

# 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/buiding

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

### **NOTICE OF ACCEPTANCE (NOA)**

WinDoor, Inc. 104 Triple Diamond Blvd. North Venice, FL 34275

#### 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 "9470 Thermally Broken" Aluminum Horizontal Rolling Window - L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **9470-LMI-NOA**, titled "Thermally Broken Alum. Horiz. Roller (LM)" sheets 1 through 21 of 21, dated 08/12/20, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, 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, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

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

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 18-0116.23 and consists of this page 1 and evidence pages E-1, E-2, E-3, E-4 and E-5, as well as approval document mentioned above.

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

MIAMI-DADE COUNTY
APPROVED

NOA No. 20-0826.16 Expiration Date: March 09, 2022 Approval Date: November 05, 2020 Page 1

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

#### A. DRAWINGS

- 1. Manufacturer's die drawings and sections. (Submitted under NOA No. 16-0802.08)
- 2. Drawing No. **9470-NOA-LM**, titled "Series 9470 Thermally Broken Large Missile Impact Horizontal Roller Window" sheets 1 through 21 of 21, dated 02/24/17, with revision **A** dated 12/29/17, prepared by Turner Consulting and Engineering, Inc., signed and sealed by Lucas A. Turner, P.E.

(Submitted under NOA No. 18-0116.23)

#### 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, and TAS 202-94

along with marked-up drawings and installation diagram of 6 specimens, each consisting of a three-panel XOX configuration of an aluminum horizontal sliding window, prepared by National Certified Testing Laboratories, Inc., Test Report No. **NTCL-210-3985-01**, dated 08/25/15, signed and sealed by Gerald J. Ferrara, P.E.

(Submitted under NOA No. 16-0802.08)

- 2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202—94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) 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 6 specimens, each consisting of a three-panel XOX configuration of an aluminum horizontal sliding window, prepared by National Certified Testing Laboratories, Inc., Test Report No. **NTCL-210-3985-1B**, dated 08/25/15, with revision 1 dated 02/03/16, all signed and sealed by Gerard J. Ferrera, P.E.

(Submitted under NOA No. 16-0802.08)

- 3. 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

Manuel Perez, P.E.

Product Control Examiner NOA No. 20-0826.16

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)
- B. TESTS (CONTINUED)
  - 3. (CONTINUED)

6) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94 along with marked-up drawings and installation diagram of 4 specimens, each consisting of a three-panel XOX configuration of an aluminum horizontal sliding window, and 2 specimens, each consisting of a two-panel OX configuration of an aluminum horizontal sliding window, prepared by National Certified Testing Laboratories, Inc., Test Report No. NTCL-210-3985-02, dated 08/25/15, signed and sealed by Gerard J. Ferrera, P.E.

# (Submitted under NOA No. 16-0802.08)

- **4.** 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, and TAS 202-94

along with marked-up drawings and installation diagram of 4 specimens, each consisting of a three-panel XOX configuration of an aluminum horizontal sliding window, prepared by National Certified Testing Laboratories, Inc., Test Report No. NTCL-210-3985-2B, dated 08/25/15, signed and sealed by Gerard J. Ferrera, P.E. (Submitted under NOA No. 16-0802.08)

5. Test report on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94 along with marked-up drawings and installation diagram of one two-panel OX configuration of an aluminum horizontal sliding window, prepared by National Certified Testing Laboratories, Inc., Test Report No. NTCL-210-3985-06, dated 12/20/16, signed and sealed by Gerard J. Ferrera, P.E.

(Submitted under NOA No. 16-0802.08)

#### C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC 5<sup>th</sup> Edition (2014), dated 07/30/16 and revised on 02/03/17, prepared by Turner Engineering & Consulting, Inc., signed and sealed by Lucas A. Turner, P.E.
  - (Submitted under NOA No. 18-0116.23)
- 2. Glazing complies with ASTM E1300-09

#### D. OUALITY ASSURANCE

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

Manuel Perez, P.E. Product Control Examiner NOA No. 20-0826.16

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)
- E. MATERIAL CERTIFICATIONS
  - 1. Notice of Acceptance No. 17-0808.02 issued to Kuraray America, Inc. for their "SentryGlas® (Clear and White) Glass Interlayers" dated 01/18/18, expiring on 07/04/23.
  - 2. Notice of Acceptance No. 17-1114.14 issued to Kuraray America, Inc. for their "Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers", dated 01/18/18, expiring on 07/08/19.
  - 3. 0.500" (Length) by 0.26" (Height) by 0.0059" (Thickness) (12.5x6.6x0.15mm) Aluminum Low Profile Insulated-Glass spacer Helima AH 1256 N (P/N.: USA K 001 000 000 R7) with Aluminum Alloy AW-3000 (Ftu=17 ksi and Fty=12ksi) by Helmut Lingemann GmbH & Co., KG.
  - 4. 0.375" (Length) by 0.26" (Height) by 0.0059" (Thickness) (9.5x4.95x0.15mm) Aluminum Low Profile Insulated-Glass spacer Helima AH 956 N (P/N.: USA K 001 000 000 R7) with Aluminum Alloy AW-3000 (Ftu=17 ksi and Fty=12ksi) by Helmut Lingemann GmbH & Co., KG.
  - Test Report No. INT/ATI 60520.02-106-18R2, prepared by Intertek/Architectural Testing, Inc., dated 11/09/06, revised on 06/01/16, issued to Ensinger, Inc., for their Insulbar Tecatherm® 66 GF per ASTM D638-03 Tensile Strength of 13,031psi, ASTM D635-98 Rate of Burning Class CC1 <sup>3</sup>/<sub>4</sub>"/min. (19.1mm/min), ASTM D1929-96 Self Ignition 781°F (416°C), ASTM G 155 exposed per Xenon Arc after 4500 Hours irradiance level of 0.11 BTU/hr/ft<sup>2</sup> (0.35 W/m<sup>2</sup>) by 143°F (62°C) on 13-3/8" (340 mm) & ASTM D2843-99 Smoke Density of 1.63, signed and sealed by Joseph A. Reed, P.E.

#### F. STATEMENTS

- 1. Statement letter of conformance, complying with FBC 5<sup>th</sup> Edition (2014), with FBC 6<sup>th</sup> Edition (2017) and of no financial interest, dated March 08, 2018, issued by Turner Engineering & Consulting, Inc., signed and sealed by Lucas A. Turner, P.E. (Submitted under NOA No. 18-0116.23)
- 2. Laboratory compliance letter for Test Reports No. NCTL-210-3985-01, NCTL-210-3985-1B, NCTL-210-3985-02 and NCTL-210-3985-2B all dated 08/25/15, and NCTL-210-3985-06 dated 12/12/16, issued by National Certified Testing Laboratories, Inc., all signed and sealed by Gerard J. Ferrara, P.E. (Submitted under NOA No. 16-0802.08)

#### G. OTHERS

1. Notice of Acceptance No. **16-0802.08**, issued to WinDoor, Inc. for their Series "9470" Thermally Broken Horizontal Rolling Window - L.M.I. approved on 03/09/17 and expiring on 03/09/22.

Manuel Perez, P.E. Product Control Examiner NOA No. 20-0826.16

#### 2. NEW EVIDENCE SUBMITTED

#### A. DRAWINGS

1. Drawing No. 9470-LMI-NOA, titled "Thermally Broken Alum. Horiz. Roller (LM)", sheets 1 through 21 of 21, dated 08/12/20, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, 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 ASTM F588 and TAS 202-94

along with marked-up drawings and installation diagram of all PGT Industries, Inc., CGI Windows and Doors, Inc. and WinDoor, Inc. representative units listed below and tested to qualify **Dowsil 791** and **Dowsil 983** silicones, per Proposal #19-1155TP, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.:

### **PGT Industries, Inc. test specimens:**

FTL-7897, PGT PW5520 PVC Fixed Window (unit 6 in proposal), dated 09/03/14 FTL-20-2107.1, PGT SGD780 Aluminum Sliding Glass Door (unit 7 in proposal) FTL-20-2107.2, PGT CA740 Alum. Outswing Casement Window (unit 8 in proposal) FTL-20-2107.3, PGT PW7620A Aluminum Fixed Window (unit 9 in proposal) and FTL-20-2107.4, PGT PW7620A Aluminum Fixed Window (unit 10 in proposal) all dated 07/13/20 and signed and sealed by Idalmis Ortega, P.E.

#### **CGI** Windows and Doors Inc. test specimens:

FTL-20-2108.1, CGI SH360 Aluminum Single Hung Window (unit 1 in proposal) FTL-20-2108.2, CGI CA238 Alum. Outswing Casement Window (unit 2 in proposal) FTL-20-2108.3, CGI SGD560 Aluminum Sliding Glass Door (unit 3 in proposal) FTL-20-2108.4, CGI PW410 Aluminum Fixed Window (unit 4 in proposal) and FTL-20-2108.5, CGI SH360 Aluminum Single Hung Window (unit 5 in proposal) all dated 08/24/20 and signed and sealed by Idalmis Ortega, P.E

#### WinDoor, Inc. test specimens:

FTL-20-2078.1, WinDoor PW3000 Aluminum Fixed Lite (unit 11 in proposal)
FTL-20-2078.2, WinDoor HR9470 Thermally Broken Alum. Horiz. Roller (unit 12)

FTL-20-2078.3, WinDoor SGD8100 Alum. Sliding Glass Door (unit 13 in proposal)

FTL-20-2078.4, WinDoor HR9470 Thermally Broken Alum. Horiz. Roller (unit 14)

FTL-20-2078.5, WinDoor PW9020 Alum. Fixed Lite (unit 15 in proposal) and

FTL-20-2078.6, WinDoor PW9020 Alum. Fixed Lite (unit 16 in proposal) all dated 09/24/20 and signed and sealed by Idalmis Ortega, P.E

Manuel Pérez, P.E. Product Control Examiner NOA No. 20-0826.16

### 2. NEW EVIDENCE SUBMITTED (CONTINUED)

#### C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC 5<sup>th</sup> Edition (2014), dated 07/30/16 and revised on 02/03/17, prepared by Turner Engineering & Consulting, Inc., signed and sealed by Lucas A. Turner, P.E., updated to comply with FBC 7<sup>th</sup> Edition (2020), on 08/12/20 by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
- 2. Glazing complies with ASTM E1300-04/09

#### D. QUALITY ASSURANCE

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

#### E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 18-0725.11 issued to Kuraray America, Inc. for their "Kuraray SentryGlas® Xtra<sup>TM</sup> (SGX<sup>TM</sup>) Clear Glass Interlayer" dated 05/23/19, expiring on 05/23/24.
- 2. Notice of Acceptance No. 19-0305.02 issued to Kuraray America, Inc. for their "Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers" dated 05/09/19, expiring on 07/08/24.

#### F. STATEMENTS

- 1. Statement letter of conformance, complying with FBC 6<sup>th</sup> Edition (2017) and FBC 7<sup>th</sup> Edition (2020), dated August 12, 2020, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
- 2. Statement letter of no financial interest, dated August 12, 2020, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
- 3. Notification of Successor Engineer for WinDoor NOA documents dated August 12, 2020 issued, signed and sealed by Anthony Lynn Miller, P.E.
- **4.** Proposal No. **19-1155 TP** issued by the Product Control Section, dated January 10, 2020, signed by Ishaq Chanda, P.E.

#### G. OTHERS

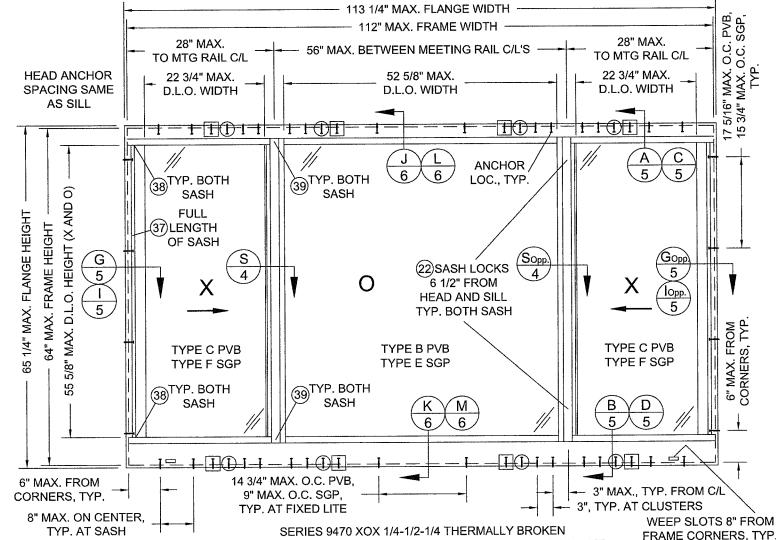
1. Notice of Acceptance No. **18-0116.23**, issued to WinDoor, Inc. for their Series "9470 Thermally Broken" Aluminum Horizontal Rolling Window - L.M.I., approved on 05/03/18 and expiring on 03/09/22.

