**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/economy

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

# NOTICE OF ACCEPTANCE (NOA)

**Custom Window Systems, Inc.**
**1900 SW 44th 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 "310 (Flange Frame)" Aluminum Single Hung Window - N.I.**

**APPROVAL DOCUMENT:** Drawing No. **CWS-1254**, titled "CWS 310 Non-Impact Aluminum Single Hung Flange Frame Window", sheets 1 through 5 of 5, dated 11/17/23, with revision **A** dated 05/15/25, 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, Medley, Florida, series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

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

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

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

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

This NOA **revises and renews NOA No. 23-1017.06** 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.**

MIAMI-DADE COUNTY APPROVED

**6/27/25**

**NOA No. 25-0612.02**
**Expiration Date: September 01, 2030**
**Approval Date: July 03, 2025**

**Custom Window Systems, Inc.**

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

**A. DRAWINGS**

**1.** Manufacturer's die drawings and sections.
***(Submitted under NOA's No. 05-0324.07 and 0-7-0925.11)***

**2.** Drawing No. **L7600-0401**, titled "SH-7500 Single Hung Flange Window", sheets 1 through 5 of 5, dated 09/20/04, with revision **I** dated 10/11/23, prepared by manufacturer, signed and sealed by Thomas J. Sotos, P.E.
***(Submitted under NOA No. 23-1017.06)***

**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, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-23-8048** and **HETI-23-8049**, dated 07/24/23, signed and sealed by Ram N. Tewari, P.E.
***(Submitted under NOA No. 23-1017.06)***

**2.** Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
along with marked-up drawings and installation diagram of an aluminum single hung windows - (fin/flange mounted), prepared by Fenestration Testing Laboratories, Inc., Test Report No. **FTL-5283**, dated 08/24/07, signed and sealed by Carlos Rionda, P.E.
***(Submitted under NOA No.07-0925.11)***

**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 aluminum single hung windows - (flange mounted), prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-4323, FTL-4343, FTL-4344, FTL-4345, FTL-4346, FTL-4350, FTL-4351, FTL-4363** and **FTL-4364**, all dated 11/08/04 and **FTL-4505** dated 01/25/05, signed and sealed by Edmundo J. Largaespada, P.E.
***(Submitted under NOA No.05-0324.07)***

Manuel Perez

**Manuel Pérez, P.E.**
**Product Control Examiner**
**NOA No. 25-0612.02**
**Expiration Date: September 01, 2030**
**Approval Date: July 03, 2025**

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

**C. CALCULATIONS**

**1.** Anchor verification calculations and structural analysis, complying with FBC, dated 08/03/09, prepared by manufacturer, signed and sealed by Thomas J. Sotos, P.E.
***(Submitted under NOA No. 09-0720.06)***

**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 8th Edition (2023)**, dated October 11, 2023, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.
***(Submitted under NOA No. 23-1017.06)***

**2.** Statement letter of no financial interest, dated October 11, 2023, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.
***(Submitted under NOA No. 23-1017.06)***

**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. 23-1017.06)***

**G. OTHERS**

**1.** Notice of Acceptance No. **20-0713.02**, issued to Lawson Industries, Inc. for their Series "SH-7500 (Flange Frame)" Aluminum Single Hung Window – N.I., approved on 08/20/20 and expiring on 09/01/25.

**2. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

**1.** Drawing No. **CWS-1254**, titled "CWS 310 Non-Impact Aluminum Single Hung Flange Frame Window", sheets 1 through 5 of 5, dated 11/17/23, with revision **A** dated 05/15/25, prepared by manufacturer, signed and sealed by Thomas J. Sotos, P.E.

**B. TESTS**

**1.** None.

**Manuel Perez, P.E.**
**Product Control Examiner**
**NOA No. 25-0612.02**
**Expiration Date: September 01, 2030**
**Approval Date: July 03, 2025**

## 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.** None.

### F. STATEMENTS
**1.** Statement letter of conformance, complying with **FBC 8th Edition (2023)**, dated June 9, 2025, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.

**2.** Statement letter of no financial interest, dated June 9, 2025, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.

**3.** Bill of Sales between CWS-SF, LLC (Buyer) and Lawson Industries, Inc. (Seller), dated Nov. 28, 2023, signed by Nicholas Cross (President, CWS) and Harold Bailey (President, Lawson Industries).

**4.** Statement letter dated June 5, 2025, confirming that Custom Window System, Inc. is a wholly owned subsidiary of Pella Corporation, signed by Chantel Kramme, Secretary Pella Corp.

**5.** Letter from owners of existing NOA, stating that they have sold all assets to the applicant, that they no longer manufacture the product, relinquish their rights to the current NOA and request that it be rescinded, dated June 10, 2025, signed by Mr. Harold Bailey, President, Lawson Industries, Inc.

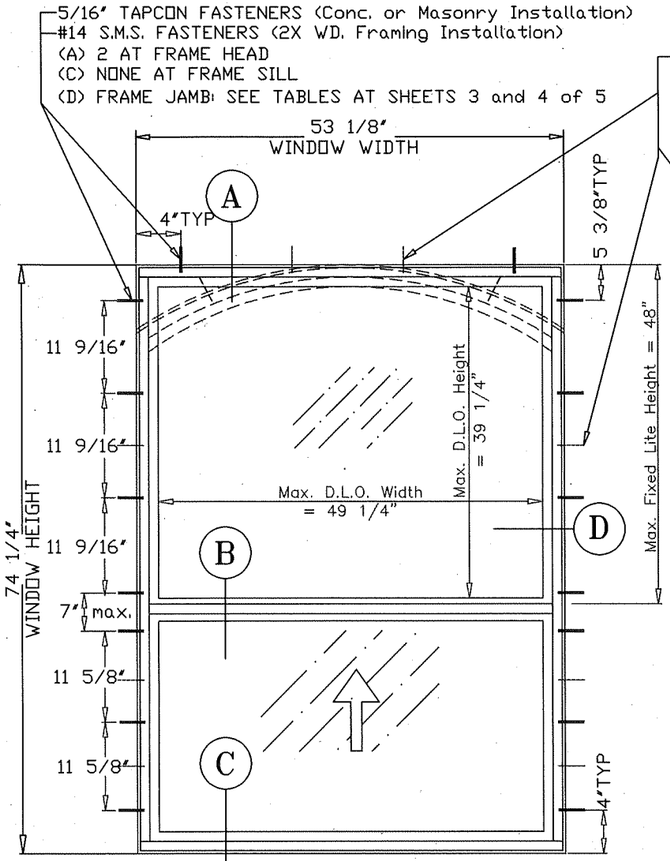
**6.** Statement letter dated June 25, 2025, issued by Custom Window Systems, Inc. (CWS) stating that they have legally purchased all assets of (18) listed NOA's from Lawson Industries, Inc. and requesting that new corresponding NOA's be issued to CWS name; also, that (18) listed Private Label Agreement NOA's between Lawson Industries, Inc. and CWS be rescinded, signed by Kevin Pine, Vice President.

