



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 "400" Aluminum Window Wall System w/Window Inserts – S.M.I.

**APPROVAL DOCUMENT:** Drawing No. **W12-09**, titled "Series 400 Alum. Window Wall System (S.M.I.)", sheets 1, 1.1, 2 through 7, 7.1, 8 and 9 of 9 dated 03/02/12, with revision **F** dated 11/05/20, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: 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.

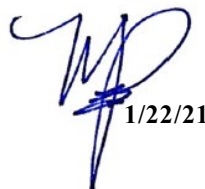
**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**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 **revises** NOA No. **18-0503.04** and consists of this page 1 and evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

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



  
1/22/21

NOA No. 20-1119.16  
Expiration Date: December 20, 2022  
Approval Date: February 04, 2021  
Page 1

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

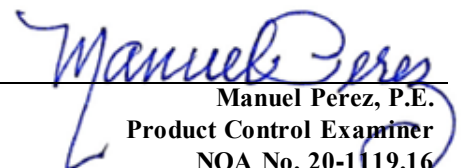
**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.  
*(Submitted under NOA No. 12-0801.03)*
2. Drawing No. **W12-09**, titled "Series 400 Alum. Window Wall System (S.M.I.)", sheets 1, 1.1, 2 through 7, 7.1, 8 and 9 of 9, dated 03/02/12, with revision **E** dated 04/13/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.  
*(Submitted under NOA No. 18-0503.04)*

**B. TESTS**

1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94  
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
3) Safety Performance Test, (class A, Sec. 5) per ANSI Z97.1  
along with marked-up drawings and installation diagram of outswing alum. door and alum. window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-9872**, dated 12/12/17, signed and sealed by Idalmis Ortega, P.E.  
*(Submitted under NOA No. 18-0503.04)*
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  
along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-10-3064R**, dated 01/18/11, signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 12-0801.03)*
3. Test reports on: 1) Small 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 an aluminum window wall system, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-10-3065**, **HETI-10-3067**, **HETI-10-3069** and **HETI-10-3070**, all dated 10/18/10, all signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 12-0801.03)*

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 20-1119.16  
Expiration Date: December 20, 2022  
Approval Date: February 04, 2021

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)**

**B. TESTS (CONTINUED)**

4. 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  
along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-10-3064, HETI-10-3066 and HETI-10-3068**, all dated 10/18/10, all signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 12-0801.03)*
5. Test reports on: 1) Safety Performance (Drop Load) Test, (class A, Sec. 5)  
per ANSI Z97.1-1984 and CPSC 16 CFR, CH II, Part 1201  
along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-10-3096**, dated 10/18/10, signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 12-0801.03)*

**C. CALCULATIONS**

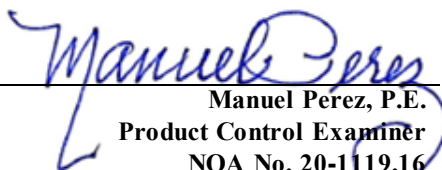
1. Anchor verification calculations and structural analysis, complying with **FBC 6<sup>th</sup> Edition (2017)**, dated 08/01/17 and 03/01/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.  
*(Submitted under NOA No. 18-0503.04)*
2. Glazing complies with **ASTM E1300-09**

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **17-1114.14** issued to **Kuraray America, Inc.** for their "**Trosifol® Ultraclear, Clear and Color PVB Interlayers**" dated 01/18/18, expiring on 07/08/19.

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 20-1119.16  
Expiration Date: December 20, 2022  
Approval Date: February 04, 2021

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

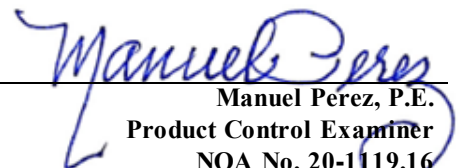
**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)**

**F. STATEMENTS**

1. Statement letter of conformance, complying with **FBC 6<sup>th</sup> Edition (2017)** and of no financial interest, dated March 15, 2018, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.  
*(Submitted under NOA No. 18-0503.04)*
2. Proposal No. **17-0579** issued by the Product Control Section, dated 07/18/17, signed by Manuel Perez, P.E.  
*(Submitted under NOA No. 18-0503.04)*
3. Laboratory compliance letters for Test Reports No.: **HETI-10-3065, HETI-10-3067, HETI-10-3069, HETI-10-3070, HETI-10-3064, HETI-10-3066, HETI-10-3068** and **HETI-10-3064R**, all issued by Hurricane Engineering & Testing, Inc., all dated 10/18/10 and 01/18/11, all signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 12-0801.03)*
4. Proposal No. **10-0233R** issued by Product Control Section, dated 07/12/10, signed by Manuel Perez, P.E.  
*(Submitted under NOA No. 12-0801.03)*

**G. OTHERS**

1. Notice of Acceptance No. **17-0329.02**, issued to Eco Window Systems, LLC for their Series "400" Aluminum Window Wall System w/Window Inserts – S.M.I. approved on 10/19/17 and expiring on 12/20/22.

  
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Manuel Pérez, P.E.  
Product Control Examiner  
NOA No. 20-1119.16  
Expiration Date: December 20, 2022  
Approval Date: February 04, 2021

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**2. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Drawing No. **W12-09**, titled “Series 400 Alum. Window Wall System (S.M.I.)”, sheets 1, 1.1, 2 through 7, 7.1, 8 and 9 of 9, dated 03/02/12, with revision **F** dated 11/05/20, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

**B. TESTS**

1. None.

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with **FBC 6<sup>th</sup> Edition (2017)**, dated 08/01/17 and 03/01/18 and further updated on 11/12/20 to comply with **FBC 7<sup>th</sup> Edition (2020)**, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
2. Glazing complies with **ASTM E1300-09**

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

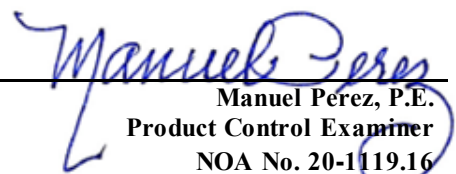
1. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America, Inc.** for their “**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**” dated 05/09/19, expiring on 07/08/24.

**F. STATEMENTS**

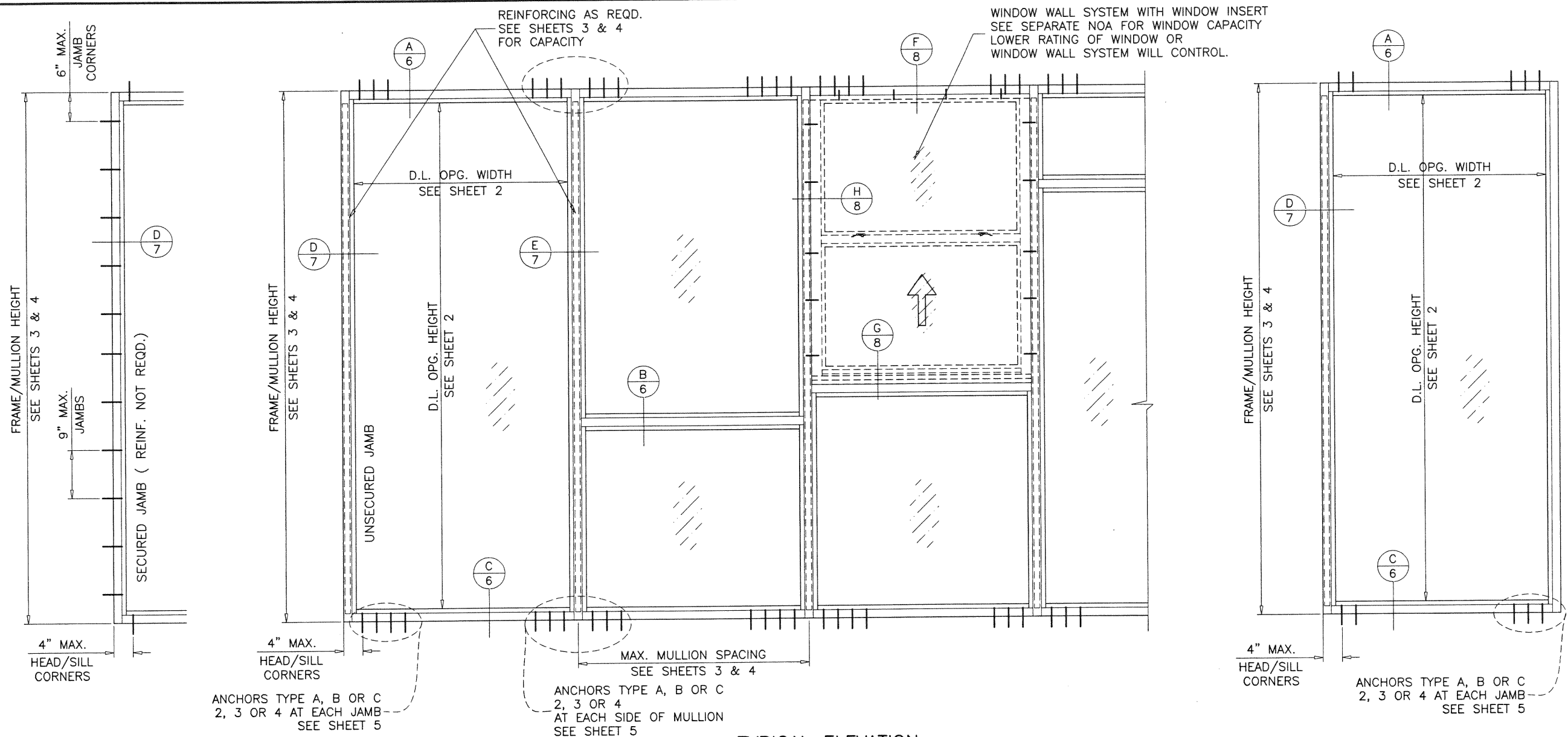
1. Statement letter of conformance, complying with **FBC 6<sup>th</sup> Edition (2017)**, with **FBC 7<sup>th</sup> Edition (2020)** and of no financial interest, dated November 12, 2020, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

**G. OTHERS**

1. Notice of Acceptance No. **18-0503.04**, issued to Eco Window Systems, LLC for their Series “400” Aluminum Window Wall System w/Window Inserts – S.M.I. approved on 08/23/18 and expiring on 12/20/22.

  
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Manuel Pérez, P.E.  
Product Control Examiner  
NOA No. 20-1119.16  
Expiration Date: December 20, 2022  
Approval Date: February 04, 2021





**TYPICAL ELEVATION**

## SERIES 400 ALUMINUM WINDOW WALL 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)'.

## 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 2 FOR GLASS TYPE, GLASS DIMENSIONS (WIDTH & HEIGHT) AND PRESSURE CAPACITY. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 3** CHECK WINDOW WALL SYSTEM CAPACITY FOR DESIRED HEIGHT AND MULLION SPACING USING CHARTS ON SHEETS 3 & 4. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** USING CHARTS ON SHEET 5 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5** VERIFY UNANCHORED JAMBS, IF USED AS PER SHEETS 3, 4 AND 7.
- STEP 6** THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.

THIS SYSTEM IS RATED FOR SMALL MISSILE IMPACT. MIAMI-DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS REQUIRED FOR INSTALLATIONS UP TO 30 FT. OF GRADE. SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

**PRODUCT REVISED**  
as complying with the Florida  
Building Code

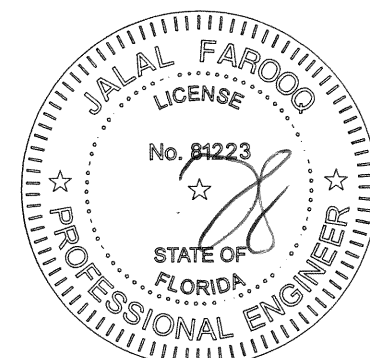
**NOA-No. 20-1119.16**

**Expiration Date: 12/20/2022**

By: *Manuel Fern*  
**Miami-Dade Product Control**

NOV 10 2020

**SMALL MISSILE IMPACT**



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

STORE W12-09ECO

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SERIES 400 ALUM WINDOW WALL SYSTEM (S.M.I.)