Manuel Perez, P.E. Product Control Examiner NOA No. 20-0826.16

#### **GENERAL NOTES**

- THIS PRODUCT, FABRICATED AND ANCHORED AS DETAILED IN THIS DRAWING, IS LARGE MISSILE IMPACT RESISTANT AND DOES NOT REQUIRE THE USE OF IMPACT PROTECTIVE DEVICES (SHUTTERS) IN WINDBORNE DEBRIS REGIONS.
- THIS PRODUCT HAS BEEN TESTED TO AAMA/WDMA/CSA 101/I.S.2/A440-08, ASTM E 1886-05, ASTM E 1996-05/09, AND TAS 201/202/203-94, AND MEETS THE REQUIREMENTS OF THE 6TH EDITION (2017) AND 7TH EDITION (2020) FLORIDA BUILDING CODE, INCLUDING THE HIGH VELOCITY HURRICANE ZONE.
- ALLOWABLE CONFIGURATIONS ARE AS INDICATED HEREIN.
- THE DESIGN PRESSURE RATINGS (SEE SHEETS 7 THROUGH 15) IN THIS DRAWING ARE AS LIMITED BY ASTM E-1300 04/09 GLASS TABLES, TESTED WATER, STRUCTURAL, AND CYCLIC PRESSURES, AND COMPARATIVE ANALYSIS (LIMITED BY CYCLIC AND WATER).
- THE 4/3 ALLOWABLE STRESS INCREASE FACTOR (SHORT-TERM INCREASE FACTOR) HAS NOT BEEN USED IN THE ANCHOR ANALYSIS FOR THIS SYSTEM. THE 1.6 Cd FACTOR WAS USED IN THE ANALYSIS OF ANCHORAGE INTO WOOD SUBSTRATE.
- INSTALLATION OF WOOD BUCKS TO THE SUBSTRATE TO BE ENGINEERED BY OTHERS OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION (A.H.J.). BUCKING, OPENINGS, & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED BY OTHERS IN ACCORDANCE WITH THE FBC TO TRANSFER SUPERIMPOSED LOADS TO THE STRUCTURE. ADEQUACY OF THE STRUCTURE TO RECEIVE THESE LOADS SHALL BE VERIFIED BY THE CONTRACTOR OR A.H.J. WHEN INSTALLING INTO CONCRETE/MASONRY WITH WOOD BUCKS LESS THAN 1-1/2" THICK, ANCHOR EMBEDMENT SHALL BE INTO CONCRETE/MASONRY. WHEN INSTALLING INTO WOOD BUCKS 1-1/2" OR THICKER OVER CONCRETE/MASONTRY, ANCHOR EMBEDMENT SHALL BE INTO THE WOOD.
- DISSIMILAR MATERIALS THAT COME INTO CONTACT SHALL BE COATED OR OTHERWISE PROTECTED PER FBC CHAPTER 20 TO PREVENT GALVANIC REACTIONS. WOOD BUCKS, IF USED. SHALL BE PRESSURE TREATED, WITH EITHER A TREATMENT OR COATING COMPATIBLE WITH 6063-T6 ALUMINUM. ALL ANCHORS USED SHALL BE OF A MATERIAL OR HAVE A COATING COMPATIBLE WITH THE PRESSURE TREATED WOOD BUCKS AND ALL OTHER WINDOW MATERIALS.
- ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, OR AS APPROVED, SIGNED, AND SEALED BY A FLORIDA-REGISTERED PROFESSIONAL ENGINEER ON A SITE-SPECIFIC BASIS.
- SEALING AND FLASHING STRATEGIES FOR OVERALL WATER INFILTRATION RESISTANCE OF THE INSTALLED PRODUCT SHALL BE THE RESPONSIBILITY OF OTHERS USING ASTM E-2112 AND IS NOT ADDRESSED BY THIS DOCUMENT.
- FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK, USE #12 GRADE 5 STEEL WOOD SCREWS WITH 1-3/8" MINIMUM EMBEDMENT INTO SUBSTRATE AND 1" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 11. FOR ANCHORING INTO SOLID CONCRETE, USE:
  - A. 1/4" ELCO ULTRACONS: 1-3/4" MIN. EMBEDMENT, 1" MIN. EDGE DISTANCE, 3" MIN. O.C.
  - B. 1/4" DEWALT ULTRACON+: 1-3/4" MIN. EMBEDMENT, 1-3/16" MIN EDGE DISTANCE, 3" MIN. O.C.
  - C. 1/4" ELCO CRETE-FLEX: 1-3/4" MIN. EMBEDMENT, 1" MIN. EDGE DISTANCE, 3" MIN. O.C.
  - D. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS. CONCRETE SHALL NOT BE CRACKED
- 12. FOR ANCHORING INTO MASONRY (ONLY AT JAMBS), USE:
  - B. 1/4" ELCO ULTRACON, DEWALT ULTRACON+ OR ELCO CRETE-FLEX: 1-1/4" MIN. EMBEDMENT, 2-1/2" MIN. EDGE DISTANCE, 3" MIN. O.C.
- C. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS. MASONRY SHALL NOT BE CRACKED.
- 13. FOR ANCHORING INTO 0.060" MINIMUM 33KSI YIELD STRENGTH (45KSI MIN. ULT. TENSILE STRENGTH) STEEL, USE #12 ITW TEKS WITH FULL THREAD ENGAGEMENT THROUGH THE METAL WALL THICKNESS AND 1/2" MINIMUM EDGE DISTANCE. FOR ANCHORING INTO 1/8" MINIMUM THICKNESS 6063-T5 ALUMINUM OR 33KSI YIELD STRENGTH (45KSI MIN. ULT. TENSILE STRENGTH) STEEL. USE #12 GRADE 5 SELF-DRILLING FASTENER WITH FULL THREAD ENGAGEMENT THROUGH THE METAL WALL THICKNESS AND 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 14. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTRUCTIONS AND MINIMUM SUBSTRATE STRENGTH SHALL BE AS FOLLOWS:
  - A. WOOD MIN. SPECIFIC GRAVITY OF 0.42 (SPRUCE-PINE-FIR)
  - B. SOLID CONCRETE 2,846 KSI MIN. COMPRESSIVE STRENGTH WHEN USING ELCO ULTRACON FASTENERS, OR 3,350 KSI MIN. COMPRESSIVE STRENGTH WHEN USING ELCO CRETEFLEX OR DEWALT ULTRACON+ FASTENERS.
  - C. MASONRY/CMU STRENGTH CONFORMANCE TO ASTM C-90 WITH NORMAL COMPRESSIVE STRENGTH OF 2 KSI MIN.
  - D. STEEL 33 KSI MIN. YIELD STRENGTH (45KSI MIN. ULTIMATE TENSILE STRENGTH)
  - E. ALUMINUM 6063-T5 MIN.

# SERIES 9470 THERMALLY BROKEN HORIZONTAL ROLLER WINDOW LARGE MISSILE IMPACT



SERIES 9470 XOX 1/4-1/2-1/4 THERMALLY BROKEN HORIZONTAL ROLLING WINDOW EQUAL LEG OR FLANGE FRAME, **EXTERIOR ELEVATION** 

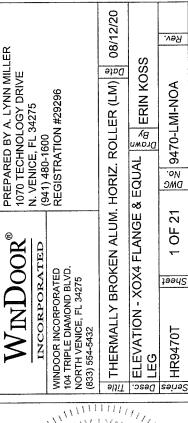
FOR DESIGN PRESSURES AND ANCHOR QTYS., SEE: CHART 1, SHEET 7 FOR PVB AND CHART 2, SHEET 8 FOR SGP

FOR MEETING RAIL CLUSTERS, **ANCHORS WITH** CIRCLE ( ) ONLY REQ'D FOR **QUANTITIES OF 6** SQUARE ONLY OF 8 'MR' ANCHORS, SEE SHEETS 7 AND 8 FOR 'MR' ANCHOR **QUANTITIES** 

NOTE: AND 8 'MR' ANCHORS, AND ANCHORS WITH REQ'D FOR QUANTITY

**PRODUCT REVISED** as complying with the Florida Building Code 20-0826.16 NOA-No. Expiration Date: 03/09/22 Miami-Dade Product Control

UPDATES FOR 2020 FBC. UPDATED MANUFACTURING ADDRESS.



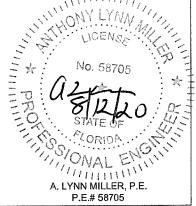
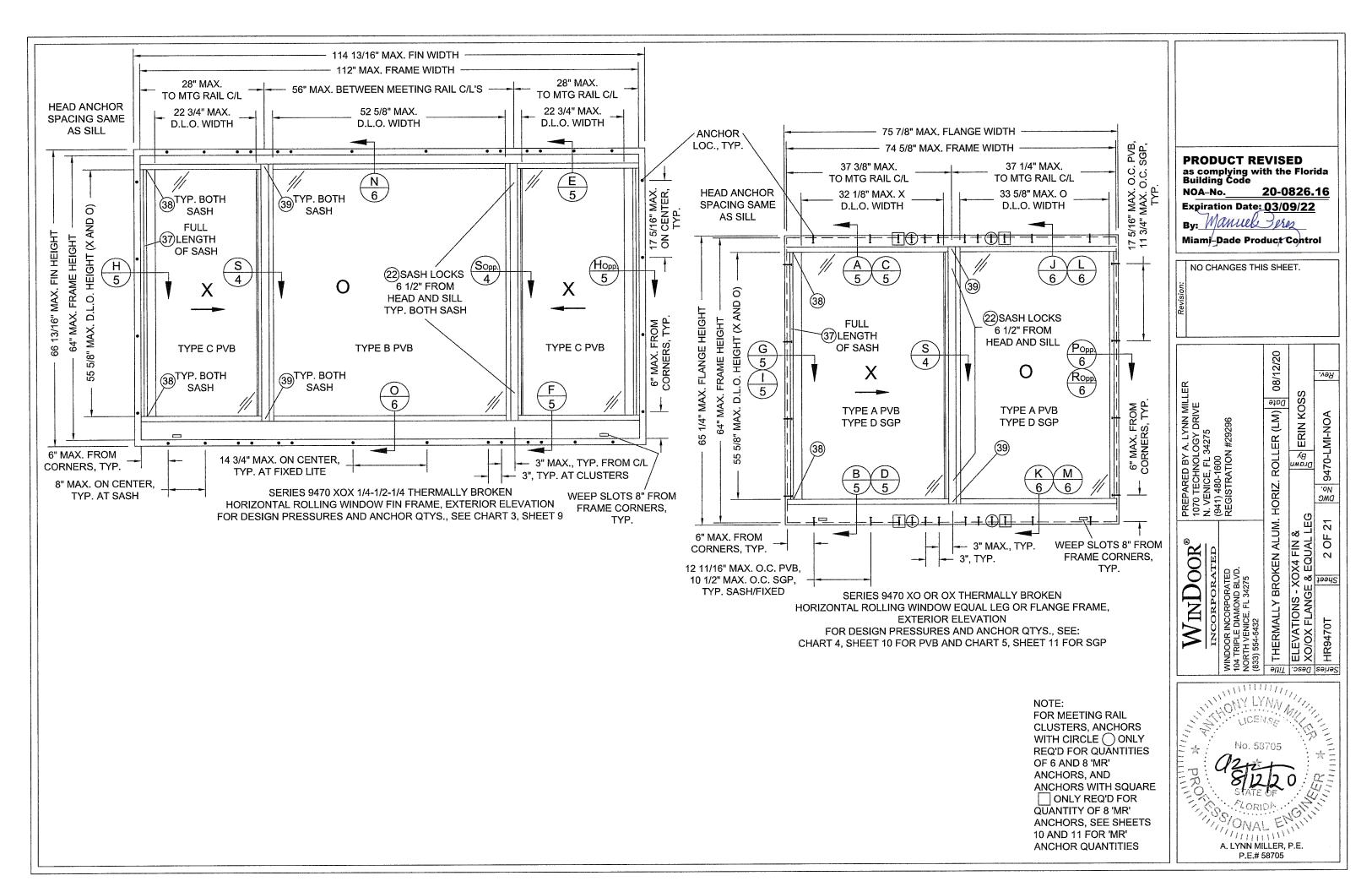
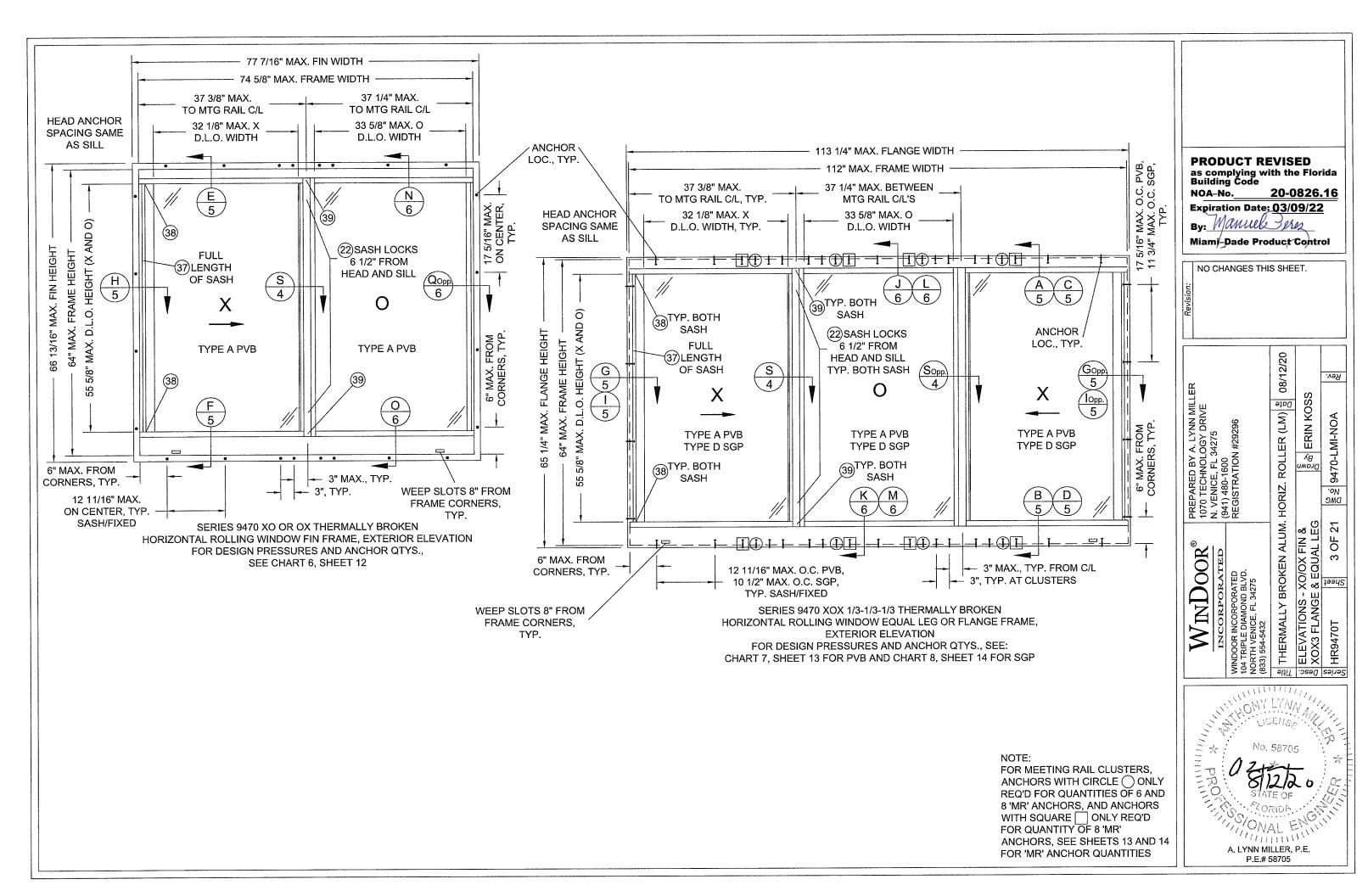
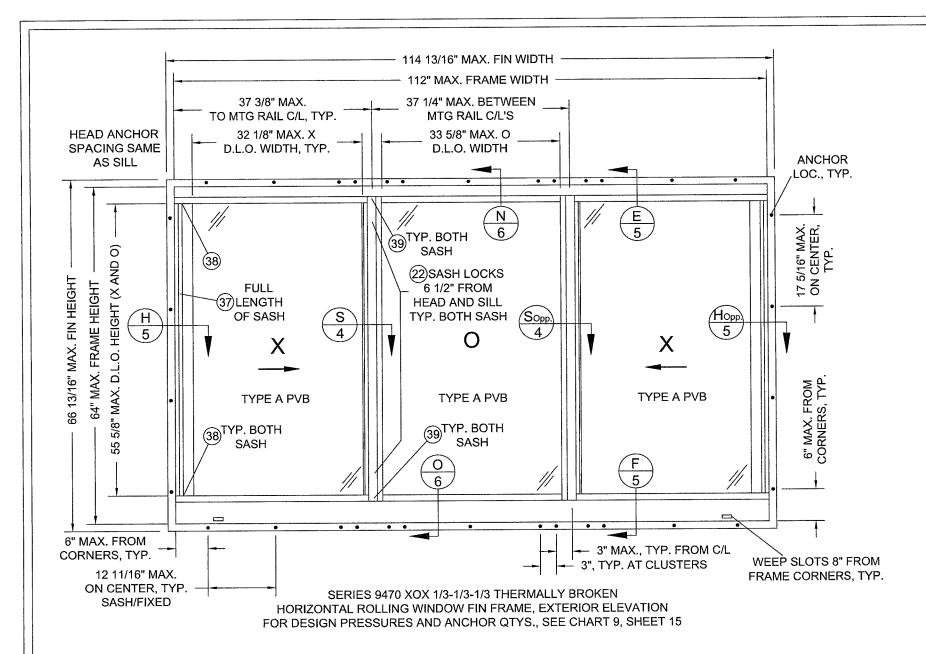