### G. OTHERS
**1.** Notice of Acceptance No. **23-1017.06**, issued to Lawson Industries, Inc. for their Series "SH-7500 (Flange Frame)" Aluminum Single Hung Window – N.I., approved on 11/16/23 and expiring on 09/01/25. **(Previous NOA to be rescinded)**

**2.** Notice of Acceptance No. **24-0116.14**, issued to Custom Window Systems, Inc. for their Series "CWS-310 (Flange Frame)" Aluminum Single Hung Window – N.I., approved on 02/01/24 and expiring on 09/01/25. **(Private Label NOA to be rescinded)**

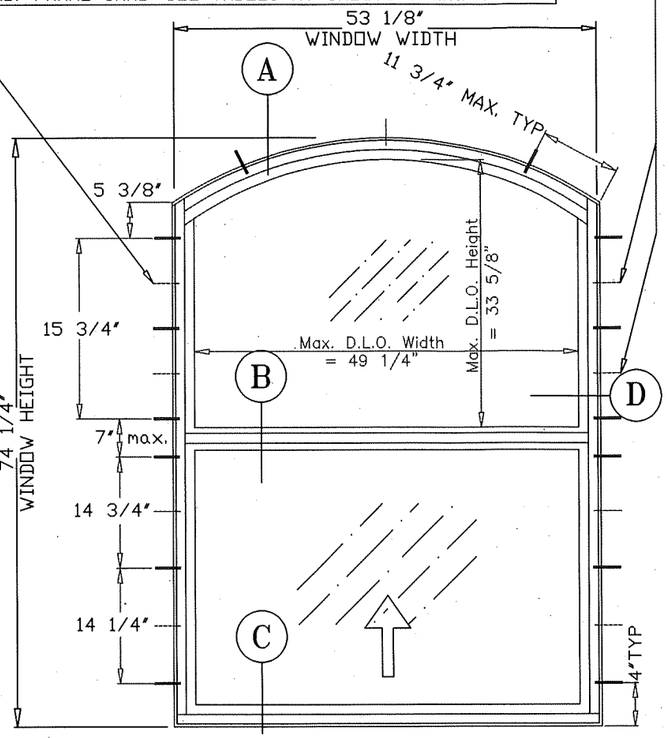
Manuel Perez

**Manuel Perez, P.E.**
**Product Control Examiner**
**NOA No. 25-0612.02**
**Expiration Date: September 01, 2030**
**Approval Date: July 03, 2025**

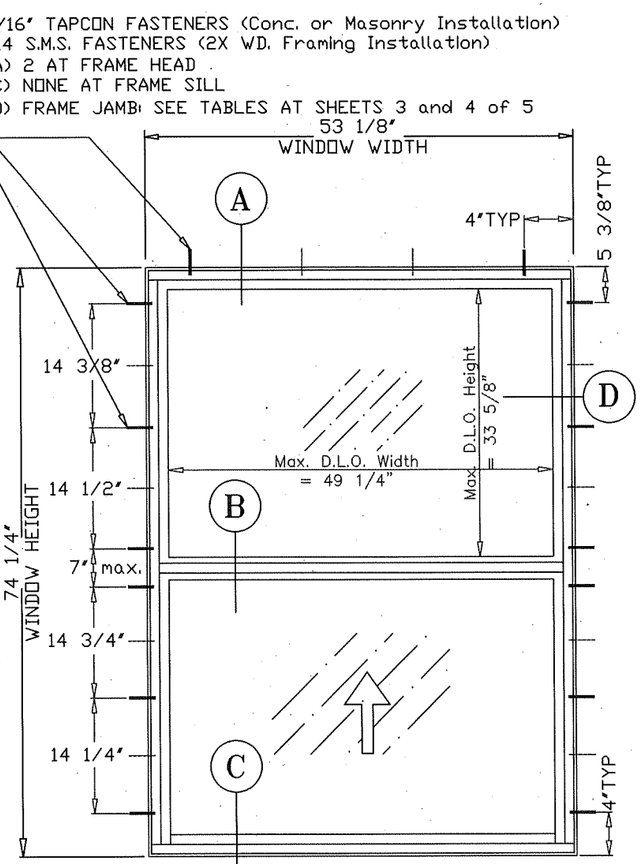



UNEQUAL LITE VIEW WINDOW
TEST UNIT ELEVATION
(SEE TABLE V-1 & V-2 FOR DESIGN PRESSURE)

**OPTIONAL FASTENERS NOTE:**
1/4" TAPCON FASTENERS or #12 S.M.S. SCREWS MAY BE USED, SEE DP CHARTS FOR TOTAL ANCHORS REQUIRED.
(ADDITIONAL ANCHORS TO BE FIELD DRILLED & APPLIED)
(A) 3 AT FRAME HEAD
(C) NONE AT FRAME SILL
(D) FRAME JAMB: SEE TABLES AT SHEETS 3 and 4 of 5




RADIUS HEAD EQUAL LITE WINDOW
TEST UNIT ELEVATION




EQUAL LITE WINDOW
TEST UNIT ELEVATION

# CWS 310 ALUMINUM NON-IMPACT FLANGE FRAME SINGLE HUNG WINDOW

## 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 F.B.C. & TO BE REVIEWED BY THE BUILDING OFFICIAL.
3.) ANCHORS SHOWN ABOVE ARE AS PER TEST UNITS. INTERIOR 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.) RADIUS HEAD WINDOWS ARE QUALIFIED FOR USE WITH ALL GLASS TYPES TABULATED HEREIN.
6.) VIEW WINDOWS ARE QUALIFIED FOR USE WITH 3/16" ANNEALED & 3/16" TEMPERED GLASS USING THE HEAVY DUTY MEETING RAIL ONLY.
7.) SEE PAGE 4 FOR LOCK OPTIONS.
8.) APPROVAL APPLIES TO SINGLE UNITS OR MULTIPLE UNITS AND MAY BE MULLED VERTICALLY OR HORIZONTALLY.
9.) MULLING SINGLE HUNG WINDOWS WITH OTHER TYPES OF MIAMI-DADE COUNTY APPROVED WINDOWS USING A MIAMI-DADE COUNTY APPROVED MULLION IN BETWEEN ARE ACCEPTABLE BUT THE LOWER DESIGN PRESSURE FROM THE WINDOWS OR MULLION APPROVAL WILL APPLY TO THE ENTIRE MULLED SYSTEM.
10.) SEE SHEET # 4 FOR MULLION/METAL ATTACHMENT DETAILS & NOTES.

WINDOWS ARE TO BE PROTECTED WITH MIAMI-DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS

**PRODUCT REVISED**
**As complying with the Florida Building Code**
**NOA-No. 25-0612.02**
**Expiration Date: 09/01/2030**
**By:** Manuel Perez
**Miami-Dade Product Control**

