

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

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

PRODUCT CONTROL SECTION

www.miamidade.gov/building

MIAMI-DADE COUNTY

NOTICE OF ACCEPTANCE (NOA)

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 "EL-150" Aluminum Fixed Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W16-70**, titled "ES-EL150 Fixed Aluminum Wdw. (L.M.I)", sheets 1, 2, 2.1, 3, 3.1, 4 and 5 through 9 of 9, dated 11/13/16, with revision E dated 06/29/23, 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 NOA No. 22-0105.01 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.



NOA No. 23-0714.17 Expiration Date: May 18, 2027 Approval Date: August 24, 2023 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. 16-0617.05)
- 2. Drawing No. W16-70, titled "ES-EL150 Fixed Aluminum Wdw. (L.M.I)", sheets 1, 2, 2.1, 3, 3.1, 4 and 5 through 9 of 9, dated 11/13/16, with revision **D** dated 06/15/21, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E. (Submitted under NOA No. 21-0708.03)

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) Safety Performance Test, (class A) per ANSI Z97.1

along with marked-up drawings and installation diagram of a series EL-150 aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No.

FTL-12002, dated 04/30/20, signed and sealed by Idalmis Ortega, P.E.

(Submitted under NOA No. 20-1223.01)

- 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) Safety Performance Test, (class A) per ANSI Z97.1

along with marked-up drawings and installation diagram of a series EL-150 aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No.

FTL-11035, dated 04/30/20, signed and sealed by Idalmis Ortega, P.E.

(Submitted under NOA No. 20-1223.01)

- 3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Safety Performance Test, (class A) per ANSI Z97.1

along with marked-up drawings and installation diagram of a series EL-150 aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No.

FTL-11027, dated 04/23/20, signed and sealed by Idalmis Ortega, P.E.

(Submitted under NOA No. 20-1223.01)

Manuel Perez, P.E. Product Control Examiner NOA No. 23-0714.17

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 aluminum fixed window, prepared by Blackwater Testing, Inc., Test Report No. **BT-ESW-16-004**, dated 11/14/16, and revised on 05/10/17, signed and sealed by Constantin Bortes, P.E.

(Submitted under NOA No. 16-0617.05)

- **5.** Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
 - 2) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with marked-up drawings and installation diagram of aluminum fixed window, prepared by Blackwater Testing, Inc., Test Report No. **BT-ESW-17-012**, dated 05/10/17, signed and sealed by Constantin Bortes, P.E.

(Submitted under NOA No. 16-0617.05)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC 5th Edition (2014), dated 11/16/16, revised on 12/21/16, updated on 11/09/20 to comply with FBC 7th Edition (2020) and further revised on 06/29/21 to include additional window sizes, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

(Submitted under NOA No. 21-0708.03)

2. Glazing complies with ASTM E1300-09

D. OUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 20-0915.22 issued to Kuraray America, Inc. for their "Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers" dated 11/19/20, expiring on 07/08/24.
- 2. Notice of Acceptance No. 20-0915.19 issued to Kuraray America, Inc. for their "SentryGlas® (Clear and White) Glass Interlayers" dated 11/19/20, expiring on 07/04/23.
- 3. Notice of Acceptance No. 20-0622.03 issued to Eastman Chemical Company (MA) for their "Saflex Storm Saflex and Saflex HP Composite Glass Interlayers with PET Core" dated 08/06/20, expiring on 12/11/23.
- 4. Notice of Acceptance No. 20-0622.01 issued to Eastman Chemical Company (MA) for their "Saflex PVB Clear and Color Glass Interlayers" dated 08/06/20, expiring on 05/21/21.

Manuel Perez, P.E. Product Control Examiner NOA No. 23-0714.17

E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

F. STATEMENTS

- 1. Statement letter of conformance, complying with **FBC** 7th **Edition (2020)** dated February 20, 2020, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
 - (Submitted under NOA No. 22-0105.01)
- 2. Statement letter of conformance, complying with FBC 6th Edition (2017), with FBC 7th Edition (2020), and of no financial interest, dated November 09, 2020, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E. (Submitted under NOA No. 20-1223.01)
- 3. Proposal No. **18-0784** issued by the Product Control Section, dated June 29, 2018, signed by Manuel Perez, P.E. (Submitted under NOA No. 20-1223.01)
- 4. Proposal No. 19-1230 issued by the Product Control Section, dated November 18, 2019, signed by Manuel Perez, P.E. (Submitted under NOA No. 20-1223.01)

G. OTHERS

1. Notice of Acceptance No. **21-0708.03**, issued to E.S. Windows, LLC, for their Series "EL-150" Aluminum Fixed Windows – L.M.I., approved on 09/02/21 and expiring on 05/18/22.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-0714.17

E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. W16-70, titled "ES-EL150 Fixed Aluminum Wdw. (L.M.I)", sheets 1, 2, 2.1, 3, 3.1, 4 and 5 through 9 of 9, dated 11/13/16, with revision E dated 06/29/23, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 20-0915.22 issued to Kuraray America, Inc. for their "Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers" dated 11/19/20, expiring on 07/08/24.
- 2. Notice of Acceptance No. 22-1116.01 issued to Kuraray America, Inc. for their "SentryGlas® (Clear and White) Glass Interlayers" dated 12/15/22, expiring on 07/04/28.
- 3. Notice of Acceptance No. 22-1130.05 issued to Eastman Chemical Company (MA) for their "Saflex Storm Saflex and Saflex HP Composite Glass Interlayers with PET Core" dated 01/26/23, expiring on 12/11/28.
- 4. Notice of Acceptance No. 21-0216.01 issued to Eastman Chemical Company (MA) for their "Saflex PVB Interlayers Clear and Colored for Glass" dated 04/29/21, expiring on 05/21/26.