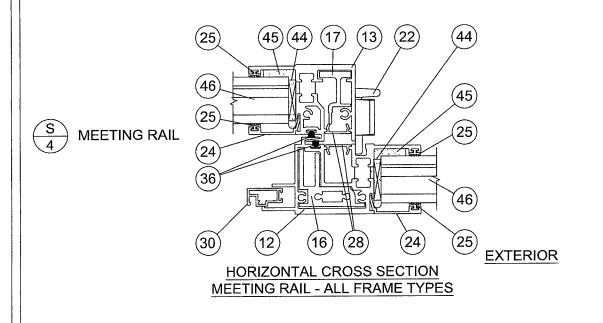
TABLE OF CONTENTS:

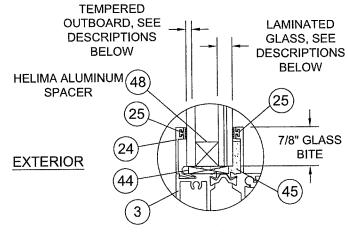
- 1. NOTES, ELEVATION
- 2-3. ELEVATIONS
- 4. ELEVATION, GLAZING, SECTION
- 5. X SECTION DETAILS
- 6. O SECTION DETAILS
- 7-15. DP AND ANCHOR QTY CHARTS
- 16. EQUAL LEG HEAD/SILL INSTALL DETAILS
- 17. FLANGE HEAD/SILL INSTALL DETAILS
- 18. JAMB INSTALL DETAILS
- 19. FIN INSTALL DETAILS
- 20. EXTRUSION PROFILE DRAWINGS
- 21. BILL OF MATERIALS, PROFILE DWGS











TYP. GLAZING DETAIL

IN GLAZING DESCRIPTIONS BELOW:

'PVB' IS KURARAY PVB® (CLEAR AND WHITE)

GLASS INTERLAYERS BY KURARAY AMERICA, INC.,

'SGP' IS SENTRYGLAS® (CLEAR AND WHITE)

GLASS INTERLAYERS BY KURARAY AMERICA, INC., AND
'SPACER' IS HELIMA ALUMINUM SPACER, B.O.M. ITEM #48

TYPE A 1" INSULATED LAMINATED GLASS: 3/16" TEMPERED OUTBOARD + 1/2" SPACER + 5/16" LAMINATED (1/8" ANNEALED-0.090" PVB-1/8" ANNEALED)

TYPE B: 1" INSULATED LAMINATED GLASS: 3/16" TEMPERED OUTBOARD + 3/8" SPACER + 7/16" LAMINATED (3/16" ANNEALED-0.090" PVB-3/16" ANNEALED)

TYPE C 1" INSULATED LAMINATED GLASS: 1/8" TEMPERED OUTBOARD + 9/16" SPACER + 5/16" LAMINATED (1/8" ANNEALED-0.090" PVB-1/8" ANNEALED)

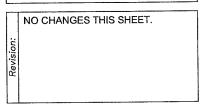
TYPE D 1" INSULATED LAMINATED GLASS:
3/16" TEMPERED OUTBOARD + 3/8" SPACER + 7/16" LAMINATED
(3/16" ANNEALED-0.090" SGP-3/16" ANNEALED)

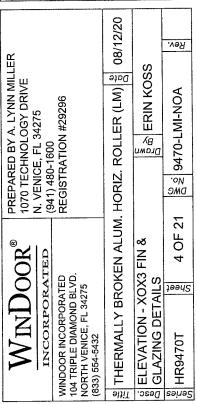
TYPE E 1" INSULATED LAMINATED GLASS: 3/16" TEMPERED OUTBOARD + 1/2" SPACER + 5/16" LAMINATED (1/8" HEAT STREGTHENED-0.090" SGP-1/8" HEAT STRENGTHENED)

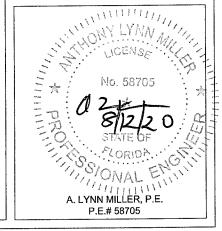
TYPE F 1" INSULATED LAMINATED GLASS: 3/16" TEMPERED OUTBOARD + 1/2" SPACER + 5/16" LAMINATED (1/8" ANNEALED-0.090" SGP-1/8" ANNEALED)

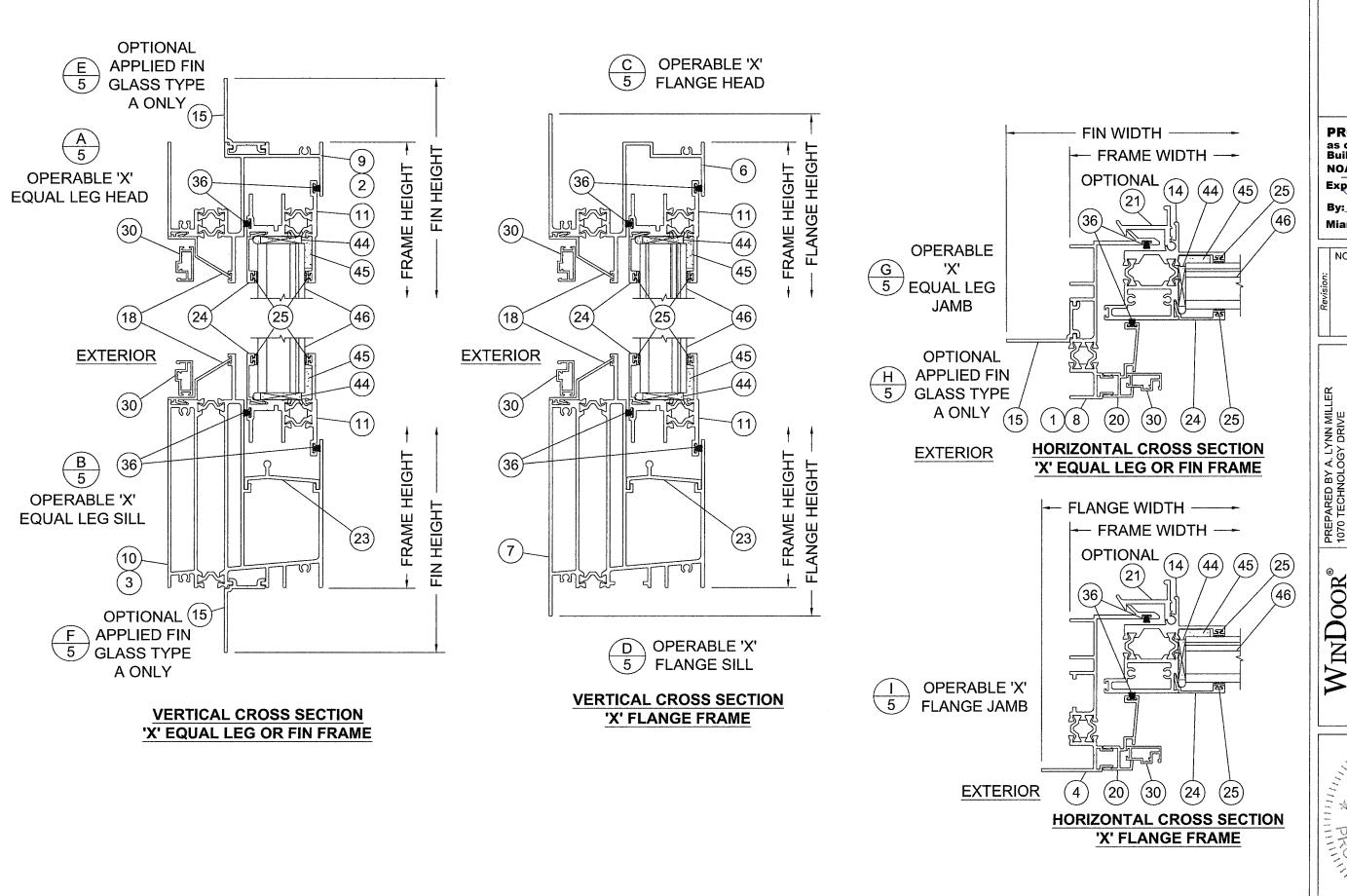
as complying with the Florida Building Code
NOA-No. 20-0826.16
Expiration Date: 03/09/22
By: Manuel Pres

