



## Product Approval

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 **Application Detail**

OFFICE OF THE SECRETARY

FL #	FL33676-R2								
Application Type	Revision								
Code Version	2023								
Application Status	Approved								
Comments									
Archived	<input type="checkbox"/>								
Product Manufacturer	Marvin								
Address/Phone/Email	Hwy 11 West Warroad, MN 56763 (218) 386-1430 Ext 2143 cherylf@marvin.com								
Authorized Signature	Jalal Farooq veronica@afceng.com								
Technical Representative	Jacob Dannecker								
Address/Phone/Email	975 S Congress Ave Suite 102 Delray Beach, FL 33445 (561) 274-9392 f_jacobd@marvin.com								
Quality Assurance Representative									
Address/Phone/Email									
Category	Panel Walls								
Subcategory	Storefronts								
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> Evaluation Report - Hardcopy Received								
Florida Engineer or Architect Name who developed the Evaluation Report	Jalal Farooq								
Florida License	PE-81223								
Quality Assurance Entity	Window and Door Manufacturers Association-QA								
Quality Assurance Contract Expiration Date	06/20/2029								
Validated By	Abel Carrasco, PE <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received								
Certificate of Independence	<a href="#">FL33676 R2 COI SS - Certificate of Independence.pdf</a>								
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th style="text-align: left;"><b>Standard</b></th> <th style="text-align: left;"><b>Year</b></th> </tr> </thead> <tbody> <tr> <td>AAMA 501</td> <td>2015</td> </tr> <tr> <td>TAS 201/203</td> <td>1994</td> </tr> <tr> <td>TAS 202</td> <td>1994</td> </tr> </tbody> </table>	<b>Standard</b>	<b>Year</b>	AAMA 501	2015	TAS 201/203	1994	TAS 202	1994
<b>Standard</b>	<b>Year</b>								
AAMA 501	2015								
TAS 201/203	1994								
TAS 202	1994								
Equivalence of Product Standards Certified By									

Product Approval Method

Method 1 Option D

Date Submitted 07/27/2023  
 Date Validated 07/29/2023  
 Date Pending FBC Approval 07/31/2023  
 Date Approved 10/18/2023

**Summary of Products**

FL #	Model, Number or Name	Description
33676.1	Coastline Storefront 4 11/16inch Frame IZ4	Large missile impact resistant aluminum storefront system.
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> Yes <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> Yes <b>Design Pressure:</b> +100/-110 <b>Other:</b> See attached W15-111 installation instructions for span vs load combinations and limitations of use.		<b>Installation Instructions</b> <a href="#">FL33676_R2_II_SS - Coastline SF 4-11-16in (LMI) - DWG W15-111 (2023).pdf</a> Verified By: Jalal Farooq PE # 81223 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL33676_R2_AE_SS - Coastline SF 4.6875 in IZ4 LMI (1100 SF) - PAE 2023.pdf</a> Created by Independent Third Party: Yes

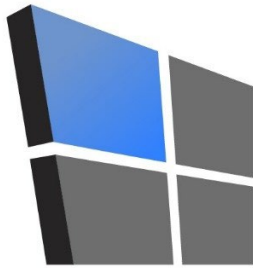
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[Contact Us](#) :: [2601 Blair Stone Road, Tallahassee FL 32399](#) Phone: 850-487-1824

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# AL-FAROOQ CORPORATION

CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

## PRODUCT APPROVAL EVALUATION RULE CHAPTER #61G20-3 • METHOD 1 OPTION D

FL 33676

Date: 07/26/2023

**Detailed Product Description:**

**Manufacturer:** MARVIN WINDOWS & DOORS

**Manufacturer Address:** PO Box 100, 401 State Ave N, Warroad, MN 56763

**Model Name:** Coastline Storefront 4-11/16inch Frame IZ4

**Maximum Load:** +100 PSF, -110 PSF (Large Missile Impact)

**Installation Drawings #** W15-111

This product complies with the High Velocity Hurricane Zone (HVHZ) testing requirements.					
For maximum sizes, combination of span vs loads and anchor type refer to installation drawings.					
Comparative analysis used <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					

**Mandatory Tests (Tested in accordance with AAMA 501/101/I.S.2/NAFS/TAS-202)**

TEST	DESCRIPTION	TEST LOCATION	TEST REPORT DATE	TEST REPORT #	Test Sealed by
ASTM E283	Air Infiltration Leakage	Blackwater Testing, Inc.	09/23/2015	BT-SIW-15-002	Yamil G. Kuri, PE
ASTM E331 OR ASTM 547 & TAS 202	Water Penetration	Blackwater Testing, Inc.	09/23/2015	BT-SIW-15-002	Yamil G. Kuri, PE
ASTM E330 & TAS 202	Uniform Static Air Press.	Blackwater Testing, Inc.	09/23/2015	BT-SIW-15-002	Yamil G. Kuri, PE

**Supplemental Tests (Tested in accordance with TAS-201 and TAS-203)**

TEST	DESCRIPTION	TEST LOCATION	TEST REPORT DATE	TEST REPORT #	Test Sealed by
FBC 1626.2 TAS 201 & 203 ASTM E1996/ E1886 ANSI Z97.1	Large Missile Impact & Cyclic	Blackwater Testing, Inc.	09/23/2015	BT-SIW-15-002	Yamil G. Kuri, PE

Under the limitations of the attached installation drawings, to the best of my knowledge and ability, the above product conforms to the requirements of the 2023 Florida Building Code.

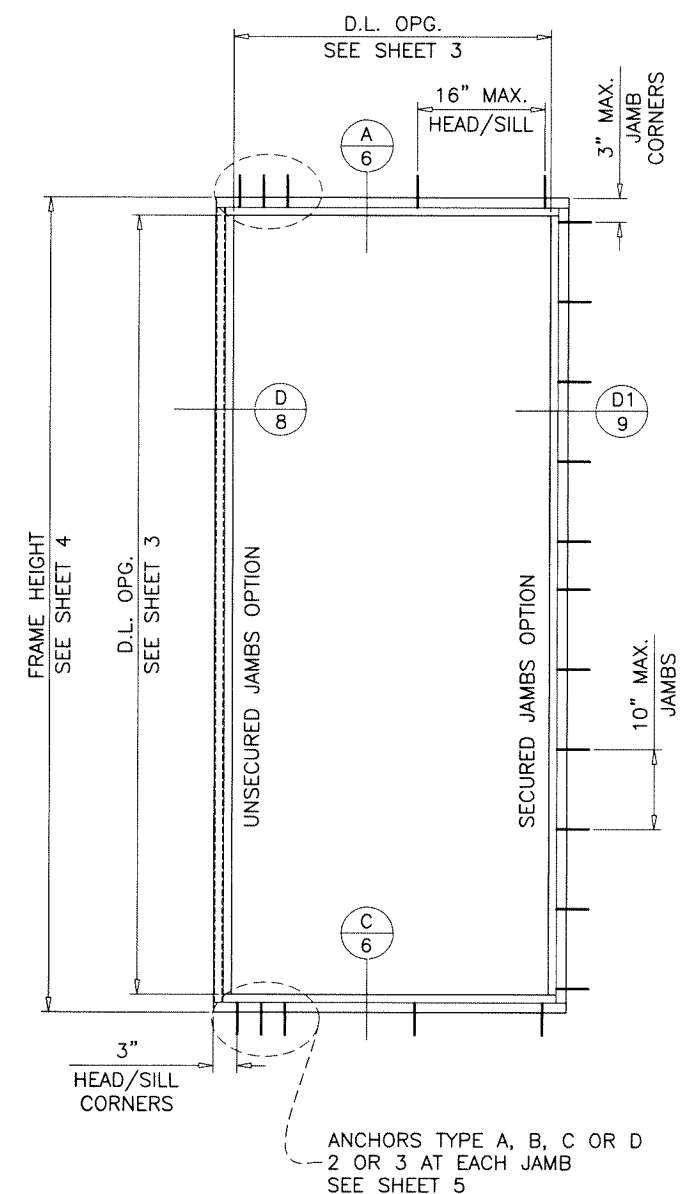
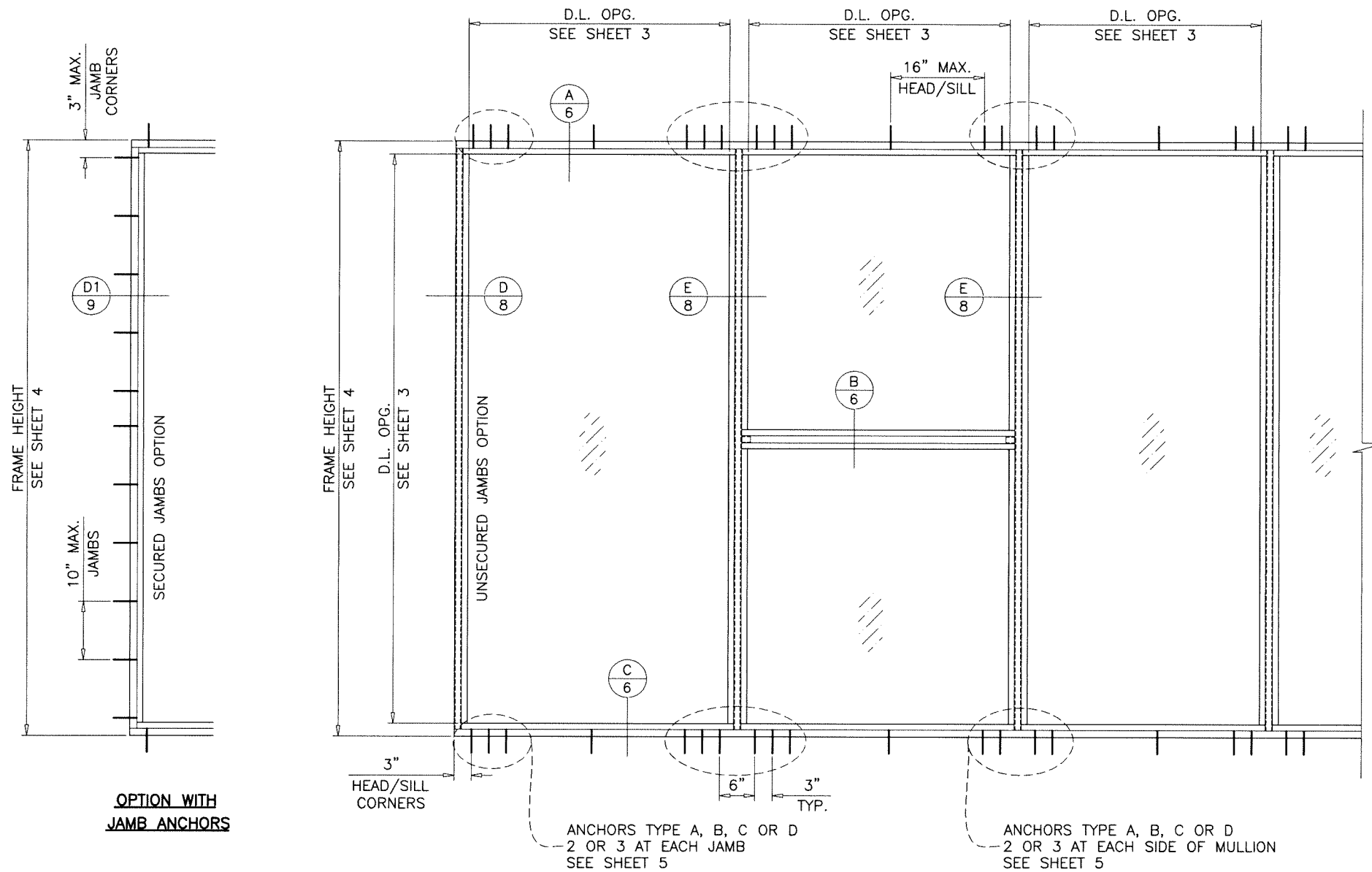
**Evaluation Report Engineer:**

Jalal Farooq  
Al-Farooq Corporation

PE # 81223  
EB # 3538



Sealed: 7/26/2023



NOTE:  
STAND ALONE PANELS CAN BE WITH SECURED JAMBS OR  
UNSECURED JAMBS ON BOTH SIDES.  
SEE CHART ON SHEET 4 TO DETERMINE ALLOWABLE SIZES.

### Coastline Storefront 4-11/16 inch Frame IZ4

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)'.

MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. LABELING TO COMPLY WITH SECTION 1709.9.2.

### TYPICAL ELEVATIONS

THIS SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

### INSTRUCTIONS:

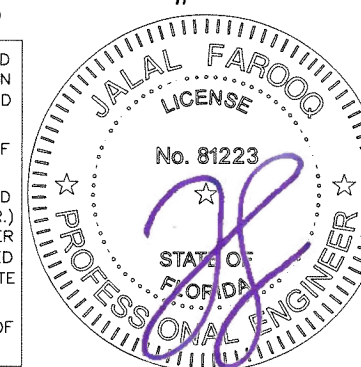
USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN WIND PRESSURE REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2** SEE CHARTS ON SHEET 3 FOR GLASS DESIGN LOAD CAPACITY.
- STEP 3** CHECK MULLION DESIGN LOAD CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEET 4 THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** USING CHARTS ON SHEET 5 SELECT ANCHOR OPTION WITH DESIGN LOAD CAPACITY MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5** THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 THAT EXCEED THE DESIGN WIND PRESSURES DETERMINED THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM.
- STEP 6** FOR SYSTEMS WITH UNANCHORED JAMBS, USING SHEET 8, DETERMINE THE MIN. & MAX. GAP DIMENSIONS.

- A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.
- B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
- C- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

Sealed: 7/25/2023

FL #33676



### DAYLITE OPENINGS SINGLE 'O' PANEL:

DLO WIDTH = FRAME WIDTH - 4.50"  
DLO HEIGHT = FRAME HEIGHT - 4.50"

THIS PRODUCT WITH GLASS TYPES 'A' & 'A1'  
COMPLY WITH REQUIREMENTS OF ANSI Z97.1.

