

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

NOTICE OF ACCEPTANCE (NOA)

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

PRODUCT CONTROL SECTION

www.miamidade.gov/economy

MIAMI-DADE COUNTY

E.S. Windows, LLC 3550 N. W. 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-6600 Ultra**" Aluminum Sliding Glass Doors (Dry glazed) w/ reinforcements-**SMI APPROVAL DOCUMENT:** Drawing No. **W14-14 Rev H,** titled "ES-6600 Ultra Alum Sliding Glass Door (SMI)", sheets 1 through 14 of 14, prepared by Al-Farooq Corporation, dated 07-11-14 and last revised on NOV 10, 2020, 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: Small Missile Impact Resistant Limitations:

- 1. See Design Pressures (DP) VS Rail reinforcements & glazing options charts in sheet <u>1</u>. See DP VS free jamb reinforcement in sheet <u>12</u>. See secured jambs elevation, sheet <u>3</u> and unsecured (free Jambs) elev. sheet <u>4</u>.
- 2. See Head anchors capacity charts for both secure and free jambs w/ Sill anchor note, in sheet <u>5</u>. Lower DP shall control from all applicable charts for the entire system.
- 3. (4) Panels or less configured options (see sheet $\underline{\mathbf{6}}$), not to exceed tested frame/panel area and tested panel height.
- 4. See sheet <u>6</u>, for fixed panel arrangement using alum clip item **M-29** (top/bottom), threshold cover item #**E-11** and head cover item #**E-18**.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, Barranquilla, Columbia and series and following statement: "Miami-Dade County Product Control Approved", 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 # 18-0426.06 consists of this page 1 and evidence pages E-1, E-2, E-3, E-4 & E-5, as well as approval document mentioned above.

The submitted documentation was reviewed by Ishaq I. Chanda, P.E.



Ishaq I. Chands

NOA No. 20-1118.10 Expiration Date: September 19, 2023 Approval Date: February 18, 2021

Page 1

1. Evidence submitted in previous files

A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No. **W14-14**, titled "ES-6600 Ultra Alum Sliding Glass Door (SMI)", sheets 1 through 13 of 13, prepared by Al-Farooq Corporation, dated JAN 16, 2015, signed and sealed by Javad Ahmad, P.E.

B. TESTS (submitted under file #14-0408.02)

- 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) Small Missile Impact Test per FBC, TAS 201-94
 - 5) Large Missile Impact Test per FBC, TAS 201-94
 - 6) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 7) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

Along with marked-up drawings and installation diagram of OXXO aluminum SGD, prepared by Fenestration Testing Laboratories, Test Report No. FTL-7651 (FTL13074), dated 02/04/14, signed and sealed by Idalmis Ortega, P.E.

- 2. Additional Referenced 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) Small Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of OXXX aluminum sliding glass door, prepared by, prepared by Fenestration Testing Laboratories, Test Report No. FTL-6293 (FTL 10063), dated 10/15/10 and FTL-5669 (FTL 08057), signed and sealed by Jorge A. Causo, P.E. and Michael Wenzel, P.E. respectively and Test Report No. FTL-7130 (FTL 12093), dated 04/05/13 and last revised on 09-12-13, signed and sealed by Marlin D. Brinson, P.E.

C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC-2014, prepared by Al Farooq Corporation, dated JUL 15, 2014, NOV 12, 2014 and last revised on 01/16/15, signed and sealed by Javad Ahmad, P.E.
- 2. Engineering structural analysis of reinforced rails wider than 48", prepared by Al Farooq Corporation, dated NOV 12, 2012, signed and sealed by Javad Ahmad, P.E.
- 3. Glazing complies w/ ASTME-1300-02, -04 & -09.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. 11-0624.01 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Butacite PVB ® Interlayer", expiring on 12/11/16.

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 20-1118.10
Expiration Date: September 19, 2023

Approval Date: February 18, 2021

F. STATEMENTS

- 1. Statement letter of conformance to FBC 2014(5th edition) and letter of no financial interest, prepared by Al Farooq Corporation, dated 07/15/14, signed and sealed by Javad Ahmad, P.E.
- 2. Lab compliance as part of the above referenced test report.
- 3. Statement letter of clarification via e-mail dated 01/20/15 for test report FTL-7651, issued by Fenestration testing lab, signed by Ms. Iliana Sanchez.
- 4. ES Windows Distribution agreement -Energia Solar, S.A. and ES Windows, LLC, dated 09/12/13, signed by Ms. Adriana Montoya, Manager and Andres Chamorro, General manager respectively on behalf of the companies.

G. OTHER

- 1. Test proposals prepared by Al-Farooq Corp. and approved by RER dated 04/11/13 & 01/16/15.
- 2. Technical cut sheet data for EPDM, rubber compound by Solucionesencaucho, Columbia.

2. Evidence submitted in previous files

A. DRAWINGS

1. Drawing No. **W14-14**, titled Series "ES-6600 Ultra Alum. Sliding Glass Door (SMI)", sheets 1 through 13 of 13, dated 01/16/15, with revision **D** dated 07/20/15, prepared by Al–Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS (submitted under file #15-0727.06)

- 1. Test reports on: 1) Air Infiltratio
 - 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) Small Missile Impact Test per FBC, TAS 201–94.
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203–94
 - 6) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202–94

along with marked-up drawings and installation diagram of OXXO aluminum SGD (2–Tracks), prepared by Blackwater Testing, Inc., Test Report No. **BT-ESW-15-006**, dated 06/17/15, signed and sealed by Yamil Gerardo Kuri, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 5th Edition (2014)**, prepared by Al–Farooq Corporation, dated 04/09/15, signed and sealed by Javad Ahmad, P. E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. **14-0916.10** issued to **Kuraray America**, **Inc.** for their "Butacite® **PVB Glass Interlayer**", dated 04/25/15, expiring on 12/11/16.
- 2. Notice of Acceptance No. 14-0916.11 issued to Kuraray America, Inc. for their "SentryGlas® (Clear and White) Glass Interlayers" dated 06/25/15, expiring on 07/04/18.

Ishaq I. Chanda, P.E. Product Control Unit Supervisor NOA No. 20-1118.10

Expiration Date: September 19, 2023 Approval Date: February 18, 2021

E. MATERIAL CERTIFICATIONS (continue):

- 3. Notice of Acceptance No. 14-0423.17 issued to Eastman Chemical Company (MA) for their "Saflex Clear and Color Glass Interlayers" dated 06/19/14, expiring on 05/21/16.
- 4. TREMCO <u>Silicone Dense Rubber Extrusions</u> complying with ASTM C864 with Option II, ASTM D412 Tensile Strength of 1139 PSI, ASTM D395B Compression Set for 22 HRS/212°F/12.5%, ASTM D 624 Tear Strength and Thermoplastic Elastomers of 107 lb./ in., ASTM D 2240 Shore "A" hardness with 65 durometer, ASTM D 1149 Ozone Resistance 100 HRS/ 104°F/ 6.852 lb./ft. and ASTM D 746 Brittleness Temperature –40°F.
- 5. Soluciones En Caucho Part No. **ES-6018 EPDM rubber glazing gasket** complying with ASTM D3677 Infrared Spectrophotometry 10.26 lbs./ gal., ASTM D412 Tensile Strength of 905 PSI, ASTM D395B Compression set for 22 HRS/ 158°/ F27%, ASTM D2240 Shore "A" hardness with 70±5 Durometer, ASTM D792 Specific Gravity 2.75 and Density 2.7 lb./in.³±0.044 lb. /in.³, ASTM D2407 Unified Soil 1.343 kip/ft. and ASTM D746 Brittleness Temperature –40°F. (Submitted under previous NOA No. 14-0408.02)

F. STATEMENTS

- 1. Statement letter of conformance, complying with **FBC** 5th **Edition** (2014), dated 07/24/15, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
- 2. Laboratory compliance letter prepared by Blackwater Testing, Inc., for the following Test Report No. **BT–ESW–15–006**, dated 06/17/15, signed and sealed by Yamil Gerardo Kuri, P.E.

G. OTHERS

1. Notice of Acceptance No. **15–0413.07**, issued to ES Windows, LLC, for their Series "ES–6600 Ultra Dry-Glazed" **12-Ft Aluminum Sliding Glass Doors w/ Reinforcements – S.M.I.**", approved on 04/23/15 and expiring on 09/19/18.

2. Evidence submitted under previous approval.

A. DRAWINGS

1. Drawing No. **W14-14 Rev G,** titled "ES-6600 Ultra Alum Sliding Glass Door (SMI)", sheets 1 through 14 of 14, prepared by Al-Farooq Corporation, dated 07-11-14 and last revised on DEC 26, 2018, signed and sealed by Javad Ahmad, P.E.

B. Test

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

along with marked-up drawings and installation diagram of XXO aluminum SGD, prepared by Blackwater Testing, Inc., Test Report No. **BT-ESW-15-005**, dated 07/21/15, signed and sealed by Yamil Gerardo Kuri, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2017 (6th Edition), prepared by Al Farooq Corporation, dated APR 234, 2018, signed and sealed by Javad Ahmad, P.E.

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 20-1118.10
Expiration Date: September 19, 2023

Approval Date: February 18, 2021

D. **QUALITY ASSURANCE**

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

Ε. **MATERIAL CERTIFICATIONS**

- Notice of Acceptance No. 17-0808.02 issued to Kuraray America, Inc. (Former E.I. DuPont De Nemours) for the "Sentry Glass ® clear & white interlayer", expiring on 07/04/23.
- Notice of Acceptance No. 16-1117.01 issued to Kuraray America, Inc. (former E.I. DuPont DeNemours & Co., Inc.) for "Trosifol: Ultra clear, clear & color PVB glass interlayer" (former "Kuraray **Butacite** PVB Interlayer)", expiring on 07/08/19.
- Notice of Acceptance No. 17-0712.05 issued to Eastman Chemical Company (MA) for the "Saflex Clear and Color Glass Interlayers", expiring on 05/21/21.

