



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

## NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION

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

[www.miamidade.gov/building](http://www.miamidade.gov/building)

Lawson Industries, Inc.  
8501 NW 90 Street  
Medley, FL 33166

### 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 "HS-8700 (Flange Frame)" Aluminum Horizontal Sliding Window – L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **L8700-0901**, titled "HS-8700 Horizontal Rolling Flange Impact Window", sheets 1 through 10 of 10, dated 05/30/09, with revision **G**, dated 01/07/22, prepared by manufacturer, and signed and sealed by Thomas J. Sotos, 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, city, state, 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.

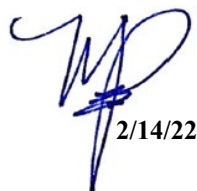
**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**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 and renews** NOA No. **20-0813.06** and consists of this page 1 and evidence pages E-1, E-2, E-3, E-4, E-5 and E-6, as well as approval document mentioned above.

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



  
2/14/22

NOA No. 22-0118.01  
Expiration Date: April 11, 2027  
Approval Date: February 24, 2022  
Page 1

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**


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

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.  
*(Submitted under NOA No. 02-0227.05)*
2. Drawing No. **L8700-0901**, titled "HS-8700 Horizontal Rolling Flange Impact Window", sheets 1 through 10 of 10, dated 05/30/09, with revision **F** dated 07/31/20, prepared by manufacturer, signed and sealed by Thomas J. Sotos, P.E.  
*(Submitted under NOA No. 20-0813.06)*

**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) 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 a series HS-8700 flange frame aluminum horizontal sliding window, XO and XOX configurations, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-10715**, dated 05/08/19, signed and sealed by Idalmis Ortega, P.E.  
*(Submitted under NOA No. 19-0708.09)*
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) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94  
along with marked-up drawings and installation diagram of an aluminum horizontal sliding window, XOX (1/4-1/2-1/4 and 1/3-1/3-1/3) configuration, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-10-3049** and **HETI-10-3051**, dated 03/23/11, signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 11-0705.10)*
3. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
along with marked-up drawings and installation diagram of 8 specimens of an aluminum horizontal sliding window, XOX (1/4-1/2-1/4 and 1/3-1/3-1/3) configuration, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-10-3047**, **HETI-10-3053**, **HETI-10-3057**, **HETI-10-3130**, **HETI-10-3223** and **HET-10-3225**, all dated 03/23/11, and signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 11-0705.10)*


  
Manuel Pérez, P.E.  
Product Control Examiner  
NOA No. 22-0118.01  
Expiration Date: April 11, 2027  
Approval Date: February 24, 2022

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

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

**B. TESTS (CONTINUED)**

- 4.** Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94  
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of an aluminum horizontal sliding window, XOX (1/4-1/2-1/4 and 1/3-1/3-1/3) configuration, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-10-3048**, **HETI-10-3049I**, dated 11/09/10, **HETI-10-3050**, **HETI-10-3052B**, **HETI-10-3056**, **HETI-10-3131**, **HETI-10-3224** and **HETI-10-3226**, all dated 03/23/11, and signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 11-0705.10)*
- 5.** Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94  
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of an aluminum horizontal sliding window, XOX configuration, prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-10-3251**, dated 04/25/11, signed and sealed by Rafael E. Droz-Seda, P.E.  
*(Submitted under NOA No. 11-0705.10)*
- 6.** 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 8 specimens of an aluminum horizontal sliding window, XO configuration, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-08-2033**, **HETI-08-2034**, **HETI-08-2035**, **HETI-08-2036**, **HETI-08-2037**, **HETI-08-2038**, **HETI-08-2116A** and **HETI-08-2116B**, all dated 02/28/08, and signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 09-0706.05)*

  
Manuel Pérez, P.E.  
Product Control Examiner  
NOA No. 22-0118.01  
Expiration Date: April 11, 2027  
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**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

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

**B. TESTS (CONTINUED)**

7. 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 8 specimens of an aluminum horizontal sliding window, XO configuration, prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-3097, FTL-3098 and FTL-3364**, dated 12/06/01, 12/11/01 and 01/28/02, respectively, all signed and sealed by Luis Antonio Figueredo, P.E.  
*(Submitted under NOA No. 02-0227.05)*

**C. CALCULATIONS**


1. Anchor verification calculations and structural analysis, complying with FBC, prepared by Lawson Industries, Inc., dated 05/28/09, revised on 07/10 and updated on 01/25/12, signed and sealed by Thomas J. Sotos, P.E.  
*(Submitted under NOA No. 12-0127.08)*
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. **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.
2. 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.

  
Manuel Pérez, P.E.  
Product Control Examiner  
NOA No. 22-0118.01  
Expiration Date: April 11, 2027  
Approval Date: February 24, 2022



**Lawson Industries, Inc.**


**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

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

1. Statement letter of conformance, complying with **FBC 7<sup>th</sup> Edition (2020)**, dated August 03, 2020, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.  
*(Submitted under NOA No. 20-0813.06)*
2. Statement letter of no financial interest, dated June 24, 2019, signed and sealed by Thomas J. Sotos, P.E.  
*(Submitted under NOA No. 19-0708.09)*
3. Proposal No. **18-1697** issued by the Product Control Section, dated January 04, 2019, signed by Manuel Perez, P.E.  
*(Submitted under NOA No. 19-0708.09)*
4. Laboratory compliance letter for Test Reports No. **HETI-10-3047, HETI-10-3048, HETI-10-3049, HETI-10-3049I, HETI-10-3050, HETI-10-3051, HETI-10-3052B, HETI-10-3053, HETI-10-3056, HETI-10-3057, HETI-10-3130, HETI-10-3131, HETI-10-3223, HETI-10-3224, HETI-10-3225 and HETI-10-3226**, all issued by Hurricane Engineering & Testing, Inc., dated 11/09/10, 03/23/11 and 04/25/11, signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 11-0705.10)*
5. Laboratory compliance letter for Test Report No. **HETI-10-3251**, issued by Hurricane Engineering & Testing, Inc., dated 04/25/11, signed and sealed by Rafael E. Droz-Seda, P.E.  
*(Submitted under NOA No. 11-0705.10)*
6. Laboratory compliance letter for Test Reports No. **HETI-08-2033, HETI-08-2034, HETI-08-2035, HETI-08-2036, HETI-08-2037, HETI-08-2038, HETI-08-2116A and HETI-08-2116B**, all issued by Hurricane Engineering & Testing, Inc., dated 01/15/08 through 02/28/08, and signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No. 09-0706.05)*
7. Laboratory compliance letter for Test Reports No. **FTL-3097, FTL-3098 and FTL-3364**, all issued by Fenestration Testing Laboratory, Inc., dated 12/06/01, 12/11/01 and 01/28/02, and signed and sealed by Luis Antonio Figueredo, P.E.  
*(Submitted under NOA No. 02-0227.05)*

**G. OTHERS**

1. Notice of Acceptance No. **19-0708.09**, issued to Lawson Industries, Inc. for their Series "HS-8700 (Flange Frame)" Aluminum Horizontal Sliding Window – L.M.I., approved on 08/01/19 and expiring on 04/11/22.

  
Manuel Pérez, P.E.  
Product Control Examiner  
NOA No. 22-0118.01  
Expiration Date: April 11, 2027  
Approval Date: February 24, 2022

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**2. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Drawing No. **L8700-0901**, titled “HS-8700 Horizontal Rolling Flange Impact Window”, sheets 1 through 10 of 10, dated 05/30/09, with revision **G** dated 01/07/22, prepared by manufacturer, signed and sealed by Thomas J. Sotos, P.E.

**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) 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 3 specimens of an aluminum horizontal sliding window, XO configuration, prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-4148-01**, dated 06/04/21, signed and sealed by Douglas J. McDougall, P.E.

**C. CALCULATIONS**


1. Anchor verification calculations and structural analysis, complying with FBC, prepared by Lawson Industries, Inc., dated 05/28/09, revised on 07/10 and 01/25/12 and updated on 01/12/22, signed and sealed by Thomas J. Sotos, P.E.
2. Glazing complies with **ASTM E1300-09/12/16**.

**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**” dated 11/19/20, expiring on 07/08/24.
2. 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.

  
Manuel Pérez, P.E.  
Product Control Examiner  
NOA No. 22-0118.01  
Expiration Date: April 11, 2027  
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**Lawson Industries, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**


**2. NEW EVIDENCE SUBMITTED (CONTINUED)**

**F. STATEMENTS**

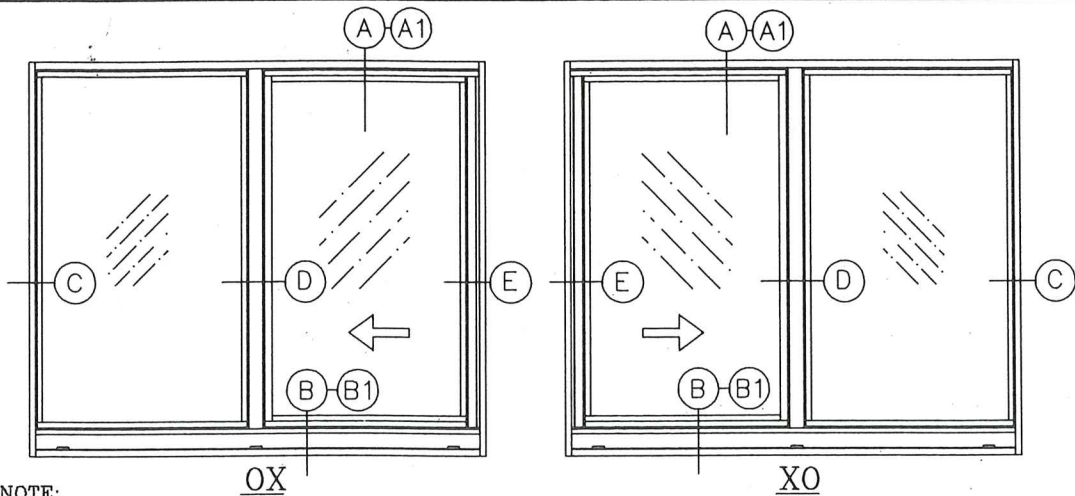
1. Statement letter of conformance, complying with **FBC 7<sup>th</sup> Edition (2020)**, dated January 12, 2022, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.
2. Statement letter of no financial interest, dated January 12, 2022, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.
3. Proposal No. **19-1433** issued by the Product Control Section, dated January 15, 2020, signed by Manuel Perez, P.E.

**G. OTHERS**

1. Notice of Acceptance No. **20-0813.06**, issued to Lawson Industries, Inc. for their Series "HS-8700 (Flange Frame)" Aluminum Horizontal Sliding Window – L.M.I., approved on 10/08/20 and expiring on 04/11/22.

