



**Product Approval**  
USER: Public User

[Product Approval Menu](#) > [Product or Application Search](#) > [Application List](#) > **Application Detail**

OFFICE OF THE SECRETARY

FL #	FL42471										
Application Type	New										
Code Version	2023										
Application Status	Approved										
Comments											
Archived	<input type="checkbox"/>										
Product Manufacturer	GIG Windows & Doors										
Address/Phone/Email	290 W 78 Road Hialeah, FL 33014 (305) 558-8103 tony@generalimpact.com										
Authorized Signature	Jose Zuniga tony@generalimpact.com										
Technical Representative											
Address/Phone/Email											
Quality Assurance Representative											
Address/Phone/Email											
Category	Windows										
Subcategory	Casement										
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> Evaluation Report - Hardcopy Received										
Florida Engineer or Architect Name who developed the Evaluation Report	Walter A. Tillit Jr., P.E.										
Florida License	PE-44167										
Quality Assurance Entity	National Accreditation and Management Institute										
Quality Assurance Contract Expiration Date	12/31/2026										
Validated By	John W. Knezevich, PE <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received										
Certificate of Independence	<a href="#">FL42471_R0_COI_COI Drwg 23-154 GIG Windows Doors.pdf</a>										
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th><b>Standard</b></th> <th><b>Year</b></th> </tr> </thead> <tbody> <tr> <td>ASTM E1300</td> <td>2009</td> </tr> <tr> <td>TAS 201</td> <td>1994</td> </tr> <tr> <td>TAS 202</td> <td>1994</td> </tr> <tr> <td>TAS 203</td> <td>1994</td> </tr> </tbody> </table>	<b>Standard</b>	<b>Year</b>	ASTM E1300	2009	TAS 201	1994	TAS 202	1994	TAS 203	1994
<b>Standard</b>	<b>Year</b>										
ASTM E1300	2009										
TAS 201	1994										
TAS 202	1994										
TAS 203	1994										
Equivalence of Product Standards Certified By											
Sections from the Code											

Product Approval Method

Method 1 Option D

Date Submitted

10/05/2023

Date Validated

10/07/2023

Date Pending FBC Approval

10/10/2023

Date Approved

12/13/2023

**Summary of Products**

FL #	Model, Number or Name	Description
42471.1	Series VPF 8000 Outswing Aluminum Casement Window=LMI (Typical & Heavy Systems)	Window System made of Laminated and Insulated Impact Resistant Glass retained by aluminum profile frame, wet glazed.
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> Yes <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> Yes <b>Design Pressure:</b> +varies/-varies <b>Other:</b> Large & Small Missile Impact Resistant, see General Notes No. 1 thru 5, and sheet 1 of installation Drawing No. 23-154. For A.S.D. Pressure ratings, See schedules on sheets 5 and 27 thru 33 of installation Drawing No. 23-154. See Section 7 of the Evaluation Report for additional limitations and conditions of use.		<b>Installation Instructions</b> <a href="#">FL42471_R0_II_PED_Drwg_23-154_GIG_Windows_Doors.pdf</a> Verified By: Walter A. Tillit Jr., P.E. PE 44167 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL42471_R0_AE_PER_Drwg_23-154_GIG_Windows_Doors.pdf</a> Created by Independent Third Party: Yes

[Back](#)

[Next](#)

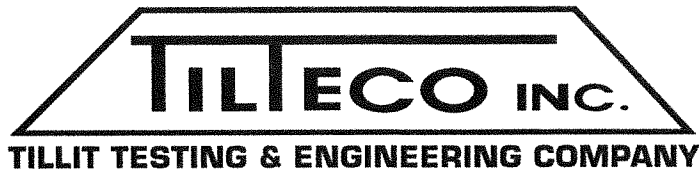
Contact Us :: 2601 Blair Stone Road, Tallahassee FL 32399 Phone: 850-487-1824

The State of Florida is an AA/EEO employer. [Copyright 2007-2013 State of Florida.](#) :: [Privacy Statement](#) :: [Accessibility Statement](#) :: [Refund Statement](#)

Under Florida law, email addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions, please contact 850.487.1395. \*Pursuant to Section 455.275(1), Florida Statutes, effective October 1, 2012, licensees licensed under Chapter 455, F.S. must provide the Department with an email address if they have one. The emails provided may be used for official communication with the licensee. However email addresses are public record. If you do not wish to supply a personal address, please provide the Department with an email address which can be made available to the public. To determine if you are a licensee under Chapter 455, F.S., please click [here](#).

