

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

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

MIAMI-DADE COUNTY, FLORIDA PRODUCT CONTROL SECTION

www.miamidade.gov/building

# **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 "PW-740 Casement Picture" Aluminum Fixed Window – L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **MD-PW740-LM**, titled "Casement Picture Window Details - LM", sheets 1 through 11 of 11, dated 08/08/12, 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 NOA No. 23-0303.02** and consists of this page 1 and evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

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



9/8/23

NOA No. 23-0816.08 Expiration Date: April 11, 2028 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. 12-1218.11)
- 2. Drawing No. MD-PW740-LM, titled "Casement Picture Window Details LM", sheets 1 through 11 of 11, dated 08/08/12, with revision E dated 12/17/20, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E. (Submitted under NOA No. 20-1223.06)

# B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Forced Entry Test, per 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. 20-0401.14)
- 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® spacer system, Super Spacer® 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. 16-0629.22)

Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-0816.08
Expiration Date: April 11, 2028

# **PGT Industries, Inc.**

# 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 a series CA-740F aluminum fixed casement window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-7063, dated 09/17/12, signed and sealed by Marlin D. Brinson, P.E.

(Submitted under NOA No. 12-1218.11)

# C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC 6<sup>th</sup> Edition (2017) and FBC 7<sup>th</sup> Edition (2020) dated 03/19/20. prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E. (Submitted under NOA No. 20-0401.14)

# D. QUALITY ASSURANCE

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

# E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. **20-0915.22** issued to **Kuraray America**, **Inc.** for their "**Trosifol® Ultraclear**, **Clear and Color PVB Glass Interlayers**" dated 11/19/20, expiring on 07/08/24.
- 2. Notice of Acceptance No. 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. 23-0816.08
Expiration Date: April 11, 2028

# **PGT Industries, Inc.**

# NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

# E. STATEMENTS

1. Statement letter of conformance, complying with **FBC** 7<sup>th</sup> **Edition (2020)**, dated March 1, 2023, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

(Submitted under NOA No. 23-0303.02)

- 2. Statement letter of no financial interest, dated March 1, 2023, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.. (Submitted under NOA No. 23-0303.02)
- 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. 20-0401.14)

# G. OTHERS

1. Notice of Acceptance No. **20-1223.06**, issued to PGT Industries, Inc. for their Series "PW740 Casement Picture" Aluminum Fixed Window – L.M.I." approved on 03/04/21 and expiring on 04/11/23.

# 2. NEW EVIDENCE SUBMITTED

# A. DRAWINGS

1. Drawing No. **MD-PW740-LM**, titled "Casement Picture Window Details - LM", sheets 1 through 11 of 11, dated 08/08/12, 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 07/13/20), each dated 08/02/23, and signed and sealed by Idalmis Ortega, P.E

Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-0816.08/
Expiration Date: April 11, 2028

# **PGT Industries, Inc.**

# NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 2. NEW EVIDENCE SUBMITTED (CONTINUED)
- C. CALCULATIONS
  - 1. None.

# D. QUALITY ASSURANCE

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

# E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 20-0915.22 issued to Kuraray America, Inc. for their "Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers" 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.

# 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. **23-0303.02**, issued to PGT Industries, Inc. for their Series "PW740 Casement Picture" Aluminum Fixed Window – L.M.I." approved on 03/30/23 and expiring on 04/11/28.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-0816.08
Expiration Date: April 11, 2028

# GENERAL NOTES: SERIES PW740 IMPACT-RESISTANT CASEMENT PICTURE 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  $\underline{\text{ARE NOT}}$  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, SEE TABLE 3, SHEET 4.

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 OR ARCHITECT OF RECORD.

5) ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. USE ANCHORS OF SUFFICIENT EMBEDMENT AS SPECIFIED ON TABLE 3, SHEET 4. 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) 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 TEST PRESSURE, FRAME ANALYSIS AND GLASS PER ASTM E1300.

B. POSITIVE DESIGN LOADS BASED ON WATER TEST PRESSURE, STRUCTURAL 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-7063, 3579, 3580, 3724; DEWALT ULTRACON+ NOA; ELCO ULTRACON NOA; DEWALT/ELCO CRETEFLEX NOA; ANSI/AF&PA NDS FOR WOOD CONSTRUCTION AND ADM ALUMINUM DESIGN MANUAL.

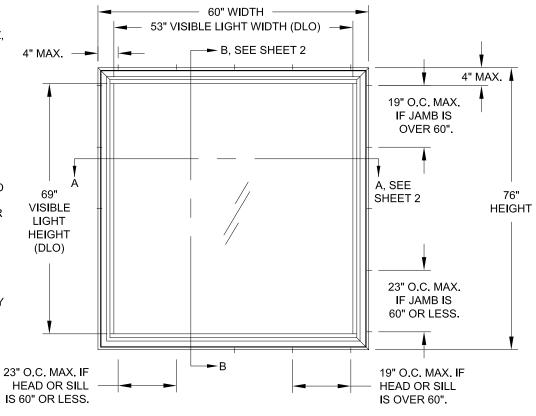
10) THE PW740 CASEMENT PICTURE WINDOW WAS FORMERLY KNOWN AS THE CA740F FIXED CASEMENT WINDOW.

11) FRAME FLANGES OR INTEGRAL FINS MAY BE TRIMMED IN-FIELD TO CREATE AN EQUAL-LEG FRAME.

# CODES / STANDARDS USED:

- 2023 FLORIDA BUILDING CODE (FBC), 8TH EDITION
  2020 FLORIDA BUILDING CODE (FBC), 7TH EDITION
- ASTM E1300-04
- ANSI/AF&PA NDS-2018 FOR WOOD CONSTRUCTION
- ALUMINUM DESIGN MANUAL, ADM-2020
- AISI S100-16
- AISC 360-16

DESIGN PRESSURE RATING	IMPACT RATING
VARIES,	RATED FOR LARGE & SMALL
SEE SHEETS 6-10	MISSILE IMPACT RESISTANCE



# TYP. ELEVATION OF CASEMENT PICTURE WINDOW

# TABLE 1:

	Glass Types	Sheet #
1	5/16" Lami (1/8 An090" PVB - 1/8 An)	6
2	7/16" Lami (3/16 An090" SG - 3/16 An)	8
3	7/16" Lami (3/16 HS090" SG - 3/16 HS)	9
4	7/8" Lami. IG (1/8" An - 7/16" Air - 1/8" An090" PVB - 1/8" An	10
5	7/8" Lami. IG (1/8" T - 7/16" Air - 1/8" An090" PVB - 1/8" An	7
6	7/8" Lami. IG (3/16" An - 1/4" Air - 3/16" An090" SG - 3/16" An	8
7	7/8" Lami. IG (3/16" An - 1/4" Air - 3/16" HS090" SG - 3/16" HS	9
8	7/8" Lami. IG (3/16" T - 1/4" Air - 3/16" An090" SG - 3/16" An	8
9	7/8" Lami. IG (3/16" T - 1/4" Air - 3/16" HS090" SG - 3/16" HS	9

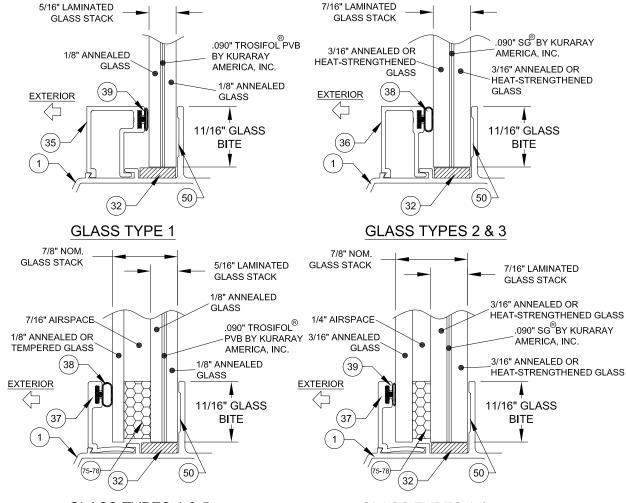
"PVB"= TROSIFOL® PVB INTERLAYER BY KURARAY AMERICA, INC. "SG"= SENTRYGLAS® INTERLAYER BY KURARAY AMERICA, INC.

THIS SYSTEM HAS BEEN TESTED TO MEET THE 400 FT-LB KINETIC ENERGY IMPACT LOADING REQUIREMENTS OF ANSI Z97.1 WHEN USING GLASS TYPES 3 & 9.