**af c**  
**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\W15-111SIW

Coastline Storefront 4-11/16 inch Frame IZ4  
**MARVIN**  
PO Box 100, 401 State Ave. N.  
Warrroad, MN. 56763  
Tel. (218) 386-1430 Ext. 2143

no	date	description
A	11.27.17	UPDATED TO 2017 FBC
B	12.10.18	COMPANY NAME REV.
C	09.28.20	UPDATED TO 2020 FBC
D	03.18.21	PRODUCT NAME REV.
E	07.25.23	UPDATED TO 2023 FBC

date: 12-17-15  
scale: 1/2"=1'-0"  
dr. by: TARIQ  
chk. by:

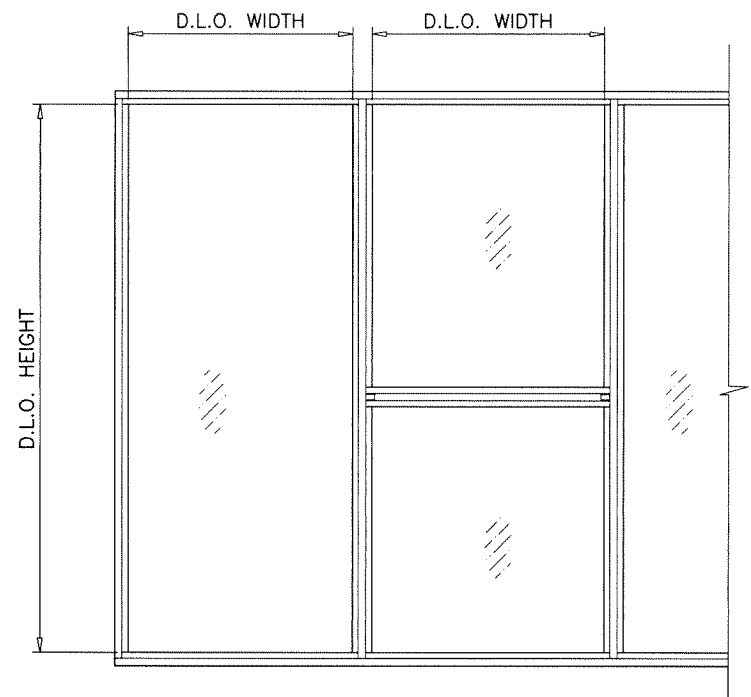
drawing no.  
**W15-111**  
sheet 1 of 12





GLASS LOAD CAPACITY - PSF										
NOMINAL DIMS.		GLASS TYPES								
		'A' & 'A1'		'B' & 'B1'		'C'		'CI'		
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	
32-3/4"	79-1/2"	100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
38-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
44-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
50-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
54"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
56-3/4"		-	-	60.0	60.0	70.0	70.0	60.0	60.0	
32-3/4"	85-1/2"	100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
38-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
44-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
44-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
50-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
51"		100.0	110.0	60.0	60.0	-	-	-	-	
56-3/4"		-	-	60.0	60.0	-	-	-	-	
32-3/4"	91-1/2"	100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
38-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
44-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
47"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
50"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
50-3/4"			-	-	60.0	60.0	-	-	-	-
56-3/4"		-	-	60.0	60.0	-	-	-	-	
32-3/4"	97-1/2"	100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
38-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
44-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
47"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
50-3/4"			-	-	60.0	60.0	-	-	-	-
56-3/4"		-	-	60.0	60.0	-	-	-	-	
32-3/4"	103-1/2"	100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
38-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
42"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
44-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
47-3/4"			-	-	60.0	60.0	-	-	-	-
50-3/4"		-	-	60.0	60.0	-	-	-	-	
32-3/4"	109-1/2"	100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
38-3/4"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
42"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
44-3/4"			-	-	60.0	60.0	-	-	-	-
50-3/4"		-	-	60.0	60.0	-	-	-	-	
32-3/4"	115-1/2"	100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
37"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
38-3/4"			-	-	60.0	60.0	70.0	70.0	60.0	60.0
40"			-	-	60.0	60.0	70.0	70.0	60.0	60.0
44-3/4"			-	-	60.0	60.0	-	-	-	-
49"		-	-	60.0	60.0	-	-	-	-	
32-3/4"	121-1/2"	100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
35"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
38"			-	-	60.0	60.0	70.0	70.0	60.0	60.0
38-3/4"			-	-	60.0	60.0	-	-	-	-
44-3/4"			-	-	60.0	60.0	-	-	-	-
46"		-	-	60.0	60.0	-	-	-	-	
32-3/4"	127-1/2"	100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
34"		100.0	110.0	60.0	60.0	70.0	70.0	60.0	60.0	
36"			-	-	60.0	60.0	70.0	70.0	60.0	60.0
38-3/4"			-	-	60.0	60.0	-	-	-	-
44-3/4"			-	-	60.0	60.0	-	-	-	-
44"		-	-	60.0	60.0	-	-	-	-	

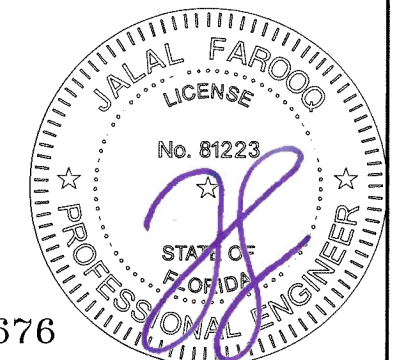
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.




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

Sealed: 7/25/2023

FL #33676






**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173 (C.A.N. 3558)  
TEL. (305) 262-6978 FAX. (305) 262-6978  
COMP-ANL\W15-111SIW

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Coastline Storefront 4-11/16 inch Frame IZ4



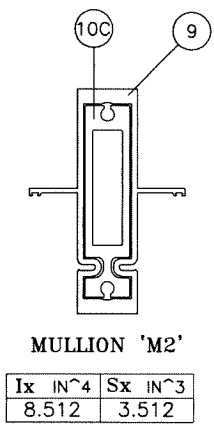
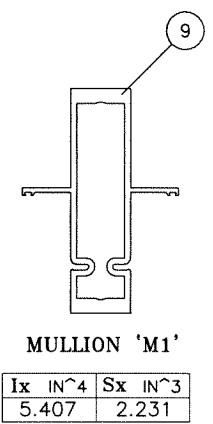
**MARVIN**  
PO Box 100, 401 State Ave. N.  
Warroad, MN. 56763  
Tel. (218) 386-1430 Ext. 2143

revisions:	
no	description

date: 12-17-15	scale: -	dr. by: TARIQ	chk. by:
drawing no.		W15-111	
sheet 3 of 12			

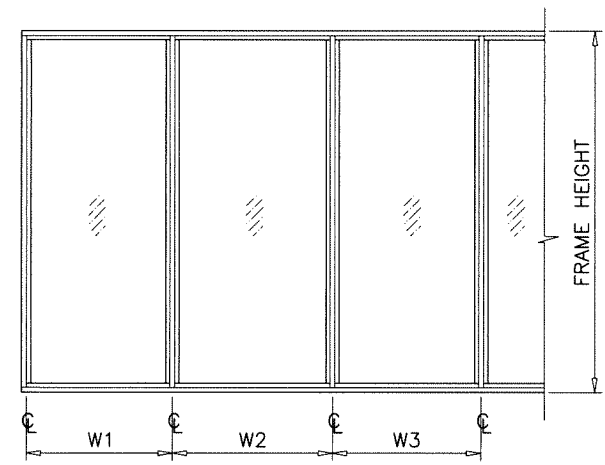
DESIGN LOAD CAPACITY - PSF MULLION WITHOUT INTERMEDIATE HORIZONTALS			
NOMINAL DIMS.		MULLION 'M1'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)
36"	84"	70.0	70.0
42"		70.0	70.0
48"		70.0	70.0
54"		70.0	70.0
60"		70.0	70.0
36"	90"	70.0	70.0
42"		70.0	70.0
48"		70.0	70.0
54"		70.0	70.0
57"		70.0	70.0
36"	96"	70.0	70.0
42"		70.0	70.0
48"		70.0	70.0
54"		70.0	70.0
60"		70.0	70.0
36"	102"	70.0	70.0
42"		70.0	70.0
48"		70.0	70.0
50"		70.0	70.0
60"		70.0	70.0
36"	108"	70.0	70.0
42"		70.0	70.0
48"		70.0	70.0
60"		70.0	70.0

DESIGN LOAD CAPACITY - PSF MULLION WITHOUT INTERMEDIATE HORIZONTALS				
NOMINAL DIMS.		MULLION 'M2'		
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	
36"	84"	100.0	110.0	
42"		100.0	110.0	
48"		100.0	110.0	
54"		100.0	110.0	
58"		100.0	110.0	
60"		60.0	60.0	
66"		60.0	60.0	
72"		60.0	60.0	
36"	90"	100.0	110.0	
42"		100.0	110.0	
48"		100.0	110.0	
54"		100.0	110.0	
60"		60.0	60.0	
66"		60.0	60.0	
70"		60.0	60.0	
36"		96"	100.0	110.0
42"	100.0		110.0	
48"	100.0		110.0	
54"	100.0		110.0	
60"	60.0		60.0	
66"	60.0		60.0	
70"	60.0		60.0	
36"	102"		100.0	110.0
42"		100.0	110.0	
48"		100.0	110.0	
54"		100.0	110.0	
60"		60.0	60.0	
66"		60.0	60.0	
70"		60.0	60.0	
36"		108"	60.0	60.0
42"	60.0		60.0	
48"	60.0		60.0	
54"	60.0		60.0	
60"	60.0		60.0	
66"	60.0		60.0	
36"	114"		60.0	60.0
42"			60.0	60.0
48"		60.0	60.0	
54"		60.0	60.0	
55"		60.0	60.0	
36"		120"	60.0	60.0
42"			60.0	60.0
48"			60.0	60.0
52"	60.0		60.0	
36"	126"		60.0	60.0
42"			60.0	60.0
48"			57.6	57.6
50"			55.6	55.6
36"		132"	60.0	60.0
42"			56.3	56.3
48"			49.9	49.9



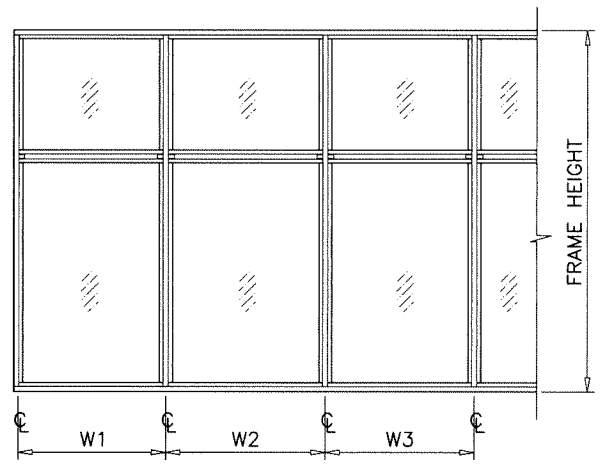
DESIGN LOAD CAPACITY - PSF MULLION WITH INTERMEDIATE HORIZONTALS			
NOMINAL DIMS.		MULLION 'M1'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)
36"	84"	70.0	70.0
42"		70.0	70.0
48"		70.0	70.0
36"	90"	70.0	70.0
42"		70.0	70.0
48"		70.0	70.0
36"	96"	70.0	70.0
42"		70.0	70.0
48"		70.0	70.0
36"	102"	70.0	70.0
42"		70.0	70.0
48"		65.2	65.2
36"	108"	70.0	70.0
42"		62.8	62.8
48"		54.9	54.9

DESIGN LOAD CAPACITY - PSF MULLION WITH INTERMEDIATE HORIZONTALS			
NOMINAL DIMS.		MULLION 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)
36"	84"	100.0	110.0
42"		100.0	110.0
48"		100.0	110.0
36"	90"	100.0	110.0
42"		100.0	110.0
48"		100.0	110.0
36"	96"	100.0	110.0
42"		100.0	110.0
48"		100.0	110.0
36"	102"	100.0	110.0
42"		100.0	110.0
48"		100.0	102.7
36"	108"	60.0	60.0
42"		60.0	60.0
48"		60.0	60.0
36"	114"	60.0	60.0
42"		60.0	60.0
48"		60.0	60.0
36"	120"	60.0	60.0
42"		60.0	60.0
48"		60.0	60.0
36"	126"	60.0	60.0
42"		60.0	60.0
48"		54.5	54.5
36"	132"	60.0	60.0
42"		54.1	54.1
48"		47.4	47.4



WIDTH (W) = W1  
AT FRAME JAMB

WIDTH (W) =  $\frac{W2 + W3}{2}$   
AT FRAME MULLION



WIDTH (W) = W1  
AT FRAME JAMB

WIDTH (W) =  $\frac{W2 + W3}{2}$   
AT FRAME MULLION

SEE SHEET 8 FOR UNANCHORED JAMB  
REINFORCING LIMITS

**af c**  
**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 \W15-111SW

Coastline Storefront 4-11/16 inch Frame IZ4  
**MARVIN**  
PO Box 100, 401 State Ave. N.  
Warroad, MN, 56763  
Tel. (218) 386-1430 Ext. 2143

revisions:	no	date	description
date:	12-17-15	scale:	-
dr. by:	TARIQ	chk. by:	
drawing no.	W15-111		
sheet	4 of 12		



