AL-FAROOQ CORPORATION

CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

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

FL 38057
Date: 03/01/2021

Detailed Product Description:

Manufacturer: MR-GLASS DOORS & WINDOWS MANUFACTURING LLC.

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

Model Name: MG-1500 ALUMINUM SLIDING GLASS DOOR

Maximum Load: +60 PSF, -70 PSF (Small Missile Impact)

Installation Drawings # 21-20F

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 _X_ Yes ___ No

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

TEST	DESCRIPTION	TEST LOCATION	TEST REPORT DATE	TEST REPORT #	Test Sealed by
ASTM E283	Air Infiltration Leakage	Hurricane Engineering & Testing Inc.	05/21/2020	HETI-20-8079	Rafael E. Droz-Seda, PE
ASTM E331 OR ASTM 547 & TAS 202	Water Penetration	Hurricane Engineering & Testing Inc.	05/21/2020	HETI-20-8079	Rafael E. Droz-Seda, PE
ASTM E330 & TAS 202	Uniform Static Air Press.	Hurricane Engineering & Testing Inc.	05/21/2020	HETI-20-8079	Rafael E. Droz-Seda, PE
ASTM F842	Forced Entry	Hurricane Engineering & Testing Inc.	05/21/2020	HETI-20-8079	Rafael E. Droz-Seda, PE

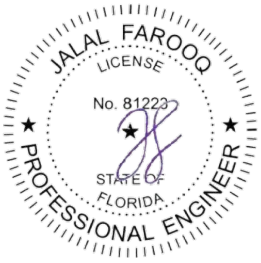
Supplemental Tests (Tested in accordance with TAS-201 and TAS-203)

TEST	DESCRIPTION	TEST LOCATION	TEST REPORT DATE	TEST REPORT #	Test Sealed by
FBC 1626.3 (TAS 201 & 203) ASTM E1886/1996	Small Missile Impact & Cyclic	Hurricane Engineering & Testing Inc.	05/21/2020	HETI-20-8079	Rafael E. Droz-Seda, 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 2020 Florida Building Code.

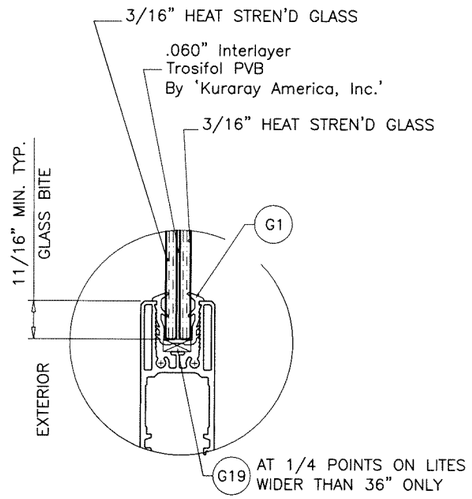
Evaluation Report Engineer:

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



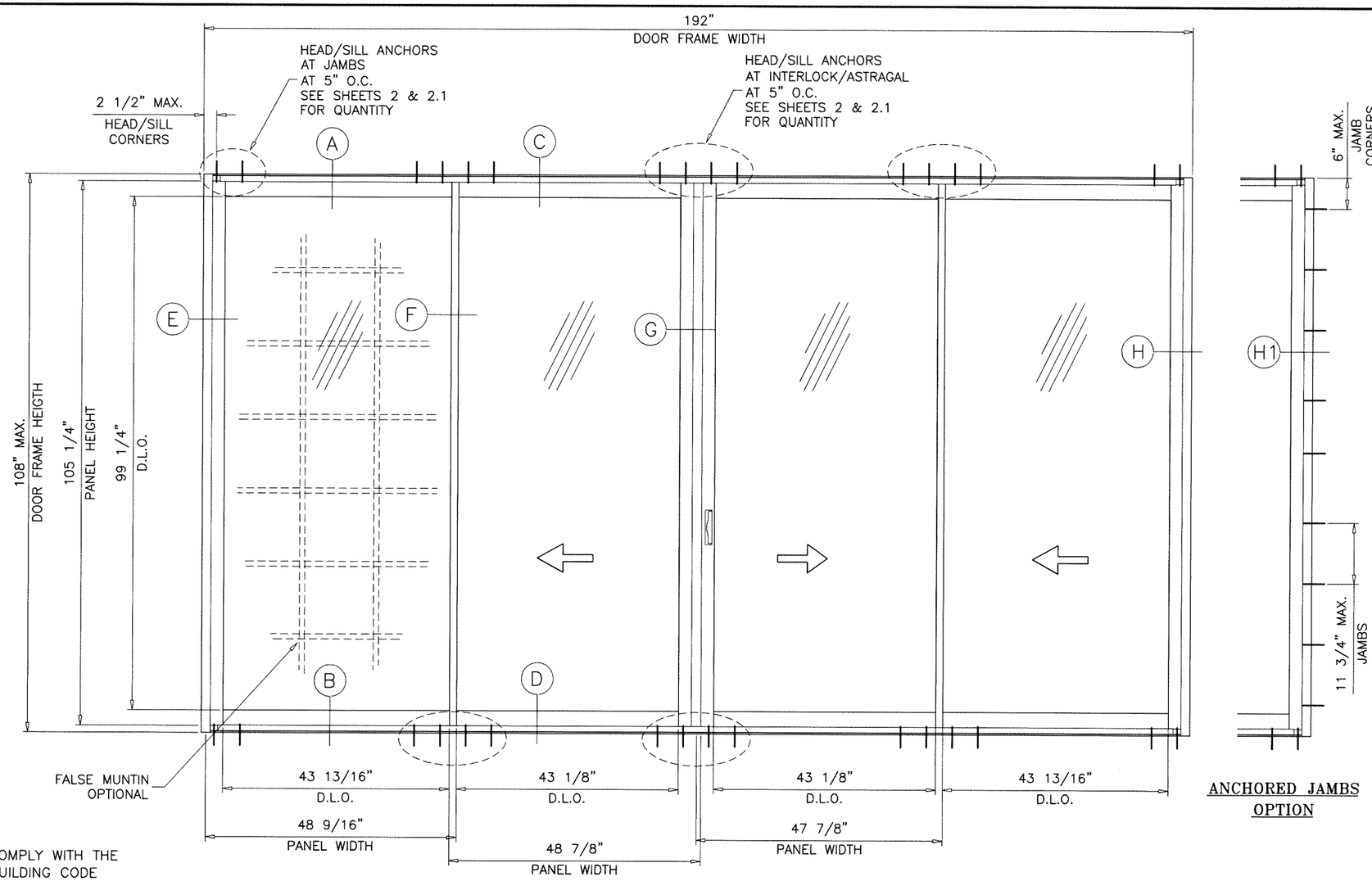
SEALED: 3/18/2021

9360 Sunset Drive Ste 220 | Miami, FL 33173 | T: 305.264.8100 | F: 305.262.6978 | www.afceng.com | alfarooq@afceng.com



GLAZING DETAIL

7/16" OVERALL LAM. GLASS



TYPICAL ELEVATION

TESTED UNIT

ANCHORED JAMBS OPTION

SERIES MG-1500 (S.M.I.)
ALUMINUM SLIDING GLASS DOOR

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2020 (7TH 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 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.

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 SHEETS 2 & 3 FOR DESIGN LOAD CAPACITY OF DOORS AND REQUIRED HEAD/SILL ANCHOR QUANTITY.

STEP 3 FOR DOORS WITH FREE STANDING JAMBS SEE SHEET 7 TO VERIFY MIN. & MAX. GAP DIMENSIONS.

THESE DOORS ARE RATED FOR SMALL MISSILE IMPACT.
F.B.C. APPROVED IMPACT RESISTANT SHUTTERS
REQUIRED FOR INSTALLATIONS UP TO 30 FT. OF GRADE.
SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

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.

