



Product Approval
USER: Public User

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

OFFICE OF THE
SECRETARY

FL #
Application Type
Code Version
Application Status

FL18411-R4
Revision
2023
Approved

Fixed Windows Mark:
A, B, C, D, E, E1, F, G, H,
J, K, M, N, P, P1, P2, Q

Comments
Archived

☐

Product Manufacturer
Address/Phone/Email

Mr-Glass Doors & Windows Manufacturing, LLC
8051 NW 79th Place
Medley, FL 33166
(305) 470-8284
ulises@mrglasswindows.com

Authorized Signature

Ulises Senaris
ulises@mrglasswindows.com

Technical Representative
Address/Phone/Email

Augusto Arias
8120 NW 84th St
Medley, FL 33166
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aarias@mrglasswindows.com

Quality Assurance Representative
Address/Phone/Email

Category
Subcategory

Panel Walls
Storefronts

Compliance Method

Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer
☐ Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed the Evaluation Report
Florida License
Quality Assurance Entity
Quality Assurance Contract Expiration Date
Validated By

Jalal Farooq
PE-81223
Keystone Certifications, Inc.
04/30/2035
Abel Carrasco, PE
☒ Validation Checklist - Hardcopy Received

Certificate of Independence

[FL18411_R4_COI_SS - Certificate of Independence 2023.pdf](#)

Referenced Standard and Year (of Standard)

Standard	Year
AAMA 501	2015
TAS-201	1994
TAS-202	1994
TAS-203	1994

Equivalence of Product Standards

Certified By

Florida Licensed Professional Engineer or Architect
[FL18411_R4_Equiv_SS -Equiv Ltr 501-15.pdf](#)

Sections from the Code

Product Approval Method

Method 1 Option D

Date Submitted

07/25/2023

Date Validated

07/25/2023

Date Pending FBC Approval

08/01/2023

Date Approved

10/17/2023

Summary of Products

FL #	Model, Number or Name	Description
18411.1	Series MG-6000 Aluminum Window Wall System	Large Missile Impact Resistant Aluminum Window Wall System.
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: +100/-145 Other: See installation drawing W15-71 for span vs. load combinations and installation details.		Installation Instructions FL18411_R4_II_SS - MG-6000 WW (LMI)-DWG W15-71 (2023).pdf Verified By: Jalal Farooq PE # 81223 Created by Independent Third Party: Yes Evaluation Reports FL18411_R4_AE_SS - MG-6000 WW (LMI)-PAE 2023.pdf Created by Independent Third Party: Yes

[Back](#)

[Next](#)

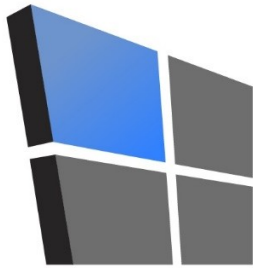
[Contact Us](#) :: 2601 Blair Stone Road, Tallahassee FL 32399 Phone: 850-487-1824

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Product Approval Accepts:





AL-FAROOQ CORPORATION

CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

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

FL 18411

Date: 7/24/2023

Detailed Product Description:

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

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

Model Name: SERIES MG-6000 ALUMINUM WINDOW WALL SYSTEM

Maximum Load: +100 PSF, -145 PSF (Large Missile Impact)

Installation Drawings # W15-71

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 ☒ Yes ☐ 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	Fenestration Testing Laboratory	08/06/2015	FTL-8021	Idalmis Ortega, P.E.
ASTM E331 OR ASTM 547 & TAS 202	Water Penetration	Fenestration Testing Laboratory	08/06/2015	FTL-8021	Idalmis Ortega, P.E.
ASTM E330 & TAS 202	Uniform Static Air Press.	Fenestration Testing Laboratory	08/06/2015	FTL-8021	Idalmis Ortega, P.E.

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) ANSI Z97.1	Large Missile Impact & Cyclic	Fenestration Testing Laboratory	11/12/2015 08/06/2015	FTL-8643 FTL-8021	Idalmis Ortega, P.E. Idalmis Ortega, P.E.

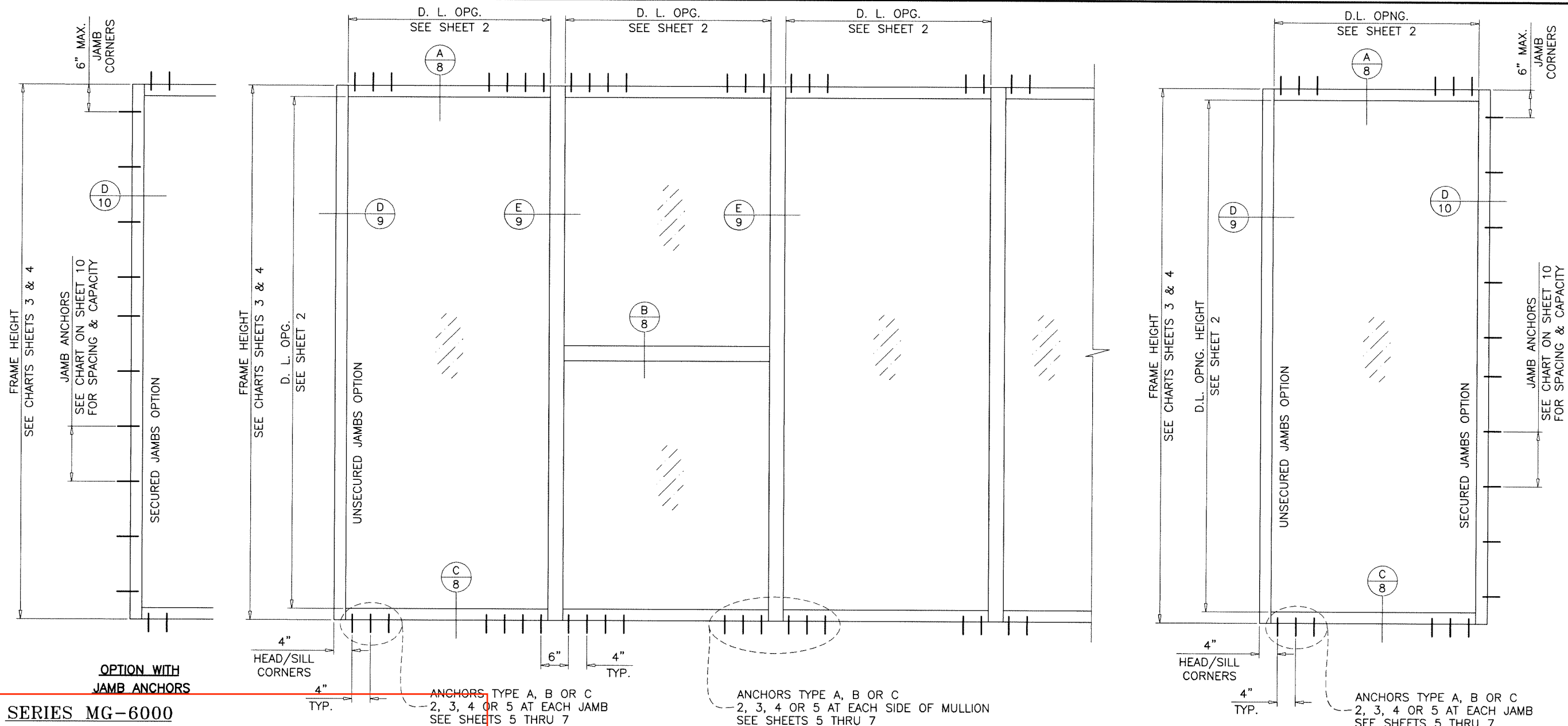
Under the limitations of the attached installation drawings, to the best of my knowledge and ability, the above product conforms to the requirements of the 2023 Florida Building Code.

Evaluation Report Engineer:

Jalal Farooq PE # 81223
Al-Farooq Corporation EB # 3538



Sealed: 7/24/2023



SERIES MG-6000 ALUMINUM WINDOW WALL SYSTEM

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

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

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 2 FOR GLASS DESIGN LOAD CAPACITY.
- STEP 3** CHECK MULLION DESIGN LOAD CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEETS 3 & 4 THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** USING CHARTS ON SHEET 5 THRU 7 SELECT ANCHOR OPTION WITH DESIGN LOAD CAPACITY MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5** FOR SECURED JAMB OPTION CHECK JAMB ANCHOR CAPACITY USING CHART ON SHEET 10.
- STEP 6** THE LOWEST VALUE RESULTING FROM STEPS 2, 3, 4 AND 5 THAT EXCEED THE DESIGN WIND PRESSURES DETERMINED THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM.
- STEP 7** FOR SYSTEMS WITH UNANCHORED JAMBS, USING SHEET 9, DETERMINE THE MIN. & MAX. GAP DIMENSIONS.

SINGLE 'O' PANEL:

FRAME WIDTH = D.L.O. WIDTH + 5.0"
FRAME HEIGHT = D.L.O. HEIGHT + 5.0"

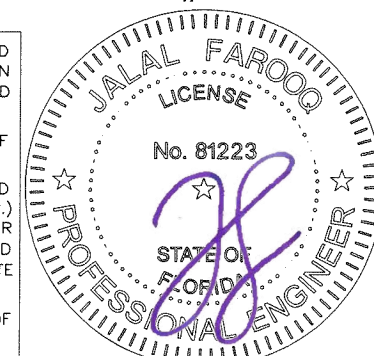
PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.

LARGE MISSILE IMPACT

Sealed: 7/24/2023

FL #18411

- 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.



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

SERIES MG-6000 ALUM WINDOW WALL SYSTEM (L.M.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:	no	date	by	description
	A	12.10.15	LOADS	REVISED
	B	01.26.18		UPDATED TO 2017 FBC
	C	07.23.20		UPDATED TO 2020 FBC
	D	07.21.23		UPDATED TO 2023 FBC

date: 08-27-15
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W15-71

sheet 1 of 12

COMP-ANL\W15-71MG

G, H

Q

A

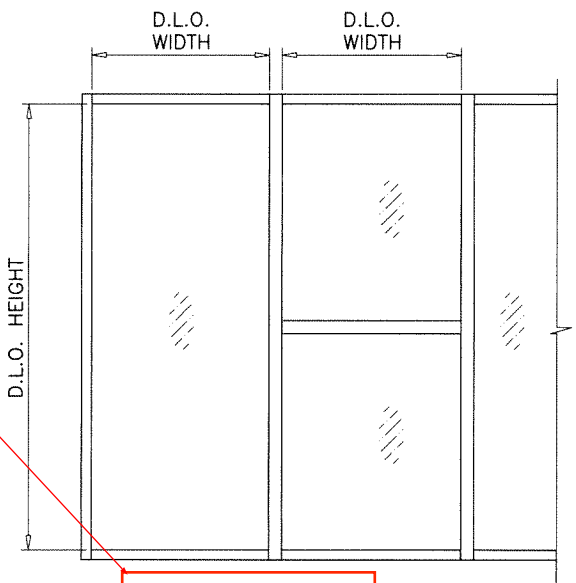
J

B

M

GLASS LOAD CAPACITY - PSF					
NOMINAL DIMS.		GLASS TYPES			
		'G1L' & 'G1LI'		'G2L' & 'G2LI'	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
45"	85"	70.0	70.0	100.0	145.0
48"		70.0	70.0	100.0	145.0
51"		70.0	70.0	100.0	145.0
54"		70.0	70.0	100.0	145.0
57"		70.0	70.0	100.0	145.0
60"		70.0	70.0	100.0	145.0
63"		65.0	65.0	100.0	145.0
66"	91"	65.0	65.0	100.0	145.0
69"		65.0	65.0	100.0	145.0
45"		70.0	70.0	100.0	145.0
48"		70.0	70.0	100.0	145.0
51"		70.0	70.0	100.0	145.0
54"		70.0	70.0	100.0	145.0
57"		65.0	65.0	100.0	145.0
60"		65.0	65.0	100.0	145.0
63"		65.0	65.0	100.0	145.0
66"		65.0	65.0	100.0	143.0
69"		65.0	65.0	100.0	137.0
45"	97"	70.0	70.0	100.0	145.0
48"		70.0	70.0	100.0	145.0
51"		70.0	70.0	100.0	145.0
54"		70.0	70.0	100.0	145.0
57"		65.0	65.0	100.0	145.0
60"		65.0	65.0	100.0	145.0
63"		65.0	65.0	100.0	142.0
66"	103"	-	-	100.0	136.0
69"		-	-	100.0	129.0
45"	109"	70.0	70.0	100.0	145.0
48"		70.0	70.0	100.0	145.0
51"		65.0	65.0	100.0	145.0
54"		65.0	65.0	100.0	145.0
57"		65.0	65.0	100.0	145.0
60"		65.0	65.0	100.0	140.0
63"		-	-	100.0	133.0
45"	109"	70.0	70.0	100.0	145.0
48"		70.0	70.0	100.0	145.0
51"		65.0	65.0	100.0	145.0
54"		65.0	65.0	100.0	145.0
57"		65.0	65.0	100.0	139.0
60"		-	-	100.0	132.0
45"	115"	70.0	70.0	100.0	145.0
48"		65.0	65.0	100.0	145.0
51"		65.0	65.0	100.0	145.0
54"		65.0	65.0	100.0	141.0
57"		-	-	100.0	133.0
45"	121"	65.0	65.0	100.0	115.0
48"		65.0	65.0	100.0	115.0
51"		65.0	65.0	100.0	115.0
54"		-	-	100.0	115.0
45"	127"	65.0	65.0	100.0	115.0
48"		65.0	65.0	100.0	115.0
51"		-	-	100.0	115.0
45"	133"	65.0	65.0	100.0	115.0
48"		65.0	65.0	100.0	115.0
51"		-	-	100.0	115.0
45"	139"	65.0	65.0	100.0	115.0
48"		65.0	65.0	100.0	115.0

