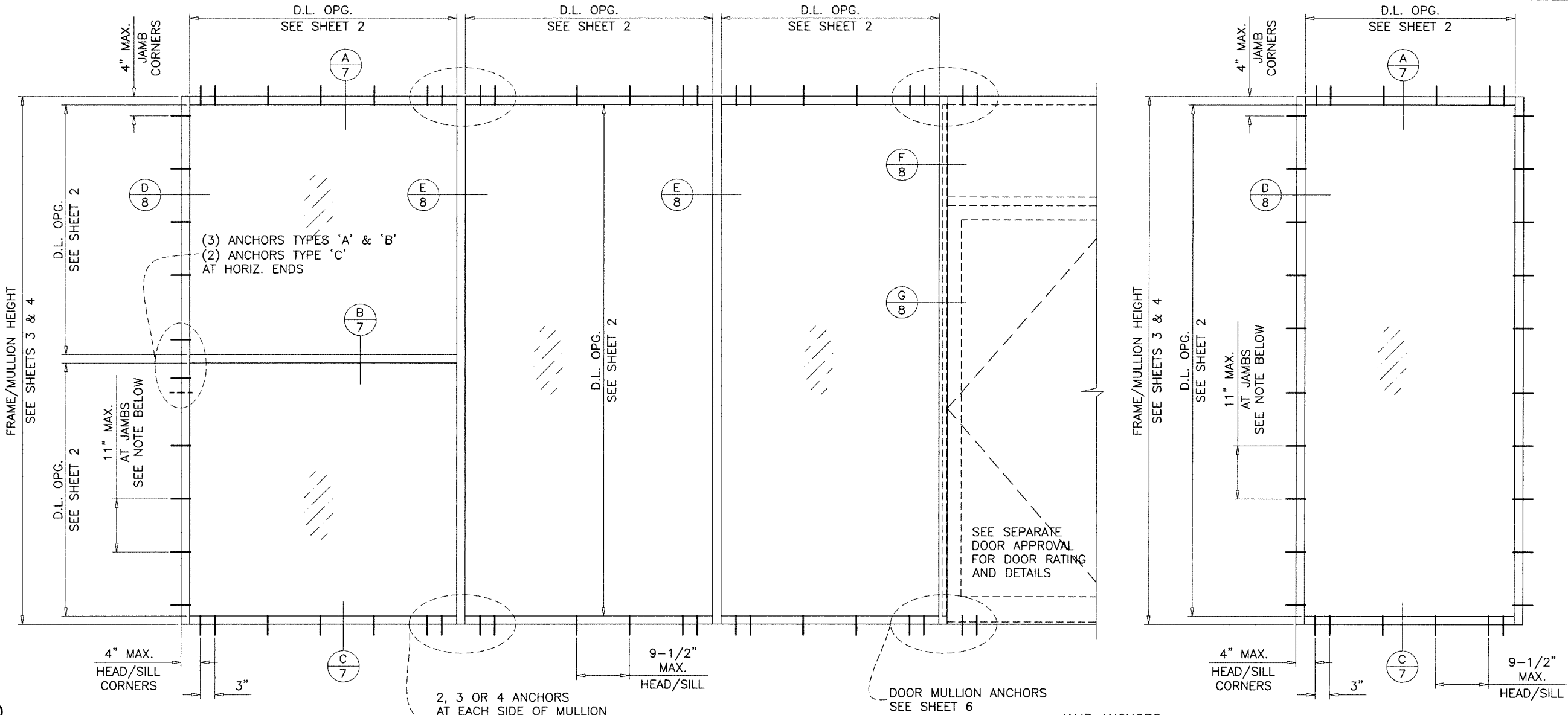




MG-4500
ALUMINUM FLUSH GLAZED STOREFRONT SYSTEM

CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2023 (8TH EDITION)/2026 (9TH 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 LOAD-BEARING, (HIGH DENSITY PLASTIC/COMPOSITE, METAL OR OTHER RIGID MATERIALS).

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2023/2026 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 LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2** SEE CHARTS ON SHEET 2 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE.
- STEP 3** CHECK MULLION CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEETS 3 & 4 FOR STOREFRONT MULLION AND SHEET 6 FOR DOOR MULLION. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** USING CHART ON SHEETS 5 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5** THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

THIS SYSTEM MAY BE USED IN CONJUNCTION WITH F.B.C. APPROVED FRENCH DOORS. LOWER DESIGN PRESSURE FROM STOREFRONT OR DOOR APPROVAL WILL APPLY TO ENTIRE SYSTEM.

JAMB ANCHORS:
LIMIT MAX. LOAD TO 85.0 PSF
FOR ANCHOR TYPE 'A' ONLY

FASTENERS AND CONNECTORS (AS APPLICABLE) SHOWN IN THIS APPROVAL MAY NOT MEET CORROSION RESISTANCE REQUIREMENTS FOR COASTAL OR SALT WATER EXPOSURE ZONES. COMPLIANCE WITH THESE CONDITIONS TO BE CHECKED PER FBC 1711.

THIS SYSTEM IS NOT RATED FOR IMPACT. INSTALLATION OF THIS PRODUCT IN THE HVHZ AREA REQUIRES THE USE OF APPROVED SHUTTERS OR EXTERNAL PROTECTION DEVICES COMPLYING WITH HVHZ REQUIREMENTS. INSTALLATION OF THIS SYSTEM OUTSIDE THE HVHZ AREA SHALL MEET THE APPLICABLE REQUIREMENTS FOR WIND BORNE DEBRIS PROTECTION.

Sealed: 9/3/2026

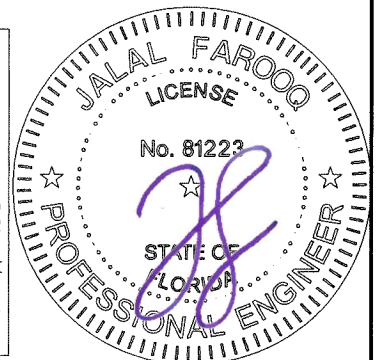
FL #39786

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.

