



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

E.S. Windows, LLC
3550 NW 49th Street
Miami, FL 33142

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 "ES-8000T Thermally Broken" Aluminum Window Wall System – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W14-38**, titled "ES-8000T Alum. Window Wall System (L.M.I.)", sheets 1, 2, 3, 4, 5, 6, 7, 7.1, 8, 9, 10, 11, 11.1, 12 and 13 of 13, dated 10/01/14, with revision F dated 11/12/20, 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: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, **Barranquilla, Colombia**, 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.

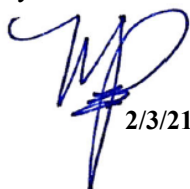
ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

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 and renews** NOA No. **19-0326.07** 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.**




2/3/21

NOA No. 20-1118.02
Expiration Date: August 25, 2026
Approval Date: February 11, 2021
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

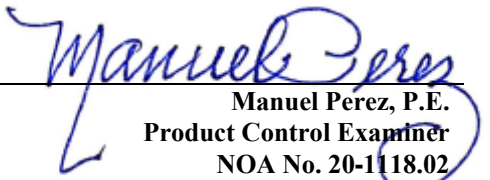
1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA No. 15-0826.26)
2. Drawing No. **W14-38**, titled "ES-8000T Alum. Window Wall System (L.M.I.)", sheets 1, 2, 3, 4, 5, 6, 7, 7.1, 8, 9, 10, 11, 11.1, 12 and 13 of 13, dated 10/01/14, with revision **E** dated 02/20/19, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 19-0326.07)

B. TESTS

1. 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) Large 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 (400 foot-pound impact)
along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-9605**, dated 08/16/17, signed and sealed by Idalmis Ortega, P.E.
(Submitted under NOA No. 18-0129.07)
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) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
7) Drop Load Test, per CPCS 16 CFR 1201 (Cat 11)
8) Safety Performance Test, (class A) per ANSI Z97.1
along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-7546**, dated 04/14/15, signed and sealed by Idalmis Ortega, P.E.
(Submitted under NOA No. 15-0826.26)


Manuel Perez, P.E.
Product Control Examiner
NOA No. 20-1118.02
Expiration Date: August 25, 2026
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 6th Edition (2017)**, dated 01/15/18, and supporting technical information for approved modification, dated 03/12/19, all prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 19-0326.07)
2. Glazing complies with **ASTM E1300-09**

D. QUALITY ASSURANCE

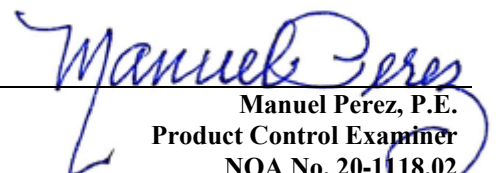
1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **17-0808.02** issued to **Kuraray America, Inc.** for their "**SentryGlas® (Clear and White) Glass Interlayers**" dated 12/28/17, expiring on 07/04/23.
2. Notice of Acceptance No. **17-1114.14** issued to **Kuraray America, Inc.** for their "**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**" dated 01/18/18, expiring on 07/08/19.
3. Bayer Material Science, LLC Part No. **Baydur TB 100-30 Thermal Break System** complying with ASTM D638 Tensile Strength of 5,700 psi, ASTM D 790 Flexural Modulus of 225 ksi, ASTM D 256 Notched Izod of 1.9 ft.-lb./in., ASTM D 648 Heat Distortion of 178°F @ 66 psi, ASTM D 2240 Hardness Shore D @ 5 sec. of ±78 Durometer, ASTM D 1622 Density of 72 pcf and ¼" thickness.
4. 0.375" (Length) by 0.26" (Height) by 0.0059" (Thickness) (9.5x6.6x0.15mm) Aluminum Low Profile Insulated-Glass spacer **Helima AH 956 N** (P/N.: USA K 001 000 000 R7) with Aluminum Alloy **AW-3000** (F_{tu}=17 ksi and F_{ty}=12ksi) by **Helmut Lingemann GmbH & Co., KG**.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 6th Edition (2017)**, dated March 12, 2019, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 19-0326.07)
2. Distributor Agreement between ES Windows-Energia Solar, S.A., Barranquilla, Columbia, S.A. and E.S. Windows, LLC, Miami, Florida, dated 09/12/13, signed by Ms. Adriana Montoya, Manager and Andres Chamorro, General Manager respectively on behalf of the companies.
(Submitted under NOA No. 15-0826.26)


Manuel Perez, P.E.
Product Control Examiner
NOA No. 20-1118.02
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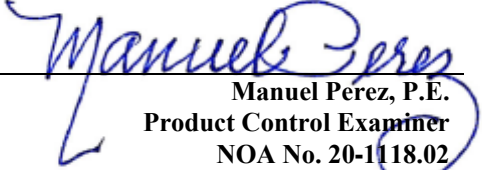
1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)

F. STATEMENTS (CONTINUED)

3. Laboratory compliance letters for Test Report No. **FTL-7546**, dated 04/14/15, issued by Fenestration Testing Laboratory, Inc., signed and sealed by Idalmis Ortega, P.E. *(Submitted under NOA No. 15-0826.26)*
4. Proposal issued by Product Control, dated 11/08/13, signed by Jaime D. Gascon, P.E. *(Submitted under NOA No. 15-0826.26)*
5. Proposal No. **17-0417R** issued by the Product Control Section, dated June 6, 2017 and revised on August 8, 2017, signed by Manuel Perez, P.E. *(Submitted under NOA No. 18-0129.07)*

G. OTHERS

1. Notice of Acceptance No. **18-0129.07**, issued to E.S. Windows, LLC for their Series "ES-8000T Thermally Broken" Aluminum Window Wall System - L.M.I., approved on 07/05/18 and expiring on 08/25/21.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 20-1118.02
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **W14-38**, titled “ES-8000T Alum. Window Wall System (L.M.I.)”, sheets 1, 2, 3, 4, 5, 6, 7, 7.1, 8, 9, 10, 11, 11.1, 12 and 13 of 13, dated 10/01/14, with revision **F** dated 11/12/20, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 6th Edition (2017)**, dated 01/15/18, supporting technical information for approved modification, dated 03/12/19, and further updated to complying with **FBC 7th Edition (2020)**, prepared by Al-Farooq Corporation, dated 11/16/20, 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

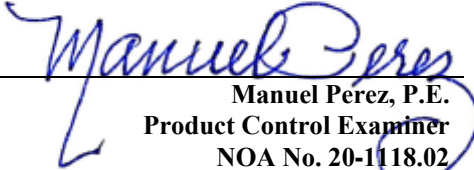
1. Notice of Acceptance No. **18-0725.11** issued to **Kuraray America, Inc.** for their “**Kuraray SentryGlas[®] Xtra[™] (SGX[™]) Clear Glass Interlayer**” dated 05/23/19, expiring on 05/23/24.
2. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America, Inc.** for their “**Trosifol[®] Ultraclear, Clear and Color PVB Glass Interlayers**” dated 05/09/19, expiring on 07/08/24.

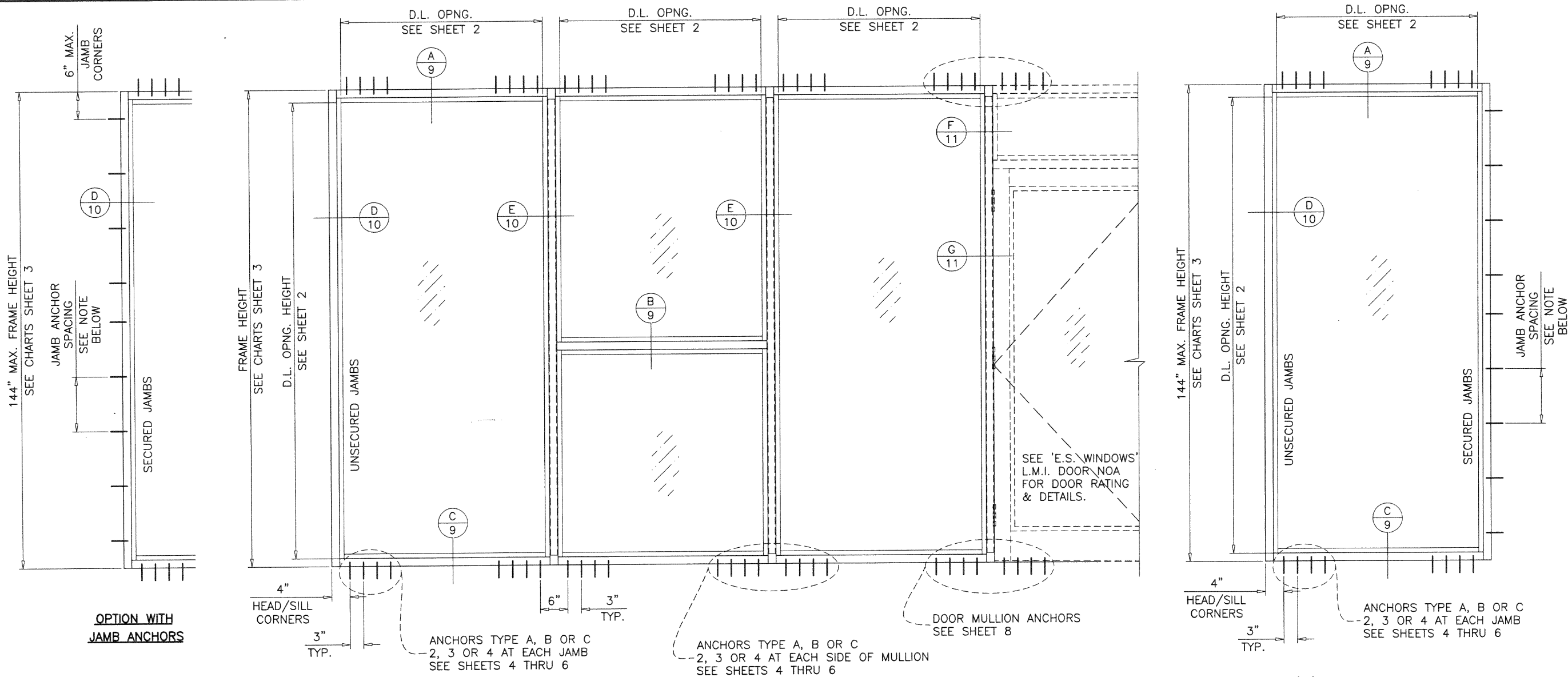
F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 6th Edition (2017)**, with **FBC 7th Edition (2020)**, and of no financial interest, dated November 16, 2020, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

G. OTHERS

1. Notice of Acceptance No. **19-0326.07**, issued to E.S. Windows, LLC for their Series “**ES-8000T Thermally Broken**” Aluminum Window Wall System – L.M.I., approved on 05/09/19 and expiring on 08/25/21.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 20-1118.02
Expiration Date: August 25, 2026
Approval Date: February 11, 2021



**SERIES ES-8000T
ALUMINUM WINDOW WALL SYSTEM**

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

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)'.

TYPICAL ELEVATIONS

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** SEE CHARTS ON SHEET 2 FOR DESIGN LOAD CAPACITY
OF DESIRED GLASS SIZE.
- STEP 3** CHECK MULLION CAPACITY FOR A GIVEN SPACING AND
HEIGHT USING CHARTS ON SHEETS 3 FOR WINDOW
WALL MULLION AND SHEETS 7 THRU 8 FOR
DOOR MULLION
THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** CHECK ANCHOR CAPACITY FOR WINDOW WALL SYSTEM
USING CHARTS ON SHEETS 4 THRU 6
FOR DOOR MULLION ANCHOR CAPACITY SEE CHART
ON SHEET 8.
THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 5** THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND
4 SHALL APPLY TO ENTIRE SYSTEM.

JAMB ANCHORS:

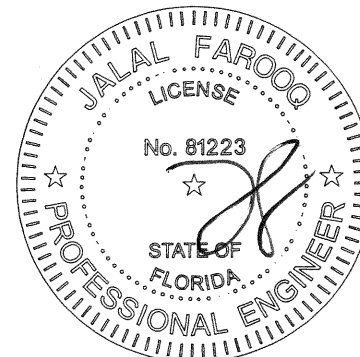
FOR 12" MAX. SPACING LIMIT MAX. LOADS
TO 80.0 PSF FOR ANCHOR TYPES 'A' & 'B'
TO 74.0 PSF FOR ANCHOR TYPE 'C'
FOR LOADS HIGHER THAN SHOWN ABOVE
LIMIT ANCHOR SPACING TO 6" MAX.

PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-1118.02**
Expiration Date: **08/25/2026**

By: *Manuel Perez*
Miami-Dade Product Control

NOV 18 2020



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\W14-38ES

ES-8000T ALUM WINDOW WALL SYSTEM (L.M.I.)

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	no	date	by	description
	C	08.22.17		GENERAL REVISION
	D	04.05.18		NO CHANGE THIS SHEET
	E	02.20.19		NO CHANGE THIS SHEET
	F	11.12.20		UPDATED TO 2020 FBC

date: 10-01-14

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

dr. by: TARIQ

chk. by:

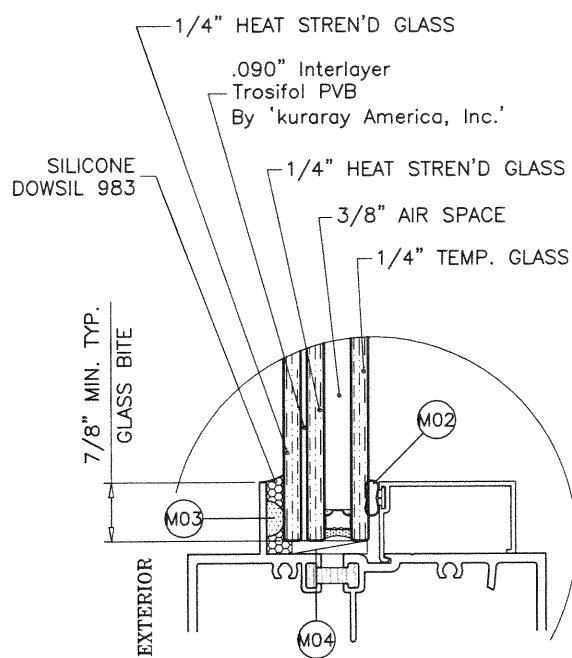
drawing no.
W14-38

sheet 1 of 13

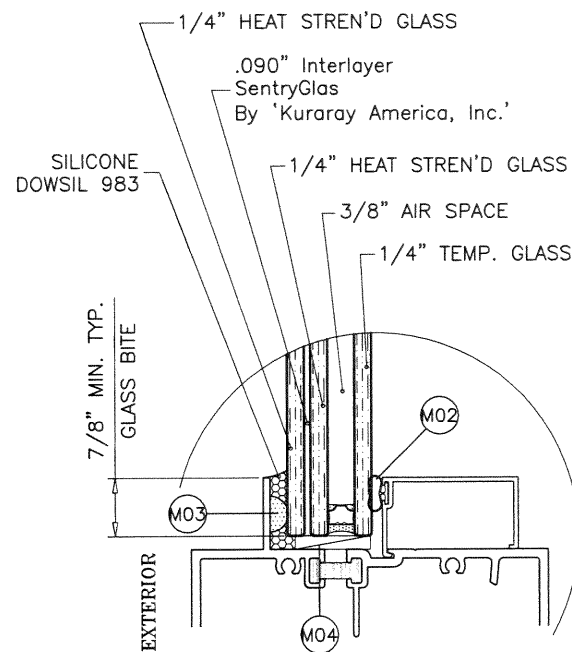
GLASS LOAD CAPACITY - PSF			
NOMINAL DIMS.		GLASS TYPES	
		'GL1'/'GL1R'	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(-)
26-1/4"	105-1/2"	60.0	70.0
32-1/4"		60.0	70.0
38-1/4"		60.0	70.0
44-1/4"		60.0	70.0
50-1/4"		60.0	70.0
56-1/4"		60.0	70.0
26-1/4"	108-1/2"	60.0	70.0
32-1/4"		60.0	70.0
38-1/4"		60.0	70.0
44-1/4"		60.0	70.0
50-1/4"		60.0	70.0
56-1/4"		60.0	70.0
26-1/4"	114-1/2"	60.0	70.0
32-1/4"		60.0	70.0
38-1/4"		60.0	70.0
44-1/4"		60.0	70.0
50-1/4"		60.0	70.0
56-1/4"		60.0	70.0
26-1/4"	120-1/2"	60.0	70.0
32-1/4"		60.0	70.0
38-1/4"		60.0	70.0
44-1/4"		60.0	70.0
50-1/4"		60.0	70.0
56-1/4"		60.0	70.0
26-1/4"	126-1/2"	60.0	70.0
32-1/4"		60.0	70.0
38-1/4"		60.0	70.0
44-1/4"		60.0	70.0
50-1/4"		60.0	70.0
56-1/4"		60.0	70.0
26-1/4"	132-1/2"	60.0	70.0
32-1/4"		60.0	70.0
38-1/4"		60.0	70.0
44-1/4"		60.0	70.0
50-1/4"		60.0	70.0
56-1/4"		60.0	70.0
26-1/4"	138-1/2"	60.0	70.0
32-1/4"		60.0	70.0
38-1/4"		60.0	70.0
44-1/4"		60.0	70.0
50-1/4"		60.0	70.0
56-1/4"		60.0	70.0

