

FLORIDA DEPARTMENT OF
Business & Professional Regulation



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Product Approval
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SECRETARY

FL #	FL29676-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												
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	Casement												
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	Jalal Farooq												
Florida License	PE-81223												
Quality Assurance Entity	Keystone Certifications, Inc.												
Quality Assurance Contract Expiration Date	08/27/2025												
Validated By	JAVAD AHMAD PE, INC. ☒ Validation Checklist - Hardcopy Received												
Certificate of Independence	FL29676_R1_COI_SS - 600 Casement (LMI) - CI 2020.pdf												
Referenced Standard and Year (of Standard)	<table> <thead> <tr> <th>Standard</th><th>Year</th></tr> </thead> <tbody> <tr> <td>ASTM E1886</td><td>2013</td></tr> <tr> <td>ASTM E1996</td><td>2014</td></tr> <tr> <td>TAS 201</td><td>1994</td></tr> <tr> <td>TAS 202</td><td>1994</td></tr> <tr> <td>TAS 203</td><td>1994</td></tr> </tbody> </table>	Standard	Year	ASTM E1886	2013	ASTM E1996	2014	TAS 201	1994	TAS 202	1994	TAS 203	1994
Standard	Year												
ASTM E1886	2013												
ASTM E1996	2014												
TAS 201	1994												
TAS 202	1994												
TAS 203	1994												
Equivalence of Product Standards													
Certified By													

Sections from the Code

Product Approval Method

Method 1 Option D

Date Submitted 08/12/2020
 Date Validated 08/12/2020
 Date Pending FBC Approval 08/18/2020
 Date Approved 10/13/2020
 Date Revised 07/21/2023

Summary of Products

FL #	Model, Number or Name	Description
29676.1	Series 600 Aluminum Casement Window	Large missile impact resistant aluminum outswing casement window.
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: +80/-100 Other: See installation drawing 19-28F for span vs. load combination and installation details.		Installation Instructions FL29676_R1_II_SS - 600 CASEMENT (LMI) DWG 19-28F (2020).pdf Verified By: Jalal Farooq PE 81223 Created by Independent Third Party: Yes Evaluation Reports FL29676_R1_AE_SS - 600 CASEMENT (LMI) PAE 2020.pdf Created by Independent Third Party: Yes

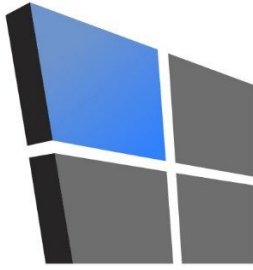
[Back](#)[Next](#)

[Contact Us](#) :: [2601 Blair Stone Road, Tallahassee FL 32399](#) Phone: 850-487-1824

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Product Approval Accepts:



AL-FAROOQ CORPORATION

CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

August 7, 2020

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

Ref: Mr-Glass Doors & Windows Manufacturing LLC.
Series 600 Aluminum Casement Window (L.M.I)
Certificate of Independence

To whom it may concern,

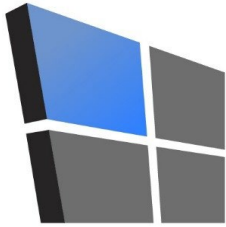
As the design engineer retained by Mr-Glass Doors & Windows Manufacturing LLC. on the product referenced above, I do hereby declare that I do not have and will not have any financial interest in any company manufacturing or distributing the above referenced product, nor do I have or will have any financial interest with any other entity involved in the approval process of the product.

Sincerely,



Sealed:8/7/2020

Jalal Farooq, P.E.
CFO



AL-FAROOQ CORPORATION

CONSULTING ENGINEERS & PRODUCT DEVELOPMENT

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

FL 29676

Date: 08/11/2020

Detailed Product Description:

Manufacturer: MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC

Manufacturer Address: 8051 N.W. 79TH PLACE, MEDLEY, FL 33166

Model Name: SERIES 600 ALUMINUM CASEMENT WINDOW

Maximum Load: +80 PSF, -100 PSF (Large Missile Impact)

Installation Drawings # 19-28F

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 ☐ 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.	3/19/2019 3/19/2019 3/19/2019	HELT-18-6079 HELT-18-6082 HELT-19-7004	Rafael Droz-Seda, PE
ASTM E331 OR ASTM E547 & TAS 202	Water Penetration	Hurricane Engineering & Testing Inc.	3/19/2019 3/19/2019 3/19/2019	HELT-18-6079 HELT-18-6082 HELT-19-7004	Rafael Droz-Seda, PE
ASTM E330 & TAS 202	Uniform Static Air Press.	Hurricane Engineering & Testing Inc.	3/19/2019 3/19/2019 3/19/2019 3/19/2019 3/19/2019	HELT-18-6079 HELT-18-6082 HELT-19-7004 HELT-19-7008 HELT-19-7011	Rafael Droz-Seda, PE
ASTM F588 or AAMA 1302.5	Forced Entry Test	Hurricane Engineering & Testing Inc.	3/19/2019 3/19/2019	HELT-18-6079 HELT-18-6082	Rafael 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 1626.2 (TAS 201 & 203) ASTM E1886/1996 ANSI Z97.1	Large Missile Impact & Cyclic	Hurricane Engineering & Testing Inc.	3/19/2019 3/19/2019 3/19/2019 1/19/2019 3/19/2019 3/19/2019 3/19/2019 3/19/2019 4/29/2020 6/29/2020	HELT-18-6080 HELT-18-6081 HELT-19-7005 HELT-19-7009 HELT-19-7010 HELT-19-7012 HELT-19-7015 HELT-19-7016 HELT-20-8050 HELT-20-8071	Rafael 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