**Product Approval Accepts:**





WALTER A. TILLIT, JR., P.E.

tilteco@aol.com  
FL P.E. License No. 44167  
FL C.A. License No. 0006719

## **CERTIFICATE OF INDEPENDENCE**

**Evaluation Report #:** 23-0807.01

**Date:** August 7, 2023

**Product Category:** Windows

**Product Subcategory:** Casement

**Product Name:** **SERIES VPF 8000 OUTSWING ALUMINUM  
CASEMENT WINDOW – LMI (TYPICAL AND  
HEAVY SYSTEM**

**Manufacturer Name:** **GIG WINDOWS & DOORS  
290 West 78th Road  
Hialeah, FL 33014**

**Dear Sir (Madam):**

This is to certify that this Florida Professional Engineer, performing this evaluation does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the reports are being issued.

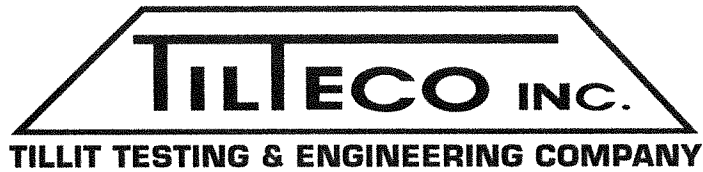
This is also to certify that this Florida Professional Engineer performing this evaluation does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

**Certificate of Independence prepared by Walter A. Tillit, Jr., P.E. (Florida License No. 44167), President of Tilteco, Inc. (Florida CA-0006719).**

8/7/2023

WAT\ma

D:\TILTECO ADMIN RECORDS \ CERTIFICATION OF INDEPENDENCE \ GIG WINDOWS & DOORS \SERIES VPF 8000  
OUTSWING ALUMINUM CASEMENT WINDOW – LMI (TYPICAL AND HEAVY SYSTEMS) / HIGH LOADS\ EVALUATION REPORT  
# 23-0807.01



WALTER A. TILLIT, JR., P.E.

tilteco@aol.com  
FL P.E. License No. 44167  
FL C.A. License No. 0006719

## PRODUCT EVALUATION REPORT

**REPORT No.:** 23-0807.01

**DATE:** August 7, 2023

**PRODUCT CATEGORY:** Windows

**PRODUCT SUB-CATEGORY:** Casement

**PRODUCT NAME:** SERIES VPF 8000 OUTSWING ALUMINUM  
CASEMENT WINDOW – LMI (TYPICAL AND  
HEAVY SYSTEMS)

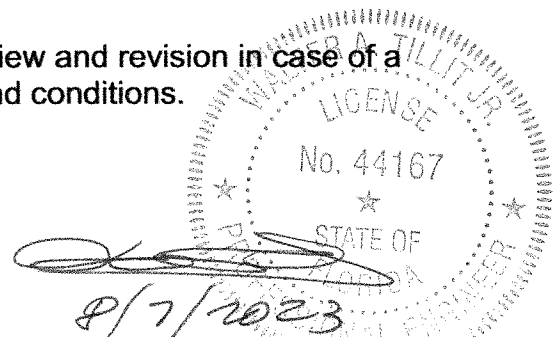
**MANUFACTURER:** GIG WINDOWS & DOORS  
290 West 78th Road  
Hialeah, FL 33014

### 1. PURPOSE OF EVALUATION:

This is a Product Evaluation Report issued by **Walter A. Tillit, Jr., P.E.** (System ID # 1906) to **GIG WINDOWS & DOORS**, based on **Rule Chapter No. 61G20-3, Method 1D** of the **Florida Department of Business and Professional Regulation**.

