

#### DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION NOTICE OF ACCEPTANCE (NOA)

E.S. Windows, LLC 3550 NW 49<sup>th</sup> Street Miami, FL 33142

#### Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

# **DESCRIPTION:** Series "ES-5500" Aluminum Project Out Window – L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **W17-45**, titled "Series ES-5500 Project-Out Aluminum Wdw. (L.M.I.)", sheets 1 through 6 of 6, dated 04/20/17, with revision **D** dated 11/05/20, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

# MISSILE IMPACT RATING: 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. 17-0505.03** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

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



2/17/21

NOA No. 20-1116.03 Expiration Date: October 11, 2023 Approval Date: February 25, 2021 Page 1

# **NOTICE OF ACCEPTANCE:** EVIDENCE SUBMITTED

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

#### A. DRAWINGS

- 1. Manufacturer's die drawings and sections. (Submitted under NOA No. 17-0505.03)
- Drawing No. W17-45, titled "Series ES-5500 Project-Out Aluminum Wdw. (L.M.I.)", sheets 1 through 6 of 6, dated 04/20/17, with revision C dated 06/21/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E. (Submitted under NOA No. 17-0505.03)

#### **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) Drop Load Test, per CPCS 16 CFR 1201 (Cat 11)
  - 5) Large Missile Impact Test per FBC, TAS 201-94
  - 6) Small Missile Impact Test per FBC, TAS 201-94
  - 7) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 8) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94

along with marked-up drawings and installation diagram of a Project out aluminum window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-8320**, dated 03/07/2017, signed and sealed by Idalmis Ortega, P.E. (*Submitted under NOA No. 17-0505.03*)

## C. CALCULATIONS

- Anchor verification calculations and structural analysis, complying with FBC 6<sup>th</sup> Edition (2017), dated 04/18/17 with revisions dated 04/19/18 and 06/20/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E. (*Submitted under NOA No. 17-0505.03*)
- 2. Glazing complies with **ASTM E1300-09**

#### D. QUALITY ASSURANCE

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

# E. MATERIAL CERTIFICATIONS

1. NOA No. 17-0808.02 issued to Kuraray America, Inc. for their "SentryGlas® (Clear and White) Glass Interlayers" dated 12/28/17, expiring on 07/04/23.

Manuel Perez, P.E. Product Control Examiner NOA No. 20-1116.03 Expiration Date: October 11, 2023 Approval Date: February 25, 2021

# **NOTICE OF ACCEPTANCE:** EVIDENCE SUBMITTED

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

#### F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 6<sup>th</sup> Edition (2017)**, and of no financial interest, dated June 20, 2018, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

(Submitted under NOA No. 17-0505.03)

2. Distributor Agreement dated 08/01/18 between Energia Solar, S.A., Barranquilla, Columbia, S.A. and Tecnoglass, LLC, Miami, Florida, , signed by Ms. Carla Garcia, Int'l Sales Manager and MS. Evelyn Daes, General Manager on behalf of their respective companies.

(Submitted under NOA No. 17-0505.03)

Proposal issued by Product Control Section, dated 10/16/14, signed by Jaime D. Gascon, P.E.
(Submitted under NOA No. 17-0505.03)

#### G. OTHERS

1. None.

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Manuel Perez, P.E. Product Control Examiner NOA No. 20-1116.03 Expiration Date: October 11, 2023 Approval Date: February 25, 2021

# NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### 2. NEW EVIDENCE SUBMITTED

#### A. DRAWINGS

1. Drawing No. W17-45, titled "Series ES-5500 Project-Out Aluminum Wdw. (L.M.I.)", sheets 1 through 6 of 6, dated 04/20/17, with revision **D** dated 11/05/20, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

#### B. TESTS

1. None.

### C. CALCULATIONS

- Anchor verification calculations and structural analysis, complying with FBC 6<sup>th</sup> Edition (2017), dated 04/18/17 with revisions dated 04/19/18 and 06/20/18, further updated on 10/30/20 to comply with FBC 7<sup>th</sup> Edition (2020), prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
- 2. Glazing complies with ASTM E1300-09

#### **D. QUALITY ASSURANCE**

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

#### E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. 18-0725.11 issued to Kuraray America, Inc. for their "Kuraray SentryGlas<sup>®</sup> Xtra<sup>™</sup> (SGX<sup>™</sup>) Clear Glass Interlayer" dated 05/23/19, expiring on 05/23/24.

