

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

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

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 **D** dated 06/12/21, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E., bearing the Miami–Dade County Product Control Renewal 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 **renews NOA No. 21-0708.03** 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. 22-0105.01 Expiration Date: May 18, 2027 Approval Date: February 10, 2022 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. 22-0105.01

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. 20-0622.02 issued to Eastman Chemical Company (MA) for their "Saflex HP Clear or Color Glass Interlayers" dated 08/06/20, expiring on 04/14/23.

Manuel Perez, P.E. Product Control Examiner NOA No. 22-0105.01

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 June 25, 2021, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E (Submitted under NOA No. 21-0708.03)
- 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. **20-1223.01**, issued to E.S. Windows, LLC, for their Series "EL-150" Aluminum Fixed Window – L.M.I., approved on 04/22/21 and expiring on 05/18/22.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 22-0105.01

E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. None.

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. 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. 20-0622.02 issued to Eastman Chemical Company (MA) for their "Saflex HP Clear or Color Glass Interlayers" dated 08/06/20, expiring on 04/14/23.

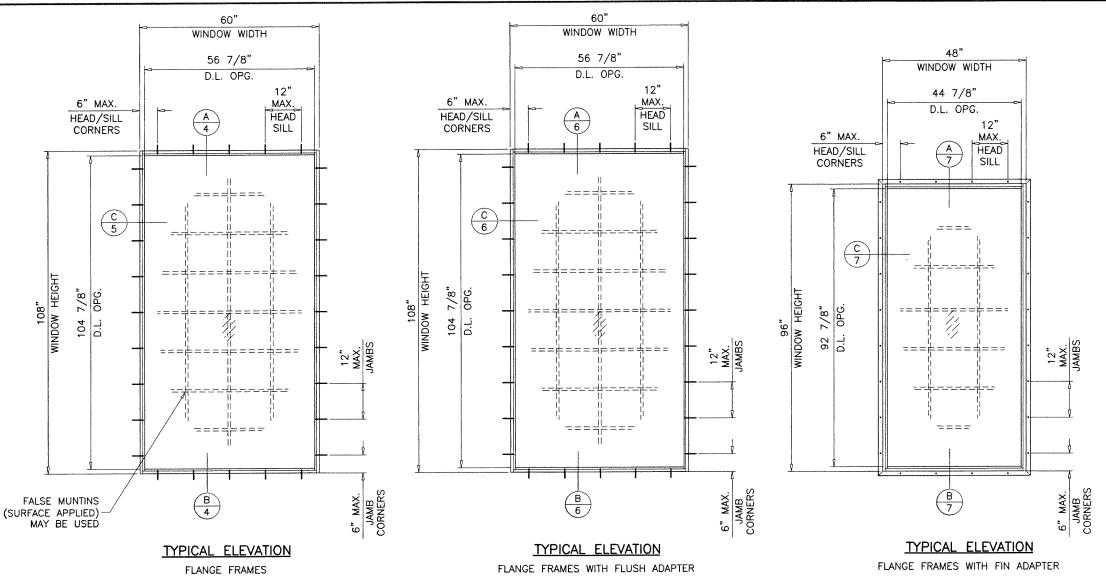
F. STATEMENTS

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.

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. 22-0105.01



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) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ)

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

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

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

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

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2020 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT 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)'.

WINDOWS WITH FIN FRAME ADAPTERS LIMITED TO GLASS TYPES 'A', 'Ai', 'B', 'DI' & 'Ei' ONLY

22-0105.01 **Expiration Date: 05/18/2027** DAYLITE OPENINGS:

Miami-Dade Product Control

PRODUCT RENEWED

NOA-No.

as complying with the Florida Building Code

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.

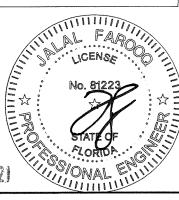
THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 21-0708.03

Expiration Date: 05/18/2022

By: Manuel Peres Miami-Dade Product Control

JUL 0 6 2021



		by description	NO CHANGE THIS SHEET	UPDATED TO 2017 FBC	GENERAL REVISION	NO CHANGE THIS SHEET	
	revisions:	no date by	A 05.12.17	B 11.27.17	C 06.22.20	D 06.15.21	
	date: 11-13-16		scale: 1/2"=1'-0"		dr. by: TARIQ		cnk. by:
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sheet 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

