

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

Scope:

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

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

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

DESCRIPTION: Series "ES-P252 Thermally Broken" Outswing Aluminum Casement Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W15-27**, titled "ES-P252 Thermal Alum Casement Wdw. (L.M.I)", sheets 1, 1.1, 2 and 3 through 8 of 8, dated 06/26/15, 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. 20-1118.04 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.

MIAMI-DADE COUNTY APPROVED

8/17/23

NOA No. 23-0717.23 Expiration Date: August 25, 2026 Approval Date: August 24, 2023 Page 1

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

- 1. Manufacturer's die drawings and sections. *(Submitted under NOA No. 15-0305.03)*
- Drawing No. W15-27, titled "ES-P252 Thermal Alum Casement Wdw. (L.M.I)", sheets 1, 1.1, 2, and 3 through 8 of 8, dated 06/26/15, with revision D dated 07/31/20, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E. (Submitted under NOA No. 20-1118.04)

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) Small Missile Impact Test per FBC, TAS 201-94
 - 6) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 7) Forced Entry Test, per ASTM F 588-04/ 07 and per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of a series ES-P252 aluminum casement window samples A-1, B-1, C-1, D-1, E-1, F-1, G-1, H-1, I-1, J-1, K-1, K-2, K-3 and L-1, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-12064**, dated 07/16/20, signed and sealed by Idalmis Ortega, P.E. (Submitted under NOA No. 20.1118.04)

(Submitted under NOA No. 20-1118.04)

- 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) Small Missile Impact Test per FBC, TAS 201-94
 - 6) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 7) Forced Entry Test, per ASTM F 588-04/ 07 and per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of aa aluminum casement window samples A-1, A-2, A-3, B-1, B-2 and B-3, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-7798**, dated 10/09/15, signed and sealed by Idalmis Ortega, P.E.

(Submitted under NOA No. 15-0305.03)

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Manuel Perez, P.E. Product Control Examiner NOA No. 23-0717.23 Expiration Date: August 25, 2026 Approval Date: August 24, 2023

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

C. CALCULATIONS

Anchor verification calculations and structural analysis, complying with FBC 5th Edition (2014), dated 04/20/16, revised on 07/20/16, and further updated on to complying with FBC 7th Edition (2020), prepared by Al-Farooq Corporation, dated 11/16/20, signed and sealed by Jalal Farooq, P.E.

(Submitted under NOA No. 20-1118.04)

2. Glazing complies with ASTM E1300-09

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 18-0725.11 issued to Kuraray America, Inc. for their "Kuraray SentryGlas[®] Xtra[™] (SGX[™]) Clear Glass Interlayer" dated 05/23/19, expiring on 05/23/24.
- 2. Notice of Acceptance No. 19-0305.02 issued to Kuraray America, Inc. for their "Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers" dated 05/09/19, expiring on 07/08/24.
- 3. 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.
- 0.315-inch (Length) by 0.26-inch (Height) by 0.0059-inch (Thickness) (8x6.6x0.15mm) Aluminum Low Profile Insulated-Glass spacer Helima AH 800 N (P/N.: USA K 001 000 000 R7) with Aluminum Alloy AW-3000 (Ft_u=17 ksi and Ft_v=12ksi) by Helmut Lingemann GmbH & Co., KG. (Helima).
- 5. Ensinger, GmbH Part No. Tecatherm 66 GF <u>Insulbar</u> complying with ASTM D638 Tensile Strength of 13,031 psi, ASTM D 1929 Self Ignition 793°F and Flash Ignition – 781°F, ASTM D 2843 Smoke Density of 1.63, ASTM D 635 Rate of Burn 0.752 in./ min., ASTM D 790 Flexural Modulus of 870 ksi, ASTM D 256 Notched Izod of 1.9 ft.-lb./in.

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Manuel Pérez, P.E. Product Control Examiner NOA No. 23-0717.23 Expiration Date: August 25, 2026 Approval Date: August 24, 2023

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

E. MATERIAL CERTIFICATIONS (CONTINUED)

- 6. Test Report No. ATI-60520.02-106-18, prepared by Architectural Testing, Inc., dated 11/09/06, with revision date 11/29/06, issued to Ensinger, Inc., for their <u>Tecatherm®</u> 66GF Insulbar material comprised of Polyamide 66 with 25% glass fibers, per ASTM G 155-00ae1, "Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of /Non-Metallic Materials", per ASTM D638-03 "Standard Test Methods for Tensile Properties of Plastics", for exposed & unexposed sample per Xenon Arc after 4500 Hours, ASTM D635-98 "Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position", ASTM D1929-96 (2000)e01 "Standard Test Method for Determining Ignition Properties of Plastics" and ASTM D2843-99 "Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics" and ASTM D2843-99
 "Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics", signed and sealed by Joseph A. Reed, P.E
- 7. Standard Material Values Data Sheet from Ensinger for "*Tecatherm 66 GF* Polyamide 66 with 25% glass fibers, black– Mechanical Properties and Thermal Properties.

