

## MIAMI-DADE COUNTY, FLORIDA 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

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

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

PGT Industries, Inc. 1070 Technology Drive 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 "PW7720A" Aluminum Fixed Window – L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **MD-7720A.1**, titled "Fixed Window Installation Guidelines", sheets 1 through 10 of 10, dated 04/12/13, with revision **F** dated 07/31/23, 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 and renews NOA No. 20-0401.10 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. 23-0816.02 Expiration Date: February 19, 2029 Approval Date: September 14, 2023 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. 08-1112.09)
- 2. Drawing No. **MD-7720A.1**, titled "Fixed Window Installation Guidelines", sheets 1 through 10 of 10, dated 04/12/13, with revision **E** dated 03/11/20, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E. (Submitted under NOA No. 20-0401.10)

#### 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. representative units listed below and tested to qualify **Dowsil 791** and **Dowsil 983** silicones, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.: **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) dated 07/13/20, all signed and sealed by Idalmis Ortega, P.E.

(Submitted under NOA No. 20-0401.10)

- 2. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of a PVC sliding glass door, a PVC fixed window and an aluminum sliding glass door, using: Kodispace 4SG TPS spacer system, Duraseal<sup>®</sup> spacer system, Super Spacer<sup>®</sup> NXT<sup>TM</sup> spacer system and XL Edge<sup>TM</sup> spacer system at insulated glass, prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-8717**, **FTL-8968** and **FTL-8970**, dated 11/16/15, 06/07/16 and 06/02/16 respectively, all signed and sealed by Idalmis Ortega, P.E. (Submitted under NOA No. 16-0629.14)

Manuel Perez, P.E. Product Control Examiner NOA No. 23-0816.02

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)
- B. TESTS (CONTINUED)
  - 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
    - 6) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94

along with marked-up drawings and installation diagram of an aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-7212**, dated 03/21/13, signed and sealed by Marlin D. Brinson, P.E.

(Submitted under NOA No. 13-0502.03)

- **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

along with marked-up drawings and installation diagram of an aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-3835** and **FTL-3850**, dated 07/18/03 and 07/31/03 respectively, all signed and sealed by Joseph C. Chan, P.E.

(Submitted under NOA No. 03-1105.02)

## C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC 6<sup>th</sup> Edition (2017), prepared by manufacturer, dated 04/19/18, revised and updated to the FBC 7<sup>th</sup> Edition (2020) on 03/19/20, signed and sealed by Anthony Lynn Miller, P.E. (Submitted under NOA No. 20-0401.10)
- 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. 18-0725.11 issued to Kuraray America, Inc. for their "Kuraray SentryGlas® Xtra™ (SGX™) Clear Glass Interlayer" dated 05/23/19, expiring on 05/23/24.

Manuel Perez, P.E. Product Control Examiner NOA No. 23-0816.02

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)
- E. MATERIAL CERTIFICATIONS (CONTINUED)
  - **3.** TREMCO Part No. **TR-14271E** EPDM exterior glazing gasket complying with the following:
    - a) ASTM C864 Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers with Option II exceptions.
    - b) ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers Tension of 1600 PSI.
    - c) ASTM D395B Test Methods for Rubber Property Compression Set for 22 HRS 158°F.
    - d) ASTM D 624 Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers of 143 lb./ in.

## F. STATEMENTS

- 1. Statement letter of conformance, complying with FBC 6<sup>th</sup> Edition (2017) and the FBC 7<sup>th</sup> Edition (2020), dated March 10, 2020, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
  - (Submitted under NOA No. 20-0401.10)
- 2. Statement letter of no financial interest, dated March 10, 2018, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E. (Submitted under NOA No. 20-0401.10)
- **3.** Proposal No. **19-1155 TP** issued by the Product Control Section, dated January 10, 2020, signed by Ishaq Chanda, P.E.
  - (Submitted under NOA No. 20-0401.10)
- 4. Proposal No. 17-1508 issued by the Product Control Section, dated November 16, 2017, signed by Jorge Plasencia, P.E., Product Control Unit Supervisor. (Submitted under NOA No. 18-0430.05)
- 5. Proposal No. **16-1372B** issued by the Product Control Section, dated 11/09/16, signed by Manuel Perez, P.E
  - (Submitted under NOA No. 17-0614.11)
- **6.** Proposal No. **16-0125** issued by the Product Control Section, dated March 09, 2016, signed by Ishaq Chanda, P.E.
  - (Submitted under NOA No. 17-0614.11)
- 7. Laboratory compliance letter for Test Report No. FTL-7212, dated 03/21/13, signed and sealed by Marlin D. Brinson, P.E. (Submitted under NOA No. 13-0502.03)
- 8. Laboratory compliance letter for Test Reports No. FTL-3834 and FTL-3847, dated 07/30/03 and 07/31/03 respectively, all signed and sealed by Joseph C. Chan, P.E. (Submitted under NOA No. 03-1105.01)

Manuel Perez, P.E. Product Control Examiner NOA No. 23-0816.02

## **PGT Industries, Inc.**

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

## 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)

#### G. OTHERS

1. Notice of Acceptance No. **18-0430.05**, issued to PGT Industries, Inc. for their Series "PW7720A" Aluminum Fixed Window – L.M.I., approved on 08/23/18 and expiring on 02/19/24.

#### 2. NEW EVIDENCE SUBMITTED

#### A. DRAWINGS

1. Drawing No. **MD-7720A.1**, titled "Fixed Window Installation Guidelines", sheets 1 through 10 of 10, dated 04/12/13, with revision **F** dated 07/31/23, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

#### B. TESTS

and FBC Sections 2406.2 and 2406.4.3.

along with marked-up drawings and installation diagram of CGI Windows & Doors, Inc. and PGT Industries, Inc. representative units listed below and tested to qualify ANSI Z97.1 Safety Glazing on corresponding lites of CGI and PGT lines of fixed window products, prepared by QAI Laboratories, Test Reports No.:

NOK-0049, test specimen: CGI Windows & Doors, Inc. Series "PW238" Aluminum Fixed Window – L.M.I. (unit 1 in proposal No. 23-0441R dated 06/12/23).

NOK-0050, test specimen: PGT Industries, Inc. Series "PW5520 Vinyl Fixed Window – L.M.I. (unit 2 in proposal No. 23-0441R dated 06/12/23), each dated 08/02/23, and signed and sealed by Idalmis Ortega, P.E.

#### C. CALCULATIONS

1. None.

#### D. OUALITY 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. 22-1116.01 issued to Kuraray America, Inc. for their "SentryGlas® (Clear and White) Glass Interlayers" dated 12/15/22, expiring on 07/04/28.

Manuel Perez, P.E. Product Control Examiner NOA No. 23-0816.02

## **PGT 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) and the FBC 8<sup>th</sup> Edition (2023), dated July 31, 2023, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
- 2. Statement letter of no financial interest, dated July 31, 2023, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
- **3.** Proposal No. **23-0441R** issued by the Product Control Section, dated 06/06/23 and revised on 06/12/23, signed by Manuel Perez, P.E

## G. OTHERS

1. Notice of Acceptance No. **20-0401.10**, issued to PGT Industries, Inc. for their Series "PW7720A" Aluminum Fixed Window – L.M.I., approved on 08/06/20 and expiring on 02/19/24.

Manuel Pérez, P.E.
Product Control Examiner
NOA No. 23-0816.02

## **GENERAL NOTES: SERIES PW7720A IMPACT-RESISTANT FIXED WINDOW**

- 1) THIS PRODUCT HAS BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 2) SHUTTERS ARE NOT REQUIRED WHEN USED IN WIND-BORNE DEBRIS REGIONS. FOR INSULATED GLASS INSTALLATIONS ABOVE 30' IN THE HVHZ, THE OUTBOARD LITE (CAP) MUST TEMPERED.
- 3) FOR MASONRY APPLICATIONS IN MIAMI-DADE COUNTY, USE ONLY MIAMI-DADE COUNTY APPROVED MASONRY ANCHORS. MATERIALS USED FOR ANCHOR EVALUATIONS WERE SOUTHERN PINE, ASTM C90 CONCRETE MASONRY UNITS AND CONCRETE WITH MIN. KSI PER ANCHOR TYPE.
- 4) ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1X INSTALLATIONS. 1X WOOD BUCKS ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER, 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED TO PROPERLY TRANSFER LOADS TO THE STRUCTURE. WOOD BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER, (EOR) OR ARCHITECT OF RECORD, (AOR).
- 5) ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. USE ANCHORS OF SUFFICIENT EMBEDMENT. NARROW JOINT SEALANT IS USED ON ALL FOUR CORNERS OF THE FRAME. OVERALL SEALING/FLASHING STRATEGY FOR WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS AND IS BEYOND THE SCOPE OF THESE INSTRUCTIONS.
- 6) MAX. 1/4" SHIMS ARE REQUIRED AT EACH ANCHOR LOCATION WHERE THE PRODUCT IS NOT FLUSH TO THE SUBSTRATE, USE SHIMS CAPABLE OF TRANSFERRING APPLIED LOADS. WOOD BUCKS, BY OTHERS, MUST BE SUFFICIENTLY ANCHORED TO RESIST LOADS IMPOSED ON THEM BY THE WINDOW.