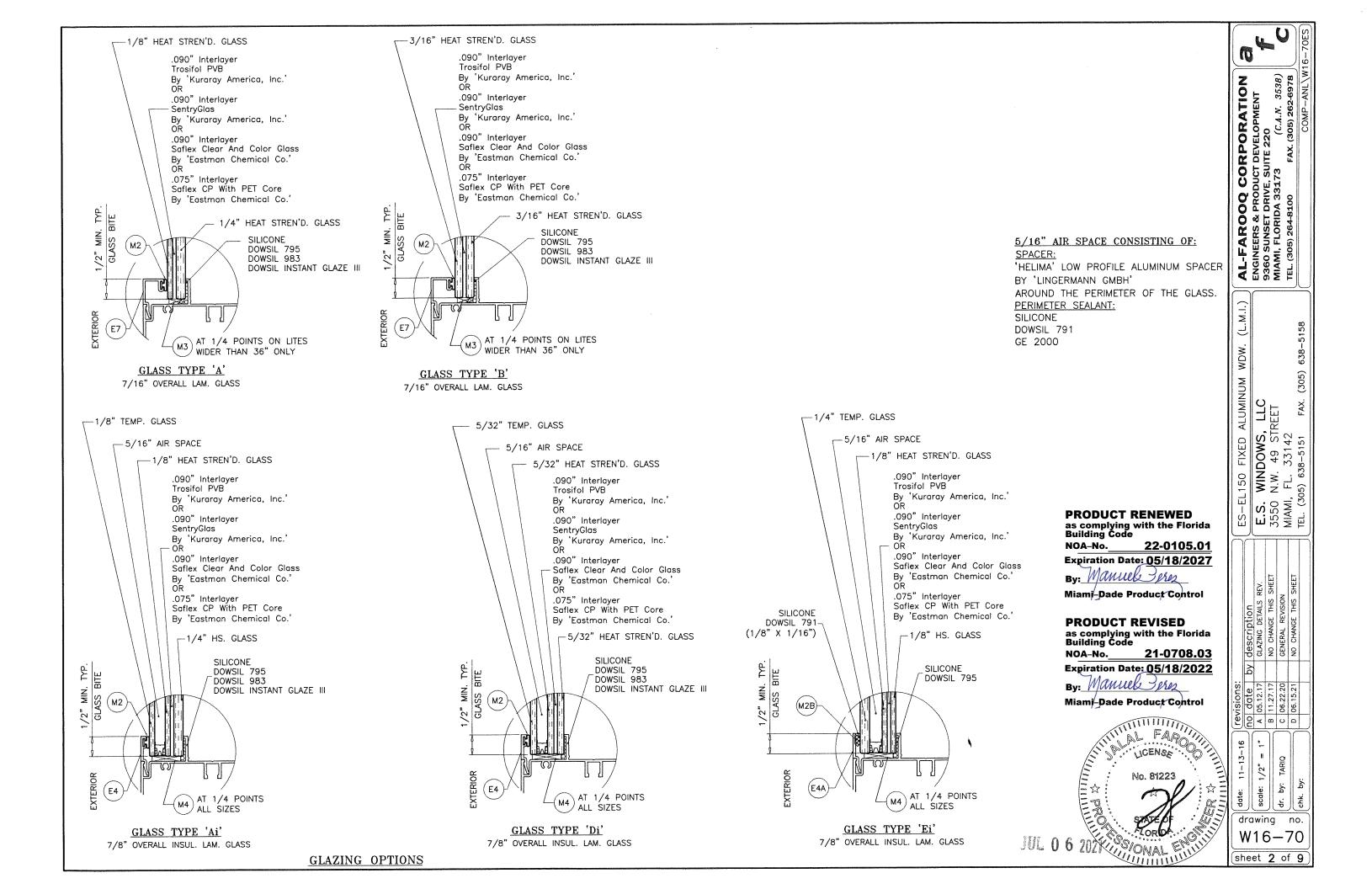
(L.M.I.)

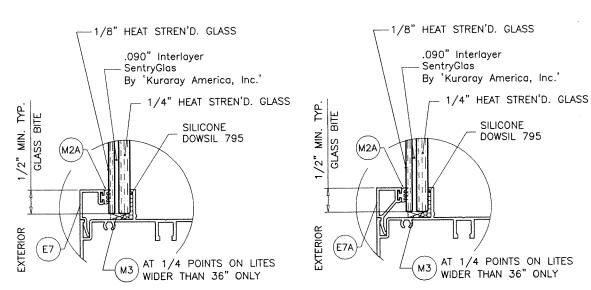
WDW.

ES-EL150 FIXED ALUMINUM

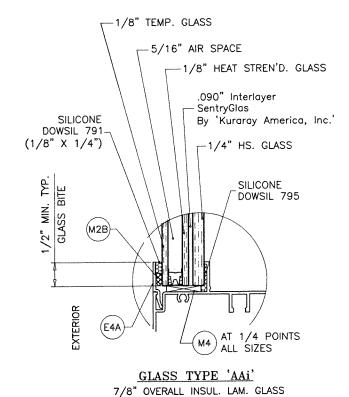
WINDOWS, LLC N.W. 49 STREET I, FL. 33142 305) 638–5151 FAX.