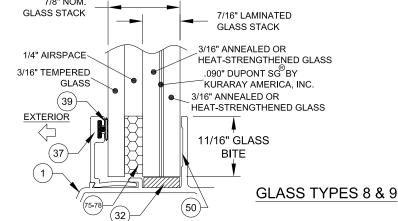
## 

# PRODUCT REVISED As complying with the Florida Building Code NOA-No. 23-0816.08 Expiration Date: 04/11/2028

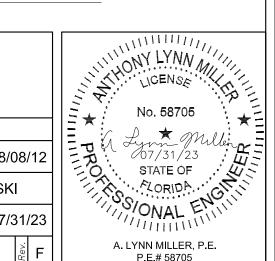
By: Manuel Product Control

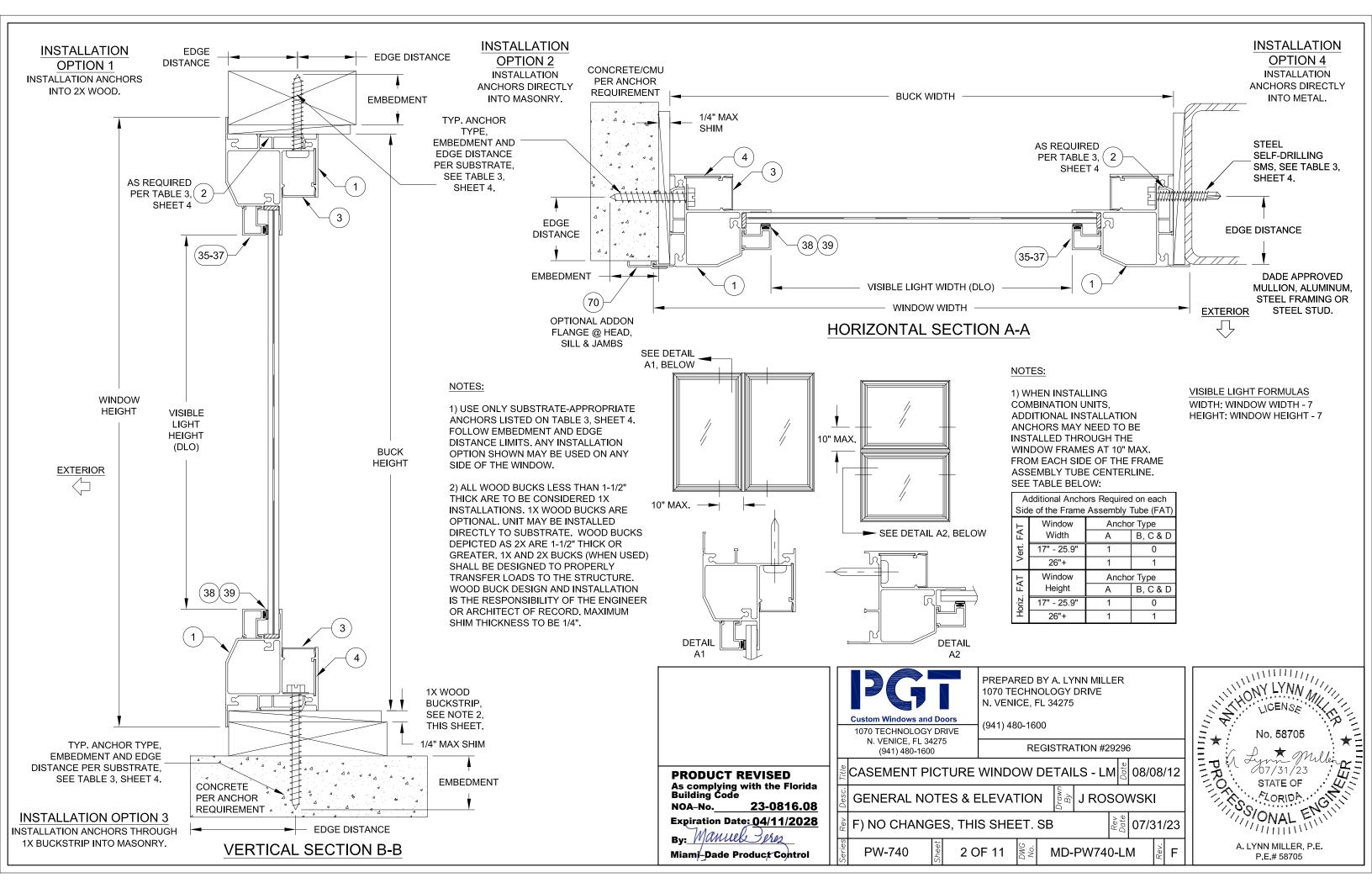


# GLASS TYPES 4 & 5 7/8" NOM. GLASS STACK 7/16" LAMINATED

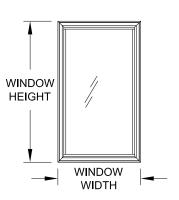


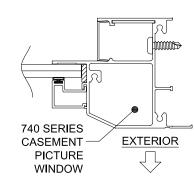






# **CASEMENT PICTURE** WINDOW (O)



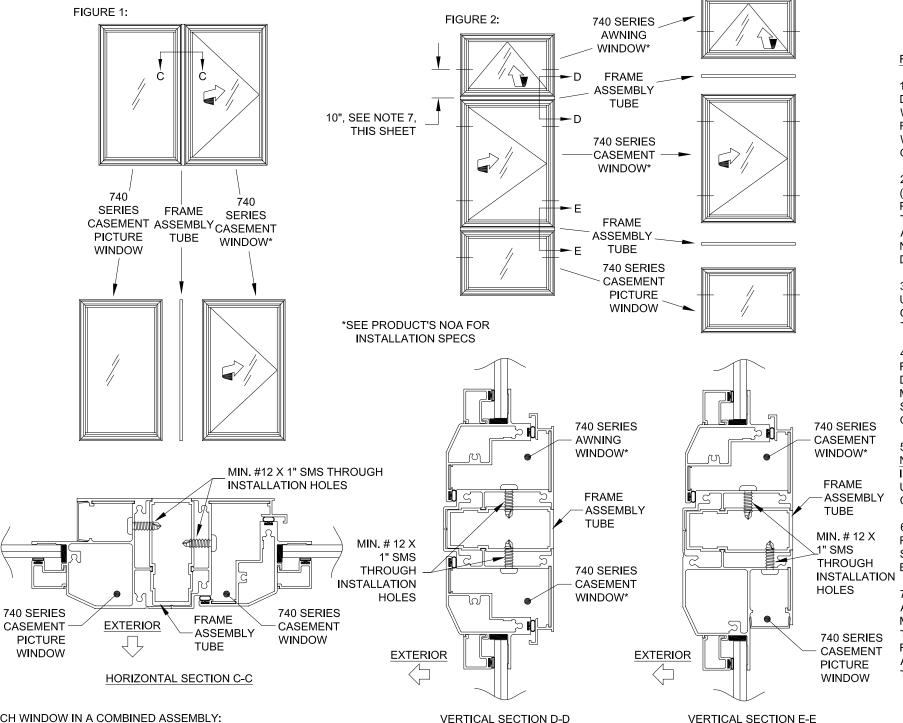


## FOR SINGLE UNITS:

- 1) DETERMINE YOUR WINDOW SIZE AND GLASS.
- 2) KNOWING YOUR ANCHOR TYPE AND SUBSTRATE, DETERMINE YOUR ANCHOR GROUP FROM TABLE 3. SHEET 4.
- 3) FROM SHEETS 6-10, FIND THE SHEET FOR YOUR GLASS TYPE. FIND THE PRODUCT'S DESIGN PRESSURE FROM THE TABLE LABELED "DESIGN PRESSURE (PSF) FOR SINGLE WINDOWS, ALL ANCHOR GROUPS".
- 4) DIMENSIONS SHOWN ARE TIP-TO-TIP. FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION SHOWN ON THE TABLES.
- 5) USING THE TABLES LABELED "WINDOW ANCHORS REQUIRED" (TABLES 2A & 2B, SHEETS 4 & 5), DETERMINE THE NUMBER OF ANCHORS NEEDED IN THE HEAD, SILL AND JAMBS OF YOUR WINDOW.
- 6) INSTALL AS PER THE INSTRUCTIONS ON SHEET 2.

