



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

**NOTICE OF ACCEPTANCE (NOA)**

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/building](http://www.miamidade.gov/building)

**Custom Window Systems, Inc.**  
1900 SW 44<sup>th</sup> Avenue  
Ocala, FL 34474

**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 “CWS-330 (Flange & Fin Frame)” Aluminum Fixed Window - N.I.**

**APPROVAL DOCUMENT:** Drawing No. **CWS-1228**, titled “CWS 330 Aluminum Non-Impact Flange & Fin Frame Non-Impact Picture Window”, sheets 1 through 12 of 12, dated 11/17/23, prepared by the manufacturer, signed and sealed by Thomas J. Sotos, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING: None**

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

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

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

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

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

This NOA **revises NOA No. 23-1017.10** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

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

  
1/25/24

NOA No. 24-0116.18  
Expiration Date: May 08, 2028  
Approval Date: February 01, 2024  
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

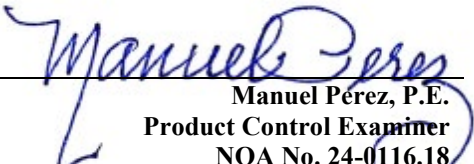
**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.  
*(Submitted under NOA No. 09-0825.09)*
2. Drawing No. **L-4000 / 6000.01**, titled "Series 4000 / 6000 Aluminum Fixed Windows", sheets 1 through 12 of 12, dated 11/01/17, with revision **H** dated 10/11/23, prepared by manufacturer, and signed and sealed by Thomas J. Sotos, P.E.  
*(Submitted under NOA No. 23-1017.10)*

**B. TESTS**

1. 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 series SH-7700 aluminum single hung window and a series PW-4000/6000 aluminum fixed window, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-23-8049** and **HETI-23-8048**, both dated 07/24/23, signed and sealed by Ram N. Tewari, P.E.  
*(Submitted under NOA No. 23-1017.10)*
2. Test report on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94 along with marked-up drawings and installation diagram of an aluminum fixed window, prepared by Hurricane Engineering & Testing Inc., Test Report No. **HETI-09-2604**, dated 08/14/09, signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No.09-0825.09)*
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) 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 Reports No. **FTL-3619**, dated 11/27/02 and **FTL-3627** dated 11/27/02, signed and sealed by Joseph C. Chan, P.E.  
*(Submitted under NOA No. 03-0128.06)*
4. Test report on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94 along with marked-up drawings and installation diagram of an aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.: **FTL-3620**, **FTL-3621**, **FTL-3622**, **FTL-3623**, **FTL-3624**, **FTL-3625**, **FTL-3626**, all dated 11/27/02, all signed and sealed by Joseph C. Chan, P.E.  
*(Submitted under NOA No. 03-0128.06)*

  
Manuel Pérez, P.E.  
Product Control Examiner  
NOA No. 24-0116.18  
Expiration Date: May 08, 2028  
Approval Date: February 01, 2024

**Custom Window Systems, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

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

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with FBC, dated 08/15/09, prepared by manufacturer, signed and sealed by Thomas J. Sotos, P.E.  
*(Submitted under NOA No. 09-0825.09)*
2. Glazing complies with ASTM E1300-04/09

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

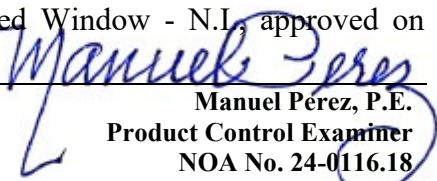
1. None.

**F. STATEMENTS**

1. Statement letter of conformance, complying with **FBC 8<sup>th</sup> Edition (2023)**, dated October 13, 2023, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.  
*(Submitted under NOA No. 23-1017.10)*
2. Statement letter of no financial interest, dated October 13, 2023, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.  
*(Submitted under NOA No. 23-1017.10)*
3. Proposal No. **23-0461R** issued by Product Control Section, dated June 13, 2023, and revised on June 16, 2023, signed by Manuel Perez, P.E.  
*(Submitted under NOA No. 23-1017.10)*
4. Department of State Certification of **LAWSON INDUSTRIES, INC.** as a for profit corporation, active and organized under the laws of the State of Florida, dated 04/11/14 and filed at the Secretary of State.  
*(Submitted under NOA No. 14-0908.19)*
5. Laboratory compliance letter for Test Report No. **HETI-09-2604**, dated 08/14/09, issued by Hurricane Engineering & Testing, Inc., signed and sealed by Candido F. Font, P.E.  
*(Submitted under NOA No.09-0825.09)*
6. Laboratory compliance letter for Test Reports No.: **FTL-3619, FTL-3620, FTL-3621, FTL-3622, FTL-3623, FTL-3624, FTL-3625, FTL-3626, FTL-3627**, all dated 11/27/02, issued by Fenestration Testing Laboratory, Inc., and signed and sealed by Joseph C. Chan, P.E.  
*(Submitted under NOA No. 03-0128.06)*

**G. OTHERS**

1. Notice of Acceptance No. **23-0314.03**, issued to Lawson Industries, Inc. for their Series "4000/6000 (Flange & Fin Frame)" Aluminum Fixed Window - N.I., approved on 04/06/23 and expiring on 05/08/28.

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 24-0116.18  
Expiration Date: May 08, 2028  
Approval Date: February 01, 2024

**Custom Window Systems, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**2. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Drawing No. **CWS-1228**, titled “CWS 330 Aluminum Non-Impact Flange & Fin Frame Non-Impact Picture Window”, sheets 1 through 12 of 12, dated 11/17/23, prepared by manufacturer, and signed and sealed by Thomas J. Sotos, P.E.

**B. TESTS**

1. None.

**C. CALCULATIONS**

1. None.

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS**

1. Statement letter of conformance, complying with **FBC 8<sup>th</sup> Edition (2023)**, dated December 18, 2023, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.
2. Statement letter of no financial interest, dated December 18, 2023, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.
3. Private Labeling Agreement document in conformance to Product Control guidelines dated 01/11/24, signed by Kevin E. Pine, vice president.

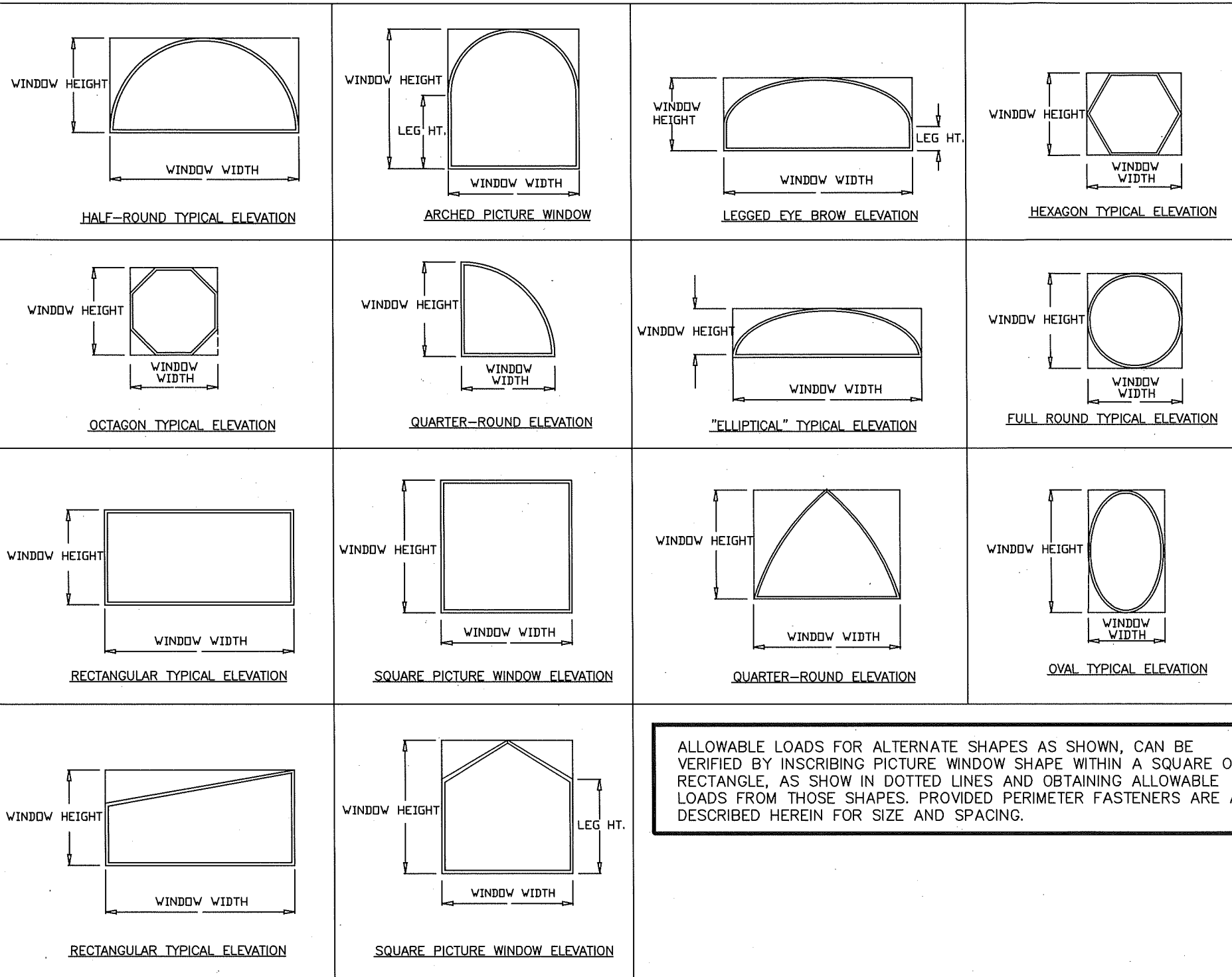
**G. OTHERS**

1. Notice of Acceptance No. **23-1017.10**, issued to Lawson Industries, Inc. for their Series “4000/6000 (Flange & Fin Frame)” Aluminum Fixed Window - N.I., approved on 11/16/23 and expiring on 05/08/28.



**Manuel Perez, P.E.**  
**Product Control Examiner**  
**NOA No. 24-0116.18**  
**Expiration Date: May 08, 2028**  
**Approval Date: February 01, 2024**

**CWS 330 ALUM. PICTURE WINDOW- APPROVED WINDOW ELEVATIONS (NON-IMPACT)**

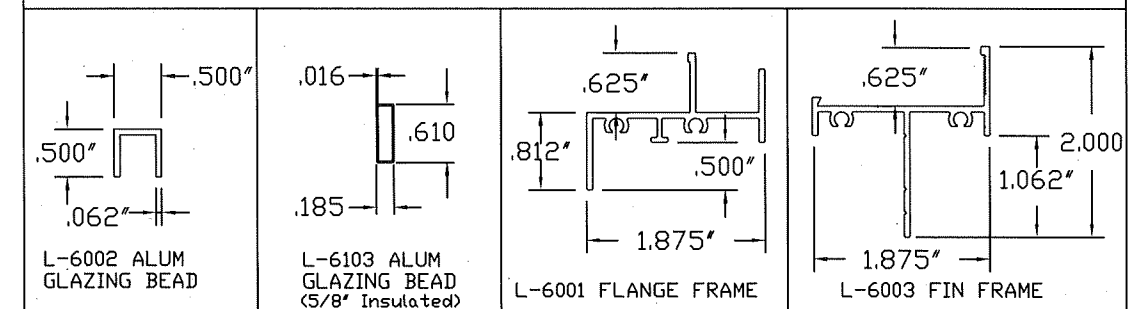


ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN, CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN A SQUARE OR RECTANGLE, AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES. PROVIDED PERIMETER FASTENERS ARE AS DESCRIBED HEREIN FOR SIZE AND SPACING.

**General Notes:**

- 1.) THIS WINDOW SYSTEM IS DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (2020-7th Edition & 2023-8th Edition) AND ASTM 1300-09. THIS PRODUCT IS NOT IMPACT RESISTANT. WINDOWS ARE TO BE PROTECTED WITH MIAMI-DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS.
- 2.) 1 X OR 2 X WOOD BUCKS SHALL BE INSTALLED AND ANCHORED SO THAT THE BUILDING RESISTS THE SUPERIMPOSED LOADS IN ACCORDANCE WITH REQUIREMENTS OF THE FBC & TO BE REVIEWED BY BUILDING OFFICIAL.
- 3.) ANCHORS SHOWN ON TYPICAL ELEVATIONS ARE AS PER TEST UNITS. ON CENTER (O.C.) ANCHOR SPACINGS WILL VARY WITH UNIT DIMENSIONS, AND THE NUMBER OF ANCHORS REQUIRED, AS SPECIFIED ON THE LOAD TABLES.
- 4.) ANCHOR CONDITIONS NOT DESCRIBED IN THESE DRAWING'S ARE TO BE ENGINEERED ON A SITE SPECIFIC BASIS, UNDER SEPARATE APPROVAL AND TO BE REVIEWED BY BUILDING OFFICIAL.
- 5.) WINDOWS ARE QUALIFIED FOR USE WITH SINGLE GLAZE GLASS TYPES TABULATED HEREIN (SEE SHEETS #4, 5, 8, 10, & 11).
- 6.) WINDOWS ARE QUALIFIED FOR USE WITH DOUBLE GLAZE GLASS TYPES TABULATED HEREIN (SEE SHEETS #6, 7, & 9).
- 7.) FALSE COLONIAL MUNTINS MAY BE USED & APPLIED TO THE GLASS WITH CLEAR SILICONE CLEAR SILICONE AND MAY BE PLACED AT INTERIOR AND/OR EXTERIOR SIDES OF GLASS.
- 8.) APPROVAL APPLIES TO SINGLE UNITS, OR MULTIPLE UNITS AND MAY BE MULLED VERTICALLY OR HORIZONTALLY.
- 9.) MULLING FIXED WINDOWS WITH OTHER TYPES OF MIAMI-DADE COUNTY APPROVED WINDOWS USING A MIAMI-DADE COUNTY APPROVED MULLION IN BETWEEN ARE ACCEPTABLE BUT THE LOWER PRESSURE FROM THE WINDOWS APPROVAL OR MULLION APPROVAL WILL APPLY TO THE ENTIRE MULLED SYSTEM.
- 10.) SEE SHEETS # 2 & 3 FOR MULLION/METAL ATTACHMENT DETAILS & NOTES.

**WINDOW FRAME EXTRUSION DETAILS**



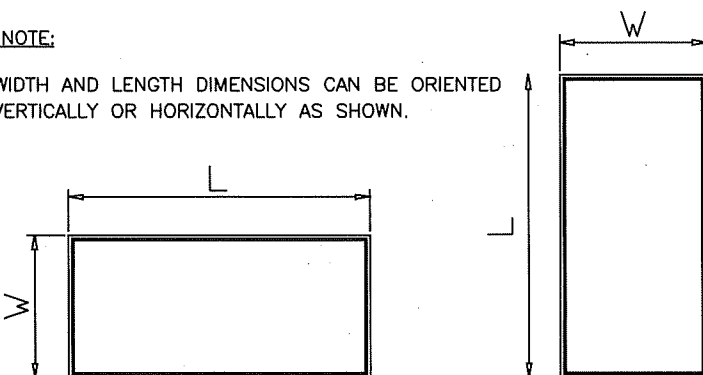
**SEALANT:**

FRAME CORNERS, OR JOINTS SEALED WITH A COLORED SEALANT AND PERIMETER OF GLAZING BEAD WITH CLEAR SILICONE

**WINDOWS TO BE PROTECTED WITH DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS**

**PRODUCT REVISED**  
As complying with the Florida Building Code  
NOA-No. **24-0116.18**  
Expiration Date: **05/08/2028**  
By: *Manuel Perez*  
Miami-Dade Product Control

**NOTE:**  
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN.



<b>THOMAS J. SOTOS</b> PROFESSIONAL ENGINEER FL LIC. # 55225		SHEET DESCRIPTION: APPROVED SHAPES, DETAILS, CONFIGURATIONS AND GENERAL NOTES	
DRAWN BY: NELSON ERAZO	DATE: 11/17/2023	NO.: A	REVISIONS DESCRIPTION:
REV. BY:	DATE:	BY:	DATE:
DWG #: CWS-1228	REV #:		
SCALE: AS NOTED	SHEET 1 OF 12		
DATE:			