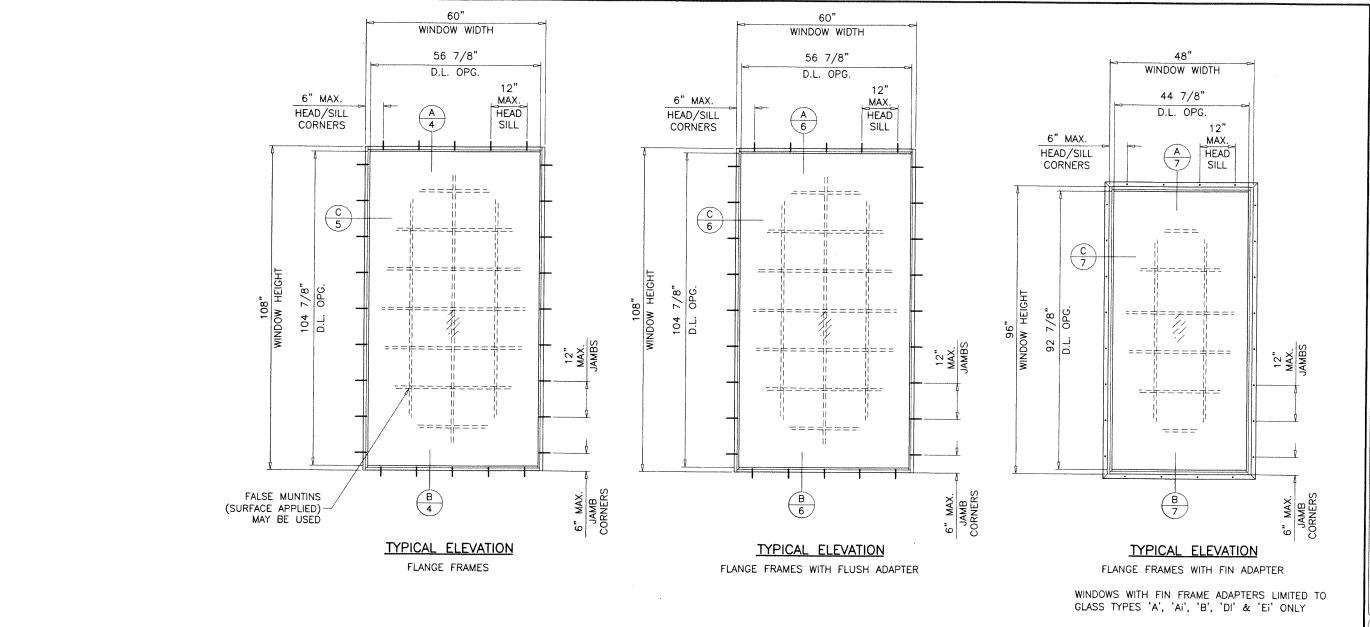
F. STATEMENTS

1. Statement letter of conformance, complying with FBC 7th Edition (2020), with FBC 8th Edition (2023), and of no financial interest, dated July 12, 2023, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

G. OTHERS

1. Notice of Acceptance No. **22-0105.01**, issued to E.S. Windows, LLC, for their Series "EL-150" Aluminum Fixed Windows – L.M.I., approved on 02/10/22 and expiring on 05/18/27.

Manuel Perez, P.E. Product Control Examiner NOA No. 23-0714.17



ES-EL150

FIXED ALUMINUM WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEETS 3 AND 3.1.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF FIX./FIX. OR FIXED WITH OTHER WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING MIAMI-DADE COUNTY APPROVED MULLIONS IN BETWEEN. LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2020 (7TH EDITION)/2023 (8TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2020/2023 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.

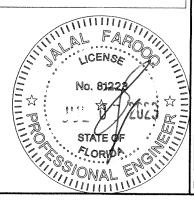
DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

DAYLITE OPENINGS: D.L.O. HEIGHT = WINDOW HEIGHT - 3.125" D.L.O. WIDTH = WINDOW WIDTH -3.125"

WINDOWS WITH GLASS TYPES 'AA', 'BB' & 'AAI' COMPLY WITH REQUIREMENTS OF ANSI Z97.1.

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

PRODUCT REVISED As complying with the Florida Building Code NOA-No. 23-0714.17



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

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WDW.

(302)

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

ES-EL150 FIXED ALUMINUM

description
NO CHANGE THIS
UPDATED TO 201
GENERAL REVISIO
NO CHANGE THIS

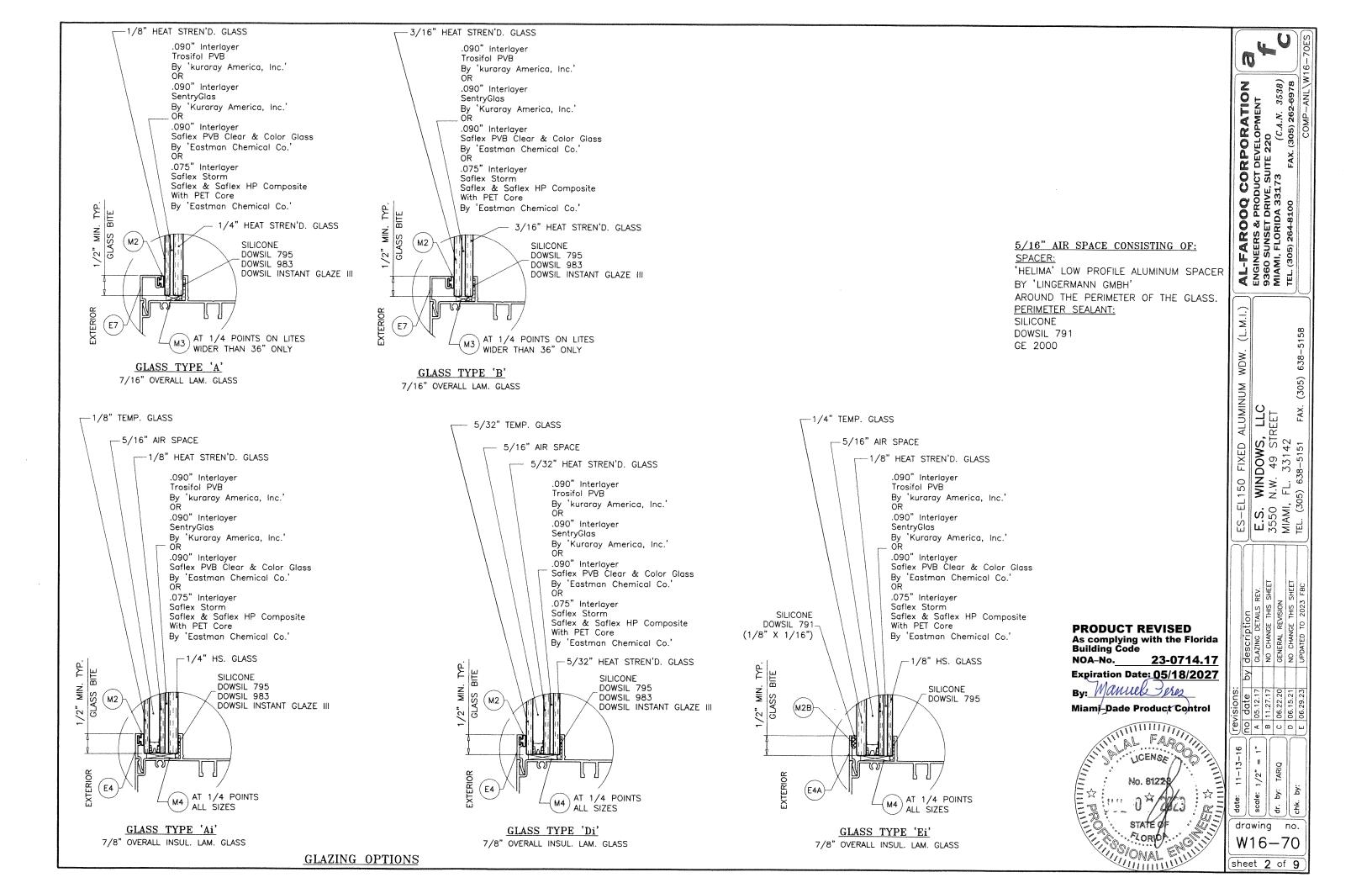
| revisions: | no date | A 05.12.17 | B 11.27.17 | C 06.22.20 | D 06.15.21 | E 06.29.74 , o 13-16 الأذا

