PA-08

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/building

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

# NOTICE OF ACCEPTANCE (NOA)

**E.S. Windows, LLC**
**3550 NW 49th Street**
**Miami, FL 33142**

## SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami–Dade County RER–Product Control Section to be used in Miami–Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami–Dade County Product Control Section (In Miami–Dade County) and/ or the AHJ (in areas other than Miami–Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami–Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

**DESCRIPTION: Series "5100 Fixed Casement" Aluminum Fixed Window – L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. **W11-15**, titled "Series 5100 Aluminum Fixed Wdw. (L.M.I.)", sheets 1 through 7 of 7, dated 03/22/11, with revision **H** dated 07/14/23, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING: Large and Small Missile Impact Resistant**

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, **Barranquilla**, **Colombia**, model/series, and following statement: "Miami–Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami–Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises NOA No. 20-1116.01** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**

MIAMI-DADE COUNTY APPROVED

9/13/23

**NOA No. 23-0724.08**
**Expiration Date: September 22, 2026**
**Approval Date: September 21, 2023**

**E.S. Windows, LLC**

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's**

**A. DRAWINGS**

**1.** Manufacturer's die drawings and sections.
***(Submitted under NOA No. 11-0531.09)***

**2.** Drawing No. **W11-15**, titled "Series 5100 Aluminum Fixed Wdw. (L.M.I.)", sheets 1 through 7 of 7, dated 03/22/11, with revision **G** dated 11/05/20, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
***(Submitted under NOA No. 20-1116.01)***

**B. TESTS**

**1.** Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum fixed casement window, prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-6294** and **FTL-6295**, dated 02/25/11 and 03/16/11 respectively, both signed and sealed by Marlin D. Brinson, P.E.
***(Submitted under NOA No. 11-0531.09)***

**C. CALCULATIONS**

**1.** Anchor verification calculations and structural analysis, complying with **FBC 5th Edition (2014)** and **FBC 6th Edition (2017)**, dated 10/28/14 and 10/06/17, and further updated on 07/24/20 to comply with **FBC 7th Edition (2020)**, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
***(Submitted under NOA No. 20-1116.01)***

**D. QUALITY ASSURANCE**

**1.** Miami-Dade Department of Regulatory and Economic Resources (RER)

**E. MATERIAL CERTIFICATIONS**

**1.** Notice of Acceptance No. **19-0305.02** issued to **Kuraray America, Inc.** for their "**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**" dated 05/09/19, expiring on 07/08/24.

**2.** Notice of Acceptance No. **18-0725.11** issued to **Kuraray America, Inc.** for their "**Kuraray SentryGlas® Xtra™ (SGX™) Clear Glass Interlayer**" dated 05/23/19, expiring on 05/23/24.

**Manuel Pérez, P.E.**
**Product Control Examiner**
**NOA No. 23-0724.08**
**Expiration Date: September 22, 2026**
**Approval Date: September 21, 2023**

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)**

**F. STATEMENTS**

**1.** Statement letter of conformance, complying with **FBC 6th Edition (2017),** with **FBC 7th Edition (2020),** and of no financial interest, dated November 16, 2020, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
***(Submitted under NOA No. 20-1116.01)***

**2.** Laboratory compliance letter for Test Reports No. **FTL-6294** and **FTL-6295**, issued by Fenestration Testing Laboratory, Inc., dated 02/25/11 and 03/16/11 respectively, both signed and sealed by Marlin D. Brinson, P.E.
***(Submitted under NOA No. 11-0531.09)***

**3.** Proposal No. **10-0505** issued by Product Control, dated 06/29/10, signed by Manuel Perez, P.E.
***(Submitted under NOA No. 11-0531.09)***

**4.** Distributor Agreement between, E.S. Windows – Energia Solar S.A., Barranquilla, Colombia and E.S. Windows, LLC, Miami, Florida, U.S.A., dated 10/20/10, signed by Carla Garcia Torrente and by Andres Chamorro, respectively.
***(Submitted under NOA No. 11-0531.09)***

**G. OTHERS**

**1.** Notice of Acceptance No. **18-0116.05**, issued to E.S. Windows, LLC for their Series "5100 Fixed Casement" Aluminum Fixed Window – L.M.I., approved on 02/22/18 and expiring on 09/22/21.

**Manuel Pérez, P.E.**
**Product Control Examiner**
**NOA No. 23-0724.08**
**Expiration Date: September 22, 2026**
**Approval Date: September 21, 2023**

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**2. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

**1.** Drawing No. **W11-15**, titled "Series 5100 Aluminum Fixed Wdw. (L.M.I.)", sheets 1 through 7 of 7, dated 03/22/11, with revision **H** dated 07/14/23, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

**B. TESTS**

**1.** None.

**C. CALCULATIONS**

**1.** None.

**D. QUALITY ASSURANCE**

**1.** Miami-Dade Department of Regulatory and Economic Resources (RER)

**E. MATERIAL CERTIFICATIONS**

**1.** Notice of Acceptance No. **20-0915.22** issued to **Kuraray America, Inc.** for their "**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**" dated 11/19/20, expiring on 07/08/24.

**2.** Notice of Acceptance No. **22-1116.01** issued to **Kuraray America, Inc.** for their **"SentryGlas® (Clear and White) Glass Interlayers**" dated 12/15/22, expiring on 07/04/28.