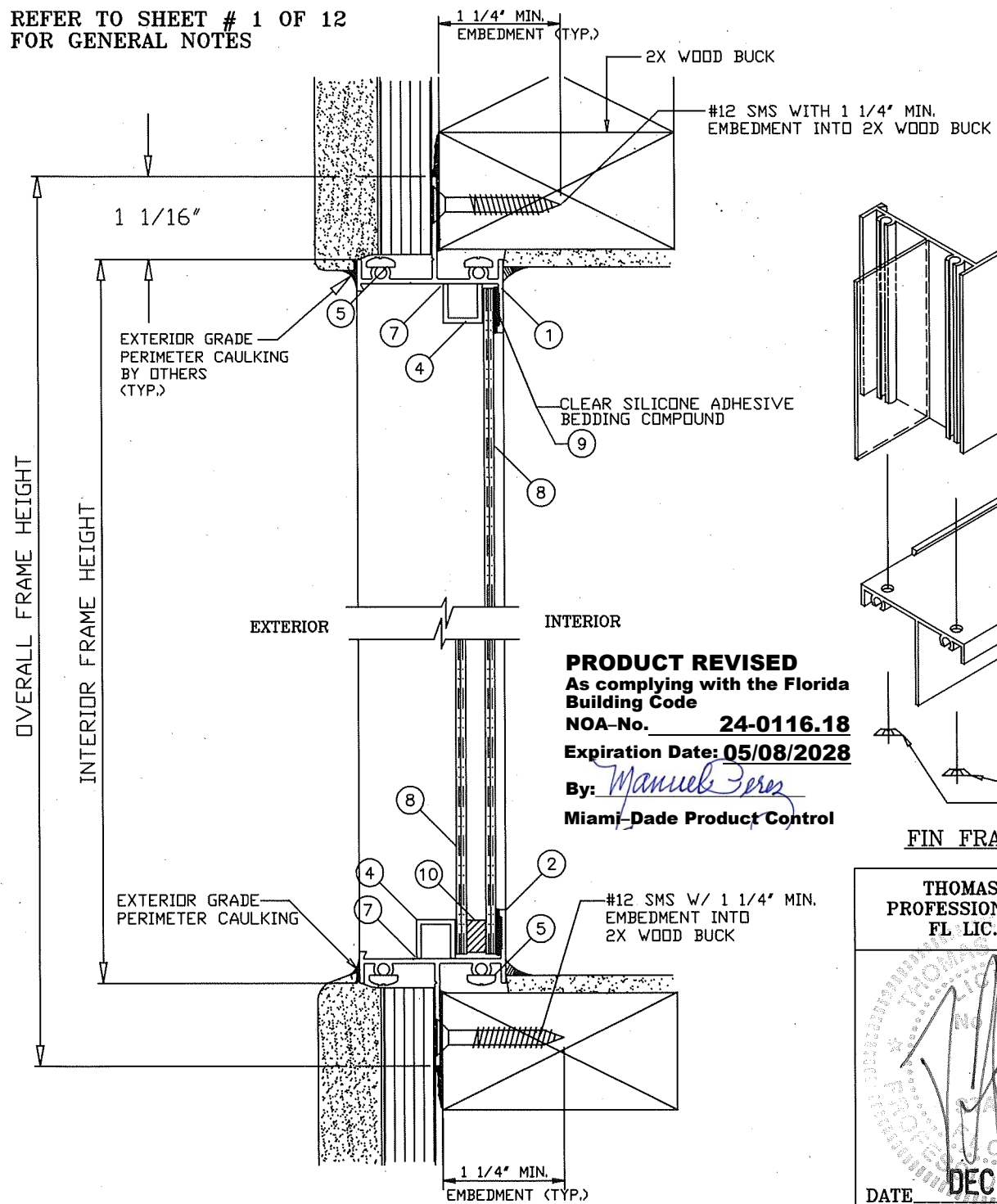
1900 SW 44TH AVE.  
OCALA, FLORIDA 34474  
WWW.CWS.CC

**CWS 330 ALUMINUM  
NON IMPACT FLANGE & FIN  
FRAME NON-IMPACT  
PICTURE WINDOW**

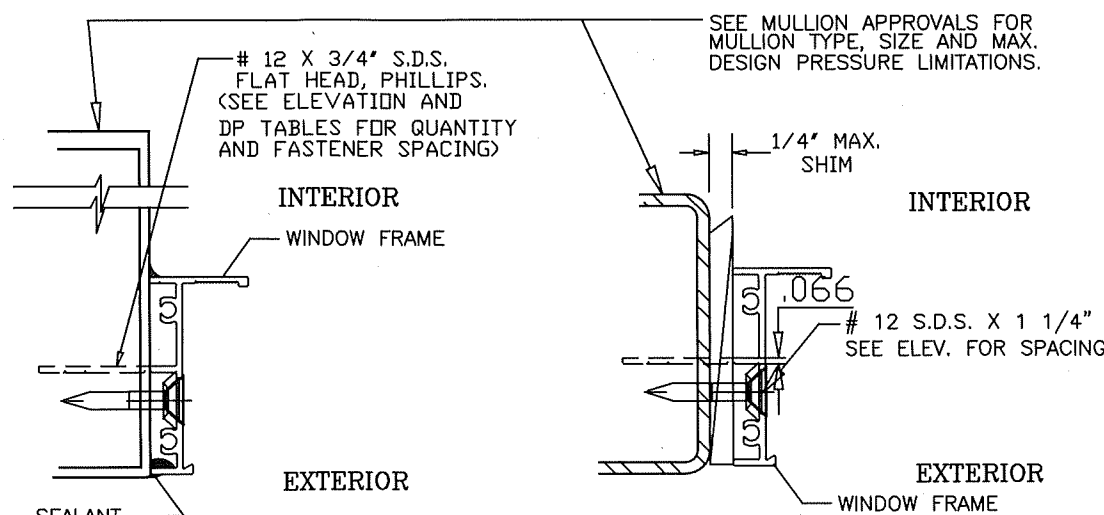
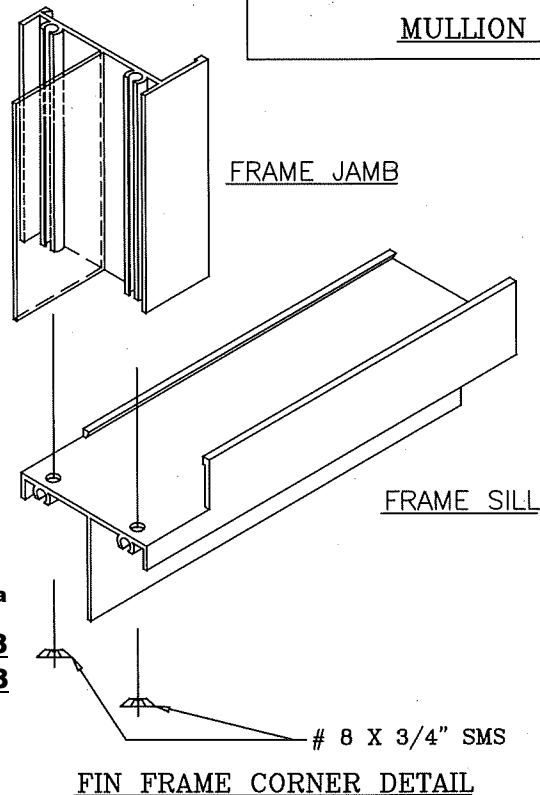
**BILL OF MATERIALS**

ITEM #	PART #	REQD.	DESCRIPTION	REMARKS
1	L-6003	1	FRAME HEAD	6063-T5 ALUMINUM
2	L-6003	1	FRAME SILL	6063-T5 ALUMINUM
3	L-6003	2	FRAME JAMB	6063-T5 ALUMINUM
4a	L-6002	AS REQ'D.	ALUM. GLAZING BEAD	6063-T5 ALUMINUM
4b	*	AS REQ'D.	5/8" GLAZING BEAD	0.016" THICK ALUMINUM
5	FS-006	AS REQ'D.	FRAME ASSEMBLY SCREWS	#8 X 3/4" P.H. PHILLIPS
6	*	AS REQ'D.	INSTALLATION SCREWS	#12 SMS X 1 1/2" F.H./PHIL.
7	*	AS REQ'D.	JOINT SEALANT	"Purvis Co." Super Seal
8	*	1	GLASS	SEE CHART
9	*	AS REQ'D.	NEUTRAL CURE SILICONE	SM -5731 IR DC-899
10a	Truseal	AS REQ'D.	Insulated Swiggle Spacer	Black w/ 1/4" air space
10b	Quanex	AS REQ'D.	Insulated SuperSpacer	Black w/ 1/4" air space
10c	Quanex	AS REQ'D.	Insulated Duraseal Spacer	Black w/ 1/4" air space

REFER TO SHEET # 1 OF 12 FOR GENERAL NOTES

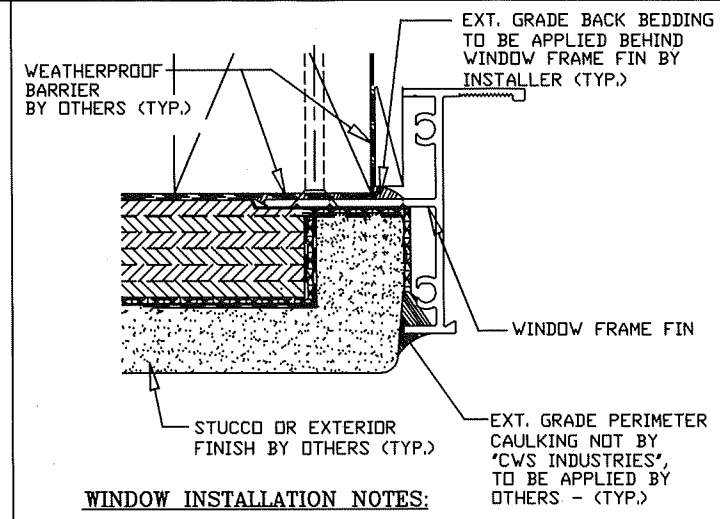


**PRODUCT REVISED**  
 As complying with the Florida Building Code  
 NOA-No. **24-0116.18**  
 Expiration Date: **05/08/2028**  
 By: *Manuel Perez*  
 Miami-Dade Product Control



**MULLION & METAL STRUCTURE ATTACHMENT DETAIL**

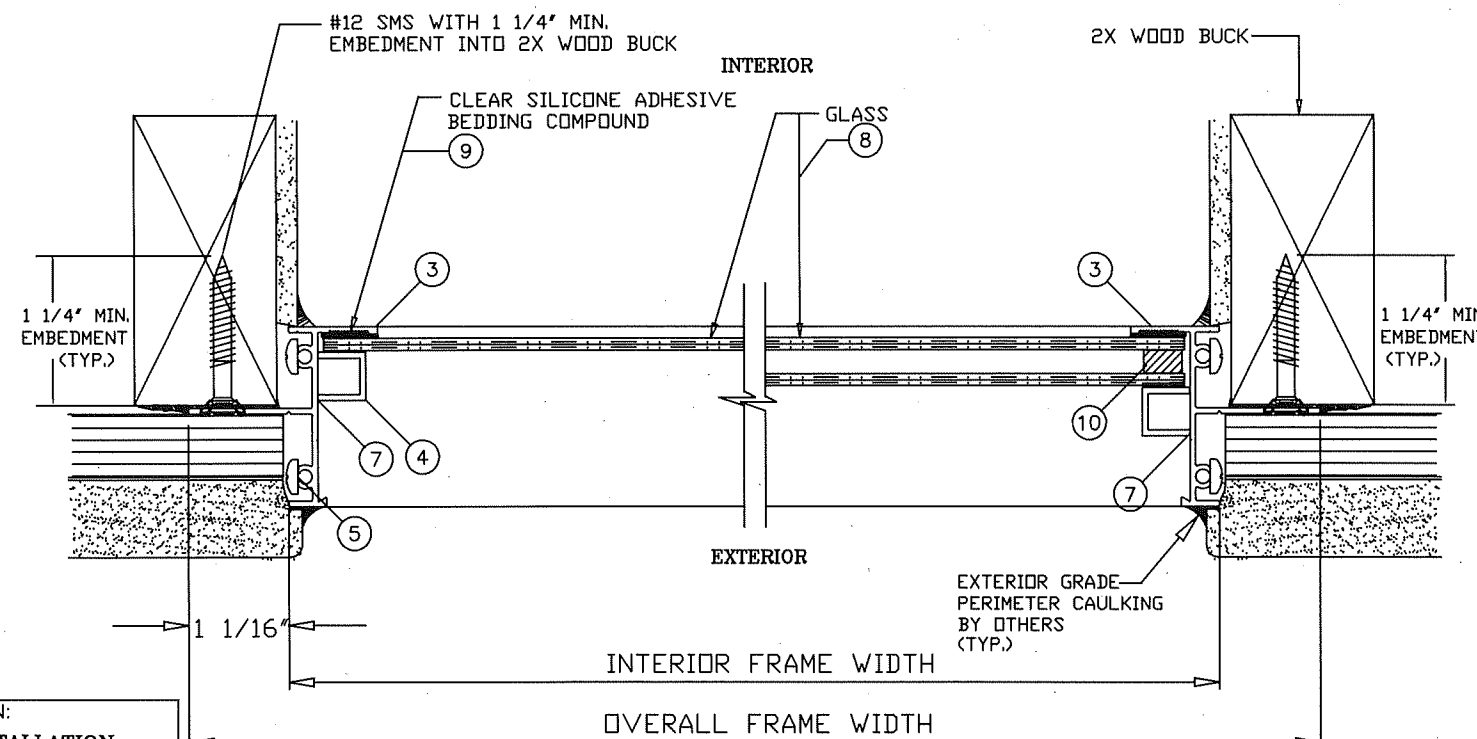
- NOTE: THE LOWER PRESSURES OF SINGLE HUNG WINDOW OR MULL SHALL GOVERN
1. ALL STEEL IN CONTACT WITH ALUM. TO BE PAINTED OR PLATED.
  2. METAL STRUCTURES: (STEEL OR ALUM. 1/8" MIN. THICK)
    - A) STEEL : Fy = 36 KSI MIN.
    - B) ALUMINUM : 6063-T5 MIN.



**WINDOW INSTALLATION NOTES:**

1. THE WINDOW OPENING MUST BE PROTECTED WITH A CODE APPROVED FELT OR MOISTURE/WEATHER BARRIER, APPROX. 12" WIDE THROUGHOUT ENTIRE PERIMETER OF THE WINDOW MOUNTING FIN. (NOT BY CWS INDUSTRIES)
2. THE WINDOW FRAME FIN TO BE BACK-BEDDED W/ AN EXT. GRADE CAULK THROUGHOUT THE ENTIRE PERIMETER OF FIN BY WINDOW INSTALLER (TYP.)
3. THE EXPOSED EXT. PERIMETER OF THE WINDOW FRAME TO BE SEALED W/ AN APPROVED EXTERIOR GRADE CAULK BY OTHERS (TYP.)

**FIN WINDOW INSTALLATION DETAIL**



<b>THOMAS J. SOTOS</b> PROFESSIONAL ENGINEER FL LIC. # 55225		SHEET DESCRIPTION: FIN FRAME INSTALLATION DETAILS, BOM & NOTES	
DRAWN BY: NELSON ERAZO	DATE: 11/17/2023	NO.: A	REVISIONS DESCRIPTION:
REV. BY:	DATE:	BY:	DATE:
DWG #: CWS-1228	REV #:	SCALE: AS NOTED	
DATE: <b>DEC 18 2023</b>		SHEET 2 OF 12	