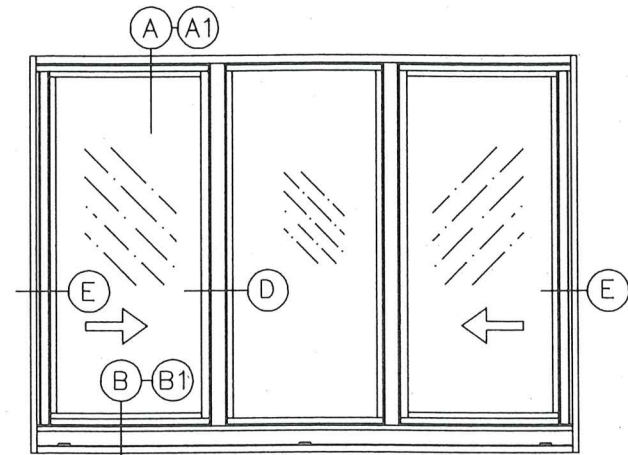
  
Manuel Pérez, P.E.  
Product Control Examiner  
NOA No. 22-0118.01  
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NOTE:

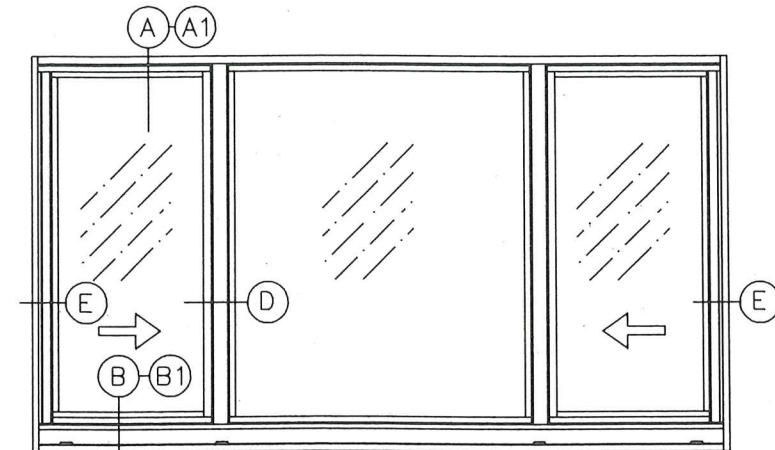
- 1) REFER TO SHEET 2 OF 10 FOR INSTALLATION ANCHOR DETAILS AND NOTES.
- 2) FOR VERTICAL CROSS-SECTION DETAILS "A, A1, B, & B1" REFER TO SHEET #3
- 3) FOR HORIZONTAL CROSS-SECTION DETAILS "C, D, & E" REFER TO SHEET #4
- 4) REFER TO SHEET 6 OF 10 FOR DESIGN LOAD CHARTS AND NOTES.



XO - Equal Lite (1/3-1/3-1/3)

NOTES:

- 1) REFER TO SHEET 2 OF 10 FOR INSTALLATION ANCHOR DETAILS AND NOTES.
- 2) FOR VERTICAL CROSS-SECTION DETAILS "A, A1, B, & B1" REFER TO SHEET #3
- 3) FOR HORIZONTAL CROSS-SECTION DETAILS "D, & E" REFER TO SHEET #5
- 4) REFER TO SHEET 8 OF 10 FOR DESIGN LOAD CHARTS AND NOTES.



XO - Un-Equal Lite (1/4-1/2-1/4)

NOTES:

- 1) REFER TO SHEET 2 OF 10 FOR INSTALLATION ANCHOR DETAILS AND NOTES.
- 2) FOR VERTICAL CROSS-SECTION DETAILS "A, A1, B, & B1" REFER TO SHEET #3
- 3) FOR HORIZONTAL CROSS-SECTION DETAILS "D, & E" REFER TO SHEET #5
- 4) REFER TO SHEET 7 OF 10 FOR DESIGN LOAD CHARTS AND NOTES.

**SERIES-8700 HORIZONTAL SLIDING IMPACT WINDOW**  
**APPROVED ELEVATIONS**

**General Notes:**

- 1.) THIS WINDOW SYSTEM IS DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (2017-6th Edition & 2020-7th Edition, INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ) AND ASTM 1300-09. THIS PRODUCT IS IMPACT RESISTANT. (SHUTTERS NOT REQUIRED)
- 2.) WOOD BUCKS SHALL BE INSTALLED AND ANCHORED SO THAT THE BUILDING RESISTS THE SUPERIMPOSED LOADS IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE & TO BE REVIEWED BY BUILDING OFFICIAL.
- 3.) ANCHORS SHOWN ON SHEET 2 OF 10 ARE AS PER TEST UNITS. ANCHORS ON ALL WINDOW SIZES ARE NOT TO EXCEED THESE MAXIMUM SPACINGS ON CENTER (O.C.), AND AS TABULATED ON SHEETS 6, 7, or 8.
- 4.) ANCHOR CONDITIONS NOT DESCRIBED IN THESE DRAWING'S ARE TO BE ENGINEERED ON A SITE SPECIFIC BASIS, UNDER SEPARATE APPROVAL AND TO BE REVIEWED BY BUILDING OFFICIAL.
- 5.) WINDOWS ARE QUALIFIED FOR USE WITH SINGLE GLAZE LAMINATED GLASS TYPES TABULATED HEREIN (SEE SHEETS #6, 7, or 8), AND FOR USE WITH DOUBLE GLAZE LAMINATED INSULATED GLASS TYPES TABULATED HEREIN (SEE SHEETS #6, 7 or 8).
- 6.) WINDOWS WITH GLASS TYPES "A, C, OR G" INSTALLED ABOVE 30FT. IN THE HVHZ, THE I.G. EXTERIOR LITE SHALL BE TEMPERED.
- 7.) SEE SHEET 4 FOR LOCK DETAILS & OPTIONS.
- 8.) SEE SHEET 9 FOR GLASS TYPES.
- 9.) SEE SHEET 6 FOR DESIGN PRESSURES ON "XO or OX" WINDOWS.
- 10.) SEE SHEET 7 FOR DESIGN PRESSURES ON EQUAL-LITE "XOX" WINDOWS.
- 11.) SEE SHEET 8 FOR DESIGN PRESSURES ON UN-EQUAL LITE "XOX" WINDOWS.
- 12.) FOR OPTIONAL FRAME INSTALLATION DETAILS SEE SHEETS 3, 4, or 9.
- 13.) EXT. & INT. FALSE COLONIAL MUNTINS ARE OPTIONAL & AND ARE APPLIED W/ SILICONE
- 14.) WOOD BUCKS IN CONTACT WITH CONCRETE MUST BE PRESSURE TREATED AND ANCHORED (BY OTHERS), PRIOR TO WINDOW INSTALLATION. (SEE SHEET #3, 4 & 5 FOR DETAILS & NOTES) WOOD BUCKS TO BE ANCHORED IN COMPLIANCE WITH THE FBC CHAPTER 24 SECTION 11.3.3.3.
- 15.) APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE MULLED UNITS.
- 16.) SEE SHEET # 5 FOR MULLION/METAL ATTACHMENT DETAILS, NOTES & OPTIONS.
- 17.) MULLING HORIZONTAL SLIDING WINDOWS WITH OTHER TYPES OF MIAMI-DADE COUNTY APPROVED WINDOWS USING A MIAMI-DADE COUNTY APPROVED MULLION IN BETWEEN ARE ACCEPTABLE BUT THE LOWER DESIGN PRESSURE FROM THE WINDOWS OR MULLION APPROVAL WILL APPLY TO THE ENTIRE MULLED SYSTEM.

8501 N.W. 90 ST.  
MEDLEY, FLORIDA 33166  
PH No. (305) 696-8660

**LAWSON**  
INDUSTRIES, INC.

MANUFACTURER OF QUALITY ALUMINUM WINDOWS AND GLASS DOORS

HS-8700 HORIZONTAL ROLLING FLANGE IMPACT WINDOW

APPROVED ELEVATIONS, AND GENERAL NOTES

Revision #:

Sheet: 1 OF 10

Drawing Number: L8700-0901

Product Reference Number:

Revision Notes:

C. Compliance w/ FBC 5th Edition (2014) and ASTM E1300-09

D. Compliance w/ FBC 6th Edition (2017)

E. Added new Hi Sill w/ new Track

F. Compliance w/ FBC 7th Edition (2020)

G. Added Max "XO or OX" Size: 74" x 74 1/4"

Drawn By: N. ERAZO

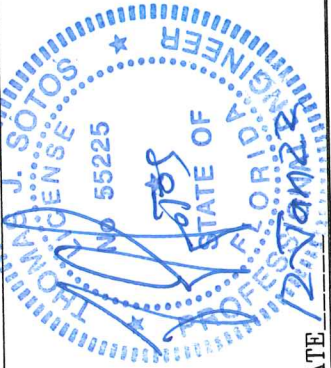
Date Drawn: 05/30/08

Revised By: N. ERAZO

Date Revised: 01/07/22

Revision Level: G

THOMAS J. SOTOS  
PROFESSIONAL ENGINEER  
FL LIC. # 55225



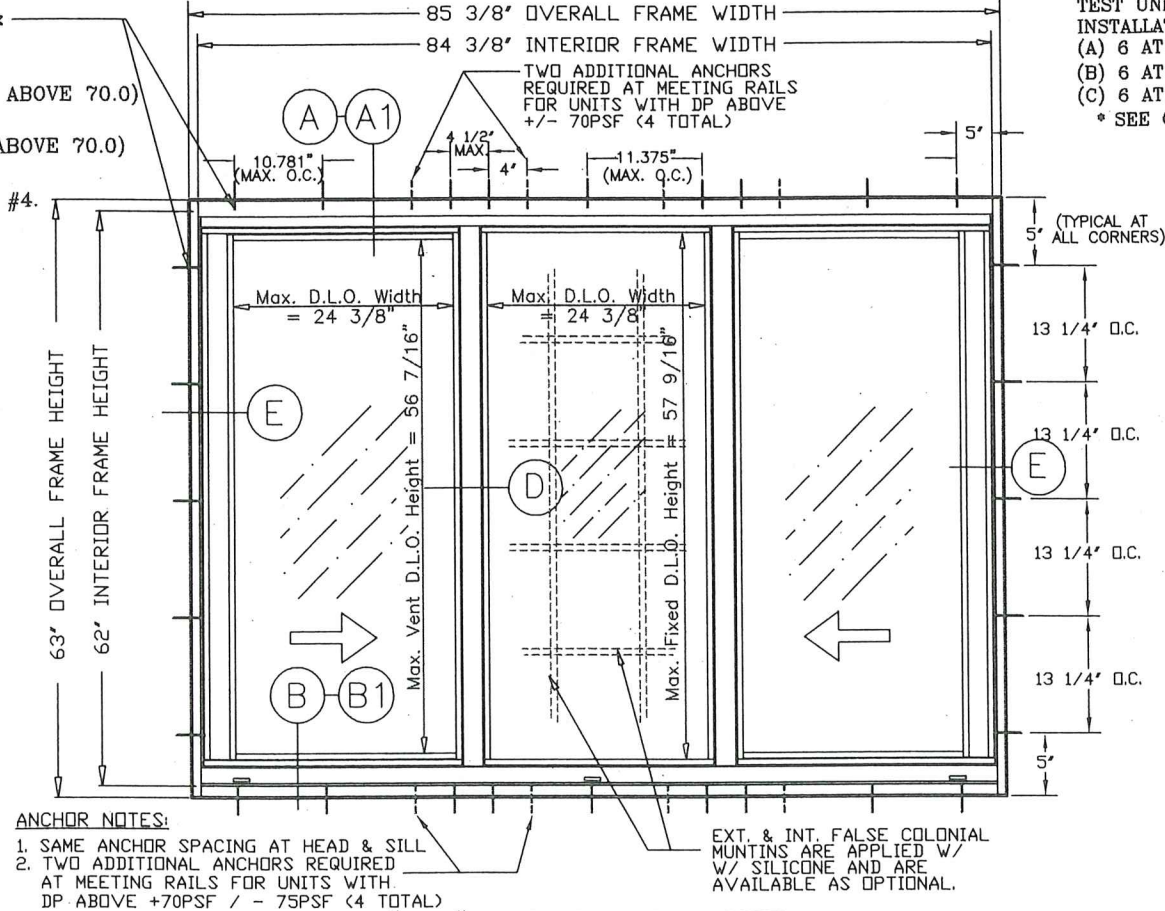
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **22-0118.01**  
Expiration Date: **04/11/2027**  
By: *Manuel Fern*  
Miami-Dade Product Control