Miami-Dade Product Control







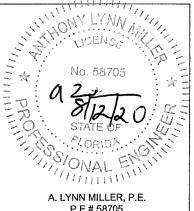


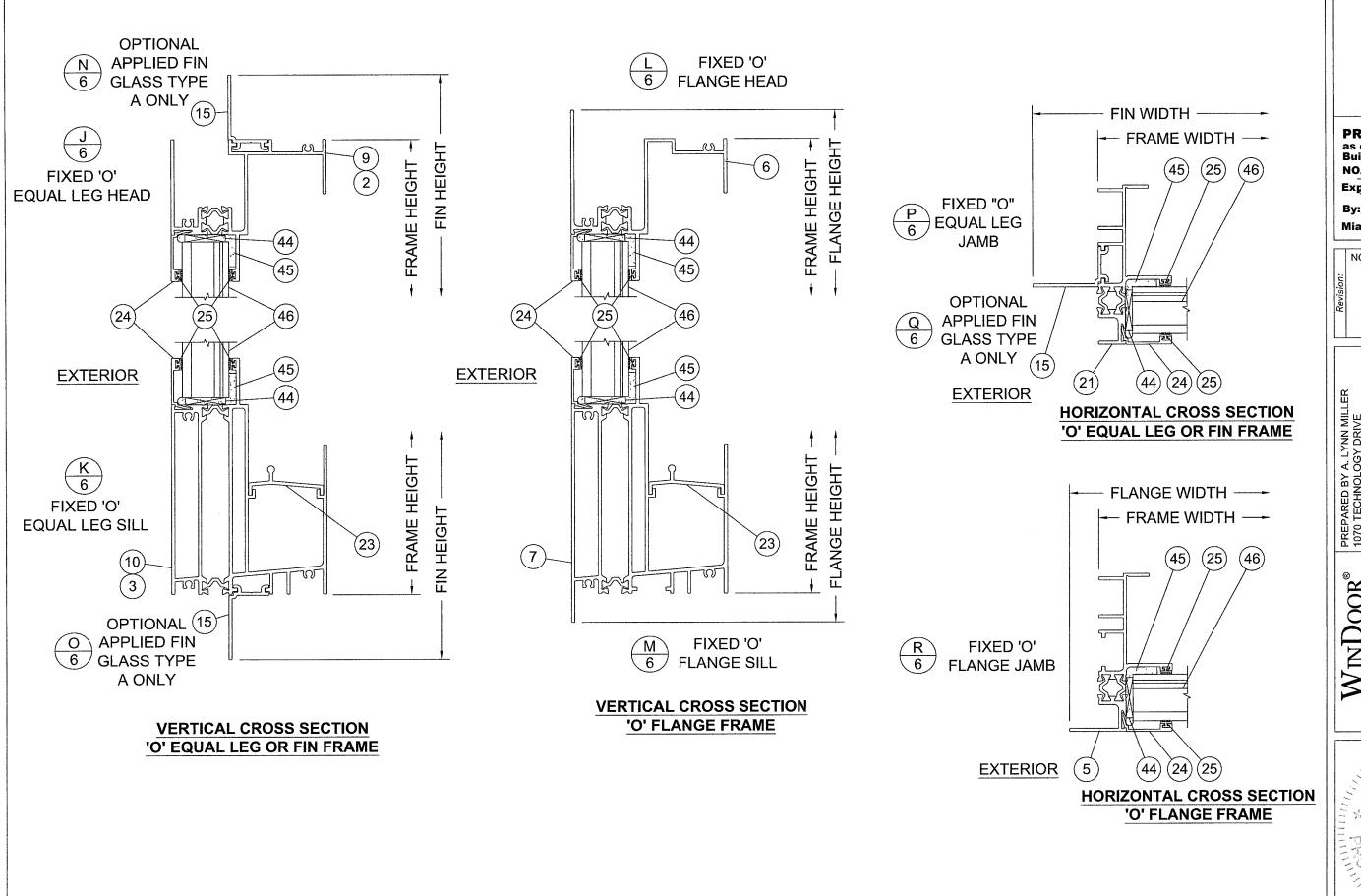
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0826.16
Expiration Date: 03/09/22
By: Manuel Product Control

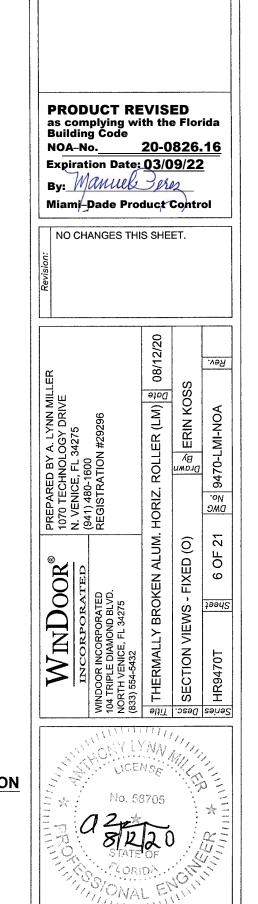
NO CHANGES THIS SHEET.

NO CHANGES THIS SHEET.

| MINDOR | PREFARED BT A. LT IN MILLER IN CORPORATED | 1.00 TECHNOLOGY DRIVE | N. VENICE, FL 34275 | 941) 480-1600 | WINDOOR INCORPORATED | 941) 480-1600 | REGISTRATION #29296 | REGISTRATION #29296







A. LYNN MILLER, P.E. P.E.# 58705

CHART 1	. XOX 1/4-	1/2-1/4 (FLANGE	OR EQ. LEG) W	ITH PVB (GLASS	TYPE B IN FIXED	, GLASS TYPE C I	N SASH) DESIGN	PRESSURES (PSF	-)		
FRAME	SUB-					FRAME W	IDTH (in.)				
HEIGHT	STRATE						,				
(in.)		60	66	72	78	84	90	96	102	108	112
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
24	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
30	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
36	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+78.0/-78.0	+74.0/-74.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
42	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+73.0/-73.0	+69.0/-69.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
48	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+78.0/-78.0	+70.0/-70.0	+66.0/-66.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
54	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+78.0/-78.0	+69.0/-69.0	+65.0/-65.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
60	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+79.0/-79.0	+76.0/-76.0	+73.0/-73.0	+70.0/-70.0	+68.0/-68.0	+67.0/-67.0	+65.0/-65.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
64	W	+80.0/-80.0	+80.0/-80.0	+77.0/-77.0	+72.0/-72.0	+69.0/-69.0	+66.0/-66.0	+64.0/-64.0	+62.0/-62.0	+62.0/-62.0	+62.0/-62.0

1				
1	ANCHOR QUANTITIES FOR CHART 1, 5	CEEVONALA A 10	/ . ELEV / ATION	CHEET 4 CODIOCATIONS
	V VICHUD ULIVVIIIIEZ FUB CHVBL F. A	NEE X ( ) X 1 / / / - 1 / /	- 1/4 FI FV & HE IN	SMEEL LEURIULATIONS
1	ANCHUR QUANTITLES FOR CHARLES	3LL	. 1/7 LLL V / 11 () 1 ()	SHEET E, I OK LOCK HOLD

ANCHO			1201	011.0	,			7 -/					,		<u></u>																									
FRAME																			FRAI	ME W	IDTH	(in )																		1
HEIGHT																						,																		
(in.)		6	50			$\epsilon$	56	•		7	2			-	78			8	34			ç	90			9	6			10	02			10	80			11	12	
\	1			SHS	J		1	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	j	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS
24	2	1	4	1	2	1	4	1	2	1	4	1	2	1	4	1	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2
30	3	1	4	1	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
36	3	1	4	1	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
42	3	1	4	1	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
48	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
54	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
60	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
64	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	6	2	4	2	6	2	4	2	6	2

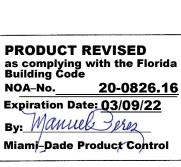
J = TOTAL QTY EACH JAMB FHS = QTY AT FIXED HEAD AND SILL NOT INCLUDING MTG RAIL

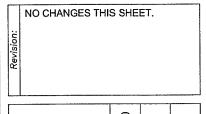
MR = TOTAL QTY AT EACH END OF MEETING RAIL

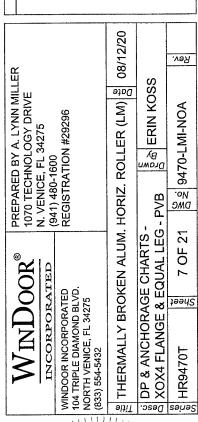
SHS = QTY AT SASH HEAD AND SILL NOT INCLUDING MTG RAIL

#### **CHART 1 ANCHORAGE QUANTITY NOTES:**

- 1. CHART APPLIES TO FLANGE OR EQUAL LEG WINDOWS. SUBSTRATE 'C/M' INDICATES INSTALLATION TO CONCRETE/MASONRY OR METAL. SUBSTRATE 'W' INDICATES INSTALLATION TO WOOD FRAMING.
- 2. DO NOT EXCEED MAX. ANCHOR SPACING SHOWN IN THE ELEVATION ON SHEET 1.
- 3. ANCHOR QUANTITIES IN SHS LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
- 4. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS







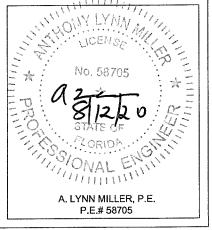


CHART 2.	XOX 1/4-1/	2-1/4 (FLANGE OF	R EQ. LEG) WITH S	GP (GLASS TYPE E	IN FIXED, GLASS	TYPE F IN SASH) D	ESIGN PRESSURES	S (PSF)		· · · · · · · · · · · · · · · · · · ·	
FRAME HEIGHT	SUB- STRATE					FRAME W	IDTH (in.)				
(in.)		60	66	72	78	84	90	96	102	108	112
	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-147.0	+100.0/-137.8
24	W	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-157.0	+100.0/-141.0	+100.0/-132.0
20	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.2	+100.0/-135.0
30	W	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-151.0	+100.0/-151.0	+100.0/-151.0	+100.0/-139.0	+100.0/-130.0
26	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.2	+100.0/-135.0
36	W	+100.0/-160.0	+100.0/-160.0	+100.0/-157.0	+100.0/-157.0	+100.0/-157.0	+100.0/-139.0	+100.0/-139.0	+100.0/-139.0	+100.0/-131.0	+100.0/-124.0
42	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-159.0	+100.0/-145.2	+100.0/-135.0
42	W	+100.0/-153.0	+100.0/-145.0	+100.0/-139.0	+100.0/-135.0	+100.0/-132.0	+100.0/-129.0	+100.0/-127.0	+100.0/-125.0	+100.0/-122.0	+100.0/-115.0
40	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-159.0	+100.0/-145.2	+100.0/-135.0
48	W	+100.0/-153.0	+100.0/-145.0	+100.0/-139.0	+100.0/-135.0	+100.0/-132.0	+100.0/-129.0	+100.0/-127.0	+100.0/-125.0	+100.0/-118.0	+100.0/-110.0
Ε4	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-159.0	+100.0/-145.2	+100.0/-135.0
54	W	+100.0/-153.0	+100.0/-145.0	+100.0/-139.0	+100.0/-135.0	+100.0/-132.0	+100.0/-129.0	+100.0/-127.0	+100.0/-125.0	+100.0/-116.0	+100.0/-108.0
60	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-157.8	+100.0/-149.6	+100.0/-142.4	+100.0/-135.0
60	W	+100.0/-153.0	+100.0/-145.0	+100.0/-139.0	+100.0/-132.0	+100.0/-126.0	+100.0/-126.0	+100.0/-126.0	+100.0/-125.0	+100.0/-116.0	+100.0/-108.0
C4	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-157.4	+100.0/-151.0	+100.0/-145.6	+100.0/-140.6	+100.0/-134.1	+100.0/-129.6
64	W	+100.0/-146.0	+100.0/-136.0	+100.0/-128.0	+100.0/-128.0	+100.0/-126.0	+100.0/-126.0	+100.0/-126.0	+100.0/-125.0	+100.0/-116.0	+100.0/-108.0

ANCHOR QUANTITIES FOR CHART 2, SEE XOX 1/4-1/2-1/4 ELEVATION, SHEET 1, FOF	R LOCATIONS
--	-------------

FRAME HEIGHT																			FRAI	VIE W	IDTH	(in.)																		
(in.)		FINAL SHEAR SHIS SHIS SHIS SHIS SHIS SHIS SHIS SHI																																						
	j	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	j	FHS	MR	SHS	J	FHS	MR	SHS
24	2	2	4	1	2	2	4	1	2	2	4	1	2	3	4	1	2	3	4	2	2	3	4	2	2	4	4	2	2	4	.4	2	2	4	4	2	2	4	4	2
30	3	2	4	1	3	2	4	1	3	2	4	1	3	3	4	1	3	3	4	2	3	3	4	2	3	4	4	2	3	4	4	2	3	4	4	2	3	4	4	2
36	3	2	4	1	3	2	4	1	3	2	4	1	3	3	4	1	3	3	4	2	3	3	4	2	3	4	4	2	3	4	4	2	3	4	4	2	3	4	4	2
42	3	2	4	1	3	2	4	1	3	2	4	1	3	3	4	1	3	3	4	2	3	3	4	2	3	4	4	2	3	4	4	2	3	4	4	2	3	4	4	2
48	4	2	6	1	4	2	6	1	4	2	6	1	4	3	6	1	4	3	6	2	4	3	6	2	4	4	6	2	4	4	6	2	4	4	6	2	4	4	6	2
54	4	2	6	1	4	2	6	1	4	2	6	1	4	3	6	1	4	3	6	2	4	3	6	2	4	4	6	2	4	4	6	2	4	4	6	2	4	4	6	2
60	5	2	6	1	5	2	6	1	5	2	6	1	5	3	6	1	5	3	6	2	5	3	8	2	5	4	8	2	5	4	8	2	5	4	8	2	-5	4	8	2
64	5	2	6	1	5	2	6	1	5	2	6	1	5	3	8	1	5	3	8	2	5	3	8	2	5	4	8	2	5	4	8	2	5	4	8	2	5	4	8	2

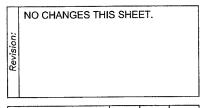
J = TOTAL QTY EACH JAMB FHS = QTY AT FIXED HEAD AND SILL NOT INCLUDING MTG RAIL SHS = QTY AT SASH HEAD AND SILL NOT INCLUDING MTG RAIL

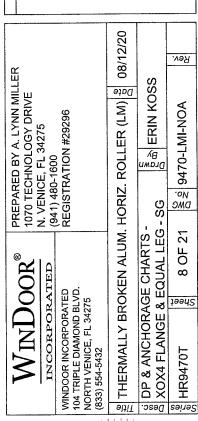
MR = TOTAL QTY AT EACH END OF MEETING RAIL