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

(C.A.N. 3538)

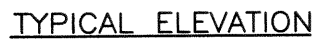
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| revisions: | no | date     | by | description           |
|------------|----|----------|----|-----------------------|
|            | C  | 12.01.15 |    | REV. PER PER COMMENTS |
|            | D  | 08.02.17 |    | UPDATED TO 2017 FBC   |
|            | E  | 04.13.18 |    | CORNER MULLION ADDED  |
|            | F  | 11.05.20 |    | UPDATED TO 2020 FBC   |

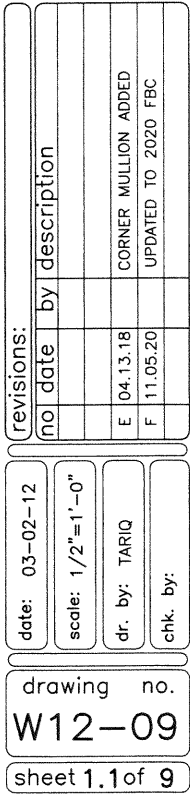
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chk. by:

drawing no.  
**W12-09**  
sheet 1 of 9



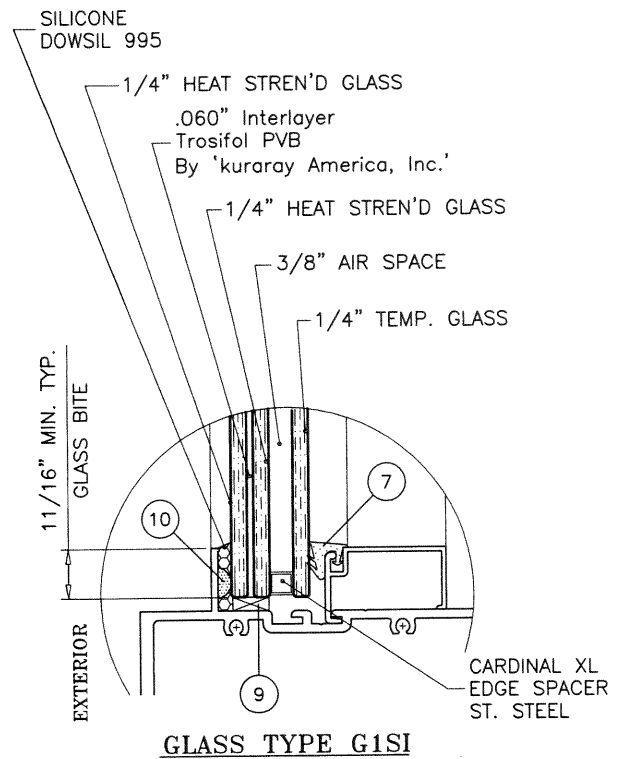
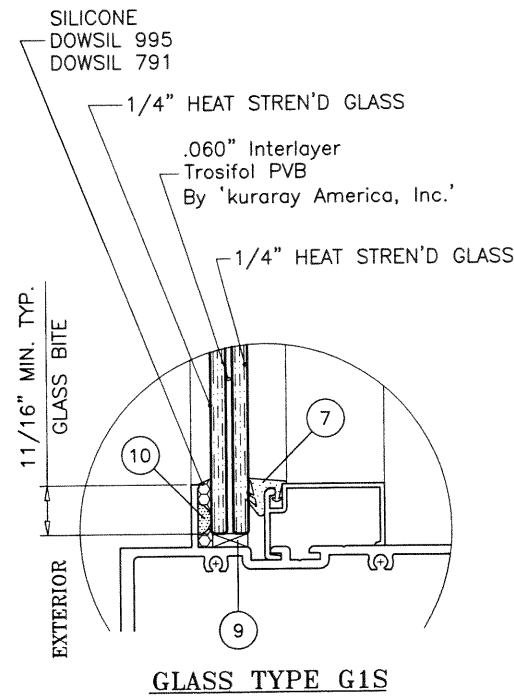
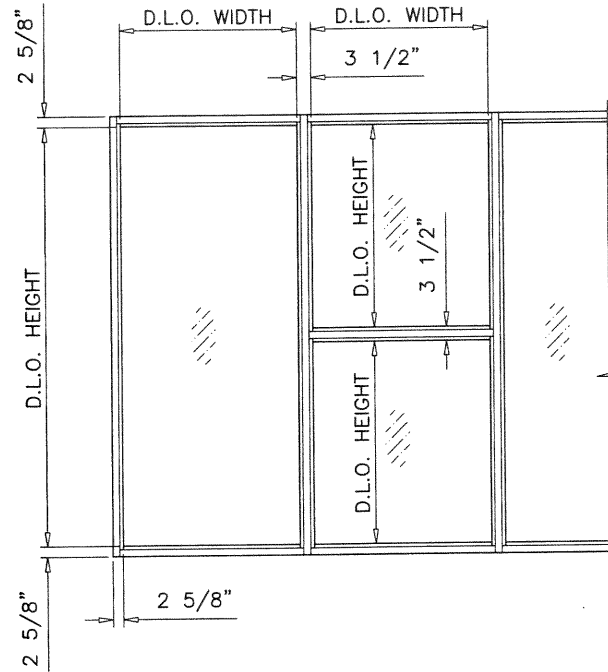
NOV 10 2020



**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

| GLASS LOAD CAPACITY - PSF |               |                               |         |
|---------------------------|---------------|-------------------------------|---------|
| NOMINAL DIMS.             |               | GLASS TYPES<br>'G1S' & 'G1SI' |         |
| D.L.O. WIDTH              | D.L.O. HEIGHT | EXT.(+)                       | INT.(-) |
| 26-1/2"                   | 78-3/4"       | 90.0                          | 130.0   |
| 32-1/2"                   |               | 90.0                          | 130.0   |
| 38-1/2"                   |               | 90.0                          | 130.0   |
| 44-1/2"                   |               | 90.0                          | 130.0   |
| 50-1/2"                   |               | 90.0                          | 130.0   |
| 56-1/2"                   |               | 90.0                          | 130.0   |
| 26-1/2"                   | 84-3/4"       | 90.0                          | 130.0   |
| 32-1/2"                   |               | 90.0                          | 130.0   |
| 38-1/2"                   |               | 90.0                          | 130.0   |
| 44-1/2"                   |               | 90.0                          | 130.0   |
| 50-1/2"                   |               | 90.0                          | 130.0   |
| 56-1/2"                   |               | 90.0                          | 130.0   |
| 26-1/2"                   | 90-3/4"       | 90.0                          | 130.0   |
| 32-1/2"                   |               | 90.0                          | 130.0   |
| 38-1/2"                   |               | 90.0                          | 130.0   |
| 44-1/2"                   |               | 90.0                          | 130.0   |
| 50"                       |               | 90.0                          | 130.0   |
| 50-1/2"                   |               | 90.0                          | 130.0   |
| 56-1/2"                   |               | 90.0                          | 130.0   |
| 26-1/2"                   | 96-3/4"       | 90.0                          | 130.0   |
| 32-1/2"                   |               | 90.0                          | 130.0   |
| 38-1/2"                   |               | 90.0                          | 130.0   |
| 44-1/2"                   |               | 90.0                          | 130.0   |
| 47"                       |               | 90.0                          | 130.0   |
| 50-1/2"                   |               | 90.0                          | 130.0   |
| 26-1/2"                   | 102-3/4"      | 90.0                          | 130.0   |
| 32-1/2"                   |               | 90.0                          | 130.0   |
| 38-1/2"                   |               | 90.0                          | 130.0   |
| 44"                       |               | 90.0                          | 130.0   |
| 44-1/2"                   |               | 90.0                          | 130.0   |
| 49"                       |               | 90.0                          | 130.0   |
| 26-1/2"                   | 108-3/4"      | 90.0                          | 130.0   |
| 32-1/2"                   |               | 90.0                          | 130.0   |
| 38-1/2"                   |               | 90.0                          | 130.0   |
| 41"                       |               | 90.0                          | 130.0   |
| 44-1/2"                   |               | 90.0                          | 130.0   |
| 47"                       |               | 90.0                          | 130.0   |
| 26-1/2"                   | 114-3/4"      | 90.0                          | 130.0   |
| 32-1/2"                   |               | 90.0                          | 130.0   |
| 38-1/2"                   |               | 90.0                          | 130.0   |
| 39"                       |               | 90.0                          | 130.0   |
| 44-1/2"                   |               | 90.0                          | 130.0   |

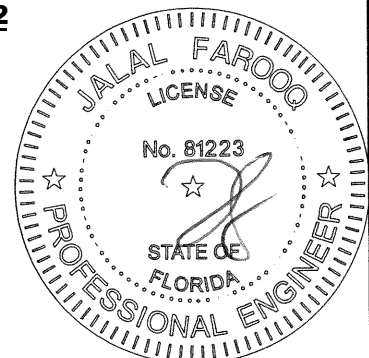
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



### GLAZING OPTIONS

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **20-1119.16**  
Expiration Date: **12/20/2022**  
By: *Manuel Perez*  
Miami-Dade Product Control

NOV 10 2020



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

**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 W12-09ECO

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SERIES 400 ALUM WINDOW WALL SYSTEM (S.M.I.)

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

| NO | DATE     | DESCRIPTION           |
|----|----------|-----------------------|
| C  | 12.01.15 | REV. PER PER COMMENTS |
| D  | 08.02.17 | UPDATED TO 2017 FBC   |
| E  | 04.13.18 | NO CHANGE THIS SHEET  |
| F  | 11.05.20 | UPDATED TO 2020 FBC   |

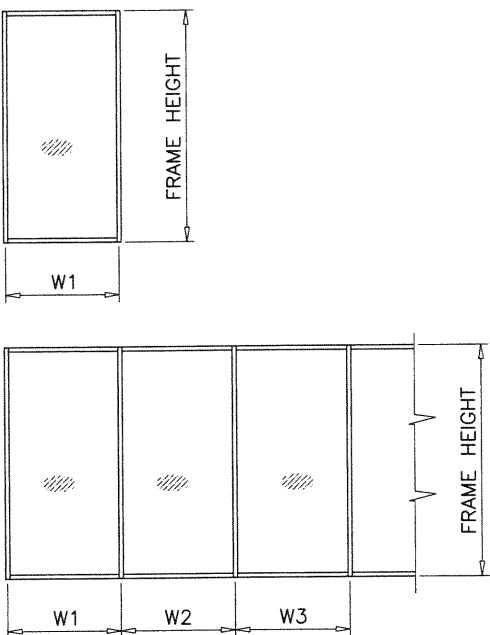
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date: 03-02-12  
scale: 1/2"=1'-0"  
dr. by: TARIQ  
chk. by:

drawing no.  
**W12-09**  
sheet 2 of 9

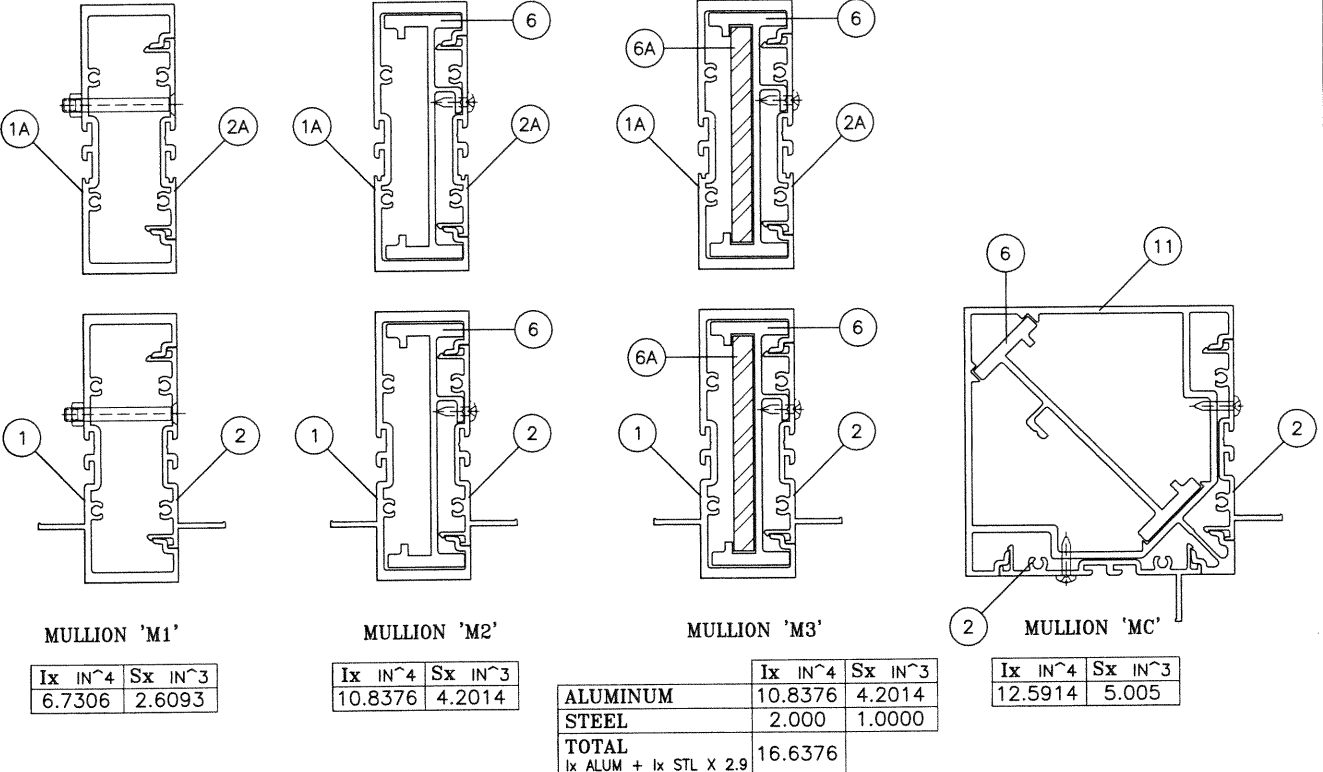
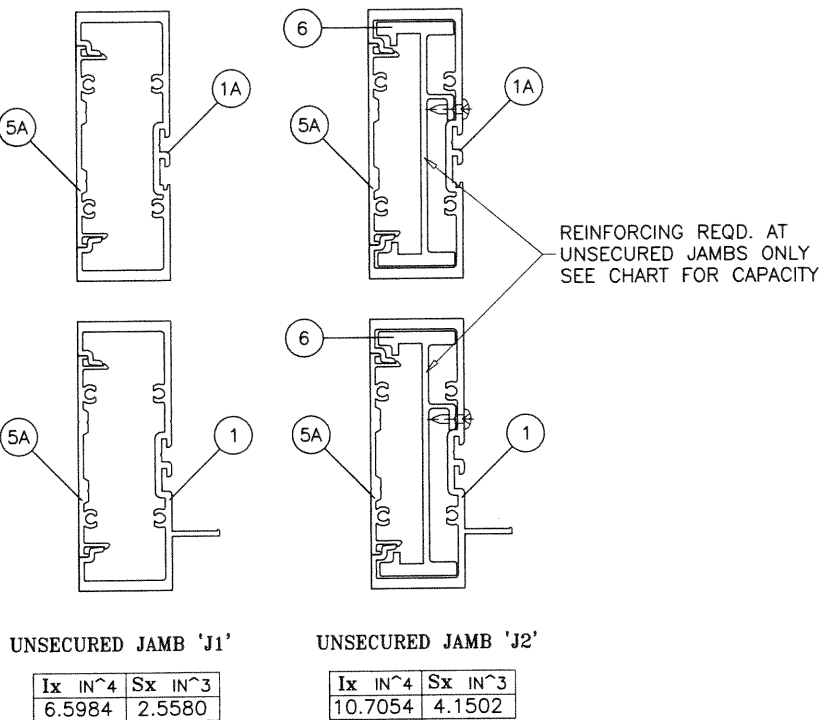


| JAMB & MULLION LOAD CAPACITY - PSF                |              |                        |         |                        |         |                        |         |           |         |
|---|--------------|------------------------|---------|------------------------|---------|------------------------|---------|-----------|---------|
| JAMBS & MULLIONS WITHOUT INTERMEDIATE HORIZONTALS |              |                        |         |                        |         |                        |         |           |         |
| NOMINAL DIMS.                                     |              | JAMB 'J1'<br>MULL 'M1' |         | JAMB 'J2'<br>MULL 'M2' |         | JAMB 'J2'<br>MULL 'M3' |         | MULL 'MC' |         |
| WIDTH (W)   | FRAME HEIGHT | EXT.(+)                | INT.(-) | EXT.(+)                | INT.(-) | EXT.(+)                | INT.(-) | EXT.(+)   | INT.(-) |
| 30"   | 84"          | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 36"   |              | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 42"   |              | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 48"   |              | 90.0                   | 125.5   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 54"   |              | 90.0                   | 115.3   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 60"   |              | 90.0                   | 107.9   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 30"   | 90"          | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 36"   |              | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 42"   |              | 90.0                   | 119.2   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 48"   |              | 90.0                   | 106.9   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 54"   |              | 90.0                   | 97.7    | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 60"   |              | 90.0                   | 90.9    | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 30"   | 96"          | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 36"   |              | 90.0                   | 118.2   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 42"   |              | 90.0                   | 103.1   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 48"   |              | 90.0                   | 92.1    | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 54"   |              | 83.9                   | 83.9    | 90.0                   | 129.2   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 60"   |              | 77.7                   | 77.7    | 90.0                   | 119.6   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 30"   | 102"         | 90.0                   | 122.6   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 36"   |              | 90.0                   | 103.4   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 42"   |              | 90.0                   | 90.1    | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 48"   |              | 80.2                   | 80.2    | 90.0                   | 123.3   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 54"   |              | 72.9                   | 72.9    | 90.0                   | 111.9   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 56"   |              | 70.8                   | 70.8    | 90.0                   | 108.8   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 30"   | 108"         | 90.0                   | 108.3   | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 36"   |              | 90.0                   | 91.3    | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 42"   |              | 79.3                   | 79.3    | 90.0                   | 121.7   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 48"   |              | 70.5                   | 70.5    | 90.0                   | 108.2   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 53"   |              | 64.8                   | 64.8    | 90.0                   | 99.5    | 90.0                   | 125.3   | 90.0      | 120.0   |
| 30"   | 114"         | 90.0                   | 96.4    | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 36"   |              | 81.1                   | 81.1    | 90.0                   | 124.2   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 42"   |              | 70.4                   | 70.4    | 90.0                   | 107.7   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 48"   |              | 62.4                   | 62.4    | 90.0                   | 95.6    | 90.0                   | 121.4   | 90.0      | 120.0   |
| 50"   |              | 60.3                   | 60.3    | 90.0                   | 92.3    | 90.0                   | 117.2   | 90.0      | 120.0   |
| 30"   | 120"         | 82.4                   | 82.4    | 90.0                   | 130.0   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 36"   |              | 69.5                   | 69.5    | 90.0                   | 110.9   | 90.0                   | 130.0   | 90.0      | 120.0   |
| 42"   |              | 60.3                   | 60.3    | 90.0                   | 96.0    | 90.0                   | 122.9   | 90.0      | 120.0   |
| 48"   |              | 53.6                   | 53.6    | 85.1                   | 85.1    | 90.0                   | 108.9   | 90.0      | 120.0   |



WIDTH (W) = W1  
AT FRAME JAMB

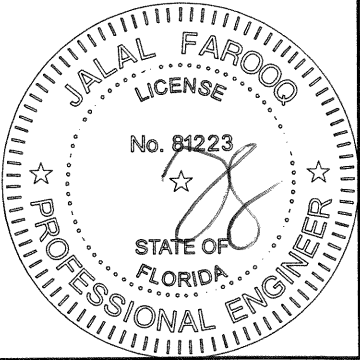
WIDTH (W) =  $\frac{W2 + W3}{2}$   
AT FRAME MULLION



|         |         |         |         |                        |         |         |         |         |
|---------|---------|---------|---------|------------------------|---------|---------|---------|---------|
| Ix IN^4 | Sx IN^3 | Ix IN^4 | Sx IN^3 |                        | Ix IN^4 | Sx IN^3 | Ix IN^4 | Sx IN^3 |
| 6.7306  | 2.6093  | 10.8376 | 4.2014  | ALUMINUM               | 10.8376 | 4.2014  | 12.5914 | 5.005   |
|         |         |         |         | STEEL                  | 2.000   | 1.0000  |         |         |
|         |         |         |         | TOTAL                  |         |         |         |         |
|         |         |         |         | Ix ALUM + Ix STL X 2.9 | 16.6376 |         |         |         |

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **20-1119.16**  
Expiration Date: **12/20/2022**  
By: *Manuel Perez*  
Miami-Dade Product Control

NOV 10 2020



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

SERIES 400 ALUM WINDOW WALL SYSTEM (S.M.I.)

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

date: 03-02-12

scale: 1/2"=1'-0"

dr. by: TARIQ

chk. by:

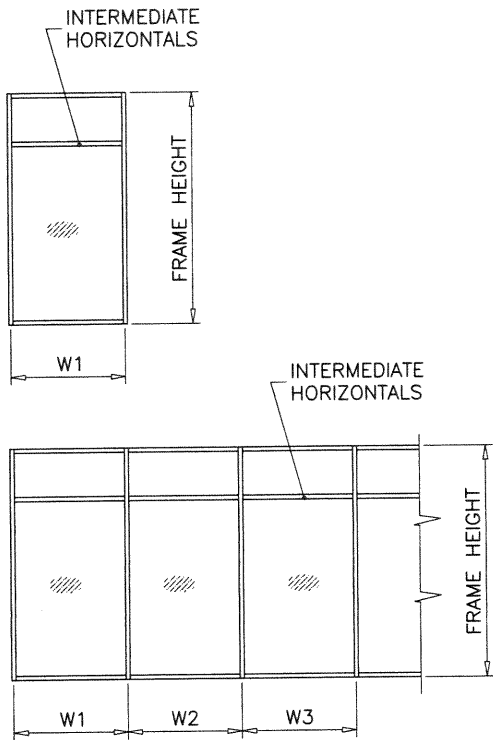
drawing no. **W12-09**

sheet **3** of **9**

REVISIONS:

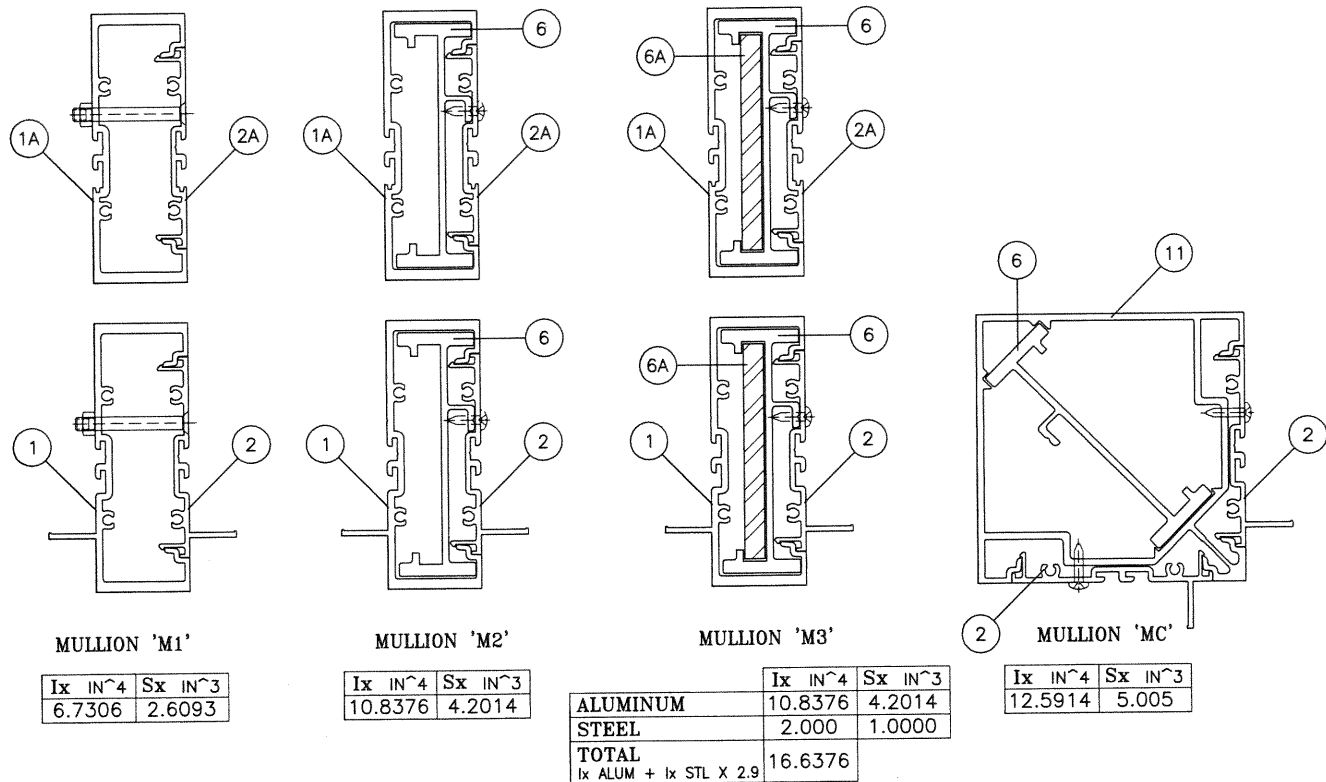
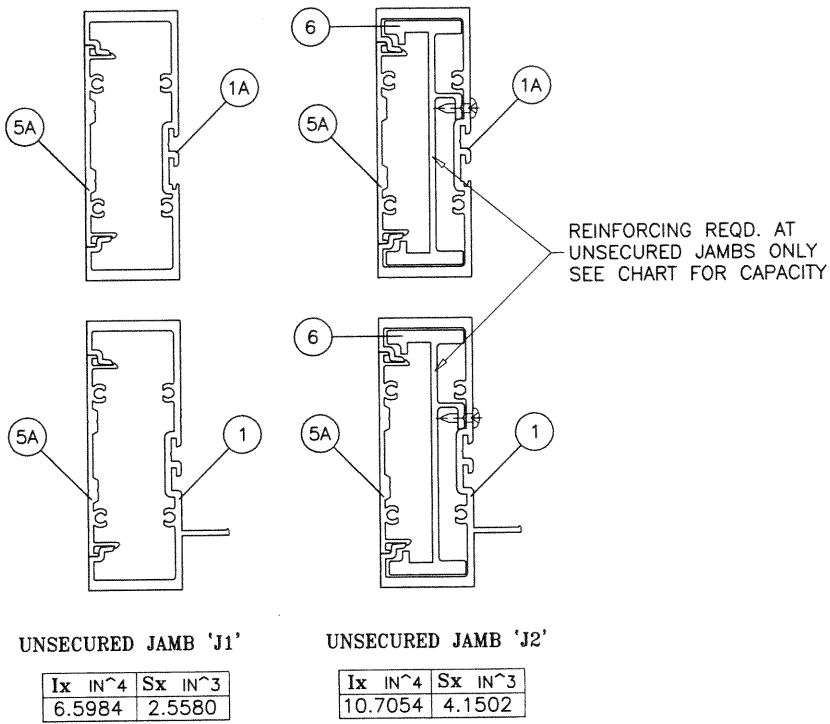
| no | date     | by | description          |
|----|----------|----|----------------------|
| C  | 12.01.15 |    | NO CHANGE THIS SHEET |
| D  | 08.02.17 |    | UPDATED TO 2017 FBC  |
| E  | 04.13.18 |    | CORNER MULLION ADDED |
| F  | 11.05.20 |    | UPDATED TO 2020 FBC  |

| JAMB & MULLION LOAD CAPACITY - PSF             |              |           |         |           |         |           |         |           |         |
|--|--------------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| JAMBS & MULLIONS WITH INTERMEDIATE HORIZONTALS |              |           |         |           |         |           |         |           |         |
| NOMINAL DIMS.                                  |              | JAMB 'J1' |         | JAMB 'J2' |         | JAMB 'J2' |         | MULL 'MC' |         |
| WIDTH (W)                                      | FRAME HEIGHT | EXT.(+)   | INT.(-) | EXT.(+)   | INT.(-) | EXT.(+)   | INT.(-) | EXT.(+)   | INT.(-) |
| 30"  | 84"          | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 36"  |              | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 42"  |              | 90.0      | 128.1   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 48"  |              | 90.0      | 112.1   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 54"  |              | 90.0      | 99.6    | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 60"  |              | 89.7      | 89.7    | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 30"  | 90"          | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 36"  |              | 90.0      | 129.3   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 42"  |              | 90.0      | 110.8   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 48"  |              | 90.0      | 97.0    | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 54"  |              | 86.2      | 86.2    | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 60"  |              | 77.6      | 77.6    | 90.0      | 119.6   | 90.0      | 130.0   | 90.0      | 120.0   |
| 30"  | 96"          | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 36"  |              | 90.0      | 112.8   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 42"  |              | 90.0      | 96.7    | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 48"  |              | 84.6      | 84.6    | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 54"  |              | 75.2      | 75.2    | 90.0      | 115.8   | 90.0      | 130.0   | 90.0      | 120.0   |
| 60"  |              | 67.7      | 67.7    | 90.0      | 104.2   | 90.0      | 129.1   | 90.0      | 120.0   |
| 30"  | 102"         | 90.0      | 119.2   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 36"  |              | 90.0      | 99.3    | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 42"  |              | 85.1      | 85.1    | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 48"  |              | 74.5      | 74.5    | 90.0      | 114.4   | 90.0      | 130.0   | 90.0      | 120.0   |
| 54"  |              | 66.2      | 66.2    | 90.0      | 101.7   | 90.0      | 127.1   | 90.0      | 120.0   |
| 56"  |              | 63.8      | 63.8    | 90.0      | 98.1    | 90.0      | 122.5   | 90.0      | 120.0   |
| 30"  | 108"         | 90.0      | 105.6   | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 36"  |              | 88.0      | 88.0    | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 42"  |              | 75.4      | 75.4    | 90.0      | 115.7   | 90.0      | 130.0   | 90.0      | 120.0   |
| 48"  |              | 66.0      | 66.0    | 90.0      | 101.2   | 90.0      | 127.5   | 90.0      | 120.0   |
| 53"  |              | 59.8      | 59.8    | 90.0      | 91.7    | 90.0      | 115.5   | 90.0      | 120.0   |
| 30"  | 114"         | 90.0      | 94.0    | 90.0      | 130.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 36"  |              | 78.3      | 78.3    | 90.0      | 120.2   | 90.0      | 130.0   | 90.0      | 120.0   |
| 42"  |              | 67.1      | 67.1    | 90.0      | 103.0   | 90.0      | 130.0   | 90.0      | 120.0   |
| 48"  |              | 58.7      | 58.7    | 90.0      | 90.1    | 90.0      | 114.4   | 90.0      | 120.0   |
| 50"  |              | 56.4      | 56.4    | 86.5      | 86.5    | 90.0      | 109.8   | 90.0      | 120.0   |
| 30"  | 120"         | 80.6      | 80.6    | 90.0      | 129.1   | 90.0      | 130.0   | 90.0      | 120.0   |
| 36"  |              | 67.1      | 67.1    | 90.0      | 107.6   | 90.0      | 130.0   | 90.0      | 120.0   |
| 42"  |              | 57.5      | 57.5    | 90.0      | 92.2    | 90.0      | 118.0   | 90.0      | 120.0   |
| 48"  |              | 50.4      | 50.4    | 80.7      | 80.7    | 90.0      | 103.3   | 90.0      | 120.0   |



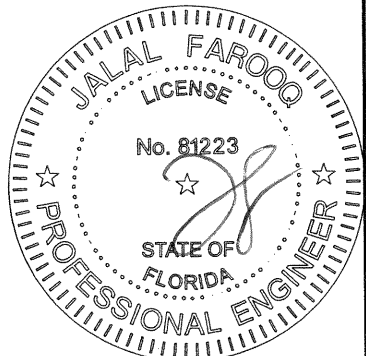
WIDTH (W) = W1  
AT FRAME JAMB

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



**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **20-1119.16**  
Expiration Date: **12/20/2022**  
By: *Manuel Perez*  
Miami-Dade Product Control

NOV 10 2020



SERIES 400 ALUM WINDOW WALL SYSTEM (S.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          |
|------------|----|----------|----|----------------------|
|            | C  | 12.01.15 |    | NO CHANGE THIS SHEET |
|            | D  | 08.02.17 |    | UPDATED TO 2017 FBC  |
|            | E  | 04.13.18 |    | CORNER MULLION ADDED |
|            | F  | 11.05.20 |    | UPDATED TO 2020 FBC  |

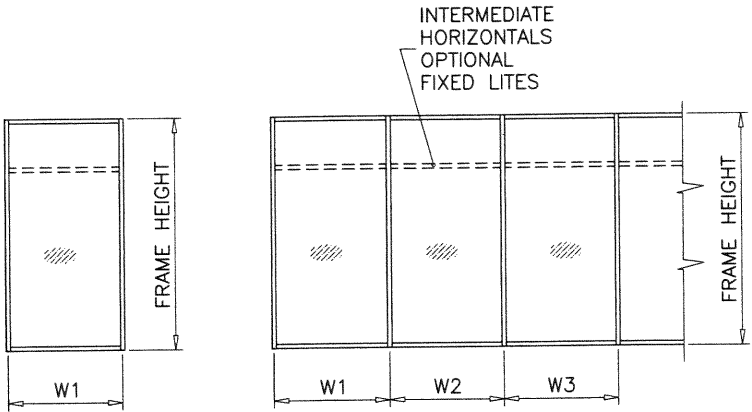
|                |                   |               |          |
|----------------|-------------------|---------------|----------|
| date: 03-02-12 | scale: 1/2"=1'-0" | dr. by: TARIQ | chk. by: |
| drawing no.    | W12-09            |               |          |
| sheet          | 4 of 9            |               |          |