FL #38057

JALAL FAROOQ
LICENSE
No. 81223
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

SEALED: 3/18/2021

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\21-20F-MG

MG-1500 ALUM SLIDING GLASS DOOR (S.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: 03-11-21
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:

drawing no. 21-20F

sheet 1 of 11

1/4" MAX. SHIMS

DESIGN LOAD CAPACITY – PSF											
AVERAGE PANEL WIDTH INCHES	DOOR FRAME HEIGHT INCHES	ANCHORS TYPE 'A'				ANCHORS 'B'		ANCHORS TYPE 'C'			
		2 ANCHORS AT JAMBS		3 ANCHORS AT JAMBS		2 ANCHORS AT JAMBS		2 ANCHORS AT JAMBS		3 ANCHORS AT JAMBS	
		4 ANCHORS AT STILE ENDS		6 ANCHORS AT STILE ENDS		4 ANCHORS AT STILE ENDS		4 ANCHORS AT STILE ENDS		6 ANCHORS AT STILE ENDS	
		EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)
30	82	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
54		60.0	69.5	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
60		60.0	62.5	60.0	70.0	60.0	70.0	60.0	69.5	60.0	70.0
30	84	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
54		60.0	67.8	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
60		60.0	61.0	60.0	70.0	60.0	70.0	60.0	67.9	60.0	70.0
30	90	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
54		60.0	63.3	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
30	96	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		60.0	66.8	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
54		59.3	59.3	60.0	70.0	60.0	70.0	60.0	66.0	60.0	70.0
30	102	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		60.0	62.8	60.0	70.0	60.0	70.0	60.0	69.9	60.0	70.0
30	108	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	67.8	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		59.3	59.3	60.0	70.0	60.0	70.0	60.0	66.0	60.0	70.0

3/8" MAX. SHIMS

DESIGN LOAD CAPACITY – PSF													
AVERAGE PANEL WIDTH INCHES	DOOR FRAME HEIGHT INCHES	ANCHORS TYPE 'A'				ANCHORS TYPE 'B'				ANCHORS TYPE 'C'			
		2 ANCHORS AT JAMBS		3 ANCHORS AT JAMBS		2 ANCHORS AT JAMBS		3 ANCHORS AT JAMBS		2 ANCHORS AT JAMBS		3 ANCHORS AT JAMBS	
		4 ANCHORS AT STILE ENDS		6 ANCHORS AT STILE ENDS		4 ANCHORS AT STILE ENDS		6 ANCHORS AT STILE ENDS		4 ANCHORS AT STILE ENDS		6 ANCHORS AT STILE ENDS	
		EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)
30	82	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
54		60.0	69.5	60.0	70.0	60.0	70.0	60.0	70.0	60.0	64.2	60.0	70.0
60		60.0	62.5	60.0	70.0	60.0	70.0	60.0	64.4	60.0	70.0	57.7	57.7	60.0	70.0
30	84	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
54		60.0	67.8	60.0	70.0	60.0	70.0	60.0	69.9	60.0	70.0	60.0	62.6	60.0	70.0
60		60.0	61.0	60.0	70.0	60.0	70.0	60.0	62.9	60.0	70.0	56.4	56.4	60.0	70.0
30	90	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	65.8	60.0	70.0
54		60.0	63.3	60.0	70.0	60.0	70.0	60.0	65.2	60.0	70.0	58.5	58.5	60.0	70.0
30	96	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		60.0	66.8	60.0	70.0	60.0	70.0	60.0	68.8	60.0	61.7	60.0	70.0
54		59.3	59.3	60.0	70.0	60.0	70.0	60.0	61.2	60.0	70.0	54.8	54.8	60.0	70.0
30	102	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	66.3	60.0	70.0
48		60.0	62.8	60.0	70.0	60.0	70.0	60.0	64.8	60.0	70.0	58.0	58.0	60.0	70.0
30	108	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	67.8	60.0	70.0	60.0	70.0	60.0	69.9	60.0	70.0	60.0	62.6	60.0	70.0
48		59.3	59.3	60.0	70.0	60.0	70.0	60.0	61.2	60.0	70.0	54.8	54.8	60.0	70.0

AVERAGE PANEL WIDTH = $\frac{\text{DOOR FRAME WIDTH}}{\text{NUMBER OF PANELS}}$

DOOR HEIGHT AND WIDTH SIZE MUST COMPLY EGRESS REQUIREMENTS PER FBC AS REQUIRED.

NOTE:
FOR DOOR CAPACITY SEE CHARTS ABOVE.
FOR FREE STANDING JAMB CAPACITY SEE CHART ON SHEET 6.
LOWER VALUES FROM DOOR CAPACITY CHART OR JAMB CAPACITY CHART WILL APPLY.

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300–09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05–DEC–219

JALAL FAROOQ LICENSE No. 81223 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL #38057

SEALED: 3/18/2021

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\21–20F–MG

MG–1500 ALUM SLIDING GLASS DOOR (S.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: 03–11–21
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no. 21–20F

1/2" MAX. SHIMS

DESIGN LOAD CAPACITY – PSF									
AVERAGE PANEL WIDTH INCHES	DOOR FRAME HEIGHT INCHES	ANCHORS TYPE 'A' & 'B'				ANCHORS TYPE 'C'			
		2 ANCHORS AT JAMBS 4 ANCHORS AT STILE ENDS		3 ANCHORS AT JAMBS 6 ANCHORS AT STILE ENDS		2 ANCHORS AT JAMBS 4 ANCHORS AT STILE ENDS		3 ANCHORS AT JAMBS 6 ANCHORS AT STILE ENDS	
		EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)
30	82	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
48		60.0	68.4	60.0	70.0	60.0	61.7	60.0	70.0
54		60.0	60.8	60.0	70.0	54.8	54.8	60.0	70.0
60		54.7	54.7	60.0	70.0	49.4	49.4	60.0	70.0
30	84	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	68.8	60.0	70.0
48		60.0	66.8	60.0	70.0	60.0	60.2	60.0	70.0
54		59.4	59.4	60.0	70.0	53.5	53.5	60.0	70.0
60		53.4	53.4	60.0	70.0	48.2	48.2	60.0	70.0
30	90	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	70.0	60.0	70.0	60.0	64.2	60.0	70.0
48		60.0	62.3	60.0	70.0	56.2	56.2	60.0	70.0
54		55.4	55.4	60.0	70.0	50.0	50.0	60.0	70.0
30	96	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
42		60.0	66.8	60.0	70.0	60.0	60.2	60.0	70.0
48		58.5	58.5	60.0	70.0	60.0	52.7	60.0	70.0
54		52.0	52.0	60.0	70.0	46.8	46.8	60.0	70.0
30	102	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	66.1	60.0	70.0
42		60.0	62.9	60.0	70.0	60.0	56.7	60.0	70.0
48		55.0	55.0	60.0	70.0	49.6	49.6	60.0	70.0
30	108	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	69.3	60.0	70.0	60.0	62.5	60.0	70.0
42		60.0	59.4	60.0	70.0	53.5	53.5	60.0	70.0
48		52.0	52.0	60.0	70.0	46.8	46.8	60.0	70.0