#### **CHART 2 ANCHORAGE QUANTITY NOTES:**

- 1. CHART APPLIES TO FLANGE OR EQUAL LEG WINDOWS. SUBSTRATE 'C/M' INDICATES INSTALLATION TO CONCRETE/MASONRY OR METAL. SUBSTRATE 'W' INDICATES INSTALLATION TO WOOD FRAMING.
- 2. DO NOT EXCEED MAX. ANCHOR SPACING SHOWN IN THE ELEVATION ON SHEET 1.
- 3. ANCHOR QUANTITIES IN SHS LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
- 4. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0826.16
Expiration Date: 03/09/22
By: Manuel Product Control





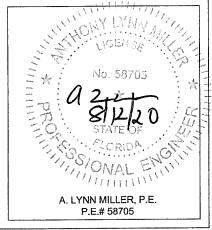


CHART 3.	XOX 1/4-1/	2-1/4 (FIN) WITH	PVB (GLASS TYPE	B IN FIXED, GLAS	S TYPE C IN SASH)	DESIGN PRESSUR	ES (PSF)				
FRAME HEIGHT	SUB- STRATE					FRAME W	IDTH (in.)				
(in.)	SINAIL	60	66	72	78	84	90	96	102	108	112
24	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
30	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
36	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
42	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
48	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
54	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
60	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
64	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0

ANCHOR QUANTITIES FOR CHART 3, SEE XOX	1/4-1/2-1/4 ELEVATION, SHEET 2, FOR LOCATIONS

FRAME													<u>,                                     </u>						FRAI	ME W	IDTH	(in.)																		
HEIGHT (in.)			50			. 6	66			7	'2			7	'8			8	34			9	90			S	6			10	)2			10	08			11	12	
	J	FHS	MR	SHS	J	FHS	MR	SHS	j	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	j	FHS	MR	SHS
24	2	1	4	1	2	1	4	1	2	1	4	1	2	1	4	1	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2
30	3	1	4	1	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
36	3	1	4	1	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
42	3	1	4	1	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
48	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
54	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
60	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
64	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2

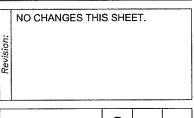
J = TOTAL QTY EACH JAMB FHS = QTY AT FIXED HEAD AND SILL NOT INCLUDING MTG RAIL SHS = QTY AT SASH HEAD AND SILL NOT INCLUDING MTG RAIL

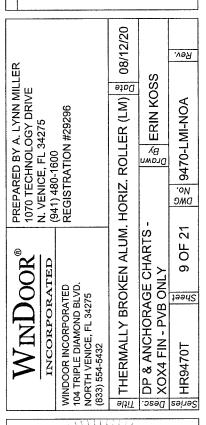
MR = TOTAL QTY AT EACH END OF MEETING RAIL

# **CHART 3 ANCHORAGE QUANTITY NOTES:**

- 1. CHART APPLIES TO FIN WINDOWS INSTALLED TO 2X WOOD THROUGH THE FIN.
- 2. DO NOT EXCEED MAX. ANCHOR SPACING SHOWN IN THE XOX ELEVATION ON SHEET 2.
- 3. ANCHOR QUANTITIES IN SHS LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
- 4. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0826.16
Expiration Date: 03/09/22
By: Manual Product Control





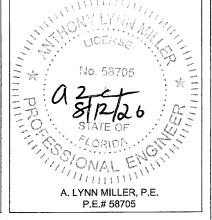


CHART 4.	XO OR O	X (FLANGE OR E	Q. LEG) WITH PV	B (GLASS TYPE A	IN FIXED AND S	ASH) DESIGN PR	ESSURES (PSF)				
FRAME HEIGHT	SUB- STRATE					FRAME W	IDTH (in.)				
(in.)		40	44	48	52	56	60	64	68	72	74.625
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
24	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
30	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
26	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
36	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
42	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
42	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
40	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
48	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
E 4	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
54	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+78.0/-78.0	+77.0/-77.0
60	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
60	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+79.0/-79.0	+75.0/-75.0	+72.0/-72.0	+69.0/-69.0	+67.0/-67.0	+66.0/-66.0
6.4	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
64	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+76.0/-76.0	+72.0/-72.0	+69.0/-69.0	+66.0/-66.0	+63.0/-63.0	+63.0/-63.0	+63.0/-63.0

<b>ANCHOR QUANTITIES FOR CHART 4</b>	SEE YO ELEVATION	SHEET 2 FOR LOCAT	TIONS
ANCHUR QUANTITIES FUR CHART 4	, SEE AU ELEVATION	, SHELL Z, FOR LOCA	110142

FRAME HEIGHT						<del></del>													FRAI	ΛΕ W	'IDTI	H (in.	)																	
(in.)		4	0			4	4			4	8				52				6			e	60			$\epsilon$	64			6	8			•	72			74.	625	
	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS
24	2	1	4	1	2	1	4	1	2	1	4	1	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2
30	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
36	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
42	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
48	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2_	4	2	4	2	4	2	4	2	4	2	4	2	4	2
54	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
60	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
64	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	6	2	4	2	6	2

J = TOTAL QTY EACH JAMB FHS = QTY AT FIXED HEAD AND SILL NOT INCLUDING MTG RAIL

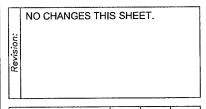
MR = TOTAL QTY AT EACH END OF MEETING RAIL

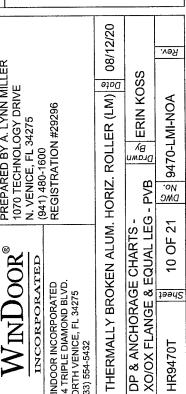
SHS = QTY AT SASH HEAD AND SILL NOT INCLUDING MTG RAIL

#### **CHART 4 ANCHORAGE QUANTITY NOTES:**

- 1. CHART APPLIES TO FLANGE OR EQUAL LEG WINDOWS. SUBSTRATE 'C/M' INDICATES INSTALLATION TO CONCRETE/MASONRY OR METAL. SUBSTRATE 'W' INDICATES INSTALLATION TO WOOD FRAMING.
- 2. DO NOT EXCEED MAX. ANCHOR SPACING SHOWN IN THE XO ELEVATION ON SHEET 2.
- 3. ANCHOR QUANTITIES IN SHS LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
- 4. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0826.16
Expiration Date: 03/09/22
By: Manuel Product Control





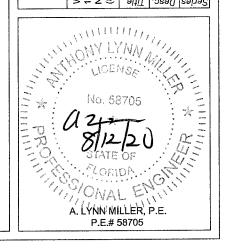


CHART 5.	XO OR O	X (FLANGE OR EC	Q. LEG) WITH SG	P (GLASS TYPE D	IN FIXED AND SA	SH) DESIGN PRE	SSURES (PSF)				
FRAME HEIGHT	SUB- STRATE					FRAME W	IDTH (in.)				
(in.)		40	44	48	52	56	60	64	68	72	74.625
	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-154.7
24	W	+100.0/-160.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0
20	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-149.2	+100.0/-140.4
30	W	+100.0/-160.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-133.0	+100.0/-133.0	+100.0/-133.0	+100.0/-133.0
26	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.0	+100.0/-135.2
36	W	+100.0/-160.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-132.0	+100.0/-132.0	+100.0/-132.0	+100.0/-132.0
40	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.0	+100.0/-135.0
42	W	+100.0/-159.0	+100.0/-140.0	+100.0/-140.0	+100.0/-135.0	+100.0/-130.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0
	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.0	+100.0/-135.0
48	W	+100.0/-159.0	+100.0/-140.0	+100.0/-140.0	+100.0/-135.0	+100.0/-130.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0
	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.0	+100.0/-135.0
54	W	+100.0/-159.0	+100.0/-140.0	+100.0/-140.0	+100.0/-135.0	+100.0/-130.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0
6.0	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-157.4	+100.0/-150.4	+100.0/-144.4	+100.0/-135.0
60	W	+100.0/-159.0	+100.0/-140.0	+100.0/-140.0	+100.0/-135.0	+100.0/-130.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0
	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-155.4	+100.0/-148.7	+100.0/-142.9	+100.0/-136.4	+100.0/-132.5
64	W	+100.0/-157.0	+100.0/-140.0	+100.0/-136.0	+100.0/-128.0	+100.0/-128.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-123.0	+100.0/-120.0

FRAME HEIGHT																			FRA	ME W	/IDTH	ł (in.)																		
(in.)		4	10			4	4				18				52			1	56			(	50			(	54			6	8			-	<b>7</b> 2			74.	625	
	J	FHS	MR	SHS	j	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MF	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS
24	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	3	4	3	3	3	4	3	3	3	4	3
30	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	3	4	3	3	3	4	3	3	3	4_	3
36	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	3	4	3	4	3	4	3	4	3	4	3
42	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	6	2	4	3	6	3	4	3	6	3	4	3	6	3
48	5	1	6	1	5	1	6	1	5	2	6	2	5	2	6	2	5	2	6	2	5	2	6	2	5	2	6	2	5	3	6	3	5	3	6	3	5	3	6	3
54	5	1	6	1	5	1	6	1	5	2	6	2	5	2	6	2	5	2	6	2	5	2	6	2	5	2	6	2	5	3	6	3	5	3	6	3	5	3	6	3
60	6	1	6	1,	6	1	6	1	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	8	2	6	3	8	3	6	3	8	3	6	3	8	3
64	6	1	6	1	6	1	6	1	6	2	6	2	6	2	6	2	6	2	8	2	6	2	8	2	6	2	8	2	6	3	8	3	6	3	8	3	6	3	8	3

J = TOTAL QTY EACH JAMB FHS = QTY AT FIXED HEAD AND SILL NOT INCLUDING MTG RAIL SHS = QTY AT SASH HEAD AND SILL NOT INCLUDING MTG RAIL

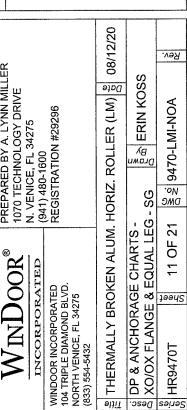
MR = TOTAL QTY AT EACH END OF MEETING RAIL

# **CHART 5 ANCHORAGE QUANTITY NOTES:**

- 1. CHART APPLIES TO FLANGE OR EQUAL LEG WINDOWS. SUBSTRATE 'C/M' INDICATES INSTALLATION TO CONCRETE/MASONRY OR METAL. SUBSTRATE 'W' INDICATES INSTALLATION TO WOOD FRAMING.
- 2. DO NOT EXCEED MAX. ANCHOR SPACING SHOWN IN THE XO ELEVATION ON SHEET 2.
- 3. ANCHOR QUANTITIES IN SHS LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
- 4. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0826.16
Expiration Date: 03/09/22
By: Manuel Product Control

NO CHANGES THIS SHEET.



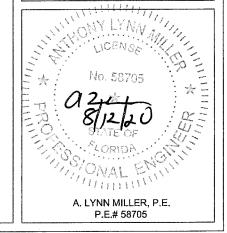


CHART 6.	XO OR OX (	FIN) WITH PVB (	GLASS TYPE A IN F	XED AND SASH) [	DESIGN PRESSURE	S (PSF)					
FRAME HEIGHT	SUB- STRATE					FRAME W	IDTH (in.)				
(in.)	311,511	40	44	48	52	56	60	64	68	72	74.625
24	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
30	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
36	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
42	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
48	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
54	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
60	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
64	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0

ANCHOR QUANTITIES FOR CHART 6, SEE XO ELEVATION, SHEET 3, FOR LOCATIONS
---

FRAME HEIGHT																		1	FRAN	⁄IE W	IDTH	l (in.	)																	
(in.)			10			4	4			4	8				2			5	6			6	0			6	64			6	8			7	72			74.	625	
	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	j	FHS.	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS												
24	2	1	4	1	2	1	4	1	2	1	4	1	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2	2	2	4	2
30	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
36	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
42	3	1	4	1	3	1	4	1	3	1	4	1	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2	3	2	4	2
48	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
54	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
60	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2
64	4	1	4	1	4	1	4	1	4	1	4	1	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4	2

J = TOTAL QTY EACH JAMB FHS = QTY AT FIXED HEAD AND SILL NOT INCLUDING MTG RAIL SHS = QTY AT SASH HEAD AND SILL NOT INCLUDING MTG RAIL

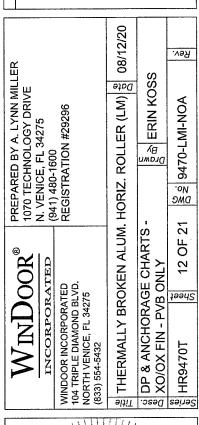
MR = TOTAL QTY AT EACH END OF MEETING RAIL

# **CHART 6 ANCHORAGE QUANTITY NOTES:**

- 1. CHART APPLIES TO FIN WINDOWS INSTALLED TO 2X WOOD THROUGH THE FIN.
- 2. DO NOT EXCEED MAX. ANCHOR SPACING SHOWN IN THE ELEVATION ON SHEET 3.
- 3. ANCHOR QUANTITIES IN SHS LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
- 4. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0826.16
Expiration Date: 03/09/22
By: Manuel Product Control

NO CHANGES THIS SHEET.



