# Business & Professional Regulation





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▶ OFFICE OF THE SECRETARY FL # FL41845-R1
Application Type Revision
Code Version 2023
Application Status Approved

Comments Archived

A Convect

Product Manufacturer Mr-Glass Doors & Windows Manufacturing, LLC

Address/Phone/Email 8051 NW 79th Place Medley, FL 33166 (305) 470-8284

ulises@mrglasswindows.com

Authorized Signature Ulises Senaris

ulises@mrglasswindows.com

Technical Representative Augusto Arias
Address/Phone/Email 8120 NW 84th St
Medley, FL 33166

Medley, FL 33166 (305) 470-8284

aarias@mrglasswindows.com

Quality Assurance Representative

Address/Phone/Email

Category Windows
Subcategory Single Hung

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 PE

Quality Assurance Entity

Quality Assurance Contract Expiration Date

Validated By

Jalal Farooq

PE-81223

 $\label{lem:continuous} \mbox{Keystone Certifications, Inc.}$ 

08/27/2025 Abel Carrasco, PE

☑ Validation Checklist - Hardcopy Received

Certificate of Independence FL41845 R1 COI SS - Certificate of Independence 2022.pdf

 Referenced Standard and Year (of Standard)
 Standard
 Year

 AAMA 501
 2015

 TAS 201/203
 1994

 TAS 202
 1994

Equivalence of Product Standards Certified By

Sections from the Code

**Product Approval Method** Method 1 Option D

Date Submitted 07/25/2023 Date Validated 08/07/2023 Date Pending FBC Approval 08/08/2023 Date Approved 10/18/2023

#### **Summary of Products**

FL # Model, Number or Name		Description		
41845.1	Series 250-CH Aluminum Single Hung Window Wall System	Large missile impact resistant aluminum single hung window wall system		
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: +66/-120 Other: See attached drawing 22-46F for span vs load combinations and installation instructions		Installation Instructions  FL41845 R1 II SS - 250CH SH WW LMI - DWG 22-46F 2023.1.pdf  Verified By: Jalal Farooq PE # 81223  Created by Independent Third Party: Yes  Evaluation Reports  FL41845 R1 AE SS - 250CH SH WW LMI - PAE 2023.pdf  Created by Independent Third Party: Yes		
41845.2	Series 250-CH Aluminum Single Hung Window Wall System	Small missile impact resistant aluminum single hung window wall system		
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: +66/-120 Other: See attached drawing 22-47F for span vs load combinations and installation instructions		Installation Instructions FL41845 R1 II SS - 250CH SH WW SMI - DWG 22-47F 2023.1.pdf Verified By: Jalal Farooq PE # 81223 Created by Independent Third Party: Yes Evaluation Reports FL41845 R1 AE SS - 250CH SH WW SMI - PAE 2023.pdf Created by Independent Third Party: Yes		





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

August 26, 2022

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

To whom it may concern,

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

Sincerely,

No. 81223

Sealed: 8/26/2022

Jalal Farooq, P.E. CFO



# AL-FAROOQ CORPORATION

CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

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

FL 41845

Date: 07/21/2023

**Detailed Product Description:** 

Manufacturer: MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC Manufacturer Address: 8051 N.W. 79TH PLACE. MEDLEY, FL 33166

Model Name: SERIES MG250-CH ALUMINUM SINGLE HUNG WINDOW WALL SYSTEM

Maximum Load: +66 PSF, -120 PSF (Small Missile Impact)

Installation Drawings # 22-47F

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 X 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	Hurricane Engineering & Testing, Inc	11/8/2022	HETI-22-7235	Ram N Tewari, PE
ASTM E331 OR ASTM 547 & TAS 202	Water Penetration	Hurricane Engineering & Testing, Inc	11/8/2022	HETI-22-7235	Ram N Tewari, PE
ASTM E330 & TAS 202	Uniform Static Air Pressure	Hurricane Engineering & Testing, Inc	11/8/2022	HETI-22-7235	Ram N Tewari, PE
ASTM F588	Forced Entry	Hurricane Engineering & Testing, Inc	11/8/2022	HETI-22-7235	Ram N Tewari, PE