F. **STATEMENTS**

1. Statement letter of conformance to FBC 2017 (6th Edition) and "No financial interest" dated 12/31/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

G. **OTHER**

1. This NOA revises & renews # 15-0727.06, expiring 09/19/23.

3. **New Evidence submitted**

Α. **DRAWINGS**

1. Drawing No. W14-14 Rev H, titled "ES-6600 Ultra Alum Sliding Glass Door (SMI)", sheets 1 through 14 of 14, prepared by Al-Farooq Corporation, dated 07-11-14 and last revised on NOV 10, 2020, signed and sealed by Jalal Farooq, P.E.

B. **TESTS**

1. None.

C. **CALCULATIONS**

Anchor verification calculations and structural analysis, complying with FBC 7th Edition (2020), dated 11/10/20, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

D. **QUALITY ASSURANCE**

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

Ε. **MATERIAL CERTIFICATIONS**

- Notice of Acceptance No. 19-0305.02 issued to Kuraray America, Inc. for their "Trosifol® 1. Ultraclear, Clear and Color PVB Glass Interlayers" dated 05/09/19, expiring on 07/08/24.
- 2. Notice of Acceptance No. 15-1201.11 issued to Eastman Chemical Company (MA) former Solutia Inc. for their "Saflex Clear or colored interlayer", expiring on 05/21/21.
- 3. Notice of Acceptance No. 17-0808.02 issued to Kuraray America, Inc. (former E.I. DuPont DE Nemours & Co., Inc.) for the "Sentry Glass ® Interlayer", expiring on 07/4/23.

Ishaq I. Chanda, P.E. **Product Control Unit Supervisor** NOA No. 20-1118.10 **Expiration Date: September 19, 2023** Approval Date: February 18, 2021

E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

D. STATEMENTS

- 1. Statement letter of conformance, complying with **FBC** 7th **Edition (2020)**, dated 11/10/20, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
- 2. Distribution agreement between Energia Solar, S.A.-ES Windows and ES Windows, LLC, dtd 08/03/15, signed by Ms. Carla Garcia (MGR) and Andres Chamorro (Gen. MGR) respectively (original copy in various ES approved NOA(s) files.

G. OTHER

1. This NOA revises NOA No. 18-0426.06, expiring 09/19/23.

Ishaq I. Chands

THESE DOORS ARE RATED FOR SMALL MISSILE IMPACT. MIAMI-DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS REQUIRED FOR INSTALLATIONS UP TO 30 FT. OF GRADE. SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

SERIES ES-6600 ULTRA ALUMINUM SLIDING GLASS DOOR

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)'.

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 20-1118.10

Expiration Date 09/19/2023

NOV 1 0 2020

By Shag 1. Chands Miami-Dade Product Control

> LAMINATED GLASS INSUL. LAM. GLASS SMALL MISSILE IMPACT



by description
GENERAL REVISIC
REV. PER RER C
REV. PER RER C
UPDATED TO 202 E G T R D E drawing no. W14 - 14

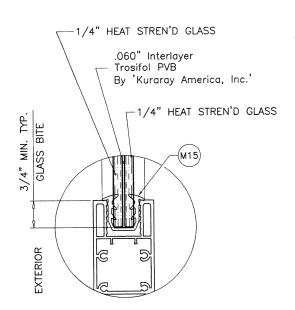
sheet 1 of 14

CORPORATION DUCT DEVELOPMENT

(S.M.I.)

SERIES ES-6600 ULTRA ALUM S.G. DOOR

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



GLASS TYPE 'A' 9/16" OVERALL LAMINATED GLASS

3/8" AIR SPACE

1/4" HEAT STREN'D GLASS

.060" Interlayer

(M14)(M14A)

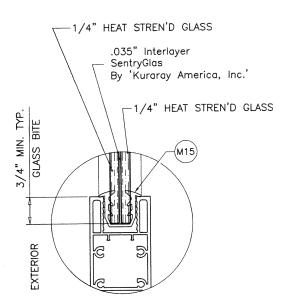
Trosifol PVB

-1/4" TEMP. GLASS

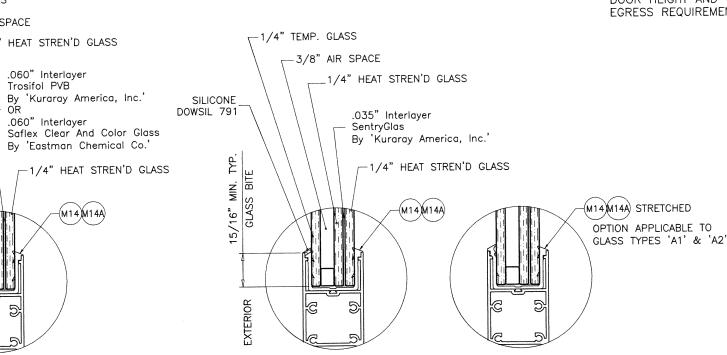
SILICONE

716" MIN. TO

DOWSIL 791



GLASS TYPE 'AA' 9/16" OVERALL LAMINATED GLASS



GLASS TYPE 'A2'

1-1/4" OVERALL INSUL. LAM. GLASS

GLAZING OPTIONS

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

GLASS TYPE 'AI'

1-1/4" OVERALL INSUL. LAM. GLASS

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

DESIGN LOAD CAPACITY - PSF (APPLICABLE TO SECURED & FREE JAMBS)

| | | GLA | SS TYPES | 'A' & 'A1 | , | GLASS 'AA' & 'A2' | | |
|-----------------------|------------------|----------|---------------------|------------------|---------------------|-------------------------------------|---------|--|
| AVERAGE | DOOR FRAME | TOP & BO | TTOM RAIL REINF. | TOP & BO WITH | TTOM RAIL REINF. | TOP & BOTTOM RAIL WITHOUT REINF. | | |
| PANEL WIDTH INCHES | HEIGHT INCHES | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | |
| 36 | | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | |
| 42 | | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | |
| 48 | 100" | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | |
| 50 | 126" | 115.0 | 120.0 | 120.0 | 125.0 | - | | |
| 52 | | 111.0 | 115.0 | 120.0 | 125.0 | - | _ | |
| 54 | | 106.0 | 111.0 | 120.0 | 125.0 | _ | _ | |
| 36 | 132" | 120.0 | 125.0 | 120.0 | 125.0 | _ | _ | |
| 42 | | 120.0 | 125.0 | 120.0 | 125.0 | - | _ | |
| 48 | | 120.0 | 125.0 | 120.0 | 125.0 | - | _ | |
| 50 | | 115.0 | 120.0 | 120.0 | 125.0 | - | | |
| 52 | | 111.0 | 115.0 | 120.0 | 125.0 | _ | _ | |
| 36 | | 120.0 | 125.0 | 120.0 | 125.0 | _ | - | |
| 42 | 138" | 120.0 | 125.0 | 120.0 | 125.0 | - | _ | |
| 48 | | 120.0 | 125.0 | 120.0 | 125.0 | | _ | |
| 50 | | 115.0 | 120.0 | 120.0 | 125.0 | _ | _ | |
| 36 | | 120.0 | 125.0 | 120.0 | 125.0 | _ | _ | |
| 42 | 144" | 120.0 | 125.0 | 120.0 | 125.0 | _ | _ | |
| 48 | | 120.0 | 125.0 | 120.0 | 125.0 | _ | _ | |

CHART ABOVE TO BE USED AS PER INSTRUCTIONS SHOWN ON SHEETS 3 & 4.

DOOR HEIGHT AND WIDTH SIZE MUST COMPLY EGRESS REQUIREMENTS PER FBC AS REQUIRED.

> **PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 20-1118.10

Expiration Date 09/19/2023

Ishaq 1. Chands

Miami-Dade Product Control

NOV 1 0 2020

TOP & BOTTOM RAIL WITHOUT REINF. (DETAIL A&B SHEET 8)



TOP & BOTTOM RAIL WITH REINF. (DETAIL C&D SHEET 8)



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

(S.M.I.) DOOR

U

S.G.