# CASEMENT PICTURE WINDOW / CASEMENT (OX)

# AWNING / CASEMENT / CASEMENT PICTURE WINDOW (XXO)

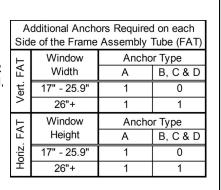


# FRAME ASSEMBLY TUBE NOTES:

- 1) DIMENSIONS SHOWN ARE TIP-TO-TIP DIMENSIONS FOR EACH INDIVIDUAL WINDOW. FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION SHOWN ON THE TABLES.
- 2) ANY 740-SERIES PRODUCT (CASEMENT, AWNING OR CASEMENT PICTURE WINDOW) MAY BE ATTACHED TO THE FRAME ASSEMBLY TUBE. FOR ALL WINDOWS, USE THE WINDOW'S NOA FOR ANCHORAGE, SIZE AND DESIGN PRESSURE LIMITATIONS.
- 3) ALL WINDOWS IN THE COMBINATION UNIT MUST BE ABLE TO INDIVIDUALLY COMPLY WITH THE REQUIREMENTS OF THEIR RESPECTIVE NOA.
- 4) FRAME ASSEMBLY TUBE TO BE FASTENED TO WINDOW, AS SHOW IN DETAILS, WITH MIN, #12 X 1" SHEET METAL SCREWS. USE THE SAME SPACING AND QUANTITY AS THE OPPOSITE FRAME MEMBER.
- 5) THE FRAME ASSEMBLY TUBE MAY NOT EXCEED 62" IN LENGTH (AS USED IN A 63" FLANGED WINDOW) OR BE USED IN TEE OR CROSS CONFIGURATIONS.
- 6) THE FRAME ASSEMBLY TUBE IS NOT REQUIRED TO BE CLIPPED TO THE SUBSTRATE, ALL EXTERIOR JOINTS TO BE SEALED BY INSTALLER.
- 7) FOR ALL COMBINATION UNITS, ADDITIONAL INSTALLATION ANCHORS MAY NEED TO BE INSTALLED THROUGH THE WINDOW FRAMES AT 10" MAX. FROM EACH SIDE OF THE FRAME ASSEMBLY TUBE CENTERLINE. SEE **TABLE BELOW:**

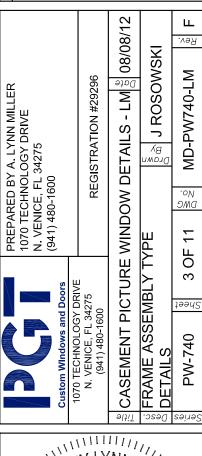
# FOR EACH WINDOW IN A COMBINED ASSEMBLY:

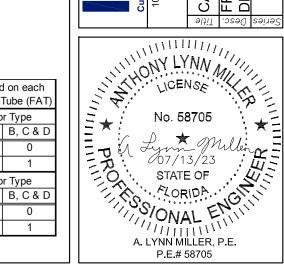
- 1) DETERMINE EACH INDIVIDUAL WINDOW TYPE, SIZE AND GLASS MAKEUP, SEE FIGURES 1 & 2, THIS SHEET, DETERMINE YOUR ANCHOR GROUP FROM TABLE 3, SHEET 4,
- 2) FROM SHEETS 6-10, FIND THE SHEET FOR YOUR GLASS TYPE.
- 3) FIND THE DESIGN PRESSURE FROM THE TABLES LABELED "DESIGN PRESSURE (PSF) FOR WINDOWS ATTACHED TO A FRAME ASSEMBLY TUBE". THIS MUST BE DONE FOR EACH WINDOW IN THE ASSEMBLY, AND THE LOWEST DESIGN PRESSURE APPLIES TO THE ENTIRE ASSEMBLY. DIMENSIONS SHOWN ARE TIP-TO-TIP. FOR SIZES NOT SHOWN ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION SHOWN ON THE TABLES.
- 4) USING THE TABLE LABELED "WINDOW ANCHORS REQUIRED" (TABLES 2A & 2B, SHEETS 4 & 5), DETERMINE THE NUMBER OF ANCHORS NEEDED IN THE HEAD, SILL AND JAMBS OF YOUR WINDOW.
- 5) INSTALL AS PER THE INSTRUCTIONS ON SHEETS 2-3, NOTE THAT ADDITIONAL ANCHORS THROUGH THE WINDOW FRAME INTO THE SUBSTRATE MAY BE REQUIRED (SEE SHEET 2), AND THAT MIN. # 12 X 1" ANCHORS ARE TO BE USED THROUGH THE FRAME INTO THE FRAME ASSEMBLY TUBE (SEE DETAILS ON THIS SHEET).



**PRODUCT REVISED** As complying with the Florida Building Code NOA-No. 23-0816.08 **Expiration Date: 04/11/2028** By: Manuel Peres Miami-Dade Product Control

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





											Win	dow	Anc	hor	s Re	auire	-d (3	7" a	nd L	ess ·	on S	hort	t Side	Din ج	nens	sion)	1							
																<b>1</b>	<del>,                                    </del>																	
	Anabar			unde	er 23"		_	25.1	15/16"			- 27	-3/4				9"	Snort	t Side		·1/2"			33-	4 / 2 !!				34"				7"	
	Anchor	Type	Α	B	er 23	D	A	B	15/16 C	D	Α	B	-3/4 C	D	Α	B	9   C	D	A	31- B	· 1/2	D	A	33- B	1/2 C	D	A	В	C	D	A	В	, С	ΤЪ
—		Long Side	2	2	2	2	+~		Щ_	12	<del>  ^</del>				<del>  ^  </del>				$\vdash \sim$				┢╧╜	D			<del>  ^-</del>				┝╧┙			
,	under 23"	Short Side	2	2	2	2	1			1				1				ļ				ŀ				ŀ				I	l			
ļ	:5/40"	Long Side	3	2	2	2	3	2	2	2	1			1					1			ļ				ļ				I	l			
,	25-15/16"	Short Side	2	2	2	2	3	2	2	2	1			1				ļ				ŀ				ŀ				I	l			
,	25"	Long Side	4	3	3	3	5	3	3	3	5	3	3	3	5	3	3	3	5	3	3	3	5	3	3	3	5	3	3	3				
,	35"	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	l			
ŗ	37"	Long Side	5	3	3	3	5	3	3	3	5	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3	5	4	3	3	5	4	3	3
ļ	1 31	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
ſ	44"	Long Side	6	4	3	3	6	4	3	3	6	4	4	3	7	4	4	3	7	4	4	3	7	5	4	3	7	5	4	3	7	5	4	3
,		Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
ļ	44-1/4"	Long Side	6	4	3	3	6	4	4	3	7	4	4	3	7	4	4	3	7	4	4	3	7	5	4	3	7	5	4	3	7	5	4	3
ļ		Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
ļ	53-1/8"	Long Side	7	5	4	3	8	5	4	3	8	5	5	3	8	5	5	3	9	6	5	3	9	6	5	3	9	6	5	3	10	6	5	3
ļ	<u> </u>	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
ļ	58"	Long Side	8	5	4	4	9	6	5	4	9	6	5	4	10	6	5	4	10	6	5	4	10	7	6	4	10	7	6	4	11	7	6	4
ļ	<b></b>	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
ļ	63"	Long Side	9	6	5	4	10	6	5	4	10	7	6	4	11	7	6	4	11	7	6	4	12	7	6	4	12	7	6	4	12	8	7	4
,	<u> </u>	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
Side	66-13/16"	Long Side Short Side	10	6 2	5 2	5	10	7	6	5 2	11 3	7	6	5	11	7	6	5	12 4	8	6	5	12 5	8	7	5 3	13 5	8	7	5 3	13 5	8	7	5 3
	$\vdash$		10	6	5	5	11	7	6	5	11	7	6	5	11	7	6	2 5	12	8	7	5	13	8	7	5	13	8	7	5	13	9	7	5
Long	67-1/2"	Long Side Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
_	$\vdash$	Long Side	10	6	5	5	11		6	5	11	7	6	5	12	7	6	5	12	8	7	5	13	8	7	5	13	8	7	5	14	9	7	5
ļ	68"	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
,	$\vdash$	Long Side	10	6	6	5	11	7	6	5	12	7	6	5	12	8	6	5	13	8	7	5	13	8	7	5	13	9	7	5	14	9	8	5
ļ	70"	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
ŀ		Long Side	10	7	6	5	11	7	6	5	12	8	7	5	12	8	7	5	13	8	7	5	14	9	7	5	14	9	7	5	15	9	8	5
- 1	72"	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
ŀ	<del></del>	Long Side	11	7	6	5	12	8	6	5	12	8	7	5	13	8	7	5	14	9	7	5	14	9	8	5	14	9	8	5	15	10	8	5
ļ	74"	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
•	70"	Long Side	11	7	6	5	12	8	7	5	13	8	7	5	13	8	7	5	14	9	8	5	15	9	8	5	15	9	8	5	16	10	8	5
,	76"	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
,	04"	Long Side	12		7	5	14	9	7	5	14	9	8	5	15	9	8	5	16	10	8	6	17	11	9	6	17	11	9	6	18	11	10	6
ļ	84"	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
Ţ	444"	Long Side	17	11	9	7	19	12		7	20	13	11	7	21	13	11	7	23	14	12	8	24	15	13	8	24	15	13	8	26	16	14	9
ļ	114"	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	5	4	3	3
Ţ	134"	Long Side	21	13	11	8	23	14	12	8	24	15	13	8	25	16	13	9	27	17	14	9	29	18	15	10	29	18	15	10				
- 1	134	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	5	3	3	3	5	3	3	3	1			
ſ	145"	Long Side	22	14	12	9	25	16		9	26	17	14	9	28	17	15	9	29	19	16	10					•				,			
J	1 145 5	Short Side	2	2	2	2	3	2	2	2	3	2	2	2	4	2	2	2	4	3	3	3	1											