This product is being issued an Evaluation Report as described herein and has been verified for compliance in accordance with the 2023 8th Edition of the Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

This Product Evaluation Report shall be subject to review and revision in case of a Building Code change that may affect its limitations and conditions.



## **2. EVIDENCE SUBMITTED:**

### **2.1. PRODUCT EVALUATION DOCUMENT (P.E.D.):**

Drawing No. 23-154, titled “**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOWS– LMI (TYPICAL AND HEAVY SYSTEMS)**” sheets 1 thru 33 of 33 prepared by **Tilteco, Inc.**; signed and sealed by **Walter A. Tillit, Jr., P.E.**; dated 8/7/2023. This drawing is an integral part of this Evaluation Report.

### **2.2. TEST REPORTS:**

Impact and Cyclic Tests as per protocol TAS-201, TAS-203, Uniform Static Load as per Protocol TAS 202 per sections 1626 and 1609.1.2, respectively of the Florida Building Code.

Test reports prepared by Fenestration Testing Lab Inc., Report No.9073, signed and sealed by Idalmis Ortega, P.E.

### **2.3. STRUCTURAL ENGINEERING CALCULATIONS:**

On Series VPF 8000 outswing Aluminum casement window – LMI (Typical and heavy systems) for Maximum Pressure Rating vs. Maximum anchor spacing, maximum width and height, and Maximum Glass Size, based on rational and comparative analysis, in accordance with sections 1604 and 1616 of the Florida Building Code. Calculations prepared by Tilteco, Inc., dated 03/09/2017, signed and sealed by Walter A. Tillit, Jr., P.E. Glass verified per ASTM E-1300-9a Standard, per section 2404.1 of the Florida Building Code

## **3. MISSILE IMPACT RESISTANCE:**

Large Missile Impact resistance is provided per TAS 201 (9 lbs, 50 feet/sec, 2”x 4” Large Missile).

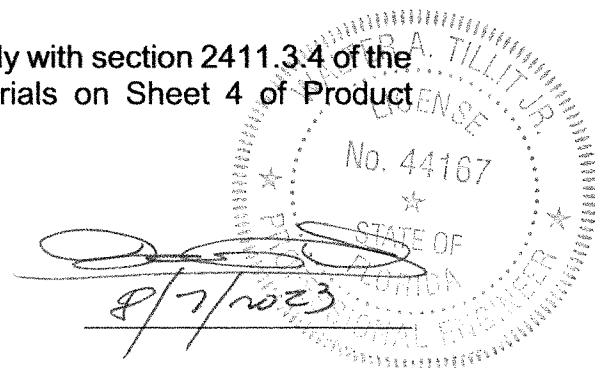
## **4. WIND LOADS RESISTANCE:**

On Series VPF 8000 outswing Aluminum casement window – LMI (Typical and heavy systems) has been verified to keep sustain wind pressures. Maximum Glass Panel Dimensions, window dimensions shall be as indicated on sheet 5 and 27 thru 33 of Product Evaluation Document (P.E.D.), Drawing No. **23-154**

## **5. INSTALLATION:**

Installation shall be performed strictly in accordance with General Notes # 3 thru 12, indicated on sheet 1 and details indicated on sheet 8 thru 26 of Product Evaluation Document (P.E.D.), drawing No.**23-154**.

Gaskets and setting blocks used at installations comply with section 2411.3.4 of the Florida Building Code as specified on Bill of Materials on Sheet 4 of Product Evaluation Document (P.E.D.), drawing No. **23-154**



**6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:**

Shall be strictly in accordance with General Notes and Components indicated on sheets 1 thru 5, of Product Evaluation Document (P.E.D.), **Drawing No. 23-154.**

Anchor specifications shall be as indicated on sheets 1, of Product Evaluation Document (P.E.D.), Drawing No. **23-154.**

**7. LIMITATIONS AND CONDITIONS OF USE:**

7.1. Shall be strictly in compliance with General Notes No. 1 thru 5, indicated on sheet 1 of Product Evaluation Document (P.E.D.), Drawing No. **23-154** prepared by Tilteco, Inc. and signed and sealed by Walter A. Tillit, Jr., P.E.

