

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)

BOARD AND CODE ADMINISTRATION DIVISION

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

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 "EL200" Aluminum Horizontal Rolling Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. W16-86, titled "ES-EL200 Horizontal Rolling Alum. Wdw. (L.M.I.)", sheets 1, 2, 2.1, 2.2, 3, 3.1, 3.2, 4 and 5 through 11 of 11, dated 12/19/16, with revision F 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. 23-0103.02 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. 23-0714.18 **Expiration Date: January 19, 2027** Approval Date: March 14, 2024 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. 16-0617.04)
- 2. Drawing No. W16-86, titled "ES-EL200 Horizontal Rolling Alum. Wdw. (L.M.I.)", sheets 1, 2, 2.1, 2.2, 3, 3.1, 3.2, 4 and 5 through 11 of 11, dated 12/19/16, with revision E dated 11/01/22, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

(Submitted under NOA No. 23-0103.02)

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) Forced Entry Test, per FBC, and TAS 202-94
 - 5) Large Missile Impact Test per FBC, TAS 201-94
 - 6) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of an aluminum horizontal sliding window, prepared by QAI Laboratories, Test Report No. **QAI-13090**, dated 10/19/22, revised on 07/21/23 and 10/03/23, signed and sealed by Idalmis Ortega, P.E. (Submitted under NOA No. 23-0103.02)

- 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

along with marked-up drawings and installation diagram of an aluminum horizontal sliding 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. 20-1208.07)

- 3. 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 an aluminum horizontal sliding window, prepared by Blackwater Testing, Inc., Test Report No.

BT-ESW-17-007, dated 10/24/17, and addendum letter dated 12/15/16, both signed and sealed by Constantin Bortes, P.E.

(Submitted under NOA No. 18-0221.03)

Manuel Perez, P.E. Product Control Examiner NOA No. 23-0714.18

E.S. Windows, LLC

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
 - 4) Forced Entry Test, per FBC, and TAS 202-94
 - 5) Large Missile Impact Test per FBC, TAS 201-94
 - 6) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of an aluminum horizontal sliding window, prepared by Blackwater Testing, Inc., Test Report No.

BT-ESW-16-007, dated 12/08/16, signed and sealed by Constantin Bortes, P.E. (Submitted under NOA No. 16-0617.04)

C. CALCULATIONS

Anchor verification calculations and structural analysis, complying with FBC 7th Edition (2020), dated 11/16/22, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

(Submitted under NOA No. 23-0103.02)

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. 23-0717.30 issued to Kuraray America, Inc. for their "SentryGlas® (Clear and White) Glass Interlayers" dated 08/31/23, expiring on 07/04/28.
- 2. Notice of Acceptance No. 23-0717.28 issued to Kuraray America, Inc. for their "Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers" dated 08/24/23, expiring on 07/08/24.
- 3. Notice of Acceptance No. 23-0713.18 issued to Eastman Chemical Company (MA) for their "Saflex PVB Interlayers Clear and Colored for Glass" dated 08/17/23, expiring on 05/21/26.
- 4. Notice of Acceptance No. 23-0713.21 issued to Eastman Chemical Company (MA) for their "Saflex Storm Saflex and Saflex HP Composite Glass Interlayers with PET Core" dated 08/17/23, expiring on 12/11/28.

Manuel Perez, P.E. Product Control Examiner NOA No. 23-0714.18

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), 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.

(Submitted under NOA's No. 23-0103.02)

- 2. Testing proposal issued by the Product Control Section, dated 04/15/13, signed by Jaime Gascon, P.E., Product Control Supervisor.

 (Submitted under NOA's No. 20-1208.07)
- 3. Distributor Agreement signed by Carlos Garcia and by Evelyn Daes. (Submitted under NOA No. 16-0617.04)
- 4. Laboratory compliance statement for Test Report No. **BT-ESW-16-007**, issued by Blackwater Testing, Inc., dated 12/08/16, signed and sealed by Constantin Bortes, P.E. (Submitted under NOA No. 16-0617.04)
- 5. Proposal No. 16-1228 issued by the Product Control Section, dated 11/16/16, signed by Manuel Perez, P.E. (Submitted under NOA No. 16-0617.04)

G. OTHERS

1. Notice of Acceptance No. **21-0608.03**, issued to E.S. Windows, LLC for their Series "EL200" Aluminum Horizontal Rolling Window – L.M.I., approved on 09/02/21 and expiring on 01/19/27.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-0714.18

E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. W16-86, titled "ES-EL200 Horizontal Rolling Alum. Wdw. (L.M.I.)", sheets 1, 2, 2.1, 2.2, 3, 3.1, 3.2, 4 and 5 through 11 of 11, dated 12/19/16, with revision F 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. 23-0717.30 issued to Kuraray America, Inc. for their "SentryGlas® (Clear and White) Glass Interlayers" dated 08/31/23, expiring on 07/04/28.
- 2. Notice of Acceptance No. 23-0717.28 issued to Kuraray America, Inc. for their "Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers" dated 08/24/23, expiring on 07/08/24.
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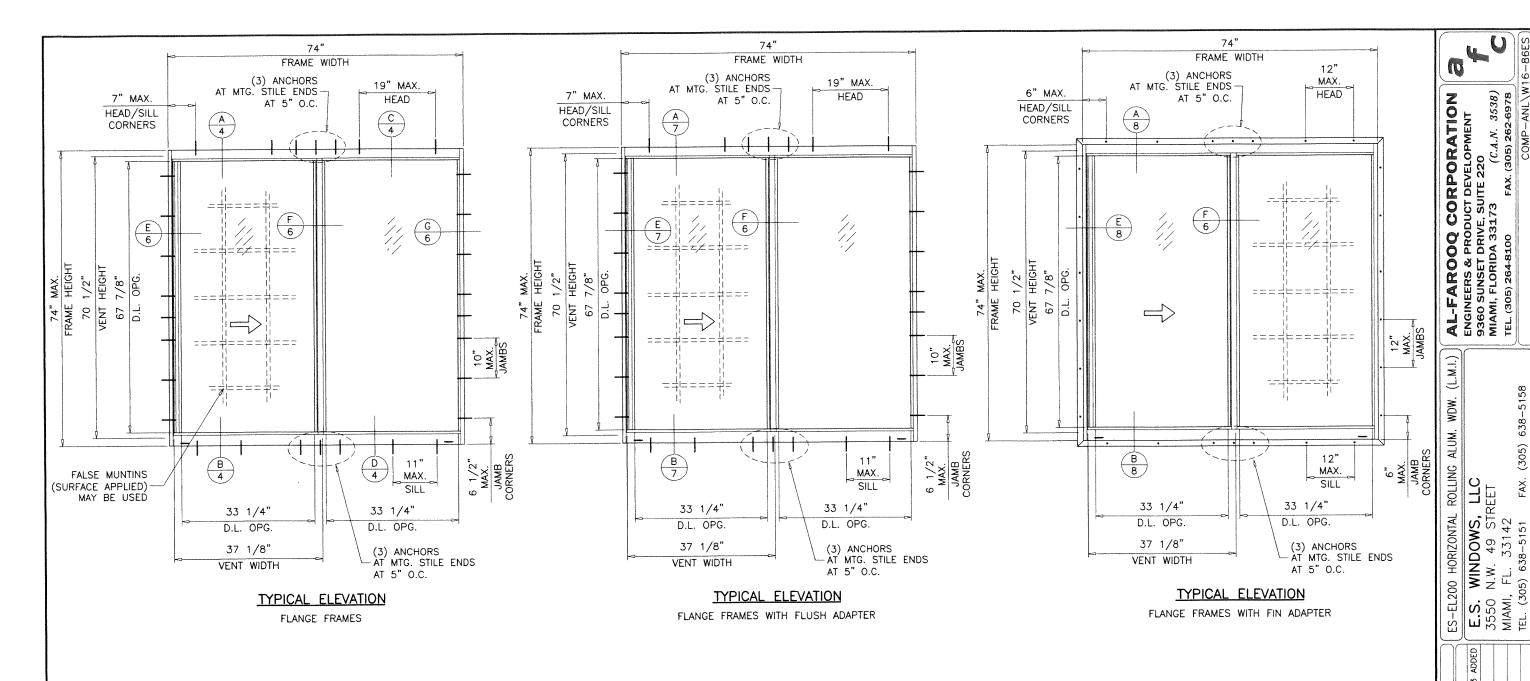
F. STATEMENTS