#### 7) DESIGN PRESSURES:

A. NEGATIVE DESIGN LOADS BASED ON STRUCTURAL/CYCLE TEST PRESSURE, FRAME ANALYSIS AND GLASS PER ASTM E1300. B. POSITIVE DESIGN LOADS BASED ON WATER TEST PRESSURE STRUCTURAL/ CYCLE TEST PRESSURE, FRAME ANALYSIS AND GLASS PER ASTM E1300.

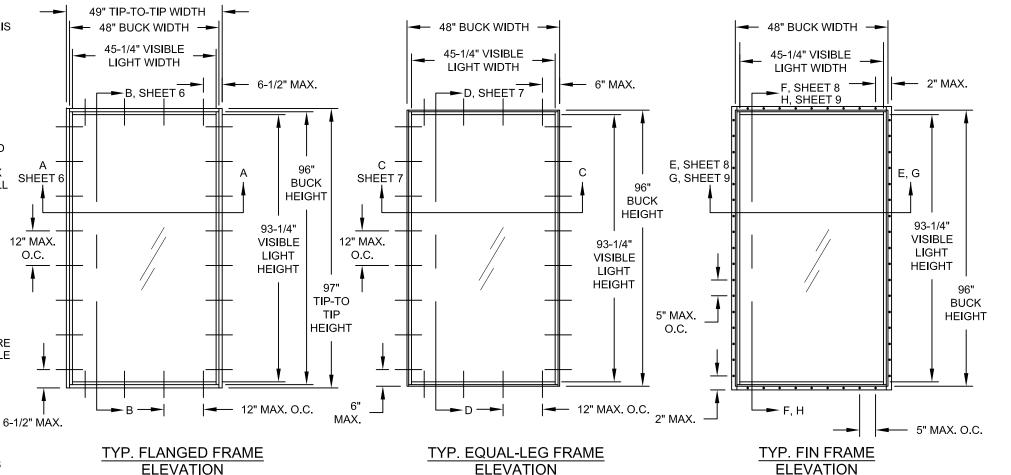
- C. DESIGN LOADS ARE BASED ON ALLOWABLE STRESS DESIGN, ASD.
- 8) THE ANCHORAGE METHODS SHOWN HAVE BEEN DESIGNED TO RESIST THE WINDLOADS CORRESPONDING TO THE REQUIRED DESIGN PRESSURE. THE 33-1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. THE 1.6 LOAD DURATION FACTOR WAS USED FOR THE EVALUATION OF ANCHORS INTO WOOD. ANCHORS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE FOR CORROSION RESISTANCE.
- 9) REFERENCES: TEST REPORTS FTL-3835, 3850, 7212 & 18-7763; DEWALT ULTRACON/ULTRACON + NOA; DEWALT/ELCO CRETEFLEX NOA; ANSI/AF&PA NDS FOR WOOD CONSTRUCTION AND ALUMINUM DESIGN MANUAL.
- 10) THE 7720A SERIES WAS FORMERLY CALLED THE 720/820 SERIES.
- 11) FRAME FLANGES OR INTEGRAL FINS CAN BE REMOVED IN-FIELD TO CREATE AN EQUAL-LEG FRAME. SEAL CUT EDGE.

#### CODES / STANDARDS USED:

- 2023 FLORIDA BUILDING CODE (FBC), 8TH EDITION
- 2020 FLORIDA BUILDING CODE (FBC), 7TH EDITION
- ANSI/AF&PA NDS-2018 FOR WOOD CONSTRUCTION
- ALUMINUM DESIGN MANUAL, ADM-2020
- AISI S100-16
- AISC 360-16

THIS SYSTEM HAS BEEN TESTED TO MEET THE 400 FT-LB KINETIC ENERGY IMPACT LOADING REQUIREMENTS OF ANSI Z97.1 WHEN USING GLASS TYPES 2, 4, 6, OR 8

**DESIGN PRESSURE RATING** IMPACT RATING LARGE & SMALL MISSILE SEE SHEETS 2-5 IMPACT RESISTANCE

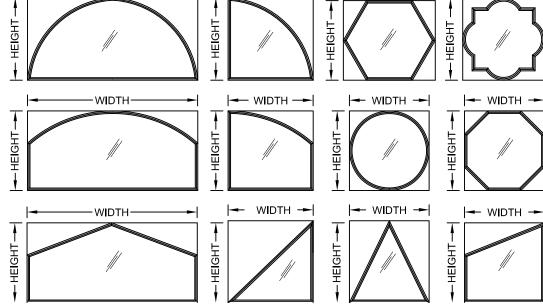


# **ELEVATION**

FIGURE 1: 12" O.C. MAX. 12" O.C. MAX.

**ELEVATION** 

SHAPES AS SHOWN BELOW OR SIMILAR, MAY BE USED BY INSCRIBING THE SHAPE IN A BLOCK AND OBTAINING DESIGN PRESSURES FOR THAT BLOCK SIZE FROM THE TABLES ON SHEETS 2-5 ANCHOR SPACING TO BE 6" MAX. FROM CORNERS AND 12" O.C. MAX. FOR ALL CURVED FRAME MEMBERS, SEE FIGURE 1, THIS SHEET.



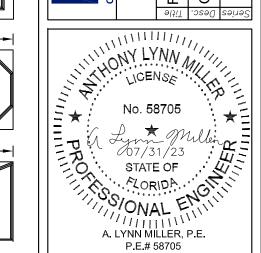
**PRODUCT REVISED** As complying with the Florida Building Code NOA-No. 23-0816.02 **Expiration Date: 02/19/2029** 

By: Manuel Peres Miami-Dade Product Control

F) UPDATED TO 2023 BUILDING CODE. REMOVE 'INTALLATION ANCHORS s/b SEALED" FROM NOTE 5. ADD NOTE, MEETS ANSI Z97.1. ADD NOTE 11. REVISE ULTRACON NOA, NOTE 9. SB - 07/31/23



l<del>---</del> width -<del>--</del>



## **GUIDE TO SHEETS:**

GENERAL NOTES	
GLAZING DETAILS	
DESIGN PRESSURES	2-5
INSTALLATION, FLANGE	6
INSTALLATION, EQUAL-LEG	7
INSTALLATION, INT. FIN A	8
INSTALLATION, INT. FIN B	9
CORNER ASSEMBLY	10
EXTRUSION PROFILES	10
PARTS LIST	10

6" MAX

Type #	Description	Sheet #
1	7/16" Lami (3/16" An090" PVB - 3/16" HS)	2
2	7/16" Lami (3/16" HS090" PVB - 3/16" HS)	3
3	1-1/16" Lami. IG (3/16" T - 7/16" Air - 3/16" An090" PVB - 3/16" HS)	2
4	1-1/16" Lami. IG (3/16" T - 7/16" Air - 3/16" HS090" PVB - 3/16" HS)	3
5	7/16" Lami (3/16" An090" SG - 3/16" An)	4
6	7/16" Lami (3/16" HS090" SG - 3/16" HS)	5
7	1-1/16" Lami. IG (3/16" T - 7/16" Air - 3/16" An090" SG - 3/16" An)	4
8	1-1/16" Lami. IG (3/16" T - 7/16" Air - 3/16" HS090" SG - 3/16" HS)	5

"SG" = "KURARAY SENTRYGLAS" INTERLAYER" BY KURARAY AMERICA, INC. "PVB" = "KURARAY TROSIFOL® PVB INTERLAYER" BY KURARAY AMERICA, INC.