E.S. 3550 MIAMI, TEL. (30)

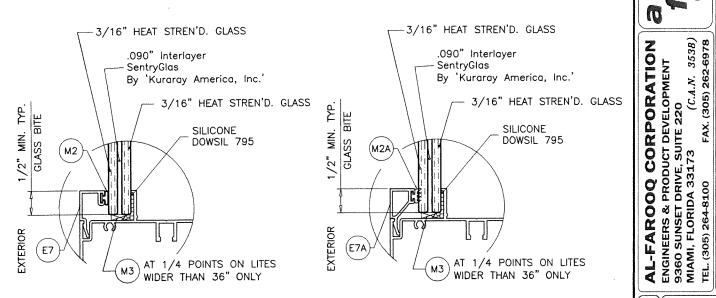




GLASS TYPE 'AA' 7/16" OVERALL LAM. GLASS



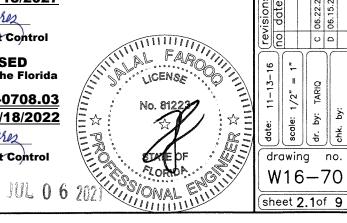
5/16" AIR SPACE CONSISTING OF: SPACER: 'HELIMA' LOW PROFILE ALUMINUM SPACER BY 'LINGERMANN GMBH' AROUND THE PERIMETER OF THE GLASS. PERIMETER SEALANT: SILICONE DOWSIL 791 GE 2000



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



Miami-Dade Product Control



	FS-F1150 FIXED ALLIMINI WDW (1		E.S. WINDOWS, LLC	3550 N W 49 STRFFT	MINNI EL 33140	WIMMII, L. 00142	TEL. (305) 638-5151 FAX. (305) 638-515
		description			GENERAL REVISION	NO CHANGE THIS SHEET	
	revisions:	no date by description			C 06.22.20	D 06.15.21	
	4 g date: 11-13-16 re		scale: 1/2" = 1"		dr. by: TARIQ		chk. by:
<u> </u>	d	ra N	wii	ng 3-		nc 7(·]

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

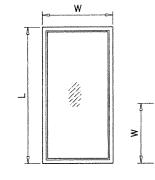
(L.M.I.)

GLAZING OPTIONS

F	LANGE FRA	1	TYPE	*	S TYPES	
WINDOX	V 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"	60.0	68.6	80.0	80.0	
42 48"	/2	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	78.0	80.0	80.0	
36 42"	78"	60.0	68.6	80.0	80.0	
42 48"	, ,	60.0	60.0	80.0	80.0	
46 54"		53.3	53.3	71.1	71.1	
30"	<u> </u>	60.0	80.0	80.0	80.0	
36"		60.0	76.4	80.0	80.0	
36 42"	84"	60.0	68.6	80.0	80.0	
42 48"		60.0	60.0	80.0	80.0	
48 54"		53.3	53.3	71.1	71.1	
30"	<u> </u>	60.0	80.0	80.0	80.0	
36"		60.0	75.0	80.0	80.0	
36 42"	90"	60.0	67.1	80.0	80.0	
		60.0	60.0	80.0	80.0	
48"		60.0	80.0	80.0	80.0	
30"			73.8	80.0	80.0	
36"	96"	60.0	65.8	80.0	80.0	
42"		60.0	60.0	80.0	80.0	

	DESIGN LOAD CAPACITY - PSF FLANGE FRAMES, FLUSH FRAMES, FIN FRAMES								
ŀ	GLASS TYPE GLASS TYPES								
1	WINDOV	V DIMS.		A'	'B', 'Ai', 'Di', 'Ei'				
Ì	WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)			
I	30"		60.0	80.0	80.0	80.0			
۱	36"		60.0	78.1	80.0	80.0			
١	36"	102"	60.0	72.9	80.0	80.0			
۱	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			
1	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							
			TYPE	GLASS TYPES			
WINDOV	V DIMS.		A'	'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"	t .	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.

11/1/2

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\W16-

(L.M.I.)

ES-EL150 FIXED ALUMINUM WDW. (1 E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151

by description
GLASS CHART REV.
NO CHANGE THIS SH
GENERAL REVISION
WOW. SIZES ADDED

Expiration Date: <u>05/18/2027</u> By: Manuel Peres Miami-Dade Product Control

revisions:
no date
A 05.12.17
B 11.27.17
C 06.22.20
D 06.15.21 FAROUSE STATE OF THE STATE OF T date:

W16 - 70sheet 3 of 9

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

NOA-No.

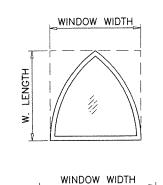
PRODUCT RENEWED

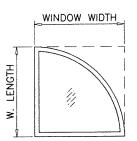
as complying with the Florida Building Code

22-0105.01

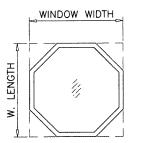
WINDOW

WIDTH

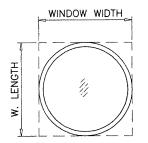


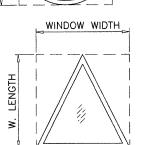


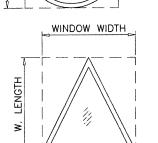
WINDOW WIDTH



WINDOW WIDTH







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

Miami-Dade Product Control

WINDOW WIDTH

WINDOW LENGTH

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.