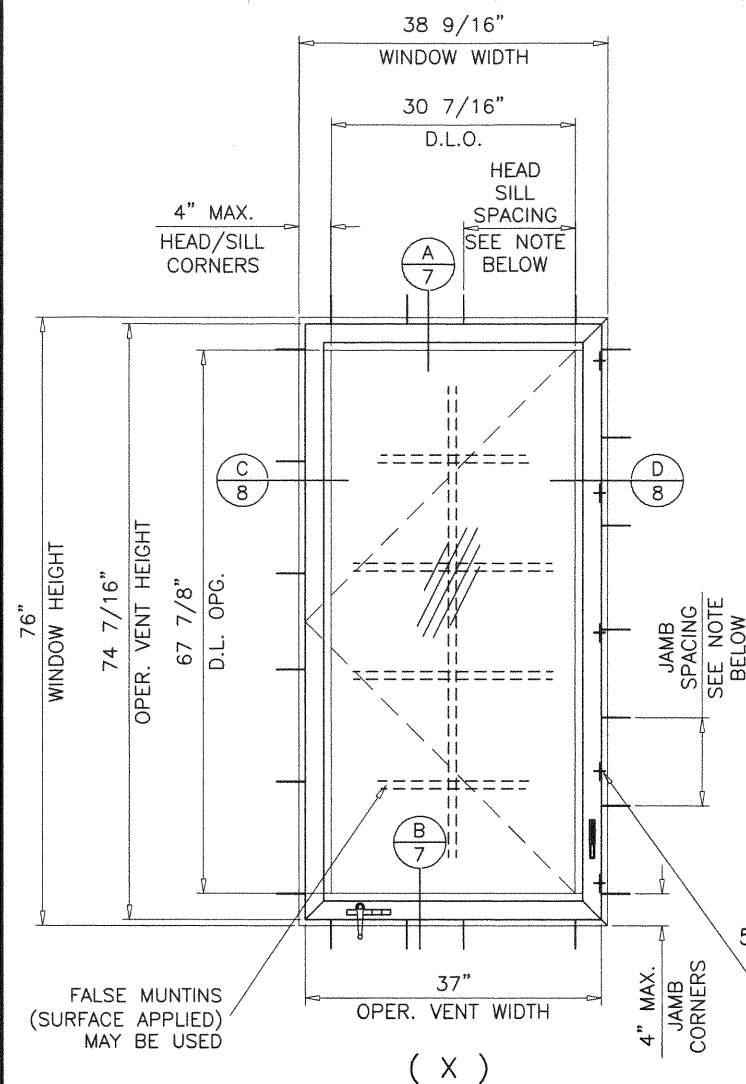
PE # 81223

Al-Farooq Corporation

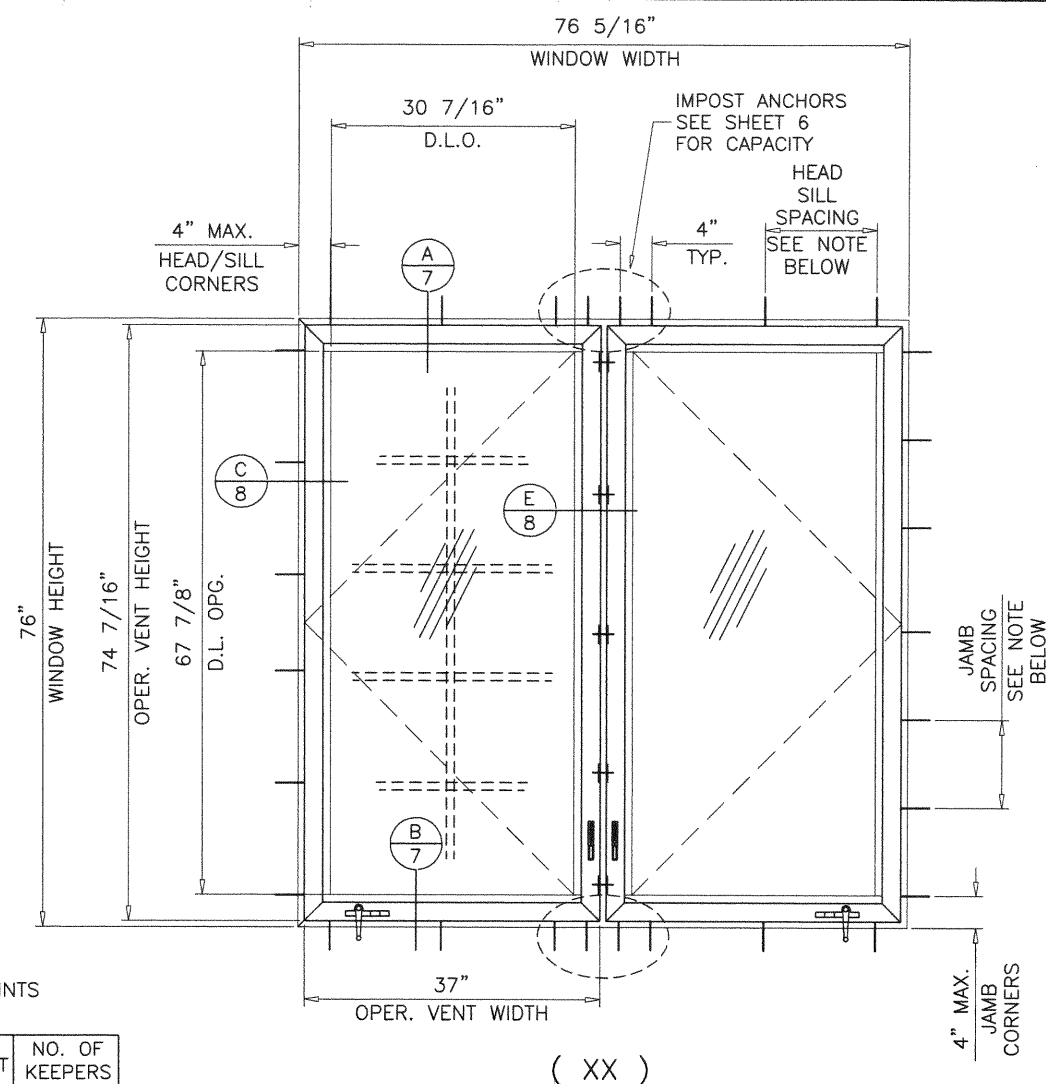
EB # 3538



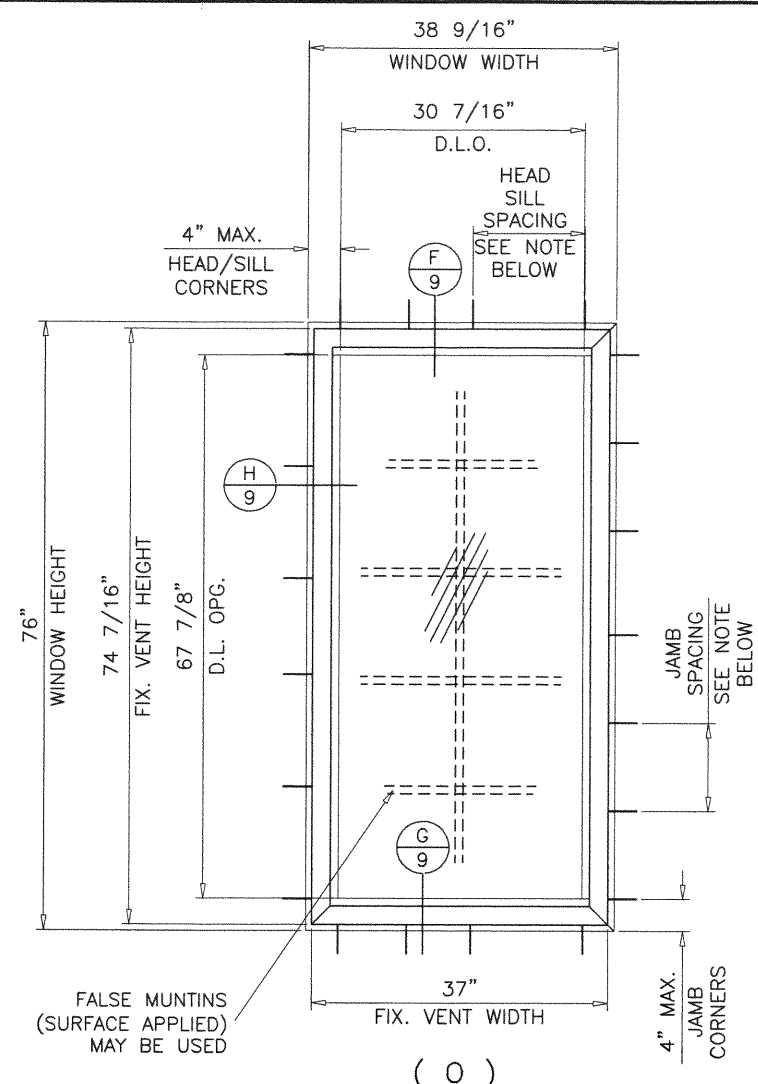
Sealed:8/12/2020



WDW. HEIGHT UPTO	NO. OF KEEPERS AT SASH
26"	2
38-3/8"	3
50-5/8"	4
76"	5



TYPICAL ELEVATIONS



ANCHOR SPACING:
14" O.C. MAX. FOR LOADS UPTO 80 PSF
11" O.C. MAX. FOR LOADS ABOVE 80 PSF

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

FIXED WINDOW (O) COMPLIES WITH REQUIREMENTS
OF ANSI Z97.1.

SERIES 600 ALUMINUM CASEMENT WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER
CHARTS SHOWN ON SHEET 6.

APPROVAL APPLIES TO SINGLE, DOUBLE OR TRIPLE WINDOWS
IN ANY COMBINATION OF OPERATING OR FIXED UNITS USING
INTEGRAL IMPOST IN BETWEEN.

ALSO TOP & BOTTOM COMBINATIONS OF FIXED/OPERATING OR
OPERATING/FIXED IN SINGLE, DOUBLE AND TRIPLE UNIT
COMBINATIONS USING INTEGRAL IMPOST IN BETWEEN.

ALSO SIDE BY SIDE OR TOP AND BOTTOM COMBINATIONS OF
CASMT/CASMT OR CASEMENT WITH OTHER WINDOW TYPES IN
MODULES OF TWO OR MORE WINDOWS USING FBC 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 2017 (6TH EDITION)/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 2017/2020 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

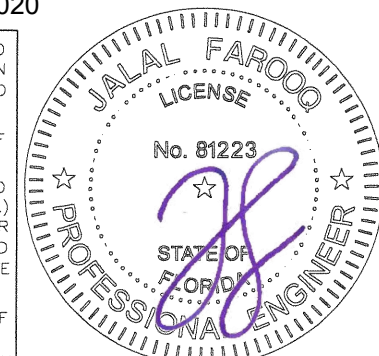
THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION
FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY
OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR
WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY,
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.

Sealed 8-11-2020

FL #29676



- 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.

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL 19-28F-MG

SERIES 600 ALUMINUM CASEMENT WINDOW (L.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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A	03.06.20		X/O OPTION ADDED
B	07.24.20		UPDATED TO 2020 FBC

date: 04-15-19

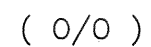
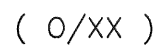
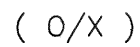
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chk. by:

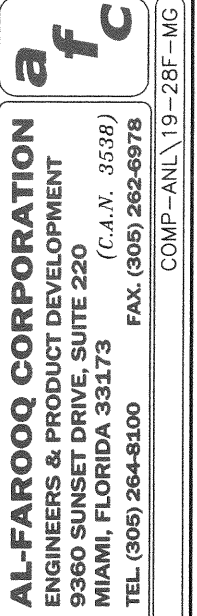
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19-28F

sheet 1 of 14



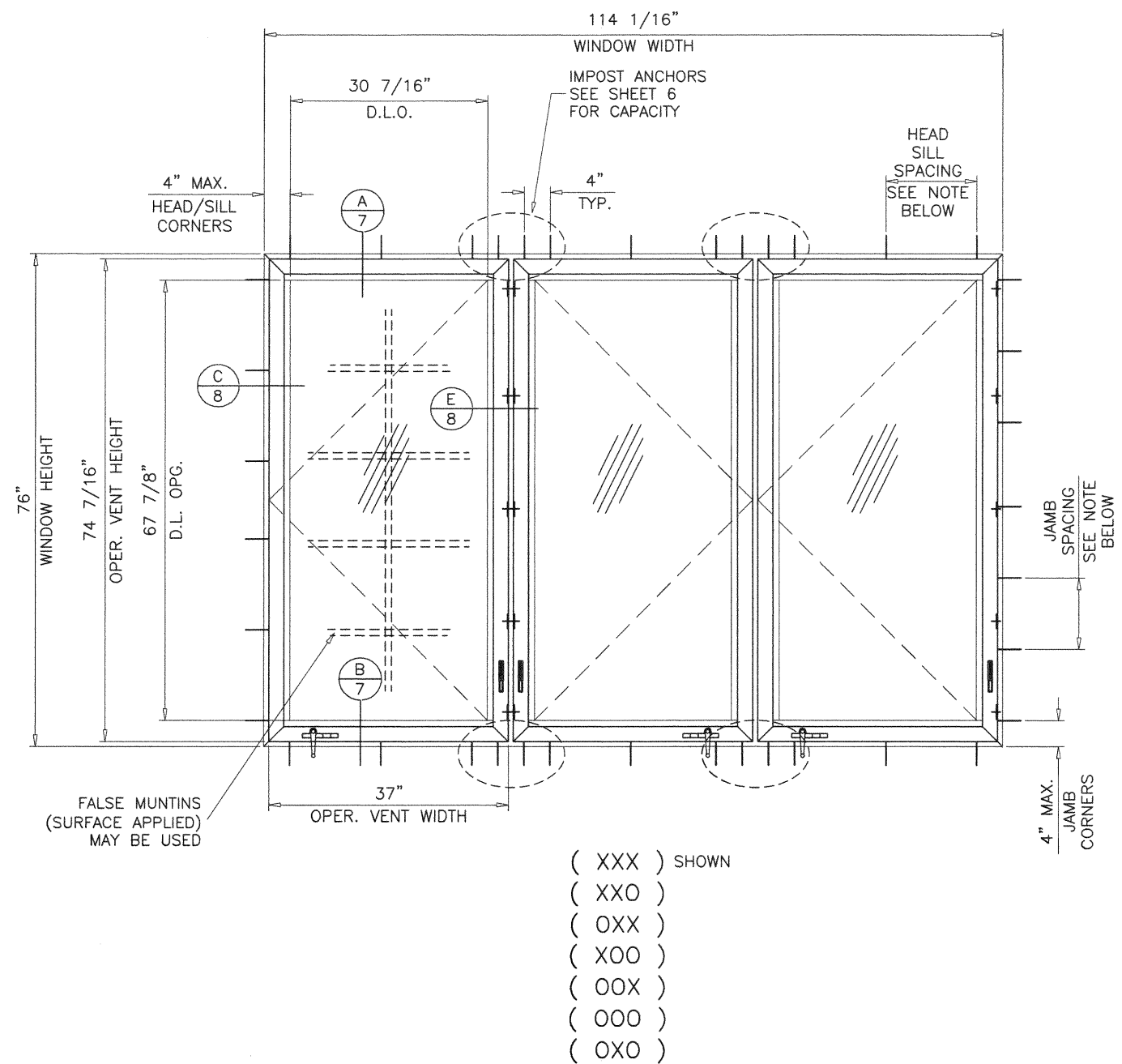
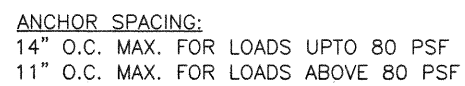
TYPICAL ELEVATIONS

FL #29676



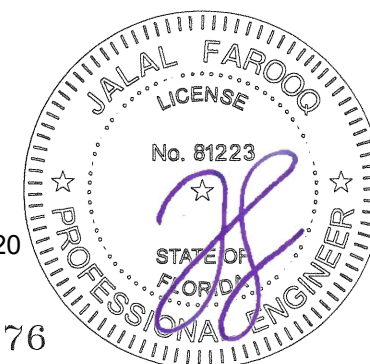
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chk. by:																															
revisions: <table border="1"> <thead> <tr> <th>no</th> <th>date</th> <th>by</th> <th>description</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				no	date	by	description																								
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Sealed 8-11-2020

FL #29676



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Medley, FL. 33166

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Tel. (305) 764-3963

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

AL-FAROOQ CORPORATION

ALFALFA & COMPANY ENGINEERS & PRODUCT DEVELOPMENT

**ENGINEERS & PRODUCT DEVELOPERS
9360 SUNSET DRIVE, SUITE 220**

MIAMI, FLORIDA 33173

(C.A.N. 3538)

TEL. (305) 264-8100 FAX. (305) 262-6978

COMP--ANL\19-28F--MG

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no	date by description

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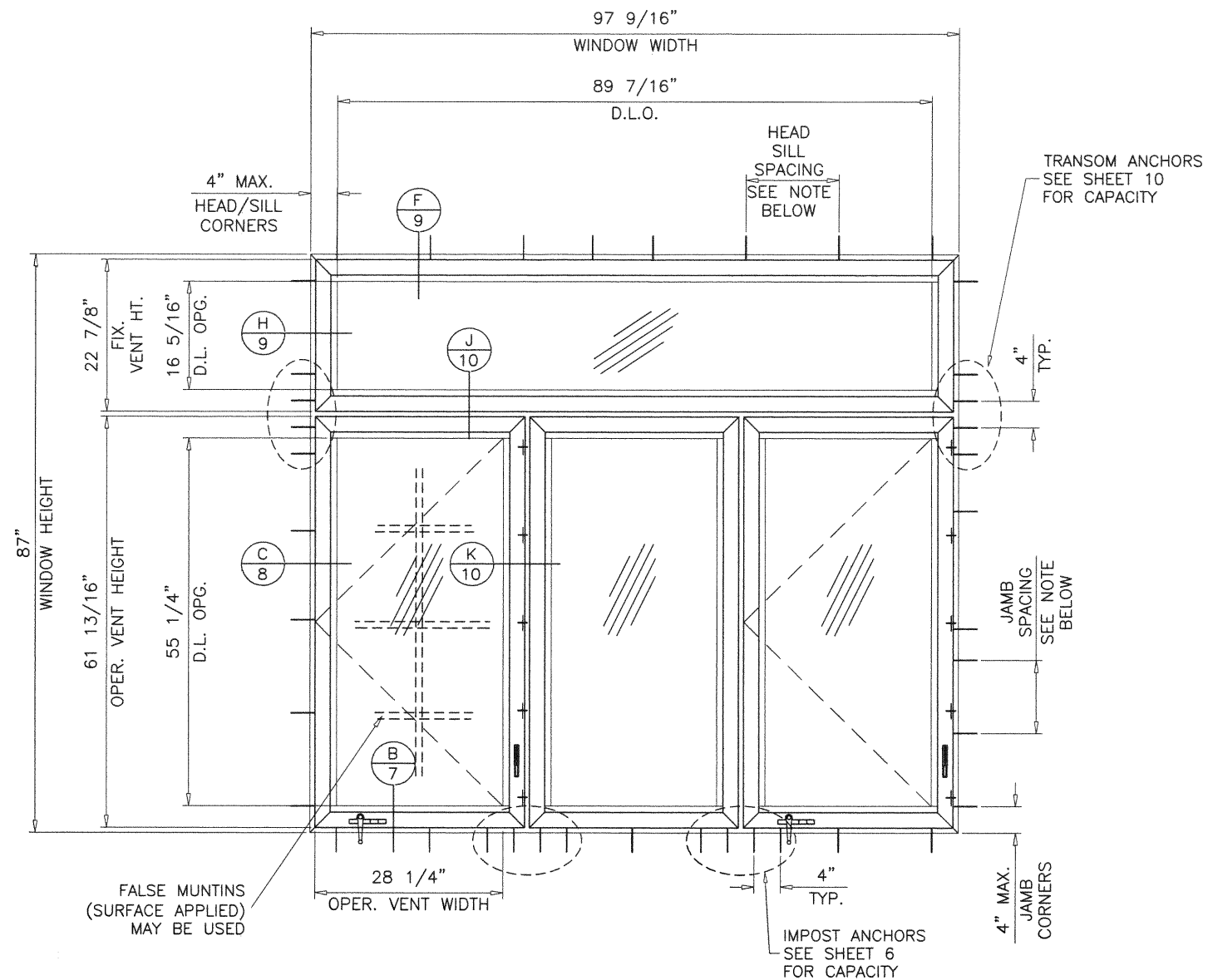
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chk. by:

drawing no.