3/4" MAX. SHIMS

DESIGN LOAD CAPACITY – PSF													
AVERAGE PANEL WIDTH INCHES	DOOR FRAME HEIGHT INCHES	ANCHORS TYPE 'A' & 'B'						ANCHORS TYPE 'C'					
		2 ANCHORS AT JAMBS 4 ANCHORS AT STILE ENDS		3 ANCHORS AT JAMBS 6 ANCHORS AT STILE ENDS		4 ANCHORS AT JAMBS 8 ANCHORS AT STILE ENDS		2 ANCHORS AT JAMBS 4 ANCHORS AT STILE ENDS		3 ANCHORS AT JAMBS 6 ANCHORS AT STILE ENDS		4 ANCHORS AT JAMBS 8 ANCHORS AT STILE ENDS	
		EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)
30	82	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	70.0	60.0	70.0	60.0	70.0	60.0	63.8	60.0	70.0	60.0	70.0
42		60.0	60.1	60.0	70.0	60.0	70.0	54.7	54.7	60.0	70.0	60.0	70.0
48		52.6	52.6	60.0	70.0	60.0	70.0	47.8	47.8	60.0	70.0	60.0	70.0
54		46.8	46.8	60.0	70.0	60.0	70.0	42.5	42.5	60.0	63.8	60.0	70.0
60		42.1	42.1	60.0	63.1	60.0	70.0	38.3	38.3	57.4	57.4	60.0	70.0
30	84	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0	60.0	70.0
36		60.0	68.5	60.0	70.0	60.0	70.0	60.0	62.2	60.0	70.0	60.0	70.0
42		58.7	58.7	60.0	70.0	60.0	70.0	53.4	53.4	60.0	70.0	60.0	70.0
48		51.3	51.3	60.0	70.0	60.0	70.0	46.7	46.7	60.0	70.0	60.0	70.0
54		45.6	45.6	60.0	68.5	60.0	70.0	41.5	41.5	60.0	62.2	60.0	70.0
60		41.1	41.1	60.0	61.6	60.0	70.0	37.3	37.3	56.0	56.0	60.0	70.0
30	90	60.0	70.0	60.0	70.0	60.0	70.0	60.0	69.7	60.0	70.0	60.0	70.0
36		60.0	63.9	60.0	70.0	60.0	70.0	58.1	58.1	60.0	70.0	60.0	70.0
42		54.8	54.8	60.0	70.0	60.0	70.0	49.8	49.8	60.0	70.0	60.0	70.0
48		47.9	47.9	60.0	70.0	60.0	70.0	43.6	43.6	60.0	65.4	60.0	70.0
54		42.6	42.6	60.0	63.9	60.0	70.0	38.7	38.7	58.1	58.1	60.0	70.0
30	96	60.0	70.0	60.0	70.0	60.0	70.0	60.0	65.4	60.0	70.0	60.0	70.0
36		59.9	59.9	60.0	70.0	60.0	70.0	54.5	54.5	60.0	70.0	60.0	70.0
42		51.3	51.3	60.0	70.0	60.0	70.0	46.7	46.7	60.0	70.0	60.0	70.0
48		44.9	44.9	60.0	67.4	60.0	70.0	40.9	40.9	60.0	61.3	60.0	70.0
54		39.9	39.9	59.9	59.9	60.0	70.0	36.3	36.3	54.5	54.5	60.0	70.0
30	102	60.0	67.7	60.0	70.0	60.0	70.0	60.0	61.5	60.0	70.0	60.0	70.0
36		56.4	56.4	60.0	70.0	60.0	70.0	51.3	51.3	60.0	70.0	60.0	70.0
42		48.3	48.3	60.0	70.0	60.0	70.0	43.9	43.9	60.0	65.9	60.0	70.0
48		42.3	42.3	60.0	63.4	60.0	70.0	38.4	38.4	57.7	57.7	60.0	70.0
30	108	60.0	63.9	60.0	70.0	60.0	70.0	58.1	58.1	60.0	70.0	60.0	70.0
36		53.2	53.2	60.0	70.0	60.0	70.0	48.4	48.4	60.0	70.0	60.0	70.0
42		45.6	45.6	60.0	68.5	60.0	70.0	41.5	41.5	60.0	62.2	60.0	70.0
48		39.9	39.9	59.9	59.9	60.0	70.0	36.3	36.3	54.5	54.5	60.0	70.0

$$\text{AVERAGE PANEL WIDTH} = \frac{\text{DOOR FRAME WIDTH}}{\text{NUMBER OF PANELS}}$$

DOOR HEIGHT AND WIDTH SIZE MUST COMPLY EGRESS REQUIREMENTS PER FBC AS REQUIRED.

NOTE:
FOR DOOR CAPACITY SEE CHARTS ABOVE.
FOR FREE STANDING JAMB CAPACITY SEE CHART ON SHEET 6.
LOWER VALUES FROM DOOR CAPACITY CHART OR JAMB CAPACITY CHART WILL APPLY.

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300–09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05–DEC–219

JALAL FAROOQ LICENSE No. 61223 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL #38057

SEALED: 3/18/2021

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\21–20F–MG

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Tel. (305) 764–3963 Fax. (305) 470–8285

revisions:

no	date	by	description

date: 03–11–21
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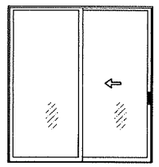
dr. by: TARIQ
chk. by:

drawing no. 21–20F



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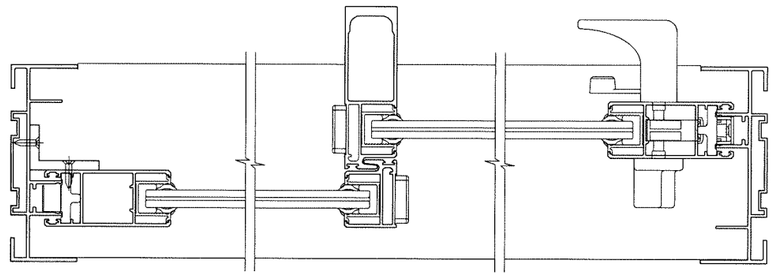
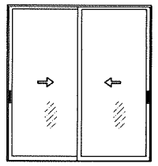
XO





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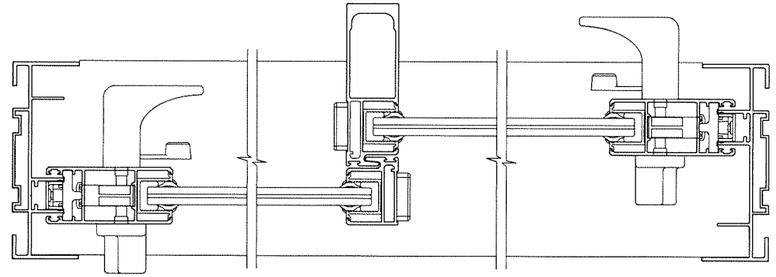

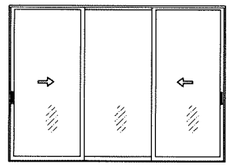

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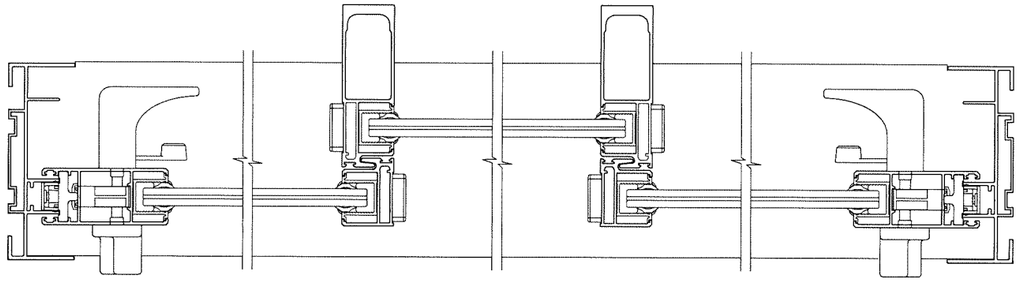
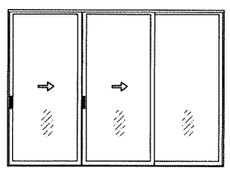
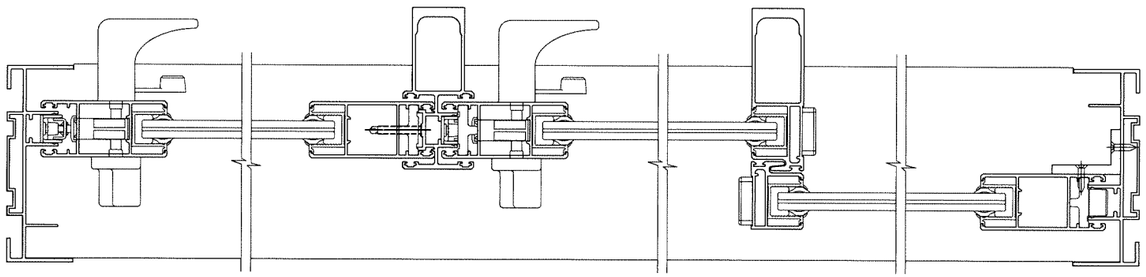
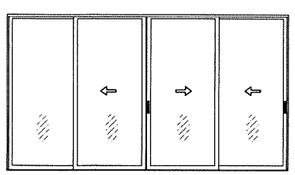


