



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

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

NOTICE OF ACCEPTANCE (NOA)

VELUX America LLC
450 Old Brickyard Rd., P.O. Box 5001
Greenwood, SC 29648-5001

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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Pinnacle HU Gabled Skylight W/ L.M. Impact Resistant Laminated / Insulated Glass

APPROVAL DOCUMENT: Drawing No. 23-153 titled "Pinnacle HU Gabled Skylight W/ L.M. Impact Resistant Laminated / Insulated Glass", sheets 1 through 27 of 27, dated 08/08/2023, Last revision #1 dated 08/08/2023, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E., on 08/08/2023, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state 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 #21-1209.06 and consists of this page 1 and evidence submitted pages E-1, E-2, E-3, E-4 & E-5, as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.



Helmy A. Makar
10/26/2023

NOA No. 23-0815.24
Expiration Date: 02/22/2027
Approval Date: 10/26/2023

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 06-0816.05

A. DRAWINGS

1. *Manufacturer's die drawings and sections.*
2. *Drawing No. 06-173 titled "Pinnacle HU Gabled Skylight with L.M. Impact Resistant Laminated /Insulated Glass", sheets 1 through 15 of 15, dated 01/15/07 prepared by Tillit Testing & Engineering Company signed and sealed by Walter A. Tillit Jr. P.E.,*

B. TESTS

1. *Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94*
 - 2) *Uniform Static Air Pressure Test, Loading per FBC TAS 202-94*
 - 3) *Water Resistance Test, per FBC, TAS 202-94*
 - 4) *Large Missile Impact Test per FBC, TAS 201-94*
 - 5) *Cyclic Wind Pressure Loading per FBC, TAS 203-94**along with marked-up drawings of "Pinnacle HU Test units", prepared by American Test Lab of South Florida, Test Report No. ATLSF # 1107.01-05, dated 07/10/06, signed and sealed by William R. Mehner P.E.*

C. CALCULATIONS

1. *Skylight Calculations and structural analysis, complying with FBC-2004, prepared by Tillit Testing & Engineering Company signed and sealed by Walter A. Tillit Jr. P.E.*

D. QUALITY ASSURANCE

1. *Miami Dade Building Code Compliance Office (BCCO).*

E. MATERIAL CERTIFICATIONS

1. *Notice of Acceptance No. 06-1205.10 issued to E.I. DuPont DeNemours for "Sentry Glass Plus dated 01/14/07, expiring on 01/14/2012.*

F. STATEMENTS

1. *Statement letter of conformance to FBC 2004, dated January 15 2007, signed and sealed by Walter A. Tillit jr. P.E.*
2. *Statement letter of no financial interest, dated July 27, 2006, signed and sealed by Walter A. Tillit Jr. P.E.*

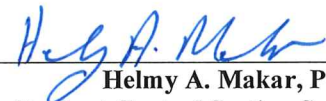
G. OTHER

1. *None.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 11-0602.08

A. DRAWINGS

1. *Drawing No. 06-063 titled "Pinnacle HU Gabled Skylight and HU-Opy Hurricane Resistant Octagonal Skylight", sheets 1 through 27 of 27, dated 06/24/10, Last revision #1 dated 06/24/10, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E., on 10/24/11*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 23-0815.24
Expiration Date: 02/22/2027
Approval Date: 10/26/2023

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS

1. *Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings of HU-Opy Hurricane Resistant Octagonal Skylight,
prepared by American Test Lab of South Florida, Test Report No. **ATLSF # 0519.01-09**, dated 07/02/09, signed and sealed by Edmundo Largaespada, P.E.*

C. CALCULATIONS

1. *Skylight Calculations and structural analysis, 40 pages, complying with FBC-2007, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E., on 07/07/10.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs.*

E. MATERIAL CERTIFICATIONS

1. *Notice of Acceptance No. 06-1205.10 issued to E.I. DuPont DeNemours for "Sentry Glass Plus dated 01/14/07, expiring on 01/14/2012.*

F. STATEMENTS

1. *Statement letter of conformance to FBC 2007, dated May 16, 2011, signed and sealed by Walter A. Tillit Jr. P.E.*
2. *Statement letter of no financial interest, dated May 16, 2011, signed and sealed by Walter A. Tillit Jr. P.E.*

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 11-1227.06

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs (PERA).*

E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 23-0815.24
Expiration Date: 02/22/2027
Approval Date: 10/26/2023

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 12-0119.08

A. DRAWINGS

1. *Drawing No. 12-007 titled "Pinnacle HU Gabled Skylight and HU-Opy Hurricane Resistant Octagonal Skylight", sheets 1 through 27 of 27, dated 01/06/12, revision #1 dated 01/06/12, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E., on 01/06/12.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs (PERA).*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *Statement letter of conformance to FBC 2010, dated January 09, 2012, signed and sealed by Walter A. Tillit Jr., P.E.*

5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 16-1018.02

A. DRAWINGS

1. *Drawing No. 15-302 titled "Pinnacle HU Gabled Skylight and HU-Opy Hurricane Resistant Octagonal Skylight", sheets 1 through 27 of 27, dated 06/01/15, Last revision #1 dated 06/01/15, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E., on 09/19/16.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE


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

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *Statement letter of conformance to FBC 2014, dated September 19, 2016, signed and sealed by Walter A. Tillit Jr., P.E.*



**Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor**

NOA No. 23-0815.24

Expiration Date: 02/22/2027

Approval Date: 10/26/2023

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

6. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 17-0118.05

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

7. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 21-0201.12

A. DRAWINGS

1. *Drawing No. 20-302 titled "Pinnacle HU Gabled Skylight and HU-Opy Hurricane Resistant Octagonal Skylight", sheets 1 through 27 of 27, dated 11/24/2020, Last revision #1 dated 11/24/2020, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E., on 11/24/2020.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

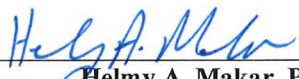
1. *By Miami-Dade County Department of Regulatory and Economic Resources (RER).*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *Statement letter of conformance to FBC, 2020 Edition, dated November 24, 2020, signed and sealed by Walter A. Tillit Jr., P.E.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 23-0815.24
Expiration Date: 02/22/2027
Approval Date: 10/26/2023

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

8. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 21-1209.06

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *Statement letter of conformance to FBC, 2020 Edition, dated November 24, 2020, signed and sealed by Walter A. Tillit Jr., P.E.*

9. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 23-153 titled "Pinnacle HU Gabled Skylight W/ L.M. Impact Resistant Laminated / Insulated Glass", sheets 1 through 27 of 27, dated 08/08/2023, Last revision #1 dated 08/08/2023, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E., on 08/08/2023.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

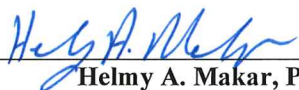
1. *By Miami-Dade County Department of Regulatory and Economic Resources (RER).*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *Statement letter of conformance to FBC, 2020 and 2023 Editions, dated August 09, 2023, signed and sealed by Walter A. Tillit Jr., P.E.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 23-0815.24
Expiration Date: 02/22/2027
Approval Date: 10/26/2023

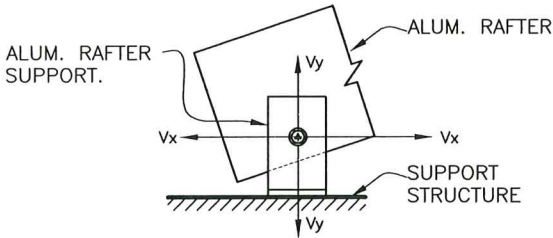
PINNACLE H.U GABLED SKYLIGHT W/ L.M. IMPACT RESISTANT LAMINATED / INSULATED GLASS (VALID ONLY FOR SHEETS 1 THRU 15)

GENERAL NOTES:

1. PINNACLE H.U GABLED SKYLIGHT W/ L.M. IMPACT RESISTANT LAMINATED / INSULATED GLASS SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2020 (7th EDITION) AND 2023 (8th EDITION) OF THE FLORIDA BUILDING CODE. THIS SKYLIGHT MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES.
- DESIGN LIVE & WIND LOADS SHALL BE DETERMINED AS PER CHAPTER 16 OF THE ABOVE MENTIONED CODES, USING ASCE 7-16 STANDARD (FBC 2020) AND ASCE 7-22 (FBC 2023) AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON NOTE 2 BELOW.
- IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-16 AND ASCE 7-22 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/ MAX. (A.S.D) DESIGN PRESSURE RATINGS INDICATED ON NOTE 2 BELOW.
- IN ORDER TO VERIFY THAT FASTENERS & ANCHORS ON THIS P.A.D. ARE NOT OVERSTRESSED FOR EVERY SINGLE APPLICATION OF THIS SKYLIGHT SYSTEM UNDER A.S.D DESIGN PRESSURE RATINGS INDICATED ON NOTE 2 BELOW, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS SHALL NOT BE USED IN THEIR ANALYSIS.
- 1A. SHOP DRAWINGS AND STRUCTURAL CALCULATIONS SHALL BE SUBMITTED FOR EVERY PERMIT. DRAWINGS MAY INCLUDE LARGER SKYLIGHT WIDTH, LENGTH AND RISE W/ CORRESPONDING LARGER CROSS SECTION RAFTERS & MULLIONS, BUT A.S.D. DESIGN PRESSURE RATING AS WELL AS MAX. GLASS PANEL SIZE SHALL **NOT** EXCEED THOSE INDICATED ON THIS DRAWING. (SEE NOTES 2 AND 11 RESPECTIVELY)
- THIS P.A.D. COVERS GABLE SHAPE SKYLIGHTS. OTHER SHAPES/CONFIGURATIONS W/ SLOPED GLASS MAY BE ALSO ACCEPTED, PROVIDED THAT ABOVE MENTIONED CONDITIONS ARE COMPLIED WITH. THE DESIGN OF LARGER COMPONENTS FOR LARGER SKYLIGHTS SHALL BE PERFORMED BY A FLORIDA P.E. AND REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT ON A JOB SPECIFIC BASIS. (SEE NOTES 3 & 20).
2. A.S.D. DESIGN PRESSURE RATING AT ROOF IS: +80.0 psf (WINDWARD SIDE), -80.0psf (LEEWARD SIDE).
A.S.D. DESIGN PRESSURE RATING AT WALL IS: +80.0, -80.0 psf.
A.S.D. DESIGN PRESSURE RATING AND LARGE MISSILE IMPACT RESISTANCE OBTAINED THRU TESTING AS PER SECTION 1626.2 OF THE FLORIDA BUILDING CODE, PER PROTOCOLS TAS 201, 202, 203, PER AMERICAN TESTING LABORATORY REPORT # 1107.01-05.
WATER AND AIR INFILTRATION TESTING HAS BEEN PERFORMED AS PER PROTOCOL TAS 202, QUALIFYING ASTM E 331 AND ASTM E 283 RESPECTIVELY.
3. STRUCTURAL ADEQUACY OF SUPPORTING STRUCTURAL MEMBERS IS NOT PART OF THIS P.A.D. STRUCTURAL DESIGN OF THE STRUCTURE THAT WILL PROVIDE SUPPORT TO THIS SKYLIGHT SHALL BE PERFORMED BY THE STRUCTURAL ENGINEER OF RECORD FOR THE PROJECT. STRUCTURAL DESIGN SHALL INCLUDE AND TAKE INTO CONSIDERATION THE ACTUAL Vx AND Vy LOADS TRANSFERRED FROM THIS SKYLIGHT TO THE SUPPORT STRUCTURE, BASED ON DEAD, LIVE & WIND LOADS AND USING THE LOAD COMBINATIONS AS PER A.S.C.E. 7 STANDARD. ADEQUACY OF SUPPORTING STRUCTURAL MEMBERS SHALL BE REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT ON A JOB SPECIFIC BASIS.
4. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY AND TEMPER, UNLESS OTHERWISE NOTED.
5. ALL ALUMINUM SHEET SHALL BE ALUMINUM ASSOCIATION 1100-H14 ALLOY AND HARDNESS.
6. ALL SCREWS TO BE STAINLESS STEEL AISI 304 OR 316 SERIES, WITH MIN. TENSILE LOAD CAPACITY Tu=4275# & MIN. ULTIMATE SHEAR LOAD CAPACITY Su=2700#, PER ASTM B-593 & B-594 & SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4.
7. ALL ALUMINUM POP RIVETS TO BE 5056 ALUMINUM ALLOY WITH ALUMINUM MANDREL.
8. BOLTS TO BE STAINLESS STEEL AISI 304 OR 316 SERIES WITH 50 ksi Min. YIELD STRENGTH AND 90 ksi Min. TENSILE STRENGTH, PER ASTM B-593 AND B-594.
9. GLAZING SYSTEM SHALL COMPRISE OF THE FOLLOWING COMPONENTS:

- 9.1. 1/4"x5/8" TREMCO SGT 921 STRUCTURAL GLAZING TAPES MADE OF OPEN CELL HIGH DENSITY POLYURETHANE WITH A MICROCELLULAR STRUCTURE.
- 9.2. SANTOPRENE GLAZING STOP (1/4"x1 1/4"x4", MODIFY TO GLAZING), (2) PER BAY AT 1/4 POINTS AT LOCATIONS SHOWN ON SECTIONS.
- 9.3. STRUCTURAL SILICONE FOR GLASS SEALANT AT RAFTERS TO BE DOW CORNING 995 SILICONE STRUCTURAL ADHESIVE.

10. ALL FLASHING TO BE LAPPED AND SET ON A BED OF URETHANE SEALANT.
11. GLASS OPTIONS:
- (a) 9/16" LAMINATED GLAZING CONSISTING OF:
1/4" THICK CLEAR HEAT STRENGTHENED GLASS +0.090" THICK KURARAY SENTRY GLASS @ INTERLAYER + 1/4" CLEAR HEAT STRENGTHENED GLASS.
- (b) 1 5/16" INSULATED GLAZING CONSISTING OF:
1/4" THICK CLEAR TEMPERED GLASS +1/2" AIRSPACE W/ ALUMINUM SPACER OVER 9/16" LAMINATED GLASS MADE WITH 1/4" THICK CLEAR HEAT STRENGTHENED GLASS +0.090" THICK KURARAY SENTRY GLASS @ INTERLAYER + 1/4" CLEAR HEAT STRENGTHENED GLASS.
- (c) NOTES: MAX GLASS PANEL D.L.O SIZE IS 45 1/2"x94 1/2".
MAX GLASS AREA = 32.00 FT² BETWEEN SUPPORTS.
12. ALL WELDING TO CONFORM TO THE AMERICAN WELDING SOCIETY A.W.S. D.1.2 REGULATIONS. USE CERTIFIED WELDERS. USE ER-4043 (IF NOT ANODIZED FINISH) OR ER-5356 (IF ANODIZED FINISH) ELECTRODES.
13. ALL ALUMINUM EXTRUSIONS IN CONTACT WITH DISSIMILAR MATERIALS SHALL COMPLY WITH SECTION III-6 OF THE 2015 AND 2020 ALUMINUM DESIGN MANUAL.
14. PAINT, FINISH AND COLOR TO BE SELECTED BY ARCHITECT OF RECORD FOR THE JOB IN COORDINATION W/ WASCO PRODUCTS, INC. AND SHALL COMPLY WITH AAMA 1600 SPECIFICATION, SECTION 3.11.
15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE THIS SKYLIGHT IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE. SEE NOTE 3 ABOVE.
CONTRACTOR IS TO SEAL/CAULK W/ URETHANE SEALANT ALL SKYLIGHT COMPONENT EDGES AS INDICATED ON THIS DRAWING TO PREVENT WIND/RAIN INTRUSION.
16. SKYLIGHT INSTALLATION SHALL COMPLY WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
17. SKYLIGHT MANUFACTURER'S LABEL SHALL BE PLACED ON A READILY VISIBLE LOCATION.
ONE LABEL SHALL BE PLACED FOR EVERY UNIT. LABEL SHALL COMPLY WITH SECTION 2405.5
18. (a) THE PRODUCT APPROVAL DOCUMENT (P.A.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT.
- (b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS PRODUCT APPROVAL PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.
CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
- (c) THIS PRODUCT APPROVAL DOCUMENT WILL BE CONSIDERED INVALID IF MODIFIED.
- (d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE PROFESSIONAL OF RECORD (P.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D.
PROFESSIONAL OF RECORD, ACTING AS DELEGATED ENGINEER TO THE P.A.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- (e) ORIGINAL P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER THAT PREPARED IT.



THIS DRAWING SHALL ONLY BE USED TO
OBTAIN PERMITS IN THE STATE OF FLORIDA

SHEET INDEX:

- 1 THRU 15 OF 27: PINNACLE H.U GABLED SKYLIGHT W/ L.M. IMPACT RESISTANT LAMINATED / INSULATED GLASS.
- 16 THRU 27 OF 27: HU-OPY HURRICANE RESISTANT OCTAGONAL SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT LAMINATED / INSULATED GLASS.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 23-0815-24
Expiration Date 02/22/2027
By *Walter A. Tillit Jr.*
Miami Dade Product Control

MIAMI-DADE COUNTY

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC

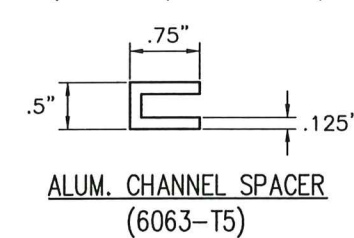
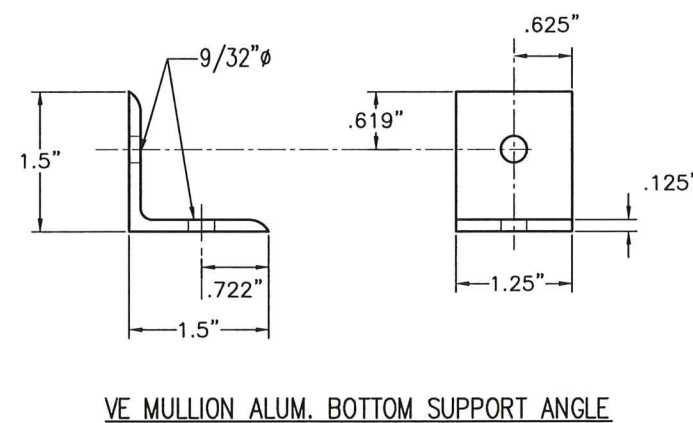
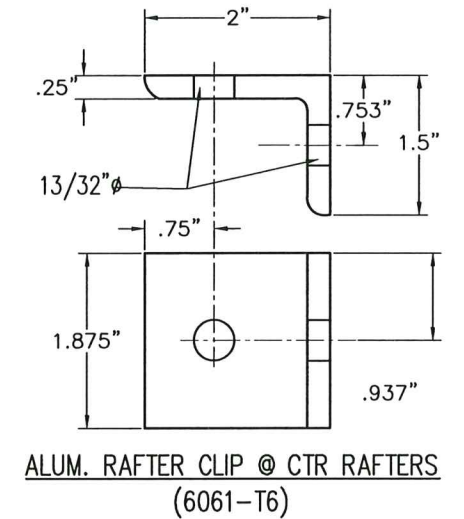
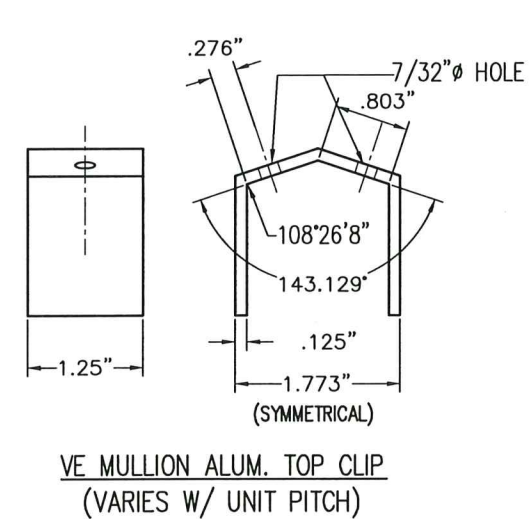
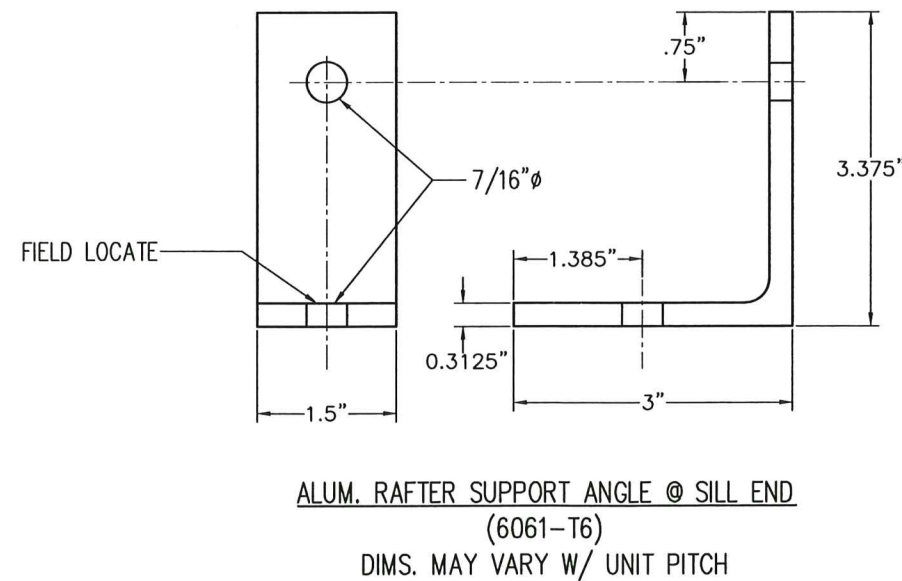
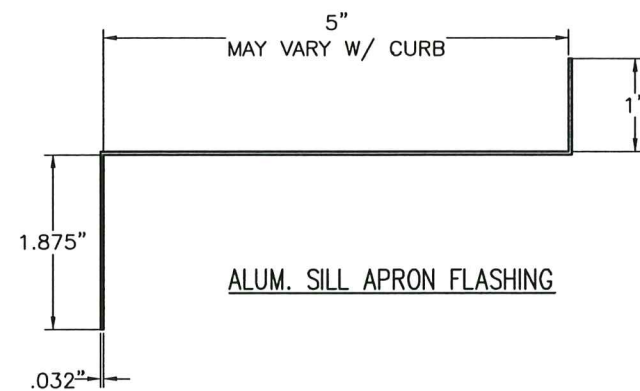
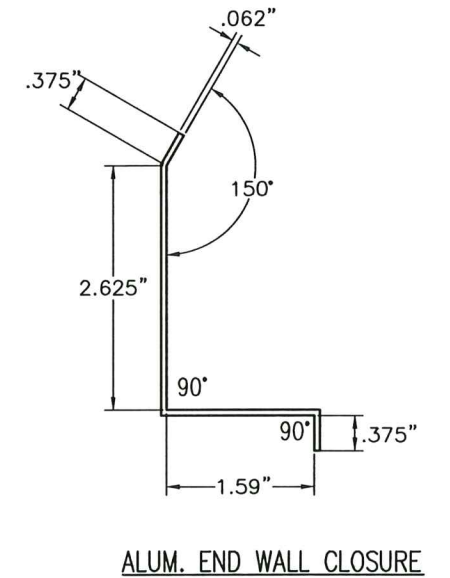
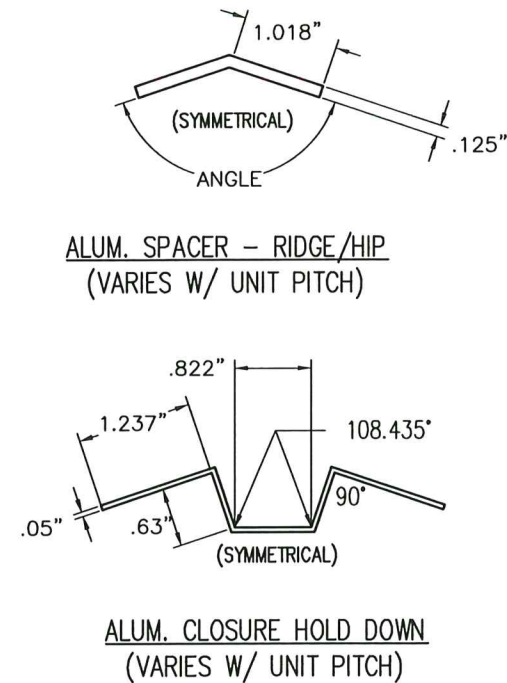
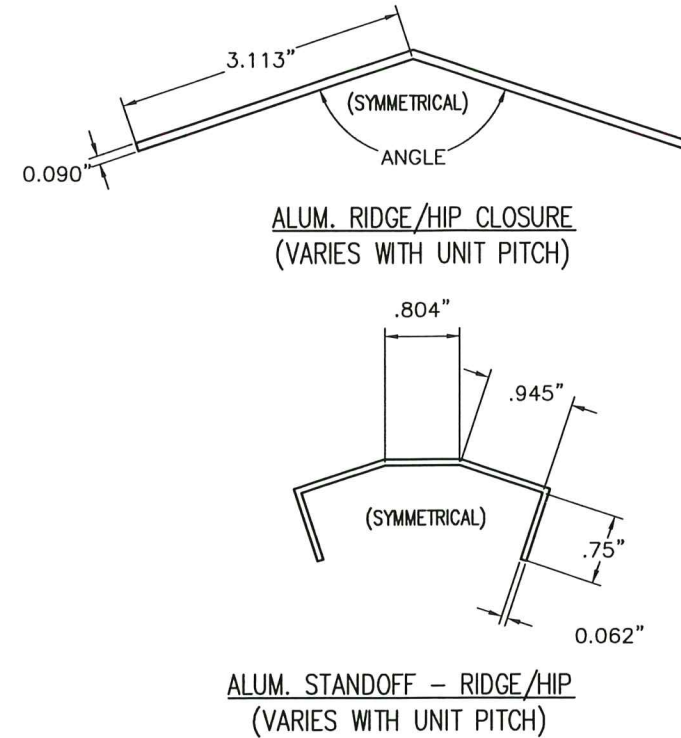
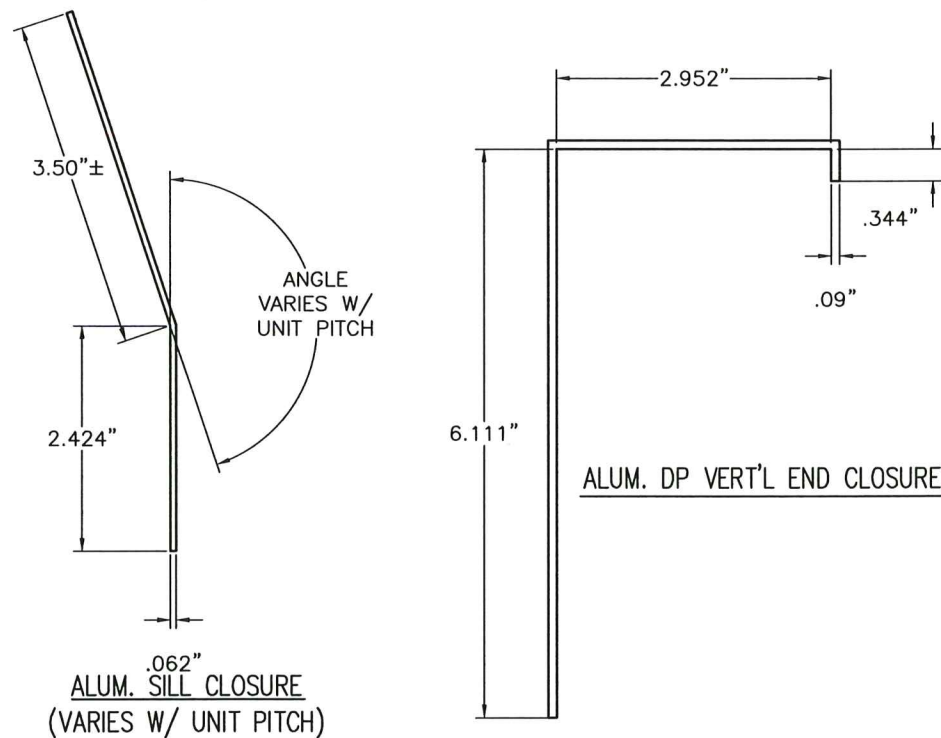
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