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. **23-0103.02**, issued to E.S. Windows, LLC for their Series "EL200" Aluminum Horizontal Rolling Window – L.M.I., approved on 03/14/24 and expiring on 01/19/27.

Manuel Pérez, P.E. Product Control Examiner NOA No. 23-0714.18



ES-EL200

HORIZONTAL ROLLING ALUMINUM WINDOW (L.M.I.)

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEETS 2.1 & 2.2.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF H.R./H.R. OR HORIZONTAL ROLLING 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 NOA 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

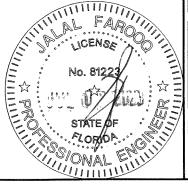
DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

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

PRODUCT REVISED As complying with the Florida Building Code NOA-No. 23-0714.18

Expiration Date: 01/19/2027

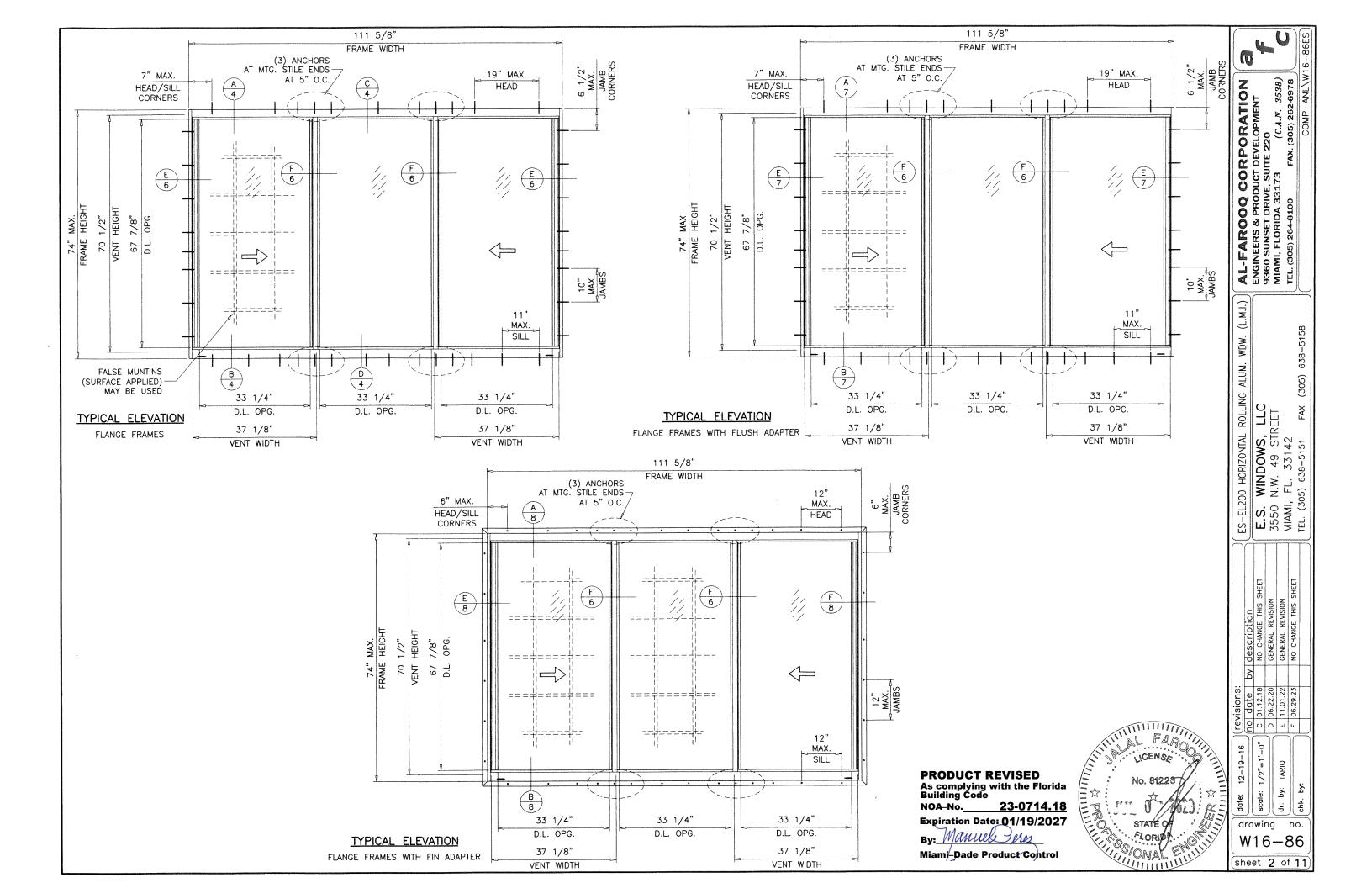
Miami-Dade Product Control



date 01.12.18 06.22.20 11.01.22 06.29.23 6 6 0 0 m r by: ੇ ਲੋਂ ਲੋਂ drawing

no. W16 - 86

sheet 1 of 11

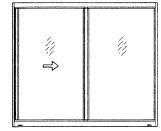


	DESIGN	LOAD (CAPACITY	- PSF	(XO OR	OX SIZE	ES)				
***************************************	***************************************	W/0	REINF.			WITH R	EINF.				
WINDOW	V DIMS.		TYPES 2, 2i , 3, 4i		TYPES 2, 2i , 3, 4i		TYPES 5i	1, 1i,	TYPES 2, 2i 2Ai, 3		
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	lL	
26-1/2"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
37"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
53-1/8"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
74"	26"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	\prod	
76"		_	-	-		75.0	80.0	_	-		
80"		_		_	-	75.0	80.0	-	_		
84"		_		_		75.0	80.0	_	_		
26-1/2"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
37"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
53-1/8"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	\prod	
74"	38-3/8"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	\prod	
76"		_	_	-	_	75.0	80.0	-	_	\prod	
80"		_		_		75.0	80.0	_	_		
84"		-			_	75.0	80.0		_		
26-1/2"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
37"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
53-1/8"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	\prod	
74"	50-5/8"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	\prod	
76"			_			75.0	80.0		_	\prod	
80"		_	_	_	_	75.0	80.0	_		\prod	
84"		_	_	_		75.0	80.0		_	\prod	
26-1/2"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	$\ \ $	
37"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	\prod	
53-1/8"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	11	
74"	63"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	\prod	
76"		_	_		_	75.0	80.0		-	\prod	
80"		_	_	_	_	75.0	80.0		_	$\ \ $	
84"					_	75.0	80.0			\prod	
26-1/2"		_	_	_	_	75.0	80.0	_		\prod	
37"	74"	-	_	_	_	75.0	80.0	_		$\ \ $	
53-1/8"	/*		_			75.0	80.0	_	_	$\ \ $	
74"			_	_		75.0	75.0		_	╽	