DATE

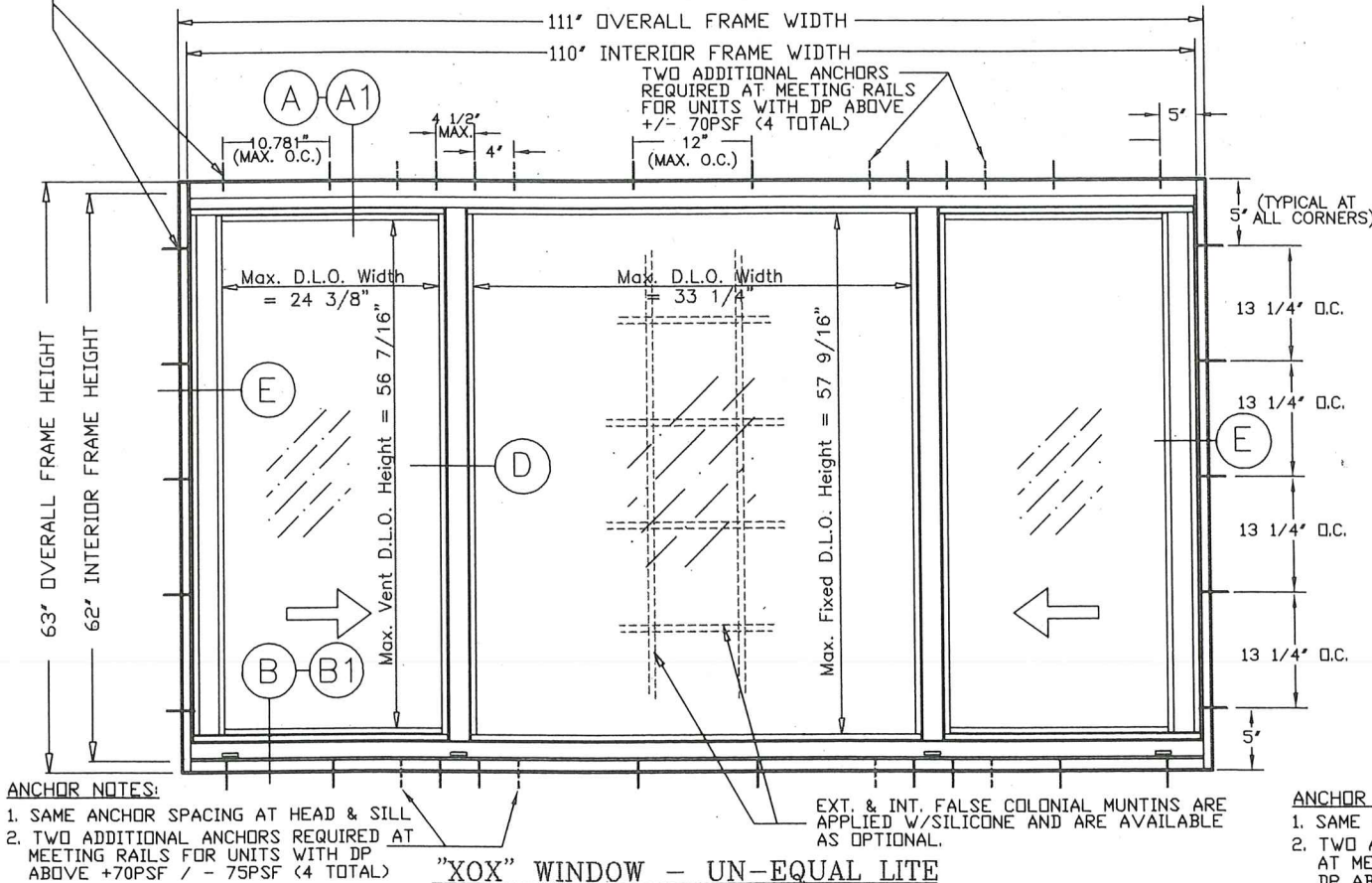


TEST UNIT SIZE: 111" X 63" \*  
INSTALLATION FASTENERS  
(A) 10 AT FRAME HEAD  
(14 AT FRAME HEAD IF DP ABOVE 70.0)  
(B) 10 AT EA. FRAME SILL  
(14 AT FRAME SILL IF DP ABOVE 70.0)  
(C) 5 AT EA. FRAME JAMB  
\* SEE GENERAL NOTE #3 & #4.

TEST UNIT SIZE: 111" X 63" \*  
INSTALLATION FASTENERS  
(A) 10 AT FRAME HEAD  
(14 AT FRAME HEAD IF DP ABOVE 70.0)  
(B) 10 AT EA. FRAME SILL  
(14 AT FRAME SILL IF DP ABOVE 70.0)  
(C) 5 AT EA. FRAME JAMB  
\* SEE GENERAL NOTE #3 & #4.

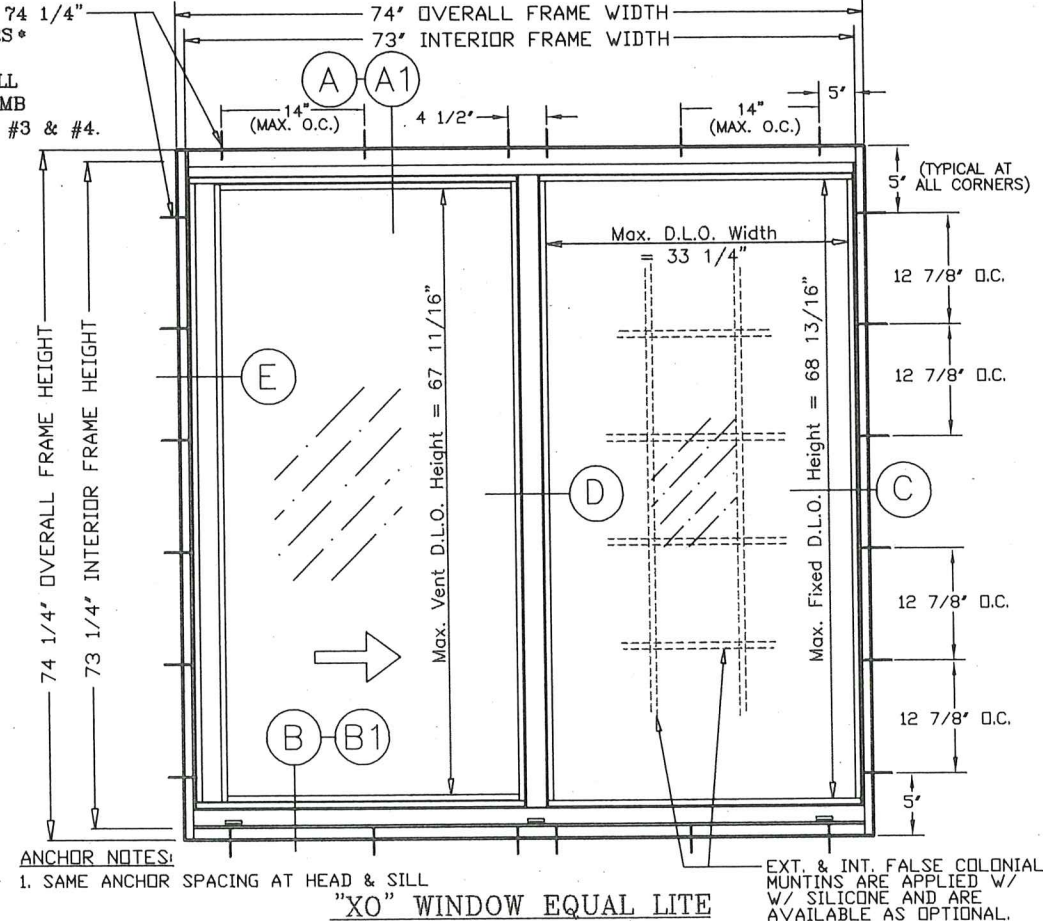


NOTES: 1. SEE VERTICAL CROSS-SECTION DETAILS 'A, A1, B, & B1' AT SHEET #3  
2. SEE HORIZONTAL CROSS-SECTION DETAILS 'C, D, & E' AT SHEET #5