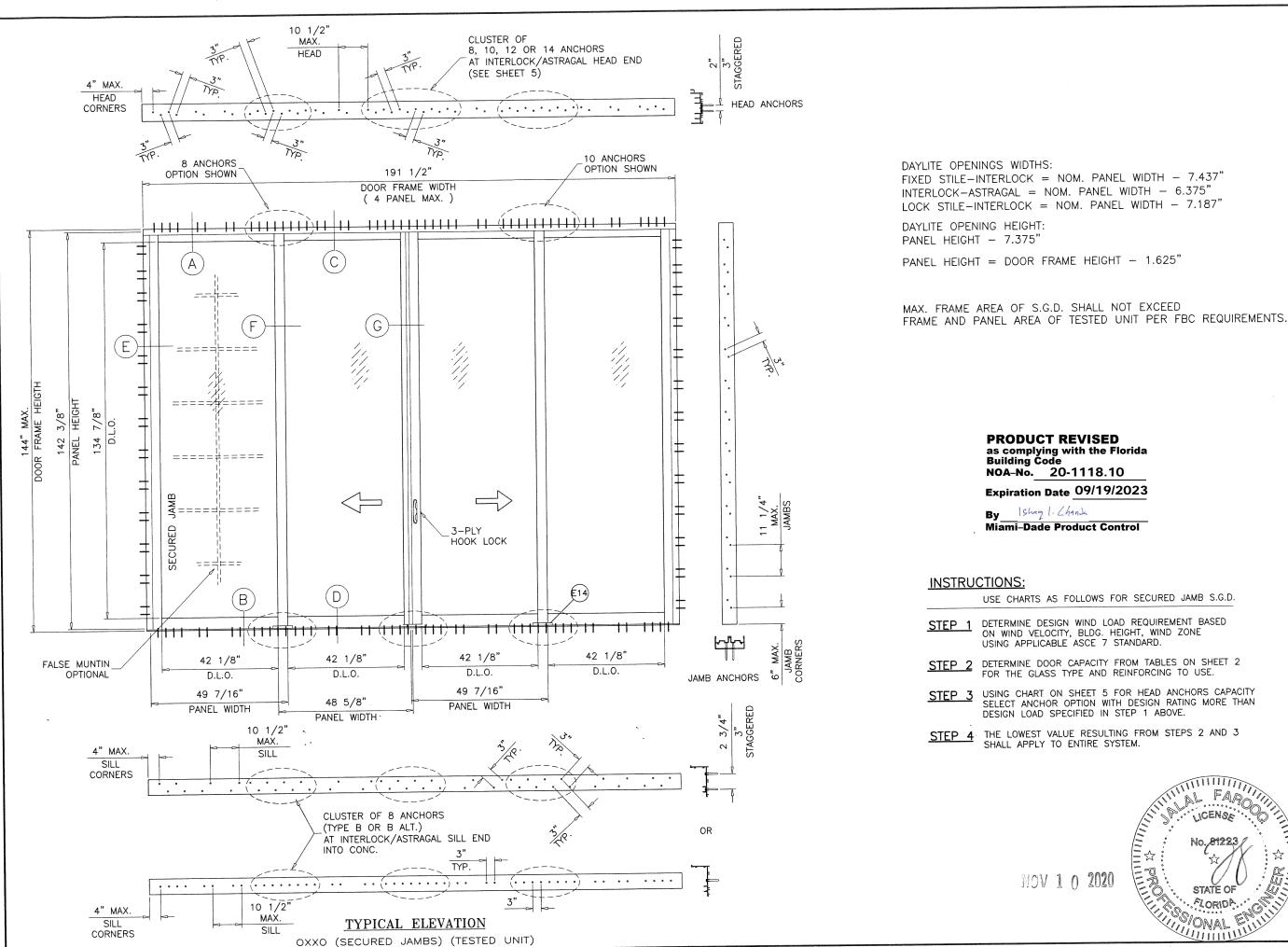
E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151 FAX. (

SERIES ES-6600 ULTRA ALUM

revisions:
no date
E 04.10.18
F 09.13.18
G 12.20.18
H 11.05.20

drawing no.

W14 - 14sheet 2 of 14



 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

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

SERIES ES-6600 ULTRA ALUM

E.S. 3550 MIAMI,

by description
GENERAL REVISION
REV. PER RER COMMENTS
REV. PER RER COMMENTS
UPDATED TO 2020 FBC

E C 1 L O T

drawing no. W14 - 14

sheet 3 of 14

USE CHARTS AS FOLLOWS FOR SECURED JAMB S.G.D.

USING CHART ON SHEET 5 FOR HEAD ANCHORS CAPACITY SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.

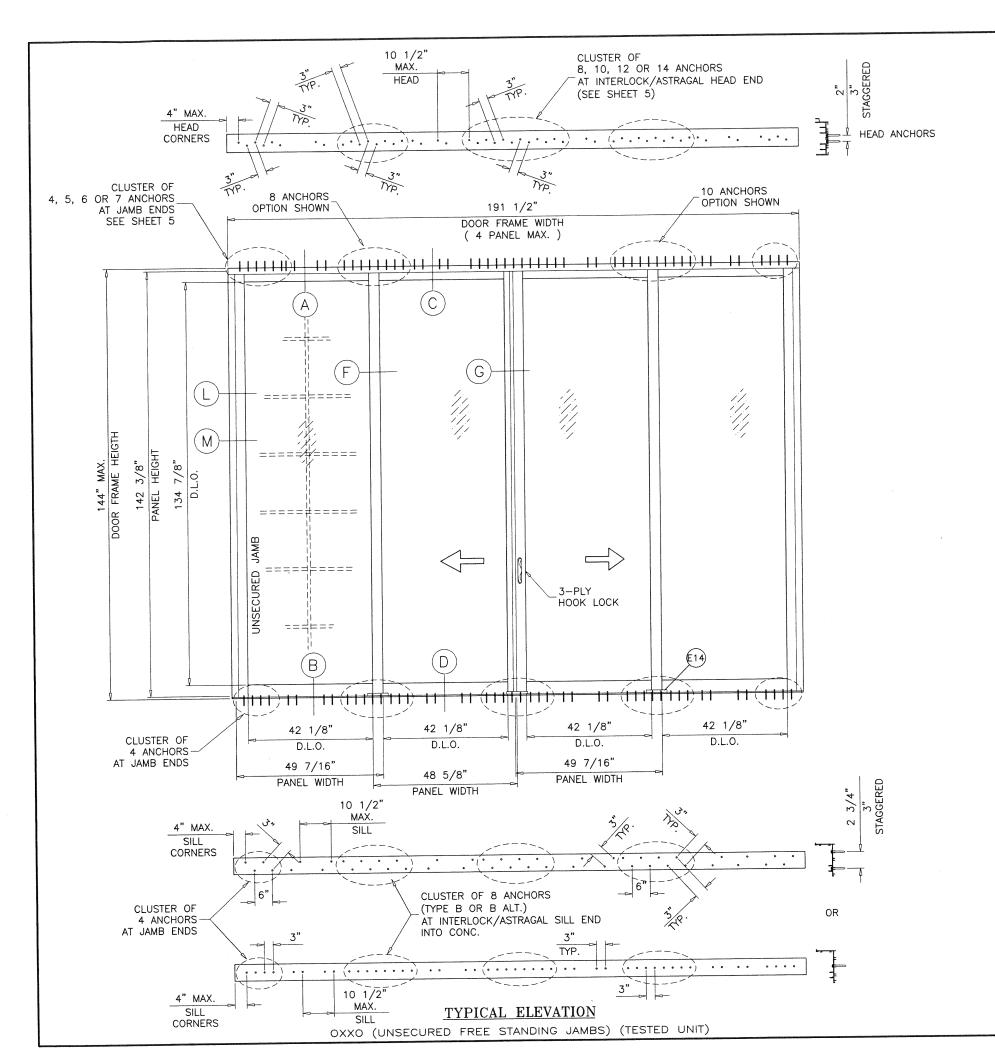
MOV 1 0 2020

PRODUCT REVISED as complying with the Florida Building Code

NOA-No. 20-1118.10 Expiration Date 09/19/2023

Ishaq I. Chands

Miami-Dade Product Control



DAYLITE OPENINGS WIDTHS: FIXED STILE-INTERLOCK = NOM. PANEL WIDTH - 7.437" INTERLOCK-ASTRAGAL = NOM. PANEL WIDTH - 6.375" LOCK STILE-INTERLOCK = NOM. PANEL WIDTH - 7.187"

DAYLITE OPENING HEIGHT: PANEL HEIGHT - 7.375'

PANEL HEIGHT = DOOR FRAME HEIGHT - 1.625"

MAX. FRAME AREA OF S.G.D. SHALL NOT EXCEED FRAME AND PANEL AREA OF TESTED UNIT PER FBC REQUIREMENTS.

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 20-1118.10

Expiration Date 09/19/2023

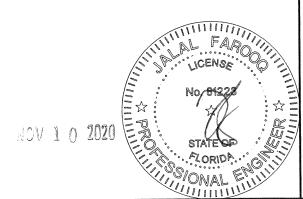
Ishaq 1. Chanda

Miami-Dade Product Control

INSTRUCTIONS:

USE CHARTS AS FOLLOWS FOR UNANCHORED JAMB S.G.D.

- STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2 DETERMINE DOOR CAPACITY FROM TABLES ON SHEET 2 FOR THE GLASS TYPE AND REINFORCING TO USE.
- STEP 3 USING CHART ON SHEET 5 FOR HEAD ANCHORS CAPACITY SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 4 USING UNANCHORED FREE STANDING JAMB AND REINFORCING OPTIONS FROM SHEET 12, SELECT THE DESIGN LOAD MORE THAN THE LOAD IN STEP 1, 2 & 3.
- STEP 5 THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.



CORPORATION
DUCT DEVELOPMENT

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

DOOR

S.G.