NOTE:

GLASS CAPACITIES ARE

	DESIGN	N LOAD (CAPACITY	– PSF	(XO OR	OX SIZI	ES)	The state of the s	
		W/0	REINF.			WITH R	EINF.		
WINDOV	V DIMS.	i .	TYPES 2, 2i , 3, 4i		TYPES 2, 2i , 3, 4i	1	TYPES 5i	1, 1i,	TYPES 2, 2i 2Ai, 3
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
24"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
36"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
48"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
60"	24"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
72"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
76"		-	-		-	75.0	80.0	_	
80"		-	_		_	75.0	80.0	_	
84"		_	_	_	_	75.0	80.0	_	-
24"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
36"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
48"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
60"	36"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
72"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
76"		_	-	-	_	75.0	80.0		_
80"		_	_	_	_	75.0	80.0		_
84"		_	_		_	75.0	80.0		
24"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
36"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
48"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
60"	48"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
72"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
76"		_	_	_		75.0	80.0	_	-
80"		_	_	-	_	75.0	80.0	_	_
84"			_		_	75.0	80.0		
24"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
36"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
48"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
60"	60"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
72"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
76"		_	_	_	-	75.0	80.0		_
80"			-	-	_	75.0	80.0		
84"		_	_	_	_	75.0	80.0		-
24"			_			75.0	80.0		_
36"			-	_	_	75.0	80.0		-
48"	70"	_	_	_	-	75.0	80.0	_	_
60"	72"	-	-	_		75.0	80.0		_
72"		-			_	75.0	79.2		_
76"		_	_		_	75.0	76.5		_



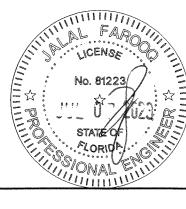
'XO OR OX'

OPERATING VENTS CAN BE 1/4 TO 1/3 OF WINDOW WIDTH MAX. D.L. OPG. FOR FIXED LITE NOT TO EXCEED 12.7 SQ. FT. FOR GLASS TYPES 1, 1i, 2, 2i, 2A, 2Ai, 3 & 4i 15.7 SQ. FT. FOR GLASS TYPES 5 & 5i

FOR ALTERNATE SIZE UNITS MAX. FRAME AREA OF WINDOW NOT TO EXCEED TESTED FRAME AREA OF 31.5 SQ. FT. FOR GLASS TYPES 1, 1i, 2, 2i, 2, 2Ai, 3 & 4i 38.0 SQ. FT. FOR GLASS TYPES 5 & 5i

> **PRODUCT REVISED** NOA-No. **Expiration Date: 01/19/2027**

By: Manuel Perez Miami-Dade Product Control



date by description 11.01.22 scale:
dr. by: drawing no. W16-86 sheet 2.1 of 11

GENERAL REVISION
NO CHANGE THIS S

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-EL200 HORIZONTAL ROLLING ALUM. W

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142

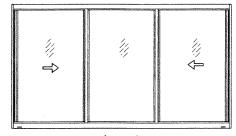
TEL. (305) 638-5151 FAX. (305) 638-

As complying with the Florida Building Code 23-0714.18

BASED ON ASTM E1300-09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

	DESIG	N LOAD	CAPAC	ITY -	PSF (X	OX SIZ	ES)				
		W/O	REINF.			WITH F	REINF.			JΓ	
WINDOV	V DIMS.		TYPES 2, 2i , 3, 4i	1	TYPES 2, 2i , 3, 4i		TYPES 5i	1, 1i,	TYPES 2, 2i 2Ai, 3		
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)		1
74"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	П	
106-1/4"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	Ш	
111"	26"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
114"		_	_		_	75.0	80.0	_	_		
118"		-	-	_		75.0	80.0			IJĹ	
74"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
106-1/4"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
111"	38-3/8"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
114"				_	_	75.0	80.0	_	_		
118"		-	-	_	_	75.0	80.0	_		lL	
74"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
106-1/4"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
111"	50-5/8"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	П	
114"		_	-	_	_	75.0	80.0	-	-		
118"		_	_		-	75.0	80.0	_		ĮĹ	
74"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0	Ш	
106-1/4"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
111"	63"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0		
114"		-	_	-		75.0	80.0	_			
118"		-			_	75.0	80.0	_	_	IJĹ	
74"			-	_	_	75.0	80.0		_		
106-1/4"	74"	_	_	_		75.0	77.3	_			
111"		_	_	_	-	75.0	75.0	-	_		

	DESIG	N LOAD	CAPAC	TTY -	PSF (X	OX SIZ	ES)		
		W/0	REINF.			WITH F	REINF.		
WINDO	W DIMS.		TYPES 2, 2i , 3, 4i	1	TYPES 2, 2i , 3, 4i		TYPES 5i	1, 1i,	TYPES 2, 2i 2Ai, 3
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
72"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
84"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
96"	24"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
108"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
120"		_	_	-	_	75.0	80.0	_	-
72"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
84"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
96"	36"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
108"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
120"			_	_	_	75.0	80.0		_
72"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
84"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
96"	48"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
108"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
120"		-			-	75.0	80.0		-
72"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
84"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
96"	60"	65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
108"		65.0	65.0	80.0	80.0	75.0	80.0	80.0	90.0
120"		_	_		_	75.0	80.0	_	_
72"		_	_	_	-	75.0	80.0	_	
84"	70"	-	_	_		75.0	80.0		_
96"	72"	_	_		_	75.0	80.0	-	
108"		_			_	75.0	79.2	_	_



'XOX'

OPERATING VENTS CAN BE 1/4 TO 1/3 OF WINDOW WIDTH MAX. D.L. OPG. FOR FIXED LITE NOT TO EXCEED 12.7 SQ. FT. FOR GLASS TYPES 1, 1i, 2, 2i, 2A, 2Ai, 3 & 4i 15.7 SQ. FT. FOR GLASS TYPES 5 & 5i

FOR ALTERNATE SIZE UNITS MAX. FRAME AREA OF WINDOW NOT TO EXCEED TESTED FRAME AREA OF 47.4 SQ. FT. FOR GLASS TYPES 1, 1i, 2, 2i, 2, 2Ai, 3 & 4i 57.3 SQ. FT. FOR GLASS TYPES 5 & 5i

ES-EL200 HORIZONTAL ROLLING ALUM. W

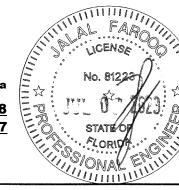
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 331.73 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

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

Expiration Date: 01/19/2027

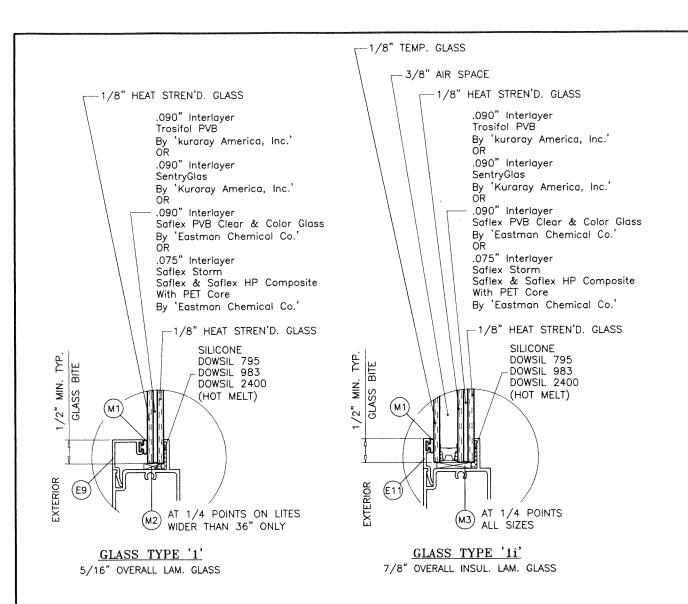
By: Manuel Perez Miami-Dade Product Control



drawing W16 - 86sheet **2.2** of **11**

no.

