



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
BOARD AND CODE ADMINISTRATION DIVISION

## NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599

[www.miamidade.gov/building](http://www.miamidade.gov/building)

Eco Window Systems, LLC  
8502 NW 80 Street  
Medley, FL 33166

### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

### DESCRIPTION: Series "ECO-Narrow" Aluminum Window Wall System – L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **21-36D**, titled "Series-Narrow Alum Window Wall Sys. (L.M.I.)" sheets 1 through 17 of 17, dated 04/27/21, with revision A dated 09/10/21, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E., bearing the Miami-Dade County Product Control Approval Stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

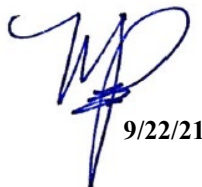
**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**



  
9/22/21

NOA No. 21-0517.01  
Expiration Date: September 30, 2026  
Approval Date: September 30, 2021  
Page 1

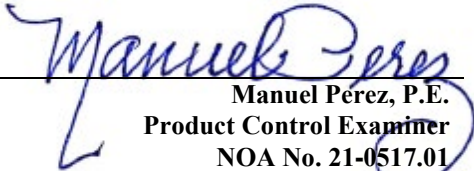
**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.
2. Drawing No. **21-36D**, titled "Series-Narrow Alum Window Wall Sys. (L.M.I.)" sheets 1 through 17 of 17, dated 04/27/21, with revision A dated 09/10/21, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

**B. TESTS**

1. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94  
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of a series 250 HR alum. horizontal rolling window (mockups #1 and #1B), prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-20-8035**, dated 01/04/21, signed and sealed by Rafael E. Droz-Seda, P.E.
2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94  
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
3) Water Resistance Test, per FBC, TAS 202-94  
4) Small Missile Impact Test per FBC, TAS 201-94  
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
6) Drop Load Test, per ANSI Z97.1, Class A, 400 ft-lb energy impact.  
along with marked-up drawings and installation diagram of a series "Narrow" alum. window wall system (mockup #2), prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-20-8034**, dated 01/04/21, signed and sealed by Rafael E. Droz-Seda, P.E.
3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94  
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
3) Water Resistance Test, per FBC, TAS 202-94  
4) Small Missile Impact Test per FBC, TAS 201-94  
5) Large Missile Impact Test per FBC, TAS 201-94  
6) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
7) Drop Load Test, per ANSI Z97.1, Class A, 400 ft-lb energy impact.  
along with marked-up drawings and installation diagram of a series "Narrow" alum. window wall system (mockup #3), prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-20-8048**, dated 01/04/21, signed and sealed by Rafael E. Droz-Seda, P.E.

  
Manuel Pérez, P.E.  
Product Control Examiner  
NOA No. 21-0517.01  
Expiration Date: September 30, 2026  
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**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**B. TESTS (CONTINUED)**

4. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94 (4A)  
(4A) 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
3) Water Resistance Test, per FBC, TAS 202-94 (4A)  
4) Large Missile Impact Test per FBC, TAS 201-94 (4A and 4B)  
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94 (4A and 4B)  
(4B) 6) Drop Load Test, per ANSI Z97.1, Class A, 400 ft-lb energy impact.  
along with marked-up drawings and installation diagram of a series “Narrow” alum.  
window wall system (mockups #4A and #4B), prepared by Hurricane Engineering &  
Testing, Inc., Test Report No. **HETI-20-8046**, dated 01/05/21, signed and sealed by  
Rafael E. Droz-Seda, P.E.

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with **FBC 7<sup>th</sup> Edition (2020)**, dated 04/09/21, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.  
2. Glazing complies with **ASTM E1300-09/12**

**D. QUALITY ASSURANCE**

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

**E. MATERIAL CERTIFICATIONS**


1. Notice of Acceptance No. **20-0915.22** issued to **Kuraray America, Inc.** for their “**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**” dated 11/19/20, expiring on 07/08/24.  
2. Notice of Acceptance No. **20-0915.19** issued to **Kuraray America, Inc.** for their “**SentryGlas® (Clear and White) Glass Interlayers**” dated 11/19/20, expiring on 07/04/23.

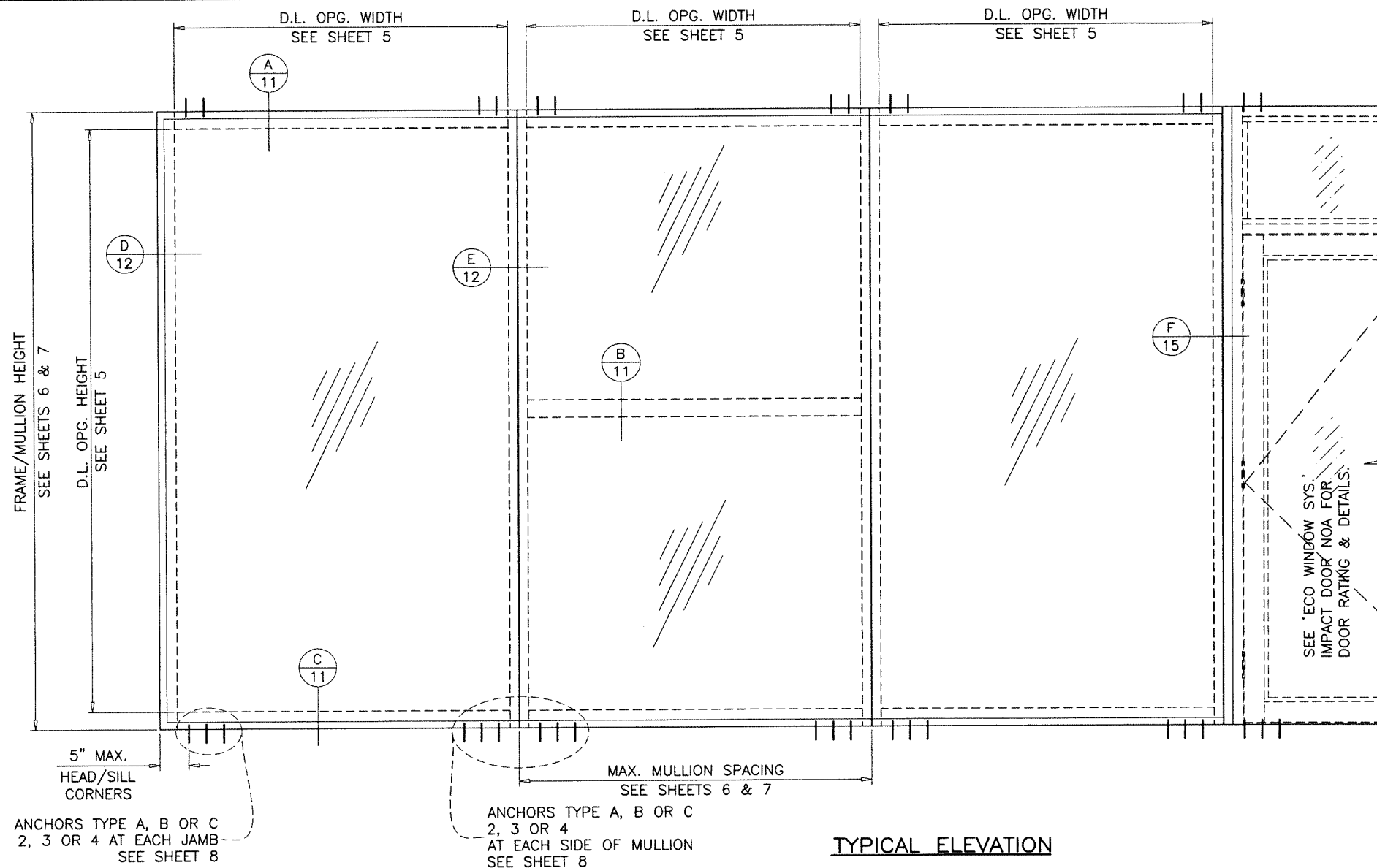
**F. STATEMENTS**

1. Statement letter of conformance, complying with **FBC 7<sup>th</sup> Edition (2020)** and of no financial interest, dated April 9, 2021, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.  
2. Proposal No. **19-1128** issued by the Product Control Section, dated December 11, 2019, signed by Manuel Perez, P.E.

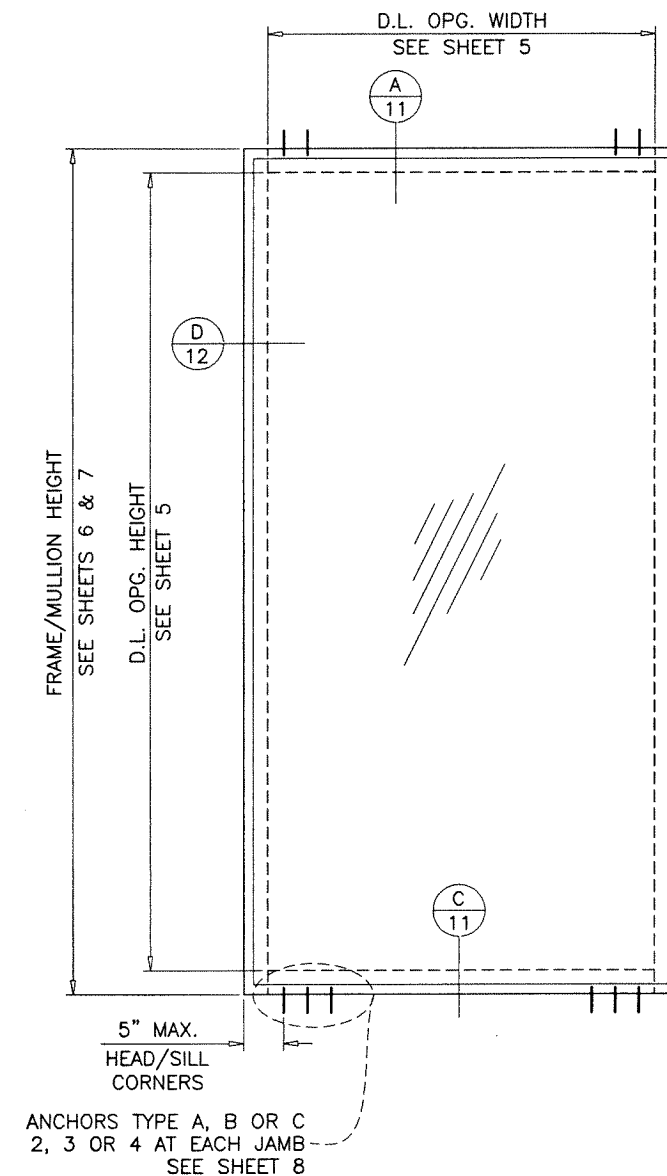
**G. OTHERS**

1. None.

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 21-0517.01  
Expiration Date: September 30, 2026  
Approval Date: September 30, 2021



TYPICAL ELEVATION



## SERIES-NARROW ALUMINUM WINDOW WALL SYSTEM

THIS SYSTEM MAY BE USED IN CONJUNCTION WITH MIAMI-DADE COUNTY APPR'D LARGE MISSILE IMPACT RESISTANT DOORS.

LOWER DESIGN PRESSURE FROM WINDOW WALL OR DOOR NOA WILL APPLY TO ENTIRE SYSTEM.

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 NOA 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)'.

## 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** CHECK GLASS CAPACITY TABLE ON SHEET 5 FOR GLASS TYPE, GLASS DIMENSIONS (WIDTH & HEIGHT) AND PRESSURE CAPACITY. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 3** WHEN USING THIS SYSTEM WITH STRUCTURAL GLAZED OPTION APPLICATIONS, CHECK 'STRUCTURAL SILICONE (SSG) AT VERTICALS LOAD CAPACITY-PSF' TABLE ON SHEET 4. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** CHECK WINDOW WALL SYSTEM CAPACITY FOR DESIRED HEIGHT AND MULLION SPACING USING CHARTS ON SHEETS 6 & 7. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 5** USING CHARTS ON SHEET 8 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 6** VERIFY UNANCHORED JAMBS, IF USED AS PER SHEETS 12 AND 14.
- STEP 7** THE LOWEST VALUE RESULTING FROM STEPS 2 THRU 5 SHALL APPLY TO ENTIRE SYSTEM.
- STEP 8** WHEN USING THIS SYSTEM WITH DOORS, THE LOWER VALUE OF THE DESIGN PRESSURE RATING FOR THE SYSTEM AND THE DOOR SHALL APPLY.

WINDOW WALL SYSTEM COMPLY WITH REQUIREMENTS OF ANSI Z97.1.

THIS SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

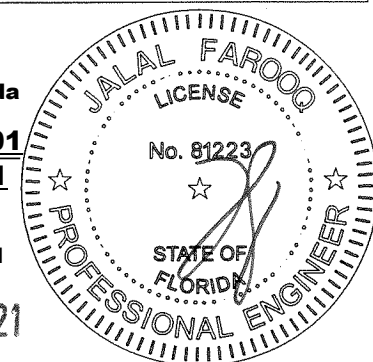
LARGE MISSILE IMPACT

**PRODUCT APPROVED**  
as complying with the Florida  
Building Code  
NOA-No. **21-0517.01**

Approval Date: **09/30/2021**

By: *Manuel Perez*  
Miami-Dade Product Control

SEP 16 2021



**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978

STORE\21-36D-ECO

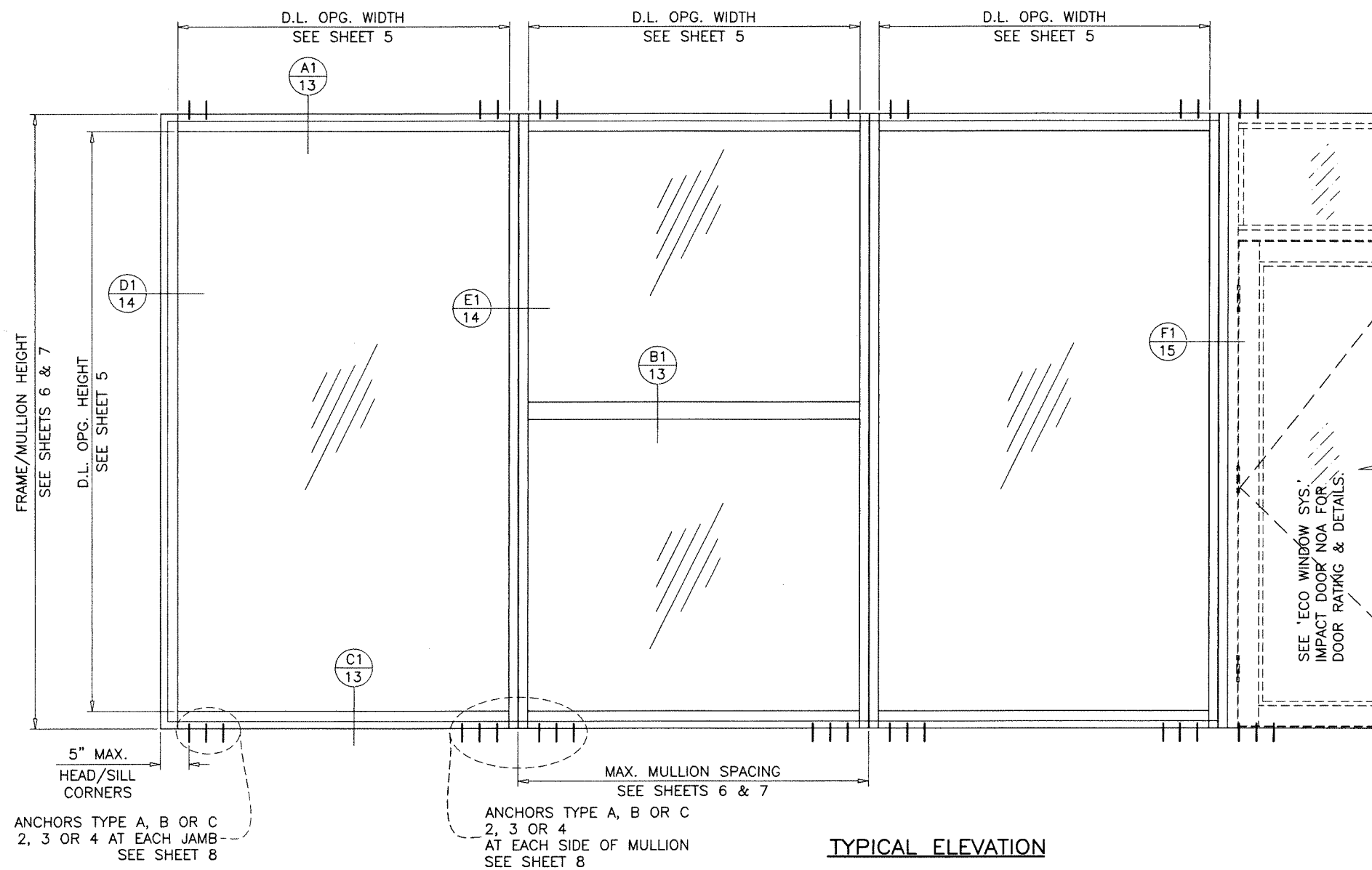
SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.)