SHEET 1 OF 27



COMPONENTS

SCALE: 1/2"=1"

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *H. G. P. Mohr*
Miami Dade Product Control

MIAMI-DADE COUNTY

WALTER A. TILLIT JR.
LICENSE
No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
8/8/2023

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tiltco@aol.com
CA-0006719
WALTER A. TILLIT Jr., P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

VELUX AMERICA, LLC
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

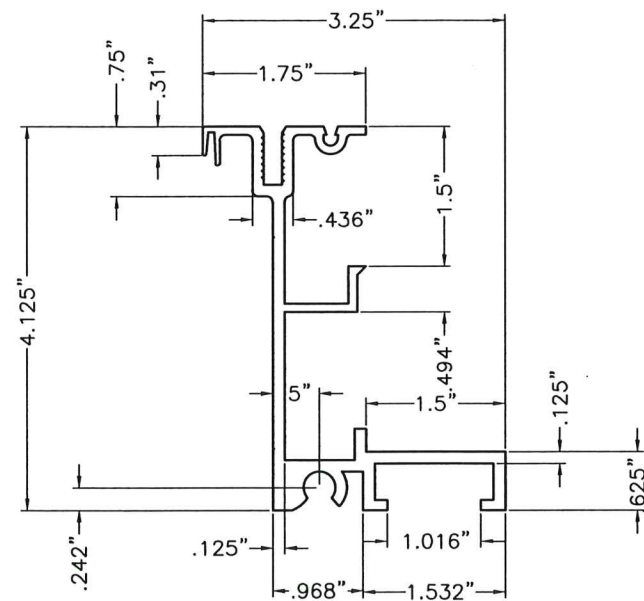
W.H.
DRAWN BY:

08/08/2023
DATE

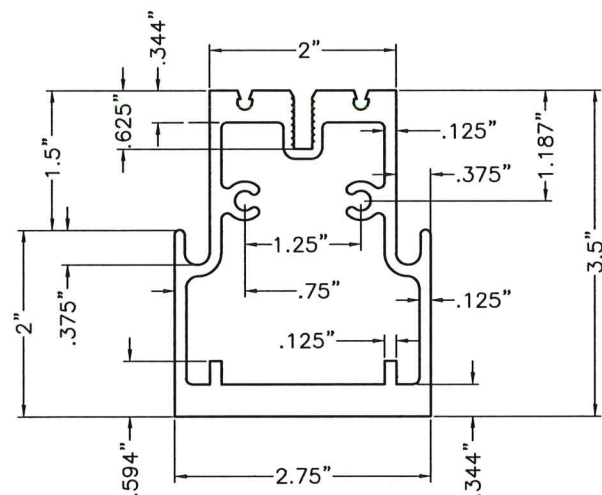
23-153
DRAWING No

SHEET 2 OF 27

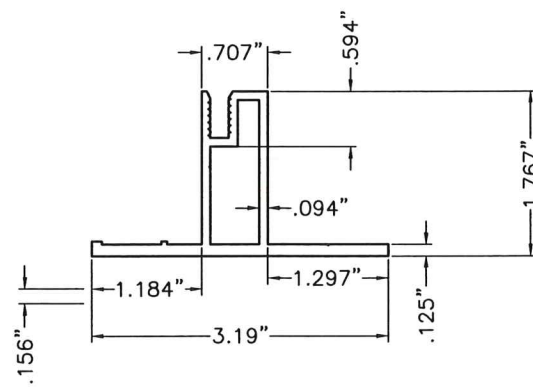
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		



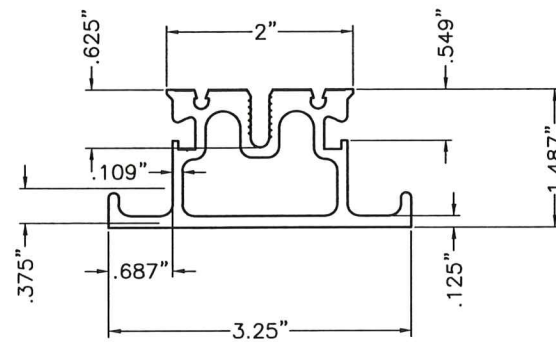
SILL EXTRUSION (35S)



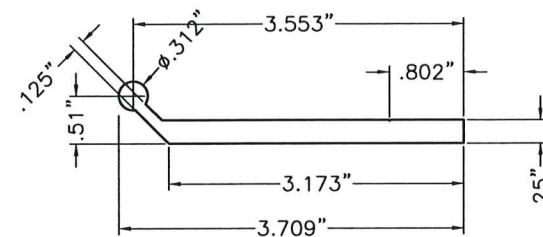
PINNACLE HR (35RF)
RAFTER EXTRUSION



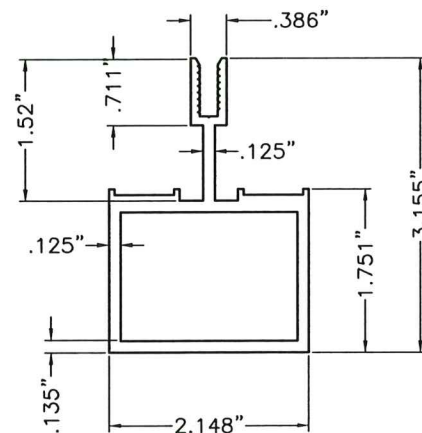
VE RAKE SASH EXTRUSION (H-RS)



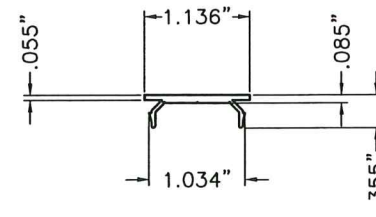
PURLIN EXTRUSION (4P1)



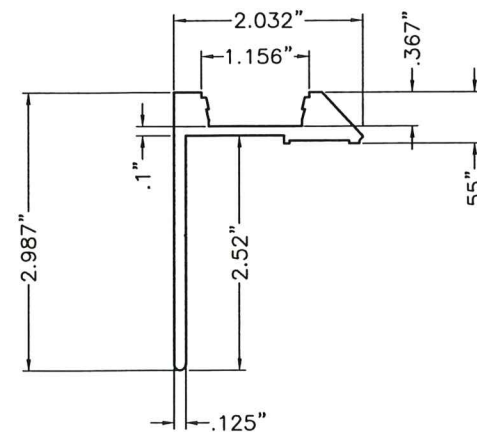
BASE PLATE EXTRUSION (BP-1)



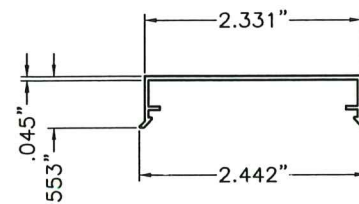
VE MULLION EXTRUSION (H-M)



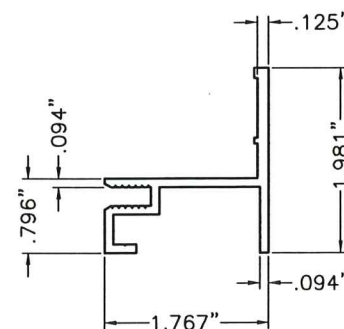
SILL CLOSURE CAP EXTRUSION



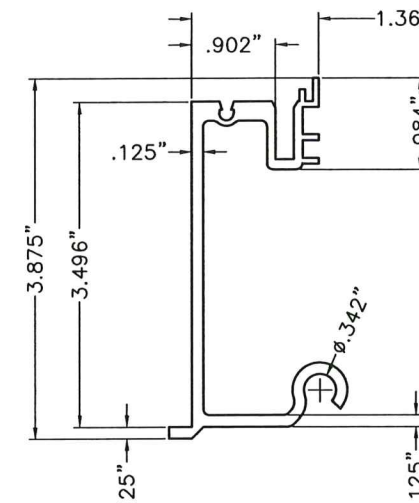
SILL PERIMETER TAPE CAP EXTRUSION (H-PC)



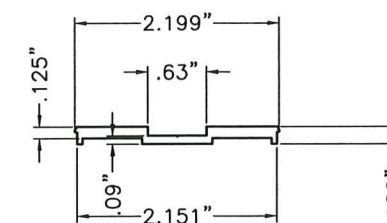
CLOSURE EXTRUSION (H-RCC)



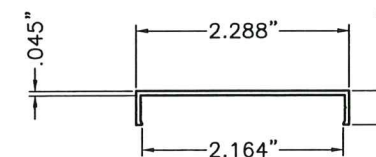
VE SASH EXTRUSION (H-HS)



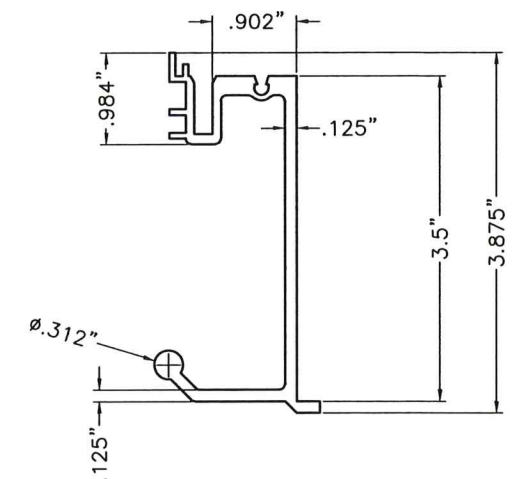
RIDGE/HIP EXTRUSION (35H-1F)



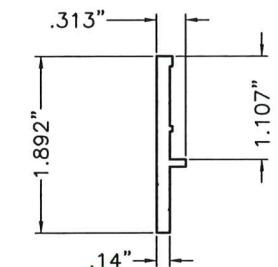
CAP EXTRUSION (H-RC)



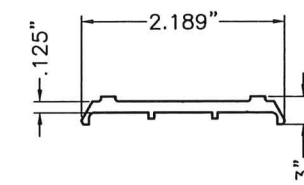
VE MULLION CLOSURE EXTRUSION (H-MCC)



RIDGE/HIP EXTRUSION (35H-1M)



SASH CAP EXTRUSION (H-SC)



VE MULLION CAP EXTRUSION (H-MC)

COMPONENTS (CONTINUED)

SCALE: 1/2"=1"

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *H. G. A. Miller*
Miami Dade Product Control

MIAMI-DADE COUNTY

WALTER A. TILLIT JR.
LICENSED
No. 44167
STATE OF FLORIDA
PROFESSIONAL ENGINEER
8/8/2023

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr., P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC

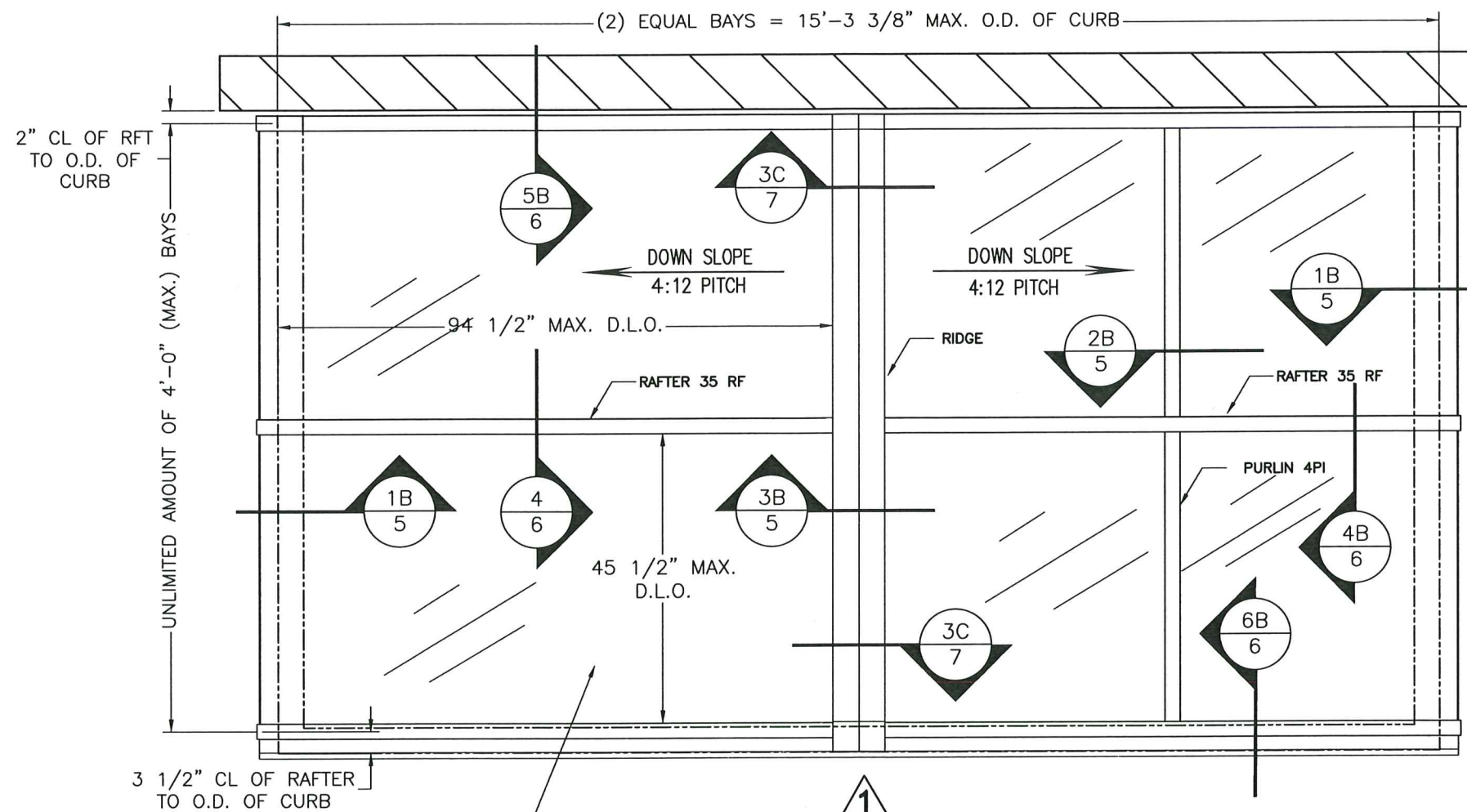
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

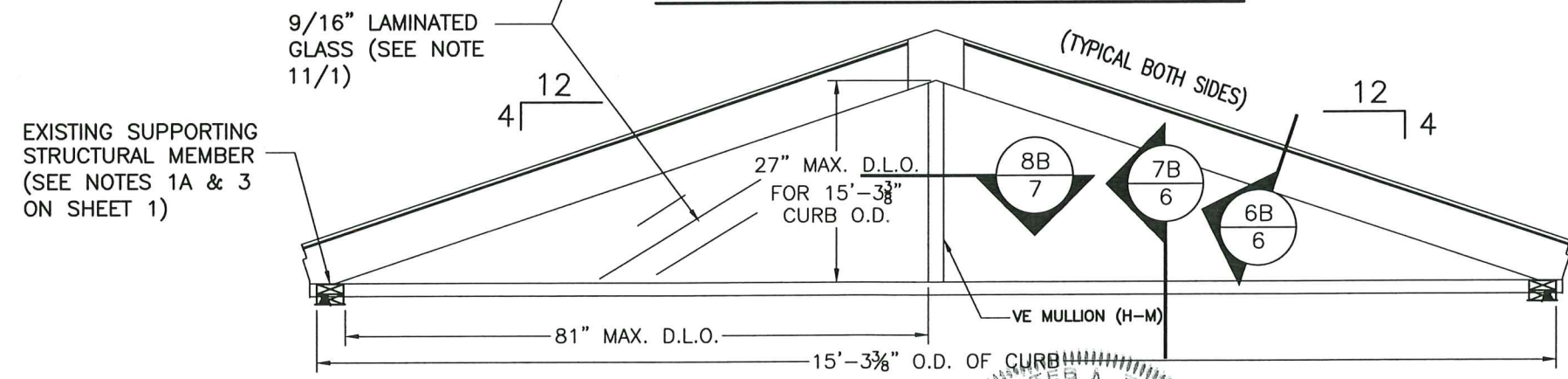
23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

SHEET 3 OF 27



TYPICAL ROOF FRAMING PLAN



ELEVATION 1
SCALE: 1/2"=1'-0"

LAMINATED GLASS CASE
(9/16" L.G.)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *[Signature]*
Miami-Dade Product Control

MIAMI-DADE COUNTY

No. 44167
STATE OF
FLORIDA
Professional Engineer
[Signature]
8/8/2023

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC.
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

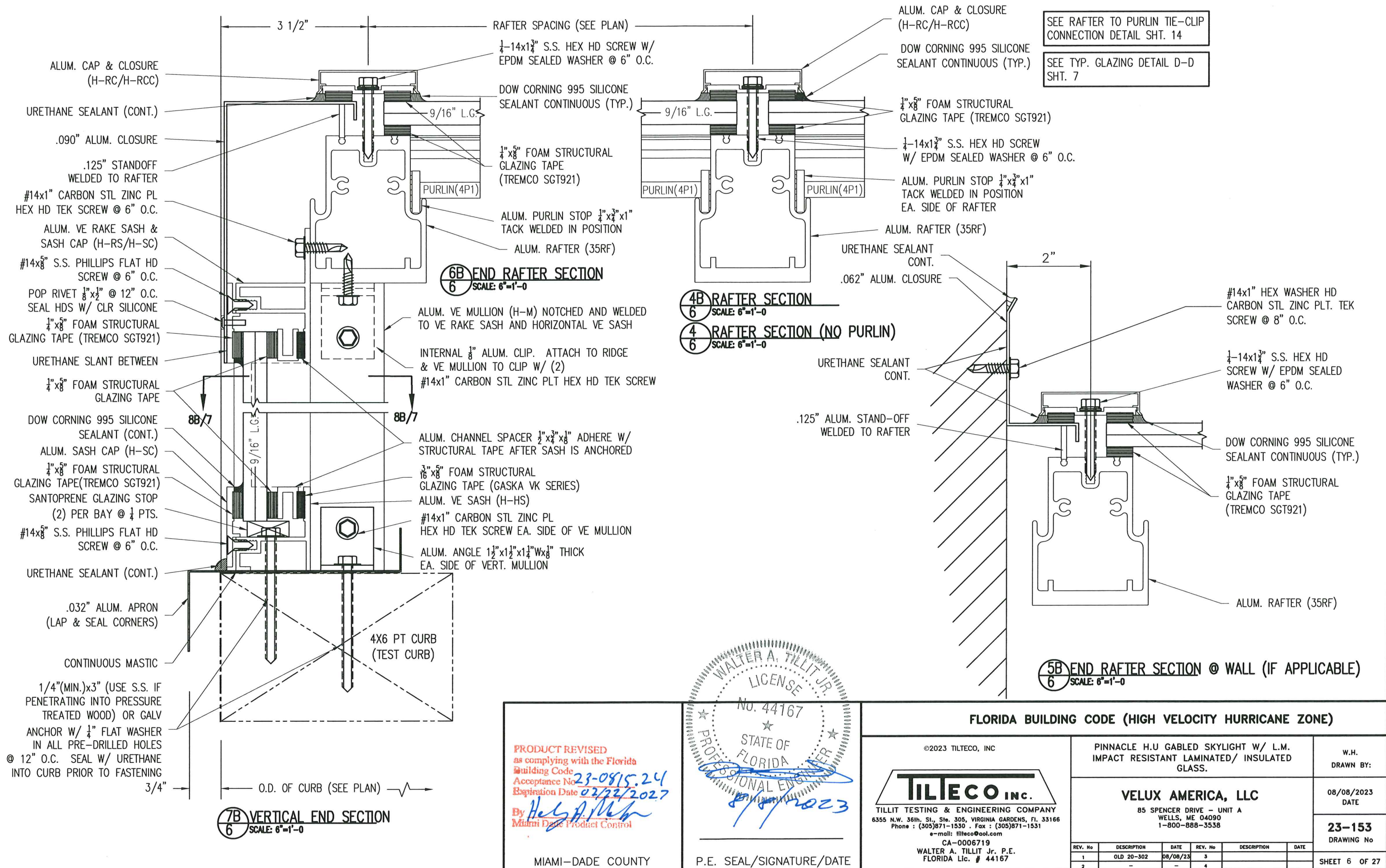
VELUX AMERICA, LLC
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

W.H.
DRAWN BY:

08/08/2023
DATE

23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		



PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 23-0815.24 Expiration Date 02/22/2027 By *Walter A. Tillit Jr.* Miami Date Product Control

MIAMI-DADE COUNTY

WALTER A. TILLIT JR.
LICENSE No. 44167
STATE OF FLORIDA
PROFESSIONAL ENGINEER
8/17/2023

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tiltco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M. IMPACT RESISTANT LAMINATED/ INSULATED GLASS.