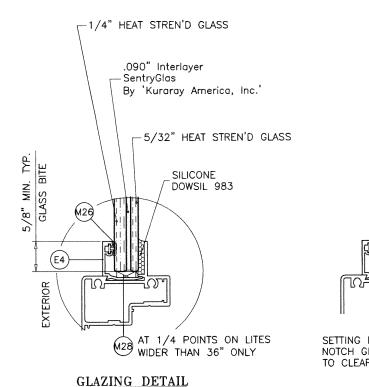
#### F. STATEMENTS

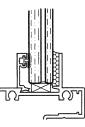
1. Statement letter of conformance, complying with **FBC 6<sup>th</sup> Edition (2017)**, with **FBC 7<sup>th</sup> Edition (2020)**, and of no financial interest, dated October 30, 2020, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

#### G. OTHERS

1. Notice of Acceptance No. **17-0505.03**, issued to E.S. Windows, LLC, for their Series "ES-5500" Aluminum Project Out Window – L.M.I., approved on 10/11/18 and expiring on 10/11/23.

Manuel Perez, P.E. Product Control Examiner NOA No. 20-1116.03 Expiration Date: October 11, 2023 Approval Date: February 25, 2021





SETTING BLOCKS AT LAM. GLASS NOTCH GLAZING BEAD LEG TO CLEAR BLOCKS

# ES-5500

#### PROJECT-OUT ALUMINUM WINDOW (L.M.I.)

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF P.O./P.O. OR PROJECT OUT 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 2017 (6TH EDITION)/2020 (7TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

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

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

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

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

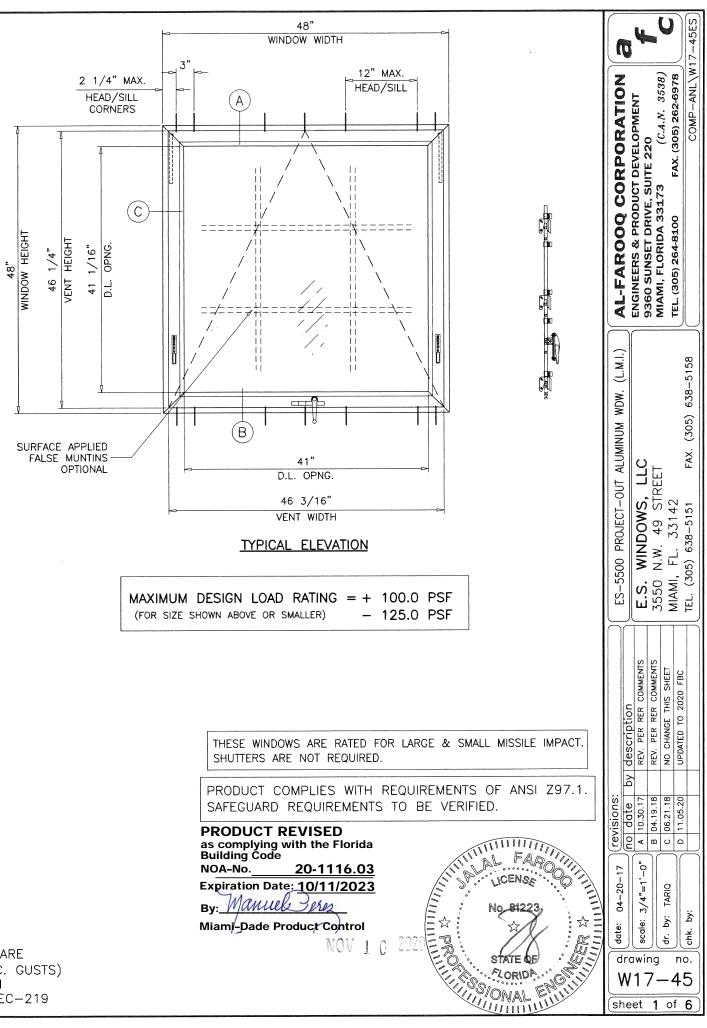
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2017/2020 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.

