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# FLORIDA DEPARTMENT OF Business & Professional Regulation



Architect or a Licensed Florida

Florida

Product Approval USER: Public User

sional Regulation 📕	Product Approval Menu > Product or Application Search > Application List > Application Detail				
ICE OF THE	FL #	FL41890-R1			
RETARY	Application Type	Revision			
	Code Version	2023			
	Application Status	Approved			
	Comments				
	Archived				
	Product Manufacturer	Mr-Glass Doors & Windows Manufacturing, I	LLC		
	Address/Phone/Email	8051 NW 79th Place Medley, FL 33166 (305) 470-8284 ulises@mrglasswindows.com			
	Authorized Signature	Ulises Senaris ulises@mrglasswindows.com			
	Technical Representative	Augusto Arias			
	Address/Phone/Email	8120 NW 84th St			
		Medley, FL 33166			
		(305) 470-8284 aarias@mrglasswindows.com			
	Quality Assurance Representative Address/Phone/Email				
	Category	Windows			
	Subcategory	Horizontal Slider			
	Compliance Method	Evaluation Report from a Florida Registered Professional Engineer Evaluation Report - Hardcopy Received	Architect or a Licen		
	Florida Engineer or Architect Name who developed the Evaluation Report	Jalal Farooq			
	Florida License	PE-81223			
	Quality Assurance Entity	Keystone Certifications, Inc.			
	Quality Assurance Contract Expiration Date	08/27/2025			
	Validated By	Abel Carrasco, PE			
		Validation Checklist - Hardcopy Received	d		
	Certificate of Independence	FL41890 R1 COI SS - Certificate of Indepe	endence 2023.pdf		
	Referenced Standard and Year (of Standard)	Standard	<u>Year</u>		
		TAS 201	1994		
		TAS 202	1994		
		TAS 203	1994		
	Equivalence of Product Standards Certified By				

Certified By

Sections from the Code

Method 1 Option D
07/25/2023
07/25/2023
08/01/2023
10/18/2023

### **Summary of Products**

FL #	Model, Number or Name	Description
41890.1	Series MG-350 Aluminum Horizontal Rolling Window	Large missile impact resistant aluminum horizontal rolling window
Limits of Use Approved for use in H Approved for use out: Impact Resistant: Yes Design Pressure: +65 Other: See attached dr combination and installa	<b>side HVHZ:</b> Yes ; /-65 awing 23-01F for span vs. load	Installation Instructions FL41890 R1 II SS - MG-350 HR (LMI) - DWG 23-01F 2023.pdf Verified By: Jalal Farooq PE # 81223 Created by Independent Third Party: Yes Evaluation Reports FL41890 R1 AE SS - MG-350 HR (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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## **AL-FAROOQ CORPORATION**

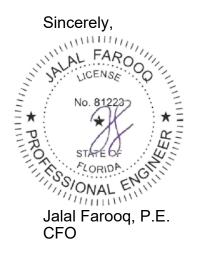
CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

January 23, 2023

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).



Sealed: 1/23/2023



## **AL-FAROOQ CORPORATION**

CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

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

FL 41890 Date: 07/21/2023

**Detailed Product Description:** 

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

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

Model Name: SERIES MG-350 ALUMINUM HORIZONTAL ROLLING WINDOW

Maximum Load: +65 PSF, -65 PSF (Large Missile Impact)