GLASS LOAD CAPACITY - PSF			
NOMINAL DIMS.		GLASS TYPES	
		'GL2'	'GL2R'
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(-)
26-1/4"	84-1/2"	90.0	120.0
32-1/4"		90.0	120.0
38-1/4"		90.0	120.0
44-1/4"		90.0	120.0
50-1/4"		90.0	120.0
56-1/4"		90.0	120.0
26-1/4"	90-1/2"	90.0	120.0
32-1/4"		90.0	120.0
38-1/4"		90.0	120.0
44-1/4"		90.0	120.0
50-1/4"		90.0	120.0
56-1/4"		90.0	120.0
26-1/4"	93-1/2"	90.0	120.0
32-1/4"		90.0	120.0
38-1/4"		90.0	120.0
44-1/4"		90.0	120.0
50-1/4"		90.0	120.0
56-1/4"		90.0	120.0
26-1/4"	96-1/2"	90.0	120.0
32-1/4"		90.0	120.0
38-1/4"		90.0	120.0
44-1/4"		90.0	120.0
50-1/4"		90.0	120.0
56-1/4"		90.0	120.0
26-1/4"	102-1/2"	90.0	120.0
32-1/4"		90.0	120.0
38-1/4"		90.0	120.0
44-1/4"		90.0	120.0
50-1/4"		90.0	120.0
56-1/4"		90.0	120.0
26-1/4"	105-1/2"	90.0	120.0
32-1/4"		90.0	120.0
38-1/4"		90.0	120.0
44-1/4"		90.0	120.0
50-1/4"		90.0	120.0
56-1/4"		90.0	120.0
26-1/4"	108-1/2"	90.0	120.0
32-1/4"		90.0	120.0
38-1/4"		90.0	120.0
44-1/4"		90.0	120.0
50-1/4"		90.0	120.0
56-1/4"		90.0	120.0
26-1/4"	114-1/2"	90.0	120.0
32-1/4"		90.0	120.0
38-1/4"		90.0	120.0
44-1/4"		90.0	120.0
50-1/4"		90.0	120.0
56-1/4"		90.0	120.0

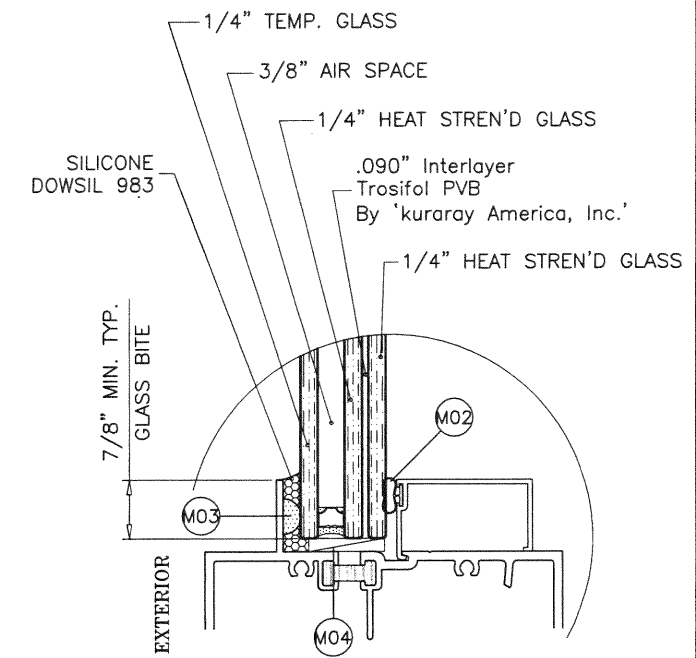
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



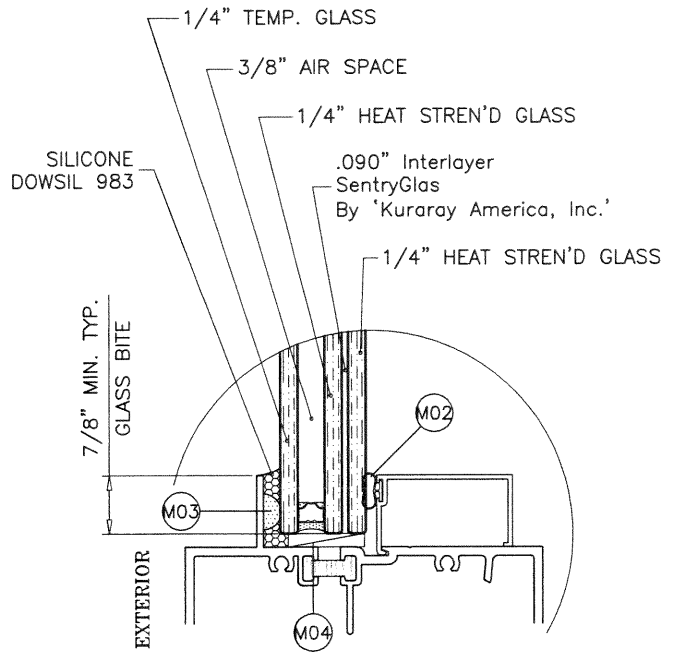
GLASS TYPE 'GL1'
1-3/16" OVERALL INSUL. LAM. GLASS



GLASS TYPE 'GL2'
1-3/16" OVERALL INSUL. LAM. GLASS



GLASS TYPE 'GL1R'
1-3/16" OVERALL INSUL. LAM. GLASS



GLASS TYPE 'GL2R'
1-3/16" OVERALL INSUL. LAM. GLASS

3/8" AIR SPACE CONSISTING OF:

SPACER:

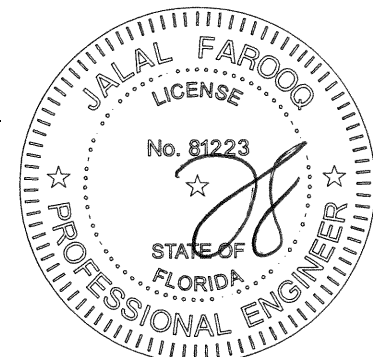
'HELIMA' LOW PROFILE ALUMINUM SPACER
BY 'LINGERMANN GMBH'
AROUND THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:

SILICONE
DOWSIL 791
GE 2000

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-1118.02**
Expiration Date: **08/25/2026**

By: *Manuel Perez*
Miami-Dade Product Control

NOV 18 2020



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

GLASS

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

ES-8000T ALUM WINDOW WALL SYSTEM (L.M.I.)

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MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:

no	date	by	description
C	08.22.17		GENERAL REVISION
D	04.05.18		REV. PER RER COMMENTS
E	02.20.19		NO CHANGE THIS SHEET
F	11.12.20		UPDATED TO 2020 FBC

date: 10-01-14

scale: -

dr. by: TARIQ

chk. by:

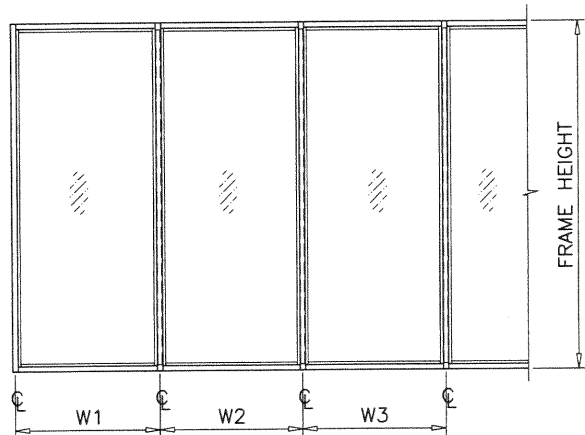
drawing no.
W14-38

sheet 2 of 13

DESIGN LOAD CAPACITY - PSF JAMB/MULLION WITHOUT INTERMEDIATE HORIZONTALS			
NOMINAL DIMS.		JAMB MULLION	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)
30"	96"	90.0	120.0
36"		90.0	120.0
42"		90.0	120.0
48"		90.0	120.0
54"		90.0	120.0
60"		90.0	120.0
30"	98-1/2"	90.0	120.0
36"		90.0	120.0
42"		90.0	120.0
48"		90.0	120.0
54"		90.0	120.0
60"		60.0	70.0
30"	102"	90.0	120.0
36"		90.0	120.0
42"		90.0	120.0
48"		90.0	120.0
54"		90.0	120.0
60"		60.0	70.0
30"	108"	90.0	120.0
36"		90.0	120.0
42"		90.0	120.0
48"		90.0	120.0
54"		60.0	70.0
60"		60.0	70.0
30"	110-1/2"	90.0	120.0
36"		90.0	120.0
42"		90.0	120.0
48"		90.0	116.1
54"		60.0	70.0
60"		60.0	70.0
30"	114"	90.0	120.0
36"		90.0	120.0
42"		90.0	118.1
48"		90.0	105.2
54"		60.0	70.0
60"		60.0	70.0
30"	120"	90.0	120.0
36"		90.0	116.0
42"		90.0	100.7
48"		90.0	89.5
54"		60.0	70.0
57"		60.0	70.0
30"	126"	60.0	70.0
36"		60.0	70.0
42"		60.0	70.0
48"		60.0	70.0
54"		60.0	69.4
57"		60.0	70.0
30"	132"	60.0	70.0
36"		60.0	70.0
42"		60.0	70.0
48"		60.0	66.5
54"		60.0	62.0
57"		60.0	62.0

DESIGN LOAD CAPACITY - PSF JAMB/MULLION WITHOUT INTERMEDIATE HORIZONTALS			
NOMINAL DIMS.		JAMB MULLION	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)
30"	138"	60.0	70.0
36"		60.0	70.0
42"		60.0	65.4
48"		57.9	57.9
50"		55.8	55.8
52"		53.7	53.7
30"	144"	60.0	70.0
36"		60.0	66.4
42"		57.4	57.4
48"		50.8	50.8
50"		48.7	48.7
52"		46.6	46.6

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

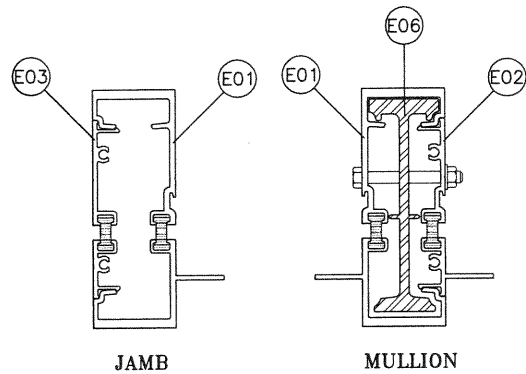


$$\text{WIDTH (W)} = W1$$

AT FRAME JAMB

$$\text{WIDTH (W)} = \frac{W2 + W3}{2}$$

AT FRAME MULLION

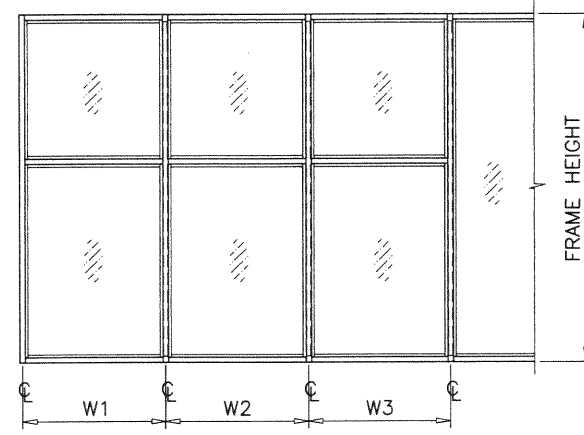


Ix IN ⁴	Sx IN ³
6.5995	2.5891

Ix IN ⁴	Sx IN ³
11.2393	4.3497

DESIGN LOAD CAPACITY - PSF JAMB/MULLION WITH INTERMEDIATE HORIZONTALS			
NOMINAL DIMS.		JAMB MULLION	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)
30"	96"	90.0	120.0
36"		90.0	120.0
42"		90.0	120.0
48"		90.0	120.0
30"	98-1/2"	90.0	120.0
36"		90.0	120.0
42"		90.0	120.0
48"		90.0	120.0
30"	102"	90.0	120.0
36"		90.0	120.0
42"		90.0	120.0
48"		90.0	120.0
30"	108"	90.0	120.0
36"		90.0	120.0
42"		90.0	120.0
48"		90.0	115.3
30"	110-1/2"	90.0	120.0
36"		90.0	120.0
42"		90.0	120.0
48"		90.0	107.7
30"	114"	90.0	120.0
36"		90.0	120.0
42"		90.0	112.1
48"		90.0	98.1
30"	120"	90.0	120.0
36"		90.0	112.1
42"		90.0	96.1
48"		84.1	84.1
30"	126"	60.0	70.0
36"		60.0	70.0
42"		60.0	70.0
48"		60.0	70.0
30"	132"	60.0	70.0
36"		60.0	70.0
42"		60.0	70.0
48"		60.0	63.2
30"	138"	60.0	70.0
36"		60.0	70.0
42"		60.0	63.2
48"		55.3	55.3
30"	144"	60.0	70.0
36"		60.0	64.9
42"		55.6	55.6
48"		48.7	48.7

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



$$\text{WIDTH (W)} = W1$$

AT FRAME JAMB

$$\text{WIDTH (W)} = \frac{W2 + W3}{2}$$

AT FRAME MULLION

MULLIONS

PRODUCT REVISED
as complying with the Florida
Building Code

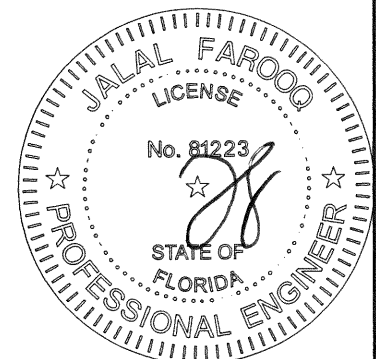
NOA-No. **20-1118.02**

Expiration Date: **08/25/2026**

By: *Manuel Perez*

Miami-Dade Product Control

NOV 18 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
COMP-ANL\W14-38ES

ES-800T ALUM WINDOW WALL SYSTEM (L.M.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	no	date	description
	C	08.22.17	GENERAL REVISION
	D	04.05.18	NO CHANGE THIS SHEET
	E	02.20.19	JAMB/MULLION REV.
	F	11.12.20	UPDATED TO 2020 FBC

date: 10-01-14	scale: -	dr. by: TARIQ	chk. by:
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drawing no.