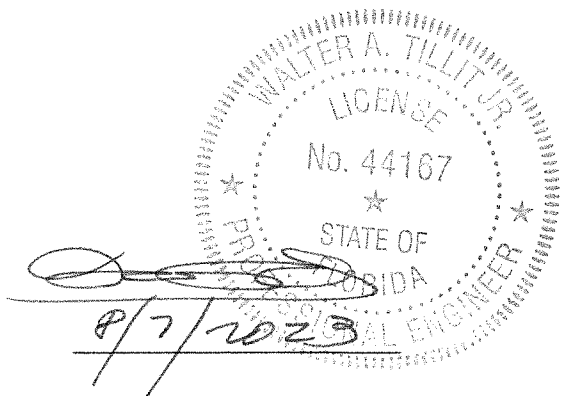
7.2. Product **may** be installed within HIGH VELOCITY HURRICANE ZONES as defined on section 202 of the Florida Building Code and out of it.

7.3. Product shall only be installed into substrates with limitations as indicated on sheets 27 thru 33 of Product Evaluation Document (P.E.D.), Drawing No. **23-154.**

Product Evaluation Report prepared by Walter A. Tillit, Jr., P.E. (Florida License No. 44167), President of Tilteco, Inc. (Florida CA-0026719).

WATmaL

D:\TILTECO ADMIN RECORDS \ P. E. REPORT.23 \ GENERAL IMPACT GLASS & WINDOW / SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW – LMI (TYPICAL AND HEAVY SYSTEMS) / HIGH LOADS\ DRWG # 23-154 \ REPORT # 23-0807.01



**GENERAL NOTES:**

1. SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW—LARGE MISSILE IMPACT RESISTANT (TYPICAL & HEAVY SYSTEMS), SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2023 (8th EDITION) OF THE FLORIDA BUILDING CODE. SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW (TYPICAL & HEAVY SYSTEMS) MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (H.V.H.Z.) OR OUT OF IT (N.H.V.H.Z)..

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTIONS 1620 & 1609 OF THE ABOVE MENTIONED CODE, USING ASCE 7-22 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 7-22 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 ANCHORS ON THIS P.E.D., AS TESTED, WERE NOT OVERSTRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS. FASTENERS SPACING IN WOOD HAS BEEN DETERMINED IN ACCORDANCE WITH N.D.S. 2018.

THIS PRODUCT'S ADEQUACY FOR IMPACT AND WIND RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTIONS 1626 & 1609.1.2 OF THE ABOVE MENTIONED CODE AS PER PROTOCOLS TAS-201, TAS-202, TAS-203, PER FENESTRATION TESTING LABORATORY REPORT # 9073 AND AS PER SUBMITTED STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTIONS 1616 & 1604 OF THE FLORIDA BUILDING CODE. GLASS HAS BEEN VERIFIED PER ASTM E-1300, PER SECTION 2404.1 OF THE FLORIDA BUILDING CODE.

2. MAXIMUM A.S.D. DESIGN PRESSURE RATINGS FOR THIS WINDOW SHALL BE AS SHOWN ON SHEET 27.

3. SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW (TYPICAL & HEAVY SYSTEMS) WILL NOT REQUIRE A HURRICANE PROTECTION DEVICE.

4. SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW (TYPICAL & HEAVY SYSTEMS) ARE APPROVED FOR AIR AND WATER INFILTRATION.

5. SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW (TYPICAL & HEAVY SYSTEMS) SHALL COMPLY WITH SECTION 2406 OF THE FLORIDA BUILDING CODE.

6. ALL COMPONENTS FOR THIS PRODUCT SHALL BE AS PER BILL OF MATERIAL & COMPONENTS SHEETS 2, 3 & 4.

7. ALL SCREWS USED FOR ASSEMBLY CONNECTIONS (METAL TO METAL) TO BE STAINLESS STEEL 410 AISI SERIES & SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4.

8. WOOD BUCKS BY OTHERS, MUST BE SOUTHERN PINE #2, G=0.55, AND SHALL COMPLY WITH SECTIONS 2411.3.3.3 & 2411.3.3.4 OF THE FLORIDA BUILDING CODE.

