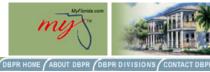
# **Business & Professional Regulation**



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<u>Product Approval Menu > Product or Application Search > Application List > Application Detail</u>

FL37319-R1 Application Type Revision Code Version 2020 **Application Status** Approved

Comments

Archived

Product Manufacturer Mr-Glass Doors & Windows Manufacturing, LLC

Address/Phone/Email 8051 NW 79th Place Medley, FL 33166

(305) 470-8284

ulises@mrglasswindows.com

Ulises Senaris Authorized Signature

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

Windows Category Subcategory Fixed

Compliance Method Evaluation Report from a Florida Registered Architect or a Licensed Florida

Professional Engineer

Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed

the Evaluation Report

Florida License

Quality Assurance Entity

Quality Assurance Contract Expiration Date

Validated By

Jalal Farooq

PE-81223

Keystone Certifications, Inc.

08/27/2025

JAVAD AHMAD PE, INC.

☑ Validation Checklist - Hardcopy Received

Certificate of Independence FL37319 R1 COI SS - Certificate of Independence.pdf

Referenced Standard and Year (of Standard) **Standard** Year **TAS 201** 1994

**TAS 202** 1994 **TAS 203** 1994

Equivalence of Product Standards

Certified By

Sections from the Code

Product Approval Method 1 Option D

 Date Submitted
 03/21/2022

 Date Validated
 03/21/2022

 Date Pending FBC Approval
 03/23/2022

 Date Approved
 06/07/2022

 Date Revised
 07/21/2023

#### **Summary of Products**

FL #	Model, Number or Name	Description			
37319.1	MRG-400 Aluminum Fixed Window	Large missile impact resistant aluminum fixed window.			
Limits of Use Approved for use in H Approved for use out: Impact Resistant: Yes Design Pressure: +10 Other: See drawings 21 and installation details.	side HVHZ: Yes	Installation Instructions FL37319 R1 II SS - MG400 FIXED (LMI) DWG 21-02F 2020 R1.pdf Verified By: Jalal Farooq PE #81223 Created by Independent Third Party: Yes Evaluation Reports FL37319 R1 AE SS - MG400 FIXED (LMI) - PAE 2020 R1.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 11, 2020

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,

VAL EN Sealed 8-11-2020

Jalal Farooq, P.E. CFO



## AL-FAROOQ CORPORATION

CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

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

FL 37319

Date: 03/16/2022

**Detailed Product Description:** 

Manufacturer: MR-GLASS DOORS & WINDOWS MANUFACTURING LLC. Manufacturer Address: 8051 NW 79th PLACE, MEDLEY, FL 33166 Model Name: SERIES MRG-400 ALUMINUM FIXED WINDOW Maximum Load: +100 PSF, -100 PSF (Large Missile Impact)

Installation Drawings # 21-02F

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	TEST REPORT	Test Sealed by	
			DATE	#		
ASTM E283	Air Infiltration Leakage	Fenestration Testing Laboratory, Inc.	01/24/2017	FTL-9147	Idalmis Ortega, PE	
ASTM E331 OR ASTM 547 & TAS 202	Water Penetration	Fenestration Testing Laboratory, Inc.	01/24/2017	FTL-9147	Idalmis Ortega, PE	
ASTM E330 & TAS 202	Uniform Static Air Press.	Fenestration Testing Laboratory, Inc.	01/24/2017	FTL-9147	Idalmis Ortega, PE	