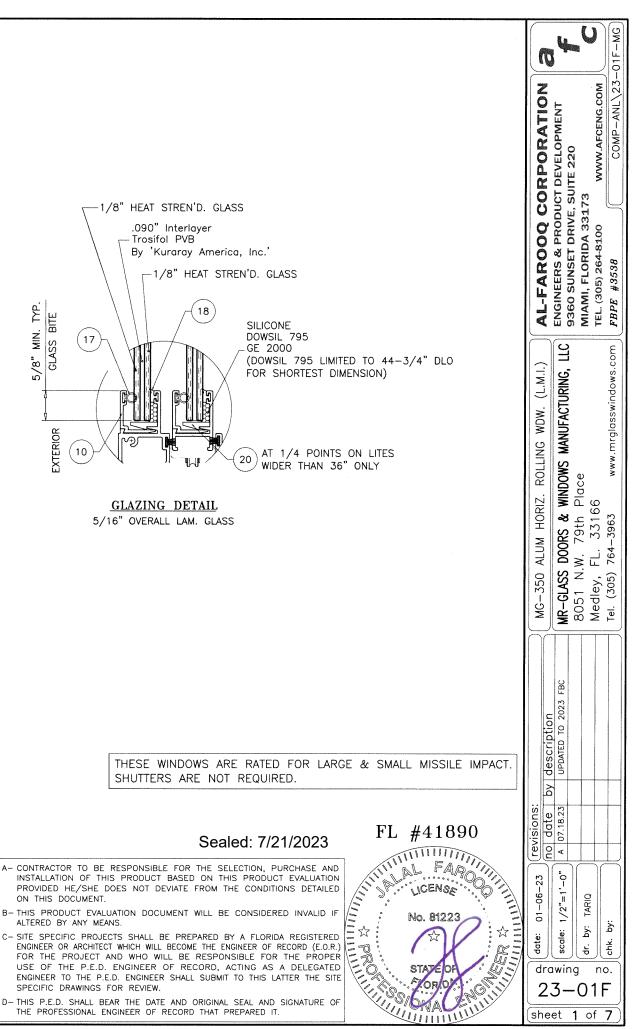
Installation Drawings # 23-01F

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 <u>X</u> YesNo						
IV	landatory Tests	(Tested in accordance wi	ith AAMA 101/	I.S.2/NAFS/TAS	5-202)	
TEST	DESCRIPTION	TEST LOCATION	TEST REPORT DATE	TEST REPORT #	Test Sealed by	
ASTM E283	Air Infiltration Leakage	Hurricane Engineering & Testing, Inc	11/10/2022 12/06/2022 11/10/2022	HETI-22-7228 HETI-22-7225 HETI-22-7213	Dr. Ram Tewari, PE.	
ASTM E331 OR ASTM 547 & TAS 202	Water Penetration	Hurricane Engineering & Testing, Inc	11/10/2022 12/06/2022 11/10/2022 11/09/2022	HETI-22-7228 HETI-22-7225 HETI-22-7213 HETI 22-7232	Dr. Ram Tewari, PE.	
ASTM E330 & TAS 202	Uniform Static Air Press.	Hurricane Engineering & Testing, Inc	11/10/2022 12/06/2022 11/10/2022 11/09/2022 01/11/2023	HETI-22-7228 HETI-22-7225 HETI-22-7213 HETI 22-7232 HETI 23-8000	Dr. Ram Tewari, PE.	
ASTM F 588	Forced Entry	Hurricane Engineering & Testing, Inc	11/10/2022 11/10/2022	HETI-22-7228 HETI-22-7213	Dr. Ram Tewari, PE.	

Supplemental Tests (Tested in accordance with TAS-201 and TAS-203)							
TEST	DESCRIPTION	TEST LOC	ATION	TEST REPORT	TEST	Test	
				DATE	<b>REPORT #</b>	Sealed by	
FBC 1626.2	Large Missile	Hurric	ane	11/10/2022	HETI-22-7228	Dr. Ram Tewari, PE.	
(TAS 201 & 203)	Impact & Cyclic	Engineer	ring &	12/06/2022	HETI-22-7225		
ASTME1886/1996		Testing	, Inc	11/10/2022	HETI-22-7213		
				11/30/2022	HETI-22-7215		
				11/09/2022 01/11/2023	HETI 22-7232 HETI 23-8000		
				01/11/2023	TIETT 25-8000		
Under the limita	tions of the attac	hed installat	ion drawii	ngs, to the best	of my knowled	lge and ability, the	
abov	ve product confor	rms to the re	quiremen	ts of the 2023 F	lorida Building	Code.	
<b>Evaluation Report</b>	: Engineer:						
			11111 C	FARO			
			I' JAL	LICENSE			
			111	No. 812237			
			Ē★∃	*			
	PE	AX H					
Jalal Farooq PE # 81223			-0	STATE OF			
Al-Faroog Corporation EB # 3538			TIS'S	ENG			
	111	UNAL	Socied: 7	104/0000			
					Sealed: 7	121/2023	



- ON THIS DOCUMENT.
- ALTERED BY ANY MEANS.
- SPECIFIC DRAWINGS FOR REVIEW.

## <u>MG-350</u>

### ALUMINUM HORIZONTAL ROLLING WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEETS 3 & 3.1.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF H.R./H.R. OR HORIZ. ROLLING WITH OTHER WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING F.B.C. APPROVED MULLIONS IN BETWEEN

LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

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

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED 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.