F. STATEMENTS

- Statement letter of conformance, complying with FBC 6th Edition (2017), with FBC 7th Edition (2020), and of no financial interest, dated August 7, 2020, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E. (Submitted under NOA No. 20-1118.04)
- 2. Distributor Agreement between ES Windows-Energia Solar, S.A., Barranquilla, Columbia, S.A. and E.S. Windows, LLC, Miami, Florida, dated 09/12/13, signed by Ms. Adriana Montoya, Manager and Andres Chamorro, General Manager respectively on behalf of the companies.

(Submitted under NOA No. 15-0305.03)

- 3. Laboratory compliance letter for Test Report No. FTL-7798, issued by Fenestration Testing Laboratory, Inc., dated 04/14/16, signed and sealed by Idalmis Ortega, P.E. *(Submitted under NOA No. 15-0305.03)*
- 4. Proposal issued by Product Control, dated 10/18/12, signed by Jaime D. Gascon, P.E. *(Submitted under NOA No. 15-0305.03)*

G. OTHERS

1. Notice of Acceptance No. **19-0528.06**, issued to E.S. Windows, LLC for their Series "ES-P252 Thermal Broken" Outswing Aluminum Casement Window – L.M.I., approved on 06/27/19 and expiring on 08/25/21.

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Manuel Pérez, P.E. Product Control Examiner NOA No. 23-0717.23 Expiration Date: August 25, 2026 Approval Date: August 24, 2023

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **W15-27**, titled "ES-P252 Thermal Alum Casement Wdw. (L.M.I)", sheets 1, 1.1, 2, and 3 through 8 of 8, dated 06/26/15, with revision **E** dated 06/29/23, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, 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. 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.
- 2. 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.
- 3. 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.

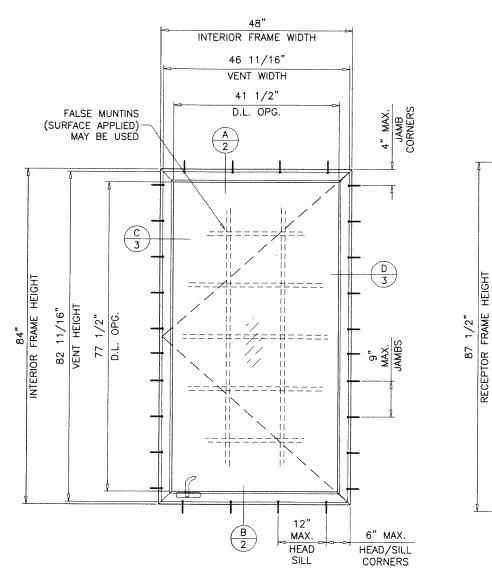
F. STATEMENTS

Statement letter of conformance, complying with FBC 7th Edition (2020), with FBC 8th Edition (2023), and of no financial interest, dated July 14, 2023, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

G. OTHERS

1. Notice of Acceptance No. **20-1118.04**, issued to E.S. Windows, LLC for their Series "ES-P252 Thermal Broken" Outswing Aluminum Casement Window – L.M.I., approved on 02/11/21 and expiring on 08/25/26.

Manuel Pérez, P.E. Product Control Examiner NOA No. 23-0717.23 Expiration Date: August 25, 2026 Approval Date: August 24, 2023



TYPICAL ELEVATION

ANCHORS THRU WDW. FRAMES

SHUTTERS ARE NOT REQUIRED

FALSE MUNTINS

MAY BE USED

1/2" 0PG.

77 D.L.

CI 5

(SURFACE APPLIED)

HEIGHT

82 11/16" VENT HEIGHT

PRODUCT REVISED As complying with the Florida Building Code NOA-No. 23-0717.23 Expiration Date: 08/25/2026 By: Manuel Jeres_

Miami-Dade Product Control

ES-P252 (L.M.I.)

THERMAL ALUMINUM CASEMENT WINDOW

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF CASMT./CASMT. OR CASEMENT 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.