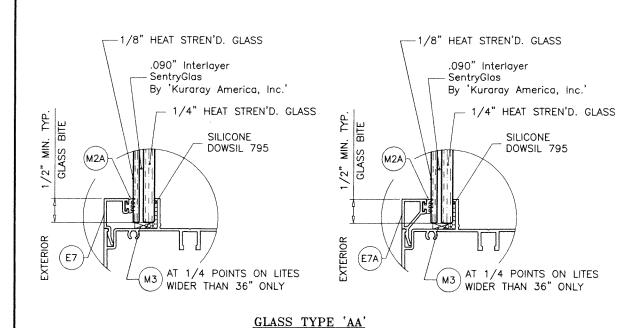
<u>₽</u> drawing

W16 - 70sheet 1 of 9

Expiration Date: 05/18/2027

Miami-Dade Product Control



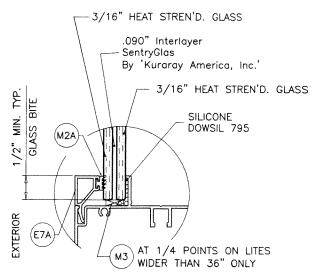


7/16" OVERALL LAM. GLASS

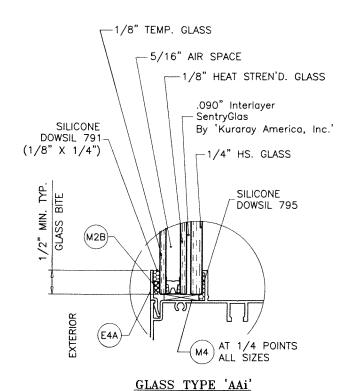
- SentryGlas By 'Kuraray America, Inc.' 3/16" HEAT STREN'D. GLASS 1/2" MIN. TYP. GLASS BITE SILICONE DOWSIL 795 (M2) (E7 AT 1/4 POINTS ON LITES WIDER THAN 36" ONLY

-3/16" HEAT STREN'D. GLASS

.090" Interlayer



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



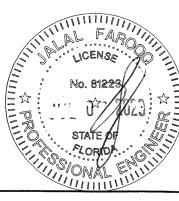
7/8" OVERALL INSUL. LAM. GLASS

5/16" 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



Expiration Date: <u>05/18/2027</u> By: Manuel Perez

Miami-Dade Product Control



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 AL-FAROOQ CORPORATION

 ENGINEERS & PRODUCT DEVELOPMENT

 9360 SUNSET DRIVE, SUITE 220

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

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

(L.M.I.)

WDW.

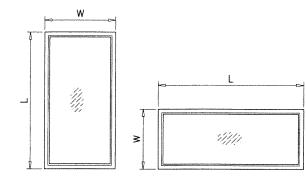
ES-EL150 FIXED ALUMINUM

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

DESIGN LOAD CAPACITY — PSF FLANGE FRAMES, FLUSH FRAMES, FIN FRAMES										
GLASS TYPE GLASS TYPES										
WINDOV	DIMS.		A'	'B', 'Ai', 'Di', 'Ei'						
WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)					
30"		60.0	80.0	80.0	80.0					
36"		60.0	80.0	80.0	80.0					
42"	48"	60.0	68.6	80.0	80.0					
48"		60.0	60.0	80.0	80.0					
54"		60.0	60.0	80.0	80.0					
60"		60.0	60.0	80.0	80.0					
30"		60.0	80.0	80.0	80.0					
36"		60.0	80.0	80.0	80.0					
42"	54"	60.0	68.6	80.0	80.0					
48"		60.0	60.0	80.0	80.0					
54"		53.3	53.3	71.1	71.1					
60"		53.3	53.3	71.1	71.1					
30"		60.0	80.0	80.0	80.0					
36"		60.0	80.0	80.0	80.0					
42"	60"	60.0	68.6	80.0	80.0					
48"		60.0	60.0	80.0	80.0					
54"		53.3	53.3	71.1	71.1					
60"		48.0	48.0	64.0	64.0					
30"		60.0	80.0	80.0	80.0					
36"		60.0	80.0	80.0	80.0					
42"	66"	60.0	68.6	80.0	80.0					
48"		60.0	60.0	80.0	80.0					
54"		53.3	53.3	71.1	71.1					
60"		48.0	48.0	64.0	64.0					
30"		60.0	80.0	80.0	80.0					
36"		60.0	80.0	80.0	80.0					
42"	72"	 								
	12	60.0	68.6	80.0	80.0					
48"		60.0	60.0	80.0	80.0					
54"		53.3	53.3	71.1	71.1					
60"		48.0	48.0	64.0	64.0					
30"		60.0	80.0	80.0	80.0					
36"	ang pa Mi	60.0	78.0	80.0	80.0					
42"	78"	60.0	68.6	80.0	80.0					
48"		60.0	60.0	80.0	80.0					
54"		53.3	53.3	71.1	71.1					
30"		60.0	80.0	80.0	80.0					
36"		60.0	76.4	80.0	80.0					
42"	84"	60.0	68.6	80.0	80.0					
48"		60.0	60.0	80.0	80.0					
54"		53.3	53.3	71.1	71.1					
30"		60.0	80.0	80.0	80.0					
36"	90"	60.0	75.0	80.0	80.0					
42"		60.0	67.1	80.0	80.0					
48"		60.0	60.0	80.0	80.0					
30"		60.0	80.0	80.0	80.0					
36"	96"	60.0	73.8	80.0	80.0					
42"	30	60.0	65.8	80.0	80.0					
48"		60.0	60.0	80.0	80.0					