(8.1) 2X WOOD BUCKS MUST BE PROPERLY ANCHORED TO EXISTING STRUCTURE TO TRANSFER LOADS TO IT. ANCHORAGE IS INDEPENDENT OF WINDOW FRAME ANCHORAGE. WINDOW FRAME MUST BE SEPARATELY ANCHORED TO 2X WOOD BUCK FOLLOWING DETAILS ON THIS DRAWING.

(8.2) 1X WOOD BUCK (OR ANY WOOD BUCK LESS THAN 2X) MUST BE PROPERLY ANCHORED TO EXISTING STRUCTURE TO TRANSFER LOADS TO IT. WINDOW FRAME ANCHOR SHALL BE USED TO ATTACH 1X WOOD BUCK TO EXISTING STRUCTURE BY DRIVING ANCHOR THRU BOTH WINDOW FRAME & 1X WOOD BUCK INTO EXISTING STRUCTURE W/ PROPER EMBEDMENT AND EDGE DISTANCE AS SHOWN ON THIS DRAWING.

(8.3) WINDOW FRAME WITH ADAPTOR (COMPONENT # 6) FOR TYPICAL SYSTEM & COMP. # 1A FOR HEAVY SYSTEM) MAY BE DIRECTLY CONNECTED TO EXISTING STRUCTURE WITH NO NEED OF WOOD BUCKS WHEN MASONRY OPENING IS NOT LARGER THAN ACTUAL WINDOW OVERALL DIMENSIONS. HOWEVER, SHIMS (SEE NOTE 10) MAY BE ALLOWED AT WINDOW FRAME ANCHOR LOCATION IF NEEDED.

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

**9. ANCHOR NOTES:** EMBEDMENT AND EDGE DISTANCE ARE BEYOND ANY FINISH.

TO EXISTING POURED CONCRETE: (MIN. f'c = 3000 psi)  
 - 1/4"Ø TAPCON ANCHOR W/ 1 3/4" MIN. EMBEDMENT, 2 1/2" MIN. EDGE DISTANCE & 4" MIN. SPACING, AS MANUFACTURED BY ITW/BUILDEX, INC. (COMPONENT 12). SEE NOTE 8.

- 1/4"Ø KWIK-CON II W/ 1 3/4" MIN. EMBEDMENT, 1 1/2" MIN. EDGE DISTANCE & 3" MIN. SPACING, AS MANUFACTURED BY HILTI, INC. (COMPONENT 12A). SEE NOTE 8.

(B) TO EXISTING A.S.T.M. C-90 CONCRETE BLOCK WALL.  
 - 1/4"Ø TAPCON ANCHOR W/ 1" MIN. EMBEDMENT, 2 1/2" MIN. EDGE DISTANCE & 4" MIN. SPACING. AS MANUFACTURED BY ITW/BUILDEX, INC. (COMPONENT 12). SEE NOTE 8.

- 1/4"Ø KWIK-CON II W/ 1" MIN. EMBEDMENT, 1 1/2" MIN. EDGE DISTANCE & 3" MIN. SPACING, AS MANUFACTURED BY HILTI, INC. (COMPONENT 12A). SEE NOTE 8.

(C) TO EXISTING 2xP.T. WOOD BUCK. OR WOOD STRUCTURE MIN. EDGE DISTANCE (E.D.)=1" & 3" MIN. SPACING.  
 - 1/4"Ø-14 TAPCON ANCHORS W/ 1 1/2" MIN. PENETRATION, 1" MIN. EDGE DISTANCE & 3" MIN. SPACING. AS MANUFACTURED BY ITW/BUILDEX, INC. (COMPONENT 12). SEE NOTE 8.

- 1/4"Ø KWIK-CON II W/ 1 1/2" MIN. EMBEDMENT, 1" MIN. EDGE DISTANCE & 3" MIN. SPACING, AS MANUFACTURED BY HILTI, INC. (COMPONENT 12A). SEE NOTE 8.