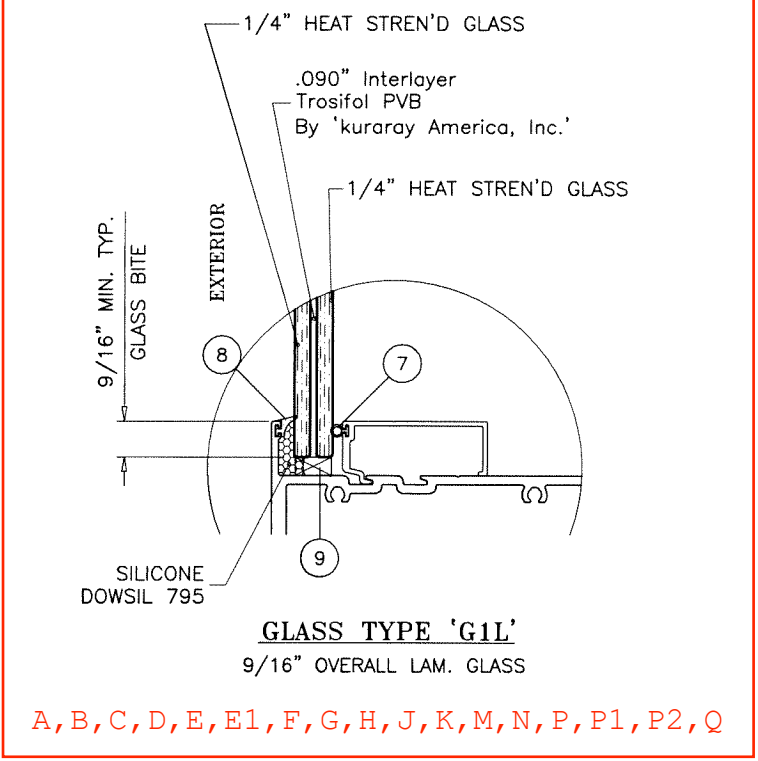
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



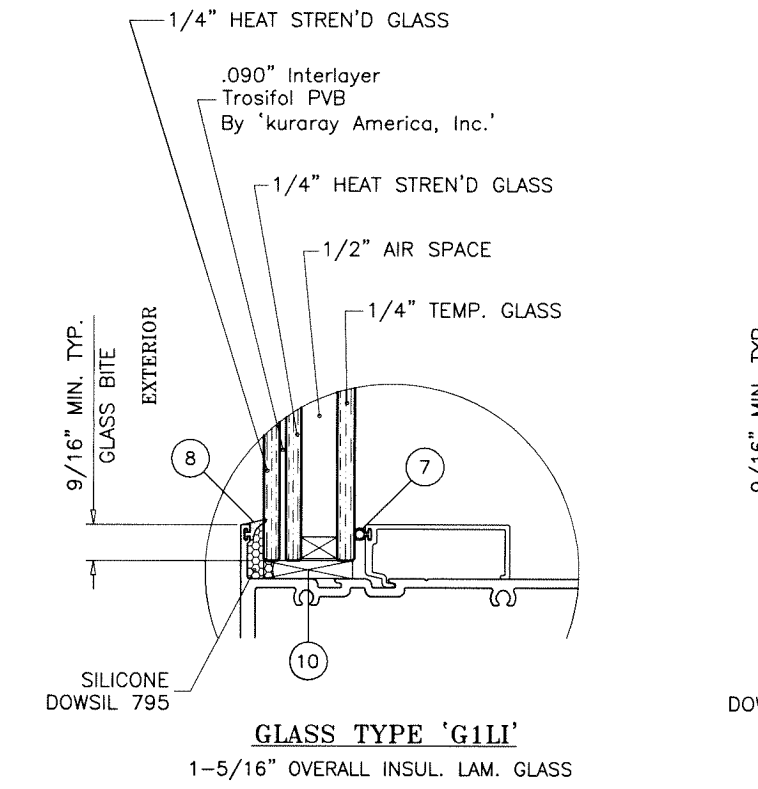
K, N, P, P1, P2

C, D, E, E1, F

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

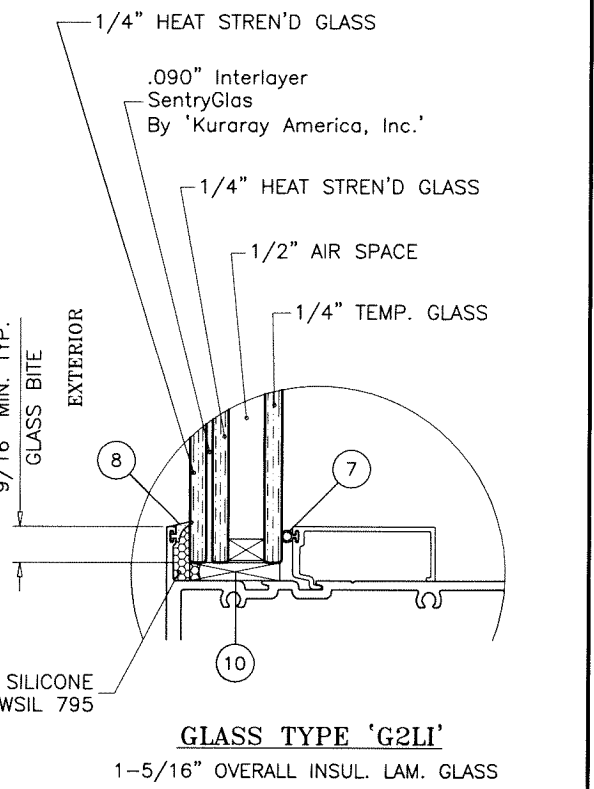
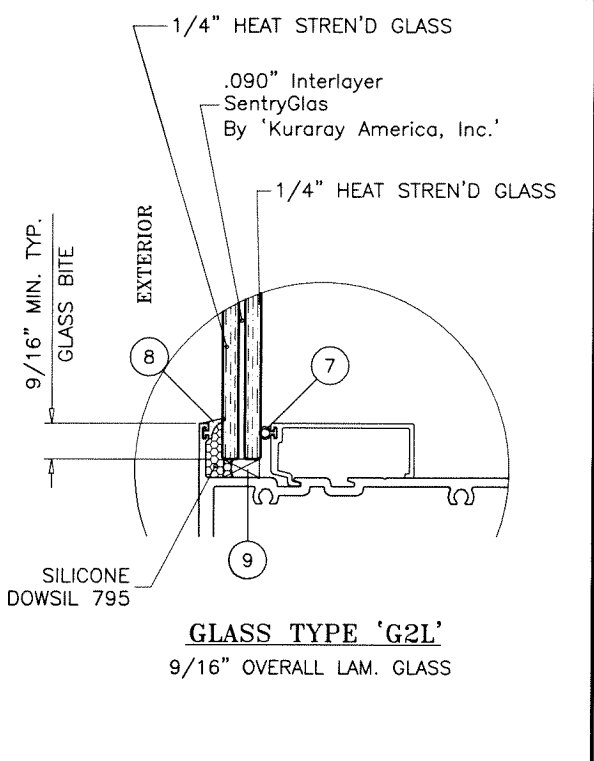


A, B, C, D, E, E1, F, G, H, J, K, M, N, P, P1, P2, Q



1/2" AIR SPACE CONSISTING OF:
SPACER:
ALUMINUM BOX SPACER AROUND
THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:
SILICONE
DOWSIL 791
GE 2000

GLASS



GLAZING OPTIONS

Sealed: 7/24/2023
FL #18411



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revisions:
no date by description

date: 08-27-15
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W15-71
sheet 2 of 12

K, N, P, P1, P2

J, Q

A

D

B

E, E1

C, F

DESIGN LOAD CAPACITY - PSF MULLION WITHOUT INTERMEDIATE HORIZONTALS			
NOMINAL DIMS.		JAMB 'J1' MULLION 'M1'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)
30"	90"	100.0	110.0
36"		100.0	110.0
42"		100.0	110.0
48"		100.0	110.0
54"		100.0	110.0
55"		100.0	110.0
60"		70.0	70.0
30"	96"	100.0	110.0
36"		100.0	110.0
42"		100.0	110.0
48"		100.0	106.5
51"		97.0	97.0
54"		70.0	70.0
60"		70.0	70.0
30"	102"	100.0	110.0
36"		100.0	110.0
42"		100.0	104.0
48"		92.7	92.7
54"		70.0	70.0
57"		70.0	70.0
30"	108"	70.0	70.0
36"		70.0	70.0
42"		70.0	70.0
48"		70.0	70.0
54"	114"	70.0	70.0
30"		70.0	70.0
36"		70.0	70.0
42"		70.0	70.0
48"	120"	70.0	70.0
51"		68.3	68.3
30"		70.0	70.0
36"	126"	70.0	70.0
42"		70.0	70.0
48"		62.8	62.8

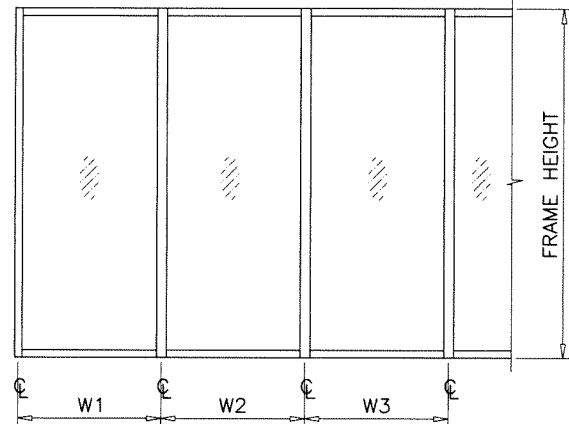
DESIGN LOAD CAPACITY - PSF MULLION WITHOUT INTERMEDIATE HORIZONTALS			
NOMINAL DIMS.		JAMB 'J2' MULLION 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)
48"	120"	65.0	65.0
54"		65.0	65.0
58"		65.0	65.0
30"		65.0	65.0
36"	126"	65.0	65.0
42"		65.0	65.0
48"		65.0	65.0
54"		65.0	65.0
55"		65.0	65.0
30"	132"	65.0	65.0
36"		65.0	65.0
42"		65.0	65.0
48"		65.0	65.0
53"		63.9	63.9
30"	138"	65.0	65.0
36"		65.0	65.0
42"		65.0	65.0
48"		60.7	60.7
50"		58.6	58.6
30"	144"	65.0	65.0
36"		65.0	65.0
42"		60.2	60.2
48"		53.2	53.2

M

DESIGN LOAD CAPACITY - PSF MULLION WITHOUT INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		JAMB 'J2' MULLION 'M3'		JAMB 'J2' MULLION 'M3'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	96"	100.0	145.0	-	-
36"		100.0	145.0	-	-
42"		100.0	145.0	-	-
48"		100.0	145.0	-	-
54"		100.0	145.0	-	-
60"		100.0	145.0	-	-
66"		100.0	115.0	-	-
72"		100.0	115.0	-	-
30"	102"	100.0	145.0	-	-
36"		100.0	145.0	-	-
42"		100.0	145.0	-	-
48"		100.0	145.0	-	-
54"		100.0	145.0	-	-
60"		100.0	115.0	-	-
66"		100.0	115.0	-	-
71"		100.0	115.0	-	-
30"	108"	100.0	145.0	-	-
36"		100.0	145.0	-	-
42"		100.0	145.0	-	-
48"		100.0	144.0	100.0	145.0
54"		100.0	115.0	-	-
60"		100.0	115.0	-	-
66"		100.0	112.5	-	-
67"		100.0	111.3	-	-
30"	114"	100.0	145.0	-	-
36"		100.0	145.0	-	-
42"		100.0	145.0	100.0	145.0
48"		100.0	129.2	100.0	145.0
54"		100.0	115.0	-	-
60"		100.0	107.1	100.0	115.0
63"		100.0	103.1	100.0	115.0
30"	120"	100.0	145.0	-	-
36"		100.0	145.0	-	-
42"		100.0	130.8	100.0	145.0
48"		100.0	115.0	100.0	137.3
54"		100.0	104.6	100.0	115.0
60"		95.7	95.7	100.0	113.4
30"		126"	100.0	115.0	-
36"	100.0		115.0	-	-
42"	100.0		115.0	-	-
48"	100.0		104.6	100.0	115.0
54"	94.2		94.2	100.0	108.6
55"	92.7		92.7	100.0	107.0
30"	132"		100.0	115.0	-
36"		100.0	115.0	-	-
42"		100.0	107.3	100.0	115.0
48"		94.9	94.9	-	-
53"		86.8	86.8	-	-
				*	

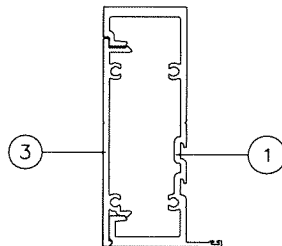
DESIGN LOAD CAPACITY – PSF MULLION WITHOUT INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		JAMB 'J2' MULLION 'M3'		JAMB 'J2' MULLION 'M3'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
30"	138"	100.0	115.0	–	–
36"		100.0	113.3	100.0	115.0
42"		97.9	97.9	100.0	102.4
48"		86.5	86.5	90.6	90.6
50"		83.3	83.3	87.4	87.4
30"	144"	100.0	115.0	–	–
36"		100.0	103.5	–	–
42"		89.5	89.5	–	–
48"		79.2	79.2	–	–
*					