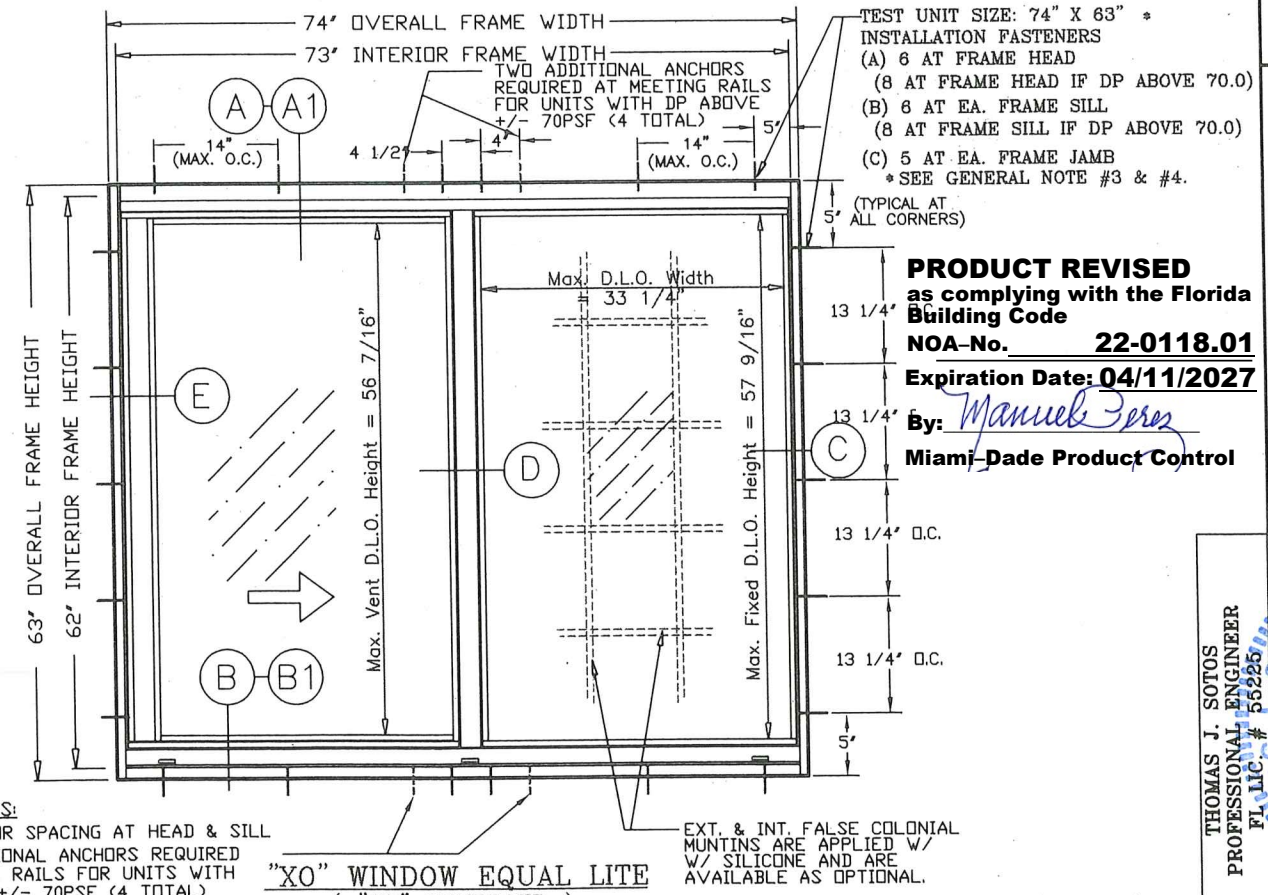


NOTES: 1. SEE VERTICAL CROSS-SECTION DETAILS 'A, A1, B, & B1' AT SHEET #3  
2. SEE HORIZONTAL CROSS-SECTION DETAILS 'C, D, & E' AT SHEET #5

TEST UNIT SIZE: 74" X 74 1/4"  
INSTALLATION FASTENERS \*  
(A) 6 AT FRAME HEAD  
(B) 6 AT EA. FRAME SILL  
(C) 6 AT EA. FRAME JAMB  
\* SEE GENERAL NOTE #3 & #4.



NOTES: 1. SEE VERTICAL CROSS-SECTION DETAILS 'A, A1, B, & B1' AT SHEET #3  
2. SEE HORIZONTAL CROSS-SECTION DETAILS 'C, D, & E' AT SHEET #4



NOTES: 1. SEE VERTICAL CROSS-SECTION DETAILS 'A, A1, B, & B1' AT SHEET #3  
2. SEE HORIZONTAL CROSS-SECTION DETAILS 'C, D, & E' AT SHEET #4

Revision Notes:	C. Compliance w/ FBC 5th Edition (2014) and ASTM E1300-09
D. Compliance w/ FBC 6th Edition (2017)	E. Added new Hi Sill w/ new Track
F. Compliance w/ FBC 7th Edition (2020)	G. Added Max "XO or OX" Size: 74" x 74 1/4"
Drawn By:	N. ERAZO
Date Drawn:	05/30/09
Revised By:	N. ERAZO
Date Revised:	01/07/22
Scale:	G

LAWSON INDUSTRIES, INC.

8501 N.W. 90 ST.  
MEDLEY, FLORIDA 33166  
PH No. (305) 696-8660

MANUFACTURER OF QUALITY ALUMINUM WINDOWS AND GLASS DOORS

HS-8700 HORIZONTAL ROLLING FLANGE IMPACT WINDOW

APPROVED ELEVATIONS, AND GENERAL NOTES

Product Reference Number: L8700-0901

Sheet: 2 OF 10

Revision #:

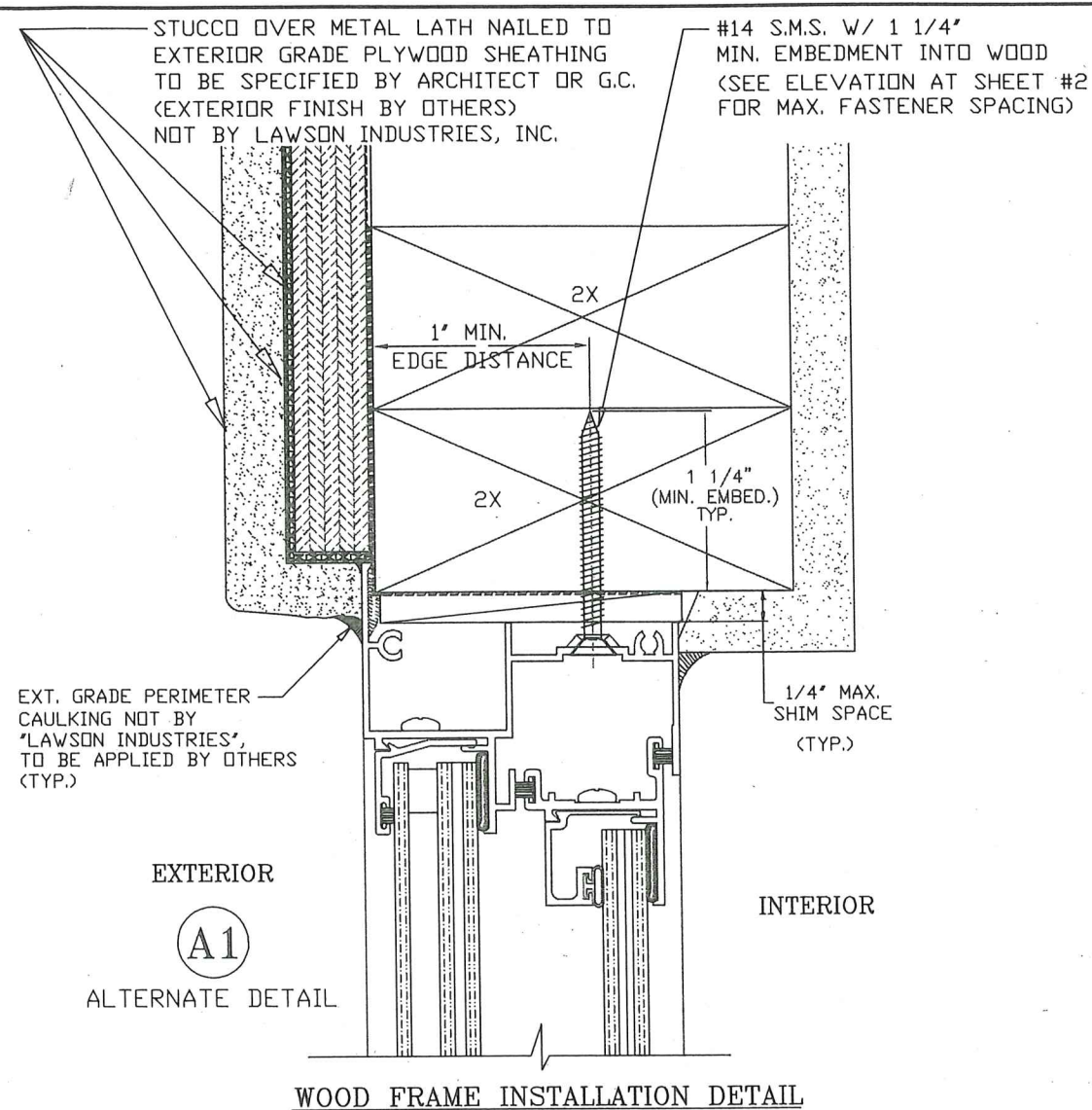
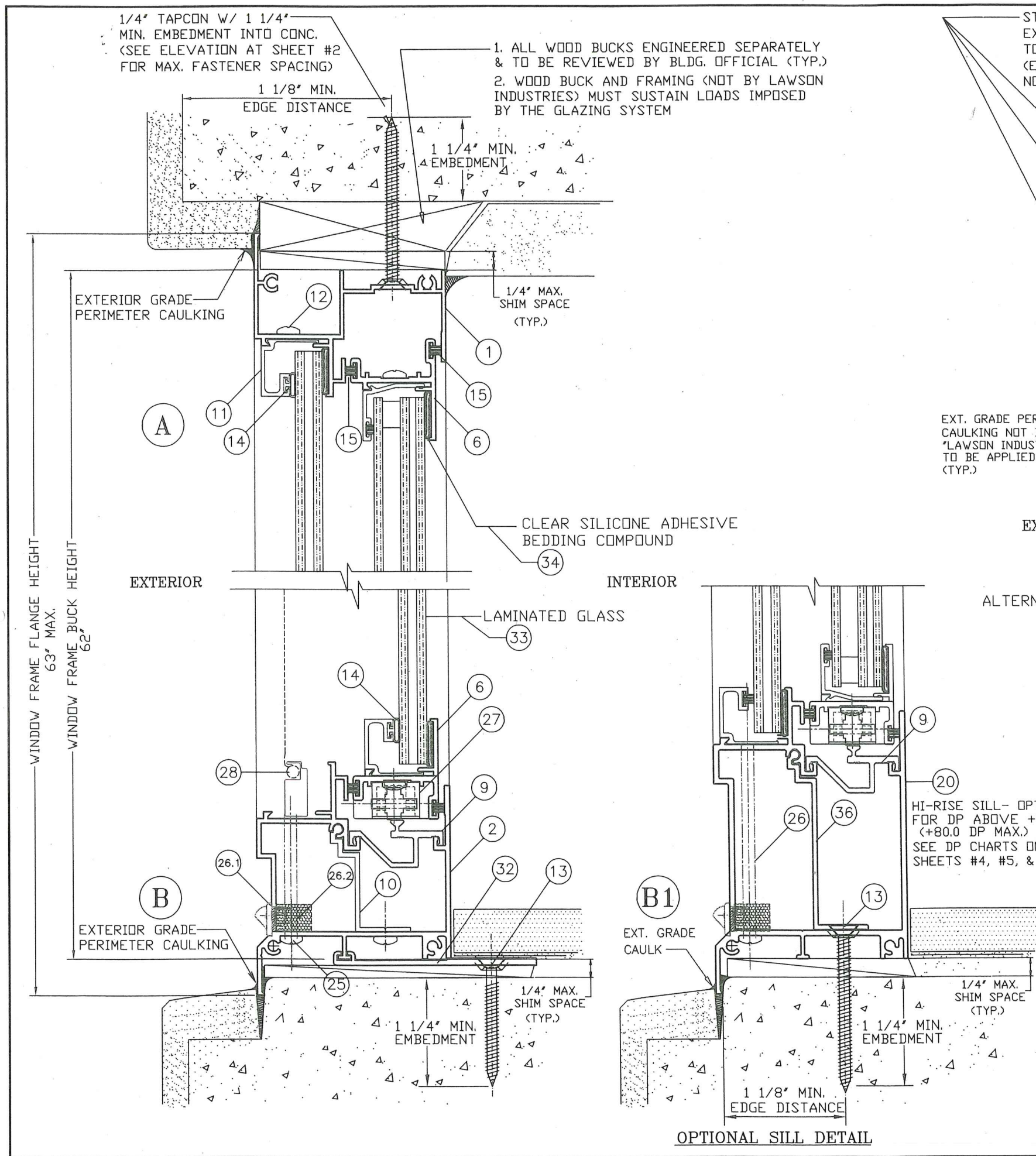
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **22-0118.01**  
Expiration Date: **04/11/2027**  
By: *Manuel Perez*  
Miami-Dade Product Control