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

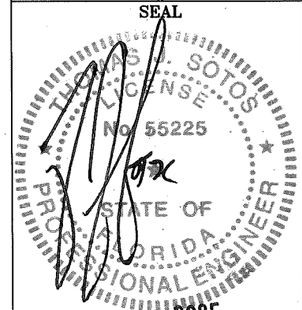
**CWS 310 NON-IMPACT ALUMINUM SINGLE HUNG FLANGE FRAME WINDOW**

| NO.: | DESCRIPTION: | BY: | DATE: |
|---|---|---|---|
| A | Revises NOA # 23-1017.06 | N.E. | 05/15/25 |

REVISIONS

THOMAS J. SOTOS
PROFESSIONAL ENGINEER
FL LIC. # 55225

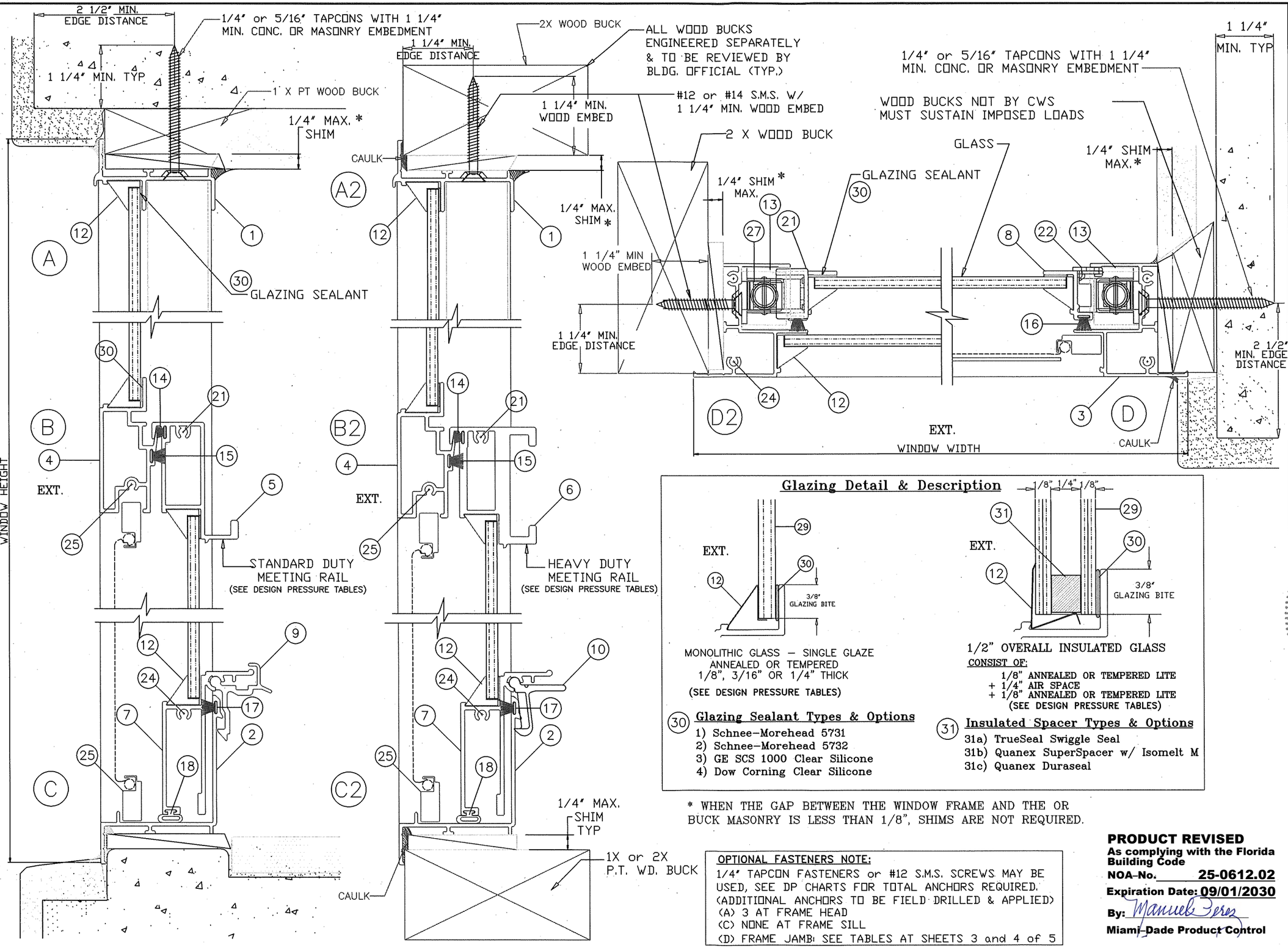
SEAL




DATE JUN 09 2025

SHEET DESCRIPTION:
APPROVED ELEVATIONS, CONFIGURATIONS AND GENERAL NOTES

| DRAWN BY: | DATE: |
|---|---|
| NELSON ERAZO | 11/17/2023 |
| REV. BY: | DATE: |
| N.E. | 05/15/2025 |
| DWG #: CWS-1254 | REV #: |
| SCALE: AS NOTED | SHEET 1 OF 5 |




## Glazing Detail & Description




MONOLITHIC GLASS – SINGLE GLAZE
ANNEALED OR TEMPERED
1/8", 3/16" OR 1/4" THICK
(SEE DESIGN PRESSURE TABLES)

1/2" OVERALL INSULATED GLASS
CONSIST OF:
1/8" ANNEALED OR TEMPERED LITE
+ 1/4" AIR SPACE
+ 1/8" ANNEALED OR TEMPERED LITE
(SEE DESIGN PRESSURE TABLES)

### (30) Glazing Sealant Types & Options

1) Schnee–Morehead 5731
2) Schnee–Morehead 5732
3) GE SCS 1000 Clear Silicone
4) Dow Corning Clear Silicone

### (31) Insulated Spacer Types & Options

31a) TrueSeal Swiggle Seal
31b) Quanex SuperSpacer w/ Isomelt M
31c) Quanex Duraseal

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

OPTIONAL FASTENERS NOTE:
1/4" TAPCON FASTENERS or #12 S.M.S. SCREWS MAY BE USED, SEE DP CHARTS FOR TOTAL ANCHORS REQUIRED.
(ADDITIONAL ANCHORS TO BE FIELD DRILLED & APPLIED)
(A) 3 AT FRAME HEAD
(C) NONE AT FRAME SILL
(D) FRAME JAMB: SEE TABLES AT SHEETS 3 and 4 of 5

**PRODUCT REVISED**
**As complying with the Florida Building Code**
**NOA-No. 25-0612.02**
**Expiration Date: 09/01/2030**
**By:** Manuel Perez
**Miami-Dade Product Control**


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

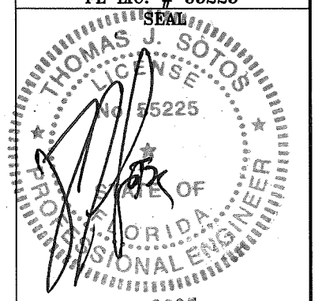

**CWS 310 NON-IMPACT ALUMINUM SINGLE HUNG FLANGE FRAME WINDOW**

REVISIONS

| NO.: | DESCRIPTION: | BY: | DATE: |
|---|---|---|---|
| A | Revises NOA # 23-1017.06 | N.E. | 05/15/25 |


THOMAS J. SOTOS
PROFESSIONAL ENGINEER
FL LIC. # 55225


SEAL




JUN 09 2025
DATE

SHEET DESCRIPTION:
CROSS SECTIONAL DETAILS FOR STANDARD AND HEAVY DUTY MEETING RAILS

| DRAWN BY: | DATE: |
|---|---|
| NELSON ERAZO | 11/17/2023 |
| REV. BY: | DATE: |
| N.E. | 05/15/2025 |
| DWG #: CWS-1254 | REV #: |
| SCALE: AS NOTED | SHEET 2 OF 5 |

### Flange Frame w/ Standard Meeting Rail
### Test # FTL 4505 - 3/16" Annealed

Negative Pressure Limited to 100psf.