GLASS CAPACITIES ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219



GLAZING OPTIONS

5/16" & 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



	ons:	ate by description		22.20 GENERAL REVISION	D1.22 GENERAL REVISION	29.23 UPDATED TO 2023 FBC	
	revisions:	no date	C 01.12.18	D 06.22.20	E 11.01.22	F 06.29.23	
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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.)

WDW.

ES-EL200 HORIZONTAL ROLLING ALUM.

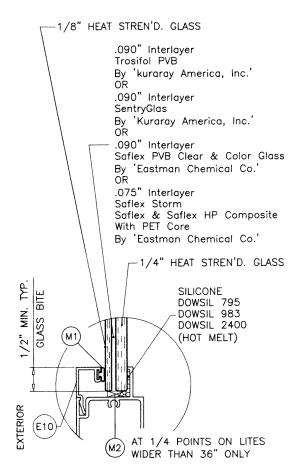
E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151 FAX. (

PRODUCT REVISED
As complying with the Florida
Building Code NOA-No._ 23-0714.18

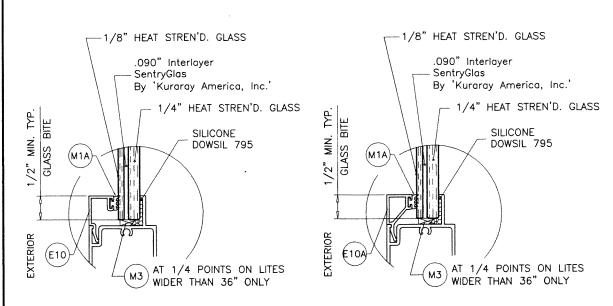
Expiration Date: 01/19/2027

By: Manuel Pres

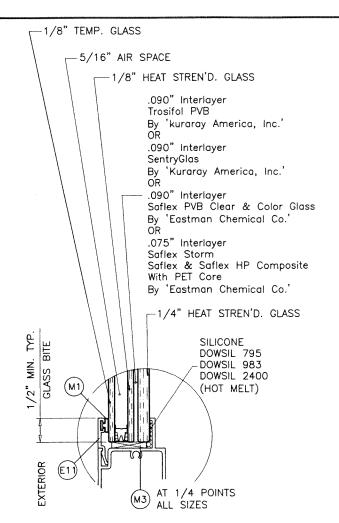
Miami-Dade Product Control



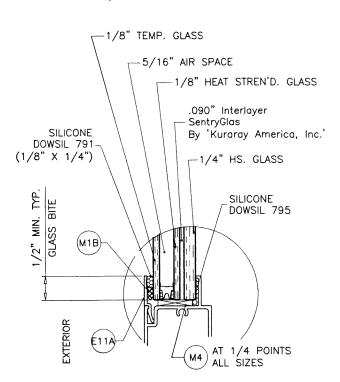
GLASS TYPE '2' 7/16" OVERALL LAM. GLASS



GLASS TYPE '2A' 7/16" OVERALL LAM. GLASS



GLASS TYPE '2i' 7/8" OVERALL INSUL. LAM. GLASS

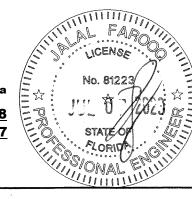


GLASS TYPE '2Ai' 7/8" OVERALL INSUL. LAM. GLASS

5/16" & 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. 23-0714.18 **Expiration Date: 01/19/2027**

By: Manuel Perez Miami-Dade Product Control



	by description		GENERAL REVISIO	GENERAL REVISIO	UPDATED TO 202	
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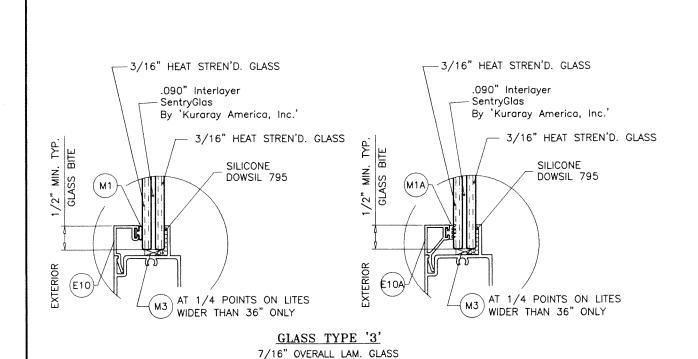
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

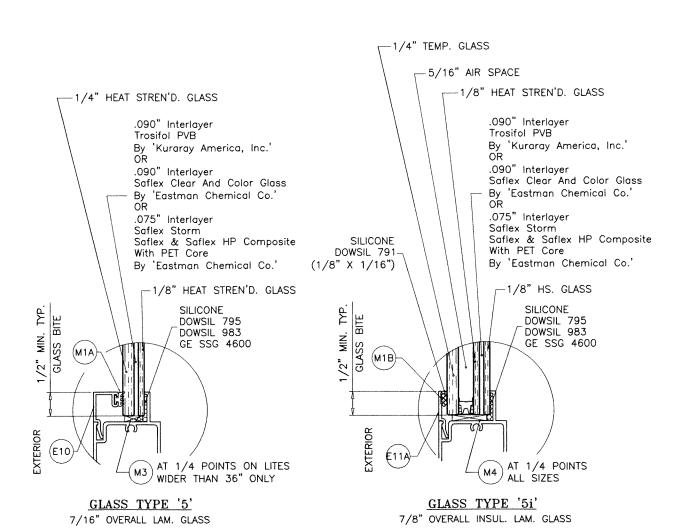
(L.M.I.)