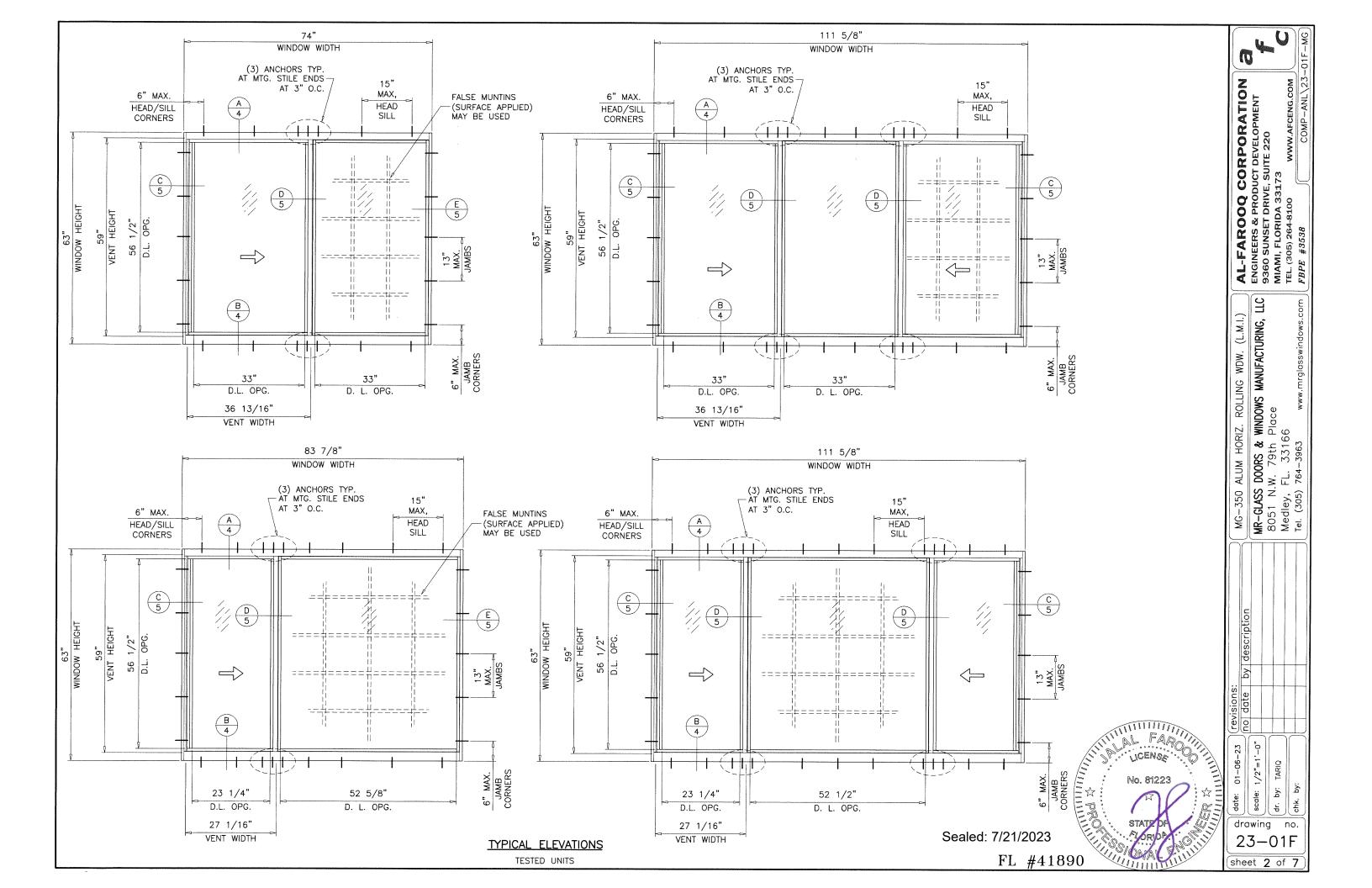
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2020/2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

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.



