	240
SW 8 (4)-W	MAT2	Concrete Rectangular	Green	192	3240.89	9216	1024	0	160	160

Table 2.2 - Frame Section Property Definitions - Summary (Part 2 of 3)

Name	S33Pos in3	S33Neg in3	S22Pos in3	S22Neg in3	Z33 in3	Z22 in3	R33 in	R22 in	CG Offset 3 in	CG Offset 2 in	PNA Offset 3 in
MW 8 (2.0)-W	768	768	256	256	1152	384	6.9282	2.3094	0	0	0
SW 12 (4)-W	1152	1152	576	576	1728	864	6.9282	3.4641	0	0	0
SW 8 (4)-W	768	768	256	256	1152	384	6.9282	2.3094	0	0	0

Table 2.2 - Frame Section Property Definitions - Summary (Part 3 of 3)

Name	PNA Offset 2 in	Area Modifier	As2 Modifier	As3 Modifier	J Modifier	I33 Modifier	I22 Modifier	Mass Modifier	Weight Modifier
MW 8 (2.0)-W	0	1	1	1	1	1	1	1	1
SW 12 (4)-W	0	1	1	1	1	1	1	1	1
SW 8 (4)-W	0	1	1	1	1	1	1	1	1

2.3 Shell Sections

Table 2.3 - Area Section Property Definitions - Summary

Name	Type	Element Type	Material	Total Thickness in
SLAB1	Slab	Shell-Thick	4000Psi	8
THK 16"	Slab	Shell-Thin	4000Psi	16

3 Loads

This chapter provides loading information as applied to the model.

3.1 Load Patterns

Table 3.1 - Load Pattern Definitions

Name	Is Auto Load	Type	Self Weight Multiplier	Auto Load
~LLRF	No	Other	0	
Dead	No	Dead	1	
$Dead_{ABOVE}$	No	Dead	0	
Flood	No	Other	0	
$Flood_{ABOVE}$	No	Other	0	
Live	No	Live	0	
$Live_{ABOVE}$	No	Live	0	
Reducible Live	No	Reducible Live	0	
Reducible $Live_{ABOVE}$	No	Reducible Live	0	
Roof Live	No	Live	0	
Roof $Live_{ABOVE}$	No	Live	0	
Super Dead	No	Super Dead	0	
Wind(1/12)	No	Wind	0	None
$Wind(1/12)_{ABOVE}$	No	Wind	0	None
Wind(10/12)	No	Wind	0	None
$Wind(10/12)_{ABOVE}$	No	Wind	0	None
Wind(11/12)	No	Wind	0	None
$Wind(11/12)_{ABOVE}$	No	Wind	0	None
Wind(12/12)	No	Wind	0	None
$Wind(12/12)_{ABOVE}$	No	Wind	0	None
Wind(2/12)	No	Wind	0	None
$Wind(2/12)_{ABOVE}$	No	Wind	0	None
Wind(3/12)	No	Wind	0	None
$Wind(3/12)_{ABOVE}$	No	Wind	0	None
Wind(4/12)	No	Wind	0	None
$Wind(4/12)_{ABOVE}$	No	Wind	0	None
Wind(5/12)	No	Wind	0	None
$Wind(5/12)_{ABOVE}$	No	Wind	0	None
Wind(6/12)	No	Wind	0	None
$Wind(6/12)_{ABOVE}$	No	Wind	0	None
Wind(7/12)	No	Wind	0	None
$Wind(7/12)_{ABOVE}$	No	Wind	0	None
Wind(8/12)	No	Wind	0	None
$Wind(8/12)_{ABOVE}$	No	Wind	0	None
Wind(9/12)	No	Wind	0	None
$Wind(9/12)_{ABOVE}$	No	Wind	0	None

3.2 Load Cases

Table 3.2 - Load Case Definitions - Summary

Name	Type
Dead	Linear Static
Live	Linear Static
Roof Live	Linear Static
Wind(1/12)	Linear Static
Wind(2/12)	Linear Static
Wind(3/12)	Linear Static
Wind(4/12)	Linear Static

Loads

Name	Type
Wind(5/12)	Linear Static
Wind(6/12)	Linear Static
Wind(7/12)	Linear Static
Wind(8/12)	Linear Static
Wind(9/12)	Linear Static
Wind(10/12)	Linear Static
Wind(11/12)	Linear Static
Wind(12/12)	Linear Static
Flood	Linear Static
Reducible Live	Linear Static

3.3 Load Combinations

Table 3.3 - Load Combination Definitions (Part 1 of 2)

Name	Type	Is Auto	Load Name
ASD1 D	Linear Add	No	Dead
ASD2 D+L	Linear Add	No	Dead
ASD2 D+L			Live
ASD2 D+L			Reducible Live
ASD3 D+Lr	Linear Add	No	Dead
ASD3 D+Lr			Roof Live
ASD4 D+0.75L+0.75Lr	Linear Add	No	Dead
ASD4 D+0.75L+0.75Lr			Live
ASD4 D+0.75L+0.75Lr			Roof Live
ASD4 D+0.75L+0.75Lr			Reducible Live
ASD5a-1 D+0.6W(1/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(1/12)			Wind(1/12)
ASD5a-1 D+0.6W(2/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(2/12)			Wind(2/12)
ASD5a-1 D+0.6W(3/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(3/12)			Wind(3/12)
ASD5a-1 D+0.6W(4/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(4/12)			Wind(4/12)
ASD5a-1 D+0.6W(5/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(5/12)			Wind(5/12)
ASD5a-1 D+0.6W(6/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(6/12)			Wind(6/12)
ASD5a-1 D+0.6W(7/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(7/12)			Wind(7/12)
ASD5a-1 D+0.6W(8/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(8/12)			Wind(8/12)
ASD5a-1 D+0.6W(9/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(9/12)			Wind(9/12)
ASD5a-1 D+0.6W(10/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(10/12)			Wind(10/12)
ASD5a-1 D+0.6W(11/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(11/12)			Wind(11/12)
ASD5a-1 D+0.6W(12/12)	Linear Add	No	Dead
ASD5a-1 D+0.6W(12/12)			Wind(12/12)
ASD5a-2 D-0.6W(1/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(1/12)			Wind(1/12)
ASD5a-2 D-0.6W(2/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(2/12)			Wind(2/12)
ASD5a-2 D-0.6W(3/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(3/12)			Wind(3/12)
ASD5a-2 D-0.6W(4/12)	Linear Add	No	Dead

Loads

Name	Type	Is Auto	Load Name
ASD5a-2 D-0.6W(4/12)			Wind(4/12)
ASD5a-2 D-0.6W(5/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(5/12)			Wind(5/12)
ASD5a-2 D-0.6W(6/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(6/12)			Wind(6/12)
ASD5a-2 D-0.6W(7/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(7/12)			Wind(7/12)
ASD5a-2 D-0.6W(8/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(8/12)			Wind(8/12)
ASD5a-2 D-0.6W(9/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(9/12)			Wind(9/12)
ASD5a-2 D-0.6W(10/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(10/12)			Wind(10/12)
ASD5a-2 D-0.6W(11/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(11/12)			Wind(11/12)
ASD5a-2 D-0.6W(12/12)	Linear Add	No	Dead
ASD5a-2 D-0.6W(12/12)			Wind(12/12)
ASD5b-1 D+0.75Fa+0.6W(1/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(1/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(1/12)			Wind(1/12)
ASD5b-1 D+0.75Fa+0.6W(2/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(2/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(2/12)			Wind(2/12)
ASD5b-1 D+0.75Fa+0.6W(3/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(3/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(3/12)			Wind(3/12)
ASD5b-1 D+0.75Fa+0.6W(4/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(4/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(4/12)			Wind(4/12)
ASD5b-1 D+0.75Fa+0.6W(5/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(5/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(5/12)			Wind(5/12)
ASD5b-1 D+0.75Fa+0.6W(6/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(6/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(6/12)			Wind(6/12)
ASD5b-1 D+0.75Fa+0.6W(7/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(7/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(7/12)			Wind(7/12)
ASD5b-1 D+0.75Fa+0.6W(8/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(8/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(8/12)			Wind(8/12)
ASD5b-1 D+0.75Fa+0.6W(9/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(9/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(9/12)			Wind(9/12)
ASD5b-1 D+0.75Fa+0.6W(10/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(10/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(10/12)			Wind(10/12)
ASD5b-1 D+0.75Fa+0.6W(11/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(11/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(11/12)			Wind(11/12)
ASD5b-1 D+0.75Fa+0.6W(12/12)	Linear Add	No	Dead
ASD5b-1 D+0.75Fa+0.6W(12/12)			Flood
ASD5b-1 D+0.75Fa+0.6W(12/12)			Wind(12/12)
ASD5b-2 D+0.75Fa-0.6W(1/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(1/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(1/12)			Wind(1/12)
ASD5b-2 D+0.75Fa-0.6W(2/12)	Linear Add	No	Dead

Loads

Name	Type	Is Auto	Load Name
ASD5b-2 D+0.75Fa-0.6W(2/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(2/12)			Wind(2/12)
ASD5b-2 D+0.75Fa-0.6W(3/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(3/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(3/12)			Wind(3/12)
ASD5b-2 D+0.75Fa-0.6W(4/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(4/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(4/12)			Wind(4/12)
ASD5b-2 D+0.75Fa-0.6W(5/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(5/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(5/12)			Wind(5/12)
ASD5b-2 D+0.75Fa-0.6W(6/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(6/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(6/12)			Wind(6/12)
ASD5b-2 D+0.75Fa-0.6W(7/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(7/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(7/12)			Wind(7/12)
ASD5b-2 D+0.75Fa-0.6W(8/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(8/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(8/12)			Wind(8/12)
ASD5b-2 D+0.75Fa-0.6W(9/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(9/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(9/12)			Wind(9/12)
ASD5b-2 D+0.75Fa-0.6W(10/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(10/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(10/12)			Wind(10/12)
ASD5b-2 D+0.75Fa-0.6W(11/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(11/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(11/12)			Wind(11/12)
ASD5b-2 D+0.75Fa-0.6W(12/12)	Linear Add	No	Dead
ASD5b-2 D+0.75Fa-0.6W(12/12)			Flood
ASD5b-2 D+0.75Fa-0.6W(12/12)			Wind(12/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)			Wind(1/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)			Reducible Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)			Wind(2/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)			Reducible Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)			Wind(3/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)			Reducible Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)			Wind(4/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)			Reducible Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)			Wind(5/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)			Reducible Live

Loads

Name	Type	Is Auto	Load Name
ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)			Wind(6/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)			Reducible Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)			Wind(7/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)			Reducible Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)			Wind(8/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)			Reducible Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)			Wind(9/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)			Reducible Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)			Wind(10/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)			Reducible Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)			Wind(11/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)			Reducible Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)	Linear Add	No	Dead
ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)			Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)			Roof Live
ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)			Wind(12/12)
ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)			Wind(1/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)			Wind(2/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)			Wind(3/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)			Wind(4/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)			Live

Loads

Name	Type	Is Auto	Load Name
ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)			Wind(5/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)			Wind(6/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)			Wind(7/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)			Wind(8/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)			Wind(9/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)			Wind(10/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)			Wind(11/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)			Reducible Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)	Linear Add	No	Dead
ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)			Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)			Roof Live
ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)			Wind(12/12)
ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)			Wind(1/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)			Wind(2/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)			Wind(3/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)	Linear Add	No	Dead

Loads

Name	Type	Is Auto	Load Name
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)			Wind(4/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)			Wind(5/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)			Wind(6/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)			Wind(7/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)			Wind(8/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)			Wind(9/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)			Wind(10/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)			Wind(11/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)			Reducible Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)	Linear Add	No	Dead
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)			Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)			Roof Live
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)			Flood
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)			Wind(12/12)
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)			Flood

Loads

Name	Type	Is Auto	Load Name
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)			Wind(1/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)			Wind(2/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)			Wind(3/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)			Wind(4/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)			Wind(5/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)			Wind(6/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)			Wind(7/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)			Wind(8/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)			Wind(9/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)			Wind(10/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)	Linear Add	No	Dead

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Name	Type	Is Auto	Load Name
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)			Wind(11/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)			Reducible Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)	Linear Add	No	Dead
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)			Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)			Roof Live
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)			Flood
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)			Wind(12/12)
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)			Reducible Live
ASD7a-1 0.6D+0.6W(1/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(1/12)			Wind(1/12)
ASD7a-1 0.6D+0.6W(2/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(2/12)			Wind(2/12)
ASD7a-1 0.6D+0.6W(3/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(3/12)			Wind(3/12)
ASD7a-1 0.6D+0.6W(4/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(4/12)			Wind(4/12)
ASD7a-1 0.6D+0.6W(5/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(5/12)			Wind(5/12)
ASD7a-1 0.6D+0.6W(6/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(6/12)			Wind(6/12)
ASD7a-1 0.6D+0.6W(7/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(7/12)			Wind(7/12)
ASD7a-1 0.6D+0.6W(8/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(8/12)			Wind(8/12)
ASD7a-1 0.6D+0.6W(9/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(9/12)			Wind(9/12)
ASD7a-1 0.6D+0.6W(10/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(10/12)			Wind(10/12)
ASD7a-1 0.6D+0.6W(11/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(11/12)			Wind(11/12)
ASD7a-1 0.6D+0.6W(12/12)	Linear Add	No	Dead
ASD7a-1 0.6D+0.6W(12/12)			Wind(12/12)
ASD7a-2 0.6D-0.6W(1/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(1/12)			Wind(1/12)
ASD7a-2 0.6D-0.6W(2/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(2/12)			Wind(2/12)
ASD7a-2 0.6D-0.6W(3/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(3/12)			Wind(3/12)
ASD7a-2 0.6D-0.6W(4/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(4/12)			Wind(4/12)
ASD7a-2 0.6D-0.6W(5/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(5/12)			Wind(5/12)
ASD7a-2 0.6D-0.6W(6/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(6/12)			Wind(6/12)
ASD7a-2 0.6D-0.6W(7/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(7/12)			Wind(7/12)
ASD7a-2 0.6D-0.6W(8/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(8/12)			Wind(8/12)
ASD7a-2 0.6D-0.6W(9/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(9/12)			Wind(9/12)
ASD7a-2 0.6D-0.6W(10/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(10/12)			Wind(10/12)
ASD7a-2 0.6D-0.6W(11/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(11/12)			Wind(11/12)

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Name	Type	Is Auto	Load Name
ASD7a-2 0.6D-0.6W(12/12)	Linear Add	No	Dead
ASD7a-2 0.6D-0.6W(12/12)			Wind(12/12)
ASD7b-1 0.6D+0.75Fa+0.6W(1/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(1/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(1/12)			Wind(1/12)
ASD7b-1 0.6D+0.75Fa+0.6W(2/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(2/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(2/12)			Wind(2/12)
ASD7b-1 0.6D+0.75Fa+0.6W(3/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(3/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(3/12)			Wind(3/12)
ASD7b-1 0.6D+0.75Fa+0.6W(4/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(4/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(4/12)			Wind(4/12)
ASD7b-1 0.6D+0.75Fa+0.6W(5/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(5/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(5/12)			Wind(5/12)
ASD7b-1 0.6D+0.75Fa+0.6W(6/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(6/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(6/12)			Wind(6/12)
ASD7b-1 0.6D+0.75Fa+0.6W(7/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(7/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(7/12)			Wind(7/12)
ASD7b-1 0.6D+0.75Fa+0.6W(8/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(8/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(8/12)			Wind(8/12)
ASD7b-1 0.6D+0.75Fa+0.6W(9/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(9/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(9/12)			Wind(9/12)
ASD7b-1 0.6D+0.75Fa+0.6W(10/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(10/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(10/12)			Wind(10/12)
ASD7b-1 0.6D+0.75Fa+0.6W(11/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(11/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(11/12)			Wind(11/12)
ASD7b-1 0.6D+0.75Fa+0.6W(12/12)	Linear Add	No	Dead
ASD7b-1 0.6D+0.75Fa+0.6W(12/12)			Flood
ASD7b-1 0.6D+0.75Fa+0.6W(12/12)			Wind(12/12)
ASD7b-2 0.6D+0.75Fa-0.6W(1/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(1/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(1/12)			Wind(1/12)
ASD7b-2 0.6D+0.75Fa-0.6W(2/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(2/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(2/12)			Wind(2/12)
ASD7b-2 0.6D+0.75Fa-0.6W(3/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(3/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(3/12)			Wind(3/12)
ASD7b-2 0.6D+0.75Fa-0.6W(4/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(4/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(4/12)			Wind(4/12)
ASD7b-2 0.6D+0.75Fa-0.6W(5/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(5/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(5/12)			Wind(5/12)
ASD7b-2 0.6D+0.75Fa-0.6W(6/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(6/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(6/12)			Wind(6/12)
ASD7b-2 0.6D+0.75Fa-0.6W(7/12)	Linear Add	No	Dead

Loads

Name	Type	Is Auto	Load Name
ASD7b-2 0.6D+0.75Fa-0.6W(7/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(7/12)			Wind(7/12)
ASD7b-2 0.6D+0.75Fa-0.6W(8/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(8/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(8/12)			Wind(8/12)
ASD7b-2 0.6D+0.75Fa-0.6W(9/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(9/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(9/12)			Wind(9/12)
ASD7b-2 0.6D+0.75Fa-0.6W(10/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(10/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(10/12)			Wind(10/12)
ASD7b-2 0.6D+0.75Fa-0.6W(11/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(11/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(11/12)			Wind(11/12)
ASD7b-2 0.6D+0.75Fa-0.6W(12/12)	Linear Add	No	Dead
ASD7b-2 0.6D+0.75Fa-0.6W(12/12)			Flood
ASD7b-2 0.6D+0.75Fa-0.6W(12/12)			Wind(12/12)
ASD8 (Alt) D+L-0.78W(1/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(1/12)			Live
ASD8 (Alt) D+L-0.78W(1/12)			Wind(1/12)
ASD8 (Alt) D+L-0.78W(2/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(2/12)			Live
ASD8 (Alt) D+L-0.78W(2/12)			Wind(2/12)
ASD8 (Alt) D+L-0.78W(3/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(3/12)			Live
ASD8 (Alt) D+L-0.78W(3/12)			Wind(3/12)
ASD8 (Alt) D+L-0.78W(4/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(4/12)			Live
ASD8 (Alt) D+L-0.78W(4/12)			Wind(4/12)
ASD8 (Alt) D+L-0.78W(5/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(5/12)			Live
ASD8 (Alt) D+L-0.78W(5/12)			Wind(5/12)
ASD8 (Alt) D+L-0.78W(6/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(6/12)			Live
ASD8 (Alt) D+L-0.78W(6/12)			Wind(6/12)
ASD8 (Alt) D+L-0.78W(7/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(7/12)			Live
ASD8 (Alt) D+L-0.78W(7/12)			Wind(7/12)
ASD8 (Alt) D+L-0.78W(8/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(8/12)			Live
ASD8 (Alt) D+L-0.78W(8/12)			Wind(8/12)
ASD8 (Alt) D+L-0.78W(9/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(9/12)			Live
ASD8 (Alt) D+L-0.78W(9/12)			Wind(9/12)
ASD8 (Alt) D+L-0.78W(10/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(10/12)			Live
ASD8 (Alt) D+L-0.78W(10/12)			Wind(10/12)
ASD8 (Alt) D+L-0.78W(11/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(11/12)			Live
ASD8 (Alt) D+L-0.78W(11/12)			Wind(11/12)
ASD8 (Alt) D+L-0.78W(12/12)	Linear Add	No	Dead
ASD8 (Alt) D+L-0.78W(12/12)			Live
ASD8 (Alt) D+L-0.78W(12/12)			Wind(12/12)
ASD8 (Alt) D+L+0.78W(1/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(1/12)			Live
ASD8 (Alt) D+L+0.78W(1/12)			Wind(1/12)
ASD8 (Alt) D+L+0.78W(2/12)	Linear Add	No	Dead