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

Test	Description	Test Location	<b>Test Report Date</b>	Test Report#	Test Sealed By
FBC 1626.3			11/8/2022	HETI-22-7235	Ram N Tewari, PE
(TAS 201 & 203)	Small Missile	Hurricane Engineering &			
ASTM E1886/1996	Impact & Cyclic	Testing, Inc			
ANSI Z97.1					

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

**Evaluation Report Engineer:** 

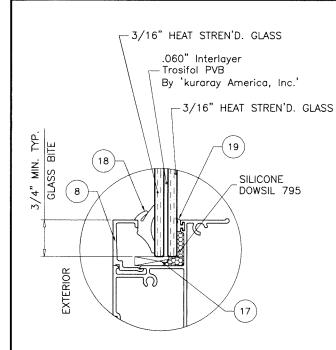
Jalal Farooq

Al-Faroog Corporation

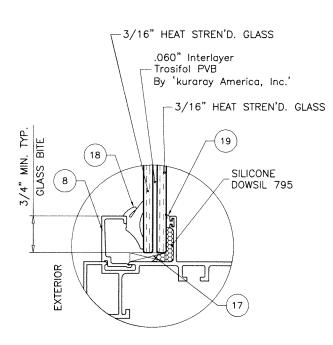
PE # 81223

EB # 3538

Sealed: 7/21/2023



**GLAZING DETAIL** S.H. OVER FIXED WINDOW 7/16" NOMINAL OVERALL LAM. GLASS



GLAZING DETAIL FIXED WINDOW 7/16" NOMINAL OVERALL LAM. GLASS

THESE WINDOWS 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.

### MG250 CH (S.M.I.) ALUMINUM SINGLE HUNG WINDOW WALL SYSTEM

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

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.

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.

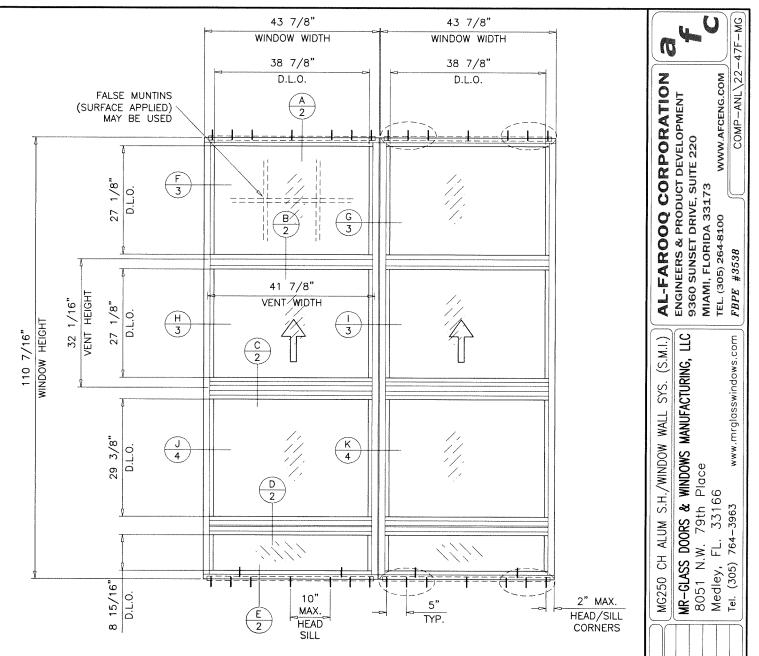
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

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.

GLASS CAPACITIES ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1. SAFEGUARD REQUIREMENTS TO BE VERIFIED BY AHJ



## TYPICAL ELEVATION

TESTED UNIT

MAXIMUM DESIGN LOAD RATING = + 66.0 PSF (FOR MAX. SIZE SHOWN ABOVE OR SMALLER) - 120.0 PSF

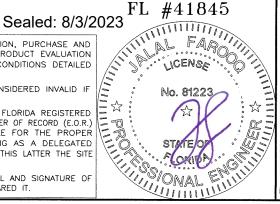
> LAMINATED GLASS SMALL MISSILE IMPACT

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

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.



by description UPDATED TO 2023 .0-22 1/2"=1 by: scale: Å. drawing

(S.M.I.) 2 H

SYS.