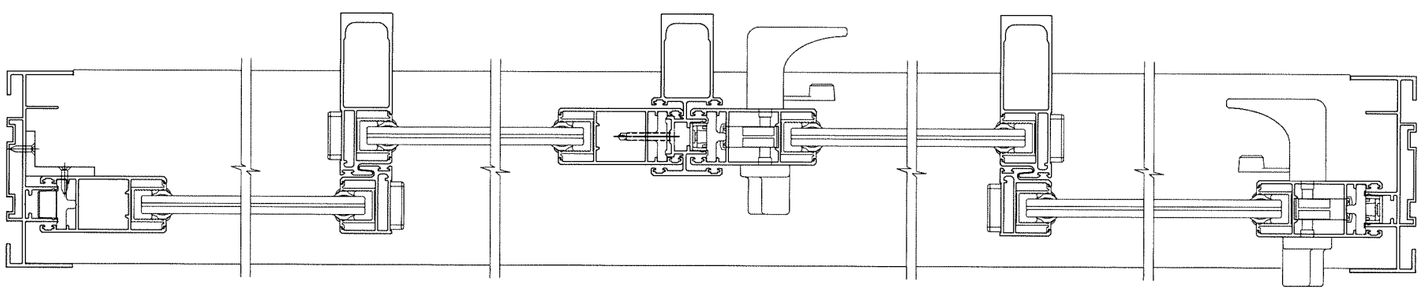


XXO (SHOWN)
OXX





OXXX(SHOWN)
XXXO
OXXO



NOTE:

1. CONFIGURATIONS SHOWN FOR ILLUSTRATION PURPOSES ONLY.
2. FOR APPLICABLE DESIGN PRESSURES SEE SHEETS 2 & 3.
3. FOR ANCHOR DETAILS SEE SHEETS 5 THRU 8.

APPROVED CONFIGURATIONS

FL #38057

JALAL FAROOQ LICENSE No. 81223 STATE OF FLORIDA PROFESSIONAL ENGINEER

SEALED: 3/18/2021

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\21-20F-MG

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8051 N.W. 79th Place
Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:

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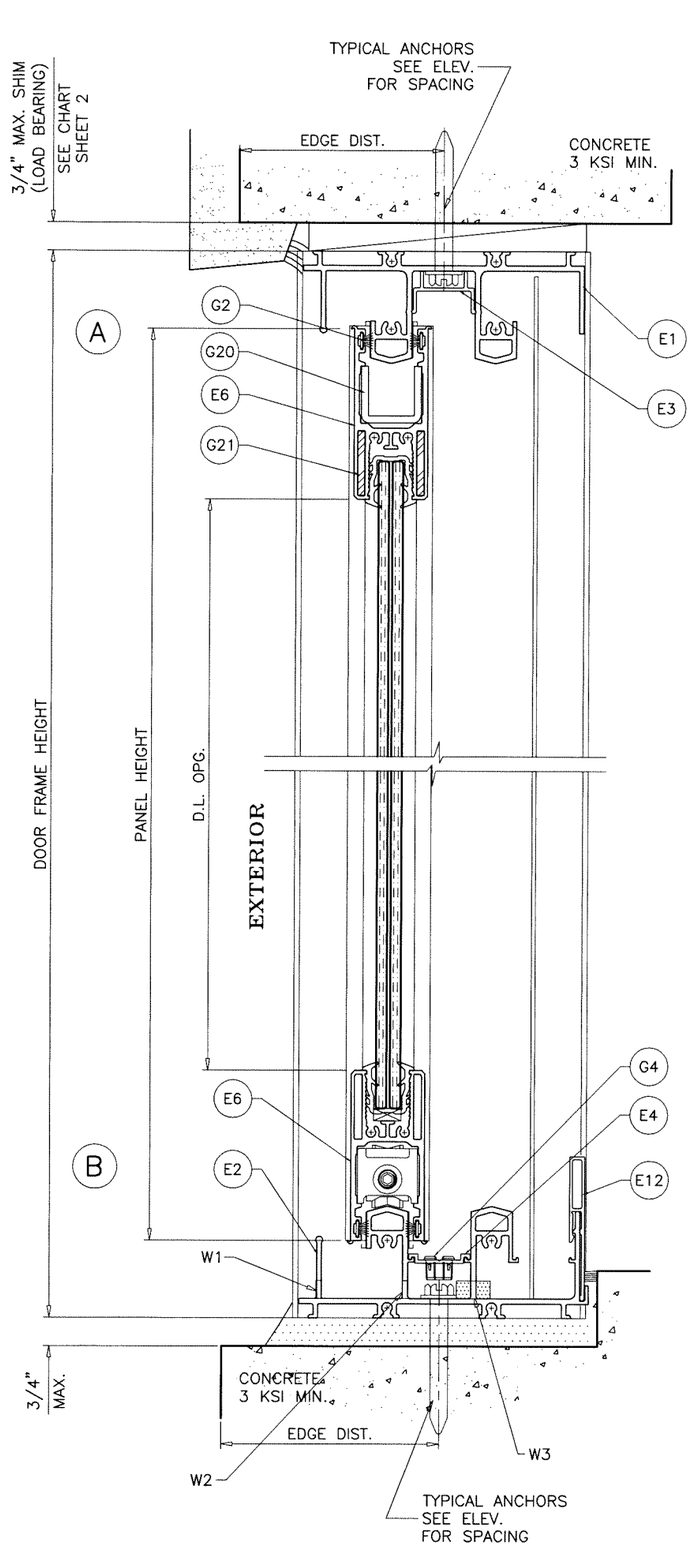