Loads

Name	Type	Is Auto	Load Name
ASD8 (Alt) D+L+0.78W(2/12)			Live
ASD8 (Alt) D+L+0.78W(2/12)			Wind(2/12)
ASD8 (Alt) D+L+0.78W(3/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(3/12)			Live
ASD8 (Alt) D+L+0.78W(3/12)			Wind(3/12)
ASD8 (Alt) D+L+0.78W(4/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(4/12)			Live
ASD8 (Alt) D+L+0.78W(4/12)			Wind(4/12)
ASD8 (Alt) D+L+0.78W(5/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(5/12)			Live
ASD8 (Alt) D+L+0.78W(5/12)			Wind(5/12)
ASD8 (Alt) D+L+0.78W(6/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(6/12)			Live
ASD8 (Alt) D+L+0.78W(6/12)			Wind(6/12)
ASD8 (Alt) D+L+0.78W(7/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(7/12)			Live
ASD8 (Alt) D+L+0.78W(7/12)			Wind(7/12)
ASD8 (Alt) D+L+0.78W(8/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(8/12)			Live
ASD8 (Alt) D+L+0.78W(8/12)			Wind(8/12)
ASD8 (Alt) D+L+0.78W(9/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(9/12)			Live
ASD8 (Alt) D+L+0.78W(9/12)			Wind(9/12)
ASD8 (Alt) D+L+0.78W(10/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(10/12)			Live
ASD8 (Alt) D+L+0.78W(10/12)			Wind(10/12)
ASD8 (Alt) D+L+0.78W(11/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(11/12)			Live
ASD8 (Alt) D+L+0.78W(11/12)			Wind(11/12)
ASD8 (Alt) D+L+0.78W(12/12)	Linear Add	No	Dead
ASD8 (Alt) D+L+0.78W(12/12)			Live
ASD8 (Alt) D+L+0.78W(12/12)			Wind(12/12)
ASD env	Envelope	No	ASD1 D
ASD env			ASD2 D+L
ASD env			ASD3 D+Lr
ASD env			ASD4 D+0.75L+0.75Lr
ASD env			ASD5a-1 D+0.6W(1/12)
ASD env			ASD5a-1 D+0.6W(2/12)
ASD env			ASD5a-1 D+0.6W(3/12)
ASD env			ASD5a-1 D+0.6W(4/12)
ASD env			ASD5a-1 D+0.6W(5/12)
ASD env			ASD5a-1 D+0.6W(6/12)
ASD env			ASD5a-1 D+0.6W(7/12)
ASD env			ASD5a-1 D+0.6W(8/12)
ASD env			ASD5a-1 D+0.6W(9/12)
ASD env			ASD5a-1 D+0.6W(10/12)
ASD env			ASD5a-1 D+0.6W(11/12)
ASD env			ASD5a-1 D+0.6W(12/12)
ASD env			ASD5a-2 D-0.6W(1/12)
ASD env			ASD5a-2 D-0.6W(2/12)
ASD env			ASD5a-2 D-0.6W(3/12)
ASD env			ASD5a-2 D-0.6W(4/12)
ASD env			ASD5a-2 D-0.6W(5/12)
ASD env			ASD5a-2 D-0.6W(6/12)
ASD env			ASD5a-2 D-0.6W(7/12)
ASD env			ASD5a-2 D-0.6W(8/12)
ASD env			ASD5a-2 D-0.6W(9/12)

Loads

Name	Type	Is Auto	Load Name
ASD env			ASD5a-2 D-0.6W(10/12)
ASD env			ASD5a-2 D-0.6W(11/12)
ASD env			ASD5a-2 D-0.6W(12/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(1/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(2/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(3/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(4/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(5/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(6/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(7/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(8/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(9/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(10/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(11/12)
ASD env			ASD5b-1 D+0.75Fa+0.6W(12/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(1/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(2/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(3/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(4/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(5/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(6/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(7/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(8/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(9/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(10/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(11/12)
ASD env			ASD5b-2 D+0.75Fa-0.6W(12/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)
ASD env			ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)
ASD env			ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)

Loads

Name	Type	Is Auto	Load Name
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)
ASD env			ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)
ASD env			ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)
ASD env			ASD7a-1 0.6D+0.6W(1/12)
ASD env			ASD7a-1 0.6D+0.6W(2/12)
ASD env			ASD7a-1 0.6D+0.6W(3/12)
ASD env			ASD7a-1 0.6D+0.6W(4/12)
ASD env			ASD7a-1 0.6D+0.6W(5/12)
ASD env			ASD7a-1 0.6D+0.6W(6/12)
ASD env			ASD7a-1 0.6D+0.6W(7/12)
ASD env			ASD7a-1 0.6D+0.6W(8/12)
ASD env			ASD7a-1 0.6D+0.6W(9/12)
ASD env			ASD7a-1 0.6D+0.6W(10/12)
ASD env			ASD7a-1 0.6D+0.6W(11/12)
ASD env			ASD7a-1 0.6D+0.6W(12/12)
ASD env			ASD7a-2 0.6D-0.6W(1/12)
ASD env			ASD7a-2 0.6D-0.6W(2/12)
ASD env			ASD7a-2 0.6D-0.6W(3/12)
ASD env			ASD7a-2 0.6D-0.6W(4/12)
ASD env			ASD7a-2 0.6D-0.6W(5/12)
ASD env			ASD7a-2 0.6D-0.6W(6/12)
ASD env			ASD7a-2 0.6D-0.6W(7/12)
ASD env			ASD7a-2 0.6D-0.6W(8/12)
ASD env			ASD7a-2 0.6D-0.6W(9/12)
ASD env			ASD7a-2 0.6D-0.6W(10/12)
ASD env			ASD7a-2 0.6D-0.6W(11/12)
ASD env			ASD7a-2 0.6D-0.6W(12/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(1/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(2/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(3/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(4/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(5/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(6/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(7/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(8/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(9/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(10/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(11/12)
ASD env			ASD7b-1 0.6D+0.75Fa+0.6W(12/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(1/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(2/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(3/12)

Loads

Name	Type	Is Auto	Load Name
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(4/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(5/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(6/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(7/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(8/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(9/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(10/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(11/12)
ASD env			ASD7b-2 0.6D+0.75Fa-0.6W(12/12)
LRFD1 1.4D	Linear Add	No	Dead
LRFD2 1.2D+1.6L+0.5Lr	Linear Add	No	Dead
LRFD2 1.2D+1.6L+0.5Lr			Live
LRFD2 1.2D+1.6L+0.5Lr			Roof Live
LRFD2 1.2D+1.6L+0.5Lr			Reducible Live
LRFD3 1.2D+1.0L+1.6Lr	Linear Add	No	Dead
LRFD3 1.2D+1.0L+1.6Lr			Live
LRFD3 1.2D+1.0L+1.6Lr			Roof Live
LRFD3 1.2D+1.0L+1.6Lr			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(1/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(1/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(1/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(1/12)			Wind(1/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(1/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(2/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(2/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(2/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(2/12)			Wind(2/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(2/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(3/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(3/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(3/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(3/12)			Wind(3/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(3/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(4/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(4/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(4/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(4/12)			Wind(4/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(4/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(5/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(5/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(5/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(5/12)			Wind(5/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(5/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(6/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(6/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(6/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(6/12)			Wind(6/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(6/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(7/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(7/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(7/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(7/12)			Wind(7/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(7/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(8/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(8/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(8/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(8/12)			Wind(8/12)

Loads

Name	Type	Is Auto	Load Name
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(8/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(9/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(9/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(9/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(9/12)			Wind(9/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(9/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(10/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(10/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(10/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(10/12)			Wind(10/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(10/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(11/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(11/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(11/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(11/12)			Wind(11/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(11/12)			Reducible Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(12/12)	Linear Add	No	Dead
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(12/12)			Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(12/12)			Roof Live
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(12/12)			Wind(12/12)
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(12/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(1/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(1/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(1/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(1/12)			Wind(1/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(1/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(2/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(2/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(2/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(2/12)			Wind(2/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(2/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(3/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(3/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(3/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(3/12)			Wind(3/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(3/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(4/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(4/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(4/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(4/12)			Wind(4/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(4/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(5/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(5/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(5/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(5/12)			Wind(5/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(5/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(6/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(6/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(6/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(6/12)			Wind(6/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(6/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(7/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(7/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(7/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(7/12)			Wind(7/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(7/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(8/12)	Linear Add	No	Dead

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Name	Type	Is Auto	Load Name
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(8/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(8/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(8/12)			Wind(8/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(8/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(9/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(9/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(9/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(9/12)			Wind(9/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(9/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(10/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(10/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(10/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(10/12)			Wind(10/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(10/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(11/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(11/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(11/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(11/12)			Wind(11/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(11/12)			Reducible Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(12/12)	Linear Add	No	Dead
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(12/12)			Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(12/12)			Roof Live
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(12/12)			Wind(12/12)
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(12/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)			Wind(1/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)			Wind(2/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)			Wind(3/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)			Wind(4/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)			Wind(5/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)			Roof Live

Loads

Name	Type	Is Auto	Load Name
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)			Wind(6/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)			Wind(7/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)			Wind(8/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)			Wind(9/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)			Wind(10/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)			Wind(11/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)			Reducible Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)	Linear Add	No	Dead
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)			Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)			Roof Live
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)			Flood
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)			Wind(12/12)
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)			Wind(1/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)			Wind(2/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)			Wind(3/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)			Reducible Live

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Name	Type	Is Auto	Load Name
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)			Wind(4/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)			Wind(5/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)			Wind(6/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)			Wind(7/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)			Wind(8/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)			Wind(9/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)			Wind(10/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)			Wind(11/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)			Reducible Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)	Linear Add	No	Dead
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)			Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)			Roof Live
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)			Flood
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)			Wind(12/12)
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)			Reducible Live
LRFD6a-1 0.9D+1.0W(1/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(1/12)			Wind(1/12)
LRFD6a-1 0.9D+1.0W(2/12)	Linear Add	No	Dead

Loads

Name	Type	Is Auto	Load Name
LRFD6a-1 0.9D+1.0W(2/12)			Wind(2/12)
LRFD6a-1 0.9D+1.0W(3/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(3/12)			Wind(3/12)
LRFD6a-1 0.9D+1.0W(4/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(4/12)			Wind(4/12)
LRFD6a-1 0.9D+1.0W(5/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(5/12)			Wind(5/12)
LRFD6a-1 0.9D+1.0W(6/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(6/12)			Wind(6/12)
LRFD6a-1 0.9D+1.0W(7/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(7/12)			Wind(7/12)
LRFD6a-1 0.9D+1.0W(8/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(8/12)			Wind(8/12)
LRFD6a-1 0.9D+1.0W(9/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(9/12)			Wind(9/12)
LRFD6a-1 0.9D+1.0W(10/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(10/12)			Wind(10/12)
LRFD6a-1 0.9D+1.0W(11/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(11/12)			Wind(11/12)
LRFD6a-1 0.9D+1.0W(12/12)	Linear Add	No	Dead
LRFD6a-1 0.9D+1.0W(12/12)			Wind(12/12)
LRFD6a-2 0.9D-1.0W(1/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(1/12)			Wind(1/12)
LRFD6a-2 0.9D-1.0W(2/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(2/12)			Wind(2/12)
LRFD6a-2 0.9D-1.0W(3/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(3/12)			Wind(3/12)
LRFD6a-2 0.9D-1.0W(4/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(4/12)			Wind(4/12)
LRFD6a-2 0.9D-1.0W(5/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(5/12)			Wind(5/12)
LRFD6a-2 0.9D-1.0W(6/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(6/12)			Wind(6/12)
LRFD6a-2 0.9D-1.0W(7/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(7/12)			Wind(7/12)
LRFD6a-2 0.9D-1.0W(8/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(8/12)			Wind(8/12)
LRFD6a-2 0.9D-1.0W(9/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(9/12)			Wind(9/12)
LRFD6a-2 0.9D-1.0W(10/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(10/12)			Wind(10/12)
LRFD6a-2 0.9D-1.0W(11/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(11/12)			Wind(11/12)
LRFD6a-2 0.9D-1.0W(12/12)	Linear Add	No	Dead
LRFD6a-2 0.9D-1.0W(12/12)			Wind(12/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(1/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(1/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(1/12)			Wind(1/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(2/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(2/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(2/12)			Wind(2/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(3/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(3/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(3/12)			Wind(3/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(4/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(4/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(4/12)			Wind(4/12)

Loads

Name	Type	Is Auto	Load Name
LRFD6b-1 0.9D+1.0Fa+0.5W(5/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(5/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(5/12)			Wind(5/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(6/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(6/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(6/12)			Wind(6/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(7/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(7/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(7/12)			Wind(7/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(8/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(8/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(8/12)			Wind(8/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(9/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(9/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(9/12)			Wind(9/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(10/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(10/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(10/12)			Wind(10/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(11/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(11/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(11/12)			Wind(11/12)
LRFD6b-1 0.9D+1.0Fa+0.5W(12/12)	Linear Add	No	Dead
LRFD6b-1 0.9D+1.0Fa+0.5W(12/12)			Flood
LRFD6b-1 0.9D+1.0Fa+0.5W(12/12)			Wind(12/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(1/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(1/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(1/12)			Wind(1/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(2/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(2/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(2/12)			Wind(2/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(3/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(3/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(3/12)			Wind(3/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(4/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(4/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(4/12)			Wind(4/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(5/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(5/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(5/12)			Wind(5/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(6/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(6/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(6/12)			Wind(6/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(7/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(7/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(7/12)			Wind(7/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(8/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(8/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(8/12)			Wind(8/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(9/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(9/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(9/12)			Wind(9/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(10/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(10/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(10/12)			Wind(10/12)
LRFD6b-2 0.9D+1.0Fa-0.5W(11/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(11/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(11/12)			Wind(11/12)

Loads

Name	Type	Is Auto	Load Name
LRFD6b-2 0.9D+1.0Fa-0.5W(12/12)	Linear Add	No	Dead
LRFD6b-2 0.9D+1.0Fa-0.5W(12/12)			Flood
LRFD6b-2 0.9D+1.0Fa-0.5W(12/12)			Wind(12/12)

Table 3.3 - Load Combination Definitions (Part 2 of 2)

Name	SF	Notes
ASD1 D	1	
ASD2 D+L	1	
ASD2 D+L	1	
ASD2 D+L	1	
ASD3 D+Lr	1	
ASD3 D+Lr	1	
ASD4 D+0.75L+0.75Lr	1	
ASD4 D+0.75L+0.75Lr	0.75	
ASD4 D+0.75L+0.75Lr	0.75	
ASD4 D+0.75L+0.75Lr	0.75	
ASD5a-1 D+0.6W(1/12)	1	
ASD5a-1 D+0.6W(1/12)	0.6	
ASD5a-1 D+0.6W(2/12)	1	
ASD5a-1 D+0.6W(2/12)	0.6	
ASD5a-1 D+0.6W(3/12)	1	
ASD5a-1 D+0.6W(3/12)	0.6	
ASD5a-1 D+0.6W(4/12)	1	
ASD5a-1 D+0.6W(4/12)	0.6	
ASD5a-1 D+0.6W(5/12)	1	
ASD5a-1 D+0.6W(5/12)	0.6	
ASD5a-1 D+0.6W(6/12)	1	
ASD5a-1 D+0.6W(6/12)	0.6	
ASD5a-1 D+0.6W(7/12)	1	
ASD5a-1 D+0.6W(7/12)	0.6	
ASD5a-1 D+0.6W(8/12)	1	
ASD5a-1 D+0.6W(8/12)	0.6	
ASD5a-1 D+0.6W(9/12)	1	
ASD5a-1 D+0.6W(9/12)	0.6	
ASD5a-1 D+0.6W(10/12)	1	
ASD5a-1 D+0.6W(10/12)	0.6	
ASD5a-1 D+0.6W(11/12)	1	
ASD5a-1 D+0.6W(11/12)	0.6	
ASD5a-1 D+0.6W(12/12)	1	
ASD5a-1 D+0.6W(12/12)	0.6	
ASD5a-2 D-0.6W(1/12)	1	
ASD5a-2 D-0.6W(1/12)	-0.6	
ASD5a-2 D-0.6W(2/12)	1	
ASD5a-2 D-0.6W(2/12)	-0.6	
ASD5a-2 D-0.6W(3/12)	1	
ASD5a-2 D-0.6W(3/12)	-0.6	
ASD5a-2 D-0.6W(4/12)	1	
ASD5a-2 D-0.6W(4/12)	-0.6	
ASD5a-2 D-0.6W(5/12)	1	
ASD5a-2 D-0.6W(5/12)	-0.6	
ASD5a-2 D-0.6W(6/12)	1	
ASD5a-2 D-0.6W(6/12)	-0.6	
ASD5a-2 D-0.6W(7/12)	1	
ASD5a-2 D-0.6W(7/12)	-0.6	
ASD5a-2 D-0.6W(8/12)	1	
ASD5a-2 D-0.6W(8/12)	-0.6	

