

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

E.S. Windows, LLC 3550 N. W. 49 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 6000 Aluminum Sliding Glass Doors(2-Tracks) w/wo Reinforcements-L.M.I.

APPROVAL DOCUMENT: Drawing No. **W11-41 Rev H** titled "Series- 6000 Alum Sliding. Glass Door (L.M.I.)", sheets 1 through 13 of 13, prepared by AL-Farooq Corporation, dated 07/22/11 and last revised on JUL 17, 2023, 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.

Limitations:

- 1. See Design Pressure (DP) tables in sheets <u>3</u>, <u>4</u> and <u>5</u> with applicable reinforcing required at interlock & astragal. Also see approved configurations in sheet 2. Lower capacity of DP table or anchor capacity table sheet 6 shall control.
- 2. Applicable Egress requirement to be reviewed by building official.
- 3. Min (2) item #26 Pabose (GT345/460A) rollers per panel as specified per sheet <u>11</u> of Bill of material.

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".

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 #21-0628.16 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 Ishaq I. Chanda, P.E.



Ishag 1. Chandes

NOA No. 23-0724.15 Expiration Date: September 05, 2024 Approval Date: September 14, 2023 Page 1

1. Evidence submitted under previous NOAs

A. DRAWINGS

- 1. Manufacturer's die drawings and sections (Submitted under file #14-0408.01).
- Drawing No. W11-41 Rev C, titled "Series- 6000 Alum Sliding Glass Door (L.M.I.)", sheets 1 through 13 of 13, prepared by AL-Farooq Corporation, dated 07/22/11 and last revised on JUL 01, 2016, signed and sealed by Javad Ahmad, P.E.

B. TESTS (Submitted under file #14-0408.01/#11-0825.07)

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of aluminum sliding glass door, prepared by Fenestration Testing Lab, Inc., Test Report No. FTL-6292 (samples A-1, B-1, C-1,

D-1 & E-1), dated 08/15/11, signed and sealed by Marlin D. Brinson, P. E.

(Note: This report has been revised for glazing types in sample A1 & E-1)

2. Additional roller assembly qualification test report #FTL-7651 per TAS 201, 202 & 203-94

C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC 2014 (5th Edition), prepared by Al Farooq Corporation, dated 12/23/2015, signed and sealed by Javad Ahmad, P.E.
- 2. Roller assembly dead load structural analysis prepared by Al-Farooq Corporation, dated 02/17/14 and last revised on 06/16/14, signed and sealed by Javad Ahmad, P.E. (Submitted under file #14-0408.01).
- 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. 14-0916.11 issued to Kuraray America, Inc. for their "SentryGlas® (Clear and White) Glass Interlayers", expiring on 07/04/18.

F. STATEMENTS

- 1. Statement letter of conformance to FBC 2014 (5th Edition) and letter of no financial interest, prepared by Al Farooq Corporation, dated 12/15/15, signed and sealed by Javad Ahmad, P.E.
- 2. Laboratory compliance statements, part of the above referenced test reports.
- 3. Distribution agreement between ES Windows-Energia Solar, SA, Colombia and ES Windows, LLC, USA, dated 10/29/10, signed by MS Carla Torrente and Andres Chomaro, respectively.
- 4. Two panel test E.S. Windows commitment letter dated June 29, 2016 and single roller test proposal dated June 20, 2014, both signed by A. Chamorro, General Manager.

Ishaq I. Chands

G. OTHER

- 1. This NOA revises & renews NOA#14-0408.01, conditionally for one year, expiring 01/19/2018
- 2. Test proposals dated 06/30/16 & 04/15/14 approved by RER and Test proposal # **10-0506**, dated 09/23/10, approved by BCCO.

2. Evidence submitted under previous approval.

A. DRAWINGS

1. Drawing No. **W11-41** titled "Series- 6000 Alum SLD. Glass Door (L.M.I.)", sheets 1 through 13 of 13, prepared by AL-Farooq Corporation, dated 07/22/11, with revision "F" dated 03/07/18, signed and sealed by Javad Ahmad, P.E.

B. TESTS

- 1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 2) Water Resistance Test, per FBC, TAS 202-94
 - 3) Large Missile Impact Test per FBC, TAS 201-94
 - 4) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 5) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of aluminum sliding glass door, prepared by Fenestration Testing Lab, Inc., Test Report No. **FTL-8721**, dated 03/08/17, signed and sealed by Idalmis Ortega, P. E.

C. CALCULATIONS

1. Anchor verification calculations complying with FBC2017 (6th Edition), prepared by Al Farooq Corporation, dated 01/19/2018, 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. **17-0808.02** issued to Kuraray America, Inc. (former E.I. DuPont DeNemours & Co., Inc.) for the "Sentry Glass ® Interlayer", expiring on 07/04/23.

F. STATEMENTS

1. Statement letter of conformance to **FBC 6th Edition (2017)** and of no financial interest, prepared by Al-Farooq Corporation, dated 01/19/2018, signed and sealed by Javad Ahmad, P.E.

G. OTHER

1. This NOA revises & renews NOA # 15-0430.04, expiring 01/19/2018.

Ishag 1. Chandes

Ishaq I. Chanda, P.E. Product Control Unit Supervisor NOA No. 23-0724.15 Expiration Date: September 05, 2024 Approval Date: September 14, 2023

3. Evidence submitted under previous approval.

A. DRAWINGS

1. Drawing No. **W11-41 Rev G** titled "Series- 6000 Alum Sliding. Glass Door (L.M.I.)", sheets 1 through 13 of 13, prepared by AL-Farooq Corporation, dated 07/22/11 and last revised on JUL 17, 2023, signed and sealed by Jalal Farooq, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. Anchor verification calculations complying with FBC 2020 (7th Edition), prepared by Al Farooq Corporation, dated May 17, 2021, signed and sealed by Jalal Farooq, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **17-0808.02** issued to Kuraray America, Inc. (former E.I. DuPont DeNemours & Co., Inc.) for the "Sentry Glass ® Interlayer", expiring on 07/04/23.

F. STATEMENTS

- 1. Statement letter of conformance to **FBC** 7th **Edition (2020)** and of no financial interest, prepared by Al-Farooq Corporation, dated May 17, 2021, 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 # 16-1130.03, expiring 09/05/2024.

Ishag 1. Chandes

Ishaq I. Chanda, P.E. Product Control Unit Supervisor NOA No. 23-0724.15 Expiration Date: September 05, 2024 Approval Date: September 14, 2023

4. New Evidence submitted.

A. DRAWINGS

1. Drawing No. **W11-41 Rev H** titled "Series- 6000 Alum SLD. Glass Door (L.M.I.)", sheets 1 through 13 of 13, prepared by AL-Farooq Corporation, dated 07/22/11 and last revised on JUL 17, 2023, 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. 20-0915.22 issued to Kuraray America, Inc. for their "Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers", expiring on 07/08/24.
- 2. 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.