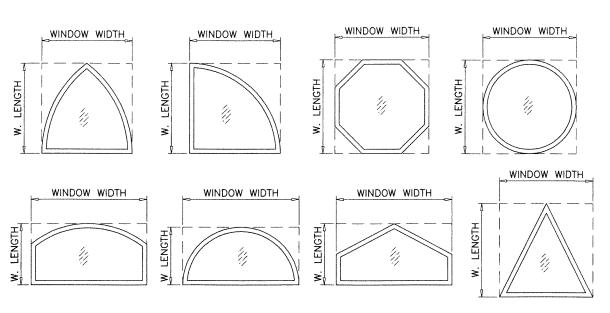
DESIGN LOAD CAPACITY - PSF FLANGE FRAMES, FLUSH FRAMES, FIN FRAMES										
GLASS TYPE GLASS TYPES										
WINDO	W DIMS.	I .	A'	i	'Di', 'Ei'					
WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)					
30"		60.0	80.0	80.0	80.0					
36"		60.0	78.1	80.0	80.0					
36"	102"	60.0	72.9	80.0	80.0					
39"		60.0	68.5	80.0	80.0					
42"		60.0	64.8	80.0	80.0					
45"		60.0	61.6	80.0	80.0					
30"		60.0	80.0	80.0	80.0					
33"		60.0	77.3	80.0	80.0					
36"	108"	60.0	72.0	80.0	80.0					
39"		60.0	67.6	80.0	80.0					
42"		60.0	63.8	80.0	80.0					
30"		60.0	80.0	80.0	80.0					
33"	114"	60.0	76.5	80.0	80.0					
36"	114	60.0	71.3	80.0	80.0					
39"		60.0	66.8	80.0	80.0					
30"		60.0	80.0	80.0	80.0					
33"	120"	60.0	75.9	80.0	80.0					
36"		60.0	70.6	80.0	80.0					
30"		60.0	80.0	80.0	80.0					
33"	126"	60.0	75.3	80.0	80.0					
36"		60.0	70.0	80.0	80.0					
30"	132"	60.0	80.0	80.0	80.0					
33"	132	60.0	74.8	80.0	80.0					
30"	138"	60.0	80.0	80.0	80.0					
33"	130	60.0	74.3	80.0	80.0					
30"	144"	60.0	80.0	80.0	80.0					

DESIGN LOAD CAPACITY - PSF FLANGE FRAMES, FLUSH FRAMES, FIN FRAMES									
WINDO	W DIMS.	1	TYPE	GLASS TYPES 'B', 'Ai', 'Di', 'Ei'					
WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)				
19-1/8"		60.0	80.0	80.0	80.0				
26-1/2"		60.0	80.0	80.0	80.0				
37"	26"	60.0	80.0	80.0	80.0				
48"		60.0	80.0	80.0	80.0				
53-1/8"		60.0	80.0	80.0	80.0				
19-1/8"		60.0	80.0	80.0	80.0				
26-1/2"		60.0	80.0	80.0	80.0				
37"	38-3/8"	60.0	77.8	80.0	80.0				
48"		60.0	75.0	80.0	80.0				
53-1/8"		60.0	75.0	80.0	80.0				
19-1/8"		60.0	80.0	80.0	80.0				
26-1/2"		60.0	80.0	80.0	80.0				
37"	50-5/8"	60.0	77.8	80.0	80.0				
48"		60.0	60.0	80.0	80.0				
53-1/8"		56.9	56.9	75.9	75.9				
19-1/8"		60.0	80.0	80.0	80.0				
26-1/2"		60.0	80.0	80.0	80.0				
37"	58"	60.0	77.8	80.0	80.0				
48"		60.0	60.0	80.0	80.0				
53-1/8"		54.2	54.2	72.3	72.3				
19-1/8"		60.0	80.0	80.0	80.0				
26-1/2"		60.0	80.0	80.0	80.0				
37"	63"	60.0	77.8	80.0	80.0				
48"		60.0	60.0	80.0	80.0				
53-1/8"		54.2	54.2	72.3	72.3				
19-1/8"		60.0	80.0	80.0	80.0				
26-1/2"		60.0	80.0	80.0	80.0				
37"	76"	60.0	77.2	80.0	80.0				
48"		60.0	60.0	80.0	80.0				
53-1/8"		54.2	54.2	72.3	72.3				

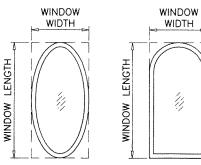


NOTE: WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.

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



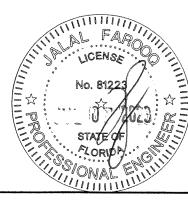
ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES.



PRODUCT REVISED As complying with the Florida Building Code NOA-No. **23-0714.17**

Expiration Date: <u>05/18/2027</u>

Miami-Dade Product Control



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(C.A.N. 3538) FAX. (305) 262-6978

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

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WDW.

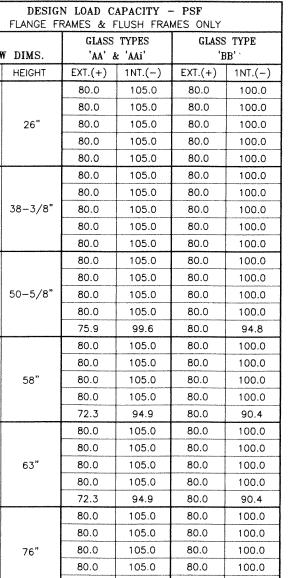
ES-EL150 FIXED ALUMINUM W
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305)

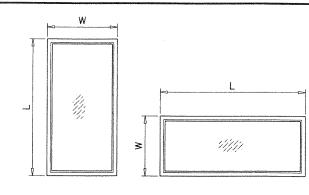
(302)