DESIGN LOAD CAPACITY - PSF (XO OR OX SIZES)					
WINDOW DIMS. 5/16" LAM. GLASS					
WIDTH	HEIGHT	EXT.(+)	INT.(-)		
26-1/2"		65.0	65.0		
37"		65.0	65.0		
53-1/8"	26"	65.0	65.0		
74"		65.0	65.0		
26-1/2"		65.0	65.0		
37"		65.0	65.0		
53–1/8"	38–3/8"	65.0	65.0		
		65.0			
74" 26-1/2"			65.0		
		65.0	65.0		
37"	50-5/8"	65.0	65.0		
53-1/8"		65.0	65.0		
74"		65.0	65.0		
26-1/2"		65.0	65.0		
37"	56"	65.0	65.0		
53-1/8"		65.0	65.0		
74"		65.0	65.0		
26-1/2"		65.0	65.0		
37"	63"	65.0	65.0		
53-1/8"		65.0	65.0		
36"		65.0	65.0		
48"	<b>.</b> . "	65.0	65.0		
60"	24"	65.0	65.0		
72"		65.0	65.0		
76"		65.0	65.0		
36"		65.0	65.0		
48"		65.0	65.0		
60"		65.0	65.0		
72"		65.0	65.0		
72 76"	70"	65.0	65.0		
78"	36"	65.0	65.0		
84"		65.0	65.0		
90"		65.0	65.0		
96"		65.0	65.0		
36"		65.0	65.0		
48"		65.0	65.0		
60"		65.0	65.0		
72"		65.0	65.0		
76"	48"	65.0	65.0		
78"		65.0	65.0		
84"		65.0	65.0		
90"		65.0	65.0		
96"		65.0	65.0		
36"		65.0	65.0		
48"		65.0	65.0		
60"	60"	65.0	65.0		
72"		65.0	65.0		
76"		65.0	65.0		
74"	63 <b>"</b>	65.0	65.0		
74	రు	65.U	05.0		

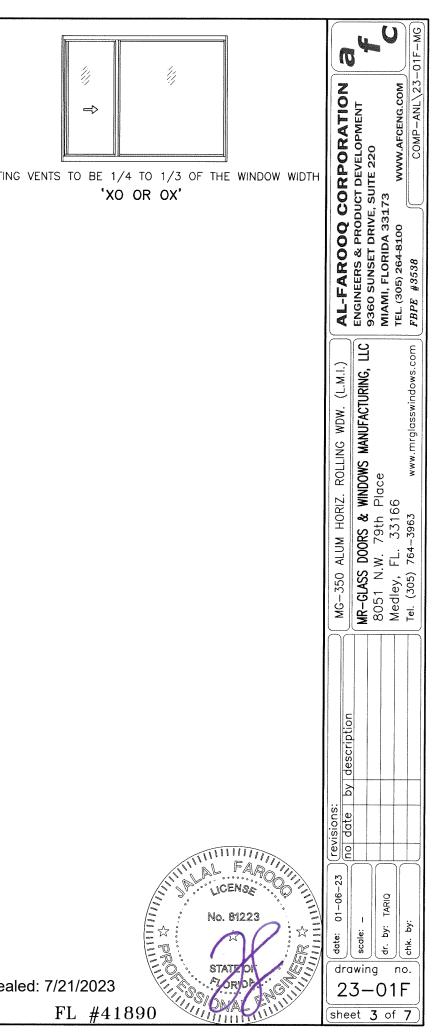
(1/2W)	(1/2W)
⇒	

## OPERATING VENTS TO BE 1/2 OF THE WINDOW WIDTH 'XO OR OX'

WINDON	V DIMS.	5/16" LA	M. GLASS	1
WIDTH	HEIGHT	EXT.(+)	INT.(-)	
26-1/2"	neioni	65.0	65.0	
37"		65.0	65.0	
53-1/8"	26"	65.0	65.0	
74"		65.0	65.0	
26-1/2"		65.0	65.0	OPERATII
37"		65.0	65.0	
53–1/8"	38-3/8"	65.0	65.0	
74"		65.0	65.0	
26-1/2"		65.0	65.0	
37"		65.0	65.0	
53-1/8"	50-5/8"	65.0	65.0	
74"		65.0	65.0	
26-1/2"		65.0	65.0	
37"				
57 53–1/8"	56"	65.0 65.0	65.0	
			65.0 65.0	
74" 26-1/2"		65.0		
		65.0	65.0	
37 <b>"</b>	63"	65.0	65.0	
53-1/8"		65.0	65.0	
74"		65.0	65.0	
48"		65.0	65.0	
60"	24"	65.0	65.0	
72"		65.0	65.0	
78"		65.0	65.0	
83-7/8"		65.0	65.0	2
48"		65.0	65.0	
60"		65.0	65.0	
72"		65.0	65.0	
78"	V	65.0	65.0	
83-7/8"	36"	65.0	65.0	
90"		65.0	65.0	
96"		65.0	65.0	
102"		65.0	65.0	
108"		65.0	65.0	
48"		65.0	65.0	
60"		65.0	65.0	
72"		65.0	65.0	
78"		65.0	65.0	
83-7/8"	48"	65.0	65.0	
90"		65.0	65.0	
96"		65.0	65.0	
102"		65.0	65.0	
108"		65.0	65.0	
48"		65.0	65.0	
60"		65.0	65.0	
72"	60"	65.0	65.0	
78"		65.0	65.0	
83-7/8"		65.0	65.0	
83-7/8"	63"	65.0		