Sealed: 7/25/2023

FL #33676

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



MULLION ANCHOR LOAD CAPACITY - PSF

ANCHOR TYPE		ANCHOR TYPE 'A'						ANCHOR TYPE 'B'						ANCHOR TYPE 'C'						ANCHOR TYPE 'D'		
SHIM SPACE		1/4" MAX. SHIM		3/8" MAX. SHIM		1/2" MAX. SHIM		1/4" MAX. SHIM		3/8" MAX. SHIM		1/2" MAX. SHIM		1/4" MAX. SHIM		3/8" MAX. SHIM		1/2" MAX. SHIM		1/4" MAX. SHIM		
WIDTH (W)	LENGTH (L)	4 ANCHORS	6 ANCHORS	4 ANCHORS	6 ANCHORS	4 ANCHORS	6 ANCHORS	4 ANCHORS	6 ANCHORS	4 ANCHORS	6 ANCHORS	4 ANCHORS	6 ANCHORS	4 ANCHORS	6 ANCHORS	4 ANCHORS	6 ANCHORS	4 ANCHORS	6 ANCHORS	4 ANCHORS	6 ANCHORS	
		EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
36"	72"	110.0	110.0	108.7	110.0	84.5	110.0	110.0	110.0	108.7	110.0	84.5	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
42"		110.0	110.0	98.6	110.0	76.7	110.0	110.0	110.0	98.6	110.0	76.7	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
48"		110.0	110.0	91.7	110.0	71.3	107.0	110.0	110.0	91.7	110.0	71.3	107.0	110.0	110.0	110.0	110.0	103.0	110.0	110.0	110.0	110.0
54"		110.0	110.0	86.9	110.0	67.6	101.4	110.0	110.0	86.9	110.0	67.6	101.4	110.0	110.0	110.0	110.0	97.7	110.0	110.0	110.0	110.0
60"		110.0	110.0	83.8	110.0	65.2	97.8	110.0	110.0	83.8	110.0	65.2	97.8	110.0	110.0	110.0	110.0	94.2	110.0	110.0	110.0	110.0
66"		110.0	110.0	82.1	110.0	63.8	95.7	110.0	110.0	82.1	110.0	63.8	95.7	110.0	110.0	110.0	110.0	92.2	110.0	110.0	110.0	110.0
72"		70.0	70.0	70.0	70.0	63.4	70.0	70.0	70.0	70.0	70.0	70.0	63.4	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36"	78"	110.0	110.0	97.8	110.0	76.1	110.0	110.0	110.0	97.8	110.0	76.1	110.0	110.0	110.0	110.0	110.0	109.9	110.0	110.0	110.0	
42"		110.0	110.0	88.3	110.0	68.6	102.9	110.0	110.0	88.3	110.0	68.6	102.9	110.0	110.0	110.0	110.0	99.1	110.0	110.0	110.0	
48"		110.0	110.0	81.5	110.0	63.4	95.1	110.0	110.0	81.5	110.0	63.4	95.1	110.0	110.0	110.0	110.0	91.6	110.0	110.0	110.0	
54"		104.6	110.0	76.7	110.0	59.6	89.5	110.0	110.0	76.7	110.0	59.6	89.5	110.0	110.0	109.2	110.0	86.2	110.0	110.0	110.0	
60"		100.0	110.0	73.4	110.0	57.0	85.6	110.0	110.0	73.4	110.0	57.0	85.6	110.0	110.0	104.4	110.0	82.4	110.0	110.0	110.0	
66"		70.0	70.0	70.0	70.0	55.3	70.0	70.0	70.0	70.0	70.0	70.0	55.3	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
72"		60.0	60.0	60.0	60.0	54.3	60.0	60.0	60.0	60.0	60.0	60.0	54.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
36"	84"	110.0	110.0	88.9	110.0	69.1	103.7	110.0	110.0	88.9	110.0	69.1	103.7	110.0	110.0	110.0	110.0	99.9	110.0	110.0	110.0	
42"		108.8	110.0	79.8	110.0	62.1	93.1	110.0	110.0	79.8	110.0	62.1	93.1	110.0	110.0	110.0	110.0	89.7	110.0	110.0	110.0	
48"		100.0	110.0	73.4	110.0	57.0	85.6	110.0	110.0	73.4	110.0	57.0	85.6	110.0	110.0	104.4	110.0	82.4	110.0	110.0	110.0	
54"		93.6	110.0	68.6	103.0	53.4	80.1	110.0	110.0	68.6	103.0	53.4	80.1	110.0	110.0	97.7	110.0	77.1	110.0	110.0	110.0	
60"		70.0	70.0	65.2	70.0	50.7	70.0	70.0	70.0	65.2	70.0	50.7	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
66"		60.0	60.0	60.0	60.0	48.8	60.0	60.0	60.0	60.0	60.0	60.0	48.8	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
72"		60.0	60.0	60.0	60.0	47.5	60.0	60.0	60.0	60.0	60.0	60.0	47.5	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
36"	90"	110.0	110.0	81.5	110.0	63.4	95.1	110.0	110.0	81.5	110.0	63.4	95.1	110.0	110.0	110.0	110.0	91.6	110.0	110.0	110.0	
42"		99.4	110.0	72.9	109.4	56.7	85.0	110.0	110.0	72.9	109.4	56.7	85.0	110.0	110.0	103.8	110.0	81.9	110.0	110.0	110.0	
48"		90.9	110.0	66.7	100.0	51.9	77.8	110.0	110.0	66.7	100.0	51.9	77.8	110.0	110.0	94.9	110.0	74.9	110.0	110.0	110.0	
54"		84.7	110.0	62.1	93.2	48.3	72.4	110.0	110.0	62.1	93.2	48.3	72.4	110.0	110.0	88.4	110.0	69.8	104.6	110.0	110.0	
60"		60.0	60.0	58.7	60.0	45.6	60.0	60.0	60.0	58.7	60.0	45.6	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
66"		60.0	60.0	56.2	60.0	43.7	60.0	60.0	60.0	56.2	60.0	43.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
36"	96"	102.6	110.0	75.2	110.0	58.5	87.8	110.0	110.0	75.2	110.0	58.5	87.8	110.0	110.0	107.1	110.0	84.5	110.0	110.0	110.0	
42"		91.4	110.0	67.1	100.6	52.2	78.2	110.0	110.0	67.1	100.6	52.2	78.2	110.0	110.0	95.5	110.0	75.3	110.0	110.0	110.0	
48"		83.3	110.0	61.1	91.7	47.5	71.3	110.0	110.0	61.1	91.7	47.5	71.3	110.0	110.0	87.0	110.0	68.7	103.0	110.0	110.0	
54"		70.0	70.0	56.7	70.0	44.1	66.1	70.0	70.0	56.7	70.0	44.1	66.1	70.0	70.0	70.0	70.0	63.7	70.0	70.0	70.0	
60"		60.0	60.0	53.4	60.0	41.5	60.0	60.0	60.0	53.4	60.0	41.5	60.0	60.0	60.0	60.0	60.0	59.9	60.0	60.0	60.0	
66"		60.0	60.0	50.8	60.0	39.5	59.3	60.0	60.0	50.8	60.0	39.5	59.3	60.0	60.0	60.0	60.0	57.1	60.0	60.0	60.0	
36"	102"	95.2	110.0	69.9	104.8	54.3	81.5	110.0	110.0	69.9	104.8	54.3	81.5	110.0	110.0	99.4	110.0	78.5	110.0	110.0	110.0	
42"		84.7	110.0	62.1	93.2	48.3	72.4	110.0	110.0	62.1	93.2	48.3	72.4	110.0	110.0	88.4	110.0	69.8	104.6	110.0	110.0	
48"		76.9	110.0	56.4	84.6	43.9	65.8	110.0	110.0	56.4	84.6	43.9	65.8	110.0	110.0	80.3	110.0	63.4	95.1	110.0	110.0	
54"		60.0	60.0	52.2	60.0	40.6	60.0	60.0	60.0	52.2	60.0	40.6	60.0	60.0	60.0	60.0	60.0	58.6	60.0	60.0	60.0	
60"		60.0	60.0	48.9	60.0	38.0	57.0	60.0	60.0	48.9	60.0	38.0	57.0	60.0	60.0	60.0	60.0	54.9	60.0	60.0	60.0	
36"	108"	70.0	70.0	65.2	70.0	50.7	70.0	70.0	70.0	65.2	70.0	50.7	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	
42"		70.0	70.0	57.8	70.0	45.0	67.4	70.0	70.0	57.8	70.0	45.0	67.4	70.0	70.0	70.0	70.0	64.9	70.0	70.0	70.0	
48"		70.0	70.0	52.4	70.0	40.7	61.1	70.0	70.0	52.4	70.0	40.7	61.1	70.0	70.0	70.0	70.0	58.9	70.0	70.0	70.0	
54"		60.0	60.0	48.3	60.0	37.6	56.3	60.0	60.0	48.3	60.0	37.6	56.3	60.0	60.0	60.0	60.0	54.3	60.0	60.0	60.0	
36"	114"	60.0	60.0	60.0	60.0	47.5	60.0	60.0	60.0	60.0	60.0	47.5	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	
42"		60.0	60.0	54.1	60.0	42.1	60.0	60.0	60.0	54.1	60.0	42.1	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	
48"		60.0	60.0	48.9	60.0	38.0	57.0	60.0	60.0	48.9	60.0	38.0	57.0	60.0	60.0	60.0	60.0	54.9	60.0	60.0	60.0	
54"		60.0	60.0	45.0	60.0	35.0	52.5	60.0	60.0	45.0	60.0	35.0	52.5	60.0	60.0	60.0	60.0	50.5	60.0	60.0	60.0	
36"	120"	60.0	60.0	57.5	60.0	44.7	60.0	60.0	60.0	57.5	60.0	44.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	
42"		60.0	60.0	50.8	60.0	39.5	59.3	60.0	60.0	50.8	60.0	39.5	59.3	60.0	60.0	60.0	60.0	57.1	60.0	60.0	60.0	
48"		60.0	60.0	45.9	60.0	35.7	53.5	60.0	60.0	45.9	60.0	35.7	53.5	60.0	60.0	60.0	60.0	51.5	60.0	60.0	60.0	
36"	126"	60.0	60.0	54.3	60.0	42.3	60.0	60.0	60.0	54.3	60.0	42.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	
42"		60.0	60.0	47.9	60.0	37.3	55.9	60.0	60.0	47.9	60.0	37.3	55.9	60.0	60.0	60.0	60.0	53.8	60.0	60.0	60.0	
48"		58.8	60.0	43.2	60.0	33.6	50.3	60.0	60.0	43.2	60.0	33.6	50.3	60.0	60.0	60.0	60.0	48.5	60.0	60.0	60.0	
36"	132"	60.0	60.0	51.5	60.0	40.0	60.0	60.0	60.0	51.5	60.0	40.0	60.0	60.0	60.0	60.0	60.0	57.8	60.0	60.0	60.0	
42"		60.0	60.0	45.3	60.0	35.2	52.9	60.0	60.0	45.3	60.0	35.2	52.9	60.0	60.0	60.0	60.0	50.9	60.0	60.0	60.0	
48"		55.6	60.0	40.8	60.0	31.7	47.5	60.0	60.0	40.8	60.0	31.7	47.5	60.0	60.0	58.0	60.0	45.8	60.0	60.0	60.0	

SEE SHEET 7 FOR ANCHOR DESCRIPTION

Sealed: 7/25/2023

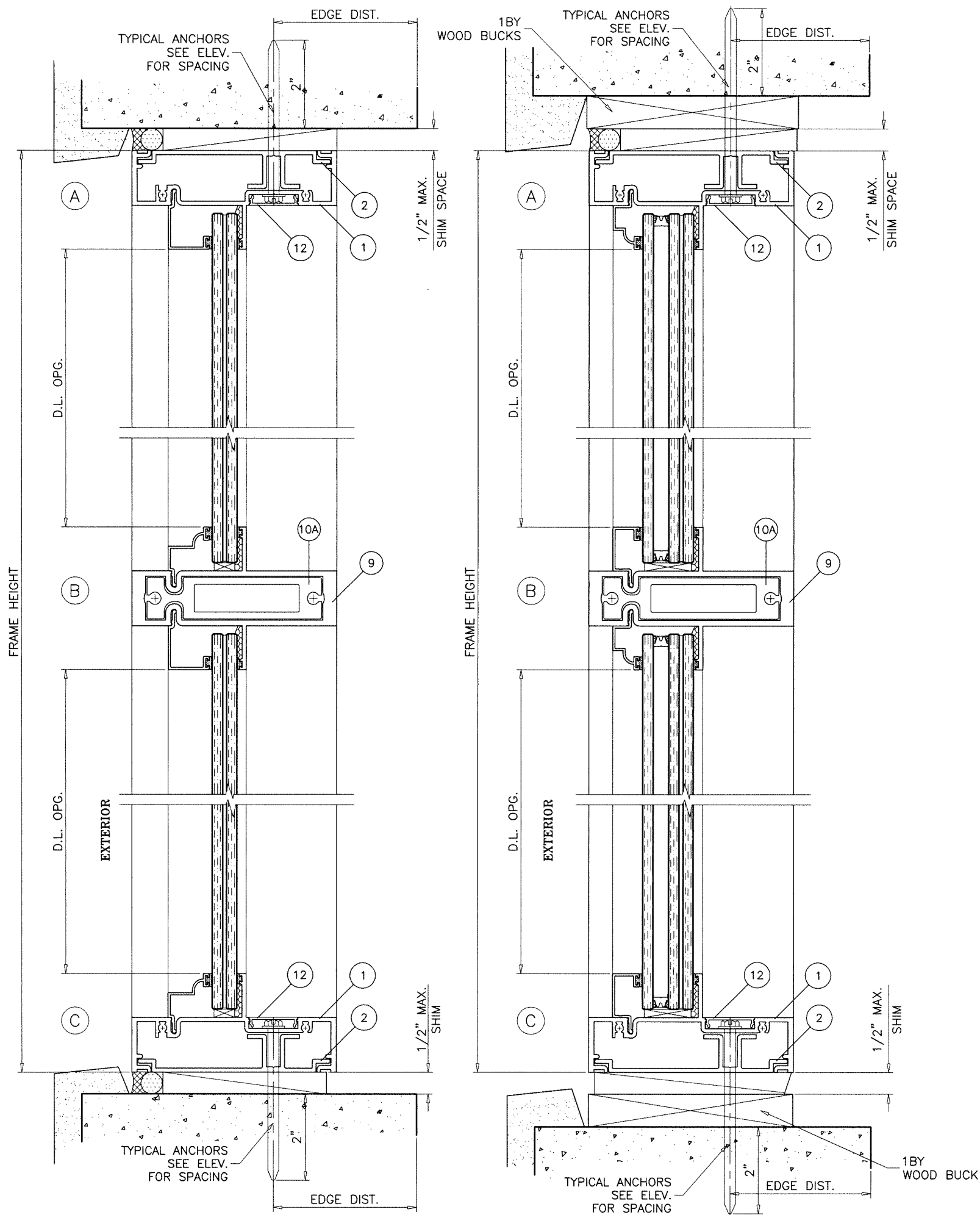
ANCHORS

FL #33676



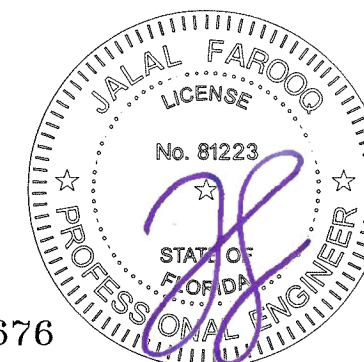
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**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 9360 SUNSET DRIVE, SUITE 220  
 MIAMI, FLORIDA 3





Sealed: 7/25/2023

FL #33676



revisions:	
no	date by description

date: 12-17-15	scale: 3/8" = 1"
dr. by: TARIQ	chk. by:

Coastline Storefront 4-11/16 inch Frame IZ4

**MARVIN**  
 PO Box 100, 401 State Ave. N.  
 Warrroad, MN. 56763  
 Tel. (218) 386-1430 Ext. 2143

**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\W15-111SIW

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

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

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

INTO WOOD STRUCTURES  
2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)

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

DIRECTLY INTO BLOCKS  
2" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

**ANCHOR EDGE DISTANCES**

INTO CONCRETE AND BLOCKS = 2-1/2" MIN.  
INTO WOOD STRUCTURE = 1" MIN.

**ANCHOR CL TO CL DISTANCE**

INTO CONCRETE AND BLOCKS = 3" MIN.

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

DIRECTLY INTO CONCRETE  
2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)

**ANCHOR EDGE DISTANCES**

INTO CONCRETE = 2-1/2" MIN.

**ANCHOR CL TO CL DISTANCE**

INTO CONCRETE = 3" MIN.

**TYPE 'C' - 5/16" DIA ULTRACON BY 'DEWALT'** (Fu=177 KSI, Fy=155 KSI)

DIRECTLY INTO CONCRETE OR BLOCKS  
2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)  
2" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

**ANCHOR EDGE DISTANCES**

INTO CONCRETE AND BLOCKS = 2-1/2" MIN.

**ANCHOR CL TO CL DISTANCE**

INTO CONCRETE = 3" MIN.  
INTO FILLED BLOCKS = 5" MIN.

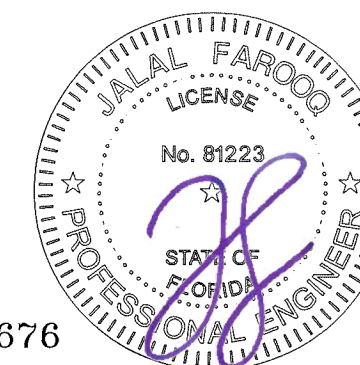
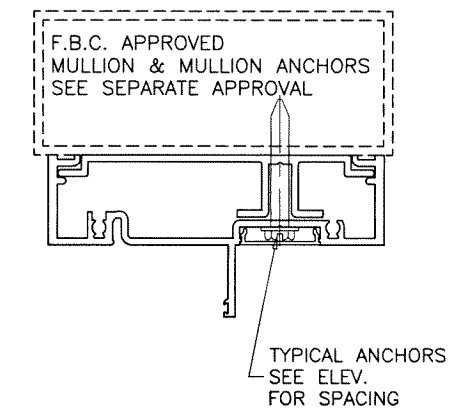
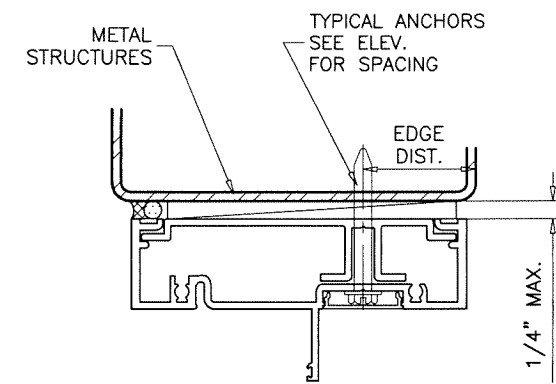
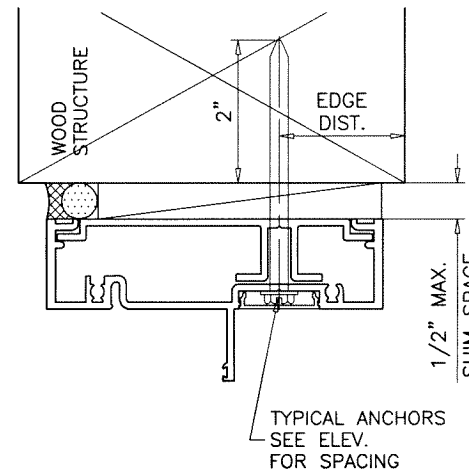
**TYPE 'D' - #14 SMS OR SELF DRILLING SCREWS** (GRADE 2 CRS)

INTO F.B.C. APPROVED MULLIONS  
OR  
INTO METAL STRUCTURES  
(3) THREADS MIN. PENETRATION BEYOND METAL 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)

**ANCHOR EDGE DISTANCES**

INTO METAL STRUCTURE = 1/2" MIN.