WINDO	W DIMS.		TYPES & 'AAi'	MES ONLY GLASS TYPE 'BB'	
WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)
48"		80.0	105.0	80.0	100.0
54"		80.0	105.0	80.0	100.0
60"		80.0	105.0	80.0	100.0
66"	48"	80.0	105.0	80.0	100.0
72"		80.0	105.0	80.0	100.0
78"		80.0	105.0	80.0	100.0
48"		80.0	105.0	80.0	100.0
54"		71.1	93.3	80.0	88.9
60"	7	71.1	93.3	80.0	88.9
66"	54"	71.1	93.3	80.0	88.9
72"		_	_	80.0	88.9
78"		-	***	80.0	88.9
48"		80.0	105.0	80.0	100.0
54"		71.1	93.3	80.0	88.9
60"	"	64.0	84.0	80.0	80.0
66"	60"		_	80.0	80.0
72"			_	80.0	80.0
78"			_	80.0	80.0
48"		80.0	105.0	80.0	100.0
54"		71.1	93.3	80.0	88.9
60"	20"	_	_	80.0	80.0
66"	66"		_	72.7	72.7
72"		_	_	72.7	72.7
78"			_	72.7	72.7
48"		80.0	105.0	80.0	100.0
54"		-		80.0	88.9
60"	70"			80.0	80.0
66"	72"		-	72.7	72.7
72"			_	66.7	66.7
78"		****	_	66.7	66.7
48"		80.0	105.0	80.0	100.0
54"			_	80.0	88.9
60"	70"	_	_	80.0	80.0
66"	78"	_	_	72.7	72.7
72"		_		66.7	66.7
78"		_	-	61.5	61.5
42"		80.0	105.0	80.0	100.0
48"		_	_	80.0	100.0
54"	84"	_	_	80.0	88.9
60"	04	_	_	80.0	80.0
66"		-	-	72.7	72.7
72"		_	-	66.7	66.7
42"		80.0	105.0	80.0	100.0
48"			•••	80.0	100.0
54"	90"	_		80.0	80.0
60"	50	_		80.0	80.0
66"		_	_	72.7	72.7
72"		-	_	66.7	66.7
36"		80.0	105.0	80.0	100.0
42"		_		80.0	100.0
48"	96"	_	_	80.0	100.0
54"		_	-	80.0	80.0
60"			-	80.0	80.0
66"		j	-	72.7	72.7

	DESIGN LOAD CAPACITY - PSF FLANGE FRAMES & FLUSH FRAMES ONLY										
٦	GLASS TYPES GLASS TYPE										
	WINDO	W DIMS.	'AA' &	k 'AAi'	'BB'						
	WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)					
	36"		80.0	105.0	80.0	100.0					
	42"		_	_	80.0	100.0					
	48"	102"	-		80.0	80.0					
	54"			-	80.0	80.0					
1	60"		_	_	80.0	80.0					
	30"		80.0	105.0	80.0	80.0					
1	42"				80.0	100.0					
1	48"	108"			80.0	80.0					
1	54"		-		80.0	80.0					
1	60"				80.0	80.0					
1	30"		80.0	105.0	80.0	80.0					
1	48"	114"			80.0	80.0					
1	54"		-		80.0	80.0					
1	30"		80.0	105.0	80.0	80.0					
	48"	120"		_	80.0	80.0					
1	54"		_	_	80.0	80.0					
1	30"	126"	80.0	105.0	80.0	80.0					
	24"		80.0	105.0	80.0	80.0					
1	42"	132"		_	80.0	80.0					
	48"				80.0	80.0					
	24"	138"	80.0	105.0	80.0	80.0					
	42"	136		***	80.0	80.0					
1	24"	144"	80.0	105.0	80.0	80.0					
	42"	144"		_	80.0	80.0					

DESIGN LOAD CAPACITY - PSF FLANGE FRAMES & FLUSH FRAMES ONLY										
GLASS TYPES GLASS TYPE WINDOW DIMS. 'AA' & 'AAI' 'BB'										
WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)					
19-1/8"		80.0	105.0	80.0	100.0					
26-1/2"		80.0	105.0	80.0	100.0					
37"	26"	80.0	105.0	80.0	100.0					
48"		80.0	105.0	80.0	100.0					
53-1/8"		80.0	105.0	80.0	100.0					
19-1/8"		80.0	105.0	80.0	100.0					
26-1/2"		80.0	105.0	80.0	100.0					
37"	38-3/8"	80.0	105.0	80.0	100.0					
48"		80.0	105.0	80.0	100.0					
53-1/8"		80.0	105.0	80.0	100.0					
19-1/8"		80.0	105.0	80.0	100.0					
26-1/2"		80.0	105.0	80.0	100.0					
37"	50-5/8"	80.0	105.0	80.0	100.0					
48"		80.0	105.0	80.0	100.0					
53-1/8"		75.9	99.6	80.0	94.8					
19-1/8"		80.0	105.0	80.0	100.0					
26-1/2"		80.0	105.0	80.0	100.0					
37"	58"	80.0	105.0	80.0	100.0					
48"		80.0	105.0	80.0	100.0					
53-1/8"		72.3	94.9	80.0	90.4					
19-1/8"		80.0	105.0	80.0	100.0					
26-1/2"		80.0	105.0	80.0	100.0					
37"	63"	80.0	105.0	80.0	100.0					
48"		80.0	105.0	80.0	100.0					
53-1/8"		72.3	94.9	80.0	90.4					
19-1/8"		80.0	105.0	80.0	100.0					
26-1/2"		80.0	105.0	80.0	100.0					
37"	76"	80.0	105.0	80.0	100.0					
48"		80.0	105.0	80.0	100.0					
53-1/8"		-		80.0	90.4					

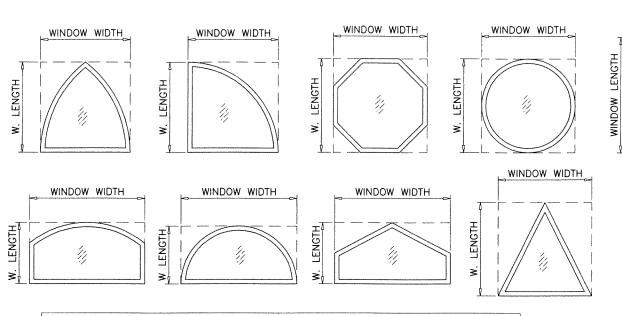




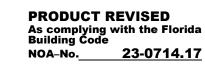
NOTE: WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.