DESIGN LOAD CAPACITY - PSF

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



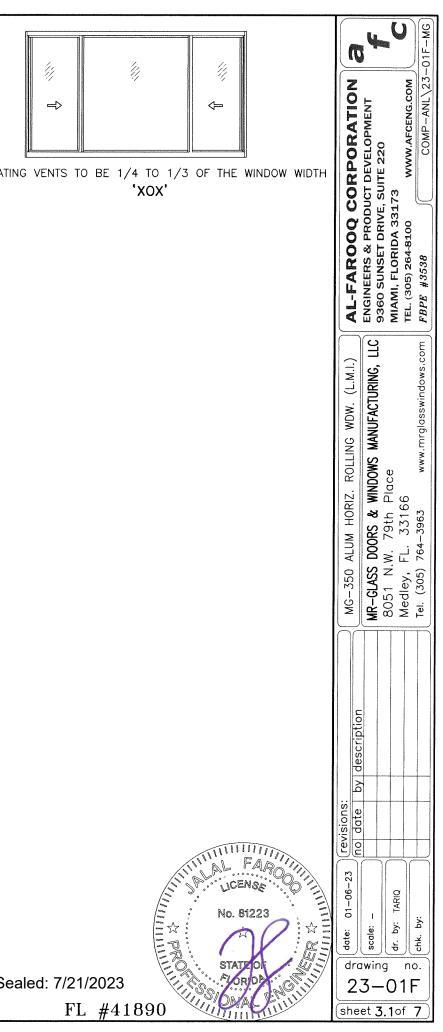
DESIGN LOAD CAPACITY - PSF (XOX SIZES)				
WINDO	W DIMS.	5/16" LA	M. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	
74"		65.0	65.0	
106-1/4"	26"	65.0	65.0	
111" 74"		65.0	65.0	
74"		65.0	65.0	
106-1/4"	38-3/8"	65.0	65.0	
111" 74"		65.0	65.0	
74"		65.0	65.0	
106-1/4"	50-5/8"	65.0	65.0	
111"		65.0	65.0	
74"		65.0	65.0	
106-1/4"	56"	65.0	65.0	
111"		65.0	65.0	
111" 74"		65.0	65.0	
106-1/4"	63"	65.0	65.0	
111"		65.0	65.0	
72"		65.0	65.0	
84"	04"	65.0	65.0	
96"	24"	65.0	65.0	
108"		65.0	65.0	
72"		65.0	65.0	
84"	70"	65.0	65.0	
96"	36"	65.0	65.0	
108"		65.0	65.0	
72"		65.0	65.0	
84"		65.0	65.0	
96"		65.0	65.0	
108"	40"	65.0	65.0	
114"	48"	65.0	65.0	
120"		65.0	65.0	
126"		65.0	65.0	
132"		65.0	65.0	
72"		65.0	65.0	
84"		65.0	65.0	
96"	60"	65.0	65.0	
108"		65.0	65.0	
114"		65.0	65.0	
111-5/8"	63"	65.0	65.0	