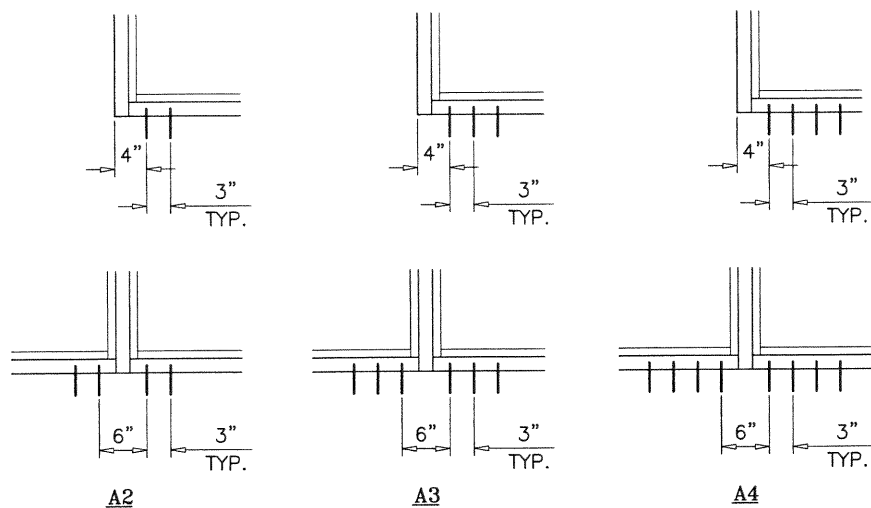
W14-38

sheet 3 of 13

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)									
NOMINAL DIMS. WIDTH (W) FRAME HEIGHT		ANCHORS TYPE 'A'							
		1/4" MAX. SHIM			3/8" MAX. SHIM			1/2" SHIM	
		A2	A3	A4	A2	A3	A4	A3	A4
30"	78"	120.0	120.0	120.0	90.3	120.0	120.0	105.3	120.0
36"		107.1	120.0	120.0	75.2	112.9	120.0	87.8	117.0
42"		91.8	120.0	120.0	64.5	96.7	120.0	75.2	100.3
48"		80.3	120.0	120.0	56.4	84.6	112.9	65.8	87.8
54"		71.4	107.1	120.0	50.2	75.2	100.3	58.5	78.0
60"		64.2	96.4	120.0	45.1	67.7	90.3	52.7	70.2
30"	84"	119.3	120.0	120.0	83.8	120.0	120.0	97.8	120.0
36"		99.4	120.0	120.0	69.9	104.8	120.0	81.5	108.6
42"		85.2	120.0	120.0	59.9	89.8	119.8	69.8	93.1
48"		74.6	111.9	120.0	52.4	78.6	104.8	61.1	81.5
54"		66.3	99.4	120.0	46.6	69.9	93.2	54.3	72.4
60"		59.7	89.5	119.3	41.9	62.9	83.8	48.9	65.2
30"	90"	111.4	120.0	120.0	78.3	117.4	120.0	91.3	120.0
36"		92.8	120.0	120.0	65.2	97.8	120.0	76.1	101.4
42"		79.5	119.3	120.0	55.9	83.8	111.8	65.2	86.9
48"		69.6	104.4	120.0	48.9	73.4	97.8	57.0	76.1
54"		61.9	92.8	120.0	43.5	65.2	86.9	50.7	67.6
60"		55.7	83.5	111.4	39.1	58.7	78.3	45.6	60.8
30"	96"	104.4	120.0	120.0	73.4	110.0	120.0	85.6	114.1
36"		87.0	120.0	120.0	61.1	91.7	120.0	71.3	95.1
42"		74.6	111.9	120.0	52.4	78.6	104.8	61.1	81.5
48"		65.3	97.9	120.0	45.9	68.8	91.7	53.5	71.3
54"		58.0	87.0	116.0	40.8	61.1	81.5	47.5	63.4
60"		52.2	78.3	104.4	36.7	55.0	73.4	42.8	57.0
30"	102"	98.3	120.0	120.0	69.0	103.6	120.0	80.5	107.4
36"		81.9	120.0	120.0	57.5	86.3	115.1	67.1	89.5
42"		70.2	105.3	120.0	49.3	74.0	98.6	57.5	76.7
48"		61.4	92.1	120.0	43.2	64.7	86.3	50.3	67.1
54"		54.6	81.9	109.2	38.4	57.5	76.7	44.7	59.6
60"		49.1	70.0	70.0	34.5	51.8	69.0	40.3	53.7
30"	108"	92.8	120.0	120.0	65.2	97.8	120.0	76.1	101.4
36"		77.3	116.0	120.0	54.3	81.5	108.7	63.4	84.5
42"		66.3	99.4	120.0	46.6	69.9	93.2	54.3	72.4
48"		58.0	87.0	116.0	40.8	61.1	81.5	47.5	63.4
54"		51.6	77.3	103.1	36.2	54.3	72.5	42.3	56.3
60"		46.4	69.6	70.0	32.6	48.9	65.2	38.0	50.7
30"	114"	87.9	120.0	120.0	61.8	92.7	120.0	72.1	96.1
36"		73.3	109.9	120.0	51.5	77.2	103.0	60.0	80.1
42"		62.8	94.2	120.0	44.1	66.2	88.3	51.5	68.6
48"		54.9	82.4	109.9	38.6	57.9	77.2	45.0	60.0
54"		48.8	70.0	70.0	34.3	51.5	68.6	40.0	53.4
60"		44.0	65.9	70.0	30.9	46.3	61.8	36.0	48.0
30"	120"	83.5	120.0	120.0	58.7	88.0	117.4	68.4	91.3
36"		69.6	104.4	120.0	48.9	73.4	97.8	57.0	76.1
42"		59.7	89.5	119.3	41.9	62.9	83.8	48.9	65.2
48"		52.2	78.3	104.4	36.7	55.0	73.4	42.8	57.0
54"		46.4	69.6	70.0	32.6	48.9	65.2	38.0	50.7
60"		41.9	62.9	83.8	28.1	41.9	58.7	33.5	45.1
30"	126"	70.0	70.0	70.0	55.9	70.0	70.0	65.2	70.0
36"		66.3	70.0	70.0	46.6	69.9	70.0	54.3	70.0
42"		56.8	70.0	70.0	39.9	59.9	70.0	46.6	62.1
48"		49.7	70.0	70.0	34.9	52.4	69.9	40.7	54.3
54"		44.2	66.3	70.0	31.1	46.6	62.1	36.2	48.3
60"		39.1	41.9	58.7	26.6	39.1	51.8	28.1	39.1

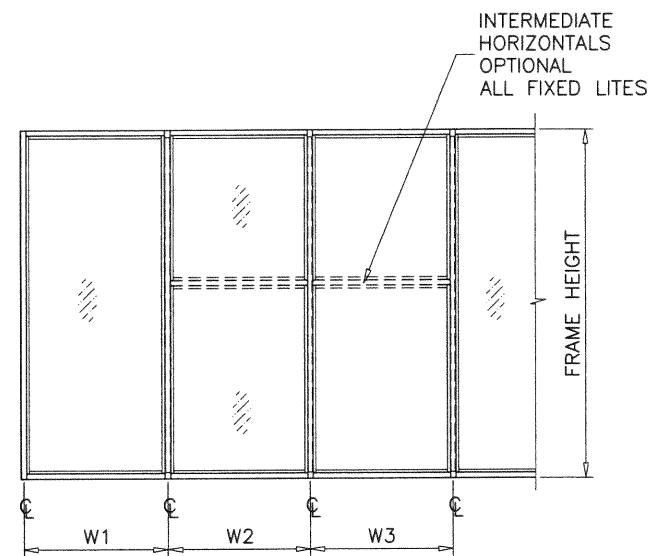
ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)									
NOMINAL DIMS. WIDTH (W) FRAME HEIGHT		ANCHORS TYPE 'A'							
		1/4" MAX. SHIM			3/8" MAX. SHIM			1/2" SHIM	
		A2	A3	A4	A2	A3	A4	A3	A4
30"	132"	70.0	70.0	70.0	53.4	70.0	70.0	62.2	70.0
36"		63.3	70.0	70.0	44.5	66.7	70.0	51.9	69.1
42"		54.2	70.0	70.0	38.1	57.2	70.0	44.4	59.3
48"		47.5	70.0	70.0	33.3	50.0	66.7	38.9	51.9
30"	138"	70.0	70.0	70.0	51.0	70.0	70.0	59.5	70.0
36"		60.5	70.0	70.0	42.5	63.8	70.0	49.6	66.1
42"		51.9	70.0	70.0	36.5	54.7	70.0	42.5	56.7
48"		45.4	68.1	70.0	31.9	47.8	63.8	37.2	49.6
30"	144"	69.6	70.0	70.0	48.9	70.0	70.0	57.0	70.0
36"		58.0	70.0	70.0	40.8	61.1	70.0	47.5	63.4
42"		49.7	70.0	70.0	34.9	52.4	69.9	40.7	54.3
48"		43.5	65.3	70.0	30.6	45.9	61.1	35.7	47.5

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



ANCHORS TYPES: SEE SHEET 9 FOR DESCRIPTION

- A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION

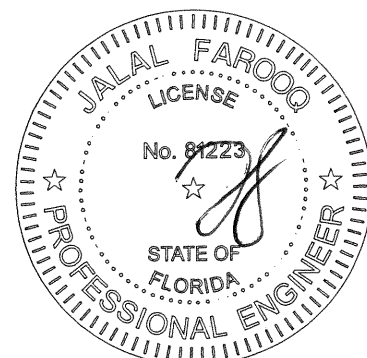


WIDTH (W) = W1
AT FRAME JAMB

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

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-1118.02**
Expiration Date: **08/25/2026**
By: *Manuel Perez*
Miami-Dade Product Control

NOV 18 2020



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
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ES-8000T ALUM WINDOW WALL SYSTEM (L.M.I.)

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	no	date	description	by
	C	08.22.17	GENERAL REVISION	
	D	04.05.18	NO CHANGE THIS SHEET	
	E	02.20.19	NO CHANGE THIS SHEET	
	F	11.12.20	UPDATED TO 2020 FBC	

date: 10-01-14

scale: -

dr. by: TARIQ

chk. by:

drawing no. **W14-38**

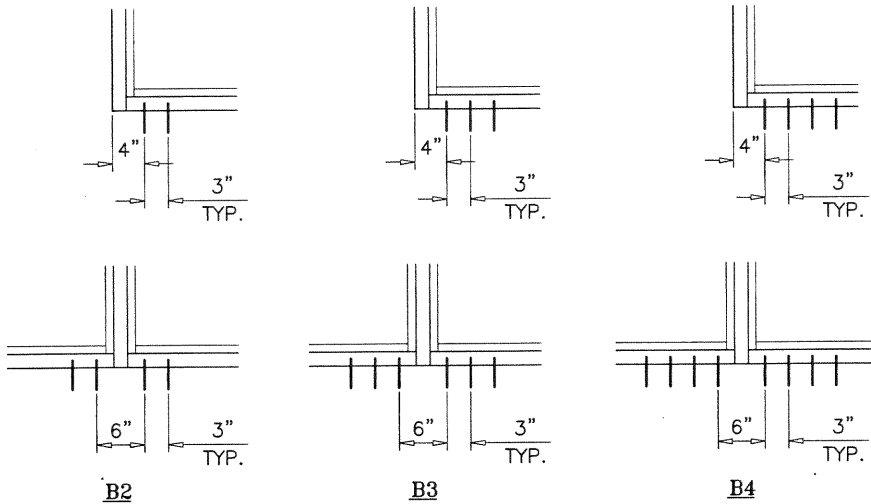
sheet **4** of **13**

ANCHORS

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)										
NOMINAL DIMS. WIDTH (W) FRAME HEIGHT		ANCHORS TYPE 'B'								
		1/4" MAX. SHIM			3/8" MAX. SHIM			1/2" SHIM		
		B2	B3	B4	B2	B3	B4	B2	B3	B4
30"	78"	120.0	120.0	120.0	120.0	120.0	120.0	101.4	120.0	120.0
36"		120.0	120.0	120.0	107.1	120.0	120.0	84.5	120.0	120.0
42"		119.9	120.0	120.0	91.8	120.0	120.0	72.4	108.7	120.0
48"		104.9	120.0	120.0	80.3	120.0	120.0	63.4	95.1	120.0
54"		93.3	120.0	120.0	71.4	107.1	120.0	56.3	84.5	112.7
60"		83.9	120.0	120.0	64.2	96.4	120.0	50.7	76.1	101.4
30"	84"	120.0	120.0	120.0	119.3	120.0	120.0	94.2	120.0	120.0
36"		120.0	120.0	120.0	99.4	120.0	120.0	78.5	117.7	120.0
42"		111.3	120.0	120.0	85.2	120.0	120.0	67.3	100.9	120.0
48"		97.4	120.0	120.0	74.6	111.9	120.0	58.9	88.3	117.7
54"		86.6	120.0	120.0	66.3	99.4	120.0	52.3	78.5	104.6
60"		77.9	116.9	120.0	59.7	89.5	119.3	47.1	70.6	94.2
30"	90"	120.0	120.0	120.0	111.4	120.0	120.0	87.9	120.0	120.0
36"		120.0	120.0	120.0	92.8	120.0	120.0	73.2	109.9	120.0
42"		103.9	120.0	120.0	79.5	119.3	120.0	62.8	94.2	120.0
48"		90.9	120.0	120.0	69.6	104.4	120.0	54.9	82.4	109.9
54"		80.8	120.0	120.0	61.9	92.8	120.0	48.8	73.2	97.7
60"		72.7	109.1	120.0	55.7	83.5	111.4	43.9	65.9	87.9
30"	96"	120.0	120.0	120.0	104.4	120.0	120.0	82.4	120.0	120.0
36"		113.7	120.0	120.0	87.0	120.0	120.0	68.7	103.0	120.0
42"		97.4	120.0	120.0	74.6	111.9	120.0	58.9	88.3	117.7
48"		85.3	120.0	120.0	65.3	97.9	120.0	51.5	77.3	103.0
54"		75.8	113.7	120.0	58.0	87.0	116.0	45.8	68.7	91.6
60"		68.2	102.3	120.0	52.2	78.3	104.4	41.2	61.8	82.4
30"	102"	120.0	120.0	120.0	98.3	120.0	120.0	77.6	116.3	120.0
36"		107.0	120.0	120.0	81.9	120.0	120.0	64.6	96.9	120.0
42"		91.7	120.0	120.0	70.2	105.3	120.0	55.4	83.1	110.8
48"		80.2	120.0	120.0	61.4	92.1	120.0	48.5	72.7	96.9
54"		71.3	107.0	120.0	54.6	81.9	109.2	43.1	64.6	86.2
60"		64.2	70.0	70.0	49.1	70.0	70.0	38.8	58.2	70.0
30"	108"	120.0	120.0	120.0	92.8	120.0	120.0	73.2	109.9	120.0
36"		101.0	120.0	120.0	77.3	116.0	120.0	61.0	91.6	120.0
42"		86.6	120.0	120.0	66.3	99.4	120.0	52.3	78.5	104.6
48"		75.8	113.7	120.0	58.0	87.0	116.0	45.8	68.7	91.6
54"		67.4	101.0	120.0	51.6	77.3	103.1	40.7	61.0	81.4
60"		60.6	70.0	70.0	46.4	69.6	70.0	36.6	54.9	70.0
30"	114"	114.9	120.0	120.0	87.9	120.0	120.0	69.4	104.1	120.0
36"		95.7	120.0	120.0	73.3	109.9	120.0	57.8	86.7	115.6
42"		82.0	120.0	120.0	62.8	94.2	120.0	49.6	74.3	99.1
48"		71.8	107.7	120.0	54.9	82.4	109.9	43.4	65.1	86.7
54"		63.8	70.0	70.0	48.8	70.0	70.0	38.5	57.8	70.0
60"		57.4	70.0	70.0	44.0	65.9	70.0	34.7	52.0	69.4
30"	120"	109.1	120.0	120.0	83.5	120.0	120.0	65.9	98.9	120.0
36"		90.9	120.0	120.0	69.6	104.4	120.0	54.9	82.4	109.9
42"		77.9	116.9	120.0	59.7	89.5	119.3	47.1	70.6	94.2
48"		68.2	102.3	120.0	52.2	78.3	104.4	41.2	61.8	82.4
54"		60.6	70.0	70.0	46.4	69.6	70.0	36.6	54.9	70.0
60"		57.4	70.0	70.0	44.0	65.9	70.0	34.7	52.0	69.4
30"	126"	70.0	70.0	70.0	70.0	70.0	70.0	62.8	70.0	70.0
36"		70.0	70.0	70.0	66.3	70.0	70.0	52.3	70.0	70.0
42"		70.0	70.0	70.0	56.8	70.0	70.0	44.8	67.3	70.0
48"		65.0	70.0	70.0	49.7	70.0	70.0	39.2	58.9	70.0
54"		57.7	70.0	70.0	44.2	66.3	70.0	34.9	52.3	69.8
60"		57.7	70.0	70.0	44.2	66.3	70.0	34.9	52.3	69.8

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)										
NOMINAL DIMS. WIDTH (W) FRAME HEIGHT		ANCHORS TYPE 'B'								
		1/4" MAX. SHIM			3/8" MAX. SHIM			1/2" SHIM		
		B2	B3	B4	B2	B3	B4	B2	B3	B4
30"	132"	70.0	70.0	70.0	70.0	70.0	70.0	59.9	70.0	70.0
36"		70.0	70.0	70.0	63.3	70.0	70.0	49.9	70.0	70.0
42"		70.0	70.0	70.0	54.2	70.0	70.0	42.8	64.2	70.0
48"		62.0	70.0	70.0	47.5	70.0	70.0	37.5	56.2	70.0
30"	138"	70.0	70.0	70.0	70.0	70.0	70.0	57.3	70.0	70.0
36"		70.0	70.0	70.0	60.5	70.0	70.0	47.8	70.0	70.0
42"		67.8	70.0	70.0	51.9	70.0	70.0	40.9	61.4	70.0
48"		59.3	70.0	70.0	45.4	68.1	70.0	35.8	53.7	70.0
30"	144"	70.0	70.0	70.0	69.6	70.0	70.0	54.9	70.0	70.0
36"		70.0	70.0	70.0	58.0	70.0	70.0	45.8	68.7	70.0
42"		65.0	70.0	70.0	49.7	70.0	70.0	39.2	58.9	70.0
48"		56.8	70.0	70.0	43.5	65.3	70.0	34.3	51.5	68.7

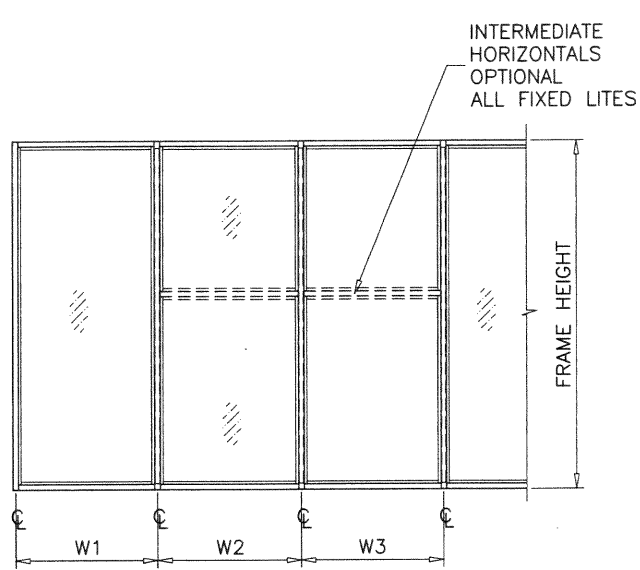
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



ANCHORS TYPES: SEE SHEET 9 FOR DESCRIPTION

B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 B4 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION

ANCHORS



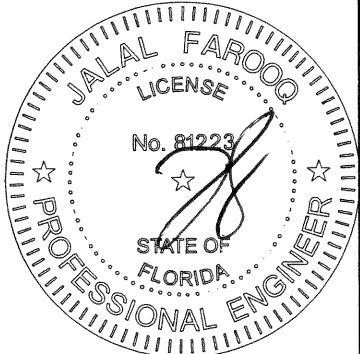
WIDTH (W) = W1
 AT FRAME JAMB

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

PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. **20-1118.02**
 Expiration Date: **08/25/2026**