| Width (in) | Height (in) | P(+) psf | P(-) psf | #14 or 5/16" Tapcons Jamb Anchors | #14 or 5/16" Tapcons Head Anchors | #12 or 1/4" Tapcons Jamb Anchors | #12 or 1/4" Tapcons Head Anchors |
|---|---|---|---|---|---|---|---|
| 19.125 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 26.5 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 37 | 26 | 70.0 | 100.0 | 2 | 2 | 4 | 3 |
| 53.125 | 26 | 70.0 | 100.0 | 3 | 2 | 5 | 3 |
| 19.125 | 38.375 | 70.0 | 100.0 | 3 | 2 | 3 | 2 |
| 26.5 | 38.375 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 37 | 38.375 | 70.0 | 100.0 | 3 | 2 | 5 | 3 |
| 53.125 | 38.375 | 70.0 | 76.8 | 4 | 2 | 6 | 3 |
| 19.125 | 50.625 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 50.625 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 37 | 50.625 | 70.0 | 100.0 | 4 | 2 | 7 | 3 |
| 53.125 | 50.625 | 62.6 | 62.6 | 4 | 2 | 6 | 3 |
| 19.125 | 58 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 58 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 37 | 58 | 70.0 | 98.3 | 5 | 2 | 8 | 3 |
| 53.125 | 58 | 57.3 | 57.3 | 4 | 2 | 7 | 3 |
| 19.125 | 63 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 63 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 37 | 63 | 70.0 | 92.1 | 5 | 2 | 8 | 3 |
| 53.125 | 63 | 54.5 | 54.5 | 4 | 2 | 7 | 3 |
| 19.125 | 74.25 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 26.5 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 37 | 74.25 | 70.0 | 85.6 | 5 | 2 | 9 | 3 |
| 53.125 | 74.25 | 50.0 | 50.0 | 4 | 2 | 7 | 3 |

### Flange Frame w/ Standard Meeting Rail.
### Test # FTL 5283 A-1 - 1/4" Annealed

Negative Pressure Limited to 100psf.

| Width (in) | Height (in) | P(+) psf | P(-) psf | #14 or 5/16" Tapcons Jamb Anchors | #14 or 5/16" Tapcons Head Anchors | #12 or 1/4" Tapcons Jamb Anchors | #12 or 1/4" Tapcons Head Anchors |
|---|---|---|---|---|---|---|---|
| 19.125 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 26.5 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 37 | 26 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 53.125 | 26 | 70.0 | 100.0 | 3 | 2 | 5 | 3 |
| 19.125 | 38.375 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 38.375 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 37 | 38.375 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 53.125 | 38.375 | 70.0 | 88.6 | 4 | 2 | 6 | 3 |
| 19.125 | 50.625 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 50.625 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 37 | 50.625 | 70.0 | 100.0 | 4 | 2 | 7 | 3 |
| 53.125 | 50.625 | 70.0 | 72.3 | 4 | 2 | 7 | 3 |
| 19.125 | 58 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 58 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 37 | 58 | 70.0 | 100.0 | 5 | 2 | 8 | 3 |
| 53.125 | 58 | 66.1 | 66.1 | 4 | 2 | 7 | 3 |
| 19.125 | 63 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 63 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 37 | 63 | 70.0 | 100.0 | 5 | 2 | 9 | 3 |
| 53.125 | 63 | 62.9 | 62.9 | 4 | 2 | 7 | 3 |
| 19.125 | 74.25 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 26.5 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 37 | 74.25 | 70.0 | 100.0 | 6 | 2 | 10 | 3 |
| 53.125 | 74.25 | 57.7 | 57.7 | 5 | 2 | 8 | 3 |

### Flange Frame w/ Standard Duty Rail
### Test # FTL 5283 A-2 & A-4 - 1/8" Annealed

Negative Pressures limited to 100psf.

| Width (in) | Height (in) | P(+) psf | P(-) psf | #14 or 5/16" Tapcons Jamb Anchors | #14 or 5/16" Tapcons Head Anchors | #12 or 1/4" Tapcons Jamb Anchors | #12 or 1/4" Tapcons Head Anchors |
|---|---|---|---|---|---|---|---|
| 19.125 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 26.5 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 37 | 26 | 70.0 | 93.8 | 2 | 2 | 4 | 2 |
| 53.125 | 26 | 61.4 | 61.4 | 2 | 2 | 2 | 2 |
| 19.125 | 38.375 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 38.375 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 37 | 38.375 | 70.0 | 70.8 | 2 | 2 | 4 | 2 |
| 53.125 | 38.375 | 44.6 | 44.6 | 2 | 2 | 4 | 2 |
| 19.125 | 50.625 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 50.625 | 70.0 | 95.6 | 3 | 2 | 5 | 2 |
| 37 | 50.625 | 60.4 | 60.4 | 2 | 2 | 4 | 2 |
| 53.125 | 50.625 | 36.3 | 36.3 | 2 | 2 | 4 | 2 |
| 19.125 | 58 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 58 | 70.0 | 86.7 | 3 | 2 | 5 | 2 |
| 37 | 58 | 57.0 | 57.0 | 2 | 2 | 5 | 2 |
| 53.125 | 58 | 33.2 | 33.2 | 2 | 2 | 4 | 2 |
| 19.125 | 63 | 70.0 | 92.3 | 3 | 2 | 4 | 2 |
| 26.5 | 63 | 70.0 | 81.1 | 3 | 2 | 5 | 2 |
| 37 | 63 | 55.6 | 55.6 | 3 | 2 | 5 | 2 |
| 53.125 | 63 | 31.6 | 31.6 | 2 | 2 | 4 | 2 |
| 19.125 | 74.25 | 70.0 | 81.6 | 3 | 2 | 4 | 2 |
| 26.5 | 74.25 | 67.4 | 67.4 | 3 | 2 | 5 | 2 |
| 37 | 74.25 | 53.8 | 53.8 | 3 | 2 | 6 | 2 |
| 53.125 | 74.25 | 29.0 | 29.0 | 2 | 2 | 4 | 2 |

### Flange Frame w/ Heavy Duty Rail - TABLE V-1
### Test # FTL 4363 - 3/16" Annealed View

Negative Pressures Limited to 100psf.

| CODE SIZE | Width (in) | Height (in) | P(+) psf | P(-) psf | #14 or 5/16" Tapcons Jamb Anchors | #14 or 5/16" Tapcons H&S Anchors | #12 or 1/4" Tapcons Jamb Anchors | #12 or 1/4" Tapcons H&S Anchors |
|---|---|---|---|---|---|---|---|---|
| 14-2 | 19.125 | 50.625 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 14-3 | 19.125 | 50.625 | 70.0 | 100.0 | 4 | 2 | 6 | 2 |
| 15-3 | 19.125 | 63 | 70.0 | 100.0 | 4 | 2 | 6 | 2 |
| 15-4 | 19.125 | 63 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 16-4 | 19.125 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 16-45 | 19.125 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 16-5 | 19.125 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| HB4-2 | 26.5 | 50.625 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| HB4-3 | 26.5 | 50.625 | 70.0 | 100.0 | 4 | 2 | 5 | 2 |
| HB5-3 | 26.5 | 63 | 70.0 | 86.7 | 3 | 2 | 5 | 2 |
| HB5-4 | 26.5 | 63 | 70.0 | 100.0 | 4 | 2 | 6 | 2 |
| HB6-4 | 26.5 | 74.25 | 70.0 | 78.0 | 3 | 2 | 5 | 2 |
| HB6-45 | 26.5 | 74.25 | 70.0 | 84.9 | 3 | 2 | 5 | 2 |
| HB6-5 | 26.5 | 74.25 | 70.0 | 88.9 | 3 | 2 | 6 | 2 |
| 24-2 | 37 | 50.625 | 70.0 | 100.0 | 4 | 2 | 6 | 2 |
| 24-3 | 37 | 50.625 | 70.0 | 90.6 | 3 | 2 | 5 | 2 |
| 25-3 | 37 | 63 | 70.0 | 73.3 | 3 | 2 | 5 | 2 |
| 25-4 | 37 | 63 | 70.0 | 83.6 | 3 | 2 | 6 | 2 |
| 26-4 | 37 | 74.25 | 64.4 | 64.4 | 4 | 2 | 5 | 2 |
| 26-45 | 37 | 74.25 | 70.0 | 71.7 | 4 | 2 | 6 | 2 |
| 26-5 | 37 | 74.25 | 70.0 | 75.3 | 4 | 2 | 6 | 2 |
| 34-2 | 53.125 | 50.625 | 59.0 | 59.0 | 3 | 2 | 4 | 2 |
| 34-3 | 53.125 | 50.625 | 62.4 | 62.4 | 3 | 2 | 4 | 2 |
| 35-3 | 53.125 | 63 | 55.3 | 55.3 | 3 | 2 | 5 | 2 |
| 35-4 | 53.125 | 63 | 54.8 | 54.8 | 3 | 2 | 5 | 2 |
| 36-4 | 53.125 | 74.25 | 51.0 | 51.0 | 3 | 2 | 5 | 2 |
| 36-45 | 53.125 | 74.25 | 50.8 | 50.8 | 3 | 2 | 5 | 2 |
| 36-5 | 53.125 | 74.25 | 50.0 | 50.0 | 3 | 2 | 5 | 2 |