VELUX AMERICA, LLC

85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

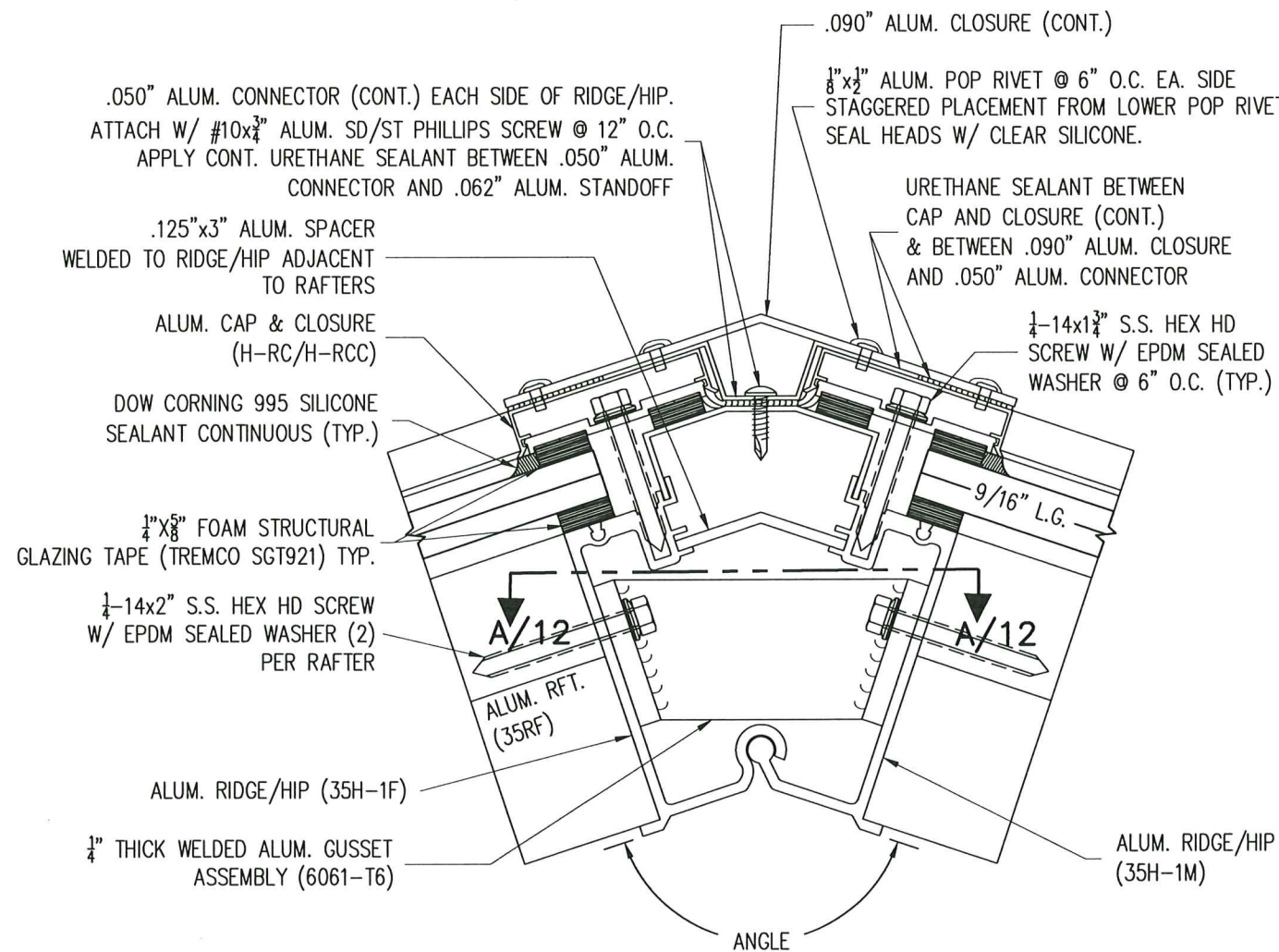
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

W.H. DRAWN BY:

08/08/2023 DATE

23-153
DRAWING No

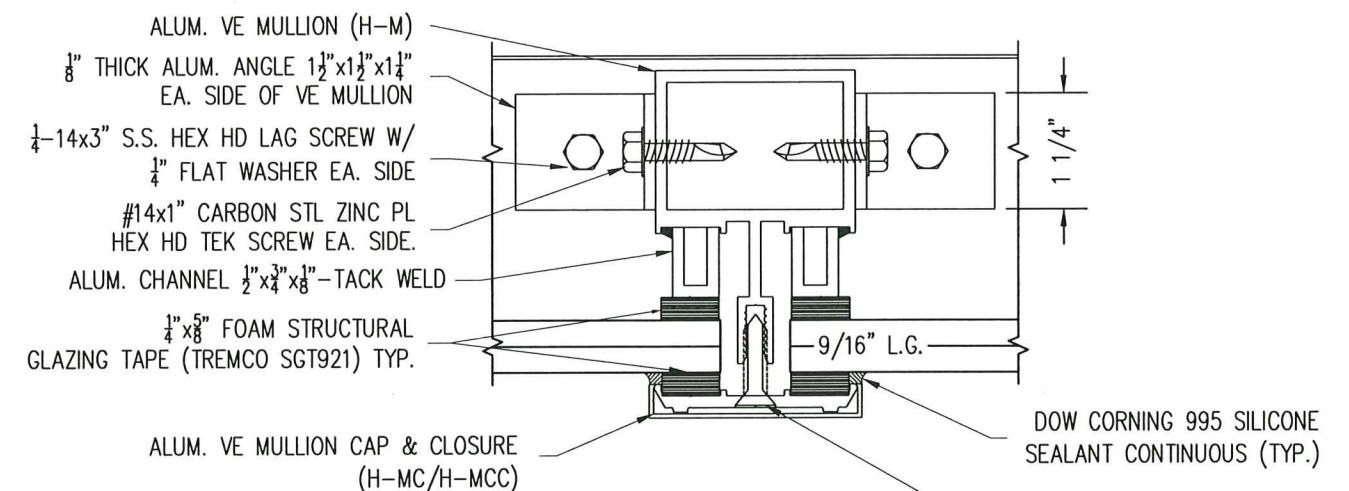
SHEET 6 OF 27



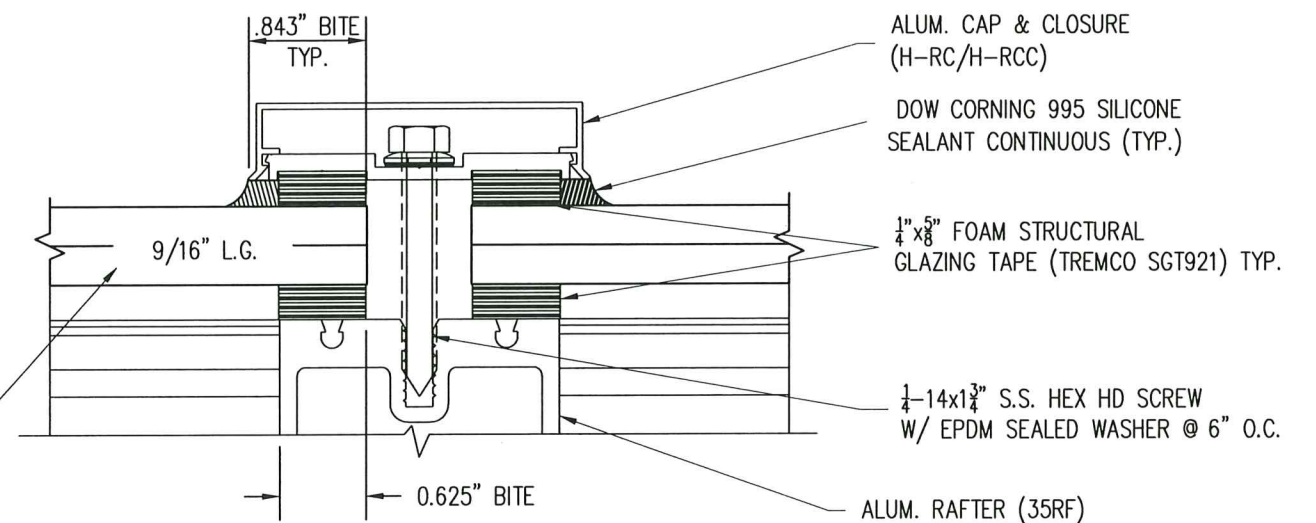
3C RIDGE SECTION @ END RAFTERS - (ANGLE - 143°7'45")
SCALE: 6"=1'-0"

ANGLE AT HIP VARIES (NOT INCLUDED)

SEE NOTE 11/1.



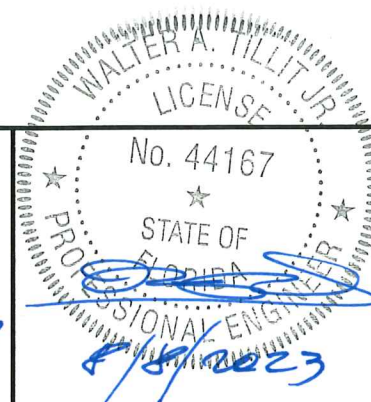
8B MULLION SECTION
SCALE: 6"=1'-0"



SECTION D-D
GLAZING DETAIL
SCALE: NTS

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *Heidi D. Mikh*
Miami Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC

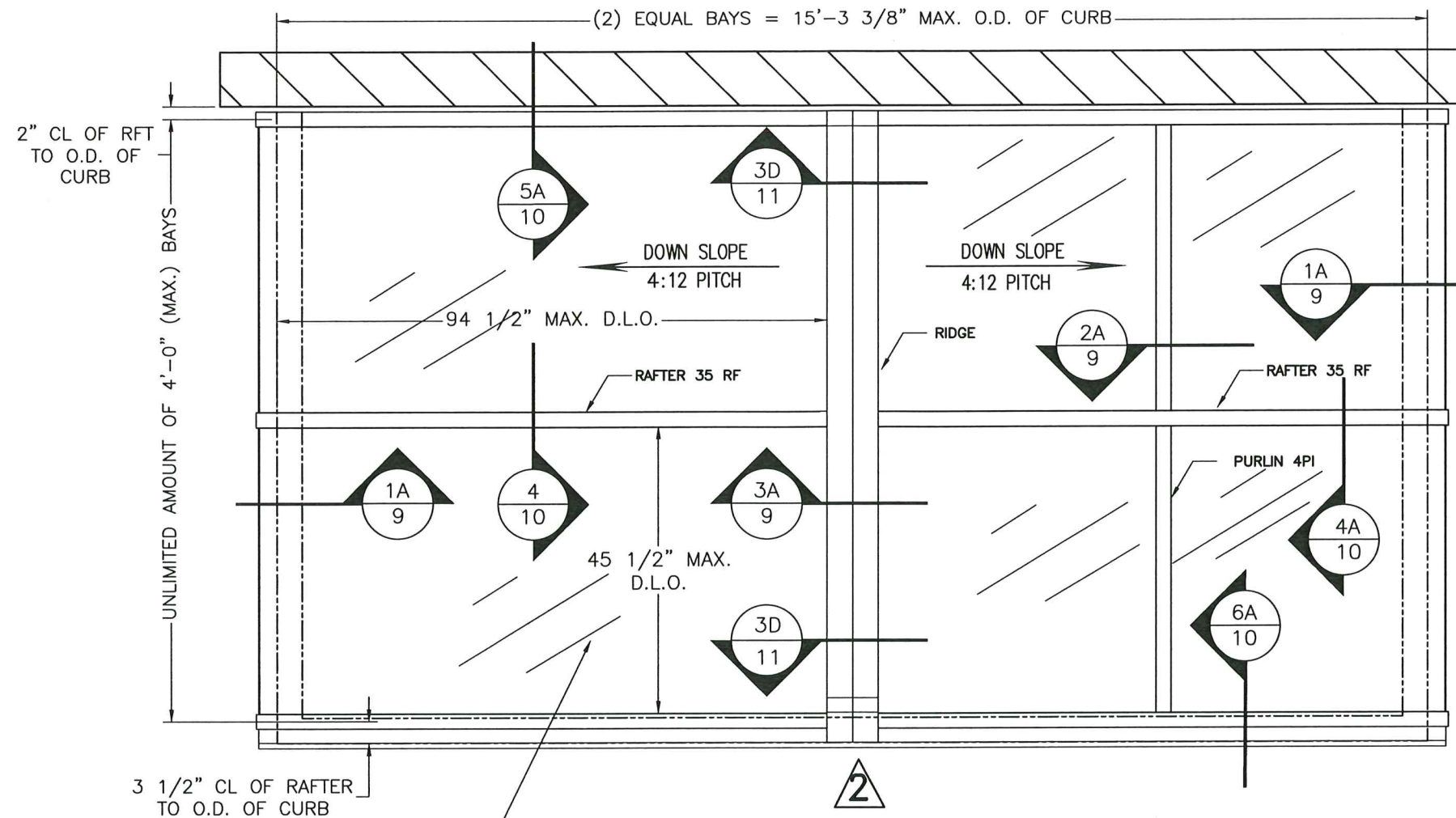
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

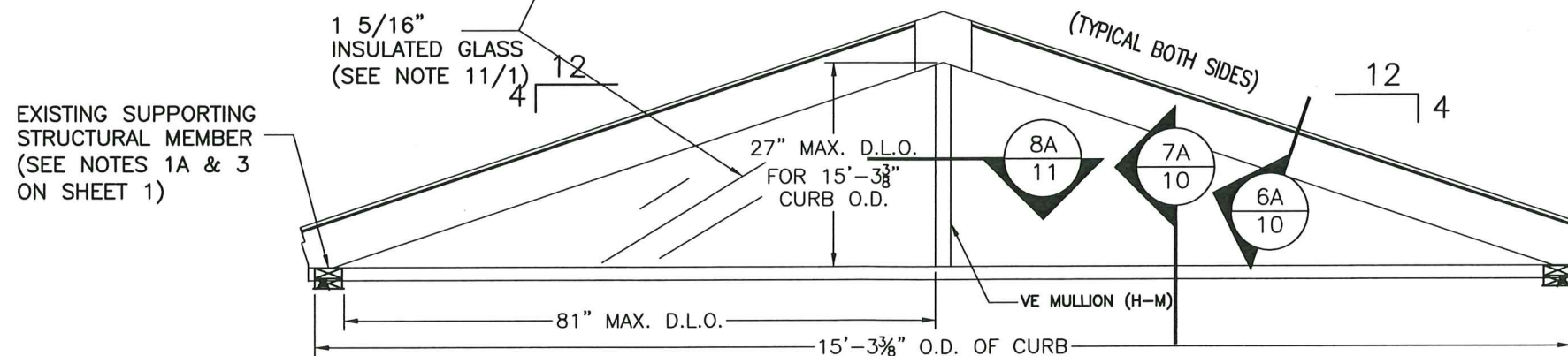
23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

SHEET 7 OF 27



TYPICAL ROOF FRAMING PLAN



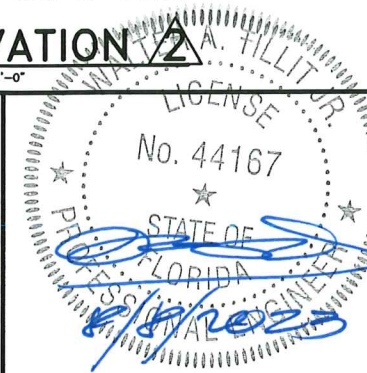
ELEVATION 2

SCALE: 1/2"=1'-0"

INSULATED GLASS CASE
(1 5/16" I.G.)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *Walter A. Tillit Jr.*
Miami-Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO inc.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

W.H.
DRAWN BY:

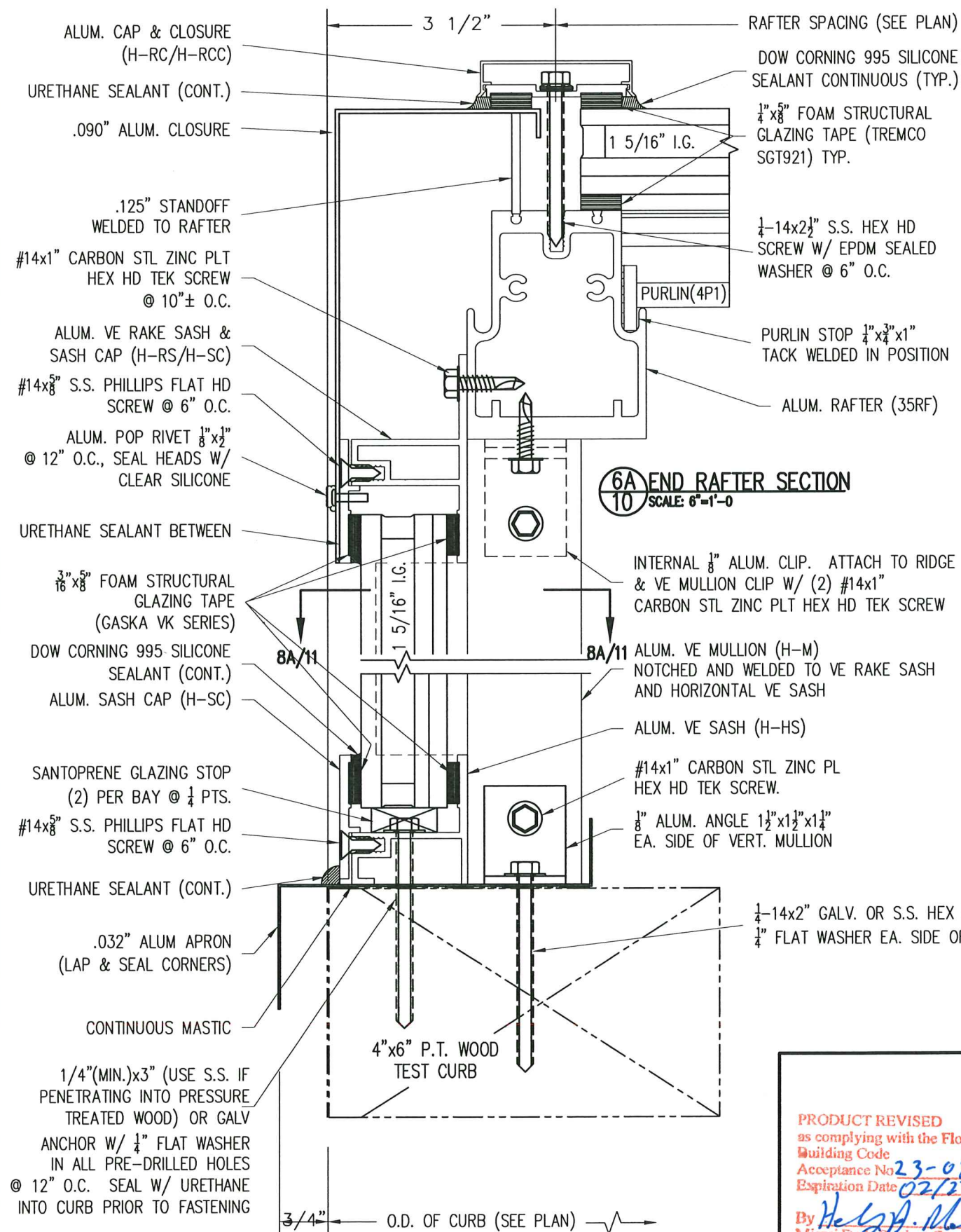
VELUX AMERICA, LLC
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

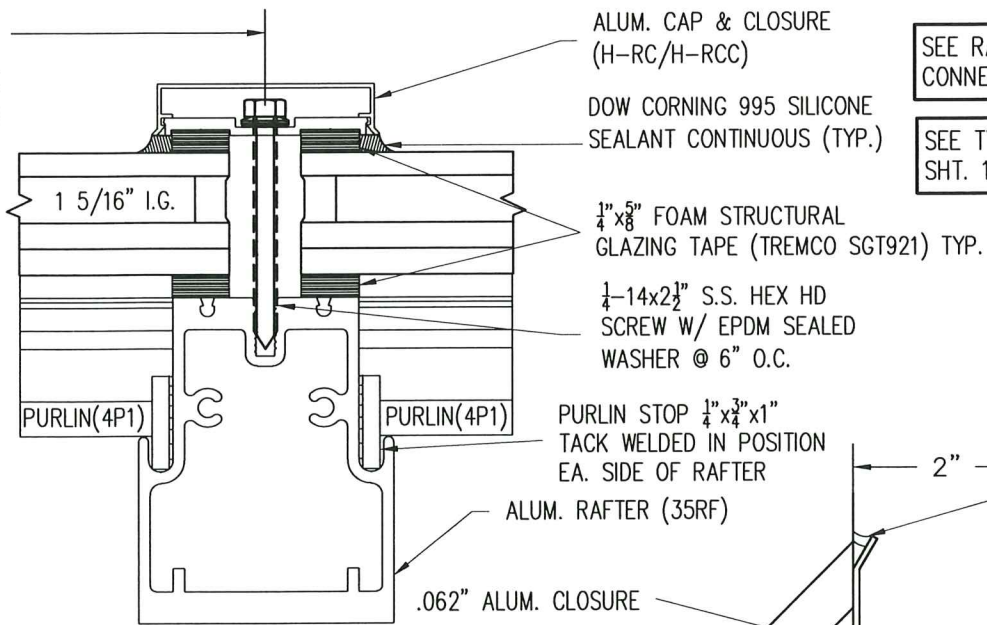
23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

SHEET 8 OF 27



6A END RAFTER SECTION
SCALE: 6"=1'-0"

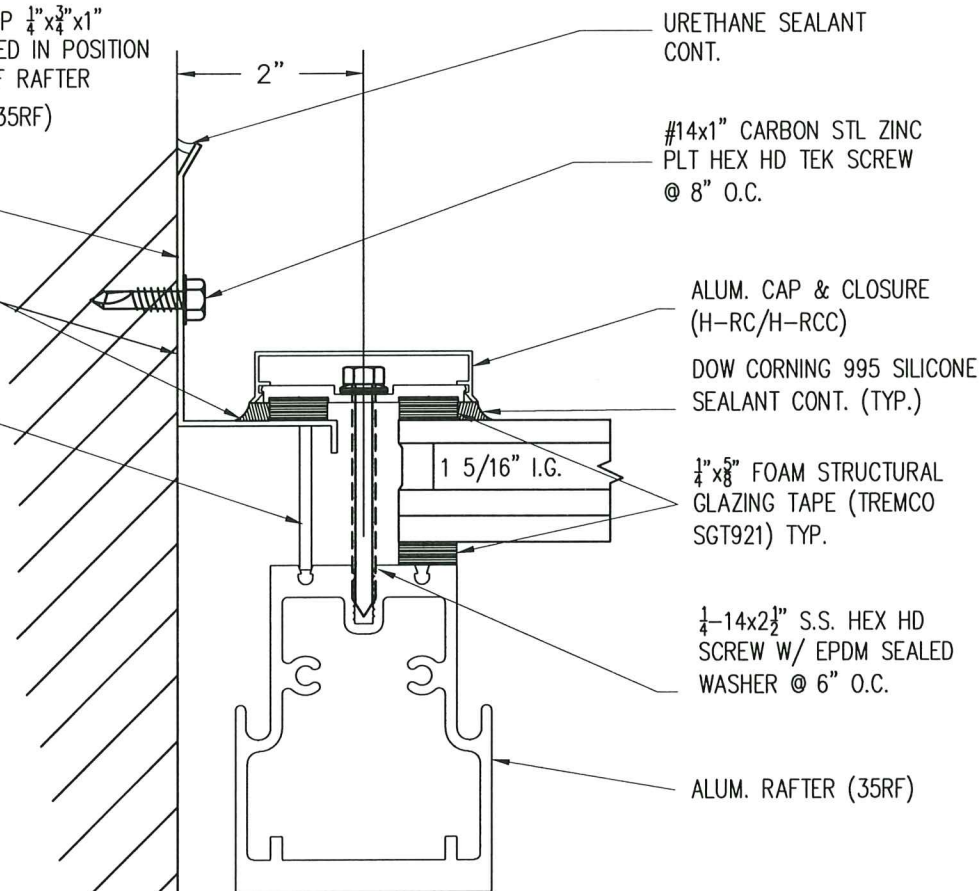


4A RAFTER SECTION
SCALE: 6"=1'-0"

4 RAFTER SECTION (NO PURLIN)
SCALE: 6"=1'-0"

URETHANE SEALANT CONT.