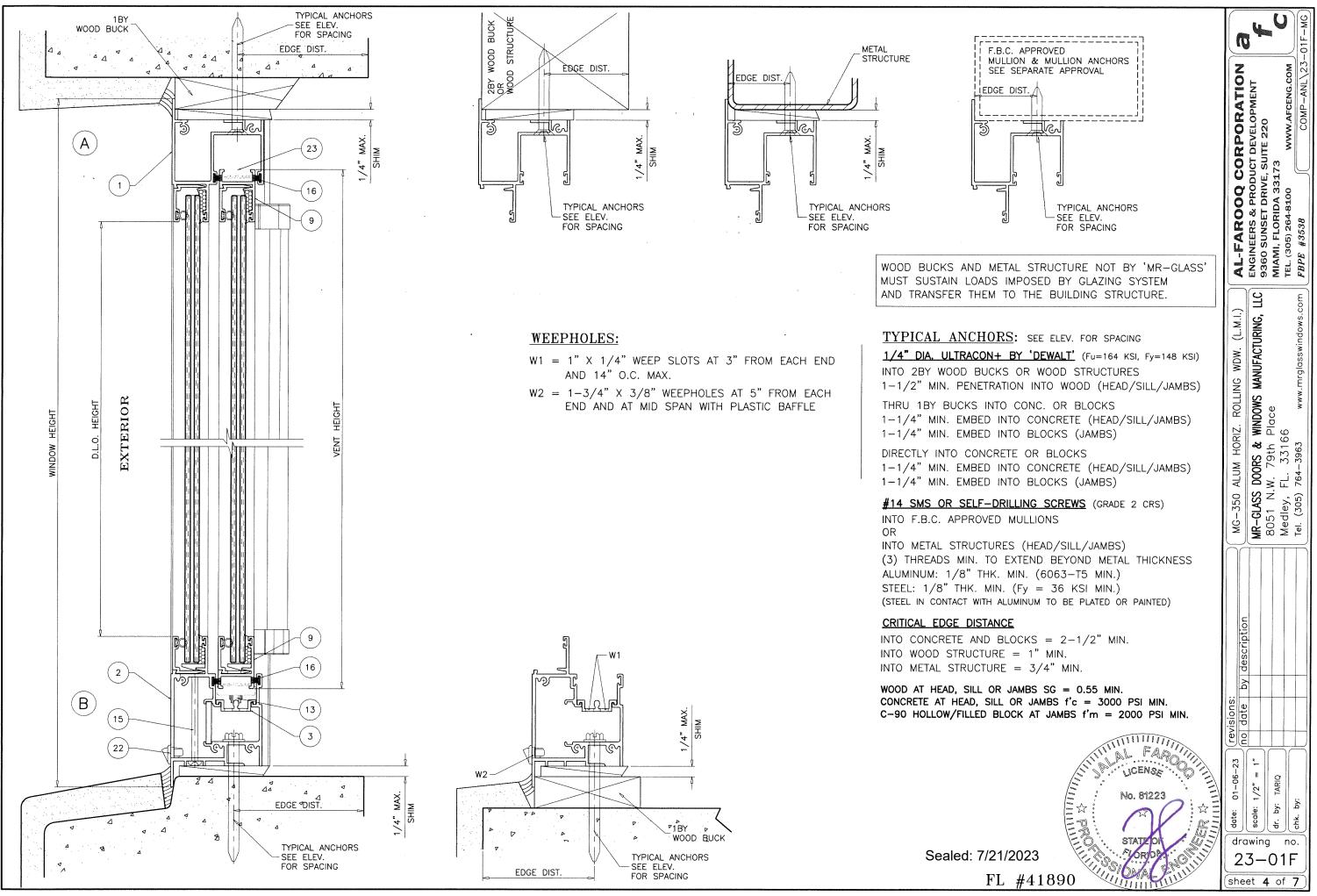
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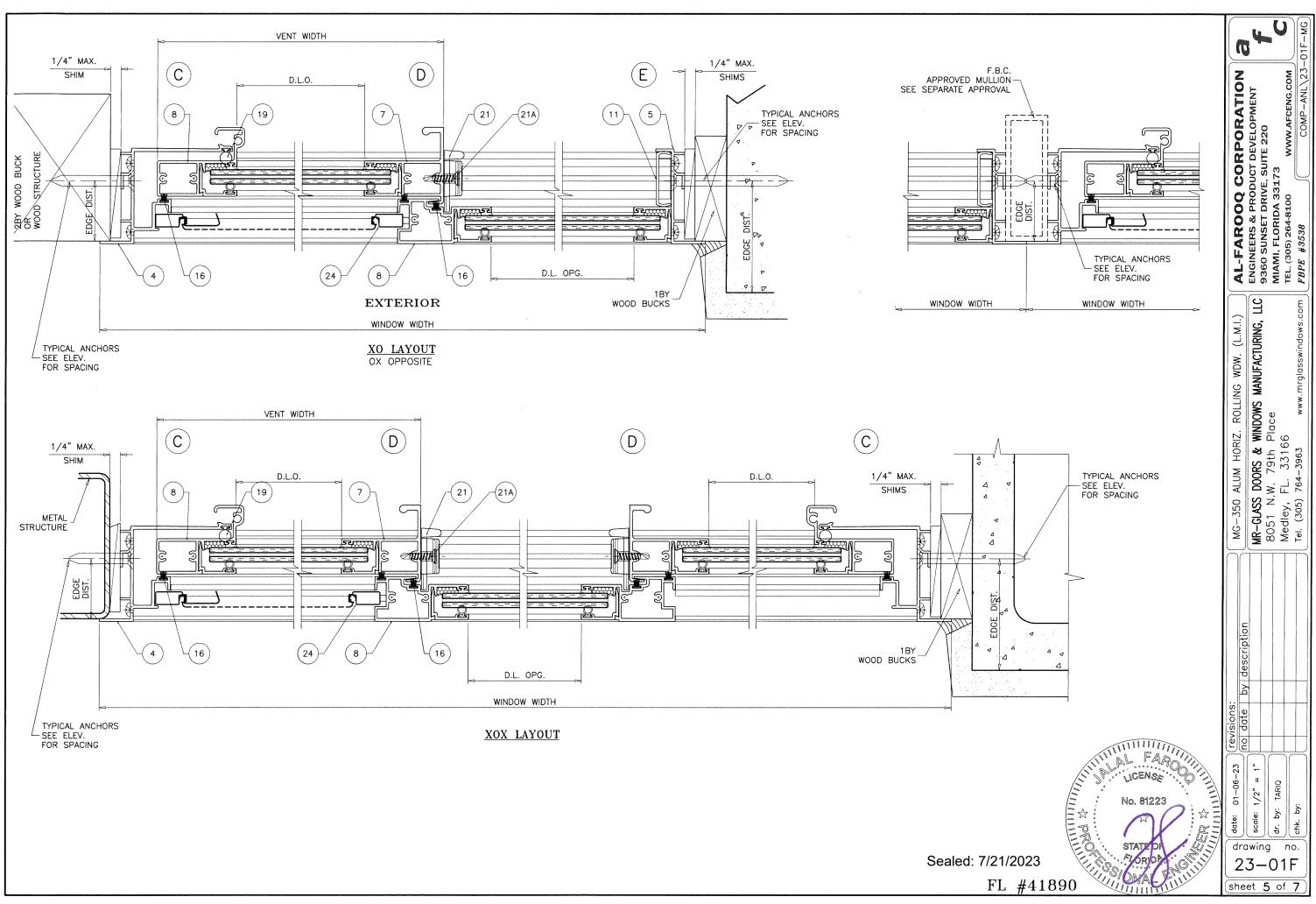
OPERATING VENTS TO BE 1/3 OF THE WINDOW WIDTH 'XOX'