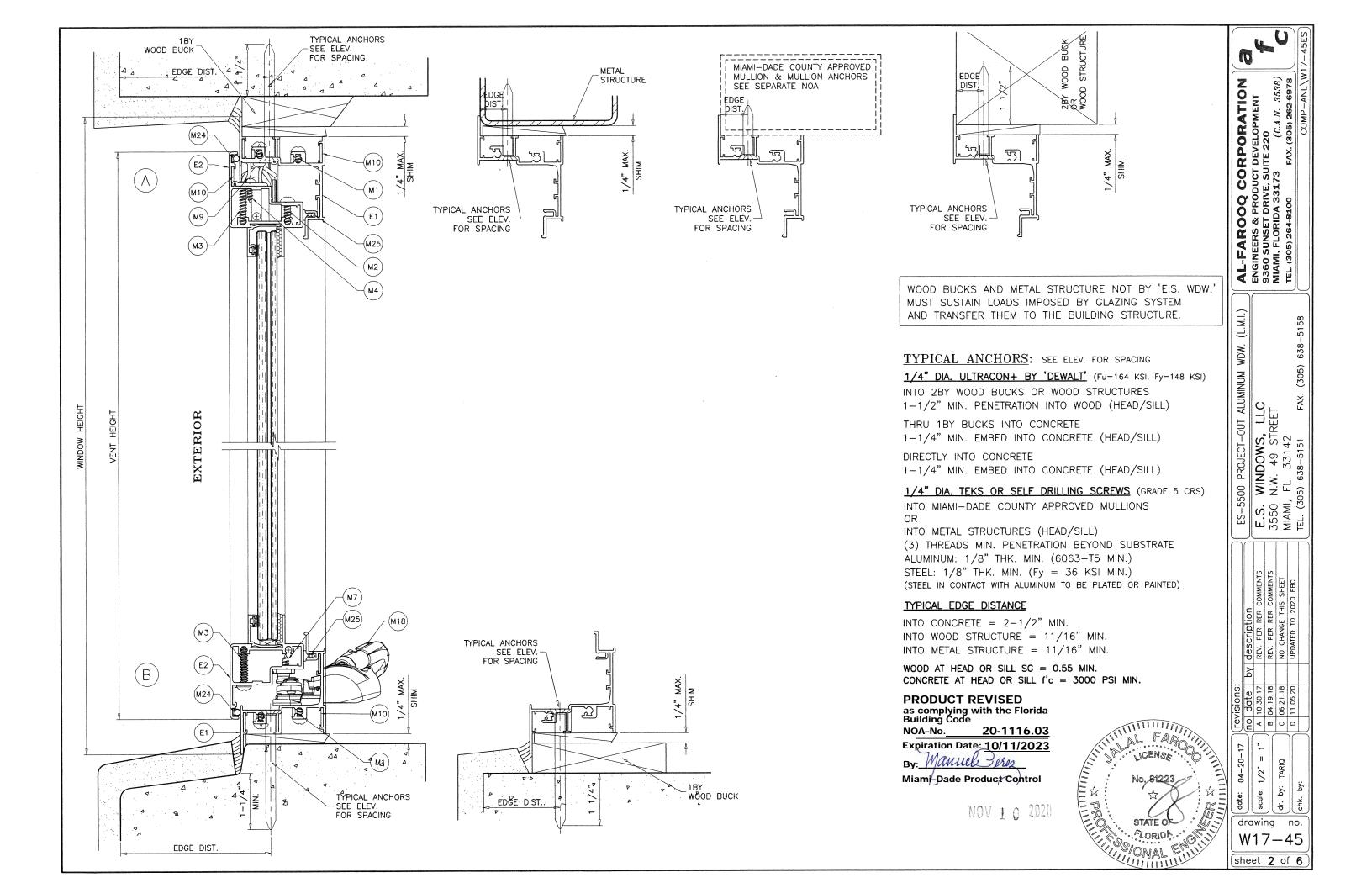
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