19-28F

sheet 3 of 14



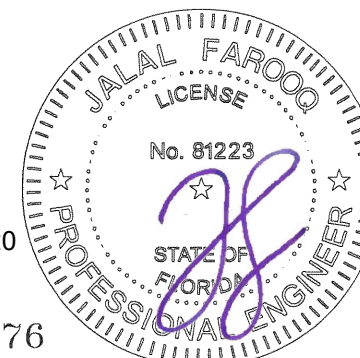
ANCHOR SPACING:
 14" O.C. MAX. FOR LOADS UPTO 80 PSF
 11" O.C. MAX. FOR LOADS ABOVE 80 PSF

(O/XOX) SHOWN
 (O/XXO)
 (O/OXX)
 (O/XOO)
 (O/OOX)
 (O/OOO)
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TYPICAL ELEVATION

Sealed 8-11-2020

FL #29676



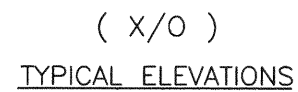
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no	date		

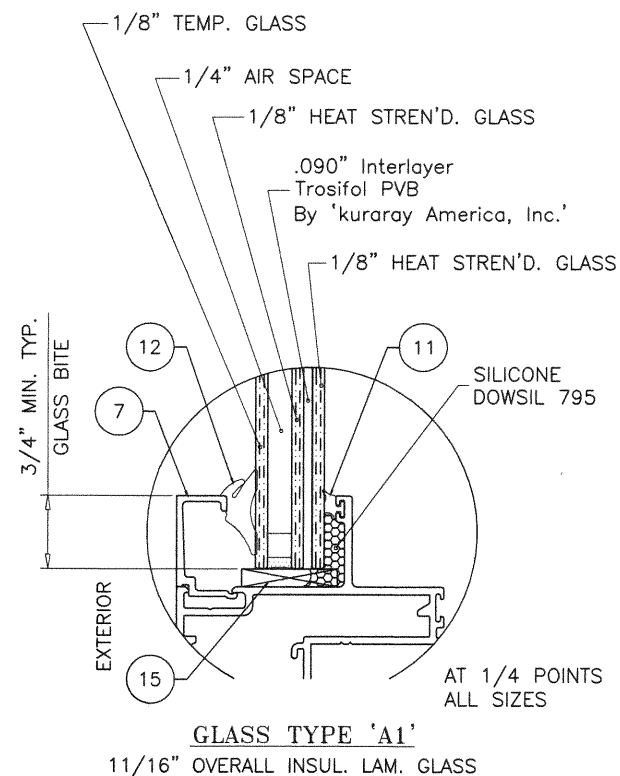
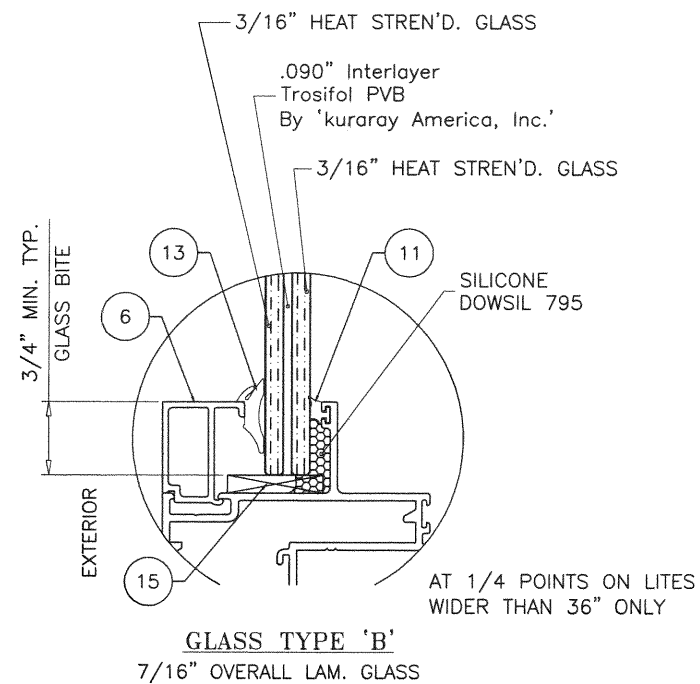
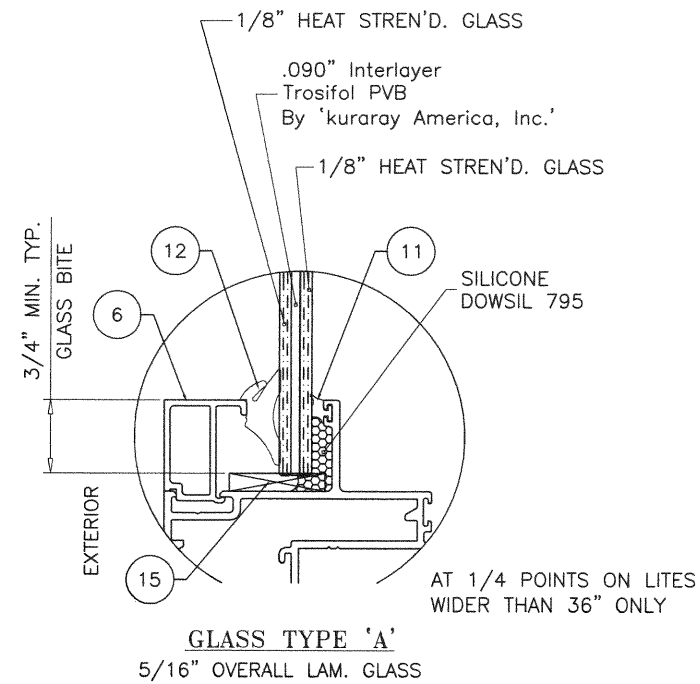
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 drawing no.
 19-28F
 sheet 4 of 14

COMP-ANL\19-28F-MG



MAXIMUM DESIGN LOAD RATING = + 78.6 PSF
(FOR SIZES SHOWN ABOVE OR SMALLER) - 78.6 PSF

[illegible]



1/4" AIR SPACE CONSISTING OF:
'DURASEAL' EDGE SEAL SYSTEM
BY 'QUANEX'



Sealed 8-11-2020

FL #29676

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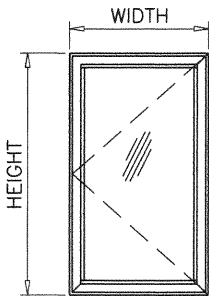
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chk. by:	

drawing no. **19-28F**

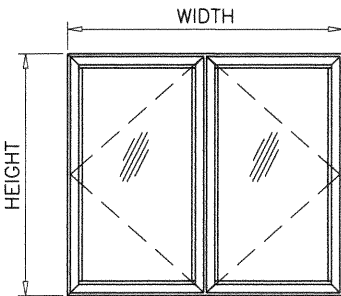
sheet 5 of 14

DESIGN LOAD CAPACITY – PSF OPERABLE CASEMENT (X SIZES)					
FRAME DIMS.		GLASS TYPES 'A' & 'A1'		GLASS TYPE 'B'	
WIDTH	HEIGHT	EXT.(+)	1NT.(–)	EXT.(+)	1NT.(–)
19–1/8"	26"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
19–1/8"	38–3/8"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
19–1/8"	50–5/8"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
19–1/8"	56"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
19–1/8"	63"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
19–1/8"	72"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
19–1/8"	76"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
38–1/2"		80.0	80.0	80.0	100.0
12"	36"	80.0	80.0	80.0	100.0
18"		80.0	80.0	80.0	100.0
24"		80.0	80.0	80.0	100.0
30"		80.0	80.0	80.0	100.0
38"		80.0	80.0	80.0	100.0
42"		80.0	80.0	80.0	100.0
12"	48"	80.0	80.0	80.0	100.0
18"		80.0	80.0	80.0	100.0
24"		80.0	80.0	80.0	100.0
30"		80.0	80.0	80.0	100.0
38"		77.9	77.9	77.9	97.4
42"		70.5	70.5	70.5	88.1
12"	60"	80.0	80.0	80.0	100.0
18"		80.0	80.0	80.0	100.0
24"		80.0	80.0	80.0	100.0
30"		80.0	80.0	80.0	100.0
38"		77.9	77.9	77.9	97.4
42"		70.5	70.5	70.5	88.1
12"	72"	80.0	80.0	80.0	100.0
18"		80.0	80.0	80.0	100.0
24"		80.0	80.0	80.0	100.0
30"		80.0	80.0	80.0	100.0
38"		77.9	77.9	77.9	97.4

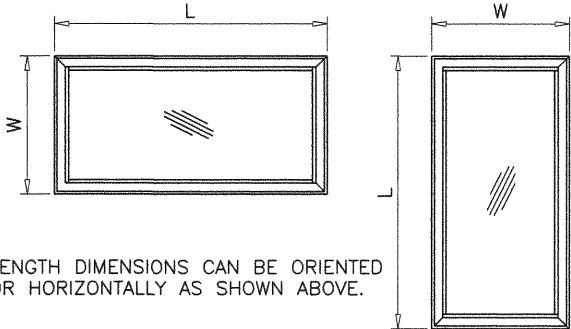


DESIGN LOAD CAPACITY – PSF OPERABLE CASEMENT (XX SIZES)					
FRAME DIMS.		2 ANCHORS AT IMPOST LOCATION		4 ANCHORS AT IMPOST LOCATION	
		GLASS TYPES 'A', 'A1' & 'B'		GLASS TYPES 'A', 'A1' & 'B'	
WIDTH	HEIGHT	EXT.(+)	1NT.(–)	EXT.(+)	1NT.(–)
37"	26"	80.0	80.0	80.0	80.0
53–1/8"		80.0	80.0	80.0	80.0
74"		80.0	80.0	80.0	80.0
37"	38–3/8"	80.0	80.0	80.0	80.0
53–1/8"		80.0	80.0	80.0	80.0
74"		80.0	80.0	80.0	80.0
37"	50–5/8"	80.0	80.0	80.0	80.0
53–1/8"		80.0	80.0	80.0	80.0
74"		74.1	74.1	80.0	80.0
37"	56"	80.0	80.0	80.0	80.0
53–1/8"		77.7	77.7	80.0	80.0
74"		63.5	63.5	80.0	80.0
37"	63"	80.0	80.0	80.0	80.0
53–1/8"		66.7	66.7	80.0	80.0
74"		53.5	53.5	80.0	80.0
37"	72"	75.9	75.9	80.0	80.0
53–1/8"		56.5	56.5	80.0	80.0
74"		44.5	44.5	80.0	80.0
37"	76"	71.4	71.4	80.0	80.0
53–1/8"		52.9	52.9	80.0	80.0
74"		41.4	41.4	80.0	80.0
76"		40.7	40.7	80.0	80.0
24"	36"	80.0	80.0	80.0	80.0
36"		80.0	80.0	80.0	80.0
48"		80.0	80.0	80.0	80.0
60"		80.0	80.0	80.0	80.0
76"		80.0	80.0	80.0	80.0
84"		80.0	80.0	80.0	80.0
24"	48"	80.0	80.0	80.0	80.0
36"		80.0	80.0	80.0	80.0
48"		80.0	80.0	80.0	80.0
60"		80.0	80.0	80.0	80.0
76"		77.9	77.9	77.9	77.9
84"		70.5	70.5	70.5	70.5
24"	60"	80.0	80.0	80.0	80.0
36"		80.0	80.0	80.0	80.0
48"		76.5	76.5	80.0	80.0
60"		65.3	65.3	80.0	80.0
76"		56.6	56.6	77.9	77.9
84"		53.8	53.8	70.5	70.5
24"	72"	80.0	80.0	80.0	80.0
36"		77.7	77.7	80.0	80.0
48"		61.2	61.2	80.0	80.0
60"		51.5	51.5	80.0	80.0
76"		45.8	45.8	77.9	77.9

NOTE:
FOR TRIPLE CASEMENT CONFIGURATION MULTIPLY
OVERALL WIDTH BY 2/3 AND APPLY CHART
FOR XX SIZES.
THE GLASS AREA OF ANY INDIVIDUAL SASH
SHALL NOT EXCEED THE MAXIMUM TESTED AREA.