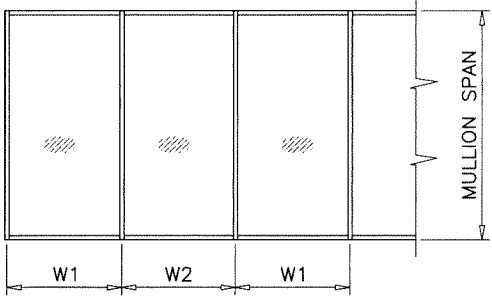
D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



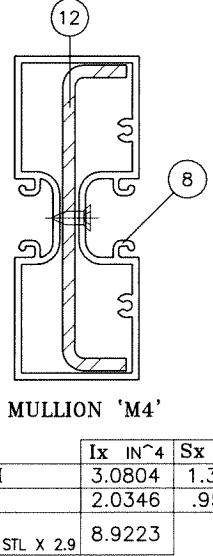
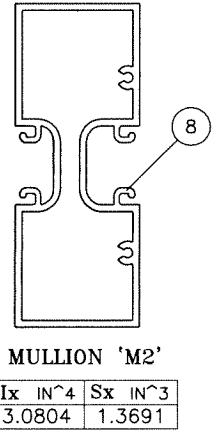
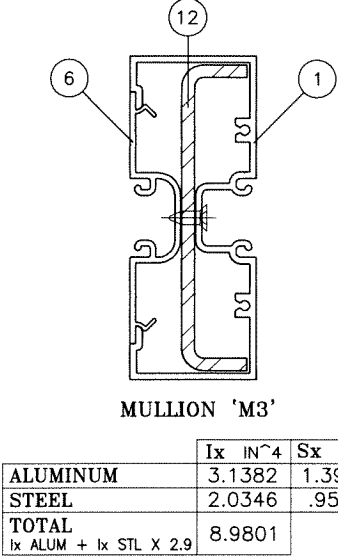
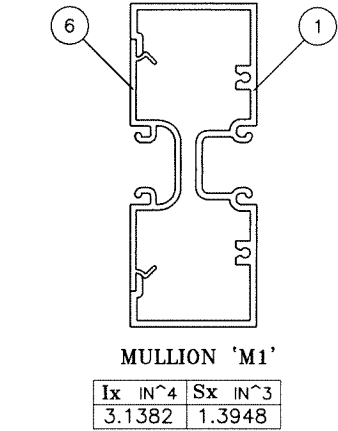
MULLION LOAD CAPACITY – PSF WITHOUT INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		MULLION 'M1'	MULLION 'M2'	MULLION 'M3'	MULLION 'M4'
WIDTH (W)	FRAME HEIGHT	EXT.(+)/INT.(–)	EXT.(+)/INT.(–)	EXT.(+)/INT.(–)	EXT.(+)/INT.(–)
24"	60"	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0
66"		100.0	100.0	100.0	100.0
72"		100.0	100.0	100.0	100.0
24"	66"	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0
66"		100.0	100.0	100.0	100.0
72"		–	–	100.0	100.0
24"	72"	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0
48"		99.4	99.6	100.0	100.0
54"		92.7	92.9	100.0	100.0
60"		88.3	88.5	100.0	100.0
66"		–	–	100.0	100.0
72"		–	–	100.0	100.0
24"	78"	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		90.6	90.9	100.0	100.0
48"		82.0	82.3	100.0	100.0
54"		75.8	76.1	100.0	100.0
60"		–	–	100.0	100.0
66"		–	–	100.0	100.0
72"		–	–	100.0	100.0
24"	84"	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0
36"		87.2	87.6	100.0	100.0
42"		76.5	76.9	100.0	100.0
48"		68.9	69.2	100.0	100.0
54"		63.3	63.6	100.0	100.0
60"		–	–	100.0	100.0
66"		–	–	99.0	98.3
24"	90"	100.0	100.0	100.0	100.0
30"		88.4	88.9	100.0	100.0
36"		74.9	75.3	100.0	100.0
42"		65.5	65.9	100.0	100.0
48"		58.7	59.0	100.0	100.0
54"		–	–	94.9	94.3
60"		–	–	88.3	87.7
66"		–	–	–	–

MULLION LOAD CAPACITY – PSF WITHOUT INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		MULLION 'M1'	MULLION 'M2'	MULLION 'M3'	MULLION 'M4'
WIDTH (W)	FRAME HEIGHT	EXT.(+)/INT.(–)	EXT.(+)/INT.(–)	EXT.(+)/INT.(–)	EXT.(+)/INT.(–)
24"	96"	93.8	92.1	100.0	100.0
30"		76.1	74.7	100.0	100.0
36"		64.6	63.4	100.0	100.0
42"		56.5	55.5	100.0	100.0
48"		50.7	49.8	90.1	89.5
54"		–	–	82.1	81.6
60"		–	–	76.0	75.5
66"		–	–	–	–
24"	97–3/4"	88.8	87.2	100.0	100.0
30"		72.0	70.7	100.0	100.0
36"		61.0	59.9	100.0	100.0
42"		53.4	52.4	97.1	96.4
45"		50.4	49.5	91.5	90.9
46–1/2"		49.1	48.2	89.0	88.4
48"		–	–	86.6	86.1
54"		–	–	78.8	78.3
60"		–	–	72.9	72.4
24"	102"	–	–	100.0	100.0
30"		–	–	100.0	100.0
36"		–	–	100.0	100.0
42"		–	–	88.7	88.1
48"		–	–	79.0	78.5
54"		–	–	71.7	71.3
60"		–	–	–	–
66"		–	–	–	–
24"	108"	–	–	100.0	100.0
30"		–	–	100.0	100.0
36"		–	–	90.5	89.9
42"		–	–	78.6	78.1
48"		–	–	69.9	69.4
54"		–	–	63.3	62.9
60"		–	–	–	–
66"		–	–	–	–
24"	114"	–	–	100.0	100.0
30"		–	–	96.1	95.5
36"		–	–	80.9	80.4
42"		–	–	70.2	69.7
48"		–	–	62.3	61.9
54"		–	–	–	–
60"		–	–	–	–
66"		–	–	–	–
24"	120"	–	–	100.0	100.0
30"		–	–	86.6	86.0
36"		–	–	72.8	72.3
42"		–	–	63.1	62.7
48"		–	–	55.9	55.5
54"		–	–	–	–
60"		–	–	–	–
66"		–	–	–	–

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

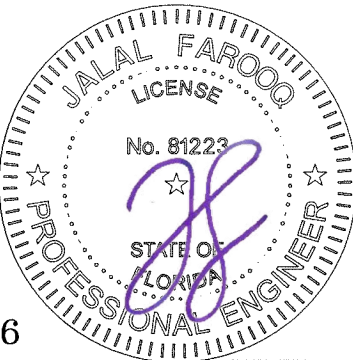


WIDTH (W) = $\frac{W1 + W2}{2}$



LOADS SHOWN IN CHARTS ARE FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED. LIMIT EXTERIOR LOADS TO +60.0 PSF FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.