#### TABLE 2:

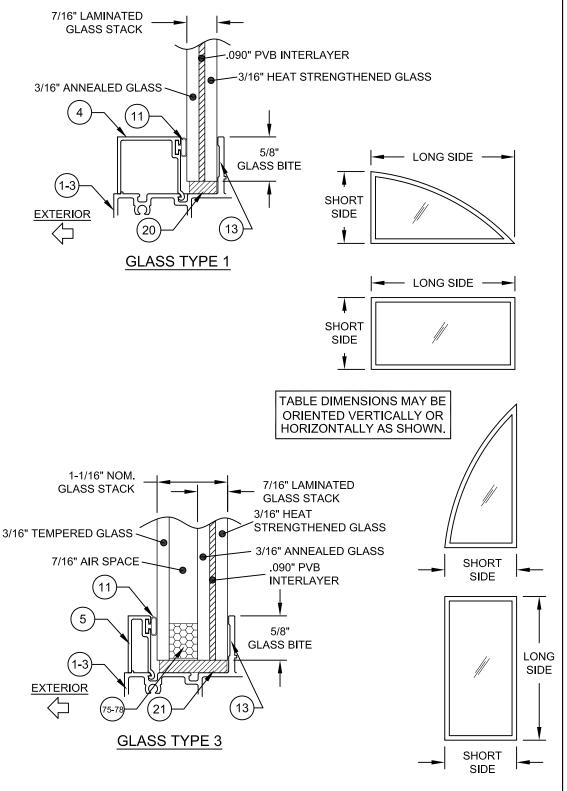
		I												
				,	Window D	esign Pres	sure (+/-, <sub> </sub>	psf) for GI	ass Type ′	1				
			Long Side, Tip to Tip (in)											
		68-7/8	73	77	81	85	89	93	97	101	105	110-1/2		
	31	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80		
	33	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80		
	35	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-79.8	+/-79.4		
	37	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-79.7	+/-77.2	+/-75.1	+/-73.4	+/-72.2		
	39	+/-80	+/-80	+/-80	+/-80	+/-80	+/-78.1	+/-75.2	+/-72.5	+/-70.3	+/-68.5	+/-66.3		
	41	+/-80	+/-80	+/-80	+/-79.8	+/-77.2	+/-74.3	+/-71.3	+/-67.9	+/-65.1	+/-63.4	+/-61.6		
(in)	43	+/-80	+/-80	+/-80	+/-77.4	+/-74.3	+/-71.3	+/-68.2	+/-64.7	+/-61.6	+/-59.8	+/-58.2		
ΞĒ	45	+/-80	+/-80	+/-78.9	+/-75.4	+/-72.1	+/-68.9	+/-65.6	+/-62.2	+/-59.7	+/-57.5			
<u>۽</u>	47	+/-80	+/-80	+/-77.2	+/-73.6	+/-70.1	+/-66.8	+/-63.5	+/-60.3	+/-57.7				
Tip to	49	+/-80	+/-79.3	+/-75.6	+/-71.9	+/-68.3	+/-64.9	+/-61.5	+/-58.2					
	51	+/-80	+/-77.5	+/-74.1	+/-70.3	+/-66.7	+/-63.1	+/-59.7						
Side,	53	+/-79.1	+/-75.6	+/-72.4	+/-68.8	+/-65.1	+/-61.5							
۱	55	+/-77.4	+/-73.8	+/-70.5	+/-67.3	+/-63.5								
Short	57	+/-75.8	+/-72	+/-68.6	+/-65.3									
	59	+/-74.2	+/-70.3	+/-66.8										
	61	+/-72.7	+/-68.7	+/-65										
	63	+/-71.2	+/-67.1											
	65	+/-69.7	+/-65.5											
	67	+/-68.3												
	68-7/8	+/-67												

- 1) TIP-TO-TIP DIMENSIONS SHOWN. FOR INTEGRAL FIN AND EQUAL LEG WINDOWS, SUBTRACT 1" FROM THE TIP-TO-TIP DIMENSION IN THE TABLE TO DETERMINE THE WINDOW SIZE.
- 2) FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE SHORT OR LONG DIMENSION.
- 3) FOR ARCHITECTURAL WINDOWS, FIND THE SMALLEST WINDOW SIZE IN THE TABLE ABOVE WHICH THE OVERALL DIMENSIONS COMPLETELY FIT WITHIN.

TABLE 3:

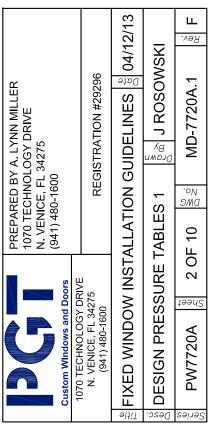
17	DLE J.											
				1	Window De	esign Pres	sure (+/-,	psf) for Gl	ass Type 3	3		
						Long	Side, Tip to T	īp (in)				
		68-7/8	73	77	81	85	89	93	97	101	105	110-1/2
	31	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
	33	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
	35	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
	37	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
	39	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-79.4	+/-76.4	+/-74.3
	41	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-76.7	+/-73.5	+/-70.9	+/-69
Tip (in)	43	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-77	+/-73.1	+/-69.6	+/-66.9	+/-65.2
l₽	45	+/-80	+/-80	+/-80	+/-80	+/-80	+/-77.8	+/-74.1	+/-70.3	+/-67.5	+/-63.9	
\$	47	+/-80	+/-80	+/-80	+/-80	+/-79.2	+/-75.4	+/-71.7	+/-68.1	+/-65.1		
Tip to	49	+/-80	+/-80	+/-80	+/-80	+/-77.2	+/-73.3	+/-69.5	+/-65.8			
o,	51	+/-80	+/-80	+/-80	+/-79.4	+/-75.3	+/-71.3	+/-67.5				
Side,	53	+/-80	+/-80	+/-80	+/-77.7	+/-73.5	+/-69.5					
벌	55	+/-80	+/-80	+/-79.6	+/-76	+/-71.8						
Short	57	+/-80	+/-80	+/-77.5	+/-73.8							
	59	+/-80	+/-79.4	+/-75.4								
	61	+/-80	+/-77.6	+/-73.5								
	63	+/-80	+/-75.8									
	65	+/-78.8	+/-74									
	67	+/-77.2										
	68-7/8	+/-74.9										

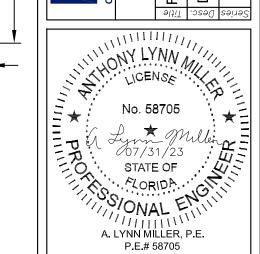
- 1) TIP-TO-TIP DIMENSIONS SHOWN. FOR INTEGRAL FIN AND EQUAL LEG WINDOWS, SUBTRACT 1" FROM THE TIP-TO-TIP DIMENSION IN THE TABLE TO DETERMINE THE WINDOW SIZE.
- 2) FOR SIZES NOT SHOWN, ROUND <u>UP</u> TO THE NEXT AVAILABLE SHORT OR LONG DIMENSION.
  3) FOR ARCHITECTURAL WINDOWS, FIND THE SMALLEST WINDOW SIZE IN THE TABLE ABOVE WHICH THE OVERALL DIMENSIONS COMPLETELY FIT WITHIN.



**PRODUCT REVISED** As complying with the Florida Building Code NOA-No. 23-0816.02 **Expiration Date: 02/19/2029** Miami-Dade Product Control

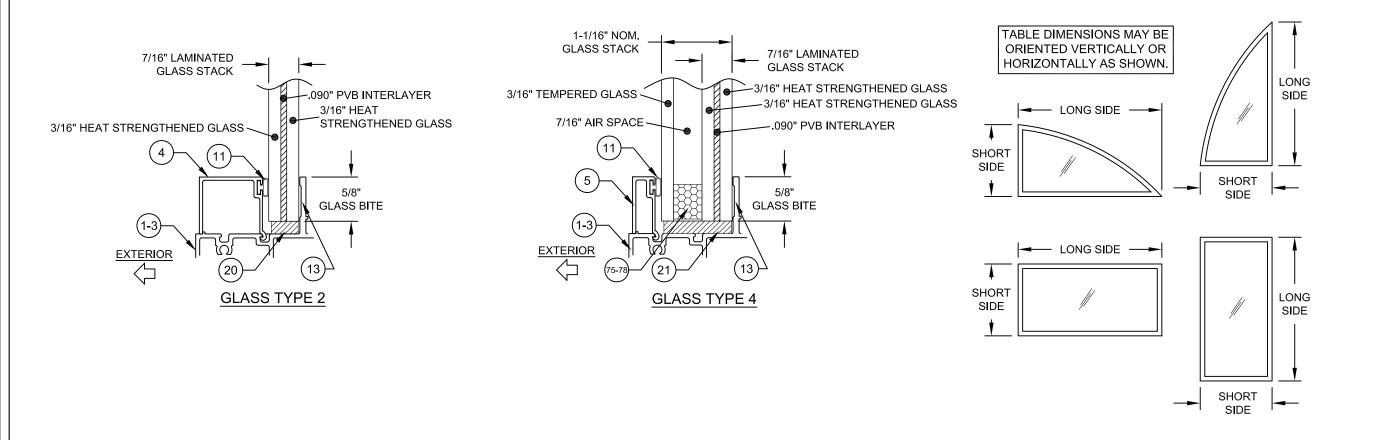
F) NO CHANGES, THIS SHEET. SB - 07/31/23





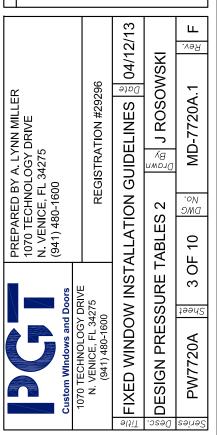
TAE	LE 4:																				
									Window	Design Pr	essure (+/	-, psf) for (	Glass Typ	es 2 & 4							
											Long Side, 7	Tip to Tip (in)									
		68-7/8	73	77	81	85	89	93	97	101	105	110-1/2	113	117	121	125	129	133	137	141	145
	31	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
	33	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
	35	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80			
	37	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80				
	39	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80						
<u></u>	41	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80								
(E)	43	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80									
I≓	45	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80										
유	47	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80											
l≓	49	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80												
<u>a</u>	51	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80													
Š	53	+/-80	+/-80	+/-80	+/-80	+/-80	+/-79.1														
P.	55	+/-80	+/-80	+/-80	+/-80	+/-78.6															
က်	57	+/-80	+/-80	+/-80	+/-79.1																
	59	+/-80	+/-80	+/-80																	$\vdash$
	61	+/-80	+/-80	+/-79.3																	
	63	+/-80	+/-80																-		
	65	+/-80	+/-80																-		
	67	+/-80																	-		
	68-7/8	+/-80																			

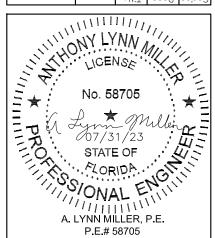
- 1) TIP-TO-TIP DIMENSIONS SHOWN. FOR INTEGRAL FIN AND EQUAL LEG WINDOWS, SUBTRACT 1" FROM THE TIP-TO-TIP DIMENSION IN THE TABLE TO DETERMINE THE WINDOW SIZE.
- 2) FOR SIZES NOT SHOWN, ROUND <u>UP</u> TO THE NEXT AVAILABLE SHORT OR LONG DIMENSION.
- 3) FOR ARCHITECTURAL WINDOWS, FIND THE SMALLEST WINDOW SIZE IN THE TABLE ABOVE WHICH THE OVERALL DIMENSIONS COMPLETELY FIT WITHIN.



PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.02
Expiration Date: 02/19/2029
By: Manuel Product Control

F) NO CHANGES, THIS SHEET. SB - 07/31/23





#### TABLE 5:

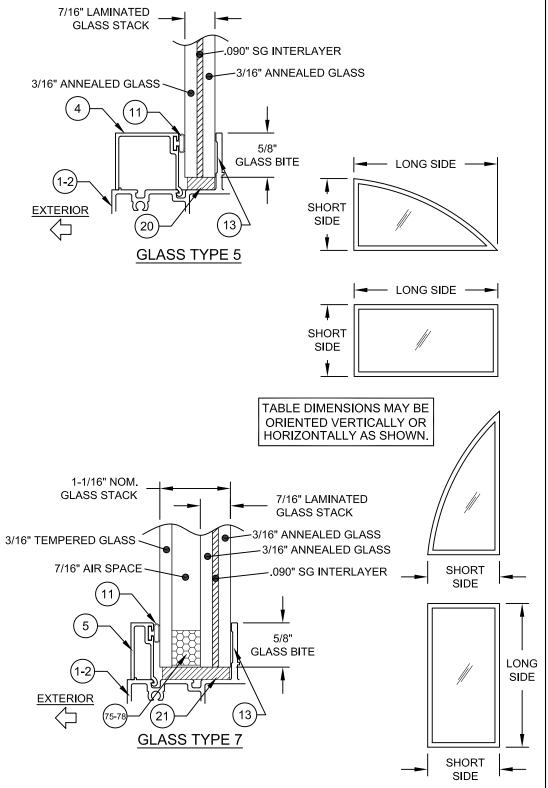
17	DLL J.													
					1	Window Do	esign Pres	sure (+/-, ¡	osf) for Gla	ass Type 5	5			
							Long	Side, Tip to T	ip (in)					
		68-7/8	73	77	78-3/4	81	85	89	93	97	101	105	109	110-1/2
	37	+90/-130	+90/-127.5	+90/-123.5	+90/-121.7	+90/-119.8	+90/-116.5	+90/-113.5	+90/-111	+90/-108.5	+90/-106.3	+90/-104.5	+90/-104.5	+90/-104.5
	39	+90/-126.1	+90/-120	+90/-114.5	+90/-112.9	+90/-111	+90/-107.5	+90/-104.5	+90/-101.7	+90/-99.5	+90/-97.7	+90/-96.1	+90/-94.6	+90/-94.1
	41	+90/-120.1	+90/-113.5	+90/-107.3	+90/-105.2	+90/-103	+90/-100.5	+90/-97.8	+90/-94.9	+90/-92	+/-89.6	+/-88	+/-86.5	+/-86
	43	+90/-114.4	+90/-107.5	+90/-102.5	+90/-100.7	+90/-98.6	+90/-95.2	+90/-92.2	+/-89.1	+/-85.8	+/-83	+/-81.4	+/-80.4	+/-80.1
	45	+90/-108.7	+90/-102.5	+90/-98.8	+90/-97.1	+90/-94.9	+90/-91	+/-87.3	+/-84.1	+/-81.7	+/-79.7	+/-77.8	+/-76.1	+/-75.6
(ii)	47	+90/-104.4	+90/-99.8	+90/-95.7	+90/-93.9	+90/-91.6	+/-87.5	+/-83.6	+/-81	+/-78.9	+/-76.7	+/-74.7	+/-72.7	+/-72
Ξ	49	+90/-101.1	+90/-97	+90/-92.8	+90/-90.9	+/-88.5	+/-84.3	+/-81.2	+/-78.5	+/-76.1	+/-73.9	+/-71.7	+/-69.6	+/-68.9
₽	51	+90/-98.1	+90/-94.1	+90/-90.1	+/-88.2	+/-85.7	+/-82	+/-79.1	+/-76.3	+/-73.6	+/-71.2	+/-68.9	+/-66.8	+/-65.9
<b>₽</b>	53	+90/-95.3	+90/-91.1	+/-87.4	+/-85.6	+/-83.3	+/-80	+/-77	+/-74.1	+/-71.3	+/-68.7	+/-66.3	+/-64	+/-63.2
₽	55	+90/-92.5	+/-88.2	+/-84.3	+/-82.9	+/-81.4	+/-78.1	+/-74.9	+/-71.9	+/-69.1	+/-66.4	+/-63.9	+/-61.8	+/-61.2
	57	+/-89.8	+/-85.3	+/-81.8	+/-80.6	+/-79	+/-76.2	+/-73	+/-69.9	+/-66.9	+/-64.1	+/-61.9	+/-60.1	
Side,	59	+/-87.1	+/-82.8	+/-79.7	+/-78.4	+/-76.8	+/-74	+/-71.1	+/-67.9	+/-64.8	+/-62.2	+/-60.3		
ť	61	+/-84.6	+/-80.8	+/-77.6	+/-76.2	+/-74.6	+/-71.7	+/-69	+/-65.9	+/-62.8	+/-60.8			
Short	63	+/-82.5	+/-78.9	+/-74.6	+/-73.2	+/-71.4	+/-68.4	+/-65.5	+/-62.9	+/-60.9				
0)	65	+/-80.7	+/-77	+/-73.6	+/-72.2	+/-70.4	+/-67.3	+/-64.4	+/-62					
	67	+/-79	+/-75.3	+/-71.7	+/-70.2	+/-68.4	+/-65.2	+/-62.4						
	68-7/8	+/-77.3	+/-73.6	+/-70	+/-68.5	+/-66.6	+/-63.3	+/-61.1						
	73	+/-73.6	+/-70.2	+/-66.5	+/-64.8	+/-62.9	+/-60.5							
	77	+/-70	+/-66.5	+/-63.2	+/-61.9									
	78-3/4	+/-68.5	+/-64.8	+/-61.9	+/-60.9						·			

- 1) TIP-TO-TIP DIMENSIONS SHOWN. FOR INTEGRAL FIN AND EQUAL LEG WINDOWS, SUBTRACT 1" FROM THE TIP-TO-TIP DIMENSION IN THE TABLE TO DETERMINE THE WINDOW SIZE.
- 2) FOR SIZES NOT SHOWN, ROUND  $\underline{\mathsf{UP}}$  TO THE NEXT AVAILABLE SHORT OR LONG DIMENSION.
- 3) FOR ARCHITECTURAL WINDOWS, FIND THE SMALLEST WINDOW SIZE IN THE TABLE ABOVE WHICH THE OVERALL DIMENSIONS COMPLETELY FIT WITHIN.