### Flange Frame w/ Heavy Duty Rail
### Test # FTL 4323 - 3/16" Tempered

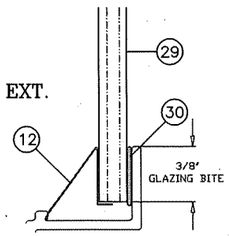
Negative Pressure Limited to 100psf.

| Width (in) | Height (in) | P(+) psf | P(-) psf | #14 or 5/16" Tapcons Jamb Anchors | #14 or 5/16" Tapcons Head Anchors | #12 or 1/4" Tapcons Jamb Anchors | #12 or 1/4" Tapcons Head Anchors |
|---|---|---|---|---|---|---|---|
| 19.125 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 26.5 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 37 | 26 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 53.125 | 26 | 70.0 | 100.0 | 2 | 2 | 5 | 3 |
| 19.125 | 38.375 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 38.375 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 37 | 38.375 | 70.0 | 100.0 | 2 | 2 | 5 | 2 |
| 53.125 | 38.375 | 70.0 | 100.0 | 4 | 2 | 7 | 4 |
| 19.125 | 50.625 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 50.625 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 37 | 50.625 | 70.0 | 100.0 | 4 | 2 | 7 | 3 |
| 53.125 | 50.625 | 70.0 | 100.0 | 6 | 2 | 8 | 4 |
| 19.125 | 58 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 58 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 37 | 58 | 70.0 | 100.0 | 5 | 2 | 8 | 3 |
| 53.125 | 58 | 70.0 | 91.6 | 6 | 2 | 9 | 4 |
| 19.125 | 63 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 63 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 37 | 63 | 70.0 | 100.0 | 5 | 2 | 8 | 4 |
| 53.125 | 63 | 70.0 | 87.2 | 6 | 2 | 9 | 4 |
| 19.125 | 74.25 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 26.5 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 37 | 74.25 | 70.0 | 100.0 | 6 | 2 | 10 | 3 |
| 53.125 | 74.25 | 70.0 | 80.0 | 6 | 2 | 10 | 4 |

### Flange Frame w/ Heavy Duty Rail - TABLE V-2
### Test # FTL 4345 - 3/16" Tempered View

Negative Pressure Limited to 100psf.

| CODE SIZE | Width (in) | Height (in) | P(+) psf | P(-) psf | #14 or 5/16" Tapcons Jamb Anchors | #14 or 5/16" Tapcons Head Anchors | #12 or 1/4" Tapcons Jamb Anchors | #12 or 1/4" Tapcons Head Anchors |
|---|---|---|---|---|---|---|---|---|
| 14-2 | 19.125 | 50.625 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 14-3 | 19.125 | 50.625 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 15-3 | 19.125 | 63 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 15-4 | 19.125 | 63 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 16-4 | 19.125 | 74.25 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 16-45 | 19.125 | 74.25 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 16-5 | 19.125 | 74.25 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| HB4-2 | 26.5 | 50.625 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| HB4-3 | 26.5 | 50.625 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| HB5-3 | 26.5 | 63 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| HB5-4 | 26.5 | 63 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| HB6-4 | 26.5 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| HB6-45 | 26.5 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| HB6-5 | 26.5 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 24-2 | 37 | 50.625 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 24-3 | 37 | 50.625 | 70.0 | 100.0 | 4 | 2 | 6 | 2 |
| 25-3 | 37 | 63 | 70.0 | 100.0 | 5 | 2 | 8 | 2 |
| 25-4 | 37 | 63 | 70.0 | 100.0 | 5 | 2 | 9 | 3 |
| 26-4 | 37 | 74.25 | 70.0 | 100.0 | 6 | 2 | 9 | 4 |
| 26-45 | 37 | 74.25 | 70.0 | 100.0 | 6 | 2 | 9 | 4 |
| 26-5 | 37 | 74.25 | 70.0 | 100.0 | 6 | 2 | 9 | 4 |
| 34-2 | 53.125 | 50.625 | 70.0 | 100.0 | 5 | 2 | 8 | 2 |
| 34-3 | 53.125 | 50.625 | 70.0 | 100.0 | 5 | 2 | 8 | 3 |
| 35-3 | 53.125 | 63 | 70.0 | 93.0 | 6 | 2 | 9 | 4 |
| 35-4 | 53.125 | 63 | 70.0 | 87.6 | 5 | 2 | 9 | 4 |
| 36-4 | 53.125 | 74.25 | 70.0 | 84.1 | 6 | 2 | 9 | 4 |
| 36-45 | 53.125 | 74.25 | 70.0 | 81.3 | 6 | 2 | 10 | 4 |
| 36-5 | 53.125 | 74.25 | 70.0 | 80.0 | 6 | 2 | 10 | 4 |




MONOLITHIC GLASS – SINGLE GLAZE ANNEALED OR TEMPERED(*) 1/8", 3/16" OR 1/4" THICK (SEE DESIGN PRESSURE TABLES)

GLAZING DETAIL

* Tempered glass marked in compliance with CPSC 16 CFR Part 1201" or "ANSI Z97.1–2015.

**PRODUCT REVISED**
**As complying with the Florida Building Code**
**NOA–No. 25-0612.02**
**Expiration Date: 09/01/2030**
**By:** Manuel Perez
**Miami-Dade Product Control**

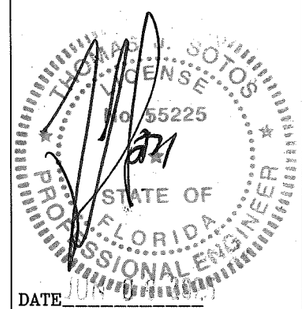

CWS
1900 SW 44TH AVE.
OCALA, FLORIDA 34474
WWW.CWS.CC


**CWS 310 NON-IMPACT ALUMINUM SINGLE HUNG FLANGE FRAME WINDOW**

REVISIONS

| NO.: | DESCRIPTION: | BY: | DATE: |
|---|---|---|---|
| A | Revises NOA # 23-1017.06 | N.E. | 05/15/25 |

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




DATE 10/17/2023

SHEET DESCRIPTION:
GLASS LOAD CHARTS & MONOLITHIC GLAZING DETAIL

| DRAWN BY: | DATE: |
|---|---|
| NELSON ERAZO | 11/17/2023 |
| REV. BY: | DATE: |
| N.E. | 05/15/2025 |
| DWG #: | REV #: |
| CWS-1254 | |
| SCALE: | SHEET |
| AS NOTED | 3 OF 5 |