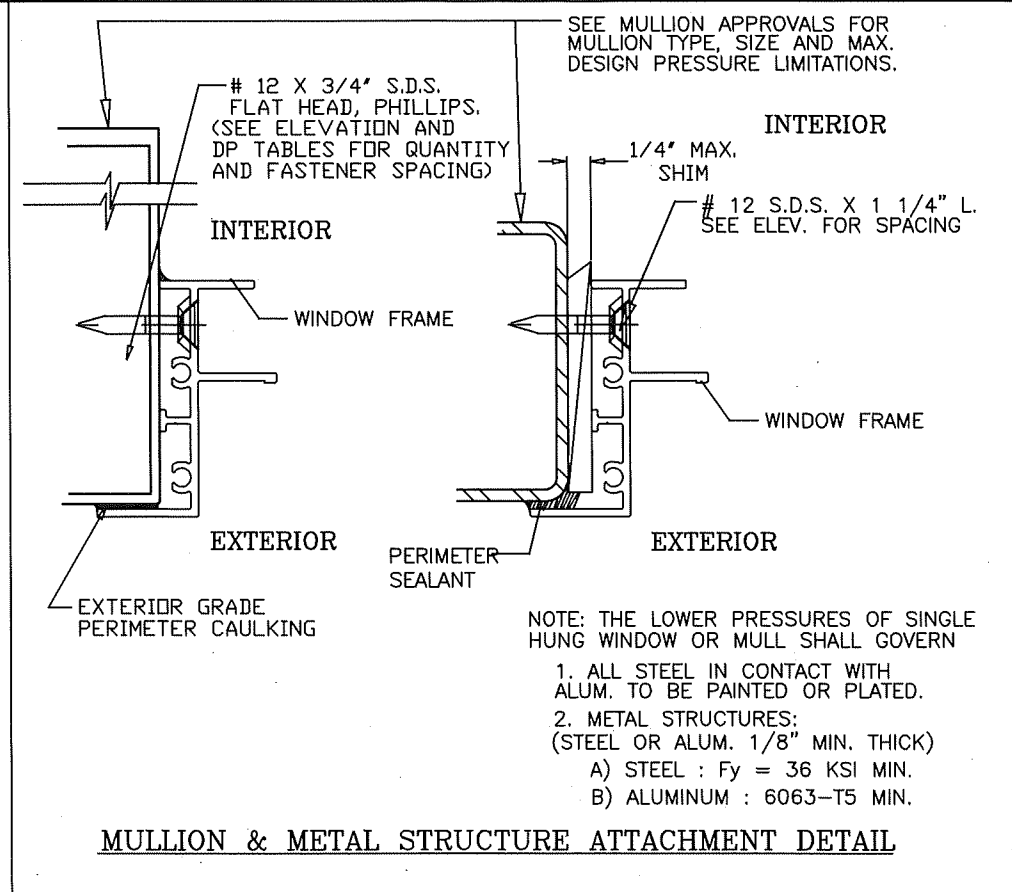
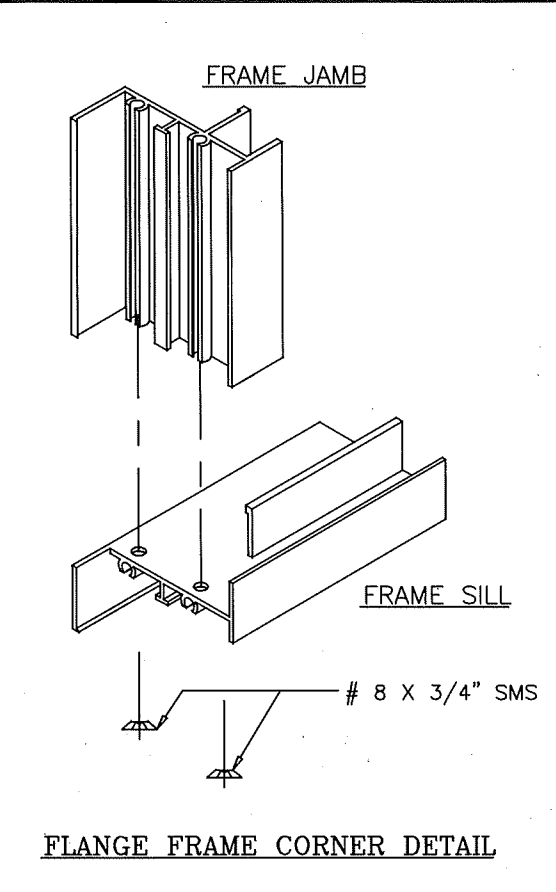
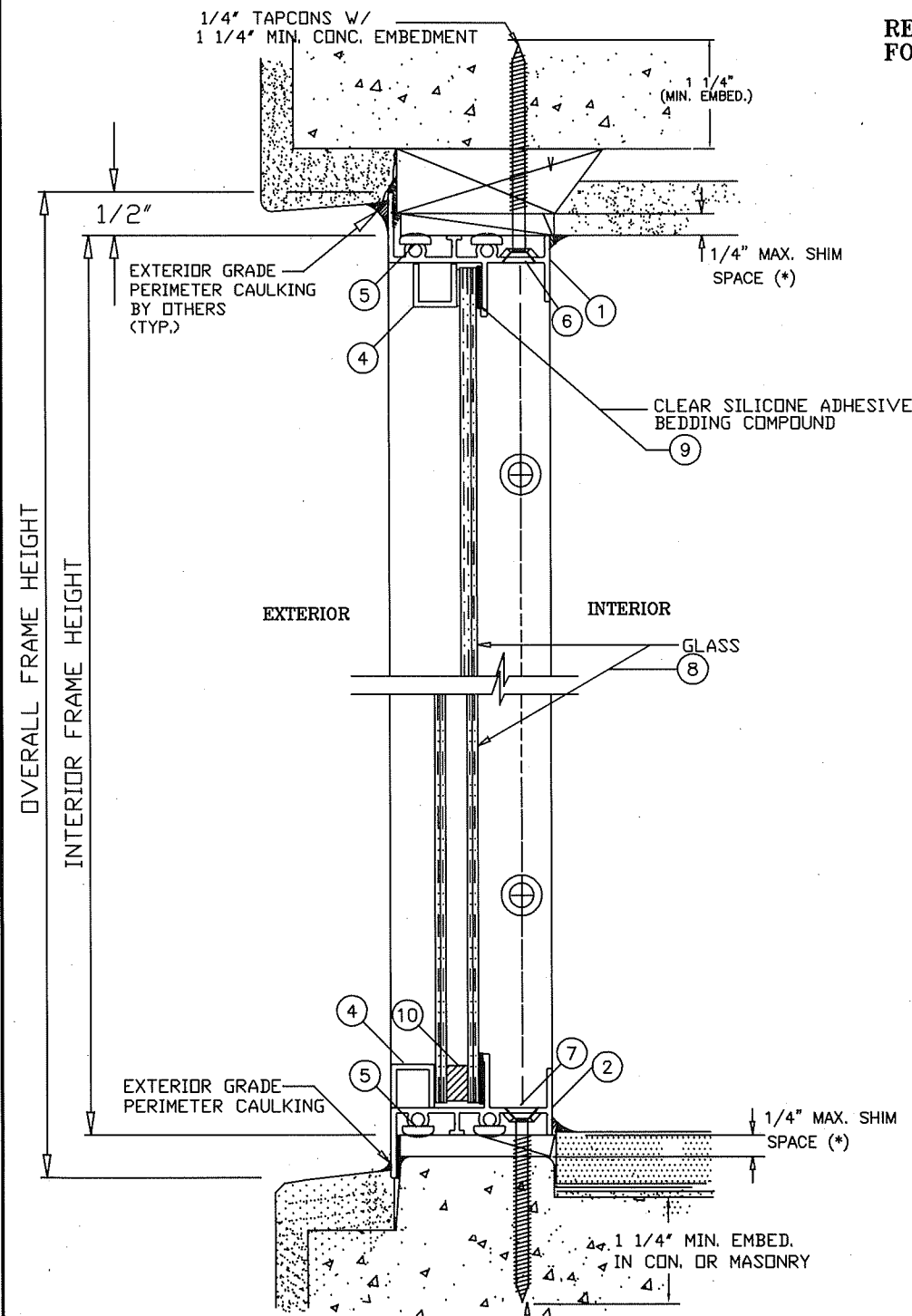


**CWS 330 ALUMINUM  
 NON IMPACT FLANGE & FIN  
 FRAME NON-IMPACT  
 PICTURE WINDOW**

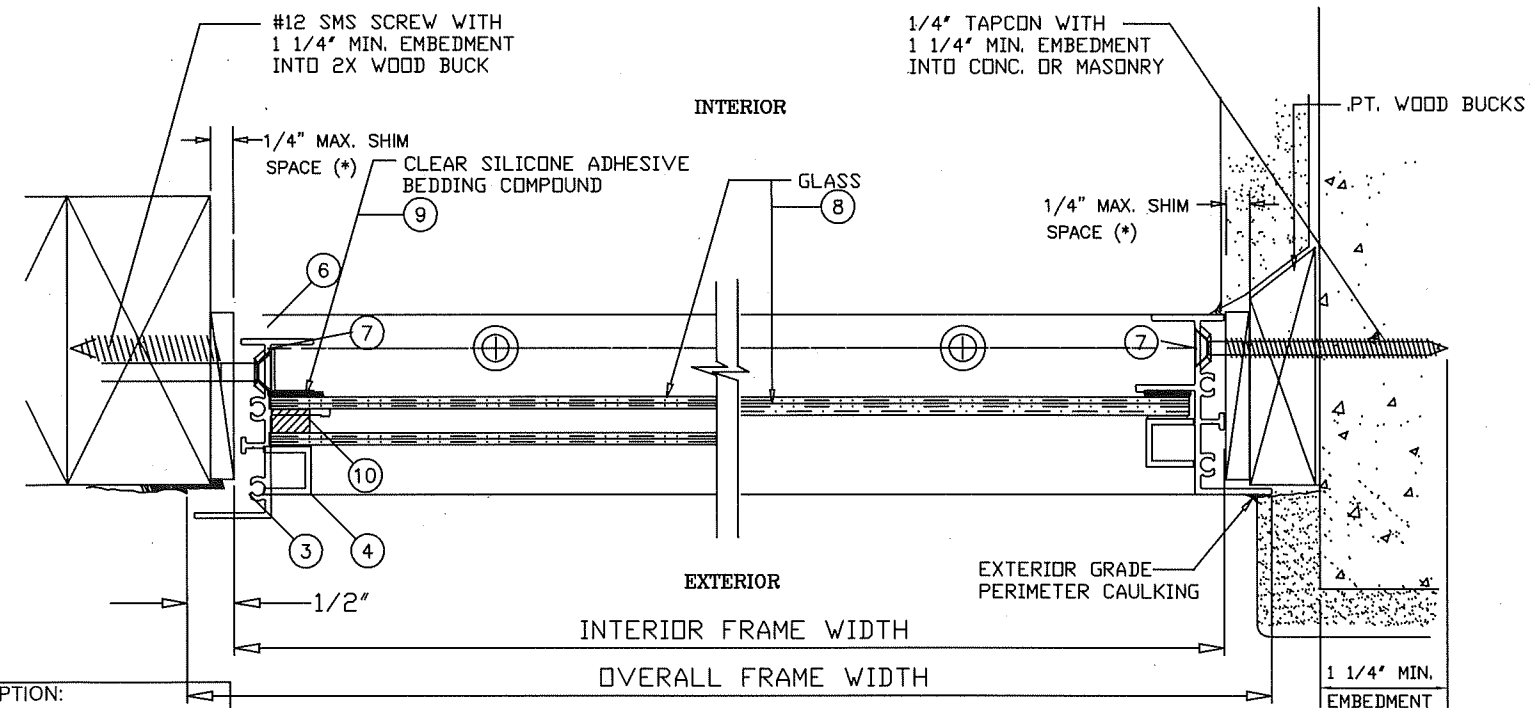
BILL OF MATERIALS				
ITEM #	PART #	REQD.	DESCRIPTION	REMARKS
1	L-6001	1	FRAME HEAD	6063-T5 ALUMINUM
2	L-6001	1	FRAME SILL	6063-T5 ALUMINUM
3	L-6001	2	FRAME JAMB	6063-T5 ALUMINUM
4a	L-6002	AS REQ'D.	ALUM. GLAZING BEAD	6063-T5 ALUMINUM
4b	*	AS REQ'D.	5/8" GLAZING BEAD	0.016" THICK ALUMINUM
5	FS-006	AS REQ'D.	FRAME ASSEMBLY SCREWS	#8 X 3/4" P.H. PHILLIPS
6	*	AS REQ'D.	INSTALLATION SCREWS	#12 SMS DR 1/4" TAPCON
7	*	AS REQ'D.	JOINT SEALANT	'Purvis Co.' Super Seal
8	*	1	GLASS	SEE CHART
9	*	AS REQ'D.	NEUTRAL CURE SILICONE	SM-5731 DR DC-899
10a	Truseal	AS REQ'D.	Insulated Swiggle Spacer	Black w/ 1/4" air space
10b	Quanex	AS REQ'D.	Insulated SuperSpacer	Black w/ 1/4" air space
10c	Quanex	AS REQ'D.	Insulated Duraseal Spacer	Black w/ 1/4" air space

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

REFER TO SHEET # 1 OF 12 FOR GENERAL NOTES



- NOTE: THE LOWER PRESSURES OF SINGLE HUNG WINDOW OR MULL SHALL GOVERN
1. ALL STEEL IN CONTACT WITH ALUM. TO BE PAINTED OR PLATED.
  2. METAL STRUCTURES: (STEEL OR ALUM. 1/8" MIN. THICK)
    - A) STEEL : Fy = 36 KSI MIN.
    - B) ALUMINUM : 6063-T5 MIN.



**PRODUCT REVISED**  
 As complying with the Florida Building Code  
 NOA-No. **24-0116.18**  
 Expiration Date: **05/08/2028**  
 By: *Manuel Perez*  
 Miami-Dade Product Control

THOMAS J. SOTOS  
 PROFESSIONAL ENGINEER  
 FL LIC. # 55225

DATE **DEC 18 2023**

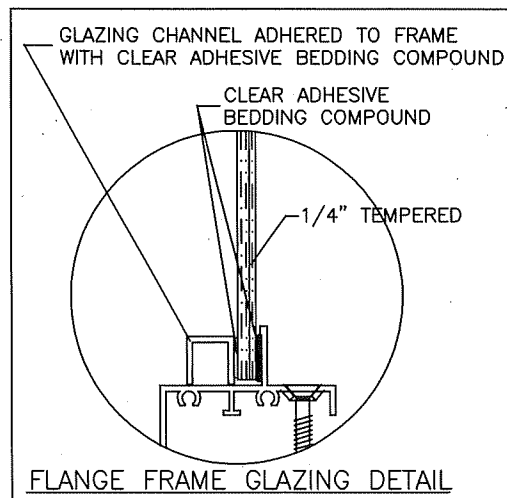
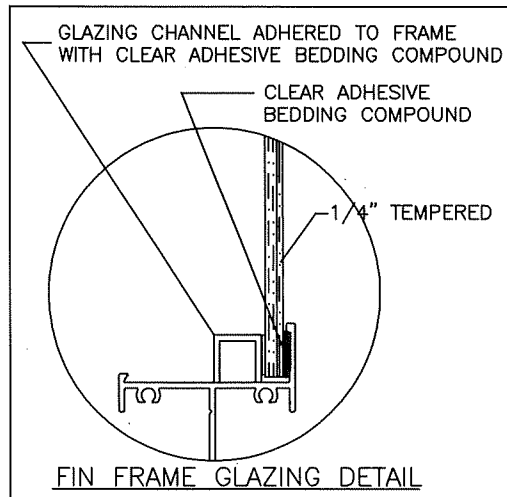
SHEET DESCRIPTION:  
 FLANGE FRAME INSTALLATION DETAILS, BOM & NOTES

DRAWN BY: NELSON ERAZO  
 DATE: 11/17/2023  
 REV. BY: DATE:  
 DWG #: CWS-1228  
 SCALE: AS NOTED  
 SHEET 3 OF 12

NO.:	REVISIONS DESCRIPTION:	BY:	DATE:
A			

**CWS**  
 1900 SW 44TH AVE.  
 OCALA, FLORIDA 34474  
 WWW.CWS.CC

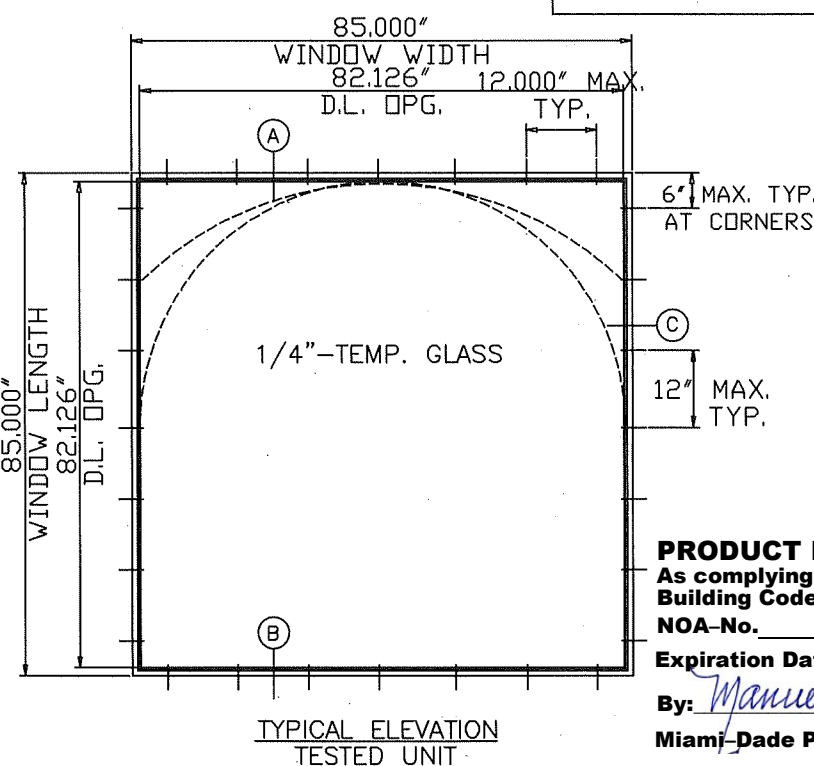
**CWS 330 ALUMINUM NON IMPACT FLANGE & FIN FRAME NON-IMPACT PICTURE WINDOW**



WINDOW COMPARATIVE ANALYSIS CHART FOR 1/4" TEMPERED					
Window Size		FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
HEIGHT INCHES	WIDTH INCHES	QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	18	10	8	100.0	100.0
36	18	14	7	100.0	100.0
48	18	19	6	100.0	100.0
60	18	23	6	100.0	100.0
72	18	28	6	100.0	100.0
84	18	32	6	100.0	100.0
96	18	37	6	100.0	100.0
108	18	41	6	100.0	100.0
120	18	46	6	100.0	100.0
132	18	50	6	100.0	100.0
144	18	55	5	100.0	100.0
148	18	57	5	100.0	100.0
156	18	60	5	100.0	100.0
24	24	13	7	100.0	100.0
36	24	19	6	100.0	100.0
48	24	25	5	100.0	100.0
60	24	31	5	100.0	100.0
72	24	37	5	100.0	100.0
84	24	43	5	100.0	100.0
96	24	49	4	100.0	100.0
108	24	55	4	100.0	100.0
120	24	61	4	100.0	100.0
132	24	67	4	100.0	100.0
144	24	73	4	100.0	100.0
148	24	75	4	100.0	100.0
156	24	79	4	100.0	100.0
24	30	16	6	100.0	100.0
36	30	23	5	100.0	100.0
48	30	31	5	100.0	100.0
60	30	38	4	100.0	100.0
72	30	46	4	100.0	100.0
84	30	54	4	100.0	100.0
96	30	61	4	100.0	100.0
108	30	69	4	100.0	100.0
120	30	76	3	100.0	100.0
132	30	84	3	100.0	100.0
144	30	91	3	100.0	100.0
148	30	94	3	100.0	100.0
156	30	99	3	100.0	100.0