.125" ALUM STAND-OFF WELDED TO RAFTER



5A END RAFTER SECTION @ WALL
SCALE: 6"=1'-0"

7A VERTICAL END SECTION
SCALE: 6"=1'-0"

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *Heidi A. Miller*
Miami Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

VELUX AMERICA, LLC
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

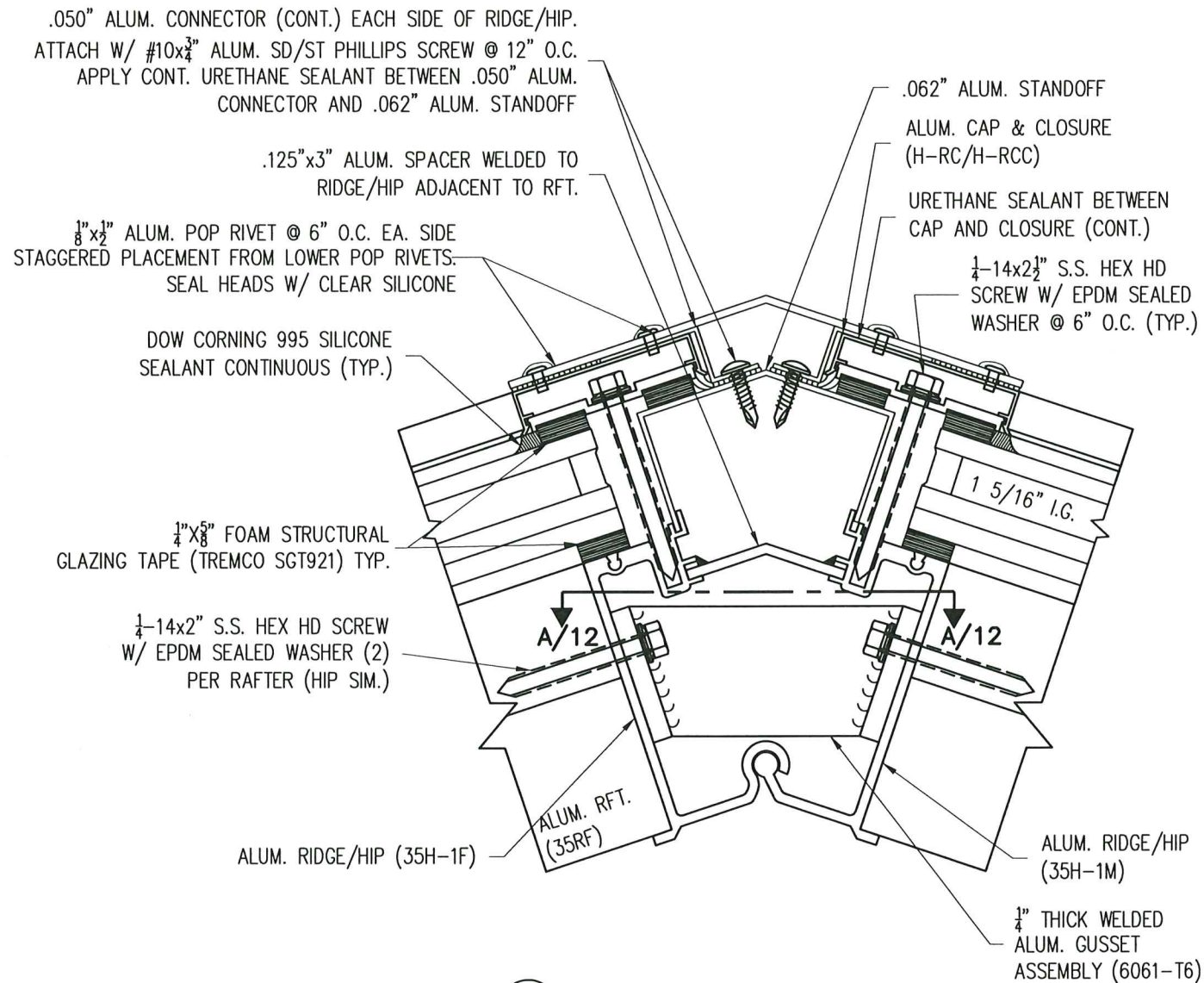
W.H.
DRAWN BY:

08/08/2023
DATE

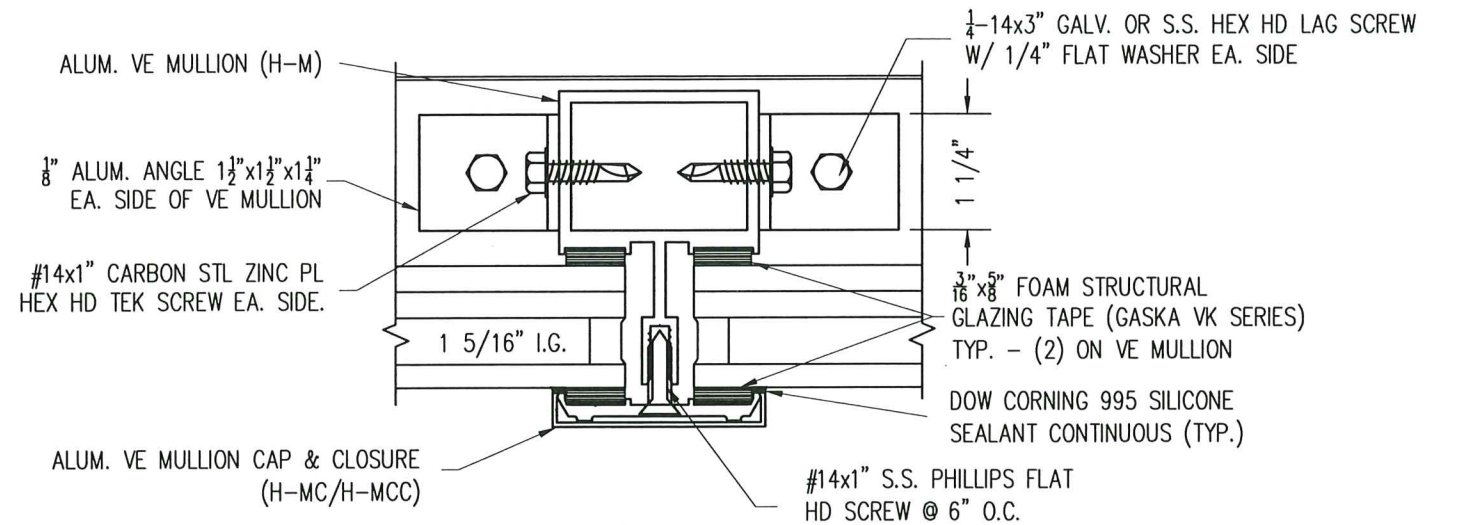
23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

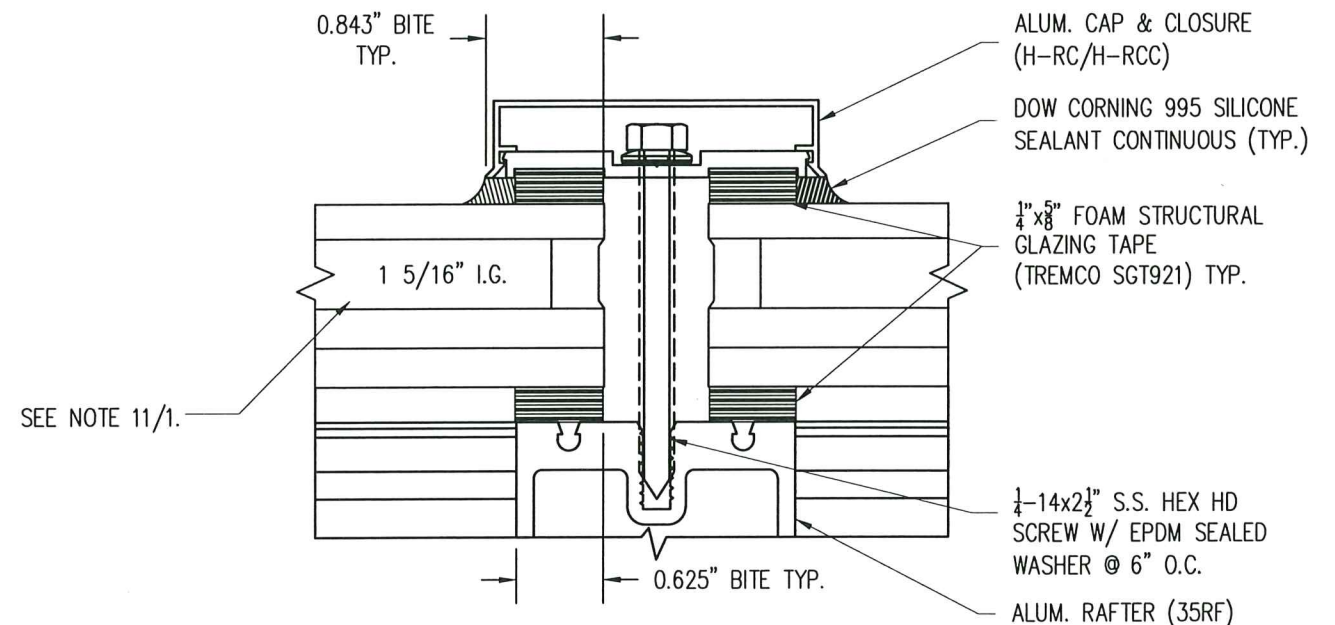
SHEET 10 OF 27



3D RIDGE SECTION @ END RAFTERS
SCALE: 6"-1'-0"



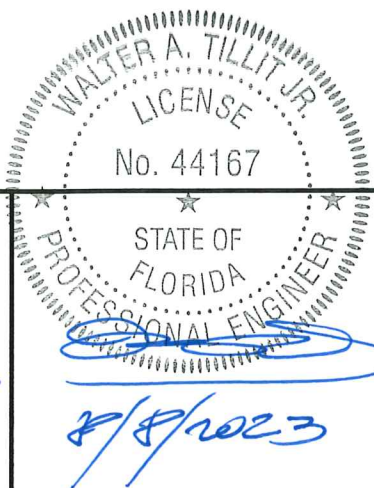
8A MULLION SECTION
SCALE: 6"-1'-0"



**SECTION D-D
GLAZING DETAIL**
SCALE: NTS

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *H. G. A. Miller*
Miami Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

VELUX AMERICA, LLC

85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

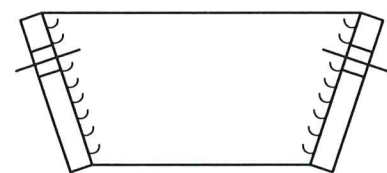
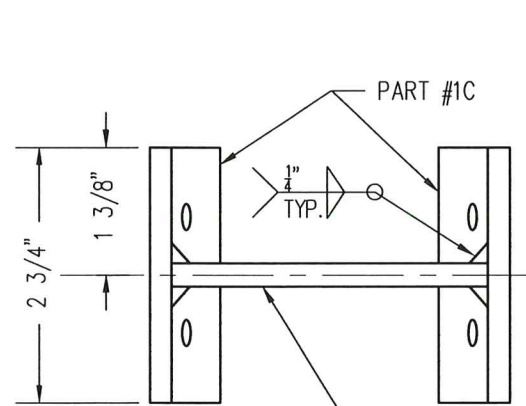
W.H.
DRAWN BY:

08/08/2023
DATE

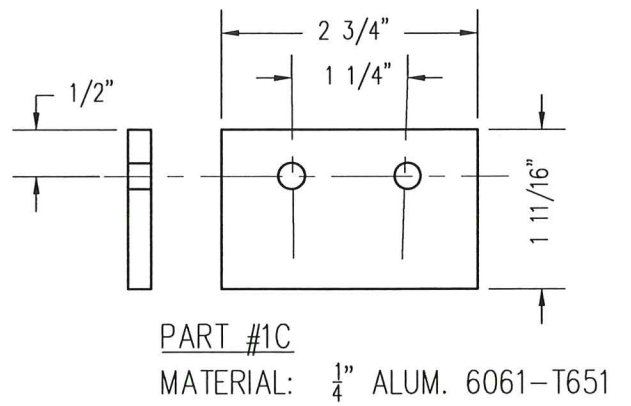
23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

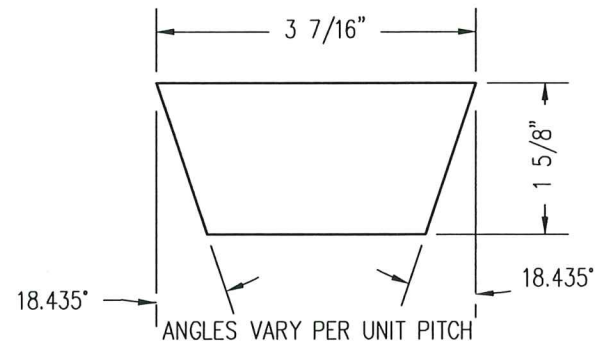
SHEET 11 OF 27



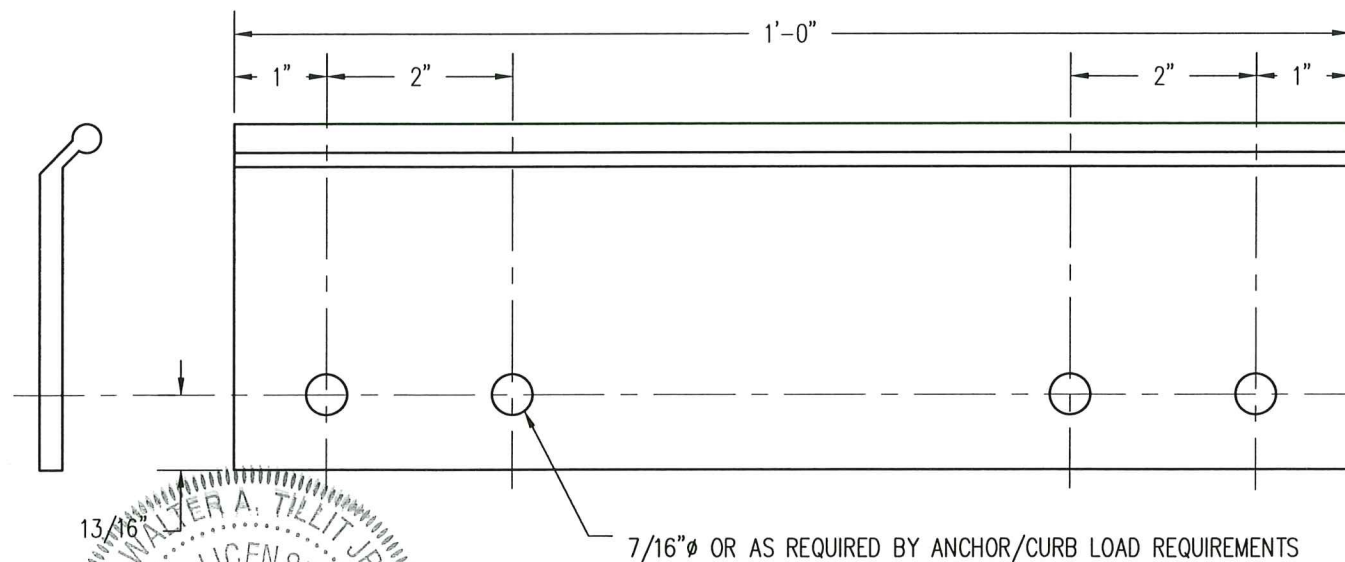
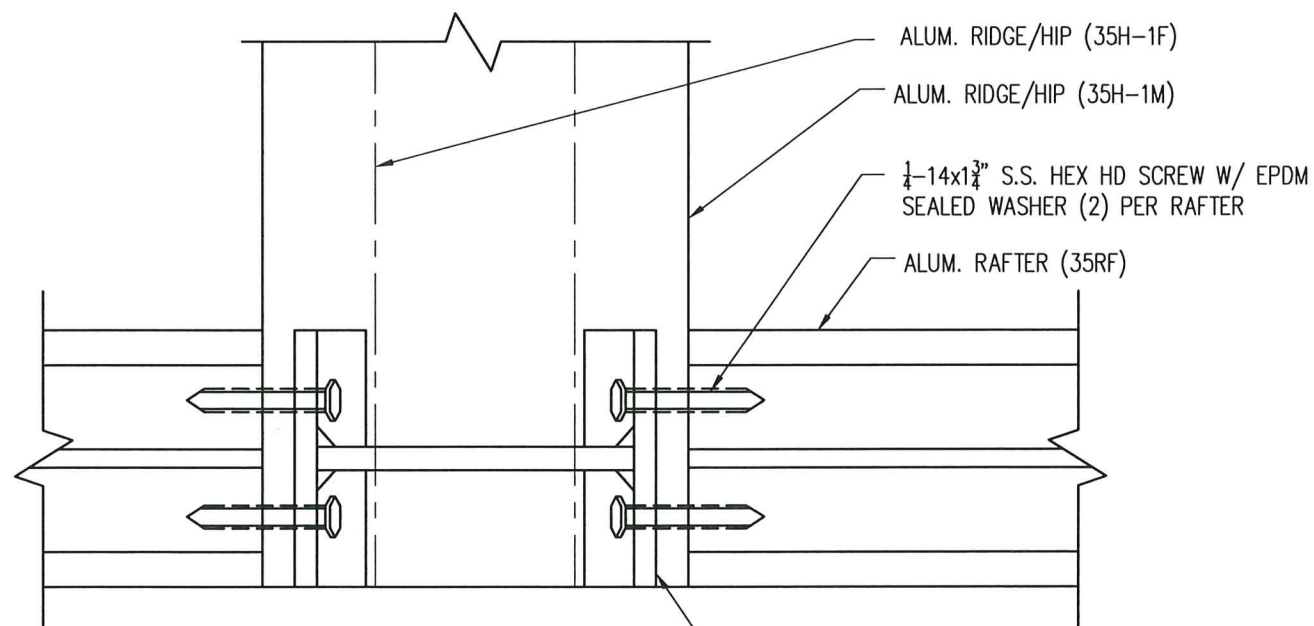
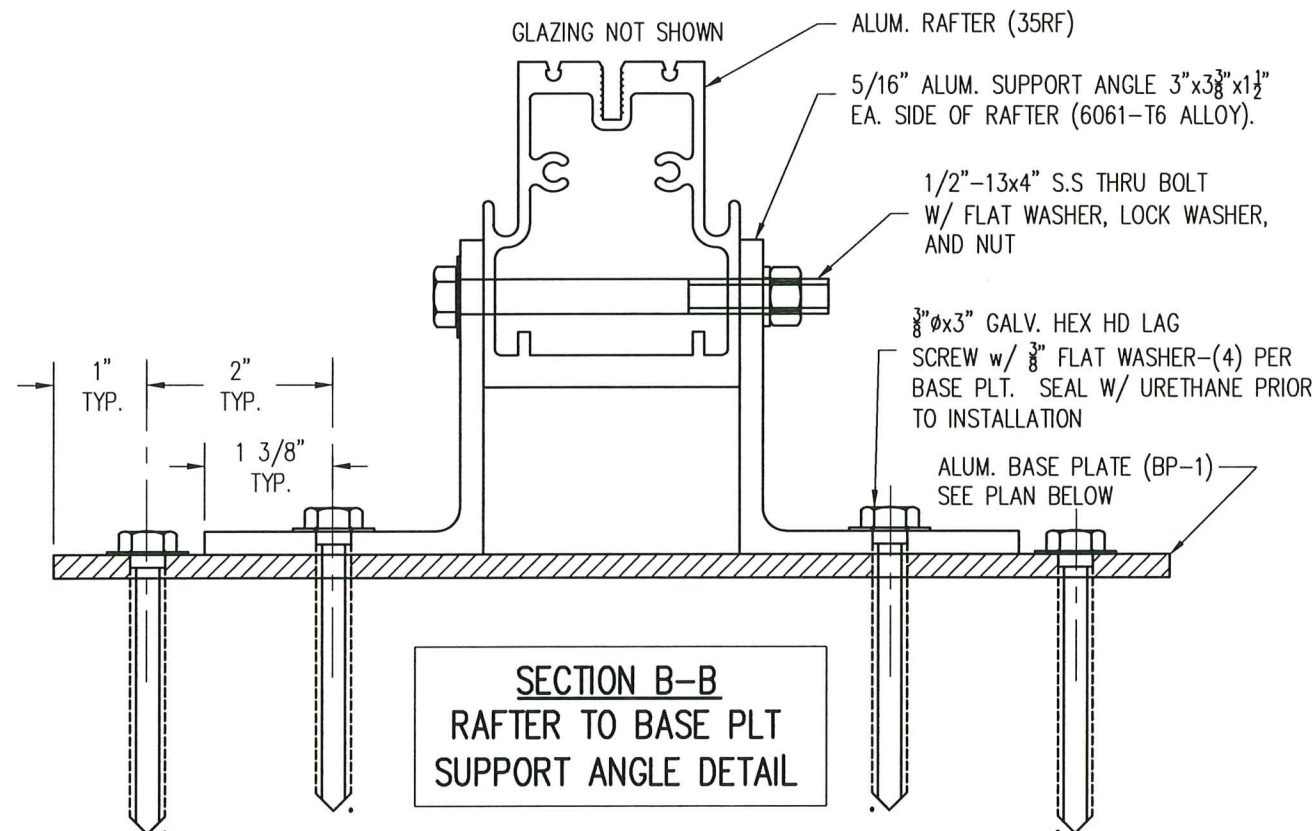
1/4" THICK WELDED ALUM. GUSSET ASSEMBLY
VARIES PER UNIT PITCH



MATERIAL: 1/4" ALUM. 6061-T651

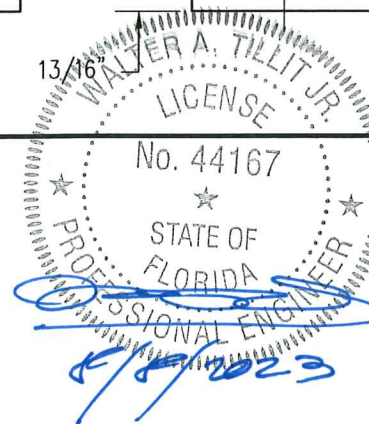


MATERIAL: 1/4" ALUM. 6061-T651



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *Walter A. Tillit Jr.*
Miami Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tiltco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

VELUX AMERICA, LLC
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

W.H.
DRAWN BY:

08/08/2023
DATE

23-153
DRAWING No

SHEET 12 OF 27

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

1" ALUM. ANGLE CLIP
2"x1 1/2"x1 7/8" EA. SIDE
OF RAFTER

ALUM. RAFTER (35RF)

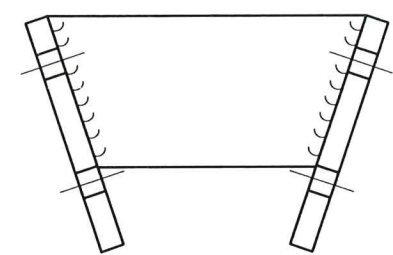
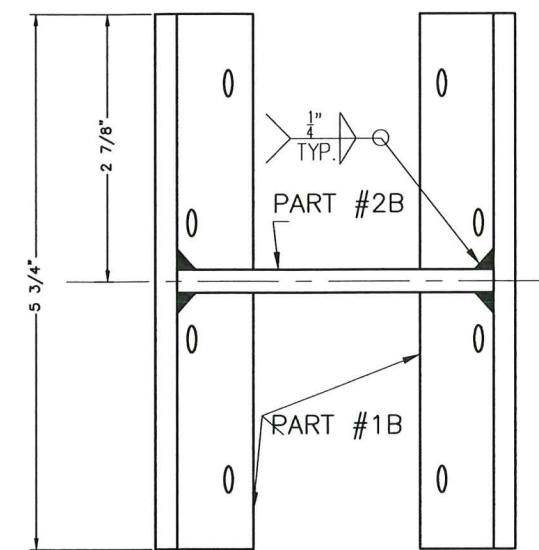
1" THICK WELDED ALUM.
GUSSET ASSEMBLY
(6061-T6) - SEE
DETAIL RIGHT SIDE

1/4"-14x1 3/4" S.S. HEX HD
SCREW W/ EPDM SEALED
WASHER (2 PER RAFTER)

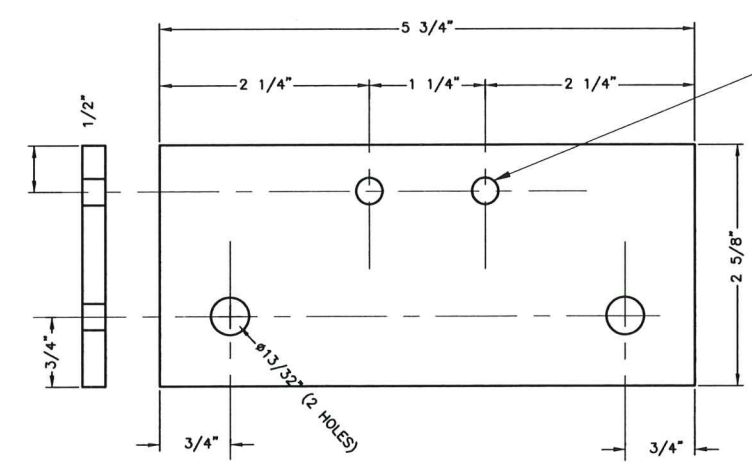
3/8"-16x4" HEX HD CAP
SCREW w/ FLAT WASHER,
LOCK WASHER AND NUT

3/8"-16x1 1/4" S.S. HEX HD CAP
SCREW w/ FLAT WASHER,
LOCK WASHER AND NUT

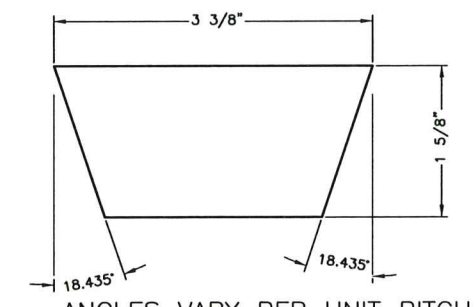
SECTION C-C
CENTER RAFTER CONNECTION
DETAIL



1/4" THICK WELDED ALUM. GUSSET ASSEMBLY



PART #1B
MATERIAL:
1/4" ALUM. 6061-T651



PART #2B
MATERIAL:
1/4" ALUM. 6061-T651

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815-24
Expiration Date 02/23/2027
By *Walter A. Tillit Jr.*
Miami Dade Product Control

MIAMI-DADE COUNTY

WALTER A. TILLIT JR.
LICENSE
No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
W. A. Tillit Jr.
8/8/2023

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

VELUX AMERICA, LLC
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

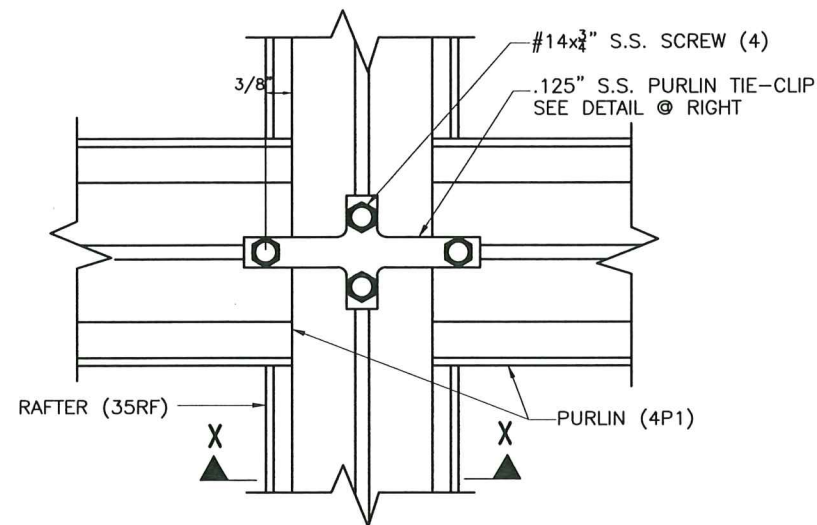
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

W.H.
DRAWN BY:

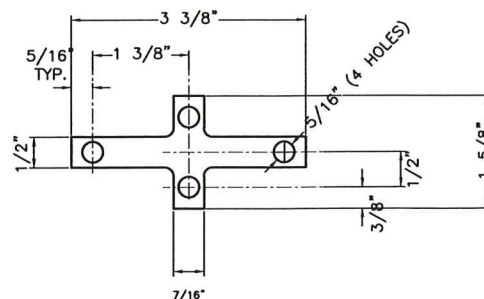
08/08/2023
DATE

23-153
DRAWING No

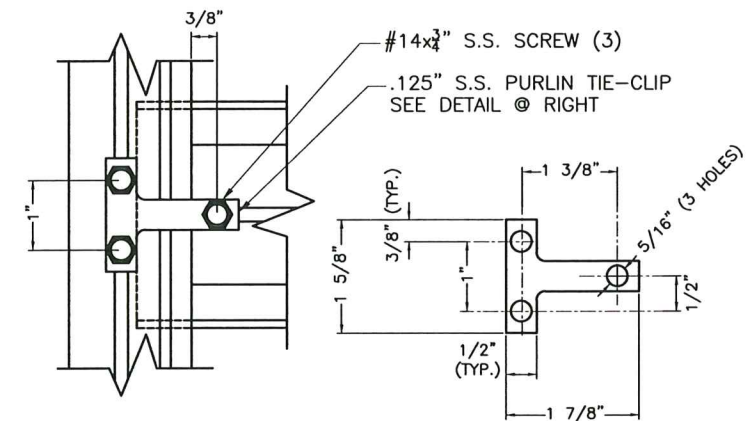
SHEET 13 OF 27



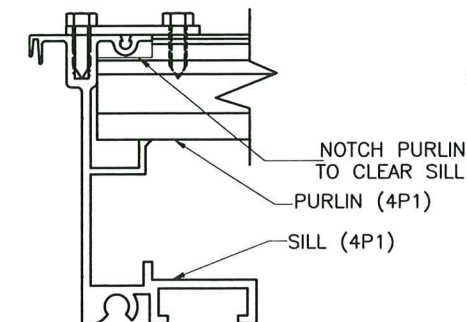
RAFTER TO PURLIN CONNECTION (PLAN)



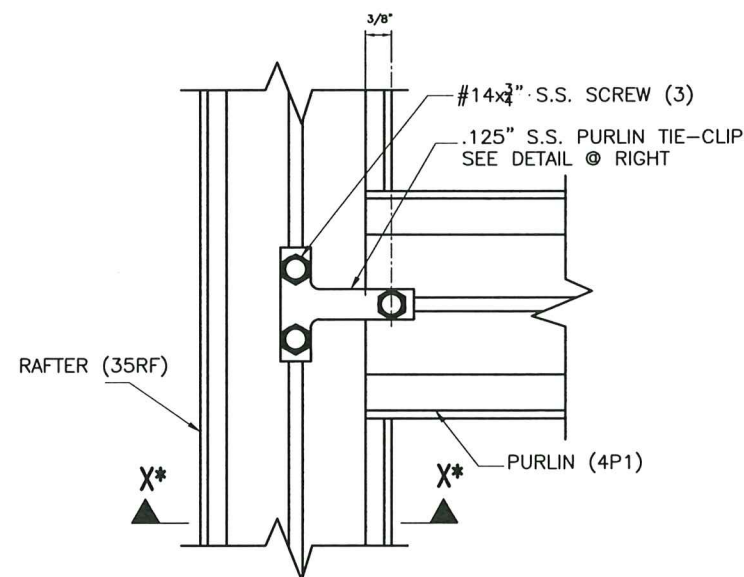
PURLIN TIE-CLIP (RAFTER TO PURLIN), 1/8\"/>



**PURLIN TIE-CLIP
(SILL & END RAFTER TO PURLIN)
(AISI 304 STAINLESS STEEL)**

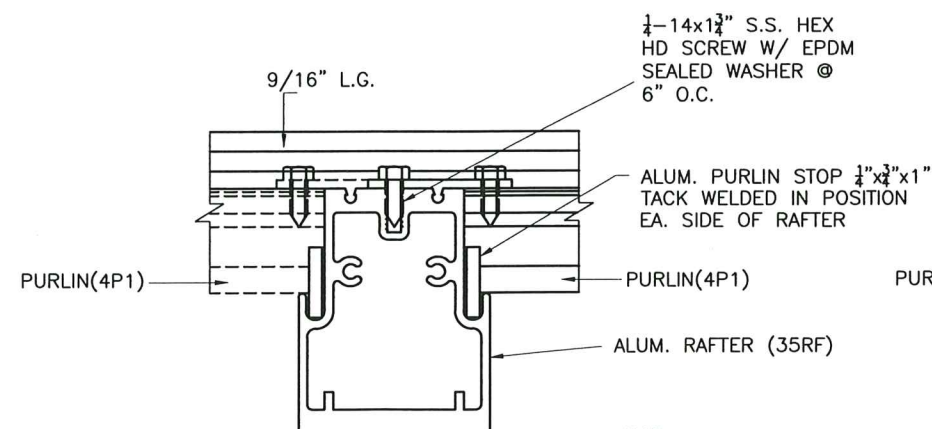


**PURLIN TIE-CLIP (SILL TO PURLIN - TYP. SINGLE PITCH UNITS)
(AISI 304 STAINLESS STEEL)**

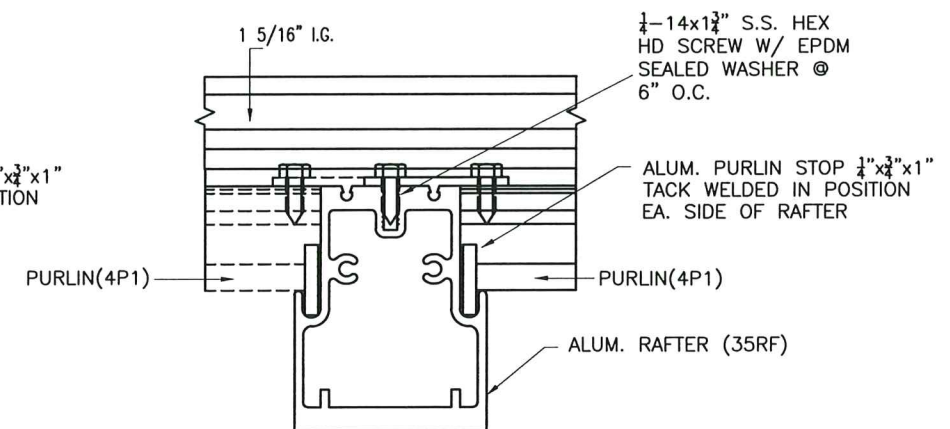


* SIMILAR ONE DIRECTION ONLY.

END RAFTER TO PURLIN CONNECTION (PLAN)

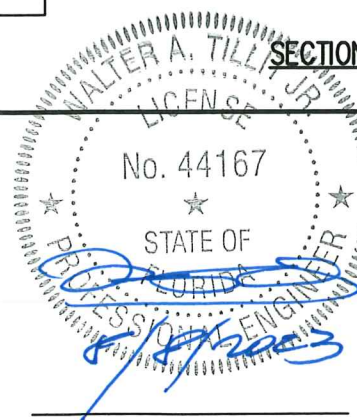


SECTION X-X (L.G. & I.G.)



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *H. G. P. Miller*
Miami Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO inc.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC

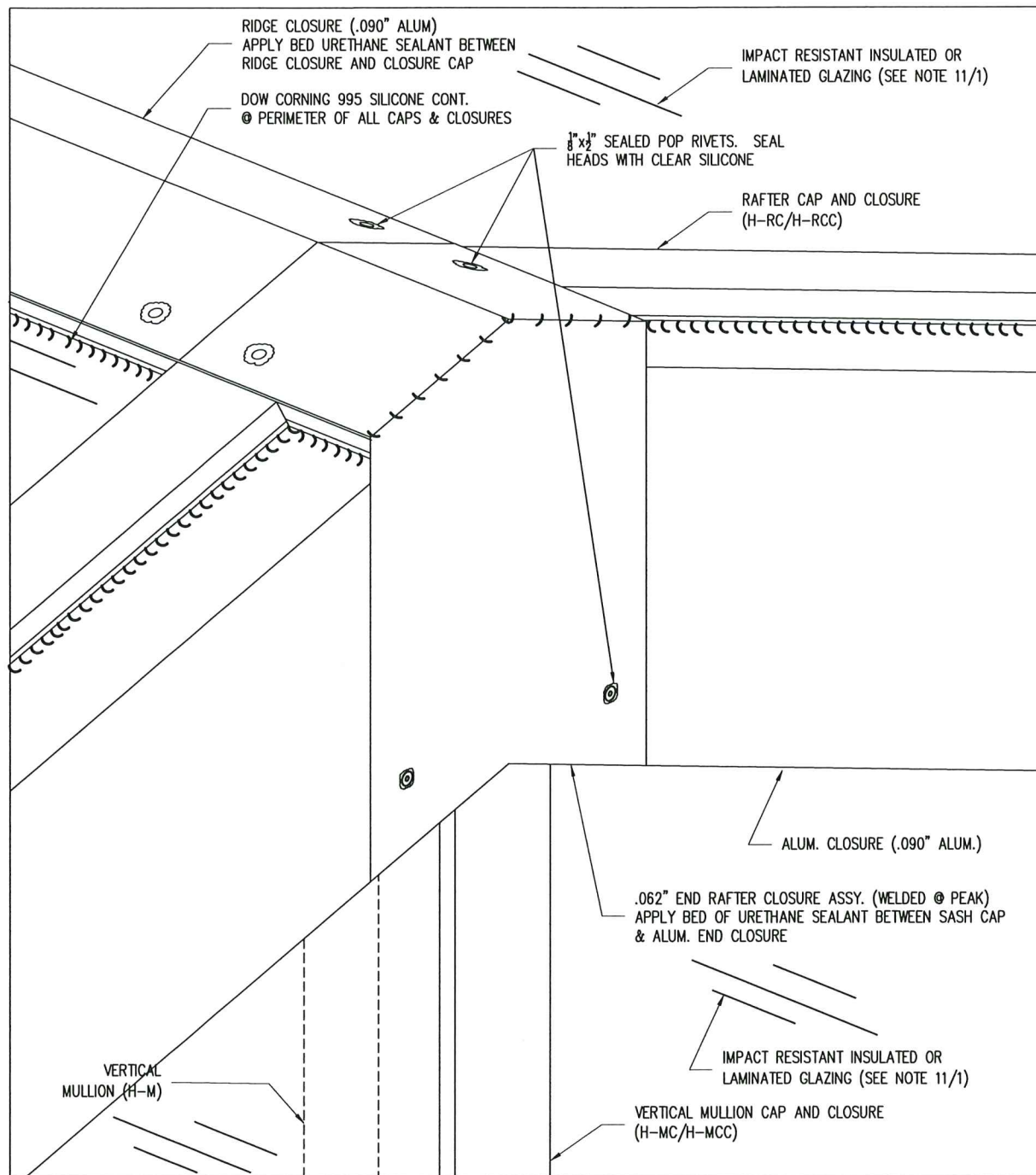
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

23-153
DRAWING No

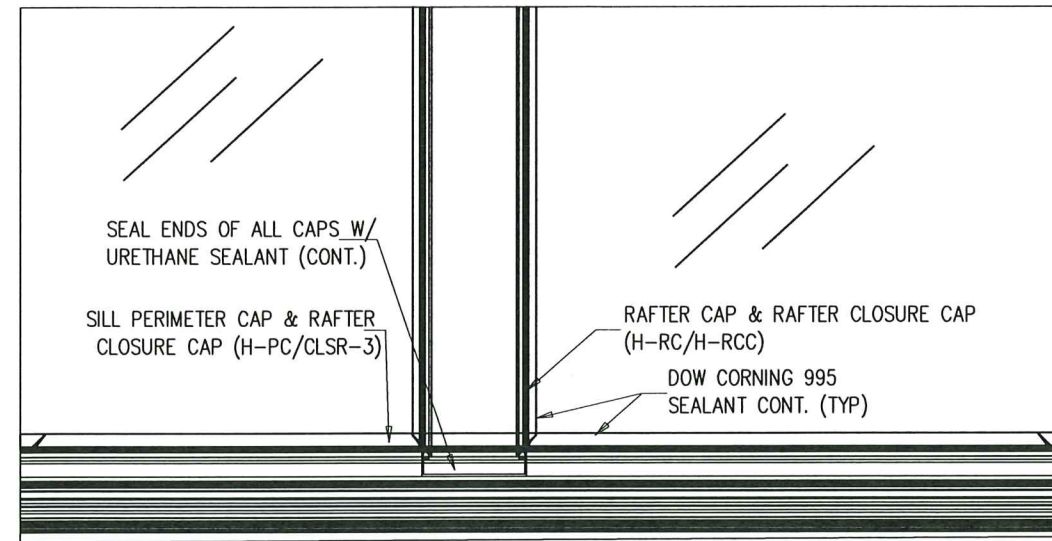
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

SHEET 14 OF 27



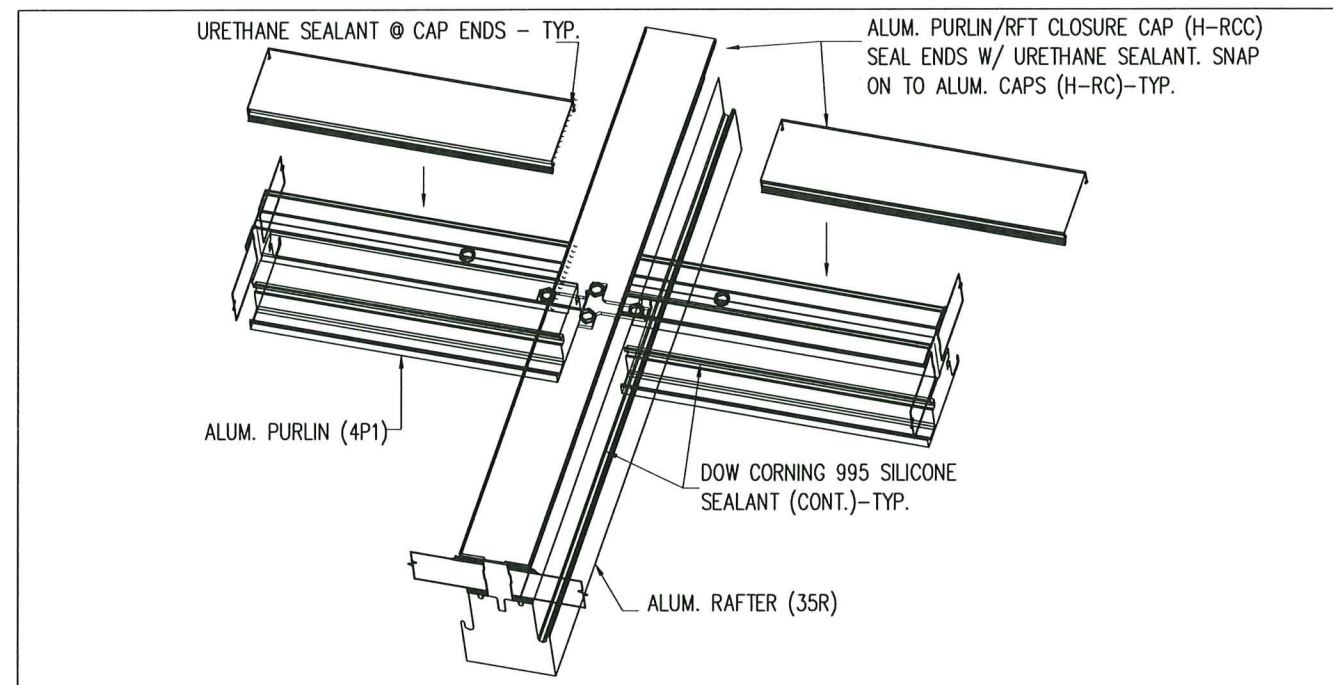
END RAFTER CLOSURE DETAIL

SCALE: 6" = 1'-0"



TYP. SEALANT DETAIL AT SILL/RAFTER

SIMILAR AT RAFTER TO RIDGE CAP/CLOSURE CONNECTIONS
SCALE: NTS

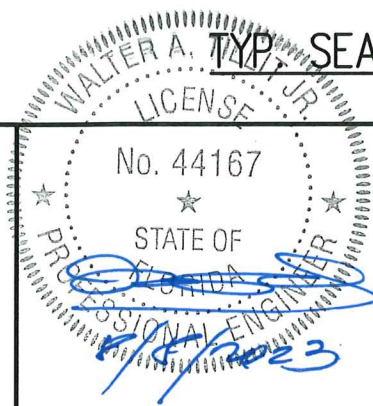


TYP. SEALANT DETAIL AT PURLIN/RAFTER

SCALE: NTS

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0515.24
Expiration Date 02/22/2027
By *Hubert A. Tillit Jr.*
Miami Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tiltco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

PINNACLE H.U GABLED SKYLIGHT W/ L.M.
IMPACT RESISTANT LAMINATED/ INSULATED
GLASS.

VELUX AMERICA, LLC

85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

W.H.
DRAWN BY:

08/08/2023
DATE

23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

SHEET 15 OF 27

HU-OPY HURRICANE RESISTANT OCTAGONAL SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT LAMINATED / INSULATED GLASS (VALID ONLY FOR SHEETS 16 THRU 27)

GENERAL NOTES:

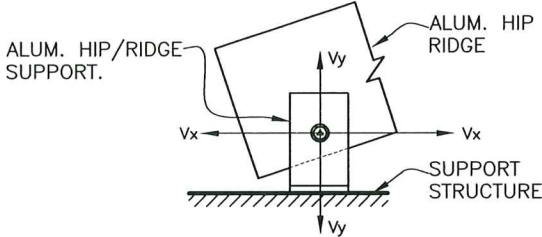
1. HU-OPY HURRICANE RESISTANT OCTAGONAL SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT LAMINATED / INSULATED GLASS SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2020 (7th EDITION) AND 2023 (8th EDITION) OF THE FLORIDA BUILDING CODE. THIS HU-OPY HURRICANE RESISTANT OCTAGONAL SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT LAMINATED / INSULATED GLASS MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES. DESIGN LIVE & WIND LOADS SHALL BE DETERMINED AS PER CHAPTER 16 OF THE ABOVE MENTIONED CODES, USING ASCE 7-16 STANDARD (FBC 2020) AND ASCE 7-22 (FBC 2023) AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON NOTE 2 BELOW. IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-16 AND ASCE 7-22 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/ MAX. (A.S.D) DESIGN PRESSURE RATINGS INDICATED ON NOTE 2 BELOW.

IN ORDER TO VERIFY THAT FASTENERS & ANCHORS ON THIS P.A.D. ARE NOT OVERSTRESSED FOR EVERY SINGLE APPLICATION OF THIS SKYLIGHT SYSTEM UNDER A.S.D DESIGN PRESSURE RATINGS INDICATED ON NOTE 2 BELOW, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS SHALL NOT BE USED IN THEIR ANALYSIS.

1A. SHOP DRAWINGS AND STRUCTURAL CALCULATIONS SHALL BE SUBMITTED FOR EVERY PERMIT. DRAWINGS MAY INCLUDE LARGER SKYLIGHT WIDTH, LENGTH AND RISE W/ CORRESPONDING LARGER CROSS SECTION HIPS/RIDGES, BUT A.S.D. DESIGN PRESSURE RATING AS WELL AS MAX. GLASS PANEL SIZE SHALL NOT EXCEED THOSE INDICATED ON THIS DRAWING. (SEE NOTES 2 AND 11 RESPECTIVELY) THIS P.A.D. COVERS OCTAGONAL PYRAMID SHAPE SKYLIGHTS. OTHER SHAPES/CONFIGURATIONS W/ SLOPED GLASS MAY BE ALSO ACCEPTED, PROVIDED THAT ABOVE MENTIONED CONDITIONS ARE COMPLIED WITH. THE DESIGN OF LARGER COMPONENTS FOR LARGER SKYLIGHTS SHALL BE PERFORMED BY A FLORIDA P.E. AND REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT ON A JOB SPECIFIC BASIS. (SEE NOTES 3 & 20).

2. A.S.D. DESIGN PRESSURE RATING AT ROOF IS: +80.0 psf (WINDWARD SIDE), -80.0psf (LEEWARD SIDE). A.S.D. DESIGN PRESSURE RATING AND LARGE MISSILE IMPACT RESISTANCE OBTAINED THRU TESTING AS PER SECTION 1626.2 OF THE FLORIDA BUILDING CODE, PER PROTOCOLS TAS 201, 202, 203, PER AMERICAN TESTING LABORATORY OF SOUTH FLORIDA REPORT # 0519.01-09. WATER AND AIR INFILTRATION TESTING HAS BEEN PERFORMED AS PER PROTOCOL TAS 202, QUALIFYING ASTM E 331 AND ASTM E 283 RESPECTIVELY.

3. STRUCTURAL ADEQUACY OF SUPPORTING STRUCTURAL MEMBERS IS NOT PART OF THIS P.A.D. STRUCTURAL DESIGN OF THE STRUCTURE THAT WILL PROVIDE SUPPORT TO THIS SKYLIGHT SHALL BE PERFORMED BY THE STRUCTURAL ENGINEER OF RECORD FOR THE PROJECT. STRUCTURAL DESIGN SHALL INCLUDE AND TAKE INTO CONSIDERATION THE ACTUAL Vx AND Vy LOADS TRANSFERRED FROM THIS SKYLIGHT TO THE SUPPORT STRUCTURE, BASED ON DEAD, LIVE & WIND LOADS AND USING THE LOAD COMBINATIONS AS PER A.S.C.E. 7 STANDARD. ADEQUACY OF SUPPORTING STRUCTURAL MEMBERS SHALL BE REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT ON A JOB SPECIFIC BASIS.



4. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY AND TEMPER, UNLESS OTHERWISE NOTED.
5. ALL ALUMINUM SHEET SHALL BE ALUMINUM ASSOCIATION 1100-H14 AND 3003-H14 ALLOY AND HARDNESS (SEE DETAILS).
6. ALL SCREWS TO BE STAINLESS STEEL AISI 304 OR 316 SERIES, WITH MIN. TENSILE LOAD CAPACITY Tu=4275# & MIN. ULTIMATE SHEAR LOAD CAPACITY Su=2700#, PER ASTM B-593 & B-594 & SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4.
7. ALL ALUMINUM POP RIVETS TO BE 5056 ALUMINUM ALLOY WITH ALUMINUM MANDREL.
8. BOLTS TO BE STAINLESS STEEL AISI 304 OR 316 SERIES WITH 50 ksi Min. YIELD STRENGTH AND 90 ksi Min. TENSILE STRENGTH, PER ASTM B-593 AND B-594.
9. GLAZING SYSTEM SHALL COMPRISE OF THE FOLLOWING COMPONENTS:
- 9.1. 3/8"x5/8" SGT 1 STRUCTURAL GLAZING TAPE FOR LAMINATED GLASS AND 1/4"x5/8" SGT 1 STRUCTURAL GLAZING TAPE FOR INSULATED GLASS, ON INTERIOR AND EXTERIOR SIDE OF GLASS.
- 9.2. (2) EXTRUDED ALUMINUM 3/16" GLAZING STOPS WERE INSERTED INTO THE SILL EXTRUSION (35S) AT 1/4" POINTS UNDER GLASS.
- 9.3. STRUCTURAL SILICONE FOR GLASS SEALANT AT SILL AND SLOPPED MULLIONS TO BE DOW CORNING 995 SILICONE STRUCTURAL ADHESIVE.
- 9.4. (2) BLACK THERMOPLASTIC RUBBER 1 1/4" GLAZING BUMPERS AT BOTTOM OF GLASS, LOCATED AT 1/4" POINTS.

10. ALL SPLICED FLASHING (ALUM. APRON) TO BE LAPPED WITH 3" MIN. OVERLAP AND SEALED WITH TREMCO VULKEM SEALANT.

11. GLASS OPTIONS:

- (a) 9/16" LAMINATED GLAZING CONSISTING OF:
1/4" THICK CLEAR HEAT STRENGTHENED GLASS +0.090" THICK KURARAY SENTRY GLASS @ INTERLAYER + 1/4" CLEAR HEAT STRENGTHENED GLASS.
- (b) 1 5/16" INSULATED GLAZING CONSISTING OF:
1/4" THICK CLEAR TEMPERED GLASS +1/2" AIRSPACE W/ ALUMINUM SPACER OVER 9/16" LAMINATED GLASS MADE WITH 1/4" THICK CLEAR HEAT STRENGTHENED GLASS +0.090" THICK KURARAY SENTRY GLASS @ INTERLAYER + 1/4" CLEAR HEAT STRENGTHENED GLASS.

(c) NOTES: MAX GLASS PANEL D.L.O SIZE IS 25 1/2"WIDE (AT BASE) x 36 7/8" HIGH (PERPENDICULAR TO BASE).
MAX GLASS AREA = 3.270 FT² BETWEEN SUPPORTS.

12. ALL WELDING TO CONFORM TO THE AMERICAN WELDING SOCIETY A.W.S. D.1.2 REGULATIONS. USE CERTIFIED WELDERS. USE ER-4043 (IF NOT ANODIZED FINISH) OR ER-5356 (IF ANODIZED FINISH) ELECTRODES.

13. ALL ALUMINUM EXTRUSIONS IN CONTACT WITH DISSIMILAR MATERIALS SHALL COMPLY WITH SECTION III-6 OF THE 2015 AND 2020 ALUMINUM DESIGN MANUAL.

14. PAINT, FINISH AND COLOR TO BE SELECTED BY ARCHITECT OF RECORD FOR THE JOB IN COORDINATION W/ WASCO PRODUCTS, INC. AND SHALL COMPLY WITH AAMA 1600 SPECIFICATION, SECTION 3.1.1.