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
STORE W12-09ECO



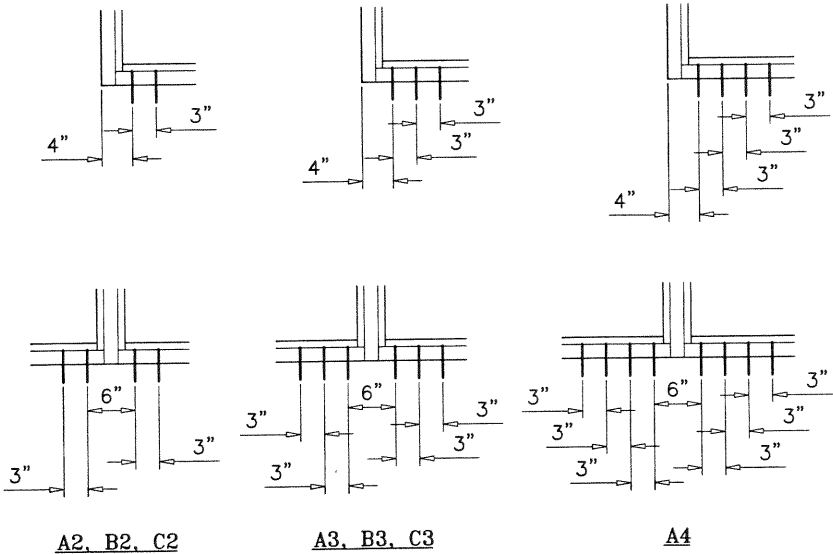
| ANCHOR LOAD CAPACITY - PSF<br>EXT.(+) & INT.(-) |              |                  |       |       |                        |       |       |
|---|--------------|------------------|-------|-------|------------------------|-------|-------|
| NOMINAL DIMS.                                   |              | ANCHORS TYPE 'A' |       |       | ANCHORS TYPE 'B' & 'C' |       |       |
| WIDTH (W)                                       | FRAME HEIGHT | A2               | A3    | A4    | B2/C2                  | B3/C3 | B4/C4 |
| 30"   | 72"          | 130.0            | 130.0 | 130.0 | 130.0                  | 130.0 | 130.0 |
| 36"   |              | 119.6            | 130.0 | 130.0 | 130.0                  | 130.0 | 130.0 |
| 42"   |              | 102.5            | 130.0 | 130.0 | 130.0                  | 130.0 | 130.0 |
| 48"   |              | 89.7             | 130.0 | 130.0 | 114.7                  | 130.0 | 130.0 |
| 53"   |              | 81.2             | 121.8 | 130.0 | 103.8                  | 130.0 | 130.0 |
| 54"   |              | 79.7             | 119.6 | 130.0 | 101.9                  | 130.0 | 130.0 |
| 56"   |              | 76.9             | 115.3 | 130.0 | 98.3                   | 130.0 | 130.0 |
| 60"   |              | 71.7             | 107.6 | 130.0 | 91.7                   | 130.0 | 130.0 |
| 30"   | 78"          | 130.0            | 130.0 | 130.0 | 130.0                  | 130.0 | 130.0 |
| 36"   |              | 110.4            | 130.0 | 130.0 | 130.0                  | 130.0 | 130.0 |
| 42"   |              | 94.6             | 130.0 | 130.0 | 121.0                  | 130.0 | 130.0 |
| 48"   |              | 82.8             | 124.2 | 130.0 | 105.8                  | 130.0 | 130.0 |
| 53"   |              | 75.0             | 112.4 | 130.0 | 95.9                   | 130.0 | 130.0 |
| 54"   |              | 73.6             | 110.4 | 130.0 | 94.1                   | 130.0 | 130.0 |
| 56"   |              | 70.9             | 106.4 | 130.0 | 90.7                   | 130.0 | 130.0 |
| 60"   |              | 66.2             | 99.3  | 130.0 | 84.7                   | 127.0 | 130.0 |
| 30"   | 84"          | 123.0            | 130.0 | 130.0 | 130.0                  | 130.0 | 130.0 |
| 36"   |              | 102.5            | 130.0 | 130.0 | 130.0                  | 130.0 | 130.0 |
| 42"   |              | 87.8             | 130.0 | 130.0 | 112.3                  | 130.0 | 130.0 |
| 48"   |              | 76.9             | 115.3 | 130.0 | 98.3                   | 130.0 | 130.0 |
| 53"   |              | 69.6             | 104.4 | 130.0 | 89.0                   | 130.0 | 130.0 |
| 54"   |              | 68.3             | 102.5 | 130.0 | 87.4                   | 130.0 | 130.0 |
| 56"   |              | 65.9             | 98.8  | 130.0 | 84.2                   | 126.4 | 130.0 |
| 60"   |              | 61.5             | 92.2  | 123.0 | 78.6                   | 117.9 | 130.0 |
| 30"   | 90"          | 114.8            | 130.0 | 130.0 | 130.0                  | 130.0 | 130.0 |
| 36"   |              | 95.6             | 130.0 | 130.0 | 122.3                  | 130.0 | 130.0 |
| 42"   |              | 82.0             | 123.0 | 130.0 | 104.8                  | 130.0 | 130.0 |
| 48"   |              | 71.7             | 107.6 | 130.0 | 91.7                   | 130.0 | 130.0 |
| 53"   |              | 65.0             | 97.4  | 129.9 | 83.1                   | 124.6 | 130.0 |
| 54"   |              | 63.8             | 95.6  | 127.5 | 81.5                   | 122.3 | 130.0 |
| 56"   |              | 61.5             | 92.2  | 123.0 | 78.6                   | 117.9 | 130.0 |
| 60"   |              | 57.4             | 86.1  | 114.8 | 73.4                   | 110.1 | 130.0 |
| 30"   | 96"          | 107.6            | 130.0 | 130.0 | 130.0                  | 130.0 | 130.0 |
| 36"   |              | 89.7             | 130.0 | 130.0 | 114.7                  | 130.0 | 130.0 |
| 42"   |              | 76.9             | 115.3 | 130.0 | 98.3                   | 130.0 | 130.0 |
| 48"   |              | 67.3             | 100.9 | 130.0 | 86.0                   | 129.0 | 130.0 |
| 53"   |              | 60.9             | 91.4  | 121.8 | 77.9                   | 116.8 | 130.0 |
| 54"   |              | 59.8             | 89.7  | 119.6 | 76.4                   | 114.7 | 130.0 |
| 56"   |              | 57.6             | 86.5  | 115.3 | 73.7                   | 110.6 | 130.0 |
| 60"   |              | 53.8             | 80.7  | 107.6 | 68.8                   | 103.2 | 130.0 |
| 30"   | 102"         | 101.3            | 130.0 | 130.0 | 129.5                  | 130.0 | 130.0 |
| 36"   |              | 84.4             | 126.6 | 130.0 | 107.9                  | 130.0 | 130.0 |
| 42"   |              | 72.3             | 108.5 | 130.0 | 92.5                   | 130.0 | 130.0 |
| 48"   |              | 63.3             | 94.9  | 126.6 | 80.9                   | 121.4 | 130.0 |
| 53"   |              | 57.3             | 86.0  | 114.6 | 73.3                   | 110.0 | 130.0 |
| 54"   |              | 56.3             | 84.4  | 112.5 | 71.9                   | 107.9 | 130.0 |
| 56"   |              | 54.3             | 81.4  | 108.5 | 69.4                   | 104.1 | 130.0 |
| 30"   | 108"         | 95.6             | 130.0 | 130.0 | 122.3                  | 130.0 | 130.0 |
| 36"   |              | 79.7             | 119.6 | 130.0 | 101.9                  | 130.0 | 130.0 |
| 42"   |              | 68.3             | 102.5 | 130.0 | 87.4                   | 130.0 | 130.0 |
| 48"   |              | 59.8             | 89.7  | 119.6 | 76.4                   | 114.7 | 130.0 |
| 53"   |              | 54.1             | 81.2  | 108.3 | 69.2                   | 103.8 | 130.0 |

| ANCHOR LOAD CAPACITY - PSF<br>EXT.(+) & INT.(-) |              |                  |       |       |                        |       |       |
|---|--------------|------------------|-------|-------|------------------------|-------|-------|
| NOMINAL DIMS.                                   |              | ANCHORS TYPE 'A' |       |       | ANCHORS TYPE 'B' & 'C' |       |       |
| WIDTH (W)                                       | FRAME HEIGHT | A2               | A3    | A4    | B2/C2                  | B3/C3 | B4/C4 |
| 30"   | 114"         | 90.6             | 130.0 | 130.0 | 115.9                  | 130.0 | 130.0 |
| 36"   |              | 75.5             | 113.3 | 130.0 | 96.6                   | 130.0 | 130.0 |
| 42"   |              | 64.7             | 97.1  | 129.4 | 82.8                   | 124.2 | 130.0 |
| 48"   |              | 56.6             | 84.9  | 113.3 | 72.4                   | 108.6 | 130.0 |
| 30"   | 120"         | 86.1             | 129.1 | 130.0 | 110.1                  | 130.0 | 130.0 |
| 36"   |              | 71.7             | 107.6 | 130.0 | 91.7                   | 130.0 | 130.0 |
| 42"   |              | 61.5             | 92.2  | 123.0 | 78.6                   | 117.9 | 130.0 |
| 48"   |              | 53.8             | 80.7  | 107.6 | 68.8                   | 103.2 | 130.0 |



WIDTH (W) = W1  
AT FRAME JAMB

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



ANCHORS TYPES: SEE SHEET 6 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

NOTE:  
USE SEAR CLIP UW-403 AT  
ANCHOR LOCATIONS OF SUFFICIENT LENGTH  
TO COVER ALL ANCHOR SPACINGS

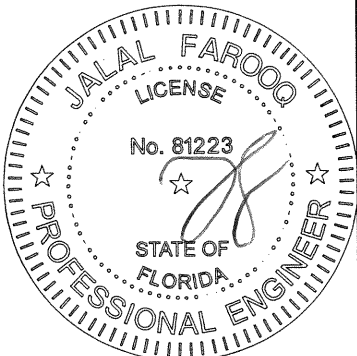
**PRODUCT REVISED**  
as complying with the Florida  
Building Code