**ECO WINDOW SYSTEMS, LLC.**  
8502 N.W. 80th STREET  
MEDLEY, FL. 33166  
TEL. (305) 885-5299 FAX. (305) 885-5902

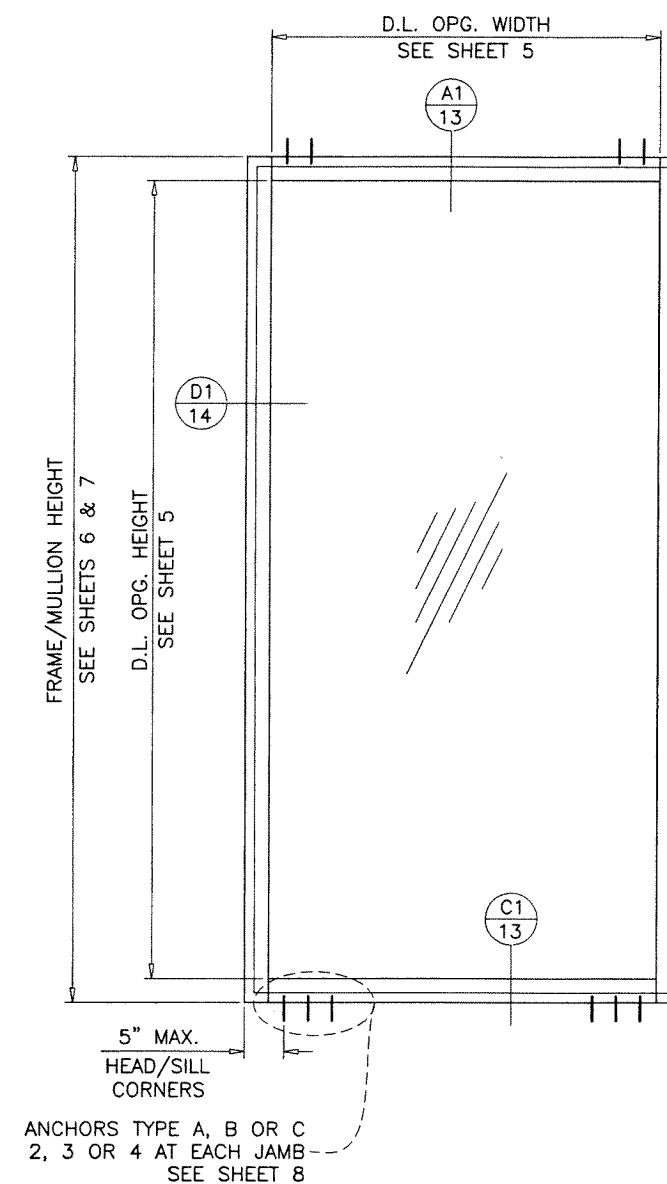
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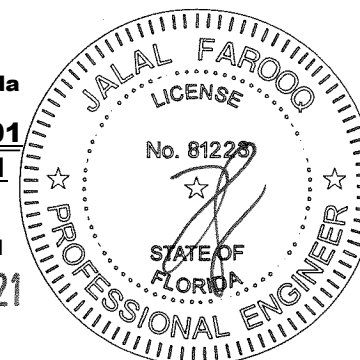
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**21-36D**  
sheet 1 of 17



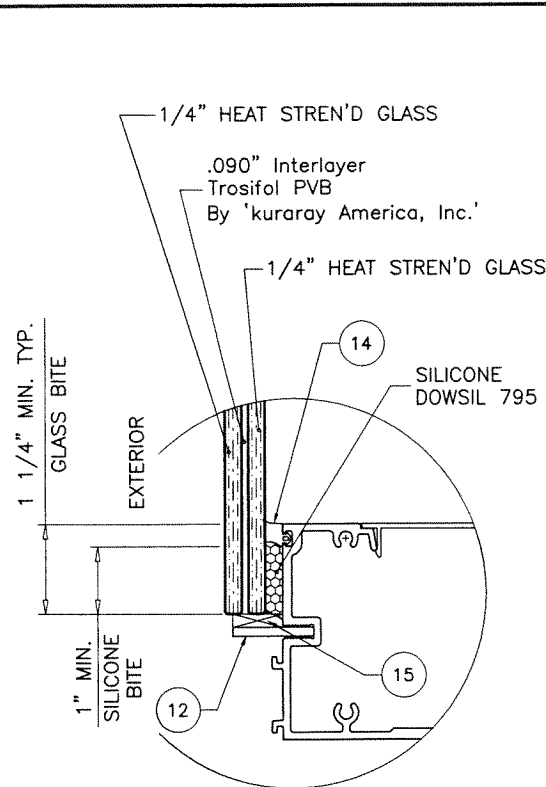
TYPICAL ELEVATION



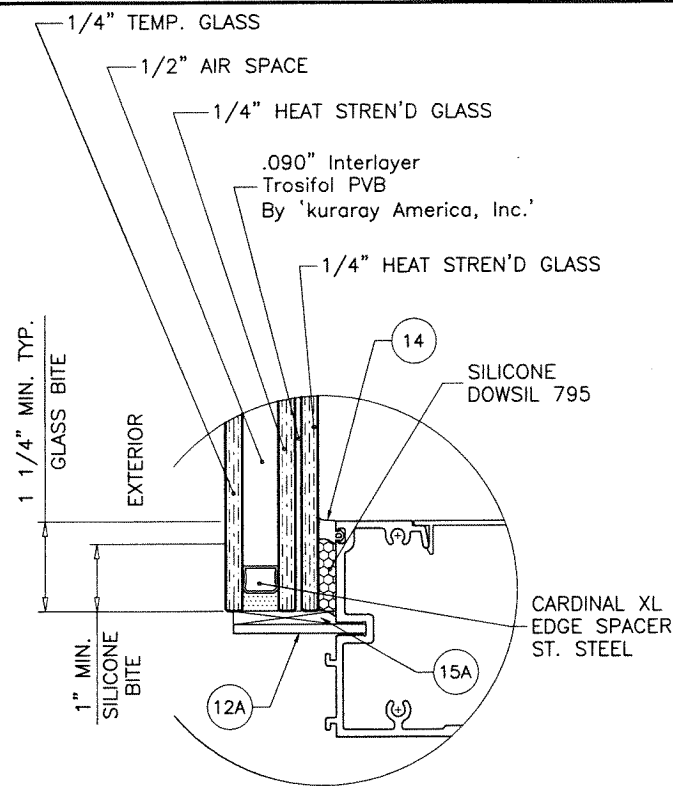
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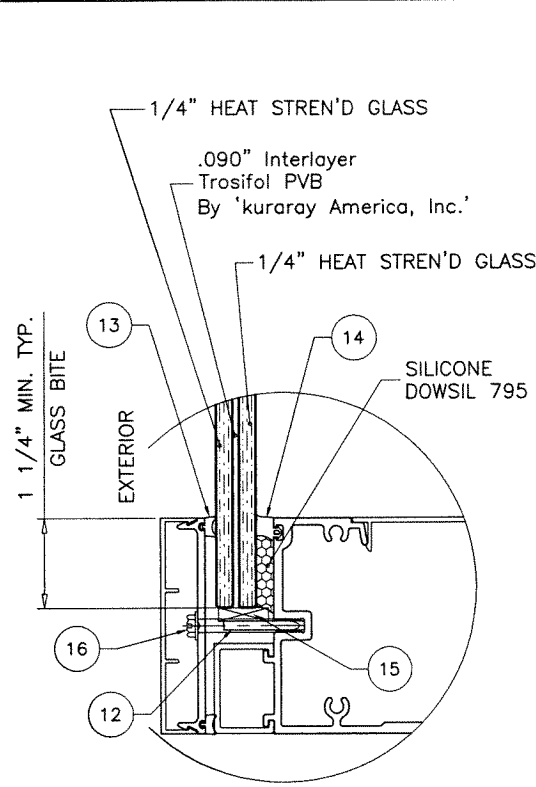
<b>AL-FAROOQ CORPORATION</b> ENGINEERS & PRODUCT DEVELOPMENT 9360 SUNSET DRIVE, SUITE 220 MIAMI, FLORIDA 33173 TEL. (305) 264-8100 FAX. (305) 262-6978 STORE 21-36D-ECO	
SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.) <b>ECO WINDOW SYSTEMS, LLC.</b> 8502 N.W. 80th STREET MEDLEY, FL. 33166 TEL. (305) 885-5299 FAX (305) 885-5902	
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drawing no. <b>21-36D</b> sheet 2 of 17	



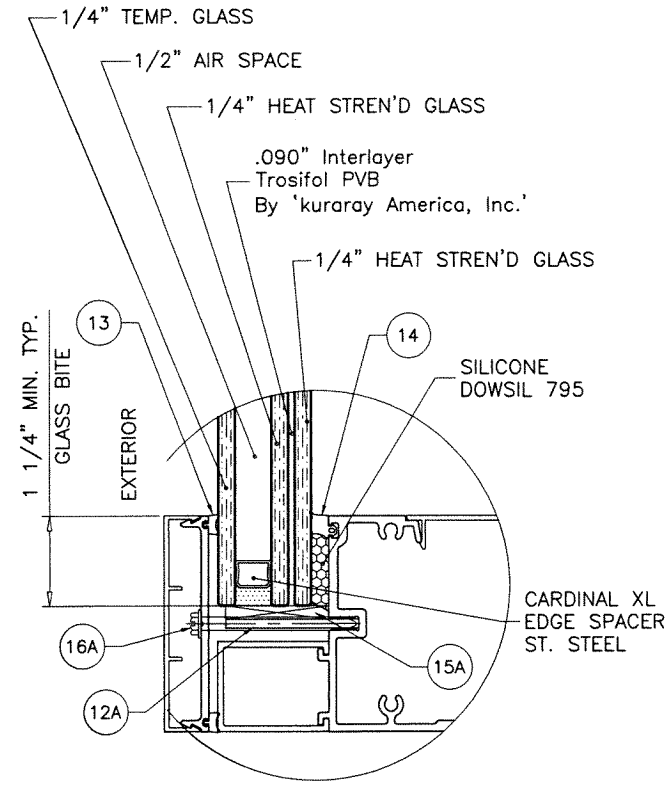
**GLAZING TYPE 'A'**  
9/16" OVERALL LAM. GLASS  
(SSG SYSTEM)



**GLAZING TYPE 'Ai'**  
1-5/16" OVERALL INSUL. LAM. GLASS  
(SSG SYSTEM)

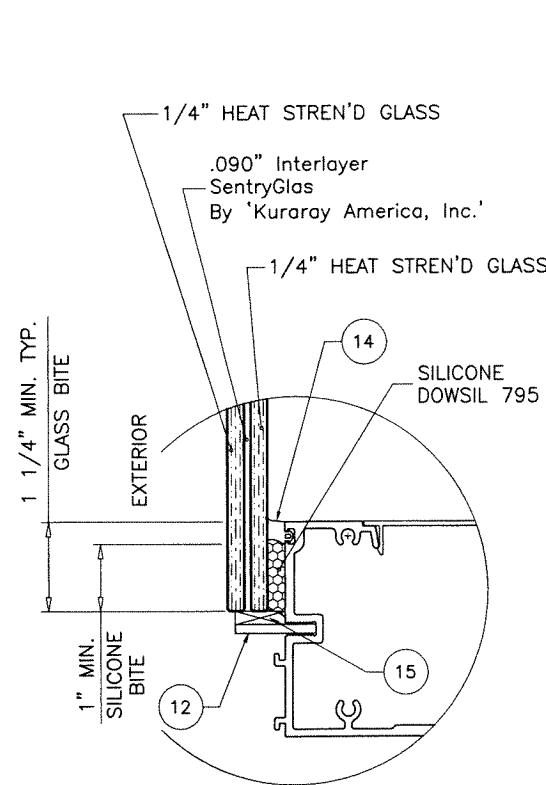


**GLAZING TYPE 'A'**  
9/16" OVERALL LAM. GLASS  
(CAPTURED SYSTEM)

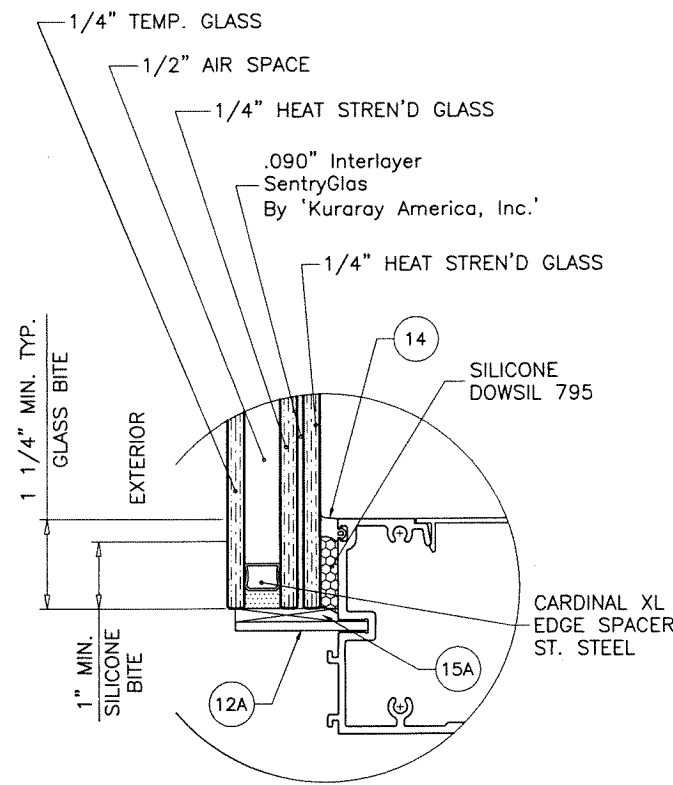


**GLAZING TYPE 'Ai'**  
1-5/16" OVERALL INSUL. LAM. GLASS  
(CAPTURED SYSTEM)

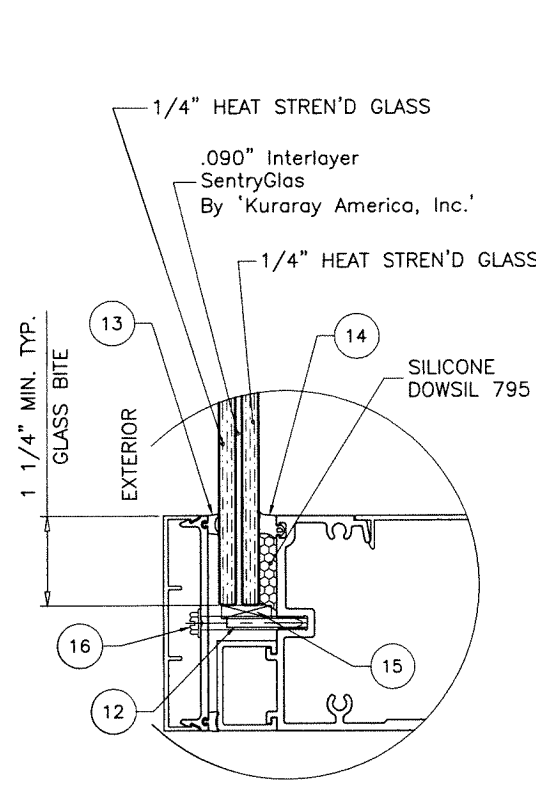
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**Miami-Dade Product Control**



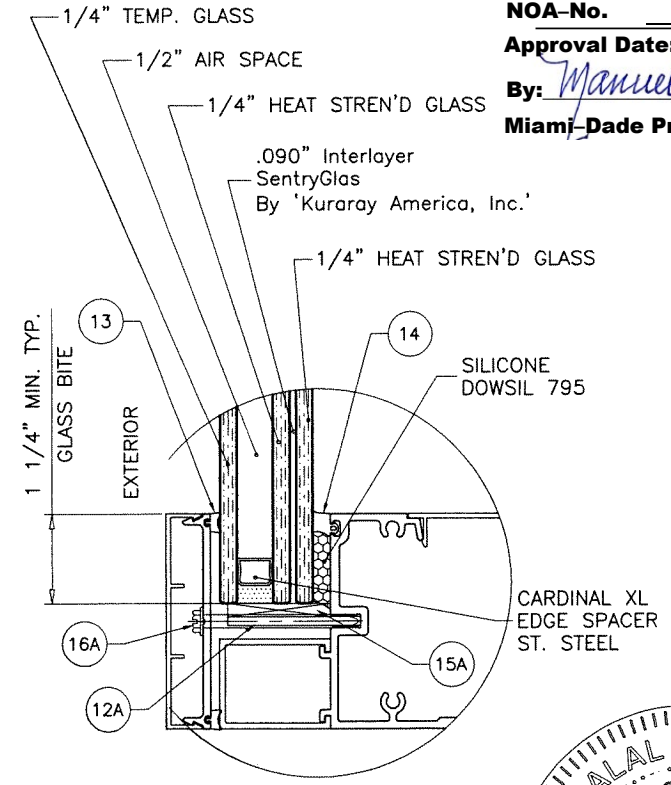
**GLAZING TYPE 'B'**  
9/16" OVERALL LAM. GLASS  
(SSG SYSTEM)



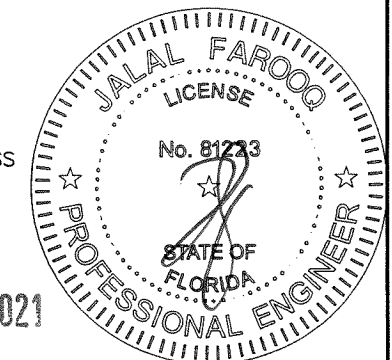
**GLAZING TYPE 'Bi'**  
1-5/16" OVERALL INSUL. LAM. GLASS  
(SSG SYSTEM)