F. STATEMENTS

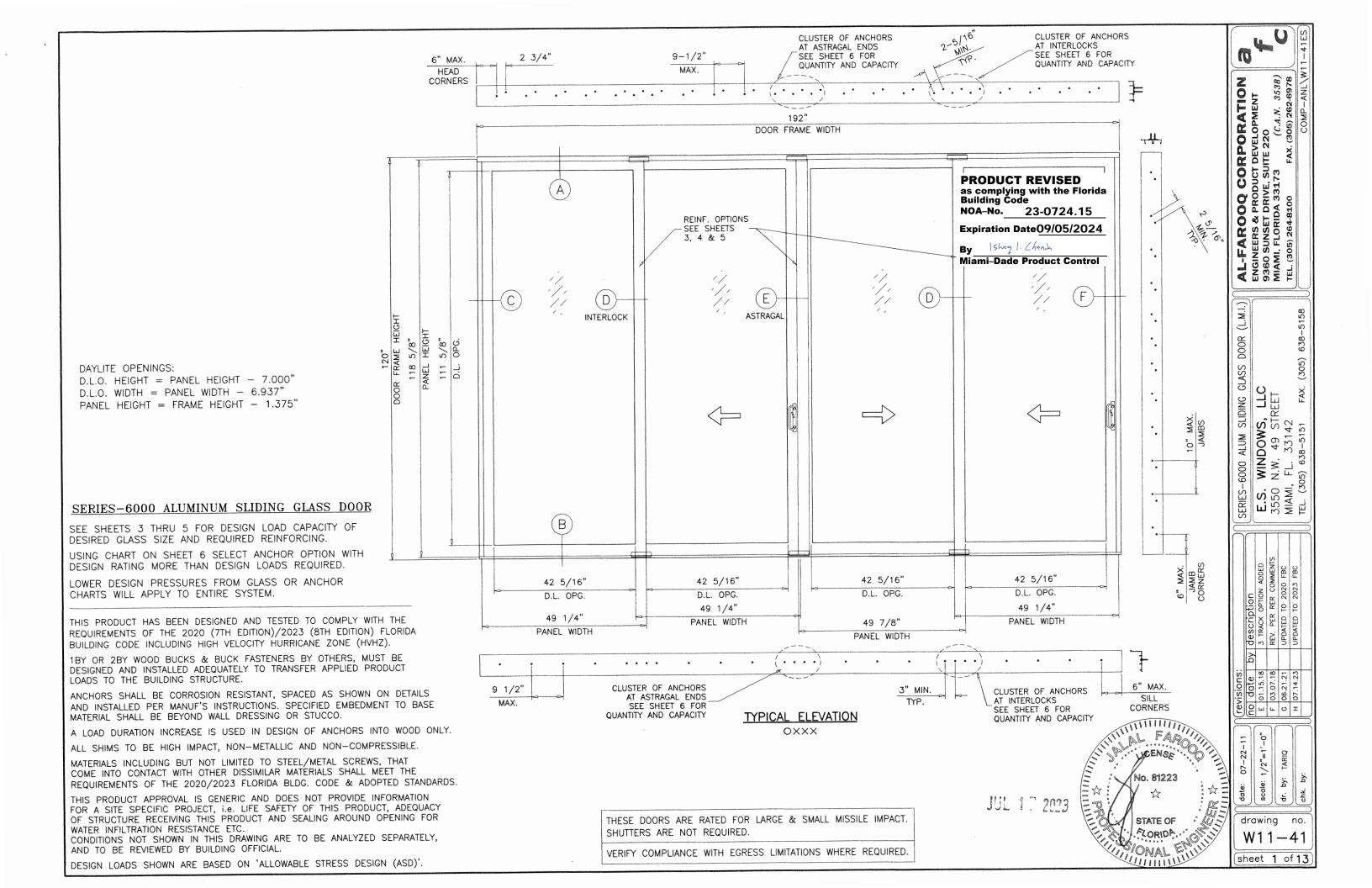
1. Statement letter of conformance to FBC 2023 (8th Edition), prepared by Al Farooq Corporation, dated 07/19/23, signed and sealed by Jalal Farooq, P.E.

G. OTHER

- 1. This NOA revises NOA # 21-0628.15 and updates to FBC 2023, expiring 09/05/24.
- 2. Distribution agreement between ES Windows, LLC (distributor) and Energia Solar, S.A, (manufacturer, dated 08/01/18, signed by MS. Carla Garcia (MGR) and Ms. Evelyn Deas (MGR) respectively (submitted under previous approvals).

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Ishaq I. Chanda, P.E. Product Control Unit Supervisor NOA No. 23-0724.15 Expiration Date: September 05, 2024 Approval Date: September 14, 2023



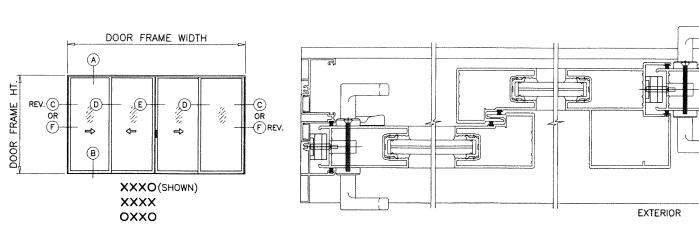
MAX. OVERALL DOOR FRAME AREA NOT TO EXCEED 160 SQ. FT.

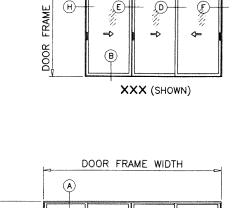
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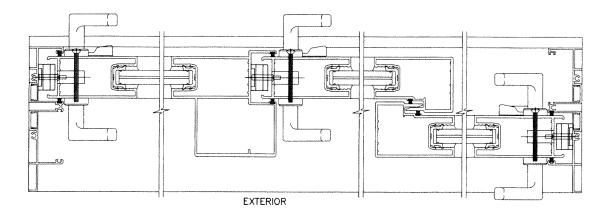


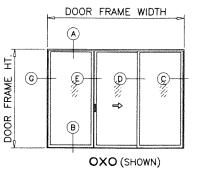
APPROVED CONFIGURATIONS

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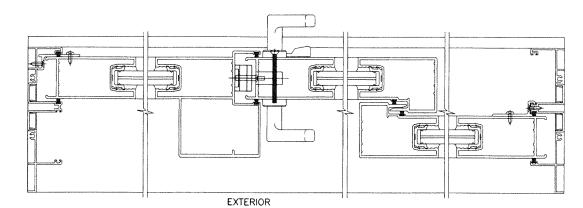
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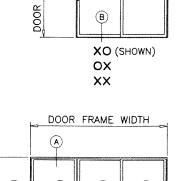




DOOR FRAME WIDTH

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DOOR FRAME W

(A)