WINDOW COMPARATIVE ANALYSIS CHART FOR 1/4" TEMPERED					
Window Size		FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
HEIGHT INCHES	WIDTH INCHES	QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	36	19	6	100.0	100.0
36	36	28	5	100.0	100.0
48	36	37	4	100.0	100.0
60	36	46	4	100.0	100.0
72	36	55	3	100.0	100.0
84	36	64	3	100.0	100.0
96	36	73	3	100.0	100.0
108	36	82	3	100.0	100.0
120	36	91	3	100.0	100.0
132	36	100	3	100.0	100.0
144	36	110	3	100.0	100.0
148	36	113	3	100.0	100.0
156	36	119	3	100.0	100.0
24	48	25	5	100.0	100.0
36	48	37	4	100.0	100.0
48	48	49	3	100.0	100.0
60	48	61	3	100.0	100.0
72	48	73	3	100.0	100.0
84	48	85	3	100.0	100.0
96	48	97	2	100.0	100.0
108	48	110	2	100.0	100.0
120	48	113	2	93.1	93.1
132	48	111	3	83.2	83.2
144	48	114	3	78.3	78.3
148	48	115	3	76.7	76.7
156	48				
24	60	31	5	100.0	100.0
36	60	46	4	100.0	100.0
48	60	61	3	100.0	100.0
60	60	76	3	100.0	100.0
72	60	91	2	100.0	100.0
84	60	107	2	100.0	100.0
96	60	122	2	100.0	100.0
108	60	137	2	100.0	100.0
120	60	139	2	91.6	91.6
132	60				
144	60				
148	60				
156	60				

WINDOW COMPARATIVE ANALYSIS CHART FOR 1/4" TEMPERED					
Window Size		FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
HEIGHT INCHES	WIDTH INCHES	QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	72	37	5	100.0	100.0
36	72	55	3	100.0	100.0
48	72	73	3	100.0	100.0
60	72	91	2	100.0	100.0
72	72	110	2	100.0	100.0
84	72	128	2	100.0	100.0
96	72	143	2	98.2	98.2
108	72				
120	72				
132	72				
144	72				
148	72				
156	72				
24	84	43	5	100.0	100.0
36	84	64	3	100.0	100.0
48	84	85	3	100.0	100.0
60	84	107	2	100.0	100.0
72	84	128	2	100.0	100.0
84	84	149	2	100.0	100.0
96	84				
108	84				
120	84				
132	84				
144	84				
148	84				
156	84				
19.125	26	11	8	100.0	100.0
26.5	26	15	7	100.0	100.0
37	26	21	6	100.0	100.0
53.125	26	30	5	100.0	100.0
19.125	38.375	16	7	100.0	100.0
26.5	38.375	22	5	100.0	100.0
37	38.375	30	5	100.0	100.0
53.125	38.375	43	4	100.0	100.0
19.125	50.625	21	6	100.0	100.0
26.5	50.625	29	5	100.0	100.0
37	50.625	40	4	100.0	100.0
53.125	50.625	57	3	100.0	100.0
19.125	58	24	6	100.0	100.0
26.5	58	33	5	100.0	100.0
37	58	46	4	100.0	100.0
53.125	58	65	3	100.0	100.0
19.125	63	26	6	100.0	100.0
26.5	63	36	4	100.0	100.0
37	63	50	4	100.0	100.0
53.125	63	71	3	100.0	100.0
19.125	74.25	30	6	100.0	100.0
26.5	74.25	42	4	100.0	100.0
37	74.25	58	3	100.0	100.0
53.125	74.25	84	3	100.0	100.0



FLANGE FRAME ANCHORS ARE TO BE SPACED NOT GREATER THAN 6" FROM EACH CORNER, AND NOT GREATER THAN 12" CENTER TO CENTER. FIN FRAME ANCHORS SPACED AS TABULATED ABOVE.

- WINDOW FRAME SIZE NOTE:**
1. THE WINDOW SIZE SHOWN ON CHARTS ARE FOR THE FLANGE WINDOW EXTERIOR OVERALL DIMENSION.
  2. ADD 1 1/8" TO THE FLANGE WINDOW SIZE TO DETERMINE THE FIN WINDOW EXTERIOR OVERALL DIMENSION.

**UNIT PERFORMANCE DATA**

REPORT #FTL-3619

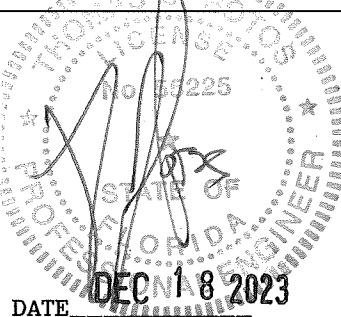
TEST SIZE = 85" wide X 85" hi ( 0 ) WATER INFILTRATION TEST = 18.0 PSF  
 DESIGN LOADS = +104.0, -104.0 PSF (PA-202) DAYLIGHT OPENING = 82 1/8" wide X 82 1/8" hi  
 STRUCTURAL TEST LOAD = +156.0, -156.0 PSF TESTED GLASS = 1/4" TEMPERED GLASS

THOMAS J. SOTOS  
 PROFESSIONAL ENGINEER  
 FL LIC. # 55225

SHEET DESCRIPTION:  
 FIN/FLANGE FRAME WINDOW  
 COMPARATIVE ANALYSIS & NOTES  
 1/4" TEMPERED GLASS

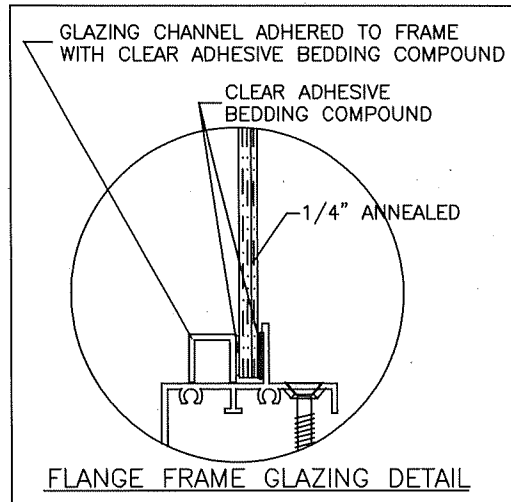
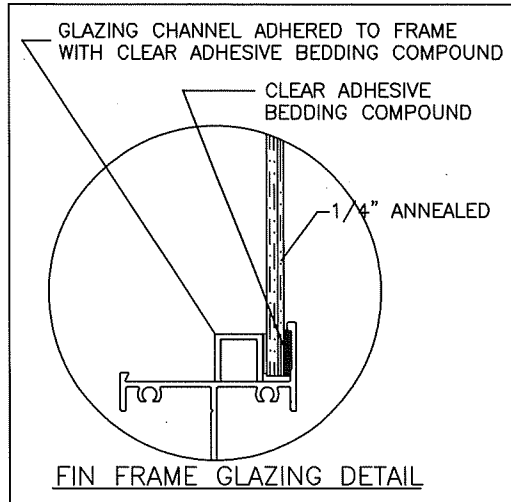
DRAWN BY: NELSON ERAZO	DATE: 11/17/2023	NO.:	REVISIONS	BY:	DATE:
REV. BY:	DATE:	A	DESCRIPTION:		
DWG #: CWS-1228	REV #:				
SCALE: AS NOTED	SHEET 4 OF 12				

**PRODUCT REVISED**  
 As complying with the Florida Building Code  
 NOA-No. **24-0116.18**  
 Expiration Date: **05/08/2028**  
 By: *Manuel Perez*  
 Miami-Dade Product Control



**CWS 330 ALUMINUM  
 NON IMPACT FLANGE & FIN  
 FRAME NON-IMPACT  
 PICTURE WINDOW**

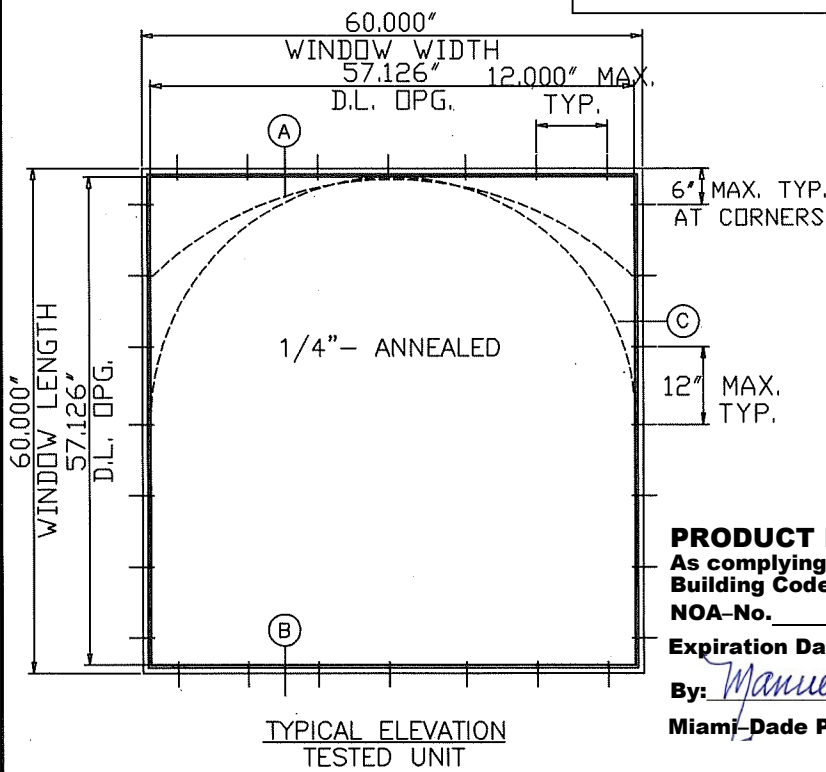




WINDOW COMPARATIVE ANALYSIS CHART FOR 1/4" ANNEALED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	18	10	8	100.0	100.0
36	18	14	7	100.0	100.0
48	18	18	7	97.2	97.2
60	18	22	7	92.9	92.9
72	18	25	7	90.3	90.3
84	18	29	7	88.5	88.5
96	18	32	7	87.2	87.2
108	18	36	7	86.2	86.2
120	18	39	7	85.4	85.4
132	18	43	6	84.8	84.8
144	18	46	7	84.3	84.3
148	18	48	6	84.1	84.1
156	18	50	6	83.8	83.8
24	24	13	7	100.0	100.0
36	24	17	7	88.9	88.9
48	24	20	7	79.0	79.0
60	24	23	7	74.1	74.1
72	24	26	7	71.1	71.1
84	24	30	7	69.1	69.1
96	24	33	7	67.7	67.7
108	24	37	7	66.7	66.7
120	24	40	7	65.8	65.8
132	24	44	7	65.2	65.2
144	24	48	7	64.6	64.6
148	24	49	7	64.5	64.5
156	24				
24	30	15	7	98.8	98.8
36	30	19	6	81.3	81.3
48	30	21	7	68.9	68.9
60	30	24	7	63.2	63.2
72	30	28	7	59.9	59.9
84	30	31	7	57.7	57.7
96	30	34	7	55.4	55.4
108	30	36	7	52.5	52.5
120	30	39	7	51.2	51.2
132	30				
144	30				
148	30				
156	30				

WINDOW COMPARATIVE ANALYSIS CHART FOR 1/4" ANNEALED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	36	17	7	88.9	88.9
36	36	22	6	79.0	79.0
48	36	23	7	63.2	63.2
60	36	26	7	56.4	56.4
72	36	28	7	50.1	50.1
84	36	28	8	43.2	43.2
96	36	29	9	39.5	39.5
108	36				
120	36				
132	36				
144	36				
148	36				
156	36				
24	48	20	7	79.0	79.0
36	48	23	7	63.2	63.2
48	48	29	6	59.3	59.3
60	48	30	7	49.4	49.4
72	48	33	7	44.4	44.4
84	48				
96	48				
108	48				
120	48				
132	48				
144	48				
148	48				
156	48				
24	60	23	7	74.1	74.1
36	60	26	7	56.4	56.4
48	60	30	7	49.4	49.4
60	60	36	6	47.4	47.4
72	60				
84	60				
96	60				
108	60				
120	60				
132	60				
144	60				
148	60				
156	60				

WINDOW COMPARATIVE ANALYSIS CHART FOR 1/4" ANNEALED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	72	26	7	71.1	71.1
36	72	28	7	50.1	50.1
48	72	33	7	44.4	44.4
60	72				
72	72				
84	72				
96	72				
108	72				
120	72				
132	72				
144	72				
148	72				
156	72				
24	84	30	7	69.1	69.1
36	84	28	8	43.2	43.2
48	84				
60	84				
72	84				
84	84				
96	84				
108	84				
120	84				
132	84				
144	84				
148	84				
156	84				
19.125	26	11	8	100.0	100.0
26.5	26	15	7	100.0	100.0
37	26	18	7	84.3	84.3
53.125	26	22	7	72.4	72.4
19.125	38.375	16	7	99.0	99.0
26.5	38.375	18	7	82.0	82.0
37	38.375	23	6	74.2	74.2
53.125	38.375	25	7	58.0	58.0
19.125	50.625	19	7	91.7	91.7
26.5	50.625	21	7	72.7	72.7
37	50.625	24	7	60.6	60.6
53.125	50.625	31	6	53.7	53.7
19.125	58	21	7	89.0	89.0
26.5	58	23	7	69.5	69.5
37	58	26	7	56.4	56.4
53.125	58	33	6	49.4	49.4
19.125	63	23	7	87.7	87.7
26.5	63	24	7	68.0	68.0
37	63	27	7	54.4	54.4
53.125	63	33	7	46.3	46.3
19.125	74.25	26	7	85.3	85.3
26.5	74.25	28	7	65.3	65.3
37	74.25	28	7	48.0	48.0
53.125	74.25				



**FLANGE FRAME ANCHORS ARE TO BE SPACED NOT GREATER THAN 6" FROM EACH CORNER, AND NOT GREATER THAN 12" CENTER TO CENTER. FIN FRAME ANCHORS SPACED AS TABULATED ABOVE.**

**WINDOW FRAME SIZE NOTE:**  
 1. THE WINDOW SIZE SHOWN ON CHARTS ARE FOR THE FLANGE WINDOW EXTERIOR OVERALL DIMENSION.  
 2. ADD 1 1/8" TO THE FLANGE WINDOW SIZE TO DETERMINE THE FIN WINDOW EXTERIOR OVERALL DIMENSION.

UNIT PERFORMANCE DATA	
REPORT #FTL-3620	TEST SIZE = 60" wide X 60" hi ( 0 )
DESIGN LOADS = +47.40, -47.40 PSF ( PA-202 )	WATER INFILTRATION TEST = 18.0 PSF @ #FTL-3619
STRUCTURAL TEST LOAD = +71.10, -71.10 PSF	DAYLIGHT OPENING = 57 1/8" wide X 57 1/8" hi
	TESTED GLASS = 1/4" ANNEALED GLASS

**THOMAS J. SOTOS**  
 PROFESSIONAL ENGINEER  
 FL LIC. # 55225

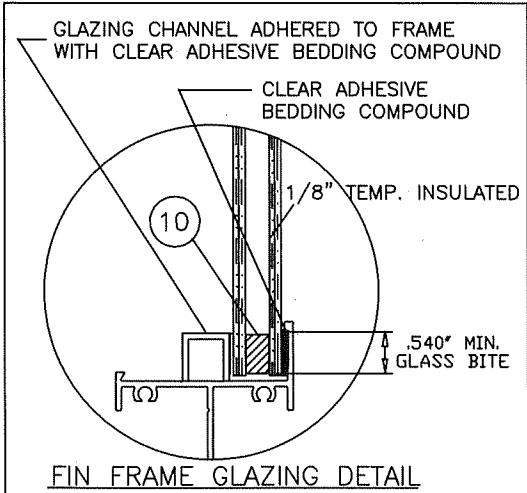
DATE: **DEC 18 2023**

SHEET DESCRIPTION:			
FIN/FLANGE FRAME WINDOW COMPARATIVE ANALYSIS & NOTES			
1/4" ANNEALED GLASS			
DRAWN BY:	DATE:	NO.:	REVISIONS
NELSON ERAZO	11/17/2023		DESCRIPTION:
REV. BY:	DATE:	A	
DWG #:	REV #:		
CWS-1228			
SCALE:	SHEET		
AS NOTED	5 OF 12		

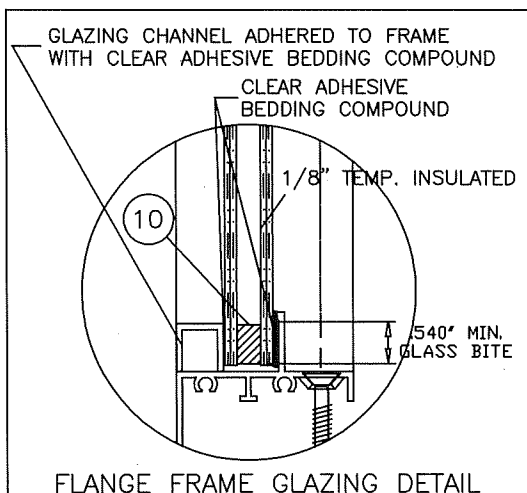


**CWS 330 ALUMINUM**  
 NON IMPACT FLANGE & FIN  
 FRAME NON-IMPACT  
 PICTURE WINDOW

**PRODUCT REVISED**  
 As complying with the Florida Building Code  
 NOA-No. **24-0116.18**  
 Expiration Date: **05/08/2028**  
 By: *Manuel Perez*  
 Miami-Dade Product Control