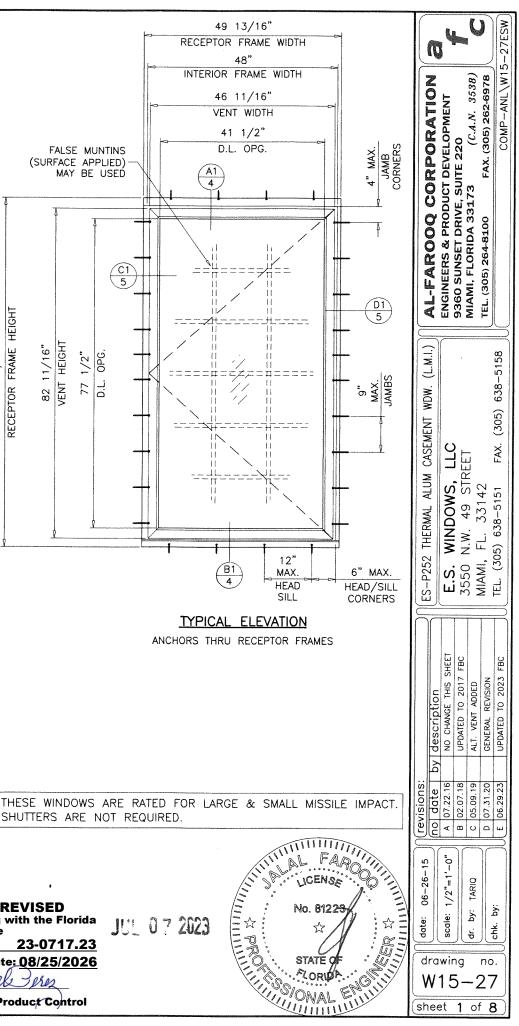
ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

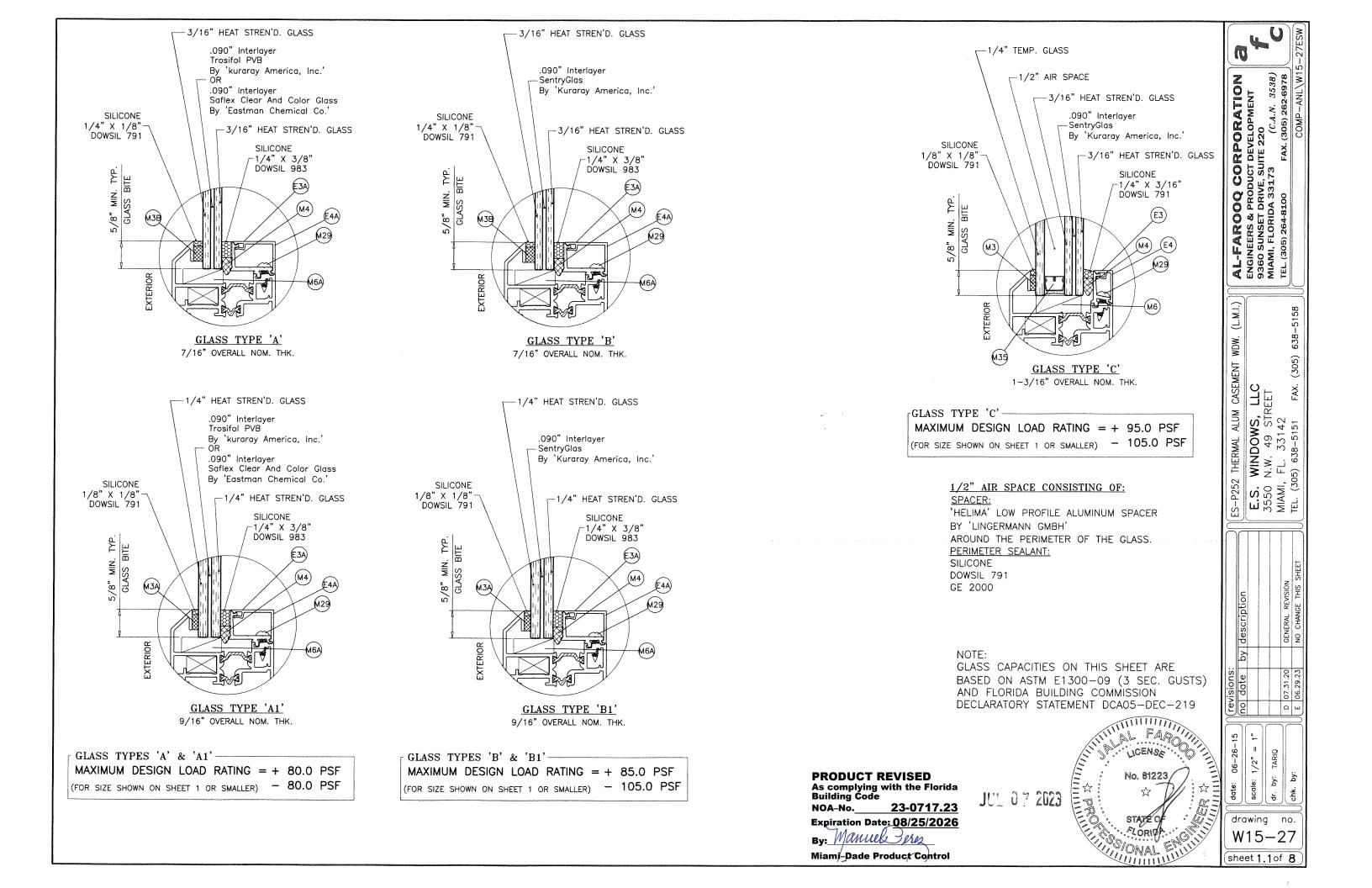
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2020/2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