LENGTH

WINDOW LENGTH

21-0708.03 Expiration Date: 05/18/2022

By: Manuel Pres

WINDOW DIMS.		1	TYPES	GLASS	TYPE
WIDTH	HEIGHT			EXT.(+)	1NT.(-)
48"	TILIOTTI	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
72 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"		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
7 2 78"		***	_	80.0	80.0
48"	<u> </u>	80.0	105.0	80.0	100.0
54"		71.1	93.3	80.0	88.9
60"		_	_	80.0	80.0
66"	66"	_	_	72.7	72.7
72"		_	ANY	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"	78"	-	_	80.0	80.0
66"	, ,	_		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"				80.0	80.0
66"			-	72.7	72.7
72"	<u> </u>			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"			_	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"	1	I -	_	80.0	80.0

1	DESIGN LOAD CAPACITY - PSF FLANGE FRAMES & FLUSH FRAMES ONLY								
\dashv	GLASS TYPES GLASS TYPE								
	WINDOV	V DIMS.		'AAi'	'BB'				
1	WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)			
1	36"		80.0	105.0	80.0	100.0			
1	42"		_	_	80.0	100.0			
1	48"	102"	-	_	80.0	80.0			
	54"			_	80.0	80.0			
1	60"		-	_	80.0	80.0			
1	30"		80.0	105.0	80.0	80.0			
٦	42"		-	-	80.0	100.0			
٦	48"	108"		_	80.0	80.0			
1	54"			-	80.0	80.0			
	60"			. –	80.0	80.0			
	30"		80.0	105.0	80.0	80.0			
	48"	114"	_	_	80.0	80.0			
٦	54"		_		80.0	80.0			
	30"		80.0	105.0	80.0	80.0			
	48"	120"	-		80.0	80.0			
	54"		_	_	80.0	80.0			
	30"	126"	80.0	105.0	80.0	80.0			
	24"		80.0	105.0	80.0	80.0			
	42"	132"	_	_	80.0	80.0			
	48"		-	-	80.0	80.0			
	24"	138"	80.0	105.0	80.0	80.0			
	42"	, 50	_		80.0	80.0			
	24"	144"	80.0	105.0	80.0	80.0			
	42"	177		-	80.0	80.0			

WINDOW WIDTH

LENGTH

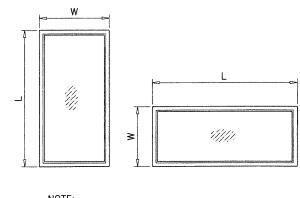
LENGTH

DESIGN LOAD CAPACITY – PSF FLANGE FRAMES & FLUSH FRAMES ONLY									
	GLASS TYPES GLASS TYPE								
WINDOY	W DIMS.	'AA' 8	c '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				

WINDOW WIDTH

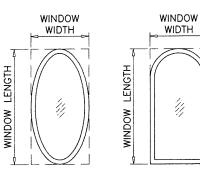
WINDOW WIDTH

W. LENGTH



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).

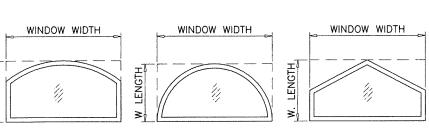


PRODUCT RENEWED as complying with the Florida Building Code 22-0105.01

NOA-No.