Loads

Name	SF	Notes
ASD5a-2 D-0.6W(9/12)	1	
ASD5a-2 D-0.6W(9/12)	-0.6	
ASD5a-2 D-0.6W(10/12)	1	
ASD5a-2 D-0.6W(10/12)	-0.6	
ASD5a-2 D-0.6W(11/12)	1	
ASD5a-2 D-0.6W(11/12)	-0.6	
ASD5a-2 D-0.6W(12/12)	1	
ASD5a-2 D-0.6W(12/12)	-0.6	
ASD5b-1 D+0.75Fa+0.6W(1/12)	1	
ASD5b-1 D+0.75Fa+0.6W(1/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(1/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(2/12)	1	
ASD5b-1 D+0.75Fa+0.6W(2/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(2/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(3/12)	1	
ASD5b-1 D+0.75Fa+0.6W(3/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(3/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(4/12)	1	
ASD5b-1 D+0.75Fa+0.6W(4/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(4/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(5/12)	1	
ASD5b-1 D+0.75Fa+0.6W(5/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(5/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(6/12)	1	
ASD5b-1 D+0.75Fa+0.6W(6/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(6/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(7/12)	1	
ASD5b-1 D+0.75Fa+0.6W(7/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(7/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(8/12)	1	
ASD5b-1 D+0.75Fa+0.6W(8/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(8/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(9/12)	1	
ASD5b-1 D+0.75Fa+0.6W(9/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(9/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(10/12)	1	
ASD5b-1 D+0.75Fa+0.6W(10/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(10/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(11/12)	1	
ASD5b-1 D+0.75Fa+0.6W(11/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(11/12)	0.6	
ASD5b-1 D+0.75Fa+0.6W(12/12)	1	
ASD5b-1 D+0.75Fa+0.6W(12/12)	0.75	
ASD5b-1 D+0.75Fa+0.6W(12/12)	0.6	
ASD5b-2 D+0.75Fa-0.6W(1/12)	1	
ASD5b-2 D+0.75Fa-0.6W(1/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(1/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(2/12)	1	
ASD5b-2 D+0.75Fa-0.6W(2/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(2/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(3/12)	1	
ASD5b-2 D+0.75Fa-0.6W(3/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(3/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(4/12)	1	
ASD5b-2 D+0.75Fa-0.6W(4/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(4/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(5/12)	1	

Loads

Name	SF	Notes
ASD5b-2 D+0.75Fa-0.6W(5/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(5/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(6/12)	1	
ASD5b-2 D+0.75Fa-0.6W(6/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(6/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(7/12)	1	
ASD5b-2 D+0.75Fa-0.6W(7/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(7/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(8/12)	1	
ASD5b-2 D+0.75Fa-0.6W(8/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(8/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(9/12)	1	
ASD5b-2 D+0.75Fa-0.6W(9/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(9/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(10/12)	1	
ASD5b-2 D+0.75Fa-0.6W(10/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(10/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(11/12)	1	
ASD5b-2 D+0.75Fa-0.6W(11/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(11/12)	-0.6	
ASD5b-2 D+0.75Fa-0.6W(12/12)	1	
ASD5b-2 D+0.75Fa-0.6W(12/12)	0.75	
ASD5b-2 D+0.75Fa-0.6W(12/12)	-0.6	
ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(1/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(2/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(3/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(4/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(5/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(6/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)	0.45	

Name	SF	Notes
ASD6a-1 D+0.75L+0.75Lr+0.45W(7/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(8/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(9/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(10/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(11/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)	1	
ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)	0.75	
ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)	0.45	
ASD6a-1 D+0.75L+0.75Lr+0.45W(12/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(1/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(2/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(3/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(4/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(5/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(6/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)	1	

Loads

Name	SF	Notes
ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(7/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(8/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(9/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(10/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(11/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)	1	
ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)	0.75	
ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)	-0.45	
ASD6a-2 D+0.75L+0.75Lr-0.45W(12/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(1/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(2/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(3/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(4/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)	0.75	

Loads

Name	SF	Notes
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(5/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(6/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(7/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(8/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(9/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(10/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(11/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)	1	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)	0.75	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)	0.45	
ASD6b-1 D+0.75L+0.75Lr+0.75Fa+0.45W(12/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(1/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(2/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)	1	

Loads

Name	SF	Notes
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(3/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(4/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(5/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(6/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(7/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(8/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(9/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(10/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(11/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)	1	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)	0.75	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)	0.75	

Loads

Name	SF	Notes
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)	-0.45	
ASD6b-2 D+0.75L+0.75Lr+0.75Fa-0.45W(12/12)	0.75	
ASD7a-1 0.6D+0.6W(1/12)	0.6	
ASD7a-1 0.6D+0.6W(1/12)	0.6	
ASD7a-1 0.6D+0.6W(2/12)	0.6	
ASD7a-1 0.6D+0.6W(2/12)	0.6	
ASD7a-1 0.6D+0.6W(3/12)	0.6	
ASD7a-1 0.6D+0.6W(3/12)	0.6	
ASD7a-1 0.6D+0.6W(4/12)	0.6	
ASD7a-1 0.6D+0.6W(4/12)	0.6	
ASD7a-1 0.6D+0.6W(5/12)	0.6	
ASD7a-1 0.6D+0.6W(5/12)	0.6	
ASD7a-1 0.6D+0.6W(6/12)	0.6	
ASD7a-1 0.6D+0.6W(6/12)	0.6	
ASD7a-1 0.6D+0.6W(7/12)	0.6	
ASD7a-1 0.6D+0.6W(7/12)	0.6	
ASD7a-1 0.6D+0.6W(8/12)	0.6	
ASD7a-1 0.6D+0.6W(8/12)	0.6	
ASD7a-1 0.6D+0.6W(9/12)	0.6	
ASD7a-1 0.6D+0.6W(9/12)	0.6	
ASD7a-1 0.6D+0.6W(10/12)	0.6	
ASD7a-1 0.6D+0.6W(10/12)	0.6	
ASD7a-1 0.6D+0.6W(11/12)	0.6	
ASD7a-1 0.6D+0.6W(11/12)	0.6	
ASD7a-1 0.6D+0.6W(12/12)	0.6	
ASD7a-1 0.6D+0.6W(12/12)	0.6	
ASD7a-2 0.6D-0.6W(1/12)	0.6	
ASD7a-2 0.6D-0.6W(1/12)	-0.6	
ASD7a-2 0.6D-0.6W(2/12)	0.6	
ASD7a-2 0.6D-0.6W(2/12)	-0.6	
ASD7a-2 0.6D-0.6W(3/12)	0.6	
ASD7a-2 0.6D-0.6W(3/12)	-0.6	
ASD7a-2 0.6D-0.6W(4/12)	0.6	
ASD7a-2 0.6D-0.6W(4/12)	-0.6	
ASD7a-2 0.6D-0.6W(5/12)	0.6	
ASD7a-2 0.6D-0.6W(5/12)	-0.6	
ASD7a-2 0.6D-0.6W(6/12)	0.6	
ASD7a-2 0.6D-0.6W(6/12)	-0.6	
ASD7a-2 0.6D-0.6W(7/12)	0.6	
ASD7a-2 0.6D-0.6W(7/12)	-0.6	
ASD7a-2 0.6D-0.6W(8/12)	0.6	
ASD7a-2 0.6D-0.6W(8/12)	-0.6	
ASD7a-2 0.6D-0.6W(9/12)	0.6	
ASD7a-2 0.6D-0.6W(9/12)	-0.6	
ASD7a-2 0.6D-0.6W(10/12)	0.6	
ASD7a-2 0.6D-0.6W(10/12)	-0.6	
ASD7a-2 0.6D-0.6W(11/12)	0.6	
ASD7a-2 0.6D-0.6W(11/12)	-0.6	
ASD7a-2 0.6D-0.6W(12/12)	0.6	
ASD7a-2 0.6D-0.6W(12/12)	-0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(1/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(1/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(1/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(2/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(2/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(2/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(3/12)	0.6	

Loads

Name	SF	Notes
ASD7b-1 0.6D+0.75Fa+0.6W(3/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(3/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(4/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(4/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(4/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(5/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(5/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(5/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(6/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(6/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(6/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(7/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(7/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(7/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(8/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(8/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(8/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(9/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(9/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(9/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(10/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(10/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(10/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(11/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(11/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(11/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(12/12)	0.6	
ASD7b-1 0.6D+0.75Fa+0.6W(12/12)	0.75	
ASD7b-1 0.6D+0.75Fa+0.6W(12/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(1/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(1/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(1/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(2/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(2/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(2/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(3/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(3/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(3/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(4/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(4/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(4/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(5/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(5/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(5/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(6/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(6/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(6/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(7/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(7/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(7/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(8/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(8/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(8/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(9/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(9/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(9/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(10/12)	0.6	

Loads

Name	SF	Notes
ASD7b-2 0.6D+0.75Fa-0.6W(10/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(10/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(11/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(11/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(11/12)	-0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(12/12)	0.6	
ASD7b-2 0.6D+0.75Fa-0.6W(12/12)	0.75	
ASD7b-2 0.6D+0.75Fa-0.6W(12/12)	-0.6	
ASD8 (Alt) D+L-0.78W(1/12)	1	
ASD8 (Alt) D+L-0.78W(1/12)	1	
ASD8 (Alt) D+L-0.78W(1/12)	-0.78	
ASD8 (Alt) D+L-0.78W(2/12)	1	
ASD8 (Alt) D+L-0.78W(2/12)	1	
ASD8 (Alt) D+L-0.78W(2/12)	-0.78	
ASD8 (Alt) D+L-0.78W(3/12)	1	
ASD8 (Alt) D+L-0.78W(3/12)	1	
ASD8 (Alt) D+L-0.78W(3/12)	-0.78	
ASD8 (Alt) D+L-0.78W(4/12)	1	
ASD8 (Alt) D+L-0.78W(4/12)	1	
ASD8 (Alt) D+L-0.78W(4/12)	-0.78	
ASD8 (Alt) D+L-0.78W(5/12)	1	
ASD8 (Alt) D+L-0.78W(5/12)	1	
ASD8 (Alt) D+L-0.78W(5/12)	-0.78	
ASD8 (Alt) D+L-0.78W(6/12)	1	
ASD8 (Alt) D+L-0.78W(6/12)	1	
ASD8 (Alt) D+L-0.78W(6/12)	-0.78	
ASD8 (Alt) D+L-0.78W(7/12)	1	
ASD8 (Alt) D+L-0.78W(7/12)	1	
ASD8 (Alt) D+L-0.78W(7/12)	-0.78	
ASD8 (Alt) D+L-0.78W(8/12)	1	
ASD8 (Alt) D+L-0.78W(8/12)	1	
ASD8 (Alt) D+L-0.78W(8/12)	-0.78	
ASD8 (Alt) D+L-0.78W(9/12)	1	
ASD8 (Alt) D+L-0.78W(9/12)	1	
ASD8 (Alt) D+L-0.78W(9/12)	-0.78	
ASD8 (Alt) D+L-0.78W(10/12)	1	
ASD8 (Alt) D+L-0.78W(10/12)	1	
ASD8 (Alt) D+L-0.78W(10/12)	-0.78	
ASD8 (Alt) D+L-0.78W(11/12)	1	
ASD8 (Alt) D+L-0.78W(11/12)	1	
ASD8 (Alt) D+L-0.78W(11/12)	-0.78	
ASD8 (Alt) D+L-0.78W(12/12)	1	
ASD8 (Alt) D+L-0.78W(12/12)	1	
ASD8 (Alt) D+L-0.78W(12/12)	-0.78	
ASD8 (Alt) D+L+0.78W(1/12)	1	
ASD8 (Alt) D+L+0.78W(1/12)	1	
ASD8 (Alt) D+L+0.78W(1/12)	0.78	
ASD8 (Alt) D+L+0.78W(2/12)	1	
ASD8 (Alt) D+L+0.78W(2/12)	1	
ASD8 (Alt) D+L+0.78W(2/12)	0.78	
ASD8 (Alt) D+L+0.78W(3/12)	1	
ASD8 (Alt) D+L+0.78W(3/12)	1	
ASD8 (Alt) D+L+0.78W(3/12)	0.78	
ASD8 (Alt) D+L+0.78W(4/12)	1	
ASD8 (Alt) D+L+0.78W(4/12)	1	
ASD8 (Alt) D+L+0.78W(4/12)	0.78	
ASD8 (Alt) D+L+0.78W(5/12)	1	

Loads

Name	SF	Notes
ASD8 (Alt) D+L+0.78W(5/12)	1	
ASD8 (Alt) D+L+0.78W(5/12)	0.78	
ASD8 (Alt) D+L+0.78W(6/12)	1	
ASD8 (Alt) D+L+0.78W(6/12)	1	
ASD8 (Alt) D+L+0.78W(6/12)	0.78	
ASD8 (Alt) D+L+0.78W(7/12)	1	
ASD8 (Alt) D+L+0.78W(7/12)	1	
ASD8 (Alt) D+L+0.78W(7/12)	0.78	
ASD8 (Alt) D+L+0.78W(8/12)	1	
ASD8 (Alt) D+L+0.78W(8/12)	1	
ASD8 (Alt) D+L+0.78W(8/12)	0.78	
ASD8 (Alt) D+L+0.78W(9/12)	1	
ASD8 (Alt) D+L+0.78W(9/12)	1	
ASD8 (Alt) D+L+0.78W(9/12)	0.78	
ASD8 (Alt) D+L+0.78W(10/12)	1	
ASD8 (Alt) D+L+0.78W(10/12)	1	
ASD8 (Alt) D+L+0.78W(10/12)	0.78	
ASD8 (Alt) D+L+0.78W(11/12)	1	
ASD8 (Alt) D+L+0.78W(11/12)	1	
ASD8 (Alt) D+L+0.78W(11/12)	0.78	
ASD8 (Alt) D+L+0.78W(12/12)	1	
ASD8 (Alt) D+L+0.78W(12/12)	1	
ASD8 (Alt) D+L+0.78W(12/12)	0.78	
ASD env	1	
ASD env	1	
ASD env	1	
ASD env	1	
ASD env	1	
ASD env	1	
ASD env	1	
ASD env	1	
ASD env	1	
ASD env	1	
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ASD env	1	

Name	SF	Notes
ASD env	1	
ASD env	1	
ASD env	1	
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ASD env	1	
ASD env	1	
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Loads

Name	SF	Notes
ASD env	1	
ASD env	1	
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ASD env	1	
ASD env	1	

Loads

Name	SF	Notes
LRFD1 1.4D	1.4	
LRFD2 1.2D+1.6L+0.5Lr	1.2	
LRFD2 1.2D+1.6L+0.5Lr	1.6	
LRFD2 1.2D+1.6L+0.5Lr	0.5	
LRFD2 1.2D+1.6L+0.5Lr	1.6	
LRFD3 1.2D+1.0L+1.6Lr	1.2	
LRFD3 1.2D+1.0L+1.6Lr	1	
LRFD3 1.2D+1.0L+1.6Lr	1.6	
LRFD3 1.2D+1.0L+1.6Lr	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(1/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(1/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(1/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(1/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(1/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(2/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(2/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(2/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(2/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(2/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(3/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(3/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(3/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(3/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(3/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(4/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(4/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(4/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(4/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(4/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(5/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(5/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(5/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(5/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(5/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(6/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(6/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(6/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(6/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(6/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(7/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(7/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(7/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(7/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(7/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(8/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(8/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(8/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(8/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(8/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(9/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(9/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(9/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(9/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(9/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(10/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(10/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(10/12)	0.5	

Loads

Name	SF	Notes
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(10/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(10/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(11/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(11/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(11/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(11/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(11/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(12/12)	1.2	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(12/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(12/12)	0.5	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(12/12)	1	
LRFD4a-1 1.2D+1.0L+0.5Lr+1.0W(12/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(1/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(1/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(1/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(1/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(1/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(2/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(2/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(2/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(2/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(2/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(3/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(3/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(3/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(3/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(3/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(4/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(4/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(4/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(4/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(4/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(5/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(5/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(5/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(5/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(5/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(6/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(6/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(6/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(6/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(6/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(7/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(7/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(7/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(7/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(7/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(8/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(8/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(8/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(8/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(8/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(9/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(9/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(9/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(9/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(9/12)	1	

Loads

Name	SF	Notes
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(10/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(10/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(10/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(10/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(10/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(11/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(11/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(11/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(11/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(11/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(12/12)	1.2	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(12/12)	1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(12/12)	0.5	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(12/12)	-1	
LRFD4a-2 1.2D+1.0L+0.5Lr-1.0W(12/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(1/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(2/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(3/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(4/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(5/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(6/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(7/12)	1	

Loads

Name	SF	Notes
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(8/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(9/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(10/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(11/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)	1.2	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)	1	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)	0.5	
LRFD4b-1 1.2D+1.0L+0.5Lr+1.0Fa+0.5W(12/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(1/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(2/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(3/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(4/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)	0.5	