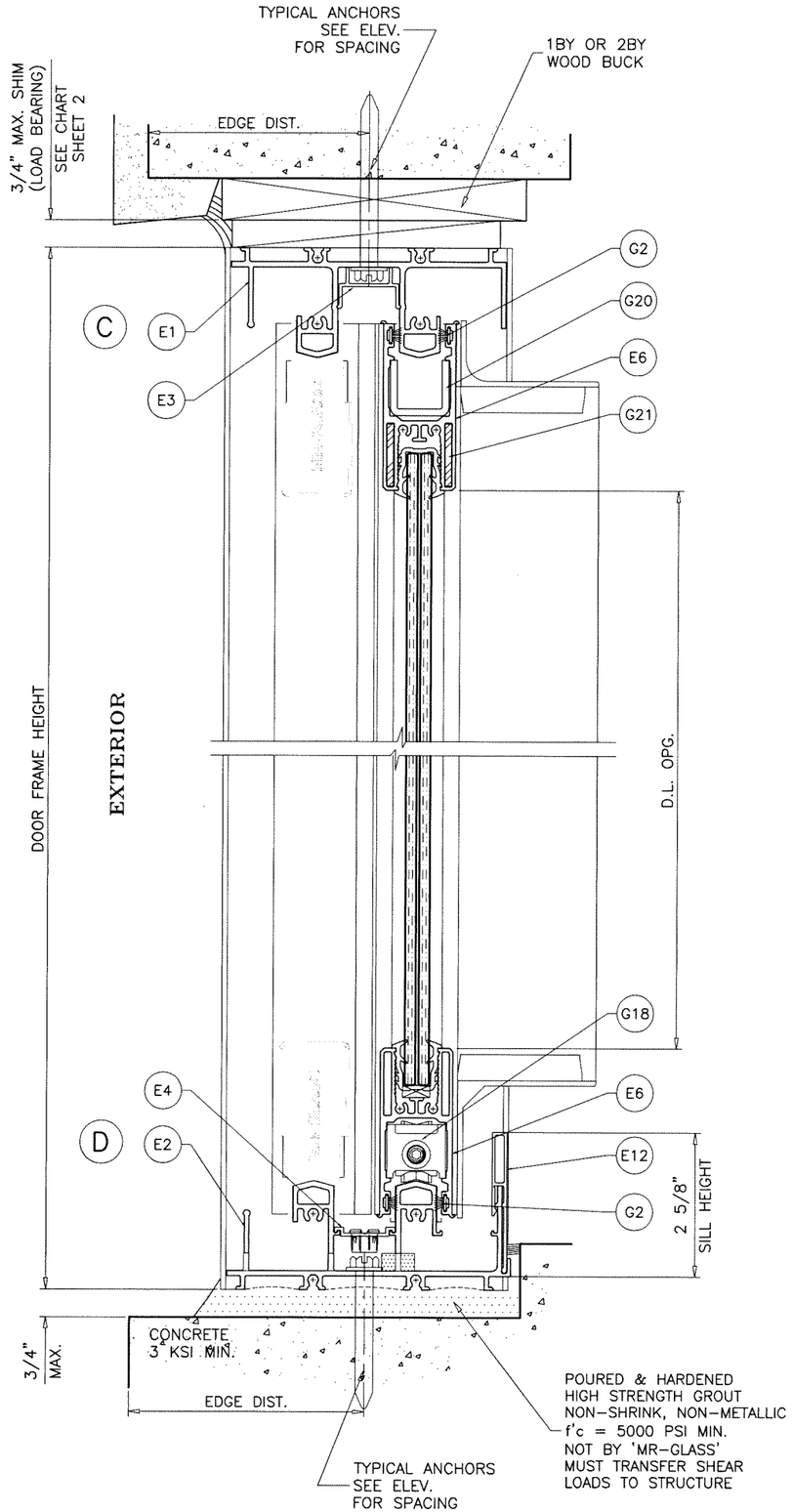

WEEPHOLES:

W1 = EXTERIOR LEG CUT 3-1/2" ON EACH END 3"W X 1/4"H WEEP SLOTS AT 24" O.C.

W2 = 1-3/8"W X 1/4"H WEEP SLOTS AT 12" O.C.

W3 = 1-3/8"W X 1/4"H WEEP SLOTS AT 12" O.C. WITH RETICULATED FOAM.

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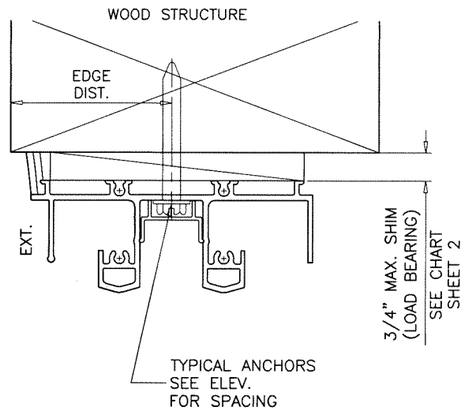
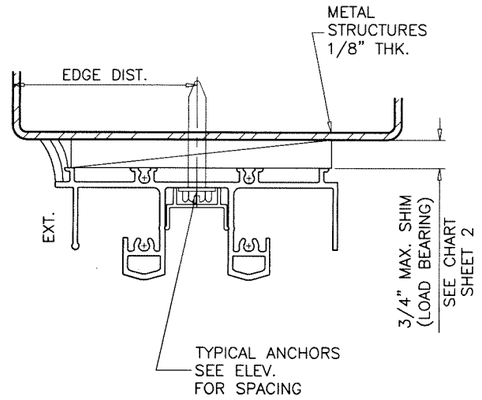
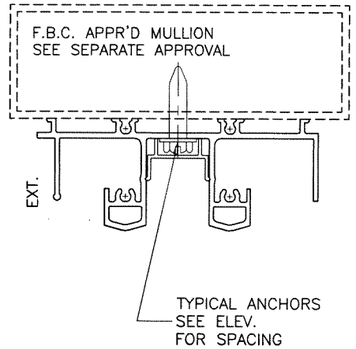
sheet 5 of 11







1BY OR 2BY 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
1-7/8" MIN. PENETRATION INTO WOOD (HEAD/JAMBS)

THRU 1BY OR 2BY BUCKS INTO CONC. OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD)
1-1/4" MIN. EMBED INTO CONC. OR BLOCKS (JAMBS)

DIRECTLY INTO CONC. OR BLOCKS
1-3/4" MIN. EMBED INTO CONCRETE (JAMBS)
1-3/4" MIN. EMBED INTO GROUT-FILLED BLOCKS (JAMBS)

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

TYPE 'C'– 5/16" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)
INTO F.B.C. APPROVED MULLIONS
OR
INTO METAL STRUCTURES (HEAD/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 AT HEAD/SILL = 2-3/16" MIN.
INTO CONCRETE AND BLOCKS AT JAMBS = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1-1/4" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD 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.

JALAL FAROOQ LICENSE No. 31223 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL #38057

SEALED: 3/18/2021

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\21-20F-MG

MC-1500 ALUM SLIDING GLASS DOOR (S.M.I.)

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8051 N.W. 79th Place
Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

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chk. by:

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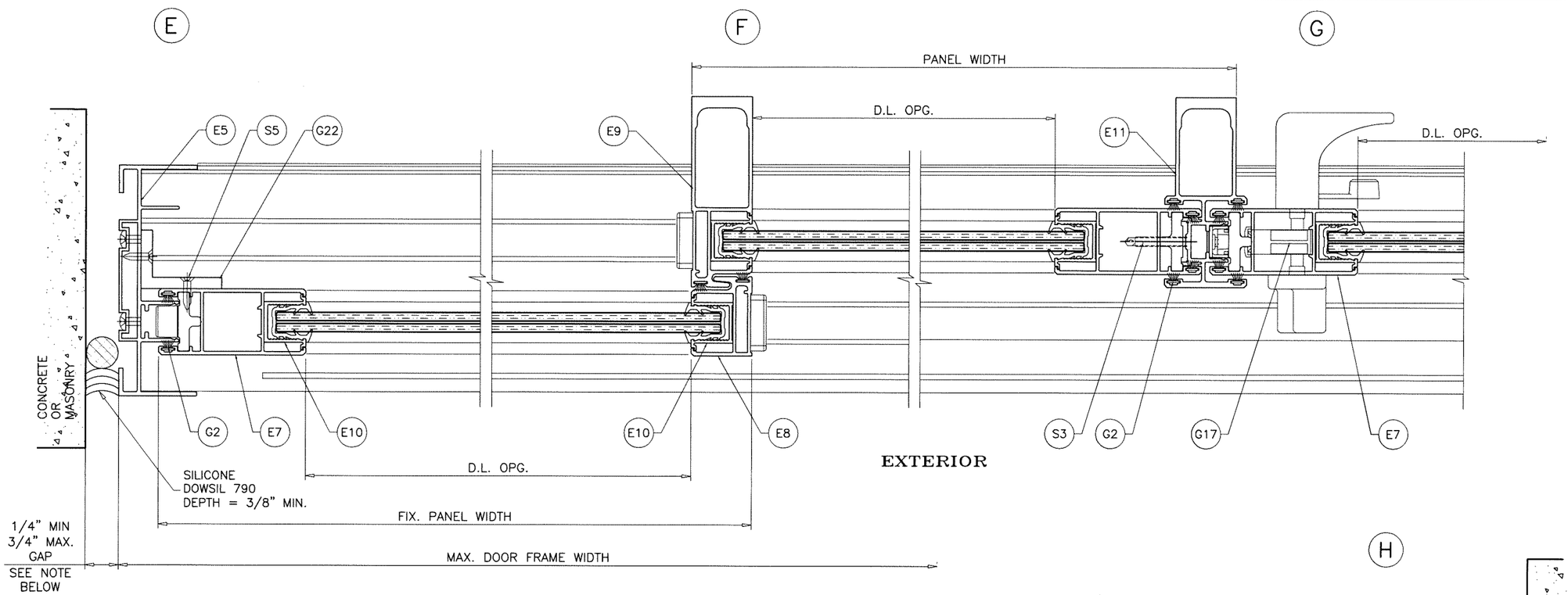
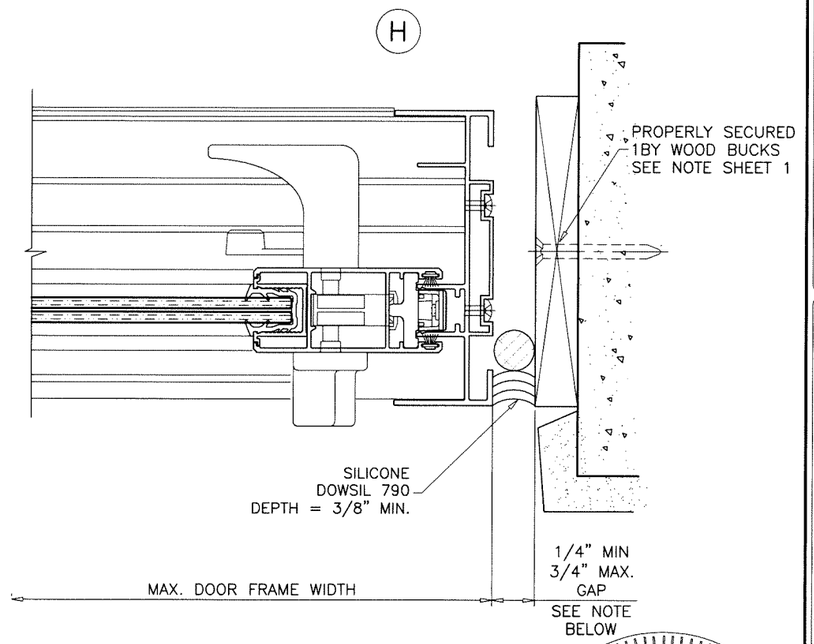
sheet 6 of 11





MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
84"	1/4"	3/4"
96"	5/16"	3/4"
108"	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.

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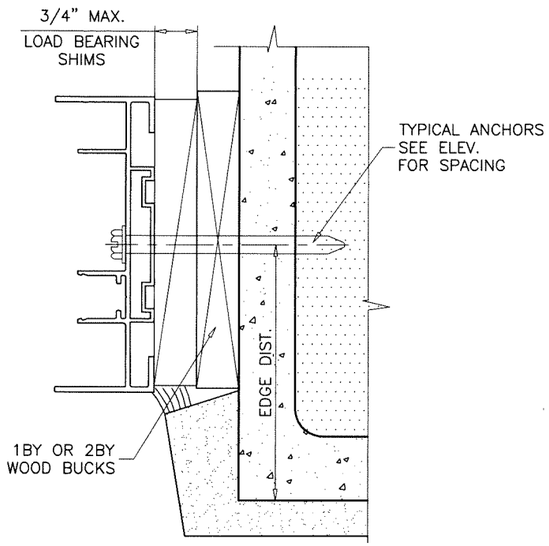