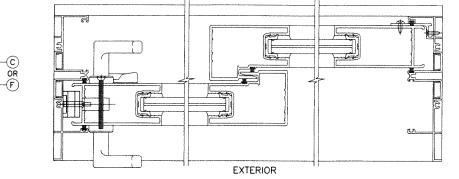
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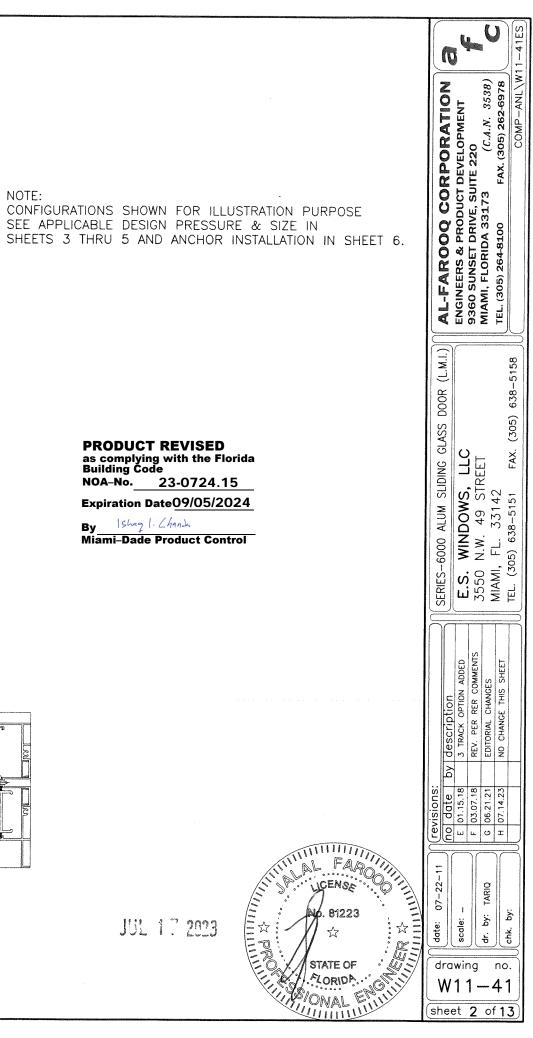
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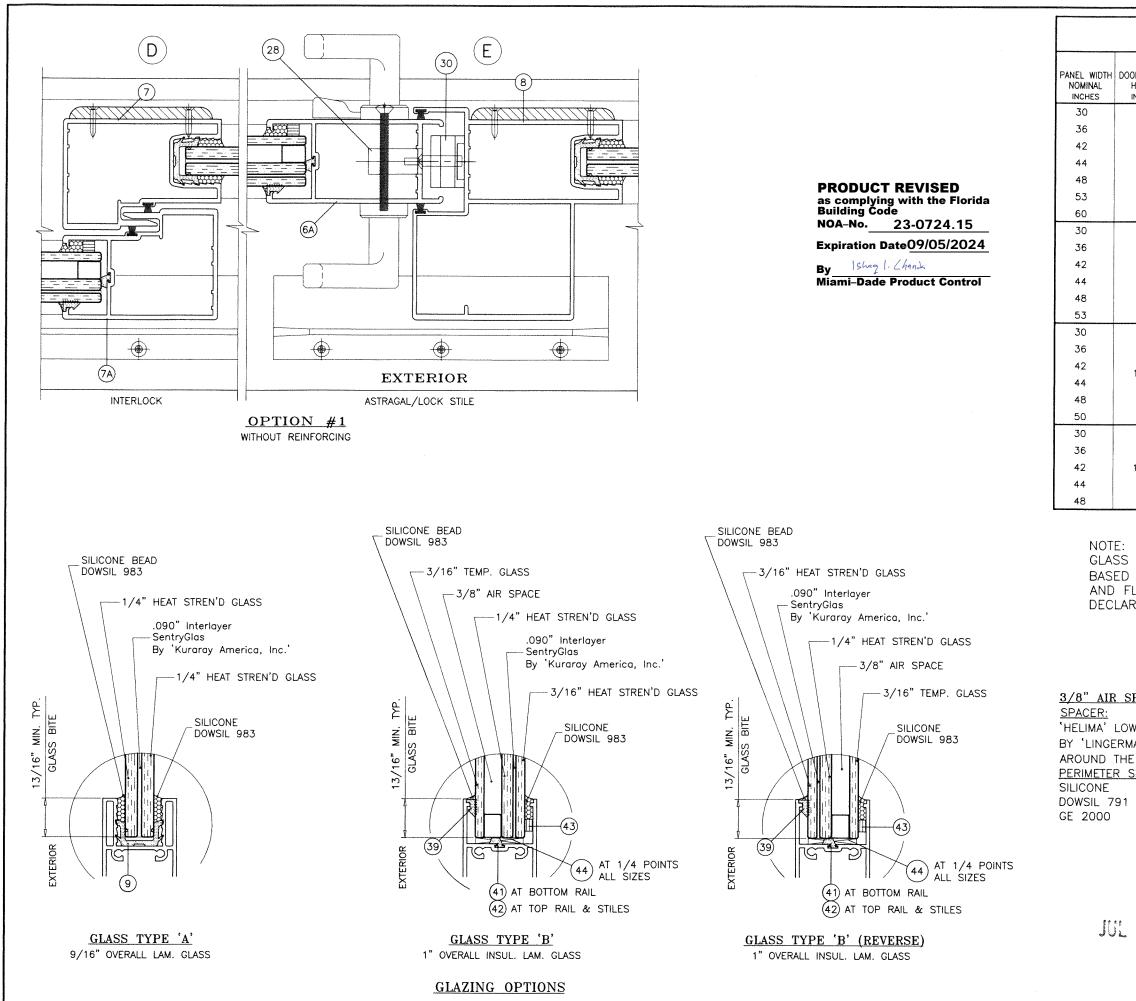
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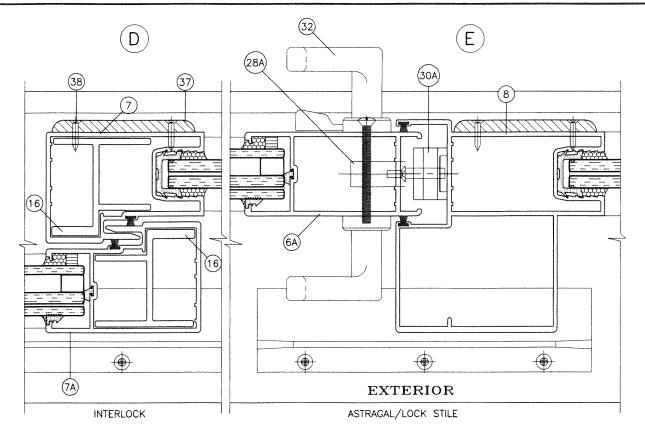
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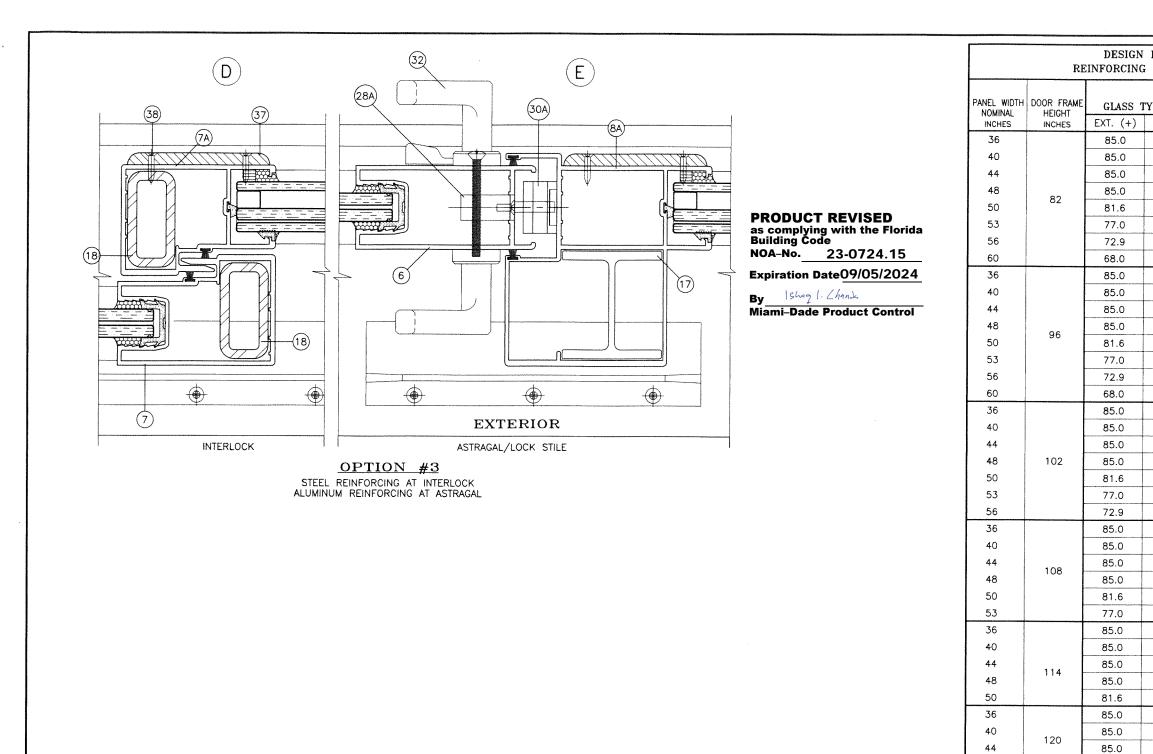
| | | APACITY INFORCING | | | | | |
|------------------|-------------------------------|----------------------------------------|---------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| OR FRAME | GLASS 7 | гуре'а' | | TYPE 'B' EVERSE | | | |
| HEIGHT INCHES | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | RPORATION DEVELOPMENT ITE 220 (C.A.N. 3538) FAX. (305) 262-6978 COMP - ANL/V | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | P S S | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | 55) 20MO | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | | | |
| 82 | 75.0 | 75.0 | 75.0 | 75.0 | AL-FAROOQ CORPORATIC ENGINEERS & PRODUCT DEVELOPMENT 9360 SUNSET DRIVE, SUITE 220 MIAMI, FLORIDA 33173 (C.A.N. 3 TEL. (305) 264-8100 FAX. (305) 262-6 COMP-AN | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | | | |
| | 67.9 | 67.9 | 67.9 | 67.9 | AL-FAROOQ CO ENGINEERS & PRODUCI 9360 SUNSET DRIVE, SL MIAMI, FLORIDA 33173 TEL. (305) 264-8100 | | |
| | 60.0 | 60.0 | 60.0 | 60.0 | | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | AL-FAROOC ENGINEERS & PRO 3360 SUNSET DRI MIAMI, FLORIDA 3 TEL. (305) 264-8100 | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | | | |
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| | 75.0 | 75.0 | 75.0 | 75.0 | | | |
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| 102 | 75.0 | 75.0 | 75.0 | 75.0 | 8 8 0 | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | 63 | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | S [)5) | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | IG GLASS LC ET FAX. (305) | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | | | |
| 108 | 75.0 | 75.0 | 75.0 | 75.0 | | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | SLIDING GLASS DOOR (L.M.I. 'S, LLC STREET 42 51 FAX. (305) 638–5158 | | |
| | 75.0 | 75.0 | 75.0 | 75.0 | ERIES-6000 ALUM SL E.S. WINDOWS, 5550 N.W. 49 ST AIAMI, FL. 33142 EL. (305) 638-5151 | | |
| V PROF ANN GI | BUILDII STATEN CONSISTI | MENT DC. <u>Ng of:</u> 11NUM SP/ | | , | by description 3 TRACK OPTION ADDED 3 TRACK OPTION ADDED REV. PER RER COMMENTS 3550 EDTORAL CHANGES MIAMI NO <change sheet<="" td="" this=""> TEL. (1</change> | | |
| EALANT | | | | - | revisions: no date 1 F 0.1.15.18 F 03.07.18 F 03.07.18 H 07.14.23 | | |