NOA-No. 20-1119.16

Expiration Date: 12/20/2022

By: *Manuel Perez*  
Miami-Dade Product Control

NOV 10 2020



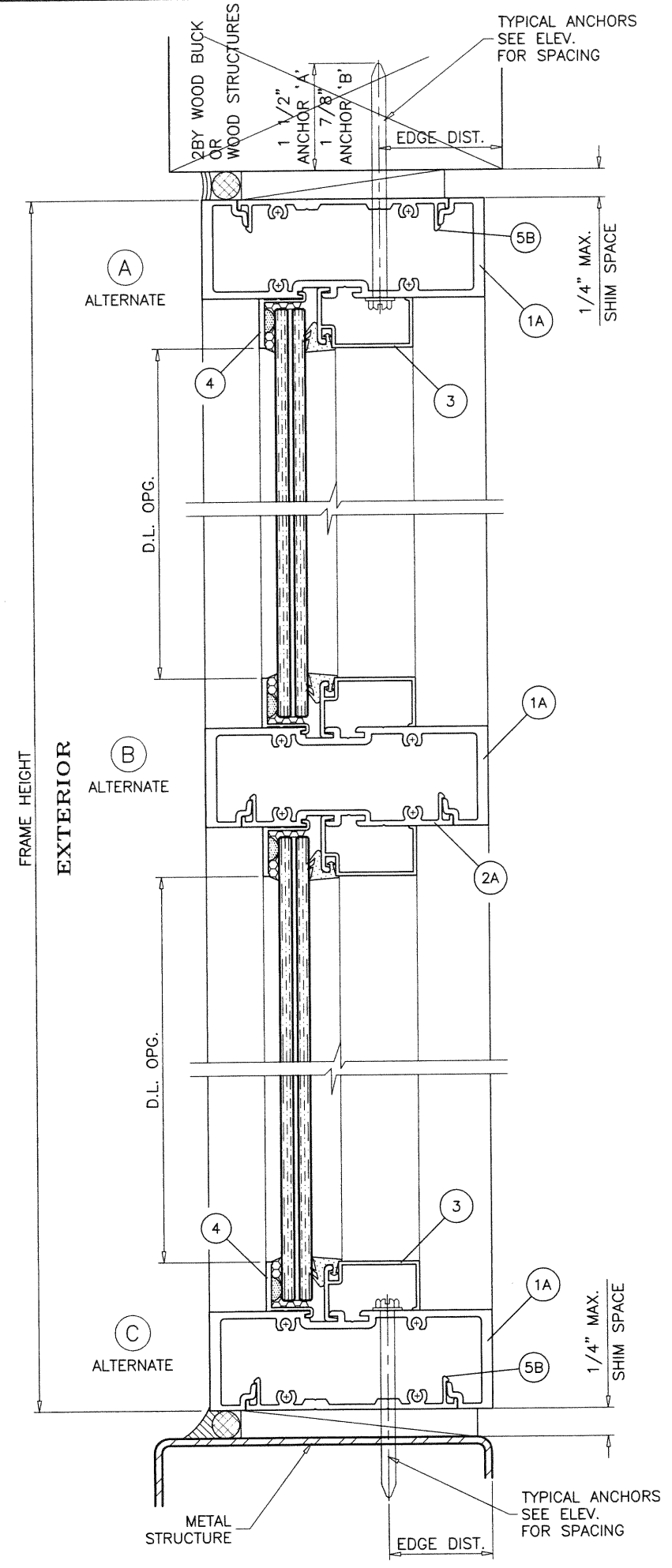
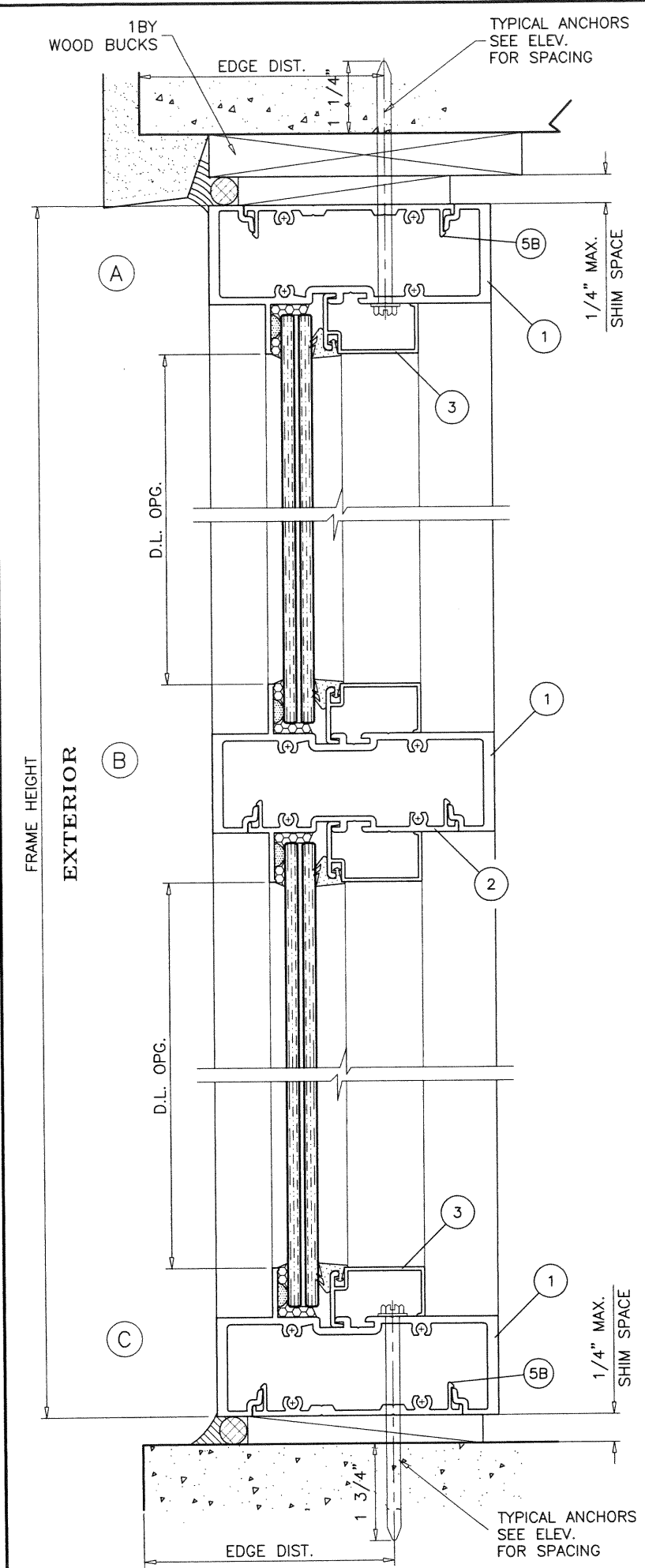
SERIES 400 ALUM WINDOW WALL SYSTEM (S.M.I.)  
**ECO WINDOW SYSTEMS, LLC.**  
8502 N.W. 80th STREET  
MEDLEY, FL. 33166  
TEL. (305) 885-5299 FAX (305) 885-5902

| revisions: | no | date     | by | description          |
|------------|----|----------|----|----------------------|
|            | C  | 12.01.15 |    | NO CHANGE THIS SHEET |
|            | D  | 08.02.17 |    | UPDATED TO 2017 FBC  |
|            | E  | 04.13.18 |    | NO CHANGE THIS SHEET |
|            | F  | 11.05.20 |    | UPDATED TO 2020 FBC  |

|          |            |
|----------|------------|
| date:    | 03-02-12   |
| scale:   | 1/2"=1'-0" |
| dr. by:  | TARIQ      |
| chk. by: |            |

drawing no.  
**W12-09**  
sheet 5 of 9

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
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TEL. (305) 264-8100 FAX. (305) 262-6978  
STORE W12-09ECO



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.

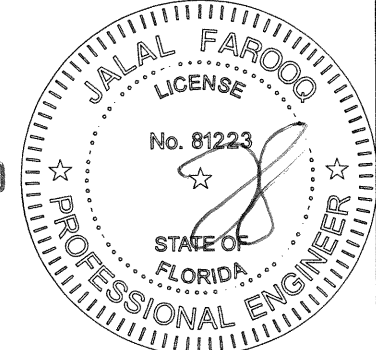
**TYPE 'C'**  
**#14 SMS OR SELF DRILLING SCREWS** (GRADE 2 CRS)  
INTO MIAMI-DADE COUNTY APPROVED MULLIONS  
OR  
INTO METAL STRUCTURES (HEAD/SILL/JAMBS)  
(3) THREADS MIN. PENETRATION BEYOND SUBSTRATE  
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)  
STEEL: 1/8" THK. MIN. ( $F_y = 36$  KSI MIN.)  
(STEEL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

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Expiration Date: **12/20/2022**  
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Miami-Dade Product Control

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**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           |
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|            | C  | 12.01.15 |    | REV. PER PER COMMENTS |
|            | D  | 08.02.17 |    | UPDATED TO 2017 FBC   |
|            | E  | 04.13.18 |    | NO CHANGE THIS SHEET  |
|            | F  | 11.05.20 |    | UPDATED TO 2020 FBC   |

date: 03-02-12

scale: 3/8" = 1"

dr. by: TARIQ

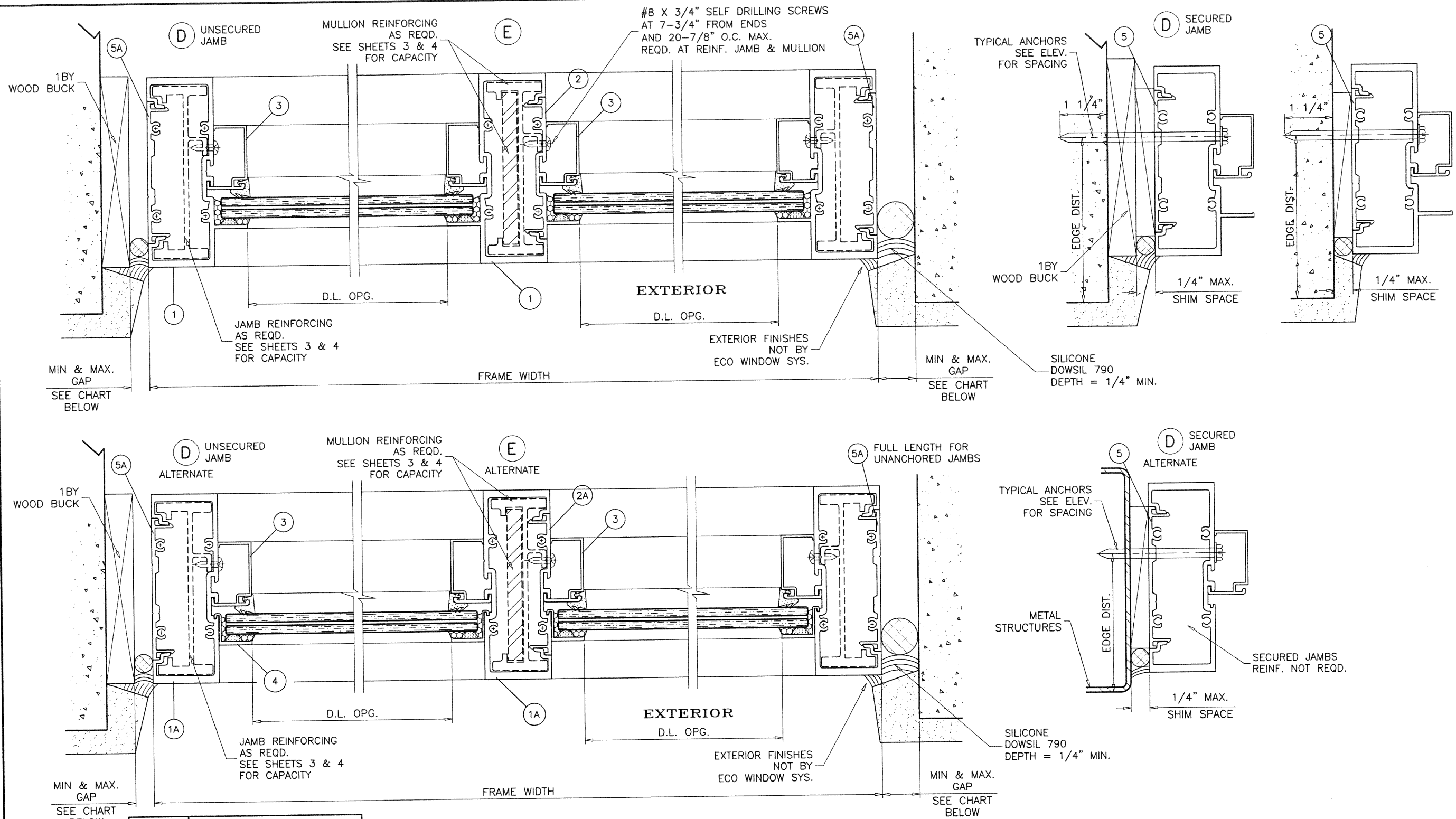
chk. by:

drawing no.