DESIGN LOAD CAPACITY – PSF FIXED CASEMENT (O)					
FRAME DIMS.		GLASS TYPES 'A' & 'A1'		GLASS TYPE 'B'	
WIDTH	LENGTH	EXT.(+)	1NT.(–)	EXT.(+)	1NT.(–)
19–1/8"	26"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
53–1/8"	38–3/8"	80.0	80.0	80.0	100.0
19–1/8"		80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"	50–5/8"	80.0	80.0	80.0	100.0
53–1/8"		77.1	77.1	77.1	96.4
19–1/8"		80.0	80.0	80.0	100.0
26–1/2"	56"	80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
53–1/8"		58.5	58.5	58.5	73.1
19–1/8"	63"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
19–1/8"	72"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
19–1/8"	76"	80.0	80.0	80.0	100.0
26–1/2"		80.0	80.0	80.0	100.0
37"		80.0	80.0	80.0	100.0
38–1/2"	48"	80.0	80.0	80.0	100.0
24"		80.0	80.0	80.0	100.0
30"		80.0	80.0	80.0	100.0
32"		80.0	80.0	80.0	100.0
36"		80.0	80.0	80.0	100.0
42"	60"	70.5	70.5	70.5	88.1
24"		80.0	80.0	80.0	100.0
30"		80.0	80.0	80.0	100.0
32"		80.0	80.0	80.0	100.0
36"		80.0	80.0	80.0	100.0
42"	72"	70.5	70.5	70.5	88.1
24"		80.0	80.0	80.0	100.0
30"		80.0	80.0	80.0	100.0
32"		80.0	80.0	80.0	100.0
36"		80.0	80.0	80.0	100.0
24"	84"	80.0	80.0	80.0	100.0
30"		80.0	80.0	80.0	100.0
32"		80.0	80.0	80.0	100.0
24"	96"	80.0	80.0	80.0	100.0



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



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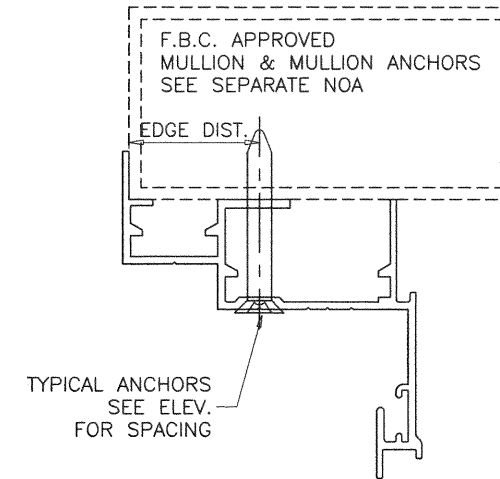
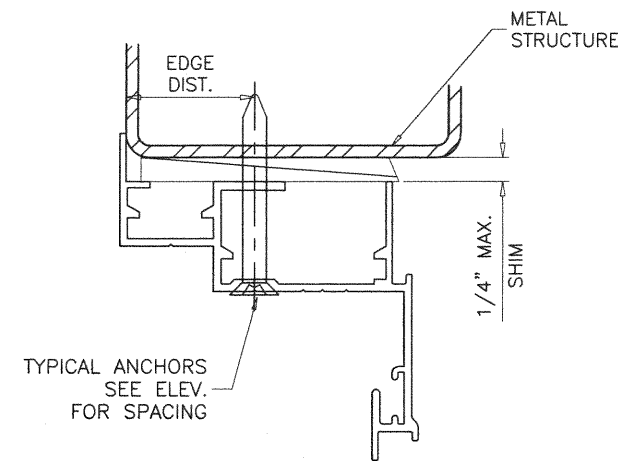
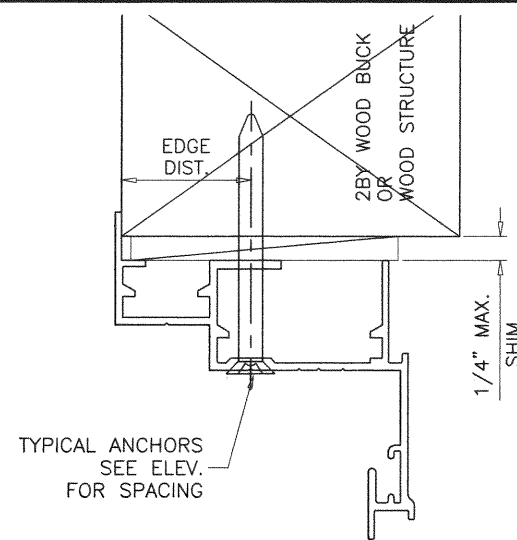
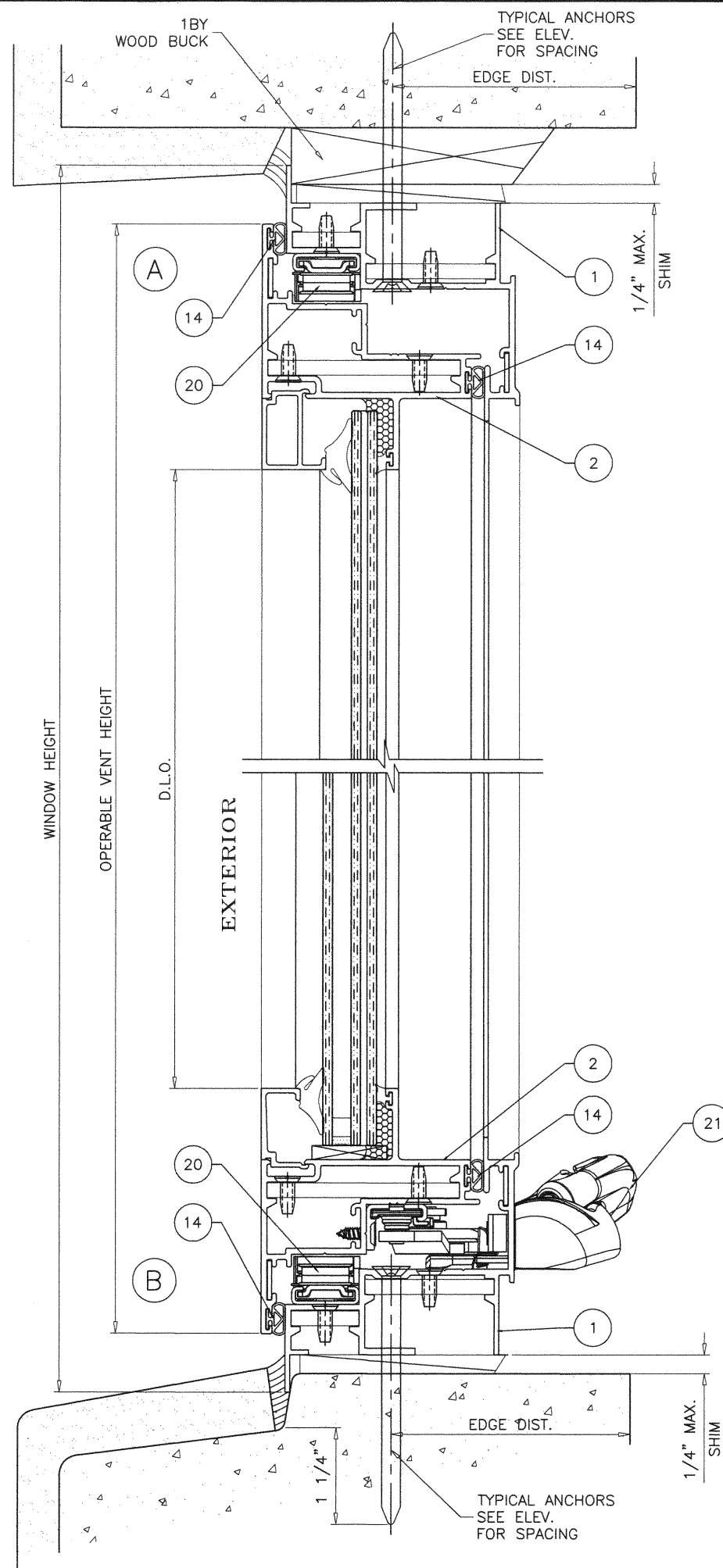
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MIAMI, FLORIDA 33173
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(C.A.N. 3538)

SERIES 600 ALUMINUM CASEMENT WINDOW (L.M.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL. 33166
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date: 04-15-19
scale: -
dr. by: TARIQ
chk. by:

drawing no.
19-28F
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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

5/16" DIA. ULTRACON BY 'DEWALT' ($F_u=177$ KSI, $F_y=155$ KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES

1-1/2" 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)

DIRECTLY INTO CONCRETE OR BLOCKS

1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)

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

5/16" DIA. TEKS OR SELF-DRILLING SCREWS (GRADE 5 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. ($F_y = 36$ KSI MIN.)

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

CRITICAL EDGE DISTANCE

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

INTO WOOD STRUCTURE = 1" MIN.

INTO METAL STRUCTURE = 3/4" MIN.

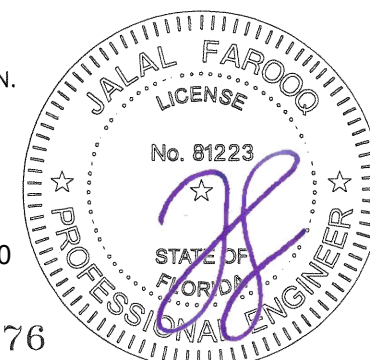
WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.

CONCRETE AT HEAD, SILL OR JAMBS $f'_c = 3000$ PSI MIN.

C-90 HOLLOW/FILLED BLOCK AT JAMBS $f'_m = 2000$ PSI MIN.