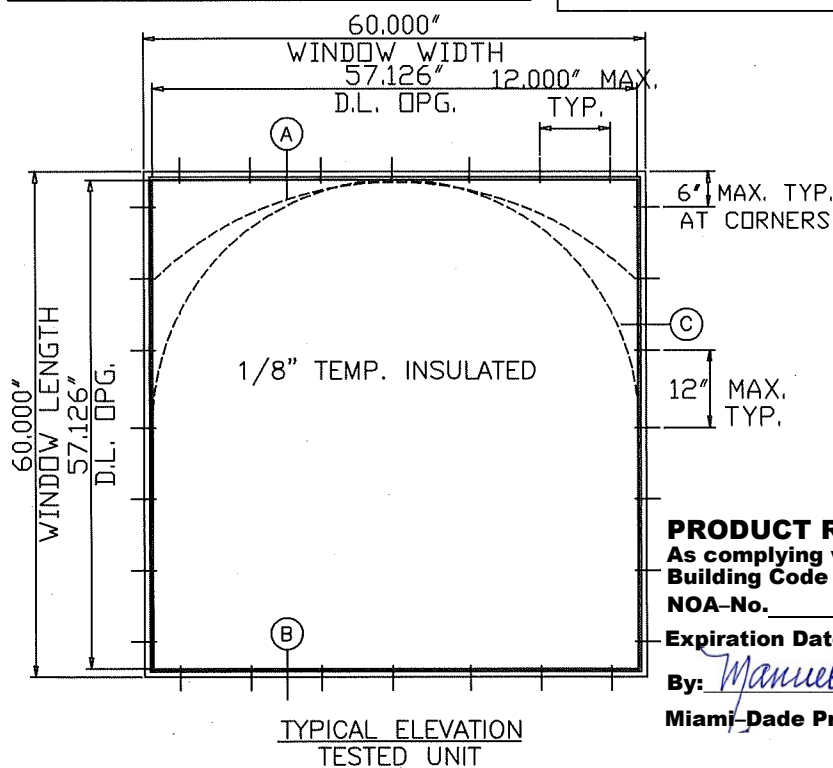
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**Insulated Spacer Types & Options**  
 10a) "TrueSeal" Swiggle Seal  
 10b) "Quanex" SuperSpacer w/ Isomelt M  
 10c) "Quanex" Duraseal



WINDOW COMPARATIVE ANALYSIS CHART FOR 1/8" TEMP. INSULATED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	18	10	8	100.0	100.0
36	18	14	7	100.0	100.0
48	18	19	6	100.0	100.0
60	18	23	6	100.0	100.0
72	18	28	6	100.0	100.0
84	18	32	6	100.0	100.0
96	18	37	6	100.0	100.0
108	18	41	6	100.0	100.0
120	18	46	6	100.0	100.0
132	18				
144	18				
148	18				
156	18				
24	24	13	7	100.0	100.0
36	24	19	6	100.0	100.0
48	24	25	5	100.0	100.0
60	24	31	5	100.0	100.0
72	24	37	5	100.0	100.0
84	24	43	5	100.0	100.0
96	24	49	4	100.0	100.0
108	24	55	4	100.0	100.0
120	24	61	4	100.0	100.0
132	24				
144	24				
148	24				
156	24				
24	30	16	6	100.0	100.0
36	30	23	5	100.0	100.0
48	30	31	5	100.0	100.0
60	30	38	4	100.0	100.0
72	30	46	4	100.0	100.0
84	30	54	4	100.0	100.0
96	30	61	4	100.0	100.0
108	30	69	4	100.0	100.0
120	30	76	3	100.0	100.0
132	30				
144	30				
148	30				
156	30				

WINDOW COMPARATIVE ANALYSIS CHART FOR 1/8" TEMP. INSULATED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	36	19	6	100.0	100.0
36	36	28	5	100.0	100.0
48	36	37	4	100.0	100.0
60	36	46	4	100.0	100.0
72	36	55	3	100.0	100.0
84	36	64	3	100.0	100.0
96	36	73	3	100.0	100.0
108	36				
120	36				
132	36				
144	36				
148	36				
156	36				
24	48	25	5	100.0	100.0
36	48	37	4	100.0	100.0
48	48	49	3	100.0	100.0
60	48	61	3	100.0	100.0
72	48	73	3	100.0	100.0
84	48				
96	48				
108	48				
120	48				
132	48				
144	48				
148	48				
156	48				
24	60	31	5	100.0	100.0
36	60	46	4	100.0	100.0
48	60	61	3	100.0	100.0
60	60	76	3	100.0	100.0
72	60				
84	60				
96	60				
108	60				
120	60				
132	60				
144	60				
148	60				
156	60				

WINDOW COMPARATIVE ANALYSIS CHART FOR 1/8" TEMP. INSULATED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	72	37	5	100.0	100.0
36	72	55	3	100.0	100.0
48	72	73	3	100.0	100.0
60	72				
72	72				
84	72				
96	72				
108	72				
120	72				
132	72				
144	72				
148	72				
156	72				
24	84	43	5	100.0	100.0
36	84	64	3	100.0	100.0
48	84				
60	84				
72	84				
84	84				
96	84				
108	84				
120	84				
132	84				
144	84				
148	84				
156	84				
19.125	26	11	8	100.0	100.0
26.5	26	15	7	100.0	100.0
37	26	21	6	100.0	100.0
53.125	26	30	5	100.0	100.0
19.125	38.375	16	7	100.0	100.0
26.5	38.375	22	5	100.0	100.0
37	38.375	30	5	100.0	100.0
53.125	38.375	43	4	100.0	100.0
19.125	50.625	21	6	100.0	100.0
26.5	50.625	29	5	100.0	100.0
37	50.625	40	4	100.0	100.0
53.125	50.625	57	3	100.0	100.0
19.125	58	24	6	100.0	100.0
26.5	58	33	5	100.0	100.0
37	58	46	4	100.0	100.0
53.125	58	65	3	100.0	100.0
19.125	63	26	6	100.0	100.0
26.5	63	36	4	100.0	100.0
37	63	50	4	100.0	100.0
53.125	63	71	3	100.0	100.0
19.125	74.25	30	6	100.0	100.0
26.5	74.25	42	4	100.0	100.0
37	74.25	58	3	100.0	100.0
53.125	74.25				



FLANGE FRAME ANCHORS ARE TO BE SPACED NOT GREATER THAN 6" FROM EACH CORNER, AND NOT GREATER THAN 12" CENTER TO CENTER. FIN FRAME ANCHORS SPACED AS TABULATED ABOVE.

WINDOW FRAME SIZE NOTE:  
 1. THE WINDOW SIZE SHOWN ON CHARTS ARE FOR THE FLANGE WINDOW EXTERIOR OVERALL DIMENSION.  
 2. ADD 1 1/8" TO THE FLANGE WINDOW SIZE TO DETERMINE THE FIN WINDOW EXTERIOR OVERALL DIMENSION.

**UNIT PERFORMANCE DATA REPORT #FTL-3621**

TEST SIZE= 60" wide X 60" hi ( 0 )  
 DESIGN LOADS= +144.00, -144.00 PSF (PA-202)  
 STRUCTURAL TEST LOAD= +216.00, -216.00 PSF

WATER INFILTRATION TEST= 18.0 PSF @ #FTL-3619  
 DAYLIGHT OPENING= 57 1/8" wide X 57 1/8" hi  
 TESTED GLASS= 1/8" TEMPERED GLASS  
 DOUBLE GLAZED INSULATED

**PRODUCT REVISED**  
 As complying with the Florida Building Code  
 NOA-No. **24-0116.18**  
 Expiration Date: **05/08/2028**  
 By: *Manuel Perez*  
 Miami-Dade Product Control

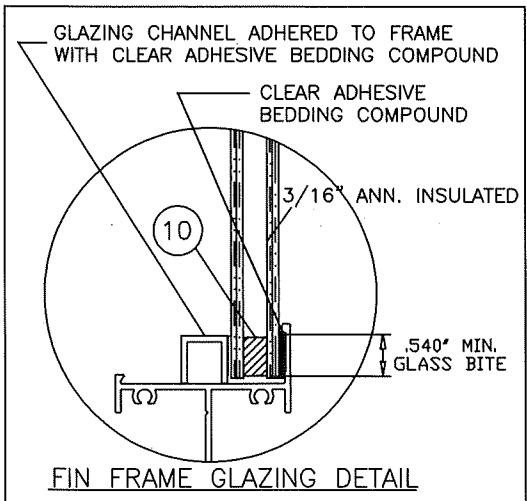
THOMAS J. SOTOS  
 PROFESSIONAL ENGINEER  
 FL LIC. # 55225  
 DATE: **DEC 18 2023**

SHEET DESCRIPTION:  
 FIN/FLANGE FRAME WINDOW  
 COMPARATIVE ANALYSIS & NOTES  
 1/2" INSULATED TEMPERED GLASS

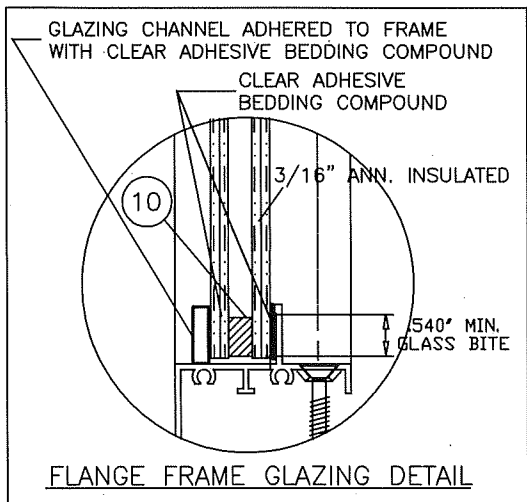
DRAWN BY: NELSON ERAZO  
 DATE: 11/17/2023  
 NO.:  
 REVISIONS DESCRIPTION: BY: DATE:  
 REV. BY: DATE: A  
 DWG #: CWS-1228  
 REV #:  
 SCALE: AS NOTED  
 SHEET 6 OF 12



**CWS 330 ALUMINUM  
 NON IMPACT FLANGE & FIN  
 FRAME NON-IMPACT  
 PICTURE WINDOW**



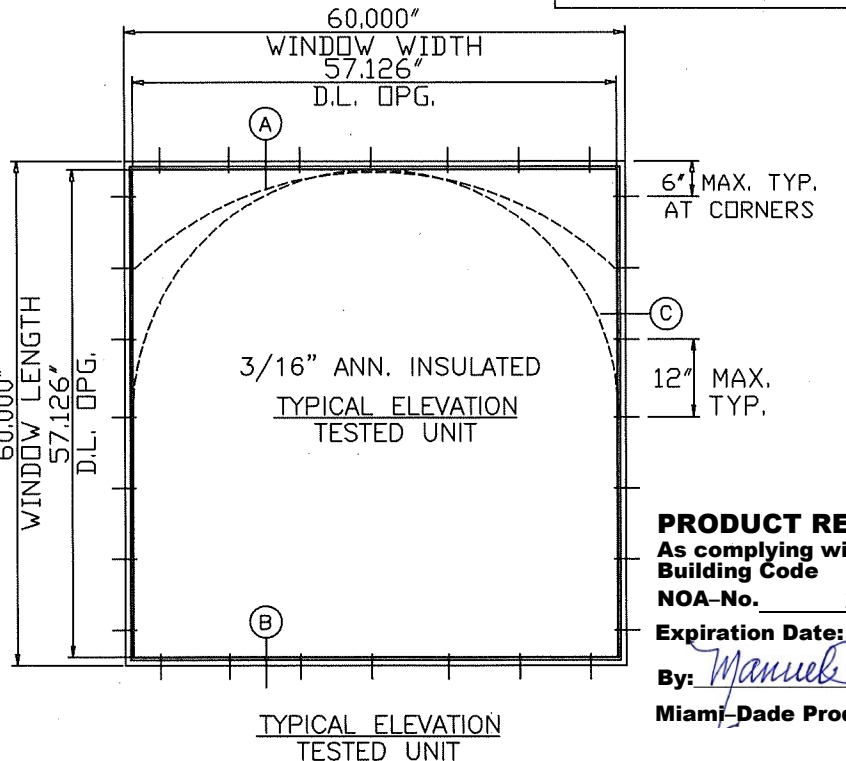
10  
**Insulated Spacer Types & Options**  
 10a) "TrueSeal" Swiggle Seal  
 10b) "Quanex" SuperSpacer w/ Isomelt M  
 10c) "Quanex" Duraseal



WINDOW COMPARATIVE ANALYSIS CHART FOR 3/16" ANN. INSULATED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	18	10	8	100.0	100.0
36	18	14	7	100.0	100.0
48	18	19	6	100.0	100.0
60	18	23	6	100.0	100.0
72	18	28	6	100.0	100.0
84	18	32	6	100.0	100.0
96	18	37	6	100.0	100.0
108	18	41	6	100.0	100.0
120	18	46	6	100.0	100.0
132	18	50	6	100.0	100.0
144	18	55	5	100.0	100.0
148	18	57	5	100.0	100.0
156	18	60	5	100.0	100.0
24	24	13	7	100.0	100.0
36	24	19	6	100.0	100.0
48	24	25	5	100.0	100.0
60	24	31	5	100.0	100.0
72	24	37	5	100.0	100.0
84	24	43	5	99.0	99.0
96	24	48	5	97.0	97.0
108	24	53	4	95.5	95.5
120	24	58	4	94.3	94.3
132	24	63	4	93.4	93.4
144	24	68	4	92.6	92.6
148	24	70	4	92.4	92.4
156	24				
24	30	16	6	100.0	100.0
36	30	23	5	100.0	100.0
48	30	30	5	98.8	98.8
60	30	35	5	90.5	90.5
72	30	37	5	80.9	80.9
84	30	39	5	72.8	72.8
96	30	42	6	68.7	68.7
108	30	45	6	65.2	65.2
120	30	48	6	63.1	63.1
132	30				
144	30				
148	30				
156	30				

WINDOW COMPARATIVE ANALYSIS CHART FOR 3/16" ANN. INSULATED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	36	19	6	100.0	100.0
36	36	28	5	100.0	100.0
48	36	33	5	90.5	90.5
60	36	37	5	80.8	80.8
72	36	39	5	70.8	70.8
84	36	37	6	58.0	58.0
96	36	38	6	50.9	50.9
108	36				
120	36				
132	36				
144	36				
148	36				
156	36				
24	48	25	5	100.0	100.0
36	48	33	5	90.5	90.5
48	48	42	4	84.9	84.9
60	48	43	5	70.7	70.7
72	48	47	5	63.7	63.7
84	48				
96	48				
108	48				
120	48				
132	48				
144	48				
148	48				
156	48				
24	60	31	5	100.0	100.0
36	60	37	5	80.8	80.8
48	60	43	5	70.7	70.7
60	60	52	4	67.9	67.9
72	60				
84	60				
96	60				
108	60				
120	60				
132	60				
144	60				
148	60				
156	60				

WINDOW COMPARATIVE ANALYSIS CHART FOR 3/16" ANN. INSULATED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	72	37	5	100.0	100.0
36	72	39	5	70.8	70.8
48	72	47	5	63.7	63.7
60	72				
72	72				
84	72				
96	72				
108	72				
120	72				
132	72				
144	72				
148	72				
156	72				
24	84	43	5	99.0	99.0
36	84	37	6	58.0	58.0
48	84				
60	84				
72	84				
84	84				
96	84				
108	84				
120	84				
132	84				
144	84				
148	84				
156	84				
19.125	26	11	8	100.0	100.0
26.5	26	15	7	100.0	100.0
37	26	21	6	100.0	100.0
53.125	26	30	5	100.0	100.0
19.125	38.375	16	7	100.0	100.0
26.5	38.375	22	5	100.0	100.0
37	38.375	30	5	100.0	100.0
53.125	38.375	36	5	83.1	83.1
19.125	50.625	21	6	100.0	100.0
26.5	50.625	29	5	100.0	100.0
37	50.625	35	5	86.8	86.8
53.125	50.625	44	4	76.9	76.9
19.125	58	24	6	100.0	100.0
26.5	58	33	5	99.6	99.6
37	58	37	5	80.8	80.8
53.125	58	46	4	70.7	70.7
19.125	63	26	6	100.0	100.0
26.5	63	35	5	97.3	97.3
37	63	39	5	77.9	77.9
53.125	63	47	4	66.3	66.3
19.125	74.25	30	6	100.0	100.0
26.5	74.25	39	5	93.6	93.6
37	74.25	40	5	68.3	68.3
53.125	74.25				



**FLANGE FRAME ANCHORS ARE TO BE SPACED NOT GREATER THAN 6" FROM EACH CORNER, AND NOT GREATER THAN 12" CENTER TO CENTER. FIN FRAME ANCHORS SPACED AS TABULATED ABOVE.**

**WINDOW FRAME SIZE NOTE:**  
 1. THE WINDOW SIZE SHOWN ON CHARTS ARE FOR THE FLANGE WINDOW EXTERIOR OVERALL DIMENSION.  
 2. ADD 1 1/8" TO THE FLANGE WINDOW SIZE TO DETERMINE THE FIN WINDOW EXTERIOR OVERALL DIMENSION.