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

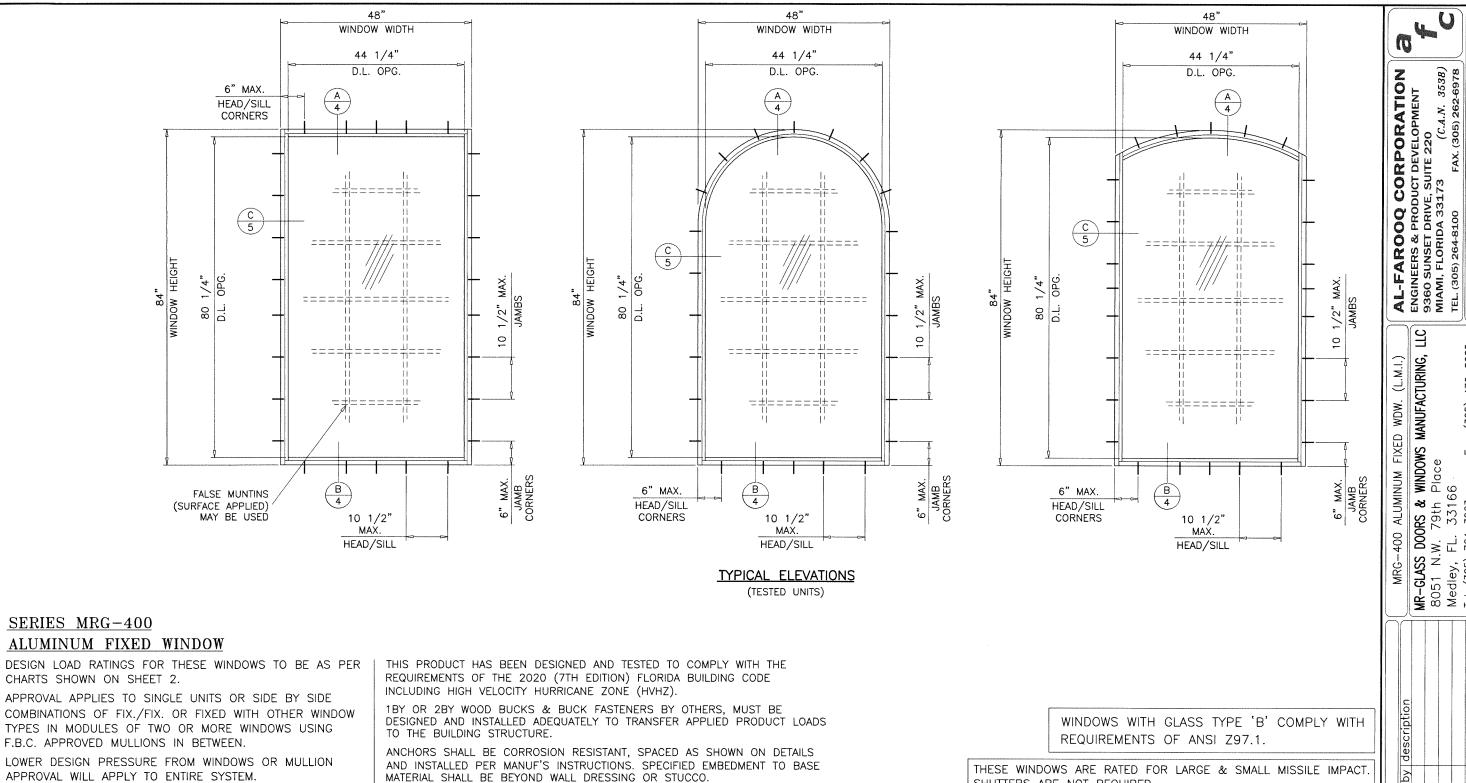
TEST	DESCRIPTION	TEST LOCATION	TEST REPORT	TEST REPORT	Test Sealed by
			DATE	#	
FBC 1626.2 TAS 201 & 203 ASTM E1886/1996 ANSI Z97.1	Large Missile Impact & Cyclic	Fenestration Testing Laboratory, Inc. Hurricane Engineering & Testing, Inc	01/24/2017 02/08/2022	FTL-9147  HETI-21-7149  HETI-21-7153  HETI-21-7155	Idalmis Ortega, PE Dr. Ram N. Tewari, 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:** 

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

Sealed: 3/18/2022



CHARTS SHOWN ON SHEET 2.

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.

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.

WINDOWS WITH GLASS TYPE 'B' COMPLY WITH REQUIREMENTS OF ANSI Z97.1.

THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

### Sealed: 3/18/2022

- 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
- 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 #37319 FAROUS SICENS LICENSE No. 81223

revisions: no date 1/2"=1'-0" <u>ه</u> å.

2

DOORS & WINDOWS MANUFACTURING, W. 79th Place FL. 33166

MR-GLASS DOO 8051 N.W. 7 Medley, FL. Tel. (305) 764-

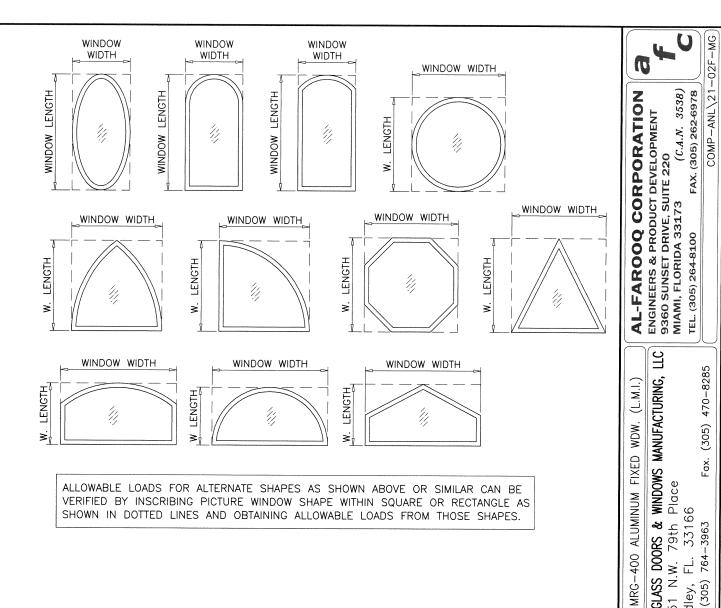
drawing no. 21-02F

sheet 1 of 7

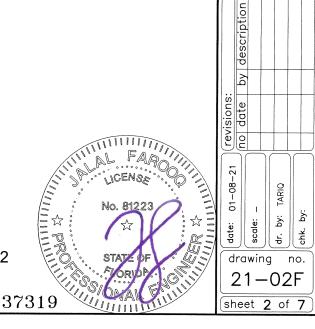
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WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.

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



ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES.

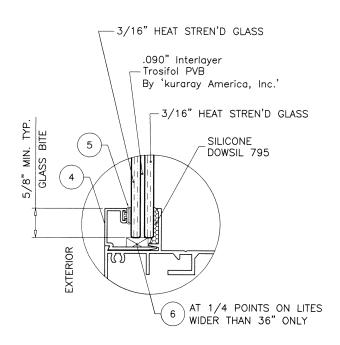


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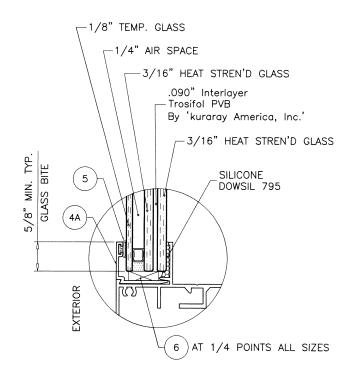
MR-GLASS DOORS & WINDOWS MANUFACTURING, 8051 N.W. 79th Place Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-828