**GLAZING TYPE 'B'**  
9/16" OVERALL LAM. GLASS  
(CAPTURED SYSTEM)



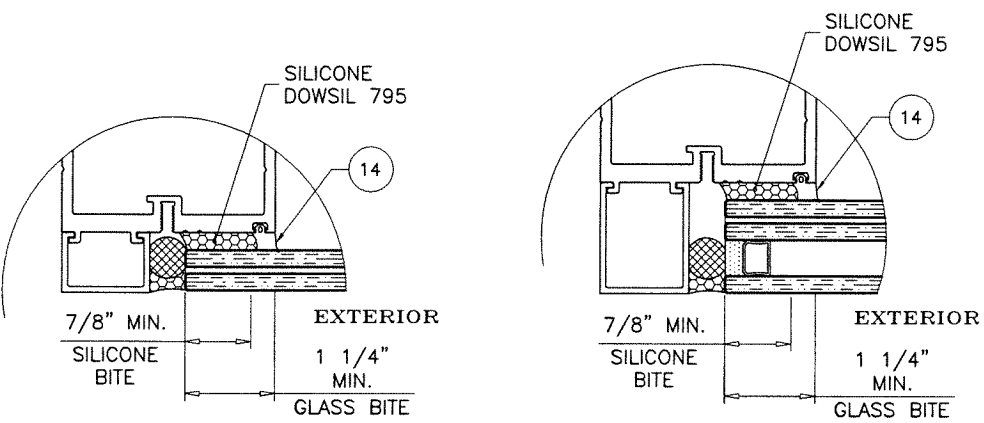
**GLAZING TYPE 'Bi'**  
1-5/16" OVERALL INSUL. LAM. GLASS  
(CAPTURED SYSTEM)



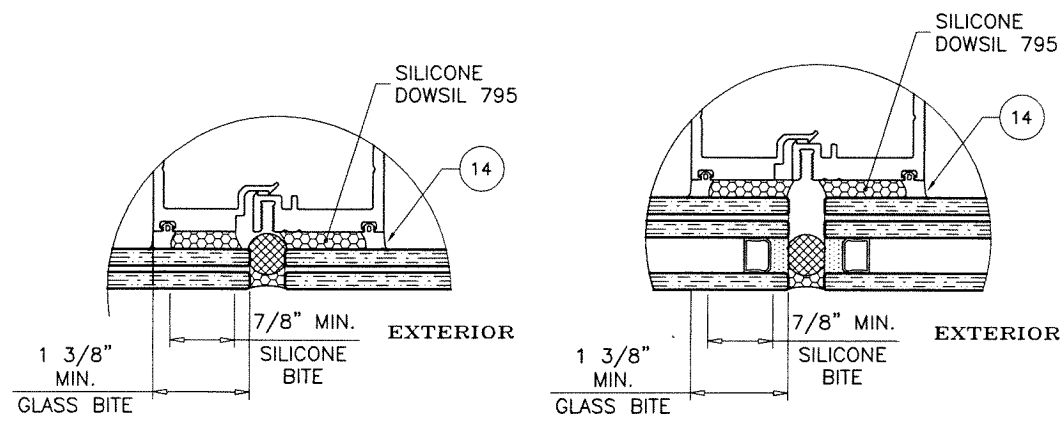
GLASS

SEP 16 2021

<b>AL-FAROOQ CORPORATION</b> ENGINEERS & PRODUCT DEVELOPMENT 9360 SUNSET DRIVE, SUITE 220 MIAMI, FLORIDA 33173 TEL. (305) 264-8100 FAX. (305) 262-6978 STORE 21-36D-ECO									
SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.) <b>ECO WINDOW SYSTEMS, LLC.</b> 8502 N.W. 80th STREET MEDLEY, FL. 33166 TEL. (305) 885-5299 FAX (305) 885-5902									
date: 04-27-21 scale: 3/8" = 1" dr. by: TARIQ chk. by:	revisions: <table border="1"> <tr> <th>no</th> <th>date</th> <th>by</th> <th>description</th> </tr> <tr> <td>A</td> <td>09.10.21</td> <td></td> <td>NO CHANGE THIS SHEET</td> </tr> </table>	no	date	by	description	A	09.10.21		NO CHANGE THIS SHEET
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drawing no. <b>21-36D</b> sheet 3 of 17									



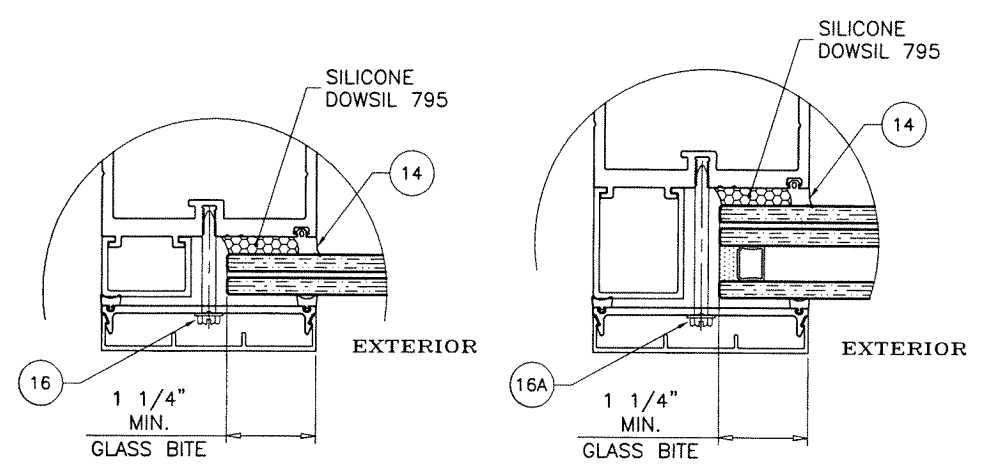
**GLAZING DETAIL**  
(SSG JAMB)



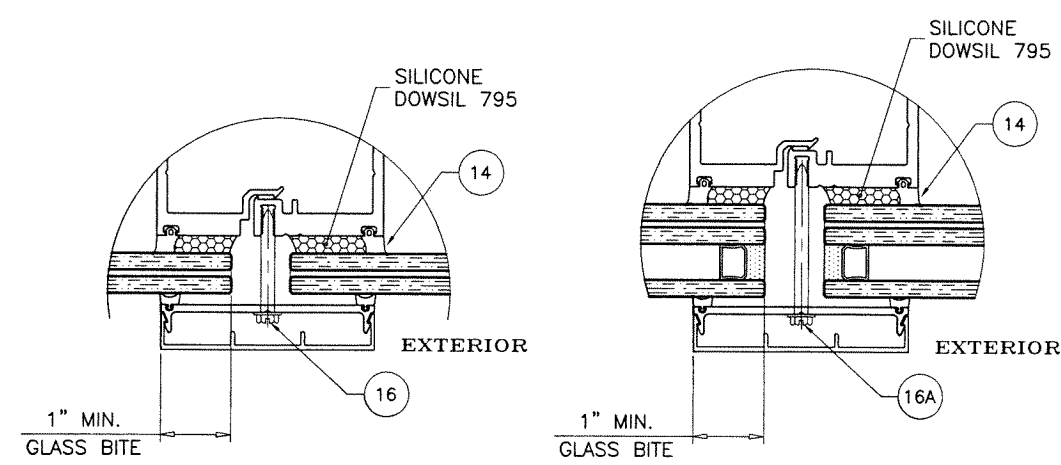
**GLAZING DETAIL**  
(SSG MULLION)

STRUCTURAL SILICONE (SSG) AT VERTICALS	
LOAD CAPACITY - PSF	
D.L.O. WIDTH	7/8" MIN. SILICONE BITE
48"	100.0
54"	93.3
60"	84.0
66"	76.4
72"	70.0

DESIGN LOADS FOR SILICONE WIDTHS AT SSG JAMBS/MULLIONS ONLY. LOWER DESIGN LOADS FROM SHEET 5 OR CHART ABOVE SHALL CONTROL.



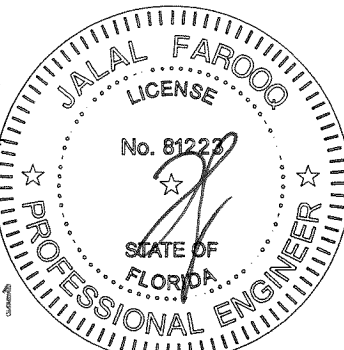
**GLAZING DETAIL**  
(CAPTURED JAMB)



**GLAZING DETAIL**  
(CAPTURED MULLION)

GLASS

**PRODUCT APPROVED**  
as complying with the Florida Building Code  
NOA-No. **21-0517.01**  
Approval Date: **09/30/2021**  
By: *Manuel Perez*  
Miami-Dade Product Control



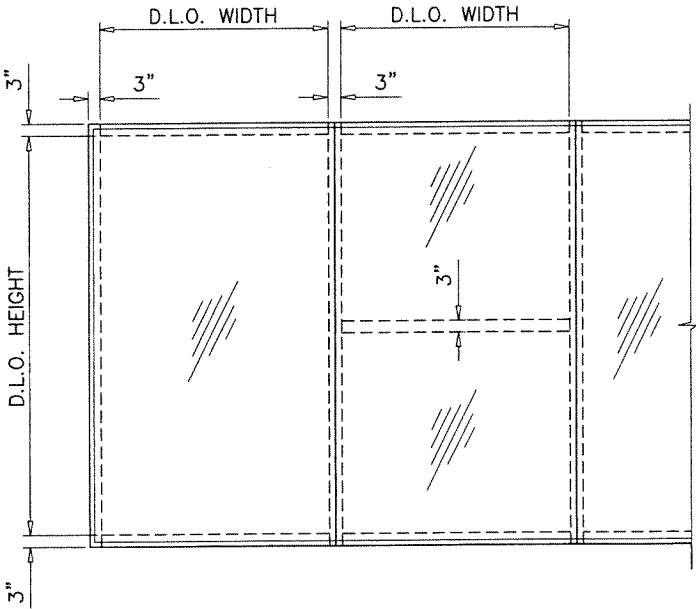
SEP 16 2021

**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  
STORE \21-36D-ECO

SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.)  
**ECO WINDOW SYSTEMS, LLC.**  
8502 N.W. 80th STREET  
MEDLEY, FL. 33166  
TEL. (305) 885-5299 FAX (305) 885-5902

revisions:	no	date	by	description
	A	09.10.21		NO CHANGE THIS SHEET
date:	04-27-21			
scale:	3/8" = 1"			
dr. by:	TARIO			
chk. by:				
drawing no.	21-36D			
sheet	4 of 17			

GLASS LOAD CAPACITY - PSF					
NOMINAL DIMS.		GLASS TYPE 'A' & 'Ai'		GLASS TYPE 'B' & 'Bi'	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)
42"	84"	75.0	75.0	100.0	100.0
48"		75.0	75.0	100.0	100.0
54"		66.7	66.7	100.0	100.0
60"		60.0	60.0	100.0	100.0
66"		—	—	90.9	90.9
72"		—	—	83.3	83.3
42"	90"	75.0	75.0	100.0	100.0
48"		75.0	75.0	100.0	100.0
54"		66.7	66.7	100.0	100.0
60"		60.0	60.0	100.0	100.0
66"		—	—	90.9	90.9
72"		—	—	83.3	83.3
42"	96"	75.0	75.0	100.0	100.0
48"		75.0	75.0	100.0	100.0
54"		66.7	66.7	100.0	100.0
60"		60.0	60.0	100.0	100.0
66"		—	—	90.9	90.9
72"		—	—	83.3	83.3
42"	102"	75.0	75.0	100.0	100.0
48"		75.0	75.0	100.0	100.0
54"		66.7	66.7	100.0	100.0
60"		—	—	100.0	100.0
66"		—	—	90.9	90.9
42"	108"	75.0	75.0	100.0	100.0
48"		75.0	75.0	100.0	100.0
54"		—	—	100.0	100.0
60"		—	—	100.0	100.0
66"		—	—	90.9	90.9
42"	114"	75.0	75.0	100.0	100.0
48"		75.0	75.0	100.0	100.0
54"		—	—	100.0	100.0
60"		—	—	100.0	100.0
42"	120"	75.0	75.0	100.0	100.0
48"		75.0	75.0	100.0	100.0
54"		—	—	100.0	100.0
60"		—	—	100.0	100.0

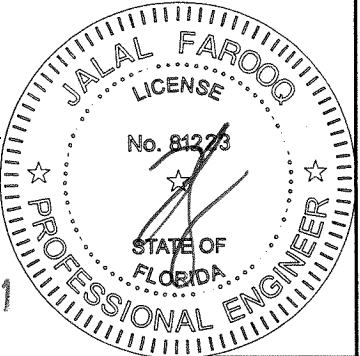


INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

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

GLASS

**PRODUCT APPROVED**  
as complying with the Florida  
Building Code  
NOA-No. **21-0517.01**  
Approval Date: **09/30/2021**  
By: *Manuel Perez*  
Miami-Dade Product Control



SEP 16 2021

**af c**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978

SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.)  
**ECO WINDOW SYSTEMS, LLC.**  
8502 N.W. 80th STREET  
MEDLEY, FL. 33166  
TEL. (305) 885-5299 FAX (305) 885-5902

revisions:  
no. date by description  
A 09.10.21 NO CHANGE THIS SHEET

date: 04-27-21  
scale: 3/8" = 1"  
dr. by: TARIQ  
chk. by:

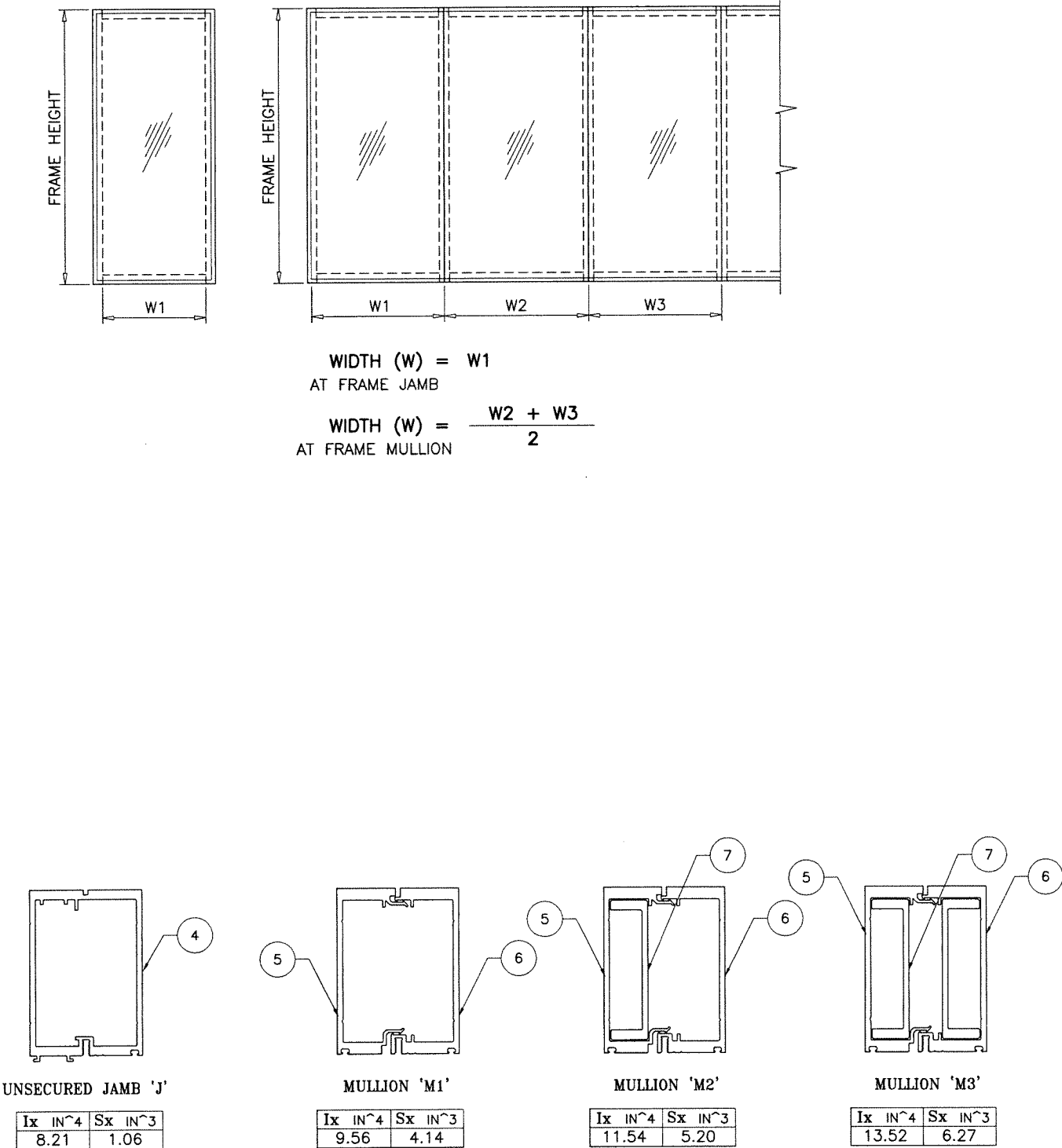
drawing no.  
**21-36D**  
sheet 5 of 17

STORE 21-36D-ECO

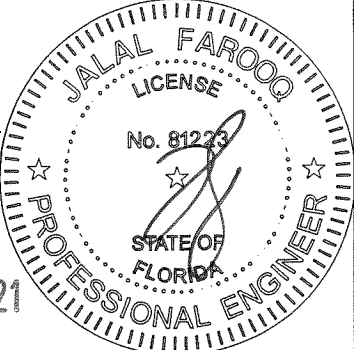
JAMB & MULLION LOAD CAPACITY - PSF									
JAMBS & MULLIONS WITHOUT INTERMEDIATE HORIZONTALS									
NOMINAL DIMS.		JAMB 'J'		MULL 'M1'		MULL 'M2'		MULL 'M3'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	96"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
66"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
72"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"	102"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
66"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"	102"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
66"		100.0	100.0	95.5	95.5	100.0	100.0	100.0	100.0
30"	108"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
54"		100.0	100.0	96.5	96.5	100.0	100.0	100.0	100.0
60"		100.0	100.0	89.1	89.1	100.0	100.0	100.0	100.0
66"		100.0	100.0	83.1	83.1	100.0	100.0	100.0	100.0
30"	114"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		100.0	100.0	89.5	89.5	100.0	100.0	100.0	100.0
54"		100.0	100.0	81.1	81.1	97.9	97.9	100.0	100.0
60"		100.0	100.0	74.7	74.7	90.2	90.2	100.0	100.0
66"		100.0	100.0	74.7	74.7	90.2	90.2	100.0	100.0
30"	120"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	98.6	98.6	100.0	100.0	100.0	100.0
42"		100.0	100.0	85.7	85.7	100.0	100.0	100.0	100.0
48"		100.0	100.0	76.2	76.2	91.9	91.9	100.0	100.0
54"		100.0	100.0	68.9	68.9	83.2	83.2	97.5	97.5
60"		100.0	100.0	63.3	63.3	76.4	76.4	89.5	89.5
66"		100.0	100.0	63.3	63.3	76.4	76.4	89.5	89.5

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

VALUES SHOWN IN CHART ABOVE APPLY TO BOTH STRUCTURAL GLAZED OPTION (SHOWN), AS WELL AS CAPTURED GLAZED OPTION APPLICATIONS.