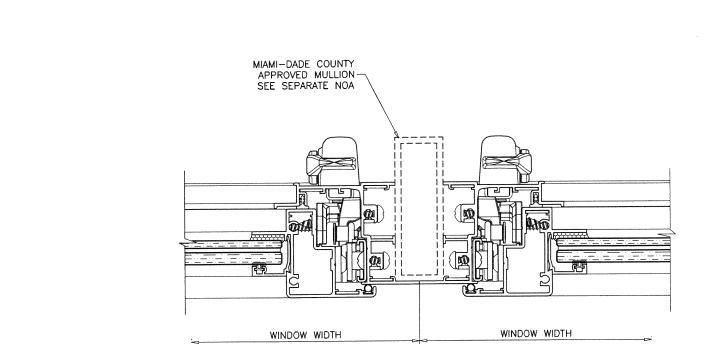
DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

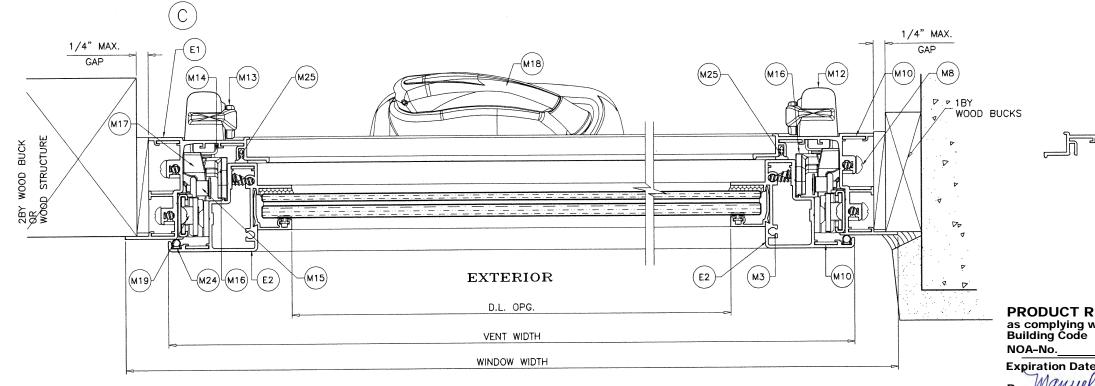
NOTE: GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