TABLE	3:					
			Min.	Min.	Min.	Anchor
Group	Anchor	Substrate	Edge	O.C.	Embedment	Plate
			Distance	Distance	Linbeament	Required?
	#12 steel SMS (G5) or	S. Pine	5/8"	1"	1-3/8"	No
	#12 steel SMS (G5) or	6063-T5 Alum.	3/8"	5/8"	.063"	No
	#14 410 SS SMS	A36 Steel	3/8"	5/8"	.050"	No
Α	#14 410 00 01010	A653 Stud, Gr. 33	3/8"	5/8"	.045", 20 Ga.	No
		3k Concrete	1"	3"	1-3/4"	No
	1/4" steel Ultracon+	Hollow Block	1"	3"	1-1/4"	No
		S. Pine	1"	1"	1-3/8"	No
		2.85k Concrete	2-1/2"	4"	1-3/8"	No
В	1/4" steel Ultracon	Hollow Block	1"	6"	1-1/4"	No
		Hollow Block	2-1/2"	5"	1-1/4"	No
	1/4" steel Ultracon	Hollow Block	1"	6"	1-1/4"	Yes
	1/4" steel Ultracon+	3k Concrete	1"	4"	1-3/8"	Yes
С	1/4 Steel Oitlacon	Hollow Block	1"	3"	1-1/4"	Yes
	1/4" 410 SS CreteFlex	3.35k Concrete	1"	5"	1-3/4"	No
	1/4 410 33 Cleteriex	Hollow Block	2-1/2"	5"	1-1/4"	No

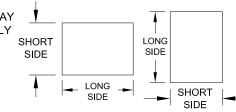
TABLE 3: (cont.)

IABLE	3: (cont.)					
Group	Anchor	Substrate	Min. Edge	Min. O.C.	Min.	Anchor Plate
•			Distance	Distance	Embedment	Required?
	#12 steel SMS (G5) or	S. Pine	5/8"	1"	1-3/8"	Yes
	#12 410 SS SMS or	6063-T5 Alum.	3/8"	5/8"	.0713"	Yes
	#14 steel SMS (G5) or	A36 Steel	3/8"	5/8"	.050"	Yes
	#14 410 SS SMS	A653 Stud, Gr. 33	3/8"	5/8"	.045", 18 Ga.	Yes
		2.85k Concrete	1"	4"	1-3/4"	Yes
	1/4" steel Ultracon	2.85k Concrete	2-1/2"	4"	1-3/8"	Yes
	1/4 Steel Oitlacon	Hollow Block	2-1/2"	5"	1-1/4"	Yes
		Filled Block	2-1/2"	4"	1-3/4"	Yes
D		3.35k Concrete	1"	6"	1-3/4"	Yes
	1/4" 410 SS CreteFlex	3.35k Concrete	2-1/2"	6"	1"	Yes
		Hollow Block	2-1/2"	6"	1-1/4"	Yes
		3.5k Concrete	1-1/4"	5"	1-3/4"	No
	5/16" steel Ultracon	Hollow Block	3-1/8"	5"	1-1/4"	No
		Filled Block	2-1/2"	5"	1-3/4"	No
ŀ		3k Concrete	1-5/16"	4"	1-3/8"	Yes
	1/4" steel Ultracon+	Hollow Block	1-3/4"	3"	1-1/4"	Yes
		S. Pine	1"	1"	1-3/8"	Yes

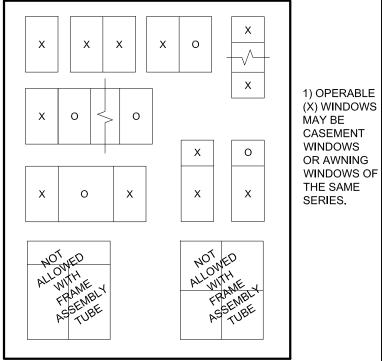
1) USE THIS TABLE FOR ALL WINDOWS PER THE ELEVATIONS ON SHEET 1. DIMENSIONS SHOWN ARE TIP-TO-TIP.

2) FOR SIZES NOT SHOWN, ROUND <u>UP</u> TO THE NEXT AVAILABLE SHORT OR LONG SIDE DIMENSION SHOWN ON THE TABLE.

3) TABLE DIMENSIONS MAY
BE ORIENTED VERTICALLY
OR HORIZONTALLY
AS SHOWN:
SHOWN:



SAMPLE CONFIGURATIONS:



1) WHERE SUBSTRATE CONDITIONS REQUIRE ANCHORAGE FROM MORE THAN ONE OF THE ANCHOR GROUPS, CHOOSE THE ANCHOR GROUP OF THE LOWEST LETTER FOR ALL SUBSEQUENT TABLES IN THIS APPROVAL.

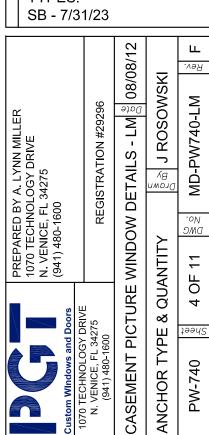
2) ANCHOR MUST EXTEND A MIN. OF 3 THREADS BEYOND ANY METAL SUBSTRATE.

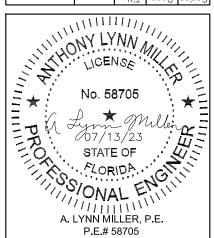
3) ALL ANCHOR HEAD TYPES ARE ACCEPTABLE.

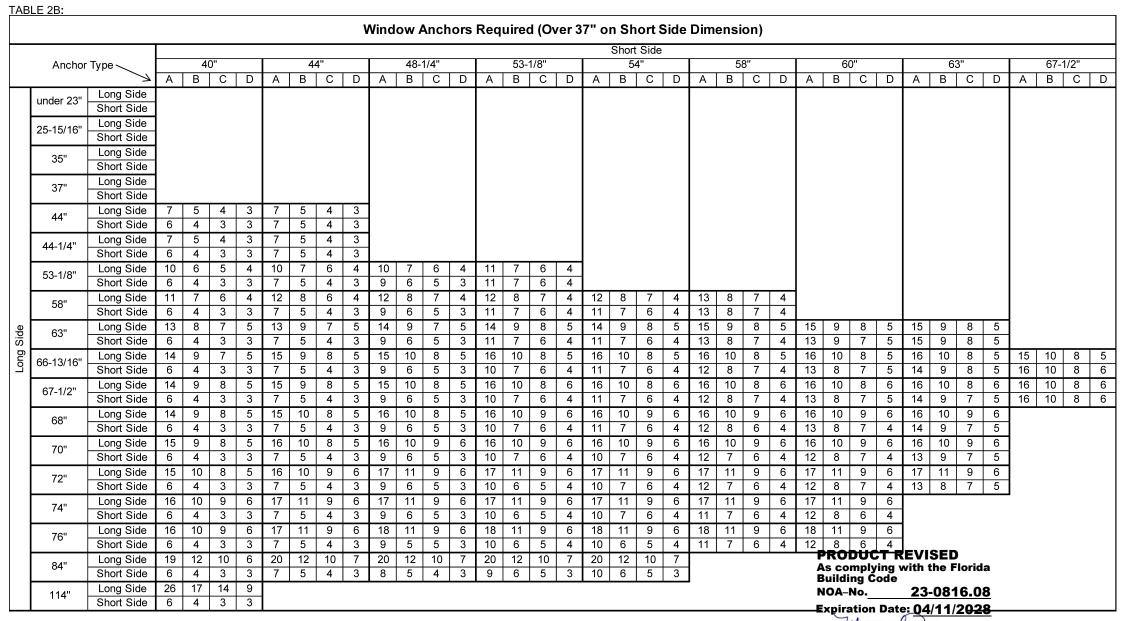
Min. F <sub>y</sub>	Min. F <sub>u</sub>
92 ksi	120 ksi
90 ksi	110 ksi
155 ksi	177 ksi
148 ksi	164 ksi
127.4 ksi	189.7 ksi
16 ksi	22 ksi
36 ksi	58 ksi
33 ksi	45 ksi
	92 ksi 90 ksi 155 ksi 148 ksi 127.4 ksi 16 ksi 36 ksi