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

SERIES ES-6600 ULTRA ALUM **E.S.** 3550 MIAMI, TEL. (30

by description
GENERAL REVISION
REV. PER RER COMMENTS
REV. PER RER COMMENTS
UPDATED TO 2020 FBC no date E 04.10.18 F 09.13.18 G 12.20.18 H 11.05.20

drawing

no. W14 - 14

sheet 4 of 14

| | | | | | | | | | | | | | | | | | | | Manual or manual |
|------------------------|--|----------|--------------------------------|--|--|--|-------------------------|--|----------|--|----------|--|----------|--|----------------|----------------------------------|-------|---------------------------------|--|
| | | | and describe the second second | F | RAME HE | EAD ANCH | OR CAPA | CITY - F | SF (APP | LICABLE 7 | O FREE | AND SEC | URED JAN | MBS) | | | | т | |
| | | | | ************************************** | en e | | | ANCH | ORS TYP | E 'A' & | 'B' | | | anne de la companya d | | | | ANCHORS 'C' | |
| ANCHOD | דייםר | 3/8 | " MAX. SHIM SPACE | | | | | | 1/2" | MAX. S | HIM SPA | CE | | | 3/8" MAX. SHIM | | | | |
| | ANCHOR TYPE | | 1/4" MAX. SHIM 8 ANCHORS AT | | 8 ANCHORS AT | | 10 ANCHORS AT 12 ANCHOR | | HORS AT | 8 ANCHORS AT | | 10 ANCHORS AT | | 12 ANCHORS AT | | 14 ANCHORS AT MTG. STILE ENDS | | 8 ANCHORS AT MTG. STILE ENDS | |
| AVERAGE PANEL WIDTH | DOOR FRAME HEIGHT | MTG. ST | | 1 | ILE ENDS | MTG. ST | TLE ENDS | MTG. ST | ILE ENDS | MTG. ST | ILE ENDS | | ILE ENDS | | ILE ENDS | | | | |
| INCHES | INCHES | EXT. (+) | INT. (-) | EXT. (+) | INT. (-) | EXT. (+) | INT. (-) | EXT. (+) | INT. (-) | EXT. (+) | INT. (-) | EXT. (+) | INT. (-) | EXT. (+) | | EXT. (+) | | EXT. (+) | INT. (-) |
| 36 | | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 121.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 42 | | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 103.7 | 103.7 | 120.0 | 124.5 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 48 | | 120.0 | 125.0 | 113.1 | 113.1 | 120.0 | 125.0 | 120.0 | 125.0 | 90.8 | 90.8 | 108.9 | 108.9 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 50 | 126 | 120.0 | 125.0 | 108.6 | 108.6 | 120.0 | 125.0 | 120.0 | 125.0 | 87.1 | 87.1 | 104.6 | 104.6 | 120.0 | 122.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 52 | | 120.0 | 125.0 | 104.4 | 104.4 | 120.0 | 125.0 | 120.0 | 125.0 | 83.8 | 83.8 | 100.5 | 100.5 | 117.3 | 117.3 | 120.0 | 125.0 | 120.0 | 125.0 |
| 54 | - | 120.0 | 125.0 | 100.5 | 100.5 | 120.0 | 120.6 | 120.0 | 125.0 | 80.7 | 80.7 | 96.8 | 96.8 | 112.9 | 112.9 | 120.0 | 125.0 | 120.0 | 125.0 |
| 36 | | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 115.5 | 115.5 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 42 | | 120.0 | 125.0 | 120.0 | 123.4 | 120.0 | 125.0 | 120.0 | 125.0 | 99.0 | 99.0 | 118.8 | 118.8 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 48 | 132 | 120.0 | 125.0 | 108.0 | 108.0 | 120.0 | 125.0 | 120.0 | 125.0 | 86.6 | 86.6 | 104.0 | 104.0 | 120.0 | 121.3 | 120.0 | 125.0 | 120.0 | 125.0 |
| 50 | 132 | 120.0 | 125.0 | 103.6 | 103.6 | 120.0 | 124.4 | 120.0 | 125.0 | 83.2 | 83.2 | 99.8 | 99.8 | 116.4 | 116.4 | 120.0 | 125.0 | 120.0 | 125.0 |
| 52 | | 120.0 | 125.0 | 99.7 | 99.7 | 119.6 | 119.6 | 120.0 | 125.0 | 80.0 | 80.0 | 96.0 | 96.0 | 112.0 | 112.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| l | | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 110.5 | 110.5 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 36 | | 120.0 | 125.0 | 118.0 | 118.0 | 120.0 | 125.0 | 120.0 | 125.0 | 94.7 | 94.7 | 113.6 | 113.6 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 42 | 138 | 120.0 | 125.0 | 103.3 | 103.3 | 120.0 | 123.9 | 120.0 | 125.0 | 82.9 | 82.9 | 99.4 | 99.4 | 116.0 | 116.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 48 | | <u></u> | 125.0 | 99.1 | 99.1 | 119.0 | 119.0 | 120.0 | 125.0 | 79.6 | 79.6 | 95.5 | 95.5 | 111.4 | 111.4 | 120.0 | 125.0 | 120.0 | 125.0 |
| 50 | | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 105.9 | 105.9 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 36 | | 120.0 | | 113.1 | 113.1 | 120.0 | 125.0 | 120.0 | 125.0 | 90.8 | 90.8 | 108.9 | 108.9 | 120.0 | 125.0 | 120.0 | 125.0 | 120.0 | 125.0 |
| 42 | 144 | 120.0 | 125.0 | | - | 118.8 | 118.8 | 120.0 | 125.0 | 79.4 | 79.4 | 95.3 | 95.3 | 111.2 | 111.2 | 120.0 | 125.0 | 120.0 | 125.0 |
| 48 | 48 120.0 125.0 99.0 99.0 4 ANCHORS AT | | 5 ANO | 5 ANCHORS AT FREE STANDING JAMB ENDS FREE STANDING JAMB ENDS FREE STANDING JAMB ENDS | | 4 ANCHORS AT FREE STANDING JAMB ENDS | | 5 ANCHORS AT FREE STANDING JAMB ENDS | | 6 ANCHORS AT FREE STANDING JAMB ENDS | | 7 ANCHORS AT FREE STANDING JAMB ENDS | | 4 ANCHORS AT FREE STANDING JAMB ENDS | | | | | |

PRODUCT REVISED as complying with the Florida **Building Code** NOA-No. 20-1118.10

Expiration Date 09/19/2023

By | Shag | . Chank Miami-Dade Product Control

SEE ELEVATION ON SHEET 4

THESE TABLES APPLY TO ANCHORS AT FRAME HEAD

NOTE: SILL ANCHORS IN CLUSTER OF 8 (INCLUSIVE TO ALL SHIM SPACES) AT INTERLOCK/ASTRAGAL ENDS, AND 4 AT FREE STANDING JAMB ENDS (ALL SIZES) MEET ALL LOAD REQUIREMENTS AND DO NOT REQUIRE SEPARATE TABLES

SEE ELEVATION IN SHEET 3, FOR DOORS WITH SECURED JAMBS WITH ANCHOR SPACING FOR ALL SIZES.

SEE ELEVATION IN SHEET 4, FOR DOORS WITH UNSECURED JAMBS (FREE JAMBS). SEE SHEET 12 FOR JAMB DESIGN CAPACITY WITH REINFORCING USED.

SEE CHARTS IN SHEET 2, FOR DESIGN LOAD CAPACITY FOR DESIRED GLASS SIZE AND REINFORCING USED AT INTERLOCKS AND RAILS (APPLICABLE TO BOOTH SECURED AND UNSECURED (FREE) JAMBS)

LOWER DESIGN PRESSURE FROM DESIGN LOAD CHARTS (SHEET 2), HEAD ANCHOR CHARTS AND SILL ANCHOR NOTE SHEET 5 OR FREE STANDING JAMBS (SHEET 12), CAPACITY CHART SHALL APPLY TO ENTIRE SYSTEM.

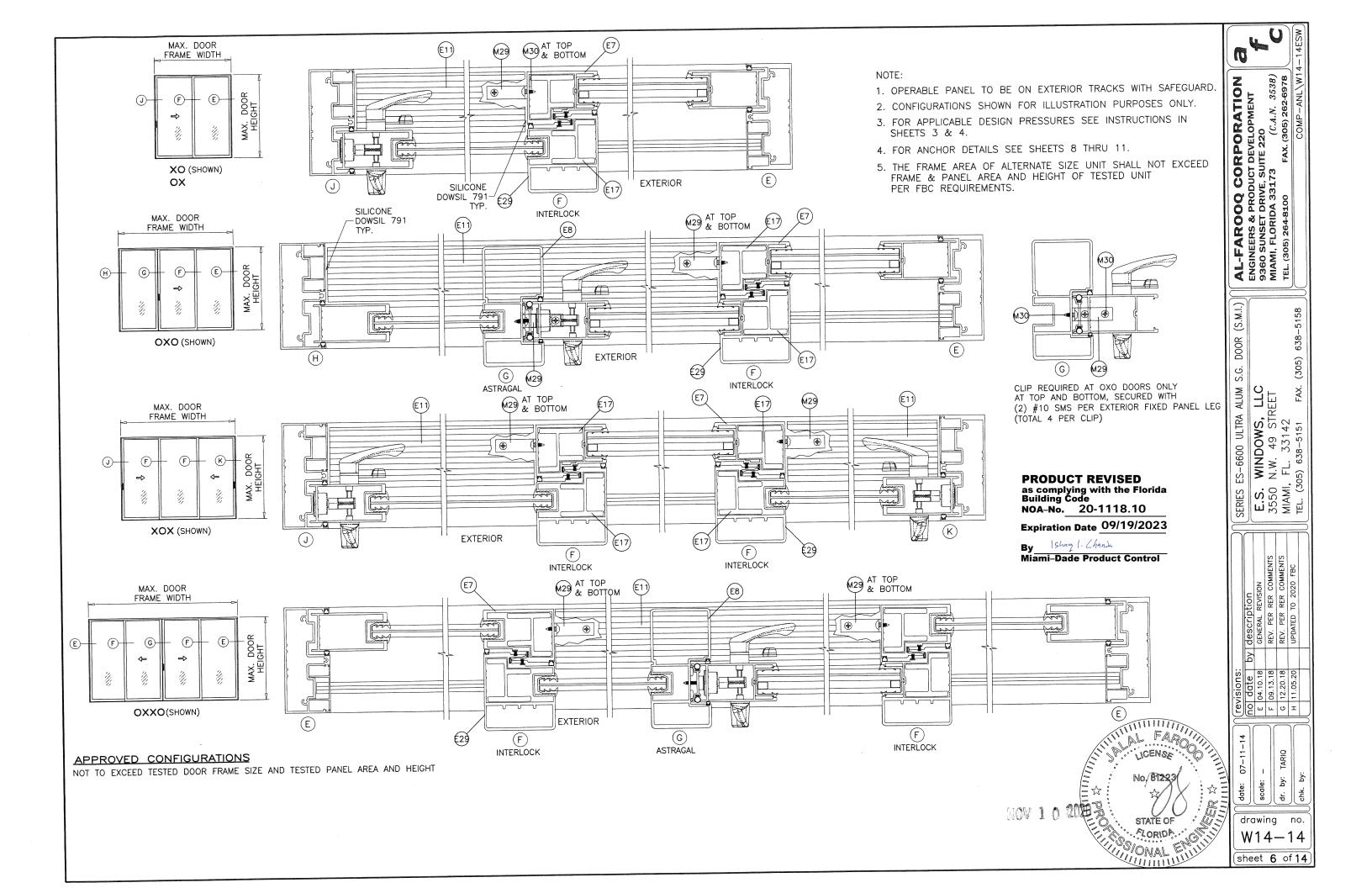
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NOV 1 0 2020