OPTION #2 ALUMINUM REINFORCING AT INTERLOCK

| | DESIGN LOAD CAPACITY - PSF REINFORCING AT INTERLOCK | | | | | | | | |
|-------------------------------------------------------------------------------|--------------------------------------------------------|----------------------|----------|----------|----------|----------|---------------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | PANEL WIDTH NOMINAL | DOOR FRAME HEIGHT | | YPE 'A' | | ЧРЕ 'В' | 'B' RE | TYPE VERSE | N (338) 978 |
| | INCHES | INCHES | EXT. (+) | INT. (-) | EXT. (+) | INT. (-) | EXT. (+) | INT. (-) | RATIOI OPMENT 0 <i>C.A.N.</i> 353 05) 262-697 |
| | 36 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| | 40 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | 02) 02 D |
| | 44 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | (3 S2E |
| | 48 | 82 | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | THE A |
| | 50 | 02 | 81.6 | 139.2 | 81.6 | 139.2 | 81.6 | 105.6 | ORPOF ICT DEVELC SUITE 220 73 ((FAX. (30 |
| | 53 | | 77.0 | 131.3 | 77.0 | 131.3 | 77.0 | 99.6 | Ŭ Ž ŭ Ž |
| | 56 | | 72.9 | 124.3 | 72.9 | 124.3 | 72.9 | 94.3 | O S S S S |
| PRODUCT REVISED as complying with the Florida | 60 | | 68.0 | 116.0 | 68.0 | 116.0 | 68.0 | 88.0 | |
| Building Code | 36 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | SEI SC |
| NOA-No. 23-0724.15 | 40 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | |
| Expiration Date09/05/2024 | 44 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | AL-FAROOQ CORPORATIC ENGINEERS & PRODUCT DEVELOPMENT 9360 SUNSET DRIVE, SUITE 220 MIAMI, FLORIDA 33173 (C.A.N. 35 TEL. (305) 264-8100 FAX. (305) 262-65 |
| By Ishag I. Chank | 48 | 96 | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | I A B |
| Miami-Dade Product Control | 50 | 30 | 81.6 | 139.2 | 81.6 | 139.2 | 81.6 | 105.6 | u mo≥ F |
| | 53 | | 77.0 | 131.3 | 77.0 | 131.3 | 77.0 | 99.6 | |
| | 56 | | 72.9 | 94.3 | 72.9 | 94.3 | 72.9 | 94.3 | (L.M.I.) |
| | 60 | | 68.0 | 88.0 | 68.0 | 88.0 | 68.0 | 88.0 | |
| | 36 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | DOOR 638- |
| | 40 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | |
| | 44 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | ASS D |
| | 48 | 102 | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | |
| | 50 | | 81.6 | 139.2 | 81.6 | 139.2 | 81.6 | 105.6 | SLIDING GI STREET 42 51 FAX |
| | 53 | | 77.0 | 99.6 | 77.0 | 99.6 | 77.0 | 99.6 | |
| | 56 | | 72.9 | 94.3 | 72.9 | 94.3 | 72.9 | 94.3 | 5 42 ST SI |
| | 36 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | 0000 ALUM SLI WINDOWS, N.W. 49 ST FL. 33142 5) 638-5151 |
| | 40 | | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | 0 ALUM SI NDOWS V. 49 S ⁻ 33142 638-5151 |
| | 44 | 108 | 85.0 | 145.0 | 85.0 | 145.0 | 85.0 | 110.0 | SERIES-6000 / E.S. WINE 3550 N.W. MIAMI, FL. TEL. (305) 630 |
| | 48 | | 85.0 | 145.0 | 85.0 | 140.6 | 85.0 | 110.0 | S-60(S-60(M, F (305) |
| | 50 | | 81.6 | 105.6 | 81.6 | 105.6 | 81.6 | 105.6 | SERIES- E.S. 3550 MIAMI, TEL. (30 |
| | 53 | | 77.0 | 99.6 | 77.0 | 99.6 | 77.0 | 99.6 | E.S 355 MIAN TEL. |
| | 36 | | 85.0 | 110.0 | 85.0 | 110.0 | 85.0 | 110.0 | |
| | 40 | | 85.0 | 110.0 | 85.0 | 110.0 | 85.0 | 110.0 | |
| | 44 | 114 | 85.0 | 110.0 | 85.0 | 110.0 | 85.0 | 110.0 | S |
| | 48 | | 85.0 | 110.0 | 85.0 | 110.0 | 85.0 | 110.0 | MEN |
| ļ | 50 | | 81.6 | 105.6 | 81.6 | 105.6 | 81.6 | 105.6 | oftion OPTION ADDED RER COMMENT CHANGES GE THIS SHEET |
| | 36 | | 85.0 | 110.0 | 85.0 | 110.0 | 85.0 | 110.0 | THIN |
| | 40 | 120 | 85.0 | 110.0 | 85.0 | 110.0 | 85.0 | 110.0 | AL C AL C |
| | 44 | | 85.0 | 110.0 | 85.0 | 110.0 | 85.0 | 110.0 | description 3 TRACK OPTION ADDED REV. PER RER COMMENTS EDITORIAL CHANGES NO CHANGE THIS SHEET |
| l | 48 | l | 85.0 | 110.0 | 85.0 | 110.0 | 85.0 | 110.0 | de 3 3 EDI NO |
| | | | | | | | 11110 | ~ | revisions: no date by E 01.15.18 F 03.07.18 G 06.21.21 H 07.14.23 |
| PACITIES ON THIS SHEET AR ASTM E1300–09 (3 SEC. IDA BUILDING COMMISSION | | | | _ 17 20 | | | LICENSE LICENSE LO. 81223 | MEER * | $\begin{bmatrix} date: 07-22-11 \\ scale: 1/2" = 1" \\ dr. by: TARIO \\ chk. by: \end{bmatrix}$ |

NOTE: GLASS CAPACITIES ON THIS S BASED ON ASTM E1300-09 (AND FLORIDA BUILDING COMM DECLARATORY STATEMENT DCA



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

48

JUL

85.0

| LOAD CAF AT INTER | PACITY - RLOCK & | PSF ASTRAGA | L | | C L C L | | | | |
|----------------------|---------------------|-----------------------|--------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| YPE 'A' | GLASS ' | INDE 'B' | 1 | TYPE | | | | | |
| INT. (-) | EXT. (+) | INT. (-) | EXT. (+) | INT. (-) | 69 69 | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | RPORATION DEVELOPMENT TTE 220 (C.A.N. 3538) FAX. (305) 262-6978 COMP-ANL/V | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | PPR DOM | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | ORPOF ICT DEVELC SUITE 220 73 (() 73 FAX. (30 | | | | |
| 124.8 | 81.6 | 124.8 | 81.6 | 105.6 | | | | | |
| 117.7 | 77.0 | 117.7 | 77.0 | 99.6 | 0,53°E | | | | |
| 111.4 | 72.9 | 111.4 | 72.9 | 94.3 | 3 CDU | | | | |
| 104.0 | 68.0 | | | | A 3 RIC | | | | |
| | | 104.0 | 68.0 | 88.0 | | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | 26.0A | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | 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 TEL. (305) 264-8100 COMP-ANL | | | | |
| 124.8 | 81.6 | 124.8 | 81.6 | 105.6 | | | | | |
| 117.7 | 77.0 | 117.7 | 77.0 | 99.6 | | | | | |
| 111.4 | 72.9 | 111.4 | 72.9 | 94.3 | M | | | | |
| 104.0 | 68.0 | 104.0 | 68.0 | 88.0 | 00R (L.M.I 638-5158 | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | 38 38 | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | ASS [| | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | (3 | | | | |
| 124.8 | 81.6 | 124.8 | 81.6 | 105.6 | FAX. | | | | |
| 117.7 | 77.0 | 117.7 | 77.0 | 99.6 | ALUM SLIDING DOWS, LL 49 STREE 33142 3-5151 F/ | | | | |
| 111.4 | 72.9 | 111.4 | 72.9 | 94.3 | SLID SLID | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | ALUM SLI DOWS, 49 ST 33142 8-5151 | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | 49 33 3-5 | | | | |
| 130.0 | 85.0 | 130.0 | | | S-6000 ALUM S S. WINDOWS 0 N.W. 49 S MI, FL. 33142 (305) 638-5151 | | | | |
| | | | 85.0 | 110.0 | 5) FL V | | | | |
| 125.7 | 85.0 | 125.7 | 85.0 | 110.0 | (30 ··· 2-(| | | | |
| 124.8 | 81.6 | 124.8 | 81.6 | 105.6 | SERIES- E.S. 3550 MIAMI Tel. (3 | | | | |
| 117.7 | 77.0 | 117.7 | 77.0 | 99.6 | B B S E | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | | | | | |
| 125.2 | 85.0 | 125.2 | 85.0 | 110.0 | s. | | | | |
| 117.3 | 85.0 | 117.3 | 85.0 | 110.0 | TEET AENI | | | | |
| 105.6 | 81.6 | 105.6 | 81.6 | 105.6 | S St AD | | | | |
| 130.0 | 85.0 | 130.0 | 85.0 | 110.0 | THIS THIS | | | | |
| 126.7 | 85.0 | 126.7 | 85.0 | 110.0 | Cription Ack option Added PER RER COMMENTS RRIAL CHANGES HANGE THIS SHEET | | | | |
| 117.6 | 85.0 | 117.6 | 85.0 | 110.0 | description 3 TRACK OPTION ADDED REV. PER RER COMMENT EDITORIAL CHANGES NO CHANGE THIS SHEET | | | | |
| 110.0 | 85.0 | 110.0 | 85.0 | 110.0 | description 3 TRack option REV. PER RER EDITORIAL CHANGE TH NO CHANGE TH | | | | |
| 1 .7 20 | | IIIIIII MALAN N | FAR CENSE | | $ \begin{array}{c} \mbox{date:} & 07-22-11 \\ \mbox{scale:} & 1/2" = 1" \\ \mbox{scale:} & 1/2" = 1" \\ \mbox{fc} & 03.07.18 \\ \mbox{fc} & 05.07.18 \\ \mbox{fc} & 05.21.21 \\ \mbox{chk. by:} \\ \mbox{chk. by:} \end{array} $ | | | | |
| | | | | | | | | | |
| | | drawing no. | | | | | | | |
| | 4 | W11-41 | | | | | | | |
| | | | WAL 5 | 1111 | (sheet 5 of 13) | | | | |
| | | <u></u> | THIN | | (aneer 3 01 13) | | | | |