Sealed: 3/18/2022 21-02F sheet 2 of 7

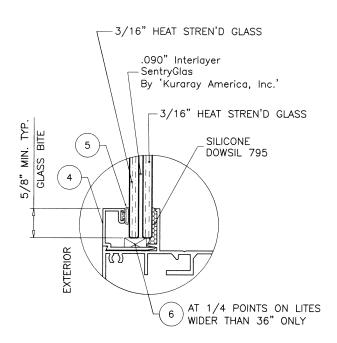
FL #37319



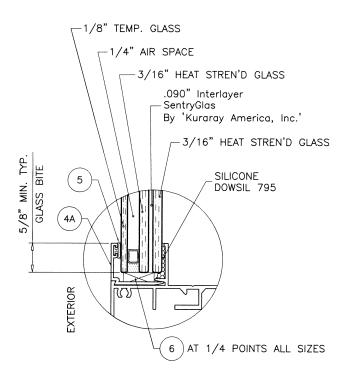
GLASS TYPE 'A' 7/16" OVERALL LAM. GLASS



GLASS TYPE 'Ai' 13/16" OVERALL INSUL. LAM. GLASS



GLASS TYPE 'B' 7/16" OVERALL LAM. GLASS



GLASS TYPE 'Bi' 13/16" OVERALL INSUL. LAM. GLASS

1/4" AIR SPACE CONSISTING OF: SPACER: 'HELIMA' LOW PROFILE ALUMINUM SPACER BY 'LINGERMANN GMBH' AROUND THE PERIMETER OF THE GLASS. PERIMETER SEALANT: SILICONE DOWSIL 791 GE 2000 OR 'DURASEAL' EDGE SEAL SYSTEM BY 'QUANEX'