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

DOOR

SERIES ES-6600 ULTRA ALUM S.G. E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638–5151 FAX. (



| Import " | DADT # | QUANTITY | DESCRIPTION | MATERIAL | MANF./SUPPLIER/REMARKS |
|----------|----------------|---------------|---|--|---|
| ITEM # | PART # | | | 6063-T6 | - |
| E1 | ES-6500-001 | 1 | STANDARD FRAME HEAD | 6063-T6 | |
| E2 | ES-6500-002 | 1 | FRAME SILL | 6063-T6 | - |
| E3 | ES-6500-003 | 2 | STANDARD FRAME JAMB | 6063-T6 | - |
| E4 | ES-6500-004 | 2 | HEAVY DUTY FRAME JAMB | 6063-T6 | |
| E5 | ES-6500-005 | | TOP AND BOTTOM RAIL (INSUL. LAM. GLASS) | 6063-T6 | |
| E5A | ES-6500-024 | | TOP AND BOTTOM RAIL (LAM. GLASS) | | |
| E6 | ES-6500-006 | 1/ PANEL | LOCK STILE (INSUL. LAM. GLASS) | 6063-T6 | |
| E6A | ES-6500-023 | 1/ PANEL | LOCK STILE (LAM. GLASS) | 6063-T6 | |
| E7 | ES-6500-007 | 1/ PANEL | INNER PANEL INTERLOCK STILE (INSUL. LAM. GLASS) | 6005-T5 | |
| E7A | ES-6500-025 | 1/ PANEL | INNER PANEL INTERLOCK STILE (LAM. GLASS) | 6005-T5 | |
| E8 | ES-6500-025 | 1 | ASTRAGAL STILE (INSUL. LAM. GLASS) | 6005-T6 | |
| E8A | ES-6500-031 | 1 | ASTRAGAL STILE (LAM. GLASS) | 6005-T5 | |
| E9 | • ES-6500-009 | 1 | ASTRAGAL ADAPTER | 6063-T6 | |
| E10 | ES-6500-010 | 1 | ADD-ON TRACK | 6063-T6 | |
| E11 | ES-6500-011 | 1 | THRESHOLD (LENGTH = OPNG. WIDTH BETWEEN FIXED PANELS) | 6063-T6 | |
| E12 | ES-6500-012 | 2 | SNAP-IN JAMB COVER (OPTIONAL) | 6063-T5 | |
| E13 | ES-6500-013 | 1 | TRACK INSERT | 6063-T6 | |
| E14 | ES-6500-014A | _ | RETAINER CLIP, 4" LONG | 6063-T6 | |
| E15 | ES-6500-015 | AS REQD. | SCREEN RAIL | 6063-T6 | _ |
| E17 | ES-6500-017 | AS REQD. | INTERLOCK REINFORCEMENT, FULL PANEL LENGTH | 6005-T5 | - |
| E18 | ES-6500-018 | AS REQD. | HEAD COVER FULL LENGTH | 6063-T5 | <u> </u> |
| E19 | | AS REQD. | INNER INTERLOCK STILE (LAM. GLASS) | 6063-T5 | |
| E22 | ES-6011 | AS REQD. | SCREW COVER (OPTIONAL) | 6063-T6 | _ |
| | ES-6500-028 | 1/ PANEL | OUTER PANEL INTERLOCK STILE (INSUL. LAM. GLASS) | 6005-T5 | |
| E29 | | 1/ PANEL | OUTER PANEL INTERLOCK STILE (LAM. GLASS) | 6005-T5 | _ |
| E29A | ES-6500-030 | 1 | SILL SCREW COVER | 6063-T5 | _ |
| E30 | ES-6500-027 | 2 | FIXED PANEL BOTTOM GUIDE | 6005-T5 | - |
| E32 | ES-6500-033 | | FRAME JAMB ALUMINUM REINFORCING | 6063-T6 | - |
| E33 | | AS REQD. | FRAME JAMB STEEL REINFORCING | STEEL | ASTM A36 GRADE B |
| E34 | - "10 V 1 1/0" | 3/ CORNER | FRAME ASSEMBLY SCREWS | ST. STEEL | P.H. SMS |
| M1 | #12 X 1 1/2" | <u> </u> | PANEL ASSEMBLY SCREWS | ST. STEEL | P.H. SMS |
| M2 | #10 X 1 1/2" | 4/ CORNER | LOCK FASTENERS | ST. STEEL | F.H. SMS |
| М3 | #8 X 1" | 2/ LOCK | | ST. STEEL | P.H. SMS |
| M4 | #8 X 3/4" | 2/ HANDLE | HANDLE SET FASTENERS RETAINER CLIP FASTENERS | ST. STEEL | F.H. SMS |
| M6 | #10 X 1/2" | 2/ CLIP | | VINYL | THERMOPLASTIC ELASTOMER |
| M8 | E-214 | AS REQD. | ASTRAGAL ADAPTER W'STRIPPING | EPDM | DUROMETER 65±5 SHORE A, EXTRUSIONS S.A. |
| M14 | ES-6600-G01 | 4/ PANEL | GLAZING GASKET (INSUL. LAM. GLASS) | SILICONE | DUROMETER 65±5 SHORE A, TREMCO |
| M14A | ES-6600-G01A | 4/ PANEL | GLAZING GASKET (INSUL. LAM. GLASS) | EPDM | DUROMETER 65±5 SHORE A, EXTRUSIONS S.A. |
| M15 | 27-564 | 4/ PANEL | GLAZING GASKET (LAM. GLASS) | POLYETHYLENE | Q-LON |
| M17 | Q300T190 | AS REQD. | FABRIC COATED FOAM WEATHERSEAL | POLYETHYLENE | Q-LON |
| M18 | Q200T190 | AS REQD. | WEATHERSEAL EXTERIOR | POLYETHYLENE | Q-LON |
| M19 | Q150T270 | AS REQD. | INTERLOCK BUMPER | POLYPROPYLENE | _ |
| M20 | W223012K | AS REQD. | PILE W'STRIPPING | POLTPROPTLENE _ | _ |
| M21 | _ | 2/ MOV. PANEL | | | INTERLOCK |
| M22 | PS01-1015-00B | 1 | MORTISE LOCK KEEPER | | INTERLOCK |
| M23 | PS01-0035-00B | 1 | TWO POINT 3-PLY HOOK LOCK | _ | |
| M24 | PS01-0016-XXX | 1/ MOV. PANEL | | - | INTERLOCK |
| M26 | 52019 | AS REQD. | THRESHOLD W'STRIPPING | - | AMESBURY |
| M27 | ES-7000 G01 | AS REQD. | SILL W'STRIPPING | SILICONE | DUROMETER 60±5 SHORE A |
| M29 | ALU-A-027 | _ | FIX. PANEL ANGLE, 2" X 2" X 1/8" X 7/8" LONG | 6063-T5 | HEAD/SILL (FIXED PANEL) |
| M30 | #10 X 1" | 4/ CLIP | FIX. PANEL ANGLE FASTENERS | _ | HWH SMS |
| M32 | ES-6500-S01 | _ | 1/4" SPACER FOR JAMB | NYLON | _ |
| M33 | ES-6500-034 | _ | 1/2" SPACER FOR ASTRAGAL | NYLON | _ |
| M35 | P6304 AFK | _ | ADHESIVE PILE PAD (4" X 1" X 1/2") | | ULTRAFAB |
| M36 | _ | AS REQD. | TOP & BOTTOM RAIL REINFORCING | 6063-T6 | 1/4" X 1-1/2" X FULL LENGTH |
| M37 | #10 X 1 1/4" | 2/ BAR | REINFORCING BAR FASTENERS, AT 6" FROM EACH END | ST. STEEL | F.H. SMS |
| M38 | W73341NK000B | AS REQD. | THRESHOLD WEATHERSEAL | PILE | _ |
| M39 | ES-6500-301 | AS REQD. | BOTTOM SPACER | POLYPROPYLENE | _ |
| 1,100 | | | | THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER. | |

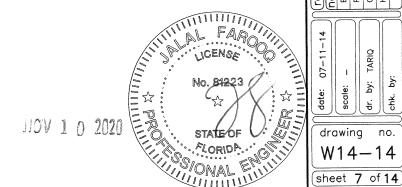
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-1118.10

Expiration Date 09/19/2023

By Ishaq 1. Chank Miami-Dade Product Control

SEALANT:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH WHITE/ALUMINUM COLORED SILICONE.