| | [| r | | D CAPACITY - PSF | | | ICHOR LOAL | r | |
|----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------|------------|-----------------------|----------------------|
| | | ANCHOR | | ANCHOR TYPE 'B' | ANCHOR TYPE 'C | | | | TYPE 'B |
| | | 6 ANCHORS | 7 ANCHORS | 6 ANCHORS | 6 ANCHORS | | | 4 ANCHORS | 5 ANCHOR |
| AVERAGE | DOOR FRAME HEIGHT | AT MTG. STILE ENDS | AT MTG. STILE ENDS | AT MTG. STILE ENDS | AT MTG. STILE ENDS | AVERAGE | DOOR FRAME | AT MTG. STILE ENDS | AT MTG. STILE END |
| ANEL WIDTH INCHES | INCHES | INT. (-) | INT. (-) | INT. (-) | INT. (-) | - PANEL WIDTH | HEIGHT | INT. (-) | INT. (-) |
| 30 | | 145.0 | 145.0 | 145.0 | 145.0 | 30 | | 145.0 | 145.0 |
| 36 | | 145.0 | 145.0 | 145.0 | 145.0 | - 36 | | 145.0 | 145.0 |
| 40 | | 145.0 | 145.0 | | | | | | |
| | | | | 145.0 | 145.0 | 40 | | 145.0 | 145.0 |
| 42 | | 145.0 | 145.0 | 145.0 | 145.0 | - 42 | | 145.0 | 145.0 |
| 44 | 82 | 145.0 | 145.0 | 145.0 | 145.0 | | 82 | 145.0 | 145.0 |
| 48 | | 145.0 | 145.0 | 145.0 | 145.0 | | | 145.0 | 145.0 |
| 50 | | 139.2 | 139.2 | 139.2 | 139.2 | 50 | | 139.2 | 139.2 |
| 53 | | 131.3 | 131.3 | 131.3 | 131.3 | 53 | | 131.3 | 131.3 |
| 56 | | 124.3 | 124.3 | 124.3 | 124.3 | 56 | | 124.3 | 124.3 |
| 60 | | 116.0 | 116.0 | 116.0 | 116.0 | 60 | | 116.0 | 116.0 |
| 30 | | 145.0 | 145.0 | 145.0 | 145.0 | | | 145.0 | 145.0 |
| 36 | | 145.0 | 145.0 | 145.0 | 145.0 | 36 | | 145.0 | 145.0 |
| 40 | | 135.9 | 145.0 | 145.0 | 145.0 | 40 | | 145.0 | 145.0 |
| 42 | | 131.1 | 145.0 | 145.0 | 145.0 | 42 | | 142.6 | 145.0 |
| 44 | 96 | 126.8 | 145.0 | 145.0 | 145.0 | 44 | 96 | 138.0 | 145.0 |
| 48 | | 119.5 | 139.4 | 145.0 | 145.0 | 48 | | 130.0 | 145.0 |
| 50 | | 116.3 | 135.7 | 139.2 | 139.2 | 50 | | 126.6 | 139.2 |
| 53 | | 112.1 | 130.0 | 131.3 | 131.3 | 53 | | 122.0 | 131.3 |
| 56 | | 94.3 | 94.3 | 94.3 | 94.3 | 56 | | 94.3 | 94.3 |
| 60 | | 88.0 | 88.0 | 88.0 | 88.0 | 60 | | 88.0 | 88.0 |
| 30 | | 130.0 | 130.0 | 130.0 | 130.0 | 30 | | | |
| | | | | | | | | 130.0 | 130.0 |
| 36 | 102 | 130.0 | 130.0 | 130.0 | 130.0 | | | 130.0 | 130.0 |
| 40 | | 125.9 | 130.0 | 130.0 | 130.0 | 40 | | 130.0 | 130.0 |
| 42 | | 121.4 | 130.0 | 130.0 | 130.0 | 42 | 102 | 130.0 | 130.0 |
| 44 | | 117.3 | 130.0 | 130.0 | 130.0 | 44 | | 127.6 | 130.0 |
| 48 | | 110.3 | 128.7 | 130.0 | 130.0 | 48 | | 120.0 | 130.0 |
| 50 | | 107.3 | 125.1 | 130.0 | 130.0 | 50 | | 116.7 | 130.0 |
| 53 | | 99.6 | 99.6 | 99.6 | 99.6 | 53 | | 99.6 | 99.6 |
| 56 | | 94.3 | 94.3 | 94.3 | 94.3 | 56 | | 94.3 | 94.3 |
| 30 | | 130.0 | 130.0 | 130.0 | 130.0 | 30 | | 130.0 | 130.0 |
| 36 | | 127.5 | 130.0 | 130.0 | 130.0 | 36 | | 130.0 | 130.0 |
| 40 | | 117.3 | 130.0 | 130.0 | 130.0 | 40 | | 127.6 | 130.0 |
| 42 | 108 | 113.0 | 130.0 | 130.0 | 130.0 | 42 | 108 | 123.0 | 130.0 |
| 44 | ,00 | 109.1 | 127.3 | 130.0 | 130.0 | 44 | 100 | 118.7 | 130.0 |
| 48 | | 102.4 | 119.5 | 130.0 | 130.0 | 48 | | 111.4 | 130.0 |
| 50 | | 99.5 | 105.6 | 105.6 | 105.6 | 50 | | 105.6 | 105.6 |
| 53 | | 95.6 | 99.6 | 99.6 | 99.6 | 53 | | 99.6 | 99.6 |
| 30 | | 110.0 | 110.0 | 110.0 | 110.0 | 30 | | 110.0 | 110.0 |
| 36 | | 110.0 | 110.0 | 110.0 | 110.0 | 36 | | 110.0 | 110.0 |
| 40 | | 109.8 | 110.0 | 110.0 | 110.0 | 40 | | 110.0 | 110.0 |
| 42 | 114 | 105.7 | 110.0 | 110.0 | 110.0 | 42 | 114 | 110.0 | 110.0 |
| 44 | | 102.0 | 110.0 | 110.0 | 110.0 | 44 | | 110.0 | 110.0 |
| 48 | | 95.6 | 110.0 | 110.0 | 110.0 | - 48 | | 104.0 | 110.0 |
| 50 | | 92.8 | 108.3 | 110.0 | 110.0 | 50 | | 104.0 | 110.0 |
| 30 | | | | | | | | | |
| | | 110.0 | 110.0 | 110.0 | 110.0 | 30 | | 110.0 | 110.0 |
| 36 | | 110.0 | 110.0 | 110.0 | 110.0 | 36 | | 110.0 | 110.0 |
| 40 | 120 | 103.2 | 110.0 | 110.0 | 110.0 | 40 | 120 | 110.0 | 110.0 |
| 42 | | 99.3 | 110.0 | 110.0 | 110.0 | 42 | | 108.1 | 110.0 |
| 44 | | 95.8 | 110.0 | 110.0 | 110.0 | - 44 | | 104.2 | 110.0 |
| 48 | | 89.6 | 104.6 | 110.0 | 110.0 | 48 | | 97.5 | 110.0 |