THOMAS J. SOTOS  
PROFESSIONAL ENGINEER  
FL LIC. # 55225



DATE





#### WINDOW INSTALLATION NOTES:

1. THE WINDOW FRAME FLANGE TO BE BACK-BEDDED W/ AN EXT. GRADE CAULK THROUGHOUT THE ENTIRE PERIMETER OF FLANGE BY WINDOW INSTALLER (TYP.)
2. THE EXPOSED EXT. PERIMETER OF THE WINDOW FRAME TO BE SEALED W/ AN APPROVED EXTERIOR GRADE CAULK BY OTHERS (TYP.)

\* WHEN THE GAP BETWEEN THE WINDOW FRAME AND THE BUCK OR MASONRY IS LESS THAN 1/8", SHIMS ARE NOT REQUIRED.

#### ANCHORS NOTE:

ANCHORS TO BE #12 SMS OR WD. SCREWS INTO WOOD, OR 1/4" TAPCONS or APPROVED CONC. FASTENERS INTO CONC., WITH A MINIMUM OF 1 1/4" PENETRATION INTO WOOD OR CONC. (REFER TO LOAD TABLES FOR QUANTITIES REQUIRED)

**PRODUCT REVISED**  
as complying with the Florida Building Code  
**NOA-No. 22-0118.01**  
**Expiration Date: 04/11/2027**  
By: *Manuel Fern*  
Miami Dade Product Control

8501 N.W. 90 ST.  
MEDLEY, FLORIDA 33166  
PH No. (305) 696-8660

**LAWSON**  
INDUSTRIES, INC.

MANUFACTURER OF QUALITY ALUMINUM WINDOWS AND GLASS DOORS

HS-8700 HORIZONTAL ROLLING FLANGE WINDOW

WINDOW VERTICAL CROSS SECTION & INSTALLATION OPTIONAL DETAILS

Revision Notes:  
C. Compliance w/ FBC 5th Edition (2014) and ASTM E1300-09  
D. Compliance w/ FBC 6th Edition (2017)  
E. Added new Hi Sill w/ new Track  
F. Compliance w/ FBC 7th Edition (2020)  
G. Added Max. "XO or OX" Size: 74" x 74 1/4"

Drawn By: N. ERAZO  
Revised By: N. ERAZO  
Revision Level: G

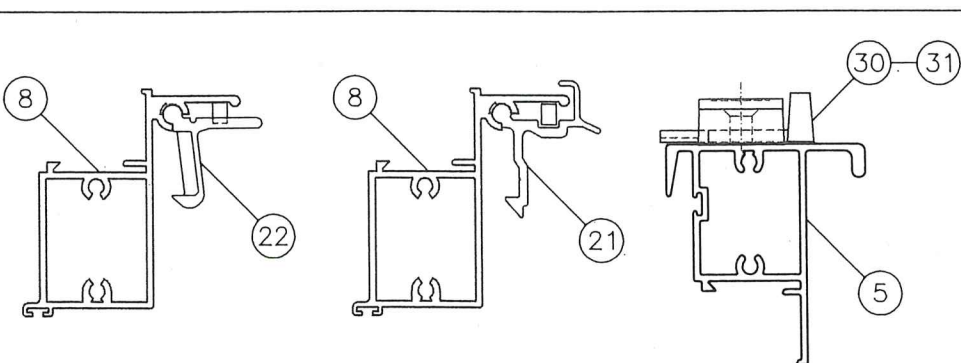
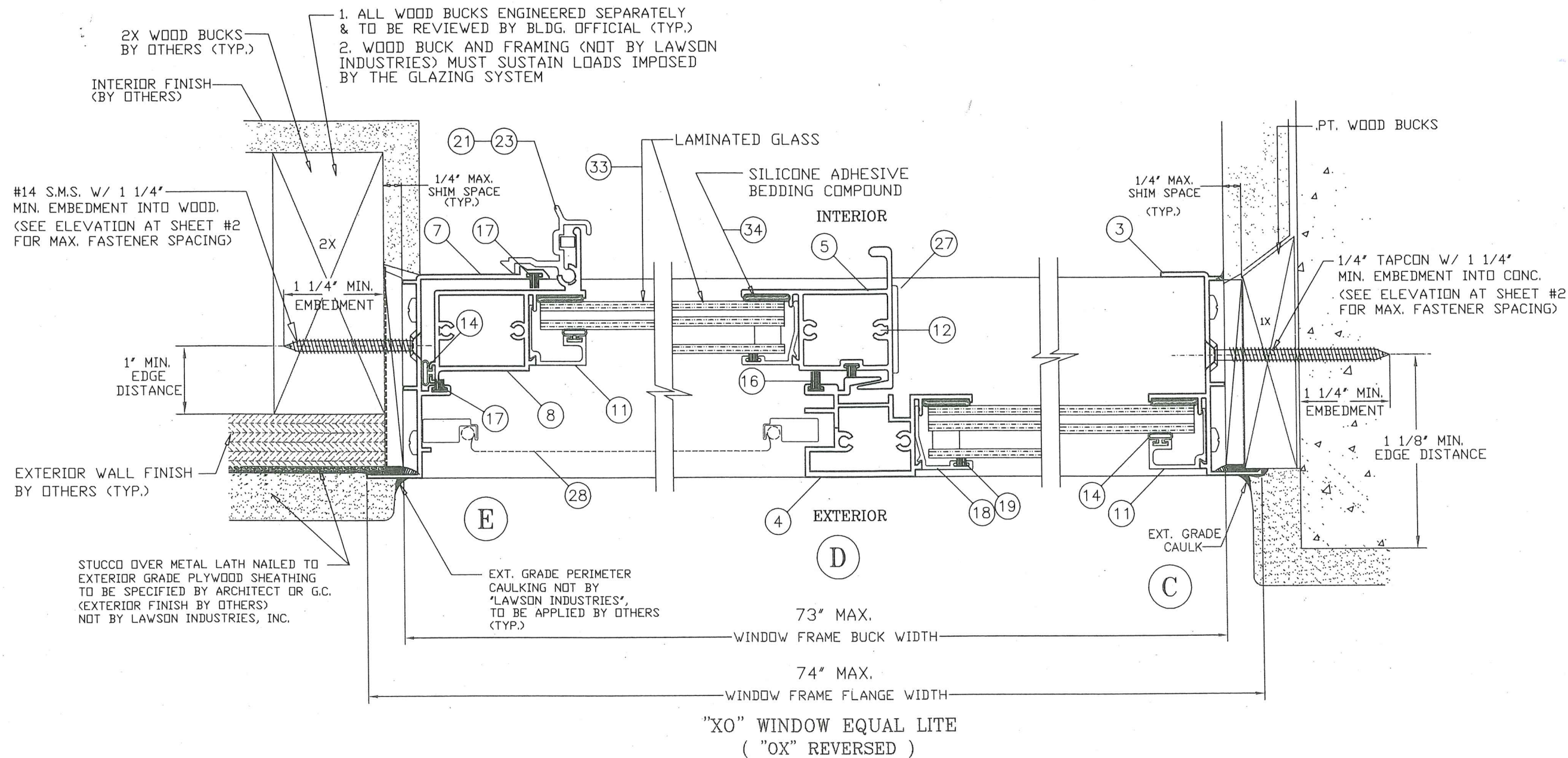
Product Reference Number: 18700-0901  
Sheet: 3 OF 10  
Revision #: 12

THOMAS J. SOTOS  
PROFESSIONAL ENGINEER  
FL LIC. # 55225



DATE





### LOCK (LATCH AND SWEEP) OPTIONS

1. BOTH EXTRUDED ALUMINUM AND PLASTIC LIFT HANDLE LOCKS ARE QUALIFIED FOR USE ON ALL WINDOWS.
2. BOTH DIE CAST AND NYLON CAM LOCKS ARE QUALIFIED FOR USE ON ALL WINDOWS.
3. TWO (2) LOCKS ARE REQUIRED PER EACH VENT.

### WINDOW INSTALLATION NOTES:

1. THE WINDOW FRAME FLANGE TO BE BACK-BEDDED W/ AN EXT. GRADE CAULK THROUGHOUT THE ENTIRE PERIMETER OF FLANGE BY WINDOW INSTALLER (TYP.)
2. THE EXPOSED EXT. PERIMETER OF THE WINDOW FRAME TO BE SEALED W/ AN APPROVED EXTERIOR GRADE CAULK BY OTHERS (TYP.)

\* WHEN THE GAP BETWEEN THE WINDOW FRAME AND THE BUCK OR MASONRY IS LESS THAN 1/8", SHIMS ARE NOT REQUIRED.