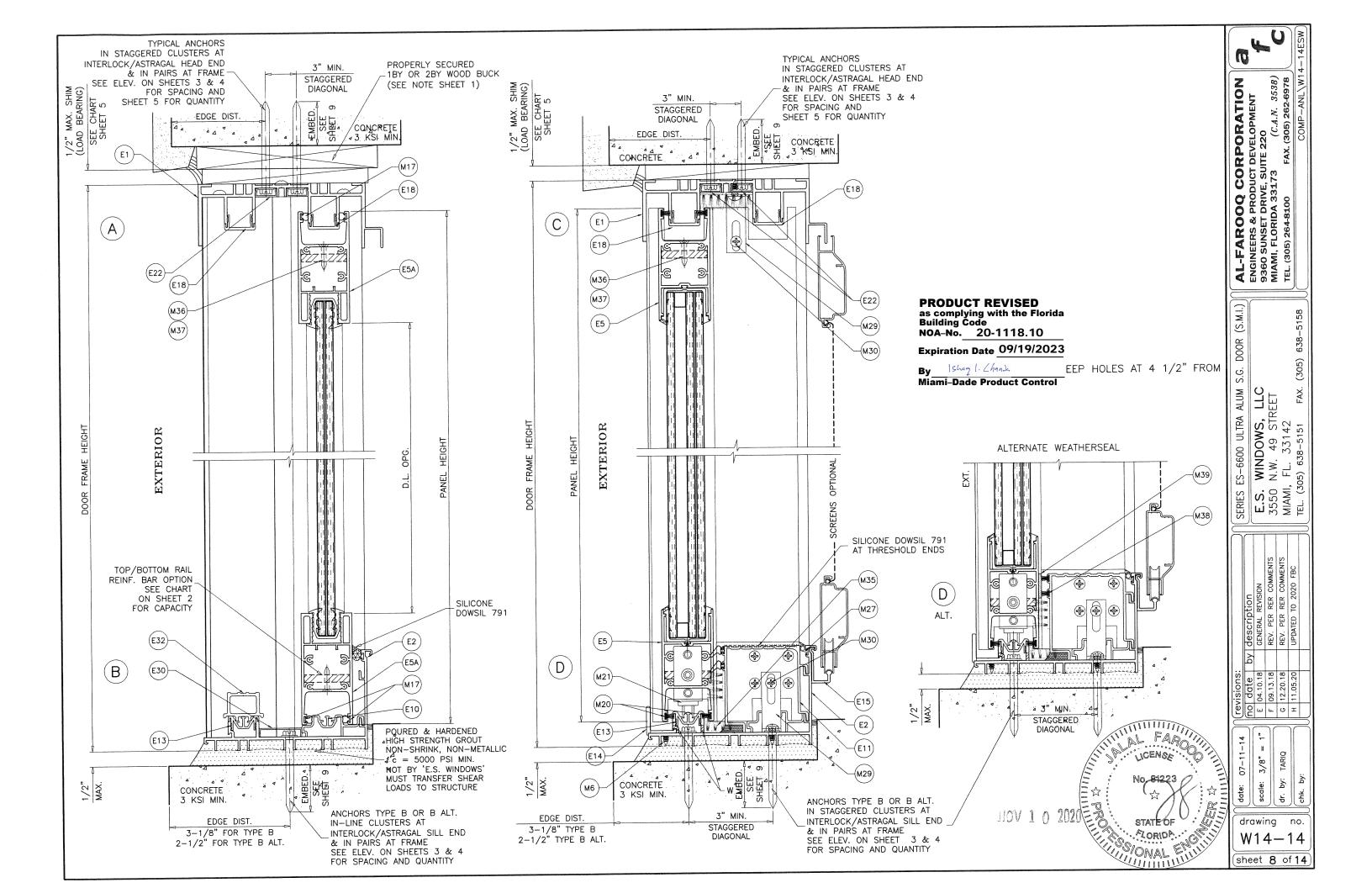
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33.173 (C.A.N. 3538)
TEL. (305) 264.8100 FAX. (305) 262-6978
COMP-ANL\W14-

| SERIES ES-6600 ULTRA ALUM S.G. DOOR (S.M.I.) | E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 | TEL. (305) 638-5158 |

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W14 - 14



TYPICAL ANCHORS: SEE ELEV. FOR SPACING

— AT HEAD

TYPE 'A'- 5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI) (1/2" MAX. SHIM)

INTO WOOD STRUCTURES

1-7/8" MIN. PENETRATION INTO WOOD

THRU 1BY OR 2BY WOOD BUCKS INTO CONCRETE

1-1/2" MIN. EMBED INTO CONCRETE

5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI) (1/2" MAX. SHIM)

DIRECTLY INTO CONCRETE 1-1/2" MIN. EMBED

5/16" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS) (3/8" MAX. SHIM) TYPE 'C'-

INTO MIAMI-DADE COUNTY APPROVED MULLIONS

AND

INTO METAL STRUCTURES

(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS

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)

TYPE 'B'- 5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)

DIRECTLY INTO CONCRETE

1-1/2" MIN. EMBED

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

DIRECTLY INTO CONCRETE 1-3/4" MIN. EMBED

5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI) (1/2" MAX. SHIM)

INTO WOOD STRUCTURES

1-7/8" MIN. PENETRATION INTO WOOD

THRU 1BY OR 2BY WOOD BUCKS INTO CONCRETE OR FILLED BLOCKS

1-1/2" MIN. EMBED INTO CONCRETE OR BLOCKS

5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI) (1/2" MAX. SHIM)

DIRECTLY INTO CONCRETE OR GROUT FILLED BLOCKS

1-1/2" MIN. EMBED

5/16" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS) (3/8" MAX. SHIM)

INTO MIAMI-DADE COUNTY APPROVED MULLIONS

INTO METAL STRUCTURES

(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS

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)

ANCHOR EDGE DISTANCES

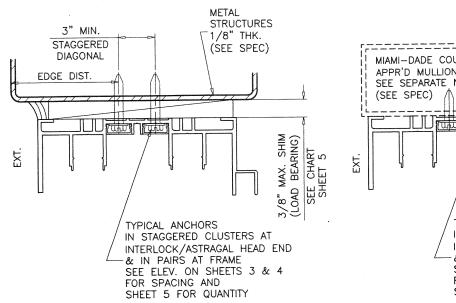
INTO CONCRETE = 2-1/2" MIN. (1/4" ANCHORS) INTO CONC. OR BLOCKS = 3-1/8" MIN. (5/16" ANCHORS)

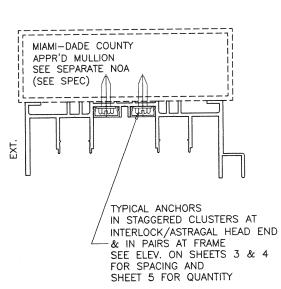
INTO WOOD STRUCTURE = 1-1/4" MIN.

INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD OR JAMBS SG = 0.55 MIN.

CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN. C-90 GROUT FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.





ALTERNATE SUBSTRATES

1BY OR 2BY WOOD BUCKS AND METAL STRUCTURE NOT BY 'E.S. WINDOWS' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

> **PRODUCT REVISED** as complying with the Florida **Building Code** NOA-No. 20-1118.10 Expiration Date 09/19/2023

Ishaq I. Chands Miami-Dade Product Control

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drawing no.

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sheet 9 of 14

CORPORATION DUCT DEVELOPMENT

S.G.