## Flange Frame w/ Standard Meeting Rail
## Test # FTL 5283 A-5 - 1/8" Tempered

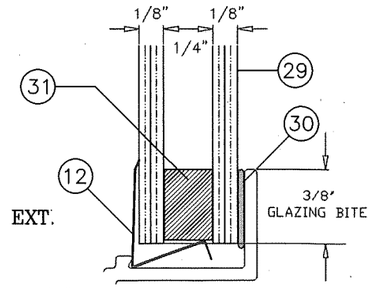
Negative Pressure Limited to 100psf.

| | | | | #14 or 5/16" Tapcons | | #12 or 1/4" Tapcons | |
|---|---|---|---|---|---|---|---|
| Width (in) | Height (in) | P(+) psf | P(-) psf | Jamb Anchors | Head Anchors | Jamb Anchors | Head Anchors |
| 19.125 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 26.5 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 37 | 26 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 53.125 | 26 | 70.0 | 100.0 | 2 | 2 | 5 | 3 |
| 19.125 | 38.375 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 38.375 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 37 | 38.375 | 70.0 | 100.0 | 2 | 2 | 5 | 2 |
| 53.125 | 38.375 | 70.0 | 88.6 | 3 | 2 | 6 | 3 |
| 19.125 | 50.625 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 50.625 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 37 | 50.625 | 70.0 | 100.0 | 3 | 2 | 7 | 3 |
| 53.125 | 50.625 | 70.0 | 72.3 | 3 | 2 | 7 | 3 |
| 19.125 | 58 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 58 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 37 | 58 | 70.0 | 100.0 | 4 | 2 | 8 | 3 |
| 53.125 | 58 | 66.1 | 66.1 | 3 | 2 | 7 | 3 |
| 19.125 | 63 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 63 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 37 | 63 | 70.0 | 100.0 | 4 | 2 | 9 | 3 |
| 53.125 | 63 | 62.9 | 62.9 | 3 | 2 | 5 | 3 |
| 19.125 | 74.25 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 26.5 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 37 | 74.25 | 70.0 | 100.0 | 5 | 2 | 10 | 3 |
| 53.125 | 74.25 | 57.7 | 57.7 | 4 | 2 | 9 | 3 |

## Flange Frame w/ Standard Meeting Rail
## Test # FTL 5283 A-3 - 1/2" Overall Insulated w/ 1/8" Annealed

Negative Pressure Limited to 100psf.

| | | | | #14 or 5/16" Tapcons | | #12 or 1/4" Tapcons | |
|---|---|---|---|---|---|---|---|
| Width (in) | Height (in) | P(+) psf | P(-) psf | Jamb Anchors | Head Anchors | Jamb Anchors | Head Anchors |
| 19.125 | 26 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 26.5 | 26 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 37 | 26 | 70.0 | 100.0 | 4 | 2 | 6 | 3 |
| 53.125 | 26 | 70.0 | 100.0 | 3 | 2 | 6 | 3 |
| 19.125 | 38.375 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 26.5 | 38.375 | 70.0 | 100.0 | 5 | 2 | 8 | 3 |
| 37 | 38.375 | 70.0 | 100.0 | 4 | 2 | 7 | 3 |
| 53.125 | 38.375 | 70.0 | 80.7 | 4 | 2 | 6 | 3 |
| 19.125 | 50.625 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 26.5 | 50.625 | 70.0 | 100.0 | 5 | 2 | 8 | 3 |
| 37 | 50.625 | 70.0 | 100.0 | 5 | 2 | 8 | 3 |
| 53.125 | 50.625 | 65.8 | 65.8 | 4 | 2 | 7 | 3 |
| 19.125 | 58 | 70.0 | 100.0 | 4 | 2 | 8 | 2 |
| 26.5 | 58 | 70.0 | 100.0 | 5 | 2 | 8 | 2 |
| 37 | 58 | 70.0 | 100.0 | 5 | 2 | 8 | 3 |
| 53.125 | 58 | 60.1 | 60.1 | 4 | 2 | 7 | 3 |
| 19.125 | 63 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 26.5 | 63 | 70.0 | 100.0 | 5 | 2 | 8 | 2 |
| 37 | 63 | 70.0 | 100.0 | 5 | 2 | 9 | 3 |
| 53.125 | 63 | 57.2 | 57.2 | 4 | 2 | 7 | 3 |
| 19.125 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 26.5 | 74.25 | 70.0 | 100.0 | 5 | 2 | 8 | 2 |
| 37 | 74.25 | 70.0 | 96.9 | 6 | 2 | 10 | 3 |
| 53.125 | 74.25 | 52.5 | 52.5 | 5 | 2 | 8 | 3 |




1/2" OVERALL INSULATED GLASS

CONSIST OF:

1/8" ANNEALED OR TEMPERED(*) LITE
+ 1/4" AIR SPACE
+ 1/8" ANNEALED OR TEMPERED(*) LITE
(SEE CORRESPONDING DESIGN PRESSURE CHARTS)

GLAZING DETAIL & DESCRIPTION

* Tempered glass marked in compliance with CPSC 16 CFR Part 1201" or "ANSI Z97.1–2015.

(31) **Insulated Spacer Types & Options**

31 a) "TrueSeal" Swiggle Seal
31 b) "Quanex" SuperSpacer w/ Isomelt M
31 c) "Quanex" Duraseal

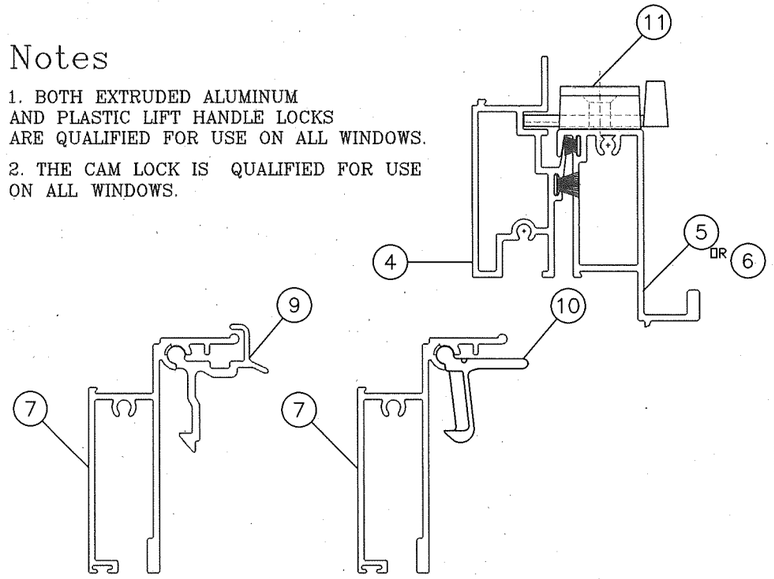
## Flange Frame w/ Heavy Duty Rail
## Test # FTL 4351 - 1/2" Overall Insulated w/ 1/8" Tempered

Negative Pressure Limited to 100psf.