PRODUCT APPROVED  
as complying with the Florida  
Building Code  
NOA-No. 21-0517.01  
Approval Date: 09/30/2021  
By: *Manuel Perez*  
Miami-Dade Product Control



SEP 16 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

STORE \ 21-36D-ECO

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SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.)

**ECO WINDOW SYSTEMS, LLC.**  
8502 N.W. 80th STREET  
MEDLEY, FL. 33166  
TEL. (305) 885-5299 FAX (305) 885-5902

revisions:	no	date	description	by
	A	09.10.21	REV. PER RER COMMENTS	

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date: 04-27-21  
scale: -  
dr. by: TARIQ  
chk. by:

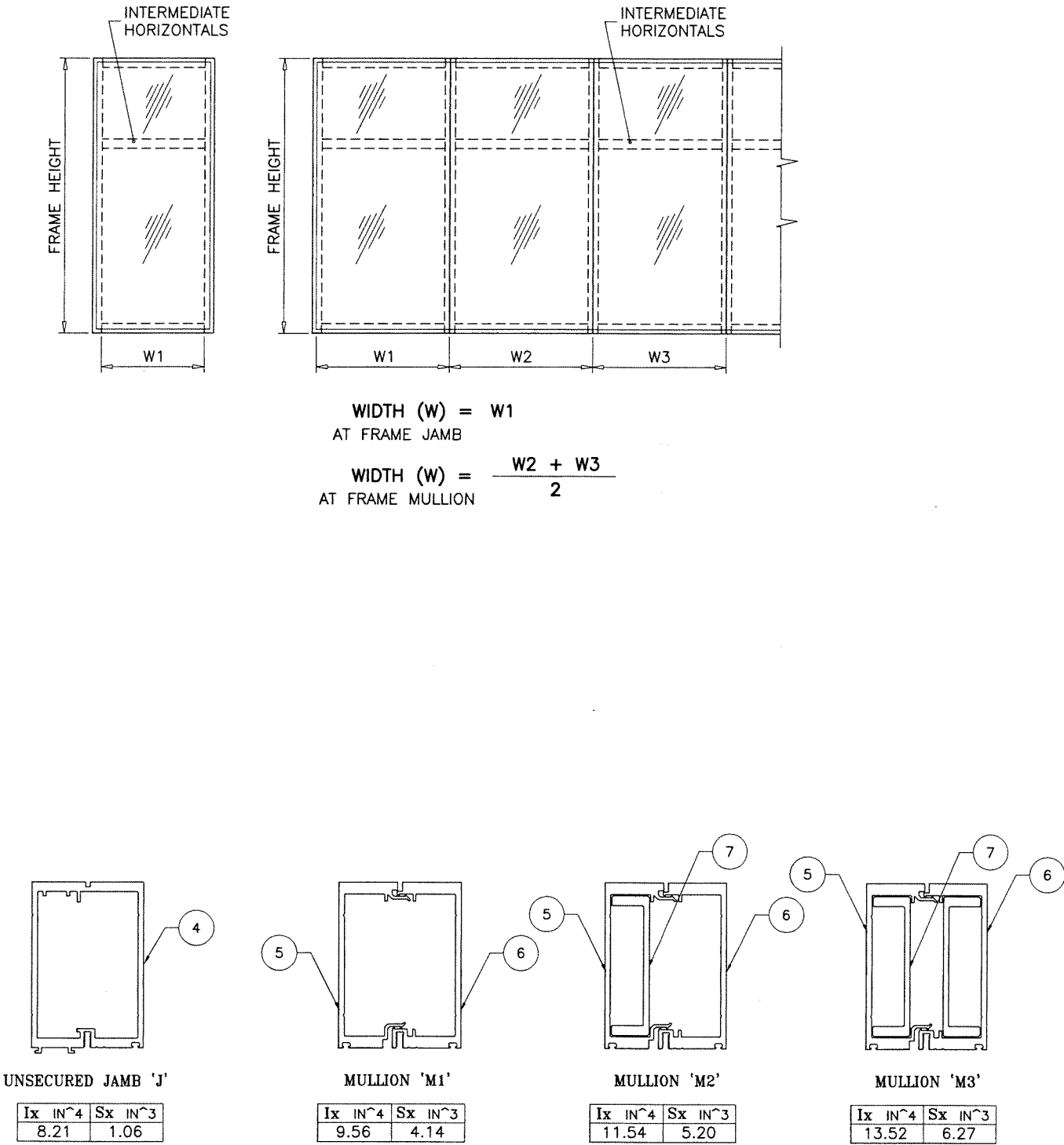
drawing no.  
**21-36D**  
sheet 6 of 17

21-36D-ECO

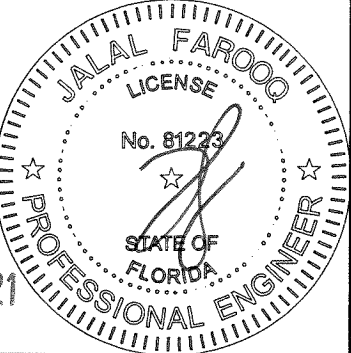
JAMB & MULLION LOAD CAPACITY - PSF									
JAMBS & MULLIONS WITH INTERMEDIATE HORIZONTALS									
NOMINAL DIMS.		JAMB 'J'		MULL 'M1'		MULL 'M2'		MULL 'M3'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	96"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
66"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
72"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"	102"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
66"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"	102"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
66"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"	108"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
54"		100.0	100.0	98.1	98.1	100.0	100.0	100.0	100.0
60"		100.0	100.0	87.2	87.2	100.0	100.0	100.0	100.0
66"		100.0	100.0	78.5	78.5	94.7	94.7	100.0	100.0
30"	114"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	95.3	95.3	100.0	100.0	100.0	100.0
48"		100.0	100.0	83.4	83.4	100.0	100.0	100.0	100.0
54"		100.0	100.0	74.2	74.2	89.5	89.5	100.0	100.0
60"		100.0	100.0	66.7	66.7	80.6	80.6	94.4	94.4
66"		100.0	100.0	66.7	66.7	80.6	80.6	94.4	94.4
30"	120"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	95.4	95.4	100.0	100.0	100.0	100.0
42"		100.0	100.0	81.7	81.7	98.7	98.7	100.0	100.0
48"		100.0	100.0	71.5	71.5	86.3	86.3	100.0	100.0
54"		100.0	100.0	63.6	63.6	76.7	76.7	89.9	89.9
60"		100.0	100.0	63.6	63.6	76.7	76.7	89.9	89.9
66"		98.3	98.3	57.2	57.2	69.1	69.1	80.9	80.9

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

VALUES SHOWN IN CHART ABOVE APPLY TO BOTH STRUCTURAL GLAZED OPTION (SHOWN), AS WELL AS CAPTURED GLAZED OPTION APPLICATIONS.



**PRODUCT APPROVED**  
as complying with the Florida  
Building Code  
NOA-No. **21-0517.01**  
Approval Date: **09/30/2021**  
By: *Manuel Perez*  
Miami-Dade Product Control



SEP 16 2021

MULLIONS

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
STORE \21-36D-ECO

SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.)  
**ECO WINDOW SYSTEMS, LLC.**  
8502 N.W. 80th STREET  
MEDLEY, FL. 33166  
TEL. (305) 885-5299 FAX (305) 885-5902

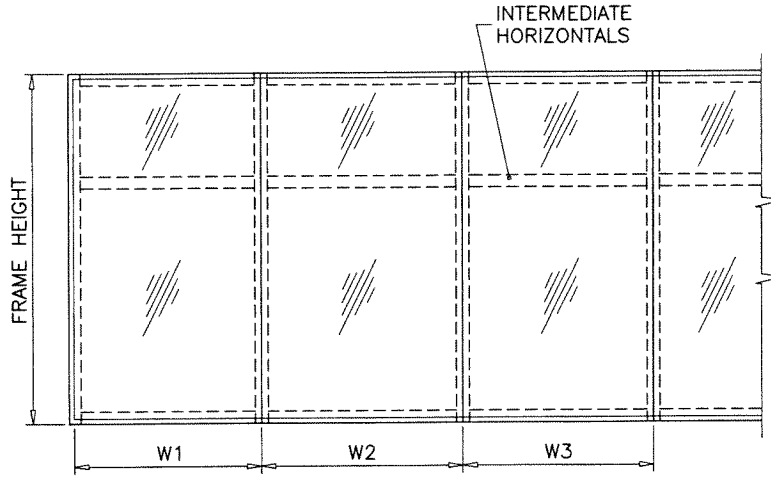
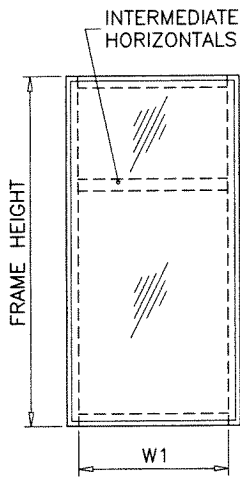
revisions:  
no. date description  
1 09.10.21 REV. PER RER COMMENTS

date: 04-27-21  
scale: -  
dr. by: TARIQ  
chk. by:

drawing no.  
**21-36D**  
sheet 7 of 17

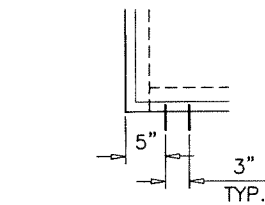
ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)										
NOMINAL DIMS.		ANCHORS TYPE 'A'			ANCHORS TYPE 'B'			ANCHORS TYPE 'C'		
WIDTH (W)	FRAME HEIGHT	A2	A3	A4	B2	B3	B4	C2	C3	C4
30"	84"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		87.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		76.9	100.0	100.0	94.3	100.0	100.0	100.0	100.0	100.0
54"		68.3	100.0	100.0	83.8	100.0	100.0	100.0	100.0	100.0
60"		61.5	92.2	100.0	75.4	100.0	100.0	91.0	100.0	100.0
66"		55.9	83.8	100.0	68.6	100.0	100.0	82.7	100.0	100.0
72"		51.2	76.9	100.0	62.9	94.3	100.0	75.8	100.0	100.0
30"	90"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		95.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		82.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		71.7	100.0	100.0	88.0	100.0	100.0	100.0	100.0	100.0
54"		63.8	95.6	100.0	78.2	100.0	100.0	94.3	100.0	100.0
60"		57.4	86.1	100.0	70.4	100.0	100.0	84.9	100.0	100.0
66"		52.2	78.3	100.0	64.0	96.0	100.0	77.2	100.0	100.0
72"		47.8	71.7	95.6	58.7	88.0	100.0	70.8	100.0	100.0
30"	96"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		89.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		76.9	100.0	100.0	94.3	100.0	100.0	100.0	100.0	100.0
48"		67.3	100.0	100.0	82.5	100.0	100.0	99.5	100.0	100.0
54"		59.8	89.7	100.0	73.3	100.0	100.0	88.4	100.0	100.0
60"		53.8	80.7	100.0	66.0	99.0	100.0	79.6	100.0	100.0
66"		48.9	73.4	97.8	60.0	90.0	100.0	72.4	100.0	100.0
72"		44.8	67.3	89.7	55.0	82.5	100.0	66.3	100.0	100.0
30"	102"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		84.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		72.3	100.0	100.0	88.7	100.0	100.0	100.0	100.0	100.0
48"		63.3	94.9	100.0	77.6	100.0	100.0	93.6	100.0	100.0
54"		56.3	84.4	100.0	69.0	100.0	100.0	83.2	100.0	100.0
60"		50.6	76.0	100.0	62.1	93.2	100.0	74.9	100.0	100.0
66"		46.0	69.0	92.1	56.5	84.7	100.0	68.1	100.0	100.0
30"	108"	95.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		79.7	100.0	100.0	97.8	100.0	100.0	100.0	100.0	100.0
42"		68.3	100.0	100.0	83.8	100.0	100.0	100.0	100.0	100.0
48"		59.8	89.7	100.0	73.3	100.0	100.0	88.4	100.0	100.0
54"		53.1	79.7	100.0	65.2	97.8	100.0	78.8	100.0	100.0
60"		47.8	71.7	95.6	58.7	88.0	100.0	70.8	100.0	100.0
66"		43.5	65.2	86.9	53.3	80.0	100.0	64.3	96.5	100.0
30"	114"	90.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		75.5	100.0	100.0	92.6	100.0	100.0	100.0	100.0	100.0
42"		64.7	97.1	100.0	79.4	100.0	100.0	95.8	100.0	100.0
48"		56.6	84.9	100.0	69.5	100.0	100.0	83.8	100.0	100.0
54"		50.3	75.5	100.0	61.8	92.6	100.0	74.5	100.0	100.0
60"		45.3	68.0	90.6	55.6	83.4	100.0	67.0	100.0	100.0
30"	120"	86.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		71.7	100.0	100.0	88.0	100.0	100.0	100.0	100.0	100.0
42"		61.5	92.2	100.0	75.4	100.0	100.0	91.0	100.0	100.0
48"		53.8	80.7	100.0	66.0	99.0	100.0	79.6	100.0	100.0
54"		47.8	71.7	95.6	58.7	88.0	100.0	70.8	100.0	100.0
60"		43.0	64.6	86.1	52.8	79.2	100.0	63.7	95.5	100.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

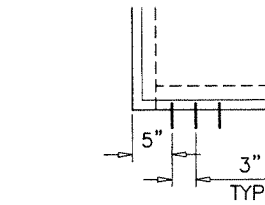


WIDTH (W) = W1  
AT FRAME JAMB

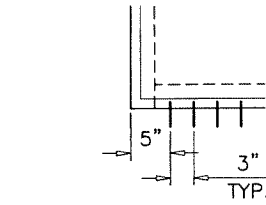
WIDTH (W) =  $\frac{W2 + W3}{2}$   
AT FRAME MULLION



A2, B2, C2



A3, B3, C3



A4, B4, C4

ANCHORS TYPES: SEE SHEET 11 FOR DESCRIPTION

A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION  
B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION  
C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION

A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION  
B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION  
C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION

A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION  
B4 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION  
C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION

## ANCHORS

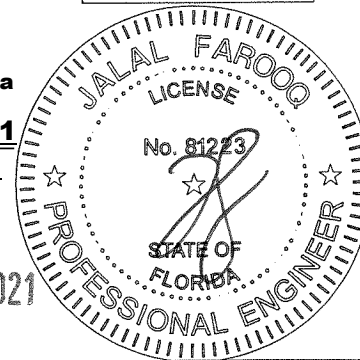
**PRODUCT APPROVED**  
as complying with the Florida  
Building Code  
NOA-No. **21-0517.01**

Approval Date: **09/30/2021**

By: *Manuel Perez*

Miami-Dade Product Control

SEP 16 2021



SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.)

ECO WINDOW SYSTEMS, LLC.

8502 N.W. 80th STREET

MEDLEY, FL. 33166

TEL. (305) 885-5299

FAX (305) 885-5902

**AL-FAROOQ CORPORATION**

ENGINEERS & PRODUCT DEVELOPMENT

9360 SUNSET DRIVE, SUITE 220

MIAMI, FLORIDA 33173

TEL. (305) 264-8100

FAX. (305) 262-6978

STORE 21-36D-ECO

revisions: no date by description

1 09.10.21 A NO CHANGE THIS SHEET

date: 04-27-21

scale: -

dr. by: TARIQ

chk. by:

drawing no.