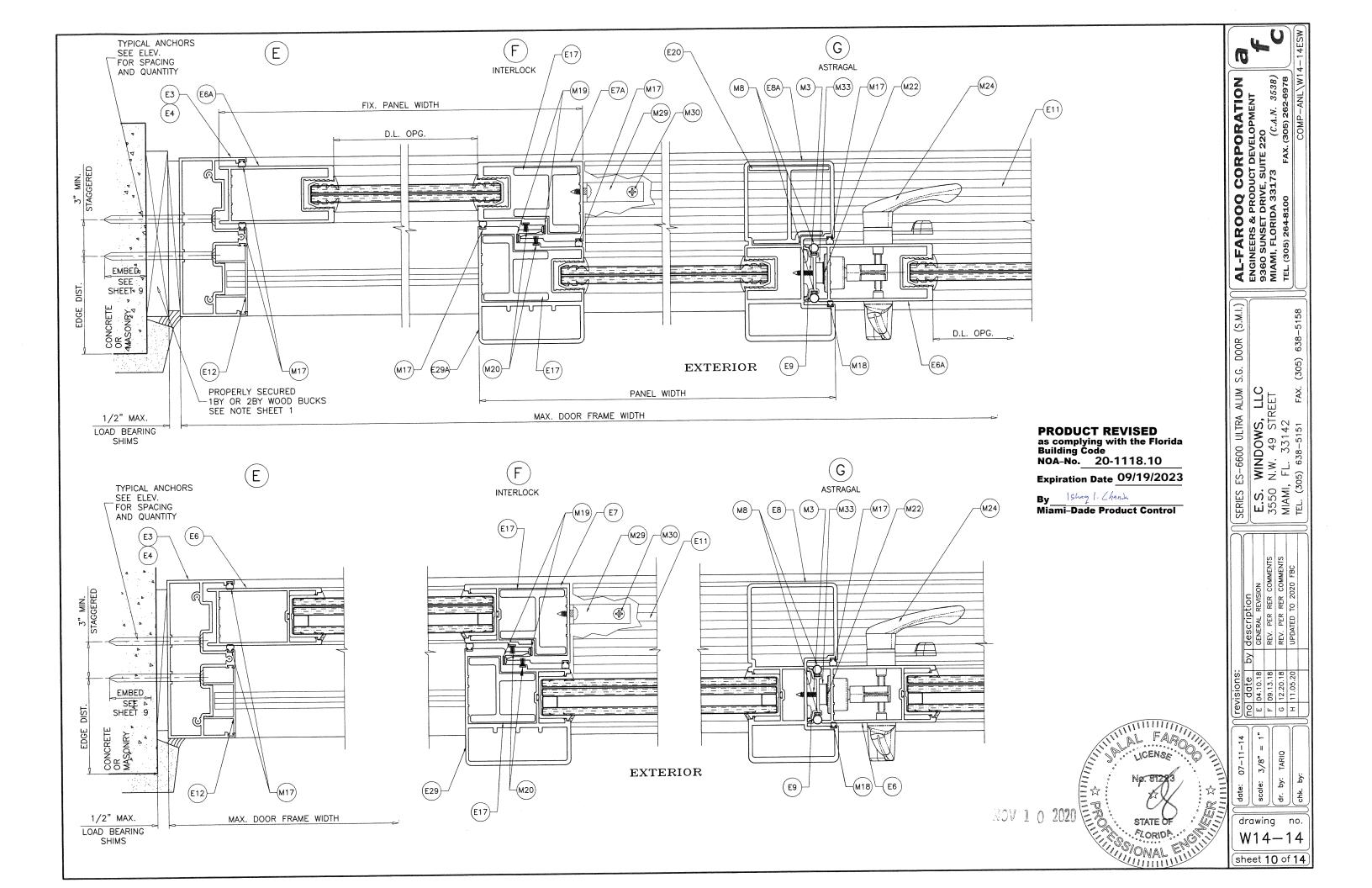
ES-6600 ULTRA ALUM

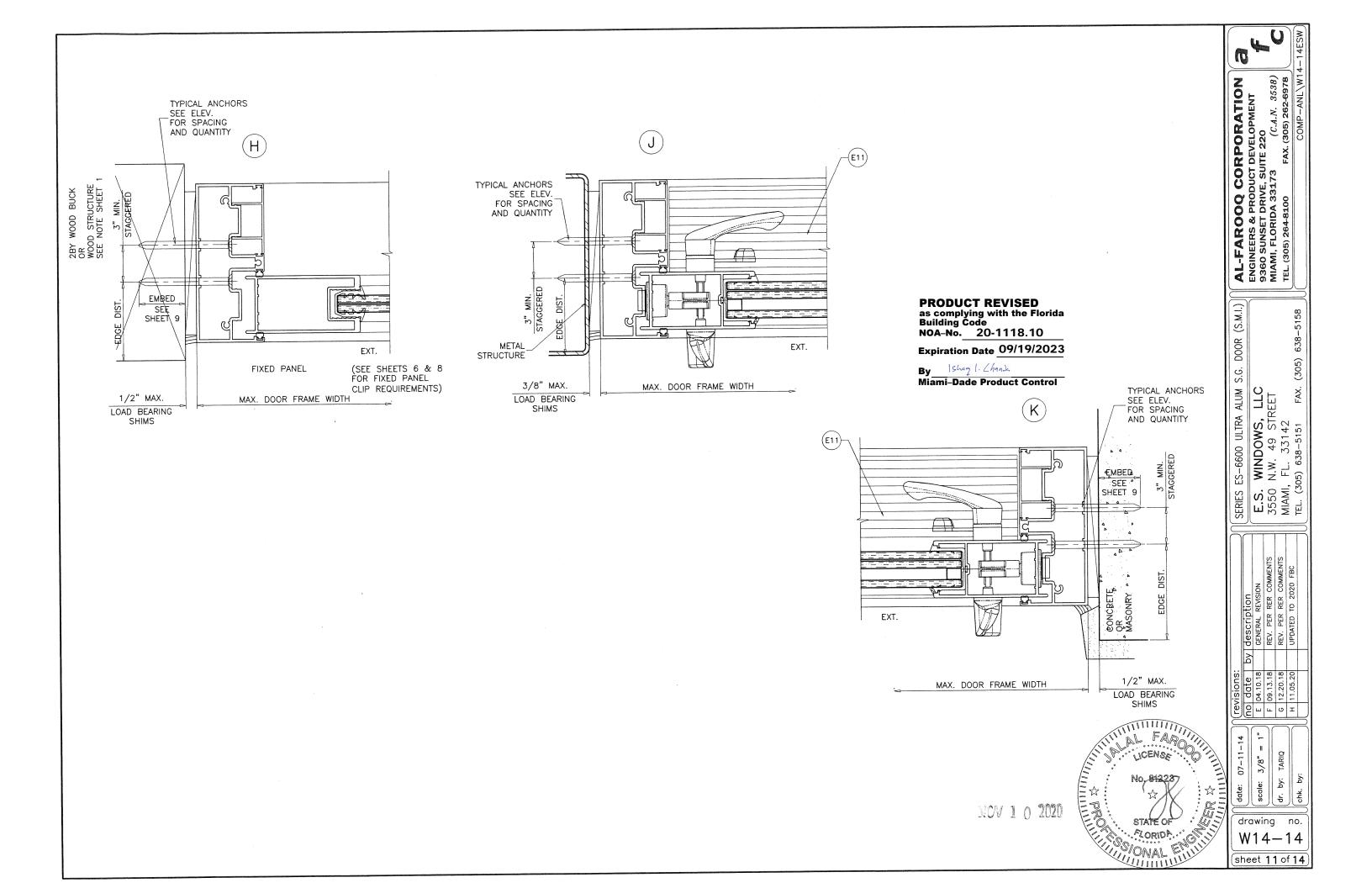
SERIES

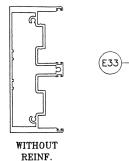
WINDOWS, LLC N.W. 49 STREET , FL. 33142 305) 638–5151 FAX.

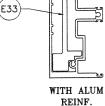
E.S. 3550 MIAMI, TEL. (30)

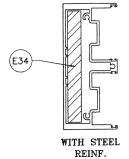
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 Ix
 IN^4
 Sx
 IN^3

 8.204
 3.125

Ix IN^4 Sx IN^3 13.592 5.720

| | Ix IN^4 | Sx IN^3 |
|---------------------------------|---------|---------|
| ALUMINUM | 8.204 | 3.125 |
| STEEL | 4.694 | 2.021 |
| TOTAL Ix ALUM + Ix STL X 2.9 | 21.808 | |

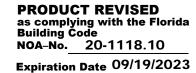
| FREE STANDING JAMB * DESIGN LOAD CAPACITY - PSF | | | | | | | | | | | | |
|---|--|---------|-------------|---------|-------------|----------------------|---------|--|--|--|--|--|
| AVERAGE | DOOR FRAME | | IOUT NF. | | ALUM NF. | WITH STEEL REINF. | | | | | | |
| PANEL WIDTH INCHES | HEIGHT INCHES | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | | | | | |
| 36 | | 113.6 | 113.6 | 120.0 | 125.0 | 120.0 | 125.0 | | | | | |
| 42 | 126" | 98.6 | 98.6 | 120.0 | 125.0 | 120.0 | 125.0 | | | | | |
| 48 | | 87.5 | 87.5 | 120.0 | 125.0 | 120.0 | 125.0 | | | | | |
| 54 | | 79.0 | 79.0 | 120.0 | 125.0 | 120.0 | 125.0 | | | | | |
| 36 | 132" | 94.1 | 94.1 | 120.0 | 125.0 | 120.0 | 125.0 | | | | | |
| 42 | | 81.5 | 81.5 | 120.0 | 125.0 | 120.0 | 125.0 | | | | | |
| 48 | | 72.2 | 72.2 | 115.7 | 115.7 | 120.0 | 125.0 | | | | | |
| 52 | | 67.3 | 67.3 | 107.8 | 107.8 | 120.0 | 125.0 | | | | | |
| 36 | | 78.6 | 78.6 | 120.0 | 125.0 | 120.0 | 125.0 | | | | | |
| 42 | 470" | 68.0 | 68.0 | 108.9 | 108.9 | 120.0 | 125.0 | | | | | |
| 48 | 138" | 60.2 | 60.2 | 96.4 | 96.4 | 120.0 | 125.0 | | | | | |
| 50 | The state of the s | 58.0 | 58.0 | 92.9 | 92.9 | 120.0 | 125.0 | | | | | |
| 36 | | 66.1 | 66.1 | 105.9 | 105.9 | 120.0 | 125.0 | | | | | |
| 42 | 144" | 57.2 | 57.2 | 91.6 | 91.6 | 120.0 | 125.0 | | | | | |
| 48 | | 50.6 | 50.6 | 81.0 | 81.0 | 120.0 | 125.0 | | | | | |

DATA IN THIS SHEET MAY BE USED TO QUALIFY SPECIFIED JOINT SEALANT TO BE USED AT UNANCHORED FREE STANDING JAMBS.

PLEASE REFER TO SEALANT MANUFACTURER'S DATA AND APPLICATION MANUAL FOR COMPATABILITY OF SEALANT TO SUBSTRATE & DOOR MATERIAL FINISH AND COMPLIANCE FOR WARRANTY. (UNDER SEPARATE REVIEW)

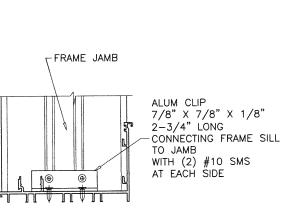
CONDITIONS OR OTHER SEALANTS NOT COVERED IN THIS SHEET TO BE ENGINEERED SEPARATELY AND TO BE REVIEWED BY AHJ.