*
LOADS SHOWN ARE WITH
COLD ROLLED STEEL STIFFENER
Fu MIN. = 70 KSI



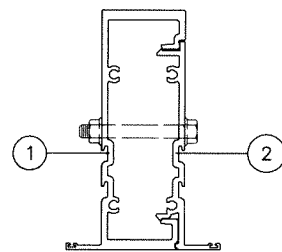
WIDTH (W) = W1
AT FRAME JAMB

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



JAMB 'J1'

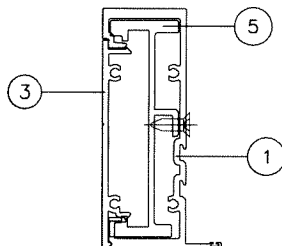
Ix	IN ⁴	Sx	IN ³
7.602		3.005	



MULLION 'M1'

Ix	IN ⁴	Sx	IN ³
7.878		3.092	

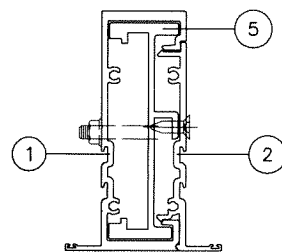
A, B, D, E, E1, F, J
K, N, P, P1, P2, Q



JAMB 'J2'

Ix	IN ⁴	Sx	IN ³
11.510		4.549	

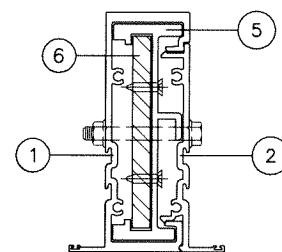
C, G, M



MULLION 'M2'

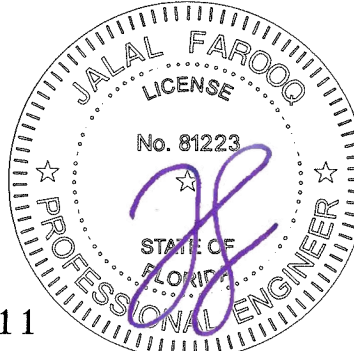
Ix	IN ⁴	Sx	IN ³
11.787		4.626	

C, M



MULLION 'M3'

	Ix	IN ⁴	Sx	IN ³
ALUMINUM	11.787		4.626	
STEEL	2.000		1.000	
TOTAL	17.587			
Ix ALUM + Ix STL X 2.9				



MULLIONS

Sealed: 7/24/2023

FL #18411

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

SEE SHEET 9 FOR UNANCHORED JAMB
REINFORCING LIMITS

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
(C.A.N. 3538)
COMP-ANL\W15-71MG

SERIES MC-6000 ALUM WINDOW WALL SYSTEM (L.M.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:	no	date	by	description

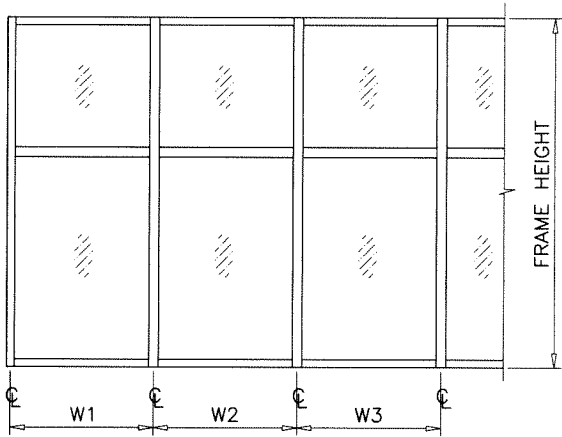
date:	08-27-15
scale:	-
dr. by:	TARIQ
chk. by:	

drawing no.
W15-71
sheet 3 of 12

DESIGN LOAD CAPACITY - PSF MULLION WITH INTERMEDIATE HORIZONTALS			
NOMINAL DIMS.		JAMB 'J1' MULLION 'M1'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)
30"	90"	100.0	110.0
36"		100.0	110.0
42"		100.0	110.0
48"		100.0	110.0
54"		99.7	99.7
55"		97.9	97.9
60"		70.0	70.0
30"	96"	100.0	110.0
36"		100.0	110.0
42"		100.0	110.0
48"		97.9	97.9
51"		92.1	92.1
54"		70.0	70.0
60"		70.0	70.0
30"	102"	100.0	110.0
36"		100.0	110.0
42"		98.3	98.3
48"		86.0	86.0
54"		70.0	70.0
57"		70.0	70.0
30"	108"	70.0	70.0
36"		70.0	70.0
42"		70.0	70.0
48"		70.0	70.0
54"		67.7	67.7
60"		70.0	70.0
30"	114"	70.0	70.0
36"		70.0	70.0
42"		70.0	70.0
48"		67.9	67.9
51"		63.9	63.9
60"		70.0	70.0
30"	120"	70.0	70.0
36"		70.0	70.0
42"		67.4	67.4
48"		58.9	58.9

DESIGN LOAD CAPACITY - PSF MULLION WITH INTERMEDIATE HORIZONTALS			
NOMINAL DIMS.		JAMB 'J2' MULLION 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)
48"	120"	65.0	65.0
54"		65.0	65.0
58"		65.0	65.0
60"		65.0	65.0
30"	126"	65.0	65.0
36"		65.0	65.0
42"		65.0	65.0
48"		65.0	65.0
54"		65.0	65.0
55"		65.0	65.0
30"	132"	65.0	65.0
36"		65.0	65.0
42"		65.0	65.0
48"		65.0	65.0
53"		60.0	60.0
60"		60.0	60.0
30"	138"	65.0	65.0
36"		65.0	65.0
42"		65.0	65.0
48"		58.0	58.0
50"		55.7	55.7
60"		55.7	55.7
30"	144"	65.0	65.0
36"		65.0	65.0
42"		58.3	58.3
48"		51.0	51.0

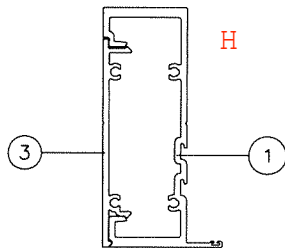
DESIGN LOAD CAPACITY – PSF MULLION WITH INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		JAMB 'J2' MULLION 'M3'		JAMB 'J2' MULLION 'M3'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
30"	96"	100.0	145.0	–	–
36"		100.0	145.0	–	–
42"		100.0	145.0	–	–
48"		100.0	145.0	–	–
54"		100.0	145.0	–	–
60"		100.0	137.4	100.0	145.0
30"	102"	100.0	145.0	–	–
36"		100.0	145.0	–	–
42"		100.0	145.0	–	–
48"		100.0	145.0	–	–
54"		100.0	135.2	100.0	145.0
60"		100.0	115.0	–	–
30"	108"	100.0	145.0	–	–
36"		100.0	145.0	–	–
42"		100.0	145.0	–	–
48"		100.0	135.7	100.0	145.0
54"		100.0	115.0	–	–
60"		100.0	108.5	–	–
30"	114"	100.0	145.0	–	–
36"		100.0	145.0	–	–
42"		100.0	139.2	100.0	145.0
48"		100.0	121.8	100.0	145.0
54"		100.0	108.2	100.0	115.0
60"		97.4	97.4	100.0	115.0
30"	120"	100.0	145.0	–	–
36"		100.0	145.0	–	–
42"		100.0	125.6	100.0	145.0
48"		100.0	109.9	100.0	129.8
54"		97.7	97.7	100.0	115.0
60"		87.9	87.9	100.0	103.8
30"	126"	100.0	115.0	–	–
36"		100.0	115.0	–	–
42"		100.0	113.9	100.0	115.0
48"		99.7	99.7	100.0	110.0
54"		88.6	88.6	100.0	100.7
55"		87.0	87.0	98.9	98.9
30"	132"	100.0	115.0	–	–
36"		100.0	115.0	–	–
42"		100.0	103.8	100.0	112.6
48"		90.8	90.8	98.5	98.5
53"		82.3	82.3	89.2	89.2
30"	138"	100.0	115.0	–	–
36"		100.0	110.8	100.0	115.0
42"		95.0	95.0	98.6	98.6
48"		83.1	83.1	86.2	86.2
50"		79.8	79.8	82.8	82.8
30"	144"	100.0	115.0	–	–
36"		100.0	101.2	–	–
42"		86.7	86.7	–	–
48"		75.9	75.9	–	–
				*	



WIDTH (W) = W1
AT FRAME JAMB

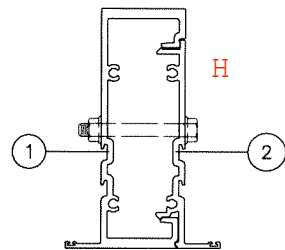
WIDTH (W) = $\frac{W2 + W3}{2}$
AT FRAME MULLION

SEE SHEET 9 FOR UNANCHORED JAMB
REINFORCING LIMITS



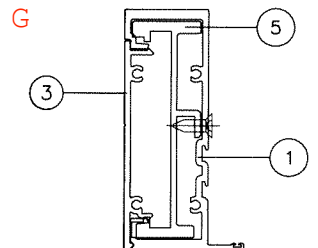
JAMB 'J1'

Ix	IN ⁴	Sx	IN ³
7.602		3.005	



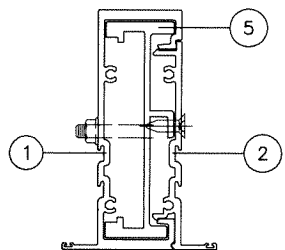
MULLION 'M1'

Ix	IN ⁴	Sx	IN ³
7.878		3.092	



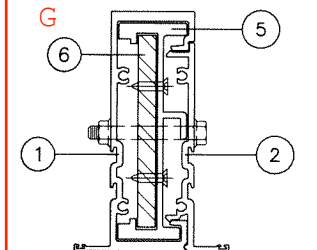
JAMB 'J2'

Ix	IN ⁴	Sx	IN ³
11.510		4.549	



MULLION 'M2'

Ix	IN ⁴	Sx	IN ³
11.787		4.626	



MULLION 'M3'

	Ix	IN ⁴	Sx	IN ³
ALUMINUM	11.787	4.626		
STEEL	2.000	1.000		
TOTAL	17.587			
Ix ALUM + Ix STL X 2.9	17.587			

*
LOADS SHOWN ARE WITH
COLD ROLLED STEEL STIFFENER
Fu MIN. = 70 KSI

MULLIONS

Sealed: 7/24/2023

FL #18411



af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
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SERIES MG-6000 ALUM WINDOW WALL SYSTEM (L.M.I.)
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8051 N.W. 79th Place
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Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:	no	date	by	description

date: 08-27-15
scale: -
dr. by: TARIQ
chk. by:

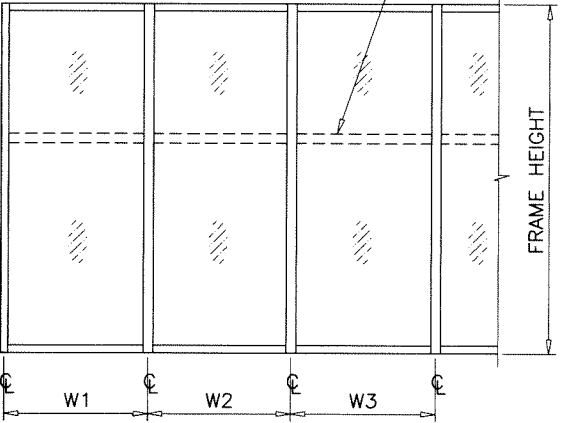
drawing no.
W15-71
sheet 4 of 12

ANCHOR LOAD CAPACITY – PSF EXT.(+) & INT.(–)													
NOMINAL DIMS.		ANCHORS TYPE 'A'											
		1/4" MAX. SHIM				3/8" MAX. SHIM				1/2" MAX. SHIM			
WIDTH (W)	FRAME HEIGHT	A2	A3	A4	A5	A2	A3	A4	A5	A2	A3	A4	A5
30"	90"	145.0	145.0	145.0	145.0	111.4	145.0	145.0	145.0	87.9	131.8	145.0	145.0
36"		122.0	145.0	145.0	145.0	92.8	139.2	145.0	145.0	73.2	109.9	145.0	145.0
42"		104.5	145.0	145.0	145.0	79.5	119.3	145.0	145.0	62.8	94.2	125.6	145.0
48"		91.5	137.2	145.0	145.0	69.6	104.4	139.2	145.0	54.9	82.4	109.9	137.3
54"		81.3	122.0	145.0	145.0	61.9	92.8	123.7	145.0	48.8	73.2	97.7	122.1
60"		73.2	109.8	145.0	145.0	55.7	83.5	111.4	139.2	43.9	65.9	87.9	109.9
66"		66.5	99.8	133.0	145.0	50.6	75.9	101.2	126.5	40.0	59.9	79.9	99.9
72"		61.0	91.5	122.0	145.0	46.4	69.6	92.8	116.0	36.6	54.9	73.2	91.6
30"	96"	137.2	145.0	145.0	145.0	104.4	145.0	145.0	145.0	82.4	123.6	145.0	145.0
36"		114.3	145.0	145.0	145.0	87.0	130.5	145.0	145.0	68.7	103.0	137.3	145.0
42"		98.0	145.0	145.0	145.0	74.6	111.9	145.0	145.0	58.9	88.3	117.7	145.0
48"		85.8	128.6	145.0	145.0	65.3	97.9	130.5	145.0	51.5	77.3	103.0	128.8
54"		76.2	114.3	145.0	145.0	58.0	87.0	116.0	145.0	45.8	68.7	91.6	114.4
60"		68.6	102.9	137.2	145.0	52.2	78.3	104.4	130.5	41.2	61.8	82.4	103.0
66"		62.4	93.5	124.7	145.0	47.5	71.2	94.9	118.6	37.5	56.2	74.9	93.6
72"		57.2	85.8	114.3	142.9	43.5	65.3	87.0	108.8	34.3	51.5	68.7	85.8
30"	102"	129.1	145.0	145.0	145.0	98.3	145.0	145.0	145.0	77.6	116.3	145.0	145.0
36"		107.6	145.0	145.0	145.0	81.9	122.8	145.0	145.0	64.6	96.9	129.3	145.0
42"		92.2	138.4	145.0	145.0	70.2	105.3	140.4	145.0	55.4	83.1	110.8	138.5
48"		80.7	121.1	145.0	145.0	61.4	92.1	122.8	145.0	48.5	72.7	96.9	121.2
54"		71.7	107.6	143.5	145.0	54.6	81.9	109.2	136.5	43.1	64.6	86.2	107.7
60"		64.6	96.8	129.1	145.0	49.1	73.7	98.3	122.8	38.8	58.2	77.6	96.9
66"		58.7	88.0	117.4	145.0	44.7	67.0	89.3	111.7	35.3	52.9	70.5	88.1
72"		53.4	80.0	109.4	145.0	40.4	60.0	82.4	108.8	31.0	45.9	63.6	81.1
30"	108"	122.0	145.0	145.0	145.0	92.8	139.2	145.0	145.0	73.2	109.9	145.0	145.0
36"		101.6	145.0	145.0	145.0	77.3	116.0	145.0	145.0	61.0	91.6	122.1	145.0
42"		87.1	130.7	145.0	145.0	66.3	99.4	132.6	145.0	52.3	78.5	104.6	130.8
48"		76.2	114.3	145.0	145.0	58.0	87.0	116.0	145.0	45.8	68.7	91.6	114.4
54"		67.8	101.6	135.5	145.0	51.6	77.3	103.1	128.9	40.7	61.0	81.4	101.7
60"		61.0	91.5	122.0	145.0	46.4	69.6	92.8	116.0	36.6	54.9	73.2	91.6
66"		55.4	83.2	110.9	138.6	42.2	63.3	84.4	105.5	33.3	49.9	66.6	83.2
72"		50.1	75.2	102.9	145.0	37.9	55.4	77.1	102.6	29.0	42.0	59.7	78.3
30"	114"	115.5	145.0	145.0	145.0	87.9	131.9	145.0	145.0	69.4	104.1	138.8	145.0
36"		96.3	144.4	145.0	145.0	73.3	109.9	145.0	145.0	57.8	86.7	115.6	144.6
42"		82.5	123.8	145.0	145.0	62.8	94.2	125.6	145.0	49.6	74.3	99.1	123.9
48"		72.2	108.3	144.4	145.0	54.9	82.4	109.9	137.4	43.4	65.1	86.7	108.4
54"		64.2	96.3	128.4	145.0	48.8	73.3	97.7	122.1	38.5	57.8	77.1	96.4
60"		57.8	86.7	115.5	144.4	44.0	65.9	87.9	109.9	34.7	52.0	69.4	86.7
66"		52.5	80.0	108.5	145.0	39.7	58.0	80.1	105.0	29.4	44.1	61.5	78.3
72"		47.2	72.2	100.5	145.0	35.4	50.1	72.2	100.5	25.1	36.2	53.2	70.4
30"	120"	109.8	145.0	145.0	145.0	83.5	125.3	145.0	145.0	65.9	98.9	131.8	145.0
36"		91.5	137.2	145.0	145.0	69.6	104.4	139.2	145.0	54.9	82.4	109.9	137.3
42"		78.4	117.6	145.0	145.0	59.7	89.5	119.3	145.0	47.1	70.6	94.2	117.7
48"		68.6	102.9	137.2	145.0	52.2	78.3	104.4	130.5	41.2	61.8	82.4	103.0
54"		61.0	91.5	122.0	145.0	46.4	69.6	92.8	116.0	36.6	54.9	73.2	91.6
60"		54.9	82.3	109.8	137.2	41.8	62.6	83.5	104.4	33.0	49.4	65.9	82.4
66"		49.6	74.3	101.7	145.0	37.7	54.6	75.7	102.6	28.7	41.6	59.7	78.3
72"		44.3	66.6	93.6	145.0	33.4	46.9	67.0	98.1	24.4	33.9	51.8	70.4
30"	126"	104.5	115.0	115.0	115.0	79.5	115.0	115.0	115.0	62.8	94.2	115.0	115.0
36"		87.1	115.0	115.0	115.0	66.3	99.4	115.0	115.0	52.3	78.5	104.6	115.0
42"		74.7	112.0	115.0	115.0	56.8	85.2	113.6	115.0	44.8	67.3	89.7	112.1
48"		65.3	98.0	115.0	115.0	49.7	74.6	99.4	115.0	39.2	58.9	78.5	98.1
54"		58.1	87.1	115.0	115.0	44.2	66.3	88.4	110.5	34.9	52.3	69.8	87.2
60"		51.8	78.3	104.4	115.0	38.5	57.8	81.4	107.0	29.0	44.1	61.5	78.3
66"		46.5	70.4	94.2	115.0	33.2	49.6	72.2	100.5	24.7	36.2	53.2	70.4
72"		41.2	61.8	82.4	103.0	28.9	41.2	58.0	80.1	20.4	28.7	41.6	59.7
30"	132"	99.8	115.0	115.0	115.0	75.9	113.9	115.0	115.0	59.9	89.9	115.0	115.0
36"		83.2	115.0	115.0	115.0	63.3	94.9	115.0	115.0	49.9	74.9	99.9	115.0
42"		71.3	106.9	115.0	115.0	54.2	81.4	108.5	115.0	42.8	64.2	85.6	107.0
48"		62.4	93.5	115.0	115.0	47.5	71.2	94.9	115.0	37.5	56.2	74.9	93.6
54"		55.4	83.2	110.9	115.0	42.2	63.3	84.4	105.5	33.3	49.9	66.6	83.2
60"		49.1	73.7	98.3	122.8	38.8	58.2	77.6	96.9	31.0	45.9	63.6	81.1
66"		43.8	64.6	86.2	107.7	33.5	46.9	61.5	78.3	26.2	36.2	53.2	70.4
72"		38.5	57.8	77.1	96.4	28.2	38.5	51.8	70.4	21.9	31.0	45.9	63.6

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

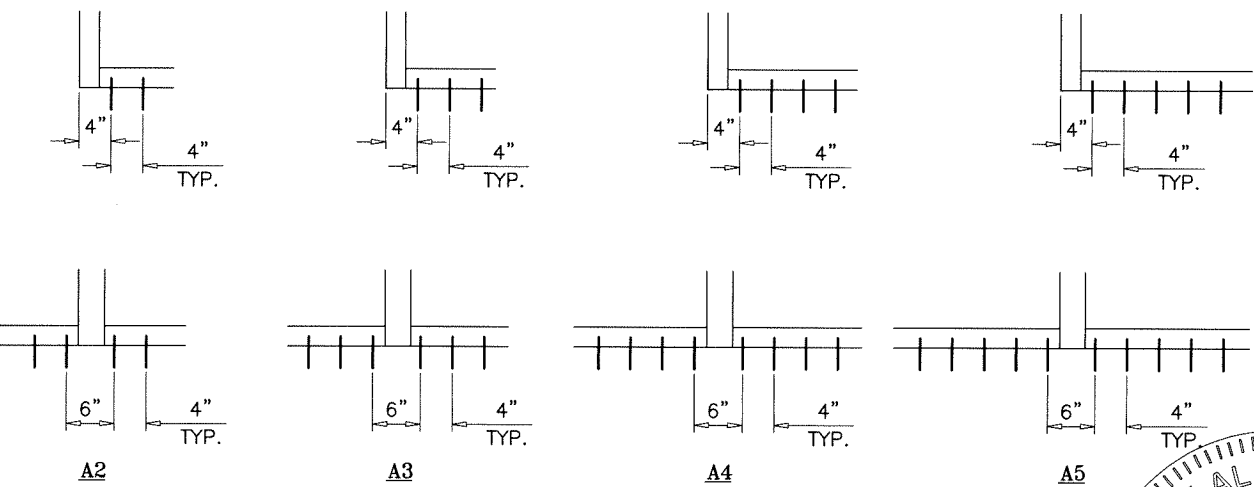
ANCHOR LOAD CAPACITY – PSF EXT.(+) & INT.(–)													
NOMINAL DIMS.		ANCHORS TYPE 'A'											
		1/4" MAX. SHIM				3/8" MAX. SHIM				1/2" MAX. SHIM			
WIDTH (W)	FRAME HEIGHT	A2	A3	A4	A5	A2	A3	A4	A5	A2	A3	A4	A5
30"	138"	95.4	115.0	115.0	115.0	72.6	108.9	115.0	115.0	57.3	86.0	114.6	115.0
36"		79.5	115.0	115.0	115.0	60.5	90.8	115.0	115.0	47.8	71.7	95.5	115.0
42"		68.2	102.3	115.0	115.0	51.9	77.8	103.8	115.0	40.9	61.4	81.9	102.4
48"		59.7	89.5	115.0	115.0	45.4	68.1	90.8	113.5	35.8	53.7	71.7	89.6
30"	144"	91.5	115.0	115.0	115.0	69.6	104.4	115.0	115.0	54.9	82.4	109.9	115.0
36"		76.2	114.3	115.0	115.0	58.0	87.0	115.0	115.0	45.8	68.7	91.6	114.4
42"		65.3	98.0	115.0	115.0	49.7	74.6	99.4	115.0	39.2	58.9	78.5	98.1
48"		57.2	85.8	114.3	115.0	43.5	65.3	87.0	108.8	34.3	51.5	68.7	85.8

INTERMEDIATE
HORIZONTALS
OPTIONAL
ALL FIXED LITES



WIDTH (W) = W1
AT FRAME JAMB

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



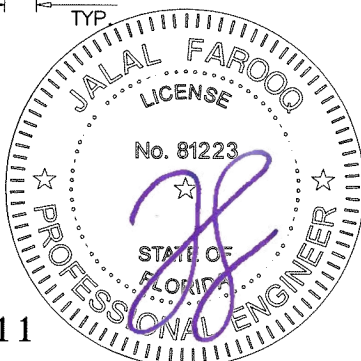
ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION

A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
A5 = (5) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION

ANCHORS

Sealed: 7/24/2023

FL #18411



af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP - ANL \ W15-71MG

SERIES MG-6000 ALUM WINDOW WALL SYSTEM (L.M.I.)
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8051 N.W. 79th Place
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revisions:	no	date	by	description

date: 08-27-15
scale: -
dr. by: TARIQ
chk. by:

drawing no.
W15-71
sheet 5 of 12

K, N, P,
P1, P2

G, H

J

Q

A

B

E, E1

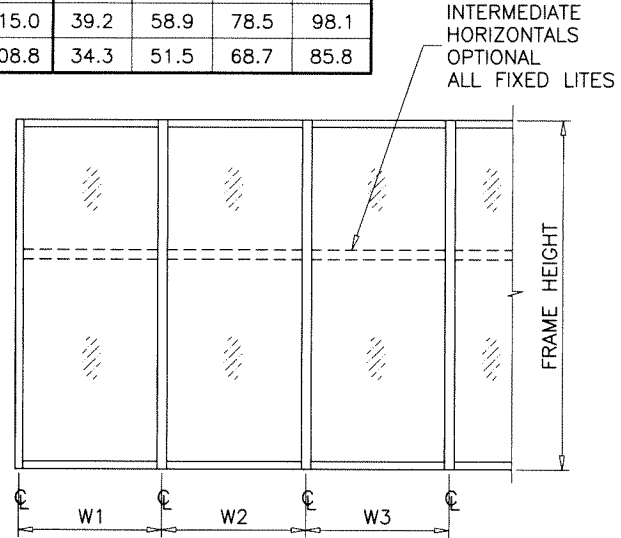
C, D, F

M

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)													
NOMINAL DIMS.		ANCHORS TYPE 'B'											
		1/4" MAX. SHIM				3/8" MAX. SHIM				1/2" MAX. SHIM			
WIDTH (W)	FRAME HEIGHT	B2	B3	B4	B5	B2	B3	B4	B5	B2	B3	B4	B5
30"	90"	145.0	145.0	145.0	145.0	111.4	145.0	145.0	145.0	87.9	131.8	145.0	145.0
36"		145.0	145.0	145.0	145.0	92.8	139.2	145.0	145.0	73.2	109.9	145.0	145.0
42"		134.7	145.0	145.0	145.0	79.5	119.3	145.0	145.0	62.8	94.2	125.6	145.0
48"		117.9	145.0	145.0	145.0	69.6	104.4	139.2	145.0	54.9	82.4	109.9	137.3
54"		104.8	145.0	145.0	145.0	61.9	92.8	123.7	145.0	48.8	73.2	97.7	122.1
60"		94.3	141.4	145.0	145.0	55.7	83.5	111.4	139.2	43.9	65.9	87.9	109.9
66"	96"	85.7	128.6	145.0	145.0	50.6	75.9	101.2	126.5	40.0	59.9	79.9	99.9
72"		78.6	117.9	145.0	145.0	46.4	69.6	92.8	116.0	36.6	54.9	73.2	91.6
30"		145.0	145.0	145.0	145.0	104.4	145.0	145.0	145.0	82.4	123.6	145.0	145.0
36"		145.0	145.0	145.0	145.0	87.0	130.5	145.0	145.0	68.7	103.0	137.3	145.0
42"		126.3	145.0	145.0	145.0	74.6	111.9	145.0	145.0	58.9	88.3	117.7	145.0
48"		110.5	145.0	145.0	145.0	65.3	97.9	130.5	145.0	51.5	77.3	103.0	128.8
54"		98.2	145.0	145.0	145.0	58.0	87.0	116.0	145.0	45.8	68.7	91.6	114.4
60"		88.4	132.6	145.0	145.0	52.2	78.3	104.4	130.5	41.2	61.8	82.4	103.0
66"		80.4	120.5	145.0	145.0	47.5	71.2	94.9	118.6	37.5	56.2	74.9	93.6
72"		73.7	110.5	145.0	145.0	43.5	65.3	87.0	108.8	34.3	51.5	68.7	85.8
30"	102"	145.0	145.0	145.0	145.0	98.3	145.0	145.0	145.0	77.6	116.3	145.0	145.0
36"		138.7	145.0	145.0	145.0	81.9	122.8	145.0	145.0	64.6	96.9	129.3	145.0
42"		118.9	145.0	145.0	145.0	70.2	105.3	140.4	145.0	55.4	83.1	110.8	138.5
48"		104.0	145.0	145.0	145.0	61.4	92.1	122.8	145.0	48.5	72.7	96.9	121.2
54"		92.4	138.7	145.0	145.0	54.6	81.9	109.2	136.5	43.1	64.6	86.2	107.7
60"		83.2	124.8	145.0	145.0	49.1	73.7	98.3	122.8	38.8	58.2	77.6	96.9
66"		75.6	113.5	145.0	145.0	44.7	67.0	89.3	111.7	35.3	52.9	70.5	88.1
30"	108"	145.0	145.0	145.0	145.0	92.8	139.2	145.0	145.0	73.2	109.9	145.0	145.0
36"		131.0	145.0	145.0	145.0	77.3	116.0	145.0	145.0	61.0	91.6	122.1	145.0
42"		112.3	145.0	145.0	145.0	66.3	99.4	132.6	145.0	52.3	78.5	104.6	130.8
48"		98.2	145.0	145.0	145.0	58.0	87.0	116.0	145.0	45.8	68.7	91.6	114.4
54"		87.3	131.0	145.0	145.0	51.6	77.3	103.1	128.9	40.7	61.0	81.4	101.7
60"		78.6	117.9	145.0	145.0	46.4	69.6	92.8	116.0	36.6	54.9	73.2	91.6
66"		71.4	107.2	142.9	145.0	42.2	63.3	84.4	105.5	33.3	49.9	66.6	83.2
30"	114"	145.0	145.0	145.0	145.0	87.9	131.9	145.0	145.0	69.4	104.1	138.8	145.0
36"		124.1	145.0	145.0	145.0	73.3	109.9	145.0	145.0	57.8	86.7	115.6	144.6
42"		106.3	145.0	145.0	145.0	62.8	94.2	125.6	145.0	49.6	74.3	99.1	123.9
48"		93.1	139.6	145.0	145.0	54.9	82.4	109.9	137.4	43.4	65.1	86.7	108.4
54"		82.7	124.1	145.0	145.0	48.8	73.3	97.7	122.1	38.5	57.8	77.1	96.4
60"		74.4	111.7	145.0	145.0	44.0	65.9	87.9	109.9	34.7	52.0	69.4	86.7
30"	120"	141.4	145.0	145.0	145.0	83.5	125.3	145.0	145.0	65.9	98.9	131.8	145.0
36"		117.9	145.0	145.0	145.0	69.6	104.4	139.2	145.0	54.9	82.4	109.9	137.3
42"		101.0	145.0	145.0	145.0	59.7	89.5	119.3	145.0	47.1	70.6	94.2	117.7
48"		88.4	132.6	145.0	145.0	52.2	78.3	104.4	130.5	41.2	61.8	82.4	103.0
54"		78.6	117.9	145.0	145.0	46.4	69.6	92.8	116.0	36.6	54.9	73.2	91.6
60"		70.7	106.1	141.4	145.0	41.8	62.6	83.5	104.4	33.0	49.4	65.9	82.4
30"	126"	115.0	115.0	115.0	115.0	79.5	115.0	115.0	115.0	62.8	94.2	115.0	115.0
36"		112.3	115.0	115.0	115.0	66.3	99.4	115.0	115.0	52.3	78.5	104.6	115.0
42"		96.2	115.0	115.0	115.0	56.8	85.2	113.6	115.0	44.8	67.3	89.7	112.1
48"		84.2	115.0	115.0	115.0	49.7	74.6	99.4	115.0	39.2	58.9	78.5	98.1
54"		74.8	112.3	115.0	115.0	44.2	66.3	88.4	110.5	34.9	52.3	69.8	87.2
60"		115.0	115.0	115.0	115.0	75.9	113.9	115.0	115.0	59.9	89.9	115.0	115.0
36"	132"	107.2	115.0	115.0	115.0	63.3	94.9	115.0	115.0	49.9	74.9	99.9	115.0
42"		91.8	115.0	115.0	115.0	54.2	81.4	108.5	115.0	42.8	64.2	85.6	107.0
48"		80.4	115.0	115.0	115.0	47.5	71.2	94.9	115.0	37.5	56.2	74.9	93.6
54"		71.4	107.2	142.9	115.0	42.2	63.3	84.4	105.5	33.3	49.9	66.6	83.2

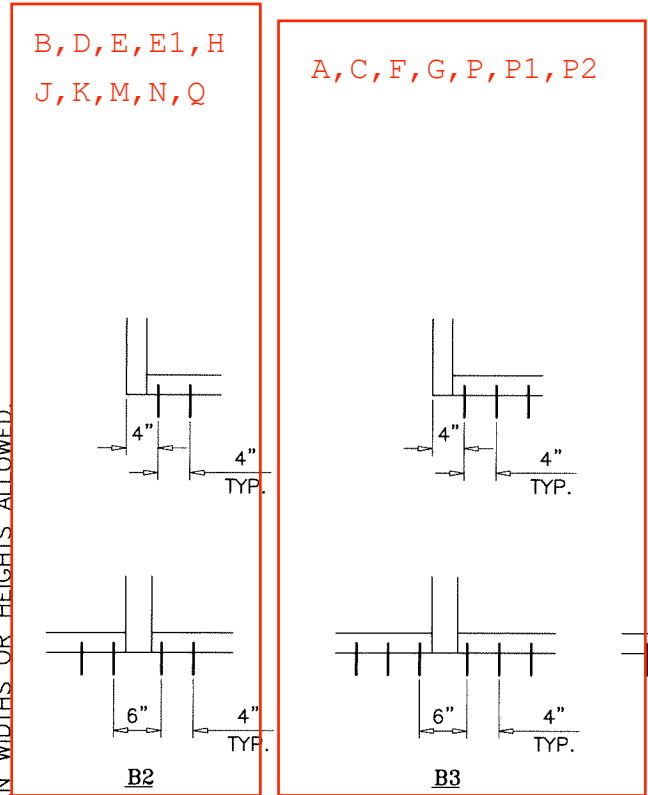
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)													
NOMINAL DIMS.		ANCHORS TYPE 'B'											
		1/4" MAX. SHIM				3/8" MAX. SHIM				1/2" MAX. SHIM			
WIDTH (W)	FRAME HEIGHT	B2	B3	B4	B5	B2	B3	B4	B5	B2	B3	B4	B5
30"	138"	115.0	115.0	115.0	115.0	72.6	108.9	115.0	115.0	57.3	86.0	114.6	115.0
36"		102.5	115.0	115.0	115.0	60.5	90.8	115.0	115.0	47.8	71.7	95.5	115.0
42"		87.9	115.0	115.0	115.0	51.9	77.8	103.8	115.0	40.9	61.4	81.9	102.4
48"		76.9	115.0	115.0	115.0	45.4	68.1	90.8	113.5	35.8	53.7	71.7	89.6
30"	144"	115.0	115.0	115.0	115.0	69.6	104.4	115.0	115.0	54.9	82.4	109.9	115.0
36"		98.2	115.0	115.0	115.0	58.0	87.0	115.0	115.0	45.8	68.7	91.6	114.4
42"		84.2	115.0	115.0	115.0	49.7	74.6	99.4	115.0	39.2	58.9	78.5	98.1
48"		73.7	110.5	115.0	115.0	43.5	65.3	87.0	108.8	34.3	51.5	68.7	85.8



WIDTH (W) = W1
AT FRAME JAMB

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



ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION

B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION

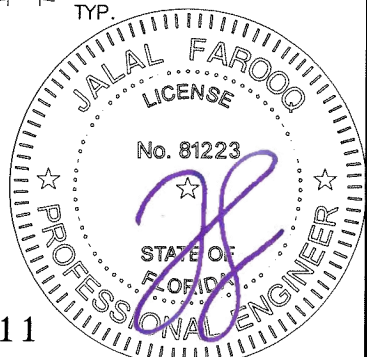
B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION

B4 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION

B5 = (5) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION

ANCHORS

Sealed: 7/24/2023
FL #18411



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\W15-71MG

SERIES MG-6000 ALUM WINDOW WALL SYSTEM (L.M.I.)

MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

Revisions:

no	date	by	description

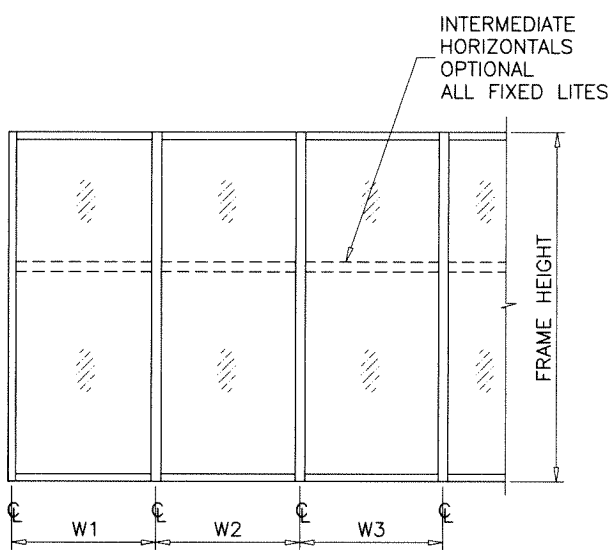
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dr. by: TARIQ
chk. by:

drawing no.
W15-71
sheet 6 of 12

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)				
NOMINAL DIMS.		ANCHORS TYPE 'C'		
WIDTH (W)	FRAME HEIGHT	1/4" MAX. SHIM		
		C2	C3	C4
30"	90"	145.0	145.0	145.0
36"		145.0	145.0	145.0
42"		136.5	145.0	145.0
48"		119.5	145.0	145.0
54"		106.2	145.0	145.0
60"		95.6	143.4	145.0
66"		86.9	130.3	145.0
72"		79.6	119.5	145.0
30"	96"	145.0	145.0	145.0
36"		145.0	145.0	145.0
42"		128.0	145.0	145.0
48"		112.0	145.0	145.0
54"		99.6	145.0	145.0
60"		89.6	134.4	145.0
66"		81.5	122.2	145.0
72"		74.7	112.0	145.0
30"	102"	145.0	145.0	145.0
36"		140.5	145.0	145.0
42"		120.5	145.0	145.0
48"		105.4	145.0	145.0
54"		93.7	140.5	145.0
60"		84.3	126.5	145.0
66"		76.7	115.0	145.0
30"	108"	145.0	145.0	145.0
36"		132.7	145.0	145.0
42"		113.8	145.0	145.0
48"		99.6	145.0	145.0
54"		88.5	132.7	145.0
60"		79.6	119.5	145.0
66"		72.4	108.6	144.8
30"	114"	145.0	145.0	145.0
36"		125.8	145.0	145.0
42"		107.8	145.0	145.0
48"		94.3	141.5	145.0
54"		83.8	125.8	145.0
60"		75.5	113.2	145.0
30"	120"	143.4	145.0	145.0
36"		119.5	145.0	145.0
42"		102.4	145.0	145.0
48"		89.6	134.4	145.0
54"		79.6	119.5	145.0
60"		71.7	107.5	143.4
30"	126"	115.0	115.0	115.0
36"		113.8	115.0	115.0
42"		97.5	115.0	115.0
48"		85.3	115.0	115.0
54"		75.9	113.8	115.0
30"	132"	115.0	115.0	115.0
36"		108.6	115.0	115.0
42"		93.1	115.0	115.0
48"		81.5	115.0	115.0
54"		72.4	108.6	115.0