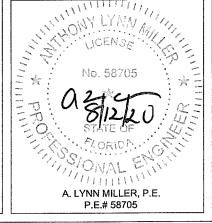


CHART 7	XOX 1/3-	1/3-1/3 (FLANGE	OR EQ. LEG) W	ITH PVB (GLASS	TYPE A IN FIXED	AND SASH) DES	IGN PRESSURES	(PSF)			
FRAME	SUB-					FRAME W	IDTH (in )				
HEIGHT	STRATE					17777	,				
(in.)		60	66	72	78	84	90	96	102	108	112
2.4	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
24	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
20	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
30	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
36	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
42	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
48	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
54	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+78.0/-78.0	+77.0/-77.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
60	W	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+79.0/-79.0	+75.0/-75.0	+72.0/-72.0	+69.0/-69.0	+67.0/-67.0	+66.0/-66.0
	C/M	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0
64	Ŵ	+80.0/-80.0	+80.0/-80.0	+80.0/-80.0	+76.0/-76.0	+72.0/-72.0	+69.0/-69.0	+66.0/-66.0	+63.0/-63.0	+63.0/-63.0	+63.0/-63.0

ANCHOR QUANTITIES FOR CHART	7, SEE XOX 1/3-1/3-1/3 ELEVATION,	, SHEET 3, FOR LOCATIONS

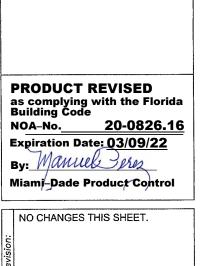
FRAME HEIGHT																			FRAN	VIE W	IDTH	l (in.	)																	
(in.)		6	0			6	66			7	'2				78			8	34			9	90			g	)6			10	02			1	08			1	12	
( , , ,	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	j	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS												
24	2	0	4	1	2	0	4	1	2	0	4	1	2	1	4	2	2	1	4	2	2	1	4	2	2	1	4	2	2	1	4	2	2	1	4	2	2	1	4	2
30	3	0	4	1	3	0	4	1	3	0	4	1	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2
36	3	0	4	1	3	0	4	1	3	0	4	1	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2
42	3	0	4	1	3	0	4	1	3	0	4	1	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2
48	4	0	4	1	4	0	4	1	4	0	4	1	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2
54	4	0	4	1	4	0	4	1	4	0	4	1	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1_	4	2	4	1	4	2	4	1	4	2
60	4	0	4	1	4	0	4	1	4	0	4	1	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2
64	4	0	4	1	4	0	4	1	4	0	4	1	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	6	2	4	1	6	2

J = TOTAL QTY EACH JAMB FHS = QTY AT FIXED HEAD AND SILL NOT INCLUDING MTG RAIL SHS = QTY AT SASH HEAD AND SILL NOT INCLUDING MTG RAIL

MR = TOTAL QTY AT EACH END OF MEETING RAIL

# **CHART 7 ANCHORAGE QUANTITY NOTES:**

- 1. CHART APPLIES TO FLANGE OR EQUAL LEG WINDOWS. SUBSTRATE 'C/M' INDICATES INSTALLATION TO CONCRETE/MASONRY OR METAL. SUBSTRATE 'W' INDICATES INSTALLATION TO WOOD FRAMING.
- 2. DO NOT EXCEED MAX. ANCHOR SPACING SHOWN IN THE XOX ELEVATION ON SHEET 3.
- 3. ANCHOR QUANTITIES IN SHS LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
- 4. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS





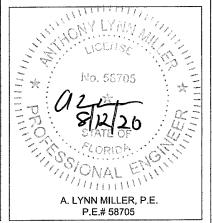


CHART 8.	. XOX 1/3-	1/3-1/3 (FLANGE	OR EQ. LEG) W	ITH SGP (GLASS	TYPE D IN FIXED	AND SASH) DES	IGN PRESSURES	(PSF)			
FRAME	SUB-					FRAME W	IDTH (in.)				
HEIGHT	STRATE					111/-11415 44	10111 (111.)				
(in.)		60	66	72	78	84	90	96	102	108	112
24	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-154.7
24	W	+100.0/-160.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0
20	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-149.3	+100.0/-140.4
30	W	+100.0/-160.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-133.0	+100.0/-133.0	+100.0/-133.0	+100.0/-133.0
26	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.2	+100.0/-135.2
36	W	+100.0/-160.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-140.0	+100.0/-132.0	+100.0/-132.0	+100.0/-132.0	+100.0/-132.0
42	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.2	+100.0/-135.0
42	W	+100.0/-159.0	+100.0/-140.0	+100.0/-140.0	+100.0/-135.0	+100.0/-130.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0
4.0	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.2	+100.0/-135.0
48	W	+100.0/-159.0	+100.0/-140.0	+100.0/-140.0	+100.0/-135.0	+100.0/-130.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0
	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.2	+100.0/-135.0
54	W	+100.0/-159.0	+100.0/-140.0	+100.0/-140.0	+100.0/-135.0	+100.0/-130.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0
	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-157.5	+100.0/-150.5	+100.0/-144.5	+100.0/-135.0
60	W	+100.0/-159.0	+100.0/-140.0	+100.0/-140.0	+100.0/-135.0	+100.0/-130.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0
	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-155.4	+100.0/-148.8	+100.0/-143.0	+100.0/-136.5	+100.0/-132.5
64	W	+100.0/-157.0	+100.0/-140.0	+100.0/-136.0	+100.0/-128.0	+100.0/-128.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-123.0	+100.0/-120.0

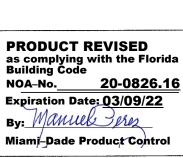
ANCHOR QUANTITIES FOR CHART 8.	SEE XOX 1/3-1/3-1/3 ELEVATION, SHEET 3, FOR LOCATIONS
Alteriore dominantes i on or and or	200 (10) (10) 10 10 10 10 10 10 10 10 10 10 10 10 10

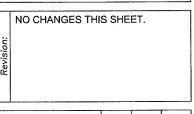
FRAME HEIGHT																•			FRAN	ΛΕ W	/IDTI	H (in.	)																	
(in.)	-	6	0			6	66			-	72			7	78			8	34			ç	0			9	6			10	02			1	08			1:	12	
	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS												
24	3	0	4	1	3	0	4	1	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	2	4	3	3	2	4	3	3	2	4	3
30	3	0	4	1	3	0	4	1	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	2	4	3	3	2	4	3	3	2	4	3
36	4	0	4	1	4	0	4	1	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	2	4	3	4	2	4	3	4	2	4	3
42	4	0	4	1	4	0	4	1	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	6	2	4	2	6	3	4	2	6	3	4	2	6	3
48	5	0	6	1	5	0	6	1	5	1	6	2	5	1	6	2	5	1	6	2	5	1	6	2	5	1	6	2	5	2	6	3	5	2	6	3	5	2	6	3
54	5	0	6	1	5	0	6	1	5	1	6	2	5	1	6	2	5	1	6	2	5	1	6	2	5	1	6	2	5	2	6	3	5	2	6	3	5	2	6	3
60	6	0	6	1	6	0	6	1	6	1	6	2	6	1	6	2	6	1	6	2	6	1	6	2	6	1	8	2	6	2	8	3	6	2	8	3	6	2	8	3
64	6	0	6	1	6	0	6	1	6	1	6	2	6	1	6	2	6	1	8	2	6	1	8	2	6	1	8	2	6	2	8	3	6	2	8	3	6	2	8	3

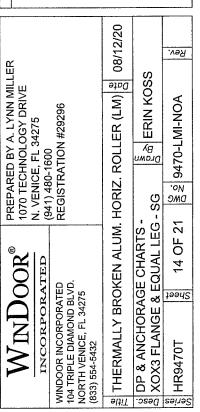
J = TOTAL QTY EACH JAMB FHS = QTY AT FIXED HEAD AND SILL NOT INCLUDING MTG RAIL SHS = QTY AT SASH HEAD AND SILL NOT INCLUDING MTG RAIL MR = TOTAL QTY AT EACH END OF MEETING RAIL

# **CHART 8 ANCHORAGE QUANTITY NOTES:**

- 1. CHART APPLIES TO FLANGE OR EQUAL LEG WINDOWS. SUBSTRATE 'C/M' INDICATES INSTALLATION TO CONCRETE/MASONRY OR METAL. SUBSTRATE 'W' INDICATES INSTALLATION TO WOOD FRAMING.
- 2. DO NOT EXCEED MAX. ANCHOR SPACING SHOWN IN THE XOX ELEVATION ON SHEET 3.
- 3. ANCHOR QUANTITIES IN SHS LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
- 4. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS







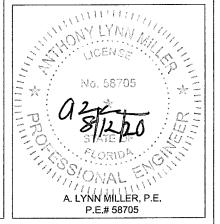


CHART 9.	XOX 1/3-1/	3-1/3 (FIN) WITH	PVB (GLASS TYPE	A IN FIXED AND S	ASH) DESIGN PRE	SSURES (PSF)					
FRAME HEIGHT	SUB- STRATE					FRAME W	IDTH (in.)				
(in.)		60	66	72	78	84	90	96	102	108	112
24	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
30	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/~70.0	+70.0/-70.0	+70.0/-70.0
36	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
42	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
48	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
54	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
60	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0
64	WOOD	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0	+70.0/-70.0

	ANCHOR QUANTITIES FOR CHART 9, SEE XOX 1/3-1/3-1/3 ELEVATION,	SHEET 4, FOR LOCATIONS
--	---	------------------------

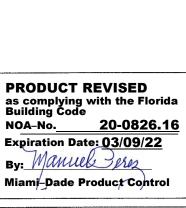
! -	RAME										<u></u>	***								***																					
11	HEIGHT	FRANCE WILLIA III.																																							
	(in.)		6	0			6	66			7	72			-	78			8	34			9	90			9	6			10	02			1	08			1	12	
	,,	j	·	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS	J	FHS	MR	SHS
	24	2	0	4	1	2	0	4	1	2	0	4	1	2	1	4	2	2	1	4	2	2	1	4	2	2	1	4	2	2	1	4	2	2	1	4	2	2	1	4	2
	30	3	0	4	1	3	0	4	1	3	0	4	1	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2
	36	3	0	4	1	3	0	4	1	3	0	4	1	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2
	42	3	0	4	1	3	0	4	1	3	0	4	1	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1_	4	2
	48	4	0	4	1	4	0	4	1	4	0	4	1	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1_	4	2
	54	4	0	4	1	4	0	4	1	4	0	4	1	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2
	60	4	0	4	1	4	0	4	1	4	0	4	1	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2
	64	4	0	4	1	4	0	4	1	4	0	4	1	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	1	4	2

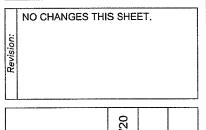
J = TOTAL QTY EACH JAMB FHS = QTY AT FIXED HEAD AND SILL NOT INCLUDING MTG RAIL SHS = QTY AT SASH HEAD AND SILL NOT INCLUDING MTG RAIL

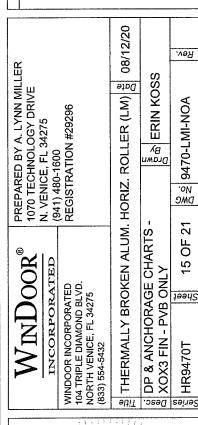
MR = TOTAL QTY AT EACH END OF MEETING RAIL

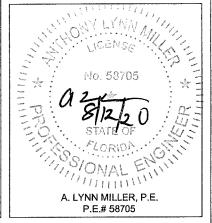
# CHART 9 ANCHORAGE QUANTITY NOTES:

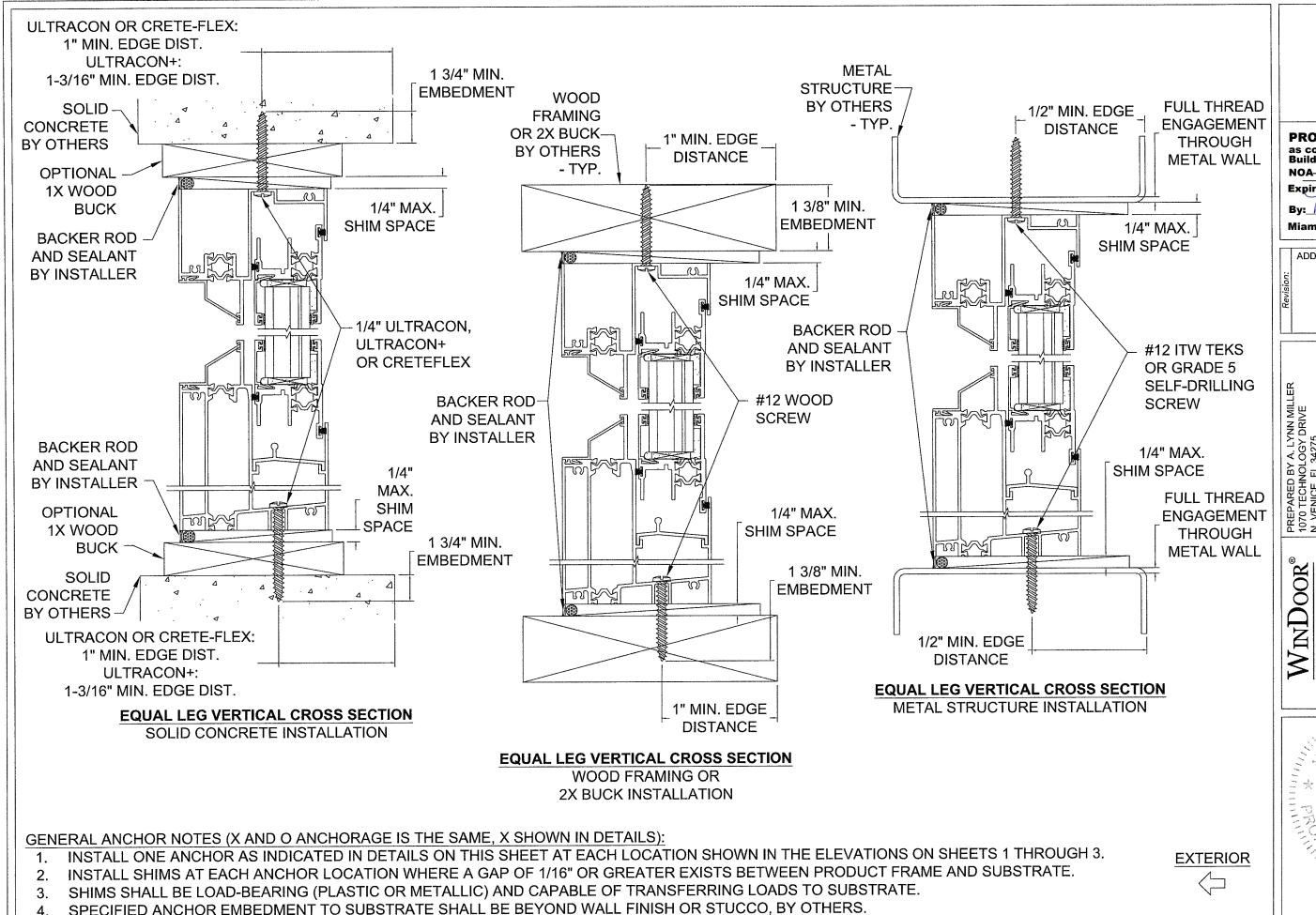
- 1. CHART APPLIES TO FIN WINDOWS INSTALLED TO 2X WOOD THROUGH THE FIN.
- 2. DO NOT EXCEED MAX. ANCHOR SPACING SHOWN IN THE ELEVATION ON SHEET 4.
- 3. ANCHOR QUANTITIES IN SHS LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
- 4. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS



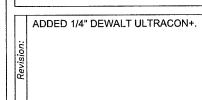


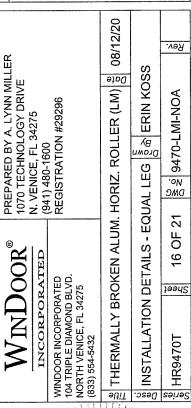


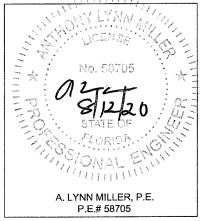


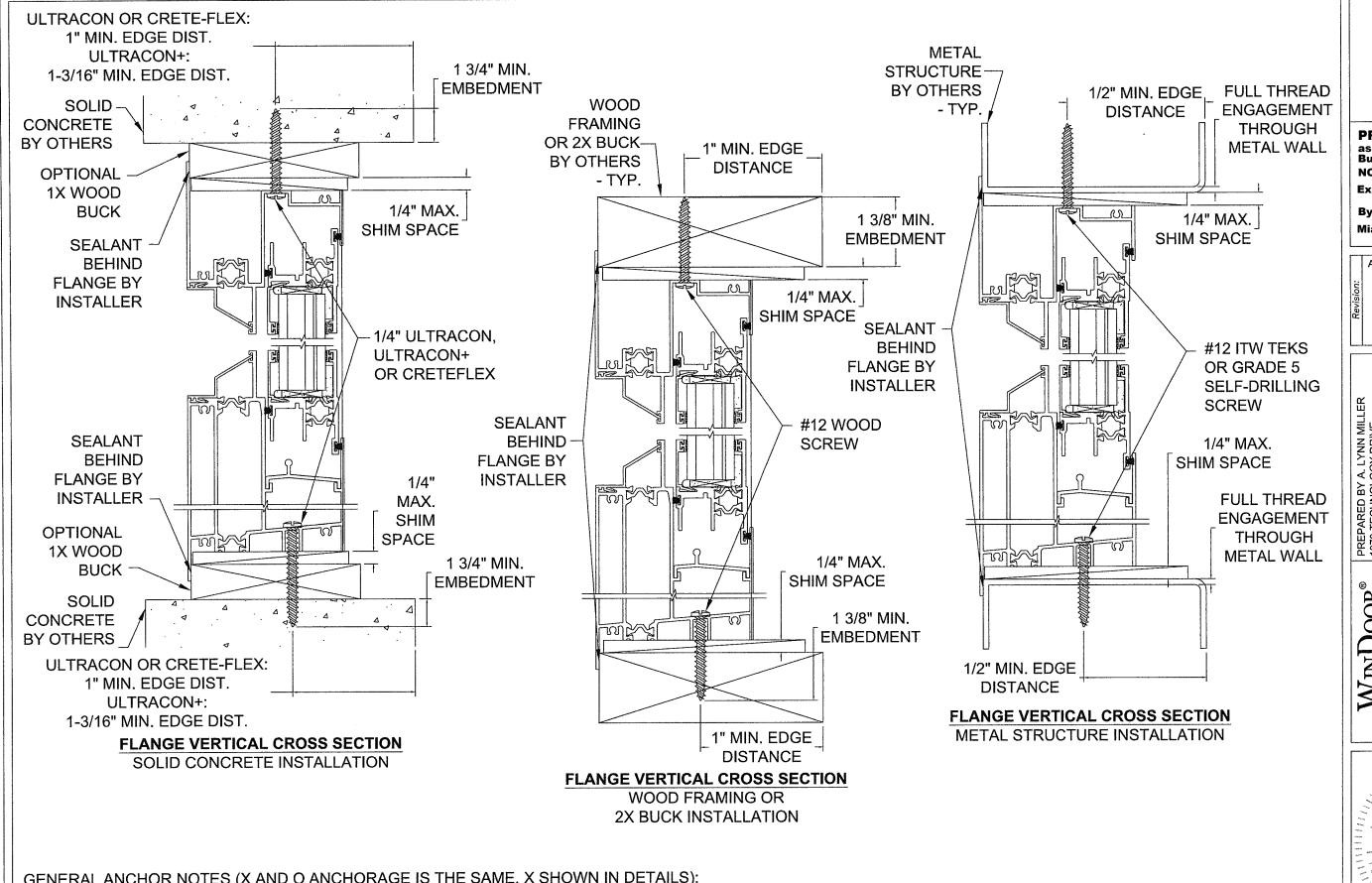


PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0826.16
Expiration Date: 03/09/22
By: Manual Product Control



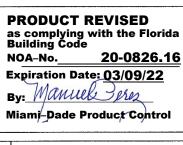


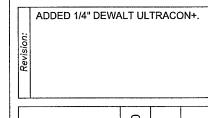


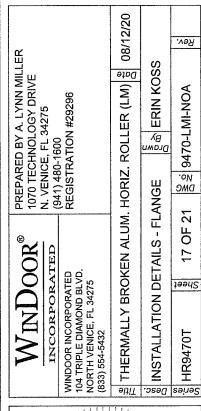


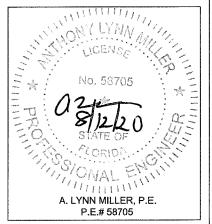
GENERAL ANCHOR NOTES (X AND O ANCHORAGE IS THE SAME, X SHOWN IN DETAILS):

- INSTALL ONE ANCHOR AS INDICATED IN DETAILS ON THIS SHEET AT EACH LOCATION SHOWN IN THE ELEVATIONS ON SHEETS 1 THROUGH 3.
- INSTALL SHIMS AT EACH ANCHOR LOCATION WHERE A GAP OF 1/16" OR GREATER EXISTS BETWEEN PRODUCT FRAME AND SUBSTRATE.
- SHIMS SHALL BE LOAD-BEARING (PLASTIC OR METALLIC) AND CAPABLE OF TRANSFERRING LOADS TO SUBSTRATE.
- 4. SPECIFIED ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL FINISH OR STUCCO. BY OTHERS.

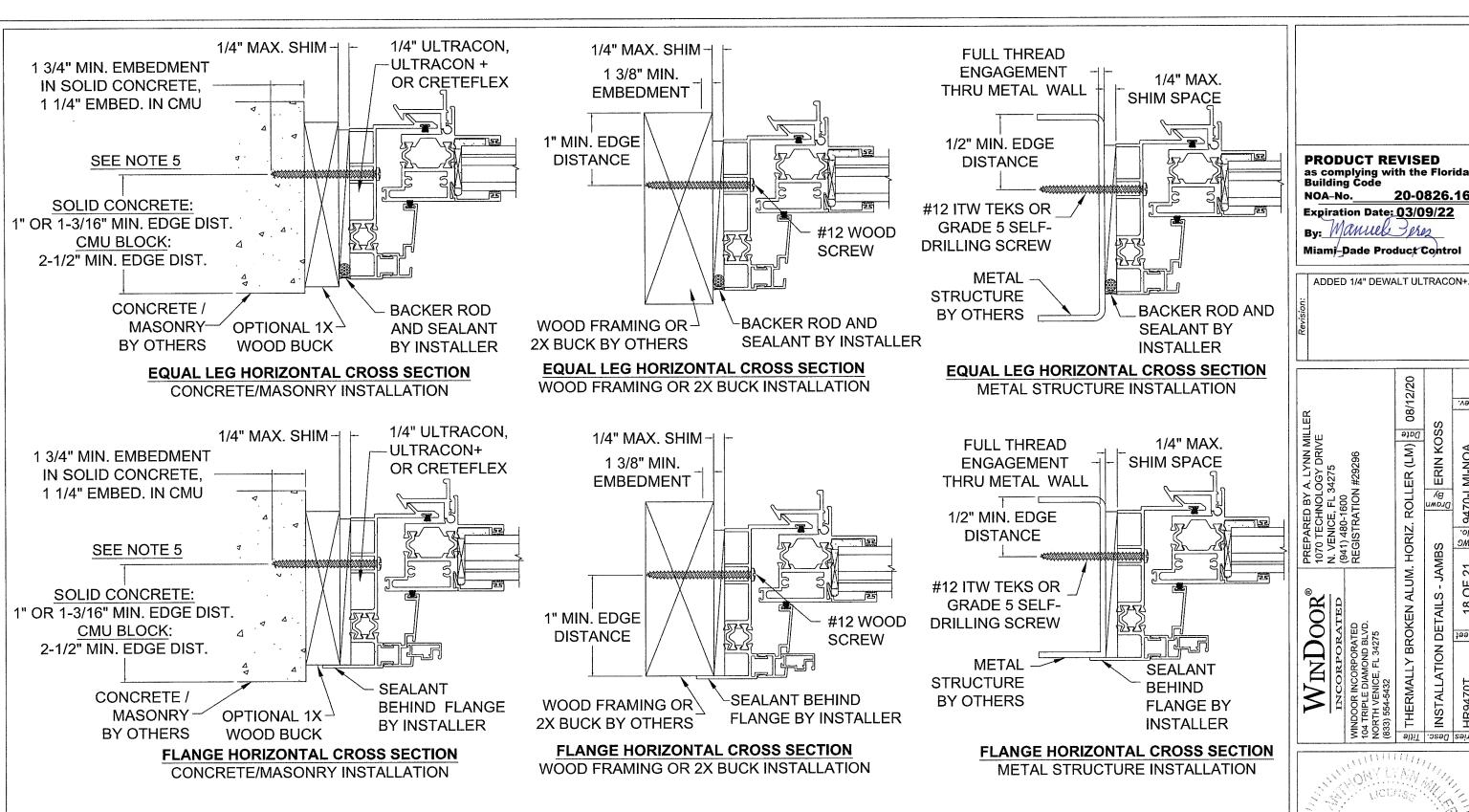






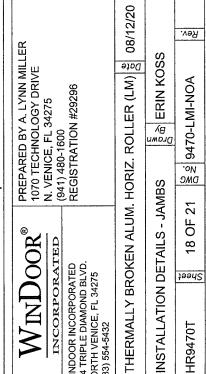


**EXTERIOR** 



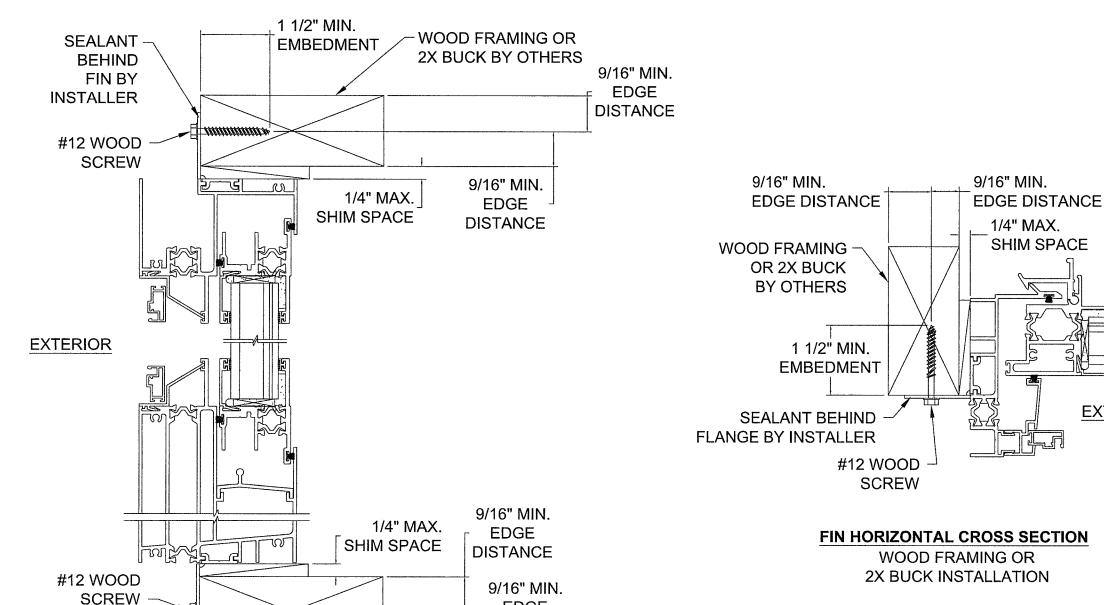
# GENERAL ANCHOR NOTES (X AND O ANCHORAGE IS THE SAME, X SHOWN IN DETAILS):

- INSTALL ONE ANCHOR AS INDICATED IN DETAILS ON THIS SHEET AT EACH LOCATION SHOWN IN THE ELEVATIONS ON SHEETS 1 THROUGH 3.
- INSTALL SHIMS AT EACH ANCHOR LOCATION WHERE A GAP OF 1/16" OR GREATER EXISTS BETWEEN PRODUCT FRAME AND SUBSTRATE.
- SHIMS SHALL BE LOAD-BEARING (PLASTIC OR METALLIC) AND CAPABLE OF TRANSFERRING LOADS TO SUBSTRATE.
- SPECIFIED ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL FINISH OR STUCCO, BY OTHERS.
- 5. 1" MIN. EDGE DIST. FOR ULTRACON OR CRETE-FLEX INTO CONCRETE, 1-3/16" MIN. EDGE DIST. FOR ULTRACON+ INTO CONCRETE.