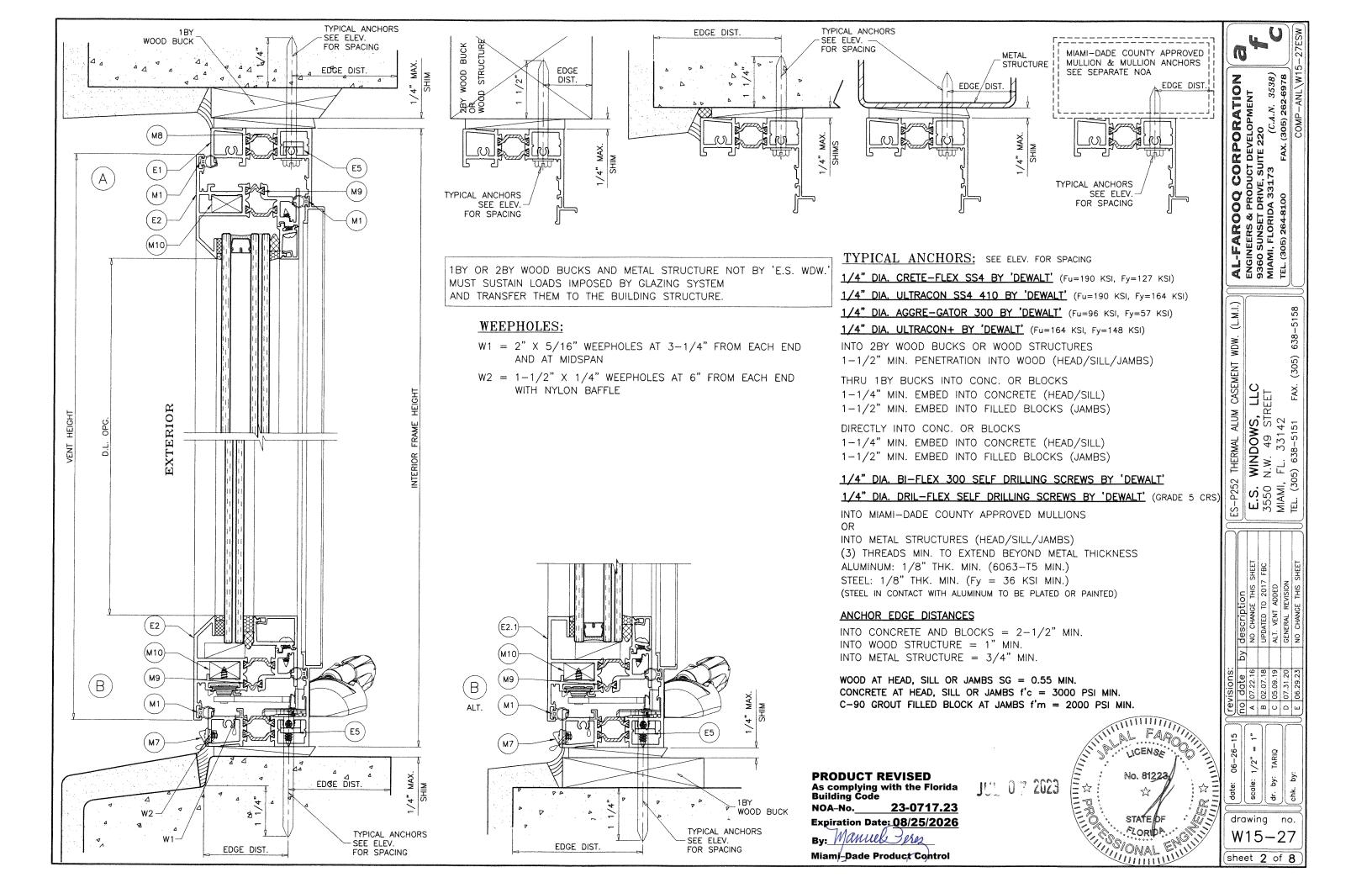
THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.