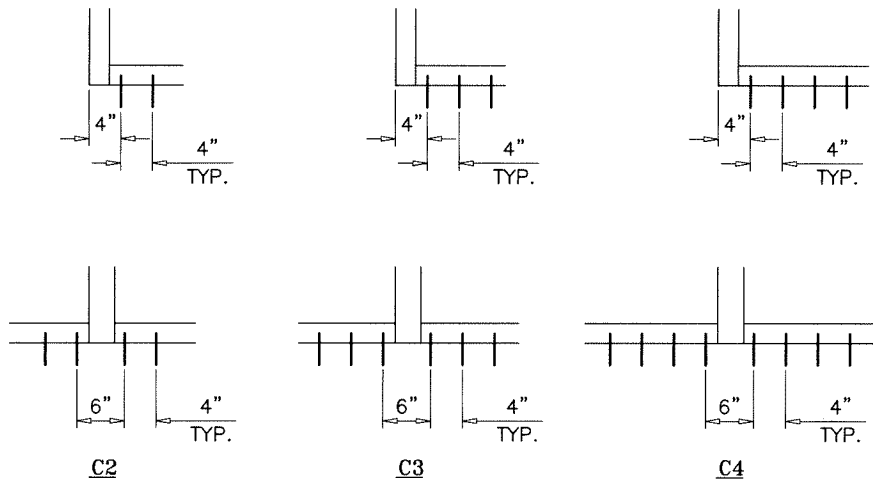
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)				
NOMINAL DIMS.		ANCHORS TYPE 'C'		
WIDTH (W)	FRAME HEIGHT	1/4" MAX. SHIM		
		C2	C3	C4
30"	138"	115.0	115.0	115.0
36"		103.9	115.0	115.0
42"		89.0	115.0	115.0
48"		77.9	115.0	115.0
30"	144"	115.0	115.0	115.0
36"		99.6	115.0	115.0
42"		85.3	115.0	115.0
48"		74.7	112.0	115.0



WIDTH (W) = W1
AT FRAME JAMB

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



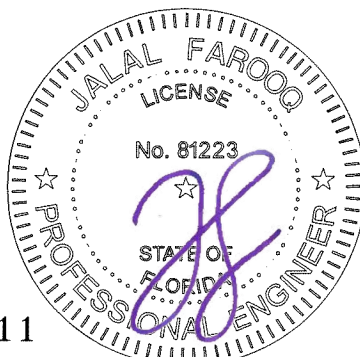
ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION

C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION

ANCHORS

Sealed: 7/24/2023

FL #18411



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revisions:

no	date	by	description

date: 08-27-15

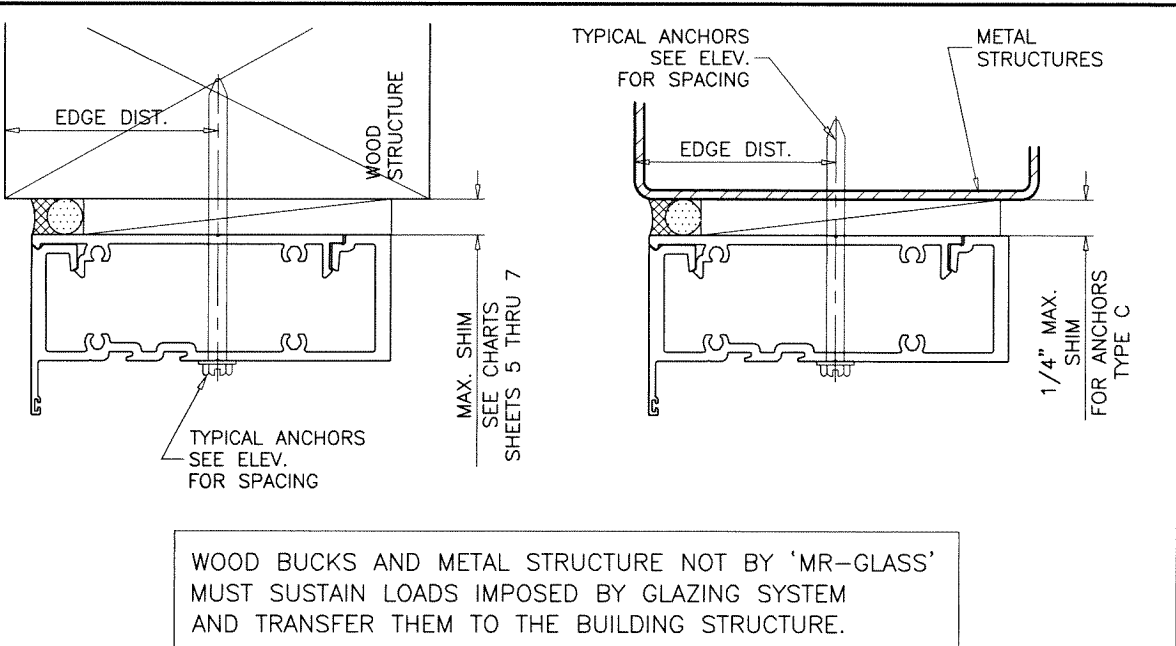
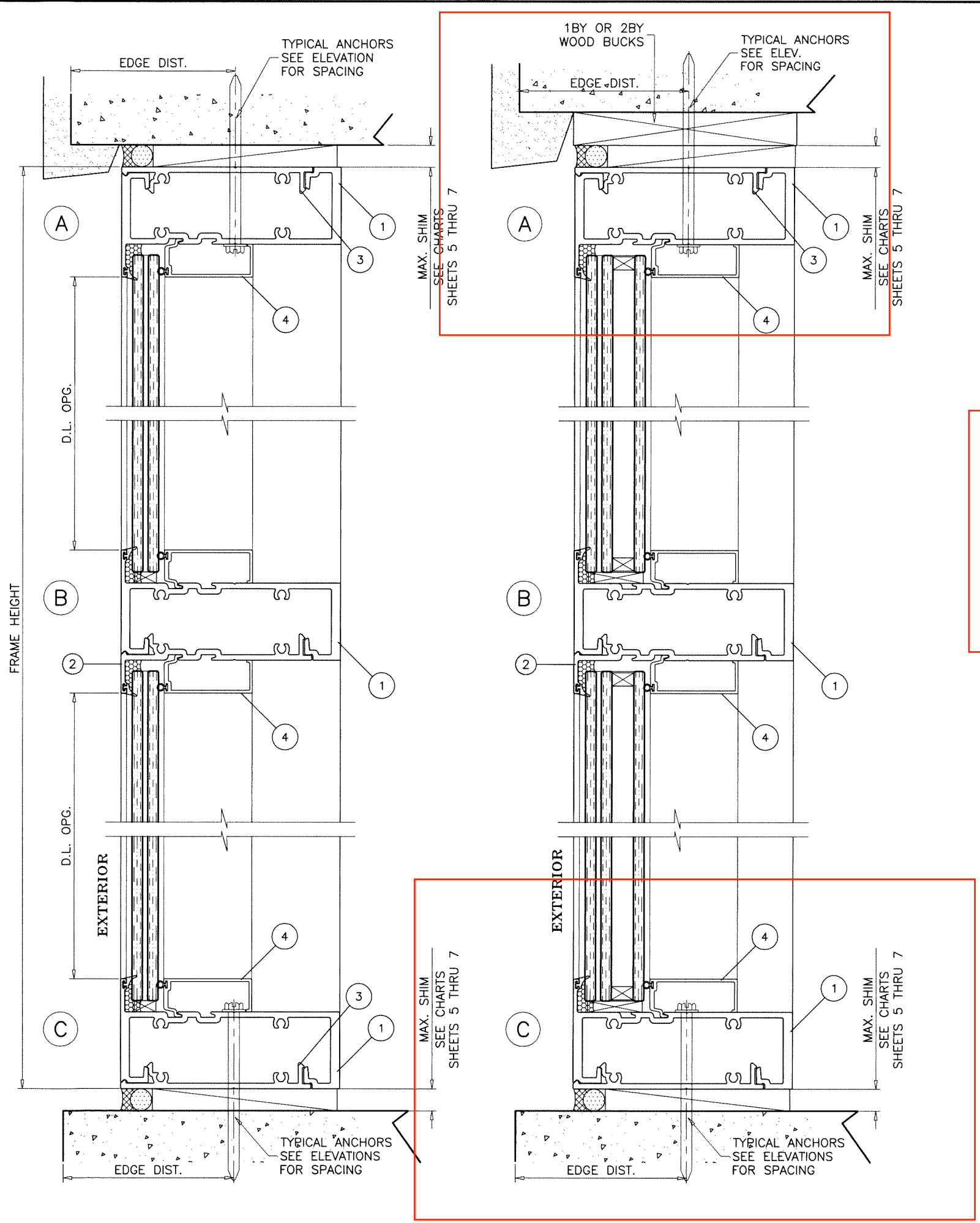
scale: -

dr. by: TARIQ

chk. by:

drawing no. **W15-71**

sheet 7 of 12



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

TYPE 'A'— 5/16" DIA ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)
 INTO WOOD STRUCTURES
 2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)
 THRU 1BY OR 2BY WOOD BUCKS INTO CONCRETE
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

ANCHOR EDGE DISTANCES
 INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1-1/4" MIN.

TYPE 'B'— 5/16" DIA ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)
 DIRECTLY INTO CONCRETE
 1-3/4" MIN. EMBED INTO CONC. (HEAD/SILL/JAMBS)
 1-3/4" MIN. EMBED INTO GROUT FILLED-BLOCKS (JAMBS)

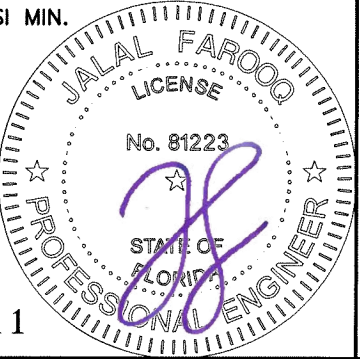
ANCHOR EDGE DISTANCES
 INTO CONCRETE AND BLOCKS = 2-1/2" MIN.

TYPE 'C'— #14 SMS OR SELF DRILLING SCREWS ST/ST (GRADE 2 CRS)
 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)

ANCHOR EDGE DISTANCES
 INTO METAL STRUCTURE = 5/8" 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: 7/24/2023
 FL #18411



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Revisions:		date		by description	
no	date	by	description	no	date

date: 08-27-15

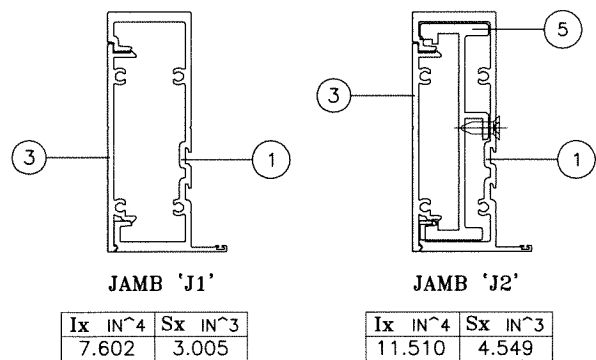
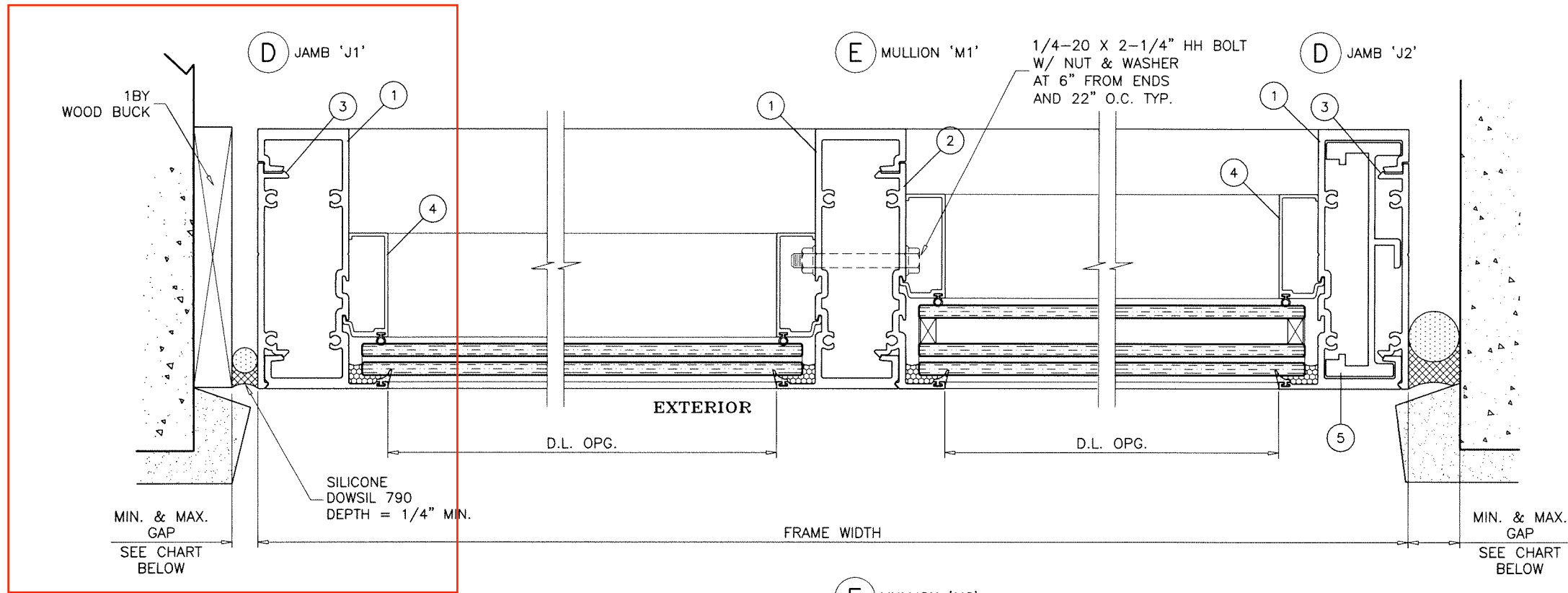
scale: 3/8" = 1"