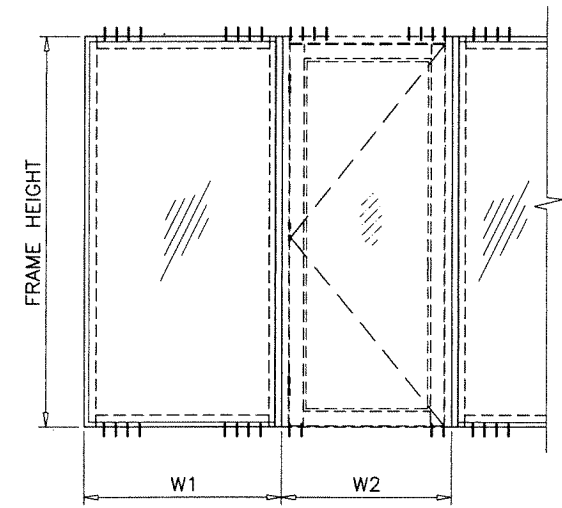
21-36D

sheet 8 of 17

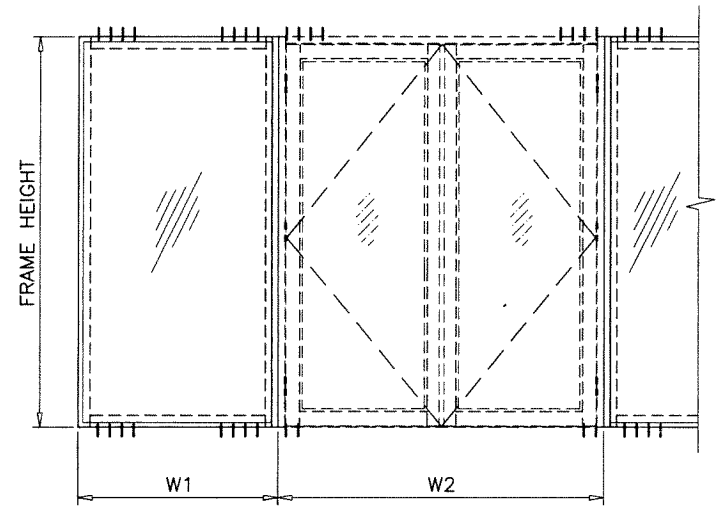
DOOR MULLION LOAD CAPACITY					
NOMINAL DIMS.		DOOR MULL 'DM2'		DOOR MULL 'DM3'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	90"	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0
66"		100.0	100.0	100.0	100.0
72"		100.0	100.0	100.0	100.0
30"	96"	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0
66"		100.0	100.0	100.0	100.0
30"	102"	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0
66"		100.0	100.0	100.0	100.0
30"	108"	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0
48"		100.0	100.0	100.0	100.0
54"		100.0	100.0	100.0	100.0
60"		100.0	100.0	100.0	100.0
66"		94.7	94.7	100.0	100.0
30"	114"	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0
48"		97.0	97.0	100.0	100.0
54"		90.8	90.8	100.0	100.0
60"		85.4	85.4	100.0	100.0
66"		85.4	85.4	100.0	100.0
30"	120"	100.0	100.0	100.0	100.0
36"		96.3	96.3	100.0	100.0
42"		89.3	89.3	100.0	100.0
48"		83.2	83.2	99.3	99.3
54"		77.9	77.9	93.0	93.0
60"		73.2	73.2	87.4	87.4
66"		73.2	73.2	87.4	87.4

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

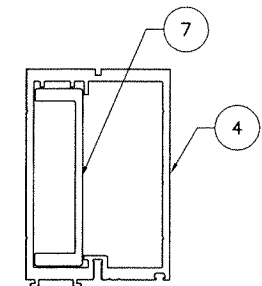
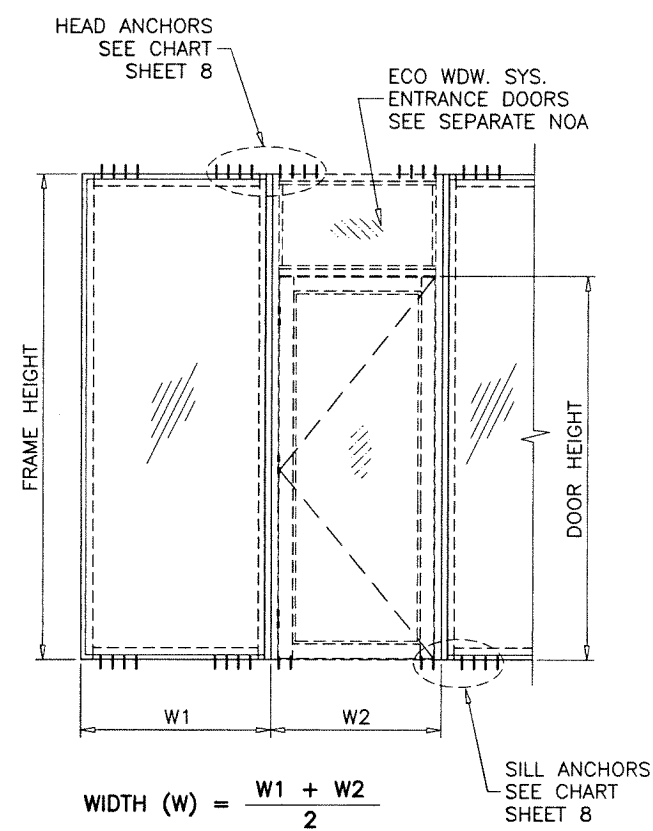
VALUES SHOWN IN CHART ABOVE APPLY TO BOTH STRUCTURAL GLAZED OPTION (SHOWN), AS WELL AS CAPTURED GLAZED OPTION APPLICATIONS.



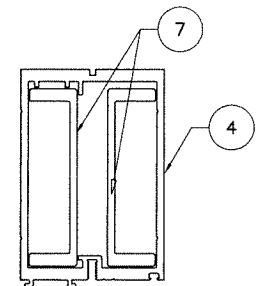
WIDTH (W) =  $\frac{W1 + W2}{2}$



WIDTH (W) =  $\frac{W1}{2} + \frac{W2}{4}$

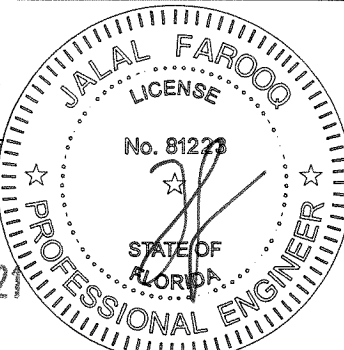


IX	IN <sup>4</sup>	SX	IN <sup>3</sup>
	10.19		4.56



IX	IN <sup>4</sup>	SX	IN <sup>3</sup>
	12.17		5.62

PRODUCT APPROVED as complying with the Florida Building Code  
NOA-No. 21-0517.01  
Approval Date: 09/30/2021  
By: Manuel Perez  
Miami-Dade Product Control



DOOR MULLION

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
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SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.)

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revisions:

no	date	by	description
A	09.10.21		REV. PER RER COMMENTS

date: 04-27-21

scale: -

dr. by: TARIO

chk. by:

drawing no. 21-36D

sheet 9 of 17

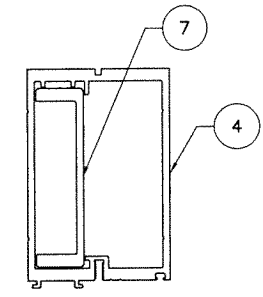
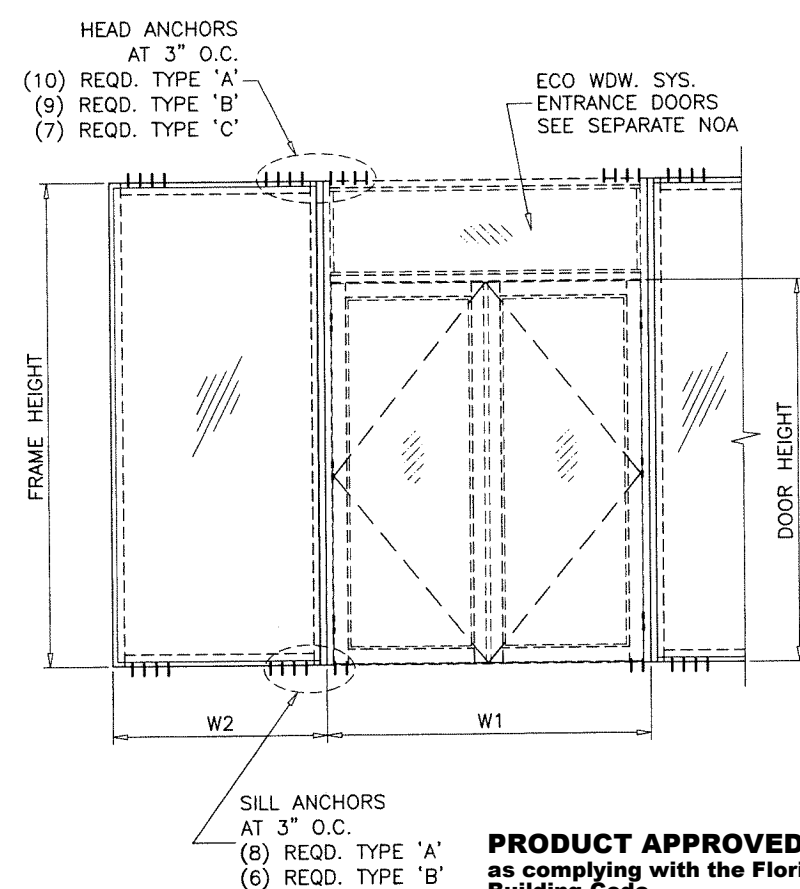
STORE\21-36D-ECO

DOOR MULLION LOAD CAPACITY - PSF							
NOMINAL DIMS.				DOOR MULL 'DM2'		DOOR MULL 'DM3'	
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)
76	30	102	84"	100.0	100.0	100.0	100.0
	36			100.0	100.0	100.0	100.0
	42			100.0	100.0	100.0	100.0
	48			100.0	100.0	100.0	100.0
	54			100.0	100.0	100.0	100.0
	60			100.0	100.0	100.0	100.0
	66			100.0	100.0	100.0	100.0
	30	108		100.0	100.0	100.0	100.0
	36			100.0	100.0	100.0	100.0
	42			100.0	100.0	100.0	100.0
	48			100.0	100.0	100.0	100.0
	54			94.4	94.4	100.0	100.0
	60			89.4	89.4	100.0	100.0
	66			84.9	84.9	100.0	100.0
	30	114		99.1	99.1	100.0	100.0
	36			92.7	92.7	100.0	100.0
	42			87.0	87.0	100.0	100.0
	48			82.0	82.0	97.9	97.9
	54			77.6	77.6	92.6	92.6
	60			73.6	73.6	87.8	87.8
	30	120		82.0	82.0	97.9	97.9
	36			76.8	76.8	91.7	91.7
	42			72.3	72.3	86.3	86.3
	48			68.2	68.2	81.5	81.5
	54			64.6	64.6	77.2	77.2
	60			63.7	63.7	76.1	76.1
76	30	102	90"	100.0	100.0	100.0	100.0
	36			100.0	100.0	100.0	100.0
	42			100.0	100.0	100.0	100.0
	48			100.0	100.0	100.0	100.0
	54			100.0	100.0	100.0	100.0
	60			100.0	100.0	100.0	100.0
	66			100.0	100.0	100.0	100.0
	30	108		100.0	100.0	100.0	100.0
	36			100.0	100.0	100.0	100.0
	42			100.0	100.0	100.0	100.0
	48			100.0	100.0	100.0	100.0
	54			99.2	99.2	100.0	100.0
	60			93.7	93.7	100.0	100.0
	66			88.7	88.7	100.0	100.0
	30	114		100.0	100.0	100.0	100.0
	36			97.8	97.8	100.0	100.0
	42			91.5	91.5	100.0	100.0
	48			86.0	86.0	100.0	100.0
	54			81.1	81.1	96.9	96.9
	60			76.8	76.8	91.7	91.7
	30	120		86.2	86.2	100.0	100.0
	36			80.5	80.5	96.1	96.1
	42			75.5	75.5	90.2	90.2
	48			71.1	71.1	84.9	84.9
	54			67.2	67.2	80.3	80.3
	60			63.7	63.7	76.1	76.1

DOOR MULLION LOAD CAPACITY - PSF							
NOMINAL DIMS.				DOOR MULL 'DM2'		DOOR MULL 'DM3'	
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
76	30	102	96	100.0	100.0	100.0	100.0
	36			100.0	100.0	100.0	100.0
	42			100.0	100.0	100.0	100.0
	48			100.0	100.0	100.0	100.0
	54			100.0	100.0	100.0	100.0
	60			100.0	100.0	100.0	100.0
	66			100.0	100.0	100.0	100.0
	30	108		100.0	100.0	100.0	100.0
	36			100.0	100.0	100.0	100.0
	42			100.0	100.0	100.0	100.0
	48			100.0	100.0	100.0	100.0
	54			100.0	100.0	100.0	100.0
	60			97.9	97.9	100.0	100.0
	66			92.5	92.5	100.0	100.0
	30	114		100.0	100.0	100.0	100.0
	36			100.0	100.0	100.0	100.0
	42			96.6	96.6	100.0	100.0
	48			90.4	90.4	100.0	100.0
	54			85.0	85.0	100.0	100.0
	60			80.3	80.3	95.8	95.8
	30	120		91.2	91.2	100.0	100.0
	36			84.8	84.8	100.0	100.0
	42			79.3	79.3	94.7	94.7
	48			74.5	74.5	89.0	89.0
54	70.2		70.2	83.9	83.9		
60	66.4		66.4	79.3	79.3		
76	30	108	102"	100.0	100.0	100.0	100.0
	36			100.0	100.0	100.0	100.0
	42			100.0	100.0	100.0	100.0
	48			100.0	100.0	100.0	100.0
	54			100.0	100.0	100.0	100.0
	60			100.0	100.0	100.0	100.0
	66			95.5	95.5	100.0	100.0
	30	114		100.0	100.0	100.0	100.0
	36			100.0	100.0	100.0	100.0
	42			100.0	100.0	100.0	100.0
	48			94.7	94.7	100.0	100.0
	54			88.8	88.8	100.0	100.0
	60			83.6	83.6	99.9	99.9
	30	120		96.6	96.6	100.0	100.0
	36			89.5	89.5	100.0	100.0
	42			83.4	83.4	99.6	99.6
	48			78.1	78.1	93.3	93.3
	54			73.4	73.4	87.7	87.7
60	69.3		69.3	82.7	82.7		

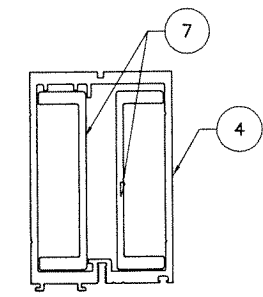
DOOR MULLION LOAD CAPACITY - PSF							
NOMINAL DIMS.				DOOR MULL 'DM2'		DOOR MULL 'DM3'	
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
76	30	114	108	100.0	100.0	100.0	100.0
	36			100.0	100.0	100.0	100.0
	42			100.0	100.0	100.0	100.0
	48			98.1	98.1	100.0	100.0
	54			91.8	91.8	100.0	100.0
	60			86.2	86.2	100.0	100.0
	30	120		100.0	100.0	100.0	100.0
	36			94.1	94.1	100.0	100.0
	42			87.4	87.4	100.0	100.0
	48			81.6	81.6	97.4	97.4
	54			76.5	76.5	91.3	91.3
	60			72.0	72.0	85.9	85.9
76	30	120	114	100.0	100.0	100.0	100.0
	36			97.7	97.7	100.0	100.0
	42			90.5	90.5	100.0	100.0
	48			84.2	84.2	100.0	100.0
	54			78.8	78.8	94.1	94.1
	60			74.0	74.0	88.4	88.4

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



MULLION 'DM2'

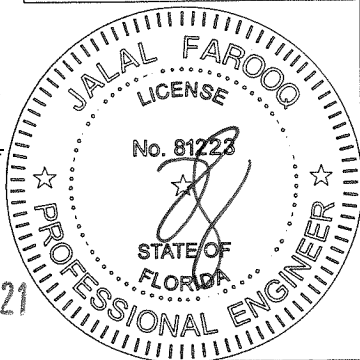
Ix IN <sup>4</sup>	Sx IN <sup>3</sup>
10.19	4.56



MULLION 'DM3'

Ix IN <sup>4</sup>	Sx IN <sup>3</sup>
12.17	5.62

DOOR MULLION



**PRODUCT APPROVED**  
as complying with the Florida Building Code  
NOA-No. **21-0517.01**  
Approval Date: **09/30/2021**  
By: *Manuel Perez*  
Miami-Dade Product Control

SEP 16 2021

VALUES SHOWN IN CHART ABOVE APPLY TO BOTH STRUCTURAL GLAZED OPTION (SHOWN), AS WELL AS CAPTURED GLAZED OPTION APPLICATIONS.