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

> WINDOW WIDTH



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



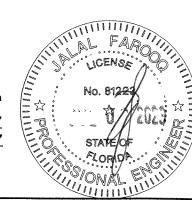
WINDOW LENGTH

WINDOW WIDTH

Expiration Date: 05/18/2027

By: Manuel Pers

Miami-Dade Product Control



W16 - 70

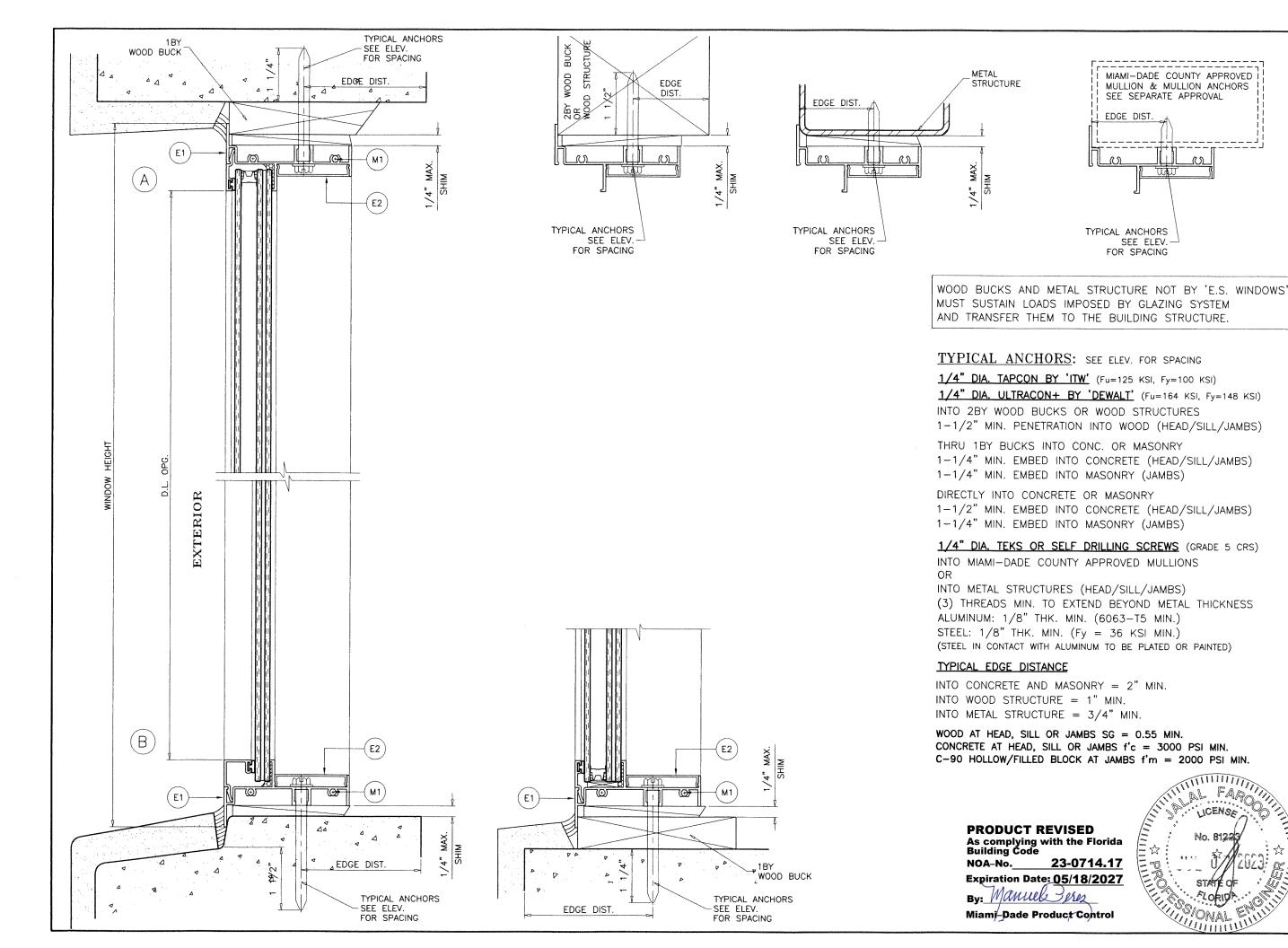
sheet **3.1**of **9**

(C.A.N. 3538) FAX. (305) 262-6978

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

WDW.

E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638–5151 FAX. (305) 6



(C.A.N. 3538) 305) 262-6978

CORPORATION DUCT DEVELOPMENT AL-FAROOQ CORPOR/
ENGINEERS & PRODUCT DEVELOPI
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A
TEL. (305) 264-8100 FAX. (305)

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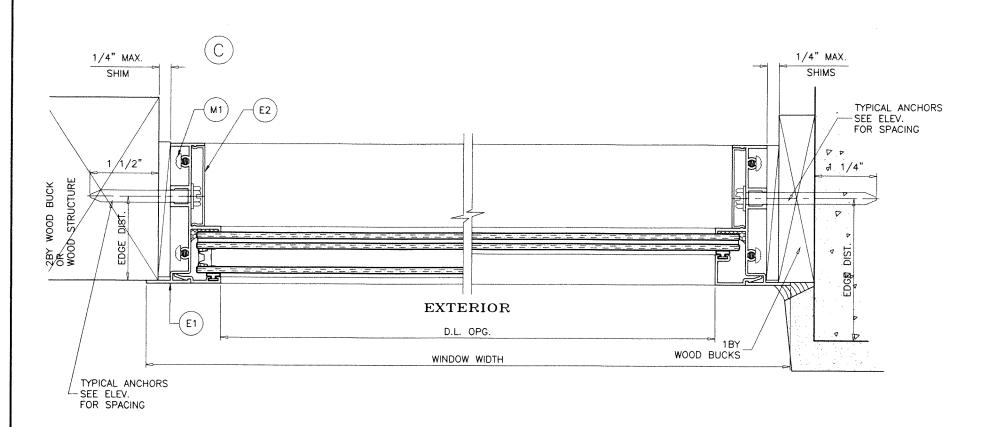
S. WINDOWS, LLC 50 N.W. 49 STREET MI, FL. 33142 (305) 638–5151 FAX.

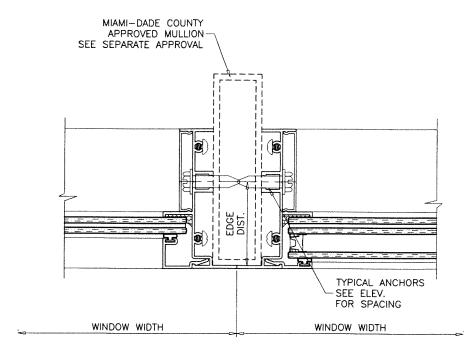
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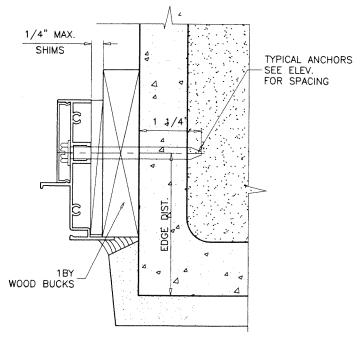
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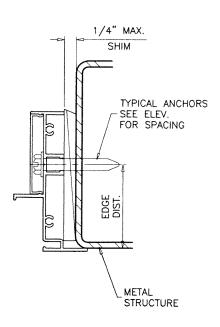
drawing W16 - 70

sheet 4 of 9







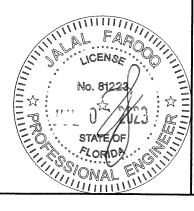


PRODUCT REVISED
As complying with the Florida
Building Code 23-0714.17 NOA-No.