### ANCHORS NOTE:

ANCHORS TO BE #12 SMS OR WD. SCREWS INTO WOOD, OR 1/4" TAPCONS OR APPROVED CONC. FASTENERS INTO CONC., WITH A MINIMUM OF 1 1/4" PENETRATION INTO WOOD OR CONC. (REFER TO LOAD TABLES FOR QUANTITIES REQUIRED)

**LAWSON**  
INDUSTRIES, INC.

8501 N.W. 90 ST.  
MEDLEY, FLORIDA 33166  
PH No. (305) 696-8660

MANUFACTURER OF QUALITY ALUMINUM WINDOWS AND GLASS DOORS

HS-8700 HORIZONTAL ROLLING FLANGE IMPACT WINDOW  
CROSS SECTION DETAILS, LOCK OPTIONS AND FRAME INSTALLATION DETAIL

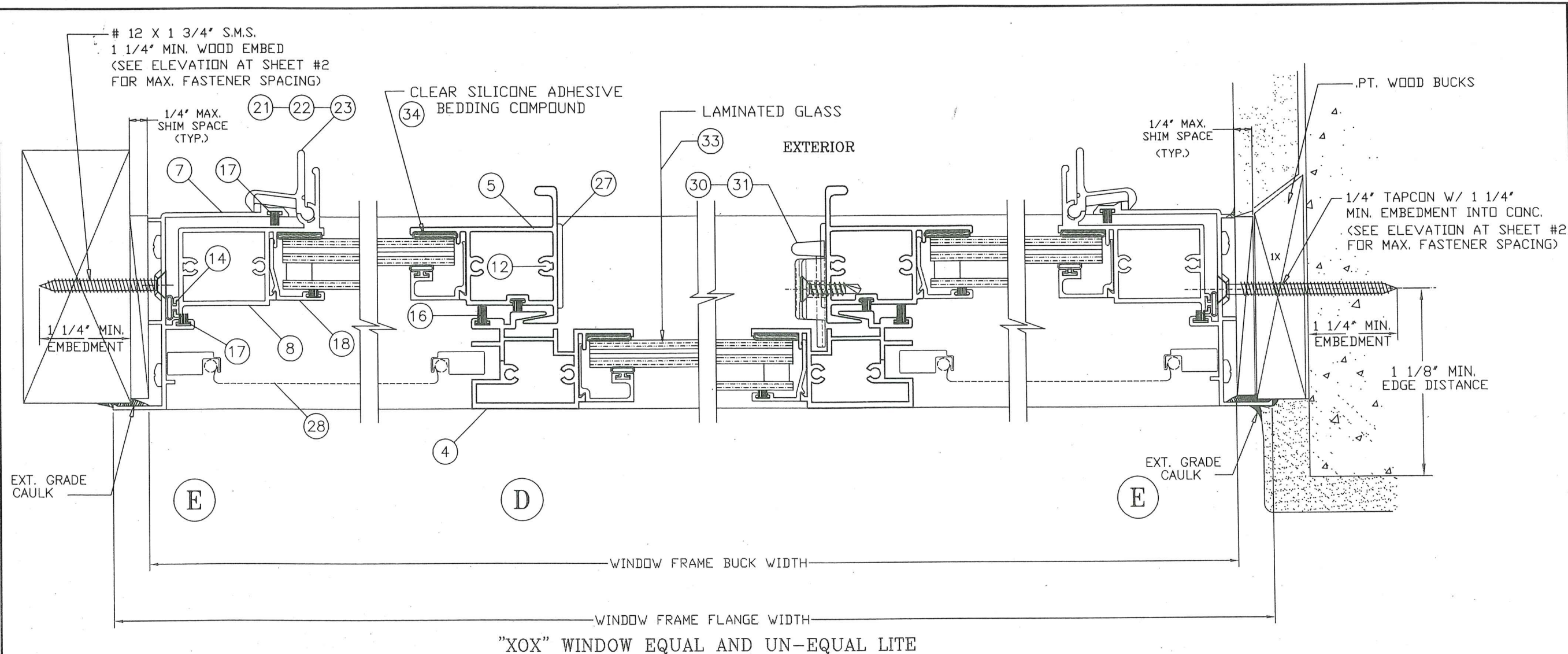
Revision Notes:	C. Compliance w/ FBC 5th Edition (2014) and ASTM E1300-09	Date Drawn: 05/30/09
	D. Compliance w/ FBC 6th Edition (2017)	Date Revised: 01/07/22
	E. Added new HI Sill w/ new Track	Scale: G
	F. Compliance w/ FBC 7th Edition (2020)	
	G. Added Max. "XO" or "OX" Size: 74" x 74 1/4"	
Drawn By:	N. BRAZO	
Revised By:	N. BRAZO	
Revision Level:	G	

THOMAS J. SOTOS  
PROFESSIONAL ENGINEER  
FL LIC. # 55225



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Expiration Date: **04/11/2027**  
By: *Manuel Fern*  
Miami Dade Product Control





"XOX" WINDOW EQUAL AND UN-EQUAL LITE

#### WINDOW INSTALLATION NOTES:

1. THE WINDOW FRAME FLANGE TO BE BACK-BEDDED W/ AN EXT. GRADE CAULK THROUGHOUT THE ENTIRE PERIMETER OF FLANGE BY WINDOW INSTALLER (TYP.)
2. THE EXPOSED EXT. PERIMETER OF THE WINDOW FRAME TO BE SEALED W/ AN APPROVED EXTERIOR GRADE CAULK BY OTHERS (TYP.)

\* WHEN THE GAP BETWEEN THE WINDOW FRAME AND THE BUCK OR MASONRY IS LESS THAN 1/8", SHIMS ARE NOT REQUIRED.

#### ANCHORS NOTE:

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Revision Notes:		C. Compliance w/ FBC 5th Edition (2014) and ASTM E1300-09	D. Compliance w/ FBC 6th Edition (2017)	E. Added new Hi Sill w/ new Track	F. Compliance w/ FBC 7th Edition (2020)	G. Added Max "XO or OX" Size: 74" x 74 1/4"	Date Drawn: 05/30/09	Date Revised: 01/07/22	Scale:
Drawn By:	N. ERAZO								
Revised By:	N. ERAZO								
Revision Level:	G								

THOMAS J. SOTOS  
PROFESSIONAL ENGINEER  
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NOA-No. **22-0118.01**  
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Miami-Dade Product Control

DATE

**LAWSON**  
INDUSTRIES, INC.

MANUFACTURER OF QUALITY ALUMINUM WINDOWS AND GLASS DOORS

HS-8700 HORIZONTAL ROLLING FLANGE IMPACT WINDOW  
CROSS SECTION DETAILS, LOCK OPTIONS AND FRAME INSTALLATION DETAIL

8501 N.W. 90 ST.  
MEDLEY, FLORIDA 33166  
PH No. (305) 696-8660

Product Reference Number: L8700-0901 Sheet: 5 OF 10 Revision #: 12/20/22



DESIGN LOAD CAPACITY (PSF) - OX or XO WINDOWS																	
WINDOW		# Jamb Anchors	# H & S Anchors	+ / - Pressures (psf)													
				Glass Type "A" (* 2)		Glass Type "B" (* 2)		Glass Type "C" (* 2)		Glass Type "D" (* 2)		Glass Type "E" (* 3)		Glass Type "F" (* 3)		Glass Type "H" (* 2)	
				+ psf	- psf	+ psf	- psf	+ psf	- psf	+ psf	- psf	+ psf	- psf	+ psf	- psf	+ psf	- psf
24	24	3	3	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
36	24	3	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
48	24	3	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
60	24	3	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
72	24	3	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
24	36	3	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
36	36	3	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
48	36	3	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
60	36	3	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
72	36	3	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
24	48	4	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
36	48	4	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
48	48	4	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
60	48	4	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
72	48	4	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
24	60	5	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
36	60	5	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
48	60	5	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
60	60	5	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
72	60	5	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
24	72	5	4	-	-	-	-	-	-	60.0	60.0	60.0	60.0	-	-	60.0	60.0
36	72	5	4	-	-	-	-	-	-	60.0	60.0	60.0	60.0	-	-	60.0	60.0
48	72	5	6	-	-	-	-	-	-	60.0	60.0	60.0	60.0	-	-	60.0	60.0
60	72	5	6	-	-	-	-	-	-	60.0	60.0	60.0	60.0	-	-	60.0	60.0
72	72	5	6	-	-	-	-	-	-	60.0	60.0	60.0	60.0	-	-	60.0	60.0
26.5	26	3	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
37	26	3	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
53.125	26	3	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
74	26	3	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
26.5	38.375	4	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
37	38.375	4	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
53.125	38.375	4	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
74	38.375	4	8	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
26.5	50.625	5	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
37	50.625	5	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
53.125	50.625	5	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
74	50.625	5	8	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
26.5	58	5	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
37	58	5	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
53.125	58	5	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
74	58	5	8	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
26.5	63	6	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
37	63	6	4	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
53.125	63	6	6	65.0	65.0	65.0	65.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	60.0	60.0
74	63	6	6	65.0	65.0	65.0	65.0	70.0	70.0	-	-	-	-	-	-	60.0	60.0
26.5	74 1/4	6	4	-	-	-	-	-	-	60.0	60.0	60.0	60.0	-	-	60.0	60.0
37	74 1/4	6	4	-	-	-	-	-	-	60.0	60.0	60.0	60.0	-	-	60.0	60.0
53.125	74 1/4	6	6	-	-	-	-	-	-	60.0	60.0	60.0	60.0	-	-	60.0	60.0
74	74 1/4	6	6	-	-	-	-	-	-	60.0	60.0	60.0	60.0	-	-	60.0	60.0

8501 N.W. 90 ST.  
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LAWSON  
INDUSTRIES, INC.

MANUFACTURER OF QUALITY ALUMINUM WINDOWS AND GLASS DOORS

HS-8700 HORIZONTAL ROLLING FLANGE IMPACT WINDOW

DESIGN LOAD CHART WITH GLASS OPTIONS (XO or OX)

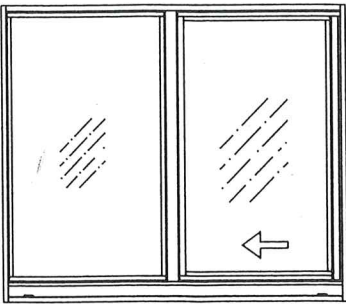
Product Reference Number: L8700-0901

Drawing Number: 6 OF 10

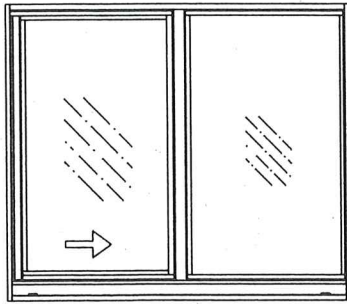
Revision #:

Revision Notes:	C. Compliance w/ FBC 5th Edition (2014) and ASTM E1300-09	D. Compliance w/ FBC 6th Edition (2017)	E. Added new Hi Sill w/ new Track	F. Compliance w/ FBC 7th Edition (2020)	G. Added Max. XO or OX Size: 74" x 74 1/4"	Date Drawn: 05/30/09	Date Revised: 01/07/22	Scale:
Drawn By:	N. ERAZO							
Revised By:	N. ERAZO							
Revision Level:	G							

- Notes (\*):
- SEE SHEET 9 FOR GLAZING TYPES, DETAILS & SILICONE OPTIONS.
  - STANDARD SILL USED ON WINDOWS WITH +70.0 DP AND BELOW (WINDOWS WITH GLASS TYPES "A, B, C, D & H")
  - HI RISE SILL ARE FOR WINDOWS ABOVE +70.0 DP (WINDOWS WITH GLASS TYPES "E, & F") AND +80.0 DP MAX. SEE HI RISE SILL DETAIL "B1" AT SHEET 3 OF 10.
  - ADDITIONAL ANCHORS REQUIRED AT FRAME HEAD & SILL ON WINDOWS WITH DP ABOVE 70.0. (SEE ELEVATION AT SHEET 2 OF 10)
  - WINDOWS WITH GLASS TYPES "A, C, OR G" INSTALLED ABOVE 30FT. IN THE HVHZ, THE I.G. EXTERIOR LITE SHALL BE TEMPERED.