**AL-FAROOQ CORPORATION**  
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STORE 21-36D-ECO

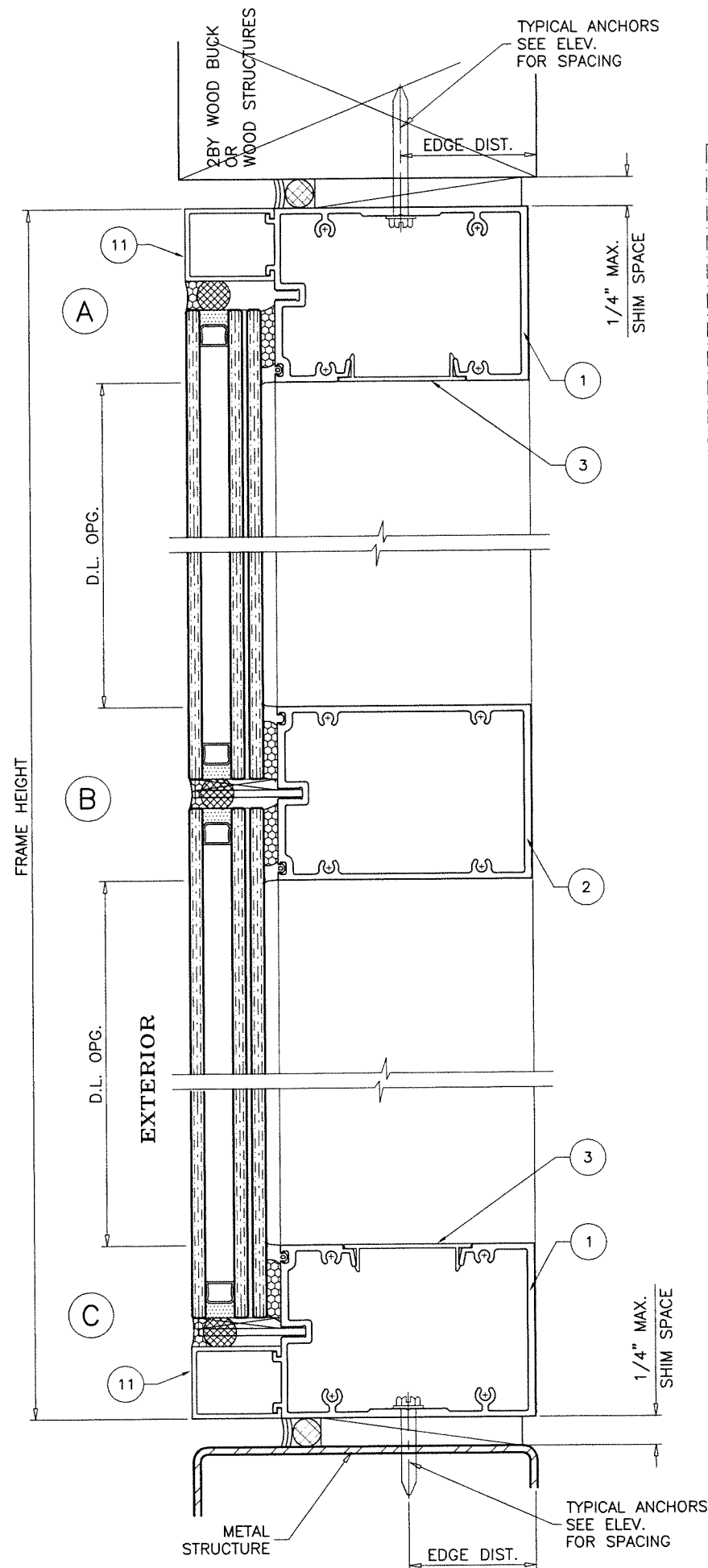
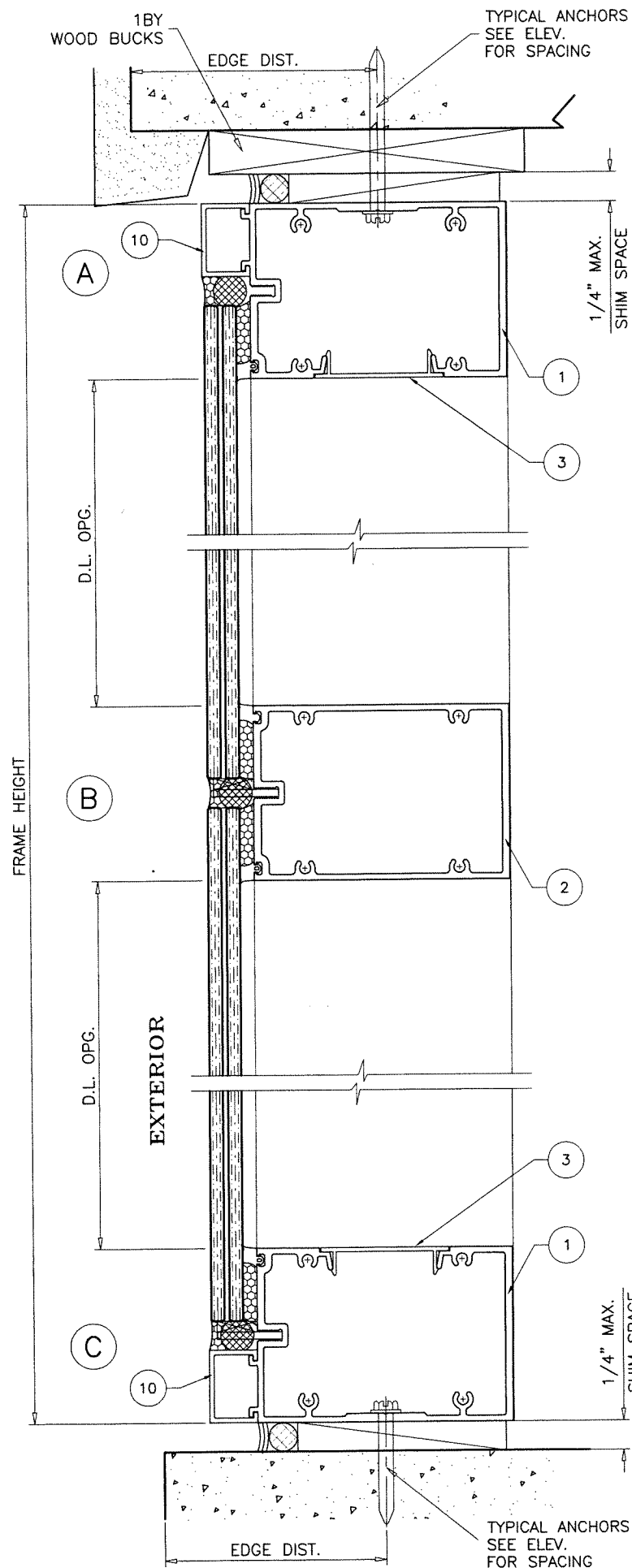
SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.)

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revisions:	no	date	by	description
	A	09.10.21		REV. PER PER COMMENTS

date: 04-27-21	scale: -	dr. by: TARIQ	chk. by:
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drawing no. **21-36D**  
sheet 10 of 17



WOOD BUCKS AND METAL STRUCTURE NOT BY 'ECO WINDOWS' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

**TYPICAL ANCHORS:** SEE ELEV. FOR SPACING

**TYPE 'A'**

**1/4" DIA. ULTRACON+ BY 'DEWALT'** ( $F_u=164$  KSI,  $F_y=148$  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  
 1-5/8" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)  
 1-3/4" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

**ANCHOR EDGE DISTANCES**

INTO CONCRETE AND MASONRY = 2-1/2" MIN.  
 INTO WOOD STRUCTURE = 1" MIN.

**TYPE 'B'**

**5/16" DIA. ULTRACON BY 'DEWALT'** ( $F_u=177$  KSI,  $F_y=155$  KSI)  
 INTO WOOD STRUCTURES  
 1-7/8" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)  
 THRU 1BY OR 2BY BUCKS INTO CONC. OR BLOCKS  
 1-1/2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)  
 1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)  
 DIRECTLY INTO CONCRETE OR BLOCKS  
 1-5/8" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)  
 1-3/4" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

**ANCHOR EDGE DISTANCES**

INTO CONCRETE AND MASONRY = 3-1/8" MIN.  
 INTO WOOD STRUCTURE = 1-1/4" MIN.

**TYPE 'C'**

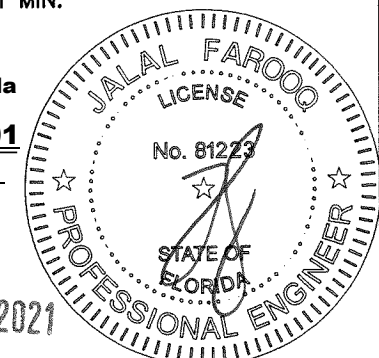
**#14 SMS OR SELF DRILLING SCREWS** (GRADE 2 CRS)  
 INTO MIAMI-DADE COUNTY APPROVED MULLIONS  
 OR  
 INTO METAL STRUCTURES (HEAD/SILL/JAMBS)  
 (3) THREADS MIN. PENETRATION BEYOND SUBSTRATE  
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)  
 STEEL: 1/8" THK. MIN. ( $F_y = 36$  KSI MIN.)  
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

**ANCHOR EDGE DISTANCES**

INTO METAL STRUCTURE = 1/2" 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.

**PRODUCT APPROVED**  
 as complying with the Florida  
 Building Code  
 NOA-No. **21-0517.01**  
 Approval Date: **09/30/2021**  
 By: *Manuel Perez*  
 Miami-Dade Product Control

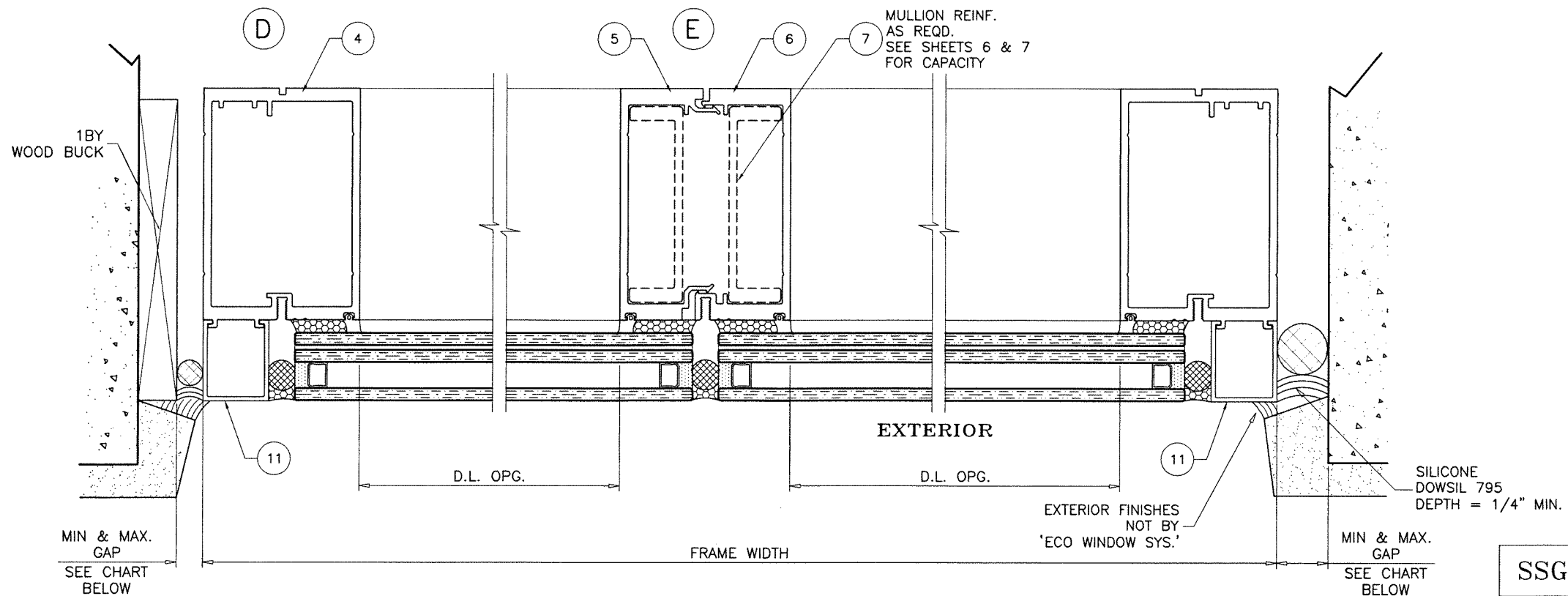
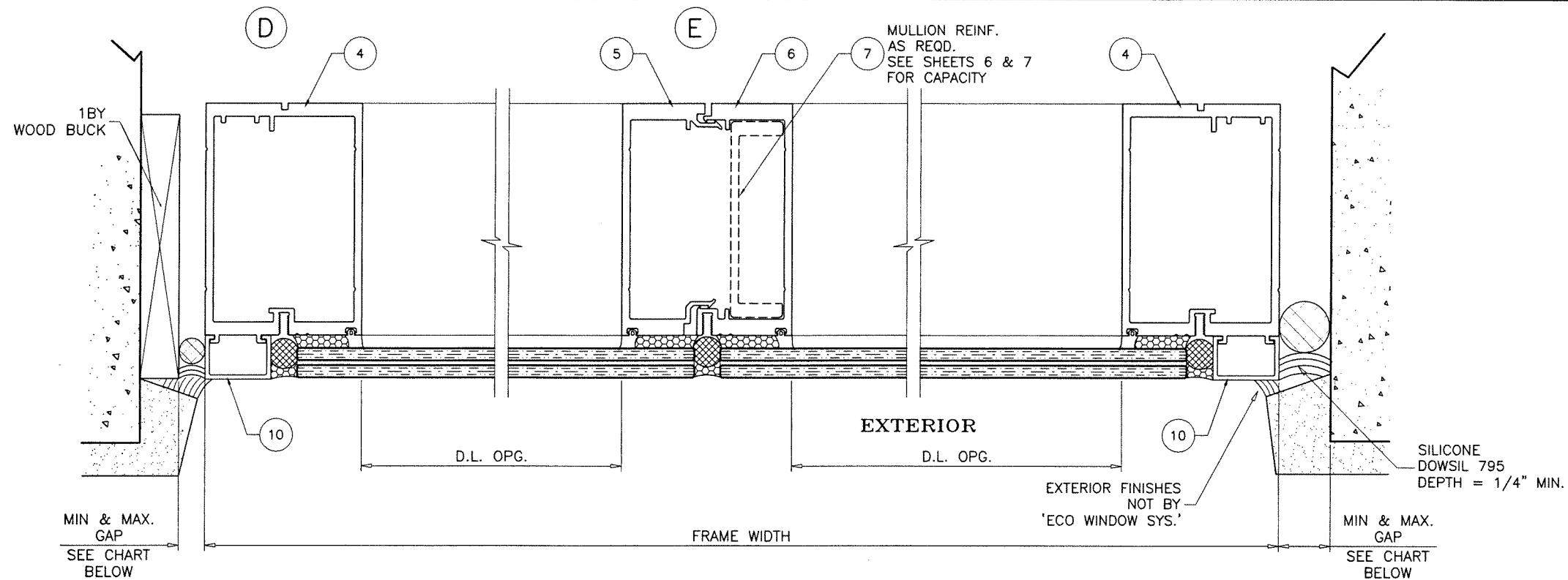


SEP 16 2021

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revisions:		date	by	description
no	date	no	date	description
1	09.10.21	A	NO CHANGE THIS SHEET	
date:	04-27-21	scale:	3/8" = 1"	
dr.	TARIQ	chk.	by:	
drawing no.	21-36D	sheet	11 of 17	

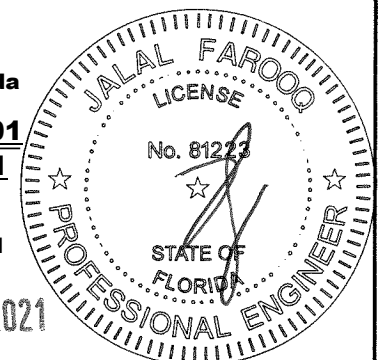


NOTE:  
MAX. MOVEMENT CONSIDERED=100% STRETCH.  
PLEASE REFER TO SEALANT MANUFACTURER'S DATA AND APPLICATION  
MANUAL FOR COMPATABILITY OF SEALANT TO SUBSTRATE & WINDOWALL  
MATERIAL/FINISH AND COMPLIANCE FOR WARRANTY.  
REFER TO ACI-117-10 FOR CONSTRUCTION TOLERANCES.

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.  
REFER TO SHEETS 4 THRU 7 FOR SELECTION OF MULLION/JAMB WITH  
REINFORCED & UNREINFORCED FRAMES.