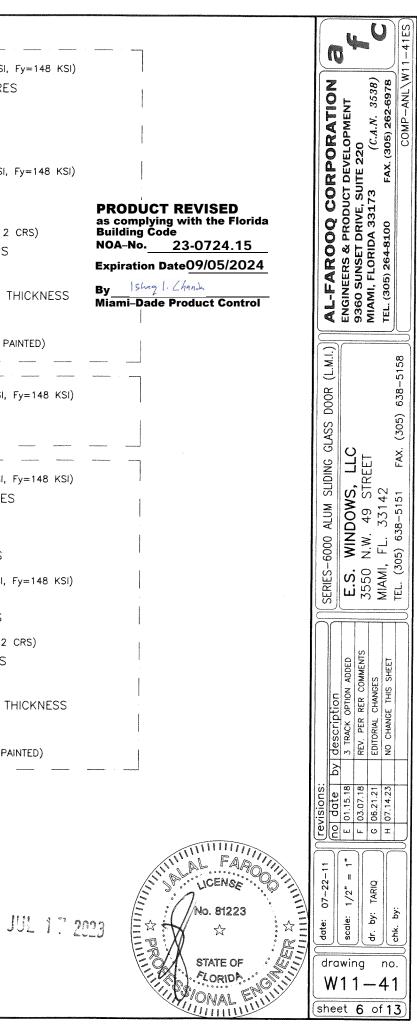
TYPICAL ANCHORS: SEE ELEV. FOR SPACING

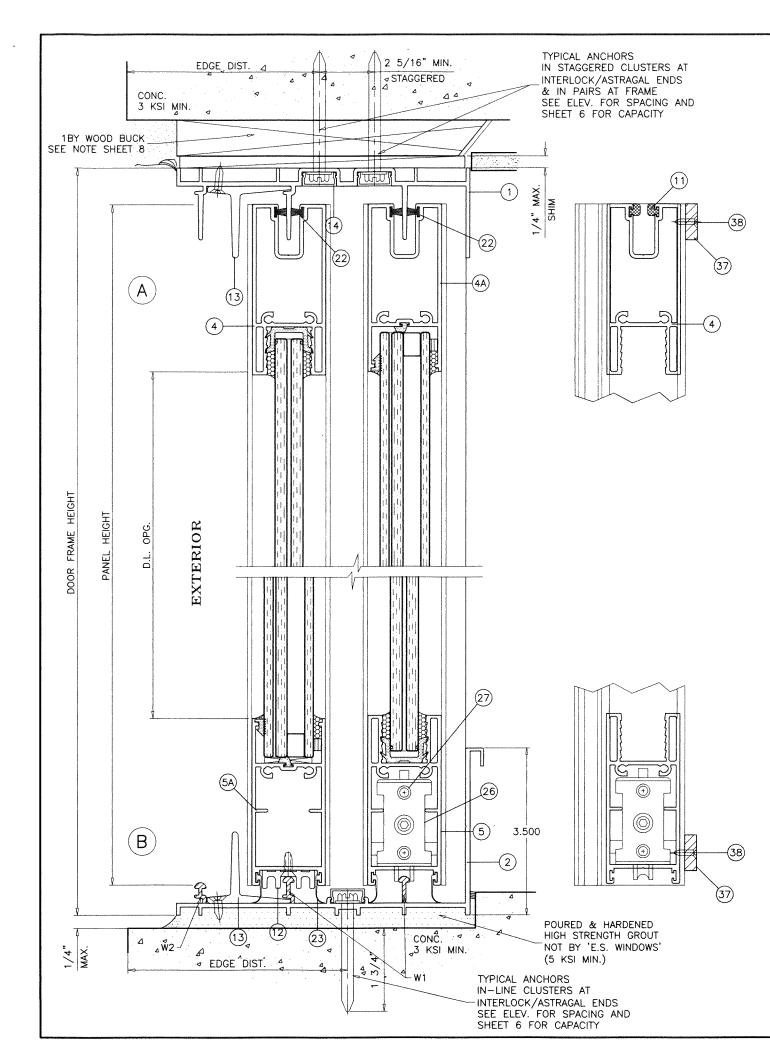
| 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 I INTO 2BY WOOD BUCKS OR WOOD STRUCTURES 1-1/2" MIN. PENETRATION INTO WOOD THRU 1BY BUCKS INTO CONCRETE |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTO 2BY WOOD BUCKS OR WOOD STRUCTURES 1-1/2" MIN. PENETRATION INTO WOOD |
| THRU 1BY BUCKS INTO CONCRETE |
| 1-1/2" MIN. EMBED INTO CONCRETE |
| 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 I DIRECTLY INTO CONCRETE 1-1/2" MIN. EMBED |
| #14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS) INTO MIAMI-DADE COUNTY APPROVED MULLIONS OR INTO METAL STRUCTURES (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNES 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) |
| |
| 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 P DIRECTLY INTO CONCRETE 1-3/4" MIN. EMBED |
| |
| 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 MINTO 2BY WOOD BUCKS OR WOOD STRUCTURES $1-1/2$ " MIN. PENETRATION INTO WOOD |
| THRU 1BY BUCKS INTO CONC. OR BLOCKS 1-1/4" MIN. EMBED INTO CONC. OR BLOCKS |
| 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 K DIRECTLY INTO CONC. OR BLOCKS 1-1/4" MIN. EMBED INTO CONC. OR BLOCKS |
| #14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS) INTO MIAMI-DADE COUNTY APPROVED MULLIONS OR INTO METAL STRUCTURES (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNES 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) |
| |

INTO CONCRETE = 2-1/2" MIN. INTO WOOD STRUCTURE = 1" MIN. INTO METAL STRUCTURE = 3/4" MIN.

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

SEE SHEETS 3 THRU 5 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE. USING CHART ON THIS SHEET SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOADS REQUIRED. LOWER DESIGN PRESSURES FROM GLASS OR HEAD, SILL, JAMB ANCHOR CHARTS WILL APPLY TO ENTIRE SYSTEM.





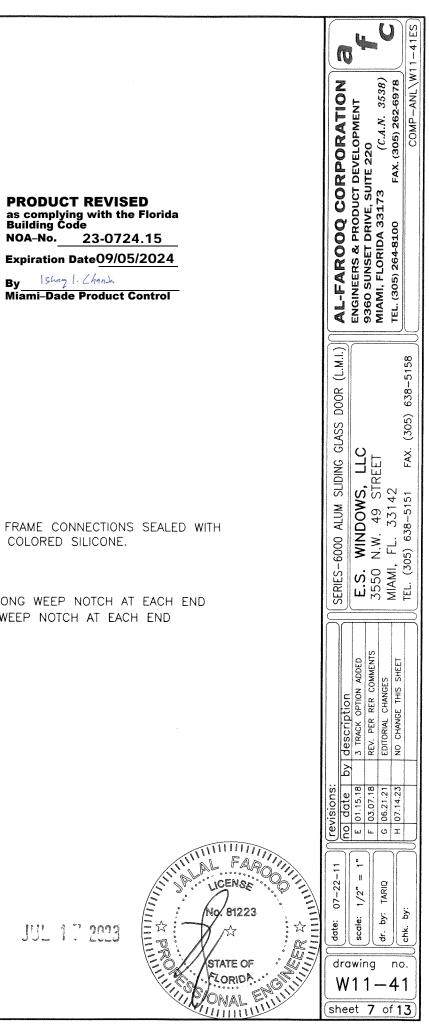


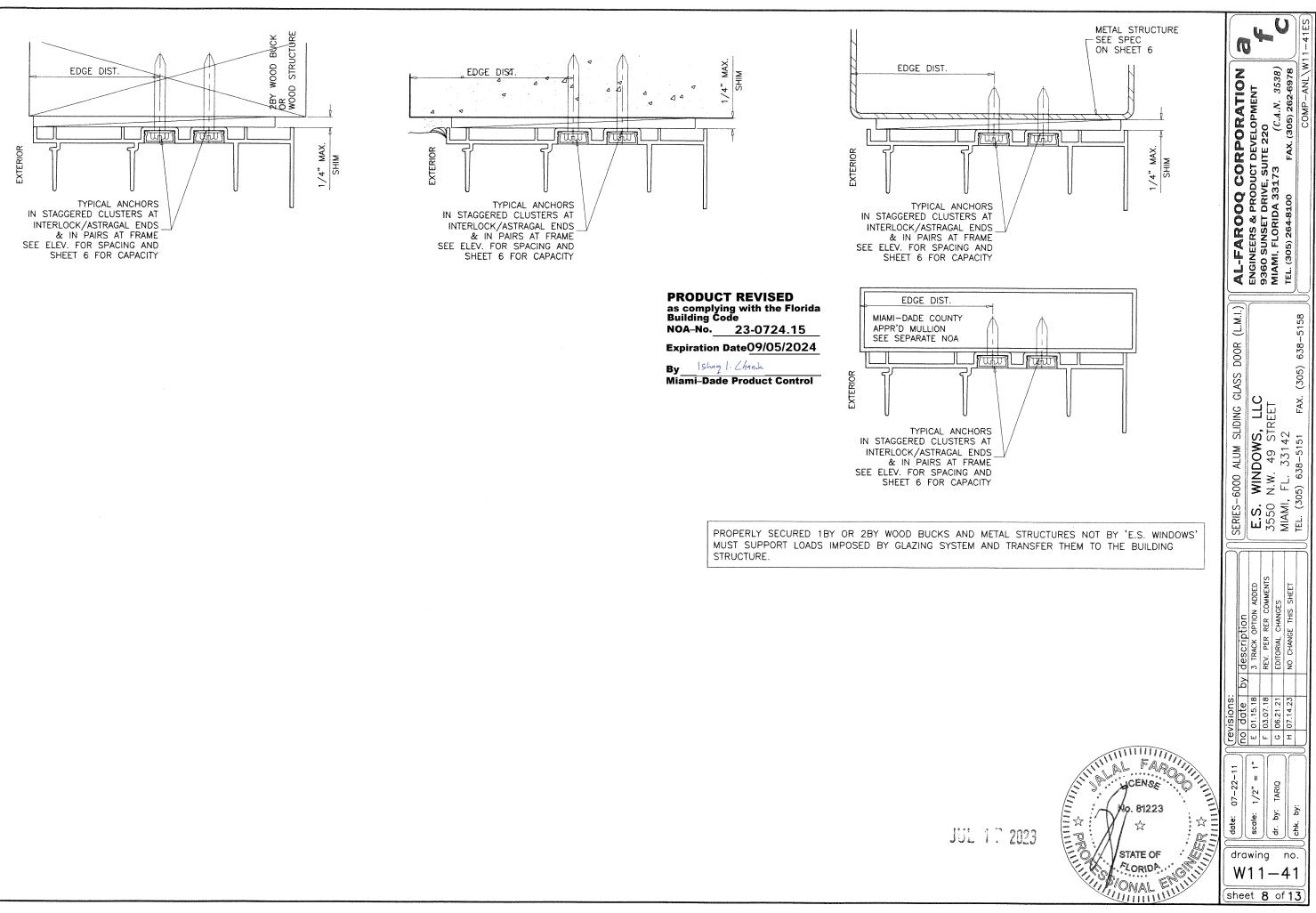
SEALANT:

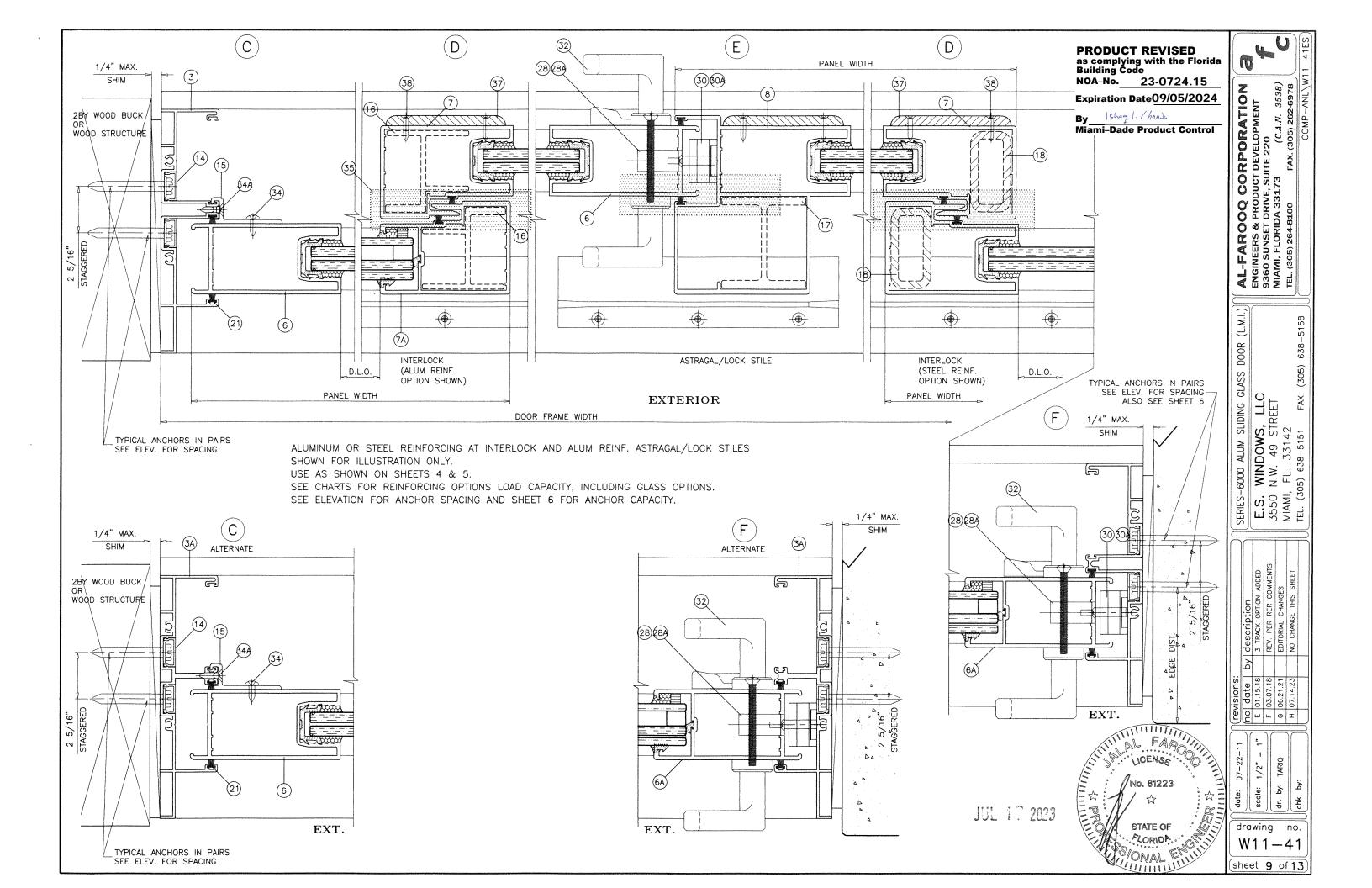
ALL JOINTS AND FRAME CONNECTIONS SEALED WITH WHITE/ALUMINUM COLORED SILICONE.

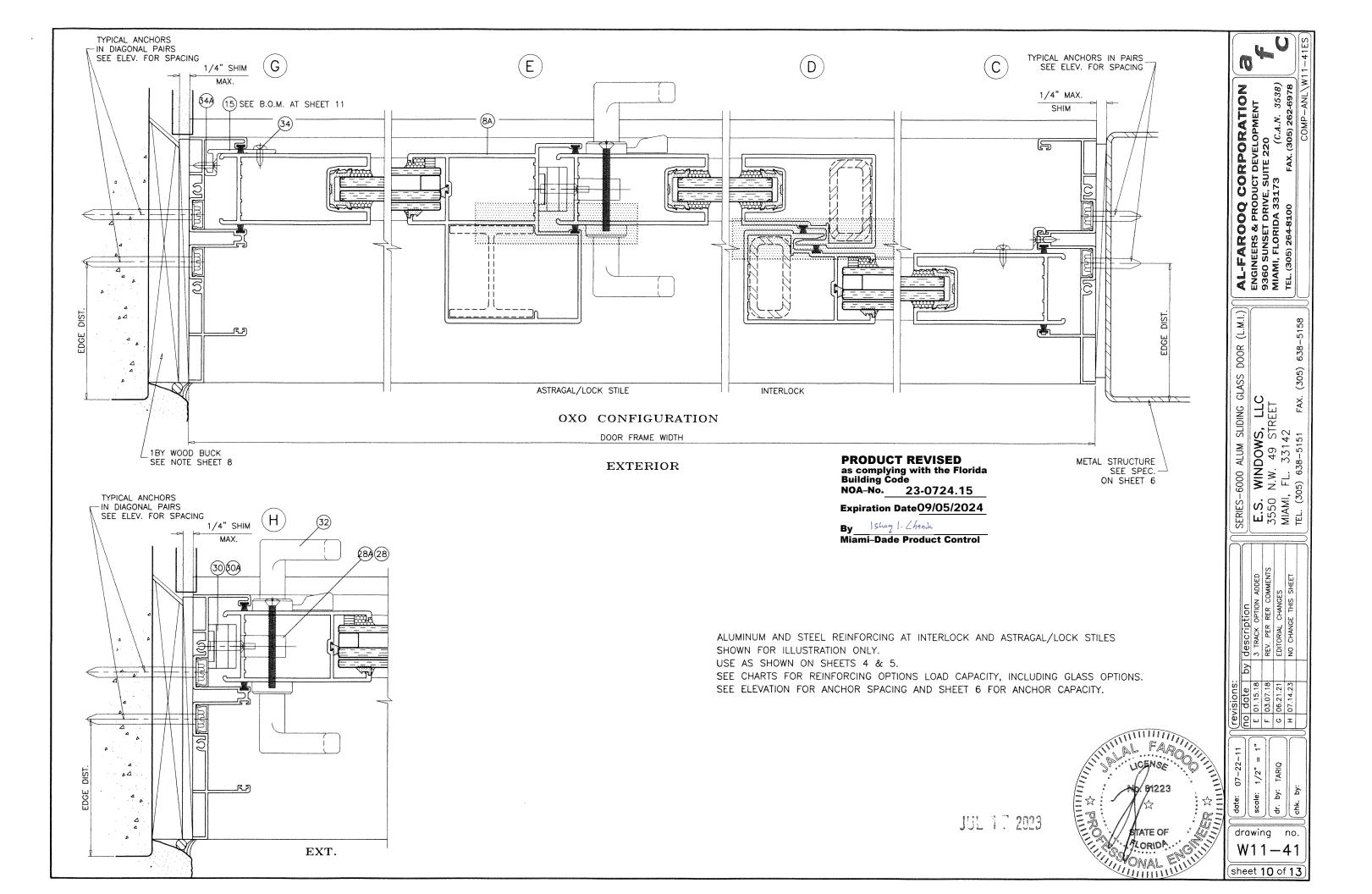
WEEPHOLES:

W1 = 2-5/8" LONG WEEP NOTCH AT EACH END W2 = 1" LONG WEEP NOTCH AT EACH END









| ITEM # | PART # | QUANTITY | DESCRIPTION | MATERIAL | MANF./SUPPLIER/REMARKS |
|-----------|----------------------------------------|--------------------|------------------------------------------------------------------------|-----------|------------------------------------------|
| 1 | ES-6001 | 1 | FRAME HEAD | 6005-T5 | - |
| 2 | ES-6023 | 1 | FRAME SILL - 3-1/2" | 6005-T5 | |
| 3 | ES-6003 | 2 | FRAME JAMB | 6063-T6 | - |
| 3A | ES6030 | 2 | ALTERNATE FRAME JAMB | 6063-T6 | |
| 4 | ES-6000-040 | 2/ PANEL | TOP RAIL (LAM. GLASS) | 6063-T6 | |
| 4A | ES-6004 | 2/ PANEL | TOP RAIL (INSUL. LAM. GLASS) | 6063-T6 | - |
| 5 | ES-6000-041 | 2/ PANEL | BOTTOM RAIL (LAM. GLASS) | 6063-T6 | - |
| 5A | ES-6005 | 2/ PANEL | BOTTOM RAIL (INSUL. LAM. GLASS) | 6063-T6 | - |
| 6 | ES-6000-042 | AS REQD. | LOCK STILE (LAM. GLASS) | 6063-T6 | - |
| 6A | ES-6006 | AS REQD. | LOCK STILE (INSUL. LAM. GLASS) | 6063-T6 | |
| 7 | ES-6000-043 | AS REQD. | INTERLOCK (LAM. GLASS) | 6063-T6 | - |
| 7A | ES-6007 | AS REQD. | INTERLOCK (INSUL. LAM. GLASS) | 6063-T6 | - |
| 8 | ES-6000-044 | AS REQD. | FEMALE ASTRAGAL (LAM. GLASS) | 6063-T6 | - |
| 8A | ES-6008 | AS REQD. | FEMALE ASTRAGAL (INSUL. LAM. GLASS) | 6063-T6 | - |
| 9 | ES-6500-G01A | 4/ PANEL | GLAZING GASKET (LAM. GLASS) | SILICONE | DUROMETER 65±5 SHORE A, EXTRUSIONES S.A. |
| 11 | ES-6016 | 4/ PANEL | PANEL GUIDE (TOP ONLY) | CELCON | LOCATED AT PANEL ENDS |
| 12 | ES-6015 | 2/ PANEL | FIXED PANEL BOTTOM CLIP , 7" LONG MIN. | 6063-T6 | SECURE W/ (2) #8 X 3/4" FH SMS |
| 13 | ES-6010 | 2/ PANEL | RETAINER CLIP, 6" LONG | 6005-T5 | AT MTG. RAIL HEAD & SILL ENDS |
| 14 | ES-6011 | 2/ JAMB | JAMB SCREW COVER | 6063-T5 | OPTIONAL |
| 15 | ES-6014 | AS REQD. | FIXED PANEL CLIP, 4" LONG | 6063-T6 | AT 20" FROM EACH END AND 27" O.C. MAX. |
| 16 | ES-6012 | AS REQD. | INTERLOCK STIFFENER (LENGTH = PANEL HT 2-3/8") | 6063-T6 | |
| 17 | ES-6013 | AS REQD. | ASTRAGAL STIFFENER (LENGTH = PANEL HT. $-2-3/8"$) | 6063-T6 | |
| 18 | 1" X 2" X 3/16" | AS REQD. | STEEL TUBE REINFORCING (LENGTH = PANEL HT. $-2-3/8$ ") | A36 STEEL | TO BE PAINTED |
| 21 | W222521K | AS REQD. | STILE & JAMB W'STRIPPING | - | ULTRAFAB |
| 22 | W223221K | AS REQD. | TOP RAIL PILE W'STRIPPING | _ | ULTRAFAB |
| 23 | ES-6027 | AS REQD. | BOTTOM RAIL W'STRIPPING | EPDM | DUROMETER 75±4 SHORE A |
| 24 | #10 X 1-1/2" PH SMS | 8/ PANEL | PANEL ASSY SCREWS | | |
| 25 | #10 X 1" PH SMS | 2/ CORNER | FRAME ASSY SCREWS | | - |
| 26 | GTT-354/460-A | + | TANDEM ACETAL WHEELS IN METALLIC HOUSING | | PABOSE |
| 27 | 1/4-20 X 1-3/4" PH MS | | ROLLER INST. SCREWS | | |
| 28 | 191056 | | STD. MORTISE LOCK, AT 40" FROM BOTTOM | ST. STEEL | INTERLOCK (ASSA ABLOY) |
| 28A | 191014 | + | MULTI POINT MORTISE LOCK, AT 40" FROM BOTTOM | ST. STEEL | INTERLOCK (ASSA ABLOY) |
| 29 | #10-24 X 3/8" PH MS | | LOCK INSTALLATION SCREW | ST. STEEL | INTEREOUR (ASSA ABLOT) |
| 30 | 191018 | 1/ LOCK | LOCK KEEPER (STD. LOCK), AT 48-1/2" FROM BOTTOM | 1 | INTERLOCK (ASSA ABLOY) |
| 30A | 191040 | 1/ LOCK | LOCK KEEPER (MULTI POINT LOCK), AT 48-1/2 TROM BOTTOM | ST. STEEL | INTERLOCK (ASSA ABLOT) |
| 31 | #10 X 5/8" PH SMS B | 2/ LOCK | LOCK KEEPER MOUNT. SCREW (STD. LOCK) | | INTERLOCK (ASSA ABLUT) |
| 31A | #8 X 3/4" FH SMS | 4/ LOCK | | ST. STEEL | |
| 32 | #623Z | 4/ LOCK | LOCK KEEPER MOUNT. SCREW (MULTI POINT LOCK) INTERIOR AND EXTERIOR PULL | ST. STEEL | - (3) #6-32 X 1/2" FH MS, ST. STEEL |
| 34 | #0232 #10 X 3/4" PH SDS | 2/ CLIP | FIXED PANEL CLIP FASTENER | | (J) #0-32 A 1/2 FH MS, SI. SIEL |
| | #10 X 3/4" PH SDS #10 X 3/4" PH SDS | 2/ CLIP 2/ CLIP | FIXED PANEL CLIP FASTENER | ST. STEEL | |
| 34A 35 | | | | ST. STEEL | |
| 35 37 | | AS REQD. | 1"X4" LONG SELF ADHESIVE PILE PAD | WOOLPILE | AT HEAD AND SILL |
| | ES-6019 | AS REQD. | RESTRAINING PLATE | NYLON | AT TOP & BOTT. INTERLOCKS & ASTRAGAL |
| 38 | #8 X 3/4" FH SMS | 2/ PLATE | RESTRAINING PLATE FASTENER | - | |
| 39 | ES-4013 | AS REQD. | GLAZING WEDGE | - | |
| 41 | ES-4014 | AS REQD. | BOTTOM RAIL GLASS STOP | EPDM | DUROMETER 68±4 SHORE A |
| 42 | ES-4018 | AS REQD. | TOP RAIL & STILES GLASS STOP | EPDM | DUROMETER 75±4 SHORE A |
| 43 | | AS REQD. | 1/4" X 1/4" GLAZING TAPE | FOAM | |
| 44 | | 2/ LITE | SETTING BLOCK, 1" X 1/8" X 2-1/2" LONG | EPDM | DUROMETER 80±5 SHORE A |

LATCHES: LIMIT ITEMS 28 AND 30 FOR USE WITH DOORS WITHOUT REINFORCING OPTION 1. ITEMS 28A AND 30A CAN BE USED FOR ALL DOORS WITH OR WITHOUT REINFORCINGS.