MULLIONS



Sealed: 9/3/2026

FL #39786

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\21-62F-MG

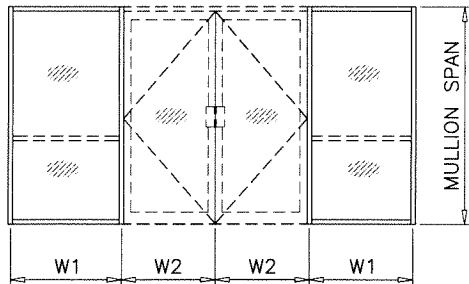
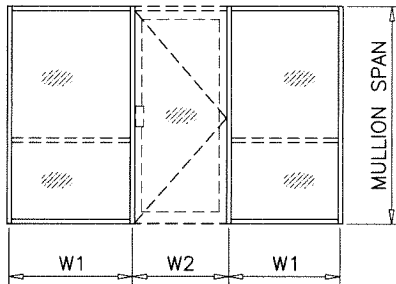
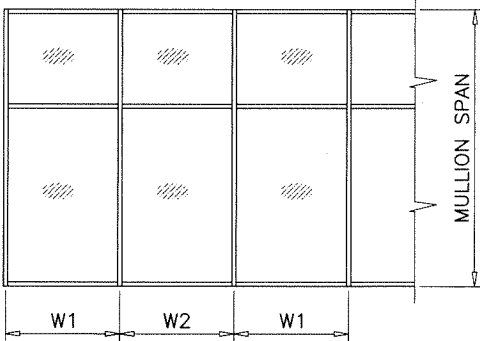
MG-4500 ALUMINUM FLUSH GLAZED SYSTEM (N.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:
no date by description
date: 08-25-21
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:
drawing no.
21-62F
sheet 3 of 9

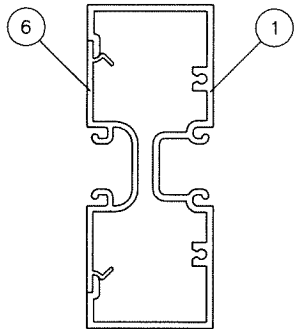
MULLION LOAD CAPACITY - PSF WITH INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		MULLION 'M1'	MULLION 'M2'	MULLION 'M3'	MULLION 'M4'
WIDTH (W)	FRAME HEIGHT	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)
24"	60"	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0
54"		100.0	99.9	100.0	100.0
60"		91.6	89.9	100.0	100.0
66"		83.2	81.7	100.0	100.0
72"		76.3	74.9	100.0	100.0
24"	66"	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0
48"		94.6	92.8	100.0	100.0
54"		84.1	82.5	100.0	100.0
60"		75.7	74.3	100.0	100.0
66"		68.8	67.5	100.0	100.0
72"		-	-	100.0	100.0
24"	72"	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		90.8	89.2	100.0	100.0
48"		79.5	78.0	100.0	100.0
54"		70.6	69.3	100.0	100.0
60"		63.6	62.4	100.0	100.0
66"		-	-	100.0	100.0
72"		-	-	98.1	97.5
24"	78"	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0
36"		90.3	88.6	100.0	100.0
42"		77.4	76.0	100.0	100.0
48"		67.7	66.5	100.0	100.0
54"		60.2	59.1	100.0	100.0
60"		-	-	100.0	99.7
66"		-	-	91.2	90.6
72"		-	-	83.6	83.1
24"	84"	100.0	100.0	100.0	100.0
30"		93.4	91.7	100.0	100.0
36"		77.9	76.4	100.0	100.0
42"		66.7	65.5	100.0	100.0
48"		58.4	57.3	100.0	100.0
54"		51.9	50.9	96.1	95.5
60"		-	-	86.5	86.0
66"		-	-	78.6	78.1
24"	90"	100.0	99.9	100.0	100.0
30"		81.4	79.9	100.0	100.0
36"		67.8	66.6	100.0	100.0
42"		58.1	57.1	100.0	100.0
48"		50.9	49.9	94.2	93.6
54"		-	-	83.7	83.2
60"		-	-	75.4	74.9

MULLION LOAD CAPACITY - PSF WITH INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		MULLION 'M1'	MULLION 'M2'	MULLION 'M3'	MULLION 'M4'
WIDTH (W)	FRAME HEIGHT	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)
24"	96"	89.4	87.8	100.0	100.0
30"		71.5	70.2	100.0	100.0
36"		59.6	58.5	100.0	100.0
42"		51.1	50.2	94.6	94.0
48"		44.7	43.9	82.8	82.3
54"		-	-	73.6	73.1
60"		-	-	66.2	65.8
66"		-	-	-	-
24"	97-3/4"	86.2	84.6	100.0	100.0
30"		69.0	67.7	100.0	100.0
36"		57.5	56.4	100.0	100.0
42"		49.3	48.4	91.3	90.7
45"		46.0	45.1	85.2	84.6
46-1/2"		44.5	43.7	82.4	81.9
48"		-	-	79.9	79.3
54"		-	-	71.0	70.5
60"		-	-	63.9	63.5
24"	102"	-	-	100.0	100.0
30"		-	-	100.0	100.0
36"		-	-	97.8	97.2
42"		-	-	83.8	83.3
48"		-	-	73.3	72.9
54"		-	-	65.2	64.8
60"		-	-	-	-
66"		-	-	-	-
24"	108"	-	-	100.0	100.0
30"		-	-	100.0	100.0
36"		-	-	87.2	86.7
42"		-	-	74.8	74.3
48"		-	-	65.4	65.0
54"		-	-	58.1	57.8
60"		-	-	-	-
66"		-	-	-	-
24"	114"	-	-	100.0	100.0
30"		-	-	93.9	93.3
36"		-	-	78.3	77.8
42"		-	-	67.1	66.7
48"		-	-	58.7	58.3
54"		-	-	-	-
60"		-	-	-	-
66"		-	-	-	-
24"	120"	-	-	100.0	100.0
30"		-	-	84.8	84.2
36"		-	-	70.6	70.2
42"		-	-	60.6	60.2
48"		-	-	53.0	52.6
54"		-	-	-	-
60"		-	-	-	-
66"		-	-	-	-