Expiration Date: 05/18/2027

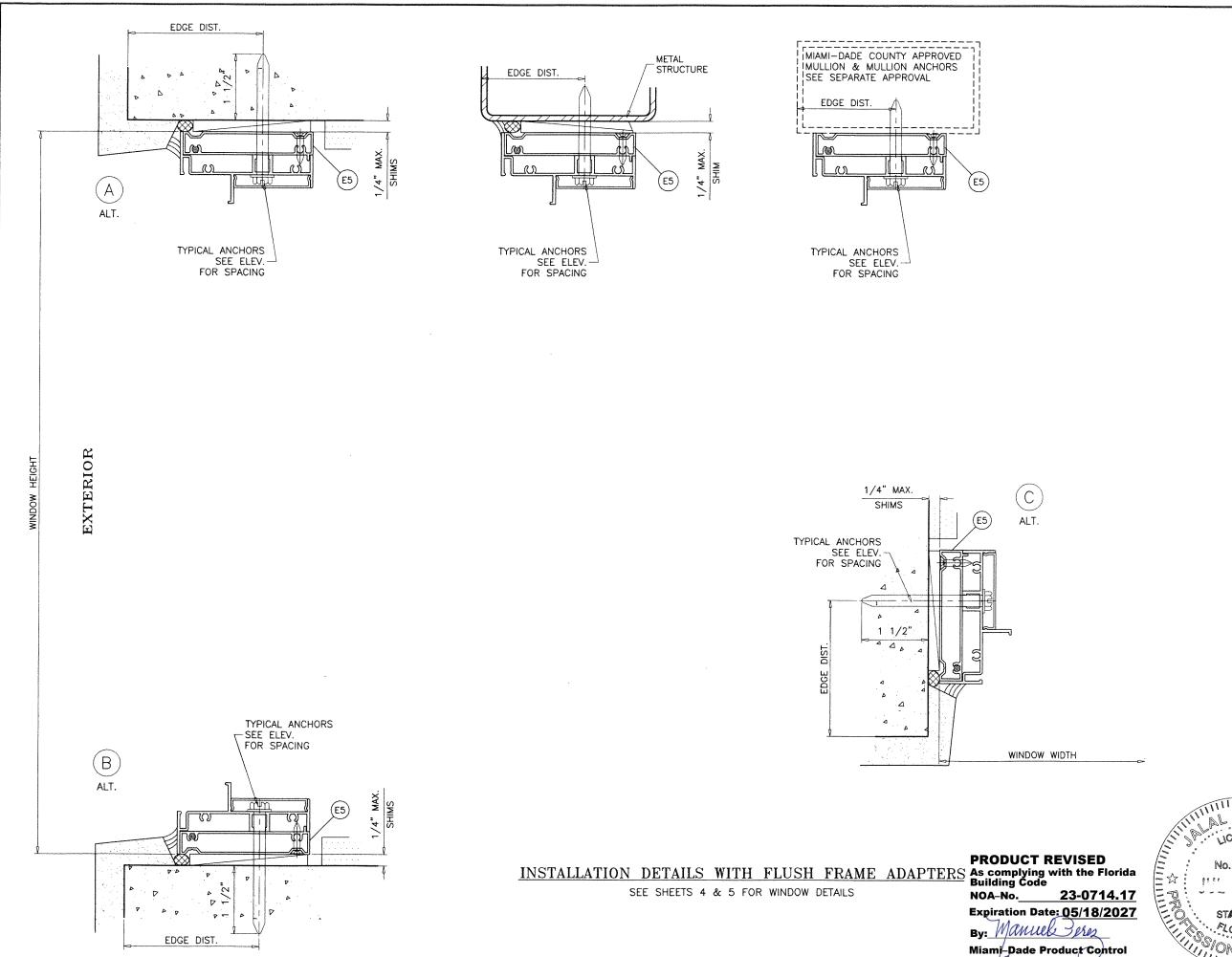
By: Manuel Pres

Miami-Dade Product Control



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 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

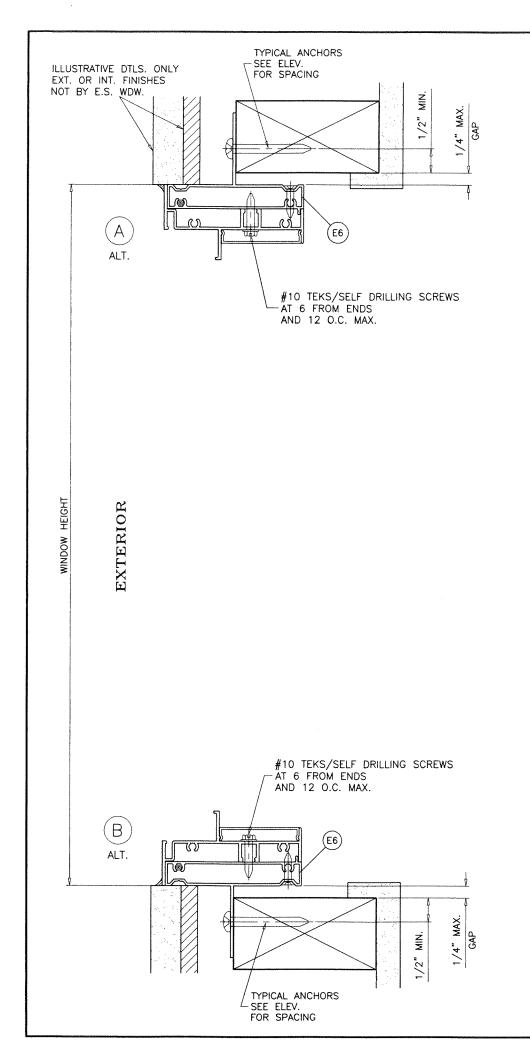
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ES-EL150 FIXED ALUMINUM W
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 0

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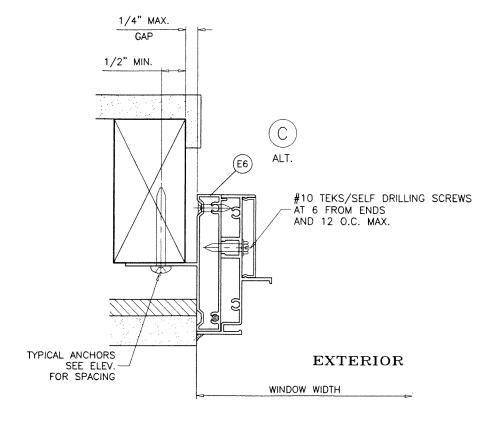
W16 - 70sheet 6 of 9