dr. by: TARIQ

chk. by:

drawing no.
W15-71

sheet 8 of 12



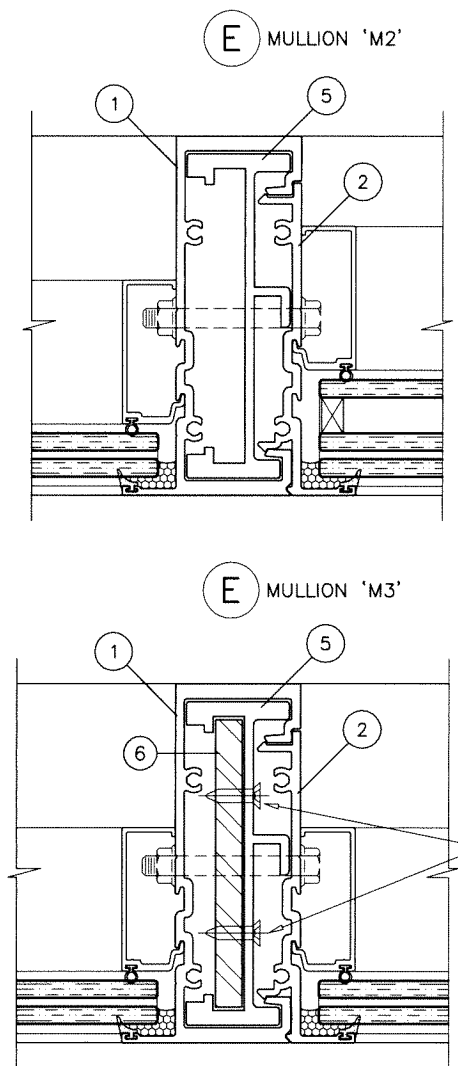
MAX. FRAME HEIGHT	MAX. GAPS FOR UNANCHORED JAMBS			
	JAMB 'J1'		JAMB 'J2'	
	MIN.	MAX.	MIN.	MAX.
96"	3/8"	1"	—	—
102"	3/8"	1"	—	—
108"	3/8"	1"	—	—
120"	3/8"	1"	—	—
132"	—	—	3/8"	1"
144"	—	—	3/8"	1"

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.

REFER TO SHEETS 4 THRU 7 FOR SELECTION OF MULLION/JAMB WITH REINFORCED & UNREINFORCED FRAMES.



SEE SHEETS 3 & 4 FOR MULLION CAPACITY

#12 X 3/4" FH
 SELF DRILLING SCREWS
 IN PAIRS
 AT 6" FROM ENDS
 AND 24" O.C.

Sealed: 7/24/2023

FL #18411



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

COMP-ANL W15-71MG

SERIES MG-6000 ALUM WINDOW WALL SYSTEM (L.M.I.)

MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
 8051 N.W. 79th Place
 Medley, FL 33166
 Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:

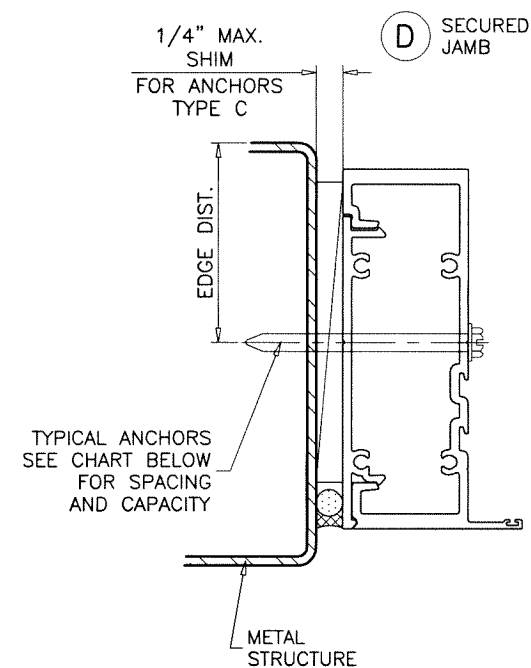
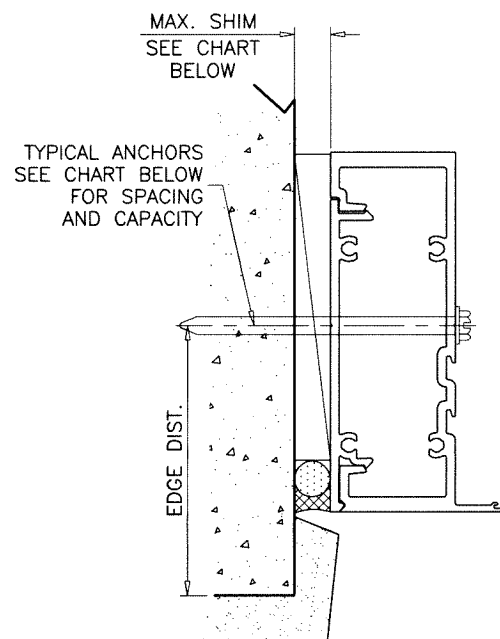
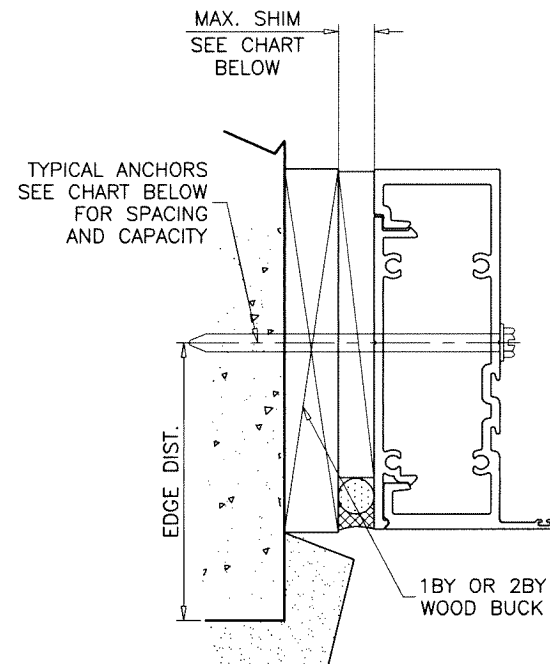
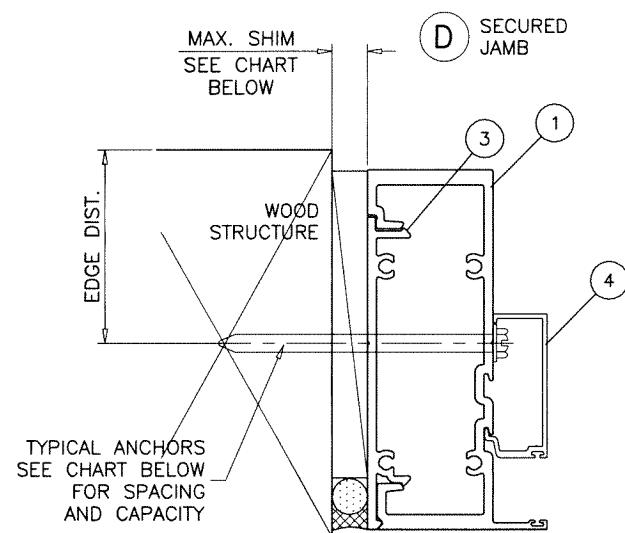
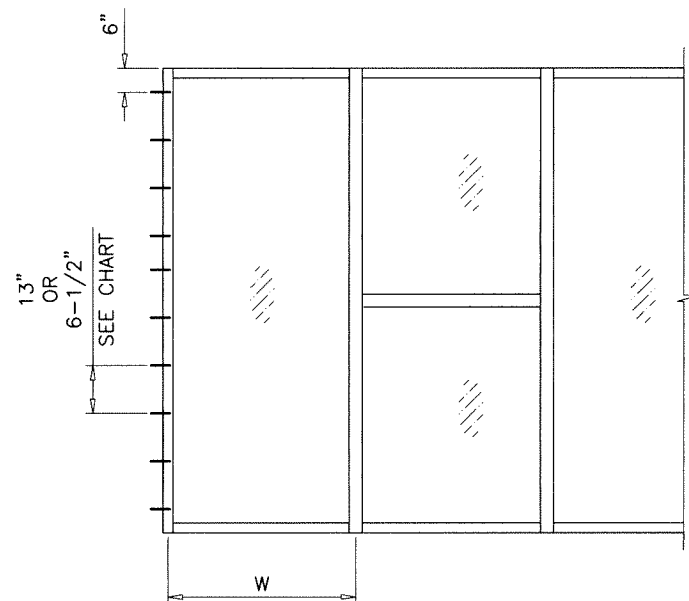
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 dr. by: TARIQ
 chk. by:

drawing no.
W15-71
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JAMB ANCHORS DESIGN LOAD CAPACITY - PSF					
WIDTH (W)	13" MAX. SPACING			6-1/2" SPACING	
	1/4" MAX. SHIM	3/8" MAX. SHIM	1/2" MAX. SHIM	3/8" MAX. SHIM	1/2" MAX. SHIM
	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
30"	145.0	145.0	145.0	145.0	145.0
36"	145.0	145.0	126.8	145.0	145.0
42"	145.0	137.7	108.7	145.0	145.0
48"	145.0	120.5	95.1	145.0	145.0
54"	140.7	107.1	84.5	145.0	145.0
60"	126.6	96.4	76.1	145.0	145.0
66"	115.1	87.6	69.1	145.0	138.3
72"	105.5	80.3	63.4	145.0	126.8

SECURED JAMBS
(REINFORCING NOT REQUIRED)



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FL #18411

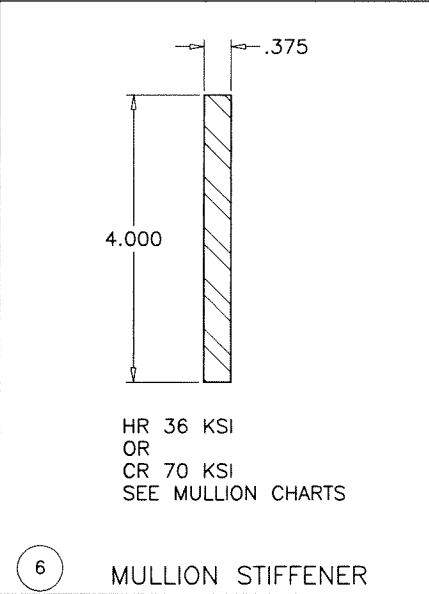
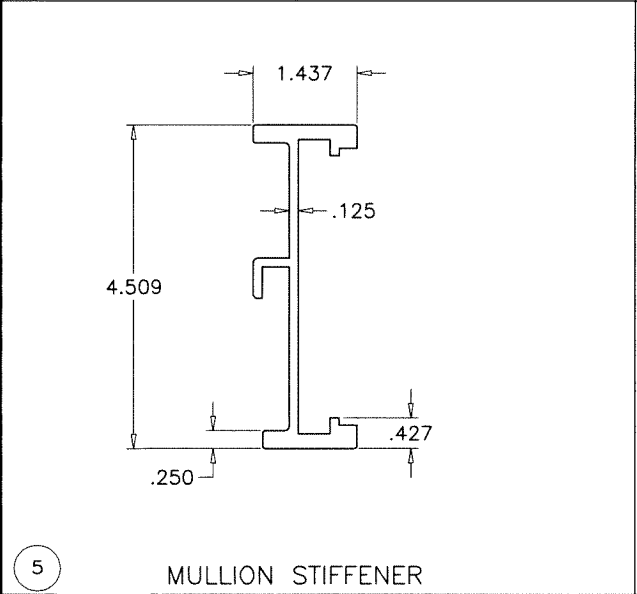
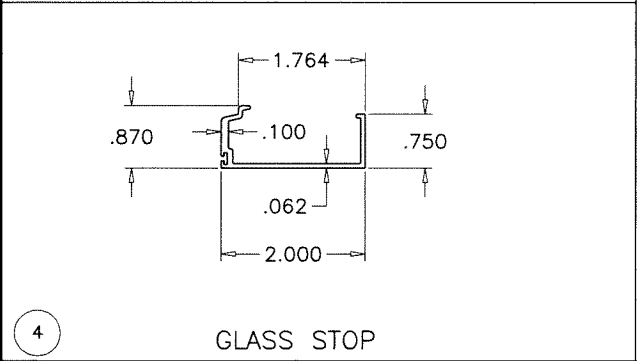
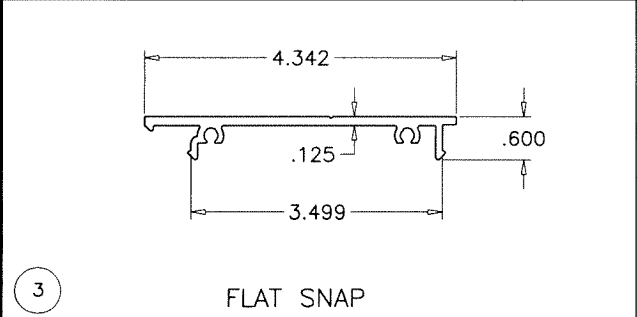
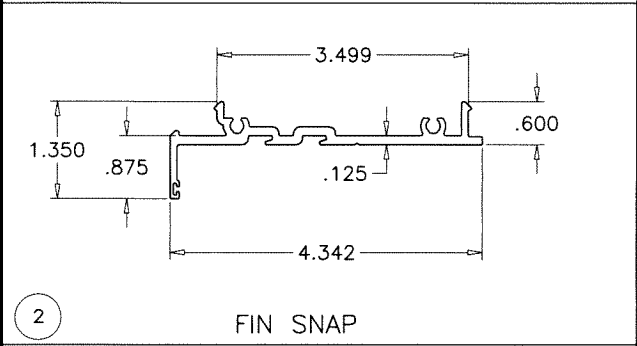
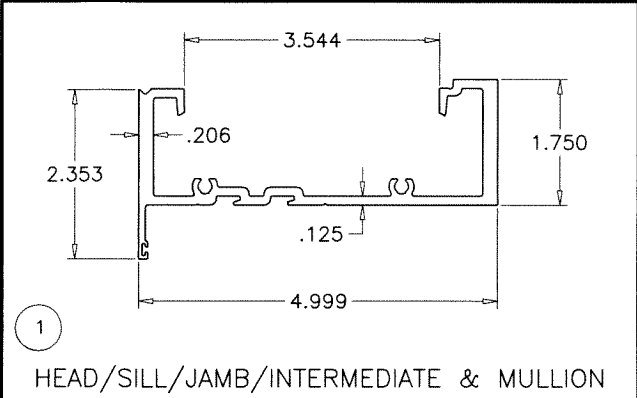
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AL-FAROOQ CORPORATION
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9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\W15-71MG