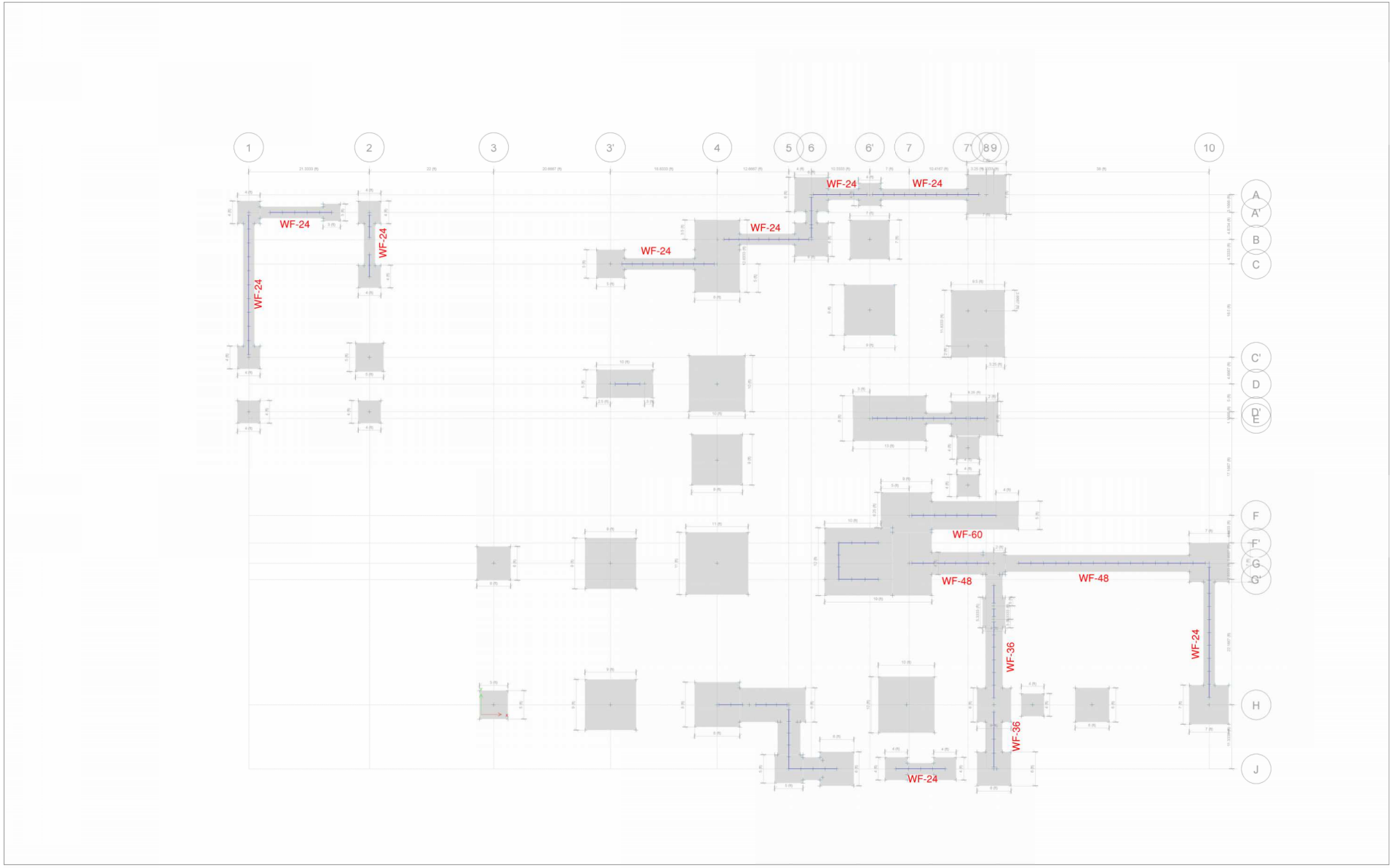
Name	SF	Notes
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(5/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(6/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(7/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(8/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(9/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(10/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(11/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)	1.2	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)	0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)	1	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)	-0.5	
LRFD4b-2 1.2D+1.0L+0.5Lr+1.0Fa-0.5W(12/12)	1	
LRFD6a-1 0.9D+1.0W(1/12)	0.9	
LRFD6a-1 0.9D+1.0W(1/12)	1	
LRFD6a-1 0.9D+1.0W(2/12)	0.9	
LRFD6a-1 0.9D+1.0W(2/12)	1	
LRFD6a-1 0.9D+1.0W(3/12)	0.9	
LRFD6a-1 0.9D+1.0W(3/12)	1	
LRFD6a-1 0.9D+1.0W(4/12)	0.9	
LRFD6a-1 0.9D+1.0W(4/12)	1	
LRFD6a-1 0.9D+1.0W(5/12)	0.9	
LRFD6a-1 0.9D+1.0W(5/12)	1	
LRFD6a-1 0.9D+1.0W(6/12)	0.9	
LRFD6a-1 0.9D+1.0W(6/12)	1	

Loads

Name	SF	Notes
LRFD6a-1 0.9D+1.0W(7/12)	0.9	
LRFD6a-1 0.9D+1.0W(7/12)	1	
LRFD6a-1 0.9D+1.0W(8/12)	0.9	
LRFD6a-1 0.9D+1.0W(8/12)	1	
LRFD6a-1 0.9D+1.0W(9/12)	0.9	
LRFD6a-1 0.9D+1.0W(9/12)	1	
LRFD6a-1 0.9D+1.0W(10/12)	0.9	
LRFD6a-1 0.9D+1.0W(10/12)	1	
LRFD6a-1 0.9D+1.0W(11/12)	0.9	
LRFD6a-1 0.9D+1.0W(11/12)	1	
LRFD6a-1 0.9D+1.0W(12/12)	0.9	
LRFD6a-1 0.9D+1.0W(12/12)	1	
LRFD6a-2 0.9D-1.0W(1/12)	0.9	
LRFD6a-2 0.9D-1.0W(1/12)	-1	
LRFD6a-2 0.9D-1.0W(2/12)	0.9	
LRFD6a-2 0.9D-1.0W(2/12)	-1	
LRFD6a-2 0.9D-1.0W(3/12)	0.9	
LRFD6a-2 0.9D-1.0W(3/12)	-1	
LRFD6a-2 0.9D-1.0W(4/12)	0.9	
LRFD6a-2 0.9D-1.0W(4/12)	-1	
LRFD6a-2 0.9D-1.0W(5/12)	0.9	
LRFD6a-2 0.9D-1.0W(5/12)	-1	
LRFD6a-2 0.9D-1.0W(6/12)	0.9	
LRFD6a-2 0.9D-1.0W(6/12)	-1	
LRFD6a-2 0.9D-1.0W(7/12)	0.9	
LRFD6a-2 0.9D-1.0W(7/12)	-1	
LRFD6a-2 0.9D-1.0W(8/12)	0.9	
LRFD6a-2 0.9D-1.0W(8/12)	-1	
LRFD6a-2 0.9D-1.0W(9/12)	0.9	
LRFD6a-2 0.9D-1.0W(9/12)	-1	
LRFD6a-2 0.9D-1.0W(10/12)	0.9	
LRFD6a-2 0.9D-1.0W(10/12)	-1	
LRFD6a-2 0.9D-1.0W(11/12)	0.9	
LRFD6a-2 0.9D-1.0W(11/12)	-1	
LRFD6a-2 0.9D-1.0W(12/12)	0.9	
LRFD6a-2 0.9D-1.0W(12/12)	-1	
LRFD6b-1 0.9D+1.0Fa+0.5W(1/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(1/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(1/12)	0.5	
LRFD6b-1 0.9D+1.0Fa+0.5W(2/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(2/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(2/12)	0.5	
LRFD6b-1 0.9D+1.0Fa+0.5W(3/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(3/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(3/12)	0.5	
LRFD6b-1 0.9D+1.0Fa+0.5W(4/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(4/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(4/12)	0.5	
LRFD6b-1 0.9D+1.0Fa+0.5W(5/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(5/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(5/12)	0.5	
LRFD6b-1 0.9D+1.0Fa+0.5W(6/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(6/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(6/12)	0.5	
LRFD6b-1 0.9D+1.0Fa+0.5W(7/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(7/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(7/12)	0.5	

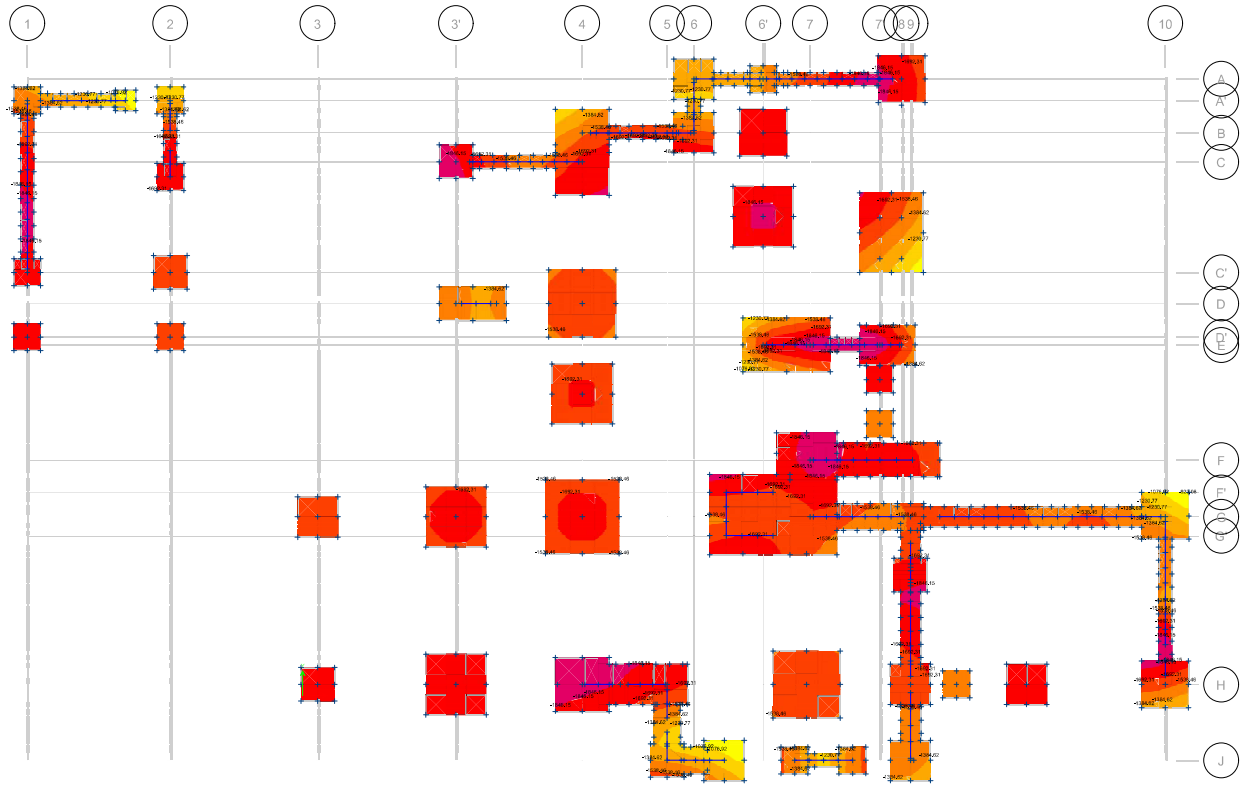
Loads

Name	SF	Notes
LRFD6b-1 0.9D+1.0Fa+0.5W(8/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(8/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(8/12)	0.5	
LRFD6b-1 0.9D+1.0Fa+0.5W(9/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(9/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(9/12)	0.5	
LRFD6b-1 0.9D+1.0Fa+0.5W(10/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(10/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(10/12)	0.5	
LRFD6b-1 0.9D+1.0Fa+0.5W(11/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(11/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(11/12)	0.5	
LRFD6b-1 0.9D+1.0Fa+0.5W(12/12)	0.9	
LRFD6b-1 0.9D+1.0Fa+0.5W(12/12)	1	
LRFD6b-1 0.9D+1.0Fa+0.5W(12/12)	0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(1/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(1/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(1/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(2/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(2/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(2/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(3/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(3/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(3/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(4/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(4/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(4/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(5/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(5/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(5/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(6/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(6/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(6/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(7/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(7/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(7/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(8/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(8/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(8/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(9/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(9/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(9/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(10/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(10/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(10/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(11/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(11/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(11/12)	-0.5	
LRFD6b-2 0.9D+1.0Fa-0.5W(12/12)	0.9	
LRFD6b-2 0.9D+1.0Fa-0.5W(12/12)	1	
LRFD6b-2 0.9D+1.0Fa-0.5W(12/12)	-0.5	



Plan View - Base - Z = 0 (ft)

SAFE 22.1.0

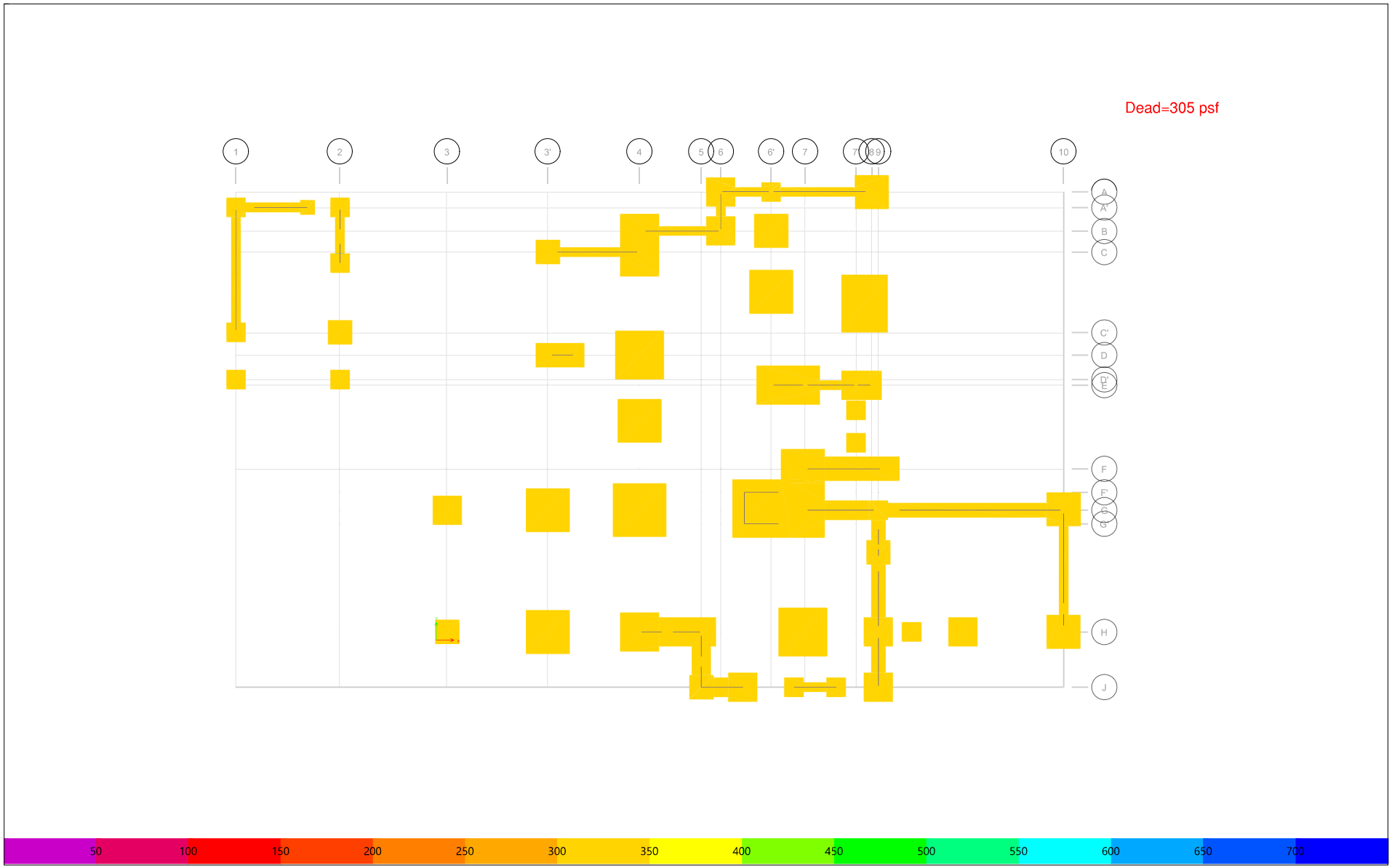


-2.00 -1.85 -1.69 -1.54 -1.38 -1.23 -1.08 -0.92 -0.77 -0.62 -0.46 -0.31 -0.15 -0.00 E+3

25-0032 12700 Rolling Rd Etabs 20.3.0 V03_V2016.FDB

Plan View - Base - Z = 0 (ft) Soil Pressures (ASD env) Min [lb/ft²]