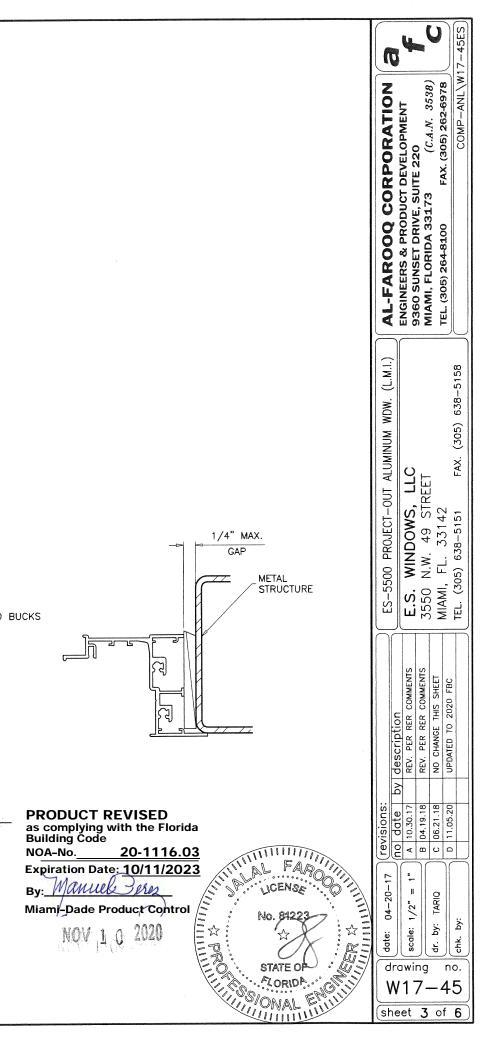


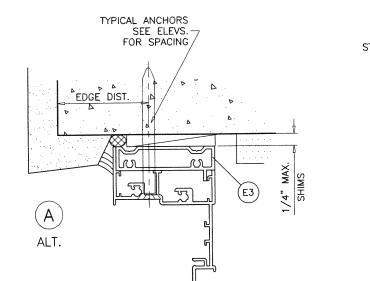
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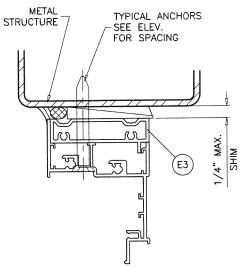


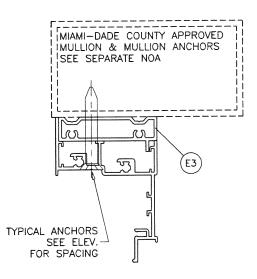


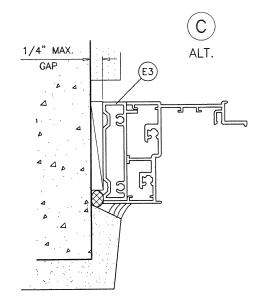




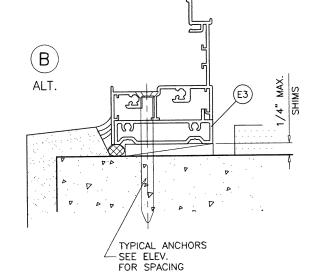




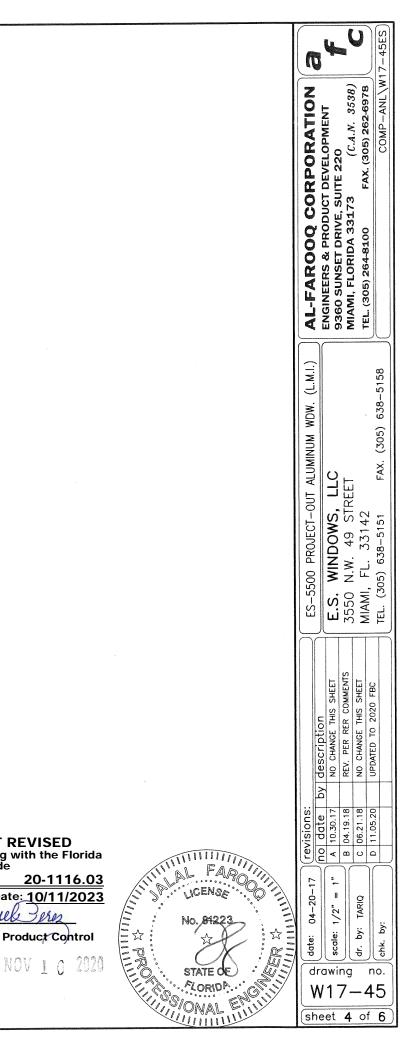




PRODUCT REVISED as complying with the Florida Building Code NOA-No. Expiration Date: 10/11/2023 By: Manuel Peres Miami-Dade Product Control