MAX. FRAME HEIGHT UPTO	GAPS FOR UNANCHORED JAMBS	
	MIN.	MAX.
108"	3/8"	1"
120"	7/16"	1"

**PRODUCT APPROVED**  
as complying with the Florida  
Building Code  
NOA-No. **21-0517.01**  
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By: *Manuel Perez*  
Miami-Dade Product Control



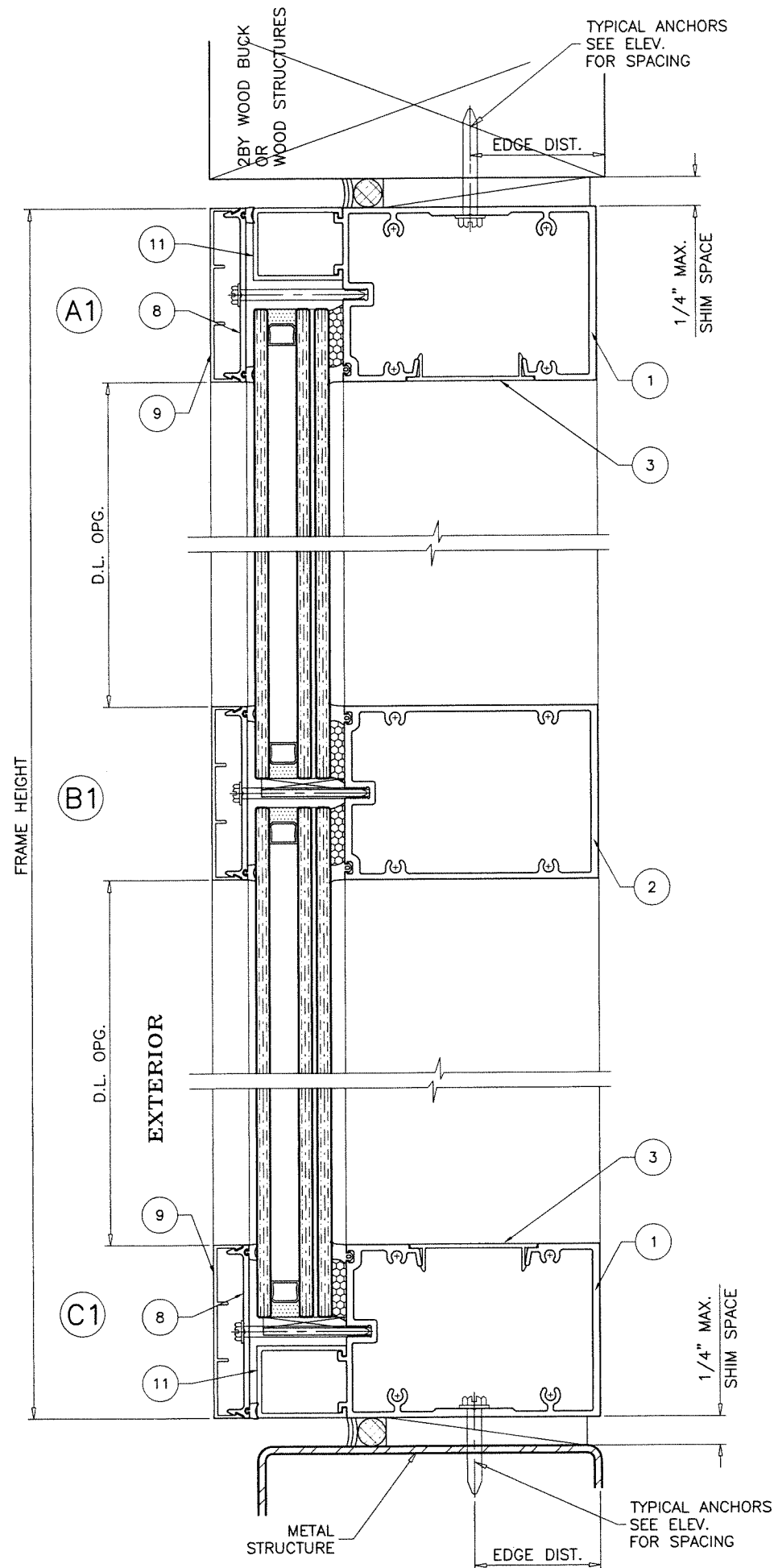
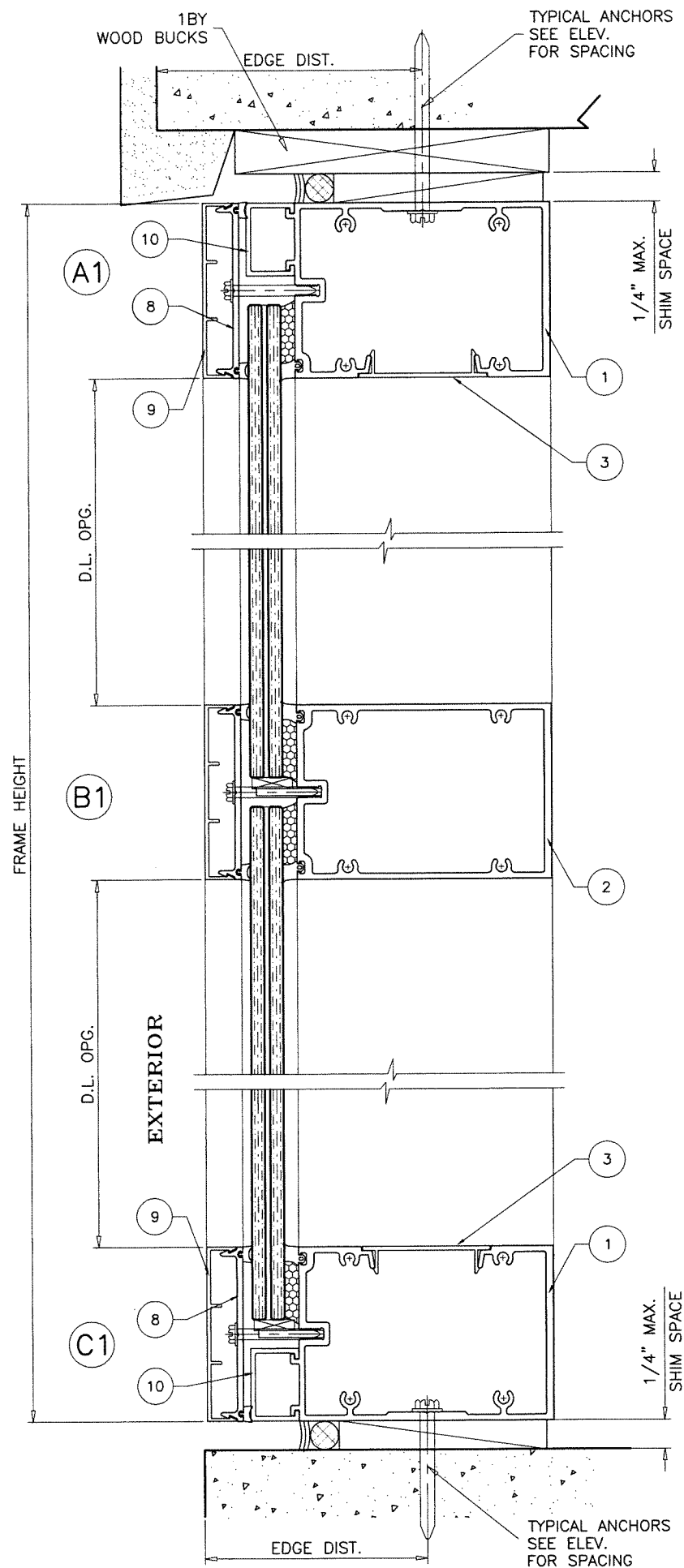
SEP 16 2021

SSG SYSTEM

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
STORE \ 21-36D-ECO

SERIES-NARROW ALUM WINDOW WALL SYS. (L.M.I.)  
**ECO WINDOW SYSTEMS, LLC.**  
8502 N.W. 80th STREET  
MEDLEY, FL. 33166  
TEL. (305) 885-5299 FAX (305) 885-5902

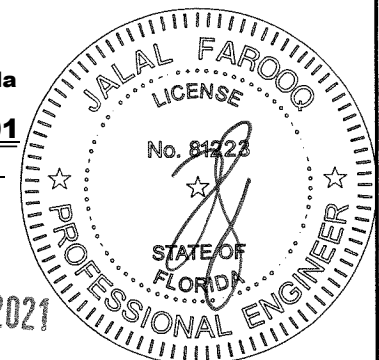
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		chk. by:			
drawing no.	21-36D				
sheet	12 of 17				



**PRODUCT APPROVED**  
as complying with the Florida  
Building Code  
NOA-No. **21-0517.01**  
Approval Date: **09/30/2021**  
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Miami-Dade Product Control

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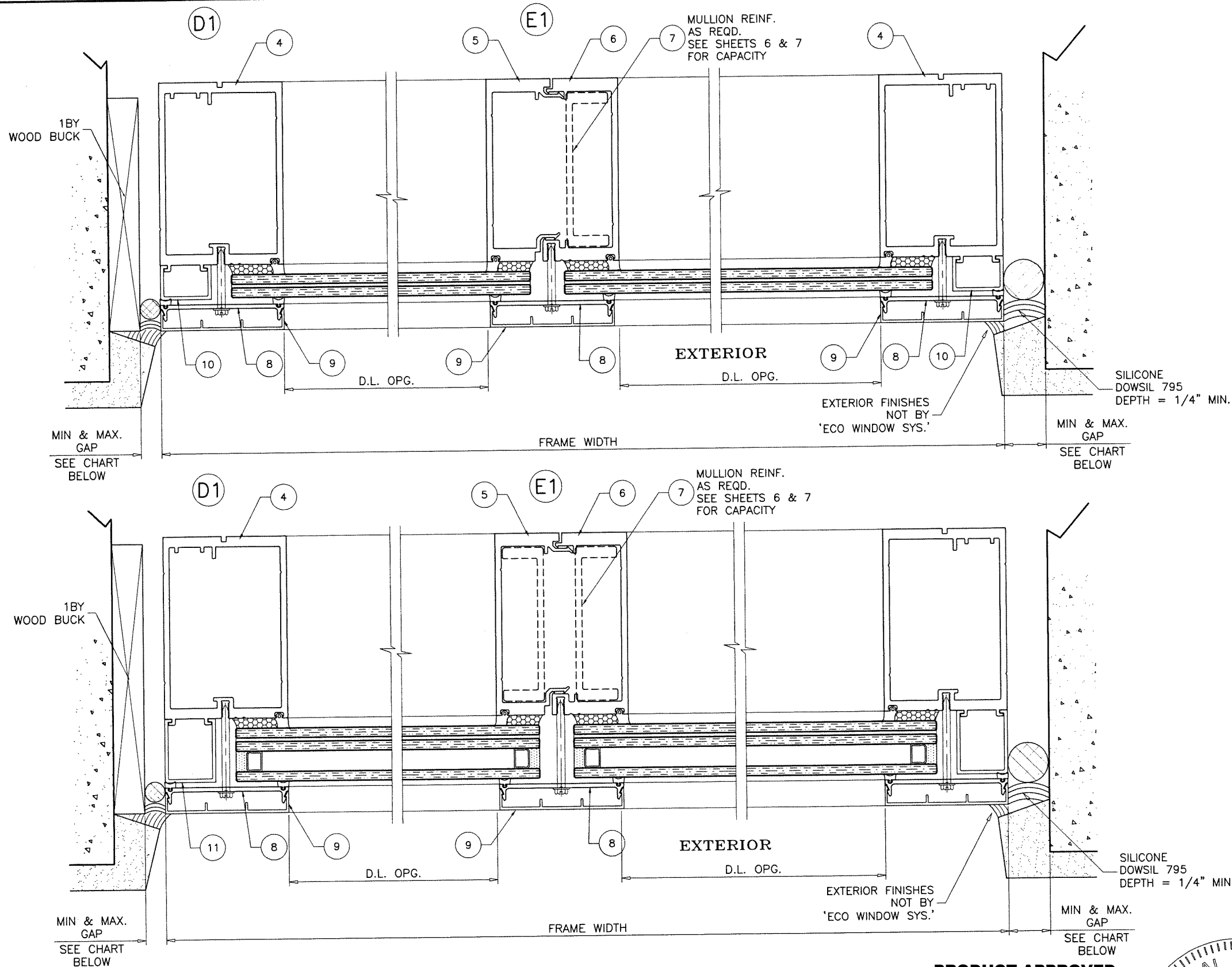
CAPTURED SYSTEM



**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173 (C.A.N. 3538)  
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STORE 21-36D-ECO

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revisions:		no	date	by	description
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chk. by:					
drawing no.	21-36D				
sheet	13 of 17				



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.

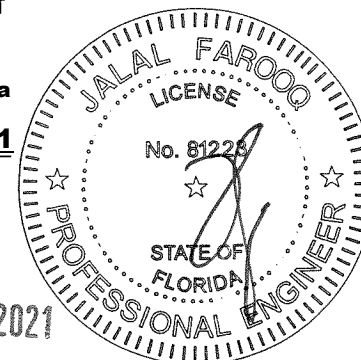
ALTERNATE SEALANTS AT JAMB GAPS CAN BE DESIGNED BY ENGINEER OF RECORD BASED ON MANUFACTURER GUIDE LINES.

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. REFER TO SHEETS 4 THRU 7 FOR SELECTION OF MULLION/JAMB WITH REINFORCED & UNREINFORCED FRAMES.

MAX. FRAME HEIGHT UPTO	GAPS FOR UNANCHORED JAMBS	
	MIN.	MAX.
108"	3/8"	1"
120"	7/16"	1"