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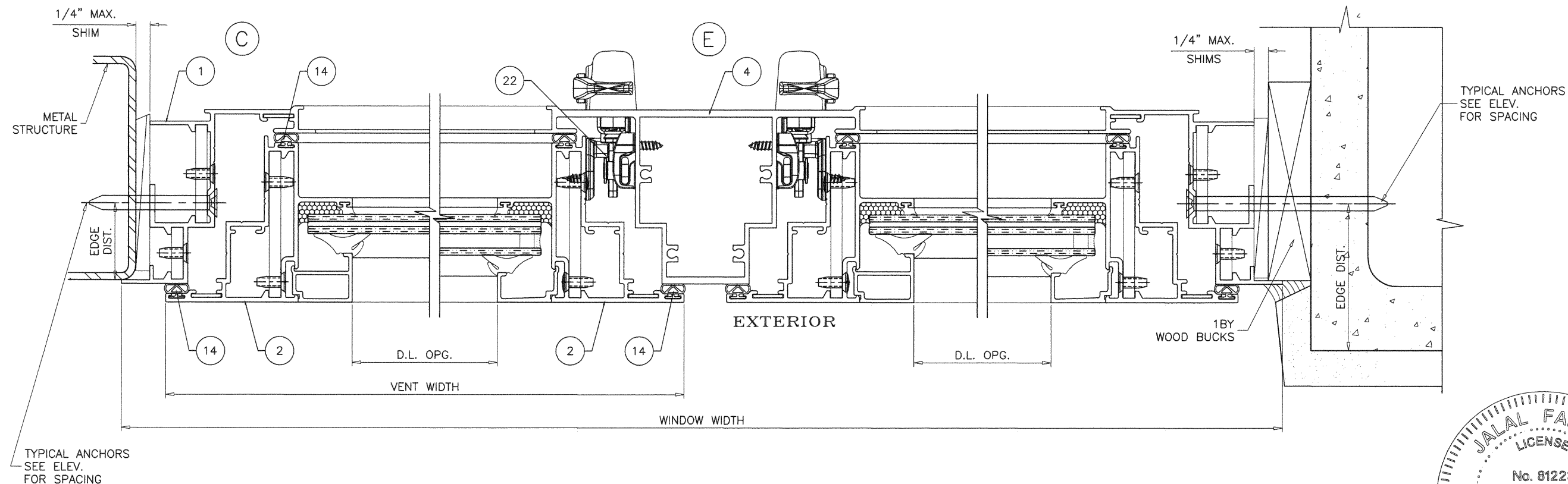
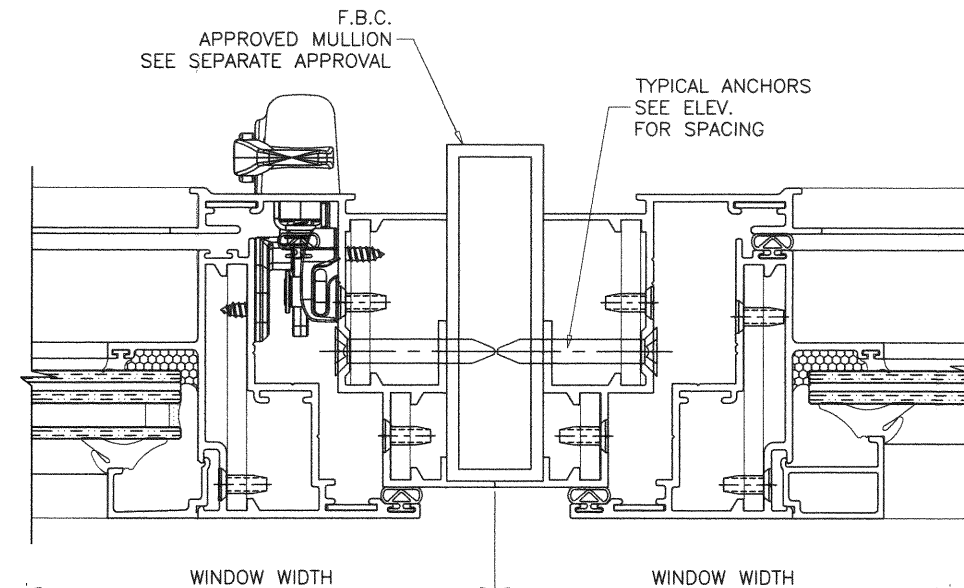
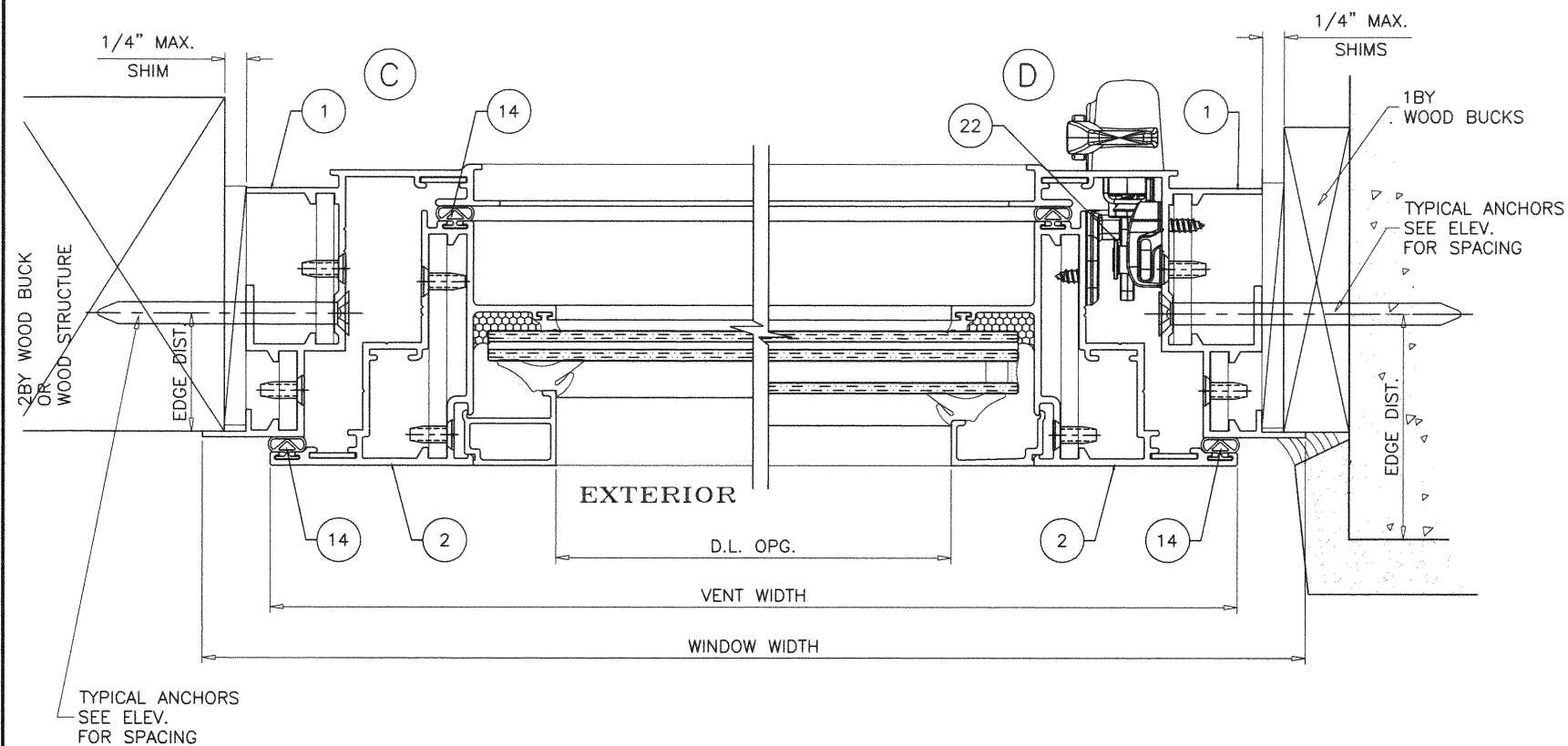
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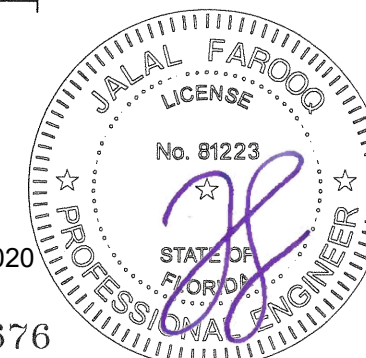
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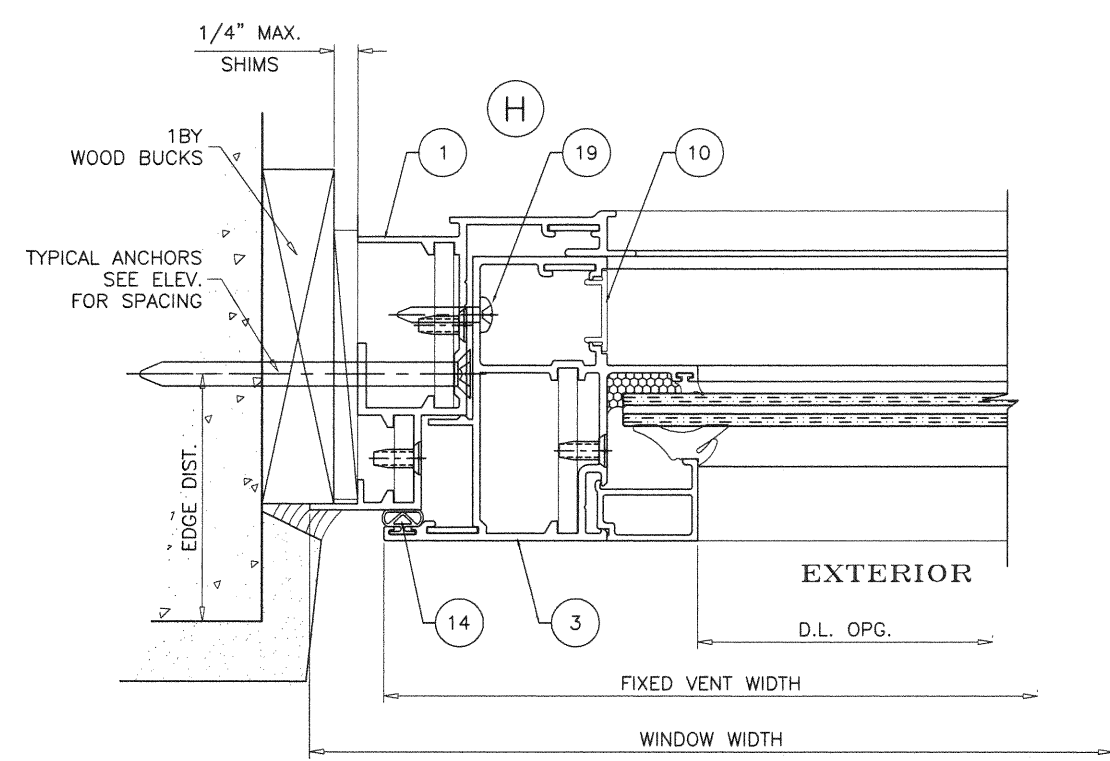
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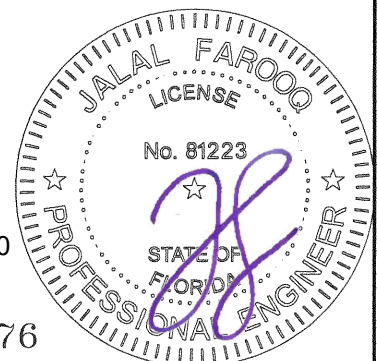
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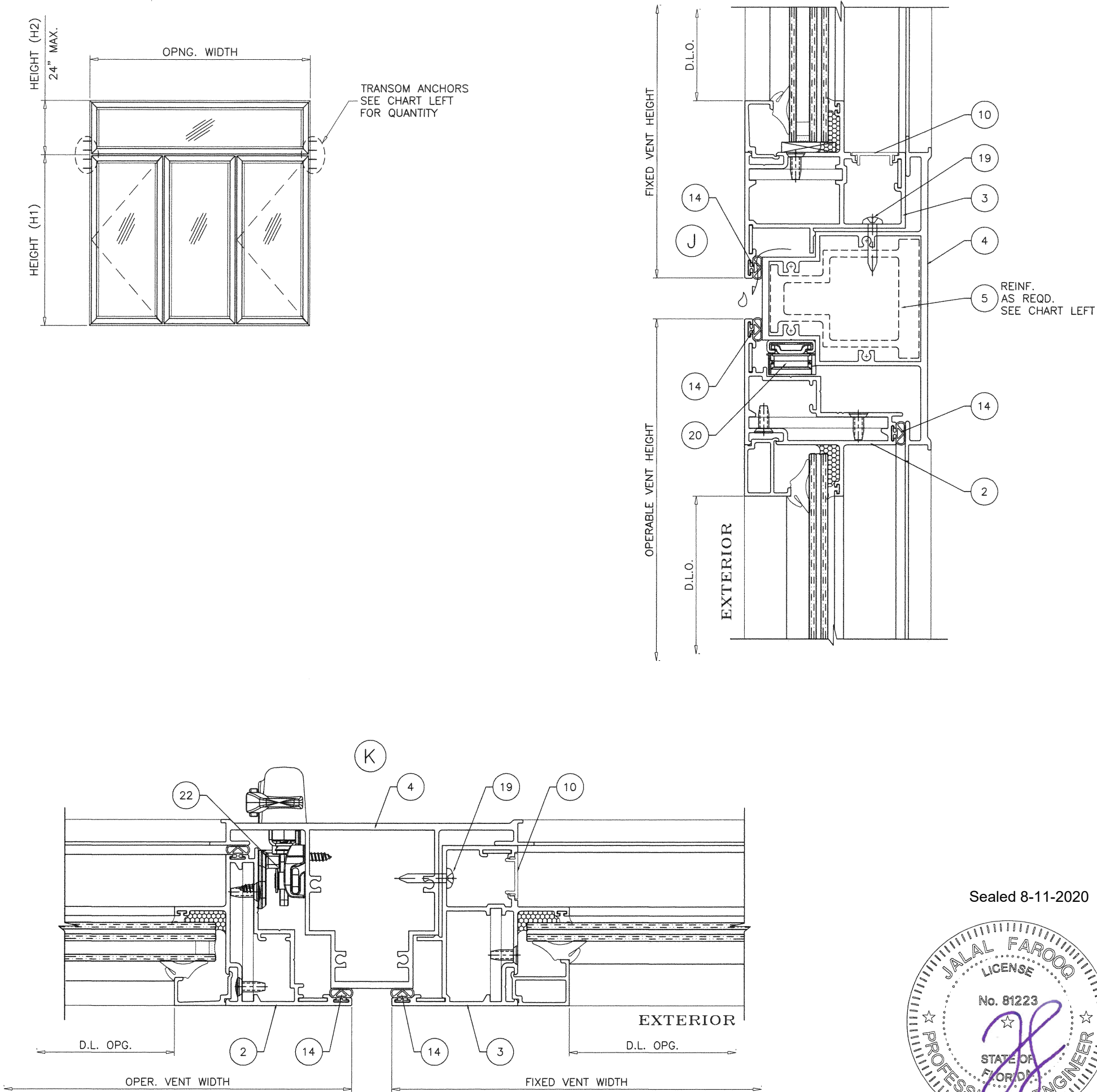
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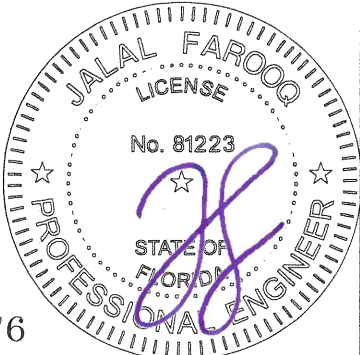
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TRANSOM DESIGN LOAD CAPACITY					
NOMINAL DIMS.			WITHOUT REINF.	WITH REINF.	NO. OF ANCHORS AT TRANSOM ENDS
OPNG. WIDTH INCHES	HEIGHT (H1) INCHES	HEIGHT (H2) INCHES			
48	36	24	80.0	80.0	2
50			80.0	80.0	3
62			80.0	80.0	3
74			80.0	80.0	4
86			—	80.0	4
98			—	80.0	5
48	38-3/8	24	80.0	80.0	3
50			80.0	80.0	3
62			80.0	80.0	3
74			80.0	80.0	4
86			—	80.0	4
98			—	80.0	5
48	48	24	80.0	80.0	3
50			80.0	80.0	3
62			80.0	80.0	4
74			80.0	80.0	4
86			—	80.0	5
98			—	80.0	6
48	50-5/8	24	80.0	80.0	3
50			80.0	80.0	3
62			80.0	80.0	4
74			80.0	80.0	4
86			—	80.0	5
98			—	80.0	6
48	56	24	80.0	80.0	3
50			80.0	80.0	3
62			80.0	80.0	4
74			80.0	80.0	5
86			—	80.0	5
98			—	80.0	6
48	60	24	80.0	80.0	3
50			80.0	80.0	3
62			80.0	80.0	4
74			80.0	80.0	5
86			—	80.0	6
98			—	80.0	6
48	63	24	80.0	80.0	3
50			80.0	80.0	3
62			80.0	80.0	4
74			80.0	80.0	5
86			—	80.0	6
98			—	78.5	6
48	76	24	80.0	80.0	4
50			80.0	80.0	4
62			80.0	80.0	5
74			80.0	80.0	6