WALL

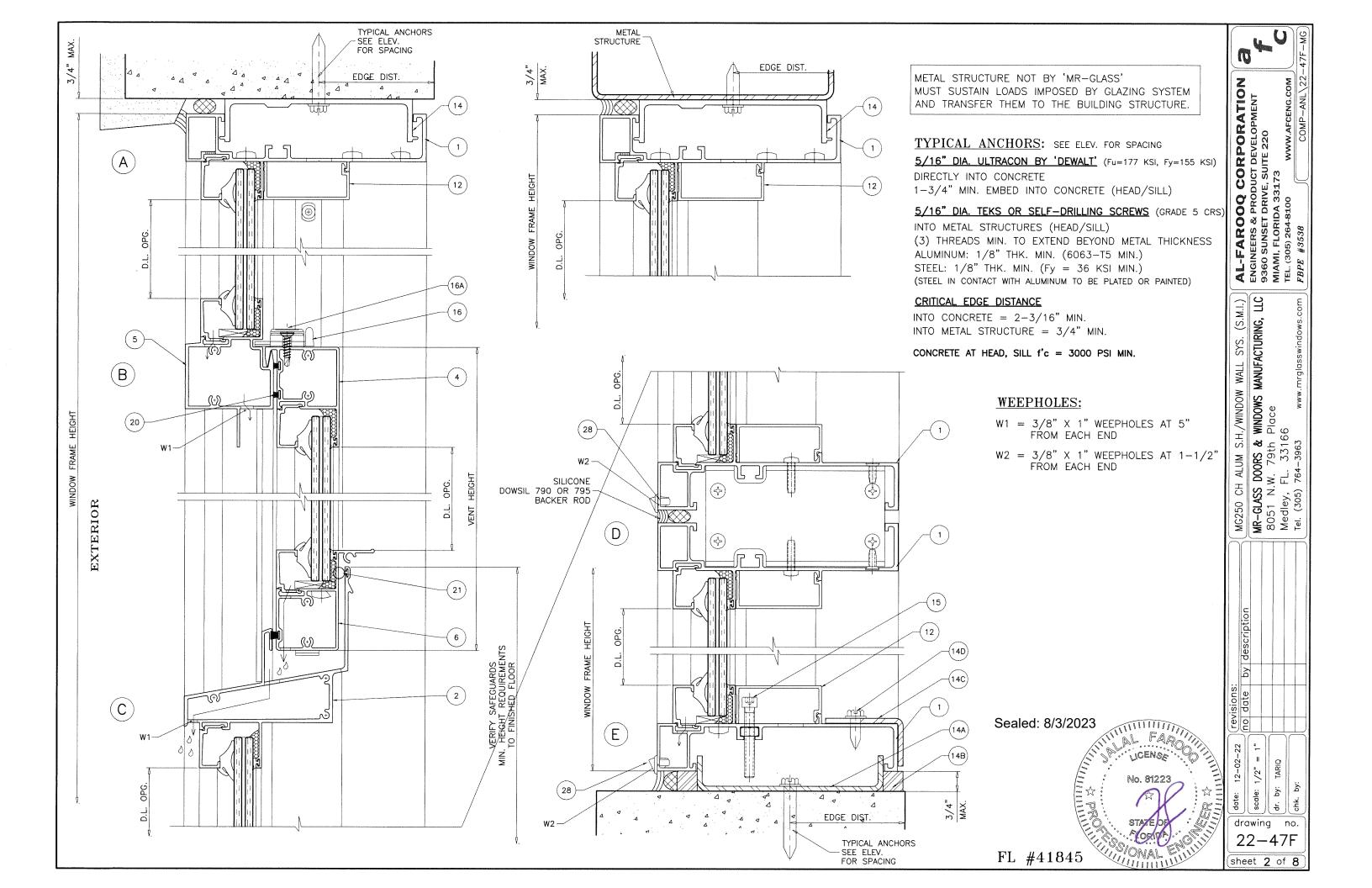
S.H./WINDOW

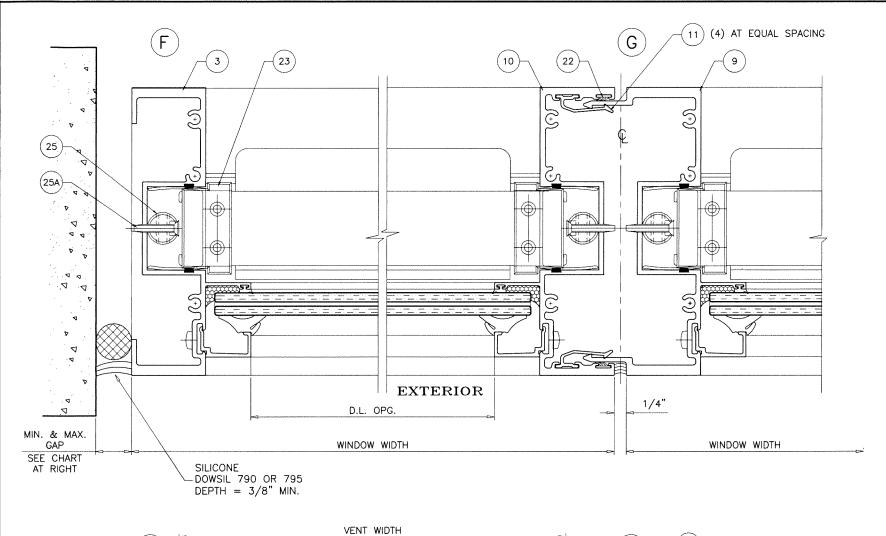
MG250 CH ALUM

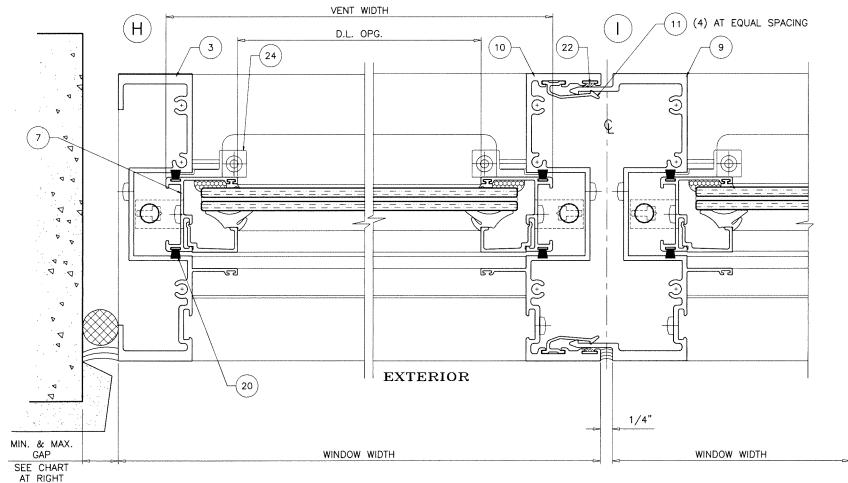
MR-GLASS DOORS & WINDOWS MANUFACTURING, 8051 N.W. 79th Place Medley, FL. 33166 Tel. (305) 764-3963 www.mrglasswindows.

no. 22-47F

sheet 1 of 8







MAX.	GAP		
FRAME HEIGHTS UPTO	MIN.	MAX.	
96"	1/2"	3/4"	
110-3/8"	9/16"	3/4"	

MAX. MOVEMENT CONSIDERED=100% STRETCH PLEASE REFER TO SEALANT MANUFACTURER'S DATA AND APPLICATION MANUAL FOR COMPATABILITY OF SEALANT TO SUBSTRATE & WINDOWALL MANUAL FOR COMPAIABILITY OF SEALANT TO SUBSTRATE & WINDOWALL MATERIAL/FINISH AND COMPLIANCE FOR WARRANTY.

REFER TO ACI-117-10 FOR CONSTRUCTION TOLERANCES.