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

Miami-Dade Product Control



WINDOW WIDTH

LENGTH

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 WIDTH

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 21-0708.03

Expiration Date: 05/18/2022

By: Manuel Pres

Miami-Dade Product Control



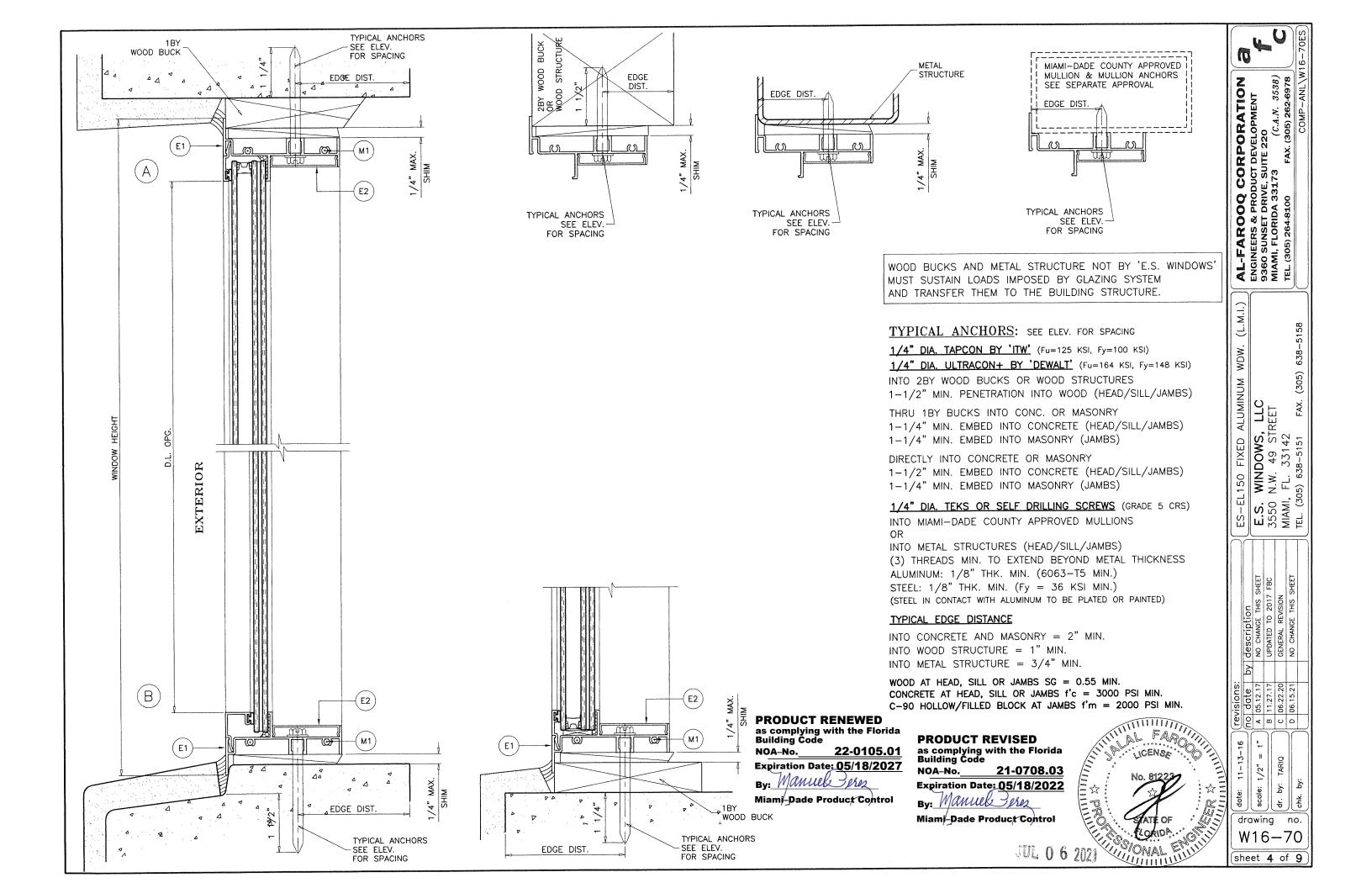
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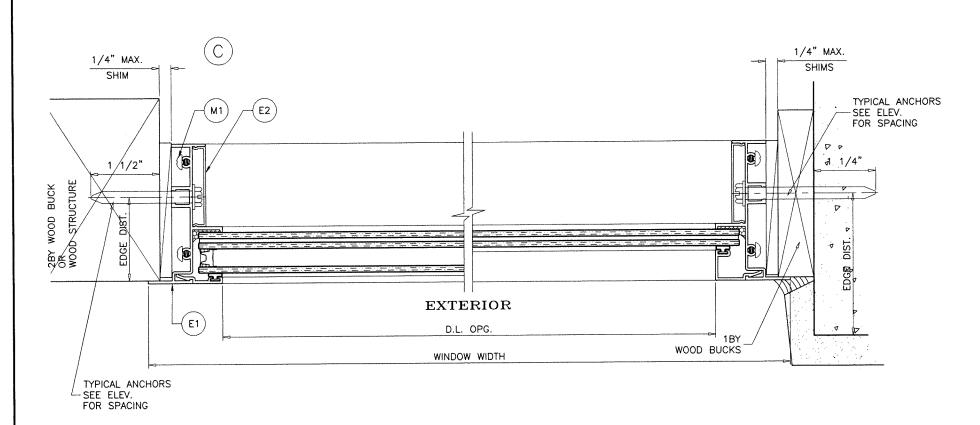
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33.173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

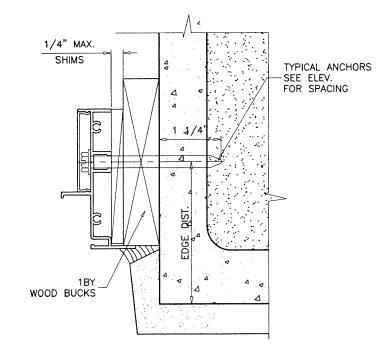
(L.M.I.)