**W12-09**

sheet 6 of 9

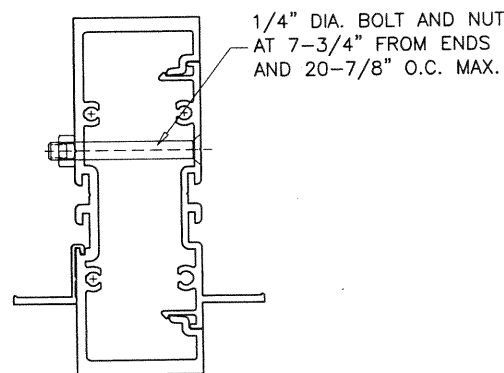




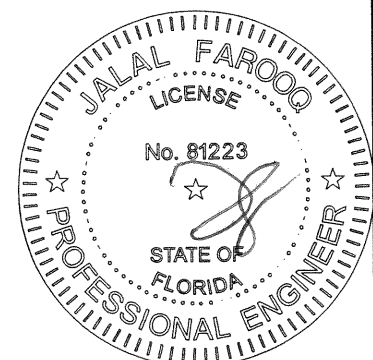
| MAX. FRAME HEIGHT UPTO | GAPS FOR UNANCHORED JAMBS |      |
|------------------------|---------------------------|------|
|                        | MIN.                      | MAX. |
| 120"                   | 1/4"                      | 1"   |

NOTE:  
MAX. MOVEMENT CONSIDERED=100% STRETCH.  
PLEASE REFER TO SEALANT MANUFACTURER'S DATA AND APPLICATION MANUAL FOR COMPATABILITY OF SEALANT TO SUBSTRATE & WINDOW WALL 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.



**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. **20-1119.16** NOV 10 2020  
Expiration Date: **12/20/2022**  
By: *Manuel Fern*  
Miami-Dade Product Control



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9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173 (C.A.N. 3538)  
TEL. (305) 264-8100 FAX. (305) 262-6978  
STORE W12-09ECO

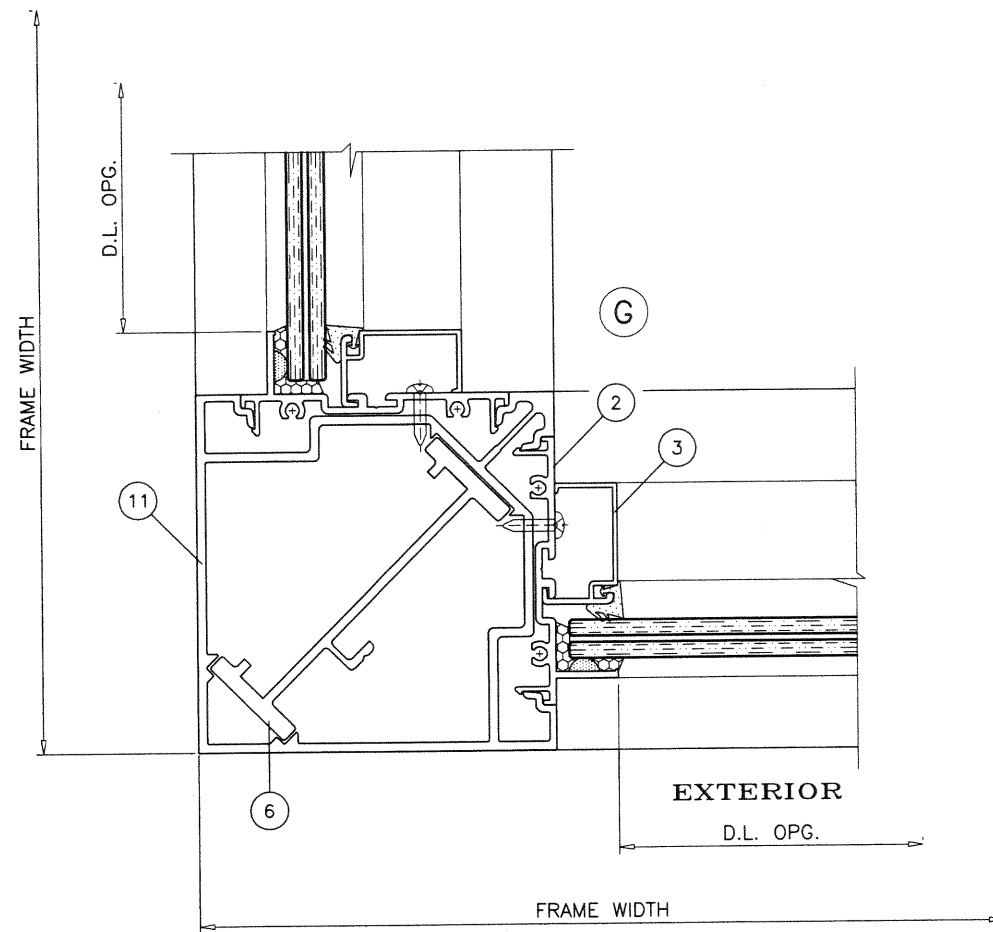
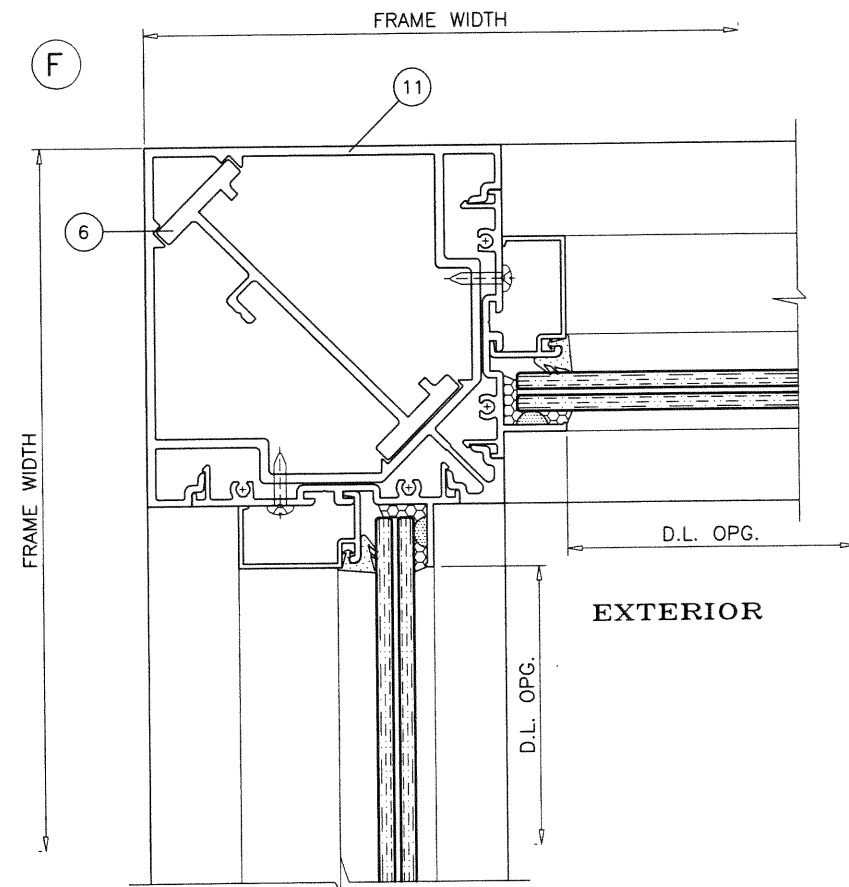
SERIES 400 ALUM WINDOW WALL SYSTEM (S.M.I.)

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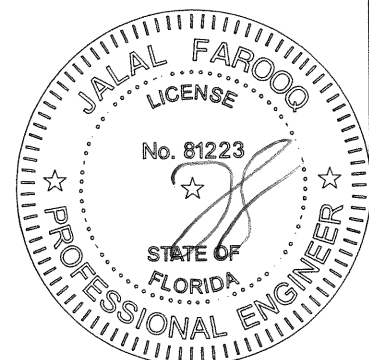
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| date:       | 03-02-12 | scale: | 3/8" = 1" | dr. by: | TARIQ | chk. by: |  |
| drawing no. |          |        |           | W12-09  |       |          |  |
| sheet       |          |        |           | 7 of 9  |       |          |  |





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Expiration Date: **12/20/2022**  
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Miami-Dade Product Control