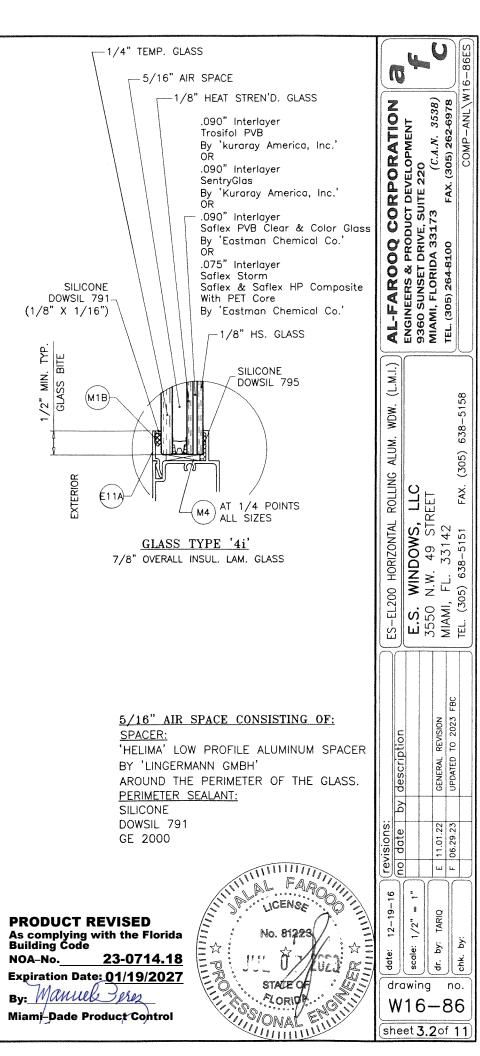
ES-EL200 HORIZONTAL ROLLING ALUM. W

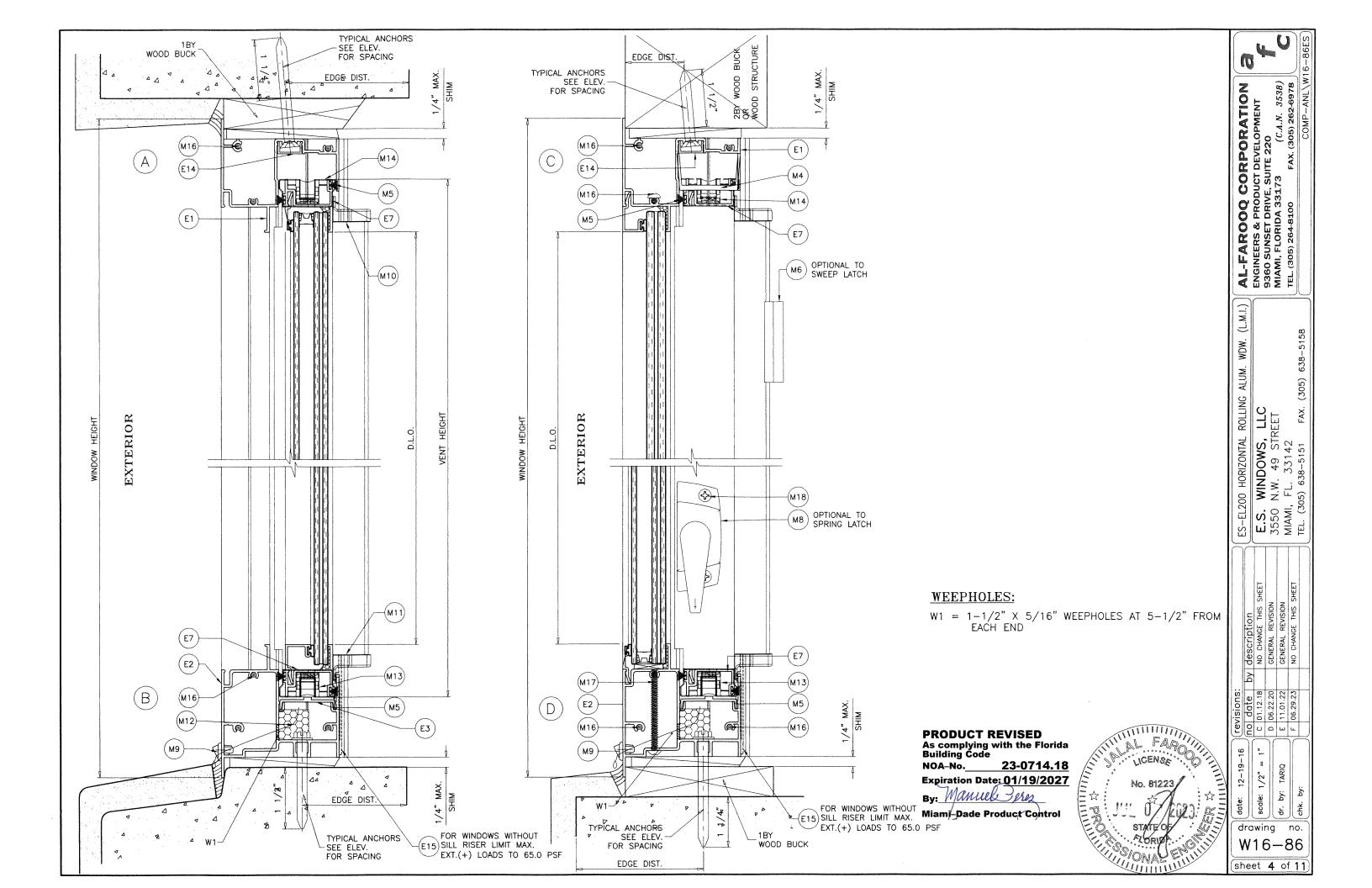
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-

GLAZING OPTIONS









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

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES

1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)

THRU 1BY BUCKS INTO CONC. OR BLOCKS

1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)

1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

DIRECTLY INTO CONCRETE OR BLOCKS

1-1/2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)

1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

1/4" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)

INTO MIAMI-DADE COUNTY APPROVED MULLIONS

OR

INTO METAL STRUCTURES (HEAD/SILL/JAMBS)

(3) THREADS MIN. PENETRATION BEYOND SUBSTRATE

ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)

STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

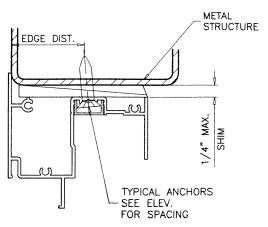
TYPICAL EDGE DISTANCE

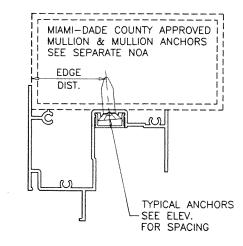
INTO CONCRETE AND MASONRY = 2-1/2" MIN.

INTO WOOD STRUCTURE = 1" MIN.

INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN. CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN. C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.







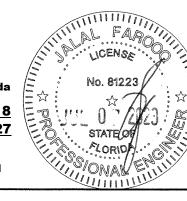
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THIS SHEET