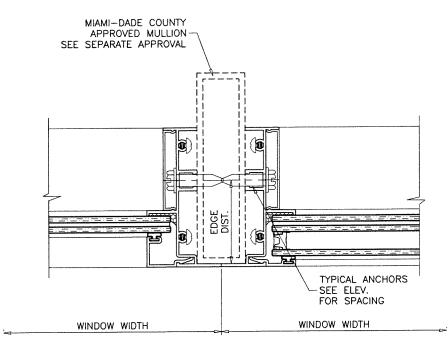
638-5158

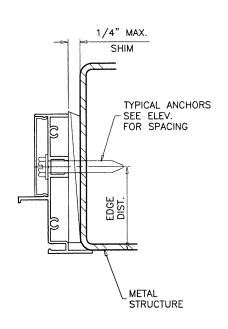
ES-EL150 FIXED ALUMINUM WDW. (1 E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151 FAX. (305) 638-515











PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 22-0105.01

NOA-No. 22-0105.01 Expiration Date: 05/18/2027

By: Manuel Perez

Miami-Dade Product Control

PRODUCT REVISED as complying with the Florida Building Code
NOA-No. 21-0708.03

Expiration Date: 05/18/2022

By: Manuel Peres

Miami-Dade Product Control



FS-FI 150 FIXED ALLIMINIM WDW (1		S. LLC	STREET	2		1 FAX. (305) 638-515
FS-FI 150 FIXE		E.S. WINDOWS, LLC	3550 N W 49 STREET	MIAMI EI 33140		TEL. (305) 638-5151
	no date by description	NO CHANGE THIS SHEET	NO CHANGE THIS SHEET	GENERAL REVISION	NO CHANGE THIS SHEET	
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 AL-FAROOQ CORPORATION