#### INSTALLATION DETAILS WITH FLUSH FRAME ADAPTER



ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1	ES-5001	4	FRAME	6063-T6	_
E2	ES-5002	4	VENT	6063-T6	
E3	ES-5017	AS REQD.	FLUSH FRAME ADAPTER	6063-T6	-
E4	ES-1017	4	GLAZING BEAD (LAM. GLASS)	6063-T6	_
M1	#10 X 1"	2/ CORNER	FRAME ASSEMBLY SCREWS	ST. STEEL	PH SMS
M2	#10 X 1-1/4"	1/ CORNER	VENT ASSEMBLY SCREWS	ST. STEEL	PH SMS
М3	#10 X 1-1/2"	1/ CORNER	VENT ASSEMBLY SCREWS	ST. STEEL	PH SMS
M4	#8 X 1/2"	AS REQD.	SNUBBER FASTENERS	ST. STEEL	PH SMS
M4A	#10 X 1/2"	6/ HINGE	HINGE INSTALLATION SCREWS	ST. STEEL	PH SMS
M4B	#10 X 1/2"	2/ KEEPER	KEEPER INSTALLATION SCREWS	ST. STEEL	PH SMS
М5	#8 X 1/2"	_	CLAP WASHER FASTENERS	ST. STEEL	PH MS
M6	#6 X 1/2"	_	SCREEN HOLDER FASTENERS	ST. STEEL	FH SMS
М7	#8 X 1/2"	8	OPERATOR FASTENERS	ST. STEEL	FH SMS
M8	#10 X 1-1/4"	2	BAR GUIDE FASTENERS	ST. STEEL	FH SMS
M8B	#8 X 1/2"	8	PLATE FASTENERS	ST. STEEL	FH SMS
м9	WS-100 (ES-5004)	AS REQD.	SNUBBER	DIE CAST ALUM	_
M10	PJS43-SS	AS REQD.	CORNER KEY	ST. STEEL	_
M11	CL01-0475	_	MULTI POINT LOCKING HANDLE	DIE CAST ZINC	-
M12	CL02-2045	-	SNAP ON COVER	DIE CAST ZINC	-
M13	CL02-1020	-	SNAP ON HANDLE	PLASTIC	-
M14	CL01-4001	-	CLAMP WASHER	ST. STEEL	-
M15	CL02-0021	_	LOCK BAR	ST. STEEL	-
M16	CL02-2036	-	LOCK KEEPER	ACETAL	-
M17	CL02-2027	3/ JAMB	BAR GUIDE, AT 8", 12-3/4" & 20-1/4" FROM BOTTOM	ACETAL	_
M18	C011-0605	_	COVER OPERATOR HANDLE	_	-
M19	AMC-320	2	4 BAR HINGE	ST. STEEL	AMC MANUFACTURING
M20	C011-0651-000		OPERATOR SPACER	_	-
M21	C011-2202	-	OPERATOR SPACER	_	-
M22	C011-2322		OPERATOR BRACKET	_	-
M23	C011-0451-085	-	AWNING OPERATOR	_	-
M24	E206	AS REQD.	OUTER W'STRIPPING	EPDM	DUROMETER 60±5 SHORE A
M25	ES5005	AS REQD.	INNER W'STRIPPING	EPDM	DUROMETER 60±5 SHORE A
M26	ES-5008 (27-425)	AS REQD.	GLAZING GASKET	EPDM	DUROMETER 70±5 SHORE A
M28	ES-9000-B01(80-341)	2/ LITE	SETTING BLOCKS	EPDM	DUROMETER 80±5 SHORE A

# SEALANTS:

ALL FRAME AND VENT CORNERS AND INSTALLATION SCREWS SEALED WITH CLEAR/ALUMINUM COLORED SEALANT.

#### LOCKS:

SURFACE MOUNT METALLIC THREE POINT LOCK SYSTEM WITH ACTIVATING LEVER TYPE CAM LOCKS LOCATED AT 10" FROM BOTTOM AT FRAME JAMBS FASTENED WITH (2) #8-32 X 1/2" PH SMS

FROM BOTTOM AT VENT JAMB RAILS EACH FASTENED WITH (2) #8 X 1/2" FH SMS

# HINGES:

CORP.'LOCATED AT WINDOW FRAME UPPER CORNERS FASTENED TO FRAME WITH (3) #10 X 1/2" PH SMS FASTENED TO VENT WITH (4) #10 X 1/2" PH SMS

# ANTI BLOW OUT CLIPS:

AND VENT TOP RAIL LOCATED AT 11-1/2" FROM EACH END FASTENED WITH (2) #8 X 1/2" FPH SMS

#### **OPERATOR:**

OF FRAME SILL FASTENED WITH (6) #8 X 3/4" FH SMS

AT MIDSPAN OF BOTTOM RAIL FASTENED WITH (2) #8 X 1/2" FH SMS

> **PRODUCT REVISED** as complying with the Florida Building Code NOA-No. Expiration Date: 10/11/2023 By: Manuel Peres