15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE THIS SKYLIGHT IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE. SEE NOTE 3 ABOVE. CONTRACTOR IS TO SEAL/CAULK W/ URETHANE SEALANT ALL SKYLIGHT COMPONENT EDGES AS INDICATED ON THIS DRAWING TO PREVENT WIND/RAIN INTRUSION.

16. SKYLIGHT INSTALLATION SHALL COMPLY WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.

17. SKYLIGHT MANUFACTURER'S LABEL SHALL BE PLACED ON A READILY VISIBLE LOCATION. ONE LABEL SHALL BE PLACED FOR EVERY UNIT. LABEL SHALL COMPLY WITH SECTION 2405.5

18. (a) THE PRODUCT APPROVAL DOCUMENT (P.A.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT.

(b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS PRODUCT APPROVAL PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.

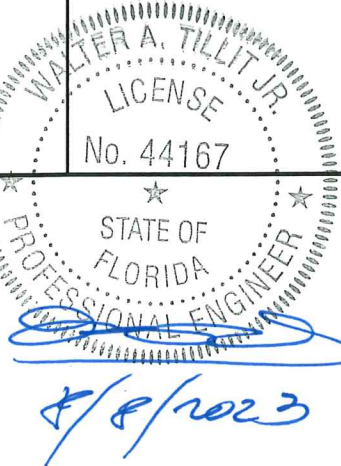
(c) THIS PRODUCT APPROVAL DOCUMENT WILL BE CONSIDERED INVALID IF MODIFIED.

(d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE PROFESSIONAL OF RECORD (P.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D. PROFESSIONAL OF RECORD, ACTING AS DELEGATED ENGINEER TO THE P.A.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.

(e) ORIGINAL P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER THAT PREPARED IT.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *Helga A. M...*
Miami Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530, Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT JR. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC

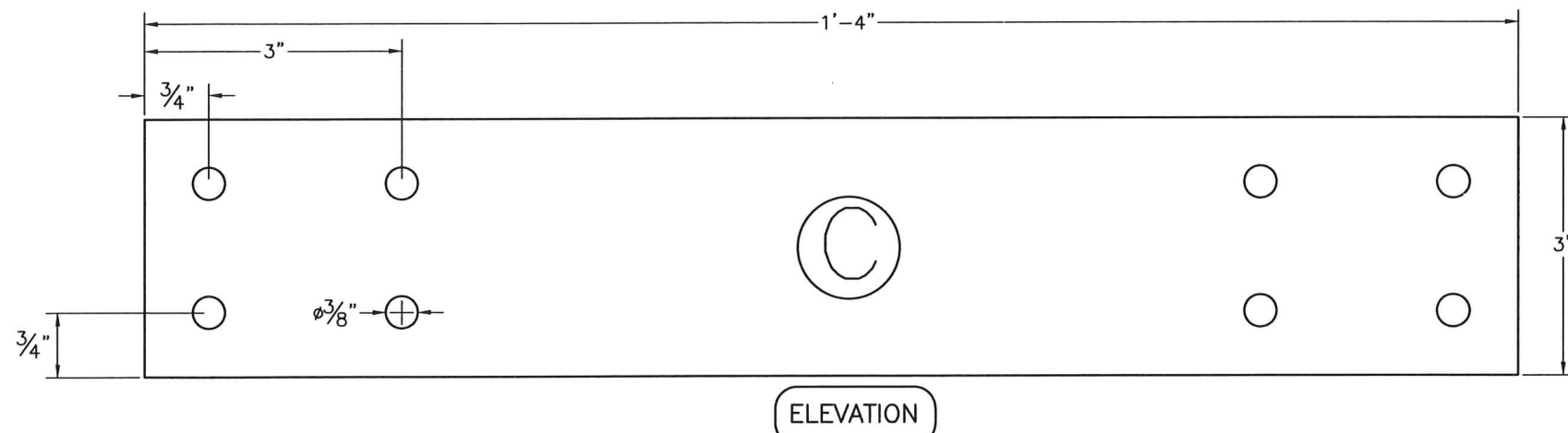
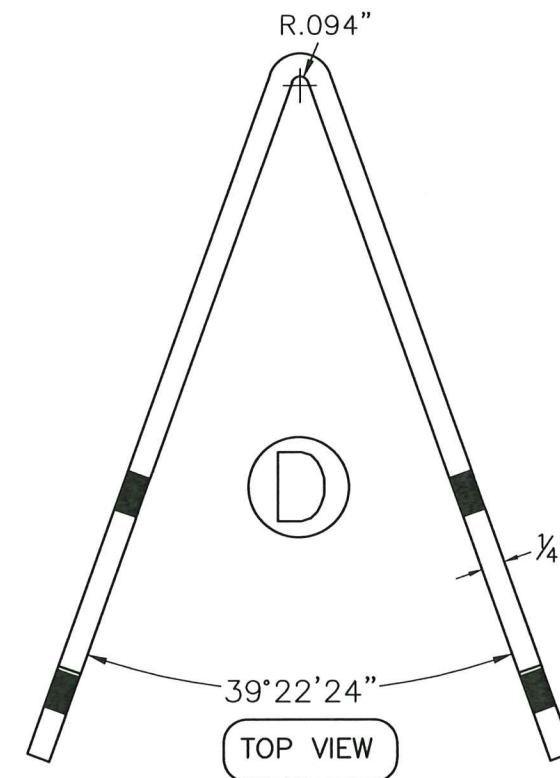
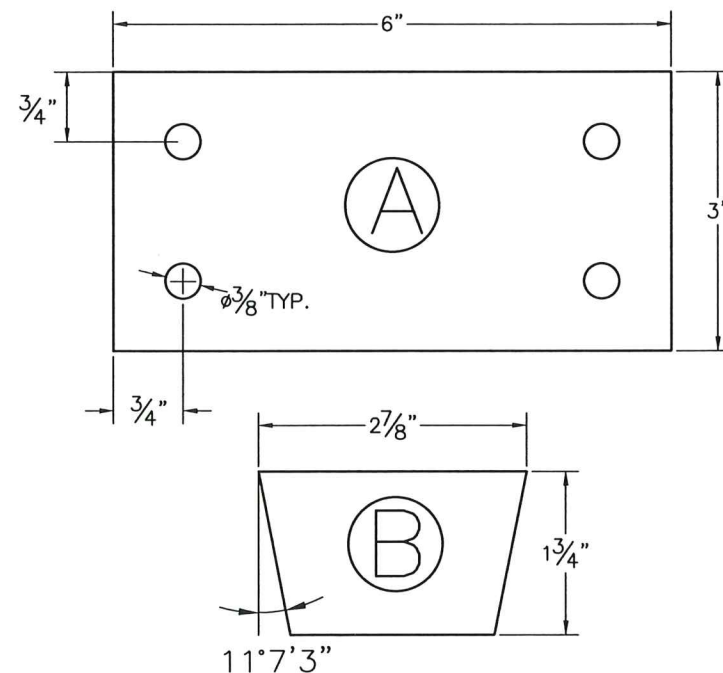
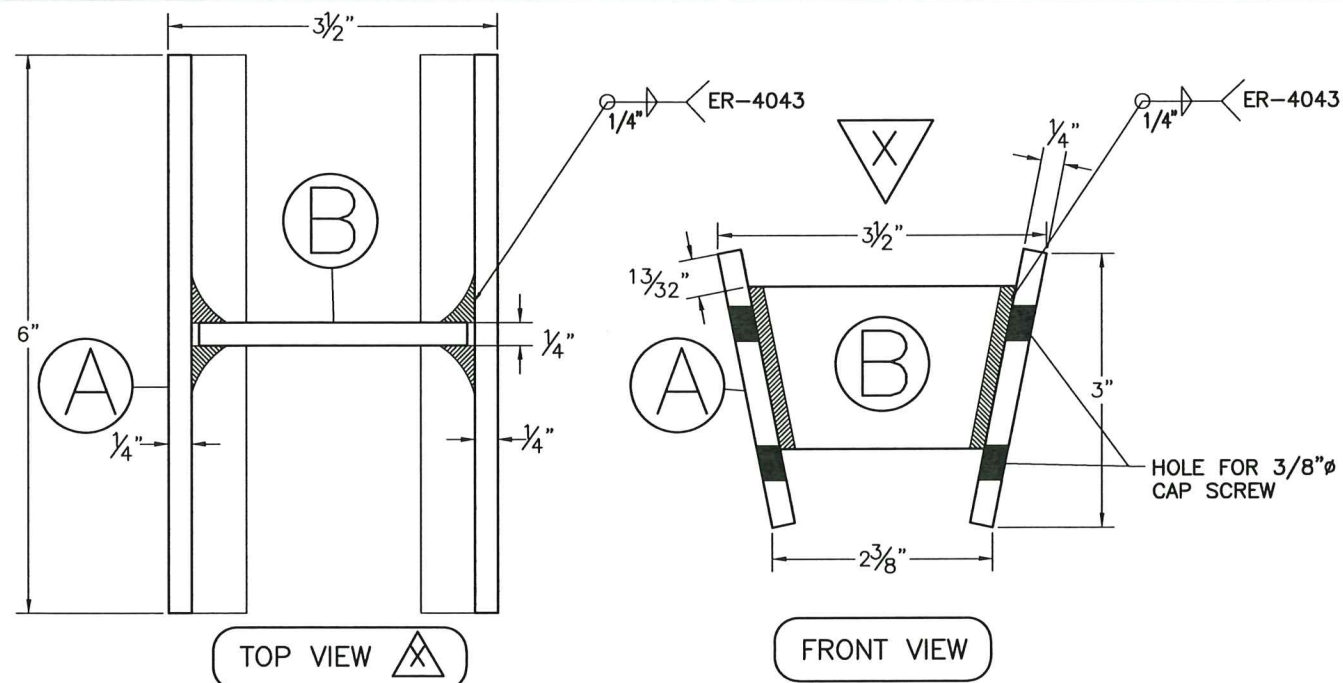
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

SHEET 16 OF 27



USING "C" FORM "D" AFTER DRILLING
& TAPPING FOR 3/8"-16 MACHINE
SCREWS - 8 NEEDED TOTAL AT RIDGE

USING .250" PCS. FABRICATE 8 BRACE ASSEMBLIES
AS SHOWN FOR MID-HIP APPLICATION & 8 PCS.
FOR SILL END.
DRILL & TAP FOR 3/8"-16 MACHINE SCREWS.

BRACE ASSEMBLY (AL25):3003-H14 ALLOY

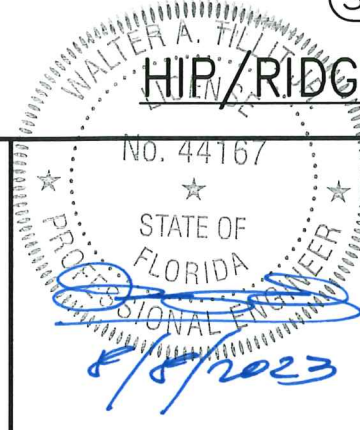
COMPONENTS

SCALE: 1/2"=1"

HIP/RIDGE CLIPS AT RIDGE (3003-H14 ALLOY)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *[Signature]*
Miami-Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC.
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 • Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

VELUX AMERICA, LLC
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

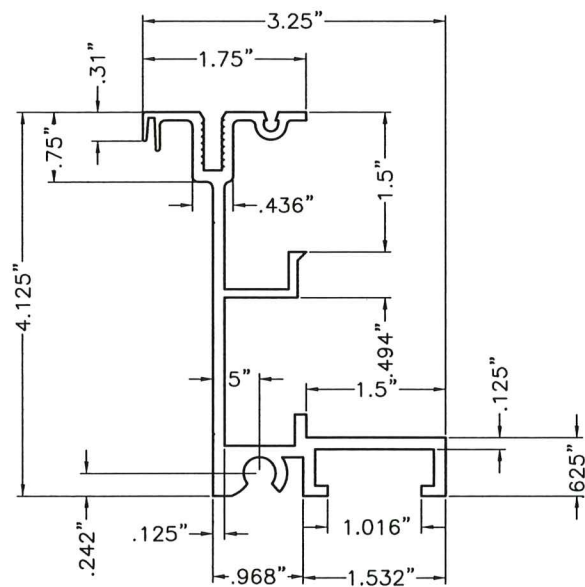
W.H.
DRAWN BY:

08/08/2023
DATE

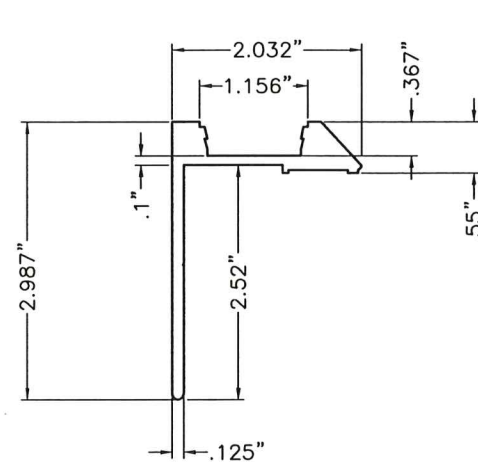
23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

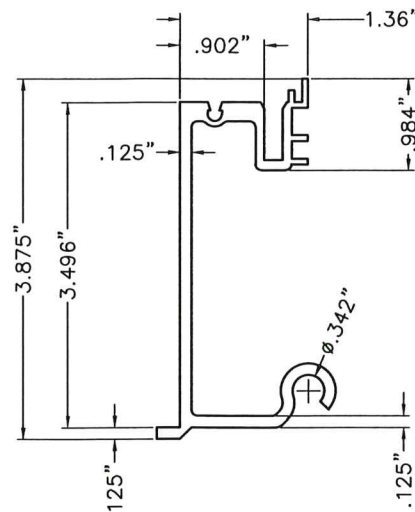
SHEET 17 OF 27



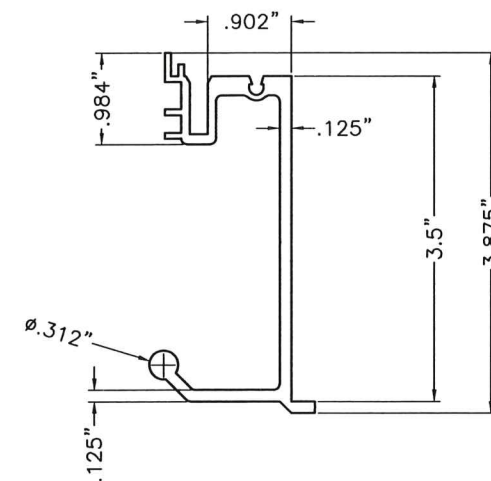
SILL EXTRUSION (35S)



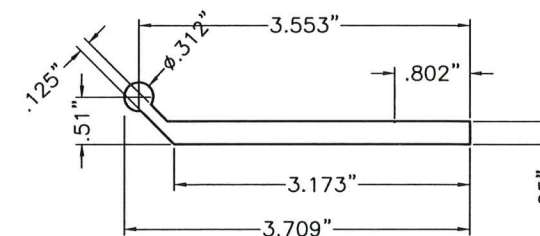
SILL PERIMETER TAPE CAP EXTRUSION (H-PC)



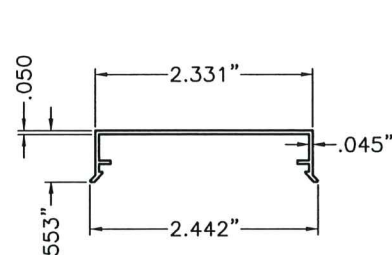
RIDGE/HIP EXTRUSION (35H-1F)



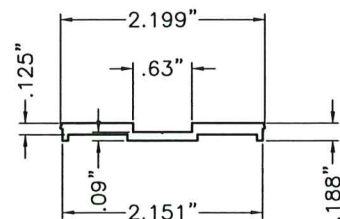
RIDGE/HIP EXTRUSION (35H-1M)



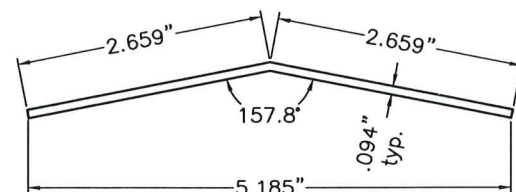
BASE PLATE EXTRUSION (BP-1)



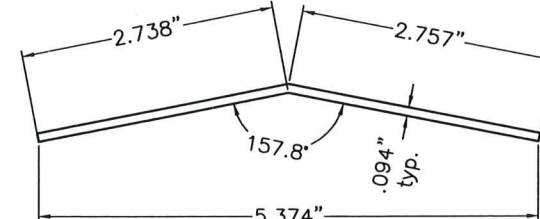
CLOSURE EXTRUSION (H-RCC)



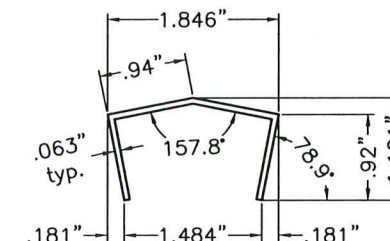
CAP EXTRUSION (H-RC)



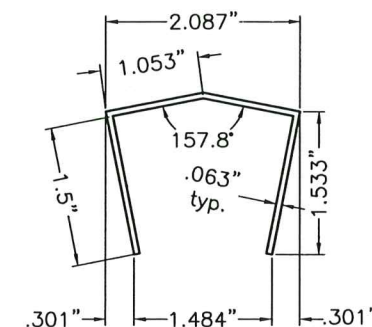
HIP CAP - LG (AL09)



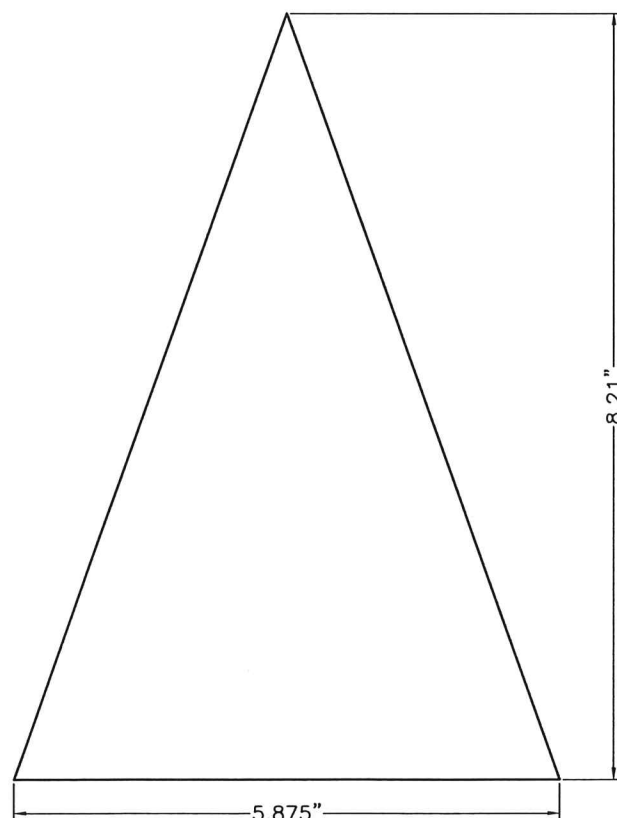
HIP CAP - IG (AL09)



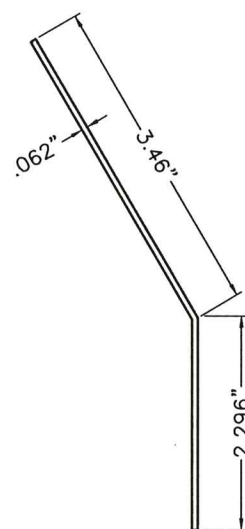
HIP STANDOFF - LG (AL06)



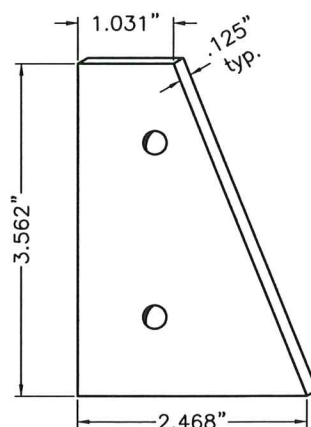
HIP STANDOFF - IG (AL06)



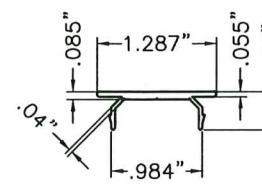
1 SIDE OF SIDED PEAK CAP
1 CAP NEEDED AS SHOWN (.090")



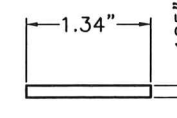
SILL CLOSURE (AL06)



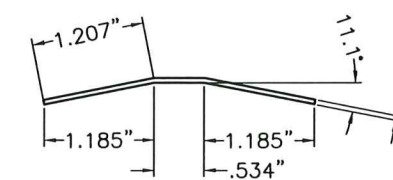
ALUM. PLATE (END SIDE OF THE SPLICE OF SILL)



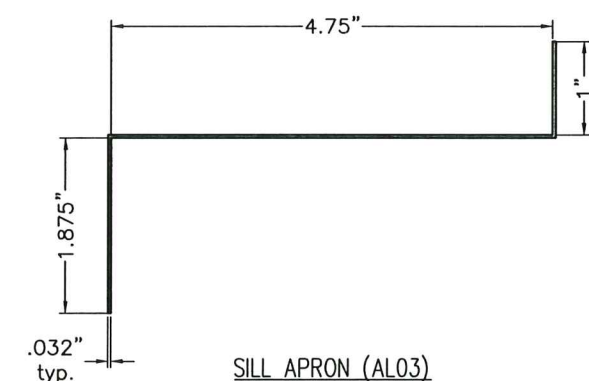
H-PC W/ S904
ALONG INSIDE EDGES



SPACER (AL12)



HIP CAP CONNECTOR - IG (AL05)



SILL APRON (AL03)

COMPONENTS (CONTINUED)

SCALE: 1/2"=1"

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0816-24
Expiration Date 02/22/2027
By *[Signature]*
Miami Dade Product Control

MIAMI-DADE COUNTY

WALTER A. TILLIT JR.
LICENSE
No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
[Signature]
8/8/2023

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC.
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th, St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

W.H.
DRAWN BY:

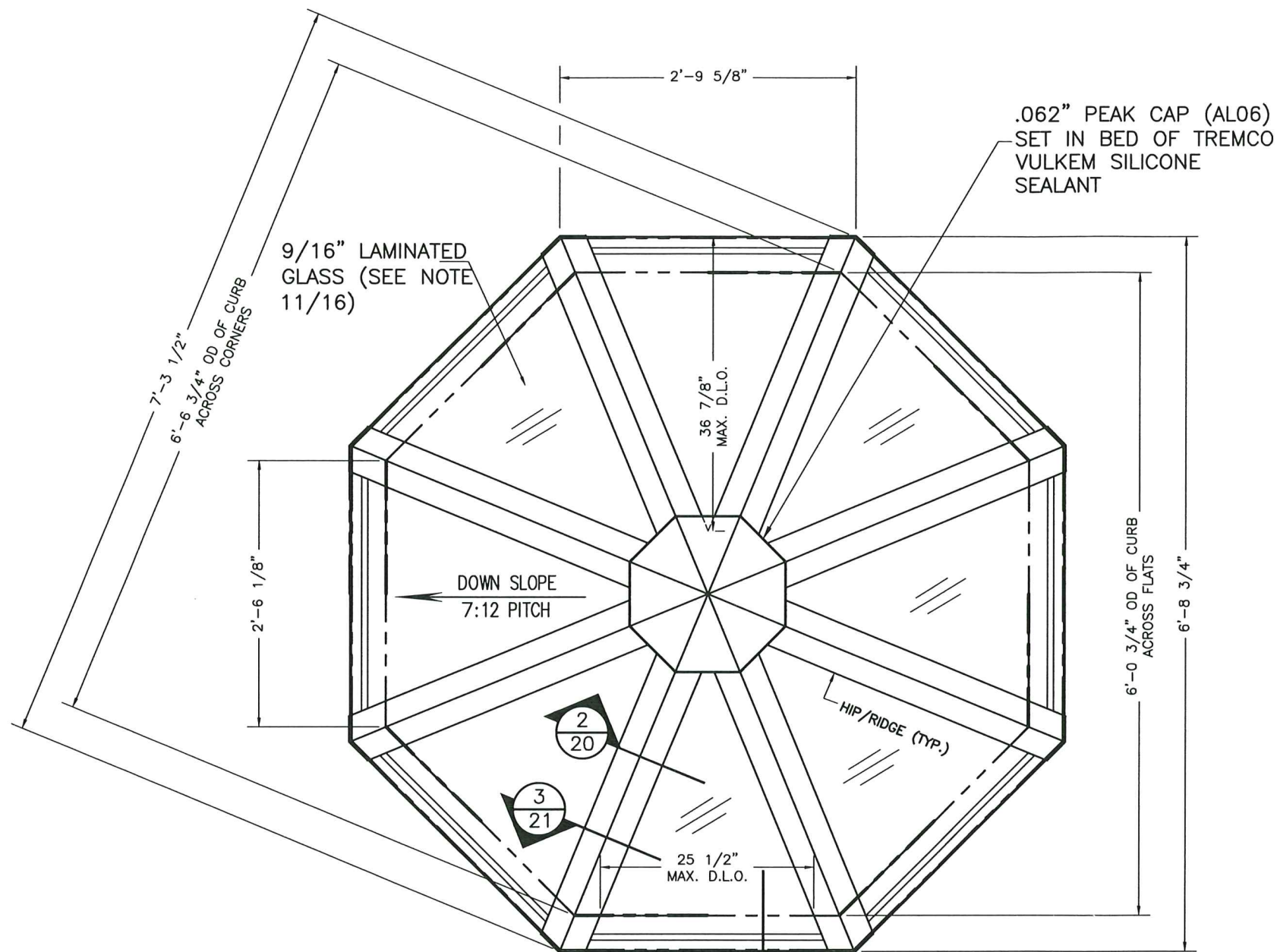
VELUX AMERICA, LLC
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2			4		