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

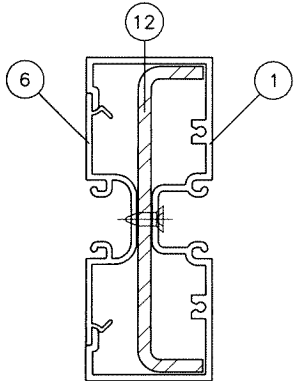


$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



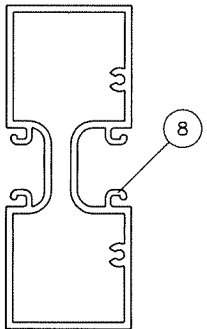
MULLION 'M1'

Ix IN ⁴	Sx IN ³
3.1382	1.3948



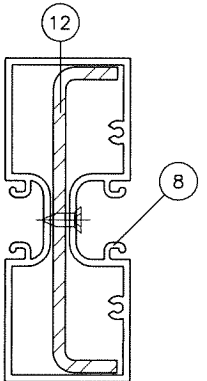
MULLION 'M3'

	Ix IN ⁴	Sx IN ³
ALUMINUM	3.1382	1.3948
STEEL	2.0346	.9575
TOTAL	8.9801	
Ix ALUM + Ix STL X 2.9		



MULLION 'M2'

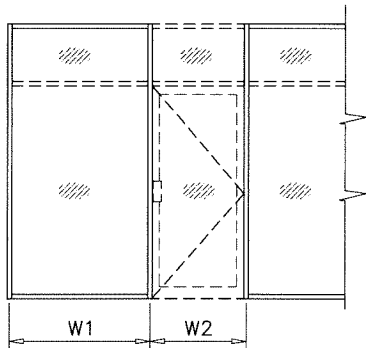
Ix IN ⁴	Sx IN ³
3.0804	1.3691



MULLION 'M4'

	Ix IN ⁴	Sx IN ³
ALUMINUM	3.0804	1.3691
STEEL	2.0346	.9575
TOTAL	8.9223	
Ix ALUM + Ix STL X 2.9		

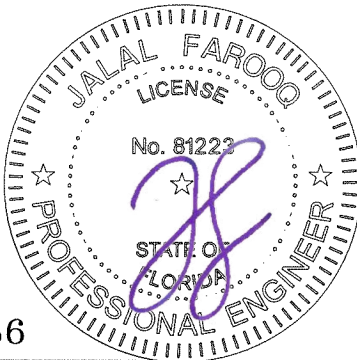
LOADS SHOWN IN CHARTS ARE FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED.
LIMIT EXTERIOR LOADS TO +60.0 PSF FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.



Sealed: 9/3/2026

DOORS NOT PART OF THIS APPROVAL.

MULLIONS



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

MG-4500 ALUMINUM FLUSH GLAZED SYSTEM (N.I.)

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

COMP-ANL 21-62F-MG

revisions:

no	date	by	description

date: 08-25-21

scale: 3/8" = 1"

dr. by: TARIQ

chk. by:

drawing no.

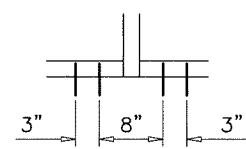
21-62F

sheet 4 of 9

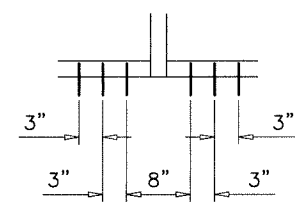
ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)								
NOMINAL DIMS.		ANCHOR TYPE 'A'			ANCHOR TYPE 'B'		ANCHOR TYPE 'C'	
WIDTH (W)	FRAME HEIGHT	A2	A3	A4	B2	B3	C2	C3
24"	60"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
54"		92.1	100.0	100.0	100.0	100.0	100.0	100.0
60"		82.9	100.0	100.0	97.8	100.0	100.0	100.0
66"		75.3	100.0	100.0	88.9	100.0	100.0	100.0
72"		69.1	100.0	100.0	81.5	100.0	100.0	100.0
24"	66"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		94.2	100.0	100.0	100.0	100.0	100.0	100.0
54"		83.7	100.0	100.0	98.8	100.0	100.0	100.0
60"		75.3	100.0	100.0	88.9	100.0	100.0	100.0
66"		68.5	100.0	100.0	80.8	100.0	100.0	100.0
72"		62.8	94.2	100.0	74.1	100.0	92.8	100.0
24"	72"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		98.7	100.0	100.0	100.0	100.0	100.0	100.0
48"		86.3	100.0	100.0	100.0	100.0	100.0	100.0
54"		76.7	100.0	100.0	90.5	100.0	100.0	100.0
60"		69.1	100.0	100.0	81.5	100.0	100.0	100.0
66"		62.8	94.2	100.0	74.1	100.0	92.8	100.0
72"		57.6	86.3	100.0	67.9	100.0	85.1	100.0
24"	78"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		91.1	100.0	100.0	100.0	100.0	100.0	100.0
48"		79.7	100.0	100.0	94.0	100.0	100.0	100.0
54"		70.8	100.0	100.0	83.6	100.0	100.0	100.0
60"		63.8	95.6	100.0	75.2	100.0	94.3	100.0
66"		58.0	86.9	100.0	68.4	100.0	85.7	100.0
72"		53.1	79.7	100.0	62.7	94.0	78.6	100.0
24"	84"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		98.7	100.0	100.0	100.0	100.0	100.0	100.0
48"		84.6	100.0	100.0	99.8	100.0	100.0	100.0
54"		74.0	100.0	100.0	87.3	100.0	100.0	100.0
60"		65.8	98.7	100.0	77.6	100.0	97.3	100.0
66"		59.2	88.8	100.0	69.9	100.0	87.5	100.0
72"		53.8	80.7	100.0	63.5	95.3	79.6	100.0
24"	96"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		86.3	100.0	100.0	100.0	100.0	100.0	100.0
42"		74.0	100.0	100.0	87.3	100.0	100.0	100.0
48"		64.8	97.1	100.0	76.4	100.0	95.8	100.0
54"		57.6	86.3	100.0	67.9	100.0	85.1	100.0
60"		51.8	77.7	100.0	61.1	91.7	76.6	100.0
66"								