**F. STATEMENTS**

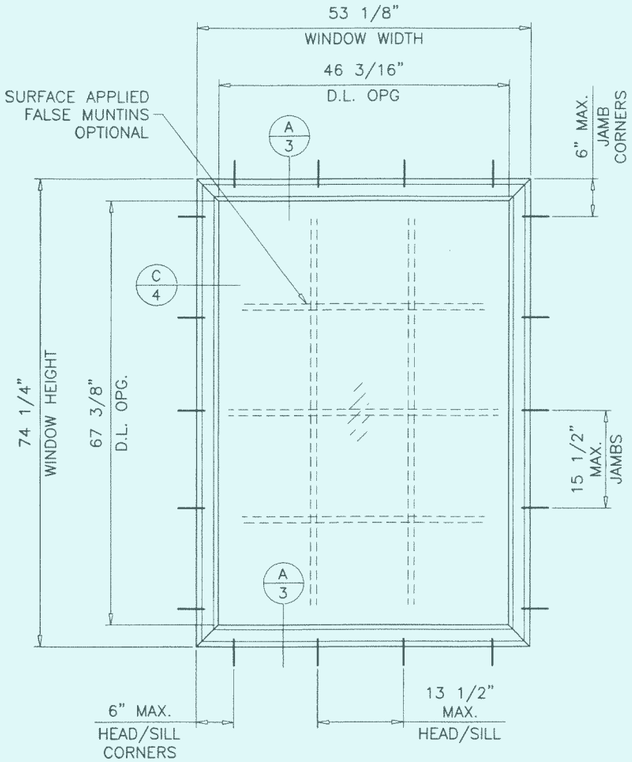
**1.** Statement letter of conformance, complying with **FBC 7th Edition (2020),** with **FBC 8th Edition (2023),** and of no financial interest, dated July 14, 2023, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

**G. OTHERS**

**1.** Notice of Acceptance No. **20-1116.01**, issued to E.S. Windows, LLC for their Series "5100 Fixed Casement" Aluminum Fixed Window – L.M.I., approved on 02/04/21 and expiring on 09/22/26.

Manuel Perez

**Manuel Perez, P.E.**
**Product Control Examiner**
**NOA No. 23-0724.08**
**Expiration Date: September 22, 2026**
**Approval Date: September 21, 2023**




TYPICAL ELEVATION
TESTED UNIT

DAYLITE OPENINGS:
D.L.O. HEIGHT = WINDOW HEIGHT – 6.9375"
D.L.O. WIDTH = WINDOW WIDTH – 6.9375"

## SERIES 5100
## ALUMINUM FIXED WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEETS 2.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF FIX./FIX. OR FIXED WITH SERIES 5000 CASEMENT WINDOWS USING MULLIONS IN BETWEEN.
LOWER DESIGN PRESSURE FROM CASEMENT WINDOW, FIXED WINDOW OR MULLION CHART WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2020 (7TH EDITION)/2023 (8TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON–METALLIC AND NON–COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2020/2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

**PRODUCT REVISED**
**As complying with the Florida Building Code**
**NOA–No. 23-0724.08**
**Expiration Date: 09/22/2026**
**By:** Manuel Perez
**Miami–Dade Product Control**

JUL 17 2023

JALAL FAROOQ
LICENSE
No. 81223
STATE OF FLORIDA
PROFESSIONAL ENGINEER


**AL-FAROOQ CORPORATION**
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978


COMP–ANL\W11–15ESW

SERIES 5100 ALUMINUM FIXED WDW. (L.M.I.)


E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638–5158 FAX. (305) 638–5151


revisions:

| no | date | by | description |
|---|---|---|---|
| E | 06.14.16 | | EDITORIAL CHANGES |
| F | 11.01.17 | | UPDATED TO 2017 FBC |
| G | 11.05.20 | | UPDATED TO 2020 FBC |
| H | 07.14.23 | | UPDATED TO 2023 FBC |

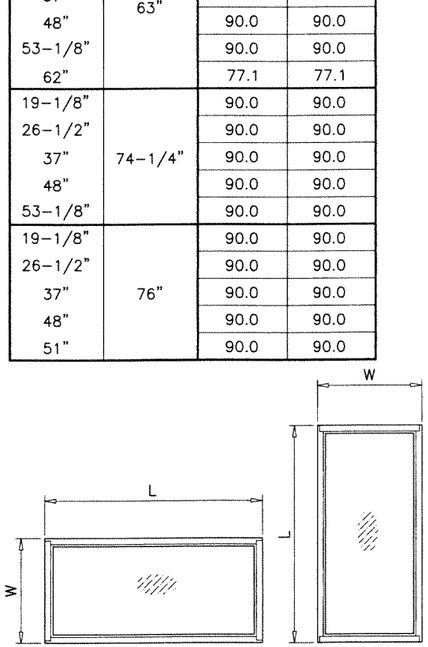
date: 03–22–11
scale: 1/2"=1'–0"
dr. by: TARIQ
chk. by:

drawing no.
W11–15

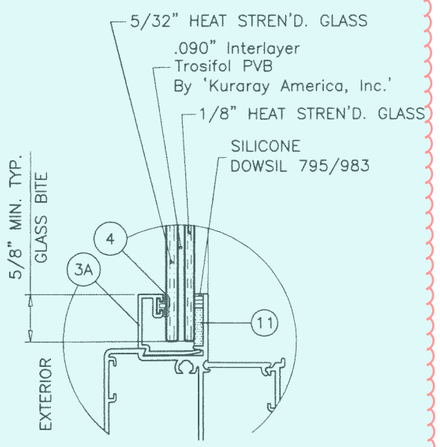
sheet 1 of 7

| DESIGN LOAD CAPACITY – PSF | | | |
|---|---|---|---|
| WINDOW DIMS. | | GLASS TYPES 'C', 'D', 'E' & 'F' | |
| WIDTH (W) | LENGTH (L) | EXT.(+) | INT.(–) |
| 24" | 42" | 90.0 | 90.0 |
| 30" | | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 54" | | 90.0 | 90.0 |
| 60" | | 90.0 | 90.0 |
| 62" | | 90.0 | 90.0 |
| 24" | 48" | 90.0 | 90.0 |
| 30" | | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 54" | | 90.0 | 90.0 |
| 60" | | 90.0 | 90.0 |
| 62" | | 90.0 | 90.0 |
| 24" | 54" | 90.0 | 90.0 |
| 30" | | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 54" | | 88.5 | 88.5 |
| 60" | | 88.5 | 88.5 |
| 62" | | 88.5 | 88.5 |
| 24" | 60" | 90.0 | 90.0 |
| 30" | | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 54" | | 88.5 | 88.5 |
| 60" | | 79.7 | 79.7 |
| 62" | | 79.7 | 79.7 |
| 24" | 66" | 90.0 | 90.0 |
| 30" | | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 54" | | 88.5 | 88.5 |
| 59" | | 81.0 | 81.0 |
| 24" | 72" | 90.0 | 90.0 |
| 30" | | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 54" | | 88.5 | 88.5 |
| 24" | 76" | 90.0 | 90.0 |
| 30" | | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 51" | | 90.0 | 90.0 |