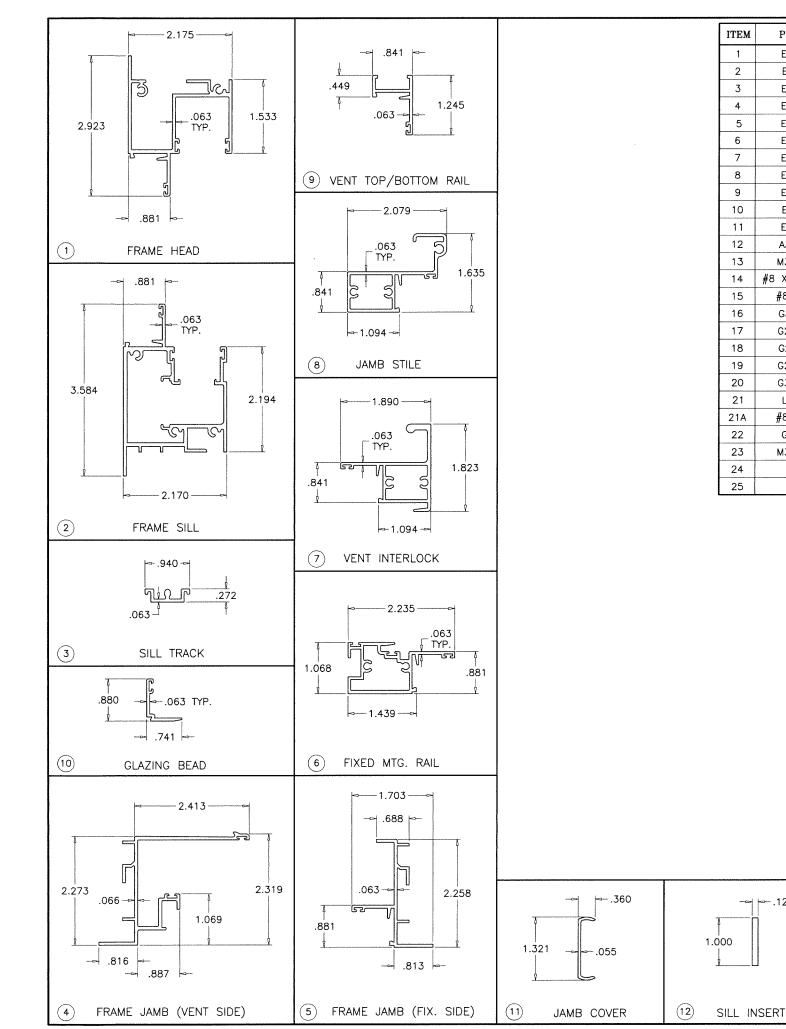
DESIGN	LOAD CA (XOX S		– PSF
WINDO	W DIMS.	5/16" LA	M. GLASS
WIDTH	HEIGHT	EXT.(+)	INT.(-)
74"		65.0	65.0
106-1/4"	26"	65.0	65.0
111"		65.0	65.0
74"		65.0	65.0
106-1/4"	38-3/8"	65.0	65.0
111"		65.0	65.0
74"		65.0	65.0
106-1/4"	50-5/8"	65.0	65.0
111"		65.0	65.0
74"		65.0	65.0
106-1/4"	56"	65.0	65.0
111"		65.0	65.0
74"		65.0	65.0
106-1/4"	63"	65.0	65.0
111"		65.0	65.0
72"		65.0	65.0
84"	24"	65.0	65.0
96"	24	65.0	65.0
108"		65.0	65.0
72"		65.0	65.0
84"	36"	65.0	65.0
96"	30	65.0	65.0
108"		65.0	65.0
72"		65.0	65.0
84"		65.0	65.0
96"		65.0	65.0
108"	48"	65.0	65.0
114"	70	65.0	65.0
120"		65.0	65.0
126"		65.0	65.0
132"		65.0	65.0
72"		65.0	65.0
84"		65.0	65.0
96"	60"	65.0	65.0
108"		65.0	65.0
114"		65.0	65.0
111-5/8"	63"	65.0	65.0