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)								
NOMINAL DIMS.		ANCHOR TYPE 'A'			ANCHOR TYPE 'B'		ANCHOR TYPE 'C'	
WIDTH (W)	FRAME HEIGHT	A2	A3	A4	B2	B3	C2	C3
24"	97-3/4"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		84.8	100.0	100.0	100.0	100.0	100.0	100.0
42"		72.7	100.0	100.0	85.8	100.0	100.0	100.0
48"		63.6	95.4	100.0	75.0	100.0	94.0	100.0
54"		56.5	84.8	100.0	66.7	100.0	83.6	100.0
60"		50.9	76.3	100.0	60.0	90.0	75.2	100.0
66"								
24"	102"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		97.5	100.0	100.0	100.0	100.0	100.0	100.0
36"		81.3	100.0	100.0	95.9	100.0	100.0	100.0
42"		69.6	100.0	100.0	82.2	100.0	100.0	100.0
48"		60.9	91.4	100.0	71.9	100.0	90.1	100.0
54"		54.2	81.3	100.0	63.9	95.9	80.1	100.0
24"	108"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		92.1	100.0	100.0	100.0	100.0	100.0	100.0
36"		76.7	100.0	100.0	90.5	100.0	100.0	100.0
42"		65.8	98.7	100.0	77.6	100.0	97.3	100.0
48"		57.6	86.3	100.0	67.9	100.0	85.1	100.0
54"		51.2	76.7	100.0	60.4	90.5	75.7	100.0
24"	114"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		87.2	100.0	100.0	100.0	100.0	100.0	100.0
36"		72.7	100.0	100.0	85.8	100.0	100.0	100.0
42"		62.3	93.5	100.0	73.5	100.0	92.2	100.0
48"		54.5	81.8	100.0	64.3	96.5	80.6	100.0
54"								
24"	120"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		82.9	100.0	100.0	97.8	100.0	100.0	100.0
36"		69.1	100.0	100.0	81.5	100.0	100.0	100.0
42"		59.2	88.8	100.0	69.9	100.0	87.5	100.0
48"		51.8	77.7	100.0	61.1	91.7	76.6	100.0
54"								

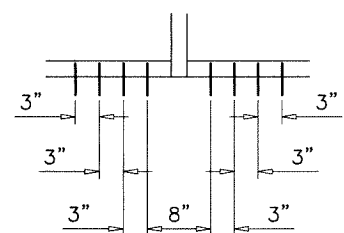
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



A2, B2, C2



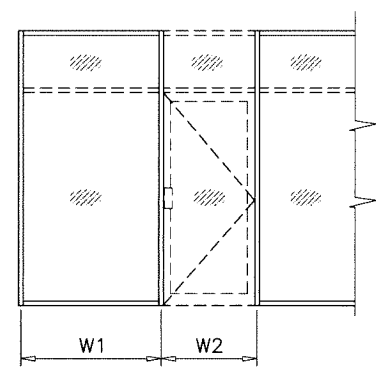
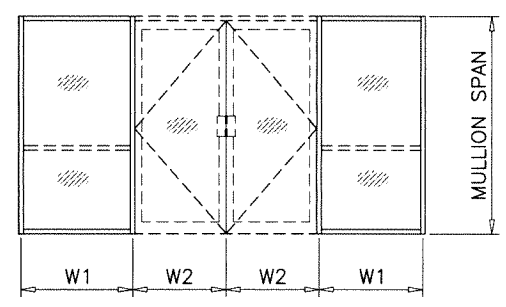
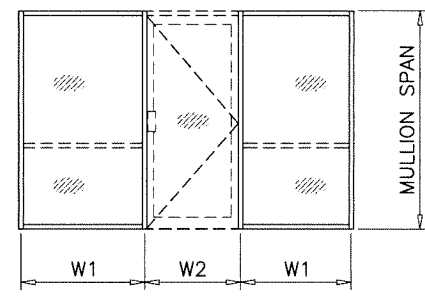
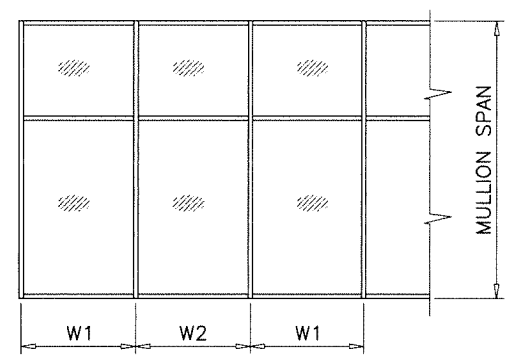
A3, B3, C3



A4

ANCHORS TYPES: SEE SHEET 7 FOR DESCRIPTION
A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION

ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.



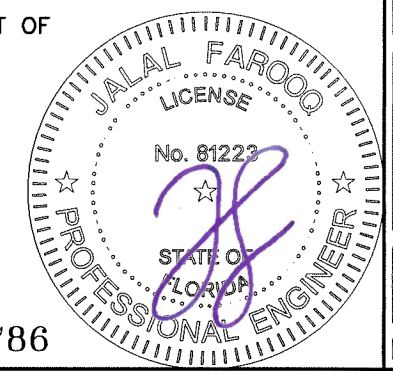
WIDTH (W) = $\frac{W1 + W2}{2}$

ANCHORS

DOORS NOT PART OF THIS APPROVAL.

Sealed: 9/3/2026

FL #39786



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 262-6978
FAX. (305) 262-6978
COMP-ANL 21-62F-MG

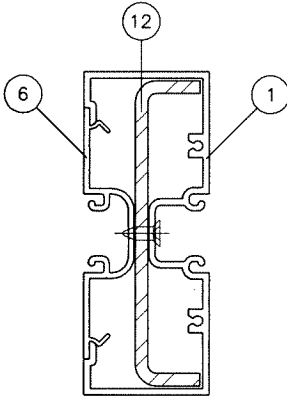
MC-4500 ALUMINUM FLUSH GLAZED SYSTEM (N.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:
no date by description
08-25-21 scale: 3/8" = 1" dr. by: TARIQ chk. by:
drawing no. 21-62F
sheet 5 of 9

DOOR MULLION LOAD CAPACITY - PSF				
NOMINAL DIMS.				DOOR MULLION
WIDTH (W1) INCHES	DOOR HEIGHT INCHES	FRAME HEIGHT INCHES	WIDTH (W2) INCHES	EXT. (+) INT. (-)
72	84	96	18	100.0
			24	100.0
			30	97.2
			36	90.6
			42	84.8
			48	79.7
		102	18	94.0
			24	87.0
			30	81.0
			36	75.8
			42	71.2
			48	67.1
		108	18	79.6
			24	74.0
			30	69.1
			36	64.8
			42	61.0
			48	57.7
		114	18	68.8
			24	64.1
			30	60.0
			36	56.4
		120	42	53.2
			18	60.4
			24	56.4
			30	52.9
			36	49.8
			42	47.0