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.08
Expiration Date: 04/11/2028
By: Manuel Product Control

F) CHANGE NOTE 3, INCLUDE ALL ANCHOR HEAD TYPES. SB - 7/31/23



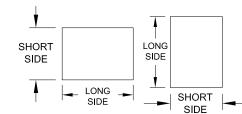




1) USE THIS TABLE FOR ALL WINDOWS PER THE ELEVATIONS ON SHEET 1. DIMENSIONS SHOWN ARE TIP-TO-TIP.

2) FOR SIZES NOT SHOWN, ROUND <u>UP</u> TO THE NEXT AVAILABLE SHORT OR LONG SIDE DIMENSION SHOWN ON THE TABLE.

3) TABLE DIMENSIONS MAY BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN:



PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.08
Expiration Date: 04/11/2028
By: Manual Product Control

Miami\_Dade Product Control

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

08/08/12 ш Rev. ROSOWSKI MD-PW740-LM Date - LM PREPARED BY A. LYNN MILLE 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION DETAILS  $\neg$ הגמאי WINDOW .oN DMC QUANTITY Ю PICTURE 2 જ Sheet CASEMENT PW-740 ANCHOR

No. 58705

No. 58705

A STATE OF

A LYNN MILLER, P.E.

P.E.# 58705

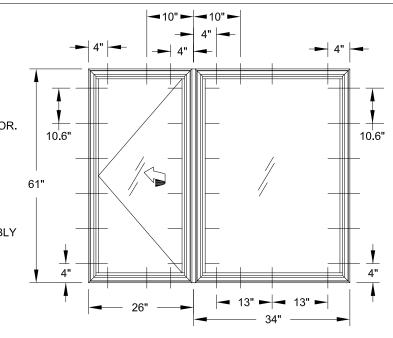
EXAMPLE 1: FOR WINDOW COMBINATION SHOWN BELOW; 7/16" Have Person LAMINATED GLASS, 1/4" MASONRY ANCHORS INTO CONCRETE, +7 Miami-Dade Product Control

# CASEMENT ANCHORS (SEE SEPERATE NOA):

A) FROM TABLE 12, ANCHORS C & D ALLOW A DP OF +70/-90.

B) FOR THE JAMB, FROM TABLE 3, ANCHOR TYPE C HAS THE ANCHOR AND SUBSTRATE DESIRED AND DOES NOT REQUIRE THE ANCHOR PLATE IF USING THE CRETEFLEX ANCHOR.

- C) FROM TABLE 2, 6 ANCHORS ARE REQUIRED IN EACH JAMB.
- D) SIMILARLY, 2 ANCHORS ARE REQUIRED IN THE HEAD & SILL.
- E) DISTRIBUTE ANCHORS FOLLOWING GUIDELINES FROM ELEVATION ON SHEET 1.
- F) PER RULES ON SHEETS 2 & 3, INSTALL 1 ADDITIONAL ANCHOR ON THE FRAME ASSEMBLY TUBE SIDE OF THE AWNING (HEAD & SILL).



CASEMENT PICTURE WINDOW ANCHORS:

A) FROM TABLE 11, A 34" X 61" CASEMENT PICTURE WINDOW HAS A DESIGN PRESSURE OF +70/-90 USING ANCHORS C OR D.

B) FOR THE JAMB, FROM TABLE 3, ANCHOR TYPE C HAS THE ANCHOR AND SUBSTRATE DESIRED AND DOES NOT REQUIRE THE ANCHOR PLATE IF USING THE CRETEFLEX ANCHOR.

- C) FROM TABLE 2A, 6 ANCHORS ARE REQUIRED IN EACH JAMB.
- D) SIMILARLY, 3 ANCHORS ARE REQUIRED IN THE HEAD & SILL.
- E) DISTRIBUTE ANCHORS FOLLOWING GUIDELINES FROM ELEVATION ON SHEET 1.

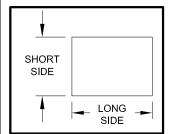
F) PER RULES ON SHEET 2, INSTALL 1 ADDITIONAL ANCHOR ON THE FRAME ASSEMBLY TUBE SIDE OF THE CASEMENT PICTURE (HEAD & SILL).

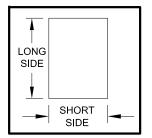
1) 5/16" LAMI (1/8 AN - .090" PVB - 1/8 AN)

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

# TABLE 4:

			De	esign Pressure	e (psf) for Singl	e Windows, A	I Anchor Grou	ps	
					Short	t Side			
		under 23"	25-15/16"	27-3/4"	33-1/2"	37"	44"	48-1/4"	53-1/8"
	under 23"	+70/-90							
	25-15/16"	+70/-90	+70/-90						
	37"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90			
o o	44"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90		
Side	48-1/4"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-84.1	+70/-80.1	
Long	53-1/8"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-84.1	+60/-70	+60/-70	+60/-67.5
ĭ	58"	+70/-90	+70/-90	+70/-90	+70/-83.2	+70/-77	+60/-67.8	+60/-63.2	
	63"	+70/-90	+70/-90	+70/-90	+70/-76.5	+70/-70.1	+60/-61.3		
	76"	+70/-90	+70/-84.6	+70/-75.7	+/-58.9	+/-55.6			
	84"	+70/-90	+70/-80.4	+70/-71.3	+/-54.2				





1) SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR LOCATIONS AND QUANTITIES. 2) TABLE DIMENSIONS MAY BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN.

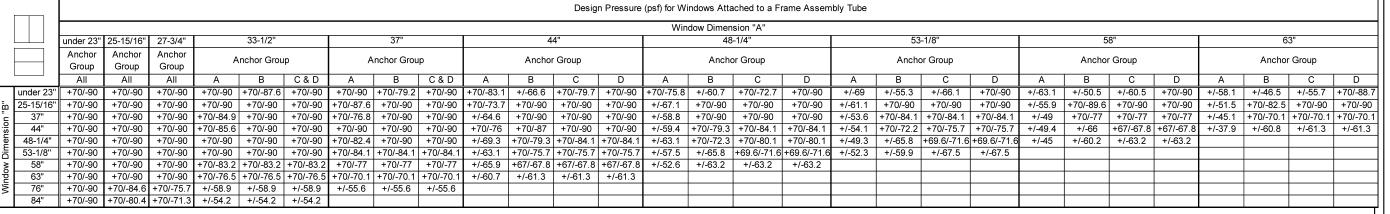
**PRODUCT REVISED** As complying with the Florida Building Code 23-0816.08 NOA-No. **Expiration Date: 04/11/2028** By: Manuel Peres

Miami-Dade Product Control

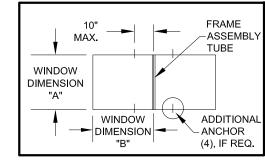
F) NO CHANGES, THIS SHEET.