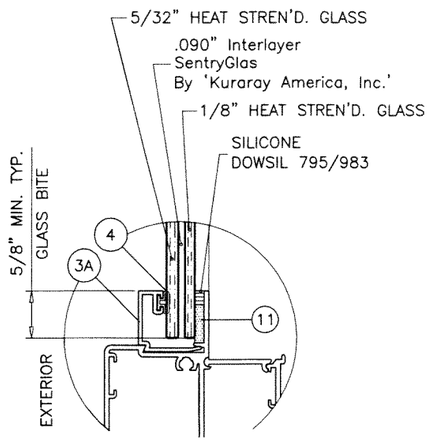
| DESIGN LOAD CAPACITY – PSF | | | |
|---|---|---|---|
| WINDOW DIMS. | | GLASS TYPES 'C', 'D', 'E' & 'F' | |
| WIDTH (W) | LENGTH (L) | EXT.(+) | INT.(–) |
| 19–1/8" | 26" | 90.0 | 90.0 |
| 26–1/2" | | 90.0 | 90.0 |
| 37" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 53–1/8" | | 90.0 | 90.0 |
| 62" | | 90.0 | 90.0 |
| 19–1/8" | 38–3/8" | 90.0 | 90.0 |
| 26–1/2" | | 90.0 | 90.0 |
| 37" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 53–1/8" | | 90.0 | 90.0 |
| 62" | | 90.0 | 90.0 |
| 19–1/8" | 50–5/8" | 90.0 | 90.0 |
| 26–1/2" | | 90.0 | 90.0 |
| 37" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 53–1/8" | | 90.0 | 90.0 |
| 62" | | 90.0 | 90.0 |
| 19–1/8" | 63" | 90.0 | 90.0 |
| 26–1/2" | | 90.0 | 90.0 |
| 37" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 53–1/8" | | 90.0 | 90.0 |
| 62" | | 77.1 | 77.1 |
| 19–1/8" | 74–1/4" | 90.0 | 90.0 |
| 26–1/2" | | 90.0 | 90.0 |
| 37" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 53–1/8" | | 90.0 | 90.0 |
| 19–1/8" | 76" | 90.0 | 90.0 |
| 26–1/2" | | 90.0 | 90.0 |
| 37" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 51" | | 90.0 | 90.0 |




NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.




GLASS TYPE 'C'

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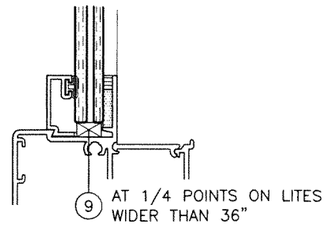
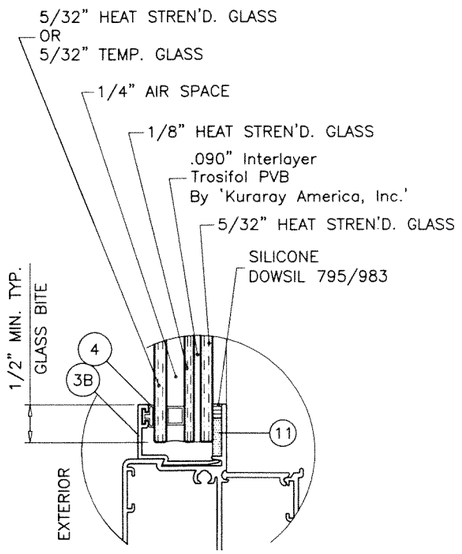



SETTING BLOCKS AT LAM. GLASS
NOTCH GLAZING BEAD LEG
TO CLEAR BLOCKS

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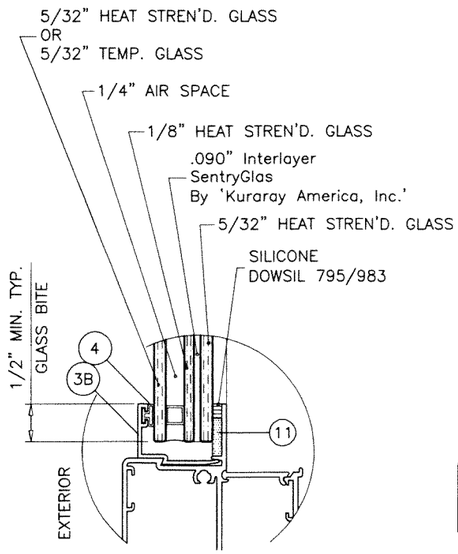
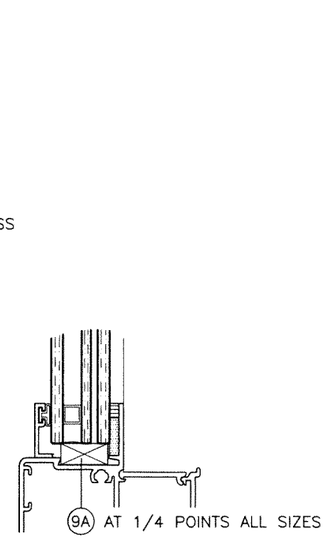



GLASS TYPE 'F'




SETTING BLOCKS AT INSUL. LAM. GLASS
NOTCH GLAZING BEAD LEG
TO CLEAR BLOCKS

## GLAZING OPTIONS

NOTE:
TO QUALIFY FOR SMALL MISSILE IMPACT RATING
EXTERIOR PLY OF GLASS TYPES 'E' & 'F' MUST BE TEMPERED.