NOV 10 2020



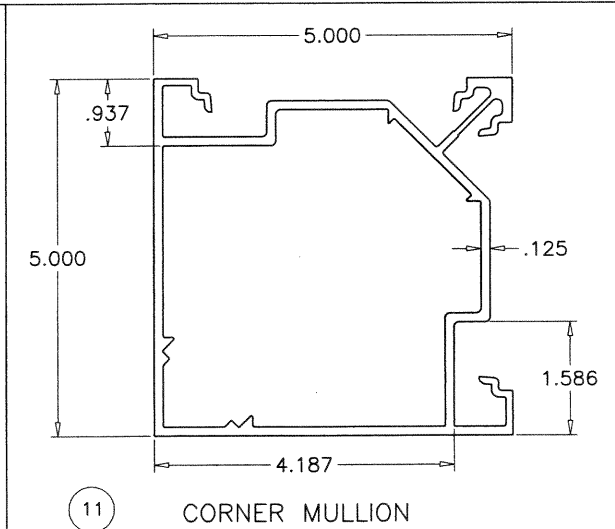
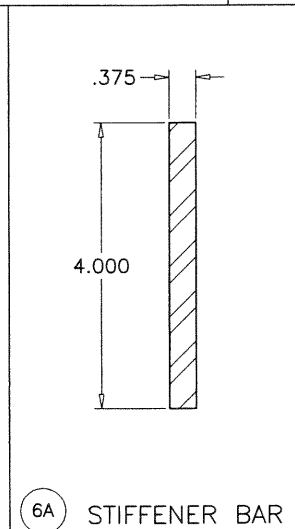
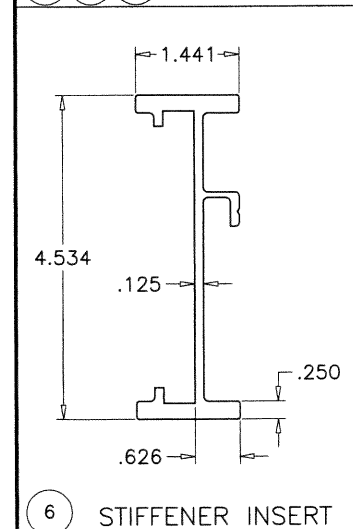
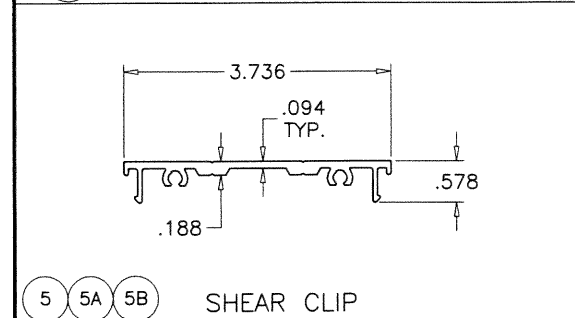
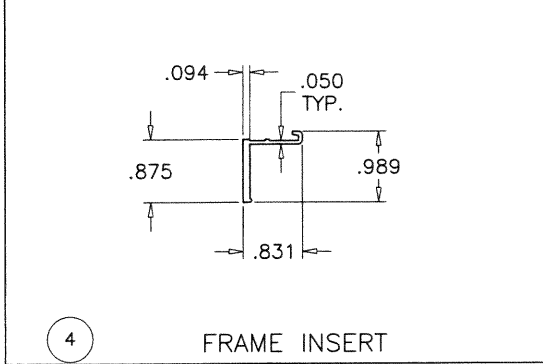
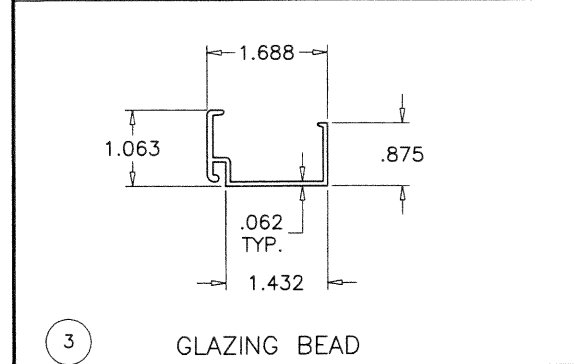
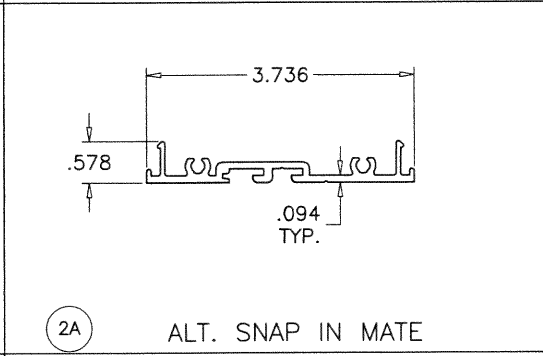
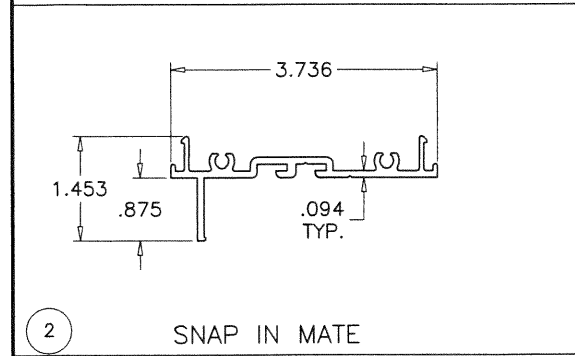
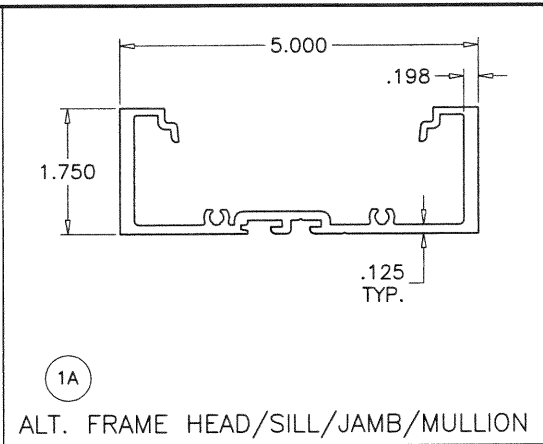
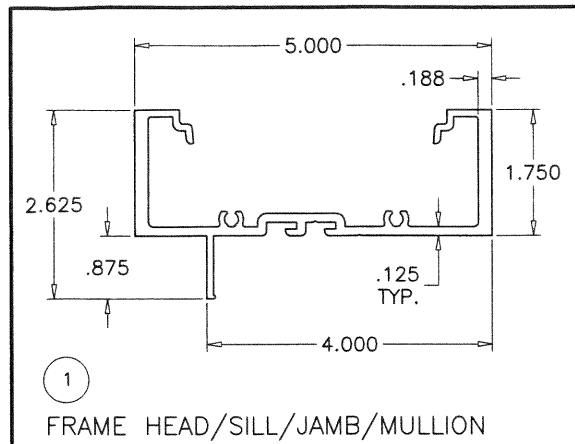
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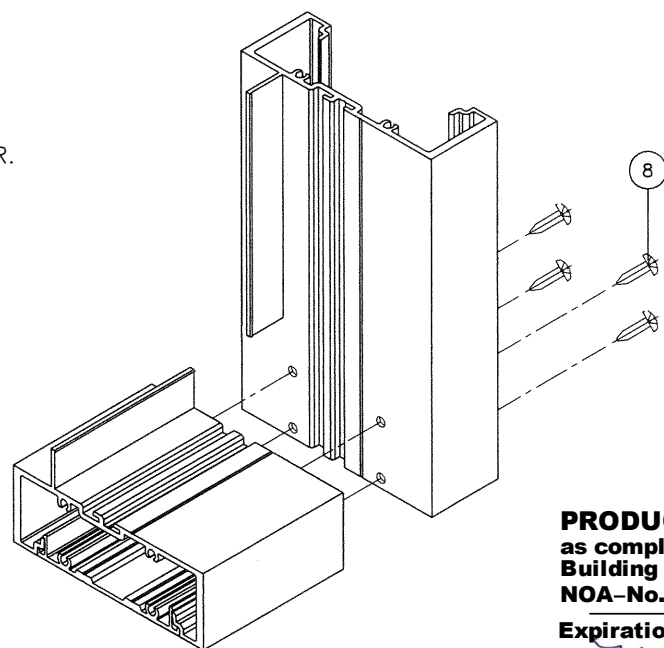
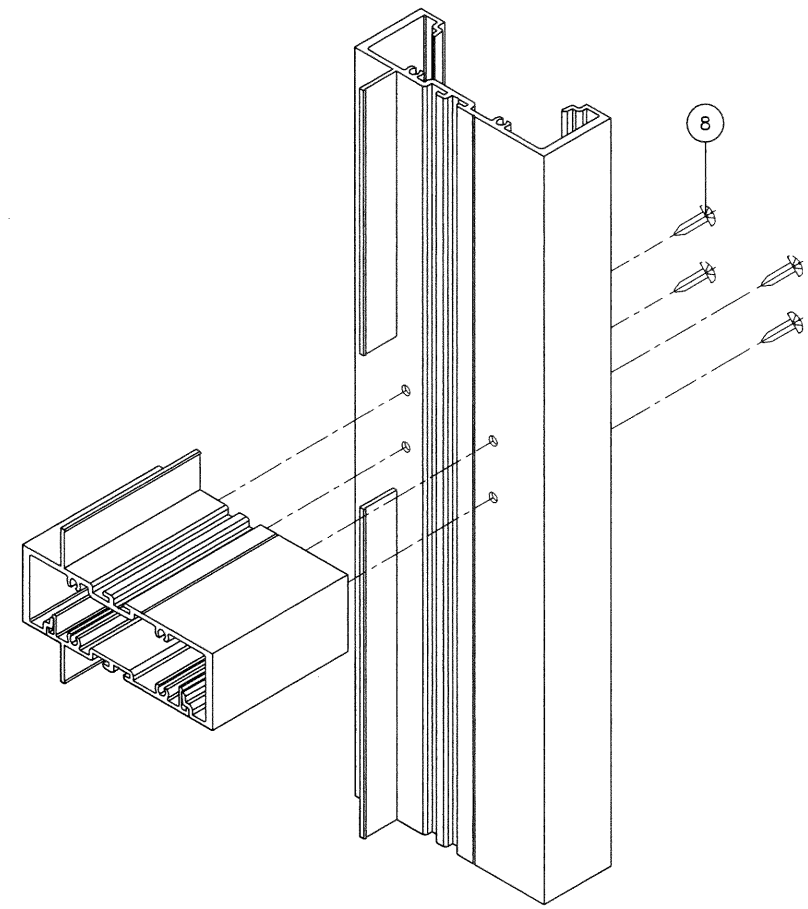
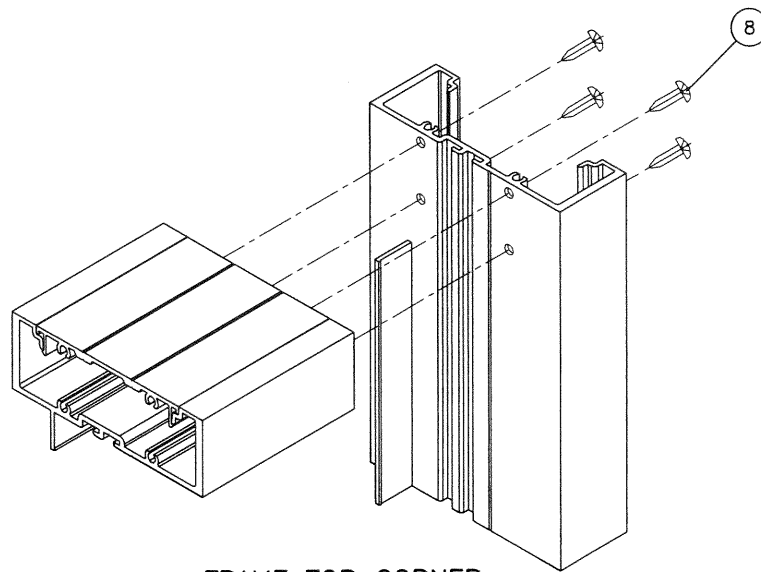
STORE W12-09ECO

| revisions:     |          | drawing no. |                      |
|----------------|----------|-------------|----------------------|
| no             | date     | by          | description          |
| E              | 04.13.18 | TARIQ       | CORNER MULLION ADDED |
| F              | 11.05.20 |             | UPDATED TO 2020 FBC  |
| date:          | 03-02-12 | scale:      | 3/8" = 1"            |
| dr. by:        | TARIQ    | chk. by:    |                      |
| sheet 7.1 of 9 |          | W12-09      |                      |





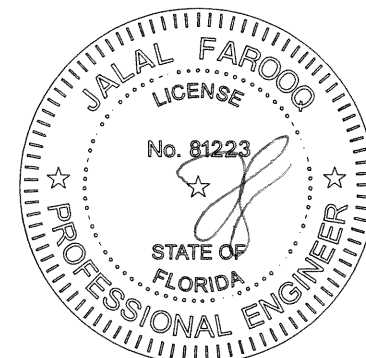
| ITEM NO. | PART NUMBER  | QUANTITY  | DESCRIPTION   | MATERIAL    | MANF./SUPPLIER/REMARKS |
|----------|--------------|-----------|---|-------------|------------------------|
| 1        | UW-401       | AS REQD.  | FRAME HEAD/SILL/JAMB/MULLION                          | 6063-T6     | -                      |
| 1A       | UW-407       | AS REQD.  | ALT. FRAME HEAD/SILL/JAMB/MULLION                     | 6063-T6     | -                      |
| 2        | UW-402       | AS REQD.  | SNAP-IN MATE  | 6063-T6     | -                      |
| 2A       | UW-402       | AS REQD.  | ALT. SNAP-IN MATE                                     | 6063-T6     | -                      |
| 3        | UW-404       | AS REQD.  | GLAZING BEAD  | 6063-T6     | -                      |
| 4        | UW-408       | AS REQD.  | FRAME INSERT  | 6063-T6     | -                      |
| 5        | UW-403       | AS REQD.  | SHEAR CLIP, 3-3/4" LONG AT JAMB ANCHORS               | 6063-T6     | -                      |
| 5A       | UW-403       | AS REQD.  | SHEAR CLIP, FULL LENGTH                               | 6063-T6     | -                      |
| 5B       | UW-403       | AS REQD.  | SHEAR CLIP, LENGTH VARIES TO COVER ANCHOR SPACINGS    | 6063-T6     | -                      |
| 6        | UW-408       | AS REQD.  | STIFFENER INSERT                                      | 6063-T6     | -                      |
| 6A       | -            | AS REQD.  | STIFFENER BAR   | GALV. STEEL | -                      |
| 7        | UW-406       | AS REQD.  | GLAZING GASKET  | NEOPRENE    | DUROMETER 55±5 SHORE A |
| 8        | #12 X 1-1/4" | 4/ CORNER | FRAME ASSEMBLY SCREWS                                 | -           | PH SMS                 |
| 9        | -            | 2/ LITE   | SETTING BLOCKS AT 1/4 POINTS (3/16" X 1/2" X 2" LONG) | EPDM        | DUROMETER 80±5 SHORE A |
| 10       | -            | AS REQD.  | GLASS SPACER  | SILICONE    | FRANK LOWE             |
| 11       | UW-411       | AS REQD.  | CORNER MULLION  | 6063-T6     | -                      |



#### SEALANTS:

ALL FRAME JOINTS AND SEAMS SEALED WITH SCHNEE-MOREHEAD SM5504 ACRYL-R SEAM SEALER.

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**af c**

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date: 03-02-12  
scale: 3/8" = 1"  
dr. by: TARIQ  
chk. by:

drawing no.  
**W12-09**  
sheet 9 of 9