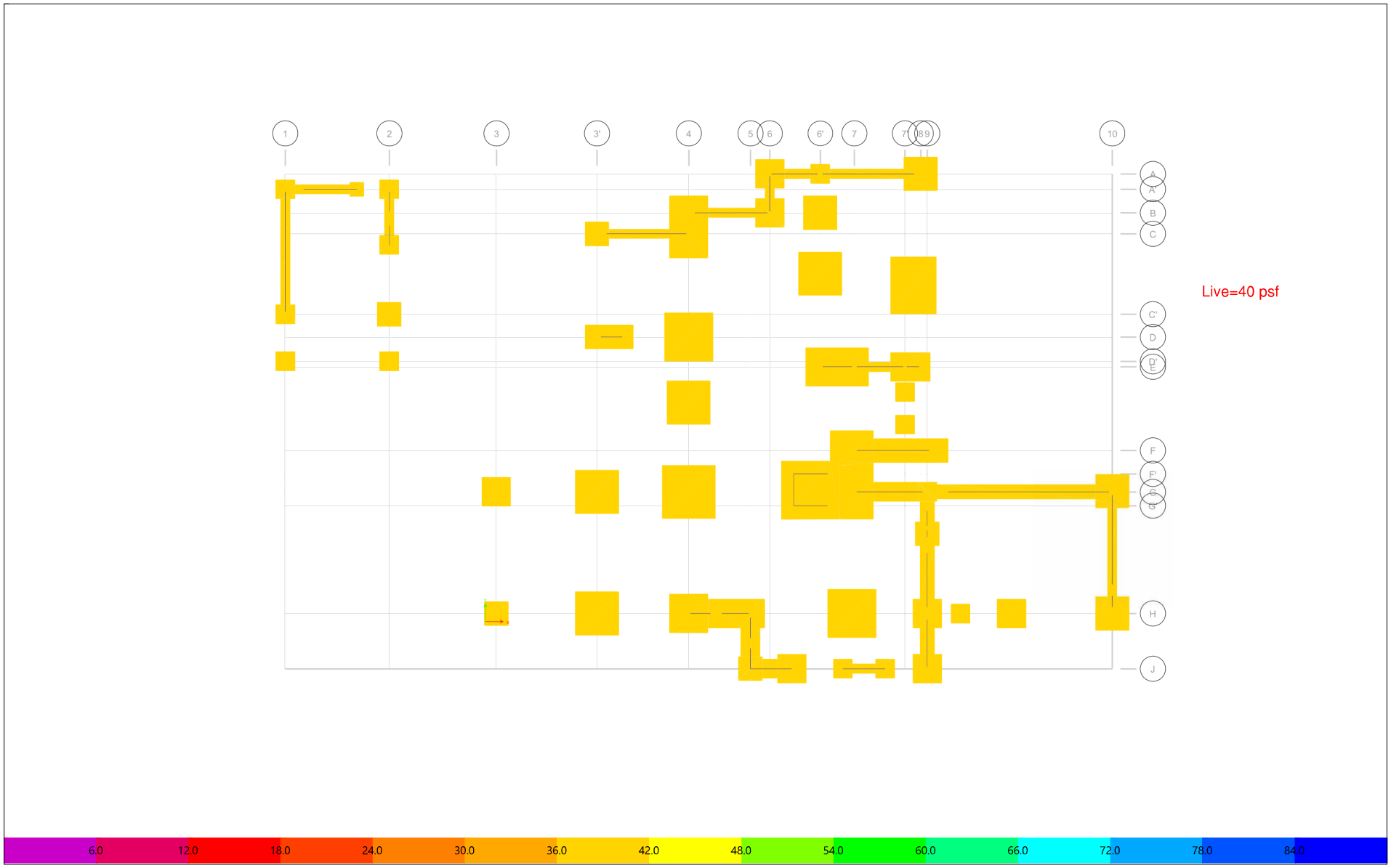
SAFE 22.1.0



25-0032 12700 Rolling Rd Etabs 20.3.0 V03_V2016.FDB

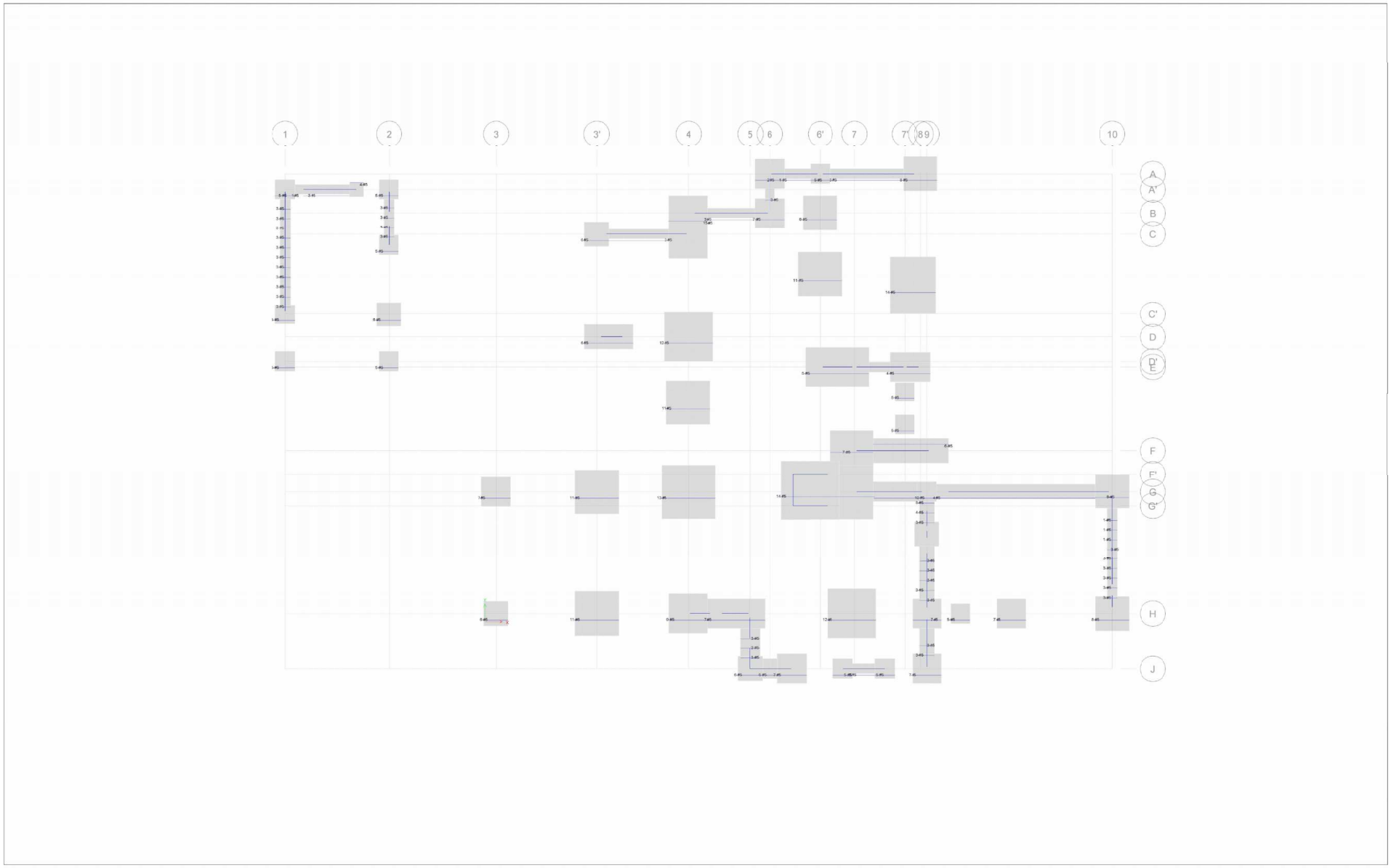
Plan View - Base - Z = 0 (ft) Surface Loads Gravity (Super Dead) [lb/ft²]

SAFE 22.1.0

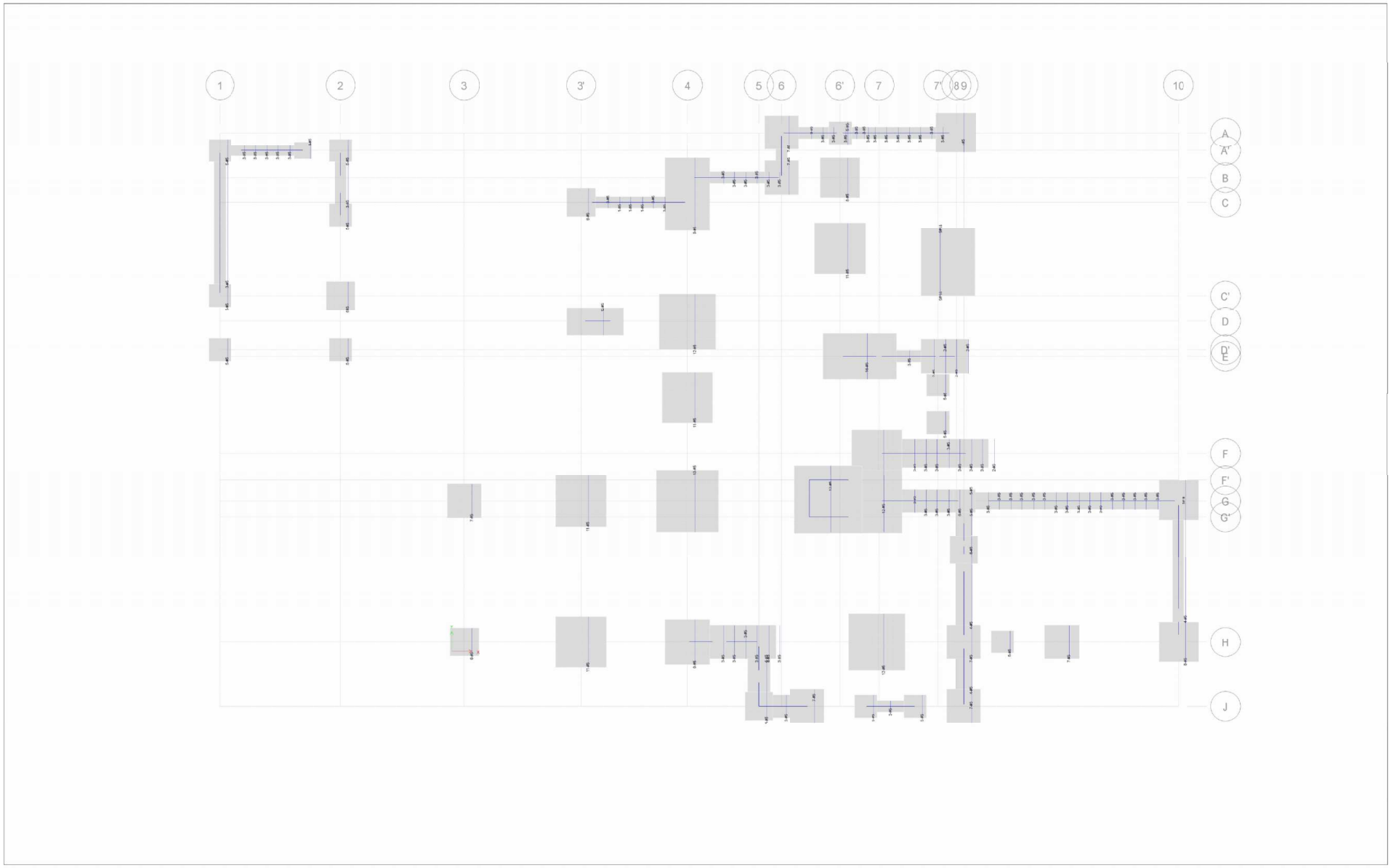


25-0032 12700 Rolling Rd Etabs 20.3.0 V03_V2016.FDB

Plan View - Base - Z = 0 (ft) Surface Loads Gravity (Live) [lb/ft²]

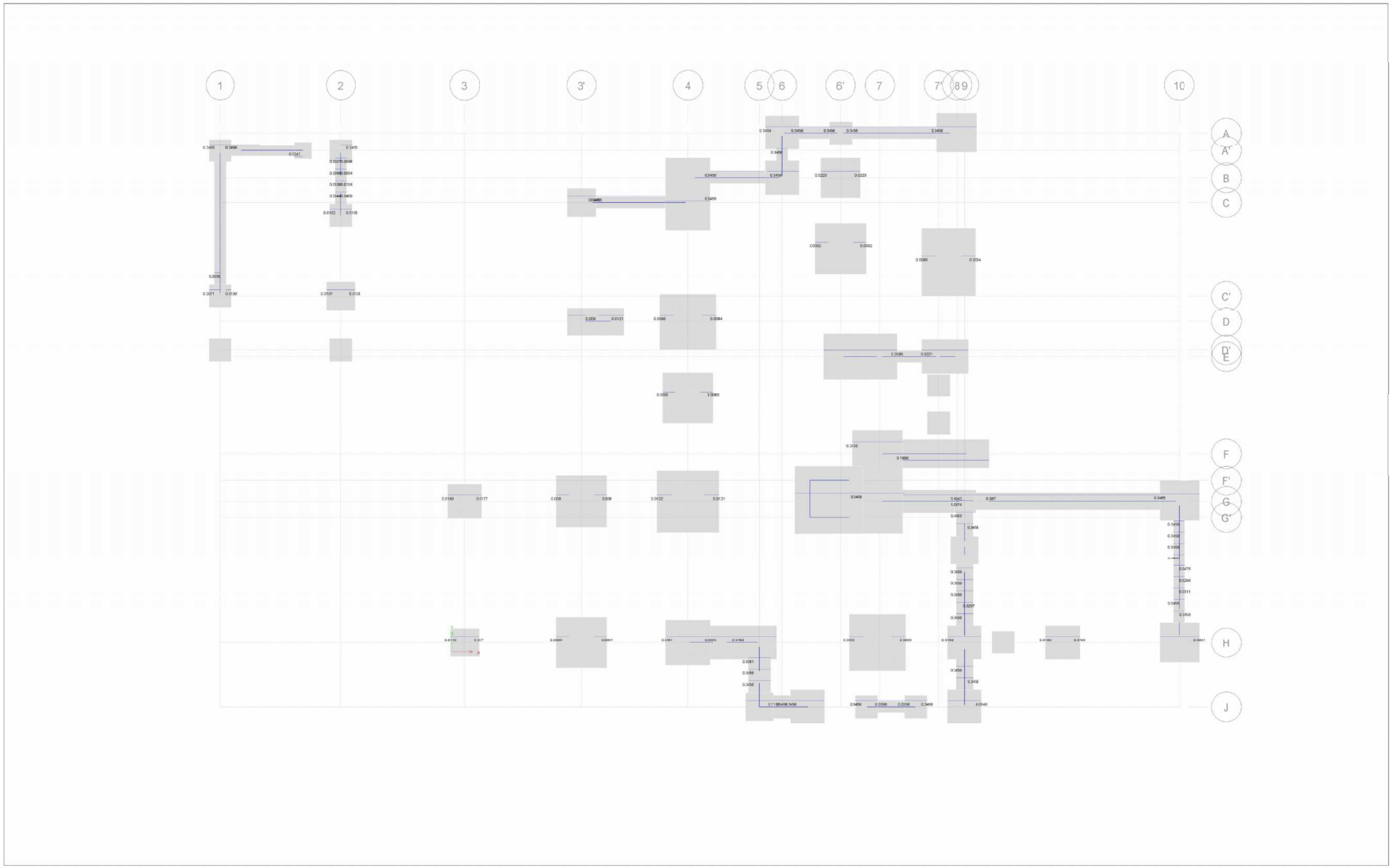


Plan View - Base - Z = 0 (ft) Slab Strip Design - Layer A - Bottom Reinforcement (Enveloping Flexural)



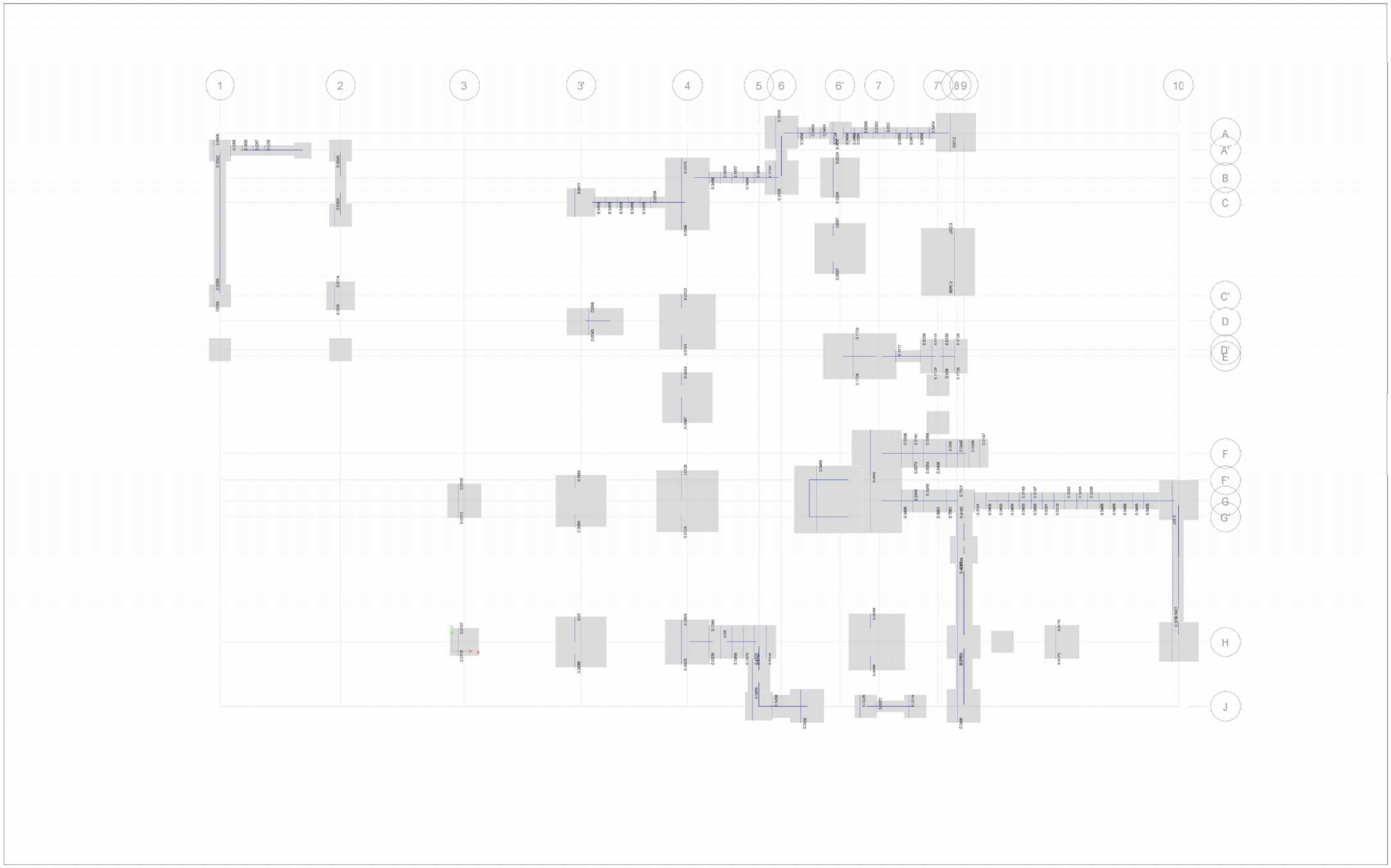
Plan View - Base - Z = 0 (ft) Slab Strip Design - Layer B - Bottom Reinforcement (Enveloping Flexural)

SAFE 22.1.0



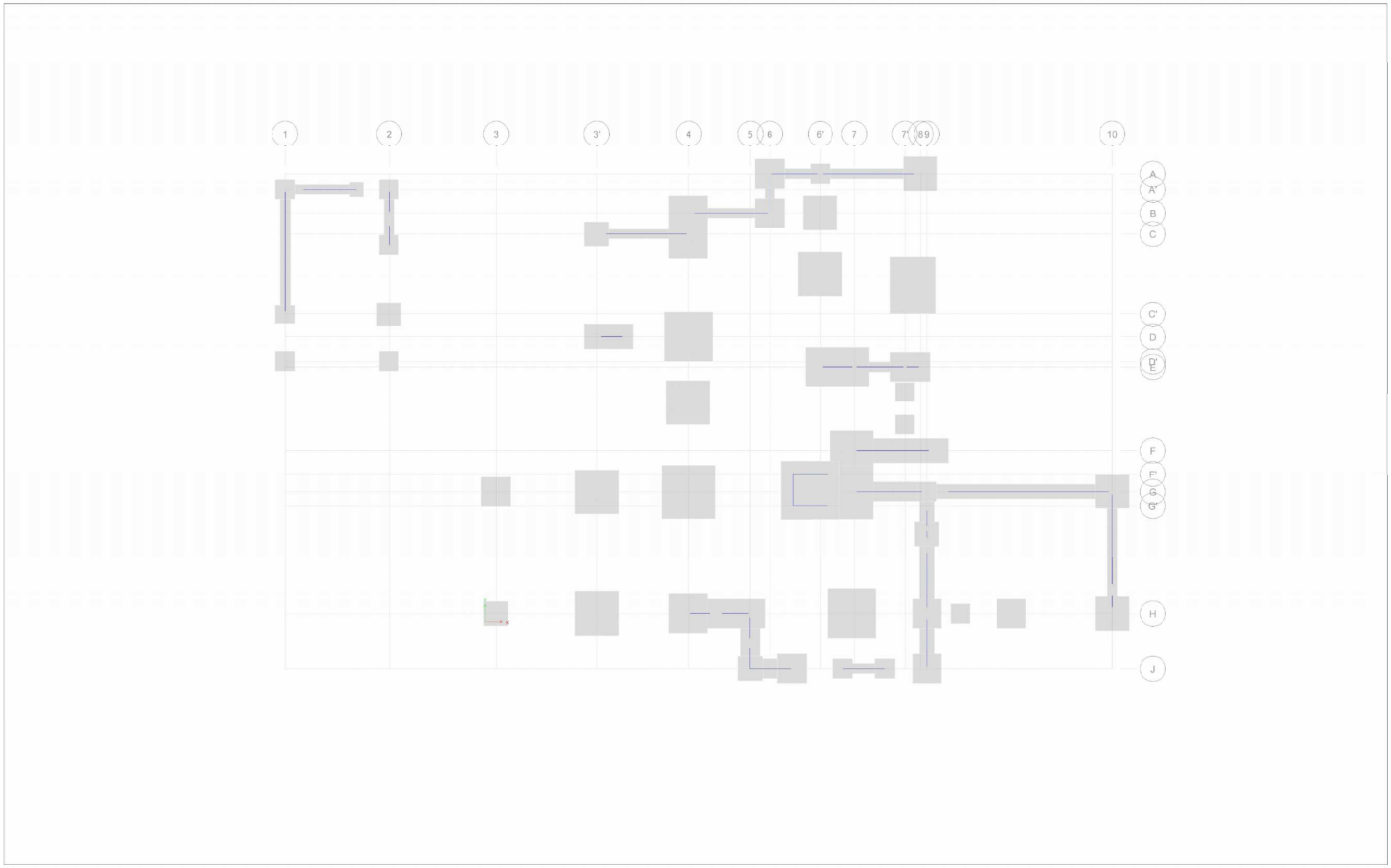
25-0032 12700 Rolling Rd Etabs 20.3.0 V03_V2016.FDB Plan View - Base - Z = 0 (ft) Slab Strip Design - Layer A - Top Reinforcement Intensity (Enveloping Flexural) [in²/ft]