SB - 7/31/23

												Desig	n Pressure	(psf) for W	ndows Atta	ched to a F	rame Assem	bly Tube											
														Win	dow Dimen	sion "A"													
	under 23"	25-15/16"	27-3/4"		33-1/2"			37"			44	4"			48	-1/4"			53	-1/8"			58	3"			6:	3"	
	Anchor	Anchor	Anchor	А	nchor Grou	aı	Д	nchor Grou	aı		Anchor	Group			Ancho	r Group			Ancho	or Group			Anchor	Group			Anchor	Group	
	Group	Group	Group				·		·F																			p	
	All	All	All	Α	В	C&D	Α	В	C & D	Α	В	С	D	Α	В	С	D	Α	В	С	D	Α	В	С	D	Α	В	С	D
under 23"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-87.6	+70/-90	+70/-90	+70/-79.2	+70/-90	+70/-83.1	+/-66.6	+70/-79.7	+70/-90	+70/-75.8	+/-60.7	+70/-72.7	+70/-90	+/-69	+/-55.3	+/-66.1	+70/-90	+/-63.1	+/-50.5	+/-60.5	+70/-90	+/-58.1	+/-46.5	+/-55.7	+70/-88.
25-15/16"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-87.6	+70/-90	+70/-90	+70/-73.7	+70/-90	+70/-90	+70/-90	+/-67.1	+70/-90	+70/-90	+70/-90	+/-61.1	+70/-90	+70/-90	+70/-90	+/-55.9	+70/-89.6	+70/-90	+70/-90	+/-51.5	+70/-82.5	+70/-90	+70/-90
37"	+70/-90	+70/-90	+70/-90	+70/-84.9	+70/-90	+70/-90	+70/-76.8	+70/-90	+70/-90	+/-64.6	+70/-90	+70/-90	+70/-90	+/-58.8	+70/-90	+70/-90	+70/-90	+/-53.6	+70/-84.1	+70/-84.1	+70/-84.1	+/-49	+70/-77	+70/-77	+70/-77	+/-45.1	+70/-70.1	+70/-70.1	+70/-70
44"	+70/-90	+70/-90	+70/-90	+70/-85.6	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-76	+70/-87	+70/-90	+70/-90	+/-59.4	+70/-79.3	+70/-84.1	+70/-84.1	+/-54.1	+70/-72.2	+70/-75.7	+70/-75.7	+/-49.4	+/-66	+67/-67.8	+67/-67.8	+/-37.9	+/-60.8	+/-61.3	+/-61.3
48-1/4"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90		+70/-82.4				+70/-79.3			+/-63.1		+70/-80.1	+70/-80.1	+/-49.3	+/-65.8	+69.6/-71.6	+69.6/-71.6	+/-45	+/-60.2	+/-63.2	+/-63.2				
53-1/8"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-84.1	+70/-84.1	+70/-84.1	+/-63.1	+70/-75.7	+70/-75.7	+70/-75.7	+/-57.5	+/-65.8	+69.6/-71.6	+69.6/-71.6	+/-52.3	+/-59.9	+/-67.5	+/-67.5								
58"	+70/-90	+70/-90	+70/-90	+70/-83.2	+70/-83.2	+70/-83.2	+70/-77	+70/-77	+70/-77	+/-65.9	+67/-67.8	+67/-67.8	+67/-67.8	+/-52.6	+/-63.2	+/-63.2	+/-63.2												
63"		+70/-90								+/-60.7	+/-61.3	+/-61.3	+/-61.3																
76"		+70/-84.6		+/-58.9			+/-55.6	+/-55.6	+/-55.6																				
84"	+70/-90	+70/-80.4	+70/-71.3	+/-54.2	+/-54.2	+/-54.2																							







SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR LOCATIONS AND QUANTITIES. SEE SHEET 3 FOR ANY ADDITIONAL ANCHORS REQUIRED FOR THE FRAME ASSEMBLY TUBE.

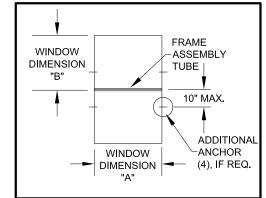
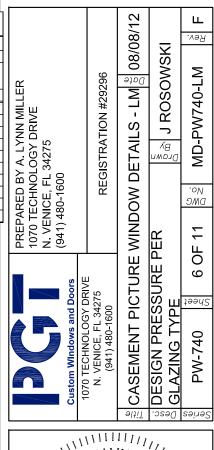
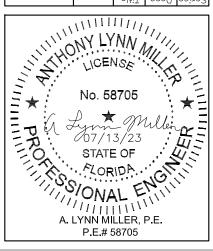


FIGURE FOR HORIZONTAL FRAME ASSEMBLY TUBE

SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR LOCATIONS AND QUANTITIES. SEE SHEET 3 FOR ANY ADDITIONAL ANCHORS REQUIRED FOR THE FRAME ASSEMBLY TUBE.



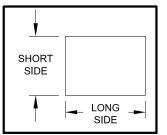


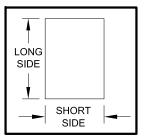
5) 7/8" LAMI. IG:(1/8" T - 7/16" AIR - 1/8" AN - .090" PVB - 1/8" AN)

"PVB"= TROSIFOL PVB INTERLAYER BY KURARAY AMERICA, INC.

# TABLE 6:

			Design Pre	essure (psf) fo	or Single Wind	lows, All Ancl	nor Groups	
					Short Side			
		under 23"	25-15/16"	27-3/4"	33-1/2"	37"	44"	48-1/4"
	under 23"	+70/-90						
	25-15/16"	+70/-90	+70/-90					
	37"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90		
<u>o</u>	44"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	
Side	48-1/4"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90
Long	53-1/8"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90		
Ľ	58"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-87.8		
	63"	+70/-90	+70/-90	+70/-90	+70/-87.2	+70/-79.9		
	76"	+70/-90	+70/-90	+70/-86.3				
	84"	+70/-90	+70/-90	+70/-81.3				



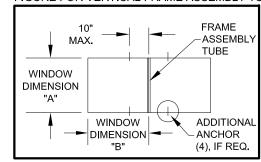


1) SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR
 LOCATIONS AND QUANTITIES.
 2) TABLE DIMENSIONS MAY BE ORIENTED VERTICALLY
 OR HORIZONTALLY AS SHOWN.

# TABLE 7:

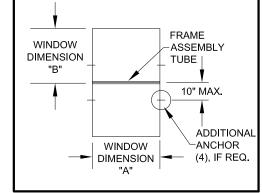
													Design I	Pressure (p	osf) for Wind	lows Attach	ned to a Fra	me Assem	nbly Tube											
															Windo	w Dimensio	on "A"													
		under 23"	25-15/16"	27-3/4"		33-1/2"			37"			4	4"			48-1	1/4"			53-1	/8"			58	3"			63	3"	
		Anchor	Anchor	Anchor	Δ	nchor Grou	n	Δ	nchor Grou	ın		Ancho	r Group			Anchor	Group			Anchor	Group			Anchor	Group			Anchor	Group	
[		Group	Group	Group		inchor Group	P		nenor Grou	iP		Allello	Стоир			Allohol	Group			Allerior	Стоир			Allollol	Огоир			Allohol	Огоир	
		All	All	All	Α	В	C&D	Α	В	C & D	Α	В	С	D	Α	В	С	D	Α	В	С	D	Α	В	С	D	Α	В	C	i D
	under 23"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-87.6	+70/-90	+70/-90	+70/-79.2	+70/-90	+70/-83.1	+/-66.6	+70/-79.7	+70/-90	+70/-75.8	+/-60.7	+70/-72.7	+70/-90	+/-69	+/-55.3	+/-66.1	+70/-90	+/-63.1	+/-50.5	+/-60.5	+70/-90	+/-58.1	+/-46.5	+/-55.7	+70/-88.7
-B	25-15/16"	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-90	+70/-87.6	+70/-90	+70/-90	+70/-73.7	+70/-90	+70/-90	+70/-90	+/-67.1	+70/-90	+70/-90	+70/-90	+/-61.1	+70/-90	+70/-90	+70/-90	+/-55.9	+70/-89.6	+70/-90	+70/-90	+/-51.5	+70/-82.5	+70/-90	+70/-90
ļ.	37"	+70/-90		+70/-90				+70/-76.8			+/-64.6	+70/-90	+70/-90	+70/-90		+70/-90	+70/-90	+70/-90	+/-53.6	+70/-85.9	+70/-90	+70/-90	+/-49	+70/-78.5	+70/-87.8	+70/-87.8	+/-45.1	+70/-72.3	+70/-79.9	+70/-79.9
Sic	44"	+70/-90			+70/-85.6			+70/-90		+70/-90		+70/-87	+70/-90	+70/-90		+70/-79.3		+70/-90												
ner	48-1/4"	+70/-90		+70/-90				+70/-82.4			+/-69.3	+70/-90	+70/-90	+70/-90	+/-63.1	+70/-86.7	+70/-86.5	+70/-90												
۱	53-1/8"	+70/-90						+70/-85.7																						ĺ
NC.	58"	+70/-90			+70/-86.6			+70/-87.8																			Ĺ'			
ndc	63"	+70/-90	+70/-90			+70/-87.2	+70/-87.2	+70/-79.9	+70/-79.9	+70/-79.9																				
Ň	76"	+70/-90		+70/-86.3																										
	84"	+70/-90	+70/-90	+70/-81.3																							1		, ,	

# FIGURE FOR VERTICAL FRAME ASSEMBLY TUBE



SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR LOCATIONS AND QUANTITIES. SEE SHEET 3 FOR ANY ADDITIONAL ANCHORS REQUIRED FOR THE FRAME ASSEMBLY TUBE.