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



Sealed: 7/25/2023

FL #33676

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 \ W15-111SW

Coastline Storefront 4-11/16 inch Frame IZ4

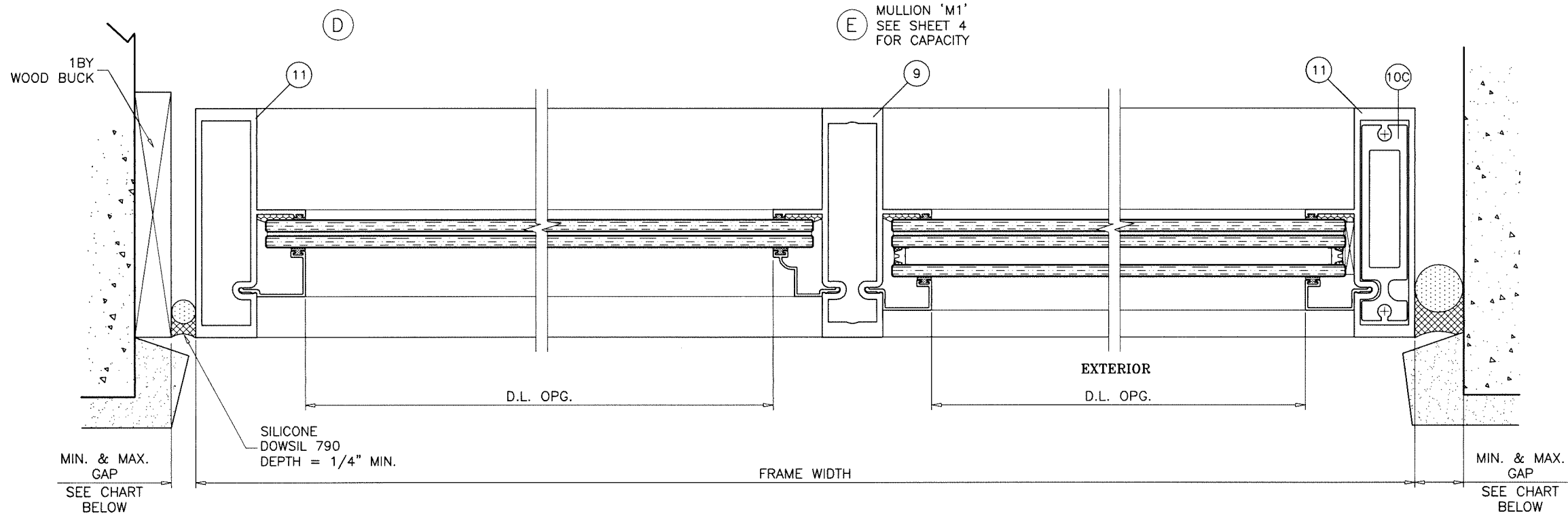


PO Box 100, 401 State Ave. N.  
Warroad, MN. 56763  
Tel. (218) 386-1430 Ext. 2143

no	date	description

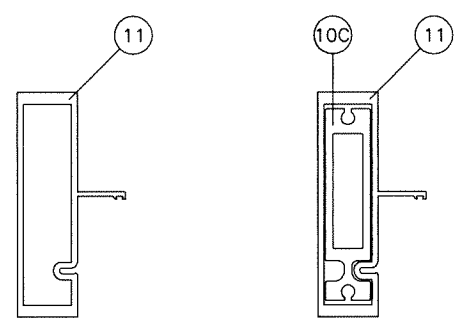
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dr. by: TARIQ  
chk. by:

drawing no.  
**W15-111**  
sheet 7 of 12



(E) MULLION 'M1'  
SEE SHEET 4  
FOR CAPACITY

(E) MULLION 'M2'  
SEE SHEET 4  
FOR CAPACITY



JAMB 'J1'

JAMB 'J2'

Ix IN <sup>4</sup>	Sx IN <sup>3</sup>
4.762	1.993

Ix IN <sup>4</sup>	Sx IN <sup>3</sup>
7.867	3.292

MAX. FRAME HEIGHT	MAX. GAPS FOR UNANCHORED JAMBS			
	JAMB 'J1'		JAMB 'J2'	
	MIN.	MAX.	MIN.	MAX.
96"	3/8"	3/4"	-	-
102"	3/8"	3/4"	-	-
108"	3/8"	3/4"	-	-
120"	-	-	3/8"	3/4"
132"	-	-	3/8"	3/4"

NOTE:  
MAX. MOVEMENT CONSIDERED=100% STRETCH.  
PLEASE REFER TO SEALANT MANUFACTURER'S DATA AND APPLICATION MANUAL FOR COMPATABILITY OF SEALANT TO SUBSTRATE & WINDOWALL MATERIAL/FINISH AND COMPLIANCE FOR WARRANTY.  
REFER TO ACI-117-10 FOR CONSTRUCTION TOLERANCES.  
ALTERNATE SEALANTS AT JAMB GAPS CAN BE DESIGNED BY ENGINEER OF RECORD BASED ON MANUFACTURER GUIDE LINES.  
GAPS LESS THAN 1/4" MAY BE DESIGNED BY ENGINEER OF RECORD BY THE USE OF BOND BREAKER TAPE OR 15% OF GAP ALLOWED MOVEMENT.

Sealed: 7/25/2023

FL #33676

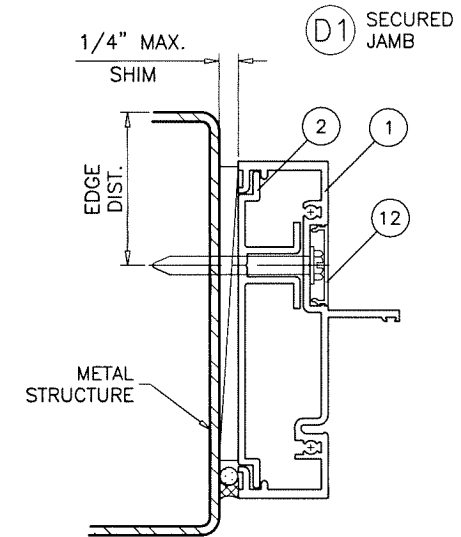
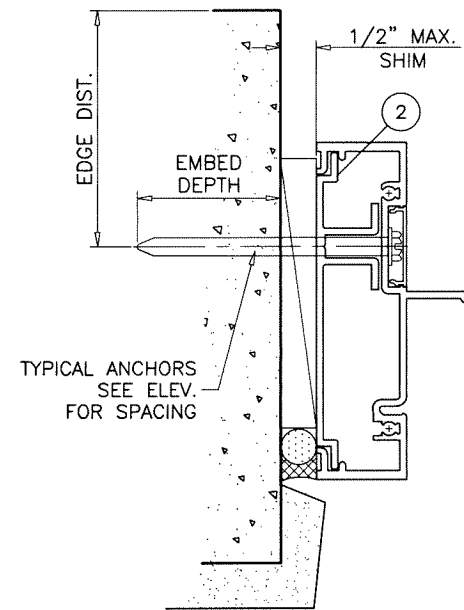
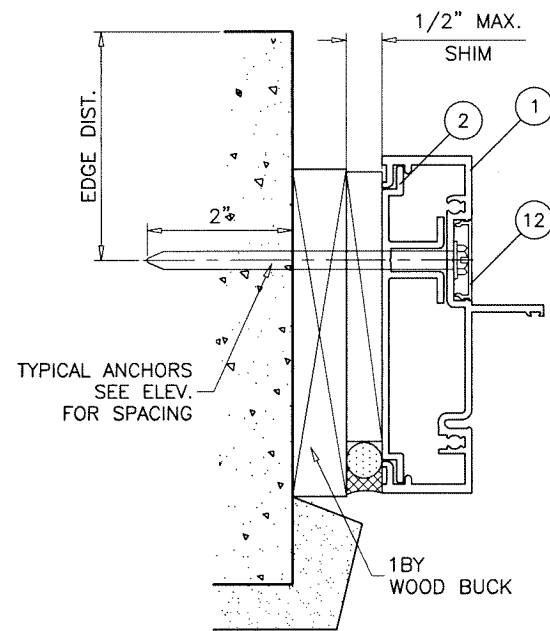
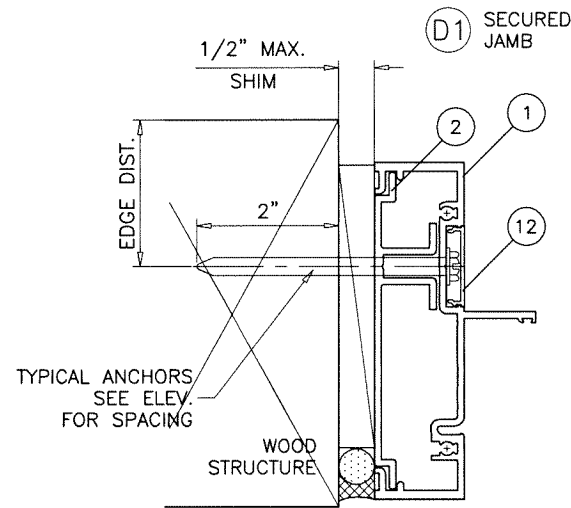


**afc**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173 (C.A.N. 3538)  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\W15-111SW

Coastline Storefront 4-11/16 inch Frame IZ4  
**MARVIN**  
PO Box 100, 401 State Ave. N.  
Warroad, MN. 56763  
Tel. (218) 386-1430 Ext. 2143

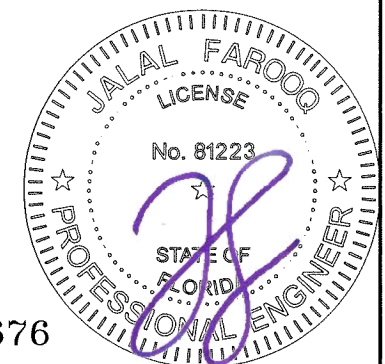
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dr. by:	TARIQ	chk. by:	
drawing no.:	W15-111		
sheet	8 of 12		





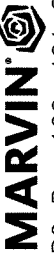
Sealed: 7/25/2023

FL #33676



date:	12-17-15
scale:	3/8" = 1"
dr. by:	TARIQ
chk. by:	
drawing no.	W15-111
sheet	9 of 12

Coastline Storefront 4-11/16 inch Frame IZ4



PO Box 100, 401 State Ave. N.  
Warroad, MN, 56763  
Tel. (218) 386-1430 Ext. 2143

**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

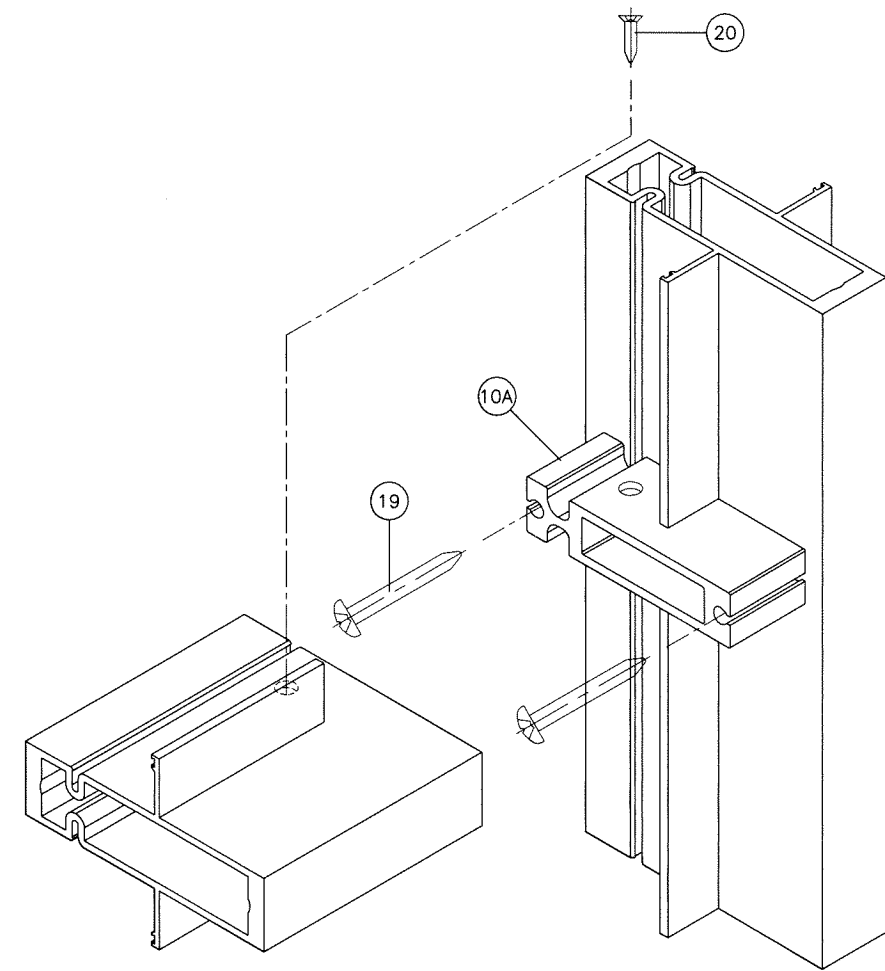
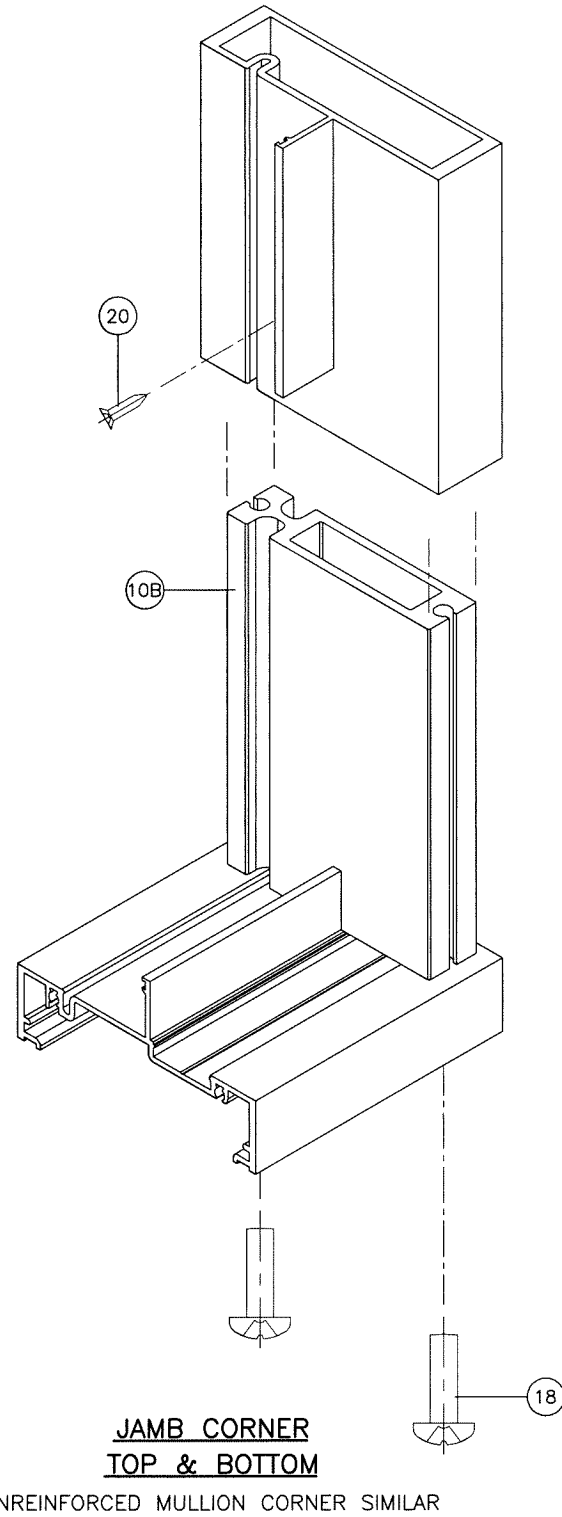
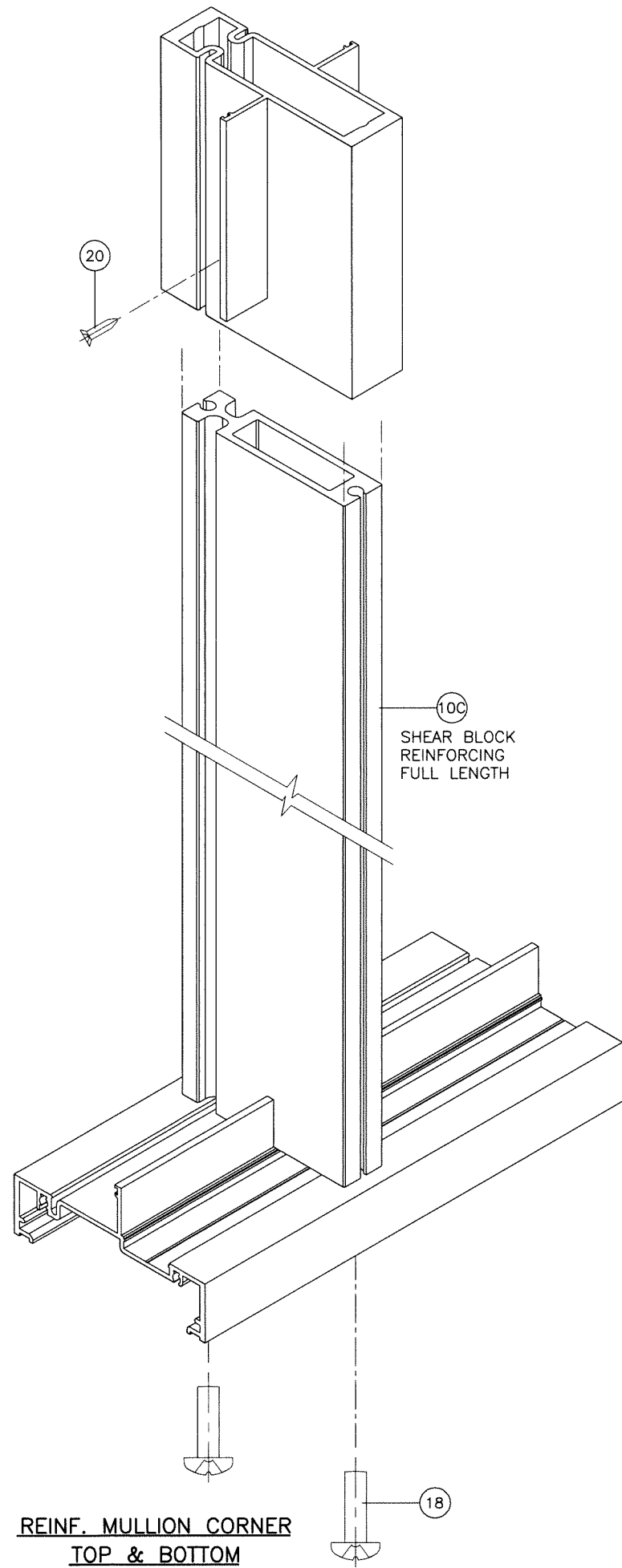
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COMP-ANL\W15-111SW