ALTERNATE SEALANTS AT JAMB AND JAMB GAPS OTHER THAN THOSE IN CHART CAN BE DESIGNED BY ENGINEER OF RECORD BASED ON MANUFACTURER GUIDE LINES.

GAPS LESS THAN 1/4" MAY BE DESIGNED BY ENGINEER OF RECORD BY THE USE OF BOND BREAKER TAPE OR 15% OF GAP ALLOWED MOVEMENT.

Sealed: 8/3/2023 FL #41845

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

FBPE #3538

COMP-ANL\22-4 MG250 CH ALUM S.H./WINDOW WALL SYS. (S.M.I.)

MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC

8051 N.W. 79th Place

Medley, FL. 33166

Tel. (305) 764-3963 www.mrglasswindows.com

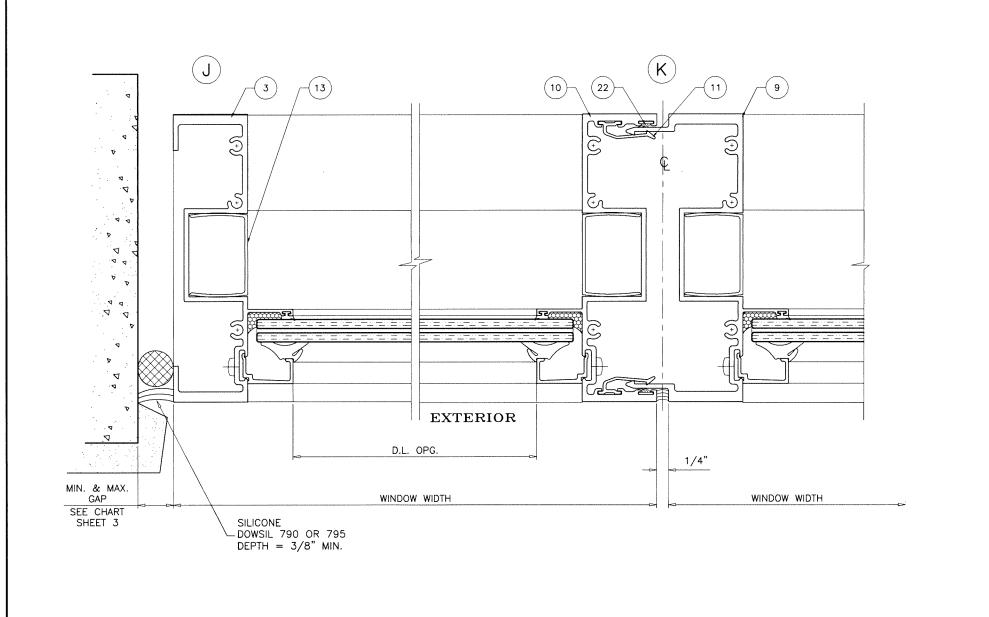
by description 1/2" = by:

dr.

drawing

22-47F

sheet 3 of 8



AL-FAROOQ CORPORATION
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9360 SUNSET DRIVE, SUITE 220
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FBPE #3538
COMP-ANL\22-4 MG250 CH ALUM S.H./WINDOW WALL SYS. (S.M.I.)

MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC

8051 N.W. 79th Place
Medley, FL. 33166
Tel. (305) 764-3963 www.mrglasswindows.com revisions:
no date by description scale: 1/2" = 1" dr. by: TARIQ chk. by: drawing no. 22-47F