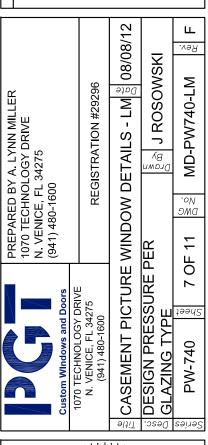
# FIGURE FOR HORIZONTAL FRAME ASSEMBLY TUBE

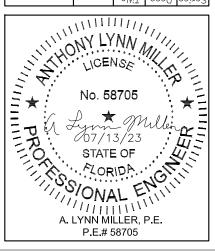


SEE SHEETS 1, 4 & 5
FOR WINDOW ANCHOR
LOCATIONS AND
QUANTITIES. SEE SHEET
3 FOR ANY ADDITIONAL
ANCHORS REQUIRED
FOR THE FRAME
ASSEMBLY TUBE.

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.08
Expiration Date: 04/11/2028
By: Manuel Product Control

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





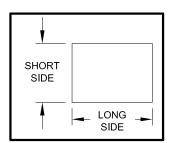
SEE SHEET 4 FOR ADDITIONAL SAMPLE CONFIGURATIONS

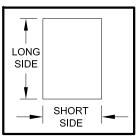
- 2) 7/16" LAMI. (3/16" AN .090" SG 3/16" AN
- 6) 7/8" LAMI. IG: (3/16" AN 1/4" AIR 3/16" AN .090" SG 3/16" AN)
- 8) 7/8" LAMI. IG: (3/16" T 1/4" AIR 3/16" AN .090" SG 3/16" AN)

"SG"= SENTRYGLAS<sup>®</sup>INTERLAYER BY KURARAY AMERICA, INC.



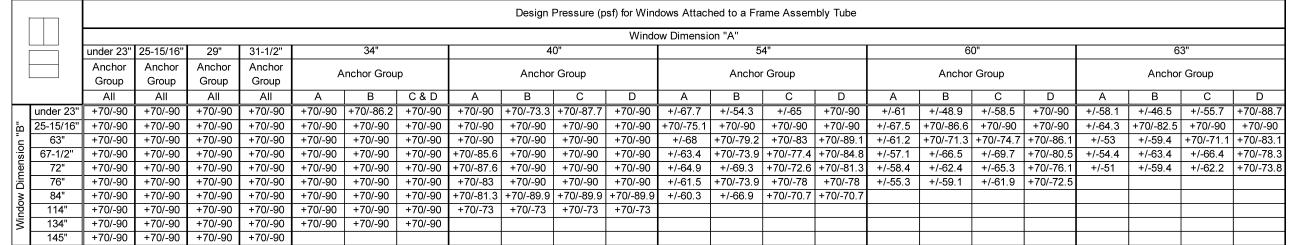
				De	esign Pressure	(psf) for Single	e Windows, Al	I Anchor Grou	ps		
						Short	Side				
		under 23"	25-15/16"	29"	31-1/2"	34"	40"	54"	60"	63"	67-1/2"
	under 23"	+90/-130									
	25-15/16"	+90/-130	+90/-130								
	63"	+90/-130	+90/-130	+90/-123.1	+90/-116.5	+90/-110.7	+90/-100.7	+/- 89.1	+/- 86.1	+/- 83.1	
<u>a</u>	67-1/2"	+90/-130	+90/-130	+90/-120.7	+90/-113.9	+90/-108	+90/-97.6	+/- 84.8	+/- 80.5	+/- 78.3	+/- 75.1
Side	72"	+90/-130	+90/-129.2	+90/-118.7	+90/-111.8	+90/-105.8	+90/-95.1	+/- 81.3	+/- 76.1	+/- 73.8	
ong.	76"	+90/-130	+90/-127.8	+90/-117.1	+90/-110.2	+90/-104.1	+90/-93.2	+/- 78	+/- 72.5		
۲	84"	+90/-130	+90/-125.3	+90/-114.5	+90/-107.5	+90/-101.3	+/- 89.9	+/- 70.7			
	114"	+90/-130	+90/-119.6	+90/-108.6	+90/-101.4	+90/-95	+/- 73				
	134"	+90/-130	+90/-117.3	+90/-106.3	+90/-99	+90/-92.6					
	145"	+90/-129.8	+90/-116.4	+90/-105.3	+90/-98						



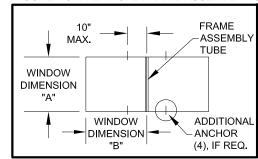


 SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR LOCATIONS AND QUANTITIES.
 TABLE DIMENSIONS MAY BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN.

# TABLE 9:

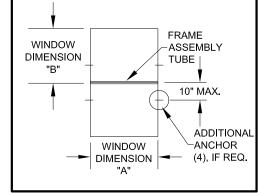


## FIGURE FOR VERTICAL FRAME ASSEMBLY TUBE



SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR LOCATIONS AND QUANTITIES. SEE SHEET 3 FOR ANY ADDITIONAL ANCHORS REQUIRED FOR THE FRAME ASSEMBLY TUBE.

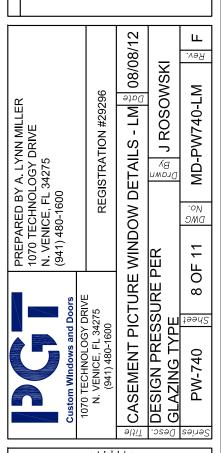
## FIGURE FOR HORIZONTAL FRAME ASSEMBLY TUBE

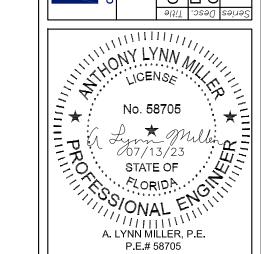


SEE SHEETS 1, 4 & 5
FOR WINDOW ANCHOR
LOCATIONS AND
QUANTITIES. SEE SHEET
3 FOR ANY ADDITIONAL
ANCHORS REQUIRED
FOR THE FRAME
ASSEMBLY TUBE.

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.08
Expiration Date: 04/11/2028
By: Manuel Product Control

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



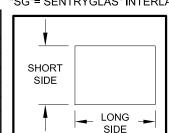


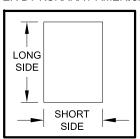
3) 7/16" LAMI (3/16 HS - .090" SG - 3/16 HS)

7) 7/8" LAMI IG: 3/16" AN - 1/4" AIR - 3/16" HS - .090" SG - 3/16" HS)

9) 7/8" LAMI IG: (3/16" T - 1/4" AIR - 3/16" HS - .090" SG - 3/16" HS)

"SG"= SENTRYGLAS<sup>®</sup>INTERLAYER BY KURARAY AMERICA, INC.





- 1) SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR LOCATIONS AND QUANTITIES.
- TABLE DIMENSIONS MAY BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN.