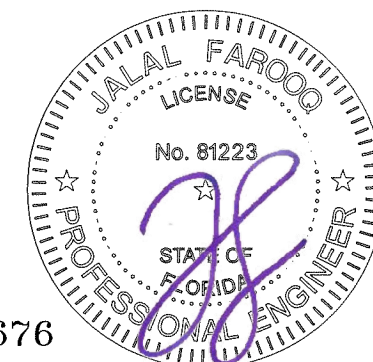




**HORIZONTAL CORNER  
JAMB & MULLION**

Sealed: 7/25/2023

FL #33676



revisions:	no	date	by	description

date: 12-17-15  
scale: 3/8" = 1"  
dr. by: TARIQ  
chk. by:

drawing no.

W15-111

sheet 12 of 12

Coastline Storefront 4-11/16 inch Frame IZ4



PO Box 100, 401 State Ave. N.  
Warroad, MN. 56763  
Tel. (218) 386-1430 Ext. 2143

**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\W15-111SIW



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

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/economy](http://www.miamidade.gov/economy)

**NOTICE OF ACCEPTANCE (NOA)**

**Santafe Tile Corporation**  
**8825 NW 95 Street**  
**Medley, FL. 33178**

**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 of the Florida Building Code.

**DESCRIPTION: Artisan Blend – Handmade Barrel Clay Roof Tile**

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state 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 renews NOA# 22-0726.05 and consists of pages 1 through 5.  
The submitted documentation was reviewed by Alex Tigera.




NOA No.: 23-0125.03  
Expiration Date: 05/09/28  
Approval Date: 04/20/23  
Page 1 of 5

# ROOFING ASSEMBLY APPROVAL

**Category:** Roofing  
**Sub Category:** Roofing Tiles  
**Material:** Clay

## 1. SCOPE

This approves a roofing system using **Artisan Blend – Handmade Barrel Clay Roof Tile** manufactured by **MNS Inversiones LTDA** in **Cucuta, Colombia** and is distributed by **Santafe Tile Corporation**, as described in Section 2 of this Notice of Acceptance. For locations where the pressure requirements, as determined by applicable Building Code, do not exceed the design pressure values obtained by calculations in compliance with RAS 127 using the values listed in section 4 herein. The attachment calculations shall be done as a moment based system.

## 2. PRODUCT DESCRIPTION

<u>Manufactured by Applicant</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
Artisan Blend – Handmade Barrel Tile	L = 18” W = 9” Thickness: 0.55”	ASTM C1167 Type 1 Grade 2	High profile two-piece tapered clay roof tile. For direct deck, adhesive set applications.
Trim Pieces	Length: varies Width: varies varying thickness	ASTM C1167	Accessory trim, clay roof pieces for use at hips, rakes, ridges and valley terminations manufactured for each tile profile.

### 2.1 MANUFACTURING LOCATION

2.1.1. Cucuta, Colombia

### 2.2 EVIDENCE SUBMITTED

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
American Test Lab of South Florida	RT1116.01-12	TAS 101	11/16/12
	RT0120.01-23	ASTM C 1167	01/28/23
	RT0201.01-22	TAS 101	02/24/22



NOA No.: 23-0125.03  
Expiration Date: 05/09/28  
Approval Date: 04/20/23  
Page 2 of 5



### 3. LIMITATIONS:

- 3.1 Fire classification is not part of this acceptance.
- 3.2 For mortar or adhesive set tile applications, a static field uplift test in accordance with TAS 106 shall be required in the HVHZ, refer to applicable building code.
- 3.3 Applicant shall retain the services of a Miami-Dade County Certified Laboratory to perform quarterly test in accordance with TAS 112, appendix 'A'. Such testing shall be submitted to the Miami-Dade County Product Control Section for review.
- 3.4 Minimum underlayment shall be in compliance with the applicable Roofing Applications Standards listed section 4.1 herein.
- 3.5 30/90 hot mopped underlayment applications may be installed perpendicular to the roof slope unless stated otherwise by the underlayment material manufacturers published literature.
- 3.6 This acceptance is for wood deck applications. Minimum deck requirements shall be in compliance with applicable building code.

### 4. INSTALLATION

- 4.1 Clay Barrel Tile and its components shall be installed in strict compliance with Roofing Application Standard RAS-120.
- 4.2 Data For Attachment Calculations.

Table 1: Average Weight (W) and Dimensions (l x w )			
Tile Profile	Weight-W (lbf)	Length-l (ft)	Width-w (ft)
Artisan Blend – Handmade Barrel Tile	6.5	1.5	0.75

Table 2: Aerodynamic Multipliers - $\lambda$ (ft <sup>3</sup> )		
Tile Profile	$\lambda$ (ft <sup>3</sup> ) Batten Application	$\lambda$ (ft <sup>3</sup> ) Direct Deck Application
Artisan Blend – Handmade Barrel Tile	N/A	0.23

Table 3: Restoring Moments due to Gravity - $M_g$ (ft-lbf)						
Tile Profile	2":12"	3":12"	4":12"	5":12"	6":12"	7":12" or Greater
Artisan Blend – Handmade Barrel Tile	Direct Deck	Direct Deck	Direct Deck	Direct Deck	Direct Deck	Direct Deck
	3.98	3.93	3.87	3.78	3.69	3.59



**Table 6: Attachment Resistance Expressed as a Moment -  $M_f$  (ft-lbf)  
for Single Paddy Adhesive<sup>1</sup> Set Systems**

Tile Profile	Tile Application	Minimum Attachment Resistance
Artisan Blend – Handmade Barrel Tile	ICP Adhesives Polyset® AH-160	66.1 <sup>2</sup>
1. See foam adhesive manufacturer’s component approval for installation requirements		
2. Medium paddy placement weight 35 grams of ICP Adhesives Polyset® AH-160for the pan tiles. 18.9g on each side of the cap tiles.		

**Table 7: Attachment Resistance Expressed as a Moment -  $M_f$  (ft-lbf)  
for Mortar Set Systems**

Tile Profile	Tile Application	Minimum Attachment Resistance
Artisan Blend – Handmade Barrel Tile	QUIKRETE Roof Tile Mortar FL-15	102.4
3. Application per The Quikrete Company current NOA		

**5. LABELING**

5.1 All tiles shall bear the imprint or identifiable marking of the manufacturer's name or logo as detailed below, or following statement: "Miami-Dade County Product Control Approved".



**LABEL FOR ARTISAN BLEND – HANDMADE BARREL TILE  
(LOCATED ON THE TOPSIDE OF TILE)**

**6. BUILDING PERMIT REQUIREMENTS:**

6.1 Application for building permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance.

6.1.2 Any other documents required by Building Official or Applicable building code in order to properly evaluate the installation of this system.



NOA No.: 23-0125.03  
Expiration Date: 05/09/28  
Approval Date: 04/20/23  
Page 4 of 5

## PROFILE DRAWING

### Product Technical Data Sheet

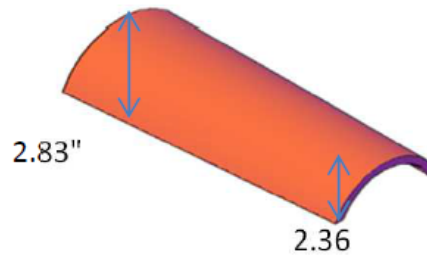
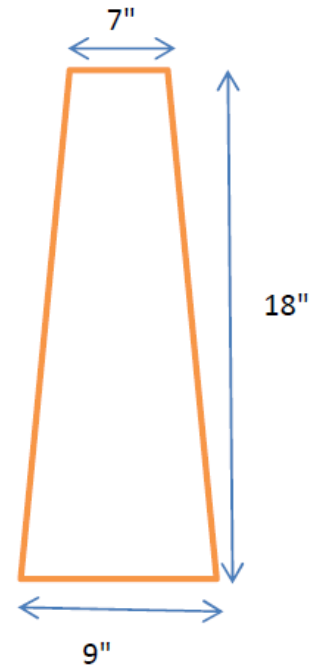


Product Name: Artisan Blend - Handmade Barrel tile

Texture: Rustic

Color: Red Blend

Heigh 1	2.36"
Heigh 2	2.83"
Length	18"
Width 1	7"
Width 2	9"
Thickness	0.55"
Weight	6.83 lbs



Pieces Per Square 180

**ARTISAN BLEND – HANDMADE BARREL TILE**

**END OF THIS ACCEPTANCE**



NOA No.: 23-0125.03  
Expiration Date: 05/09/28  
Approval Date: 04/20/23  
Page 5 of 5





**Product Approval**  
USER: Public User

[Product Approval Menu](#) > [Product or Application Search](#) > [Application List](#) > **Application Detail**

OFFICE OF THE  
SECRETARY

FL #	FL40676-R2								
Application Type	Revision								
Code Version	2023								
Application Status	Approved								
Comments									
Archived	<input type="checkbox"/>								
Product Manufacturer	Mr-Glass Doors & Windows Manufacturing, LLC								
Address/Phone/Email	8051 NW 79th Place Medley, FL 33166 (305) 470-8284 ulises@mrglasswindows.com								
Authorized Signature	Ulises Senaris ulises@mrglasswindows.com								
Technical Representative	Augusto Arias								
Address/Phone/Email	8120 NW 84th St Medley, FL 33166 (305) 470-8284 aarias@mrglasswindows.com								
Quality Assurance Representative									
Address/Phone/Email									
Category	Windows								
Subcategory	Fixed								
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> Evaluation Report - Hardcopy Received								
Florida Engineer or Architect Name who developed the Evaluation Report	Jalal Farooq								
Florida License	PE-81223								
Quality Assurance Entity	Keystone Certifications, Inc.								
Quality Assurance Contract Expiration Date	08/27/2025								
Validated By	Abel Carrasco, PE <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received								
Certificate of Independence	<a href="#">FL40676_R2_COI_SS - Certificate of Independence 2021.pdf</a>								
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th><u>Standard</u></th> <th><u>Year</u></th> </tr> </thead> <tbody> <tr> <td>TAS 201</td> <td>1994</td> </tr> <tr> <td>TAS 202</td> <td>1994</td> </tr> <tr> <td>TAS 203</td> <td>1994</td> </tr> </tbody> </table>	<u>Standard</u>	<u>Year</u>	TAS 201	1994	TAS 202	1994	TAS 203	1994
<u>Standard</u>	<u>Year</u>								
TAS 201	1994								
TAS 202	1994								
TAS 203	1994								
Equivalence of Product Standards Certified By									
Sections from the Code									

Product Approval Method

Method 1 Option D

Date Submitted

10/23/2023

Date Validated

10/23/2023

Date Pending FBC Approval

10/31/2023

Date Approved

12/13/2023

### Summary of Products

FL #	Model, Number or Name	Description
40676.1	Series MG-450 Aluminum Fixed Window	Large missile impact resistant aluminum fixed window.
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> Yes <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> Yes <b>Design Pressure:</b> +100/-130 <b>Other:</b> See drawings 21-76F for span vs load combination and installation details.		<b>Installation Instructions</b> <a href="#">FL40676 R2 II SS- MG450 FIXED (LMI) - DWG 21-76F 2023 R1.pdf</a> Verified By: Jalal Farooq PE # 81223 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL40676 R2 AE SS - MG450 FIXED (LMI) - PAE 2023 R1.pdf</a> Created by Independent Third Party: Yes
40676.2	Series MG-450 Aluminum Fixed Window	Small missile impact resistant aluminum fixed window.
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> Yes <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> Yes <b>Design Pressure:</b> +100/-130 <b>Other:</b> See drawings 22-01F for span vs load combination and installation details.		<b>Installation Instructions</b> <a href="#">FL40676 R2 II SS- MG450 FIXED (SMI) - DWG 22-01F 2023 R1.pdf</a> Verified By: Jalal Farooq PE # 81223 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL40676 R2 AE SS - MG450 FIXED (SMI) - PAE 2023 R1.pdf</a> Created by Independent Third Party: Yes

[Back](#)

[Next](#)

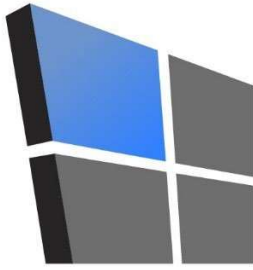
[Contact Us](#) :: [2601 Blair Stone Road, Tallahassee FL 32399](#) Phone: 850-487-1824

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**Product Approval Accepts:**





# AL-FAROOQ CORPORATION

CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

September 24, 2021

Product Approval Administrator  
Building Codes & Standards Section  
Department of Business & Professional Regulations  
1940 North Monroe Street, Suite 90  
Tallahassee, FL 32399-2100

To whom it may concern,

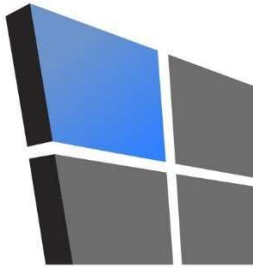
As the design engineer retained to prepare the product approval(s) associated with this letter as shown below on this same web page, I do hereby declare that I do not have and will not have any financial interest in any company manufacturing or distributing the referenced product(s), nor do I have or will have any financial interest with any other entity involved in the approval process of the referenced product(s).