SAFE 22.1.0



25-0032 12700 Rolling Rd Etabs 20.3.0 V03_V2016.FDB Plan View - Base - Z = 0 (ft) Slab Strip Design - Layer B - Top Reinforcement Intensity (Enveloping Flexural) [in²/ft]

SAFE 22.1.0



25-0032 12700 Rolling Rd Etabs 20.3.0 V03_V2016.FDB

Plan View - Base - Z = 0 (ft) Slab Strip Design - Layers A, B Reinforcement Intensity (Shear) [in²/ft]

MISCELLANEOUS

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST1 6X3X1/4

Code References

Calculations per AISC Design Guide # 1, IBC 2021
Load Combination Set : ASCE 7-22 / IBC 2024 (L<=100psf)

General Information

Material Properties

AISC Design Method	Load Resistance Factor Design		Φ c : LRFD Resistance Factor	0.65
Steel Plate Fy	=	36 ksi		
Concrete Support f'c	=	4.0 ksi		
Assumed Bearing Area	Full Bearing		Nominal Bearing Fp per J8	6.80 ksi

Column & Plate

Column Properties

Steel Section	HSS6x3x1/4		
Depth	6 in	Area	3.84 in^2
Width	3 in	Ixx	17 in^4
Flange Thickness	0.233 in	Iyy	5.7 in^4
Web Thicknes	in		

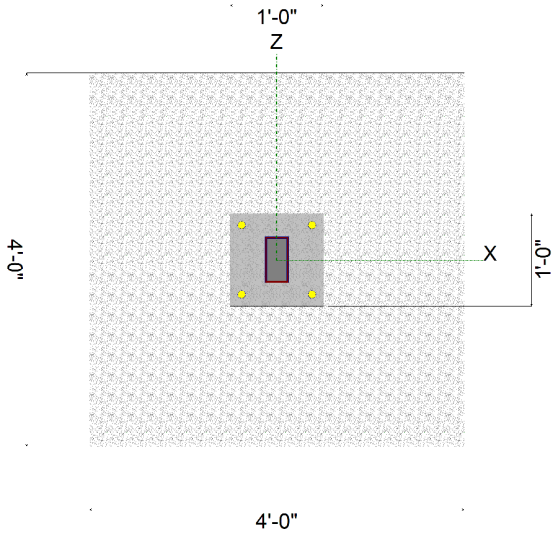
Plate Dimensions

N : Length	12.0 in
B : Width	12.0 in
Thickness	0.750 in

Column assumed welded to base plate

Support Dimensions

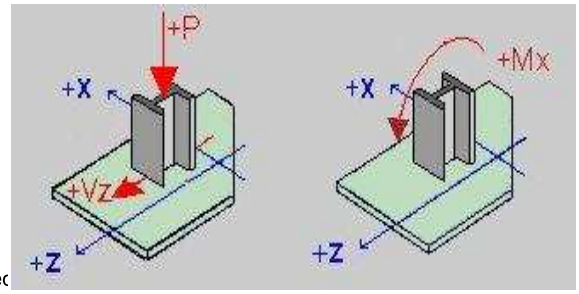
Width along "X"	48.0 in
Length along "Z'	48.0 in



Applied Loads

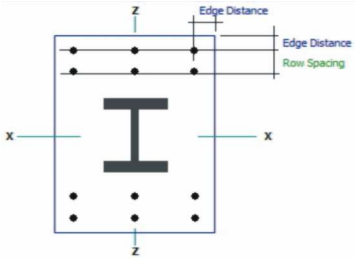
	P-Y	V-Z	M-X
D : Dead Load	38.0 k	k	k-ft
L : Live	6.20 k	k	k-ft
Lr : Roof Live	3.30 k	k	k-ft
S : Snow	k	k	k-ft
W : Wind	k	k	k-ft
E : Earthquake	k	k	k-ft
H : Lateral Earth	k	k	k-ft

" P " = Gravity load, "+" sign is downward "+" Moments create higher soil pressure at +Z ed
"+" Shears push plate towards +Z edge



Anchor Bolts

Anchor Bolt or Rod Description	0.625"	
Max of Tension or Pullout Capacity.....		k
Shear Capacity.....		k
Edge distance : bolt to plate.....	1.50	in
Number of Bolts in each Row.....	2	
Number of Bolt Rows.....	1	



Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST1 6X3X1/4

GOVERNING DESIGN LOAD CASE SUMMARY

Plate Design Summary

Design Method	**Load Resistance Factor Design**
Governing Load Combinat	**+1.20D+0.50Lr+1.60L**
Governing Load Case Typ	**Axial Load Only**
Governing STRESS RATI(	**0.9119**
Design Plate Size	**1'-0" x 1'-0" x 0 -3/4"**

Pu : Axial	57.17	k
Mu : Moment	0	k-ft

Mu : Max. Moment	4.155	k-in
fb : Max. Bending Stress	29.546	ksi
Fb : Allowable : Fy * Φ	32.400	ksi
Bending Stress Rati	0.912	
	Bending Stress OK	
fu : Max. Plate Bearing Stress	0.397	ksi
Fp : Allowable :	4.420	ksi
Bearing Stress Ratic	0.090	
	Bearing Stress OK	

Load Comb. : +1.40D

Axial Load Only, No Moment

Loading

Pu : Axial	53.200	k
Design Plate Height	12.000	in
Design Plate Width	12.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	144.000	in^2
A2: Support Area	2,304.000	in^2
sqrt(A2/A1)	2.000	

Distance for Moment Calculation

" m "	3.150	in
" n "	4.575	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	4.575	in

Bearing Stresses

Fp : Allowable	4.420	ksi
fu : Max. Bearing Pressure	0.369	ksi
Stress Ratio	**0.084**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	3.866	k-in on 1" strip
fb : Actual	27.494	ksi
Fb : Allowable	32.400	ksi
Stress Ratio	**0.849**	

Load Comb. : +1.20D+0.50Lr+1.60L

Axial Load Only, No Moment

Loading

Pu : Axial	57.170	k
Design Plate Height	12.000	in
Design Plate Width	12.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	144.000	in^2
A2: Support Area	2,304.000	in^2
sqrt(A2/A1)	2.000	

Distance for Moment Calculation

" m "	3.150	in
" n "	4.575	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	4.575	in

Bearing Stresses

Fp : Allowable	4.420	ksi
fu : Max. Bearing Pressure	0.397	ksi
Stress Ratio	**0.090**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.155	k-in on 1" strip
fb : Actual	29.546	ksi
Fb : Allowable	32.400	ksi
Stress Ratio	**0.912**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST1 6X3X1/4

Load Comb. : +1.20D+1.60L

Axial Load Only, No Moment

Loading

Pu : Axial	55.520	k
Design Plate Height	12.000	in
Design Plate Width	12.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	144.000	in^2
A2: Support Area	2,304.000	in^2
sqrt(A2/A1)	2.000	

Distance for Moment Calculation

" m "	3.150	in
" n "	4.575	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	4.575	in

Bearing Stresses

Fp : Allowable	4.420	ksi
fu : Max. Bearing Pressure	0.386	ksi
Stress Ratio	**0.087**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.035	k-in on 1" strip
fb : Actual	28.693	ksi
Fb : Allowable	32.400	ksi
Stress Ratio	**0.886**	

Load Comb. : +1.20D+1.60Lr+0.50L

Axial Load Only, No Moment

Loading

Pu : Axial	53.980	k
Design Plate Height	12.000	in
Design Plate Width	12.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	144.000	in^2
A2: Support Area	2,304.000	in^2
sqrt(A2/A1)	2.000	

Distance for Moment Calculation

" m "	3.150	in
" n "	4.575	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	4.575	in

Bearing Stresses

Fp : Allowable	4.420	ksi
fu : Max. Bearing Pressure	0.375	ksi
Stress Ratio	**0.085**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	3.923	k-in on 1" strip
fb : Actual	27.897	ksi
Fb : Allowable	32.400	ksi
Stress Ratio	**0.861**	

Load Comb. : +1.20D+1.60Lr

Axial Load Only, No Moment

Loading

Pu : Axial	50.880	k
Design Plate Height	12.000	in
Design Plate Width	12.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	144.000	in^2
A2: Support Area	2,304.000	in^2
sqrt(A2/A1)	2.000	

Distance for Moment Calculation

" m "	3.150	in
" n "	4.575	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	4.575	in

Bearing Stresses

Fp : Allowable	4.420	ksi
fu : Max. Bearing Pressure	0.353	ksi
Stress Ratio	**0.080**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	3.698	k-in on 1" strip
fb : Actual	26.295	ksi
Fb : Allowable	32.400	ksi
Stress Ratio	**0.812**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST1 6X3X1/4

Load Comb. : +1.20D+0.50L

Axial Load Only, No Moment

Loading

Pu : Axial	48.700	k
Design Plate Height	12.000	in
Design Plate Width	12.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	144.000	in^2
A2: Support Area	2,304.000	in^2
sqrt(A2/A1)	2.000	

Distance for Moment Calculation

" m "	3.150	in
" n "	4.575	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	4.575	in

Bearing Stresses

Fp : Allowable	4.420	ksi
fu : Max. Bearing Pressure	0.338	ksi
Stress Ratio	**0.077**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	3.539	k-in on 1" strip
fb : Actual	25.168	ksi
Fb : Allowable	32.400	ksi
Stress Ratio	**0.777**	

Load Comb. : +1.20D

Axial Load Only, No Moment

Loading

Pu : Axial	45.600	k
Design Plate Height	12.000	in
Design Plate Width	12.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	144.000	in^2
A2: Support Area	2,304.000	in^2
sqrt(A2/A1)	2.000	

Distance for Moment Calculation

" m "	3.150	in
" n "	4.575	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	4.575	in

Bearing Stresses

Fp : Allowable	4.420	ksi
fu : Max. Bearing Pressure	0.317	ksi
Stress Ratio	**0.072**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	3.314	k-in on 1" strip
fb : Actual	23.566	ksi
Fb : Allowable	32.400	ksi
Stress Ratio	**0.727**	

Load Comb. : +1.20D+0.50Lr+0.50L

Axial Load Only, No Moment

Loading

Pu : Axial	50.350	k
Design Plate Height	12.000	in
Design Plate Width	12.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	144.000	in^2
A2: Support Area	2,304.000	in^2
sqrt(A2/A1)	2.000	

Distance for Moment Calculation

" m "	3.150	in
" n "	4.575	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	4.575	in

Bearing Stresses

Fp : Allowable	4.420	ksi
fu : Max. Bearing Pressure	0.350	ksi
Stress Ratio	**0.079**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	3.659	k-in on 1" strip
fb : Actual	26.021	ksi
Fb : Allowable	32.400	ksi
Stress Ratio	**0.803**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST1 6X3X1/4

Load Comb. : +0.90D

Axial Load Only, No Moment

Loading

Pu : Axial	34.200	k
Design Plate Height	12.000	in
Design Plate Width	12.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	144.000	in^2
A2: Support Area	2,304.000	in^2
sqrt(A2/A1)	2.000	

Distance for Moment Calculation

" m "	3.150	in
" n "	4.575	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	4.575	in

Bearing Stresses

Fp : Allowable	4.420	ksi
fu : Max. Bearing Pressure	0.238	ksi
Stress Ratio	**0.054**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	2.486	k-in on 1" strip
fb : Actual	17.675	ksi
Fb : Allowable	32.400	ksi
Stress Ratio	**0.546**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST2 4X4X3/8

Code References

Calculations per AISC Design Guide # 1, IBC 2021
Load Combination Set : IBC 2018

General Information

Material Properties

AISC Design Method	Allowable Strength Design			
Steel Plate Fy	=	36 ksi		
Concrete Support f'c	=	4.0 ksi	Ω c : ASD Safety Facto	2.31
Assumed Bearing Area	Full Bearing		Nominal Bearing Fp per J8	5.440 ksi

Column & Plate

Column Properties

Steel Section	HSS4x4x3/8		
Depth	4 in	Area	4.78 in^2
Width	4 in	Ixx	17 in^4
Flange Thickness	0.349 in	Iyy	5.7 in^4
Web Thicknes	in		

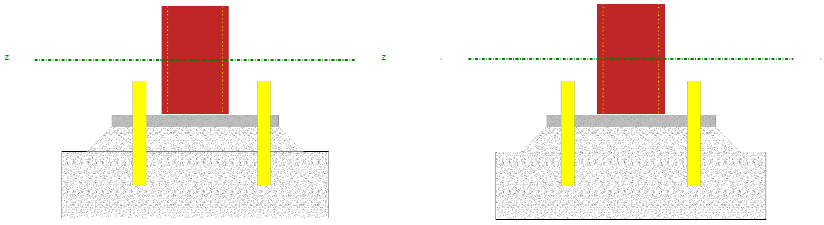
Plate Dimensions

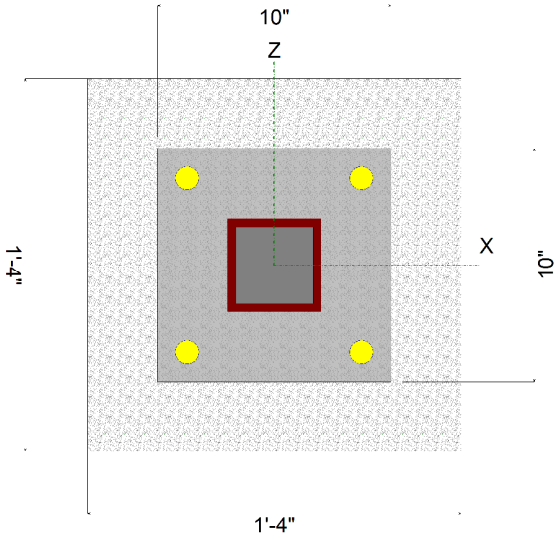
N : Length	10.0	in
B : Width	10.0	in
Thickness	0.750	in

Column assumed welded to base plate

Support Dimensions

Width along "X"	16.0	in
Length along "Z'	16.0	in

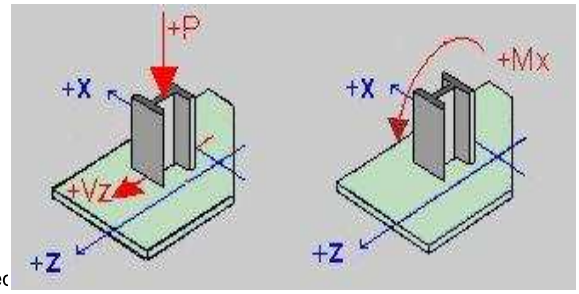




Applied Loads

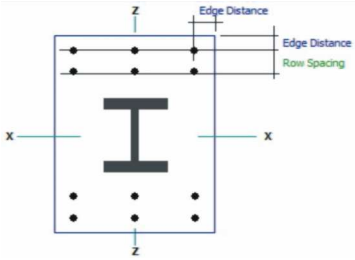
	P-Y	V-Z	M-X
D : Dead Load	51.0 k	k	k-ft
L : Live	7.40 k	k	k-ft
Lr : Roof Live	3.80 k	k	k-ft
S : Snow	k	k	k-ft
W : Wind	k	k	k-ft
E : Earthquake	k	k	k-ft
H : Lateral Earth	k	k	k-ft

" P " = Gravity load, "+" sign is downwa "+" Moments create higher soil pressure at +Z ec
"+" Shears push plate towards +Z edge



Anchor Bolts

Anchor Bolt or Rod Description	5/8"	
Max of Tension or Pullout Capacity.....		k
Shear Capacity.....		k
Edge distance : bolt to plate.....	1.25	in
Number of Bolts in each Row.....	2	
Number of Bolt Rows.....	1	



Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST2 4X4X3/8

GOVERNING DESIGN LOAD CASE SUMMARY

Plate Design Summary

Design Method	**Allowable Strength Design**
Governing Load Combinat	**+D+0.750Lr+0.750L**
Governing Load Case Typ	**Axial Load Only**
Governing STRESS RATI(	**0.9415**
Design Plate Size	**10" x 10" x 0 -3/4"**

Pa : Axial Load	59.4	k
Ma : Moment	0	k-ft

Ma : Max. Moment	2.854	k-in
fb : Max. Bending Stress	20.296	ksi
Fb : Allowable : Fy / Ω	21.557	ksi
Bending Stress Rati	0.942	
	Bending Stress OK	
fu : Max. Plate Bearing Stress	0.594	ksi
Fp : Allowable :	2.355	ksi
Bearing Stress Ratic	0.252	
	Bearing Stress OK	

Load Comb. : D Only

Axial Load Only, No Moment

Loading

Pa : Axial Load	51.000	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	3.100	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.510	ksi
Stress Ratio	**0.217**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	2.451	k-in on 1" strip
fb : Actual	17.426	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.808**	

Load Comb. : +D+L

Axial Load Only, No Moment

Loading

Pa : Axial Load	58.400	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	3.100	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.584	ksi
Stress Ratio	**0.248**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	2.806	k-in on 1" strip
fb : Actual	19.955	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.926**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST2 4X4X3/8