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

PRODUCT REVISED
As complying with the Florida
Building Code

NOA-No. 23-0714.18

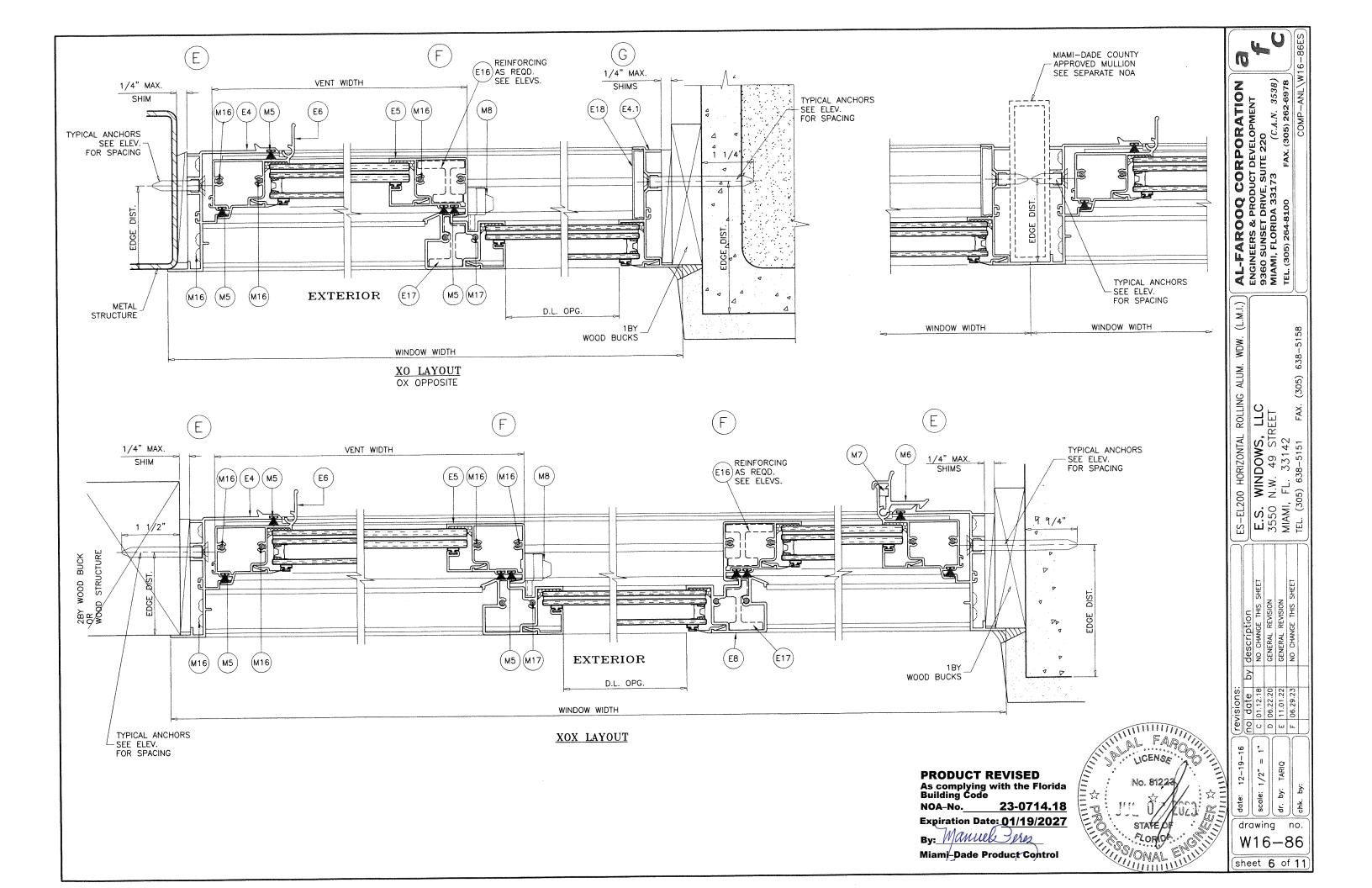
By: Manuel Product Control

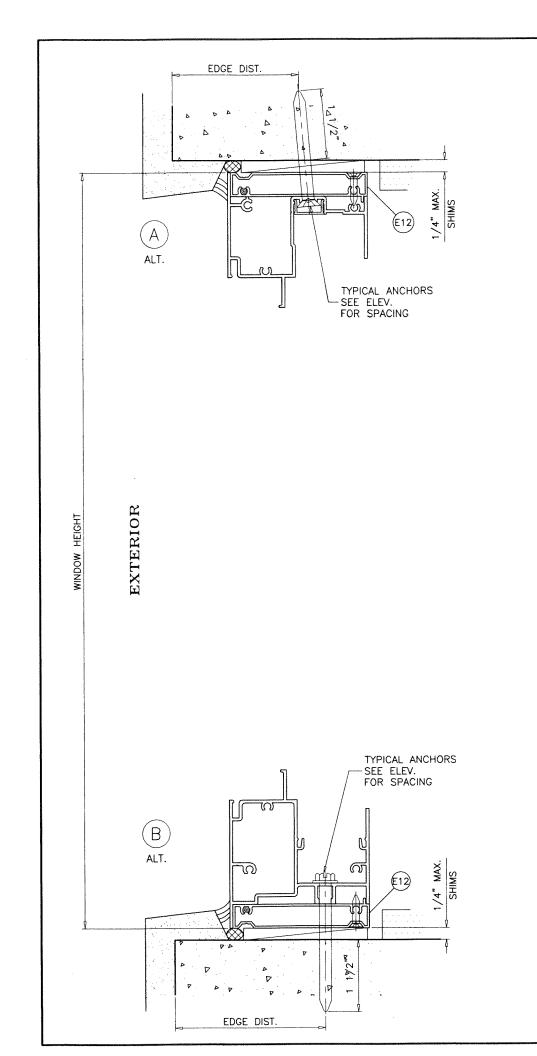


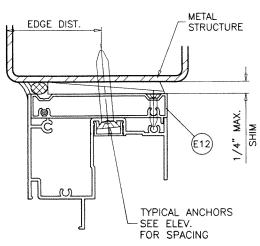
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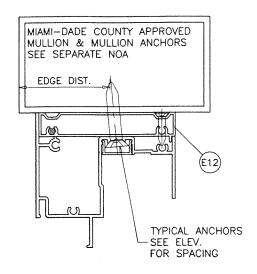
drawing no. W16-86

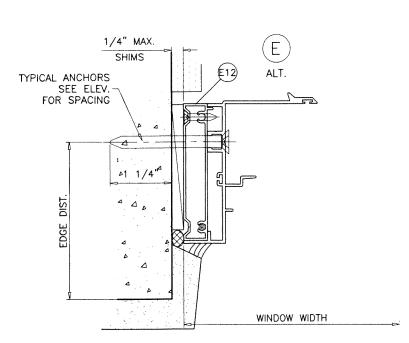
sheet **5** of **11**











INSTALLATION DETAILS WITH FLUSH FRAME ADAPTER

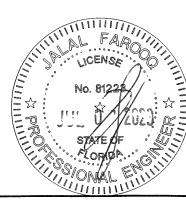
SEE SHEETS 4 & 6 FOR WINDOW DETAILS

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0714.18

Expiration Date: 01/19/2027

By: Manuel Pres

Miami-Dade Product Control

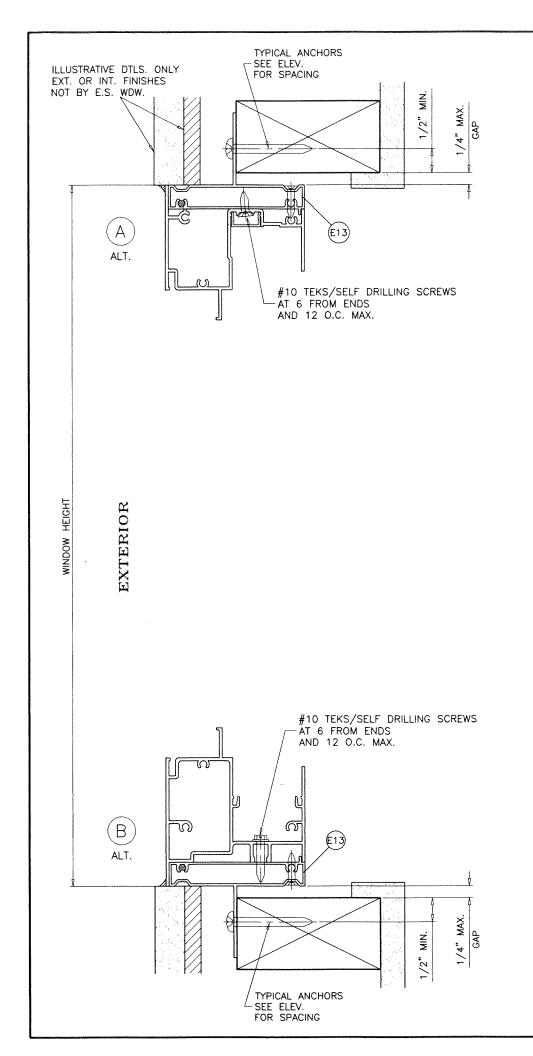


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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

ES-EL200 HORIZONTAL ROLLING ALUM.