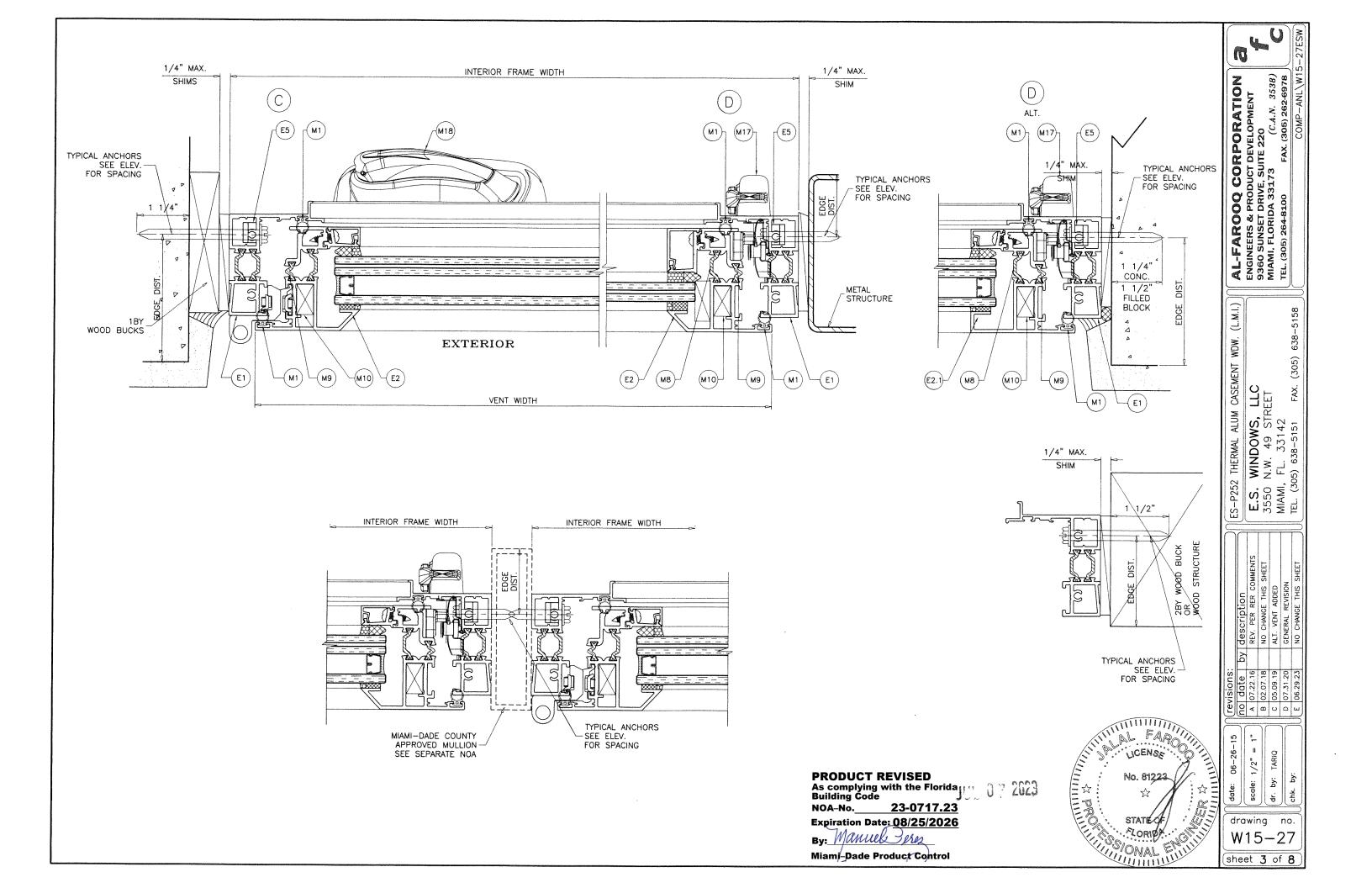
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