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ITEM	PART #	QUANTITY	DESCRIPTION	MAT
1	E-352	1	FRAME HEAD	606
2	E-351	1	FRAME SILL	606
3	E-359	1	SILL TRACK INSERT	606
4	E-353	AS REQD.	FRAME JAMB (VENT SIDE)	606
5	E-354	AS REQD.	FRAME JAMB (FIX. SIDE)	606
6	E-355	1/ VENT	FIXED MTG. RAIL	606
7	E-357	1/ VENT	VENT INTERLOCK	606
8	E-358	1/ VENT	JAMB STILE	606
9	E-356	2/ VENT	TOP AND BOTTOM RAIL	606
10	E-361	AS REQD.	GLAZING BEAD	606
11	E-365	AS REQD.	JAMB COVER	606
12	A35-01	AS REQD.	SILL INSERT, 3" LONG	606
13	M35-04	2/ VENT	ROLLER ASSEMBLY	BR
14	#8 X 1−1/2"	AS REQD.	FRAME/VENT ASSEMBLY SCREWS	ST.
15	#8 X 3"	2	FIX. RAIL SILL SCREWS (SILL END)	ST.
16	G35-01	AS REQD.	FIN SEAL W'STRIPPING (.19 X .187)	
17	G20-07	AS REQD.	EXTERIOR GLAZING GASKET	NEO
18	G25-01	AS REQD.	INTERIOR GLAZING GASKET	NEO
19	G25-03	AS REQD.	JAMB W'STRIPPING	VINYL
20	G35-02	AS REQD.	SETTING BLOCKS, AT 1/4 POINTS	EF
21	L2-01	2/ VENT	SWEEP LATCH, AT 9" FROM EACH END	ZA
21A	#8 X 1"	2/ LATCH	LATCH INST. SCREW	ST.
22	G2-01	2/ WDW.	HI-FLOW WEEPER	
23	M35-05	2/ VENT	VENT GUIDE	
24	-	1/ VENT	5/16" BOX SCREEN	
25	_	_	-	

## SEALANTS:

WITH ALUMINUM COLORED SEALANT.

Sealed: 7/21/2023