(D) TO EXISTING MIN. 1/8" THICK ALUMINUM TUBE (6063-T5 ALLOY) MIN. EDGE DISTANCE (E.D.) = 1/2" & 2" MIN. SPACING.

- 1/4"Ø-14 TEK SCREW, AS MANUFACTURED BY ITW/BUILDEX, INC. (COMPONENT 13). THREADS SHALL GO THRU THE TUBE THICKNESS.

(E) TO EXISTING MIN. 1/8" THICK STEEL MEMBER (ASTM A-500, A-653 OR A-36) MIN. EDGE DISTANCE (E.D.) = 1/2" & 2" MIN. SPACING.

- 1/4"Ø-14 TEK SCREW, AS MANUFACTURED BY ITW/BUILDEX, INC. (COMPONENT 13). THREADS SHALL GO THRU THE FULL TUBE THICKNESS.

10. PROVIDE 1/4" MAX. LOAD BEARING SHIM SPACE (TYP.).

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

12. (a) THIS P.E.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

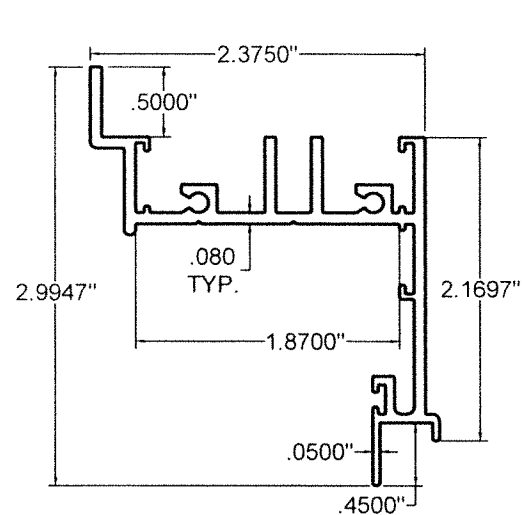
(b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS P.E.D., PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.

(c) THIS P.E.D. WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

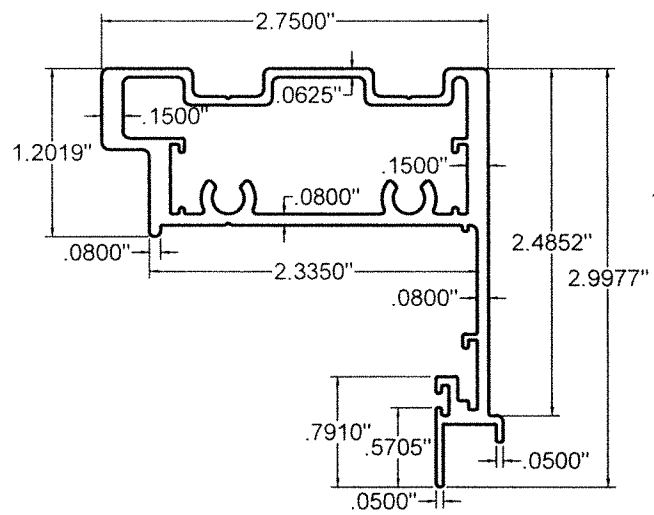
(d) ORIGINAL P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

13. SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW (TYPICAL OR HEAVY SYSTEMS) MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH SECTION 1709.5 OF THE FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY UNIT.