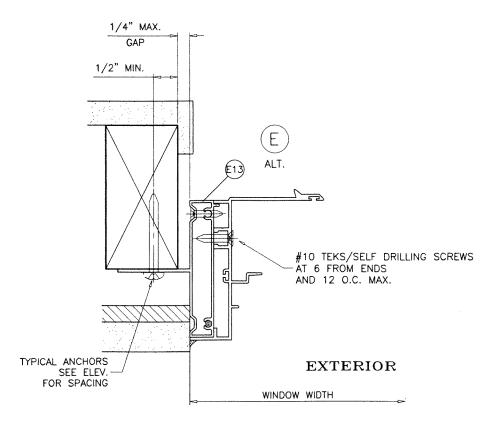
E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638–5151 FAX. (



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



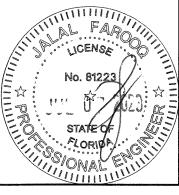
INSTALLATION DETAILS WITH FIN FRAME ADAPTER

SEE SHEETS 4 & 6 FOR WINDOW DETAILS

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0714-18

NOA-No. <u>23-0714.18</u> Expiration Date: <u>01/19/2027</u>

By: WMWW Skrs Miami-Dade Product Control



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AL-FAROOQ CORPORATION
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9360 SUNSET DRIVE, SUITE 220
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TEL. (305) 264-8100 FAX. (305) 262-6978

(L.M.I.)

ES-EL200 HORIZONTAL ROLLING ALUM.

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

ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1	ES-EL104	1	FRAME HEAD	6063-T6	-
E2	ES-EL201	1	FRAME SILL	6063-T6	
E3	ES-EL202	1	SILL TRACK	6063-T6	-
E4	ES-EL102	2	FRAME JAMB (OPERATING)	6063-T6	
E4.1	ES-EL101A	2	FRAME JAMB (FIXED)	6063-T6	-
E5	ES-EL105	1	INTERLOCK STILE	6063-T6	_
E6	ES-EL106	1	JAMB STILE	6063-T6	_
E7	ES-EL107	2	VENT TOP & BOTTOM RAIL	6063-T6	_
E8	ES-EL108A	1	FIXED MTG. STILE	6063-T6	_
E9	ES-EL109	AS RQD.	GLAZING BEAD (5/16" LAM. GLASS)	6063-T6	_
E10	ES-EL110	AS RQD.	GLAZING BEAD (7/16" LAM. GLASS)	6063-T6	_
E10A	ES-EL123	AS RQD.	GLAZING BEAD (7/16" LAM. GLASS)	6063-T6	-
E11	ES-EL111	AS RQD.	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T6	
E11A	ES-EL116	AS RQD.	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T6	-
E12	ES-EL112	AS REQD.	FLUSH FRAME ADAPTER	6063-T6	
E13	ES-EL115	AS REQD.	FLUSH FRAME ADAPTER WITH FIN	6063-T5	
E14	ES-EL114	AS REQD.	HEAD SCREW COVER	6063-T6	
E15	ES-2011	AS REQD.	SILL RISER	6063-T6	-
E16	ES-EL220	AS REQD.	INTERLOCK STILE STIFFENER	6005-T5	-
E17	ES-EL221	AS REQD.	FIX. MTG. STILE STIFFENER	6005-T5	-
E18	ES-EL113A	AS REQD.	JAMB SCREW COVER	6063-T6	-
M1	ES-5008A	AS REQD.	GLAZING BEAD BULB	SILICONE	DUROMETER 60±5 SHORE A
M1A	EL100-G02	AS REQD.	EXTERIOR LEAF GASKET	SILICONE	DUROMETER 60±5 SHORE A
M1B	ES-H-340-G05	AS REQD.	EXTERIOR WEDGE GASKET	SILICONE	DUROMETER 65±5 SHORE A
M2	80-372A	2/ LITE	SETTING BLOCK AT 1/4 POINTS (LAM. GLASS)	SILICONE	DUROMETER 80±5 SHORE A
м3	EL100-B01	2/ LITE	SETTING BLOCK AT 1/4 POINTS (INSUL. LAM. GLASS)	SILICONE	DUROMETER 80±5 SHORE A
M4	EL100-301	AS REQD.	VENT STOP	RIGID PVC	-
M5	W23211NG	AS REQD.	PILE W'STRIPPING WITH PLASTIC FIN	POLYPROPYLENE	
М6	SK08-4010	2/ VENT	SPRING LOADED LATCH	6063-T6	ALTERNATE TO SWEEP LATCH
M7	ES-1012	2/ LATCH	LATCH SPRING	ST. STEEL	-
М8	SL302-XX	2/ VENT	SWEEP LATCH	DIE CAST ALUM	
м9	WA2L	2	WEEP HOLE COVER	RIGID PVC	-
M10	ES-1000-P1L	_	LEFT NOTCH CAP	NYLON	-
M11	ES-1000-P1R		RIGHT NOTCH CAP	NYLON	
M12	WPSA-N1	2	3/4" X 3/4" RETIC FOAM PAD	FOAM	
M13	TAR-16019P-A	2	ROLLER	POLYAMIDE & ACETAL	-
M14	TAR-16019P	2	ROLLER HOUSING	POLYAMIDE	
M15	#8 X 1"	***	FLUSH FRAME ADAPTER ASSEMBLY FASTENERS	ST. STEEL	FH SMS
M16	#8 X 1"	-	FRAME AND VENT ASSEMBLY FASTENERS	ST. STEEL	PH SMS
M17	#8 X 3"		FRAME SILL ASSEMBLY FASTENERS	ST. STEEL	PH SMS
M18	#8 X 3/4"		SWEEP LATCH FASTENERS	ST. STEEL	FH SMS
M20	#14 × 3/4"	-	ASSEMBLY FASTENERS FOR FLUSH ADAPTER	ST. STEEL	PH SMS