1/4" AIR SPACE CONSISTING OF:
SPACER:
'HELIMA' LOW PROFILE ALUMINUM SPACER
BY 'LINGERMANN GMBH'
AROUND THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:
SILICONE
DOWSIL 791
GE 2000

**PRODUCT REVISED**
**As complying with the Florida Building Code**
**NOA–No. 23-0724.08**
**Expiration Date: 09/22/2026** JUL 17 2023
**By:** Manuel Perez
**Miami–Dade Product Control**

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300–09 (3 SEC. GUSTS).

JALAL FAROOQ LICENSE No. 81223 STATE OF FLORIDA PROFESSIONAL ENGINEER


afc
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP–ANL\W11–15ESW


SERIES 5100 ALUMINUM FIXED WDW. (L.M.I.)

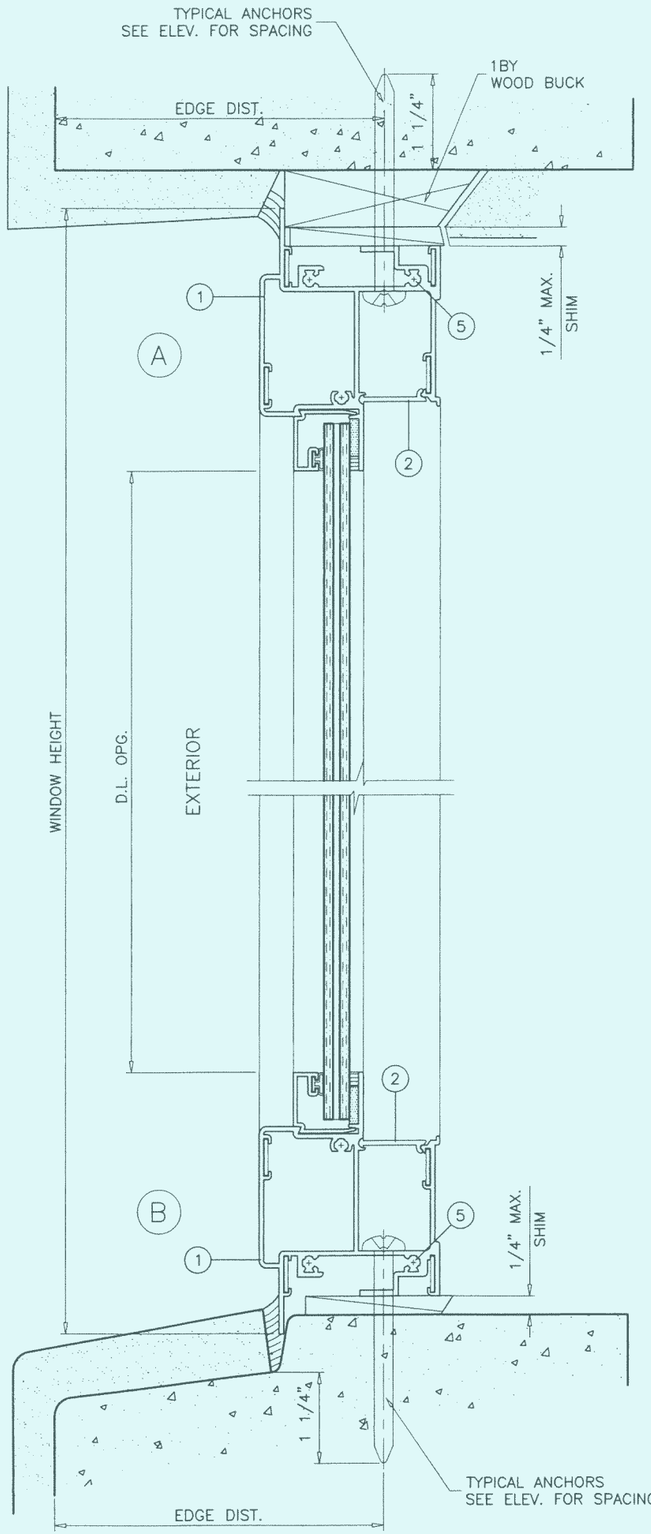
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638–5151 FAX. (305) 638–5158

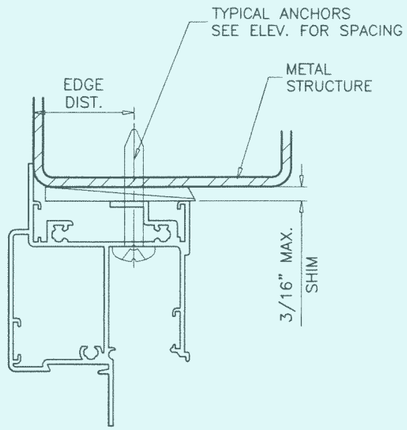
| revisions: | | | |
|---|---|---|---|
| no | date | by | description |
| E | 06.14.16 | | EDITORIAL CHANGES |
| F | 11.01.17 | | UPDATED TO 2017 FBC |
| G | 11.05.20 | | UPDATED TO 2020 FBC |
| H | 07.14.23 | | NO CHANGE THIS SHEET |

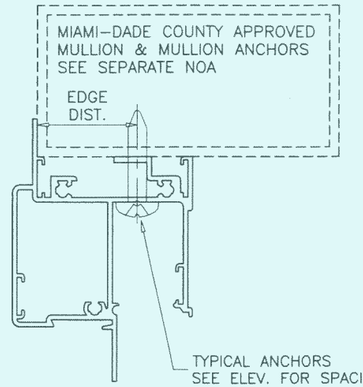
date: 03–22–11
scale: 1/2" = 1"
dr. by: TARIQ
chk. by:

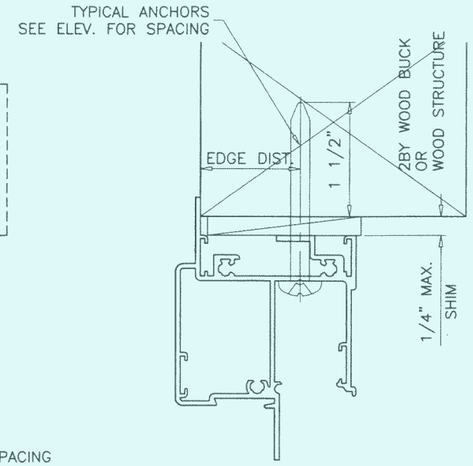
drawing no.
W11–15

sheet 2 of 7



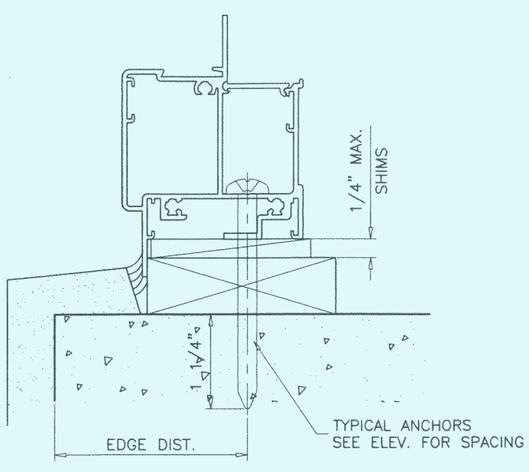










WOOD BUCKS AND METAL STRUCTURE NOT BY 'E.S. WINDOWS' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

**TYPICAL ANCHORS:** SEE ELEV. FOR SPACING

**1/4" DIA. ULTRACON+ BY 'DEWALT'** (Fu=164 KSI, Fy=148 KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)

THRU 1BY BUCKS INTO CONC. OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

DIRECTLY INTO CONCRETE OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)
1-3/4" MIN. EMBED INTO CONC. (FOR MULLION CLIPS ONLY)

**#14 SMS OR SELF DRILLING SCREWS** (GRADE 2 CRS)

INTO MIAMI-DADE COUNTY APPROVED MULLIONS
OR
INTO METAL STRUCTURES (HEAD/SILL/JAMBS)
(3) THREADS MIN. PENETRATION BEYOND SUBSTRATE
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

**TYPICAL EDGE DISTANCE**

INTO CONCRETE AND MASONRY = 2-1/2" MIN.
INTO CONCRETE = 1-1/2" MIN. (INTERIOR ANCHORS AT MULL CLIP)
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

**WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.**
**CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.**
**C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.**

**PRODUCT REVISED**
**As complying with the Florida Building Code**
**NOA-No. 23-0724.08**
**Expiration Date: 09/22/2026**
**By:** Manuel Perez
**Miami-Dade Product Control**

JUL 17 2023

JALAL FAROOQ LICENSE No. 81223 STATE OF FLORIDA PROFESSIONAL ENGINEER


**AL-FAROOQ CORPORATION**
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978


afc

COMP-ANL\W11-15ESW

SERIES 5100 ALUMINUM FIXED WDW. (L.M.I.)


**E.S. WINDOWS, LLC**
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5158 FAX. (305) 638-5151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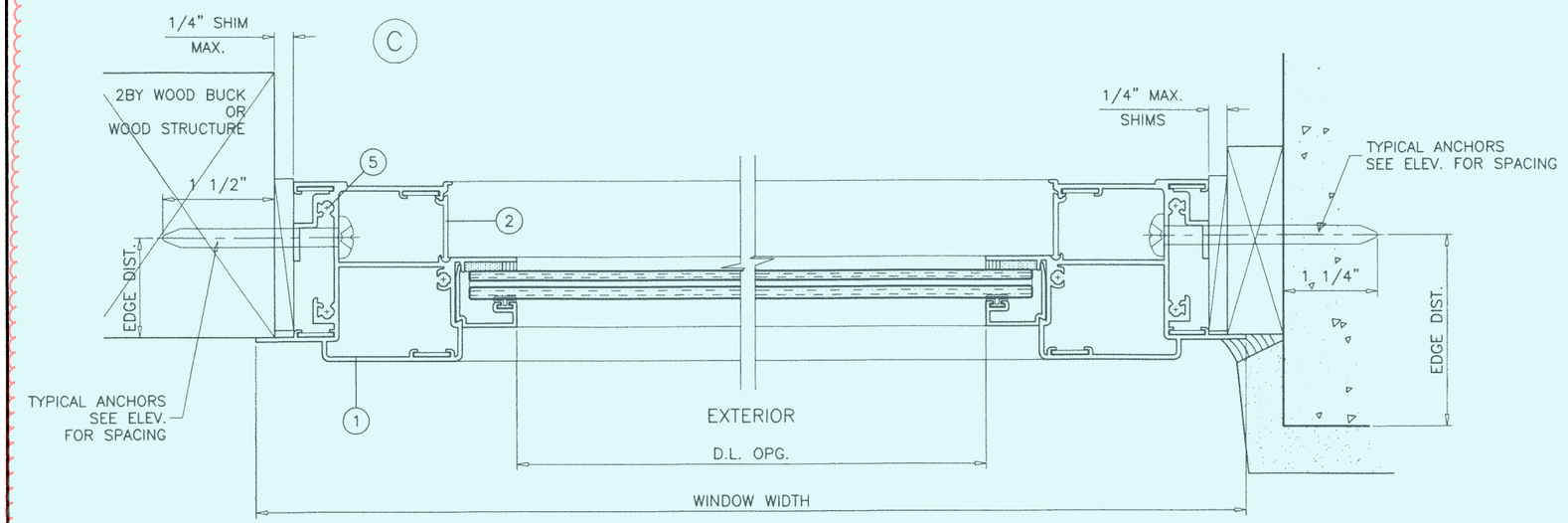
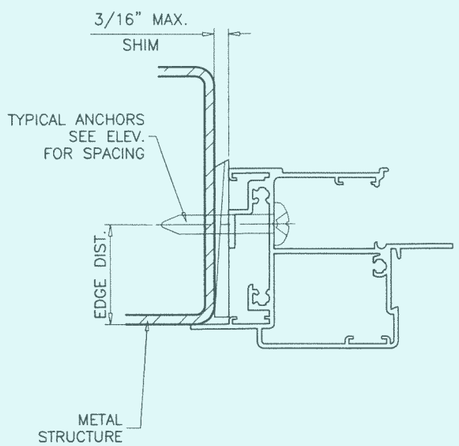
dr. by: TARIQ
chk. by:

drawing no. W11-15

sheet 3 of 7

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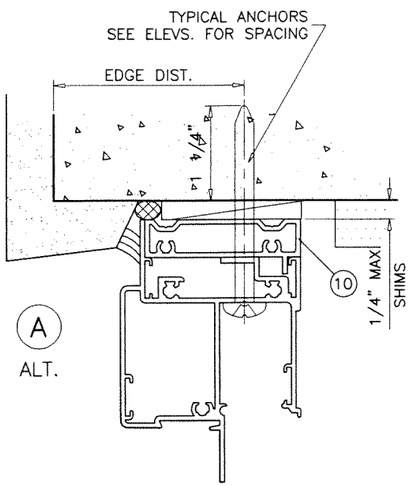
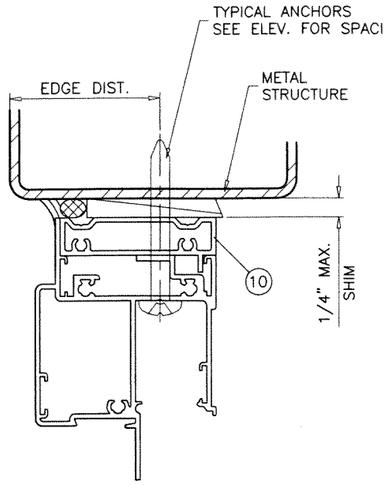
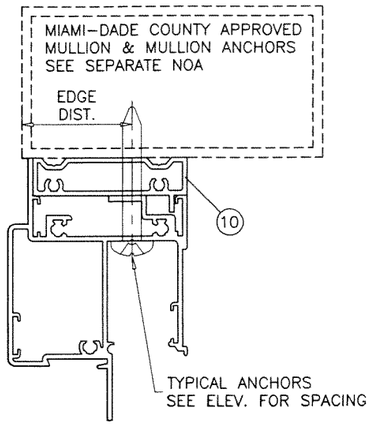
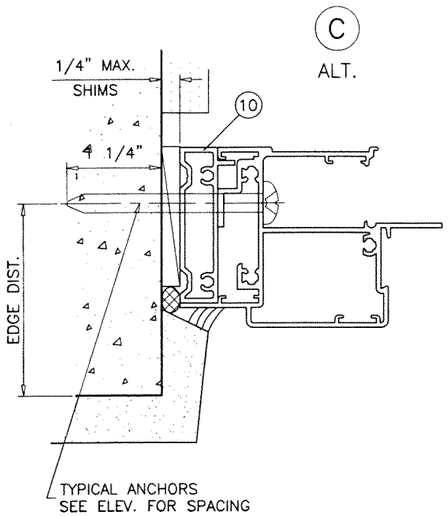
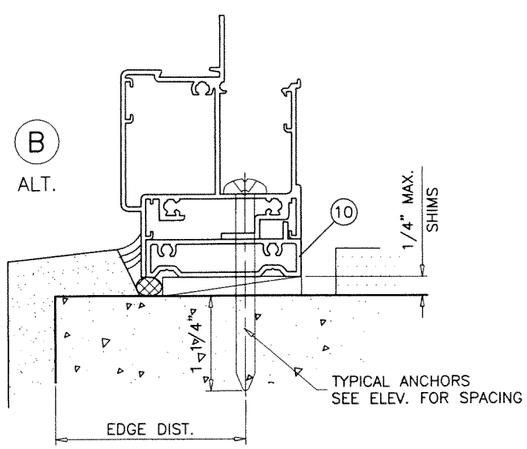
sheet 4 of 7

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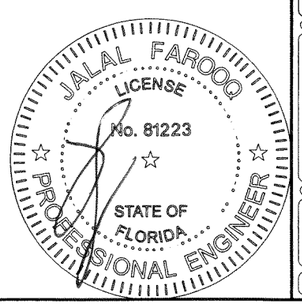


INSTALLATION DETAILS WITH FLUSH FRAME ADAPTER


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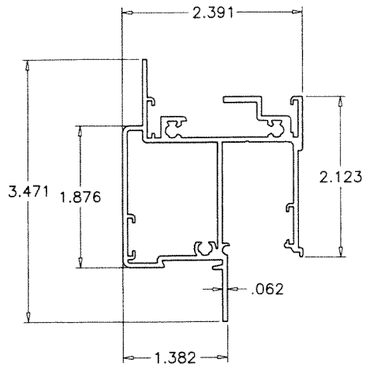
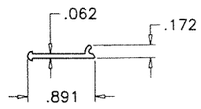
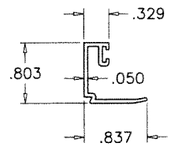


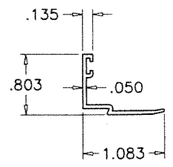

(1) FIX. WDW. FRAME



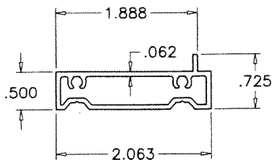

(2) FIX. FRAME COVER



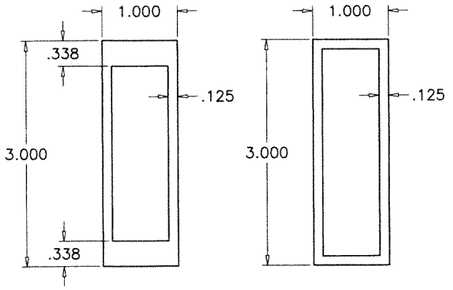

(3A) GLAZING STOP (LAM. GLASS)