Sincerely,



Sealed: 9/24/2021

Jalal Farooq, P.E.  
CFO



# AL-FAROOQ CORPORATION

CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

## PRODUCT APPROVAL EVALUATION RULE CHAPTER #61G20-3 • METHOD 1 OPTION D

FL 40676

Date: 10/19/2023

### Detailed Product Description:

**Manufacturer:** MR-GLASS DOORS & WINDOWS MANUFACTURING LLC.

**Manufacturer Address:** 8051 NW 79th PLACE, MEDLEY, FL 33166

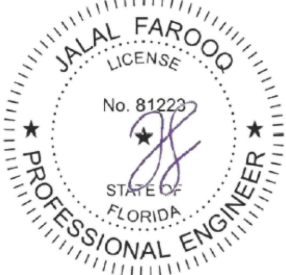
**Model Name:** SERIES MG-450 ALUMINUM FIXED WINDOW

**Maximum Load:** +100 PSF, -130 PSF (Large Missile Impact)

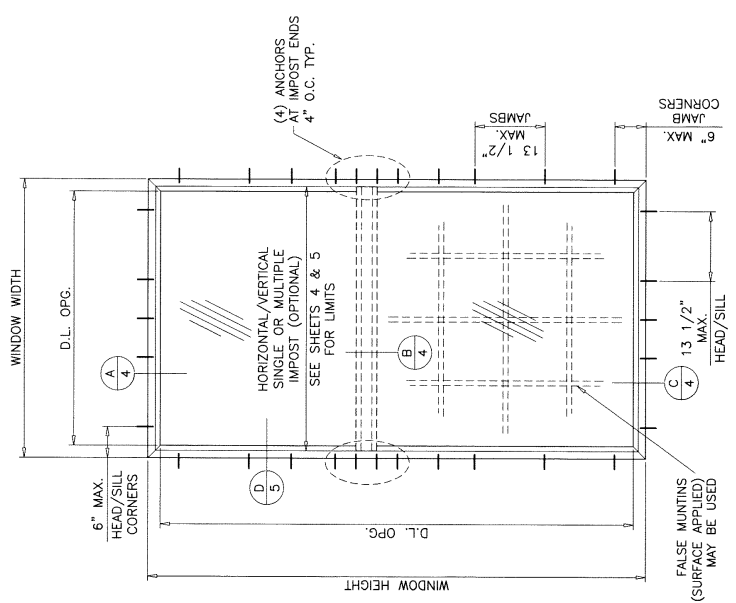
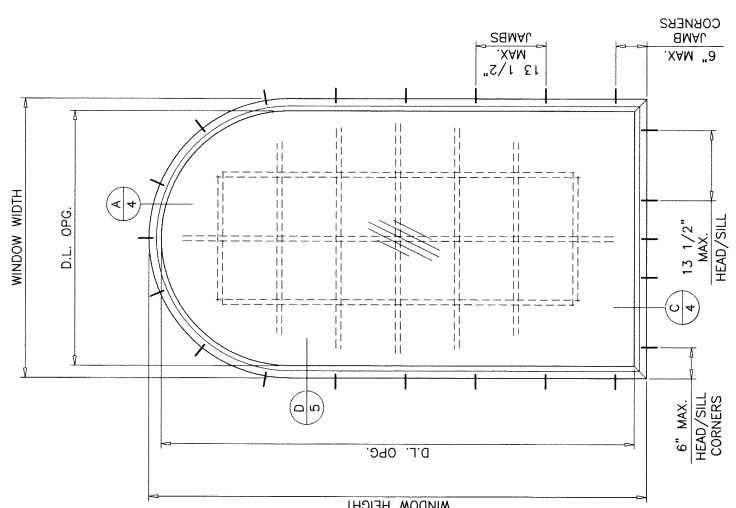
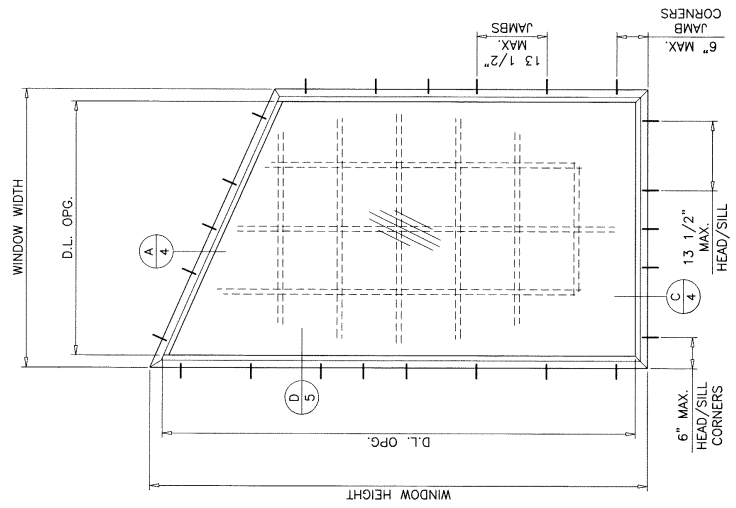
**Installation Drawings #** 21-76F

This product complies with the High Velocity Hurricane Zone (HVHZ) testing requirements.					
For maximum sizes, combination of span vs loads and anchor type refer to installation drawings.					
Comparative analysis used <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
<b>Mandatory Tests (Tested in accordance with AAMA 101/I.S.2/NAFS/TAS-202)</b>					
TEST	DESCRIPTION	TEST LOCATION	TEST REPORT DATE	TEST REPORT #	Test Sealed by
ASTM E283	Air Infiltration Leakage	Hurricane Engineering & Testing, Inc	12/06/2021 12/06/2021 12/06/2021 12/06/2021 10/28/2021 09/25/2023	HETI-21-7037 HETI-21-7040 HETI-21-7043 HETI-21-7068 HETI-21-7090 HETI-23-8057	Dr. Ram Tewari, PE
ASTM E331 OR ASTM 547 & TAS 202	Water Penetration	Hurricane Engineering & Testing, Inc	12/06/2021 12/06/2021 12/06/2021 12/06/2021 10/28/2021 09/25/2023	HETI-21-7037 HETI-21-7040 HETI-21-7043 HETI-21-7068 HETI-21-7090 HETI-23-8057	Dr. Ram Tewari, PE
ASTM E330 & TAS 202	Uniform Static Air Press.	Hurricane Engineering & Testing, Inc	12/06/2021 12/06/2021 12/06/2021 12/06/2021 10/28/2021 12/06/2021 09/25/2023	HETI-21-7037 HETI-21-7040 HETI-21-7043 HETI-21-7068 HETI-21-7090 HETI-21-7103 HETI-23-8057	Dr. Ram Tewari, PE



Supplemental Tests (Tested in accordance with TAS-201 and TAS-203)					
TEST	DESCRIPTION	TEST LOCATION	TEST REPORT DATE	TEST REPORT #	Test Sealed by
FBC 1626.2 TAS 201 & 203 ASTME1886/1996 ANSI Z97.1	Large Missile Impact & Cyclic	Hurricane Engineering & Testing, Inc	12/06/2021 12/06/2021 12/06/2021 12/06/2021 10/28/2021 12/06/2021 12/06/2021 09/25/2023	HETI-21-7037 HETI-21-7040 HETI-21-7062 HETI-21-7068 HETI-21-7090 HETI-21-7103 HETI-21-7119 HETI-23-8057	Dr. Ram Tewari, PE
Under the limitations of the attached installation drawings, to the best of my knowledge and ability, the above product conforms to the requirements of the 2023 Florida Building Code.					
<b>Evaluation Report Engineer:</b>  Jalal Farooq Al-Farooq Corporation			  PE # 81223 EB # 3538  Sealed: 10/19/2023		

NO	DATE	BY	DESCRIPTION
1	07/18/23		NEW TEST ADDED



**TYPICAL ELEVATIONS**  
(TESTED UNITS)

**SERIES MG-450**  
**ALUMINUM FIXED WINDOW (L.M.I.)**

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEET 2.  
 APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF FIX./FIX. OR FIXED WITH OTHER WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING F.B.C. APPROVED MULLIONS IN BETWEEN.  
 LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

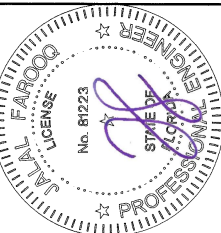
THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2020 (7TH EDITION)/2023 (8TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).  
 1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED AS REQUIRED TO TRANSFER APPLIED 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). MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. LABELING TO COMPLY WITH SECTION 1709.9.2.

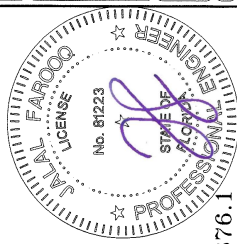
**DAYLITE OPENINGS:**  
 D.L.O. HEIGHT = WINDOW HEIGHT - 4.750"  
 D.L.O. WIDTH = WINDOW WIDTH - 4.750"

WINDOWS COMPLY WITH REQUIREMENTS OF ANSI Z97.1.  
 THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

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 FL #40676.1

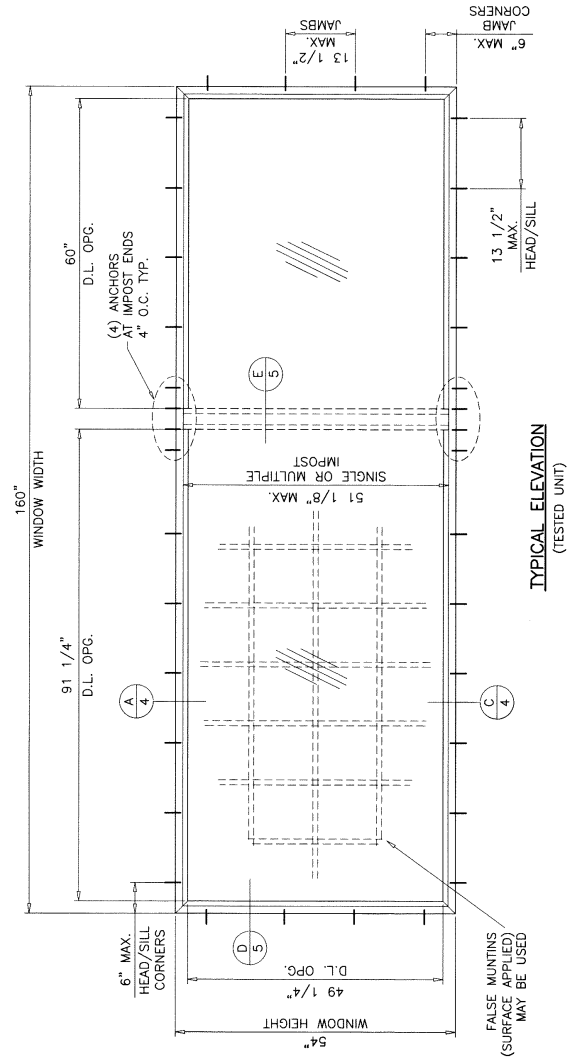
A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.  
 B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.  
 C- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER (P.E.) WHICH WILL BE REQUIRED FOR RECORD FOR THE PROJECT. THE P.E. SHALL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.  
 D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.





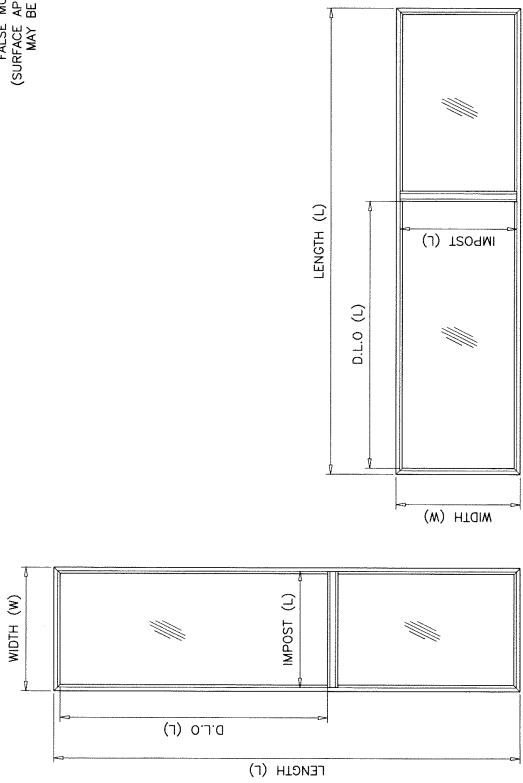
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FL #40676.1



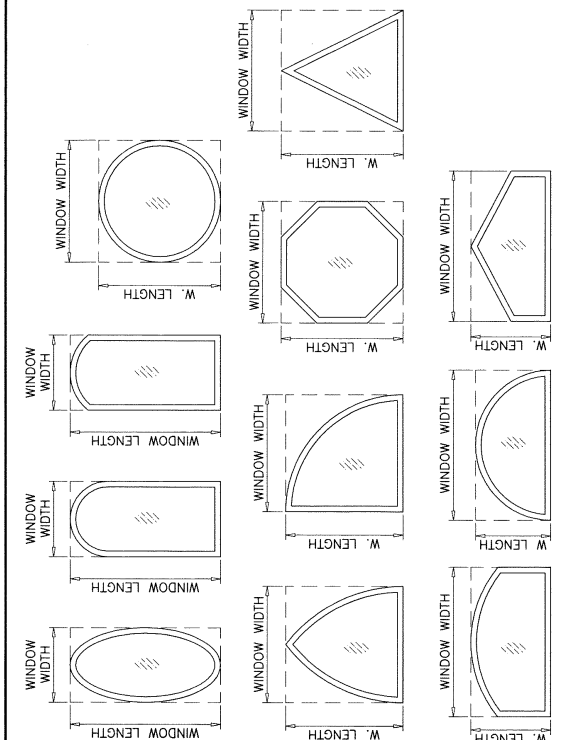
**TYPICAL ELEVATION**  
(TESTED UNIT)

FALSE MUNTINS  
(SURFACE APPLIED)  
MAY BE USED

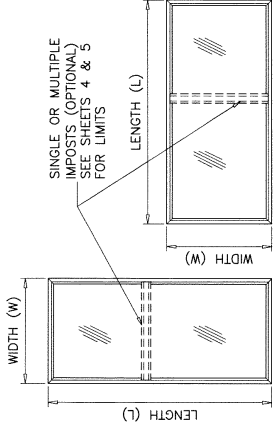


**DESIGN LOAD CAPACITY - PSF**  
 FOR WINDOWS SHOWN ON THIS SHEET ONLY

WIDTH (W)	LENGTH (L)	MAX. FRAME DIMS.		IMPOST REIN.	IMPOST (L)	GLASS TYPES	
		D.L.O. (L)	IMPOST (L)			A, 'A1' & 'B'	EXT.(+)
48"	180"	103-1/4"	45-1/8"	W/O TUBE	80.0	80.0	80.0
51"	169-3/8"	96-7/8"	48-1/8"	W/O TUBE	76.7	76.7	80.0
54"	160"	91-1/4"	51-1/8"	WITH TUBE	80.0	80.0	80.0
48"	160"	103-1/4"	45-1/8"	WITH TUBE	80.0	80.0	80.0
51"	169-3/8"	96-7/8"	48-1/8"	WITH TUBE	80.0	80.0	80.0
54"	160"	91-1/4"	51-1/8"	WITH TUBE	80.0	80.0	80.0



ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES. LIMIT MAX. DESIGN LOADS FOR ALTERNATE SHAPES TO ±80.0 PSF



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

DESIGN LOAD CAPACITY - PSF		GLASS TYPES 'A' & 'A1'		GLASS TYPE 'B'	
MAX. FRAME DIMS. WIDT (W)	LENGTH (L)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	30"	80.0	80.0	100.0	130.0
36"	36"	80.0	80.0	100.0	130.0
42"	42"	80.0	80.0	100.0	130.0
48"	48"	80.0	80.0	100.0	130.0
54"	54"	80.0	80.0	100.0	130.0
60"	60"	80.0	80.0	100.0	130.0
66"	66"	80.0	80.0	100.0	130.0
72"	72"	80.0	80.0	100.0	130.0
76"	76"	80.0	80.0	100.0	130.0
30"	108"	80.0	80.0	85.0	120.0
36"	108"	80.0	80.0	85.0	120.0
42"	108"	80.0	80.0	85.0	120.0
48"	108"	80.0	80.0	85.0	120.0
30"	120"	80.0	80.0	100.0	130.0
36"	120"	80.0	80.0	100.0	130.0
42"	120"	80.0	80.0	100.0	130.0
48"	120"	80.0	80.0	100.0	130.0
30"	132"	80.0	80.0	85.0	120.0
36"	132"	80.0	80.0	85.0	120.0
42"	132"	80.0	80.0	85.0	120.0
48"	132"	80.0	80.0	85.0	120.0
30"	144"	80.0	80.0	100.0	130.0
36"	144"	80.0	80.0	100.0	130.0
42"	144"	80.0	80.0	100.0	130.0
48"	144"	80.0	80.0	100.0	130.0
30"	156"	80.0	80.0	85.0	120.0
36"	156"	80.0	80.0	85.0	120.0
42"	156"	80.0	80.0	85.0	120.0
48"	156"	80.0	80.0	85.0	120.0
30"	168"	80.0	80.0	85.0	120.0
36"	168"	80.0	80.0	85.0	120.0
42"	168"	80.0	80.0	85.0	120.0
48"	168"	80.0	80.0	85.0	120.0