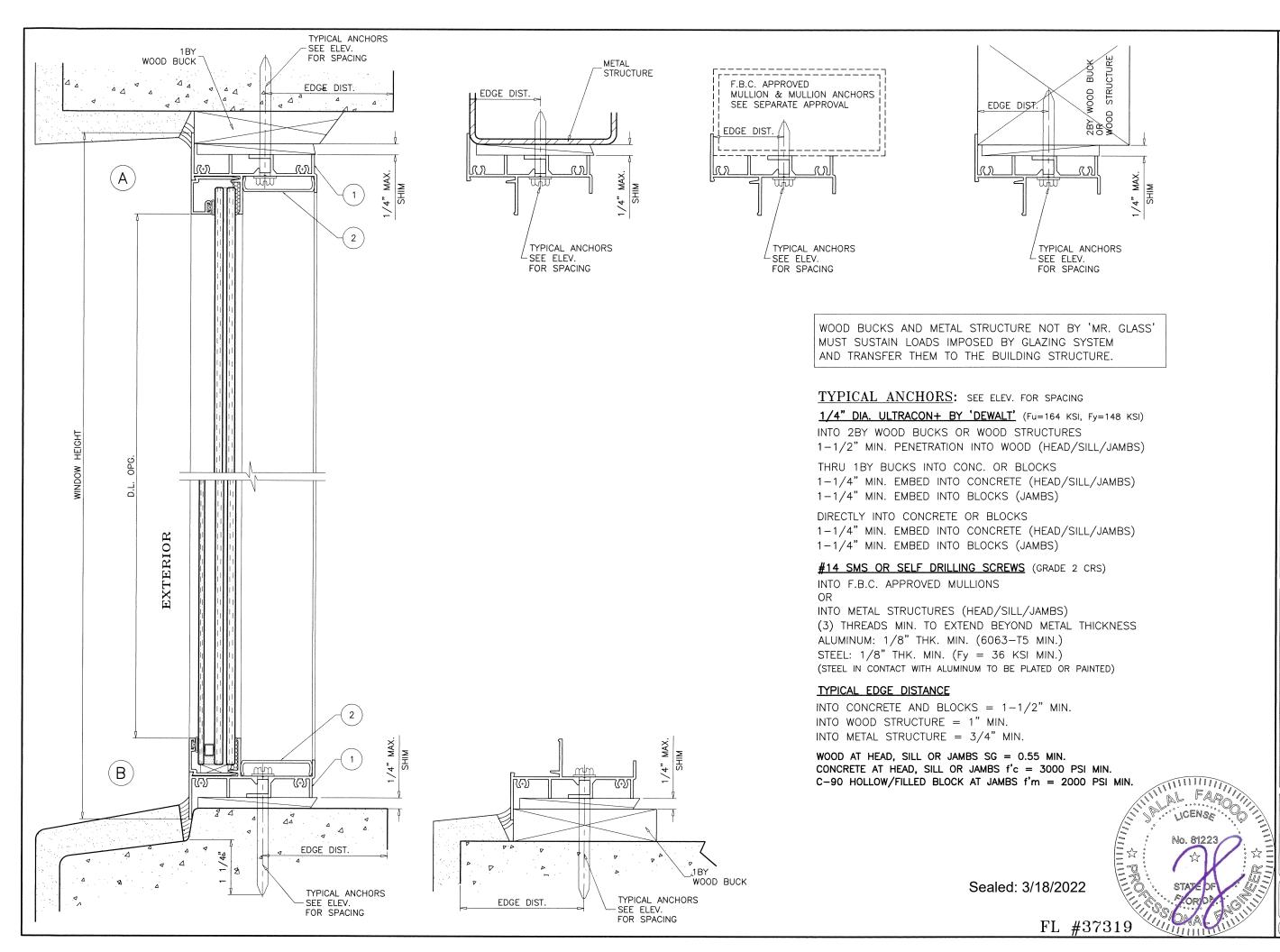
Sealed: 3/18/2022

FL #37319

sheet 3 of 7

**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 C MR-GLASS DOORS & WINDOWS MANUFACTURING, 8051 N.W. 79th Place Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-828 MRG-400 ALUMINUM FIXED WDW. (L.M.I.)

by description no 1/2" drawing no. 21-02F



 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

(L.M.I.)

MRG-400 ALUMINUM FIXED WDW.

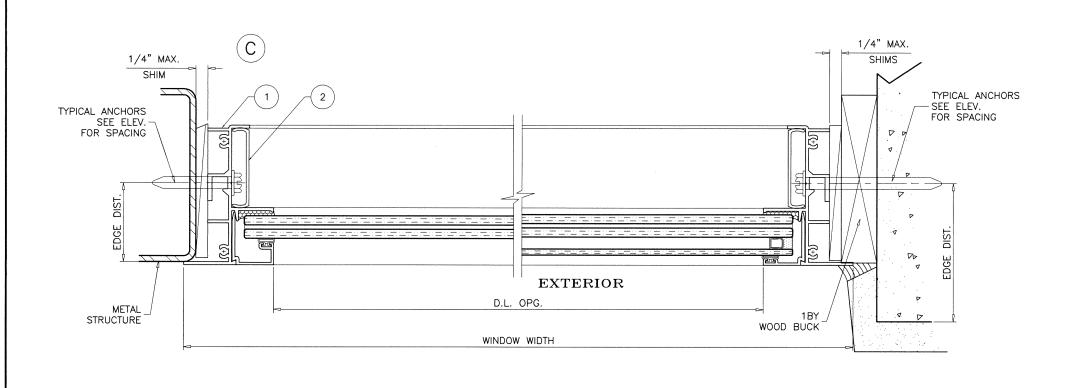
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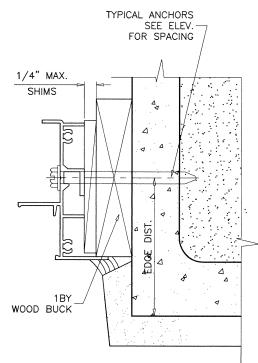
by description revisions: no date

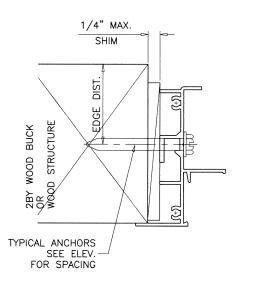
drawing

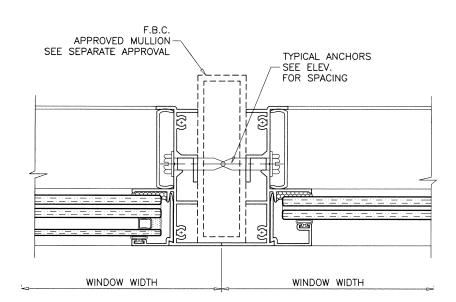
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21-02F sheet 4 of 7