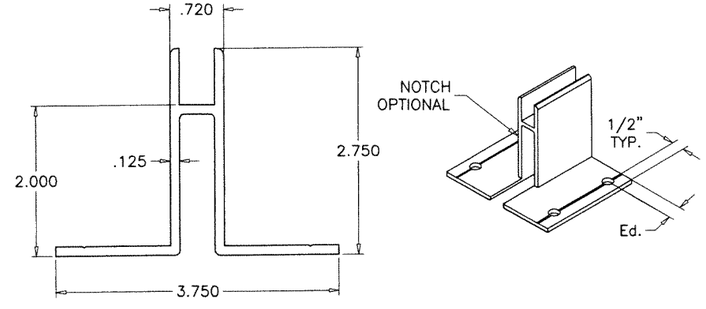

(3B) GLAZING STOP (INSUL. LAM. GLASS)




(10) FLUSH FRAME ADAPTER




(7) CUSTOM MULLION 1 X 3 (7A) STD. MULLION 1 X 3

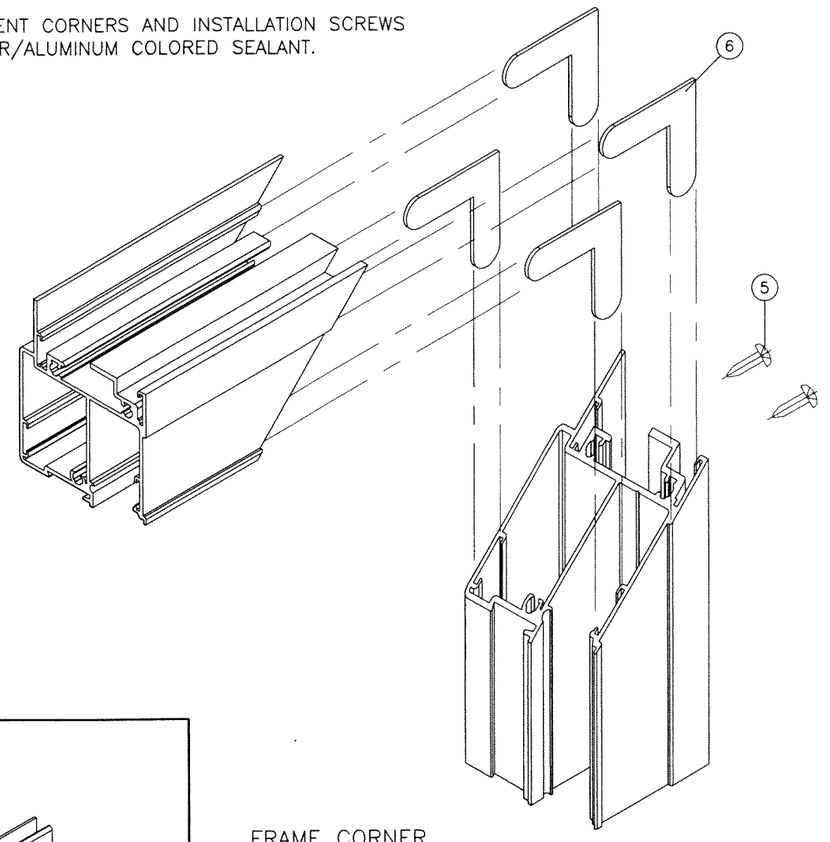



(8) MULLION CLIP

| ITEM | PART # | QUANTITY | DESCRIPTION | MATERIAL | MANF./SUPPLIER/REMARKS |
|---|---|---|---|---|---|
| 1 | ES5015 | 4 | FIX. WDW. FRAME | 6063-T6 | – |
| 2 | ES5016 | 4 | FIX. FRAME COVER | 6063-T6 | – |
| 3A | ES1103 | AS REQD. | GLAZING BEAD (LAM. GLASS) | 6063-T5 | – |
| 3B | ES1017 | AS REQD. | GLAZING BEAD (INSUL. LAM. GLASS) | 6063-T5 | – |
| 4 | 27-425 | AS REQD. | GLAZING GASKET | EPDM | DUROMETER 60 SHORE 'A' |
| 5 | – | AS REQD. | FRAME ASSEMBLY SCREWS | – | #10 X 1" PH SMS |
| 6 | PJS40-SS | AS REQD. | CORNER LOCK | ST. STEEL | SULLIVAN & ASSOCIATES |
| 7 | – | AS REQD. | 1X3 CUSTOM MULLION | 6063-T6 | – |
| 7A | – | AS REQD. | 1X3 STANDARD MULLION | 6063-T6 | – |
| 8 | – | AS REQD. | MULLION CLIP | 6063-T6 | – |
| 9 | 27-372 | 2/ LITE | SETTING BLOCK, 7/16" X 3/16" X 3-1/2" LONG | EPDM | AT 6" FROM EACH END, DUROMETER 75±5 SHORE A |
| 9A | – | 2/ LITE | SETTING BLOCK, 5/16" X 5/8" X 4" LONG | EPDM | AT 6" FROM EACH END, DUROMETER 75±5 SHORE A |
| 10 | ES-5017 | AS REQD. | FLUSH FRAME ADAPTER | 6063-T5 | OPTIONAL |
| 11 | – | AS REQD. | GLAZING TAPE (1/4" X 1/2") | FOAM | – |

## SEALANTS:

ALL FRAME AND VENT CORNERS AND INSTALLATION SCREWS SEALED WITH CLEAR/ALUMINUM COLORED SEALANT.