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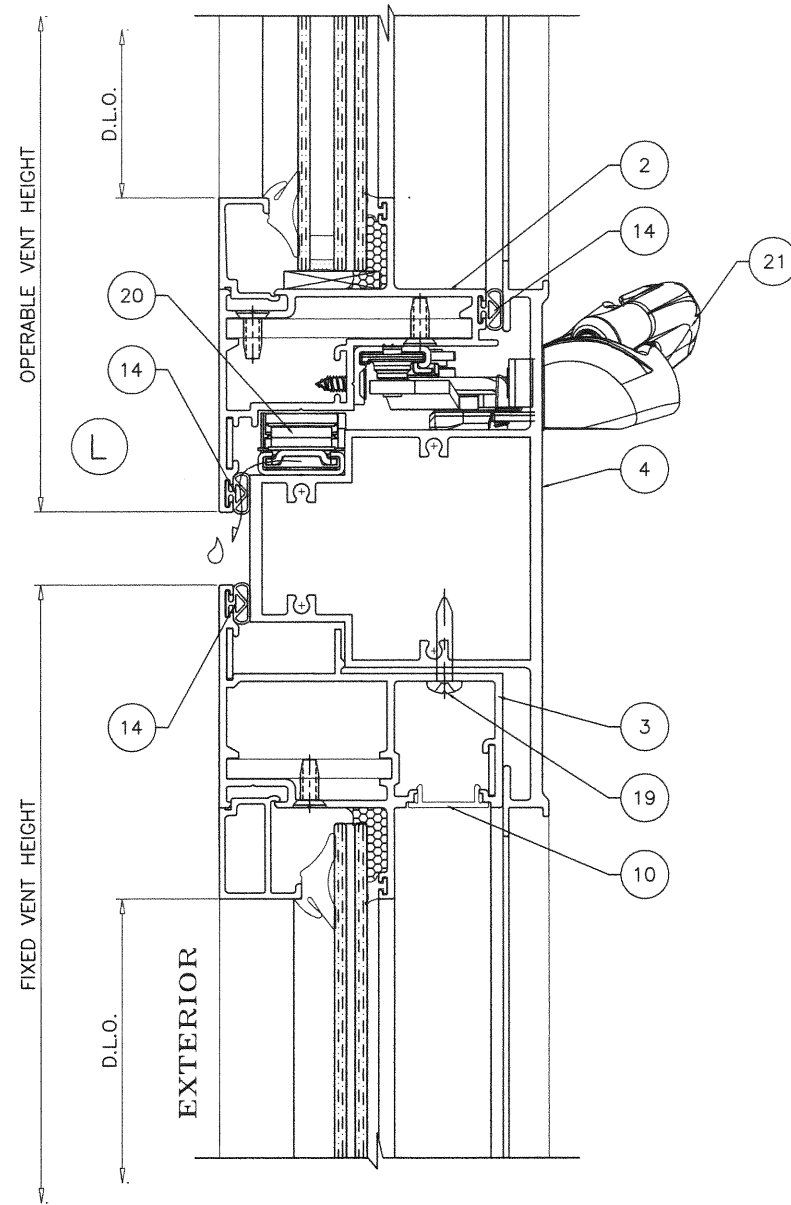
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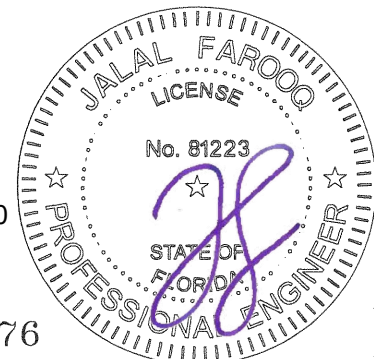
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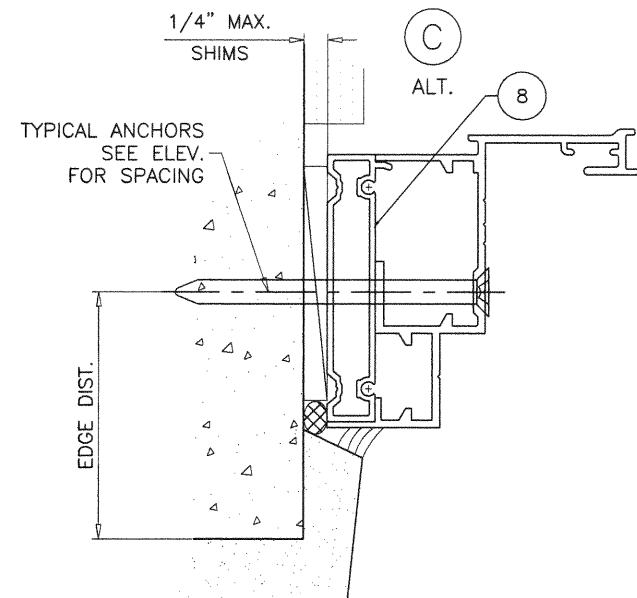
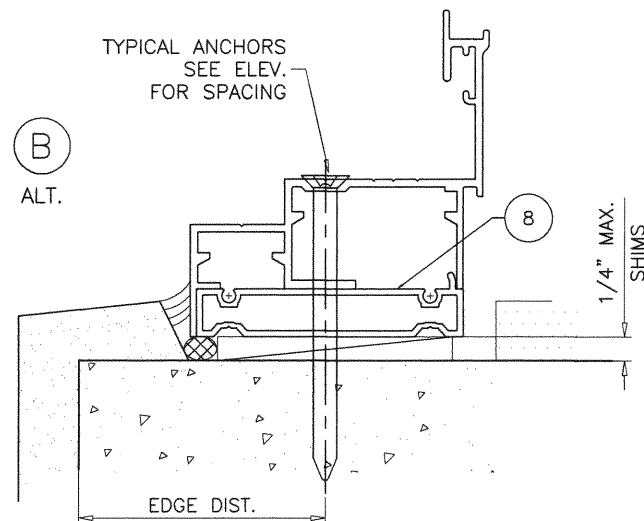
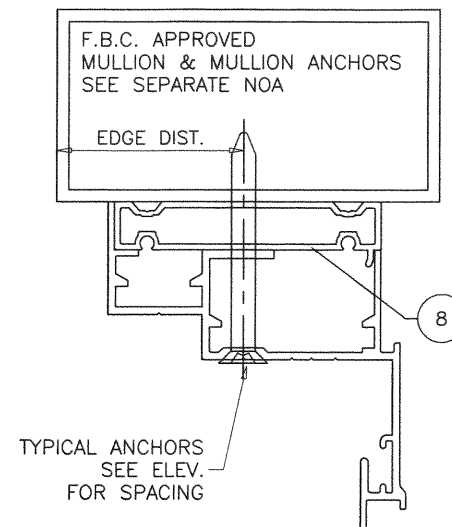
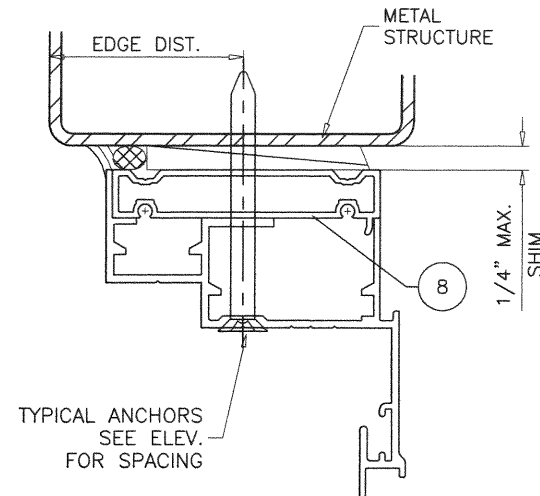
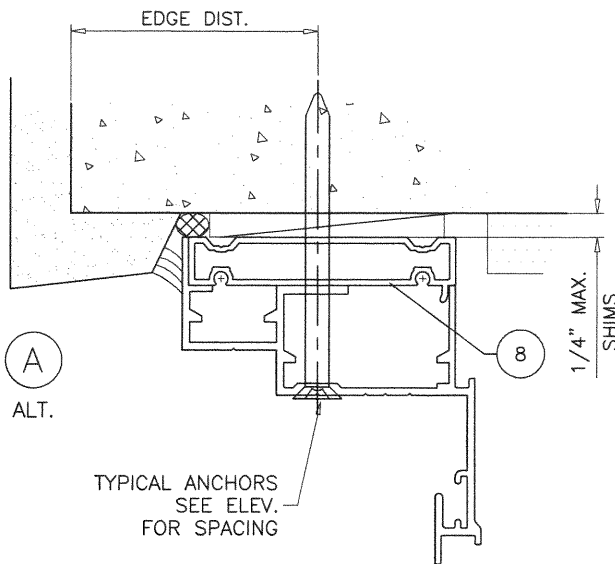
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chk. by:					

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sheet 10.1 of 14

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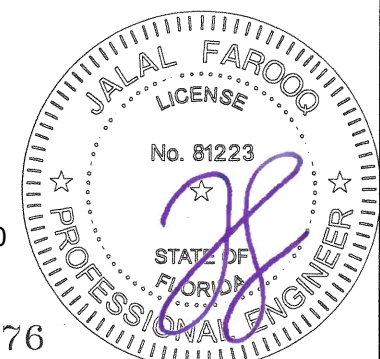