**EXTERIOR** 

20-0826.16



**EXTERIOR** 

# FIN VERTICAL CROSS SECTION

\*\*\*\*\*\*\*\*\*\*\*\*\*

**SEALANT BEHIND** FIN BY INSTALLER

> WOOD FRAMING OR 2X BUCK INSTALLATION

# GENERAL ANCHOR NOTES (X AND O ANCHORAGE IS THE SAME, X SHOWN IN DETAILS):

1 1/2" MIN.

**EMBEDMENT** 

INSTALL ONE ANCHOR AS INDICATED IN DETAILS ON THIS SHEET AT EACH LOCATION SHOWN IN THE ELEVATION ON SHEETS 2 THROUGH 4.

**EDGE** 

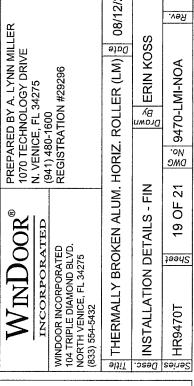
**DISTANCE** 

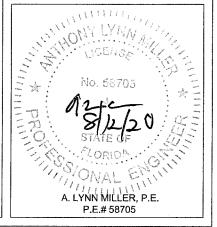
WOOD FRAMING OR

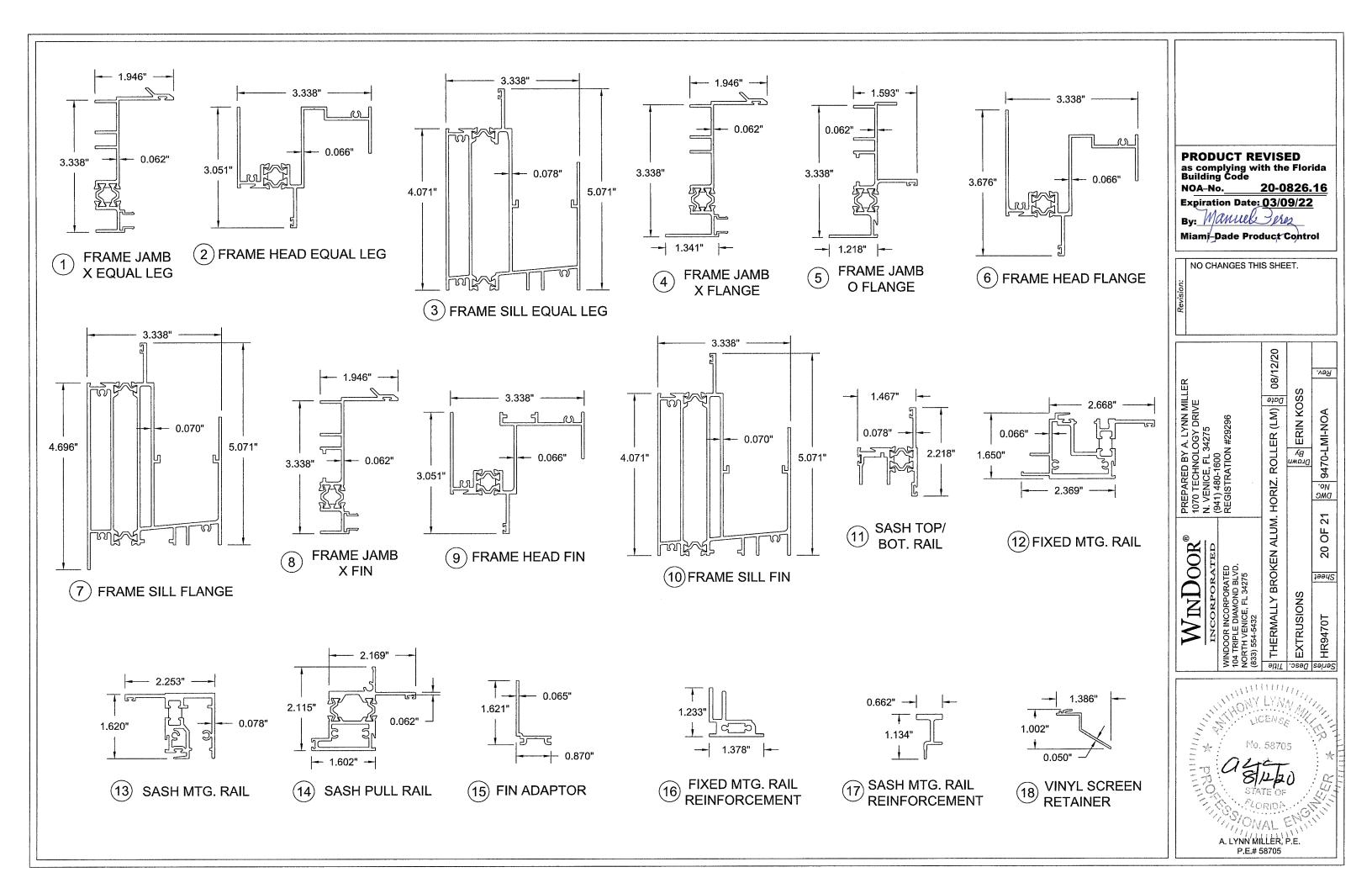
2X BUCK BY OTHERS

- INSTALL SHIMS AT EACH ANCHOR LOCATION WHERE A GAP OF 1/16" OR GREATER EXISTS BETWEEN PRODUCT FRAME AND SUBSTRATE.
- SHIMS SHALL BE LOAD-BEARING (PLASTIC OR METALLIC) AND CAPABLE OF TRANSFERRING LOADS TO SUBSTRATE.
- 4. SPECIFIED ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL FINISH OR STUCCO, BY OTHERS.







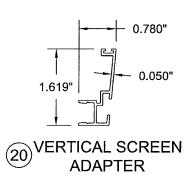


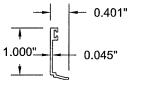
	ľ	BILL OF MATERIALS		
	MANUFACTURER (MAT.)	DESCRIPTION	PART NUMBER	NO.
	KEYMARK (ALUM. 6063-T6)	FRAME JAMB OPERABLE FLUSH	13947006	1
	KEYMARK (ALUM. 6063-T6)	FRAME HEAD FLUSH	1394X004	2
	KEYMARK (ALUM. 6063-T6)	FRAME SILL FLUSH	13947001	3
	KEYMARK (ALUM. 6063-T6)	FRAME JAMB OPERABLE FLANGE	13947007	4
	KEYMARK (ALUM. 6063-T6)	FRAME JAMB FIXED FLANGE	1394X002	5
	KEYMARK (ALUM. 6063-T6)	FRAME HEAD FLANGE	1394X005	6
	KEYMARK (ALUM. 6063-T6)	FRAME SILL FLANGE	13947002	7
	KEYMARK (ALUM. 6063-T6)	FRAME JAMB OPERABLE FIN	13497006	8
	KEYMARK (ALUM. 6063-T6)	FRAME HEAD FIN	1349X006	9
╗	KEYMARK (ALUM, 6063-T6)	FRAME SILL FIN	13947001	10
$\dashv$	KEYMARK (ALUM. 6063-T6)	SASH TOP & BOTTOM RAIL	13947004	11
_	KEYMARK (ALUM. 6063-T6)	FIXED MEETING RAIL	1394X007	12
$\dashv$	KEYMARK (ALUM. 6063-T6)	SASH MEETING RAIL	1394X010	13
ᅦ	KEYMARK (ALUM. 6063-T6)	SASH PULL RAIL	13947005	14
┧	KEYMARK (ALUM. 6063-T6)	FIN ADAPTOR	S-49332	15
	KEYMARK (ALUM. 6063-T6)	FIXED MEETING RAIL REINFORCEMENT	1294X029	16
-  -	KEYMARK (ALUM. 6063-T6)	SASH MEETING RAIL REINFORCEMENT	1194X011	17
٦L	TEAM PLASTICS (10415)	VINYL SCREEN RETAINER	17010415	18
$\neg$	KEYMARK (ALUM. 6063-T6)	FRAME HEAD SCREW COVER	1194X013	19
$\neg$	KEYMARK (ALUM. 6063-T6)	VERTICAL SCREEN ADAPTER	1194X009	20
	KEYMARK (ALUM. 6063-T6)	FRAME JAMB FIXED FLUSH	1394X001	21
		SASH LOCK	H4000-XX-SL202	22
1	KEYMARK (ALUM. 6063-T6)	ROLLER TRACK	11947009	23
	KEYMARK (ALUM. 6063-T6)	GLASS STOP	1194X012	24
	TEAM PLASTICS (VINYL)	GLAZING VINYL #5	121005	25
	TEAM PLASTICS (VINYL)	SASH STOP	17015071	26
$\neg$	TEAM PLASTICS (VINYL)	BALANCE COVER	17015070	27
	TEAM PLASTICS (VINYL)	DEBRIDGE COVER	17015072	28
$\exists$	TEAM PLASTICS (VINYL)	THERMAL ISOLATOR	17015073	29
$\exists$	KEYMARK (ALUM. 6063-T6)	SCREEN FRAME	S4000-XX-150	30

	BILL OF MATERIALS											
	NO.	PART NUMBER	DESCRIPTION	MANUFACTURER (MAT.)								
	31	S4000-BL-SC	SCREEN CORNERS									
╗	32	S4000-SS-027	SCREEN WIRE LIFT									
ヿ	33	900187	SCREEN TENSION SPRING									
$\dashv$	34	SBVXX-BL-0600Z	SCREEN MESH									
┪	35	S0010-BL-2200R	SCREEN SPLINE									
┪	36	121998	0.187" W X 0.200" H FIN WEATHERSTRIP	ULTRAFAB								
┪	37	W4000-BL-20218	0.187" W X 0.300" H PROLON WEATHERSTRIP	ULTRAFAB								
ᅦ	38	W4070-BL-W2	CLOSED CELL FOAM PAD	FRANKE LOWE								
┪	39	122023	0.810" W X 0.700" L X 0.240" H WOOLPILE PAD	ULTRAFAB								
┨	40	131096	#6 X 3/4" FLAT HEAD TYPE A PAINTED SASH L	OCK SCREWS								
$\dashv$	41	131014	#8 X 1" PAN HEAD SQUARE DRIVE LEAD POIN	T CORNER ASSEMBLY SCREWS								
$\dashv$	42	131085	#8 X 1" FLAT HEAD BALANCE SCREWS TYPE A	A								
$\dashv$	43	263400	9/16" THERMAL STRUT INSULBAR	ENSINGER (TECATHERM 66 GF)								
$\dashv$	44	121104	GLASS SHIM DUROMETER 85	FRANK LOWE (2RB-89-0250-024-032)								
$\dashv$	45		SIKA 552, DOW 791, DOW 983	SIKA / DOW (POLYURETHANE/SILICONE)								
$\dashv$	46	GLASS	SEE GLAZING DETAIL AND TYPES, SHEET 4									
-	47	1914-7188-SS	ROLLER ASSEMBLY	AMESBURY (STAINLESS STEEL)								
_	48	TP990	SPACER SYSTEM (SEE NOTE BELOW)	HELIMA (ALUMINUM AW-3000)								

NOTE: SPACER MATERIAL TENSILE ULTIMATE STRENGTH FTU= 17KSI TENSILE YIELD STRENGTH FTY= 12KSI

1.093" 0.062" 3.338" O EQUAL LEG/FIN





(23) ROLLER TRACK (24) GLASS STOP

(28) DEBRIDGE COVER

**PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 20-0826.16 Expiration Date: 03/09/22

By: Manuel Perez Miami-Dade Product Control

ADDED DOW 791 & DOW 983 TO