TYPICAL ANCHORS: SEE ELEV. FOR SPACING

#10 WOOD SCREWS (GRADE 2 CRS)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES 1-1/2" MIN. PENETRATION INTO WOOD



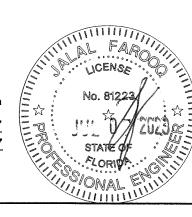
INSTALLATION DETAILS WITH FIN FRAME ADAPTERS

SEE SHEETS 4 & 5 FOR WINDOW DETAILS

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0714.17

NOA-No. 23-0714.17 Expiration Date: 05/18/2027

Miami-Dade Product Control

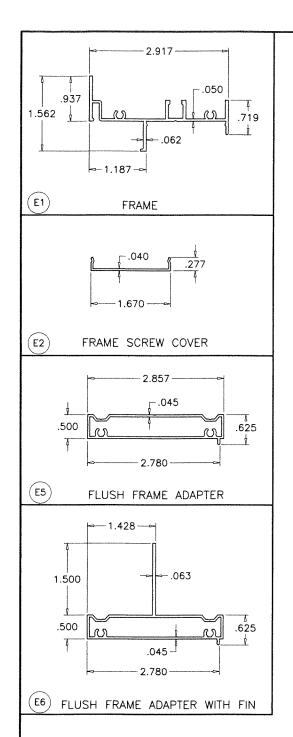


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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

ES-EL150 FIXED ALUMINUM W
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305)

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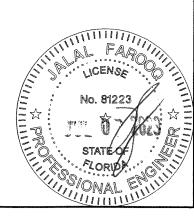
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(E7)

ITEM #	PART #	REQD.	DESCRIPTION MATERIAL MANF./SUPPLIER/		MANF./SUPPLIER/REMARKS	
E1	ES-EL151	1	FRAME	6063-T6	_	
E2	ES-EL152	AS REQD.	FRAME SCREW COVER	6063-T6	_	
E4	ES-EL111	AS RQD.	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T6	-	
E4A	ES-EL116	AS RQD.	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T6	_	
E5	ES-EL112	AS REQD.	FLUSH FRAME ADAPTER	6063-T6	-	
E6	ES-EL115	AS REQD.	FLUSH FRAME ADAPTER WITH FIN	6063-T6	-	
E7	ES-EL110	AS RQD.	GLAZING BEAD (7/16" LAM. GLASS)	6063-T6		
E7A	ES-EL123	AS RQD.	GLAZING BEAD (7/16" LAM. GLASS)	6063-T6	-	
M1	#8 X 1"		FRAME ASSEMBLY FASTENERS ST.		PH SMS	
М2	ES-5008A	AS REQD.	EXTERIOR BULB GASKET	SILICONE	DUROMETER 60±5 SHORE A	
M2A	EL100-G02	AS REQD.	EXTERIOR LEAF GASKET SILICONE DU		DUROMETER 60±5 SHORE A	
м2В	ES-H-340-G05	AS REQD.	EXTERIOR WEDGE GASKET	SILICONE	DUROMETER 65±5 SHORE A	
мз	80-372A	2/ LITE	SETTING BLOCK AT 1/4 POINTS (LAM. GLASS)	SILICONE	DUROMETER 80±5 SHORE A	
M4	EL100-B01	2/ LITE	TE SETTING BLOCK AT 1/4 POINTS (INSUL. LAM. GLASS) SILICONE DUROMETER 80		DUROMETER 80±5 SHORE A	
M5	#8 X 1"	-	FLUSH/FIN FRAME ADAPTER ASSEMBLY FASTENERS	ST. STEEL	FH SMS	

NOA-No. 23-0714.17



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 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

ES-EL150 FIXED ALUMINUM W

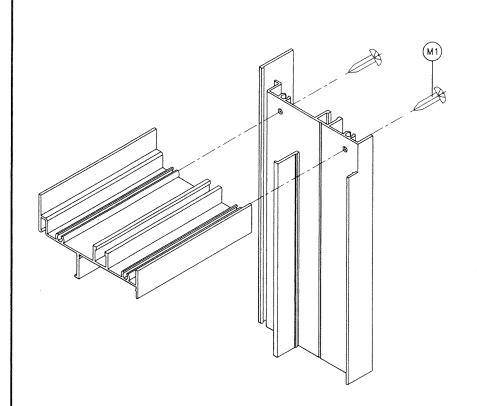
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 6

PRODUCT REVISED
As complying with the Florida
Building Code

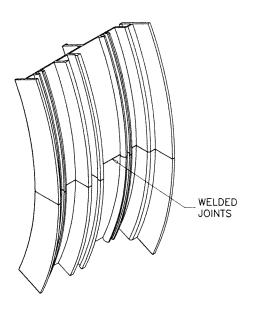
Expiration Date: 05/18/2027

By: Manuel Pers

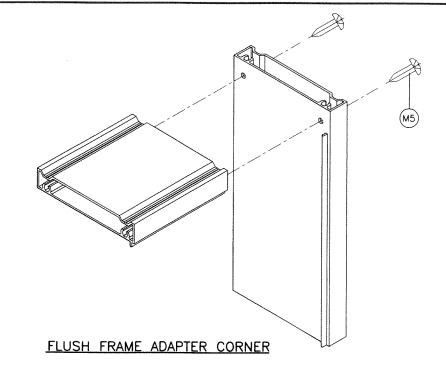
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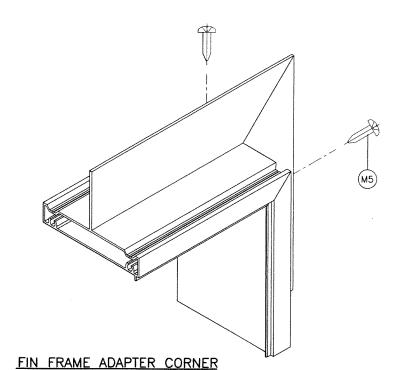






CIRCULAR WINDOWS



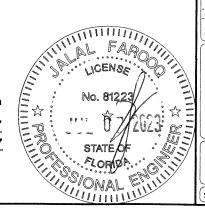


PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0714.17

Expiration Date: 05/18/2027

By: Manuel Peres

Miami-Dade Product Control



) WOW MINI	1 . NOW . VE.)			FAX. (305) 638-5158
FS-FI 150 FIXED ALLIMINIM WDW (I		E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638–5151 FAX				
	no date by description	NO CHANGE THIS SHEET	NO CHANGE THIS SHEET	GENERAL REVISION	NO CHANGE THIS SHEET	NO CHANGE THIS SHEET
revisions:	no date by	A 05.12.17	B 11.27.17	C 06.22.20	D 06.15.21	E 06.29.23
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