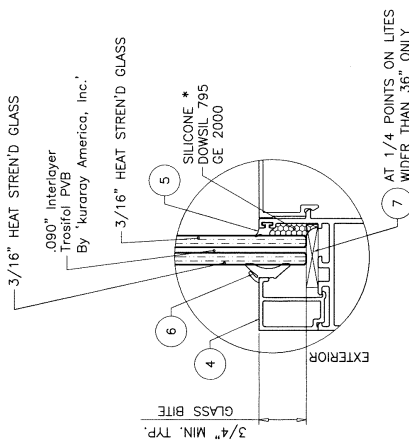
DESIGN LOAD CAPACITY - PSF		GLASS TYPES 'A' & 'A1'		GLASS TYPE 'B'	
MAX. FRAME DIMS. WIDT (W)	LENGTH (L)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
19-1/8"	19-1/8"	80.0	80.0	100.0	130.0
26-1/2"	26-1/2"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	100.0	130.0
19-1/8"	38-3/8"	80.0	80.0	100.0	130.0
26-1/2"	38-3/8"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	100.0	130.0
19-1/8"	19-1/8"	80.0	80.0	100.0	130.0
26-1/2"	50-5/8"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	100.0	130.0
19-1/8"	56"	80.0	80.0	100.0	130.0
26-1/2"	56"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	100.0	130.0
19-1/8"	63"	80.0	80.0	100.0	130.0
26-1/2"	63"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	100.0	130.0
19-1/8"	72"	80.0	80.0	100.0	130.0
26-1/2"	72"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	98.6	128.2
19-1/8"	76"	80.0	80.0	100.0	130.0
26-1/2"	76"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	95.7	124.4

DESIGN LOAD CAPACITY - PSF		GLASS TYPES 'A' & 'A1'		GLASS TYPE 'B'	
MAX. FRAME DIMS. WIDT (W)	LENGTH (L)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	30"	80.0	80.0	100.0	130.0
36"	36"	80.0	80.0	100.0	130.0
42"	42"	80.0	80.0	100.0	130.0
48"	48"	80.0	80.0	100.0	130.0
54"	54"	80.0	80.0	100.0	130.0
60"	60"	80.0	80.0	100.0	130.0
66"	66"	80.0	80.0	100.0	130.0
72"	72"	80.0	80.0	100.0	130.0
76"	76"	80.0	80.0	100.0	130.0
30"	30"	80.0	80.0	100.0	130.0
36"	36"	80.0	80.0	100.0	130.0
42"	42"	80.0	80.0	100.0	130.0
48"	48"	80.0	80.0	100.0	130.0
54"	54"	80.0	80.0	100.0	130.0
60"	60"	80.0	80.0	100.0	130.0
66"	66"	80.0	80.0	100.0	130.0
72"	72"	80.0	80.0	100.0	130.0
76"	76"	80.0	80.0	100.0	130.0
30"	60"	80.0	80.0	100.0	130.0
36"	60"	80.0	80.0	100.0	130.0
42"	60"	80.0	80.0	100.0	130.0
48"	60"	80.0	80.0	100.0	130.0
54"	60"	80.0	80.0	100.0	130.0
60"	60"	80.0	80.0	100.0	130.0
66"	60"	80.0	80.0	100.0	130.0
72"	60"	80.0	80.0	100.0	130.0
76"	60"	80.0	80.0	100.0	130.0

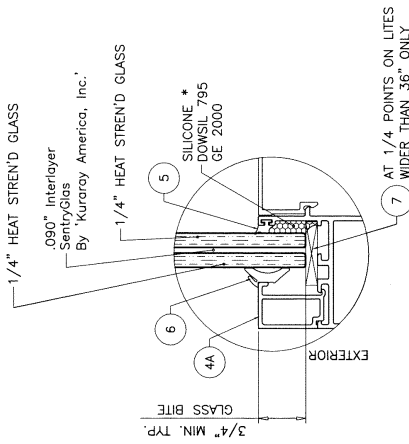
DESIGN LOAD CAPACITY - PSF		GLASS TYPES 'A' & 'A1'		GLASS TYPE 'B'	
MAX. FRAME DIMS. WIDT (W)	LENGTH (L)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
19-1/8"	19-1/8"	80.0	80.0	100.0	130.0
26-1/2"	26-1/2"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	100.0	130.0
19-1/8"	66-1/8"	80.0	80.0	100.0	130.0
26-1/2"	66-1/8"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	100.0	130.0
19-1/8"	72"	80.0	80.0	100.0	130.0
26-1/2"	72"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	100.0	130.0
19-1/8"	84"	80.0	80.0	100.0	130.0
26-1/2"	84"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	100.0	130.0
19-1/8"	96"	80.0	80.0	100.0	130.0
26-1/2"	96"	80.0	80.0	100.0	130.0
37"	37"	80.0	80.0	100.0	130.0
53-1/8"	53-1/8"	80.0	80.0	100.0	130.0

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

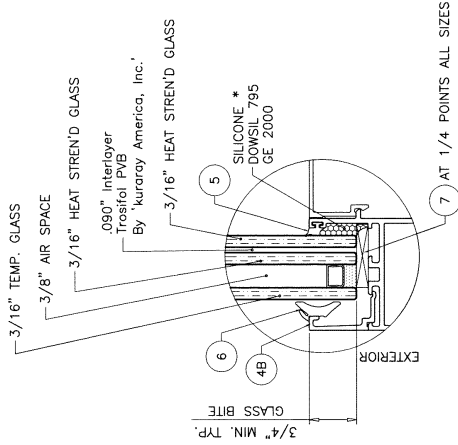




**GLASS TYPE 'A'**  
7/16" OVERALL LAM. GLASS



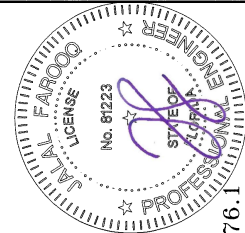
**GLASS TYPE 'B'**  
9/16" OVERALL LAM. GLASS



**GLASS TYPE 'AI'**  
13/16" OVERALL INSUL. LAM. GLASS

\*  
DOWSIL 795 SILICONE  
LIMIT MAX. DESIGN LOAD TO ±120.0 PSF  
GE 2000 SILICONE  
LIMIT MAX. DESIGN LOAD TO ±80.0 PSF  
FOR WDW. AREA MORE THAN 30.4 SQ. FT.

**3/8" AIR SPACE CONSISTING OF:**  
SPACER:  
'HELIUM' LOW PROFILE ALUMINUM SPACER  
BY 'LINGERMANN GMBH'  
AROUND THE PERIMETER OF THE GLASS.  
PERIMETER SEALANT:  
SILICONE  
DOWSIL 791  
GE 2000  
OR  
'DURASEAL' EDGE SEAL SYSTEM  
BY 'QUANEX'

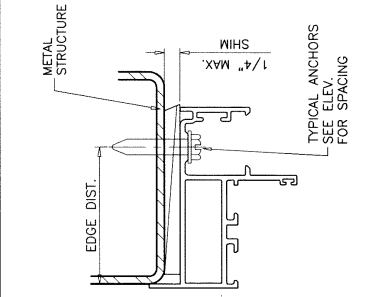
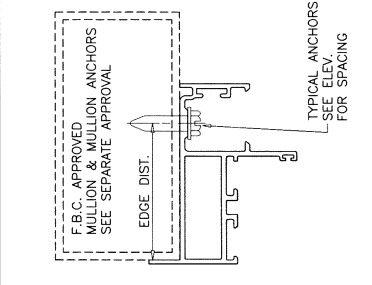
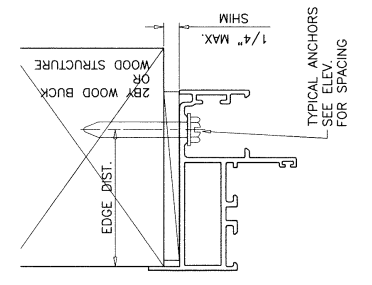


Sealed: 10/23/2023

F.L. #40676.1  
sheet 3 of 8

<b>AL-FAROOQ CORPORATION</b> ENGINEERS & PRODUCT DEVELOPMENT 9360 SUNSET DRIVE, SUITE 220 MIAMI, FLORIDA 33173 TEL. (305) 264-8100 WWW.AFENG.COM		<b>MR-GLASS DOORS &amp; WINDOWS MANUFACTURING, LLC</b> 8051 N.W. 79th Place Medley, FL. 33166 Tel. (305) 764-3963 www.mrglsswindows.com		revisions: no. date by description
<b>af</b> COMP-ANL\21-76F-MG		<b>PPF #3538</b> TEL. (305) 264-8100		drawing no. <b>21-76F</b>

revisions:	no	date	by	description
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21-76F				

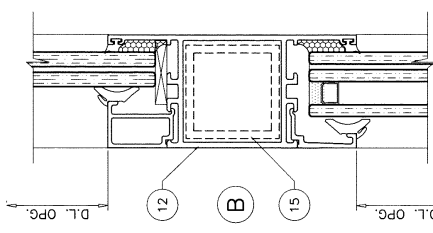


WOOD BUCKS AND METAL STRUCTURE NOT BY 'MR. GLASS' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

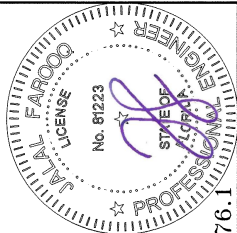
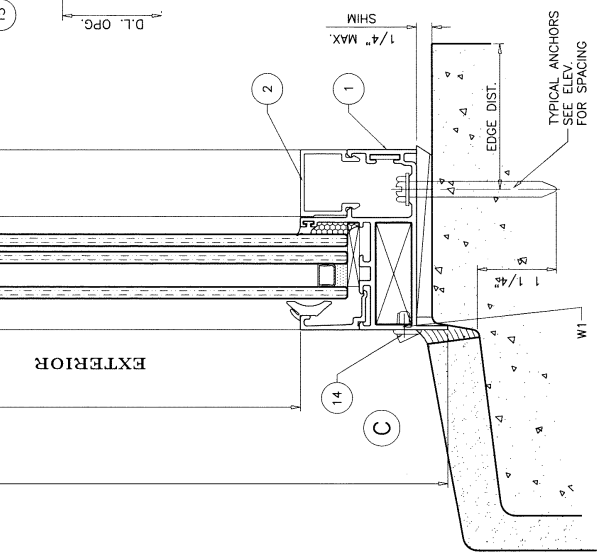
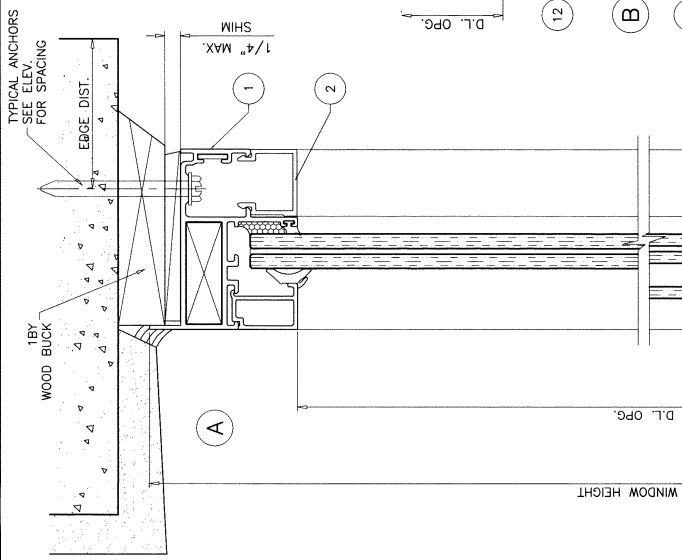
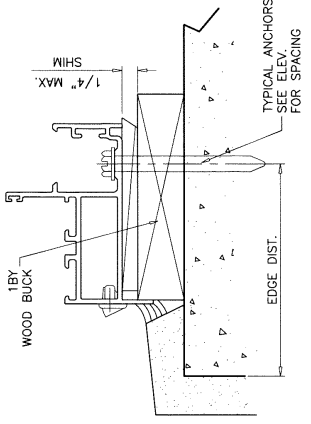
- TYPICAL ANCHORS:** SEE ELEV. FOR SPACING
- 1/4" DIA. ULTRACON+ BY 'DEWALT'** (Fu=164 KSI, Fy=148 KSI)  
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES  
 1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)  
 THRU 1BY BUCKS INTO CONC. OR BLOCKS  
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)  
 1-1/4" 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)

- #14 SMS OR SELF-DRILLING SCREWS** (GRADE 2 CR5)  
 INTO F.B.C. APPROVED MULLIONS  
 OR  
 INTO METAL STRUCTURES (HEAD/SILL/JAMBS)  
 (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS  
 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 BLOCKS = 2-1/2" MIN.  
 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 fm = 2000 PSI MIN.**



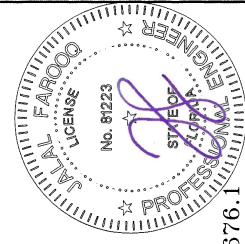
MAX. LENGTH	REINF.	LOADS - PSF
45-1/8"	W/O TUBE	80.0
48-1/8"	WITH TUBE	76.7
51-1/8"	W/O TUBE	60.2
51-1/8"	WITH TUBE	80.0



**WEEPHOLES:**  
 W1 = 5/16" X 1-3/4" WEEPHOLES WITH PLASTIC BAFFLE  
 AT 5-1/2" FROM EACH END

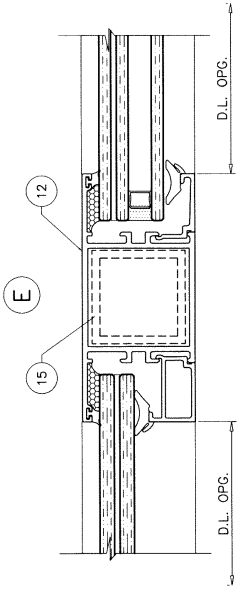
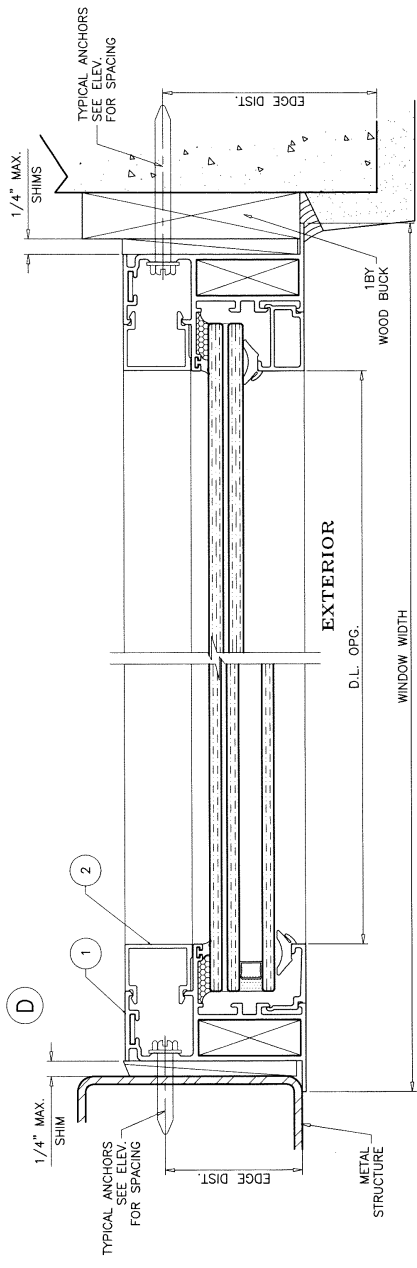
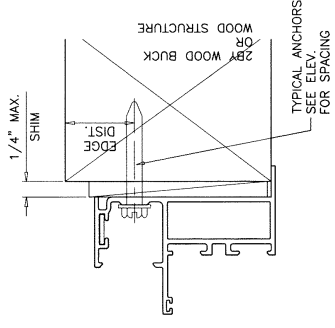
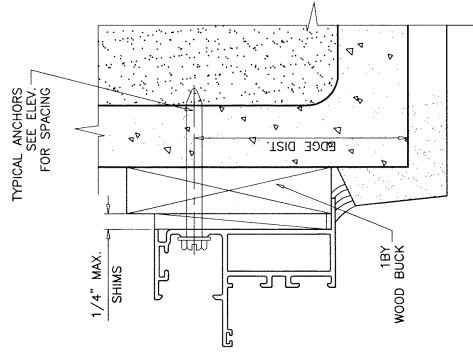
Sealed: 10/23/2023  
 FL #40676.1