INSTALLATION DETAILS WITH FLUSH FRAME ADAPTER
SEE SHEETS 7 THRU 9 FOR WINDOW DETAILS

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no	date	no	date	1/2" = 1"	1/2" = 1"	TARIQ	TARIQ		

drawing no.
19-28F
sheet 11 of 14

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	E-602	4/	WDW. FRAME	6063-T6	-
2	E-601	4/	WDW. OPERABLE VENT	6063-T6	-
3	E-604	4/	WDW. FIXED VENT	6063-T6	-
4	E-603	AS REQD.	IMPOST	6063-T6	-
5	E-605	AS REQD.	IMPOST REINFORCING	6063-T6	-
6	E-9001	4/	LITE GLAZING BEAD (LAM. GLASS)	6063-T6	-
7	E-9003	4/	LITE GLAZING BEAD (INSUL. LAM. GLASS)	6063-T6	-
8	E-212	AS REQD.	FLUSH ADAPTER	6063-T6	-
9	E-2037	AS REQD.	CORNER KEY	6063-T6	-
10	E-1018	AS REQD.	FIXED VENT COVER	6063-T6	-
11	G-3001	AS REQD.	INTERIOR GLAZING GASKET	SANTOPRENE	-
12	G-601	AS REQD.	EXTERIOR GLAZING GASKET (5/16" & INSUL. GLASS)	EPDM	DUROMETER 70±5 SHORE A
13	G10-04	AS REQD.	EXTERIOR GLAZING GASKET (7/16" GLASS)	EPDM	DUROMETER 70±5 SHORE A
14	G-3005	AS REQD.	BULB W'STRIPPING	SANTOPRENE	-
15	G-602	2/	LITE SETTING BLOCK	SILICONE	-
16	PJS45-SS	AS REQD.	CORNER GUIDE	ST. STEEL	-
17	#10 X 1/2"	AS REQD.	CORNER ASSEMBLY FASTENERS	ST. STEEL	FH SMS
18	#10 X 1-1/2"	AS REQD.	IMPOST ASSEMBLY FASTENERS	ST. STEEL	FH SMS
19	#10 X 1"	AS REQD.	FIXED VENT FASTENERS, AT 3" FROM ENDS & 13" O.C.	ST. STEEL	FH SMS
20	-	2/	VENT HINGES	-	-
21	-	1/	VENT OPERATOR	-	-
22	-	1/	VENT MULTI POINT LOCK	-	-

SEALANT:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH DOWSIL 795 SEALANT.

LOCKS:

OPTION #1
MULTI POINT LOCK SYSTEM BY 'INTERLOCK'
AT FRAME JAMB
LOCK OPERATOR AT 12-1/2" FROM SILL
FASTENED TO JAMBS WITH (2) #10 X 5/8" SMS.

LOCK BAR SECURED TO JAMB WITH 9 GUIDES
SPACED AT 10" O.C. MAX.
EACH GUIDE FASTENED WITH (3) #10 X 1/2" P FH SMS

5 NYLON KEEPERS AT VENT FACING LOCKING POINTS
SPACED AT 15" O.C. MAX.
EACH FASTENED WITH (2) #10 X 5/8" P FH SMS

OPTION #2
MULTI POINT LOCK SYSTEM BY 'ROTO FRANK OF AMERICA'
AT FRAME JAMB
LOCK OPERATOR AT 11-1/2" FROM SILL
FASTENED TO JAMBS WITH (2) #10 X 5/8" SMS.

LOCK BAR SECURED TO JAMB WITH 8 GUIDES
SPACED AT 10" O.C. MAX.
EACH GUIDE FASTENED WITH (3) #10 X 1/2" P FH SMS

5 ST. STEEL KEEPERS AT VENT FACING LOCKING POINTS
SPACED AT 17" O.C. MAX.
EACH FASTENED WITH (2) #10 X 5/8" P FH SMS

HINGES:

'STORMB16' FRICTION HINGES BY 'SECURISTYLE'
LOCATED AT TOP AND BOTTOM CORNERS
FASTENED TO FRAME WITH (3) #10 X 1/2" P FH SELF DRILLING SCREWS
FASTENED TO VENT WITH (3) #10 X 1/2" P FH SELF DRILLING SCREWS

OPERATOR:

OPTION #1
DUAL ARM ROTO OPERATOR #C001-0251 BY 'INTERLOCK'
LOCATED AT SILL END
FASTENED WITH (8) #8 X 1/2" P FH SMS

OPTION #2
DUAL ARM ROTO OPERATOR #OP06-7785-AS BY
'ROTO FRANK OF AMERICA'
LOCATED AT SILL END
FASTENED WITH (9) #8 X 1/2" P FH SMS

SNUBBERS:

'ASD2' VECTOR SECURITY DEVICE BY 'ASD' LOCATED AT JAMB AND HINGE STILE AT 11" FROM TOP AND BOTTOM
EACH FASTENED WITH (2) #10 X 1/2" P FH SDS.

'CPB1' PULL IN BLOCK BY 'SECURISTYLE' LOCATED AT JAMB AND HINGE STILE AT MIDSPAN
EACH FASTENED WITH (2) #10 X 1/2" P FH SDS.

NOTE:
FOR CASEMENT INSTALLED WITHOUT OPERATOR
MAXIMUM PUSH OUT OPERATING FORCE < 5 LBS.
NO PINCHING OR TWIST OF WRIST IS REQUIRED
TO OPERATE.

Sealed 8-11-2020

FL #29676



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AL-FAROOQ CORPORATION
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9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
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SERIES 600 ALUMINUM CASEMENT WINDOW (L.M.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
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revisions:

no	date	by	description

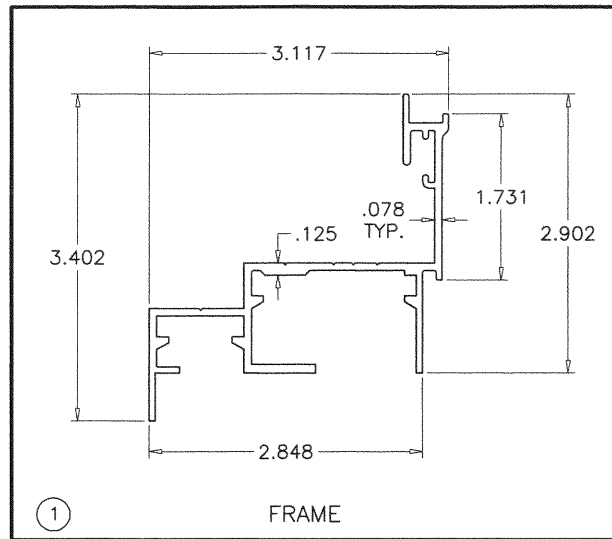
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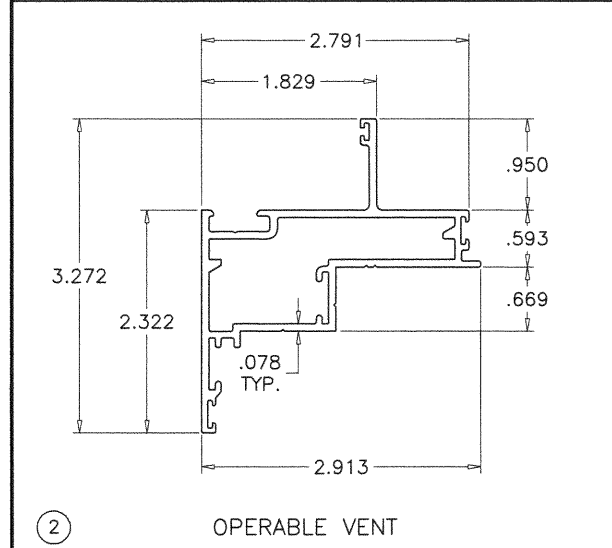
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chk. by:

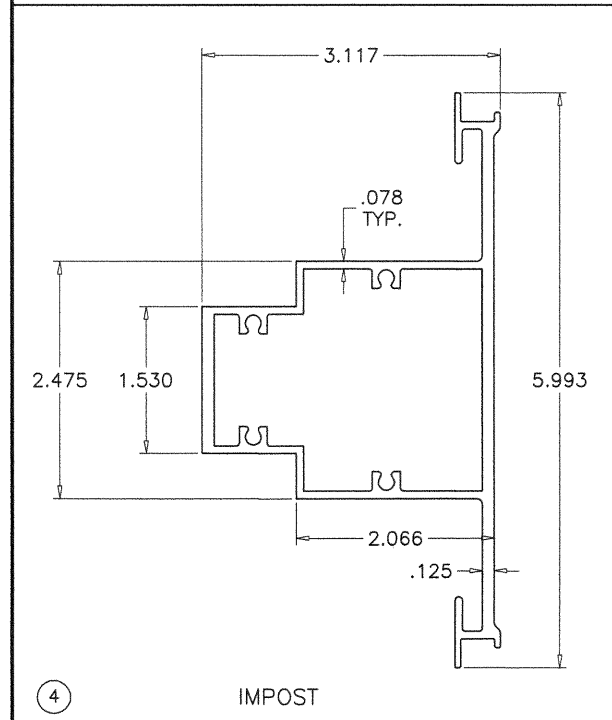
drawing no.
19-28F
sheet 12 of 14



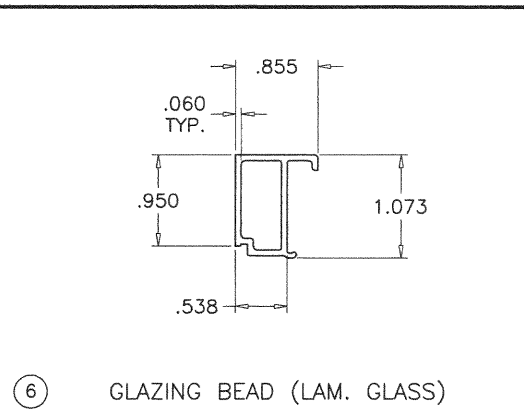
① FRAME



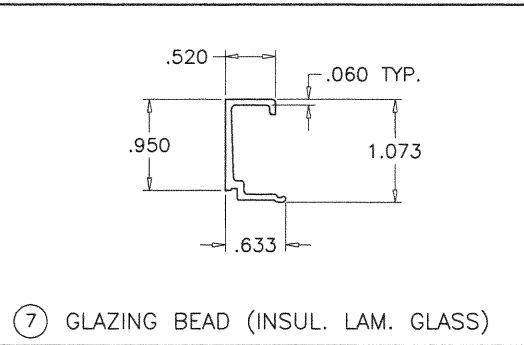
② OPERABLE VENT



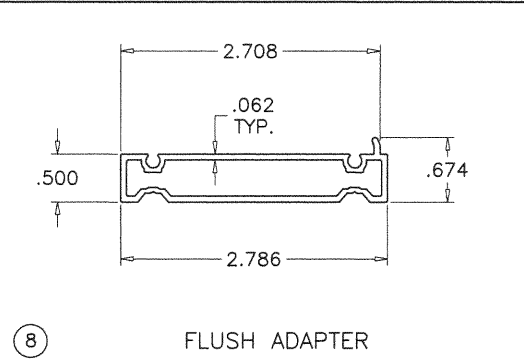
④ IMPOST



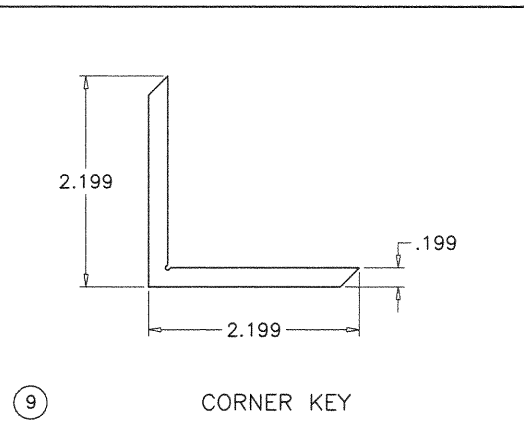
⑥ GLAZING BEAD (LAM. GLASS)



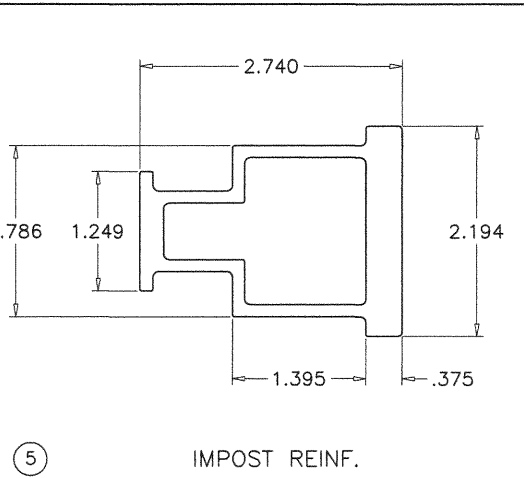
⑦ GLAZING BEAD (INSUL. LAM. GLASS)



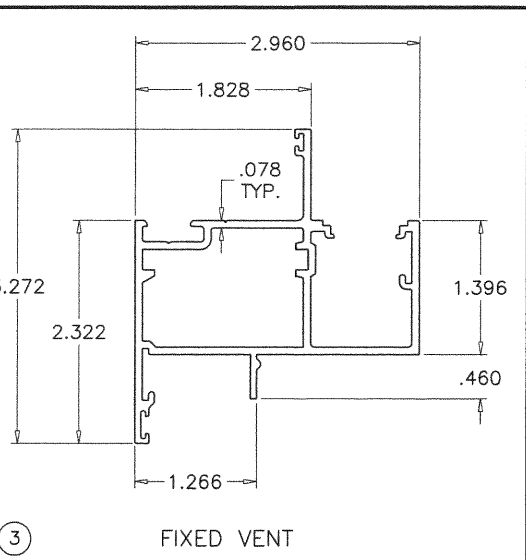
⑧ FLUSH ADAPTER



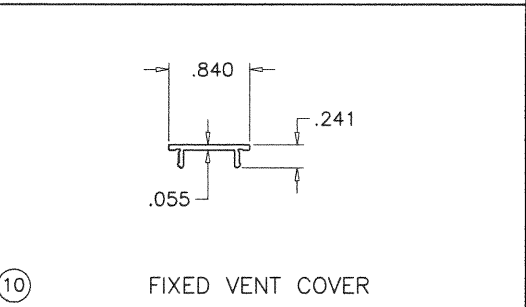
⑨ CORNER KEY



⑤ IMPOST REINF.