No. 81223

No. 81223

STATE OF

Sealed: 3/18/2022

drawing no. 21-02F sheet 5 of 7

dr. by: chk. by:

revisions: no date by description

FL #37319

AL-FAROOQ CORPORATION

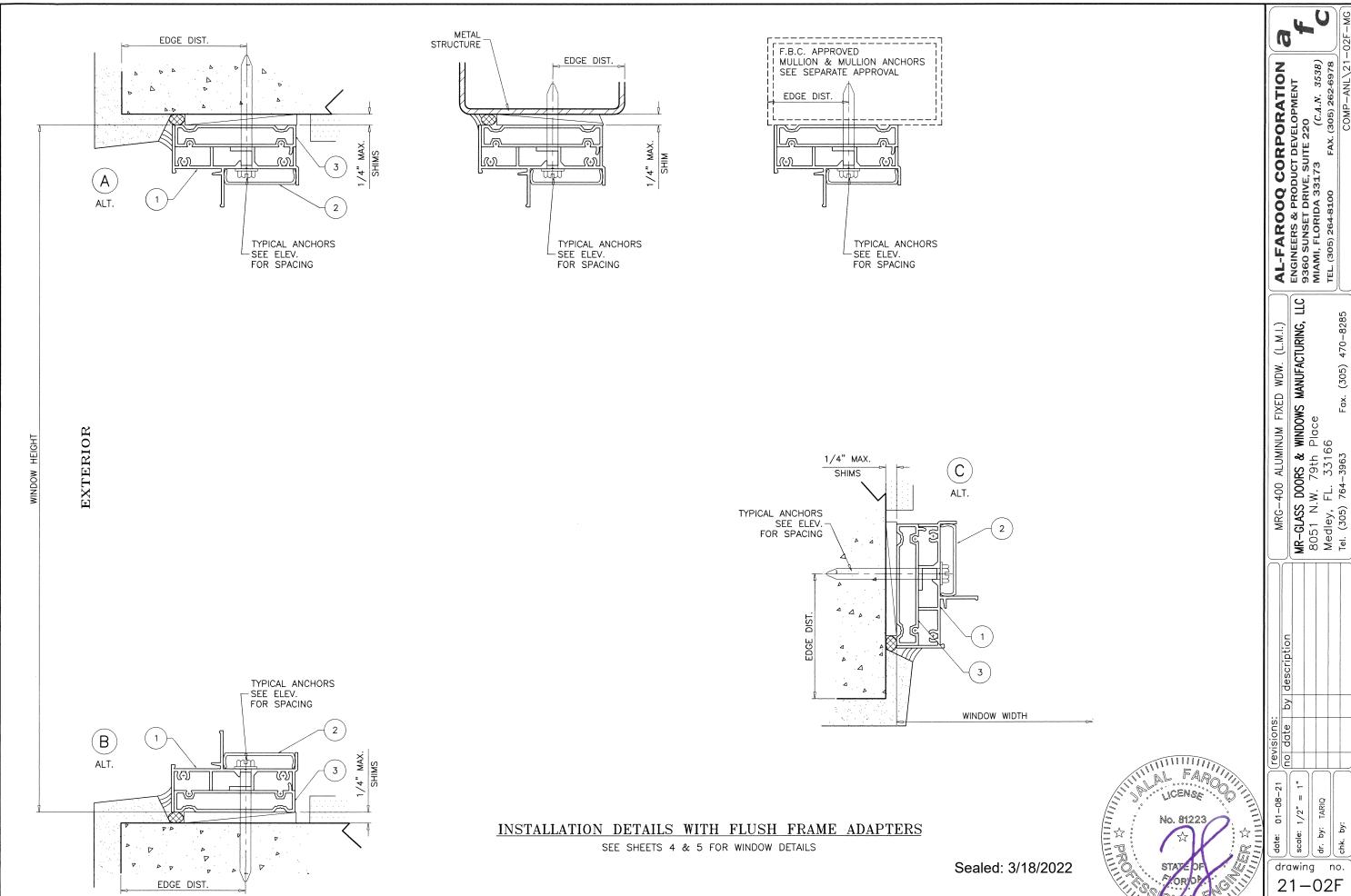
ENGINEERS & PRODUCT DEVELOPMENT

9360 SUNSET DRIVE, SUITE 220

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