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12-23-21			
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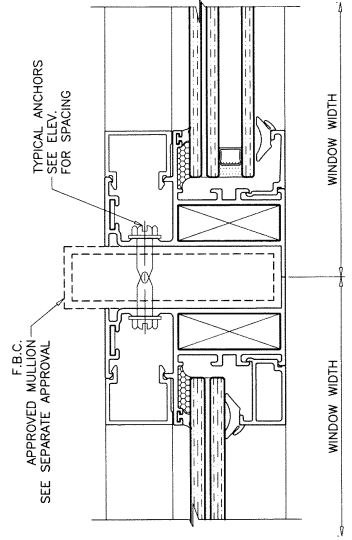


Sealed: 10/23/2023

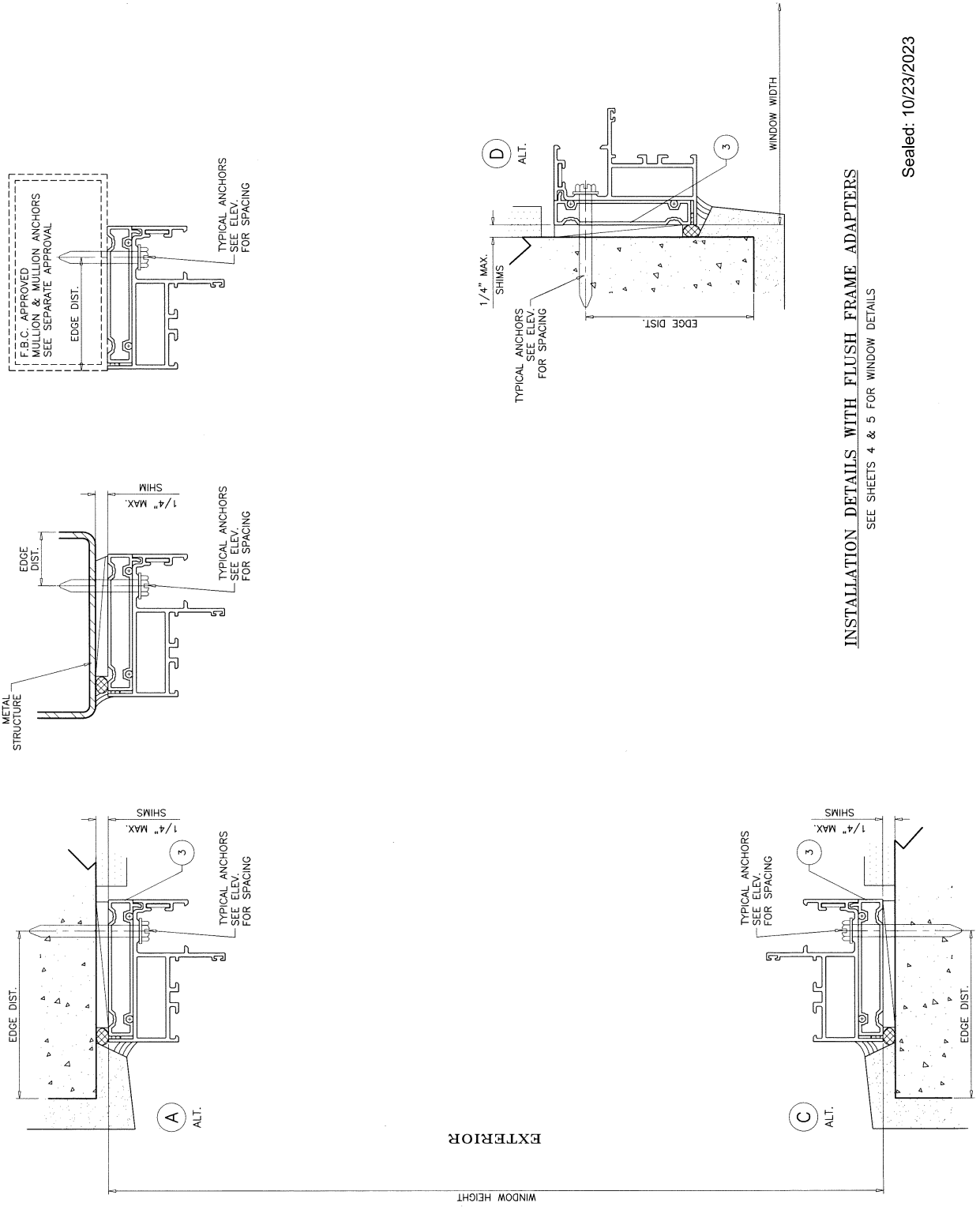
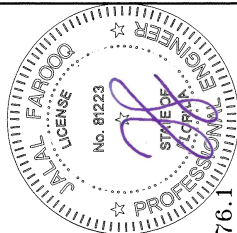
FL #40676.1



LIMIT MAX. DESIGN LOADS FOR WINDOWS WITH IMPOST AS FOLLOWS		
MAX. LENGTH	REINF.	LOADS - PSF
45-1/8"	W/O TUBE	80.0
48-1/8"	WITH TUBE	76.7
51-1/8"	WITH TUBE	60.2
51-1/8"	WITH TUBE	80.0



revisions:	no	date	by	description
12-23-21				
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dr. by:	TARLO			
chk. by:				

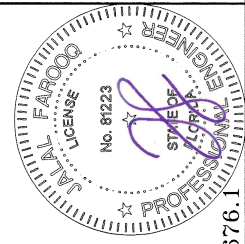


**INSTALLATION DETAILS WITH FLUSH FRAME ADAPTERS**  
 SEE SHEETS 4 & 5 FOR WINDOW DETAILS

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FL #40676.1



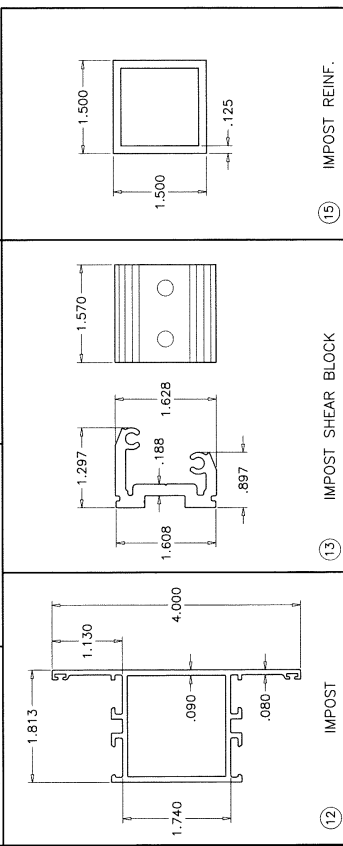
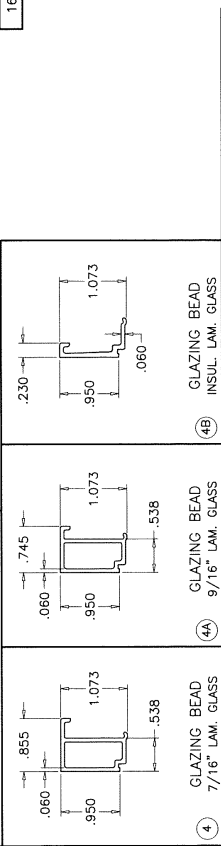
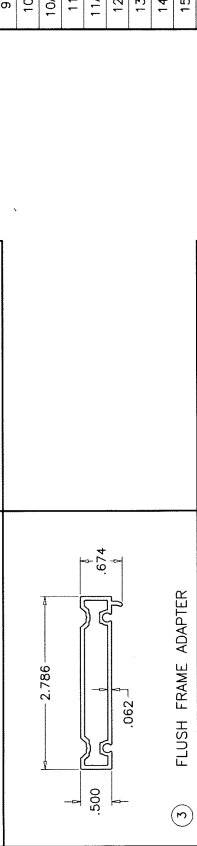
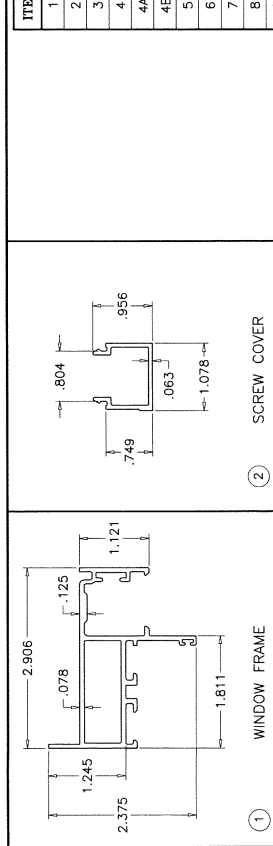


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FL #40676.1

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	E-451	4	WINDOW FRAME	6063-T6	
2	E-452	4	SCREW COVER	6063-T5	
3	E-212	4	FLUSH FRAME ADAPTER	6063-T6	
4	E-9001	4	GLAZING BEAD (7/16" LAM. GLASS)	6063-T6	
4A	E-9004	4	GLAZING BEAD (9/16" LAM. GLASS)	6063-T6	
4B	E-9002	4	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T6	
5	G30-01	AS REOD.	INTERIOR GLAZING GASKET	SANTOPRENE	
6	G10-04	AS REOD.	EXTERIOR GLAZING GASKET	EPDM	
7	G25-08	AS REOD.	SETTING BLOCKS AT 1/4 POINTS	EPDM	DIAPHETER 80±5 SHORE A
8	1/4-20 X 9/16"	AS REOD.	FRAME ASSEMBLY FASTENERS	ST/ST	SOCKET HEAD MS
9	#10 X 1"	AS REOD.	ADAPTER ASSEMBLY FASTENERS	ST/ST	F.H. SMS
10	A45-01	1/ CORNER	FIXED CORNER KEY	6063-T5	
10A	A45-01	1/ CORNER	ADJUSTABLE CORNER KEY	6063-T5	
11	A45-11	1/ CORNER	FIXED ALIGNMENT KEY	ST. STEEL	
11A	A45-12	1/ CORNER	ADJUSTABLE ALIGNMENT KEY	6063-T5	
12	E-3012	AS REOD.	IMPOST	6063-T6	
13	A30-02	AS REOD.	IMPOST SHEAR BLOCK	6063-T6	
14	G2-01	2	DRAIN VALVE	PLASTIC	
15	-	AS REOD.	TUBE REINF. AT IMPOST	6063-T6	
16	-	-	-	-	

**SEALANT:**  
 ALL JOINTS AND FRAME CONNECTIONS SEALED  
 WITH SILICONE.

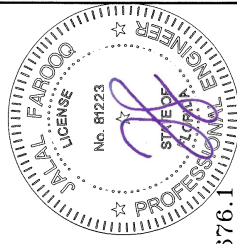


COMP-ANL\21-76F-MG  
 WWW.AFGENG.COM  
**AL-FAROQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 9360 SUNSET DRIVE, SUITE 220  
 MIAMI, FLORIDA 33173  
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MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC  
 8051 N.W. 79th Place  
 Medley, FL 33166  
 Tel. (305) 764-3963  
 www.mrglsswindows.com

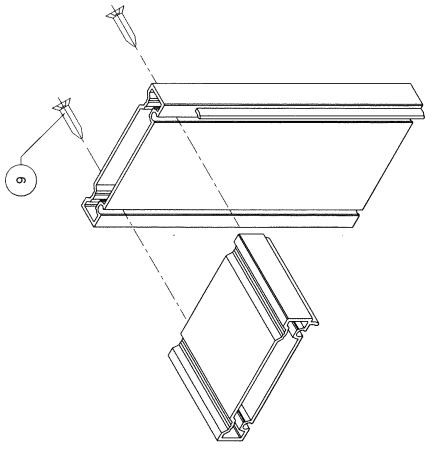
revisions:	no	date	by	description

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 dr. by: TARIQ  
 chk. by:   
 drawing no. 21-76F  
 sheet 8 of 8

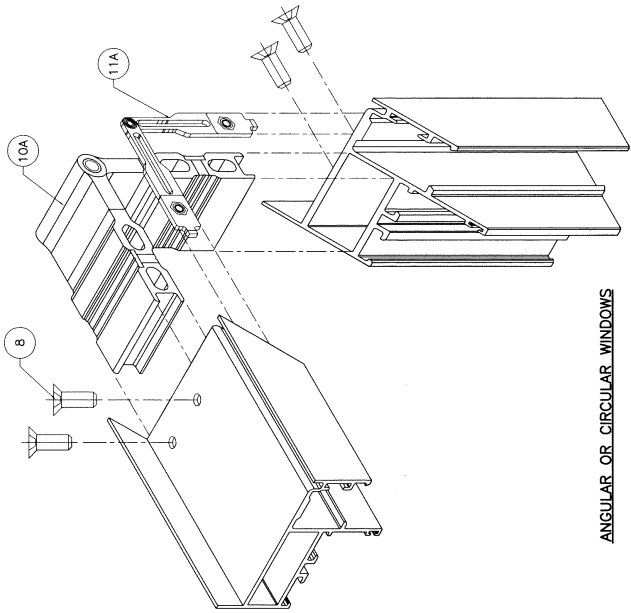


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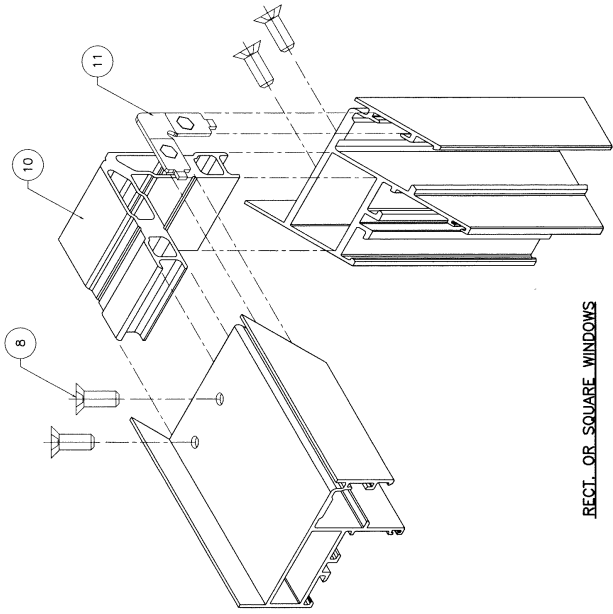
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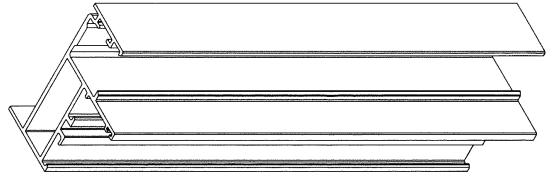
ADAPTER CORNERS



ANGULAR OR CIRCULAR WINDOWS



RECT. OR SQUARE WINDOWS



IMPOST CORNERS