By: *Manuel Perez*
 Miami-Dade Product Control

NOV 18 2020



AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 TEL. (305) 264-8100 FAX. (305) 262-6978
 (C.A.N. 3538)

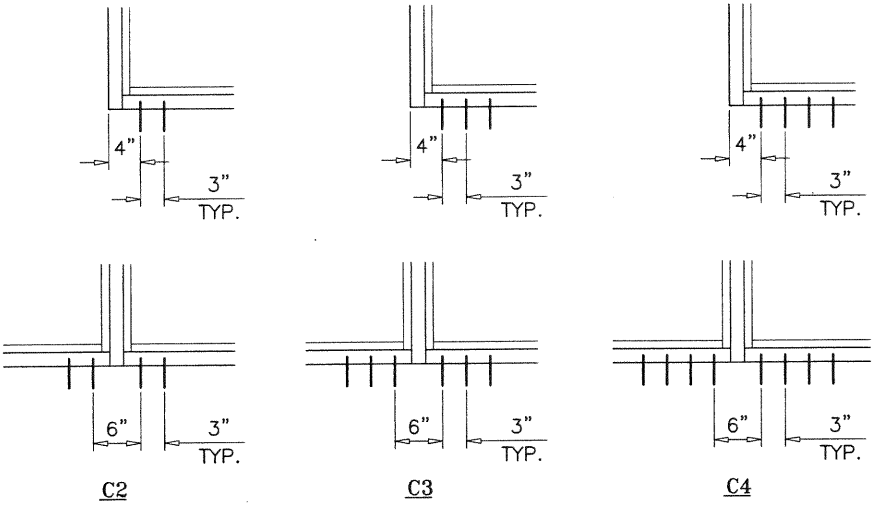
ES-8000T ALUM WINDOW WALL SYSTEM (L.M.I.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	no	date	description	by
	C	08.22.17	GENERAL REVISION	
	D	04.05.18	NO CHANGE THIS SHEET	
	E	02.20.19	NO CHANGE THIS SHEET	
	F	11.12.20	UPDATED TO 2020 FBC	
date:	10-01-14			
scale:	-			
dr. by:	TARIQ			
chk. by:				
drawing no.	W14-38			
sheet	5 of 13			

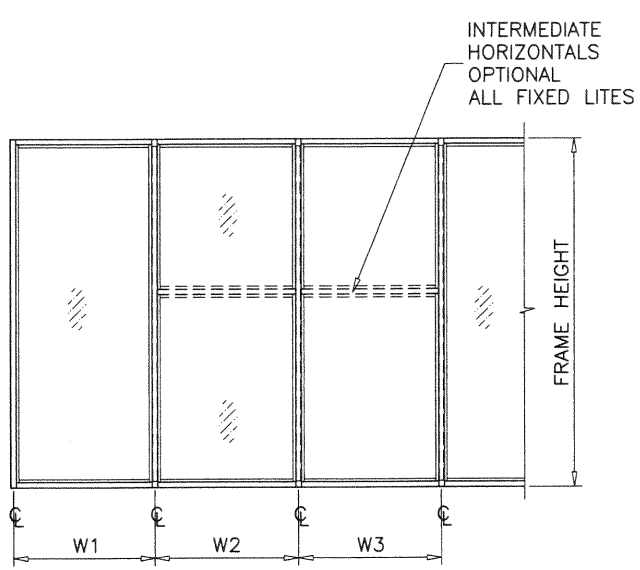
ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)									
NOMINAL DIMS. WIDTH (W) FRAME HEIGHT		ANCHORS TYPE 'C'							
		1/4" MAX. SHIM			3/8" MAX. SHIM			1/2" SHIM	
		C2	C3	C4	C2	C3	C4	C3	C4
30"	78"	120.0	120.0	120.0	91.6	120.0	120.0	108.6	120.0
36"		120.0	120.0	120.0	76.3	114.5	120.0	90.5	120.0
42"		120.0	120.0	120.0	65.4	98.1	120.0	77.5	103.4
48"		120.0	120.0	120.0	57.2	85.8	114.5	67.8	90.5
54"		106.9	120.0	120.0	50.9	76.3	101.7	60.3	80.4
60"		96.2	120.0	120.0	45.8	68.7	91.6	54.3	72.4
30"	84"	120.0	120.0	120.0	85.0	120.0	120.0	100.8	120.0
36"		120.0	120.0	120.0	70.9	106.3	120.0	84.0	112.0
42"		120.0	120.0	120.0	60.7	91.1	120.0	72.0	96.0
48"		111.7	120.0	120.0	53.1	79.7	106.3	63.0	84.0
54"		99.3	120.0	120.0	47.2	70.9	94.5	56.0	74.7
60"		89.4	120.0	120.0	42.5	63.8	85.0	50.4	67.2
30"	90"	120.0	120.0	120.0	79.4	119.0	120.0	94.1	120.0
36"		120.0	120.0	120.0	66.1	99.2	120.0	78.4	104.5
42"		119.2	120.0	120.0	56.7	85.0	113.4	67.2	89.6
48"		104.3	120.0	120.0	49.6	74.4	99.2	58.8	78.4
54"		92.7	120.0	120.0	44.1	66.1	88.2	52.3	69.7
60"		83.4	120.0	120.0	39.7	59.5	79.4	47.0	62.7
30"	96"	120.0	120.0	120.0	74.4	111.6	120.0	88.2	117.6
36"		120.0	120.0	120.0	62.0	93.0	120.0	73.5	98.0
42"		111.7	120.0	120.0	53.1	79.7	106.3	63.0	84.0
48"		97.8	120.0	120.0	46.5	69.8	93.0	55.1	73.5
54"		86.9	120.0	120.0	41.3	62.0	82.7	49.0	65.3
60"		78.2	117.3	120.0	37.2	55.8	74.4	44.1	58.8
30"	102"	120.0	120.0	120.0	70.0	105.0	120.0	83.0	110.7
36"		120.0	120.0	120.0	58.4	87.5	116.7	69.2	92.2
42"		105.1	120.0	120.0	50.0	75.0	100.0	59.3	79.1
48"		92.0	120.0	120.0	43.8	65.6	87.5	51.9	69.2
54"		81.8	120.0	120.0	38.9	58.4	77.8	46.1	61.5
60"		70.0	70.0	70.0	35.0	52.5	70.0	41.5	55.3
30"	108"	120.0	120.0	120.0	66.1	99.2	120.0	78.4	104.5
36"		115.9	120.0	120.0	55.1	82.7	110.2	65.3	87.1
42"		99.3	120.0	120.0	47.2	70.9	94.5	56.0	74.7
48"		86.9	120.0	120.0	41.3	62.0	82.7	49.0	65.3
54"		77.2	115.9	120.0	36.7	55.1	73.5	43.6	58.1
60"		69.5	70.0	70.0	33.1	49.6	66.1	39.2	52.3
30"	114"	120.0	120.0	120.0	62.7	94.0	120.0	74.3	99.0
36"		109.8	120.0	120.0	52.2	78.3	104.4	61.9	82.5
42"		94.1	120.0	120.0	44.8	67.1	89.5	53.1	70.7
48"		82.3	120.0	120.0	39.2	58.7	78.3	46.4	61.9
54"		70.0	70.0	70.0	34.8	52.2	69.6	41.3	55.0
60"		65.9	70.0	70.0	31.3	47.0	62.7	37.1	49.5
30"	120"	120.0	120.0	120.0	59.5	89.3	119.0	70.6	94.1
36"		104.3	120.0	120.0	49.6	74.4	99.2	58.8	78.4
42"		89.4	120.0	120.0	42.5	63.8	85.0	50.4	67.2
48"		78.2	117.3	120.0	37.2	55.8	74.4	44.1	58.8
54"		69.5	70.0	70.0	33.1	49.6	66.1	39.2	52.3
60"		66.2	70.0	70.0	31.5	47.2	63.0	37.3	49.8
30"	126"	70.0	70.0	70.0	56.7	70.0	70.0	67.2	70.0
36"		70.0	70.0	70.0	47.2	70.0	70.0	56.0	70.0
42"		70.0	70.0	70.0	40.5	60.7	70.0	48.0	64.0
48"		70.0	70.0	70.0	35.4	53.1	70.0	42.0	56.0
54"		66.2	70.0	70.0	31.5	47.2	63.0	37.3	49.8
60"		66.2	70.0	70.0	31.5	47.2	63.0	37.3	49.8

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)									
NOMINAL DIMS. WIDTH (W) FRAME HEIGHT		ANCHORS TYPE 'C'							
		1/4" MAX. SHIM			3/8" MAX. SHIM			1/2" SHIM	
		C2	C3	C4	C2	C3	C4	C3	C4
30"	132"	70.0	70.0	70.0	54.1	70.0	70.0	64.1	70.0
36"		70.0	70.0	70.0	45.1	67.6	70.0	53.5	70.0
42"		70.0	70.0	70.0	38.6	58.0	70.0	45.8	61.1
48"		70.0	70.0	70.0	33.8	50.7	67.6	40.1	53.5
30"	138"	70.0	70.0	70.0	51.8	70.0	70.0	61.4	70.0
36"		70.0	70.0	70.0	43.1	64.7	70.0	51.1	68.2
48"		68.0	70.0	70.0	32.3	48.5	64.7	38.3	51.1
30"	144"	70.0	70.0	70.0	49.6	70.0	70.0	58.8	70.0
36"		70.0	70.0	70.0	41.3	62.0	70.0	49.0	65.3
42"		70.0	70.0	70.0	35.4	53.1	70.0	42.0	56.0
48"		65.2	70.0	70.0	31.0	46.5	62.0	36.8	49.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



ANCHORS TYPES: SEE SHEET 9 FOR DESCRIPTION
C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION

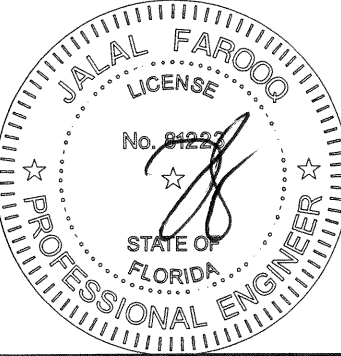


WIDTH (W) = W1
AT FRAME JAMB

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

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-1118.02**
Expiration Date: **08/25/2026**
By: *Manuel Torres*
Miami-Dade Product Control

NOV 18 2020



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

ES-8000T ALUM WINDOW WALL SYSTEM (L.M.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	no	date	description
	C	08.22.17	GENERAL REVISION
	D	04.05.18	NO CHANGE THIS SHEET
	E	02.20.19	NO CHANGE THIS SHEET
	F	11.12.20	UPDATED TO 2020 FBC

date: 10-01-14	scale: -	dr. by: TARIQ	chk. by:
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drawing no.	W14-38
sheet	6 of 13

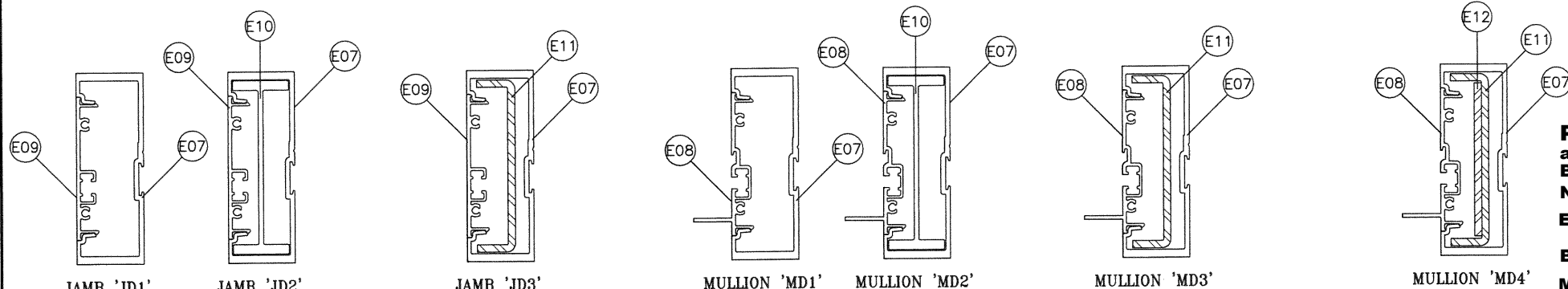
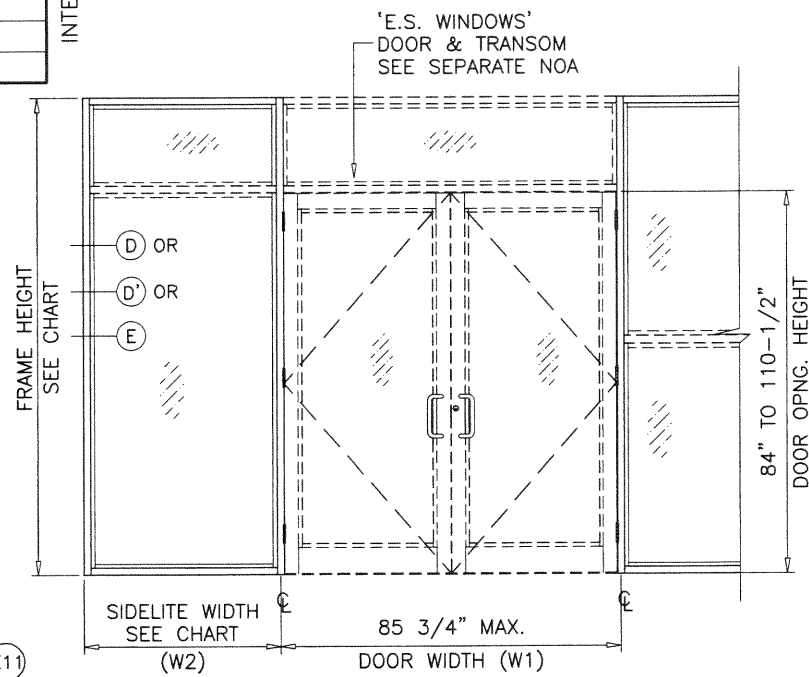
afC

COMP-ANL W14-38ES

DOOR MULLION LOAD CAPACITY - PSF								
NOMINAL DIMS.				JAMB 'JD1' MULL 'MD1'	JAMB 'JD1' MULL 'MD2'	JAMB 'JD2' JAMB 'JD3' MULL 'MD3'	JAMB 'JD3' MULL 'MD4'	
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	
85-3/4	30	96	84	90.0	90.0	90.0	90.0	
	36			90.0	90.0	90.0	90.0	
	42			90.0	90.0	90.0	90.0	
	48			90.0	90.0	90.0	90.0	
	54			90.0	90.0	90.0	90.0	
	60			85.7	90.0	90.0	90.0	
	30	102		90.0	90.0	90.0	90.0	
	36			86.9	90.0	90.0	90.0	
	42			81.5	90.0	90.0	90.0	
	48			76.7	90.0	90.0	90.0	
	54			72.5	90.0	89.0	90.0	
	30			108	74.2	90.0	90.0	90.0
	36	69.5			90.0	89.1	90.0	
	42	65.4			90.0	84.4	90.0	
	48	61.7			90.0	80.2	90.0	
	30	114			60.2	90.0	81.7	90.0
	36				56.6	90.0	77.4	90.0
	42			53.3	85.8	73.4	87.8	
	48			50.5	81.2	69.9	83.5	
	30			120	49.7	80.0	71.9	85.9
	36				46.8	75.3	68.1	81.5
	42	44.2			71.2	64.8	77.4	
	48	41.9			67.5	61.7	73.8	
	85-3/4	30			102	90	90.0	90.0
36		90.0	90.0				90.0	90.0
42		86.6	90.0	90.0			90.0	
48		81.2	90.0	90.0			90.0	
54		76.5	90.0	90.0			90.0	
30		108	79.3	90.0			90.0	90.0
36			74.0	90.0	90.0		90.0	
42			69.3	90.0	88.9		90.0	
48			65.2	90.0	84.3		90.0	
30			114	63.9	90.0		85.6	90.0
36				59.9	90.0		80.8	90.0
42		56.3		90.0	76.5		90.0	
48		53.1		85.4	72.7		86.9	
30		120		52.4	84.2		74.5	89.1
36				49.2	79.1		70.5	84.3
42			46.3	74.5	66.9		80.0	
48			43.8	70.5	63.6		76.1	