Load Comb. : +D+Lr

Axial Load Only, No Moment

Loading

Pa : Axial Load	54.800	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	3.100	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.548	ksi
Stress Ratio	**0.233**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	2.633	k-in on 1" strip
fb : Actual	18.725	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.869**	

Load Comb. : +D+0.750Lr+0.750L

Axial Load Only, No Moment

Loading

Pa : Axial Load	59.400	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	3.100	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.594	ksi
Stress Ratio	**0.252**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	2.854	k-in on 1" strip
fb : Actual	20.296	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.942**	

Load Comb. : +D+0.750L

Axial Load Only, No Moment

Loading

Pa : Axial Load	56.550	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	3.100	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.566	ksi
Stress Ratio	**0.240**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	2.717	k-in on 1" strip
fb : Actual	19.323	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.896**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST2 4X4X3/8

Load Comb. : +0.60D

Axial Load Only, No Moment

Loading

Pa : Axial Load	30.600	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	3.100	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.306	ksi
Stress Ratio	**0.130**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	1.470	k-in on 1" strip
fb : Actual	10.456	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.485**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST3 6X4X1/2

Code References

Calculations per AISC Design Guide # 1, IBC 2021
Load Combination Set : IBC 2018

General Information

Material Properties

AISC Design Method	Allowable Strength Design			
Steel Plate Fy	=	36 ksi		
Concrete Support f'c	=	4.0 ksi	Ω c : ASD Safety Facto	2.31
Assumed Bearing Area	Full Bearing		Nominal Bearing Fp per J8	5.440 ksi

Column & Plate

Column Properties

Steel Section	HSS6x4x1/2		
Depth	6 in	Area	7.88 in^2
Width	4 in	Ixx	34 in^4
Flange Thickness	0.465 in	Iyy	17.8 in^4
Web Thicknes	in		

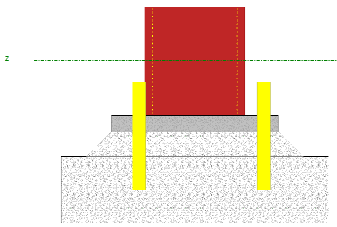
Plate Dimensions

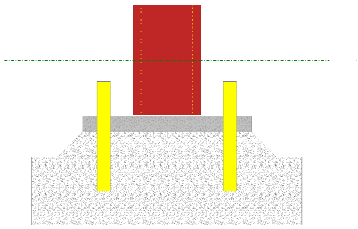
N : Length	10.0 in
B : Width	10.0 in
Thickness	1.0 in

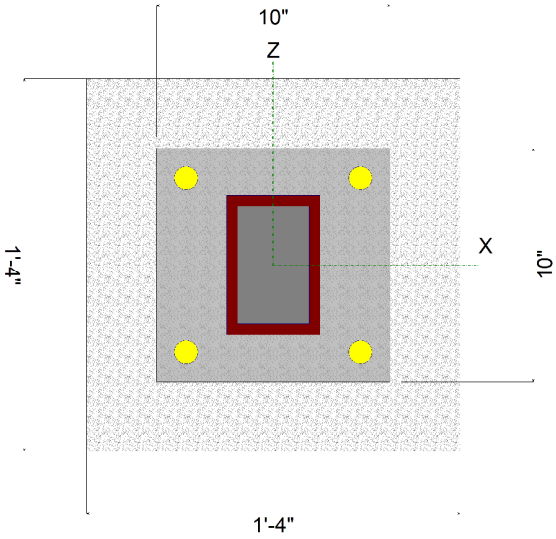
Support Dimensions

Width along "X"	16.0 in
Length along "Z'	16.0 in

Column assumed welded to base plate



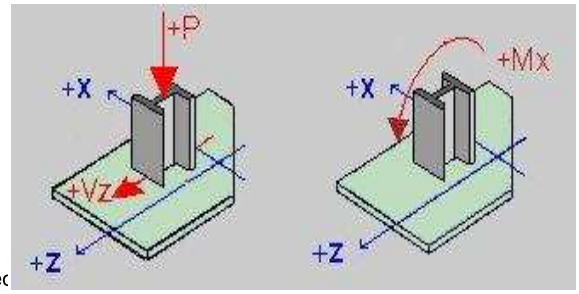




Applied Loads

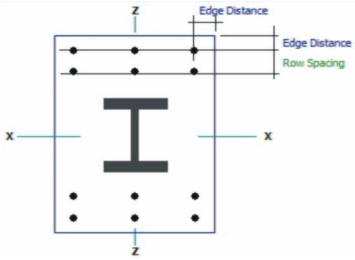
	P-Y	V-Z	M-X
D : Dead Load	85.0 k	k	k-ft
L : Live	17.30 k	k	k-ft
Lr : Roof Live	8.0 k	k	k-ft
S : Snow	k	k	k-ft
W : Wind	k	k	k-ft
E : Earthquake	k	k	k-ft
H : Lateral Earth	k	k	k-ft

" P " = Gravity load, "+" sign is downwa "+" Moments create higher soil pressure at +Z ed
"+" Shears push plate towards +Z edge



Anchor Bolts

Anchor Bolt or Rod Description	5/8"	
Max of Tension or Pullout Capacity.....		k
Shear Capacity.....		k
Edge distance : bolt to plate.....	1.25	in
Number of Bolts in each Row.....	2	
Number of Bolt Rows.....	1	



Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST3 6X4X1/2

GOVERNING DESIGN LOAD CASE SUMMARY

Plate Design Summary

Design Method	**Allowable Strength Design**
Governing Load Combinat	**+D+0.750Lr+0.750L**
Governing Load Case Typ	**Axial Load Only**
Governing STRESS RATI(	**0.9270**
Design Plate Size	**10" x 10" x 1"**

Pa : Axial Load	103.975	k
Ma : Moment	0	k-ft

Ma : Max. Moment	4.996	k-in
fb : Max. Bending Stress	19.984	ksi
Fb : Allowable : Fy / Ω	21.557	ksi
Bending Stress Rati	0.927	
	Bending Stress OK	
fu : Max. Plate Bearing Stress	1.040	ksi
Fp : Allowable :	2.355	ksi
Bearing Stress Ratic	0.442	
	Bearing Stress OK	

Load Comb. : D Only

Axial Load Only, No Moment

Loading

Pa : Axial Load	85.000	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.850	ksi
Stress Ratio	**0.361**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.084	k-in on 1" strip
fb : Actual	16.337	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.758**	

Load Comb. : +D+L

Axial Load Only, No Moment

Loading

Pa : Axial Load	102.300	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	1.023	ksi
Stress Ratio	**0.434**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.916	k-in on 1" strip
fb : Actual	19.662	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.912**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST3 6X4X1/2

Load Comb. : +D+Lr

Axial Load Only, No Moment

Loading

Pa : Axial Load	93.000	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.930	ksi
Stress Ratio	**0.395**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.469	k-in on 1" strip
fb : Actual	17.875	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.829**	

Load Comb. : +D+0.750Lr+0.750L

Axial Load Only, No Moment

Loading

Pa : Axial Load	103.975	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	1.040	ksi
Stress Ratio	**0.442**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.996	k-in on 1" strip
fb : Actual	19.984	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.927**	

Load Comb. : +D+0.750L

Axial Load Only, No Moment

Loading

Pa : Axial Load	97.975	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.980	ksi
Stress Ratio	**0.416**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.708	k-in on 1" strip
fb : Actual	18.831	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.874**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST3 6X4X1/2

Load Comb. : +0.60D

Axial Load Only, No Moment

Loading

Pa : Axial Load	51.000	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.510	ksi
Stress Ratio	**0.217**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	2.451	k-in on 1" strip
fb : Actual	9.802	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.455**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST4 6X4X1/2

Code References

Calculations per AISC Design Guide # 1, IBC 2021
Load Combination Set : IBC 2018

General Information

Material Properties

AISC Design Method	Allowable Strength Design			
Steel Plate Fy	=	36 ksi		
Concrete Support f'c	=	4.0 ksi	Ω c : ASD Safety Facto	2.31
Assumed Bearing Area	Full Bearing		Nominal Bearing Fp per J8	5.440 ksi

Column & Plate

Column Properties

Steel Section	HSS6x4x1/2		
Depth	6 in	Area	7.88 in^2
Width	4 in	Ixx	34 in^4
Flange Thickness	0.465 in	Iyy	17.8 in^4
Web Thicknes	in		

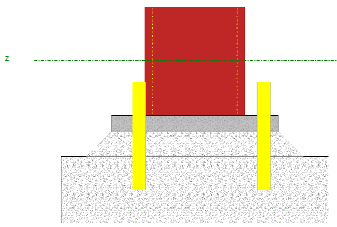
Plate Dimensions

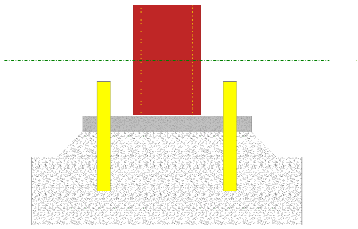
N : Length	10.0 in
B : Width	10.0 in
Thickness	1.0 in

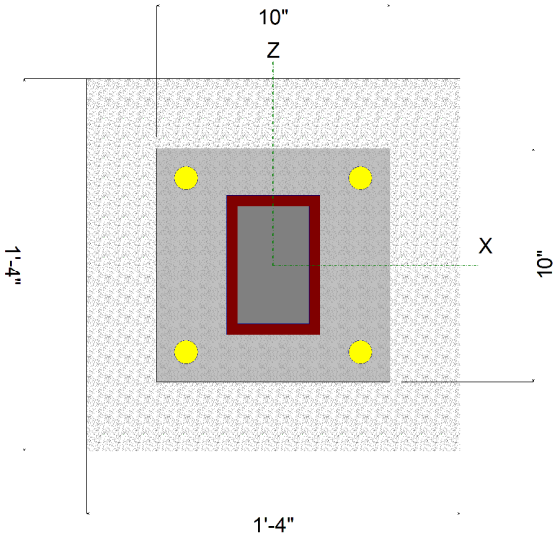
Support Dimensions

Width along "X"	16.0 in
Length along "Z'	16.0 in

Column assumed welded to base plate



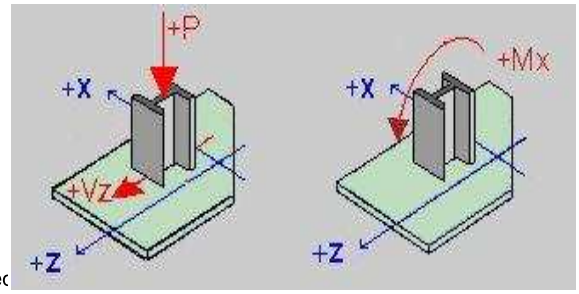




Applied Loads

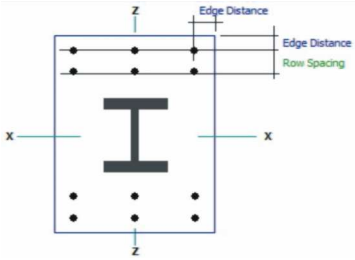
	P-Y	V-Z	M-X
D : Dead Load	91.0 k	k	k-ft
L : Live	10.70 k	k	k-ft
Lr : Roof Live	9.90 k	k	k-ft
S : Snow	k	k	k-ft
W : Wind	k	k	k-ft
E : Earthquake	k	k	k-ft
H : Lateral Earth	k	k	k-ft

" P " = Gravity load, "+" sign is downward "+" Moments create higher soil pressure at +Z ed
"+" Shears push plate towards +Z edge



Anchor Bolts

Anchor Bolt or Rod Description	5/8"	
Max of Tension or Pullout Capacity.....		k
Shear Capacity.....		k
Edge distance : bolt to plate.....	1.25	in
Number of Bolts in each Row.....	2	
Number of Bolt Rows.....	1	



Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST4 6X4X1/2

GOVERNING DESIGN LOAD CASE SUMMARY

Plate Design Summary

Design Method	**Allowable Strength Design**
Governing Load Combinat	**+D+0.750Lr+0.750L**
Governing Load Case Typ	**Axial Load Only**
Governing STRESS RATI(	**0.9491**
Design Plate Size	**10" x 10" x 1"**

Pa : Axial Load	106.45	k
Ma : Moment	0	k-ft

Ma : Max. Moment	5.115	k-in
fb : Max. Bending Stress	20.460	ksi
Fb : Allowable : Fy / Ω	21.557	ksi
Bending Stress Rati	0.949	
	Bending Stress OK	
fu : Max. Plate Bearing Stress	1.065	ksi
Fp : Allowable :	2.355	ksi
Bearing Stress Ratic	0.452	
	Bearing Stress OK	

Load Comb. : D Only

Axial Load Only, No Moment

Loading

Pa : Axial Load	91.000	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.910	ksi
Stress Ratio	**0.386**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.373	k-in on 1" strip
fb : Actual	17.490	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.811**	

Load Comb. : +D+L

Axial Load Only, No Moment

Loading

Pa : Axial Load	101.700	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	1.017	ksi
Stress Ratio	**0.432**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.887	k-in on 1" strip
fb : Actual	19.547	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.907**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST4 6X4X1/2

Load Comb. : +D+Lr

Axial Load Only, No Moment

Loading

Pa : Axial Load	100.900	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	1.009	ksi
Stress Ratio	**0.428**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.848	k-in on 1" strip
fb : Actual	19.393	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.900**	

Load Comb. : +D+0.750Lr+0.750L

Axial Load Only, No Moment

Loading

Pa : Axial Load	106.450	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	1.065	ksi
Stress Ratio	**0.452**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	5.115	k-in on 1" strip
fb : Actual	20.460	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.949**	

Load Comb. : +D+0.750L

Axial Load Only, No Moment

Loading

Pa : Axial Load	99.025	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.990	ksi
Stress Ratio	**0.420**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.758	k-in on 1" strip
fb : Actual	19.033	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.883**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST4 6X4X1/2

Load Comb. : +0.60D

Axial Load Only, No Moment

Loading

Pa : Axial Load	54.600	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.546	ksi
Stress Ratio	**0.232**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	2.624	k-in on 1" strip
fb : Actual	10.494	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.487**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST5 7X7X1/4

Code References

Calculations per AISC Design Guide # 1, IBC 2021
Load Combination Set : IBC 2018

General Information

Material Properties

AISC Design Method	Allowable Strength Design			
Steel Plate Fy	=	36 ksi		
Concrete Support f'c	=	4.0 ksi	Ω c : ASD Safety Facto	2.31
Assumed Bearing Area	Full Bearing		Nominal Bearing Fp per J8	5.440 ksi

Column & Plate

Column Properties

Steel Section	HSS6x4x1/2		
Depth	6 in	Area	7.88 in^2
Width	4 in	Ixx	34 in^4
Flange Thickness	0.465 in	Iyy	17.8 in^4
Web Thicknes	in		

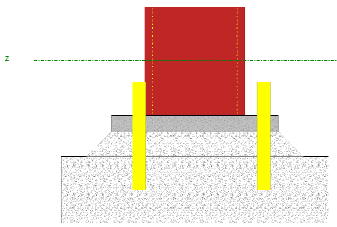
Plate Dimensions

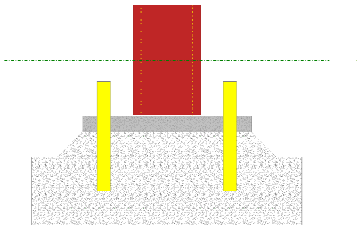
N : Length	10.0 in
B : Width	10.0 in
Thickness	1.0 in

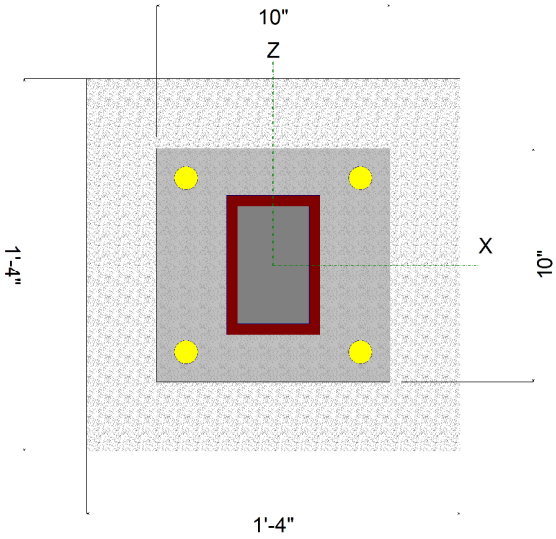
Support Dimensions

Width along "X"	16.0 in
Length along "Z'	16.0 in

Column assumed welded to base plate



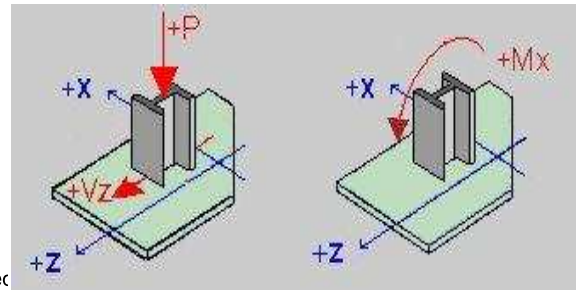




Applied Loads

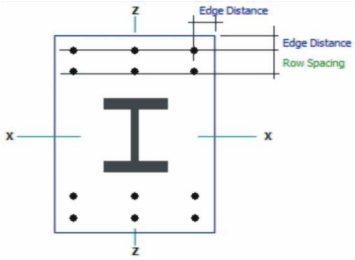
	P-Y	V-Z	M-X
D : Dead Load	80.0 k	k	k-ft
L : Live	1.30 k	k	k-ft
Lr : Roof Live	13.20 k	k	k-ft
S : Snow	k	k	k-ft
W : Wind	k	k	k-ft
E : Earthquake	k	k	k-ft
H : Lateral Earth	k	k	k-ft

" P " = Gravity load, "+" sign is downward "+" Moments create higher soil pressure at +Z ed
"+" Shears push plate towards +Z edge



Anchor Bolts

Anchor Bolt or Rod Description	5/8"	
Max of Tension or Pullout Capacity.....		k
Shear Capacity.....		k
Edge distance : bolt to plate.....	1.25	in
Number of Bolts in each Row.....	2	
Number of Bolt Rows.....	1	



Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST5 7X7X1/4

GOVERNING DESIGN LOAD CASE SUMMARY

Plate Design Summary

Design Method	**Allowable Strength Design**
Governing Load Combinat	**+D+Lr**
Governing Load Case Typ	**Axial Load Only**
Governing STRESS RATI(	**0.8310**
Design Plate Size	**10" x 10" x 1"**

Pa : Axial Load	93.2	k
Ma : Moment	0	k-ft

Ma : Max. Moment	4.478	k-in
fb : Max. Bending Stress	17.913	ksi
Fb : Allowable : Fy / Ω	21.557	ksi
Bending Stress Rati	0.831	
	Bending Stress OK	
fu : Max. Plate Bearing Stress	0.932	ksi
Fp : Allowable :	2.355	ksi
Bearing Stress Ratic	0.396	
	Bearing Stress OK	

Load Comb. : D Only

Axial Load Only, No Moment

Loading

Pa : Axial Load	80.000	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.800	ksi
Stress Ratio	**0.340**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	3.844	k-in on 1" strip
fb : Actual	15.376	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.713**	

Load Comb. : +D+L

Axial Load Only, No Moment

Loading

Pa : Axial Load	81.300	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.813	ksi
Stress Ratio	**0.345**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	3.906	k-in on 1" strip
fb : Actual	15.626	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.725**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST5 7X7X1/4

Load Comb. : +D+Lr

Axial Load Only, No Moment

Loading

Pa : Axial Load	93.200	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.932	ksi
Stress Ratio	**0.396**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.478	k-in on 1" strip
fb : Actual	17.913	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.831**	

Load Comb. : +D+0.750Lr+0.750L

Axial Load Only, No Moment

Loading

Pa : Axial Load	90.875	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.909	ksi
Stress Ratio	**0.386**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	4.367	k-in on 1" strip
fb : Actual	17.466	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.810**	

Load Comb. : +D+0.750L

Axial Load Only, No Moment

Loading

Pa : Axial Load	80.975	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in
Will be different from entry if partial bearing used.		
A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.810	ksi
Stress Ratio	**0.344**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	3.891	k-in on 1" strip
fb : Actual	15.563	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.722**	

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Base Plate

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: ST5 7X7X1/4

Load Comb. : +0.60D

Axial Load Only, No Moment

Loading

Pa : Axial Load	48.000	k
Design Plate Height	10.000	in
Design Plate Width	10.000	in

Will be different from entry if partial bearing used.