**UNIT PERFORMANCE DATA REPORT #FTL-3622**  
 TEST SIZE = 60" wide X 60" hi ( O ) WATER INFILTRATION TEST = 18.0 PSF @ #FTL-3619  
 DESIGN LOADS = +67.90, -67.90 PSF ( PA-202 ) DAYLIGHT OPENING = 57 1/8" wide X 57 1/8" hi  
 STRUCTURAL TEST LOAD = +101.9, -101.9 PSF TESTED GLASS = 3/16" ANNEALED GLASS  
 DOUBLE GLAZED INSULATED

THOMAS J. SOTOS  
 PROFESSIONAL ENGINEER  
 FL LIC. # 55225

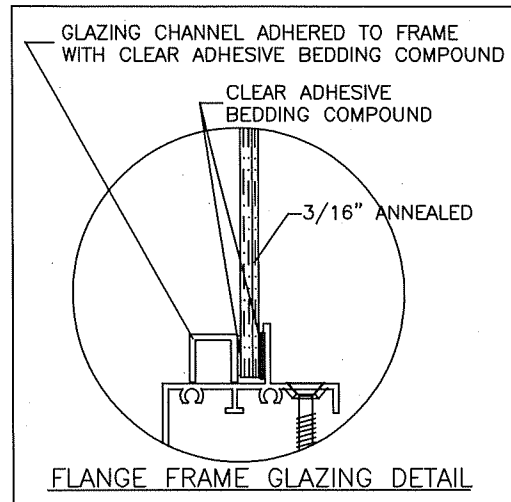
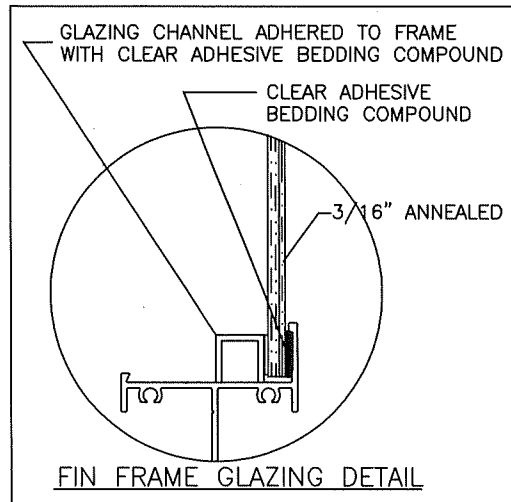
DATE: DEC 18 2023

SHEET DESCRIPTION: FIN/FLANGE FRAME WINDOW COMPARATIVE ANALYSIS & NOTES 5/8" INSULATED ANNEALED GLASS			
DRAWN BY: NELSON ERAZO	DATE: 11/17/2023	NO.:	REVISIONS
REV. BY:	DATE:	A	DESCRIPTION:
DWG #: CWS-1228	REV #:		
SCALE: AS NOTED	SHEET 7 OF 12		



**CWS 330 ALUMINUM  
 NON IMPACT FLANGE & FIN  
 FRAME NON-IMPACT  
 PICTURE WINDOW**

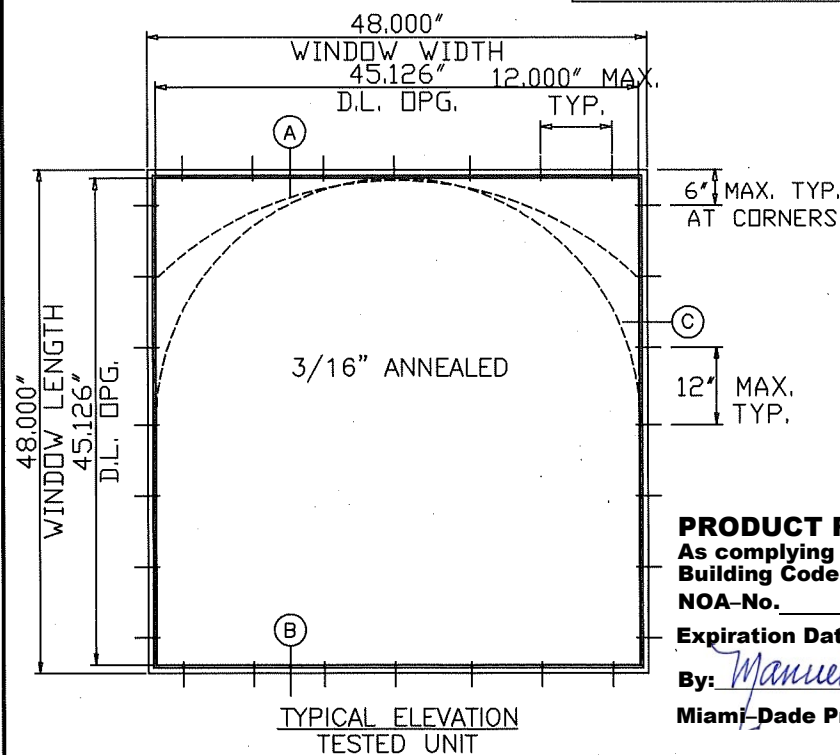
**PRODUCT REVISED**  
 As complying with the Florida  
 Building Code  
 NOA-No. 24-0116.18  
 Expiration Date: 05/08/2028  
 By: Manuel Perez  
 Miami-Dade Product Control



WINDOW COMPARATIVE ANALYSIS CHART FOR 3/16" ANNEALED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	18	10	8	100.0	100.0
36	18	13	8	95.1	95.1
48	18	16	8	87.8	87.8
60	18	20	7	83.9	83.9
72	18	23	7	81.5	81.5
84	18	26	7	79.9	79.9
96	18	29	7	78.7	78.7
108	18	32	7	77.8	77.8
120	18	36	7	77.1	77.1
132	18				
144	18				
148	18				
156	18				
24	24	13	7	100.0	100.0
36	24	15	8	80.3	80.3
48	24	18	8	71.3	71.3
60	24	21	8	66.9	66.9
72	24	24	8	64.2	64.2
84	24	27	8	62.4	62.4
96	24	30	8	61.0	61.0
108	24				
120	24				
132	24				
144	24				
148	24				
156	24				
24	30	14	7	89.2	89.2
36	30	17	7	73.4	73.4
48	30	19	8	62.3	62.3
60	30	21	8	54.1	54.1
72	30	21	9	45.0	45.0
84	30				
96	30				
108	30				
120	30				
132	30				
144	30				
148	30				
156	30				

WINDOW COMPARATIVE ANALYSIS CHART FOR 3/16" ANNEALED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	36	15	8	80.3	80.3
36	36	20	7	71.3	71.3
48	36	21	8	57.1	57.1
60	36	23	8	50.0	50.0
72	36				
84	36				
96	36				
108	36				
120	36				
132	36				
144	36				
148	36				
156	36				
24	48	18	8	71.3	71.3
36	48	21	8	57.1	57.1
48	48	26	7	53.5	53.5
60	48				
72	48				
84	48				
96	48				
108	48				
120	48				
132	48				
144	48				
148	48				
156	48				
24	60	21	8	66.9	66.9
36	60	23	8	50.0	50.0
48	60				
60	60				
72	60				
84	60				
96	60				
108	60				
120	60				
132	60				
144	60				
148	60				
156	60				

WINDOW COMPARATIVE ANALYSIS CHART FOR 3/16" ANNEALED					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	72	24	8	64.2	64.2
36	72				
48	72				
60	72				
72	72				
84	72				
96	72				
108	72				
120	72				
132	72				
144	72				
148	72				
156	72				
24	84	27	8	62.4	62.4
36	84				
48	84				
60	84				
72	84				
84	84				
96	84				
108	84				
120	84				
132	84				
144	84				
148	84				
156	84				
19.125	26	11	8	100.0	100.0
26.5	26	15	7	96.9	96.9
37	26	16	7	76.1	76.1
53.125	26	20	7	65.4	65.4
19.125	38.375	14	8	89.4	89.4
26.5	38.375	16	8	74.0	74.0
37	38.375	21	7	67.0	67.0
53.125	38.375	23	7	52.4	52.4
19.125	50.625	17	8	82.8	82.8
26.5	50.625	19	8	65.6	65.6
37	50.625	22	7	54.7	54.7
53.125	50.625				
19.125	58	19	8	80.4	80.4
26.5	58	21	8	62.8	62.8
37	58	24	7	51.0	51.0
53.125	58				
19.125	63	21	7	79.2	79.2
26.5	63	22	8	59.9	59.9
37	63				
53.125	63				
19.125	74.25	24	7	77.1	77.1
26.5	74.25	23	8	54.5	54.5
37	74.25				
53.125	74.25				



FLANGE FRAME ANCHORS ARE TO BE SPACED **WINDOW FRAME SIZE NOTE:**  
 NOT GREATER THAN 6" FROM EACH CORNER, AND NOT GREATER THAN 12" CENTER TO CENTER. FIN FRAME ANCHORS SPACED AS TABULATED ABOVE.

1. THE WINDOW SIZE SHOWN ON CHARTS ARE FOR THE FLANGE WINDOW EXTERIOR OVERALL DIMENSION.
2. ADD 1 1/8" TO THE FLANGE WINDOW SIZE TO DETERMINE THE FIN WINDOW EXTERIOR OVERALL DIMENSION.

**UNIT PERFORMANCE DATA REPORT #FTL-3623**  
 TEST SIZE = 48" wide X 48" hi ( O ) WATER INFILTRATION TEST = 18.0 PSF @ #FTL-3619  
 DESIGN LOADS = +53.50, -53.50 PSF ( PA-202 ) DAYLIGHT OPENING = 45 1/8" wide X 45 1/8" hi  
 STRUCTURAL TEST LOAD = +80.3, -80.3 PSF TESTED GLASS = 3/16" ANNEALED GLASS

THOMAS J. SOTOS  
 PROFESSIONAL ENGINEER  
 FL LIC # 55225  
 DEC 18 2023

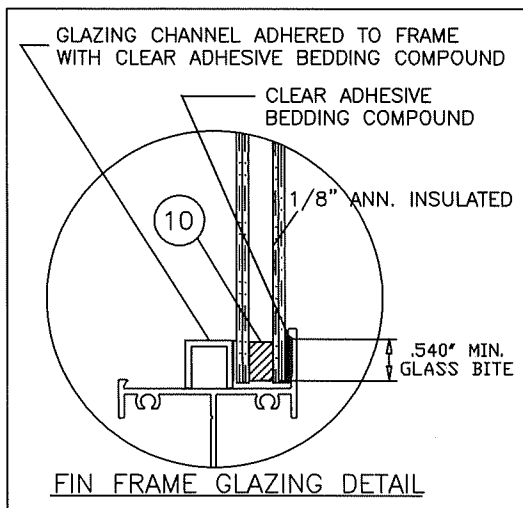
SHEET DESCRIPTION:  
 FIN/FLANGE FRAME WINDOW  
 COMPARATIVE ANALYSIS & NOTES  
 3/16" ANNEALED GLASS

DRAWN BY: NELSON ERAZO DATE: 11/17/2023 NO.:  
 REV. BY: DATE: A DESCRIPTION:  
 DWG #: CWS-1228 REV #:  
 SCALE: AS NOTED SHEET 8 OF 12

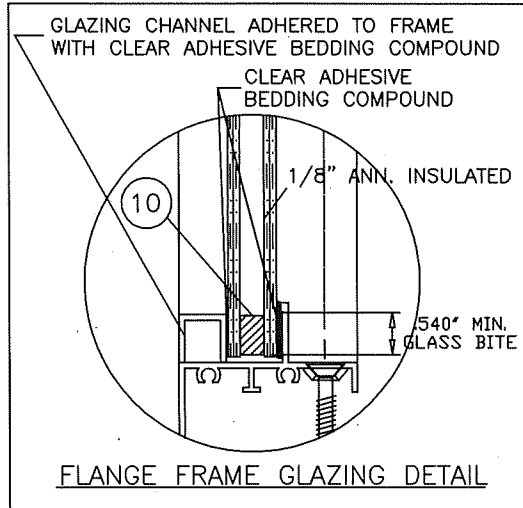
NO.:	REVISIONS	BY:	DATE:
A	DESCRIPTION:		



CWS 330 ALUMINUM  
 NON IMPACT FLANGE & FIN  
 FRAME NON-IMPACT  
 PICTURE WINDOW



10  
**Insulated Spacer Types & Options**  
 10a) "TrueSeal" Swiggle Seal  
 10b) "Quanex" SuperSpacer w/ Isomett M  
 10c) "Quanex" Duraseal

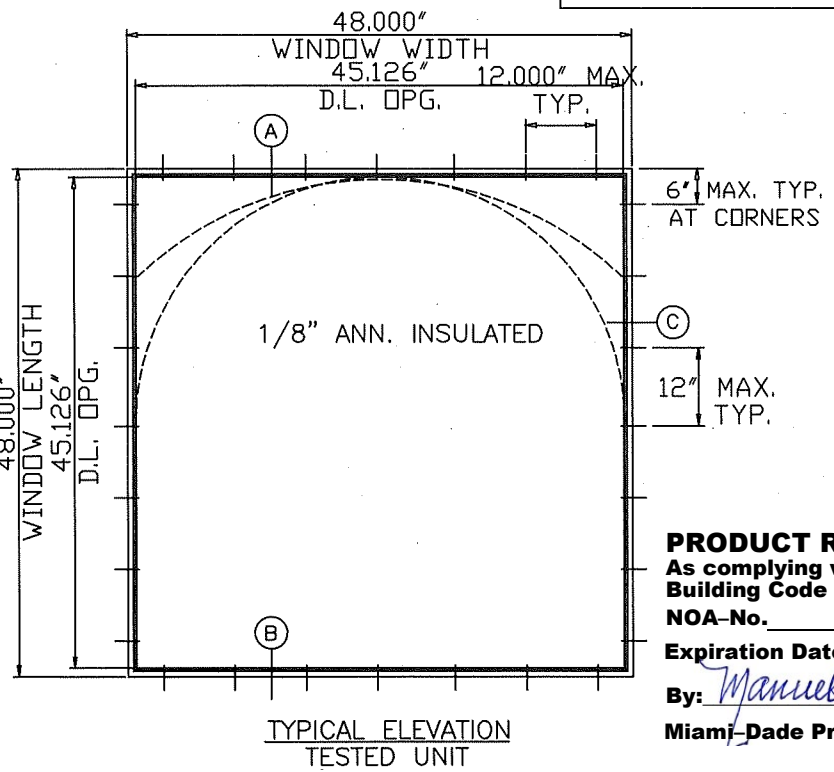


WINDOW COMPARATIVE ANALYSIS CHART FOR 1/8" ANN. INSULATED					
Window Size		FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
HEIGHT INCHES	WIDTH INCHES	QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	18	10	8	100.0	100.0
36	18	14	7	96.0	96.0
48	18	17	7	88.6	88.6
60	18	20	7	84.7	84.7
72	18	23	7	82.3	82.3
84	18	26	7	80.6	80.6
96	18	29	7	79.4	79.4
108	18	33	7	78.5	78.5
120	18	36	7	77.8	77.8
132	18				
144	18				
148	18				
156	18				
24	24	13	7	100.0	100.0
36	24	15	8	81.0	81.0
48	24	18	8	72.0	72.0
60	24	19	8	62.7	62.7
72	24	20	9	52.4	52.4
84	24	21	10	47.8	47.8
96	24	23	10	45.5	45.5
108	24				
120	24				
132	24				
144	24				
148	24				
156	24				
24	30	14	7	90.0	90.0
36	30	17	7	74.1	74.1
48	30	20	7	62.8	62.8
60	30	22	8	57.6	57.6
72	30	21	9	45.2	45.2
84	30				
96	30				
108	30				
120	30				
132	30				
144	30				
148	30				
156	30				

WINDOW COMPARATIVE ANALYSIS CHART FOR 1/8" ANN. INSULATED					
Window Size		FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
HEIGHT INCHES	WIDTH INCHES	QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	36	15	8	81.0	81.0
36	36	20	7	72.0	72.0
48	36	21	8	57.6	57.6
60	36	24	8	51.4	51.4
72	36				
84	36				
96	36				
108	36				
120	36				
132	36				
144	36				
148	36				
156	36				
24	48	18	8	72.0	72.0
36	48	21	8	57.6	57.6
48	48	27	7	54.0	54.0
60	48				
72	48				
84	48				
96	48				
108	48				
120	48				
132	48				
144	48				
148	48				
156	48				
24	60	19	8	62.7	62.7
36	60	24	8	51.4	51.4
48	60				
60	60				

**PRODUCT REVISED**  
 As complying with the Florida Building Code  
 NOA No. 60 24-0116.18  
 Expiration Date: 05/08/2028  
 By: Manuel Ferrer  
 Miami-Dade Product Control

WINDOW COMPARATIVE ANALYSIS CHART FOR 1/8" ANN. INSULATED					
Window Size		FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
HEIGHT INCHES	WIDTH INCHES	QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	72	20	9	52.4	52.4
36	72				
48	72				
60	72				
72	72				
84	72				
96	72				
108	72				
120	72				
132	72				
144	72				
148	72				
156	72				
24	84	21	10	47.8	47.8
36	84				
48	84				
60	84				
72	84				
84	84				
96	84				
108	84				
120	84				
132	84				
144	84				
148	84				
156	84				
19.125	26	11	8	100.0	100.0
26.5	26	15	7	97.8	97.8
37	26	16	7	76.8	76.8
53.125	26	20	7	66.0	66.0
19.125	38.375	14	8	90.3	90.3
26.5	38.375	16	8	74.7	74.7
37	38.375	21	7	67.6	67.6
53.125	38.375	23	7	52.9	52.9
19.125	50.625	18	7	83.5	83.5
26.5	50.625	19	8	66.2	66.2
37	50.625	22	7	55.2	55.2
53.125	50.625				
19.125	58	19	8	81.1	81.1
26.5	58	21	8	63.3	63.3
37	58	24	7	51.4	51.4
53.125	58				
19.125	63	21	7	79.9	79.9
26.5	63	20	8	55.0	55.0
37	63				
53.125	63				
19.125	74.25	24	7	77.8	77.8
26.5	74.25	19	10	45.5	45.5
37	74.25				
53.125	74.25				



**FLANGE FRAME ANCHORS ARE TO BE SPACED NOT GREATER THAN 6" FROM EACH CORNER, AND NOT GREATER THAN 12" CENTER TO CENTER. FIN FRAME ANCHORS SPACED AS TABULATED ABOVE.**

**WINDOW FRAME SIZE NOTE:**  
 1. THE WINDOW SIZE SHOWN ON CHARTS ARE FOR THE FLANGE WINDOW EXTERIOR OVERALL DIMENSION.  
 2. ADD 1/8" TO THE FLANGE WINDOW SIZE TO DETERMINE THE FIN WINDOW EXTERIOR OVERALL DIMENSION.