DOOR MULLION LOAD CAPACITY - PSF							
NOMINAL DIMS.				JAMB 'JD1' MULL 'MD1'	JAMB 'JD1' MULL 'MD2'	JAMB 'JD2' JAMB 'JD3' MULL 'MD3'	JAMB 'JD3' MULL 'MD4'
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
85-3/4	30	108	96	84.6	90.0	90.0	90.0
	36			78.6	90.0	90.0	90.0
	42			73.4	90.0	90.0	90.0
	48			68.8	90.0	89.7	90.0
	30	114		68.2	90.0	90.0	90.0
	36			63.5	90.0	85.3	90.0
	42			59.5	90.0	80.6	90.0
	48			56.0	90.0	76.3	90.0
	30	120		55.5	89.3	78.0	90.0
	36			51.9	83.5	73.6	88.0
	42			48.8	78.5	69.7	83.3
	48			46.0	74.0	66.2	79.1
85-3/4	30	114	102	72.4	90.0	90.0	90.0
	36			67.2	90.0	90.0	90.0
	42			62.7	90.0	85.9	90.0
	48			58.8	90.0	81.1	90.0
	30	120		59.0	90.0	82.6	90.0
	36			55.0	88.4	77.7	90.0
	42			51.5	82.8	73.3	87.7
	48			48.4	77.8	69.4	83.0
85-3/4	30	120	110-1/2	63.7	90.0	90.0	90.0
	36			59.0	90.0	85.7	90.0
	42			55.0	88.4	80.4	90.0
	48			51.5	82.8	75.7	90.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



Ix IN ⁴	Sx IN ³	Ix IN ⁴	Sx IN ³	Ix IN ⁴	Sx IN ³	Ix IN ⁴	Sx IN ³	Ix IN ⁴	Sx IN ³	Ix IN ⁴	Sx IN ³	Ix IN ⁴	Sx IN ³	Ix IN ⁴	Sx IN ³
6.570	2.7226	10.6577	3.8057	ALUMINUM	6.570	2.7226	STEEL	2.7506	1.2224	TOTAL	14.5467	6.7195	2.6757	10.8072	4.4788
				ALUMINUM	6.7195	2.6757	STEEL	2.7506	1.224	TOTAL	14.6962	6.7195	2.6757	3.7533	3.5717
				Ix ALUM + Ix STL X 2.9				Ix ALUM + Ix STL X 2.9				Ix ALUM + Ix STL X 2.9			

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. **20-1118.02**
Expiration Date: **08/25/2026**
By: *Manuel Perez*
Miami-Dade Product Control

**DOOR-WINDOWALL
TRANSITION MULLION**



NOV 18 2020

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
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	D	04.05.18	NO CHANGE THIS SHEET
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date: 10-01-14

scale: -

dr. by: TARIQ

chk. by:

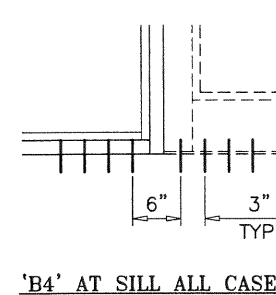
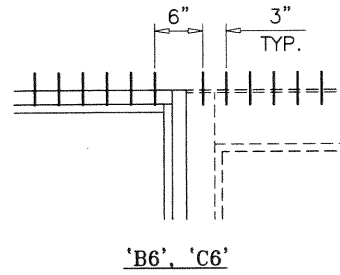
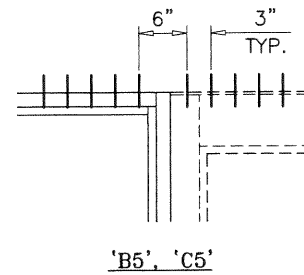
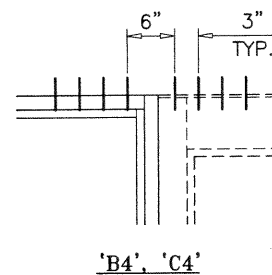
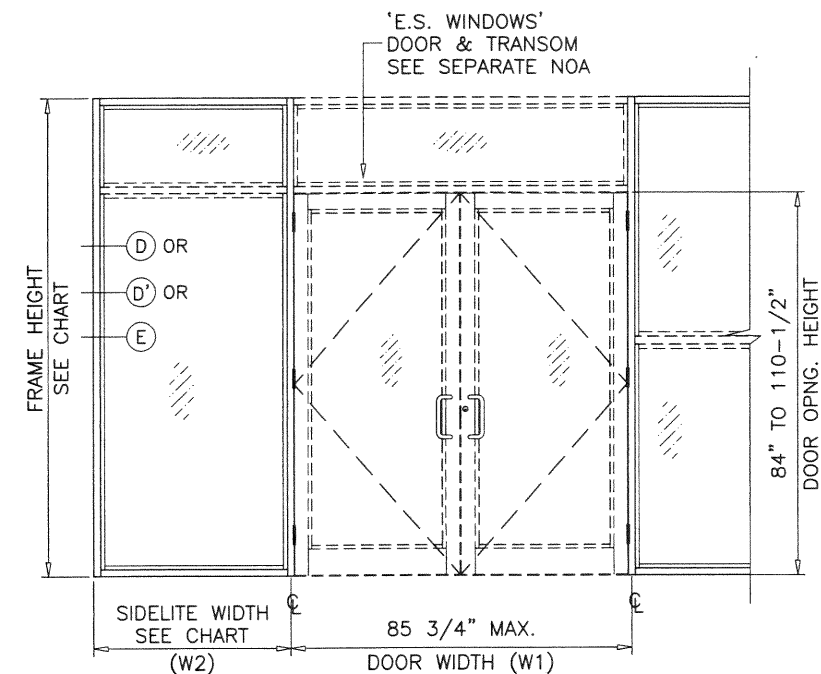
drawing no. **W14-38**

sheet **7.1** of **13**

DOOR MULLION HEAD ANCHOR LOAD CAPACITY - PSF						
NOMINAL DIMS.				'B4'/'C4'	'B5'/'C5'	'B6'/'C6'
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
85-3/4	30	96	84	89.6	90.0	90.0
	36			85.0	90.0	90.0
	42			80.8	90.0	90.0
	48			77.0	90.0	90.0
	54			73.6	90.0	90.0
	60			70.4	88.0	90.0
	30	102		86.0	90.0	90.0
	36			81.5	90.0	90.0
	42			77.4	90.0	90.0
	48			73.8	90.0	90.0
	54			70.4	88.0	90.0
	30	108		82.7	90.0	90.0
	36			78.3	90.0	90.0
	42			74.3	90.0	90.0
	48			70.8	88.4	90.0
	30	114		79.7	90.0	90.0
	36			75.4	90.0	90.0
	42			71.5	89.4	90.0
	48			68.0	85.0	90.0
	30	120		76.9	90.0	90.0
36	72.6		90.0	90.0		
42	68.9		86.1	90.0		
48	65.4		81.8	90.0		
85-3/4	30	102	90	84.1	90.0	90.0
	36			79.7	90.0	90.0
	42			75.8	90.0	90.0
	48			72.3	90.0	90.0
	54			69.1	86.4	90.0
	30	108		80.9	90.0	90.0
	36			76.7	90.0	90.0
	42			72.9	90.0	90.0
	48			69.4	86.8	90.0
	30	114		78.0	90.0	90.0
	36			73.9	90.0	90.0
	42			70.1	87.7	90.0
	48			66.8	83.5	90.0
	30	120		75.3	90.0	90.0
	36			71.2	89.1	90.0
	42			67.6	84.5	90.0
	48			64.3	80.4	90.0

DOOR MULLION HEAD ANCHOR LOAD CAPACITY - PSF						
NOMINAL DIMS.				'B4'/'C4'	'B5'/'C5'	'B6'/'C6'
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
85-3/4	30	108	96	79.2	90.0	90.0
	36			75.1	90.0	90.0
	42			71.5	89.3	90.0
	48			68.1	85.2	90.0
	30	114		76.4	90.0	90.0
	36			72.4	90.0	90.0
	42			68.8	86.0	90.0
	48			65.6	82.0	90.0
	30	120		73.8	90.0	90.0
	36			69.9	87.4	90.0
	42			66.4	83.0	90.0
	48			63.2	79.0	90.0
85-3/4	30	114	102	74.9	90.0	90.0
	36			71.0	88.8	90.0
	42			67.6	84.5	90.0
	48			64.4	80.5	90.0
	30	120		72.4	90.0	90.0
	36			68.6	85.7	90.0
	42			65.2	81.5	90.0
	48			62.1	77.7	90.0
85-3/4	30	120	110-1/2	70.4	88.0	90.0
	36			66.8	83.5	90.0
	42			63.6	79.5	90.0
	48			60.7	75.9	90.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION

B4 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF DOOR MULLION
 B5 = (5) ANCHORS TYPE 'B' AT EACH SIDE OF DOOR MULLION
 B6 = (6) ANCHORS TYPE 'B' AT EACH SIDE OF DOOR MULLION

C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION
 C5 = (5) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION
 C6 = (6) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION

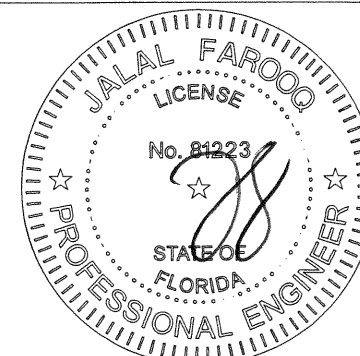
ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.
 SHIM SPACE FOR ANCHORS TYPE 'C' LIMITED TO 1/4\"

TRANSITION MULLION ANCHORS

PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. **20-1118.02**

Expiration Date: **08/25/2026** NOV 18 2020

By: *Manuel Perez*
 Miami-Dade Product Control



ES-8000T ALUM WINDOW WALL SYSTEM (L.M.I.)

E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL. (305) 638-5151 FAX. (305) 638-5158

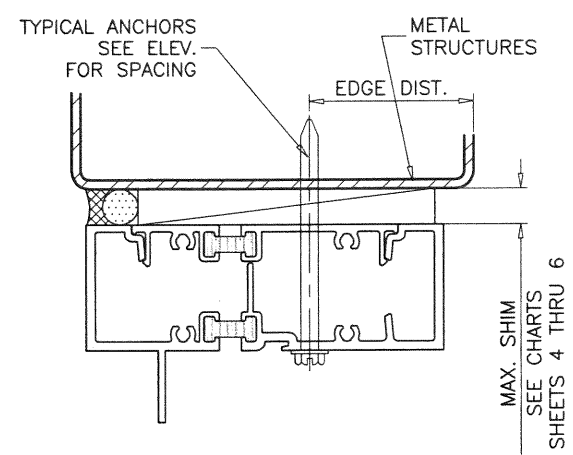
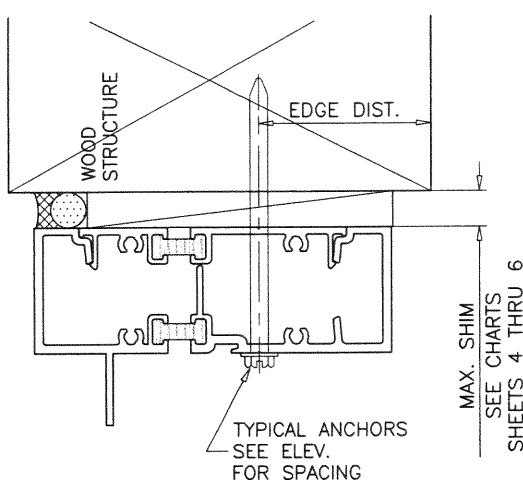
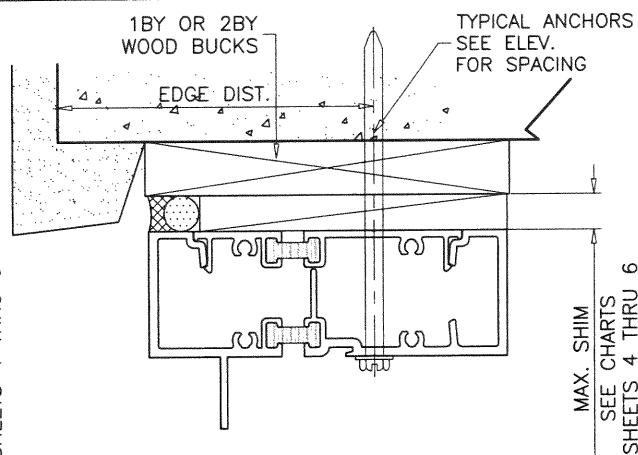
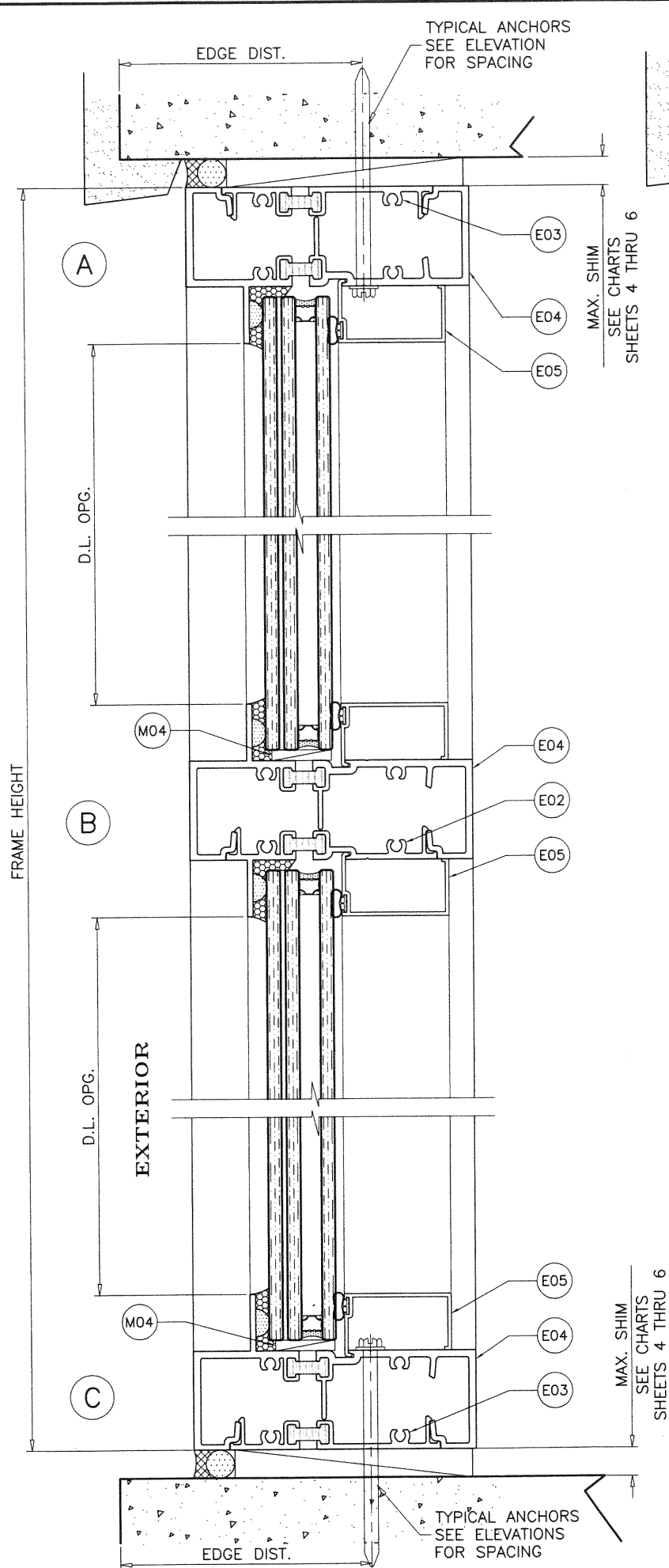
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	C	08.22.17		GENERAL REVISION
	D	04.05.18		NO CHANGE THIS SHEET
	E	02.20.19		NO CHANGE THIS SHEET
	F	11.12.20		UPDATED TO 2020 FBC

date:	10-01-14
scale:	-
dr. by:	TARIQ
chk. by:	

drawing no.
W14-38

sheet **8** of **13**

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
 COMP-ANL\W14-38ES



TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A' - 1/4" DIA. ULTRACON+ BY 'DEWALT' ($F_u=164$ KSI, $F_y=148$ KSI)
 INTO WOOD STRUCTURES
 2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)
 THRU 1BY OR 2BY 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 CONC. OR BLOCKS
 2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 2" 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
 2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)
 THRU 1BY OR 2BY 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 CONC. OR BLOCKS
 2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 2" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

ANCHOR EDGE DISTANCES

INTO CONCRETE AND MASONRY = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1-1/4" MIN.

TYPE 'C' - 1/4" DIA. TEKS OR SELF DRILLING SCREWS ST/ST (GRADE 5 CRS)
 INTO F.B.C. 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 GROUT FILLED NORMAL WEIGHT BLOCK AT JAMBS $f'_m = 2000$ PSI MIN.

SEALANTS:

ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER OF GLAZING BEAD TO FRAME SEALED WITH SILICONE SEALANT.

1BY OR 2BY WOOD BUCKS AND METAL STRUCTURE NOT BY 'E.S. WDW.'
 MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM
 AND TRANSFER THEM TO THE BUILDING STRUCTURE.

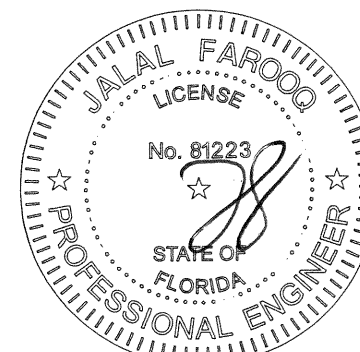
PRODUCT REVISED
 as complying with the Florida
 Building Code

NOA-No. **20-1118.02**

Expiration Date: **08/25/2026**

By: *Manuel Torres*
 Miami-Dade Product Control

NOV 18 2020



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 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
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ES-8000T ALUM WINDOW WALL SYSTEM (L.M.I.)