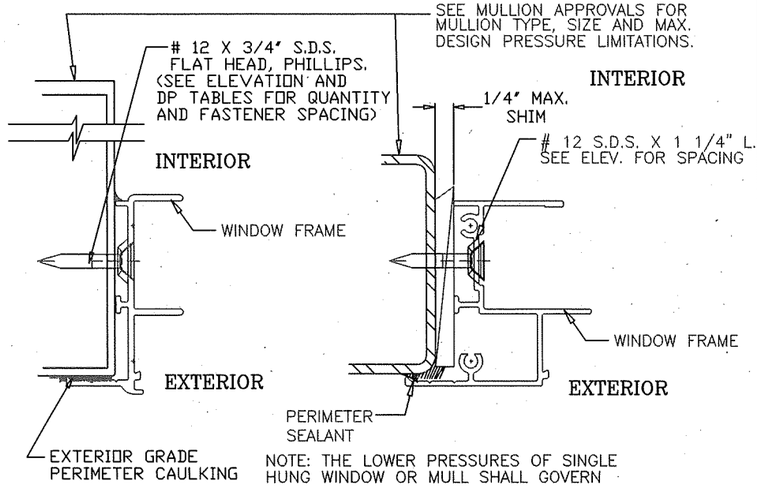
| | | | | #14 or 5/16" Tapcons | | #12 or 1/4" Tapcons | |
|---|---|---|---|---|---|---|---|
| Width (in) | Height (in) | P(+) psf | P(-) psf | Jamb Anchors | Head Anchors | Jamb Anchors | Head Anchors |
| 19.125 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 26.5 | 26 | 70.0 | 100.0 | 2 | 2 | 2 | 2 |
| 37 | 26 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 53.125 | 26 | 70.0 | 100.0 | 3 | 2 | 4 | 4 |
| 19.125 | 38.375 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 38.375 | 70.0 | 100.0 | 2 | 2 | 4 | 2 |
| 37 | 38.375 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 53.125 | 38.375 | 70.0 | 100.0 | 4 | 2 | 7 | 4 |
| 19.125 | 50.625 | 70.0 | 100.0 | 2 | 2 | 3 | 2 |
| 26.5 | 50.625 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 37 | 50.625 | 70.0 | 100.0 | 4 | 2 | 7 | 3 |
| 53.125 | 50.625 | 70.0 | 100.0 | 5 | 2 | 8 | 4 |
| 19.125 | 58 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 58 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 37 | 58 | 70.0 | 100.0 | 5 | 2 | 8 | 3 |
| 53.125 | 58 | 70.0 | 91.6 | 5 | 2 | 9 | 4 |
| 19.125 | 63 | 70.0 | 100.0 | 3 | 2 | 4 | 2 |
| 26.5 | 63 | 70.0 | 100.0 | 3 | 2 | 6 | 2 |
| 37 | 63 | 70.0 | 100.0 | 5 | 2 | 8 | 4 |
| 53.125 | 63 | 70.0 | 87.2 | 5 | 2 | 9 | 4 |
| 19.125 | 74.25 | 70.0 | 100.0 | 3 | 2 | 5 | 2 |
| 26.5 | 74.25 | 70.0 | 100.0 | 4 | 2 | 7 | 2 |
| 37 | 74.25 | 70.0 | 100.0 | 6 | 2 | 10 | 3 |
| 53.125 | 74.25 | 70.0 | 80.0 | 6 | 2 | 10 | 4 |

## Notes

1. BOTH EXTRUDED ALUMINUM AND PLASTIC LIFT HANDLE LOCKS ARE QUALIFIED FOR USE ON ALL WINDOWS.
2. THE CAM LOCK IS QUALIFIED FOR USE ON ALL WINDOWS.




LOCK (LATCH AND SWEEP) OPTIONS




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.

(E) MULLION & METAL STRUCTURE ATTACHMENT DETAIL

**PRODUCT REVISED**
**As complying with the Florida Building Code**
**NOA No. 25-0612.02**
**Expiration Date: 09/01/2030**
**By:** Manuel Perez
**Miami-Dade Product Control**


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


**CWS 310 NON-IMPACT ALUMINUM SINGLE HUNG FLANGE FRAME WINDOW**

REVISIONS

| NO.: | DESCRIPTION: | BY: | DATE: |
|---|---|---|---|
| A | Revises NOA # 23-1017.06 | N.E. | 05/15/25 |


THOMAS J. SOTOS
PROFESSIONAL ENGINEER
FL LIC. # 55225

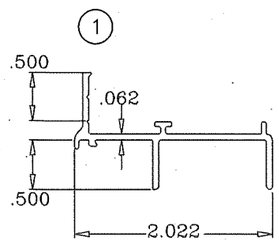

SEAL


DATE_____

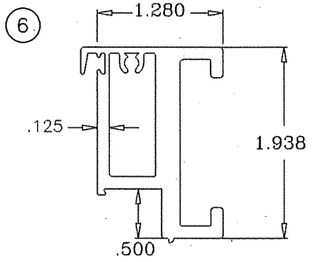
SHEET DESCRIPTION:
GLASS LOAD CHARTS, INSULATED GLAZING DETAIL & LOCK OPTIONS

| DRAWN BY: | DATE: |
|---|---|
| NELSON ERAZO | 11/17/2023 |
| REV. BY: | DATE: |
| N.E. | 05/15/2025 |
| DWG #: | REV #: |
| CWS-1254 | |
| SCALE: | SHEET |
| AS NOTED | 4 OF 5 |