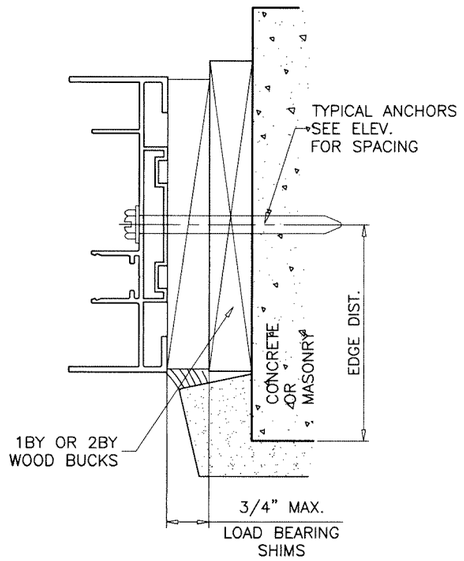

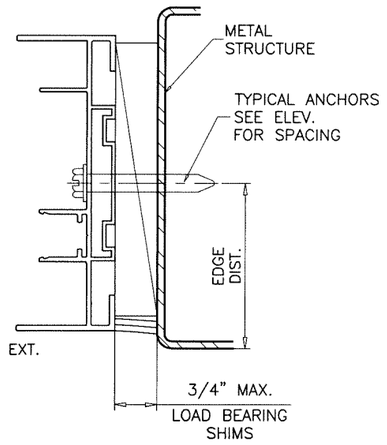

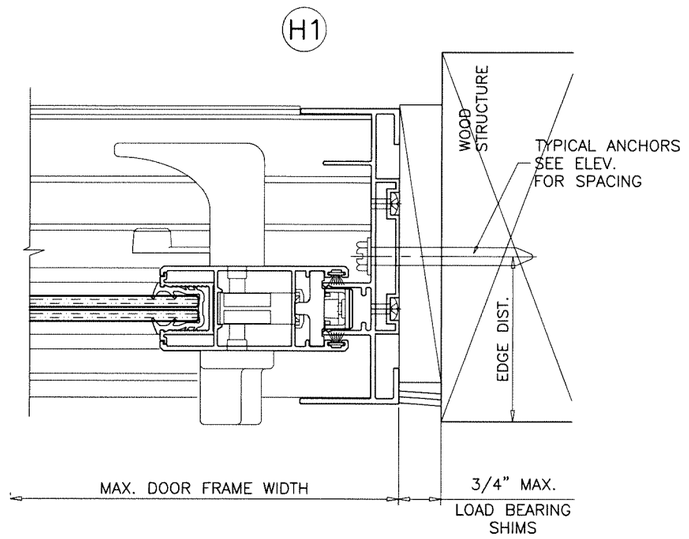

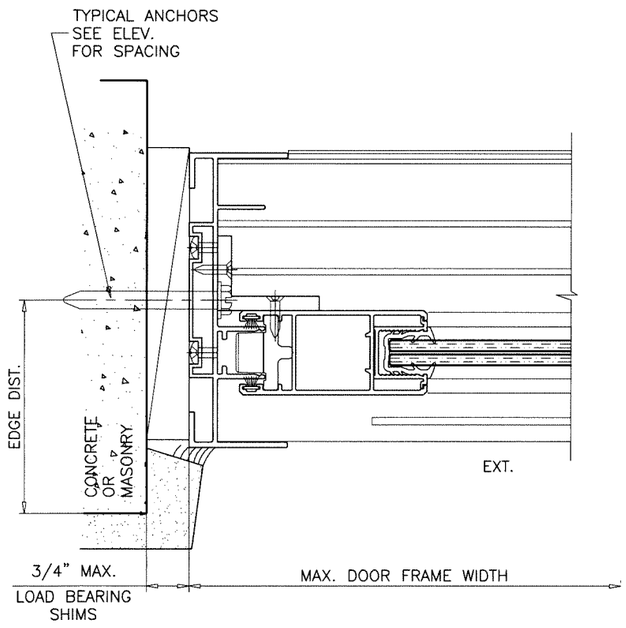

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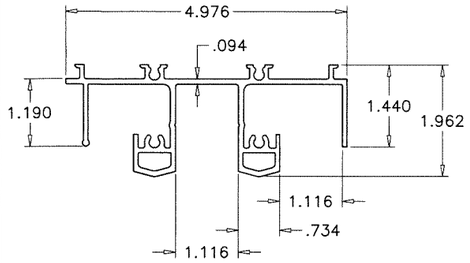
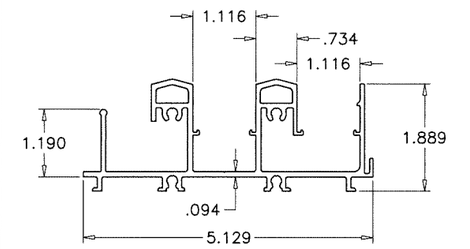
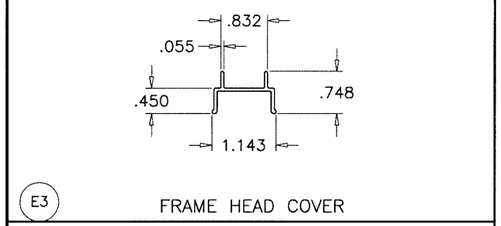
sheet 8 of 11



E1 FRAME HEAD



E2 FRAME SILL



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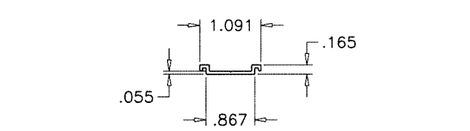
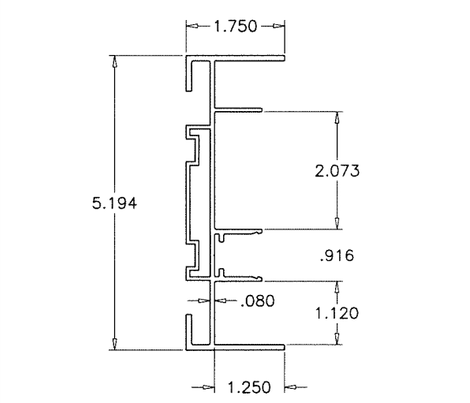
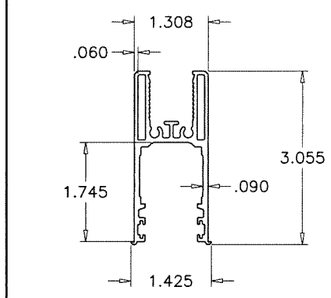


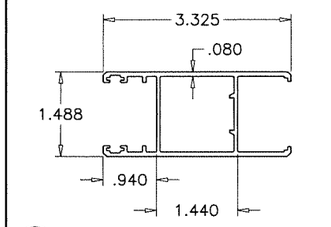
E4 FRAME SILL COVER



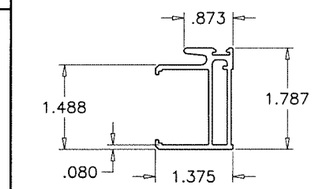
E5 FRAME JAMB



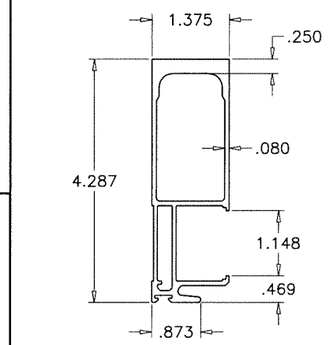
E6 PANEL TOP/BOTTOM RAIL



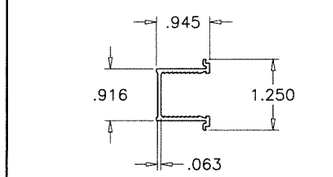
E7 LOCK STILE



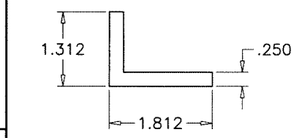
E8 EXTERIOR INTERLOCK



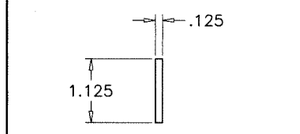
E9 INTERIOR INTERLOCK



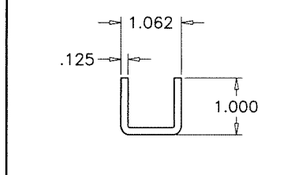
E10 GLASS ADAPTER



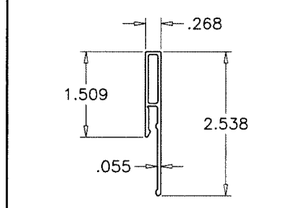
G22 FIX. PANEL CLIP



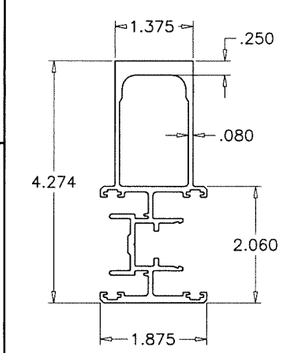
G21 TOP RAIL END BAR



G20 TOP RAIL END CHANNEL



E12 SILL RISER



E11 ASTRAGAL STILE

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\21-20F-MG

MG-1500 ALUM SLIDING GLASS DOOR (S.M.I.)

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

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chk. by:

drawing no. 21-20F

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JALAL FAROOQ LICENSE No. 81223 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL #38057