## TABLE 6:

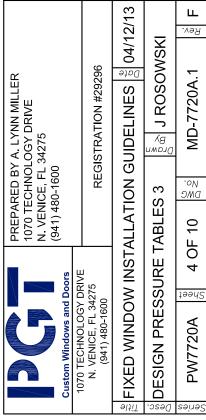
					1	Window De	esign Pres	sure (+/-, p	osf) for Gla	ass Type 7	•			
								Long Side (in	)					
		68-7/8	73	77	78-3/4	81	85	89	93	97	101	105	109	110-1/2
	31	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130
	33	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130
	35	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130
	37	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-128.3	+90/-125.4	+90/-122.6	+90/-120.1	+90/-118.1	+90/-118.1	+90/-118.
	39	+90/-130	+90/-130	+90/-129.4	+90/-127.5	+90/-125.4	+90/-121.5	+90/-118.1	+90/-114.9	+90/-112.5	+90/-110.4	+90/-108.6	+90/-106.9	+90/-106.
	41	+90/-130	+90/-128.3	+90/-121.2	+90/-118.9	+90/-116.4	+90/-113.6	+90/-110.5	+90/-107.2	+90/-103.9	+90/-101.3	+90/-99.4	+90/-97.7	+90/-97.1
	43	+90/-129.3	+90/-121.5	+90/-115.8	+90/-113.8	+90/-111.4	+90/-107.5	+90/-104.2	+90/-100.6	+90/-97	+90/-93.8	+90/-92	+90/-90.9	+90/-90.5
	45	+90/-122.9	+90/-115.8	+90/-111.6	+90/-109.7	+90/-107.3	+90/-102.8	+90/-98.7	+90/-95	+90/-92.3	+90/-90.1	+/-87.9	+80/-85.9	+80/-85.4
	47	+90/-118	+90/-112.7	+90/-108.1	+90/-106.1	+90/-103.5	+90/-98.8	+90/-94.4	+90/-91.5	+/-89.1	+/-86.7	+80/-84.4	+80/-82.1	+80/-81.3
(in)	49	+90/-114.2	+90/-109.6	+90/-104.8	+90/-102.7	+90/-100	+90/-95.3	+90/-91.8	+/-88.7	+/-86	+80/-83.5	+80/-81	+/-78.7	+/-77.8
Side	51	+90/-110.9	+90/-106.3	+90/-101.8	+90/-99.6	+90/-96.9	+90/-92.7	+/-89.3	+/-86.2	+80/-83.2	+80/-80.5	+/-77.9	+/-75.4	+/-74.5
	53	+90/-107.7	+90/-102.9	+90/-98.7	+90/-96.7	+90/-94.1	+90/-90.4	+/-87	+80/-83.7	+80/-80.6	+/-77.7	+/-74.9	+/-72.3	+/-71.4
ة	55	+90/-104.5	+90/-99.6	+90/-95.3	+90/-93.7	+90/-91.9	+/-88.3	+80/-84.6	+80/-81.3	+/-78.1	+/-75.1	+/-72.2	+/-69.8	+/-69.1
Short	57	+90/-101.5	+90/-96.4	+90/-92.5	+90/-91	+/-89.3	+80/-86.1	+80/-82.4	+/-78.9	+/-75.6	+/-72.5	+/-69.9	+/-67.9	
	59	+90/-98.5	+90/-93.5	+/-90	+/-88.5	+80/-86.8	+80/-83.6	+80/-80.3	+/-76.7	+/-73.3	+/-70.3	+/-68.2		
	61	+90/-95.6	+90/-91.3	+/-87.7	+80/-86.2	+80/-84.3	+80/-81	+/-77.9	+/-74.5	+/-71	+/-68.7			
	63	+90/-92.2	+/-88.1	+80/-84.3	+80/-82.7	+80/-80.7	+/-77.3	+/-74	+/-71	+/-68.8				
	65	+90/-91.2	+/-87	+80/-83.2	+80/-81.6	+/-79.6	+/-76.1	+/-72.8	+/-70					
	67	+/-89.3	+80/-85	+80/-81	+/-79.4	+/-77.3	+/-73.7	+/-70.5						
	68-7/8	+/-87.3	+80/-83.2	+/-79.1	+/-77.4	+/-75.2	+/-71.6	+/-69						
	73	+80/-83.2	+/-79.4	+/-75.1	+/-73.2	+/-71	+/-68.4		·					
	77	+/-79.1	+/-75.1	+/-71.4	+/-69.9				•	•	•			
	78-3/4	+/-77.4	+/-73.2	+/-69.9	+/-68.8									

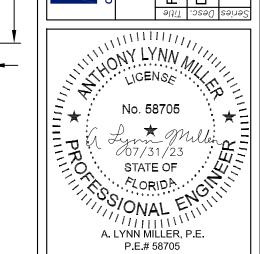
- 1) TIP-TO-TIP DIMENSIONS SHOWN. FOR INTEGRAL FIN AND EQUAL LEG WINDOWS, SUBTRACT 1" FROM THE TIP-TO-TIP DIMENSION IN THE TABLE TO DETERMINE THE WINDOW SIZE.
- 2) FOR SIZES NOT SHOWN, ROUND <u>UP</u> TO THE NEXT AVAILABLE SHORT OR LONG DIMENSION.
  3) FOR ARCHITECTURAL WINDOWS, FIND THE SMALLEST WINDOW SIZE IN THE TABLE ABOVE WHICH THE OVERALL DIMENSIONS COMPLETELY FIT WITHIN.



**PRODUCT REVISED** As complying with the Florida Building Code NOA-No. 23-0816.02 **Expiration Date: 02/19/2029** Miami-Dade Product Control

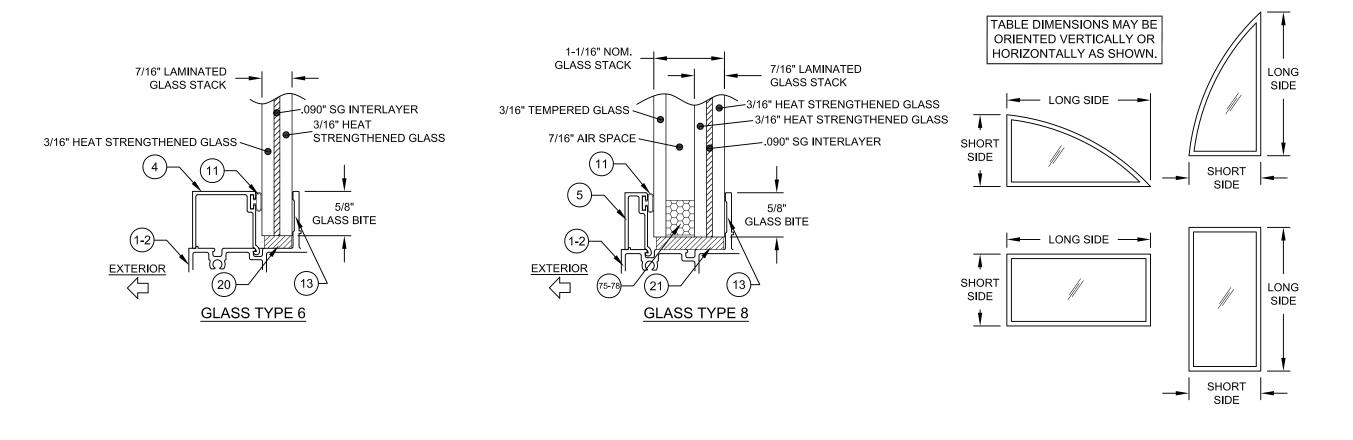
F) NO CHANGES, THIS SHEET. SB - 07/31/23





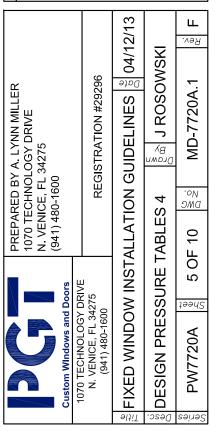
TA	BLE 7:																				
									Window	Design Pr	essure (+/	-, psf) for	Glass Typ	es 6 & 8							
			Long Side, Tip to Tip (in)																		
		68-7/8	73	77	78-3/4	81	85	89	93	97	101	105	109	110-1/2	113	117	121	125	129	137	145
	31	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130
	33	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130
	35	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+80/-110	+80/-110
	37	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+80/-110	+80/-110
	39	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+80/-110	+80/-110	+80/-110	+80/-110
	41	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110
	43	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110
(Ē	45	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	1
<u>.e</u> .	47	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110		ı
阜	49	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110			
Tip t	51	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+89.4/-128.9	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110				
ΙĒ	53	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+88.8/-128.1	1 +80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110					
g	55	+90/-130	+90/-130	+90/-130	+90/-130	+90/-130	+88.8/-128.1	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110						1
S	57	+90/-130	+90/-130	+90/-130	+90/-130	+89.4/-129	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110								
٥	59	+90/-130	+90/-130	+90/-130	+89.5/-129.1	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110									
က်	61	+90/-130	+90/-130	+89.6/-129.	3 +80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110										1
	63	+90/-130	+90/-130	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110											
	65	+90/-130	+90/-130	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110												
	67	+90/-130	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110													
	68-7/8	+90/-130	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110													
	73	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110	+80/-110														
	77	+80/-110	+80/-110	+80/-110	+80/-110																
	78-3/4	+80/-110	+80/-110	+80/-110	+80/-110																

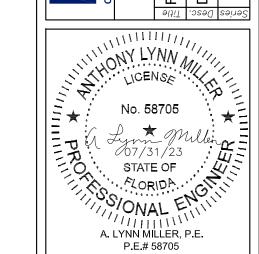
- 1) TIP-TO-TIP DIMENSIONS SHOWN. FOR INTEGRAL FIN AND EQUAL LEG WINDOWS, SUBTRACT 1" FROM THE TIP-TO-TIP DIMENSION IN THE TABLE TO DETERMINE THE WINDOW SIZE.
- 2) FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE SHORT OR LONG DIMENSION.
- 3) FOR ARCHITECTURAL WINDOWS, FIND THE SMALLEST WINDOW SIZE IN THE TABLE ABOVE WHICH THE OVERALL DIMENSIONS COMPLETELY FIT WITHIN.