E.S. WINDOWS, LLC

3550 N.W. 49 STREET

MIAMI, FL. 33142

TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	no	date	by	description
	C	08.22.17		GENERAL REVISION
	D	04.05.18		NO CHANGE THIS SHEET
	E	02.20.19		NO CHANGE THIS SHEET
	F	11.12.20		UPDATED TO 2020 FBC

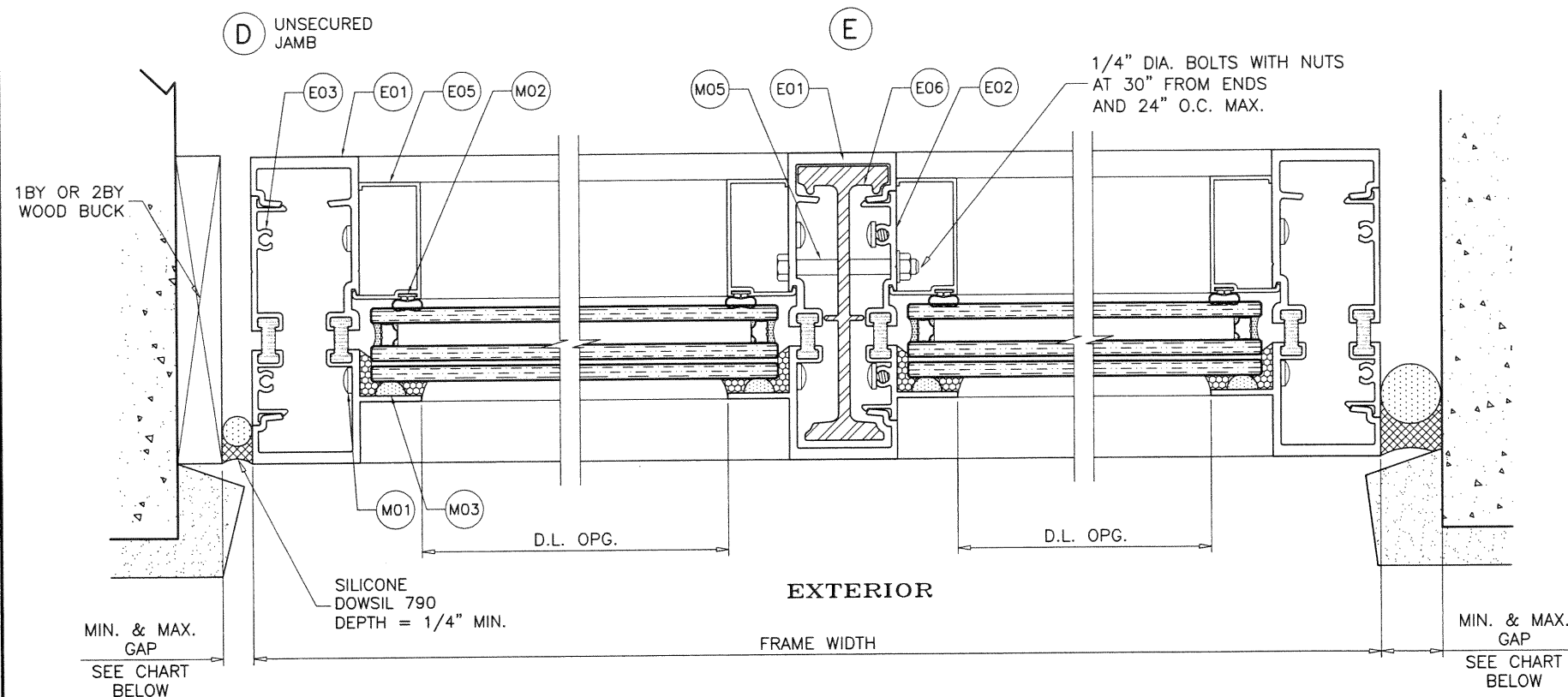
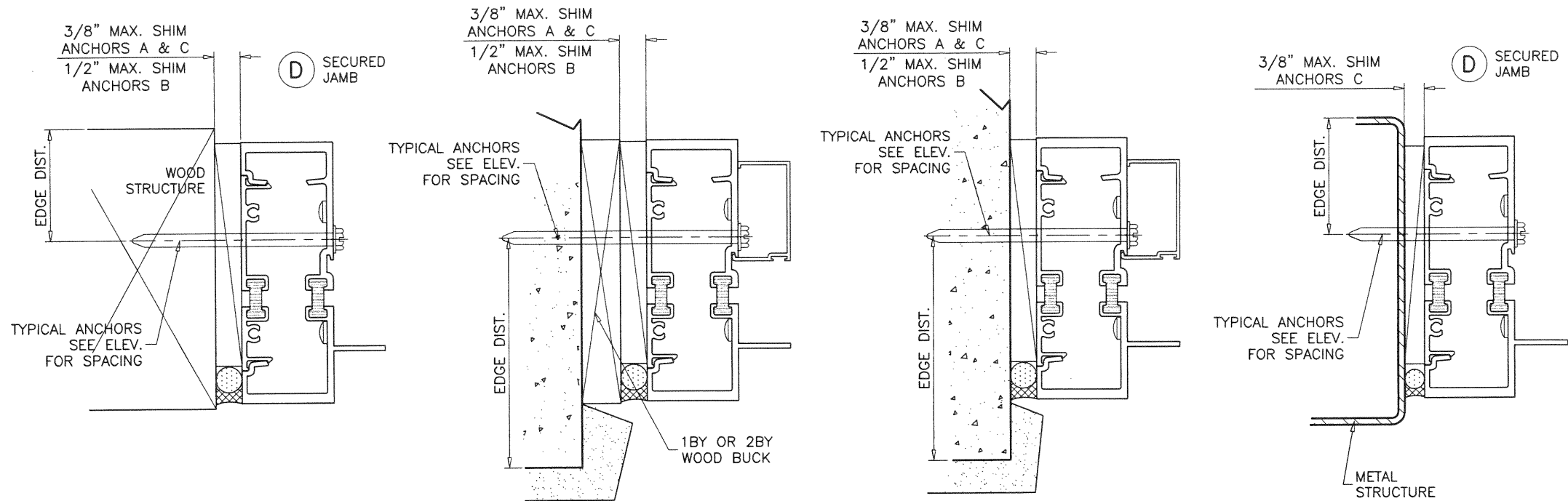
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dr. by:	TARIQ
chk. by:	

drawing no.

W14-38

sheet **9** of 13

COMP-ANL\W14-38ES



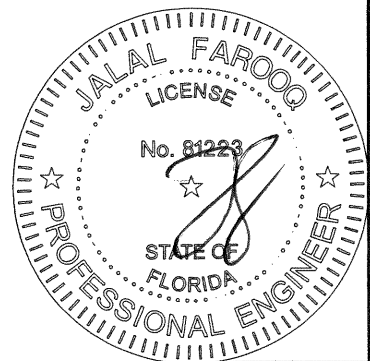
MAX. GAPS FOR UNANCHORED JAMBS		
MAX. FRAME HEIGHT	JAMB J1	
	MIN.	MAX.
96"	1/4"	1"
102"	1/4"	1"
108"	3/8"	1"
120"	3/8"	1"
132"	3/8"	1"
144"	3/8"	1"

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.

PRODUCT REVISED
 as complying with the Florida Building Code
NOA-No. 20-1118.02
Expiration Date: 08/25/2026
 By: *Manuel Fern*
 Miami-Dade Product Control
 NOV 18 2020



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 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
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date: 10-01-14

scale: 3/8" = 1"

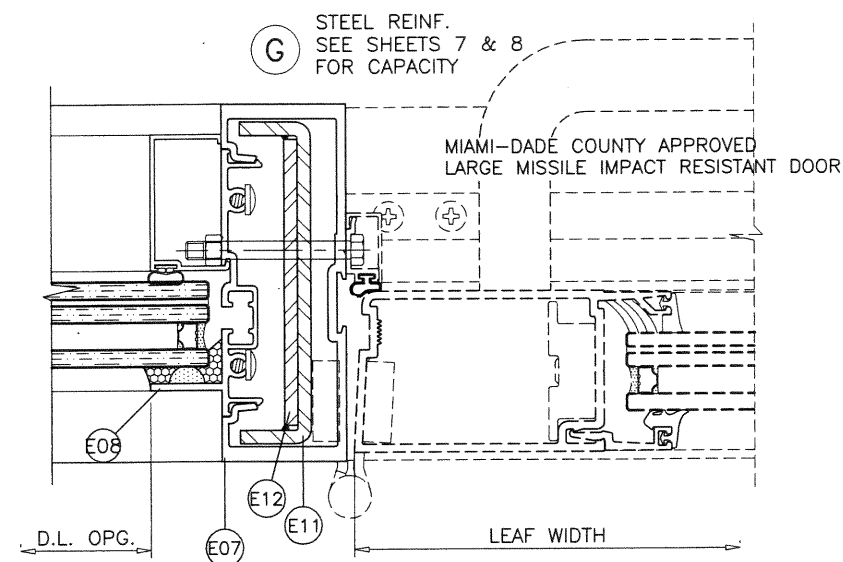
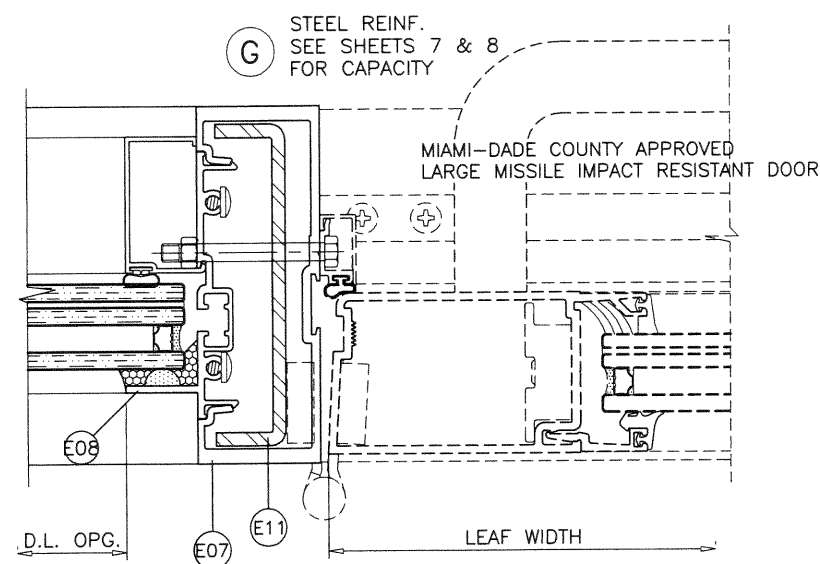
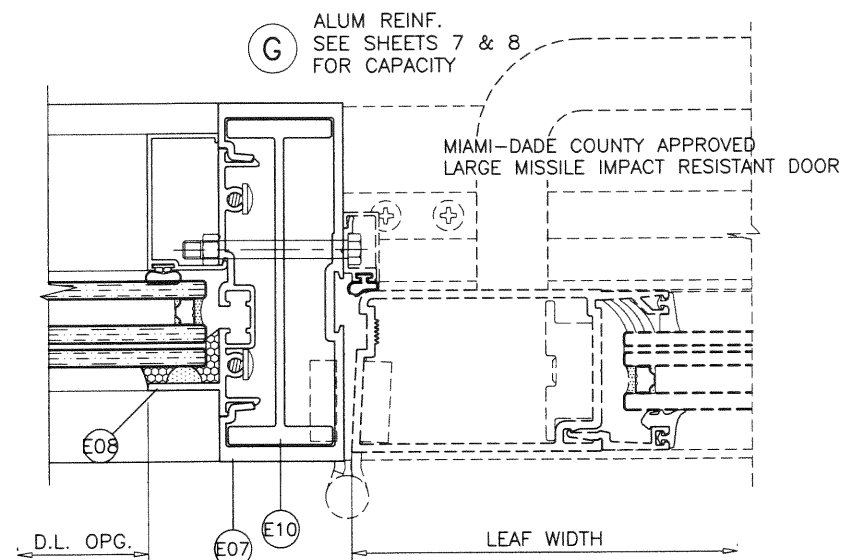
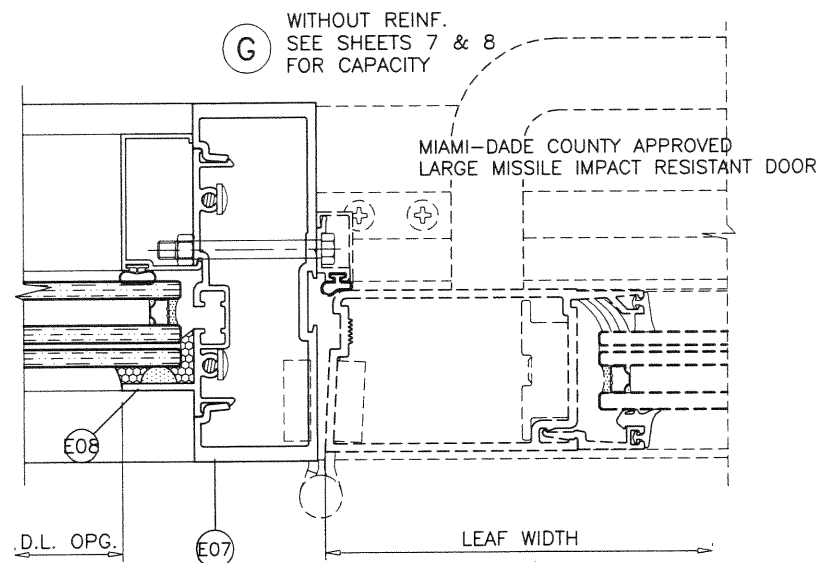
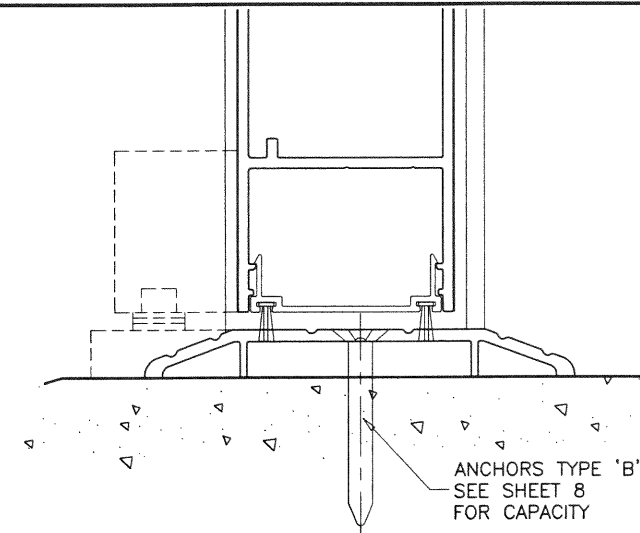
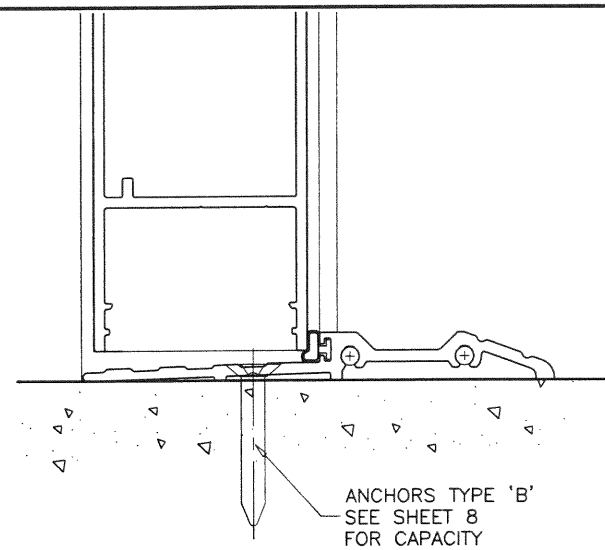
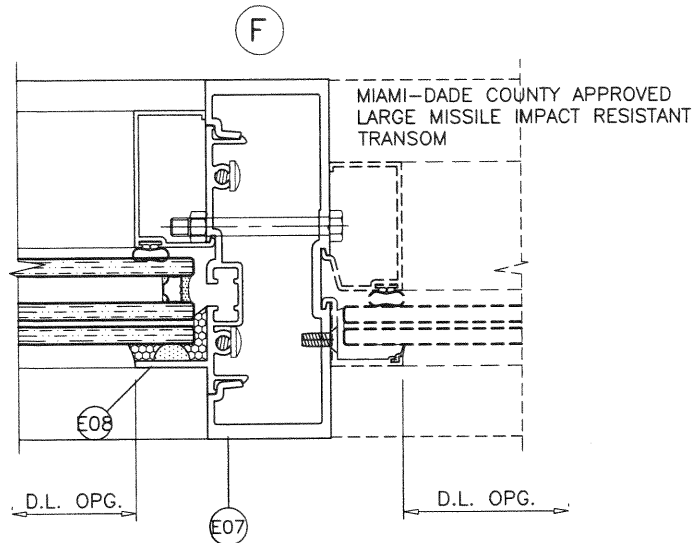
dr. by: TARIQ

chk. by:

drawing no.
W14-38

sheet 10 of 13

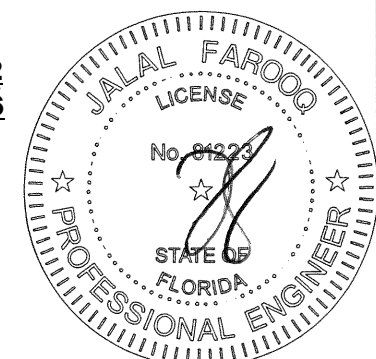
COMP-ANL\W14-38ES



SEE SEPARATE NOA FOR DESIGN LOAD CAPACITY OF DOORS AND DOOR ANCHORS.
LOWER VALUES FROM DOORS NOA OR STOREFRONT SYSTEM CAPACITY CHARTS WILL APPLY TO ENTIRE SYSTEM.