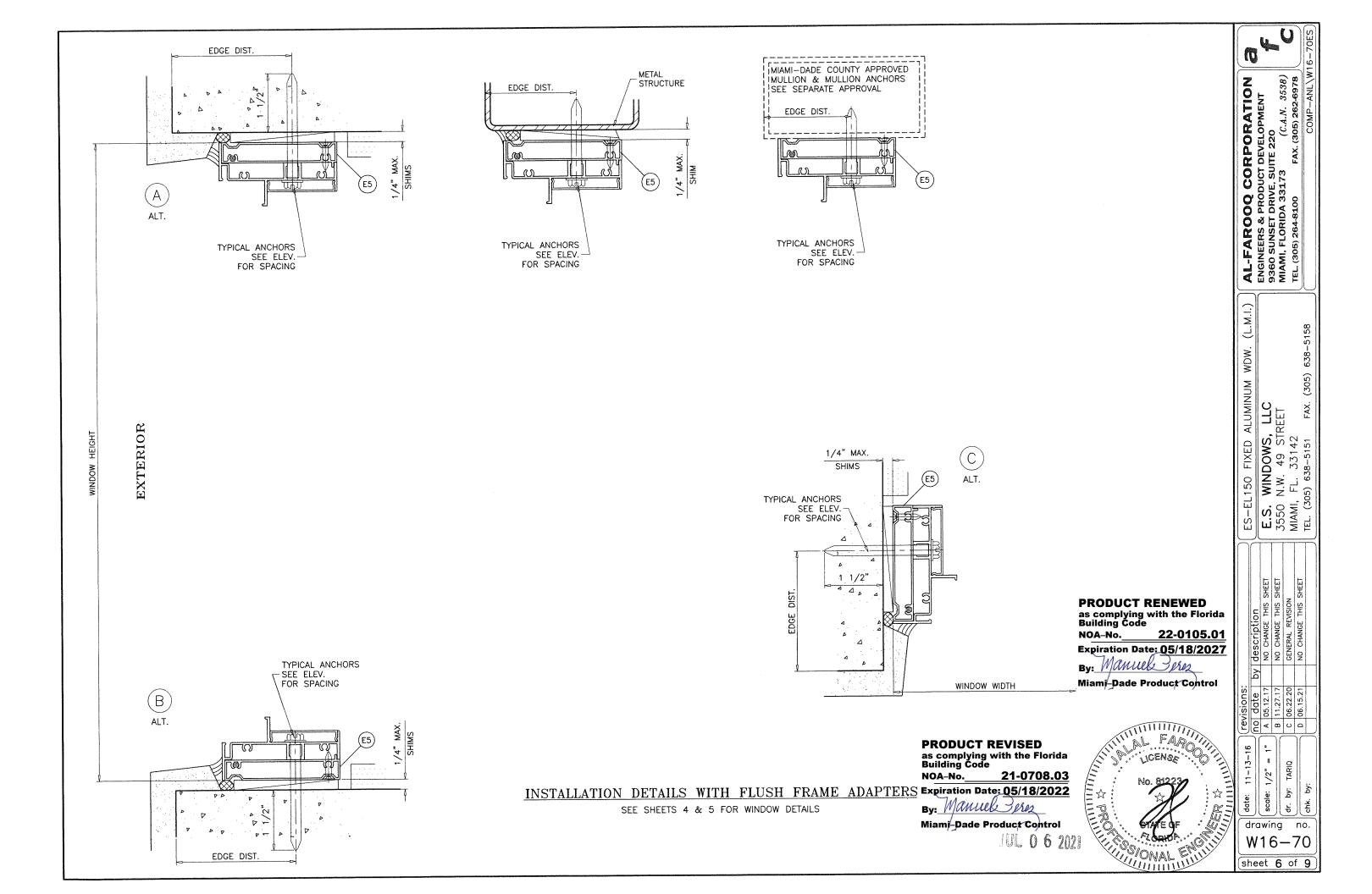
 ENGINEERS & PRODUCT DEVELOPMENT

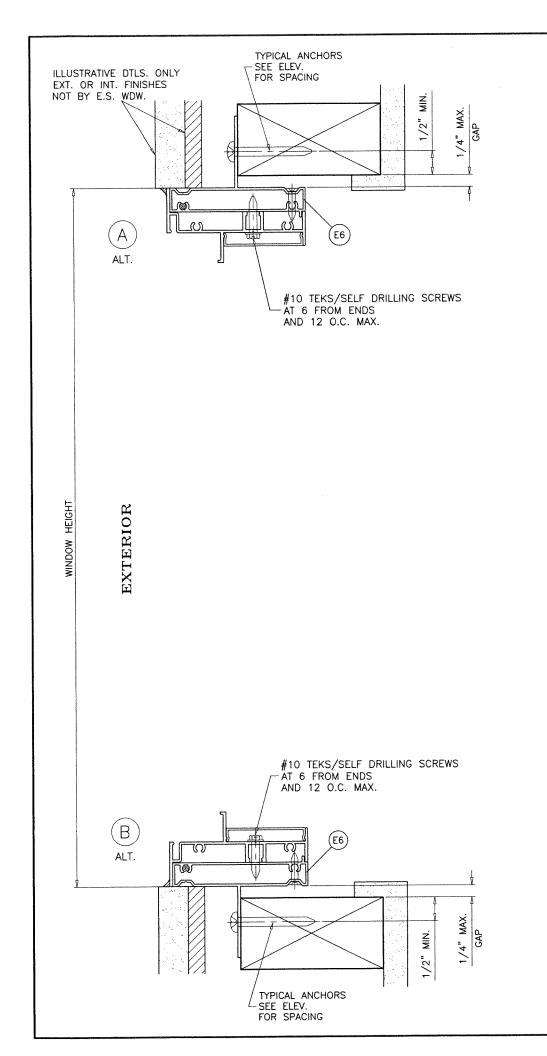
 9360 SUNSET DRIVE, SUITE 220

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

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

(L.M.I.)

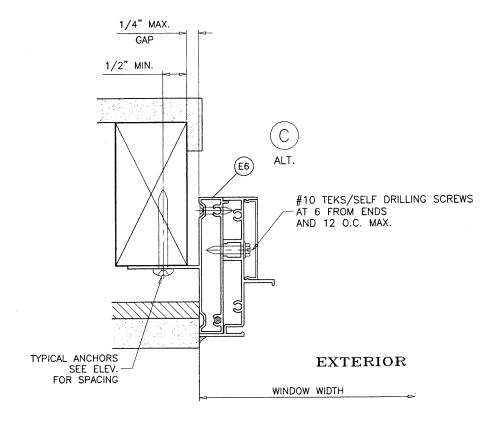




TYPICAL ANCHORS: SEE ELEV. FOR SPACING

#10 WOOD SCREWS (GRADE 2 CRS)

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



PRODUCT RENEWED as complying with the Florida Building Code 22-0105.01

NOA-No.

INSTALLATION DETAILS WITH FIN FRAME ADAPTERS

SEE SHEETS 4 & 5 FOR WINDOW DETAILS

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 21-0708.03

Expiration Date: <u>05/18/2022</u>

By: Manuel Perez Miami-Dade Product Control

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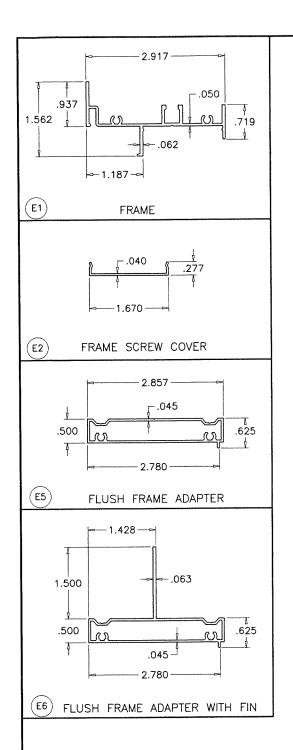


PRODUCT RENEWED as complying with the Florida Building Code NOA-No. 22-0105.01 Expiration Date: 05/18/2027		description	NO CHANGE THIS SH	NO CHANGE THIS SH	GENERAL REVISION	NO CHANGE THIS SH	
By: Manule Series Miami-Dade Product Control		by					
	revisions:	date	05.12.17	11.27.17	06.22.20	06.15.21	
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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.)