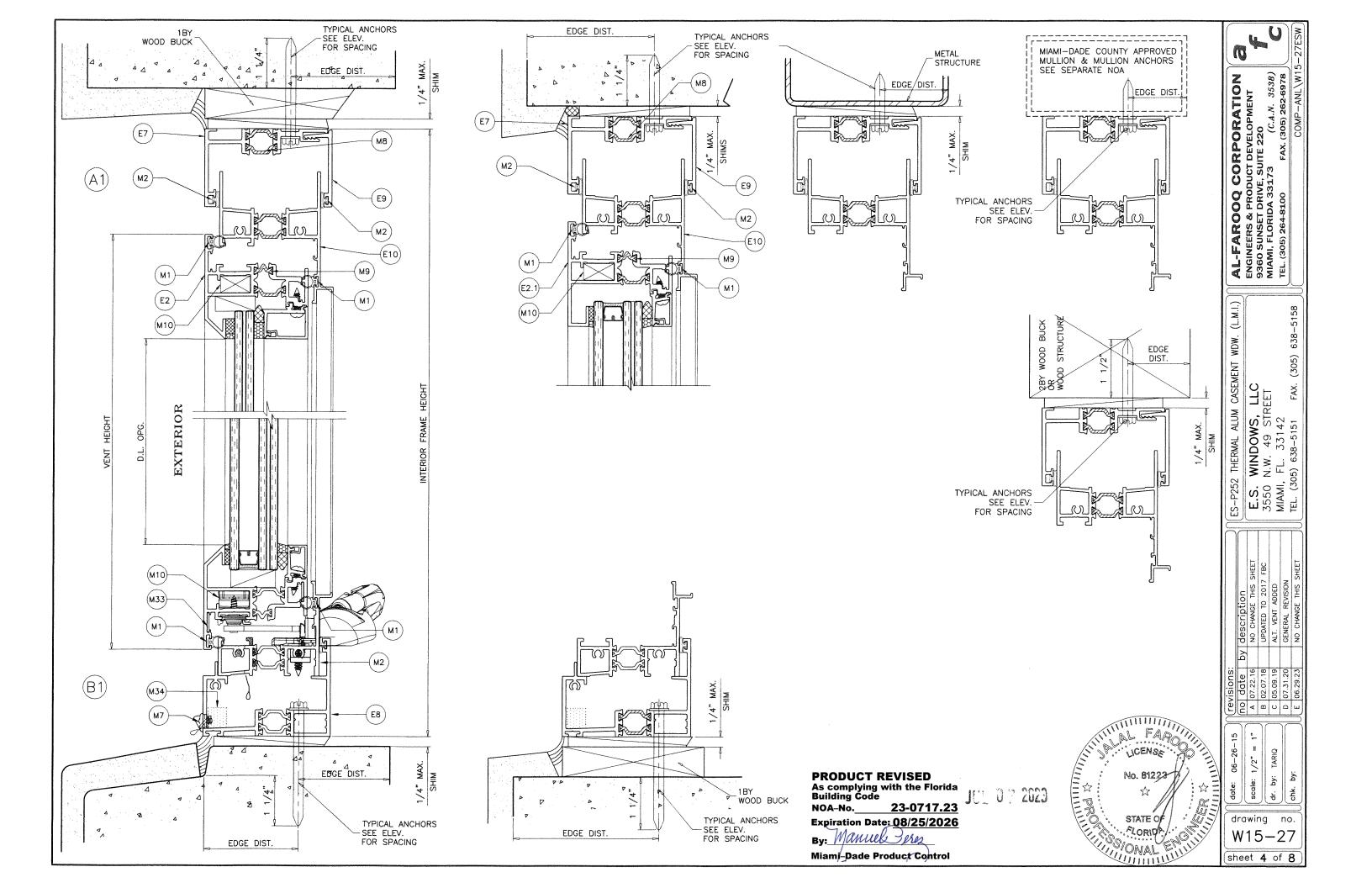
DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