CAPTURED SYSTEM

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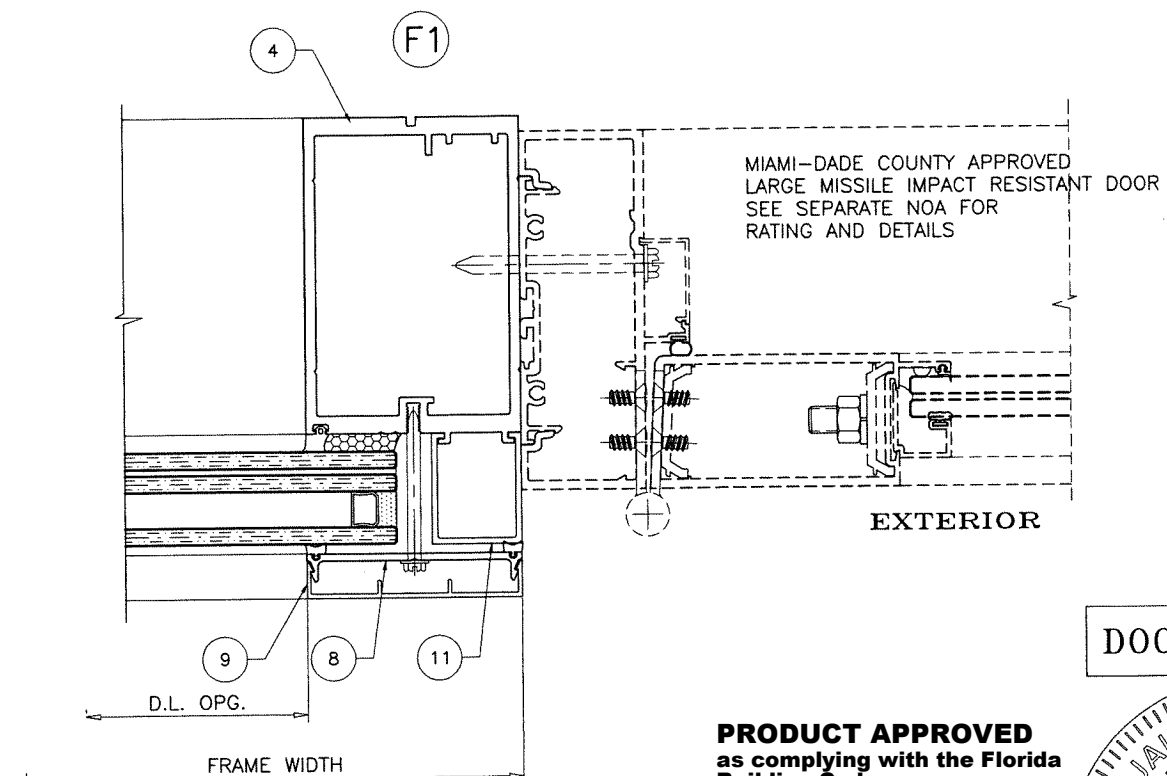
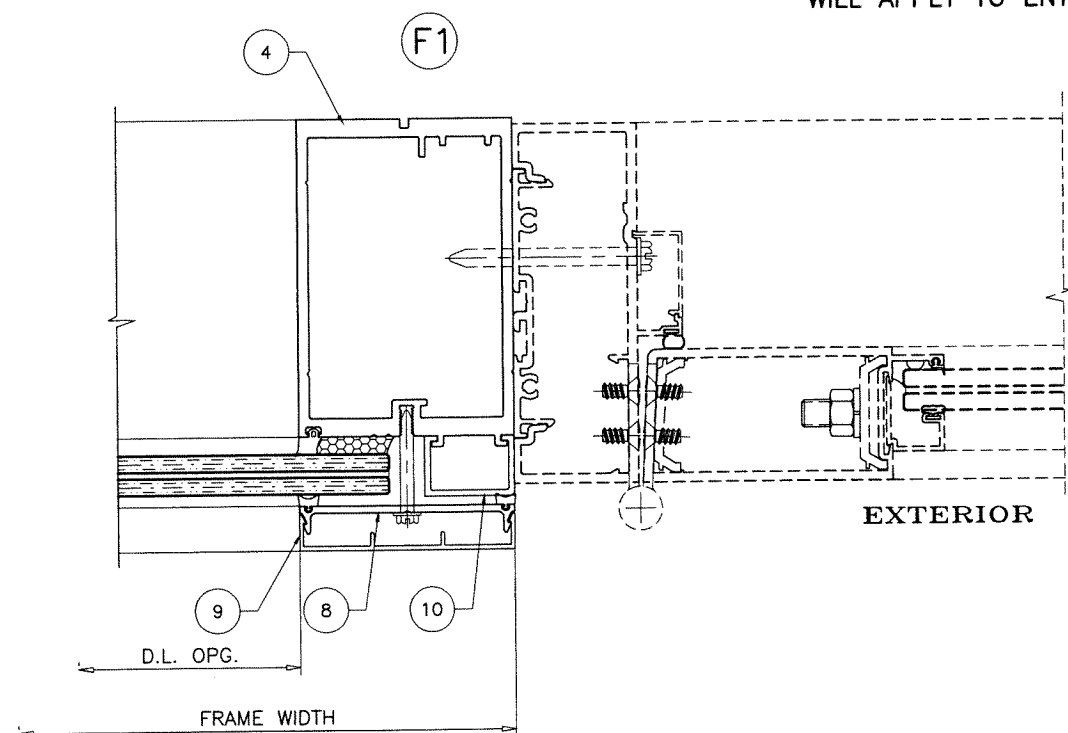
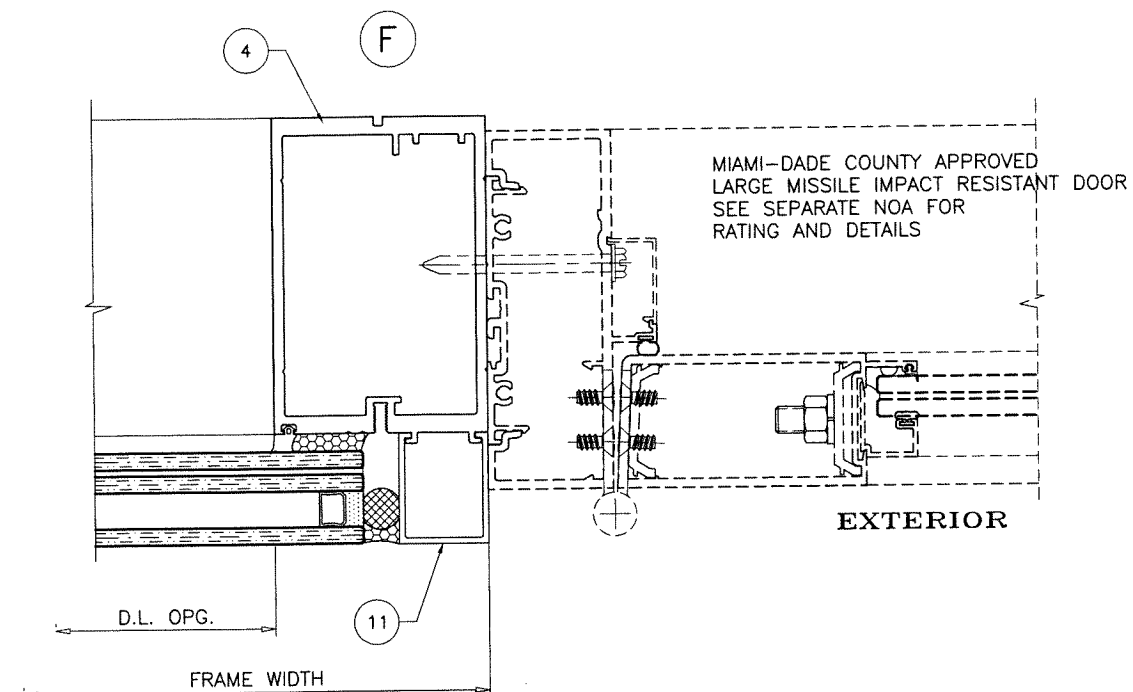
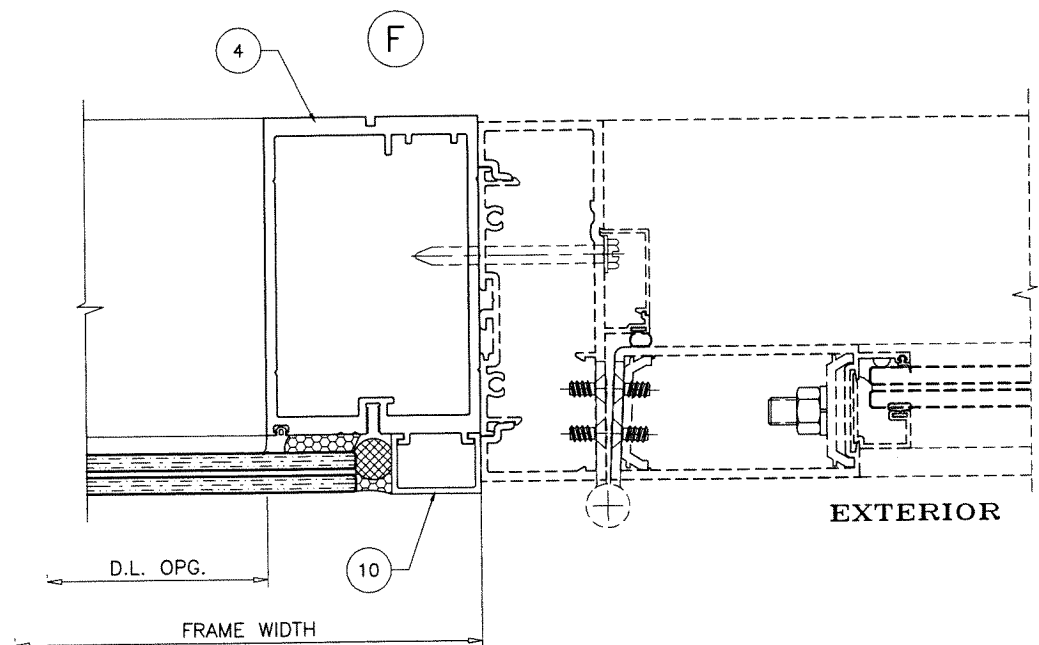
dr. by: TARIQ

chk. by:

drawing no.

**21-36D**

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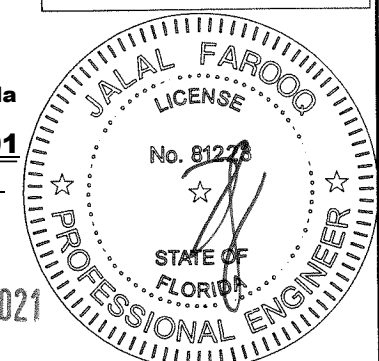


SEE SEPARATE NOA FOR DESIGN LOAD CAPACITY OF DOORS AND DOOR ANCHORS.

LOWER VALUES FROM DOORS NOA OR WINDOW WALL SYSTEM CAPACITY CHARTS WILL APPLY TO ENTIRE SYSTEM.

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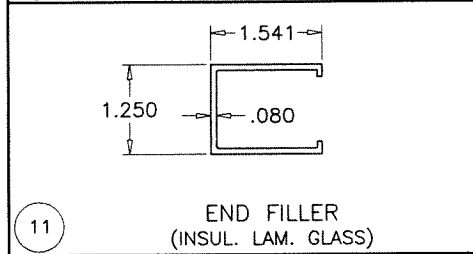
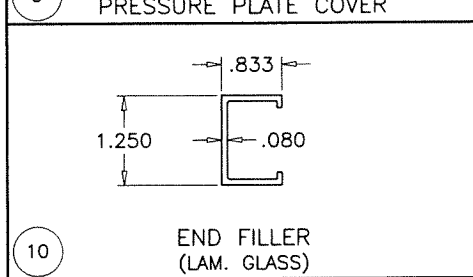
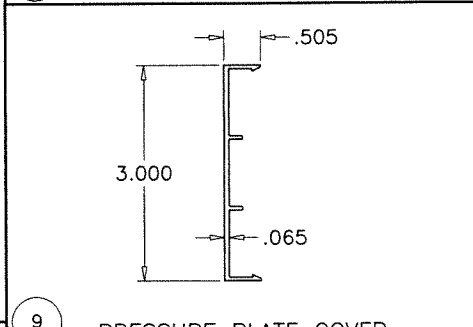
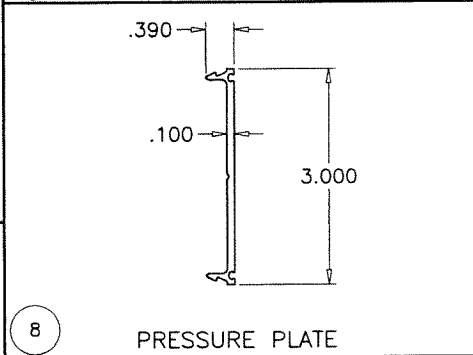
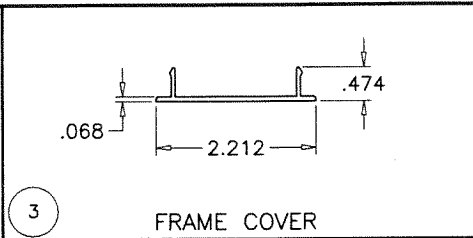
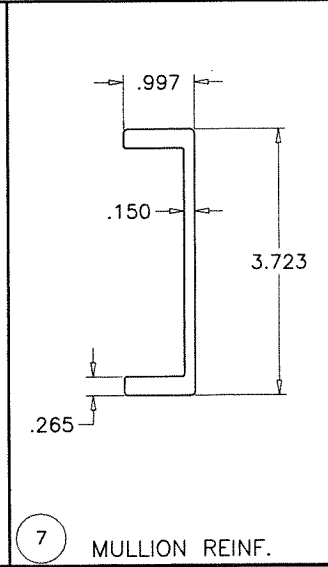
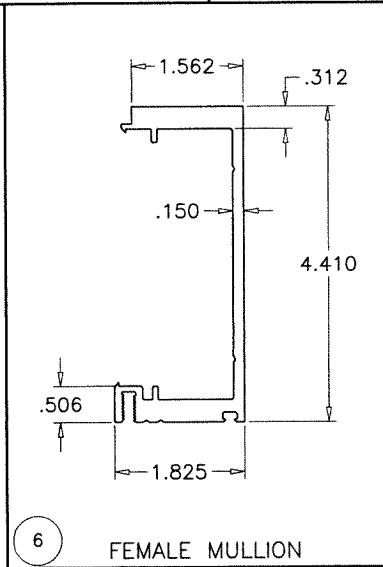
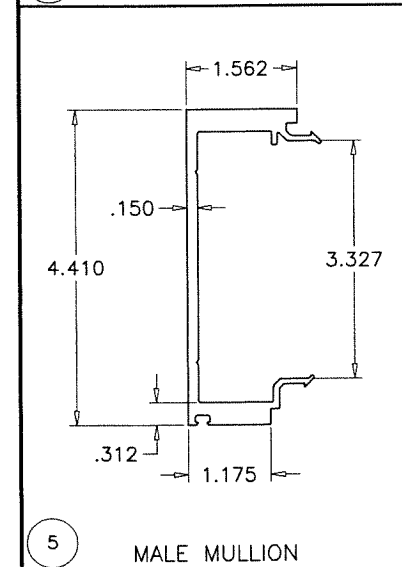
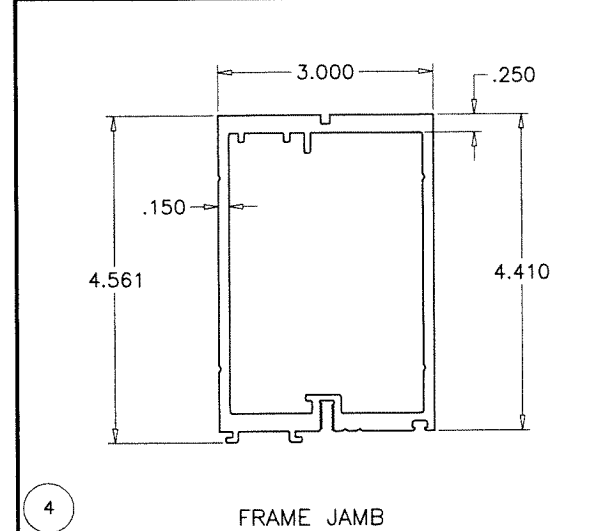
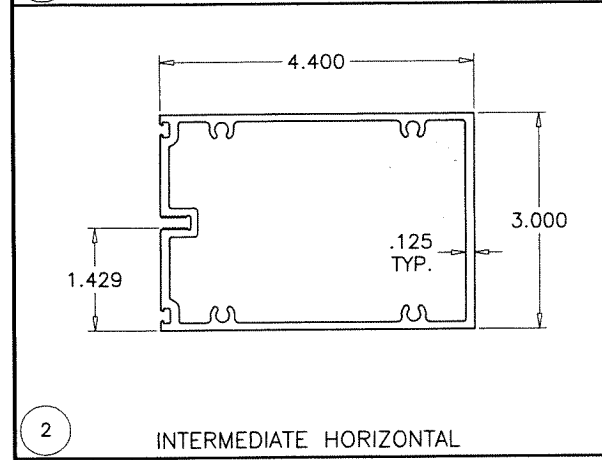
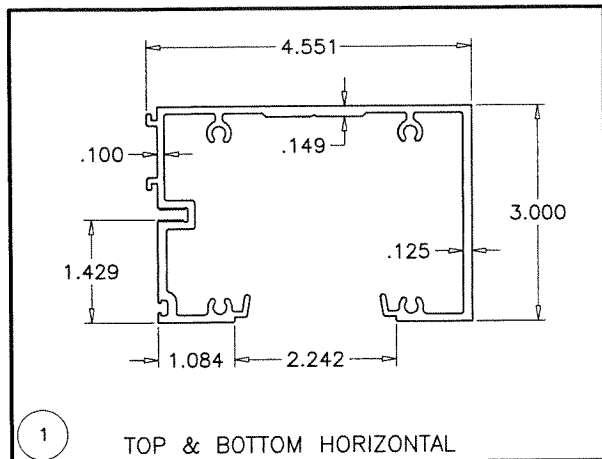


DOOR MULLION

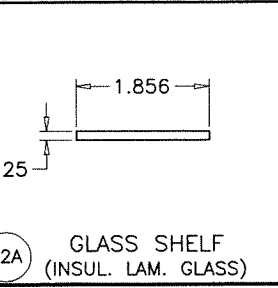
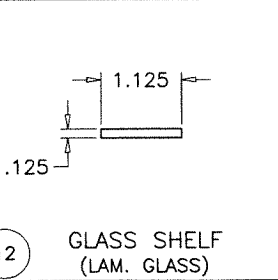
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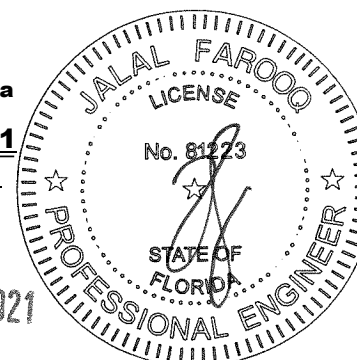
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dr. by:	TARIQ			
chk. by:				
drawing no.	21-36D			
sheet	15 of 17			



ITEM #	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	2501	AS REQD.	TOP & BOTTOM HORIZONTAL	6063-T6	-
2	2505	AS REQD.	INTERMEDIATE HORIZONTAL	6063-T6	-
3	2507	AS REQD.	FRAME COVER	6063-T5	-
4	2504	AS REQD.	FRAME JAMB	6063-T6	-
5	2502	AS REQD.	MALE MULLION	6063-T6	-
6	2503	AS REQD.	FEMALE MULLION	6063-T6	-
7	2506	AS REQD.	MULLION REINF.	6063-T6	-
8	2509	AS REQD.	PRESSURE PLATE	6063-T5	-
9	2508	AS REQD.	PRESSURE PLATE COVER	6063-T5	-
10	2510	AS REQD.	END FILLER (LAM. GLASS)	6063-T5	-
11	2511	AS REQD.	END FILLER (INSUL. LAM. GLASS)	6063-T5	-
12	-	AS REQD.	GLASS SHELF (LAM. GLASS)	6063-T5	-
12A	-	AS REQD.	GLASS SHELF (INSUL. LAM. GLASS)	6063-T5	-
13	GN-02	4/ LITE	EXTERIOR GLAZING GASKET	EPDM	DUROMETER 70±5 SHORE A
14	GN-01	4/ LITE	INTERIOR GLAZING GASKET	EPDM	DUROMETER 80±5 SHORE A
15	-	2/ LITE	SETTING BLOCKS, AT 1/4 POINTS (LAM. GLASS)	EPDM	DUROMETER 80±5 SHORE A
15A	-	2/ LITE	SETTING BLOCKS, AT 1/4 POINTS (INSUL. LAM. GLASS)	EPDM	DUROMETER 80±5 SHORE A
16	#10-24 X 1-3/8"	AS REQD.	PRESSURE PLATE FASTENERS	ST/ST	-
16A	#10-24 X 2-1/8"	AS REQD.	PRESSURE PLATE FASTENERS	ST/ST	-
17	#12 X 1-1/4"	AS REQD.	ASSEMBLY FASTENERS	ST/ST	HEX. HEAD SMS
18	-	-	-	-	-



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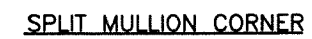
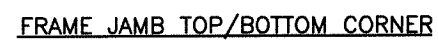
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drawing no. **21-36D**  
sheet 16 of 17



A circular professional engineer seal for Jalal Farooq. The outer ring contains the text "JALAL FAROOQ" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the word "LICENSE" is at the top and "STATE OF FLORIDA" is at the bottom, also separated by two stars. In the center, the license number "No. 81273" is printed, with a handwritten signature over it. The seal has a serrated outer edge.

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