ES-EL150 FIXED ALUMINUM WDW. (1 E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-515



ITEM #	PART #	REQD.	DESCRIPTION MATERIAL MANF./SUF		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. STEEL	PH SMS
M2	ES-5008A	AS REQD.	EXTERIOR BULB GASKET	SILICONE	DUROMETER 60±5 SHORE A
M2A	EL100-G02	AS REQD.	EXTERIOR LEAF GASKET	SILICONE	DUROMETER 60±5 SHORE A
M2B	ES-H-340-G05	AS REQD.	EXTERIOR WEDGE GASKET	SILICONE	DUROMETER 65±5 SHORE A
м3	80-372A	2/ LITE	SETTING BLOCK AT 1/4 POINTS (LAM. GLASS)	SILICONE	DUROMETER 80±5 SHORE A
M4	EL100-B01	2/ LITE	SETTING BLOCK AT 1/4 POINTS (INSUL. LAM. GLASS)	SILICONE	DUROMETER 80±5 SHORE A
M5	#8 X 1"	_	FLUSH/FIN FRAME ADAPTER ASSEMBLY FASTENERS	ST. STEEL	FH SMS

PRODUCT RENEWED
as complying with the Florida
Building Code 22-0105.01

Expiration Date: 05/18/2027

PRODUCT REVISED
as complying with the Florida
Building Code NOA-No.__

21-0708.03 Expiration Date: 05/18/2022

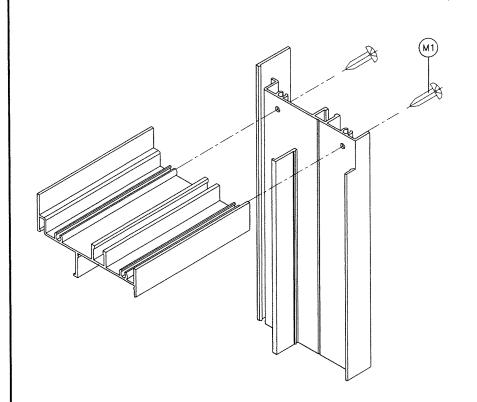
By: Manuel Pres Miami-Dade Product Control JUL 0 6

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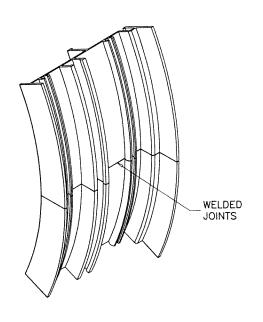
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N C)				ì	FAX. (305) 638-515
ES-EL150 FIXED ALUMINUM WDW.					į	(30
			FF]]	i	FAX.
SO FIXED A		E.S. WINDOWS, LLC	3550 N.W. 49 STRFFT	AINMI EI 33140	71.00.1	TEL. (305) 638-5151
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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

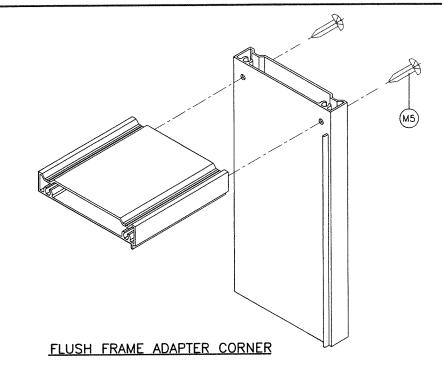
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	.519	.519	.625062 .974	.062 .974
	(E7)	(E7A)	E4	(E4A)
ı	<u> </u>	GLAZING BEADS		

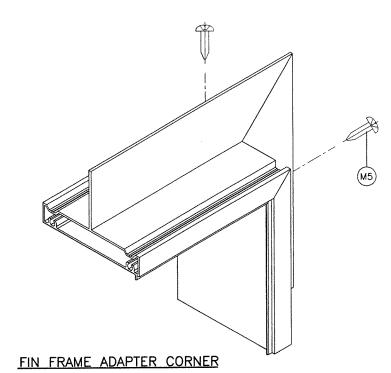






CIRCULAR WINDOWS





PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 22-0105.01

Expiration Date: 05/18/2027

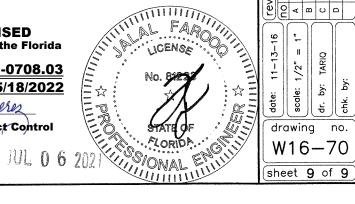
By: Manuel Peres

Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code NOA-No. 21-0708.03

Expiration Date: 05/18/2022

By: Manuel Peres Miami-Dade Product Control



ED ALUMINUM WDW. (L.M.I.) AL-FAROOQ CORPORATIO	ENGINEERS & PRODUCT DEVELOPMENT 9360 SUNSET DRIVE, SUITE 220	MIAMI, FLORIDA 33173 (C.A.N. 3	TEL. (305) 264-8100 FAX. (305) 262-6	COMP—AN	
(L.M.I.)				158	
WDW.				FAX. (305) 638-5158	
MON				(305)	
ALUMII	VS, LLC	STREET		FAX.	
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W16 - 70