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. **20-1118.02**
Expiration Date: **08/25/2026**
By: *Manuel Perez*
Miami-Dade Product Control

NOV 18 2020



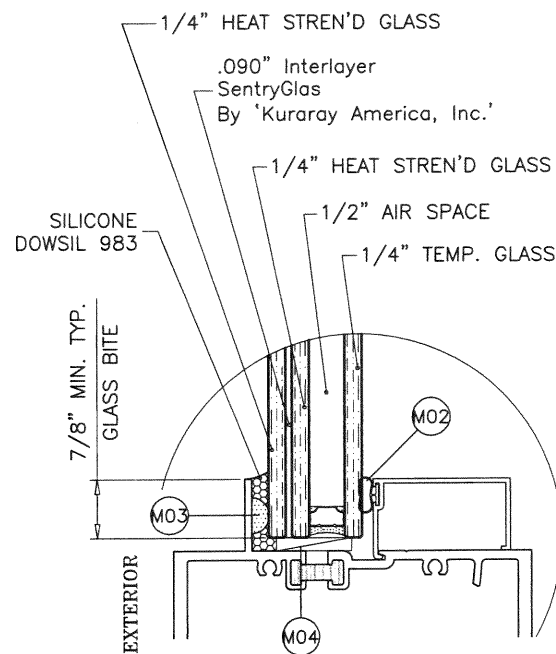
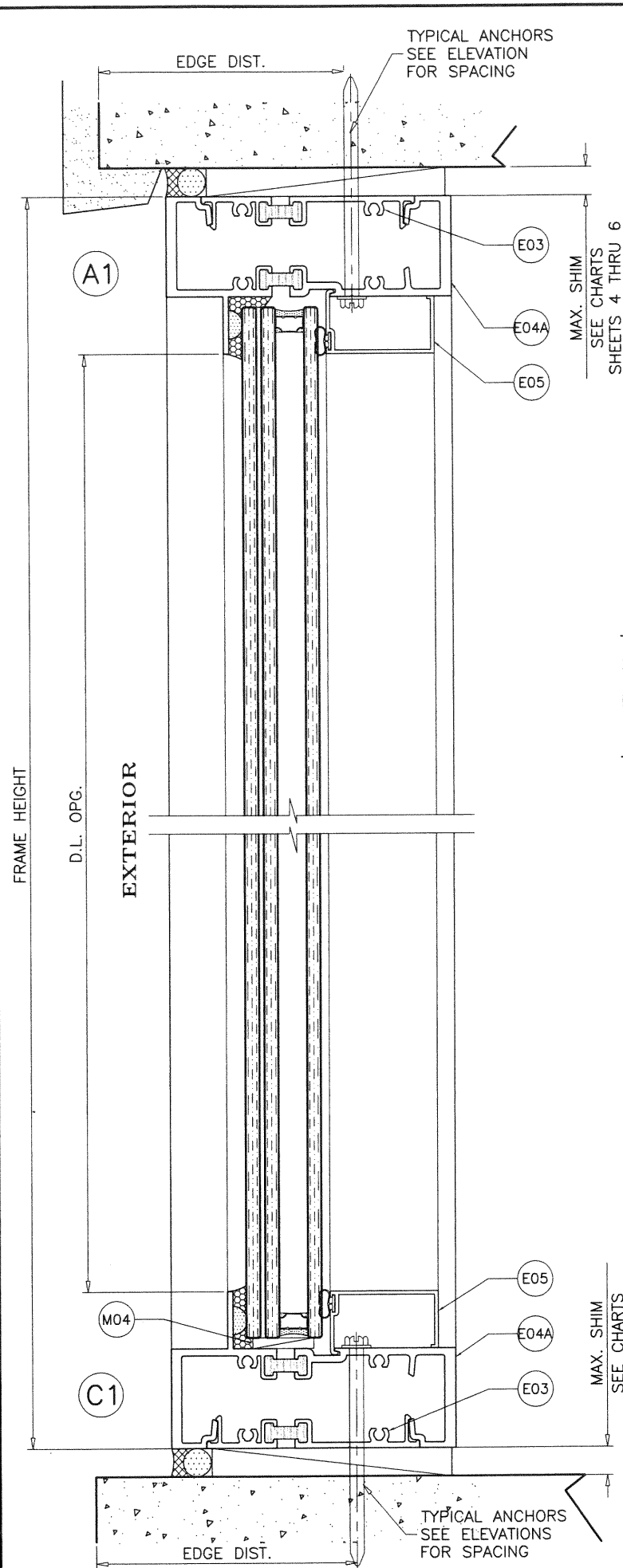
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
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COMP-ANL\W14-38ES

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E.S. WINDOWS, LLC
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revisions:		no	date	by	description
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F	11.12.20				UPDATED TO 2020 FBC

date:	10-01-14
scale:	3/8" = 1"
dr. by:	TARIQ
chk. by:	

drawing no.	W14-38
sheet	11 of 13



GLASS TYPE 'GL3'

1-5/16" OVERALL INSUL. LAM. GLASS

1/2" AIR SPACE CONSISTING OF:

SPACER:

'HELIMA' LOW PROFILE ALUMINUM SPACER
BY 'LINGERMANN GMBH'
AROUND THE PERIMETER OF THE GLASS.

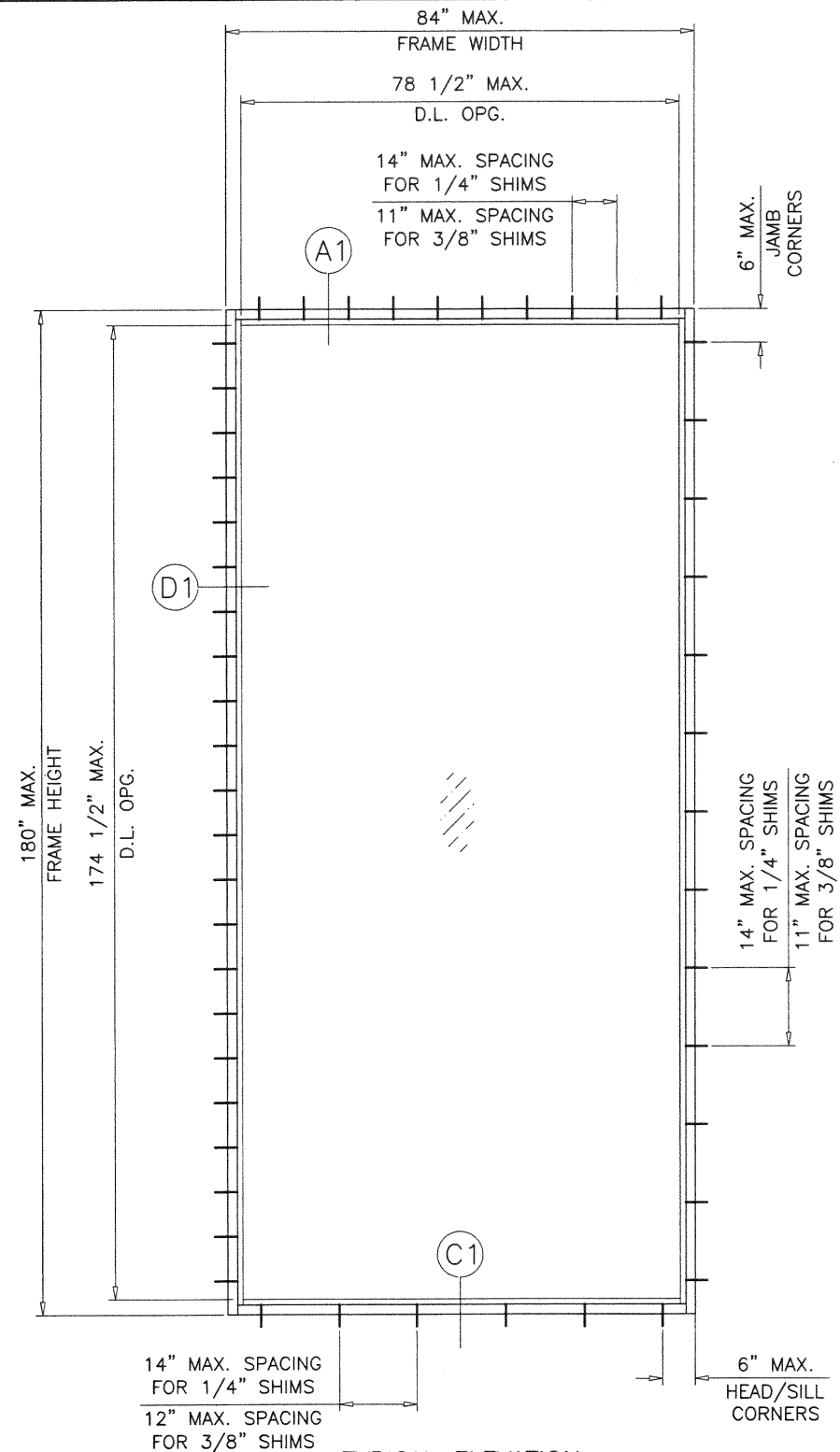
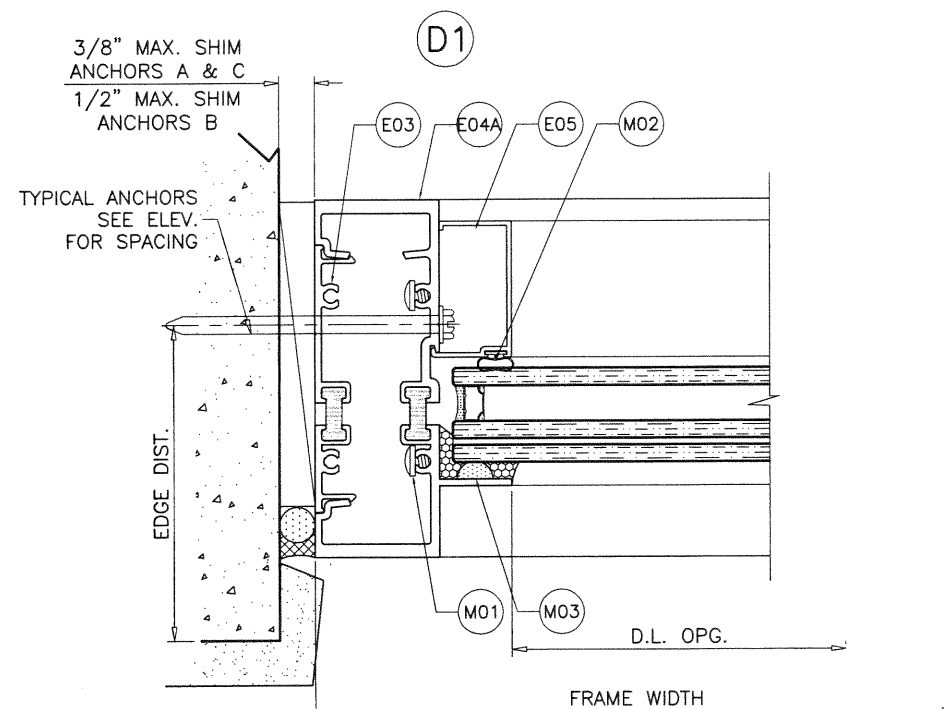
PERIMETER SEALANT:

SILICONE
DOWSIL 791
GE 2000

**MAXIMUM DESIGN LOAD RATING = + 70.0 PSF
- 70.0 PSF**

(FOR SINGLE UNITS SHOWN IN THIS SHEET OR SMALLER)

THESE FRAMES CAN BE USED AT ALL SUBSTRATES SHOWN
ON SHEETS 9 AND 10.



**TYPICAL ELEVATION
SINGLE (O) PANEL**

Scale: 3/8"=1'-0"

PRODUCT REVISED
as complying with the Florida
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NOA-No. **20-1118.02**

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By: *Manuel Perez*
Miami-Dade Product Control
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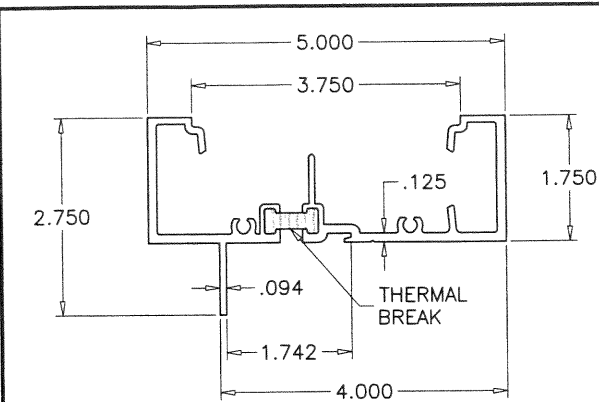
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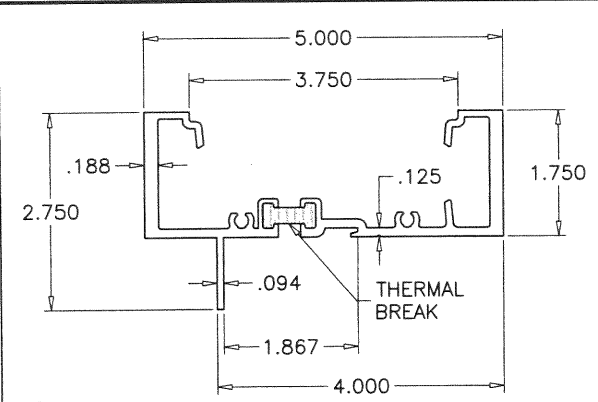
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	E	02.20.19		REV. FRAME ADDED
	F	11.12.20		UPDATED TO 2020 FBC

date:	10-01-14
scale:	3/8" = 1"
dr. by:	TARIQ
chk. by:	