A1 : Plate Area	100.000	in^2
A2: Support Area	256.000	in^2
sqrt(A2/A1)	1.600	

Distance for Moment Calculation

" m "	2.150	in
" n "	3.100	in
X	0.000	in^2
Lambda	0.000	
n'	0.000	in
n' * Lambda	0.000	in
L = max(m, n, n")	3.100	in

Bearing Stresses

Fp : Allowable	2.355	ksi
fa : Max. Bearing Pressure	0.480	ksi
Stress Ratio	**0.204**	

Plate Bending Stresses

Mmax = Fu * L^2 / 2	2.306	k-in on 1" strip
fb : Actual	9.226	ksi
Fb : Allowable	21.557	ksi
Stress Ratio	**0.428**	

Project Title:
Engineer:
Project ID:
Project Descr:

Masonry Slender Wall

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: MW ZONE 4

Code References

Calculations per TMS 402-16, IBC 2021
Load Combinations Used : ASCE 7-22 / IBC 2024 (L<=100psf)

General Information

Calculations per TMS 402-16, IBC 2021

Construction Type : Grouted Hollow Concrete Masonry

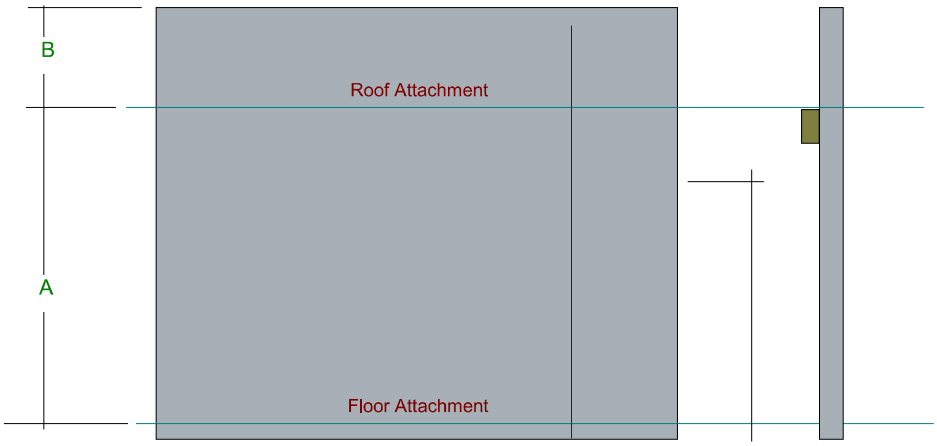
F'm	=	2.0 ksi	Nom. Wall Thickness		8 in	Temp Diff across thickness	=		deg F
Fy - Yield	=	60.0 ksi	Actual Thickness		7.625 in	Min Allow Out-of-plane Defl Ra	=	0.0	
Fr - Rupture	=	163.0 psi	Rebar "d" distance		3.8125 in				
Em = f'm *	=	900.0	Lower Level Rebar . . .			Minimum Vertical Steel %	=	0.0020	
Max % of ρ bal.	=	0.008363	Bar Size	#	5				
Grout Density	=	140 pcf	Bar Spacing		32 in				
Block Weight		Normal Weight							
Wall Weight	=	51.0 psf							

Wall is grouted at rebar cells only

One-Story Wall Dimensions

A Clear Height = 14.0 ft
B Parapet height = ft

Wall Support Condition Top & Bottom Pinned



Vertical Loads

Vertical Uniform Loads . . . (*Applied per foot of Strip Widt*			DL : Dead	Lr : Roof Live	Lf : Floor Live	S : Snow	W : Wind
Ledger Load	Eccentricity	in	3.50	1.0	0.50		k/ft
Concentric Load							k/ft

Lateral Loads

Wind Loads :
Full area WIND load 67.790 psf

Seismic Loads :
Wall Weight Seismic Load Input Method : Direct entry of Lateral Wall Weight
Seismic Wall Lateral Load psf

Fp 1.0 = 0.0 psf

Project Title:
Engineer:
Project ID:
Project Descr:

Masonry Slender Wall

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: MW ZONE 4

DESIGN SUMMARY

Results reported for "Strip Width" of 12.0 in

	Governing Load Combination . . .	Actual Values . . .			Allowable Values . . .	
PASS	Moment Capacity Check	Maximum Bending Stress Rat	**0.6827**			
	+0.90D+W	Max Mu	1.784	k-ft	Phi * Mn	2.613 k-ft
PASS	Service Deflection Check	Actual Defl. Ratio L/	336		Allowable Defl. Ratio	240.0
	W Only	Max. Deflection	0.4994	in		
PASS	Axial Load Check	Max Pu / Ag	117.645	psi	Max. Allow. Defl.	0.70 in
	+1.20D+0.50Lr+0.50L+W	Location	6.767	ft	0.2 * f'm	400.0 psi
	Reinforcing Limit Check					
		Actual As/bd	0.002541		Max Allow As/bd	0.008364

Maximum Reactions *for Load Combination...*

Top Horizontal	W Only	0.4745 k
Base Horizontal	W Only	0.4745 k
Vertical Reaction	+D+0.750Lr+0.750L	5.339 k

Design Maximum Combinations - Moments

Results reported for "Strip Width" = 12 in.

Load Combination	Axial Load Pu k	0.2*f'm*b*t k	Moment Values Mcr k-ft	Mu k-ft	Phi	Phi Mn k-ft	As in^2	As Ratio	0.6 * rho bal	Bar 'd'
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
+1.20D+1.60Lr+0.50W at 6.53 to 7.00	6.257	18.384	1.22	0.85	0.90	3.30	0.116	0.0025	0.0072	3.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
+1.20D+0.50W at 6.53 to 7.00	4.657	18.384	1.22	0.85	0.90	2.91	0.116	0.0025	0.0078	3.00
+1.20D+0.50Lr+0.50L+W at 6.53 to 7.	5.407	18.384	1.22	1.86	0.90	3.09	0.116	0.0025	0.0075	3.00
+1.20D+0.50L+W at 6.53 to 7.00	4.907	18.384	1.22	1.84	0.90	2.97	0.116	0.0025	0.0077	3.00
+0.90D+W at 6.53 to 7.00	3.493	18.384	1.22	1.78	0.90	2.62	0.116	0.0025	0.0082	3.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00

Design Maximum Combinations - Deflections

Results reported for "Strip Width" = 12 in.

Load Combination	Axial Load Pu k	Moment Values Mcr k-ft	Mactual k-ft	Stiffness I gross in^4	I cracked in^4	I effective in^4	Deflections Deflection in	Defl. Ratio
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
+D+0.60W at 6.53 to 7.00	3.881	1.22	1.01	342.40	26.75	342.400	0.058	2,898.8
+D+0.750Lr+0.750L+0.450W at 6.53 to	5.006	1.22	0.76	342.40	28.87	342.400	0.044	3,844.6
+D+0.750L+0.450W at 6.53 to 7.00	4.256	1.22	0.76	342.40	27.46	342.400	0.044	3,858.3
+0.60D+0.60W at 6.53 to 7.00	2.328	1.22	1.01	342.40	23.69	342.400	0.058	2,920.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
W Only at 7.00 to 7.47	0.000	1.22	1.66	342.40	18.78	21.889	0.499	336.4

Masonry Slender Wall

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: MW ZONE 4

	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0

Reactions - Vertical & Horizontal

Load Combination	Base Horizontal	Top Horizontal	Vertical @ Wall Base
D Only	0.0 k	0.00 k	4.214 k

Reactions - Vertical & Horizontal

Load Combination	Base Horizontal	Top Horizontal	Vertical @ Wall Base
+D+L	0.0 k	0.00 k	4.714 k
+D+Lr	0.0 k	0.00 k	5.214 k
+D+0.750Lr+0.750L	0.0 k	0.00 k	5.339 k
+D+0.750L	0.0 k	0.00 k	4.589 k
+D+0.60W	0.3 k	0.28 k	4.214 k
+D+0.750Lr+0.750L+0.450W	0.2 k	0.21 k	5.339 k
+D+0.750L+0.450W	0.2 k	0.21 k	4.589 k
+0.60D+0.60W	0.3 k	0.28 k	2.528 k
+D+0.70E	0.0 k	0.00 k	4.214 k
+D+0.750L+0.5250E	0.0 k	0.00 k	4.589 k
+0.60D+0.70E	0.0 k	0.00 k	2.528 k
Lr Only	0.0 k	0.00 k	1.000 k
L Only	0.0 k	0.00 k	0.500 k
W Only	0.5 k	0.47 k	0.000 k
E Only	0.0 k	0.00 k	0.000 k

Project Title:
Engineer:
Project ID:
Project Descr:

Masonry Slender Wall

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: MW ZONE 5

Code References

Calculations per TMS 402-16, IBC 2021
Load Combinations Used : ASCE 7-22 / IBC 2024 (L<=100psf)

General Information

Calculations per TMS 402-16, IBC 2021

Construction Type : Grouted Hollow Concrete Masonry

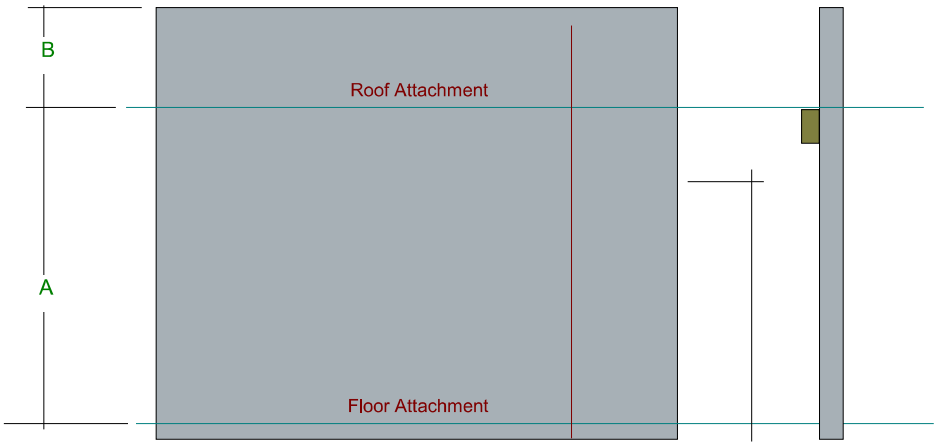
F'm	=	2.0 ksi	Nom. Wall Thickness	8 in	Temp Diff across thickness	=	deg F
Fy - Yield	=	60.0 ksi	Actual Thickness	7.625 in	Min Allow Out-of-plane Defl Ra	=	0.0
Fr - Rupture	=	163.0 psi	Rebar "d" distance	3.8125 in			
Em = f'm *	=	900.0	Lower Level Rebar . . .		Minimum Vertical Steel %	=	0.0020
Max % of ρ bal.	=	0.008362	Bar Size #	5			
Grout Density	=	140 pcf	Bar Spacing	24 in			
Block Weight		Normal Weight					
Wall Weight	=	55.0 psf					

Wall is grouted at rebar cells only

One-Story Wall Dimensions

A Clear Height = 14.0 ft
B Parapet height = ft

Wall Support Condition Top & Bottom Pinned



Vertical Loads

Vertical Uniform Loads . . . (*Applied per foot of Strip Width*)			DL : Dead	Lr : Roof Live	Lf : Floor Live	S : Snow	W : Wind
Ledger Load	Eccentricity	in	3.50	1.0	0.50		k/ft
Concentric Load							k/ft

Lateral Loads

Wind Loads :
Full area WIND load 77.970 psf

Seismic Loads :
Wall Weight Seismic Load Input Method : Direct entry of Lateral Wall Weight
Seismic Wall Lateral Load psf

Fp 1.0 = 0.0 psf

Project Title:
Engineer:
Project ID:
Project Descr:

Masonry Slender Wall

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: MW ZONE 5

DESIGN SUMMARY

Results reported for "Strip Width" of 12.0 in

	Governing Load Combination . . .	Actual Values . . .		Allowable Values . . .	
PASS	Moment Capacity Check	Maximum Bending Stress Rat	0.6598		
	+0.90D+W	Max Mu	2.068 k-ft	Phi * Mn	3.134 k-ft
PASS	Service Deflection Check	Actual Defl. Ratio L/	276	Allowable Defl. Ratio	240.0
	W Only	Max. Deflection	0.6083 in		
PASS	Axial Load Check	Max Pu / Ag	105.973 psi	Max. Allow. Defl.	0.70 in
	+1.20D+0.50Lr+0.50L+W	Location	6.767 ft	0.2 * f'm	400.0 psi
	Reinforcing Limit Check				
		Actual As/bd	0.003388	Max Allow As/bd	0.008364

Maximum Reactions *for Load Combination...*

Top Horizontal	W Only	0.5458 k
Base Horizontal	W Only	0.5458 k
Vertical Reaction	+D+0.750Lr+0.750L+0.450	5.395 k

Design Maximum Combinations - Moments

Results reported for "Strip Width" = 12 in.

Load Combination	Axial Load Pu k	0.2*f'm*b*t k	Moment Values Mcr k-ft	Mu k-ft	Phi	Phi Mn k-ft	As in^2	As Ratio	0.6 * rho bal	Bar 'd'
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
+1.20D+1.60Lr+0.50W at 6.53 to 7.00	6.293	20.544	1.26	0.98	0.90	3.80	0.155	0.0034	0.0072	3.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
+1.20D+0.50W at 6.53 to 7.00	4.693	20.544	1.26	0.97	0.90	3.42	0.155	0.0034	0.0078	3.00
+1.20D+0.50Lr+0.50L+W at 6.53 to 7.	5.443	20.544	1.26	2.17	0.90	3.60	0.155	0.0034	0.0075	3.00
+1.20D+0.50L+W at 6.53 to 7.00	4.943	20.544	1.26	2.14	0.90	3.48	0.155	0.0034	0.0077	3.00
+0.90D+W at 6.53 to 7.00	3.520	20.544	1.26	2.07	0.90	3.14	0.155	0.0034	0.0082	3.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00
	0.000	0.000	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000	0.00

Design Maximum Combinations - Deflections

Results reported for "Strip Width" = 12 in.

Load Combination	Axial Load Pu k	Moment Values Mcr k-ft	Mactual k-ft	Stiffness I gross in^4	I cracked in^4	I effective in^4	Deflections Deflection in	Defl. Ratio
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
+D+0.60W at 6.53 to 7.00	3.911	1.26	1.16	353.60	31.10	353.600	0.065	2,604.0
+D+0.750Lr+0.750L+0.450W at 6.53 to	5.036	1.26	0.88	353.60	33.08	353.600	0.049	3,454.1
+D+0.750L+0.450W at 6.53 to 7.00	4.286	1.26	0.87	353.60	31.77	353.600	0.048	3,466.0
+0.60D+0.60W at 6.53 to 7.00	2.346	1.26	1.16	353.60	28.24	353.600	0.064	2,622.5
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0
W Only at 7.00 to 7.47	0.000	1.26	1.91	353.60	23.68	26.076	0.608	276.2

Masonry Slender Wall

Project File: 25-0032.ec6

LIC# : KW-06018068, Build:20.25.01.29 Eastern Engineering Group (c) ENERCALC, LLC 1982-2025

DESCRIPTION: MW ZONE 5

	0.000	0.00	0.00	0.00	0.00	0.000	0.000	0.0

Reactions - Vertical & Horizontal

Load Combination	Base Horizontal	Top Horizontal	Vertical @ Wall Base
D Only	0.0 k	0.00 k	4.270 k

Reactions - Vertical & Horizontal

Load Combination	Base Horizontal	Top Horizontal	Vertical @ Wall Base
+D+L	0.0 k	0.00 k	4.770 k
+D+Lr	0.0 k	0.00 k	5.270 k
+D+0.750Lr+0.750L	0.0 k	0.00 k	5.395 k
+D+0.750L	0.0 k	0.00 k	4.645 k
+D+0.60W	0.3 k	0.33 k	4.270 k
+D+0.750Lr+0.750L+0.450W	0.2 k	0.25 k	5.395 k
+D+0.750L+0.450W	0.2 k	0.25 k	4.645 k
+0.60D+0.60W	0.3 k	0.33 k	2.562 k
+D+0.70E	0.0 k	0.00 k	4.270 k
+D+0.750L+0.5250E	0.0 k	0.00 k	4.645 k
+0.60D+0.70E	0.0 k	0.00 k	2.562 k
Lr Only	0.0 k	0.00 k	1.000 k
L Only	0.0 k	0.00 k	0.500 k
W Only	0.5 k	0.55 k	0.000 k
E Only	0.0 k	0.00 k	0.000 k