SHEET 18 OF 27



TYPICAL ROOF FRAMING PLAN

SCALE: 3/4"=1'-0"

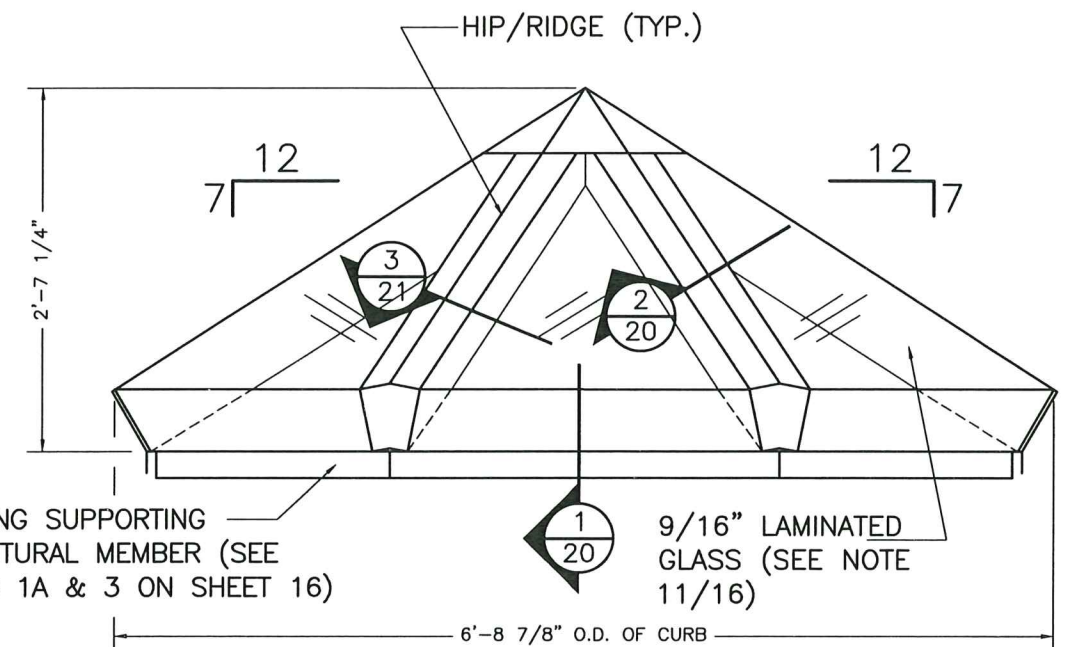
LAMINATED GLASS CASE
(9/16" L.G.)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815-24
Expiration Date 02/22/2027
By *H. A. Tillit Jr.*
Miami Date Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE



ELEVATION 1

SCALE: 1/2"=1'-0"

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tillitco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC

85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

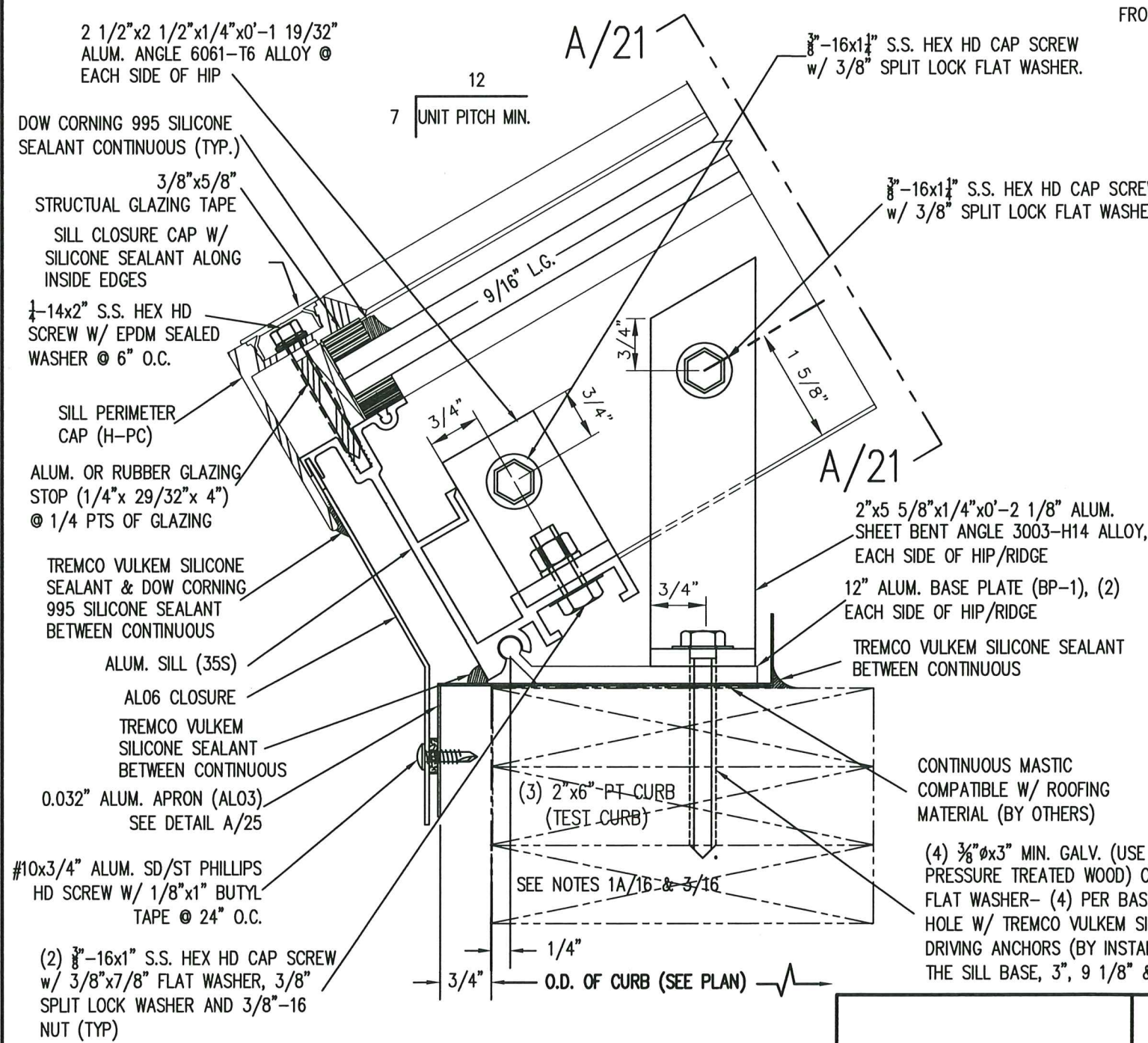
08/08/2023
DATE

23-153
DRAWING No

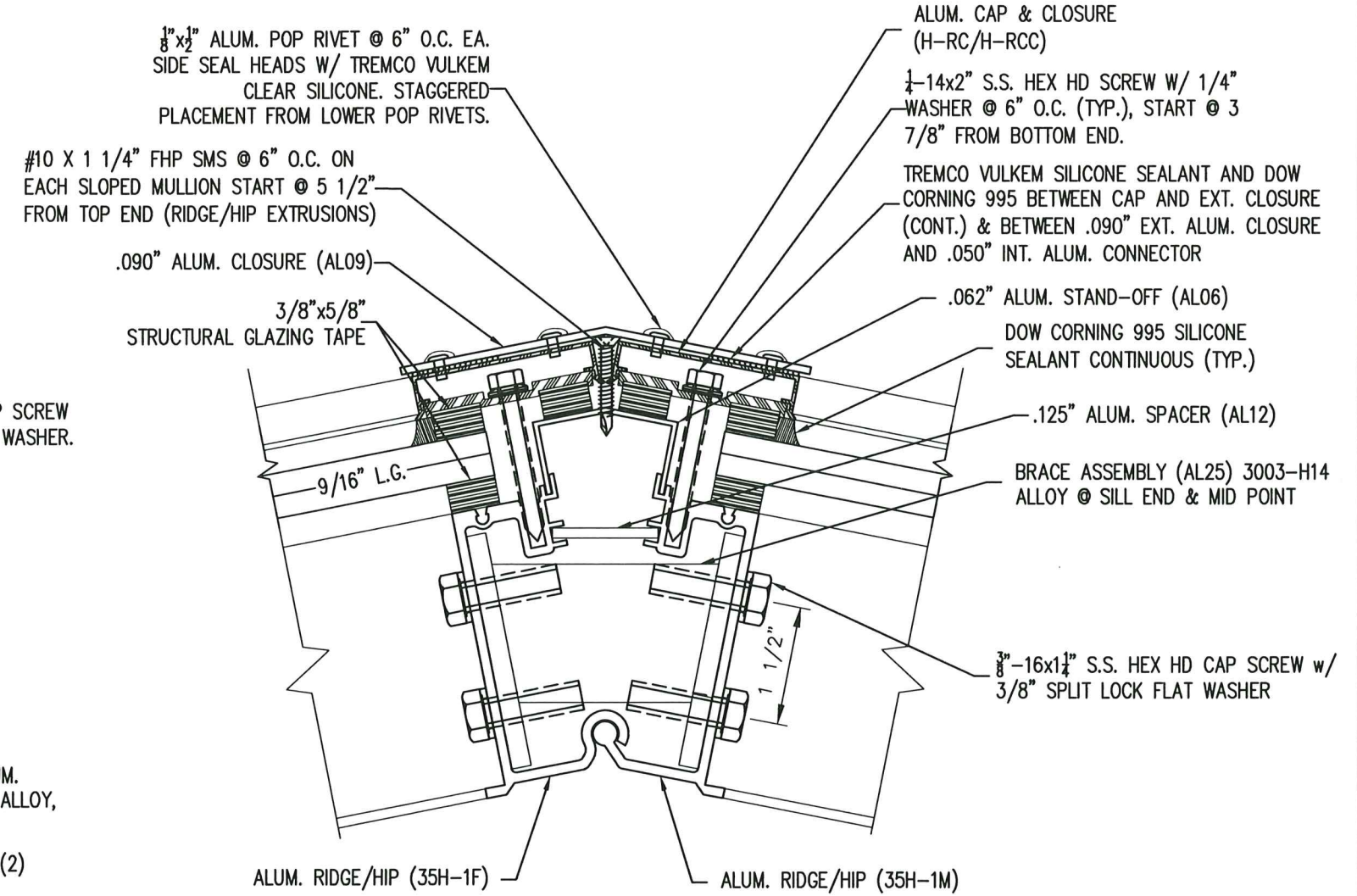
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2			4		

SHEET 19 OF 27

INSTALLATION NOTE: SPECIAL CARE MUST BE TAKEN TO FOLLOW INSTALLATION DETAILS TO THE LETTER. FAILURE TO DO SO MAY CAUSE UNIT FAILURE DURING THE EXTREME CONDITIONS FOR WHICH IT IS DESIGNED.



1 SILL SECTION (LG)
SCALE: 6"=1'-0"



2 HIP SECTION @ MID-POINT (LG)
SCALE: 6"=1'-0"

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0415.24
Expiration Date 02/22/2027
By *H. J. M. Jr.*
Miami Date Product Control

MIAMI-DADE COUNTY

No. 44167
STATE OF FLORIDA
PROFESSIONAL ENGINEER
P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)						
 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 e-mail: tilteco@aol.com CA-0006719 WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167				"HU-OPY" HURRICANE RESISTANT OCTAGONAL SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT LAMINATED/INSULATED GLASS.		W.H. DRAWN BY:
				VELUX AMERICA, LLC 85 SPENCER DRIVE - UNIT A WELLS, ME 04090 1-800-888-3538		08/08/2023 DATE
REV. No		DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3			
2			4			
23-153 DRAWING No						
SHEET 20 OF 27						

SEE DETAIL 2/20 FOR COMPONENTS NOT IDENTIFIED

#10 X 1 1/4" FHP SMS @ 6" O.C. ON EACH SLOPED MULLION START @ 5 1/2" FROM TOP END (RIDGE/HIP EXTRUSIONS)

BRACE ASSEMBLY (AL25)
@ SILL END & @ MID POINT

3/8"-16x1 1/4" S.S. HEX HD CAP SCREW w/
3/8" SPLIT LOCK FLAT WASHER.

3/8"-16x1 1/4" S.S. HEX HD CAP SCREW w/
3/8" SPLIT LOCK FLAT WASHER.
(BEYOND)

(2) 3/8"-16x1" S.S. HEX HD CAP SCREW
w/ 3/8"x7/8" FLAT WASHER, 3/8" SPLIT
LOCK WASHER AND 3/8"-16 NUT (TYP)

2 1/2"x2 1/2"x1 1/4"x0'-1 19/32"
ALUM. ANGLE 6061-T6 ALLOY (TYP)

ALUM. SILL 35S

2"x5 11/32"x1/4"x0'-2 3/32"
ALUM. SHEET BENT ANGLE
3003-H14 ALLOY

12" ALUM. BASE PLATE (BP-1),
(2) EACH SIDE OF HIP/RIDGE

FLASHED CURB
(BY OTHERS)

12" ALUM. BASE PLATE (BP-1)

2"x5 5/8"x1/4"x0'-2 3/32"
ALUM. SHEET BENT ANGLE
3003-H14 ALLOY

(4) 3/8"Øx3" MIN. GALV. (USE S.S. IF PENETRATING
INTO PRESSURE TREATED WOOD) OR S.S. LAG SCREW
w/ 3/8" FLAT WASHER- (4) PER BASE PLATE
(BP-1) FILL PILOT HOLE W/ TREMCO VULKEM
SILICONE SEALANT PRIOR TO DRIVING ANCHORS (BY
INSTALLER), START 1" FROM END OF THE SILL BASE
3", 9 1/8" & 11"

1" x 1/2" ALUM. POP RIVET @ 6" O.C. EA.
SIDE SEAL HEADS W/ TREMCO VULKEM
CLEAR SILICONE. STAGGERED
PLACEMENT FROM LOWER POP RIVETS.

#10 X 1 1/4" FHP SMS @ 6" O.C. ON EACH
SLOPED MULLION START @ 5 1/2" FROM TOP
END (RIDGE/HIP EXTRUSIONS)

.090" ALUM. CLOSURE (AL09)

ALUM. CAP & CLOSURE
(H-RC/H-RCC)

TREMCO VULKEM SILICONE SEALANT AND
DOW CORNING 995 BETWEEN CAP AND
EXT. CLOSURE (CONT.) & BETWEEN .090"
EXT. ALUM. CLOSURE AND .050" INT.
ALUM. CONNECTOR

DOW CORNING 995 SILICONE
SEALANT CONTINUOUS (TYP.)

15/16"
GLASS BITE

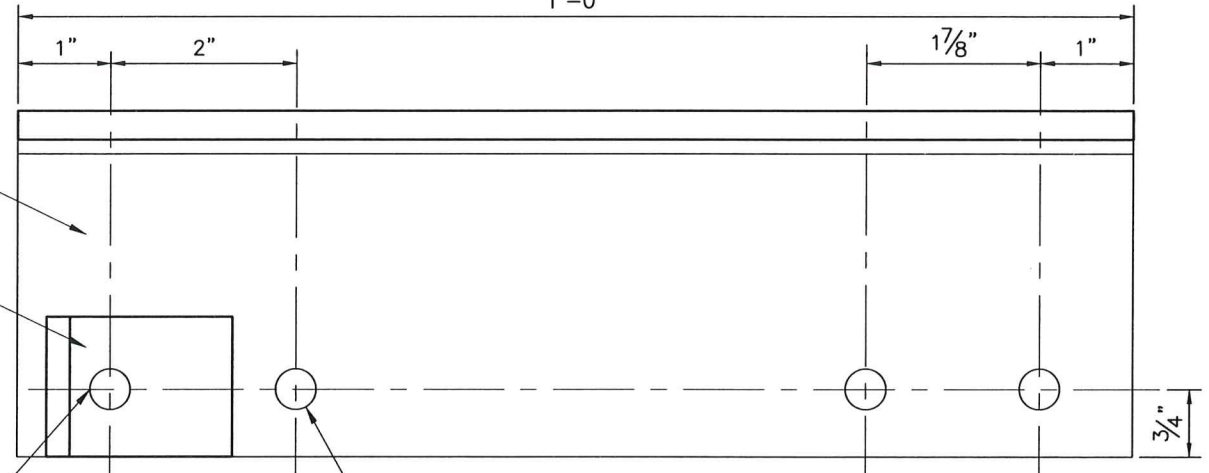
9/16" L.G.

5/8"
GLASS BITE

3/8"x5/8"
STRUCTURAL GLAZING TAPE

GLAZING DETAIL

SCALE: 1/2"=1"
1'-0"



7/16"Ø OR AS REQUIRED BY ANCHOR/CURB LOAD REQUIREMENTS

SECTION X-X

SCALE: 1/2"=1"

(sim.)

(sim.)

(3) 2"x6" TEST CURB
(SEE NOTES 1A/16 & 3/16)

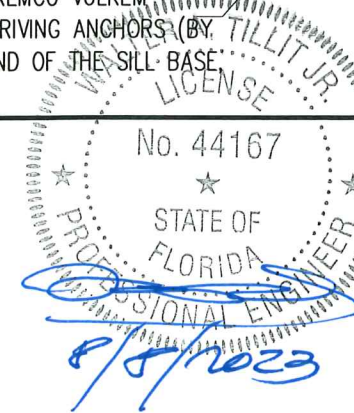
3 SILL/HIP ATTACHMENT SECTION

SCALE: 1/2"=1"

SECTION A-A

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815-24
Expiration Date 02/22/2027
By *Walter A. Tillit Jr.*
Miami Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC.
TILTECO Inc.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC

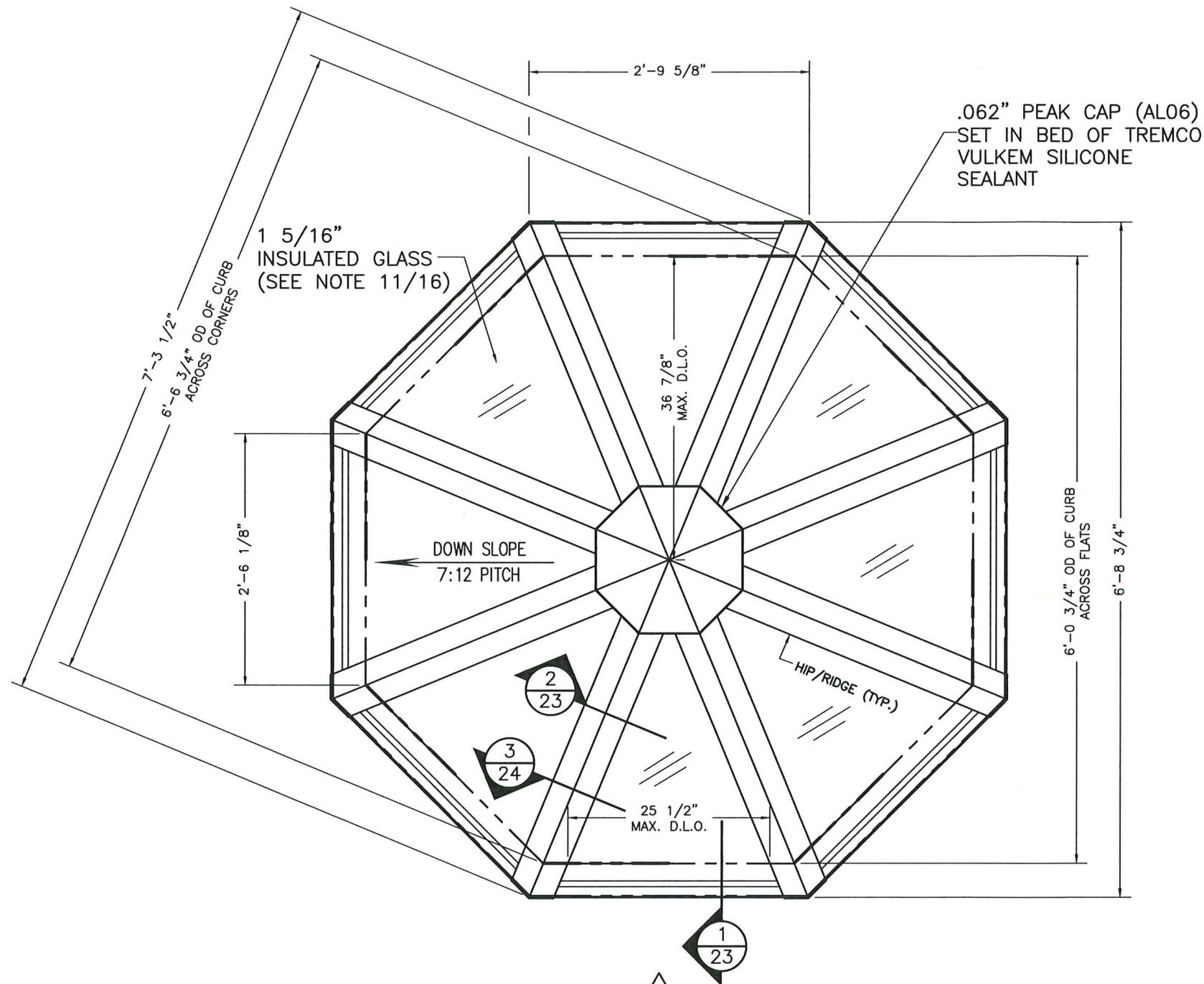
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

23-153
DRAWING No

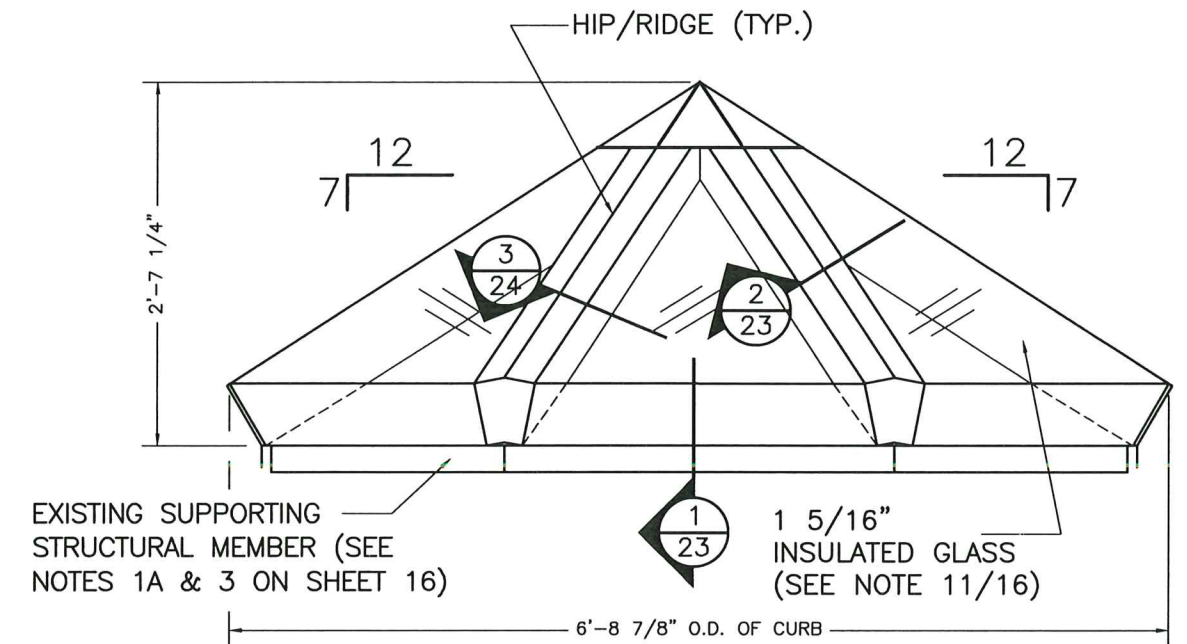
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2			4		

SHEET 21 OF 27



TYPICAL ROOF FRAMING PLAN

SCALE: 3/4"=1'-0"



ELEVATION 1

SCALE: 3/4"=1'-0"

INSULATED GLASS CASE
(1 5/16" I.G.)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0415.24
Expiration Date 02/23/2027
By: *[Signature]*
Miami Date Product Control

MIAMI-DADE COUNTY

WALTER A. TILLIT JR.
LICENSE
No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
[Signature]
8/8/2023

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC

85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2			4		

SHEET 22 OF 27

INSTALLATION NOTE: SPECIAL CARE MUST BE TAKEN TO FOLLOW INSTALLATION DETAILS TO THE LETTER. FAILURE TO DO SO MAY CAUSE UNIT FAILURE DURING THE EXTREME CONDITIONS FOR WHICH IT IS DESIGNED.

2 1/2"x2 1/2"x1/4"x0'-1 19/32"
ALUM. ANGLE 6061-T6 ALLOY @
EACH SIDE OF HIP

DOW CORNING 995 SILICONE
SEALANT CONTINUOUS (TYP.)

1/4"x5/8" STRUCTURAL
GLAZING TAPE

SILL CLOSURE CAP W/
SILICONE SEALANT
ALONG INSIDE EDGES

1/4"x2" S.S. HEX HD
SCREW W/ EPDM SEALED
WASHER @ 6" O.C.