OX



XO

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **22-0118.01**  
Expiration Date: **04/11/2027**  
By: *Manuel Fern*  
Miami Dade Product Control

THOMAS J. SOTOS  
PROFESSIONAL ENGINEER  
FL LIC. # 55225



DATE



				DESIGN LOAD CAPACITY (PSF) - XOX WINDOWS with Un-Equal Lite (1/4-1/2-1/4)											
				+ / - Pressures (psf)											
FRAME SIZE		# Jamb Anchors	# H & S Anchors	Glass Type "B" (* 2)		Glass Type "C" (* 2)		Glass Type "D" (* 2)		Glass Type "E" (* 3)		Glass Type "F" (* 3)		Glass Type "G" (* 2)	
WIDTH	HEIGHT			+ psf	- psf	+ psf	- psf	+ psf	- psf	+ psf	- psf	+ psf	- psf	+ psf	- psf
60	24	3	7	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
72	24	3	7	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	24	3	8	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
96	24	3	10	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
108	24	3	11	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
60	36	3	7	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
72	36	3	7	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	36	3	8	70.0	75.0	70.0	75.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
96	36	3	10	70.0	75.0	70.0	75.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
108	36	3	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
60	48	4	7	70.0	75.0	70.0	75.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
72	48	4	7	70.0	75.0	70.0	75.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	48	4	8	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
96	48	4	10	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
108	48	4	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
60	60	5	7	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
72	60	5	7	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	60	5	8	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
96	60	5	10	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
108	60	5	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
74	26	3	7	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
74	38.375	3	7	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
74	50.625	4	7	70.0	75.0	70.0	75.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
74	58	5	7	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
74	63	5	7	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
79.5	26	3	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
79.5	38.375	4	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
79.5	50.625	4	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
79.5	58	5	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
79.5	63	5	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
106.25	26	3	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
106.25	38.375	4	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
106.25	50.625	4	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
106.25	58	5	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
106.25	63	5	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
111	26	3	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
111	38.375	4	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
111	50.625	4	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
111	58	5	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
111	63	5	11	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0

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LAWSON

INDUSTRIES, INC.

MANUFACTURER OF QUALITY ALUMINUM WINDOWS AND GLASS DOORS  
HS-8700 HORIZONTAL ROLLING FLANGE IMPACT WINDOW  
DESIGN LOAD CHART WITH GLASS OPTIONS (XOX EQUAL LITE)

Revision #:

7 OF 10

Sheet:

7 OF 10

Drawing Number:

LB700-0901

Product Reference Number:

Revision Notes:

C. Compliance w/ FBC 5th Edition (2014) and ASTM E1300-09  
D. Compliance w/ FBC 6th Edition (2017)  
E. Added new Hi Sill w/ new Track  
F. Compliance w/ FBC 7th Edition (2020)  
G. Added Max. XO or OX Size: 74" x 74 1/4"

Date Drawn:

05/30/09

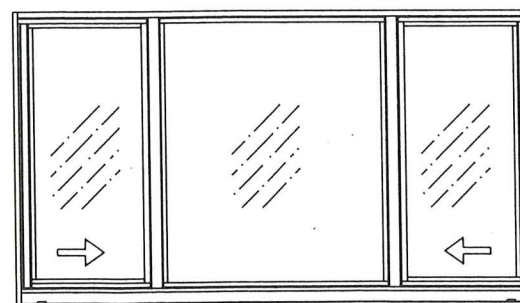
Date Revised:

01/07/22

Scale:

G

- Notes (\*):
- SEE SHEET 9 FOR GLAZING TYPES, DETAILS & SILICONE OPTIONS.
  - STANDARD SILL USED ON WINDOWS WITH +70.0 DP AND BELOW (WINDOWS WITH GLASS TYPES "A, B, C, & D")
  - HI RISE SILL ARE FOR WINDOWS ABOVE +70.0 DP (WINDOWS WITH GLASS TYPES "E, & F") AND +80.0 DP MAX. SEE HI RISE SILL DETAIL "B1" AT SHEET 3 OF 10.
  - ADDITIONAL ANCHORS REQUIRED AT FRAME HEAD & SILL ON WINDOWS WITH DP ABOVE 70.0. (SEE ELEVATION AT SHEET 2 OF 10)
  - WINDOWS WITH GLASS TYPES "A, C, OR G" INSTALLED ABOVE 30FT. IN THE HVHZ, THE I.G. EXTERIOR LITE SHALL BE TEMPERED.



XOX - Un-Equal Lite

**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. **22-0118.01**  
Expiration Date: **04/11/2027**  
By: *Manuel Fern*  
Miami-Dade Product Control

THOMAS J. SOTOS  
PROFESSIONAL ENGINEER  
FL LIC. # 55225



DATE: 12 Jan 23



				DESIGN LOAD CAPACITY (PSF) - XOX WINDOWS with Equal Lite (1/3-1/3-1/3)											
				+ / - Pressures (psf)											
FRAME SIZE		# Jamb Anchors	# H & S Anchors	Glass Type "B" (* 2)		Glass Type "C" (* 2)		Glass Type "D" (* 2)		Glass Type "E" (* 3)		Glass Type "F" (* 3)		Glass Type "G" (* 2)	
WIDTH	HEIGHT			+ psf	- psf	+ psf	- psf	+ psf	- psf	+ psf	- psf	+ psf	- psf	+ psf	- psf
60	24	3	7	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
72	24	3	9	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	24	3	9	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
60	36	3	7	70.0	75.0	70.0	75.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
72	36	3	9	70.0	75.0	70.0	75.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	36	3	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
60	48	4	7	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
72	48	4	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	48	4	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
60	60	5	7	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
72	60	5	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	60	5	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
53.125	26	3	6	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
53.125	38.375	4	6	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
53.125	50.625	4	6	70.0	75.0	70.0	75.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
53.125	58	5	6	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
53.125	63	5	6	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
74	26	3	9	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
74	38.375	4	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
74	50.625	4	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
74	58	5	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
74	63	5	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
79.5	26	3	9	80.0	80.0	80.0	80.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
79.5	38.375	4	9	70.0	75.0	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
79.5	50.625	4	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
79.5	58	5	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
79.5	63	5	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	26	3	9	70.0	75.0	70.0	75.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	38.375	4	9	70.0	75.0	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	50.625	4	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	58	5	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0
84	63	5	9	-	-	52.0	52.0	65.0	75.0	65.0	75.0	52.0	52.0	65.0	75.0

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INDUSTRIES, INC.

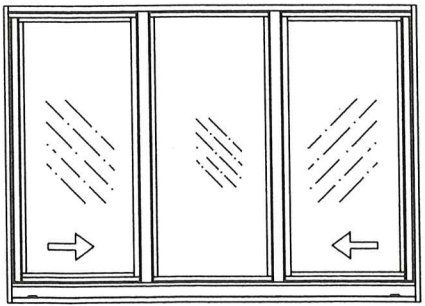
MANUFACTURER OF QUALITY ALUMINUM WINDOWS AND GLASS DOORS  
HS-8700 HORIZONTAL ROLLING FLANGE IMPACT WINDOW  
DESIGN LOAD CHART WITH GLASS OPTIONS (XOX UN-EQUAL LITE)

Revision Notes:  
C. Compliance w/ FBC 5th Edition (2014) and ASTM E1300-09  
D. Compliance w/ FBC 6th Edition (2017)  
E. Added new Hi Sill w/ new Track  
F. Compliance w/ FBC 7th Edition (2020)  
G. Added Max "XO or OX" Size: 74" x 74 1/4"

Drawn By: N. ERAZO  
Revised By: N. ERAZO  
Revision Level: G  
Date Drawn: 05/30/09  
Date Revised: 01/07/22  
Scale: 1/8" = 1'-0"

Product Reference Number: 18700-0901  
Sheet: 8 OF 10  
Revision #: 1

- Notes (\*):
- SEE SHEET 9 FOR GLAZING TYPES, DETAILS & SILICONE OPTIONS.
  - STANDARD SILL USED ON WINDOWS WITH +70.0 DP AND BELOW (WINDOWS WITH GLASS TYPES "A, B, C, & D")
  - HI RISE SILL ARE FOR WINDOWS ABOVE +70.0 DP (WINDOWS WITH GLASS TYPES "E, & F") AND +80.0 DP MAX. SEE HI RISE SILL DETAIL "B1" AT SHEET 3 OF 10.
  - ADDITIONAL ANCHORS REQUIRED AT FRAME HEAD & SILL ON WINDOWS WITH DP ABOVE 70.0. (SEE ELEVATION AT SHEET 2 OF 10)
  - WINDOWS WITH GLASS TYPES "A, C, OR G" INSTALLED ABOVE 30FT. IN THE HVHZ, THE I.G. EXTERIOR LITE SHALL BE TEMPERED.