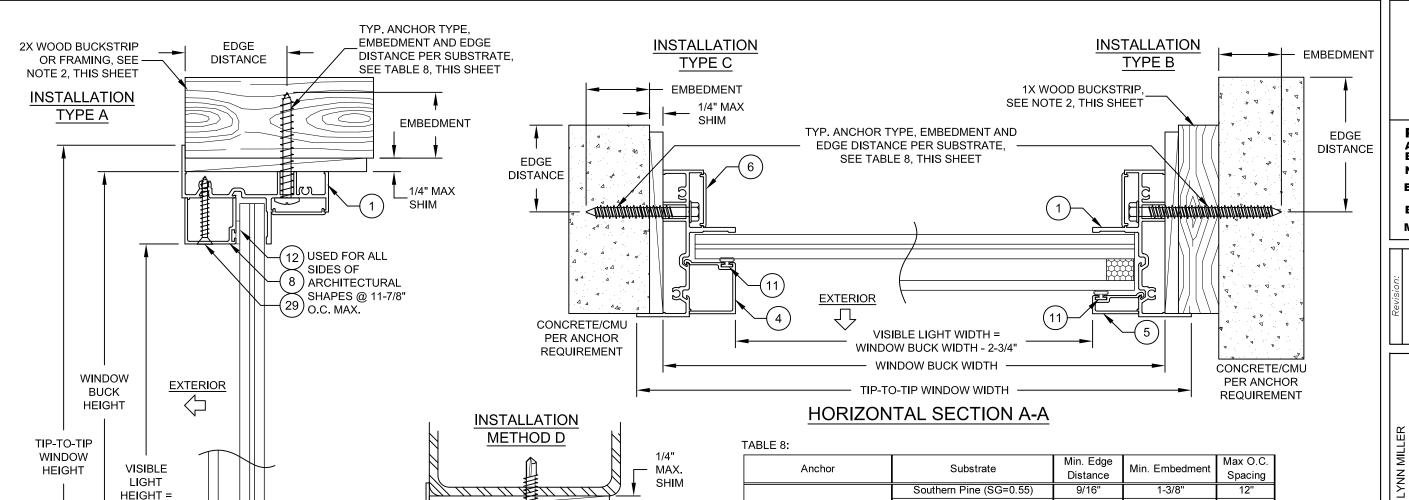


PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.02
Expiration Date: 02/19/2029
By: Manual Product Control

F) NO CHANGES, THIS SHEET. SB - 7/31/23







Anchor	Substrate	Min. Edge Distance	Min. Embedment	Max O.C. Spacing
	Southern Pine (SG=0.55)	9/16"	1-3/8"	12"
#12 or #14 410 SS Screw	Aluminum, 6063-T5 min.	3/8"	0.063" *	12"
#12 01 #14 410 00 001eW	A36 Steel	3/8"	0.063" *	12"
	Steel Stud, Gr. 33 min.	3/8"	0.045" (18 Ga) *	12"
	Southern Pine (SG=0.55)	9/16"	1-3/8"	12"
#12 or #14 Steel Screw (G5)	Aluminum, 6063-T5 min.	3/8"	0.063" *	12"
#12 01 #14 Steel Sciew (GS)	A36 Steel	3/8"	0.063" *	12"
	Steel Stud, Gr. 33 min.	3/8"	0.045" (18 Ga) *	12"
1/4" 410 SS CreteFlex	Ungrouted CMU, (ASTM C-90)	2-1/2"	1-1/4"	12"
1/4 410 33 Cleter lex	Concrete (min. 3.35 ksi)	1"	1-3/4"	12"
1/4" Steel Ultracon +	Concrete (min. 3 ksi)	1-3/16"	1-3/8"	12"
1/4 Steel Offiacon +	Ungrouted CMU, (ASTM C-90)	1-1/2"	1-1/4"	12"
5/16" Steel Ultracon	Concrete (min. 3.5 ksi)	1-1/4"	1-3/4"	12"
3/10 Steel Oillacoil	Grouted CMU, (ASTM C-90)	2-1/2"	1-3/4"	12"

\* MIN. OF 3 THREADS BEYOND THE METAL SUBSTRATE.
"UNGROUTED CMU" VALUES MAY BE USED FOR GROUTED CMU APPLICATIONS.
ALL HEAD TYPES APPLICABLE.

## INSTALLATION NOTES:

STEEL SELF-DRILLING

-SMS (G5), SEE TABLE

8, THIS SHEET

MIAMI-DADE APPROVED MULLION (SEE

SEPERATE NOA), ALUMINUM, STEEL FRAMING OR STEEL STUD. SEE SUBSTRATE PROPERTIES. TABLE 8.THIS SHEET

-1/4" MAX SHIM

1X WOOD BUCKSTRIP,

SEE NOTE 2, THIS SHEET

CONCRETE PER

REQUIREMENT

TYP. ANCHOR TYPE, EMBEDMENT

SUBSTRATE, SEE TABLE 8, THIS SHEET

**ANCHOR** 

AND EDGE DISTANCE PER

WINDOW BUCK

HEIGHT - 2-3/4"

**EMBEDMENT** 

DISTANCE

**VERTICAL SECTION B-B** 

**INSTALLATION** 

TYPE B

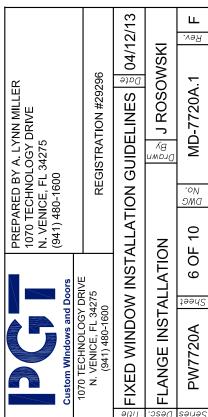
**EXTERIOR** 

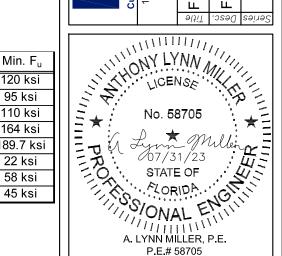
- 1. USE ONLY ANCHORS LISTED ON THIS SHEET. FOLLOW EMBEDMENT AND EDGE DISTANCE LIMITS.
- 2. WOOD BUCKS DEPICTED ON THIS SHEET AS "1X", ARE BUCKS WHOSE TOTAL THICKNESS IS LESS THAN 1-1/2". 1X WOOD BUCKS ARE OPTIONAL IF UNIT CAN BE INSTALLED DIRECTLY TO SOLID CONCRETE. WOOD BUCKS DEPICTED AS "2X" ARE 1-1/2" THICK OR GREATER. INSTALLATION TO THE SUBSTRATE OF WOOD BUCKS TO BE ENGINEERED BY OTHERS OR AS APPROVED BY AUTHORITY HAVING JURISDICTION.
- 3. FOR ATTACHMENT TO METAL: THE STRUCTURAL MEMBER SHALL BE OF A SIZE TO PROVIDE FULL SUPPORT TO THE WINDOW FRAME.
- 4. IF APPLICABLE, LOWER DESIGN PRESSURE FROM EITHER WINDOW OR MULLION NOA APPLIES TO WHOLE SYSTEM.
- 5. FLANGE CAN BE REMOVED IN-FIELD TO CREATE EQUAL-LEG FRAME. SEAL EXPOSED EDGE.

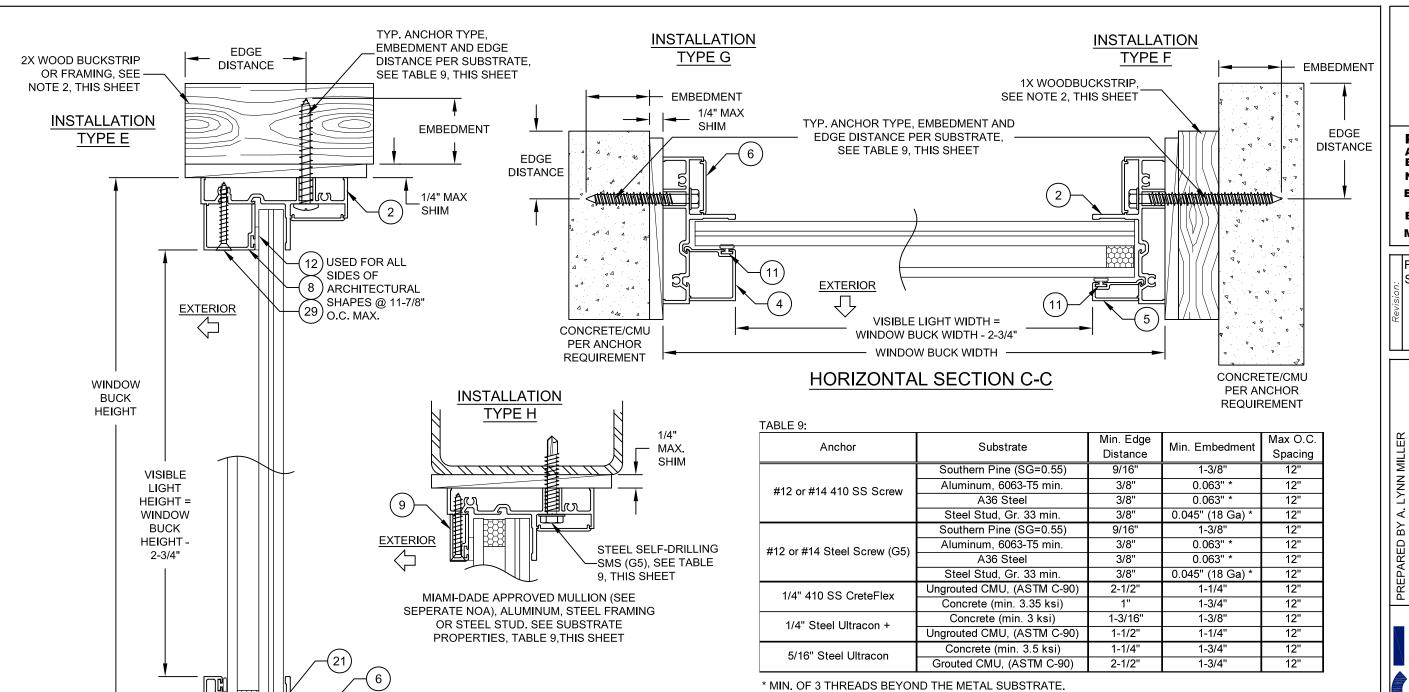
Material	Min. F <sub>y</sub>	Min. F <sub>u</sub>	
Steel Screw	92 ksi	120 ksi	
18-8 Screw	60 ksi	95 ksi	
410 Screw	90 ksi	110 ksi	:
1/4" DeWalt UltraCon+®	148 ksi	164 ksi	]
410 SS Elco/Dewalt CreteFlex®	127.4 ksi	189.7 ksi	-
6063-T5 Aluminum	16 ksi	22 ksi	ľ
A36 Steel	36 ksi	58 ksi	
Gr. 33 Steel Stud	33 ksi	45 ksi	
<u> </u>			ı