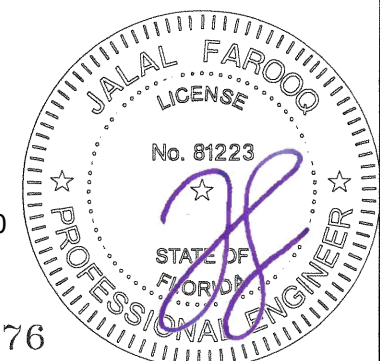
③ FIXED VENT



⑩ FIXED VENT COVER

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revisions:		by description	
no	date	no	date

date: 04-15-19

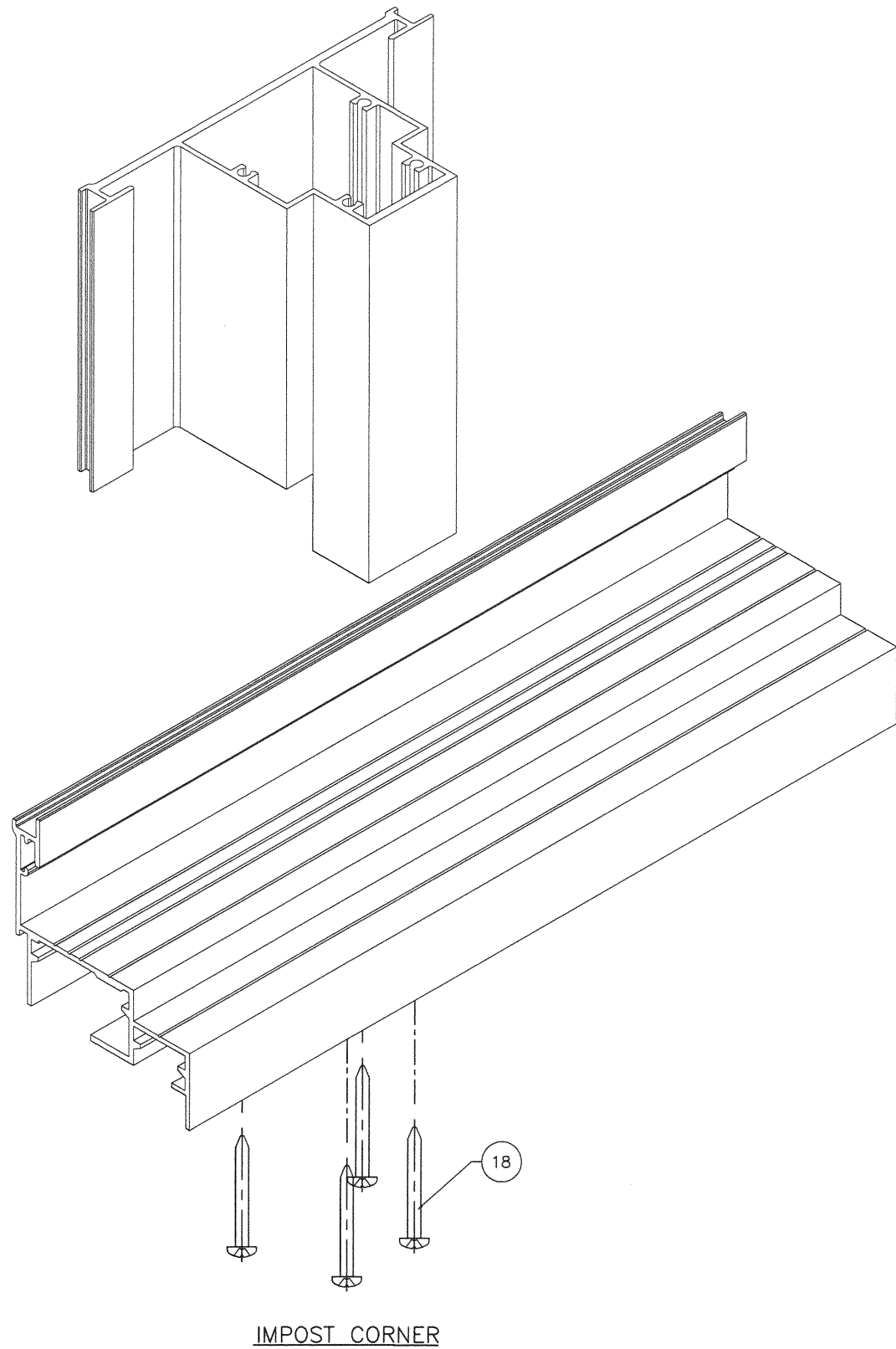
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dr. by: TARIQ

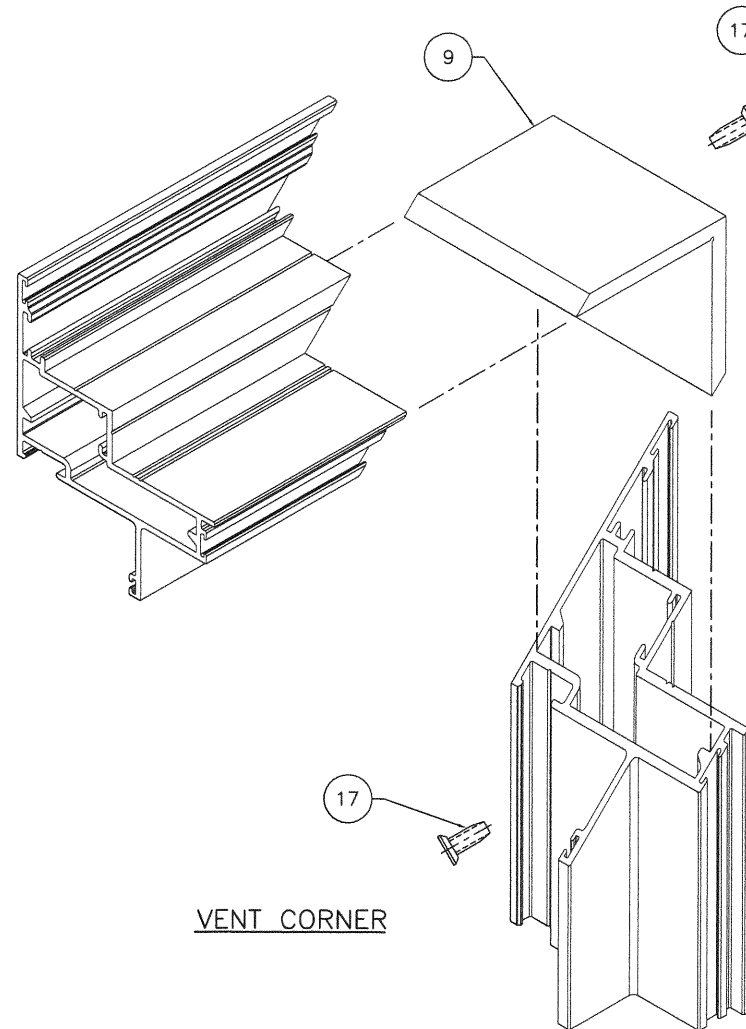
chk. by:

drawing no.
19-28F

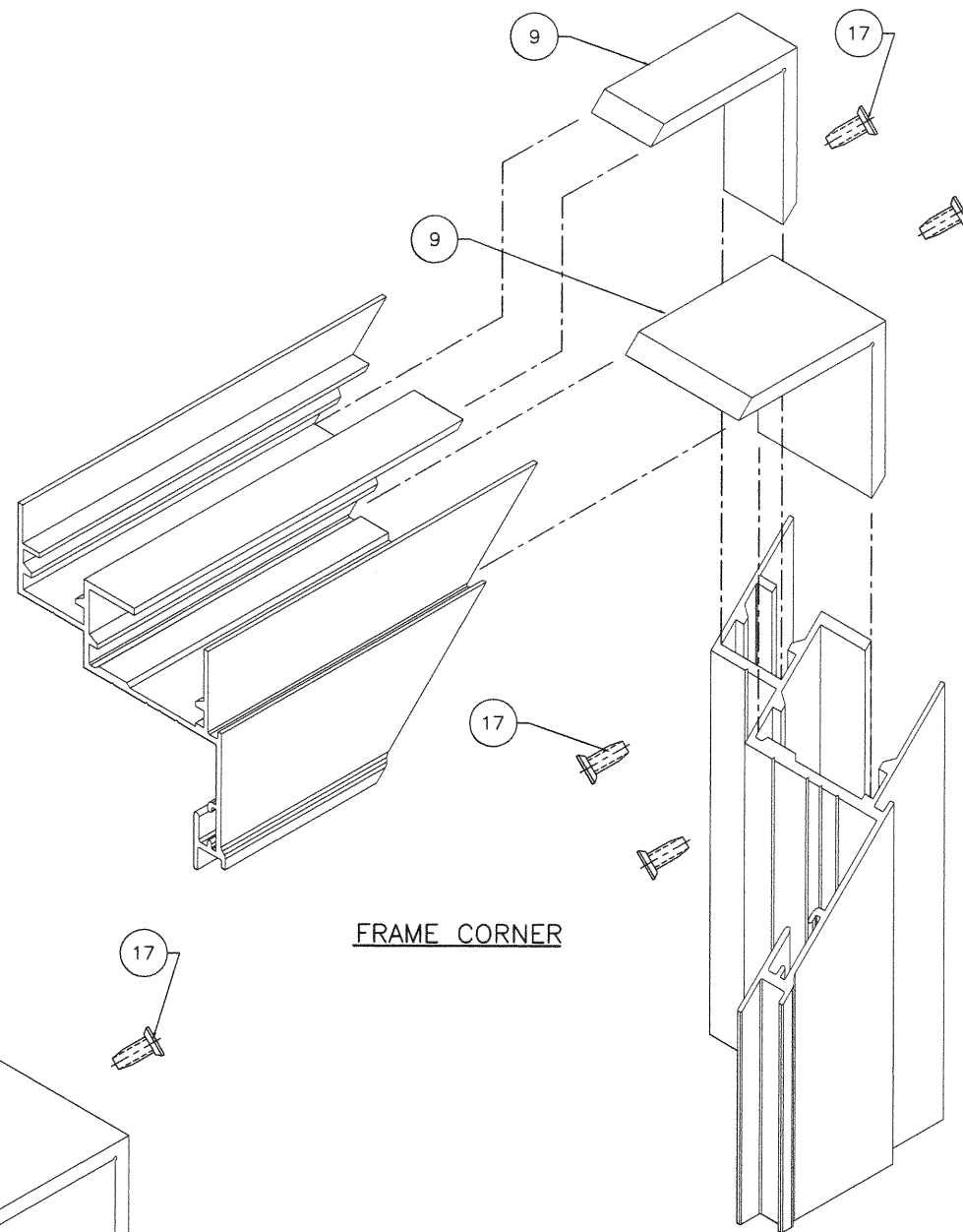
sheet 13 of 14



IMPOST CORNER



VENT CORNER



FRAME CORNER



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