XOX -Equal Lite

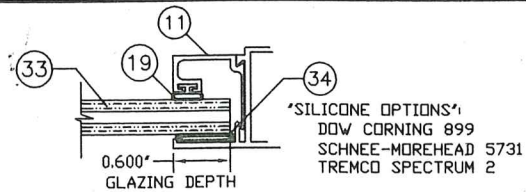
**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. **22-0118.01**  
Expiration Date: **04/11/2027**  
By: *Manuel Fern*  
Miami-Dade Product Control

THOMAS J. SOTOS  
PROFESSIONAL ENGINEER  
FL LIC. # 55225



DATE



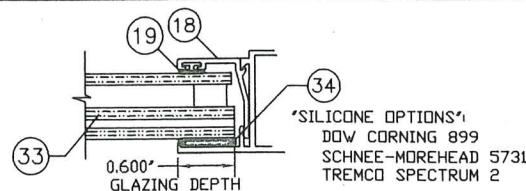


LAMINATED GLASS COMPOSITION - TYPE B			
ITEM	GLASS DESCRIPTION	DETAIL	LAMINATE DESCRIPTION
1	1/8" ANNEALED GLASS		SAFLEX PVB by Eastman Chemical co.
2	0.090" PLASTIC INTERLAYER		
3	1/8" ANNEALED GLASS		

LAMINATED GLASS COMPOSITION - TYPE D			
ITEM	GLASS DESCRIPTION	DETAIL	LAMINATE DESCRIPTION
1	1/8" HEAT-STRENGTHENED GLASS		TROSIFOL PVB by Kuraray America, Inc.
2	0.090" PLASTIC INTERLAYER		
3	1/8" HEAT-STRENGTHENED GLASS		

LAMINATED GLASS COMPOSITION - TYPE E			
ITEM	GLASS DESCRIPTION	DETAIL	LAMINATE DESCRIPTION
1	1/8" HEAT-STRENGTHENED GLASS		SAFLEX PVB by Eastman Chemical co.
2	0.090" PLASTIC INTERLAYER		
3	1/8" HEAT-STRENGTHENED GLASS		

LAMINATED GLASS COMPOSITION - TYPE F			
ITEM	GLASS DESCRIPTION	DETAIL	LAMINATE DESCRIPTION
1	1/8" ANNEALED GLASS		TROSIFOL PVB by Kuraray America, Inc.
2	0.090" PLASTIC INTERLAYER		
3	1/8" ANNEALED GLASS		



INSULATED LAMINATED GLASS COMPOSITION TYPE A			
ITEM	GLASS DESCRIPTION	DETAIL	LAMINATE DESCRIPTION
1	1/8" ANNEALED GLASS		SAFLEX PVB by Eastman Chemical co.
2	0.090" PLASTIC INTERLAYER		
3	1/8" ANNEALED GLASS		
4	1/4" INSULATED AIR SPACE		
5	1/8" ANNEALED GLASS (*)		

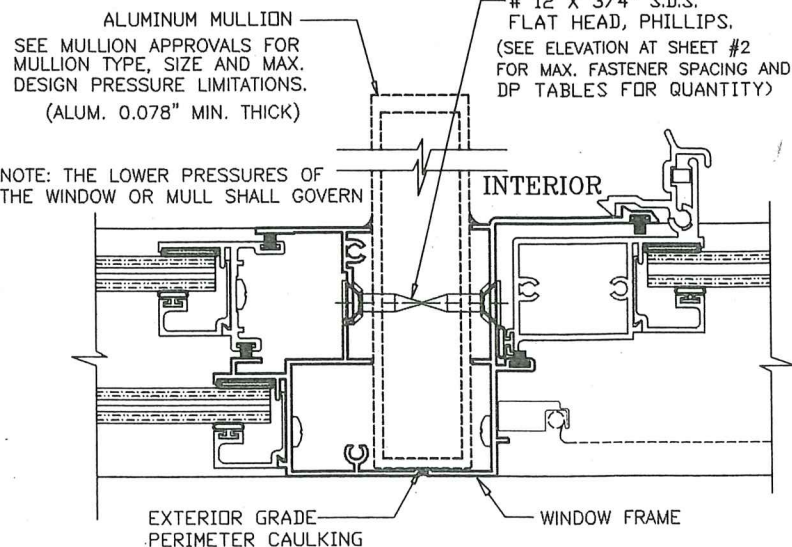
INSULATED LAMINATED GLASS COMPOSITION TYPE C			
ITEM	GLASS DESCRIPTION	DETAIL	LAMINATE DESCRIPTION
1	1/8" ANNEALED GLASS		TROSIFOL PVB by Kuraray America, Inc.
2	0.090" PLASTIC INTERLAYER		
3	1/8" ANNEALED GLASS		
4	1/4" INSULATED AIR SPACE		
5	1/8" ANNEALED GLASS (*)		

INSULATED LAMINATED GLASS COMPOSITION TYPE G			
ITEM	GLASS DESCRIPTION	DETAIL	LAMINATE DESCRIPTION
1	1/8" HEAT-STRENGTHENED GLASS		TROSIFOL PVB by Kuraray America, Inc.
2	0.090" PLASTIC INTERLAYER		
3	1/8" HEAT-STRENGTHENED GLASS		
4	1/4" INSULATED AIR SPACE		
5	1/8" ANNEALED GLASS (*)		

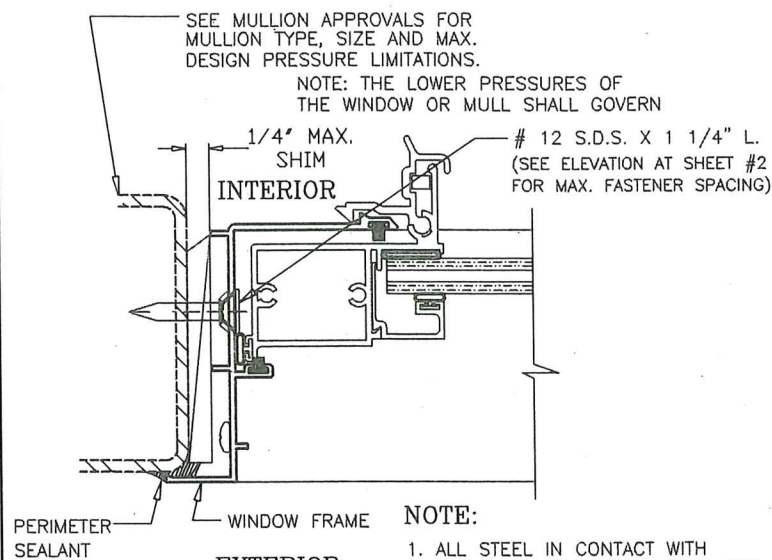
(\*) WINDOWS WITH GLASS TYPES 'A, C, OR G' INSTALLED ABOVE 30FT. IN THE HVHZ, THE I.G. EXTERIOR LITE SHALL BE TEMPERED.

INSULATED LAMINATED GLASS COMPOSITION TYPE H			
ITEM	GLASS DESCRIPTION	DETAIL	LAMINATE DESCRIPTION
1	1/8" HEAT-STRENGTHENED GLASS		TROSIFOL PVB by Kuraray America, Inc.
2	0.090" PLASTIC INTERLAYER		
3	1/8" HEAT-STRENGTHENED GLASS		
4	1/4" INSULATED AIR SPACE		
5	1/8" TEMPERED GLASS		

## GLAZING DETAILS AND OPTIONS



## E2 FRAME MULLING DETAIL



## E1 METAL STRUCTURE ATTACHMENT DETAIL

- NOTE:
1. ALL STEEL IN CONTACT WITH ALUM. TO BE PAINTED OR PLATED.
  2. METAL STRUCTURES:  
A) STEEL : Fy = 36 KSI MIN.  
(STEEL 18 GA. MIN. THICK - 0.048")  
B) ALUMINUM : 6063-T5 MIN.  
(ALUM. 0.078" MIN. THICK)

HS-8700 FLANGE FRAME WINDOW BILL OF MATERIALS				
ITEM #	PART #	REQD.	DESCRIPTION	REMARKS
1	L-7703	1	FRAME HEAD	6063-T6 ALUMINUM
2	L-8701	1	FRAME SILL	6063-T6 ALUMINUM
3	L-7701	1	FRAME FXD. JAMB	6063-T6 ALUMINUM
4	L-7704	1	FRAME FIXED MEETING RAIL	6063-T6 ALUMINUM
5	L-7705	1	VENT MEETING RAIL	6063-T6 ALUMINUM
6	L-7707	1	VENT TOP/BOTTOM RAIL	6063-T6 ALUMINUM
7	L-8703	1	FRAME VENT JAMB	6063-T6 ALUMINUM
8	L-7706	1	VENT JAMB LATCH RAIL	6063-T6 ALUMINUM
9	L-8702	1	FRAME SILL TRACK	6063-T5 ALUMINUM
10	L-8705	1	FRAME SILL RETAINING CLIP	6063-T5 ALUMINUM
11	L-7708	AS REQ'D.	GLAZING BEAD ( 3/8" )	6063-T5 ALUMINUM
12	FS-006	AS REQ'D.	FRAME ASSEMBLY SCREWS	#8 X 3/4" P.H. PHILLIPS
13	FS-040	AS REQ'D.	INSTALLATION SCREWS	#14 SMS F.H./PHIL.
14	L-7531	AS REQ'D.	VINYL BULB	1/4" DIA. BULB #3033
15	PWS-003	AS REQ'D.	FIN SEAL WEATHERSTRIP	.187" w x .230" h
16	PWS-005	AS REQ'D.	FIN SEAL WEATHERSTRIP	.187" w x .350" h
17	PWS-009	AS REQ'D.	FIN SEAL WEATHERSTRIP	.187" w x .310" h
18	L-7711	AS REQ'D.	GLAZING BEAD ( INSULATED )	6063-T5 ALUMINUM
19	PWS-001	AS REQ'D.	PILE @ GLAZING BEAD	.187" w x .150" h
20	*	*	*	*
21	L-7539	2	VENT EXTRUDED SPRING LATCH	6063-T5 ALUMINUM
22	HC-057-1	2	VENT MOLDED SPRING LATCH	MOLDED NYLON
23	L-7523	1 X LATCH	LATCH SPRING	STAINLESS STEEL
24	*	2	SILL/JAMB JOINT GASKET	1/16" CLOSED CELL FOAM
25	FS-041	2	SILL RAIL ASSEMBLY SCREW	#8 X 2 1/4" P.H./PHIL.
26.1	HC-044-1	2	WEEP FLAP & BAFFLE	*
26.2	HC-	1 X WEEP	OPEN CELL FOAM PAD	1/2" X 1/2" X 2" L.
27	HC-040-1	2	SASH ROLLER & HOUSING	*
28	HC-026-1	1	SCREEN FRAME & MESH	*
29	*	1	ATTACHMENT SCREW @ CLIP	#8 X 5/8" S.D.S.
30	HC-058-1	2	VENT SWEEP LATCH	MOLDED NYLON
31	HC-059-1	2	VENT SWEEP LATCH	DIE CAST METAL
32	L-8830	1 X Anchor	FRAME SILL ANCHOR CLIP	6063-T5 ALUMINUM
33	*	2	LAMINATED GLASS	See Details @ L.H. of sheet 9
34	*	AS REQ'D.	GLAZING SILICONE	See Details @ L.H. of sheet 9
35	L-8301	1	FRAME SILL	6063-T6 ALUMINUM
36	L-8302	1	FRAME SILL RETAINING CLIP	6063-T5 ALUMINUM
37	OPTIONAL	AS REQ'D.	COLONIAL FALSE MUNTIN	ALUMINUM
38	SM-5504	AS REQ'D.	JOINT SEALANT	*
39	*	AS REQ'D.	PERIMETER ACRYLIC CAULK	OSI POLYSEAMSEAL

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INDUSTRIES, INC.

MANUFACTURER OF QUALITY ALUMINUM WINDOWS AND GLASS DOORS

SERIES-8700 HORIZONTAL ROLLING FLANGE IMPACT WINDOW

GLAZING DETAILS, MULLION DETAILS & BILL OF MATERIALS

Revision #:

Sheet

9 OF 10

Drawing Number:

Product Reference Number:

G

Revision Notes:

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G. Added Max. "XO or OX" Size: 74" x 74 1/4"

Date Drawn: 05/30/08

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Scale:

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