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.02
Expiration Date: 02/19/2029
By: Manual Product Control

F) REMOVE 1/4"
ULTRACONS.
ADD NOTE 5.
SB - 7/31/23







\* MIN. OF 3 THREADS BEYOND THE METAL SUBSTRATE.
"UNGROUTED CMU" VALUES MAY BE USED FOR GROUTED CMU APPLICATIONS.
ALL HEAD TYPES APPLICABLE.

#### INSTALLATION NOTES:

-1/4" MAX SHIM

1X WOOD BUCKSTRIP,

SEE NOTE 2, THIS SHEET

CONCRETE PER

REQUIREMENT

AND EDGE DISTANCE PER

SUBSTRATE, SEE TABLE 9,

THIS SHEET

TYP, ANCHOR TYPE, EMBEDMENT

**ANCHOR** 

(5

**EDGE** 

DISTANCE

**VERTICAL SECTION D-D** 

**EMBEDMENT** 

INSTALLATION

TYPE F

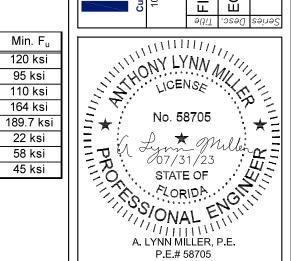
- 1. USE ONLY ANCHORS LISTED ON THIS SHEET. FOLLOW EMBEDMENT AND EDGE DISTANCE LIMITS.
- 2. WOOD BUCKS DEPICTED ON THIS SHEET AS "1X", ARE BUCKS WHOSE TOTAL THICKNESS IS LESS THAN 1-1/2". 1X WOOD BUCKS ARE OPTIONAL IF UNIT CAN BE INSTALLED DIRECTLY TO SOLID CONCRETE. WOOD BUCKS DEPICTED AS "2X" ARE 1-1/2" THICK OR GREATER. INSTALLATION TO THE SUBSTRATE OF WOOD BUCKS TO BE ENGINEERED BY OTHERS OR AS APPROVED BY AUTHORITY HAVING JURISDICTION.
- 3. FOR ATTACHMENT TO METAL: THE STRUCTURAL MEMBER SHALL BE OF A SIZE TO PROVIDE FULL SUPPORT TO THE WINDOW FRAME.
- 4. IF APPLICABLE, LOWER DESIGN PRESSURE FROM EITHER WINDOW OR MULLION NOA APPLIES TO WHOLE SYSTEM.

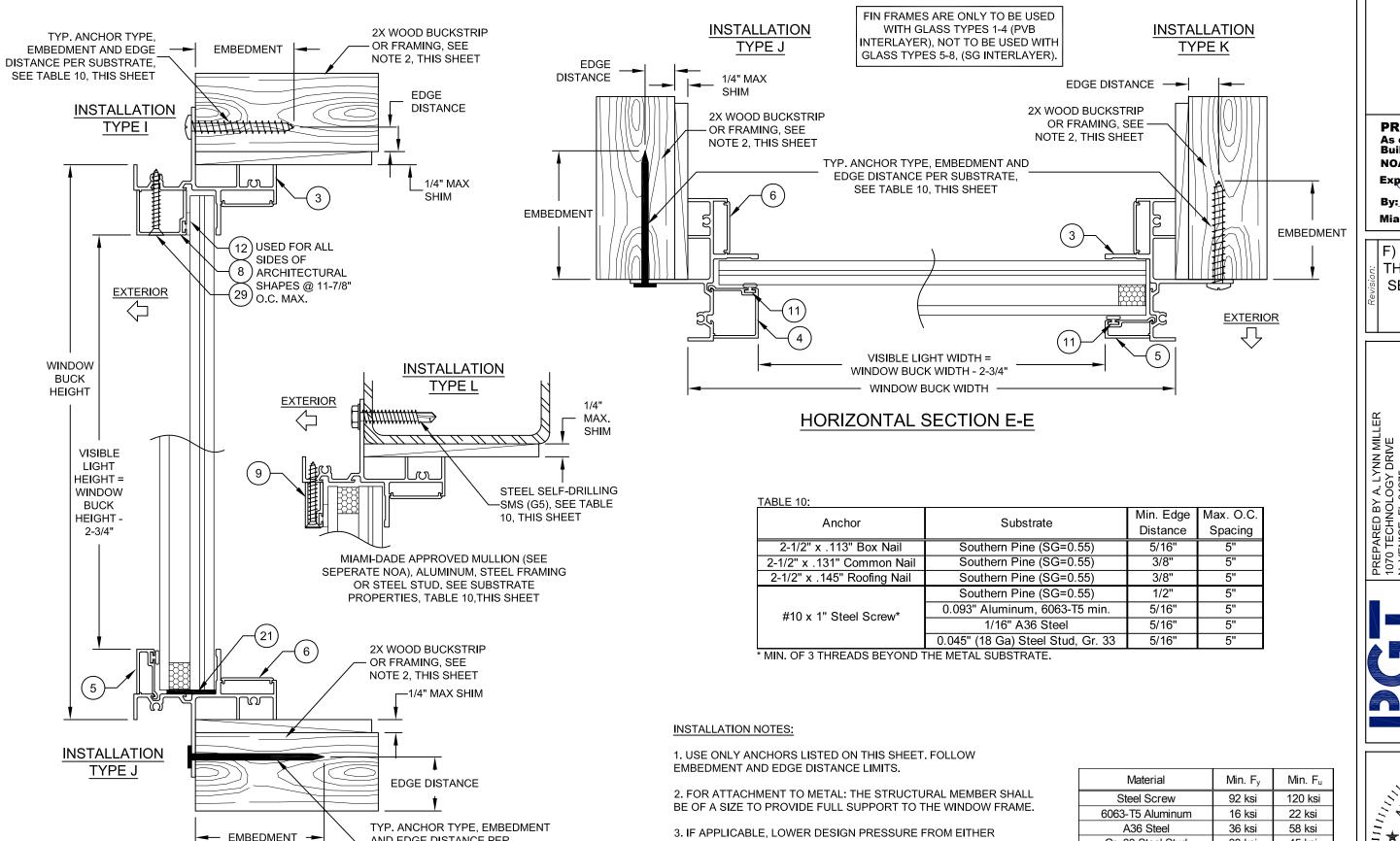
Material	Min. F <sub>y</sub>	Min. F <sub>u</sub>
Steel Screw	92 ksi	120 ksi
18-8 Screw	60 ksi	95 ksi
410 Screw	90 ksi	110 ksi
1/4" DeWalt UltraCon+®	148 ksi	164 ksi
410 SS Elco/Dewalt CreteFlex®	127.4 ksi	189.7 ksi
6063-T5 Aluminum	16 ksi	22 ksi
A36 Steel	36 ksi	58 ksi
Gr. 33 Steel Stud	33 ksi	45 ksi

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.02
Expiration Date: 02/19/2029
By: Manuel Product Control

F) REMOVE 1/4" ULTRACONS. SB - 07/31/23







**VERTICAL SECTION F-F** 

AND EDGE DISTANCE PER

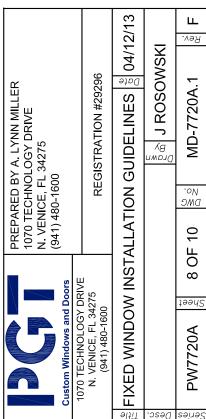
SUBSTRATE, SEE TABLE 10, THIS SHEET

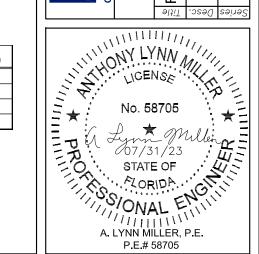
3. IF APPLICABLE, LOWER DESIGN PRESSURE FROM EITHER WINDOW OR MULLION NOA APPLIES TO WHOLE SYSTEM.