PRODUCT REVISED
As complying with the Florida
Building Code

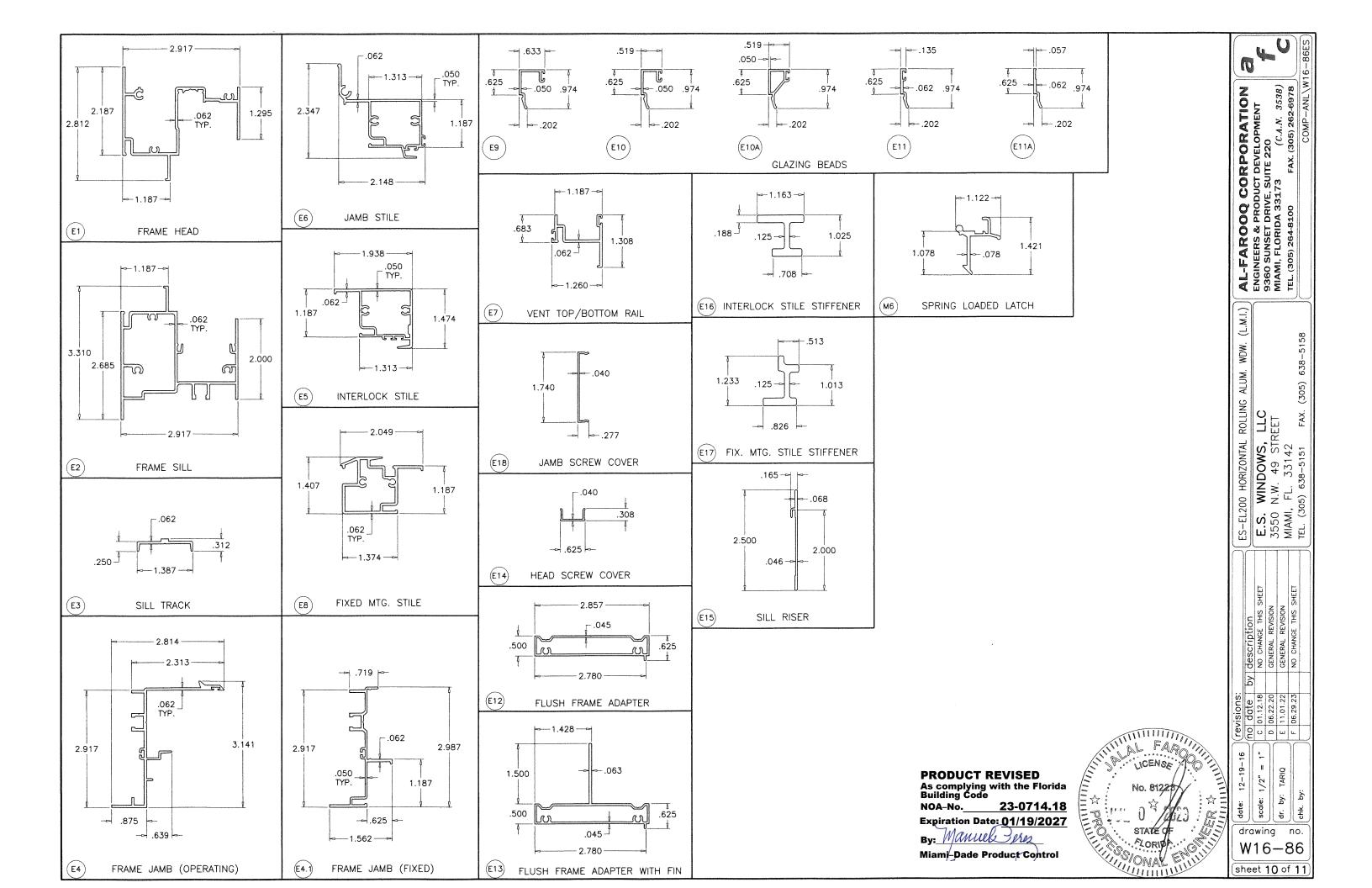
NOA-No. 23-0714.18
Expiration Date: 01/19/2027
By: Manual Pres

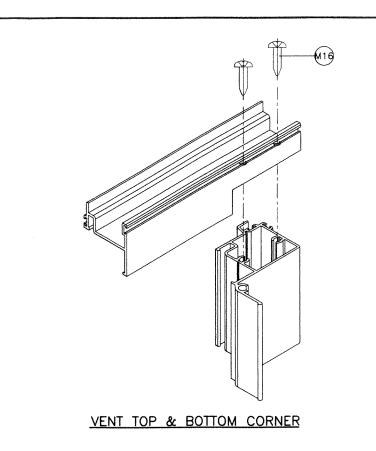
Miami-Dade Product Control

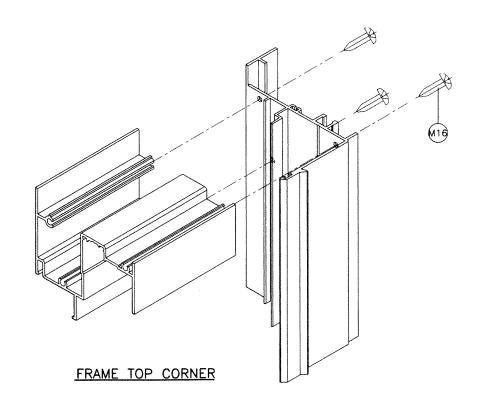


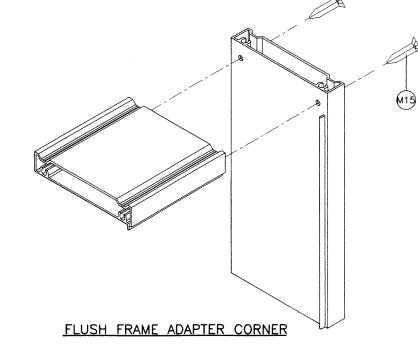
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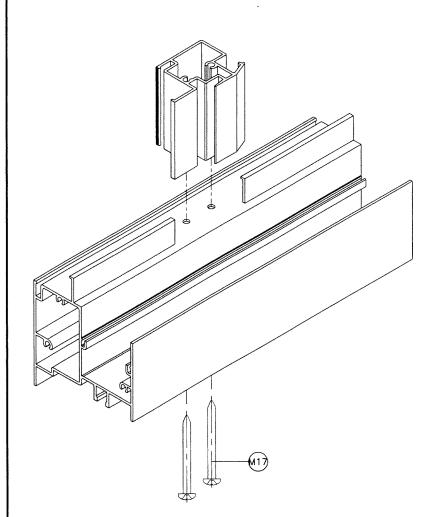
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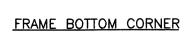


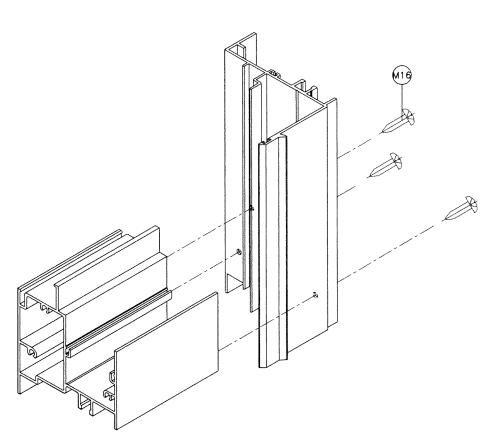






FIX. MTG. RAIL CORNER



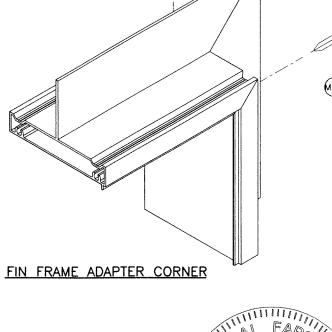


PRODUCT REVISED
As complying with the Florida
Building Code 23-0714.18 NOA-No._

Expiration Date: 01/19/2027

By: Manuel Pro

Miami-Dade Product Control



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WOW	:					FAX. (305) 638-5158
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ROLLING		LLC			•	FAX.
FS-F1200 HORIZONTAL ROLLING ALLIM WDW (LM.)		E.S. WINDOWS, LLC	3550 NW 49 STREET	MIAMI EI 22140	MIMMI, 1 L. 00 1+2	TEL. (305) 638-5151
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