SERIES MG-6000 ALUM WINDOW WALL SYSTEM (L.M.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:	
no	by description

date: 08-27-15	scale: 3/8" = 1"	dr. by: TARIQ	chk. by:
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W15-71
sheet 10 of 12



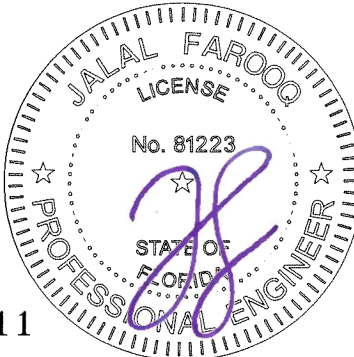
ITEM #	PART #	REQ'D	DESCRIPTION	MATERIAL	MANF. / SUPPLIER / REMARKS
1	MRC-1	AS REQ'D	HEAD, INTERM., SILL, JAMB AND MULLION	6063-T6	-
2	MRC-2	AS REQ'D	FIN SNAP	6063-T6	-
3	MRC-3	AS REQ'D	FLAT SNAP	6063-T6	-
4	MRC-5	AS REQ'D	GLASS STOP	6063-T6	-
5	MRC-?	AS REQ'D	MULLION STIFFENER	6063-T6	-
6	-	-	MULLION STIFFENER	STEEL	-
7	E238	AS REQ'D	GASKET (AT INTERIOR), BULB TPE, BASE POLYPROPYLENE	-	ULTRAFAB
8	-	AS REQ'D	SPACER / OUTER GASKET (BULB SANTOPRENE, BASE POLYPROPYLENE)	-	CENTRAL PLASTICS INC.
9	-	2/ LITE	SETTING BLOCKS (3/8" X 1/4" X 4" LG.)	EPDM	TREMCO, DUROMETER 80±5 SHORE A
10	-	2/ LITE	SETTING BLOCKS (1 1/4" X 1/4" X 4" LG.)	EPDM	TREMCO, DUROMETER 80±5 SHORE A
11	#12 X 1 1/2"	4/CORNER	FRAME ASSEMBLY SCREWS	ST. STEEL	HEX. HEAD MACHINE SCREW

SEALANTS:

ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER OF GLAZING BEAD TO FRAME SEALED WITH SILICONE SEALANT.

Sealed: 7/24/2023

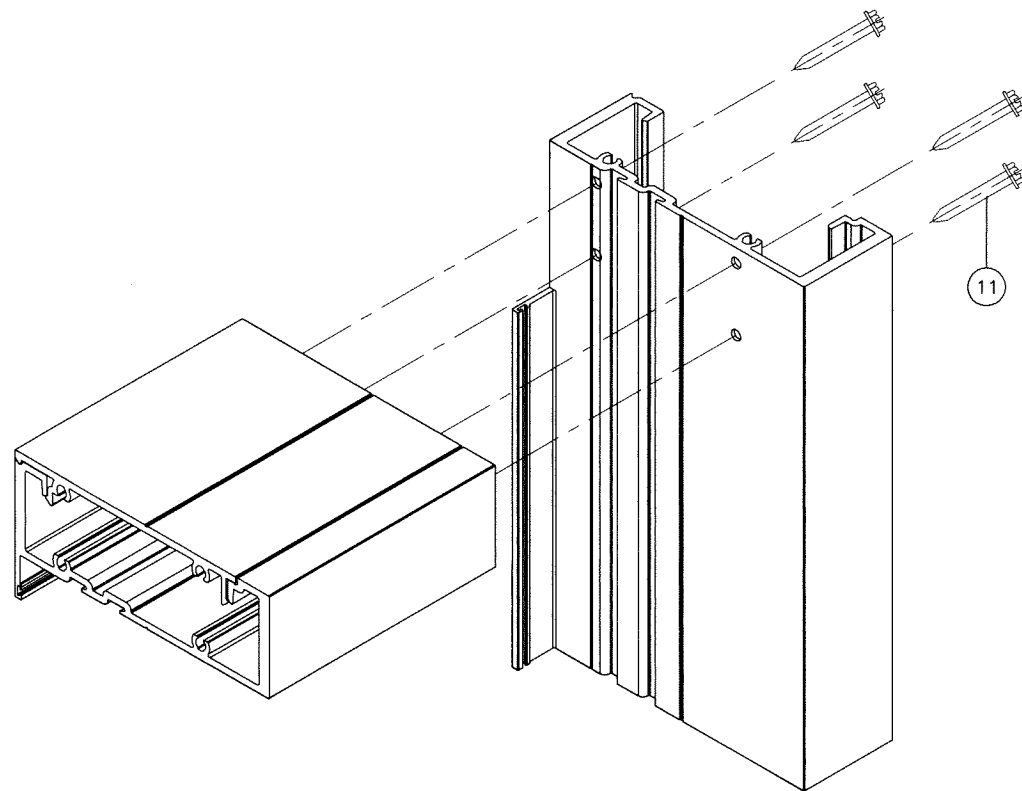
FL #18411



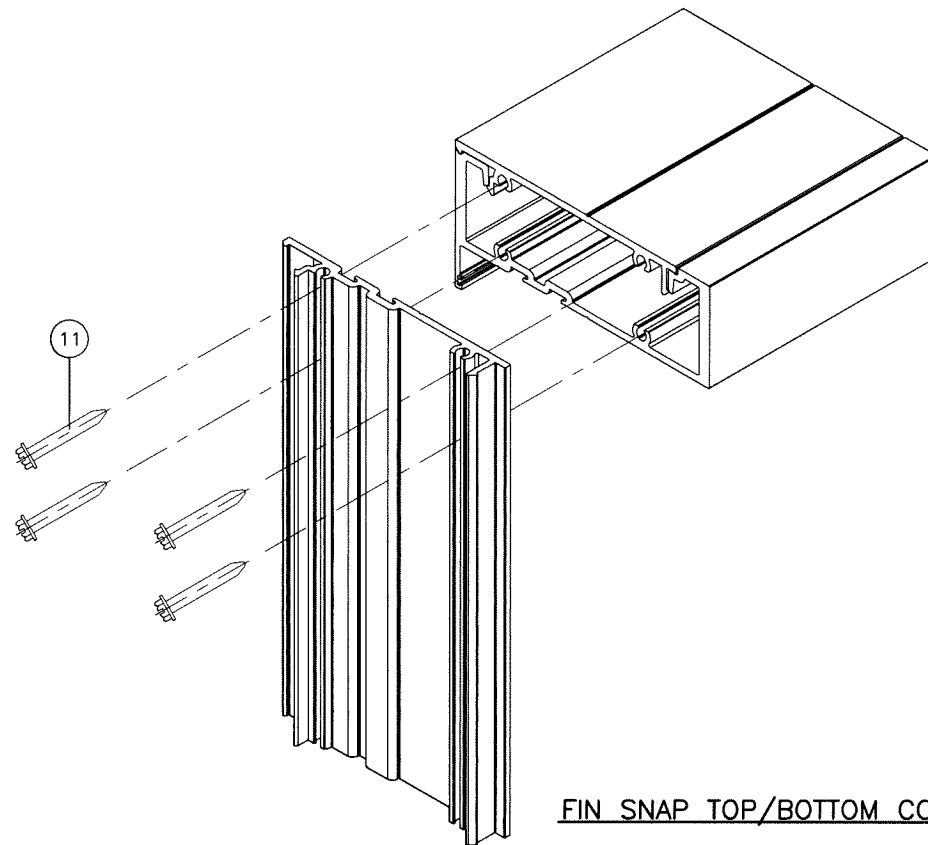
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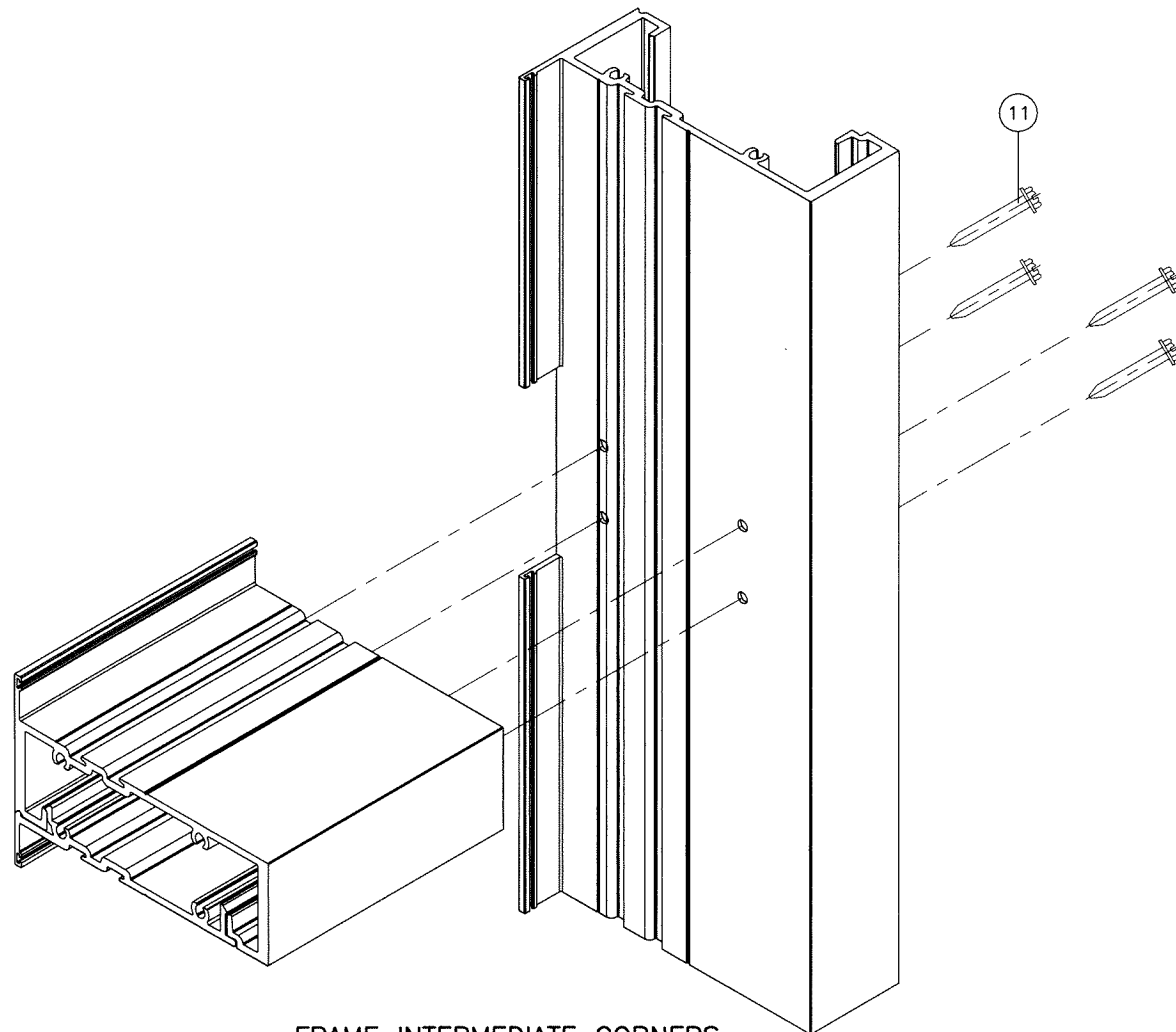
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FRAME TOP/BOTTOM CORNERS



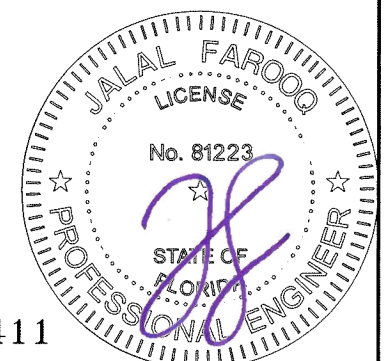
FIN SNAP TOP/BOTTOM CORNERS



FRAME INTERMEDIATE CORNERS

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