## 114" 134"

TABLE 10:

under 23"

25-15/16

63"

67-1/2"

72"

76"

84"

145"

under 23"

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

25-15/16"

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

29"

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

31-1/2"

+90/-130

+90/-130

+90/-130

+90/-130

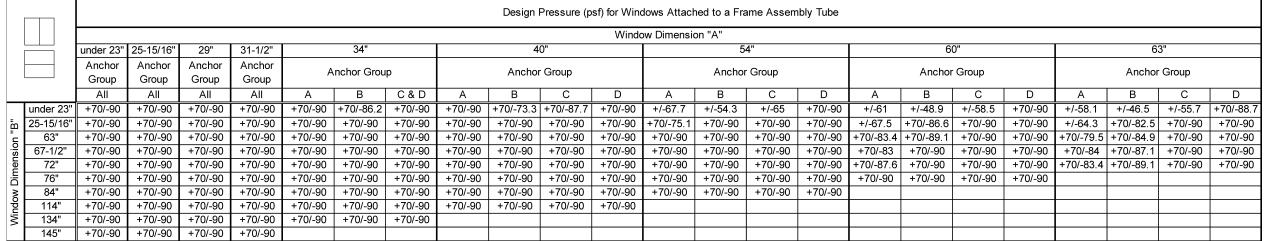
+90/-130

+90/-130

+90/-130

+90/-130

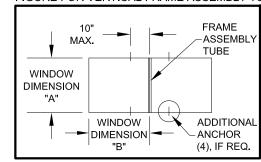
Ţ	AB	LE	1	1



67-1/2"

+90/-130

## FIGURE FOR VERTICAL FRAME ASSEMBLY TUBE



SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR LOCATIONS AND QUANTITIES. SEE SHEET 3 FOR ANY ADDITIONAL ANCHORS REQUIRED FOR THE FRAME ASSEMBLY TUBE.

Design Pressure (psf) for Single Windows, All Anchor Groups

Short Side

40"

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

54"

+90/-130

+90/-130

+90/-130

+90/-130

+90/-130

60"

+90/-130

+90/-130

+90/-130

+90/-130

63"

+90/-130

+90/-130

+90/-130

34"

+90/-130

+90/-130

+90/-130

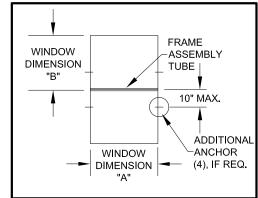
+90/-130

+90/-130

+90/-130

+90/-130

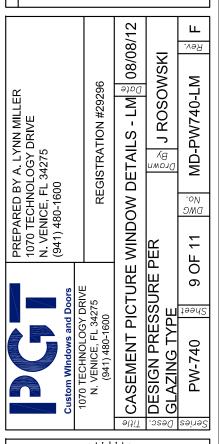
# FIGURE FOR HORIZONTAL FRAME ASSEMBLY TUBE

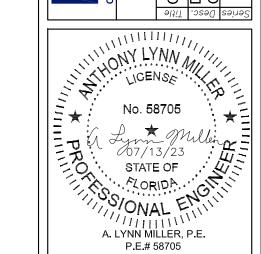


SEE SHEETS 1, 4 & 5
FOR WINDOW ANCHOR
LOCATIONS AND
QUANTITIES. SEE SHEET
3 FOR ANY ADDITIONAL
ANCHORS REQUIRED
FOR THE FRAME
ASSEMBLY TUBE.

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.08
Expiration Date: 04/11/2028
By: Manuel Product Control

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



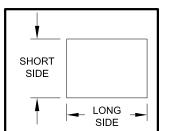


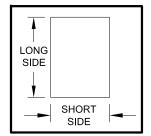
4) 7/8" LAMI. IG:(1/8" AN - 7/16" AIR - 1/8" AN - .090" PVB - 1/8" AN)

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

# TABLE 12:

		Design Pressure (psf) for Single Windows, All Anchor Groups													
		Short Side under 23"   25-15/16"   27-3/4"   33-1/2"   37"   44"   48-1/4"   53													
	under 23"	+60/-70													
	25-15/16"	+60/-70	+60/-70												
	37"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70									
<u>o</u>	44"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70								
Side	48-1/4"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70							
Long	53-1/8"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-69.3						
۲	58"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-69.6	+60/-64.9							
	63"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-62.9								
	76"	+60/-70	+60/-70	+60/-70	+60/-60.5	+/- 57									
	84"	+60/-70	+60/-70	+60/-70	+/- 55.6										



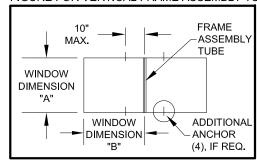


1) SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR LOCATIONS AND QUANTITIES.
2) TABLE DIMENSIONS MAY BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN.

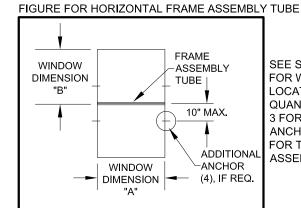
## TABLE 13:

		Design Pressure (psf) for Windows Attached to a Frame Assembly Tube																						
		Window Dimension "A"																						
		under 23"	25-15/16"	27-3/4"	34-1/2"	1/2" 37" 44"				48-1/4"			53-1/8"			58"				63"				
		Anchor	Anchor	Anchor	Anchor	Anchor	Δ	nchor Grou	n	Anchor Group		Anchor Group				Anchor Group				Anchor Group				
		Group	Group	Group	Group	Group	Attended Greeds			Attends Gloup			, the field Group				, thener Group				, monor Group			
		All	All	All	All	All	Α	В	C & D	Α	В	C&D	Α	В	С	D	Α	В	С	D	Α	В	С	D
	under 23"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-66.6	+60/-70	+60/-70	+60/-60.7	+60/-70	+60/-69	+/-55.3	+60/-66.1	+60/-70	+60/-63.1	+/-50.5	+60/-60.5	+60/-70	+/-58.1	+/-46.5	+/-55.7	+60/-70
مةٍ	25-15/16"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-67.1	+60/-70	+60/-70	+60/-61.1	+60/-70	+60/-70	+60/-70	+/-55.9	+60/-70	+60/-70	+60/-70	+/-51.5	+60/-70	+60/-70	+60/-70
<u>_</u>	37"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-64.6	+60/-70	+60/-70	+/-58.8	+60/-70	+60/-70	+/-53.6	+60/-70	+60/-70	+60/-70	+/-49	+60/-70	+60/-70	+60/-70	+/-45.1	+60/-70	+60/-70	+60/-70
Sic	44"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+60/-65.2	+60/-70	+60/-70	+/-59.4	+60/-70	+60/-70	+/-54.1	+60/-70	+60/-70	+60/-70	+/-49.4	+60/-66	+60/-69.6	+60/-69.6	+/-37.9	+60/-60.8	+60/-62.9	+60/-62.9
Je	48-1/4"	+60/-70	+60/-70	+60/-70	+60/-70	+60/-70	+/-59.4	+60/-70	+60/-70	+/-54.1	+60/-70	+60/-70	+/-49.3	+60/-65.8	+60/-70	+60/-70	+/-45	+60/-60.2	+60/-64.9	+60/-64.9				
洁	53-1/8"	+60/-70	+60/-70	+60/-70	+60/-70		+60/-63.1	+60/-70	+60/-70	+/-57.5	+60/-65.8	+60/-70	+/-52.3	+/-59.9	+60/-69.3	+60/-69.3								
<u> </u>	58"	+60/-70	+60/-70	+60/-70		+60/-68.6					+60/-64.9	+60/-64.9												
ğ	63"	+60/-70	+60/-70	+60/-70			+60/-60.7	+60/-62.9	+60/-62.9															
∣≷	76"	+60/-70	+60/-70		+60/-60.5	+/-57																		
	84"	+60/-70	+60/-70	+60/-70	+/-55.6																			

# FIGURE FOR VERTICAL FRAME ASSEMBLY TUBE



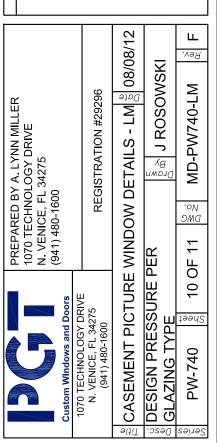
SEE SHEETS 1, 4 & 5 FOR WINDOW ANCHOR LOCATIONS AND QUANTITIES. SEE SHEET 3 FOR ANY ADDITIONAL ANCHORS REQUIRED FOR THE FRAME ASSEMBLY TUBE.

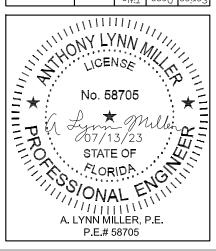


SEE SHEETS 1, 4 & 5
FOR WINDOW ANCHOR
LOCATIONS AND
QUANTITIES. SEE SHEET
3 FOR ANY ADDITIONAL
ANCHORS REQUIRED
FOR THE FRAME
ASSEMBLY TUBE.

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-0816.08
Expiration Date: 04/11/2028
By: Manuel Product Control

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





SEE SHEET 4 FOR ADDITIONAL SAMPLE CONFIGURATIONS