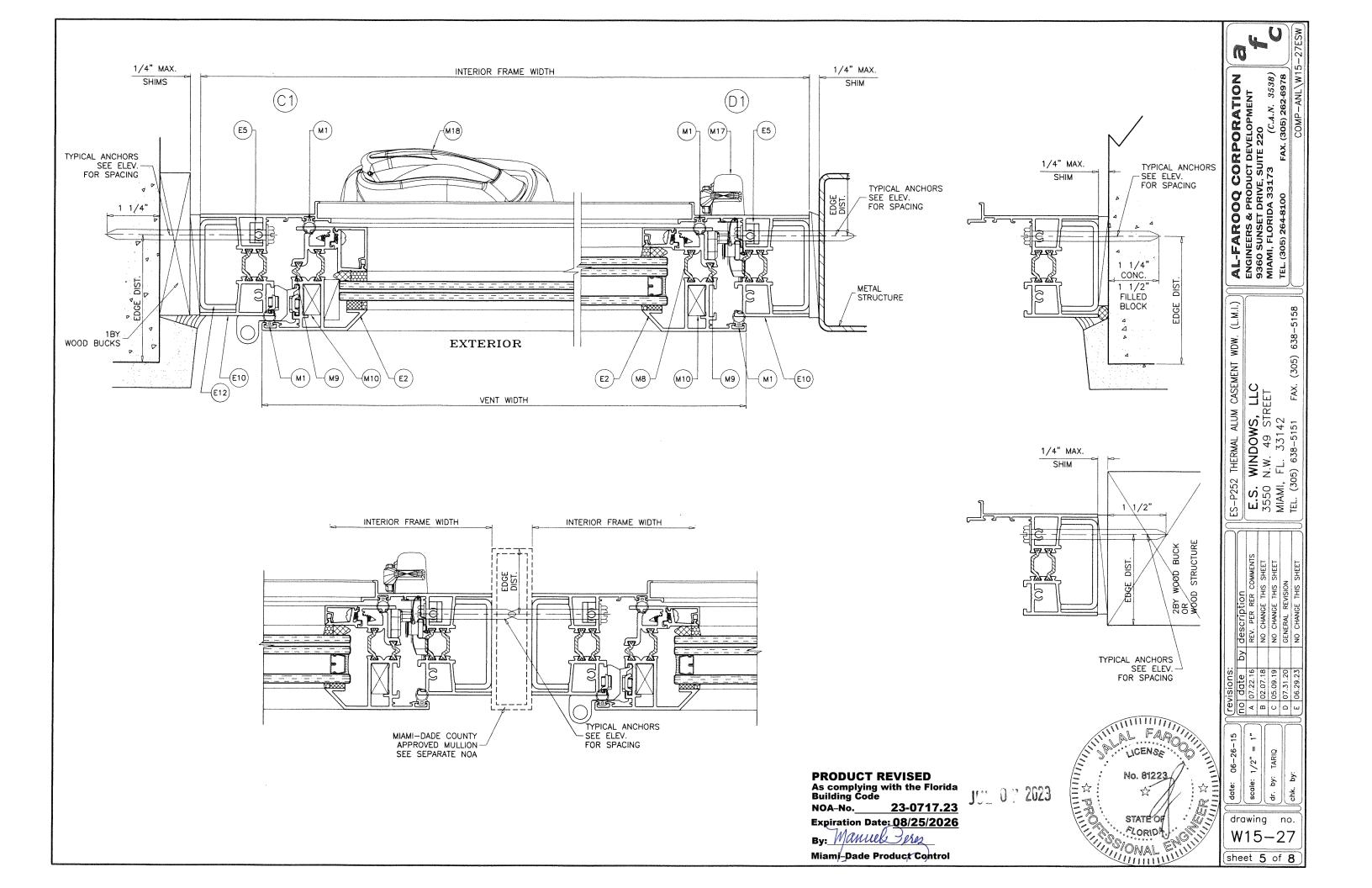












| ITEM # | PART # | REQD. | DESCRIPTION | MATERIAL | MANF./SUPPLIER/REMARKS |
|------------|----------------------|-----------|--|----------------|---|
| E1 | ES-P250-001/P252-001 | 4 | FLUSH FRAME HEAD/SILL/JAMB | 6063-T6 | - |
| E2 | ES-P252-002/P250-003 | 4 | VENT | 6063-T6 | - |
| E2.1 | ES-P252-026/P250-003 | 4 | ALT. VENT | 6063-T6 | |
| E3 | ES-P252-004 | 4/ VENT | GLASS STOP (INSUL. LAM. GLASS) | 6063-T6 | - |
| E3A | ES-P252-029 | 4/ VENT | GLASS STOP (LAM. GLASS) | 6063-T6 | _ |
| E4 | ES-P252-003 | _ | COVER IMPACT (INSUL. LAM. GLASS) | 6063-T6 | _ |
| E4A | ES-P252-030 | | COVER IMPACT (LAM. GLASS) | 6063-T6 | _ |
| E5 | AAC-A-027 | 1/ CORNER | FRAME ATTACHMENT ANGLE | 6063-T6 | |
| E7 | ES-P250-010/P251-013 | AS REQD. | RECEPTOR HEAD | 6063-T6 | - |
| E8 | ES-P251-016/032 | 1 | RECEPTOR SILL | 6063-T6 | _ |
| E9 | ES-P251-014 | 1 | RECEPTOR STOP | 6063-T6 | - |
| E10 | ES-P250-017/P252-012 | _ | EQUAL LEG FRAME HEAD/JAMB | 6063-T6 | |
| E12 | | AS REQD. | JAMB REINF. CHANNEL | 6063-T6 | _ |
| | | | | | |
| M1 | ES-P251-G05 | AS REQD. | INTERIOR VENT GASKET | EPDM | TREMCO #TX-20003E, DUROMETER 70±5 SHORE A |
| M2 | 27-245 | AS REQD. | FRAME RECEPTOR | EPDM | CANALVIDRIOS, DUROMETER 65±5 SHORE A |
| М3 | | | GLAZING TAPE (1/8" X 3/8") | POLYURETHANE | |
| M3A | | AS REQD. | GLAZING TAPE (3/16" X 3/8") | POLYURETHANE | _ |
| M3B | _ | AS REQD. | GLAZING TAPE (1/4" X 3/8") | POLYURETHANE | |
| M4 | ES-H340-G02 | - | GLAZING WEDGE | EPDM | DUROMETER 60±5 SHORE A |
| M6 | ES-6025-B01 | | SETTING BLOCK AT VENT | EPDM | TREMCO TR-1870E, DUROMETER 85±5 SHORE A |
| M6A | NS-25-B03A | | SETTING BLOCK AT VENT | EPDM | DUROMETER 85±5 SHORE A |
| M7 | WA2L | _ | WEEP HOLE COVER | | PREFERRED |
| M8 | 2479 | AS REQD. | INSULBAR 20MM OFFSET | POLYAMIDE | ENSINGER |
| M9 | 2531 | AS REQD. | INSULBAR 12MM OFFSET | POLAMIDE | ENSINGER |
| M10 | 0337 | AS REQU. | CORNER JOINT | | MASTER |
| M10 | CL02-002X | _ | LOCK POINT BAR | DIECAST ALUM | INTERLOCK |
| M12 | CL02-2059-00B | | STRIKER | ST. STEEL | |