DOOR MULLION LOAD CAPACITY - PSF				
NOMINAL DIMS.				DOOR MULLION
WIDTH (W1) INCHES	DOOR HEIGHT INCHES	FRAME HEIGHT INCHES	WIDTH (W2) INCHES	EXT. (+) INT. (-)
72	90	96	18	100.0
			24	100.0
			30	100.0
			36	98.8
			42	92.0
			48	86.0
		102	18	100.0
			24	93.9
			30	87.0
			36	81.0
			42	75.7
			48	71.2
		108	18	84.9
			24	78.5
			30	73.0
			36	68.3
			42	64.1
			48	60.4
		114	18	72.3
			24	67.2
			30	62.7
			36	58.8
		120	42	55.3
			18	62.8
			24	58.5
			30	54.7
			36	51.4
			42	48.4

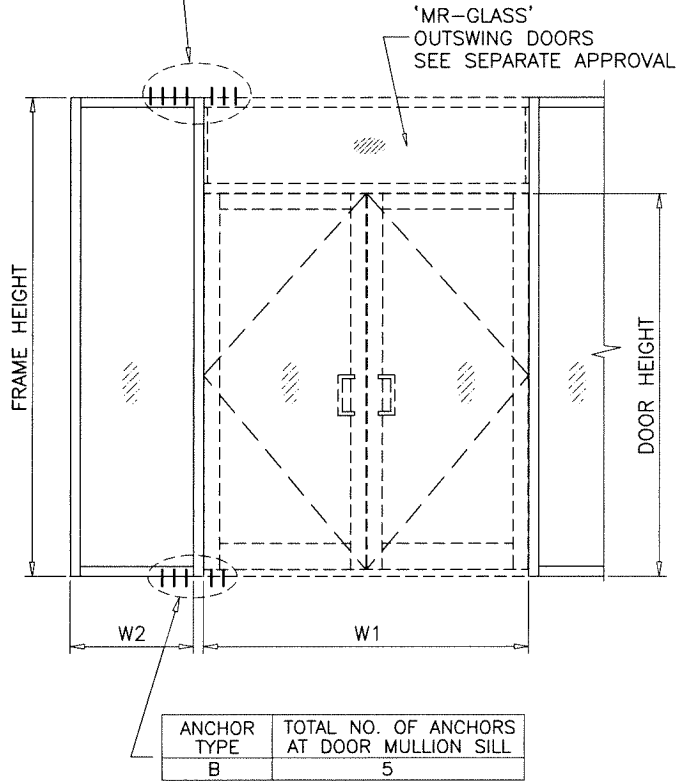
DOOR MULLION LOAD CAPACITY - PSF				
NOMINAL DIMS.				DOOR MULLION
WIDTH (W1) INCHES	DOOR HEIGHT INCHES	FRAME HEIGHT INCHES	WIDTH (W2) INCHES	EXT. (+) INT. (-)
72	96	102	18	100.0
			24	100.0
			30	95.2
			36	88.0
			42	81.9
			48	76.5
		108	18	92.1
			24	84.6
			30	78.3
			36	72.8
			42	68.1
			-	63.9
		114	18	77.1
			24	71.2
			30	66.2
			36	61.8
		120	42	58.0
			18	66.0
			24	61.3
			30	57.1
			36	53.5
			42	50.3