SILL PERIMETER
CAP (H-PC)

ALUM. OR RUBBER GLAZING
STOP (1/4"x 29/32"x 4")
@ 1/4 PTS OF GLAZING

TREMCO VULKEM SILICONE
SEALANT & DOW CORNING
995 SILICONE SEALANT
BETWEEN CONTINUOUS

ALUM. SILL (35S)

AL06 CLOSURE

TREMCO VULKEM SILICONE
SEALANT BETWEEN
CONTINUOUS

0.032" ALUM. APRON (AL03)
SEE DETAIL A/25

#10x3/4" ALUM. SD/ST PHILLIPS
HD SCREW W/ 1/8"x1" BUTYL
TAPE @ 24" O.C.

(2) 3/8"-16x1" S.S. HEX HD CAP SCREW
w/ 3/8"x7/8" FLAT WASHER, 3/8"
SPLIT LOCK WASHER AND 3/8"-16
NUT (TYP)

12
UNIT PITCH MIN.

A/24

3/8"-16x1 1/4" S.S. HEX HD CAP SCREW
w/ 3/8" SPLIT LOCK FLAT WASHER.

3/8"-16x1 1/4" S.S. HEX HD CAP SCREW
w/ 3/8" SPLIT LOCK FLAT WASHER.

2"x5 5/8"x1/4"x0'-2 1/8" ALUM.
SHEET BENT ANGLE 3003-H14 ALLOY,
EACH SIDE OF HIP/RIDGE

12" ALUM. BASE PLATE (BP-1), (2)
EACH SIDE OF HIP/RIDGE

TREMCO VULKEM SILICONE SEALANT
BETWEEN CONTINUOUS

CONTINUOUS MASTIC
COMPATIBLE W/ ROOFING
MATERIAL (BY OTHERS)

(3) 2"x6"-PT CURB
(TEST CURB)

SEE NOTES 1A/15 & 3/16

4 SILL SECTION (IG)
SCALE: 6"-1'-0"

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *Heidi A. Miller*
Miami Date Product Control

MIAMI-DADE COUNTY

#10 X 1 1/4" FHP SMS @ 6" O.C. ON
EACH SLOPED MULLION START @ 5 1/2"
FROM TOP END (RIDGE/HIP EXTRUSIONS)

.090" ALUM. CLOSURE (AL09)

3/8"x5/8"
STRUCTURAL GLAZING TAPE

1"x1/2" ALUM. POP RIVET @ 6" O.C. EA.
SIDE SEAL HEADS W/ TREMCO VULKEM
CLEAR SILICONE. STAGGERED
PLACEMENT FROM LOWER POP RIVETS.

ALUM. CAP & CLOSURE
(H-RC/H-RCC)

1/4"x2" S.S. HEX HD SCREW W/ 1/4"
WASHER @ 6" O.C. (TYP.), START @ 3
7/8" FROM BOTTOM END.

TREMCO VULKEM SILICONE SEALANT AND DOW
CORNING 995 BETWEEN CAP AND EXT. CLOSURE
(CONT.) & BETWEEN .090" EXT. ALUM. CLOSURE
AND .050" INT. ALUM. CONNECTOR

.062" ALUM. STAND-OFF (AL06)

DOW CORNING 995 SILICONE
SEALANT CONTINUOUS (TYP.)

.125" ALUM. SPACER (AL12)

BRACE ASSEMBLY (AL25) 3003-H14
ALLOY @ SILL END & MID POINT

3/8"-16x1 1/4" S.S. HEX HD CAP SCREW w/
3/8" SPLIT LOCK FLAT WASHER

ALUM. RIDGE/HIP (35H-1F)

ALUM. RIDGE/HIP (35H-1M)

5 HIP SECTION @ MID-POINT (IG)
SCALE: 6"-1'-0"

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO inc.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2			4		

SHEET 23 OF 27

P.E. SEAL/SIGNATURE/DATE

SEE DETAIL 2/20 FOR COMPONENTS NOT IDENTIFIED

#10 X 1 1/4" FHP SMS @ 6" O.C. ON EACH SLOPED MULLION START @ 5 1/2" FROM TOP END (RIDGE/HIP EXTRUSIONS)

BRACE ASSEMBLY (AL25) @ SILL END & @ MID POINT

3/8"-16x1 1/4" S.S. HEX HD CAP SCREW w/ 3/8" SPLIT LOCK FLAT WASHER.

3/8"-16x1 1/4" S.S. HEX HD CAP SCREW w/ 3/8" SPLIT LOCK FLAT WASHER. (BEYOND)

(2) 3/8"-16x1" S.S. HEX HD CAP SCREW w/ 3/8"x7/8" FLAT WASHER, 3/8" SPLIT LOCK WASHER AND 3/8"-16 NUT (TYP)

2 1/2"x2 1/2"x1/4"x0'-1 19/32" ALUM. ANGLE 6061-T6 ALLOY (TYP)

ALUM. SILL 35S

2"x5 11/32"x1/4"x0'-2 3/32" ALUM. SHEET BENT ANGLE 3003-H14 ALLOY

12" ALUM. BASE PLATE (BP-1), (2) EACH SIDE OF HIP/RIDGE

FLASHED CURB (BY OTHERS)

12" ALUM. BASE PLATE (BP-1)

2"x5 11/32"x1/4"x0'-2 3/32" ALUM. SHEET BENT ANGLE 3003-H14 ALLOY

(4) 3/8"Øx3" MIN. GALV. (USE S.S. IF PENETRATING INTO PRESSURE TREATED WOOD) OR S.S. LAG SCREW w/ 3/8" FLAT WASHER- (4) PER BASE PLATE (BP-1) FILL PILOT HOLE W/ TREMCO VULKEM SILICONE SEALANT PRIOR TO DRIVING ANCHORS (BY INSTALLER), START 1" FROM END OF THE SILL BASE, 3", 9 1/8" & 11"

1" x 1/2" ALUM. POP RIVET @ 6" O.C. EA. SIDE SEAL HEADS W/ TREMCO VULKEM CLEAR SILICONE. STAGGERED PLACEMENT FROM LOWER POP RIVETS.

#10 X 1 1/4" FHP SMS @ 6" O.C. ON EACH SLOPED MULLION START @ 5 1/2" FROM TOP END (RIDGE/HIP EXTRUSIONS)

.090" ALUM. CLOSURE (AL09)

ALUM. CAP & CLOSURE (H-RC/H-RCC)

TREMCO VULKEM SILICONE SEALANT AND DOW CORNING 995 BETWEEN CAP AND EXT. CLOSURE (CONT.) & BETWEEN .090" EXT. ALUM. CLOSURE AND .050" INT. ALUM. CONNECTOR

DOW CORNING 995 SILICONE SEALANT CONTINUOUS (TYP.)

15/16" GLASS BITE

1 5/16" I.G.

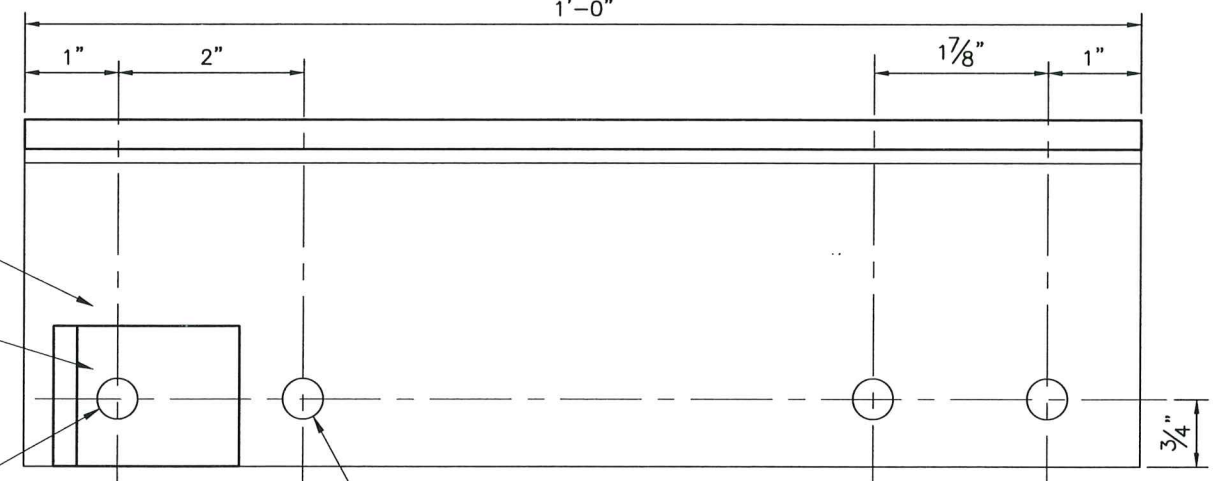
3/8"x5/8" STRUCTURAL GLAZING TAPE

5/8" GLASS BITE

GLAZING DETAIL

SCALE: 1/2"=1"

1'-0"



7/16"Ø OR AS REQUIRED BY ANCHOR/CURB LOAD REQUIREMENTS

SECTION X-X

SCALE: 1/2"=1"

3 SILL/HIP ATTACHMENT SECTION
24 SCALE: 1/2"=1"

SECTION A-A

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *[Signature]*
Miami Dade Product Control

MIAMI-DADE COUNTY

No. 44167
STATE OF
FLORIDA
Professional Engineer
WALTER A. TILLIT JR.
8/15/2023

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC

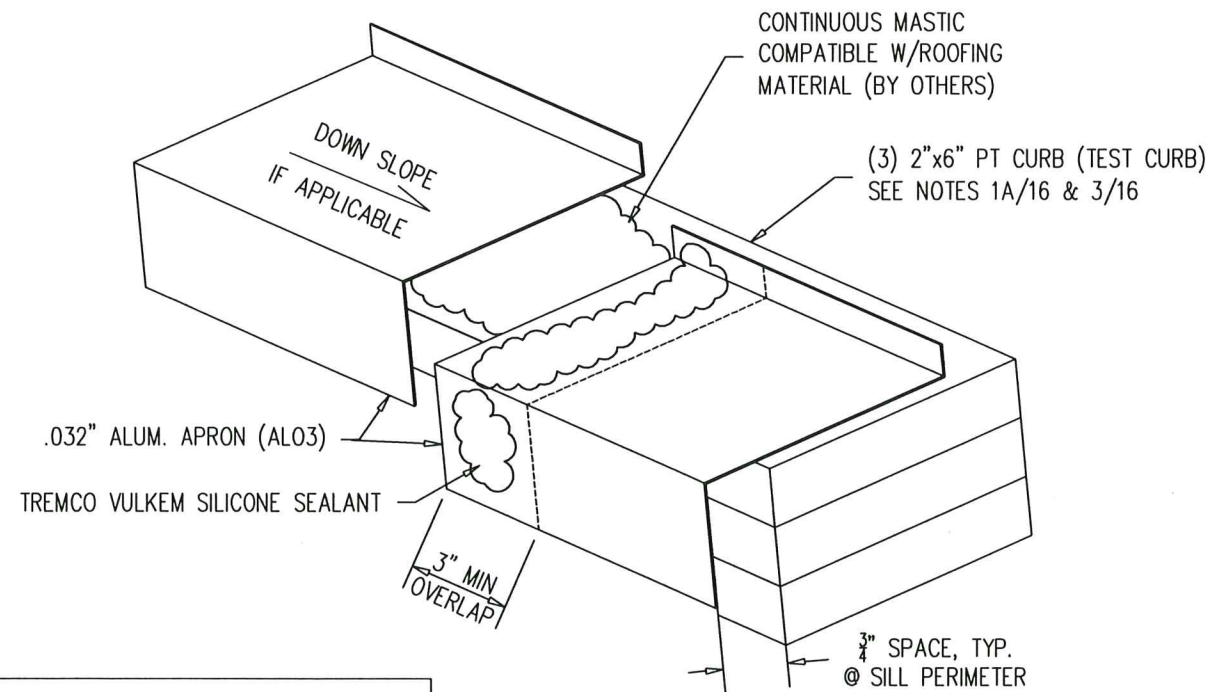
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

23-153
DRAWING No

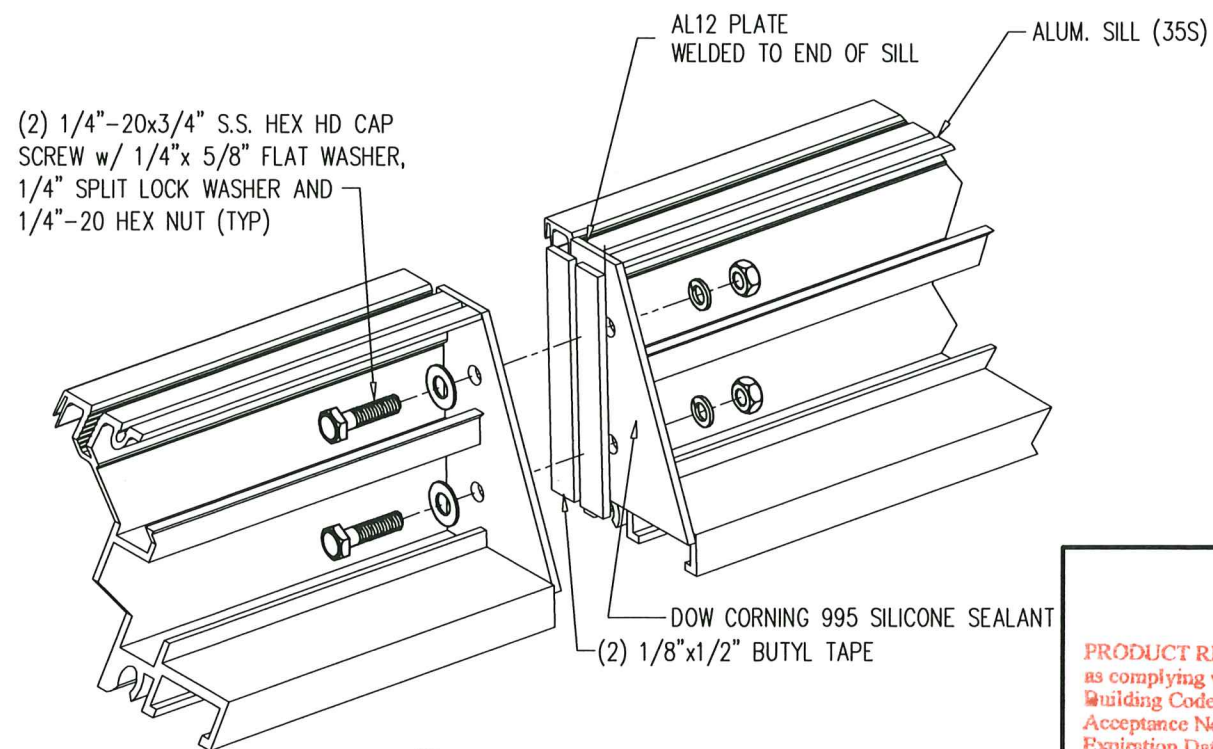
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2			4		

SHEET 24 OF 27



WASCO RECOMMENDS THAT ALL SPLICE SURFACES BE
CLEANED WITH XYLENE (TO BE FURNISHED BY OTHERS)
BEFORE APPLYING TREMCO VULKEM SILICONE SEALANT

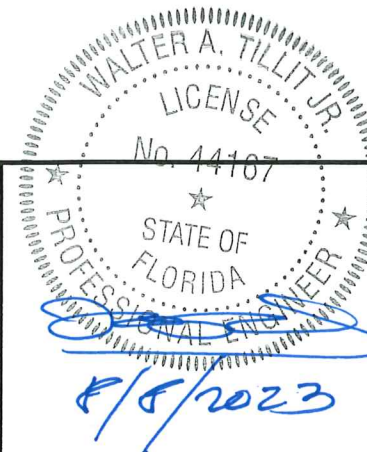
A APRON SPLICE DETAIL
SCALE: N.T.S.



B SILL SPLICE DETAIL
SCALE: N.T.S.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. **23-0915.24**
Expiration Date **02/22/2027**
By *Walter A. Tillit Jr.*
Miami Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO inc.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilliteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

W.H.
DRAWN BY:

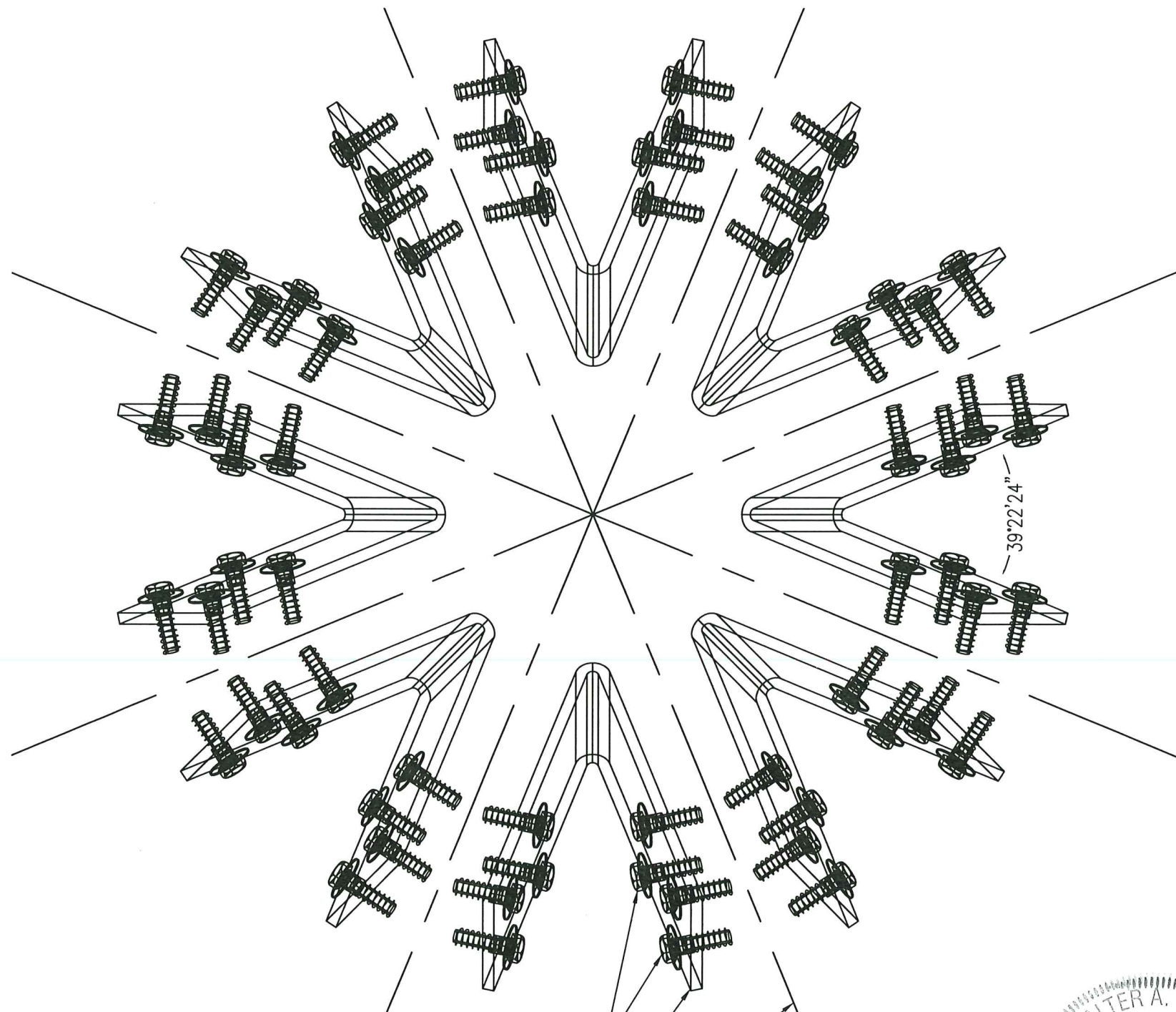
VELUX AMERICA, LLC
85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

SHEET 25 OF 27



(4) 3/8"-16x1 1/4" HH CAP MS
W/ 3/8" WASHER SPLIT LOCK

1/4" ALUM
FORMED CLIPS (SEE SHEET 17)

CENTERLINE OF
HIP ASSEMBLY

CONNECTION DETAIL HIP/RIDGE CLIPPING AT
RIDGE (SEE SHEET 27)

(PLAN)

FRAMING COMPONENTS REMOVED FOR CLARITY

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *[Signature]*
Miami Dade Product Control

MIAMI-DADE COUNTY

WALTER A. TILLIT JR.
LICENSE
No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
[Signature]
8/8/2023

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO inc.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

W.H.
DRAWN BY:

08/08/2023
DATE

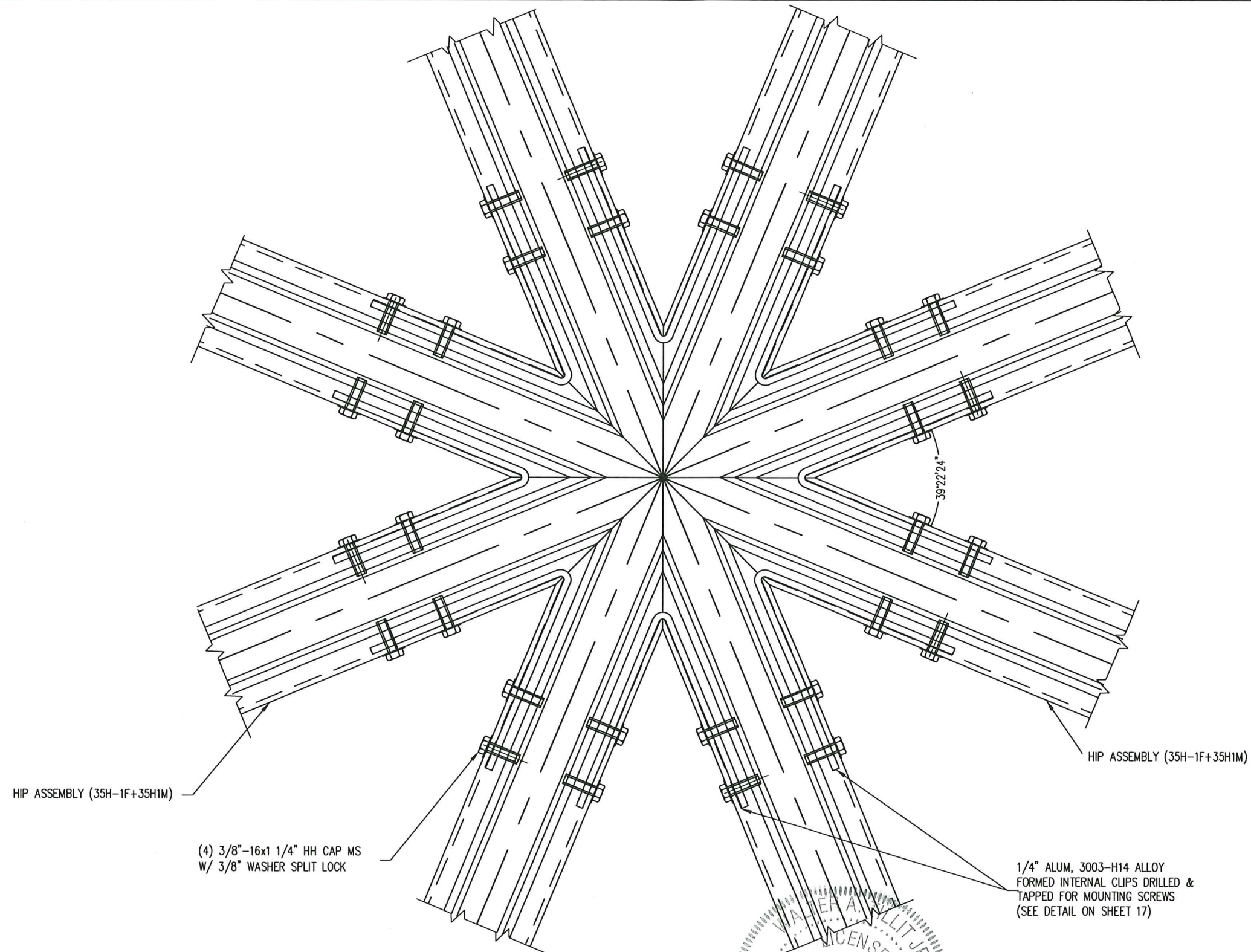
23-153
DRAWING No

VELUX AMERICA, LLC

85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2			4		

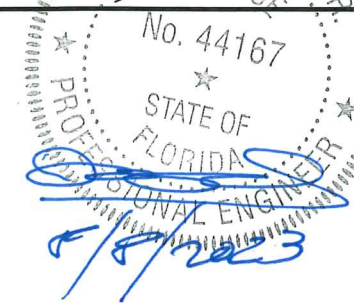
SHEET 26 OF 27



FRAMING CONNECTION FOR HIP/RIDGE AT RIDGE
(PLAN)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0815.24
Expiration Date 02/22/2027
By *Walter A. Tillit Jr.*
Miami Dade Product Control

MIAMI-DADE COUNTY



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC

TILTECO inc.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

"HU-OPY" HURRICANE RESISTANT OCTAGONAL
SKYLIGHT W/ LARGE MISSILE IMPACT RESISTANT
LAMINATED/INSULATED GLASS.

W.H.
DRAWN BY:

VELUX AMERICA, LLC

85 SPENCER DRIVE - UNIT A
WELLS, ME 04090
1-800-888-3538

08/08/2023
DATE

23-153
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-302	08/08/23	3		
2	-	-	4		

SHEET 27 OF 27