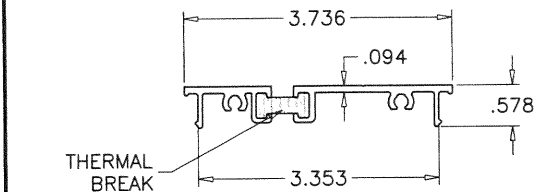
drawing no.
W14-38
sheet 11.1 of 13



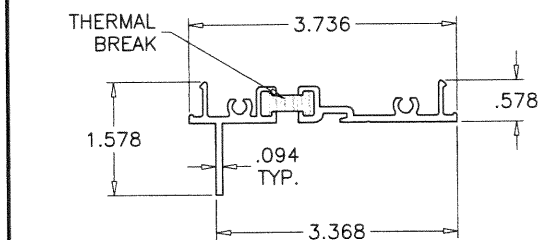
E04 FRAME HEAD/SILL/INTERMEDIATE



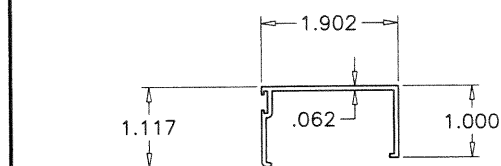
E04A FRAME HEAD/SILL/JAMB



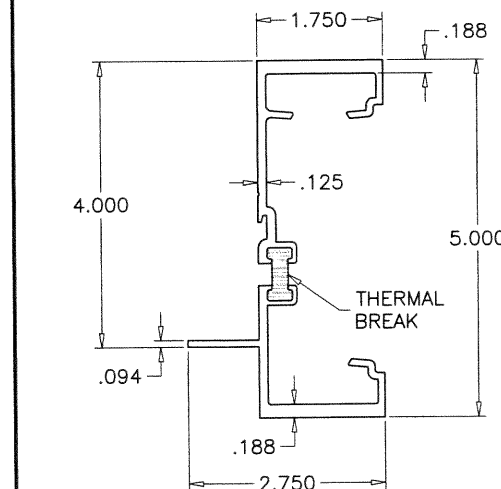
E03 FRAME HEAD/SILL/JAMB SNAP-IN PLATE



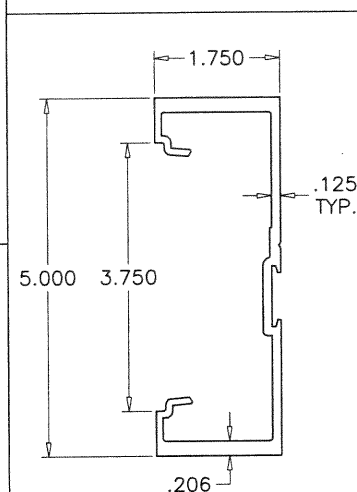
E02 SNAP-IN MATE



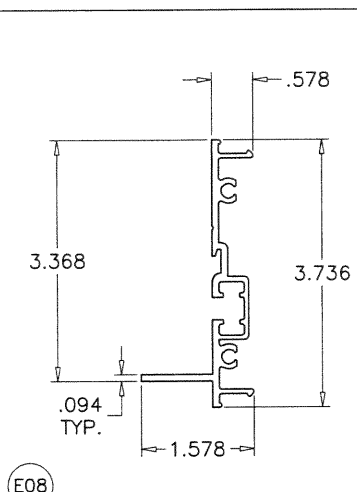
E05 GLAZING BEAD



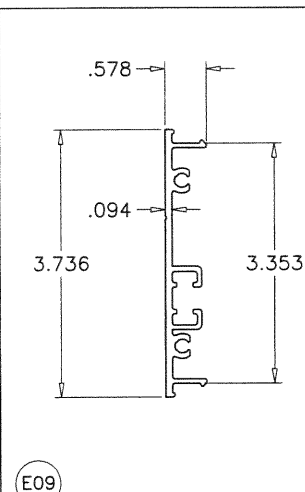
E01 JAMB/VERTICAL MULLION



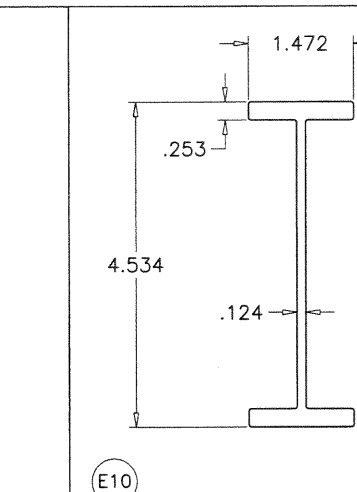
E07 DOOR MULLION



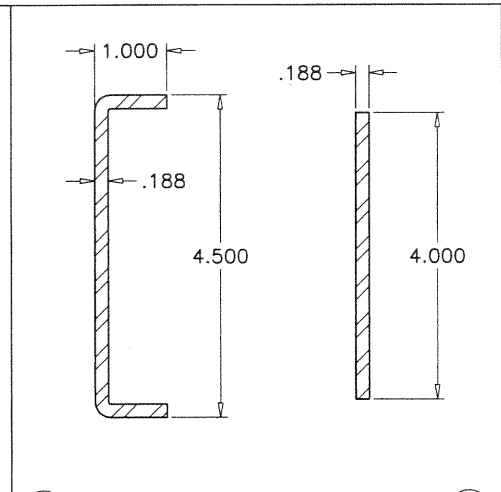
E08 DOOR MULL SNAP-IN MATE



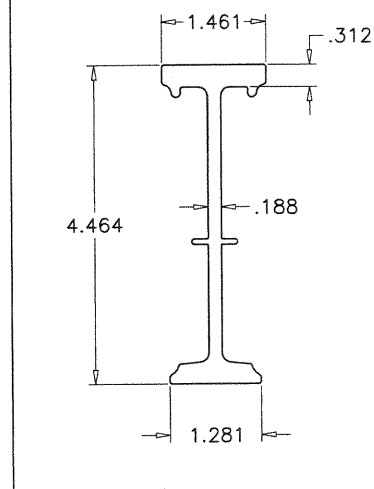
E09 DOOR MULL SNAP-IN PLATE



E10 DOOR MULL STIFFENER



E11 DOOR MULL STEEL REINF. 36 KSI MIN. E12



E06 STIFFENER

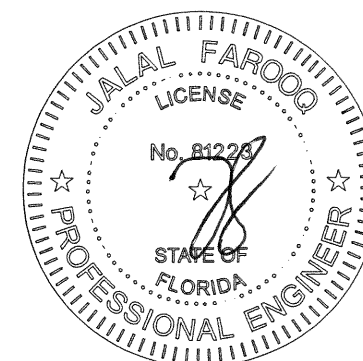
ITEM #	PART #	REQ'D	DESCRIPTION	MATERIAL	MANF. / SUPPLIER / REMARKS
E01	ES-8000T-001	AS REQD.	JAMB AND VERTICAL MULLION	6005-T5	-
E02	ES-8000T-002	AS REQD.	SNAP-IN MATE	6005-T5	-
E03	ES-8000T-003	AS REQD.	HEAD/SILL/JAMB SNAP-IN PLATE	6005-T5	-
E04	ES-8000T-004	AS REQD.	FRAME HEAD/SILL/INTERMEDIATE	6005-T5	-
E04A	ES-8000T-007	AS REQD.	FRAME HEAD/SILL/JAMB (GLASS TYPE GL3)	6005-T5	-
E05	ES-8000T-005	AS REQD.	GLAZING BEAD	6063-T5	-
E06	ES-8000T-006	AS REQD.	STIFFENER	6005-T5	-
E07	-	AS REQD.	DOOR MULLION	6005-T5	-
E08	ES-8000T-002	AS REQD.	DOOR MULLION SNAP-IN MATE	6005-T5	-
E09	ES-8000T-003	AS REQD.	DOOR MULL SNAP-IN PLATE	6005-T5	-
E10	-	AS REQD.	DOOR MULLION STIFFENER	6005-T5	-
E11	-	AS REQD.	DOOR MULLION REINFORCING CHANNEL	STEEL	-
E12	-	AS REQD.	DOOR MULLION REINFORCING BAR	STEEL	-
M01	#12 X 1-1/2"	AS REQD.	ASSEMBLY FASTENERS	ST. STEEL	PH SMS
M02	ES-8010	AS REQD.	INTERIOR GLAZING GASKET	EPDM	DUROMETER 60±5 SHORE A
M03	ES-8011A	AS REQD.	1/4" GLASS SPACER	SILICONE	DUROMETER 85±5 SHORE A
M04	ES-7530-B01A	2/ LITE	SETTING BLOCKS AT 1/4 POINTS	EPDM	DUROMETER 80±5 SHORE A
M05	1/4" X 2-1/8"	AS REQD.	MULLION FASTENERS	ST. STEEL	BOLT WITH NUT

THERMAL BREAK:
FRAME MEMBERS FILLED AND DEBRIDGED USING
'BAYDUR TB 100-30' MANUFACTURED BY
'BAYER MATERIALSCIENCE, LLC.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-1118.02**
Expiration Date: **08/25/2026**

By: *Manuel Torres*
Miami-Dade Product Control

NOV 18 2020



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

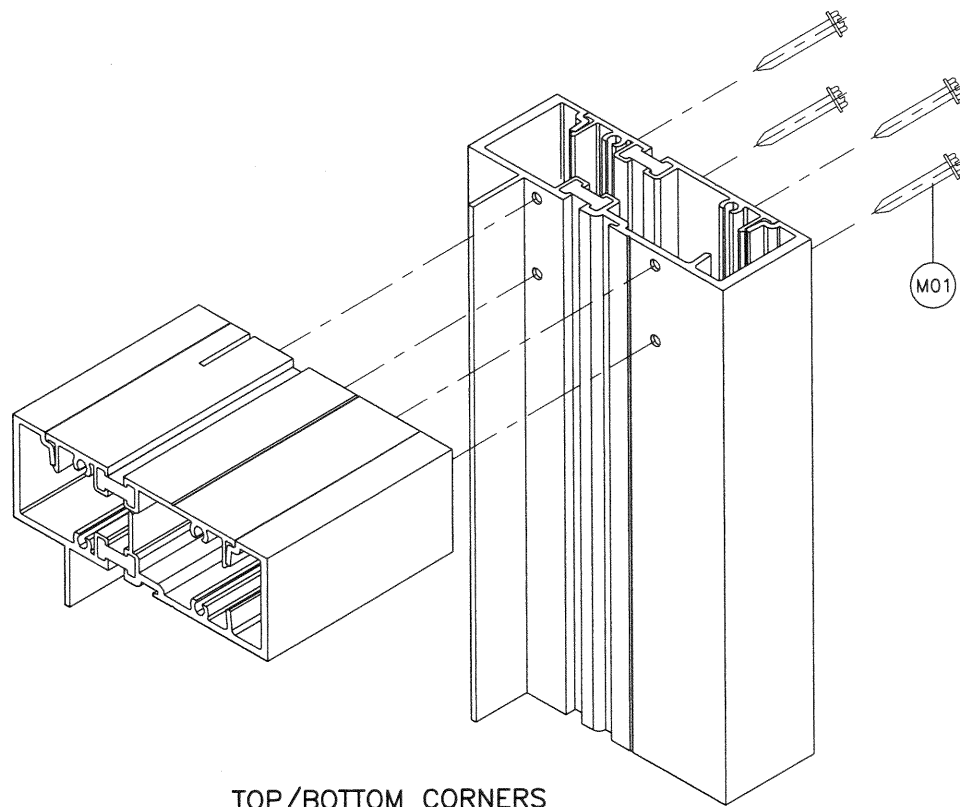
ES-8000T ALUM WINDOW WALL SYSTEM (L.M.I.)

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

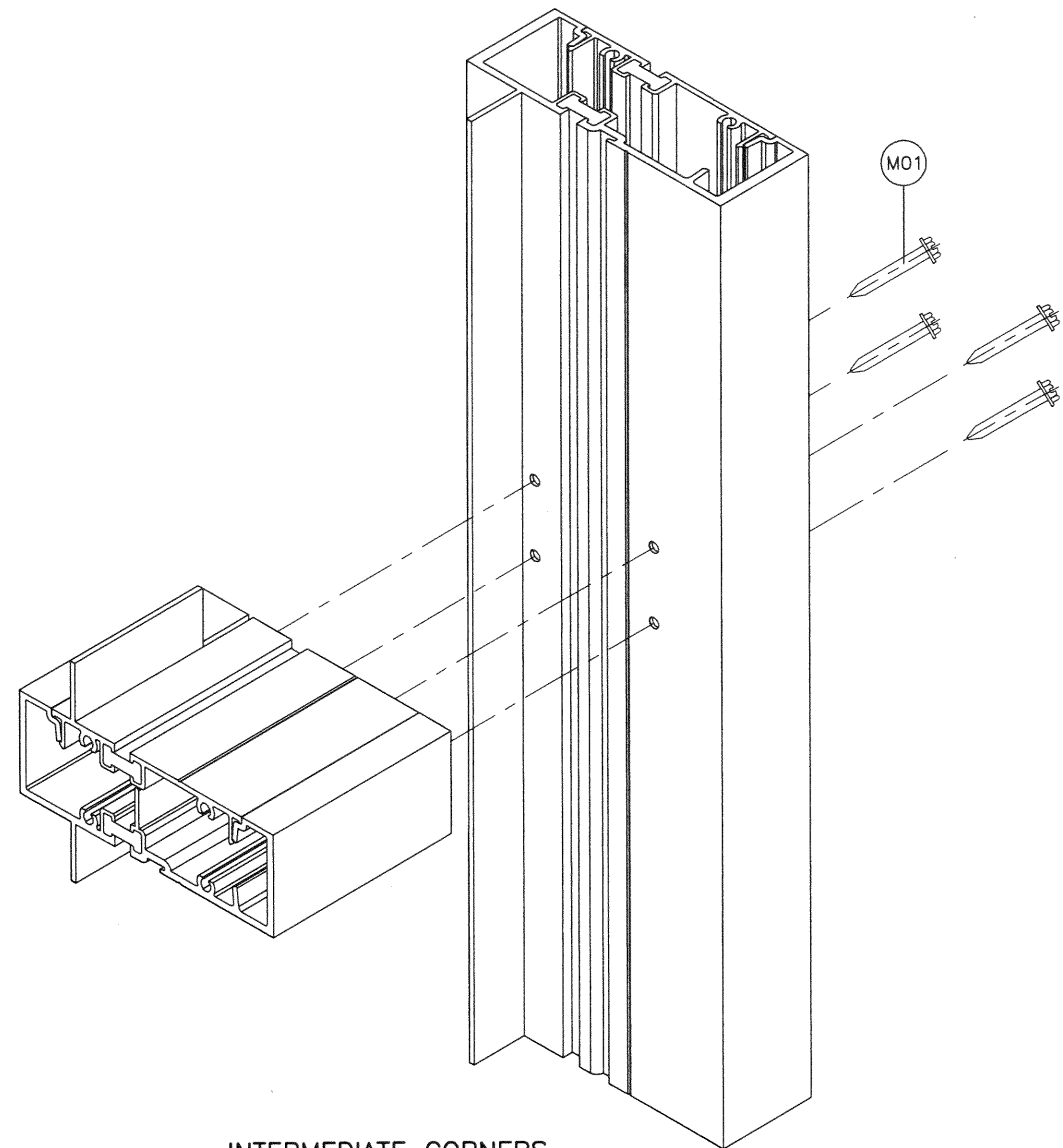
revisions:	no	date	description	by
	C	08.22.17	GENERAL REVISION	
	D	04.05.18	REV. PER RER COMMENTS	
	E	02.20.19	JAMB/MULLION REV.	
	F	11.12.20	UPDATED TO 2020 FBC	

date: 10-01-14
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

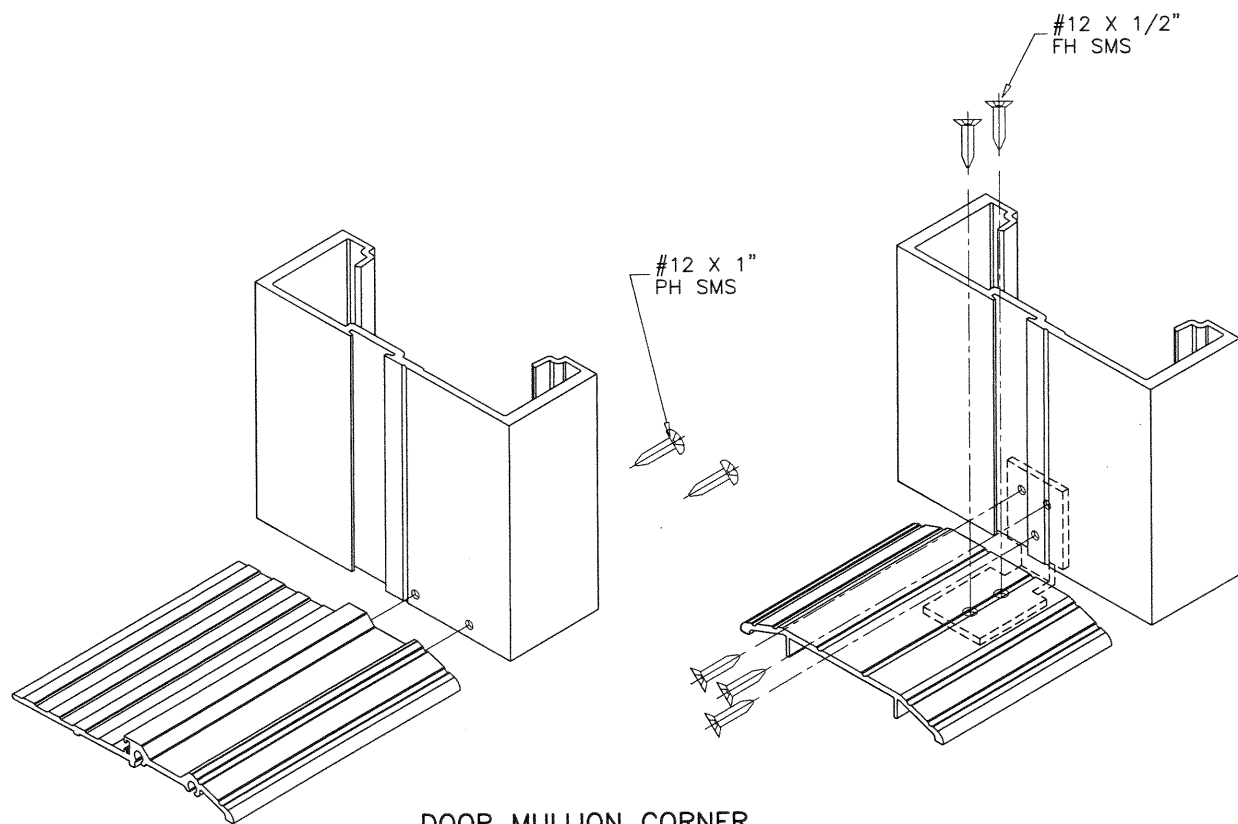
drawing no.
W14-38
sheet 12 of 13



TOP/BOTTOM CORNERS



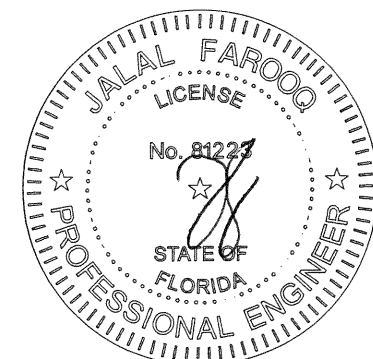
INTERMEDIATE CORNERS



DOOR MULLION CORNER

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-1118.02**
Expiration Date: **08/25/2026**
By: *Manuel Perez*
Miami-Dade Product Control

NOV 18 2020



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COMP-ANL\W14-38ES

ES-8000T ALUM WINDOW WALL SYSTEM (L.M.I.)

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MIAMI, FL. 33142
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COMP-ANL\W14-38ES

revisions:		no	date	by	description
C	08.22.17				GENERAL REVISION
D	04.05.18				NO CHANGE THIS SHEET
E	02.20.19				JAMB/MULLION REV.
F	11.12.20				UPDATED TO 2020 FBC

date: 10-01-14	scale: 3/8" = 1"	dr. by: TARIQ	chk. by:
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drawing no.
W14-38

sheet 13 of 13