DOOR MULLION
WITH REINFORCING

	Ix IN^4	Sx IN^3
ALUMINUM	3.1382	1.3948
STEEL	2.0346	.9575
TOTAL Ix ALUM + Ix STL X 2.9	8.9801	

ANCHOR TYPES	TOTAL NO. OF ANCHORS AT DOOR MULLION HEAD
A	7
B	6
C	5



DOOR MULLION



Sealed: 9/3/2026

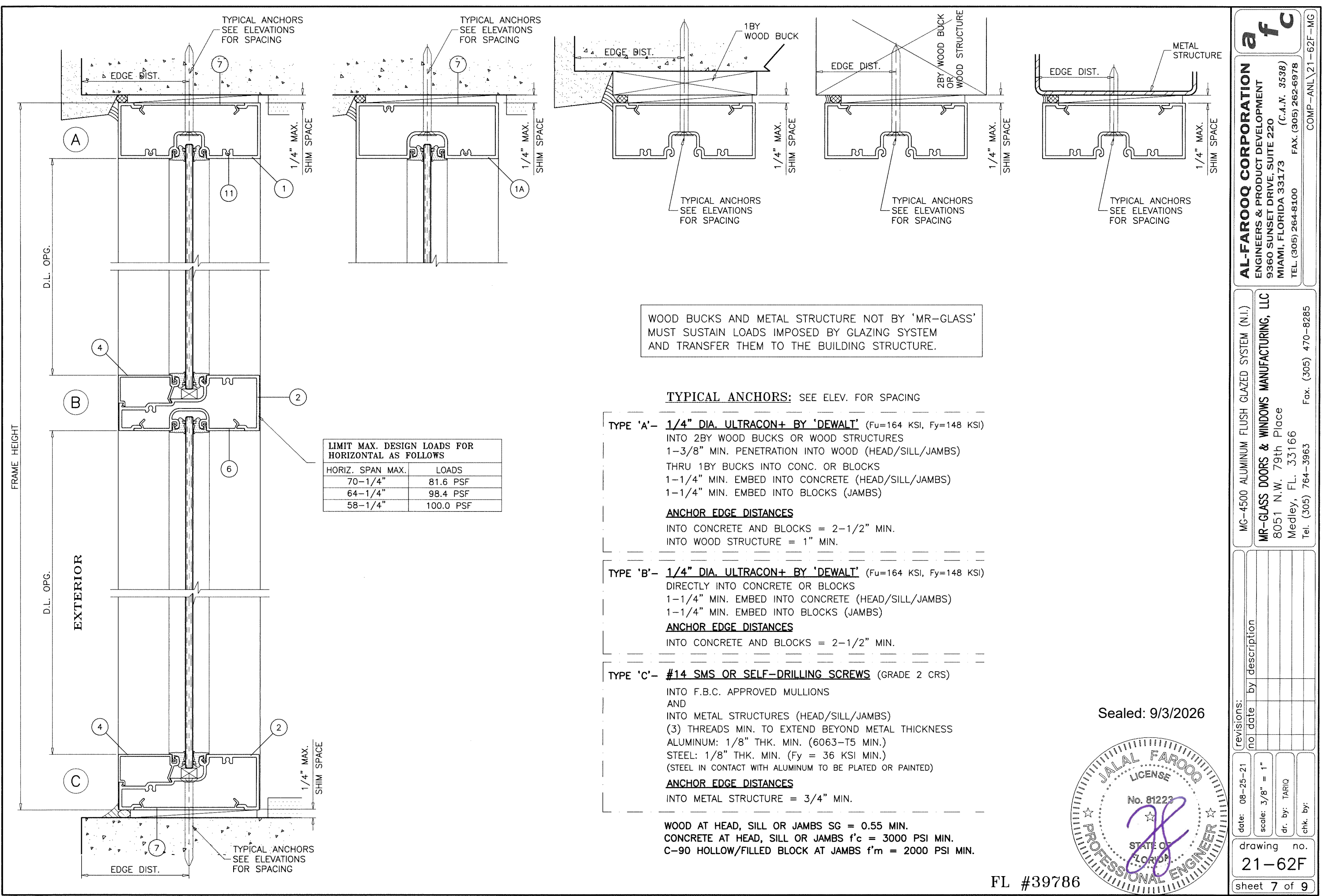
FL #39786

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

MG-4500 ALUMINUM FLUSH GLAZED SYSTEM (N.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: 08-25-21
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:
drawing no.
21-62F
sheet 6 of 9

COMP-ANL\21-62F-MG



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' - 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-3/8" 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)

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

TYPE 'B' - 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
DIRECTLY INTO CONCRETE OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

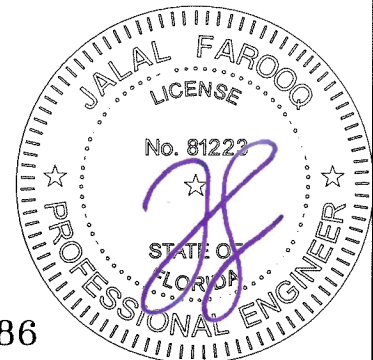
ANCHOR EDGE DISTANCES
INTO CONCRETE AND BLOCKS = 2-1/2" MIN.

TYPE 'C' - #14 SMS OR SELF-DRILLING SCREWS (GRADE 2 CRS)
INTO F.B.C. APPROVED MULLIONS
AND
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 = 3/4" MIN.

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

Sealed: 9/3/2026



FL #39786

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
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MIAMI, FLORIDA 33173
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COMP-ANL\21-62F-MG

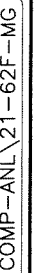
MG-4500 ALUMINUM FLUSH GLAZED SYSTEM (N.I.)

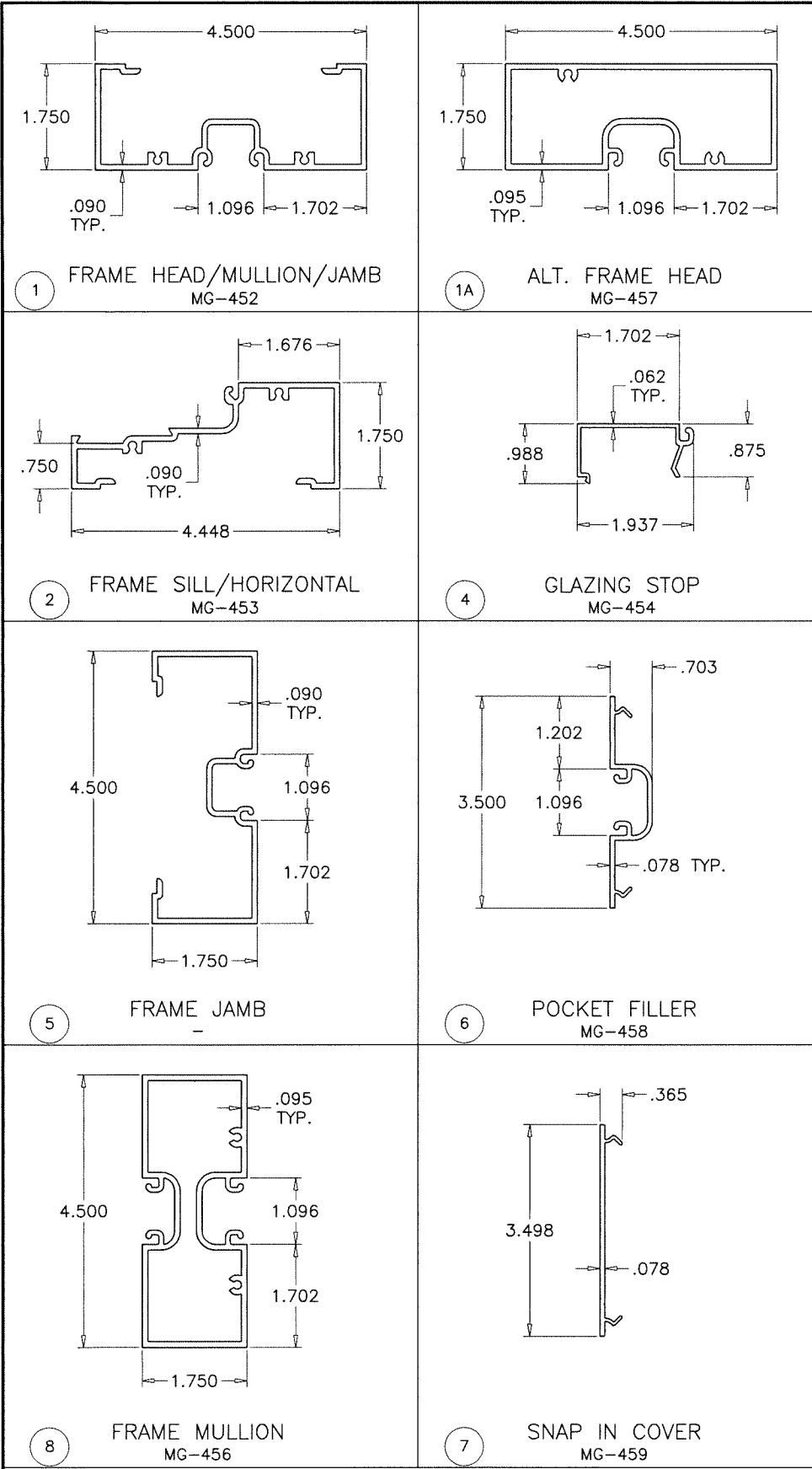
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:
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date: 08-25-21
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chk. by:

drawing no.
21-62F
sheet 7 of 9

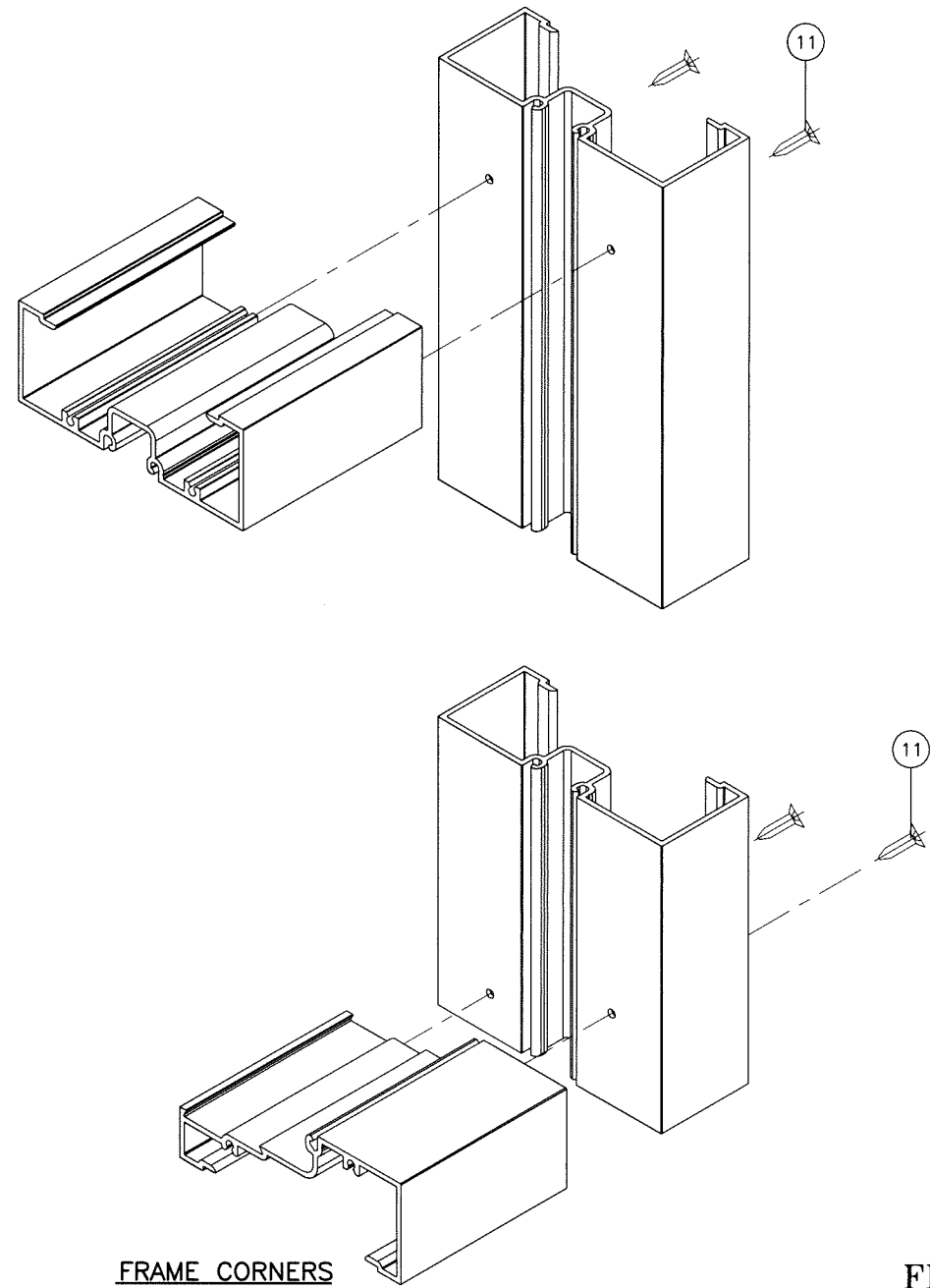




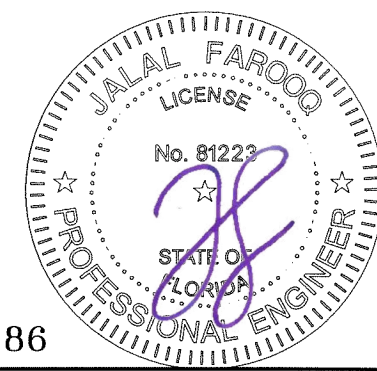
ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	MG-452	-	FRAME HEAD/MULLION/JAMB	6063-T6	-
1A	MG-457	-	ALT. FRAME HEAD	6063-T6	-
2	MG-453	-	FRAME SILL/HORIZONTAL	6063-T6	-
4	MG-454	-	GLAZING STOP	6063-T6	-
5	-	-	FRAME JAMB	6063-T6	-
6	MG-458	-	POCKET FILLER	6063-T6	-
7	MG-459	-	SNAP IN COVER	6063-T6	-
8	MG-456	-	FRAME MULLION	6063-T6	-
9	2028	AS REQD.	GLAZING GASKET	NEOPRENE	CAROLINA CUSTOM RUBBER, DUROMETER 70±5
10	SB563	2/ LITE	SETTING BLOCK, 1/4" X 1/2" X 2" LONG, AT 3" FROM EACH END	NEOPRENE	C.R. LAURENCE, DUROMETER 80±5
11	#8 X 1"	2/ CORNER	ASSEMBLY SCREWS (PH SELF DRILLING)	-	GRADE 4 CRS, Fu=92 KSI, FY=120 KSI
12	-	-	REINFORCING CHANNEL	STEEL	ASTM A36, Fy 36 KSI

SEALANTS:

ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER OF GLAZING BEAD TO FRAME TO BE SEALED WITH DOW CORNING 795 SEALANT.



Sealed: 9/3/2026



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL 21-62F-MG

MG-4500 ALUMINUM FLUSH GLAZED SYSTEM (N.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: 08-25-21 scale: 3/8" = 1" dr. by: TARIQ chk. by:
drawing no. 21-62F sheet 9 of 9