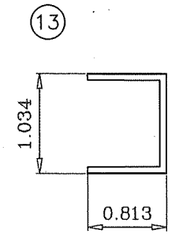
FRAME HEAD
L-7501



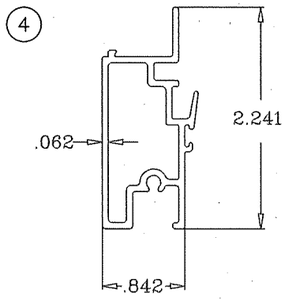

VENT TOP RAIL (Heavy Duty)
L-7506



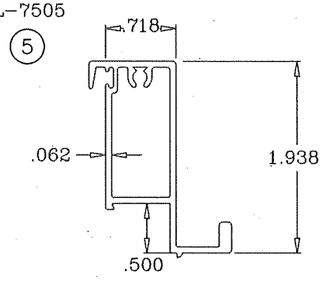

SASH STOP



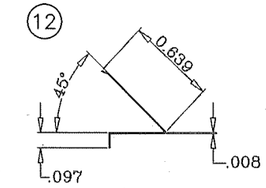

FIXED MEETING RAIL
L-7504



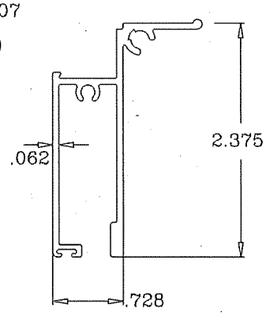

VENT TOP RAIL (Standard Duty)
L-7505



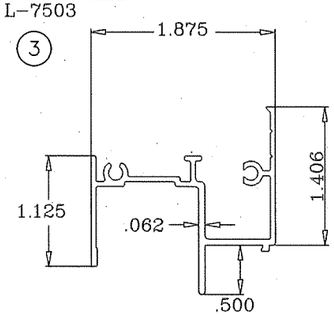

GLAZING BEAD
L-7516



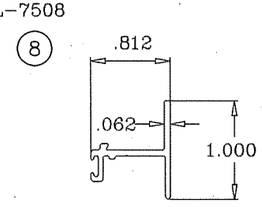

VENT BOTTOM RAIL
L-7507



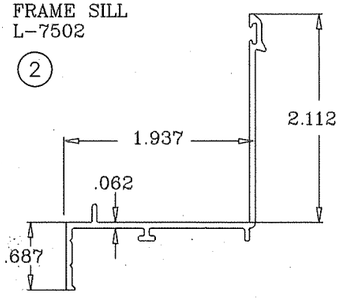

FRAME JAMB
L-7503



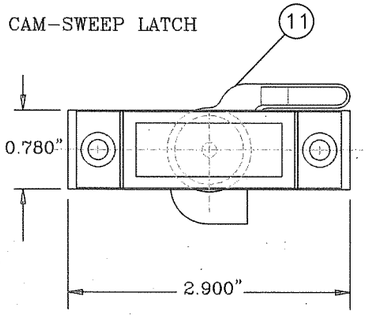

VENT JAMB
L-7508

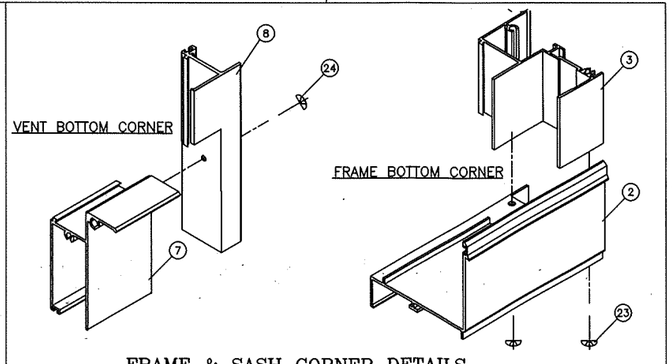



FRAME SILL
L-7502




CAM-SWEEP LATCH




FRAME & SASH CORNER DETAILS

## CWS 310 FLANGE WINDOW BILL OF MATERIALS

| ITEM # | PART # | DRWG. # | REQD. | DESCRIPTION | REMARKS |
|---|---|---|---|---|---|
| 1 | L-7501 | LII-121 | 1 | FRAME HEAD | 6063-T6 ALUMINUM |
| 2 | L-7502 | LII-120 | 1 | FRAME SILL | 6063-T6 ALUMINUM |
| 3 | L-7503 | LII-127 | 2 | FRAME JAMB | 6063-T6 ALUMINUM |
| 4 | L-7504 | LII-129 | 1 | FIXED MEETING RAIL | 6005-T5 ALUMINUM |
| 5 | L-7505 | LII-125 | 1 | VENT TOP RAIL STD. DUTY | 6005-T5 ALUMINUM |
| 6 | L-7506 | LII-126 | 1 | VENT TOP RAIL HVY DUTY | 6005-T5 ALUMINUM |
| 7 | L-7507 | LII-136 | 1 | VENT BOTTOM RAIL | 6005-T5 ALUMINUM |
| 8 | L-7508 | LII-124 | 1 | VENT JAMB | 6063-T5 ALUMINUM |
| 9 | * | * | 2 | VENT LATCH / LIFT LOCK | 6063-T6 ALUMINUM |
| 10 | * | HC-057 | 2 | VENT LATCH / LIFT LOCK | INJECTED MOLDED |
| 11 | * | * | 2 | VENT LATCH / SWEEP | DIE CAST |
| 12 | * | * | AS REQD. | GLAZING BEAD | ROLL FORMED ALUMINUM |
| 13 | * | * | 2 | VENT/SASH STOP | Rigid Vinyl PVC |
| 14 | * | SCHLEGEL | AS REQD. | TOP RAIL WEATHERSTRIP | .187" X 150" PILE |
| 15 | * | ULTRAFAB | AS REQD. | FXD. RAIL WEATHERSTRIP | .187" X 250" FIN SEAL |
| 16 | * | ULTRAFAB | AS REQD. | VENT JAMB WEATHERSTRIP | .187" X .280" FIN SEAL |
| 17 | * | ULTRAFAB | AS REQD. | FRAME SILL WEATHERSTRIP | .187" X .250" FIN SEAL |
| 18 | * | * | AS REQ'D. | 3/8" PVC WEATHERSTRIP | 3/8" DIA. DUROMETER 65 |
| 19 | * | * | 2 | VENT/SILL OPEN CELL PAD | 1"x1"x1/2" FOAM PAD |
| 20 | * | * | 2 | SILL/JAMB JOINT GASKET | 1/16" CLOSED CELL FOAM |
| 21 | L-7523 | * | 2 | VENT TOP GUIDE / CAM | 1 AT EACH END OF RAIL |
| 22 | L-7524 | HC-033 | 4 | VENT JAMB FACE GUIDE | 2 PER VENT JAMB |
| 23 | * | * | 8 | FRAME ASSEMBLY SCREWS | # 8 X 3/4" P.H. PHIL. |
| 24 | * | * | 4 | VENT ASSEMBLY SCREWS | # 8 X 1" P.H. PHILLIPS |
| 25 | * | * | 2 | FXD. MTG. RAIL SCREW | # 8 X 1" P.H. PHILLIPS |
| 26 | * | * | 16 max. | 2X FRAME INSTALL'N SCREW | #12 or #14 SMS F.H./PHI. |
| 26 | * | * | 16 max. | CONC. INSTALL'N SCREW | 1/4" or 5/16" TAPCON F.H. |
| 27 | L-7527 | * | 2 | BLOCK & TACKLE BALANCE | 1 PER JAMB |
| 28 | * | * | 1 | INSECT SCREEN | * |
| 29 | * | * | 2 | GLASS @ TOP & BOTTOM | See Detail @ sheet 2 of 5 |
| 30 | * | * | AS REQ'D | GLAZING SILICONE | See Detail @ sheet 2 of 5 |
| 31 a | Trueseal | 774-25B-767 | AS REQ'D | Insulated Swiggle Spacer | Black -1/4" air space |
| 31 b | Quanex | * | AS REQ'D | Insulated SuperSpacer | Black -1/4" air space |
| 31 c | Quanex | * | AS REQ'D | Insulated Duraseal Spacer | Black -1/4" air space |

**PRODUCT REVISED**
**As complying with the Florida Building Code**
**NOA-No. 25-0612.02**
**Expiration Date: 09/01/2030**
**By:** Manuel Perez
**Miami-Dade Product Control**


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

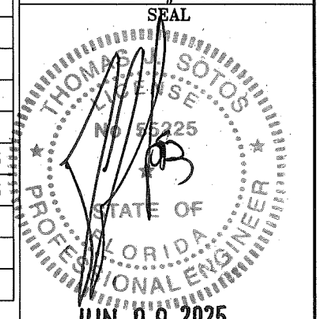

**CWS 310 NON-IMPACT ALUMINUM SINGLE HUNG FLANGE FRAME WINDOW**

REVISIONS

| NO.: | DESCRIPTION: | BY: | DATE: |
|---|---|---|---|
| A | Revises NOA # 23-1017.06 | N.E. | 05/15/25 |


THOMAS J. SOTOS
PROFESSIONAL ENGINEER
FL LIC. # 55225


SEAL




DATE JUN 09 2025

SHEET DESCRIPTION:
BILL OF MATERIALS, EXTRUSION DETAILS & CORNER ASSEMBLY DETAILS

| DRAWN BY: | DATE: |
|---|---|
| NELSON ERAZO | 11/17/2023 |
| REV. BY: | DATE: |
| N.E. | 05/15/2025 |
| DWG #: | REV #: |
| CWS-1254 | |
| SCALE: | SHEET |
| AS NOTED | 5 OF 5 |