**UNIT PERFORMANCE DATA REPORT #FTL-3625**  
 TEST SIZE = 48" wide X 48" hi ( O ) WATER INFILTRATION TEST = 18.0 PSF @ #FTL-3619  
 DESIGN LOADS = +54.00, -54.00 PSF (PA-202) DAYLIGHT OPENING = 45 1/8" wide X 45 1/8" hi  
 STRUCTURAL TEST LOAD = +81.00, -81.00 PSF TESTED GLASS = 1/8" ANNEALED GLASS  
 DOUBLE GLAZED INSULATED

THOMAS J. SOTOS  
 PROFESSIONAL ENGINEER  
 FL LIC. # 55225  
 No. 55225  
 DEC 18 2023

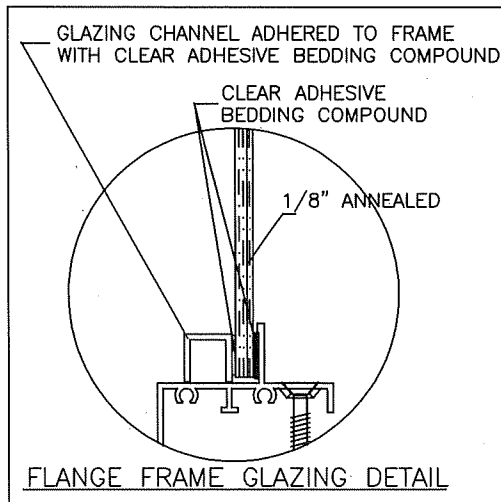
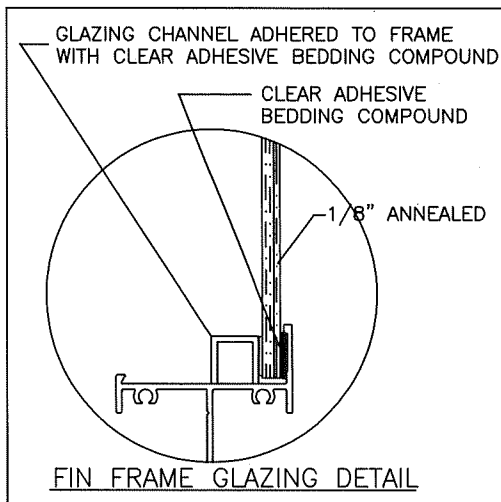
SHEET DESCRIPTION:  
 FIN/FLANGE FRAME WINDOW  
 COMPARATIVE ANALYSIS & NOTES  
 1/2" INSULATED ANNEALED GLASS

DRAWN BY: NELSON ERAZO DATE: 11/17/2023 NO.:  
 REV. BY: DATE: A  
 DWG #: CWS-1228 REV #:  
 SCALE: AS NOTED SHEET 9 OF 12

NO.	REVISIONS DESCRIPTION:	BY:	DATE:



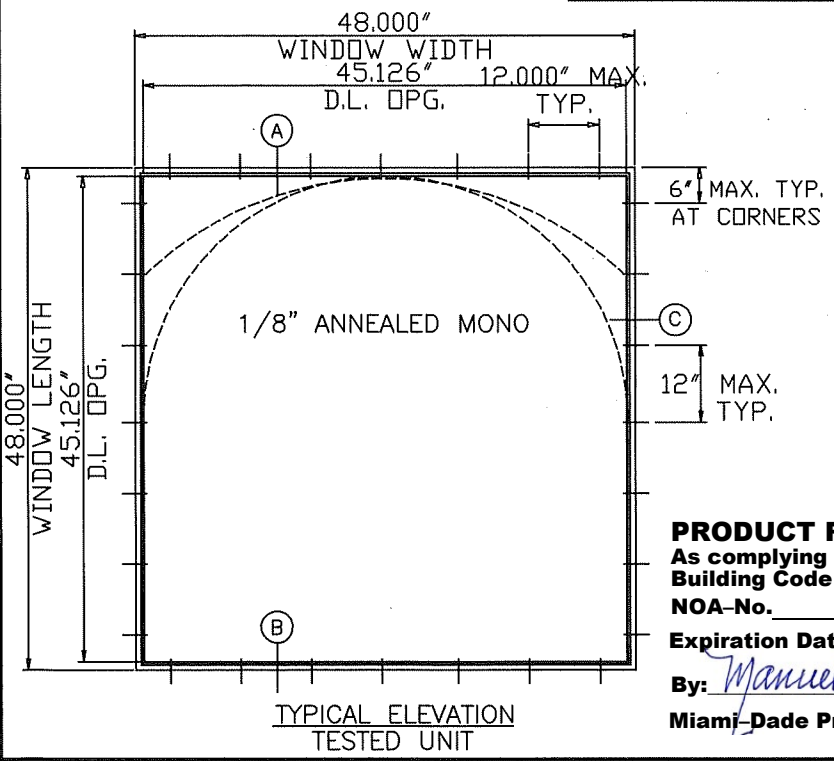
**CWS 330 ALUMINUM NON IMPACT FLANGE & FIN FRAME NON-IMPACT PICTURE WINDOW**



WINDOW COMPARATIVE ANALYSIS CHART FOR 1/8" ANNEALED MONO					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	18	10	8	64.0	64.0
36	18	13	8	53.3	53.3
48	18	16	8	49.2	49.2
60	18	20	7	47.1	47.1
72	18	23	7	45.7	45.7
84	18	26	7	44.8	44.8
96	18	29	7	44.1	44.1
108	18	32	7	43.6	43.6
120	18	36	7	43.2	43.2
132	18				
144	18				
148	18				
156	18				
24	24	13	7	60.0	60.0
36	24	15	8	45.0	45.0
48	24	18	8	40.0	40.0
60	24	21	8	34.8	34.8
72	24	24	8	29.1	29.1
84	24	27	8	26.6	26.6
96	24	30	8	25.3	25.3
108	24				
120	24				
132	24				
144	24				
148	24				
156	24				
24	30	14	7	50.0	50.0
36	30	17	7	41.1	41.1
48	30	19	8	34.9	34.9
60	30	21	8	32.0	32.0
72	30	21	9	25.1	25.1
84	30				
96	30				
108	30				
120	30				
132	30				
144	30				
148	30				
156	30				

WINDOW COMPARATIVE ANALYSIS CHART FOR 1/8" ANNEALED MONO					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	36	15	8	45.0	45.0
36	36	20	7	40.0	40.0
48	36	21	8	32.0	32.0
60	36	23	8	28.6	28.6
72	36				
84	36				
96	36				
108	36				
120	36				
132	36				
144	36				
148	36				
156	36				
24	48	18	8	40.0	40.0
36	48	21	8	32.0	32.0
48	48	26	7	30.0	30.0
60	48				
72	48				
84	48				
96	48				
108	48				
120	48				
132	48				
144	48				
148	48				
156	48				
24	60	21	8	34.8	34.8
36	60	23	8	28.6	28.6
48	60				
60	60				
72	60				
84	60				
96	60				
108	60				
120	60				
132	60				
144	60				
148	60				
156	60				

WINDOW COMPARATIVE ANALYSIS CHART FOR 1/8" ANNEALED MONO					
Window Size		FIN FRAME		DESIGN LOAD	
HEIGHT	WIDTH	QTY OF	AVG. ANCHOR	CAPACITY - (PFS)	
INCHES	INCHES	ANCHORS	SPACING (IN)	POSITIVE	NEGATIVE
24	72	24	8	29.1	29.1
36	72				
48	72				
60	72				
72	72				
84	72				
96	72				
108	72				
120	72				
132	72				
144	72				
148	72				
156	72				
24	84	27	8	26.6	26.6
36	84				
48	84				
60	84				
72	84				
84	84				
96	84				
108	84				
120	84				
132	84				
144	84				
148	84				
156	84				
19.125	26	11	8	59.5	59.5
26.5	26	15	7	54.4	54.4
37	26	16	7	42.7	42.7
53.125	26	20	7	36.7	36.7
19.125	38.375	14	8	50.1	50.1
26.5	38.375	16	8	41.5	41.5
37	38.375	21	7	37.6	37.6
53.125	38.375	23	7	29.4	29.4
19.125	50.625	17	8	46.4	46.4
26.5	50.625	19	8	36.8	36.8
37	50.625	22	7	30.7	30.7
53.125	50.625				
19.125	58	19	8	45.1	45.1
26.5	58	21	8	35.1	35.1
37	58	24	7	28.6	28.6
53.125	58				
19.125	63	21	7	44.4	44.4
26.5	63	22	8	30.5	30.5
37	63				
53.125	63				
19.125	74.25	24	7	43.2	43.2
26.5	74.25	23	8	25.3	25.3
37	74.25				
53.125	74.25				



**FLANGE FRAME ANCHORS ARE TO BE SPACED NOT GREATER THAN 6" FROM EACH CORNER, AND NOT GREATER THAN 12" CENTER TO CENTER. FIN FRAME ANCHORS SPACED AS TABULATED ABOVE.**

**WINDOW FRAME SIZE NOTE:**

1. THE WINDOW SIZE SHOWN ON CHARTS ARE FOR THE FLANGE WINDOW EXTERIOR OVERALL DIMENSION.
2. ADD 1 1/8" TO THE FLANGE WINDOW SIZE TO DETERMINE THE FIN WINDOW EXTERIOR OVERALL DIMENSION.

**UNIT PERFORMANCE DATA REPORT #FTL-3624**

TEST SIZE = 48" wide X 48" hi ( O )      WATER INFILTRATION TEST = 18.0 PSF @ #FTL-3619  
 DESIGN LOADS = +30.00, -30.00 PSF ( PA-202 )      DAYLIGHT OPENING = 45 1/8" wide X 45 1/8" hi  
 STRUCTURAL TEST LOAD = +45.00, -45.00 PSF      TESTED GLASS = 1/8" ANNEALED GLASS

**THOMAS J. SOTOS**  
 PROFESSIONAL ENGINEER  
 FL LIC. # 55225

*(Signature)*

**DEC 18 2023**

SHEET DESCRIPTION:  
 FIN/FLANGE FRAME WINDOW  
 COMPARATIVE ANALYSIS & NOTES  
 1/8" ANNEALED GLASS

DRAWN BY: NELSON ERAZO      DATE: 11/17/2023      NO.:      REVISIONS      BY:      DATE:

REV. BY:      DATE:      A      DESCRIPTION:

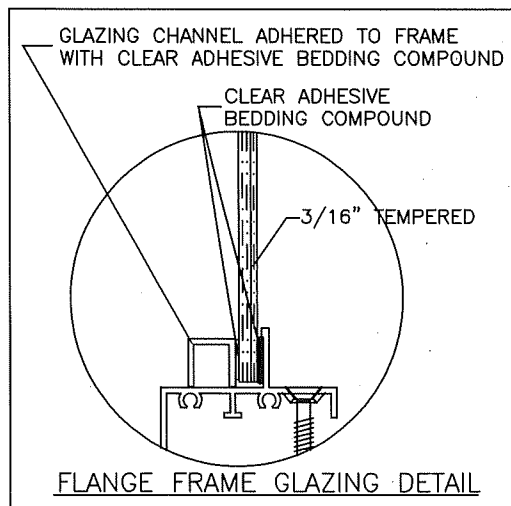
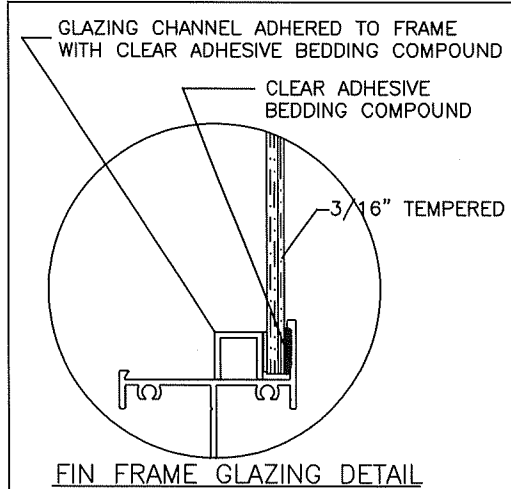
DWG #: CWS-1228      REV #:

SCALE: AS NOTED      SHEET 10 OF 12



**CWS 330 ALUMINUM  
 NON IMPACT FLANGE & FIN  
 FRAME NON-IMPACT  
 PICTURE WINDOW**

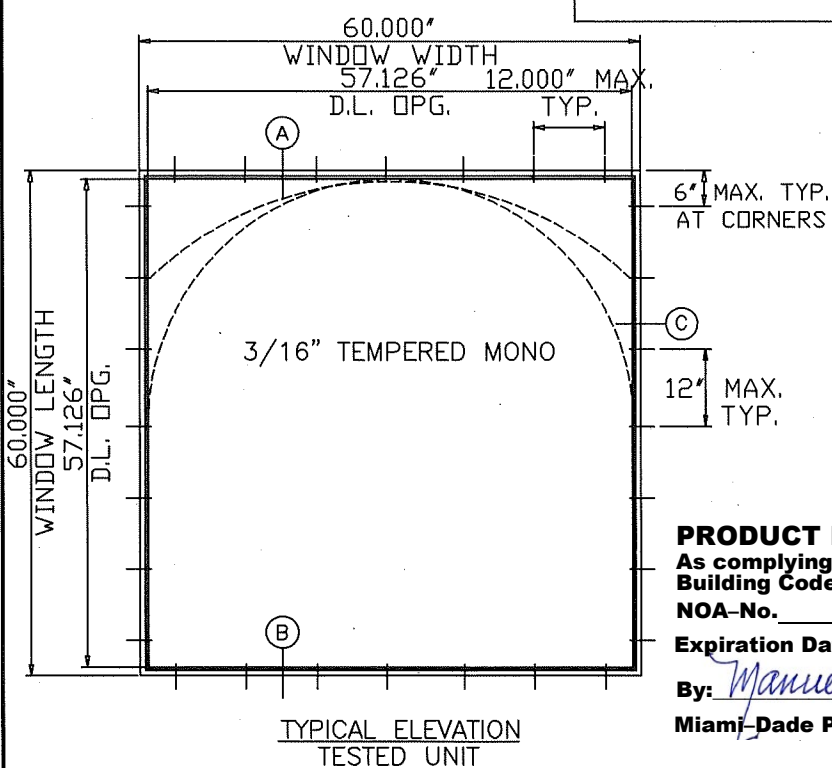
**PRODUCT REVISED**  
 As complying with the Florida Building Code  
 NOA-No. **24-0116.18**  
 Expiration Date: **05/08/2028**  
 By: *(Signature)*  
 Miami-Dade Product Control



WINDOW COMPARATIVE ANALYSIS CHART FOR 3/16" TEMPERED					
Window Size		FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
HEIGHT INCHES	WIDTH INCHES	QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	18	10	8	100.0	100.0
36	18	14	7	100.0	100.0
48	18	19	6	100.0	100.0
60	18	23	6	100.0	100.0
72	18	28	6	100.0	100.0
84	18	32	6	100.0	100.0
96	18	37	6	100.0	100.0
108	18	41	6	100.0	100.0
120	18	46	6	100.0	100.0
132	18	50	6	100.0	100.0
144	18	55	5	100.0	100.0
148	18	57	5	100.0	100.0
156	18	60	5	100.0	100.0
24	24	13	7	100.0	100.0
36	24	19	6	100.0	100.0
48	24	25	5	100.0	100.0
60	24	31	5	100.0	100.0
72	24	37	5	100.0	100.0
84	24	43	5	100.0	100.0
96	24	49	4	100.0	100.0
108	24	55	4	100.0	100.0
120	24	61	4	100.0	100.0
132	24	67	4	100.0	100.0
144	24	73	4	100.0	100.0
148	24	75	4	100.0	100.0
156	24				
24	30	16	6	100.0	100.0
36	30	23	5	100.0	100.0
48	30	31	5	100.0	100.0
60	30	38	4	100.0	100.0
72	30	46	4	100.0	100.0
84	30	54	4	100.0	100.0
96	30	61	4	100.0	100.0
108	30	69	4	100.0	100.0
120	30	76	3	100.0	100.0
132	30				
144	30				
148	30				
156	30				