THIS CHART TO BE USED WITH DP CHART IN SHEET 1 WITH ELEVATION SHEET 4 AND ANCHOR CAPACITY CHART SHEET 5. LOWER DESIGN PRESSURE SHALL CONTROL ENTIRE ASSEMBLY.

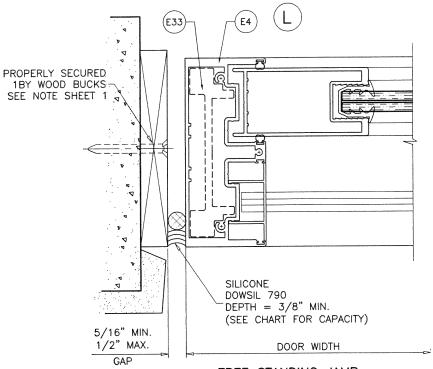


Ishaq I. Chands

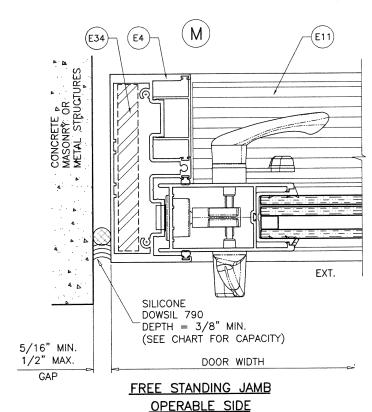
Miami-Dade Product Control



REINFORCEMENT CLIP REQUIRED AT FREE STANDING JAMB WITH STEEL REINFORCING ONLY



FREE STANDING JAMB FIXED SIDE





revisions:
no date
E 04.10.18
F 09.13.18
G 12.20.18
H 11.05.20 07-11-14

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

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

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

DOOR

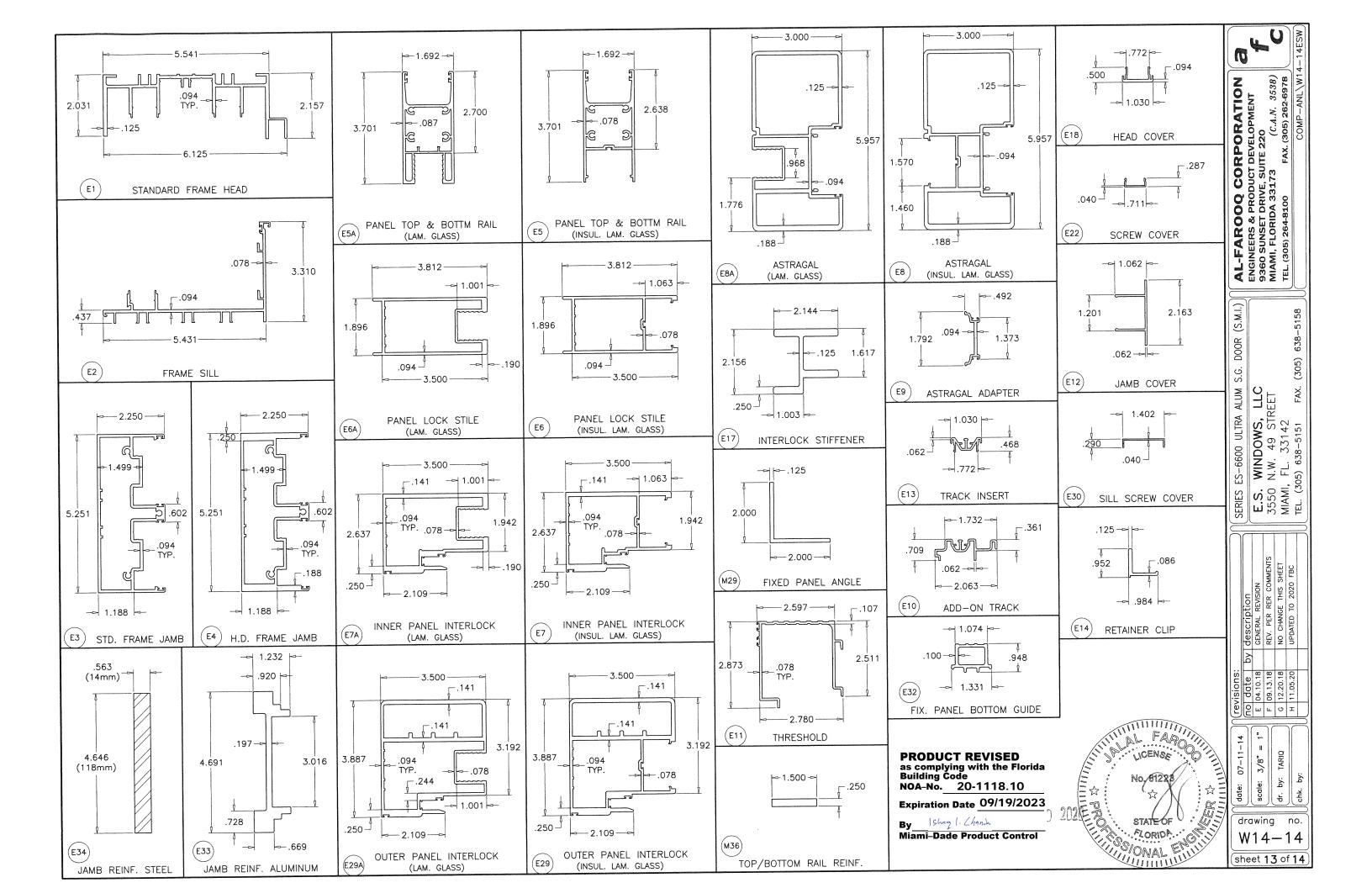
S.G.

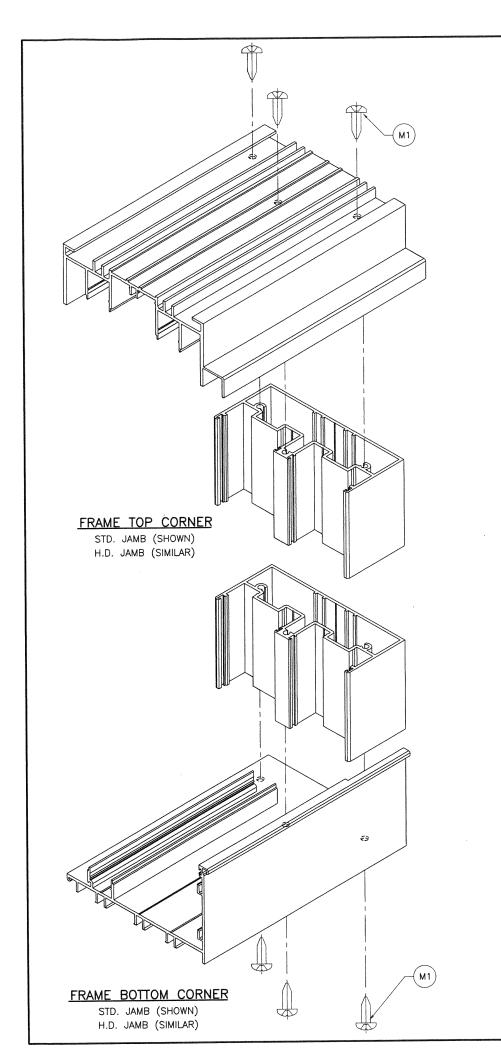
SERIES ES-6600 ULTRA ALUM

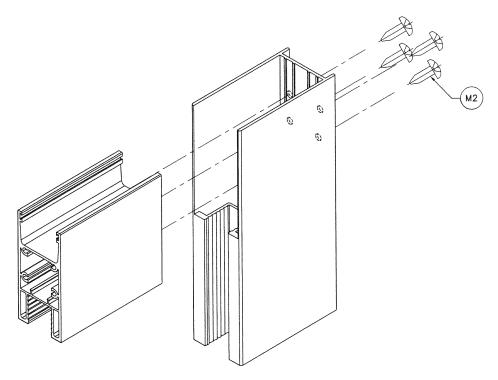
[뉴] | 축 drawing W14 - 14

| by:

sheet 12 of 14







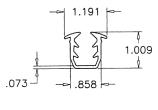
PANEL TOP/BOTTOM CORNER

LAM. GLASS RAIL & STILE (SHOWN) INSUL. LAM. GLASS RAIL & STILE (SIMILAR)

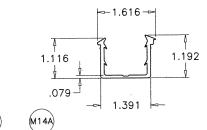
> PRODUCT REVISED
> as complying with the Florida
> Building Code NOA-No. 20-1118.10

Expiration Date 09/19/2023

By Shag I. Chank
Miami-Dade Product Control



M15 EPDM GLAZING GAKET LAM. GLASS



EPDM SILICONE GLAZING GASKET INSUL. LAM. GLASS

BASE POLYMER = EPDM RUBBER DENSITY = 10.26 Lbs/Gal(M14)(M15) HARDNESS $= 70\pm5$ TENSILE STRENGTH = 905 PSI ELONGATION AT BREAK = 273% TEAR STRENGTH = 1.343 Kip/ft BRITTLENESS TEMPERATURE = -40° F COMPRESSION SET = 27% ($22h@158^{\circ}F$)

MATERIAL = SILICONE $HARDNESS = 65\pm5$ (M14A) TENSILE STRENGTH = 1139 PSI ELONGATION AT BREAK = 235% TEAR STRENGTH = 107 Lb/IN
BRITTLENESS TEMPERATURE = -40° F COMPRESSION SET = 12.5% (22h@212°F)

DOOR SERIES ES-6600 ULTRA ALUM S.G.

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

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

DAVY 1 () 2020

drawing no. W14 - 14

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