SEALED: 3/18/2021

ITEM #	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1	E1503	1	FRAME HEAD	6063–T6	–
E2	E1501	1	FRAME SILL	6063–T6	–
E3	E1522	AS REQD.	FRAME HEAD COVER	6063–T5	OPTIONAL
E4	E1520	AS REQD.	FRAME SILL COVER	6063–T5	OPTIONAL
E5	E1502	2	FRAME JAMB	6063–T6	–
E6	E1510	2/ PANEL	PANEL TOP/BOTTOM RAIL	6063–T6	–
E7	E1511	AS REQD.	LOCK STILE	6063–T6	–
E8	E1512	AS REQD.	EXTERIOR INTERLOCK	6063–T6	–
E9	E1513	AS REQD.	INTERIOR INTERLOCK	6063–T6	–
E10	E1517	AS REQD.	GLASS ADAPTER	6063–T6	–
E11	E1514	AS REQD.	ASTRAGAL STILE	6063–T6	–
E12	E1521	AS REQD.	SILL RISER	6063–T5	–
G1	G15–01S	AS REQD.	GLAZING GASKET	SANTOPRENE	DUROMETER 65±5 SHORE A
G2	G15–02	AS REQD.	PILE W'STRIPPING	POLYETHYLENE/YARN	–
G3	G15–12	AS REQD.	BALL VALVE	–	–
G4	G15–12	AS REQD.	HOLE PLUG	PVC	–
G5	G15–15	AS REQD.	GASKET	NEOPRENE	–
G6	M10–05	AS REQD.	EXTERIOR BUMPER	–	–
G7	M15–01	AS REQD.	LOCK STILE COVER	POLYAMIDE	–
G8	M15–02	AS REQD.	–	–	–
G9	M15–03	AS REQD.	LOCK STILE GUIDE	POLYAMIDE	–
G10	–	AS REQD.	PANEL BUMPER	NEOPRENE	–
G11	M15–04	AS REQD.	INTERLOCK COVER	POLYAMIDE	–
G12	M15–05	AS REQD.	INTERLOCK COVER	POLYAMIDE	–
G13	M15–06	AS REQD.	INTERLOCK COVER/GUIDE	POLYAMIDE	–
G14	M15–07	AS REQD.	INTERLOCK CAP	POLYAMIDE	–
G15	M15–09	AS REQD.	ASTRAGAL CAP	POLYAMIDE	–
G16	M15–11	AS REQD.	ASTRAGAL COVER	POLYAMIDE	–
G17	L15–01	–	2 POINT MORTISE LOCK & HANDLE	ZAMAK	INTERLOCK
G18	M15–20	2/ MOV. PANEL	ROLLER ASSEMBLY AT 9" FROM ENDS	ST. STEEL/ACETAL	FASTENED WITH (2) 12–24 X 3/4" PH MS
G19	–	AS REQD.	SETTING BLOCKS	EPDM	DUROMETER 80±5 SHORE A
G20	–	AS REQD.	TOP RAIL END CHANNEL, 4" LONG AT PANEL ENDS	6063–T6	–
G21	–	AS REQD.	TOP RAIL END BAR, 4" LONG AT PANEL ENDS	6063–T6	–
G22	–	2/ FIX. PANEL	FIXED PANEL CLIP, 1–7/8" LONG, AT 4" FROM TOP & BOTTOM	6063–T6	–
S1	#12 X 1 1/2"	4/ CORNER	FRAME ASSEMBLY FASTENERS	ST. STEEL	PH SDS
S2	#10 X 1 1/2"	4/ CORNER	PANEL ASSEMBLY FASTENERS	ST. STEEL	PH SDS
S3	#12 X 1 1/2"	AS REQD.	ASTRAGAL FASTENERS, AT 3–1/2" FROM ENDS & 8" O.C.	ST. STEEL	FH SDS
S4	#10 X 1"	AS REQD.	BALL VALVE FASTENERS	ST. STEEL	PH SMS
S5	#10 X 1"	2/ CLIP	FIX. CLIP FASTENERS	ST. STEEL	FH SMS

SEALANT:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH WHITE/ALUMINUM COLORED SILICONE.

LOCKS:

SURFACE MOUNT METALLIC THREE PLY DUAL HOOK LOCK
AT 38–1/2" FROM BOTTOM
FASTENED TO LOCK STILE WITH
(2) 10–24 X 1/2" FH TC MS

SURFACE MOUNT METALLIC HANDLE AT 38–1/2" FROM BOTTOM
FASTENED TO LOCK STILE WITH
(2) 8–32 X 2–5/8" FH MS

SURFACE MOUNT METALLIC KEEPER FACING LOCK AT 38 1/2" FROM BOTTOM
FASTENED WITH
(1) #14 X 2–7/8" FH SDS AND
(1) 12–24 X 1/2" PH MS

JALAL FAROOQ LICENSE No. 81223 STATE OF FLORIDA PROFESSIONAL ENGINEER

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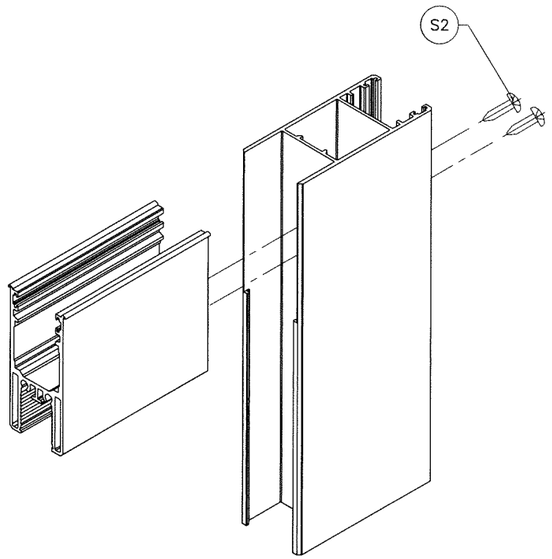
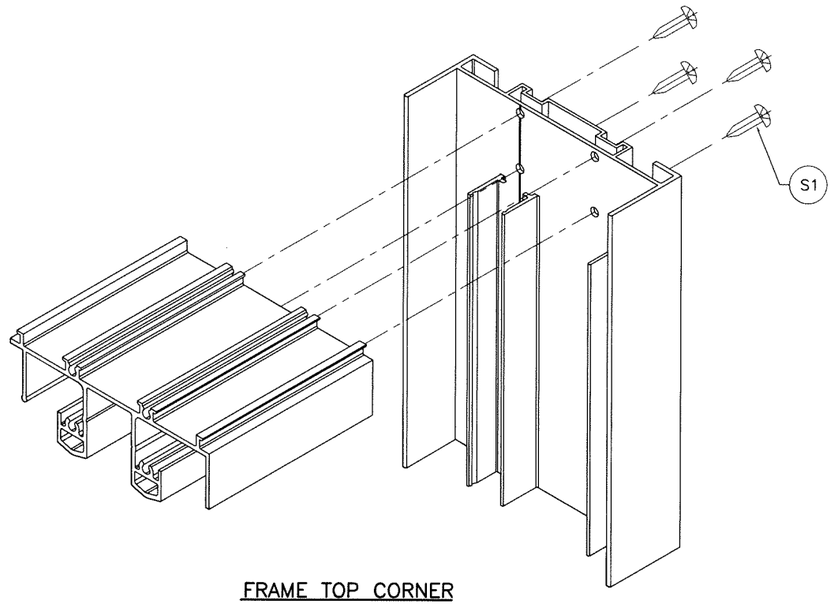
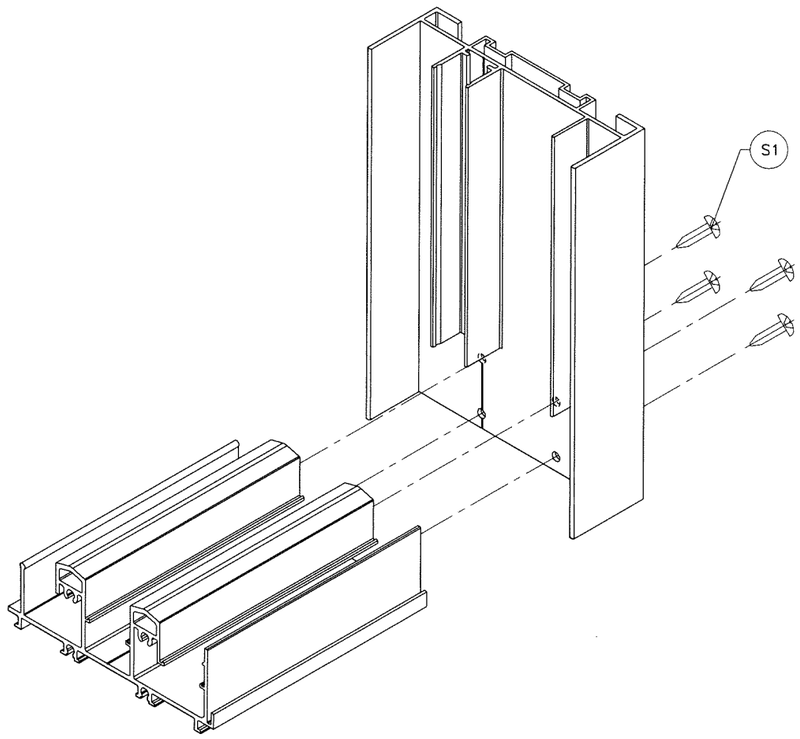


PANEL TOP/BOTTOM CORNER



FRAME TOP CORNER



FRAME BOTTOM CORNER

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