WINDOW COMPARATIVE ANALYSIS CHART FOR 3/16" TEMPERED					
Window Size		FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
HEIGHT INCHES	WIDTH INCHES	QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	36	19	6	100.0	100.0
36	36	28	5	100.0	100.0
48	36	37	4	100.0	100.0
60	36	46	4	100.0	100.0
72	36	55	3	100.0	100.0
84	36	64	3	100.0	100.0
96	36	73	3	100.0	100.0
108	36				
120	36				
132	36				
144	36				
148	36				
156	36				
24	48	25	5	100.0	100.0
36	48	37	4	100.0	100.0
48	48	49	3	100.0	100.0
60	48	61	3	100.0	100.0
72	48	73	3	100.0	100.0
84	48				
96	48				
108	48				
120	48				
132	48				
144	48				
148	48				
156	48				
24	60	31	5	100.0	100.0
36	60	46	4	100.0	100.0
48	60	61	3	100.0	100.0
60	60	76	3	100.0	100.0
72	60				
84	60				
96	60				
108	60				
120	60				
132	60				
144	60				
148	60				
156	60				

WINDOW COMPARATIVE ANALYSIS CHART FOR 3/16" TEMPERED					
Window Size		FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
HEIGHT INCHES	WIDTH INCHES	QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	72	37	5	100.0	100.0
36	72	55	3	100.0	100.0
48	72	73	3	100.0	100.0
60	72				
72	72				
84	72				
96	72				
108	72				
120	72				
132	72				
144	72				
148	72				
156	72				
24	84	43	5	100.0	100.0
36	84	64	3	100.0	100.0
48	84				
60	84				
72	84				
84	84				
96	84				
108	84				
120	84				
132	84				
144	84				
148	84				
156	84				
19.125	26	11	8	100.0	100.0
26.5	26	15	7	100.0	100.0
37	26	21	6	100.0	100.0
53.125	26	30	5	100.0	100.0
19.125	38.375	16	7	100.0	100.0
26.5	38.375	22	5	100.0	100.0
37	38.375	30	5	100.0	100.0
53.125	38.375	43	4	100.0	100.0
19.125	50.625	21	6	100.0	100.0
26.5	50.625	29	5	100.0	100.0
37	50.625	40	4	100.0	100.0
53.125	50.625	57	3	100.0	100.0
19.125	58	24	6	100.0	100.0
26.5	58	33	5	100.0	100.0
37	58	46	4	100.0	100.0
53.125	58	65	3	100.0	100.0
19.125	63	26	6	100.0	100.0
26.5	63	36	4	100.0	100.0
37	63	50	4	100.0	100.0
53.125	63	71	3	100.0	100.0
19.125	74.25	30	6	100.0	100.0
26.5	74.25	42	4	100.0	100.0
37	74.25	58	3	100.0	100.0
53.125	74.25				



FLANGE FRAME ANCHORS ARE TO BE SPACED NOT GREATER THAN 6" FROM EACH CORNER, AND NOT GREATER THAN 12" CENTER TO CENTER. FIN FRAME ANCHORS SPACED AS TABULATED ABOVE.

- WINDOW FRAME SIZE NOTE:
1. THE WINDOW SIZE SHOWN ON CHARTS ARE FOR THE FLANGE WINDOW EXTERIOR OVERALL DIMENSION.
  2. ADD 1 1/8" TO THE FLANGE WINDOW SIZE TO DETERMINE THE FIN WINDOW EXTERIOR OVERALL DIMENSION.

UNIT PERFORMANCE DATA REPORT #FTL-3626

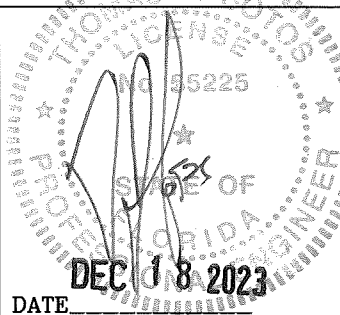
TEST SIZE = 60" wide X 60" hi ( O ) WATER INFILTRATION TEST = 18.0 PSF @ #FTL-3619  
 DESIGN LOADS = +151.00, -151.00 PSF (PA-202) DAYLIGHT OPENING = 57 1/8" wide X 57 1/8" hi  
 STRUCTURAL TEST LOAD = +226.50, -226.50 PSF TESTED GLASS = 3/16" TEMPERED GLASS

THOMAS J. SOTOS  
 PROFESSIONAL ENGINEER  
 FL LIC. # 55225

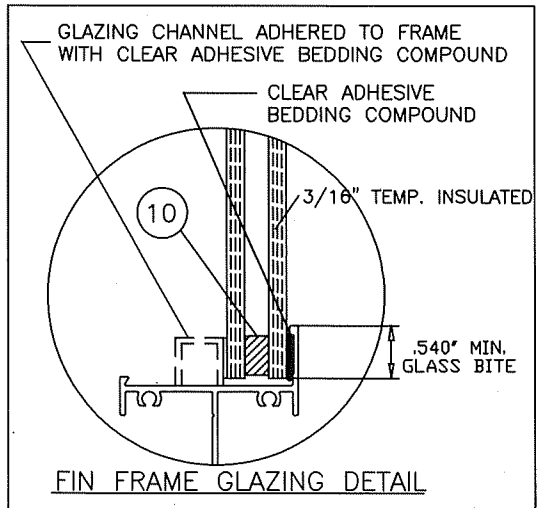
SHEET DESCRIPTION:  
 FIN/FLANGE FRAME WINDOW  
 COMPARATIVE ANALYSIS & NOTES  
 3/16" TEMPERED GLASS

DRAWN BY: NELSON ERAZO	DATE: 11/17/2023	NO.:	REVISIONS	BY:	DATE:
REV. BY:	DATE:	A	DESCRIPTION:		
DWG #: CWS-1228	REV #:				
SCALE: AS NOTED	SHEET 11 OF 12				

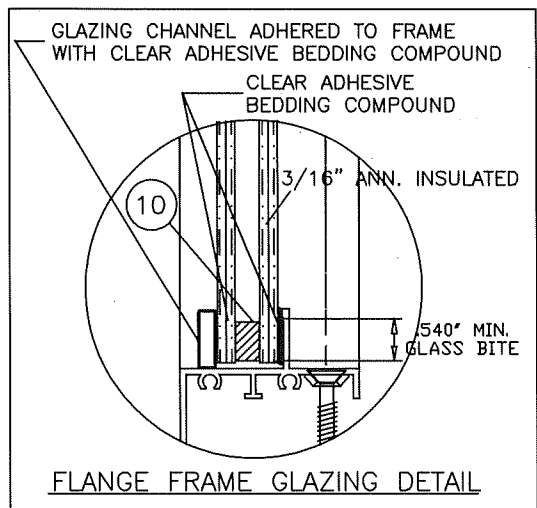
**PRODUCT REVISED**  
 As complying with the Florida Building Code  
 NOA-No. **24-0116.18**  
 Expiration Date: **05/08/2028**  
 By: *Manuel Perez*  
 Miami-Dade Product Control



CWS 330 ALUMINUM  
 NON IMPACT FLANGE & FIN  
 FRAME NON-IMPACT  
 PICTURE WINDOW



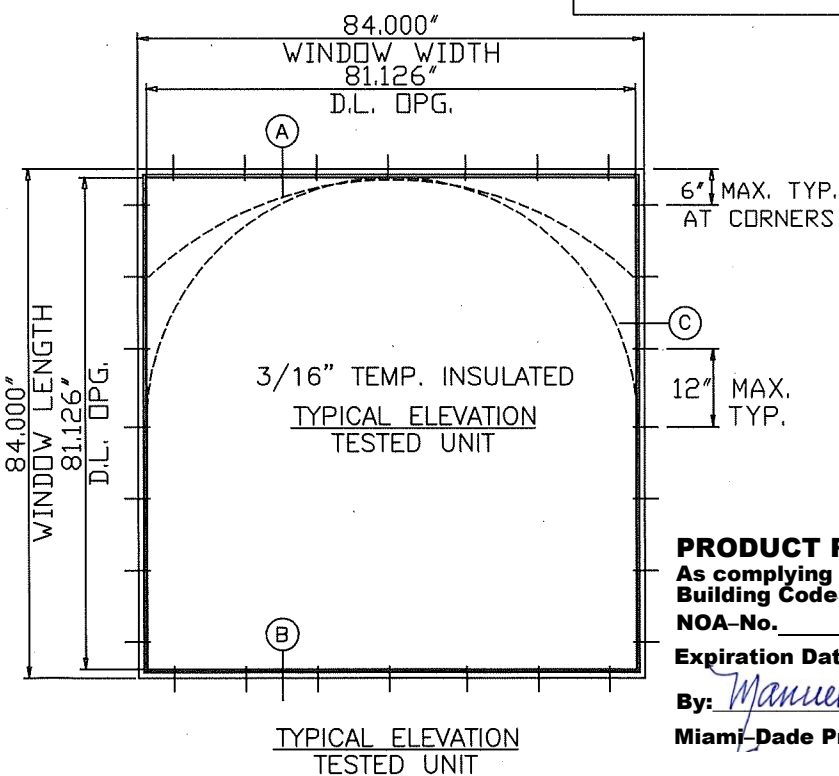
10  
**Insulated Spacer Types & Options**  
 10a) "TrueSeal" Swiggle Seal  
 10b) "Quanex" SuperSpacer w/ Isomelt M  
 10c) "Quanex" Duraseal



WINDOW COMPARATIVE ANALYSIS CHART FOR 5/8" INSULATED TEMPERED					
WIDTH INCHES	HEIGHT INCHES	FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
		QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	18	10	8	100.0	100.0
36	18	14	7	100.0	100.0
48	18	19	6	100.0	100.0
60	18	23	6	100.0	100.0
72	18	28	6	100.0	100.0
84	18	32	6	100.0	100.0
96	18	37	6	100.0	100.0
108	18	41	6	100.0	100.0
120	18	46	6	100.0	100.0
132	18	50	6	100.0	100.0
144	18	55	5	100.0	100.0
148	18	57	5	100.0	100.0
156	18	60	5	100.0	100.0
24	24	13	7	100.0	100.0
36	24	19	6	100.0	100.0
48	24	25	5	100.0	100.0
60	24	31	5	100.0	100.0
72	24	37	5	100.0	100.0
84	24	43	5	100.0	100.0
96	24	49	4	100.0	100.0
108	24	55	4	100.0	100.0
120	24	61	4	100.0	100.0
132	24	67	4	100.0	100.0
144	24	73	4	100.0	100.0
148	24	75	4	100.0	100.0
156	24	79	4	100.0	100.0
24	30	16	6	100.0	100.0
36	30	23	5	100.0	100.0
48	30	31	5	100.0	100.0
60	30	38	4	100.0	100.0
72	30	46	4	100.0	100.0
84	30	54	4	100.0	100.0
96	30	61	4	100.0	100.0
108	30	69	4	100.0	100.0
120	30	76	3	100.0	100.0
132	30	84	3	100.0	100.0
144	30	91	3	100.0	100.0
148	30	94	3	100.0	100.0
156	30	99	3	100.0	100.0

WINDOW COMPARATIVE ANALYSIS CHART FOR 5/8" INSULATED TEMPERED					
WIDTH INCHES	HEIGHT INCHES	FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
		QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	36	19	6	100.0	100.0
36	36	28	5	100.0	100.0
48	36	37	4	100.0	100.0
60	36	46	4	100.0	100.0
72	36	55	3	100.0	100.0
84	36	64	3	100.0	100.0
96	36	73	3	100.0	100.0
108	36	82	3	100.0	100.0
120	36	91	3	100.0	100.0
132	36	100	3	100.0	100.0
144	36	110	3	100.0	100.0
148	36	113	3	100.0	100.0
156	36	119	3	100.0	100.0
24	48	25	5	100.0	100.0
36	48	37	4	100.0	100.0
48	48	49	3	100.0	100.0
60	48	61	3	100.0	100.0
72	48	73	3	100.0	100.0
84	48	85	3	100.0	100.0
96	48	97	2	100.0	100.0
108	48	110	2	100.0	100.0
120	48	120	2	98.4	98.4
132	48	129	2	96.3	96.3
144	48	138	2	94.5	94.5
148	48	141	2	94.0	94.0
156	48				
24	60	31	5	100.0	100.0
36	60	46	4	100.0	100.0
48	60	61	3	100.0	100.0
60	60	76	3	100.0	100.0
72	60	91	2	100.0	100.0
84	60	104	2	98.0	98.0
96	60	112	2	91.6	91.6
108	60	119	2	87.2	87.2
120	60				
132	60				
144	60				
148	60				
156	60				

WINDOW COMPARATIVE ANALYSIS CHART FOR 5/8" INSULATED TEMPERED					
WIDTH INCHES	HEIGHT INCHES	FIN FRAME		DESIGN LOAD CAPACITY - (PFS)	
		QTY OF ANCHORS	AVG. ANCHOR SPACING (IN)	POSITIVE	NEGATIVE
24	72	37	5	100.0	100.0
36	72	55	3	100.0	100.0
48	72	73	3	100.0	100.0
60	72	91	2	100.0	100.0
72	72	110	2	100.0	100.0
84	72	117	2	91.9	91.9
96	72	123	2	84.0	84.0
108	72				
120	72				
132	72				
144	72				
148	72				
156	72				
24	84	43	5	100.0	100.0
36	84	64	3	100.0	100.0
48	84	85	3	100.0	100.0
60	84	104	2	98.0	98.0
72	84	117	2	91.9	91.9
84	84	134	2	90.0	90.0
96	84				
108	84				
120	84				
132	84				
144	84				
148	84				
156	84				
19.125	26	11	8	100.0	100.0
26.5	26	15	7	100.0	100.0
37	26	21	6	100.0	100.0
53.125	26	30	5	100.0	100.0
19.125	38.375	16	7	100.0	100.0
26.5	38.375	22	5	100.0	100.0
37	38.375	30	5	100.0	100.0
53.125	38.375	43	4	100.0	100.0
19.125	50.625	21	6	100.0	100.0
26.5	50.625	29	5	100.0	100.0
37	50.625	40	4	100.0	100.0
53.125	50.625	57	3	100.0	100.0
19.125	58	24	6	100.0	100.0
26.5	58	33	5	100.0	100.0
37	58	46	4	100.0	100.0
53.125	58	65	3	100.0	100.0
19.125	63	26	6	100.0	100.0
26.5	63	36	4	100.0	100.0
37	63	50	4	100.0	100.0
53.125	63	71	3	100.0	100.0
19.125	74.25	30	6	100.0	100.0
26.5	74.25	42	4	100.0	100.0
37	74.25	58	3	100.0	100.0
53.125	74.25	84	3	100.0	100.0



FLANGE FRAME ANCHORS ARE TO BE SPACED NOT GREATER THAN 6" FROM EACH CORNER, AND NOT GREATER THAN 12" CENTER TO CENTER. FIN FRAME ANCHORS SPACED AS TABULATED ABOVE.

WINDOW FRAME SIZE NOTE:  
 1. THE WINDOW SIZE SHOWN ON CHARTS ARE FOR THE FLANGE WINDOW EXTERIOR OVERALL DIMENSION.  
 2. ADD 1 1/8" TO THE FLANGE WINDOW SIZE TO DETERMINE THE FIN WINDOW EXTERIOR OVERALL DIMENSION.

**UNIT PERFORMANCE DATA REPORT #HETI # 09-2604**

TEST SIZE = 84" wide X 84" hi ( O ) WATER INFILTRATION TEST = 18.0 PSF @ #FTL-3619  
 DESIGN LOADS = +90.00, -90.00 PSF ( PA-202 ) DAYLIGHT OPENING = 81 1/8" wide X 81 1/8" hi  
 STRUCTURAL TEST LOAD = +135.00, -135.00 PSF TESTED GLASS = 3/16" TEMPERED GLASS  
 DOUBLE GLAZED INSULATED

THOMAS J. SOTOS  
 PROFESSIONAL ENGINEER  
 FL LIC # 55225

DEC 18 2023

SHEET DESCRIPTION:  
 FIN/FLANGE FRAME WINDOW  
 COMPARATIVE ANALYSIS & NOTES  
 5/8" INSULATED TEMPERED GLASS

DRAWN BY: NELSON ERAZO DATE: 11/17/2023 NO.: A

REV. BY: DATE: DESCRIPTION:

DWG #: CWS-1228 REV #:

SCALE: AS NOTED SHEET 12 OF 12



CWS 330 ALUMINUM  
 NON IMPACT FLANGE & FIN  
 FRAME NON-IMPACT  
 PICTURE WINDOW