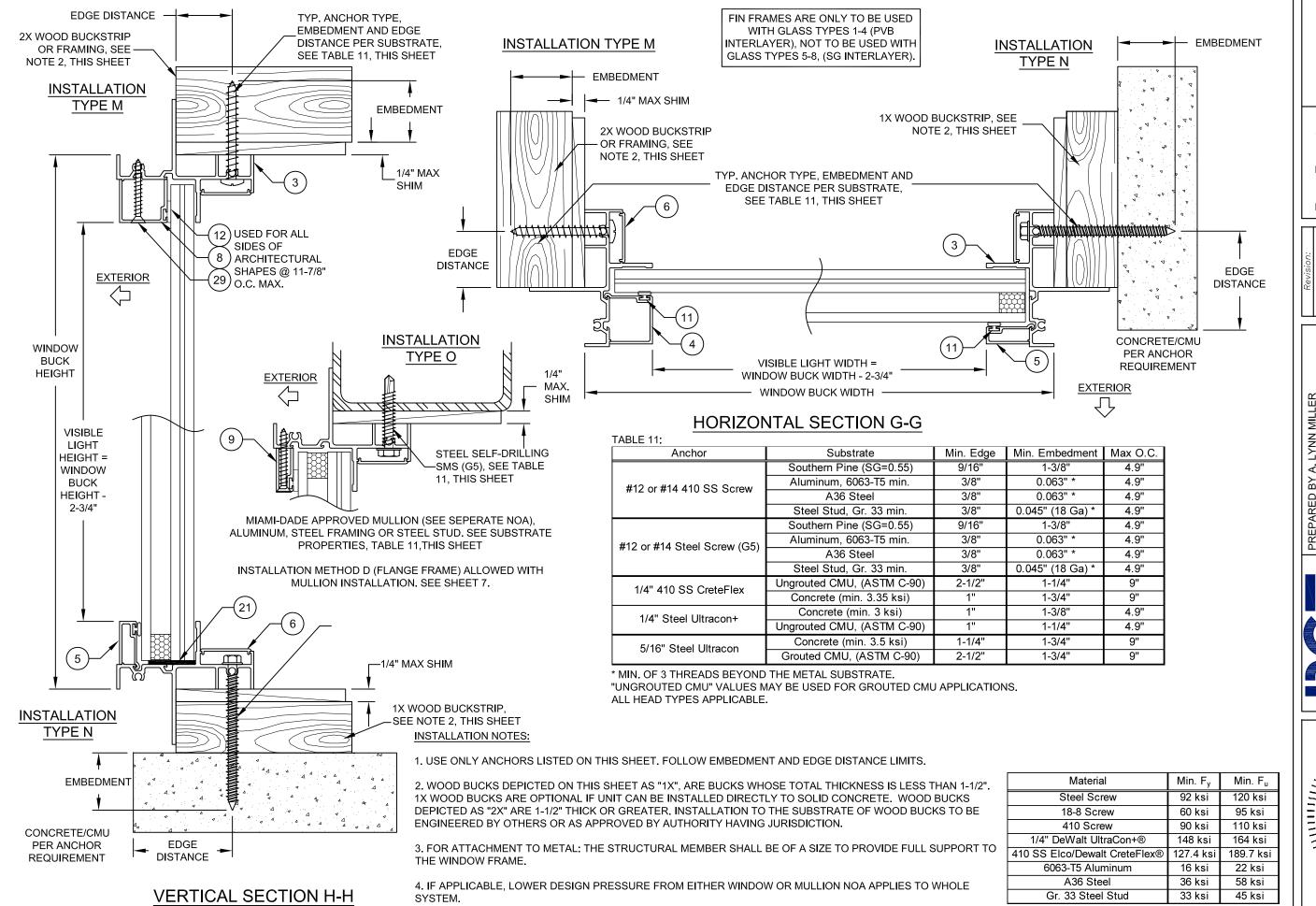
Material	Min. F <sub>y</sub>	Min. F <sub>u</sub>
Steel Screw	92 ksi	120 ksi
6063-T5 Aluminum	16 ksi	22 ksi
A36 Steel	36 ksi	58 ksi
Gr. 33 Steel Stud	33 ksi	45 ksi

**PRODUCT REVISED** As complying with the Florida Building Code 23-0816.02 NOA-No. **Expiration Date: 02/19/2029** Miami-Dade Product Control

F) NO CHANGES, THIS SHEET. SB - 7/31/23



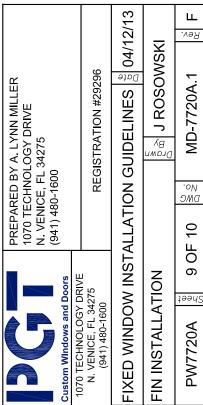


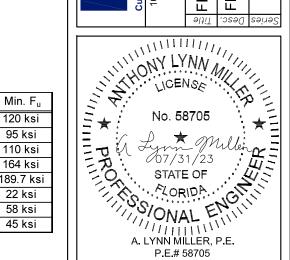


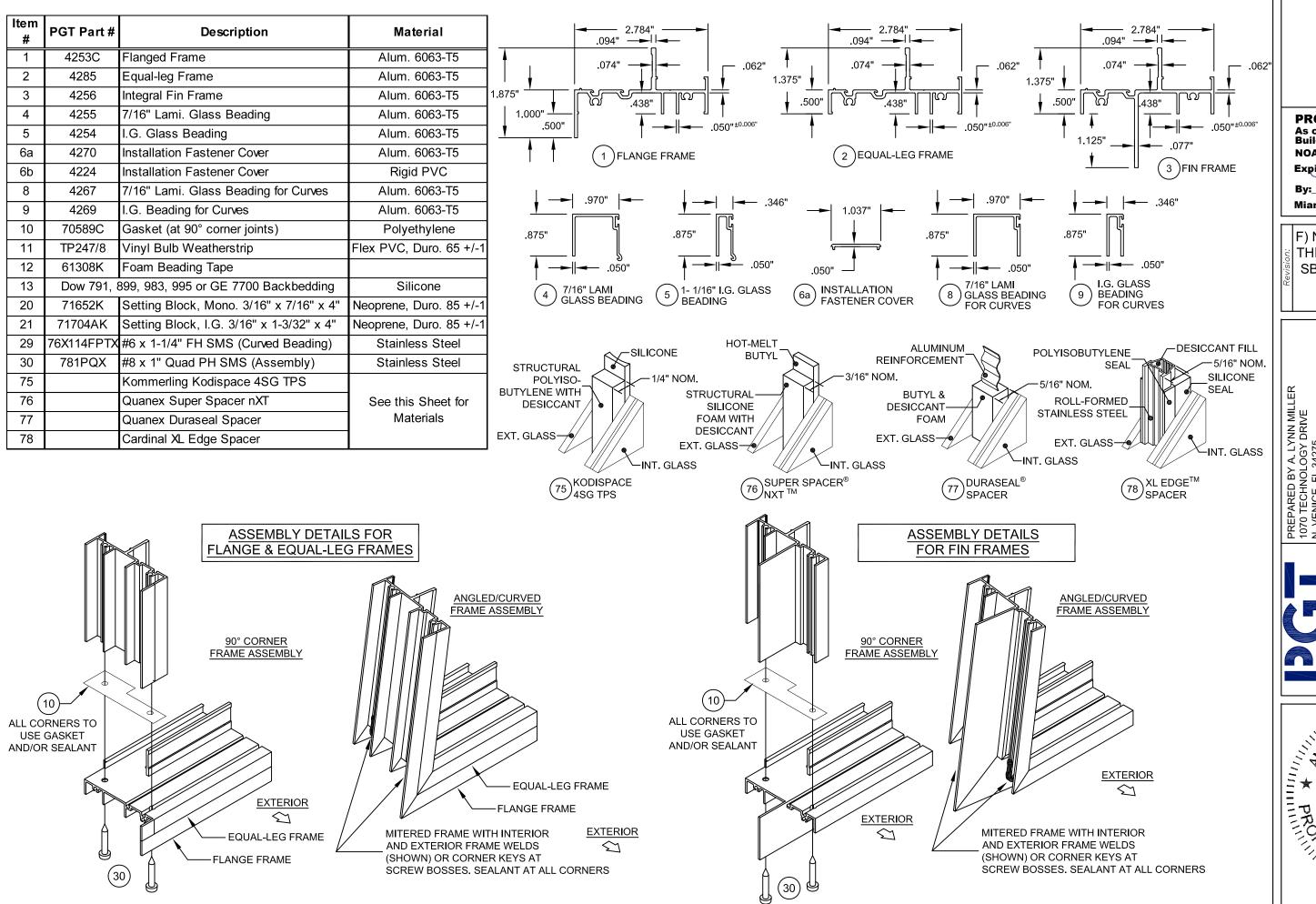
5. FIN CAN BE REMOVED IN-FIELD TO CREATE AN EQUAL-LEG FRAME. SEAL CUT EDGE.

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.02
Expiration Date: 02/19/2029
By: Manual Product Control

F) REMOVE 1/4"
ULTRACONS.
ADD NOTE 5. ADD NOTE,
FLANGE FRAME ALLOWED
W/ FIN AT MULLION.
SB - 7/31/23







PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.02
Expiration Date: 02/19/2029
By: Manual Product Control

F) NO CHANGES, THIS SHEET. SB - 7/31/23