sheet 4 of 8

Sealed: 8/3/2023

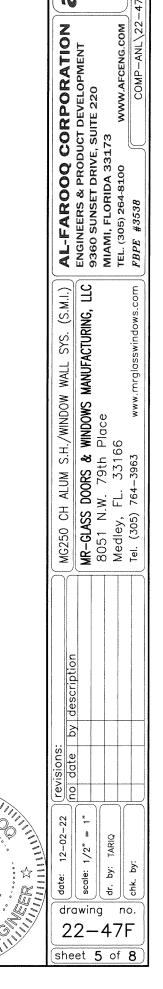
No. 81

FL #41845

IMP34 "	DAD‴ "	DECD	PEGCHIPHIAN	MATERIAL	MANUE (CUIDDIED /DEMARKS
ITEM #	PART #	REQD.	DESCRIPTION		MANUF./SUPPLIER/REMARKS
1	E250	1	FRAME HEAD/SILL	6063-T6	-
2	E251	1	INTERMEDIATE SILL	6063-T6	_
3	E256	2	FRAME JAMB	6063-T6	-
4	E261	1	VENT TOP RAIL	6063-T6	-
5	E252	1	FIXED MTG. RAIL	6063-T6	
6	E260	1	VENT BOTTOM RAIL	6063-T6	_
7	E262	2	VENT SIDE RAIL	6063-T6	-
8	E9003	AS RQD.	GLAZING BEAD (LAM. GLASS)	6063-T6	_
9	E254	_	MALE MULLION	6063-T6	_
10	E255		FEMALE MULLION	6063-T6	_
11	E9007	AS REQD.	ANTI-BUCKLING CLIP, 4" LONG	6063-T6	_
12	E257	AS REQD.	HORIZONTAL COVER	6063-T6	_
13	E258	AS REQD.	VENT STOP AND VERTICAL COVER	6063-T5	-
14	E253	AS REQD.	ADJUSTABLE ANCHOR AT HEAD (LENGTH = WINDOW WIDTH - 2")	6005-T5	
14A	-	AS REQD.	ADJUSTABLE ANCHOR AT SILL (LENGTH = WINDOW WIDTH - 2")	STEEL	_
14B	_	4/ WDW.	DEAD LOAD BLOCK, 4" LONG, AT EACH SIDE OF CHANNEL	STEEL	WELDED TO BASE CHANNEL
14C	wheels	2/ WDW.	REINF. ANGLE, 12" LONG	STEEL	_
14D	1/4-20 X 1"	4/ ANGLE	REINF. ANGLE FASTENERS AT 2-1/2" O.C.	ST. STEEL	HH SELF DRILLING
15	1/4-20 X 2"	2/VENT	ANTI-LIFT FASTENERS, AT 4-1/2" FROM EACH END	ST. STEEL	SOCKET SCREWS WITH HEX NUT
16	L20-01	2/VENT	SWEEP LATCH, AT 9" FROM ENDS	ZAMAK	-
16A	#8 X 5/8"	2/ LATCH	LATCH INST. SCREWS	ST. STEEL	FH SMS
17	G25-08	AS REQD.	SETTING BLOCKS, AT 1/4 POINTS	SILICONE	DUROMETER 80±5 SHORE A
18	G6-01	AS REQD.	EXTERIOR WEDGE GASKET (LAM. GLASS)	EPDM	DUROMETER 70±5 SHORE A
19	G25-01	AS REQD.	INTERIOR SPACER	SANTOPRENE	DUROMETER 80±5 SHORE A
20	G25-02	AS REQD.	FIN SEAL W'STRIPPING	_	ULTRAFAB
21	G25-03	AS REQD.	BOTTOM RAIL SEAL	FOAM/VINYL	
22	G30-02	AS REQD.	AIR SEAL	SANTOPRENE	-
23	M25-01	2/ VENT	VENT TOP GUIDE	DERLIN	M&M PLASTICS
24	M25-02	4/ VENT	VENT BOTTOM GUIDE	DERLIN	M&M PLASTICS
24A	#8 X 5/8"	1/ GUIDE	VENT GUIDE INST. FASTENERS	CRS	FH SMS TYPE B
25	M20-03/M20-04	2/VENT	ULTRALIFT SPIRAL BALANCE	-	CALDWELL
25A	#8 X 1"	1/ BALANCE	BALANCE INST. FASTENERS	ST. STEEL	PH SMS
26	#14 X 2"	AS REQD.	FRAME ASSEMBLY FASTENERS	ST. STEEL	PH SMS
27	#10 X 1-1/2"	AS REQD.	VENT ASSEMBLY FASTENERS	ST. STEEL	PH SMS
28	G2-01	2	HI-FLOW WEEPER		_
	1				1

## **SEALANT:**

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH DOWSIL 795 SEALANT.



Sealed: 8/3/2023

FL #41845