FRAME CORNER

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**Miami-Dade Product Control**

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sheet 6 of 7

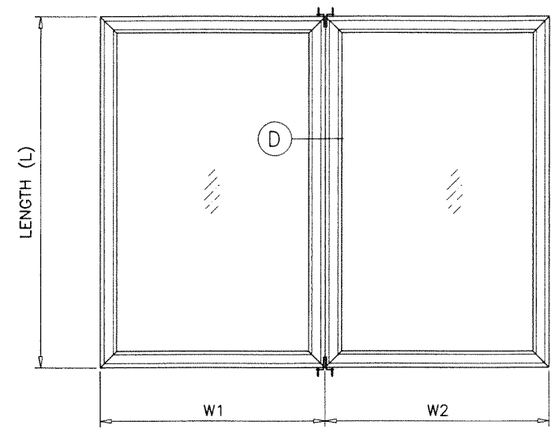
| MULLION LOAD CAPACITY - PSF | | | |
|---|---|---|---|
| WINDOW DIMS. | | 1 X 3 STD. MULL | 1 X 3 CUSTOM MULL |
| WIDTH (W) | LENGTH (L) | EXT.(+) INT.(−) | EXT.(+) INT.(−) |
| 26−1/2" | 58" | 90.0 | 90.0 |
| 37" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 45" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 53−1/8" | | 90.0 | 90.0 |
| 62" | | 90.0 | 90.0 |
| 26−1/2" | 63" | 90.0 | 90.0 |
| 37" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 45" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 53−1/8" | | 90.0 | 90.0 |
| 62" | | 90.0 | 90.0 |
| 26−1/2" | 74−1/4" | 90.0 | 90.0 |
| 37" | | 90.0 | 90.0 |
| 42" | | 82.5 | 90.0 |
| 45" | | 78.6 | 90.0 |
| 48" | | 75.4 | 87.4 |
| 53−1/8" | | 71.0 | 83.2 |
| 26−1/2" | 76" | 90.0 | 90.0 |
| 37" | | 84.2 | 90.0 |
| 42" | | 76.4 | 90.0 |
| 45" | | 72.8 | 87.6 |
| 48" | | 69.7 | 84.5 |
| 51" | | 67.1 | 81.9 |

| MULLION LOAD CAPACITY - PSF | | | |
|---|---|---|---|
| WINDOW DIMS. | | 1 X 3 STD. MULL | 1 X 3 CUSTOM MULL |
| WIDTH (W) | LENGTH (L) | EXT.(+) INT.(−) | EXT.(+) INT.(−) |
| 30" | 54" | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 54" | | 90.0 | 90.0 |
| 60" | | 90.0 | 90.0 |
| 62" | | 90.0 | 90.0 |
| 30" | 60" | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 54" | | 90.0 | 90.0 |
| 60" | | 90.0 | 90.0 |
| 62" | | 90.0 | 90.0 |
| 30" | 66" | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 90.0 | 90.0 |
| 54" | | 90.0 | 90.0 |
| 59" | | 90.0 | 90.0 |
| 30" | 72" | 90.0 | 90.0 |
| 36" | | 90.0 | 90.0 |
| 42" | | 90.0 | 90.0 |
| 48" | | 83.6 | 90.0 |
| 54" | | 78.4 | 86.8 |
| 30" | 76" | 90.0 | 90.0 |
| 36" | | 86.1 | 90.0 |
| 42" | | 76.4 | 90.0 |
| 48" | | 69.7 | 84.5 |
| 51" | | 67.1 | 81.9 |

## NOTES:

1. USE CHART ON THIS SHEET FOR SIDE BY SIDE CONNECTION CAPACITY OF WINDOW MULLION.
2. FOR FIXED WINDOW CAPACITY SEE SHEET 2 OF 7.
3. LOWER VALUES FROM STEPS 1 OR 2 WILL APPLY TO ENTIRE SYSTEM.

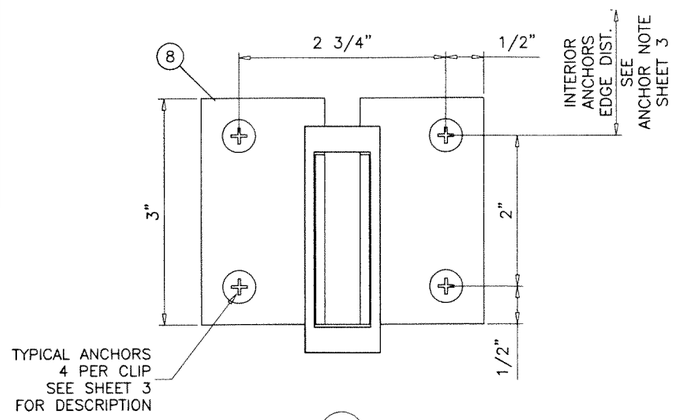
# CLIPPED MULLIONS

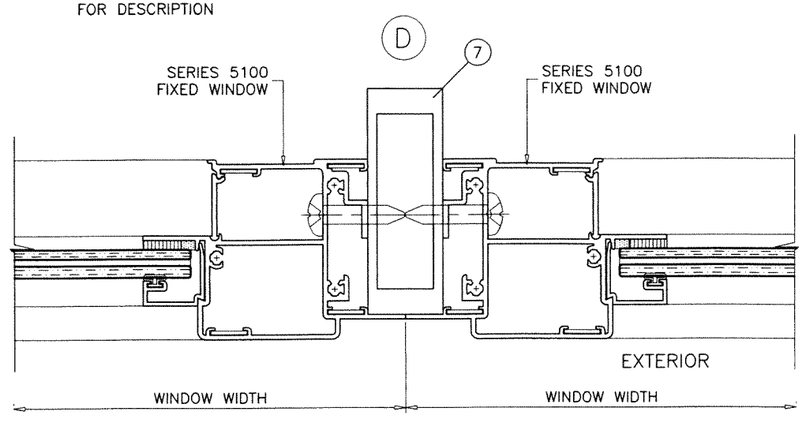



TYPICAL ELEVATION
SIDE BY SIDE WINDOWS

SIDE BY SIDE APPLIES TO TWO OR MORE WINDOWS

$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$




MULLION

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