| M12 M13 | CL02-2003-00B | | | | INTERLOCK |
| M13 | C011-0151-085 | | LOCKING BAR GUIDE | - | INTERLOCK |
| M15 | | | 13,5" SA OPERATOR LOW PROFILE RH 13,5" SA OPERATOR LOW PROFILE LH | ST. STEEL | INTERLOCK |
| M16 | C011-0152 | | | ST. STEEL | INTERLOCK |
| M10 | C011-0704 | | TRACK | ST. STEEL | INTERLOCK |
| | CL01-0475 | | MULTIPOINT HANDLE | DIE CAST ZINC | INTERLOCK |
| M18 | C011-0605-XXX | - | COVER OPERATOR HANDLE LEFT | | INTERLOCK |
| M19 | C011-0606-XXX | - | COVER OPERATOR HANDLE RIGHT | - | INTERLOCK |
| M20 | CL01-2250-XXX | | SNAP ON COVER | DIE CAST ZINC | INTERLOCK |
| M21 | CL01-1050-XXX | - | SNAP ON HANDLE | COPOLYMER | INTERLOCK |
| M22 | C001-4001 | - | CLAMP WASHER | ST. STEEL | INTERLOCK |
| M23 | A1199X0003 | - | EURO HINGE | ST. STEEL | AMC |
| M24 | #10 X 2" FH | | FRAME CORNER FASTENER | ST. STEEL | - |
| M26 | #10 X 3/4" PH | | FRAME CORNER ANGLE FASTENER | ST. STEEL | - |
| M27 | #8 X 1" FH | - | STRIKER FASTENER | ST. STEEL | - |
| M28 | #8 X 1/2" FH | - | GUIDE, OPERATOR, TRACK FASTENER | ST. STEEL | - |
| M29 | #8 X 5/8" PH SMS | - | GLASS STOP FASTENER | ST. STEEL | AT 4" FROM ENDS & 8-1/4" O.C. |
| M30 | #8-32 X 1/2" PH | | LOCKING HANDLE CLAMP WASHER FASTENER | ST. STEEL | - |
| M31 | #8 X 1/2" PH | _ | END DAM FASTENER | ST. STEEL | - |
| M32 | C001-4000 | | CLAMP WASHER | ROH | INTERLOCK |
| М33 | PJS43-SS | - | CORNER LOCK | ST. STEEL | |
| M34 | WPSA-N1 | - | 3/4" X 3/4" X 2" RETICALATED FOAM | OPEN CELL FOAM | 30 PP1 |
| M35 | HELIMA | - | LOW PROFILE SPACER | ALUMINUM | LINGERMANN GMBH & CO. KG |

SEALANTS:

LOCKS:

SEVEN POINT LOCK SYSTEM BY 'INTERLOCK' FASTENED WITH (2) #8-32 X 1/2" PH MS

TO FRAME JAMB WITH (2) #8 X 1" FH SMS

LOCKING POINTS

HINGES:

SURFACE MOUNT METALLIC PIVOT HINGE FASTENED WITH (2) #12-28 X 1/2" FH MS

OPERATOR:

FASTENED WITH (6) #8 X 3/4" FH SMS (2) #8-32 X 7/16" FH MS

PRODUCT REVISED As complying with the Florida JUL = 0.72023 Building Code 23-0717.23 NOA-No. Expiration Date: 08/25/2026 By: Manuel Jeres Miami-Dade Product Control