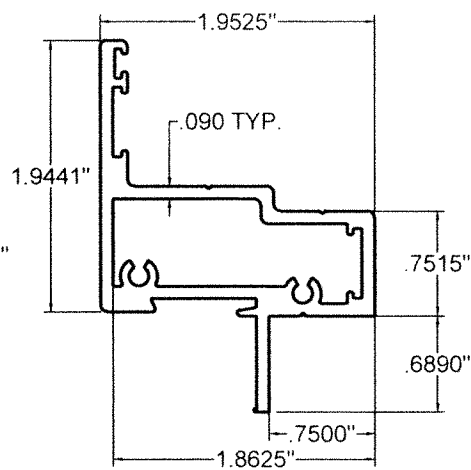
<p>P.E. SEAL/SIGNATURE/DATE</p>		<p>FLORIDA BUILDING CODE (HIGH &amp; NON HIGH VELOCITY HURRICANE ZONE)</p> <p>©2023 TILTECO, INC.</p> <p><b>TILTECO inc.</b></p> <p>TILLIT TESTING &amp; ENGINEERING COMPANY                  6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166                  Phone: (305)871-1530 Fax: (305)871-1531                  CA-0006719                  WALTER A. TILLIT Jr. P.E.                  FLORIDA Lic. # 44167</p>		<p><b>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</b></p> <p>290 WEST 78 ROAD                  HIALEAH, FL 33014                  PH: (954)226-5555/(305)558-8103                  FAX: (305)558-6665                  www.gigwindows.com</p>		<p>W.H. DRAWN BY:</p> <p>08/07/2023                  DATE:</p> <p>23-154                  DRAWING No.</p>									
		<table border="1"> <thead> <tr> <th>REV. NO</th> <th>DESCRIPTION</th> <th>DATE</th> <th>REV. No</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OLD 20-273</td> <td>06/07/23</td> <td>2</td> <td></td> <td></td> </tr> </tbody> </table>		REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	1	OLD 20-273	06/07/23	2		
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE										
1	OLD 20-273	06/07/23	2												



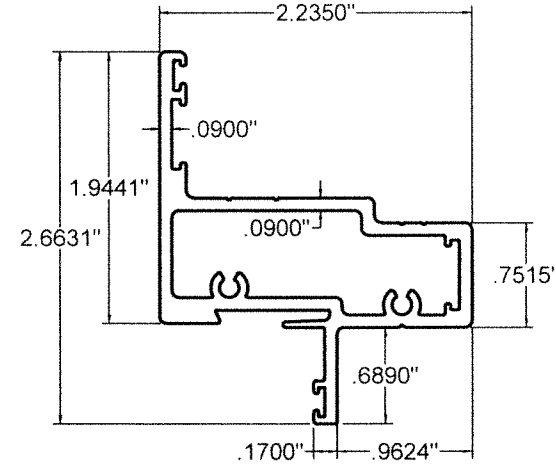
① **FRAME**  
**(TYPICAL SYSTEM)**



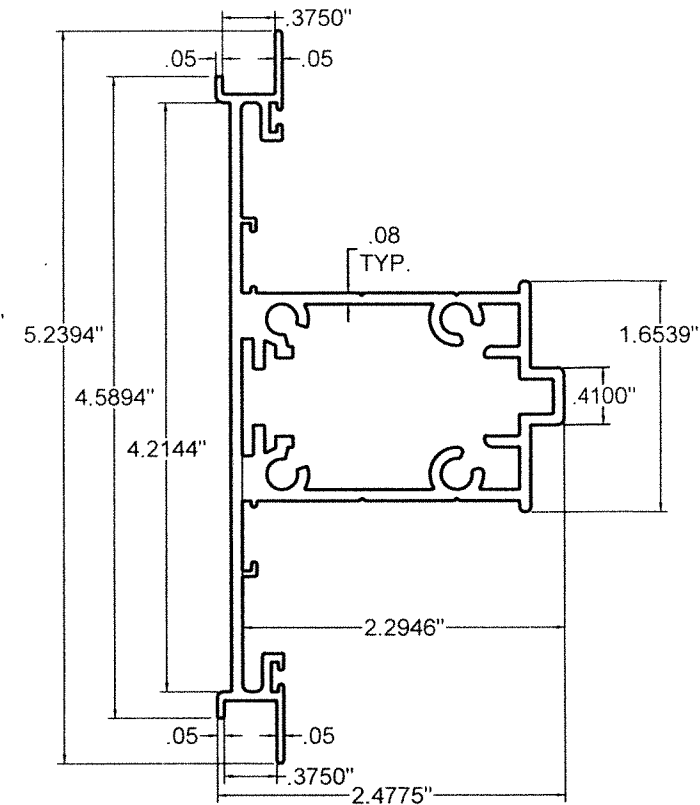
①A **ALTERNATE FRAME W/ ADAPTOR**  
**(HEAVY SYSTEM)**



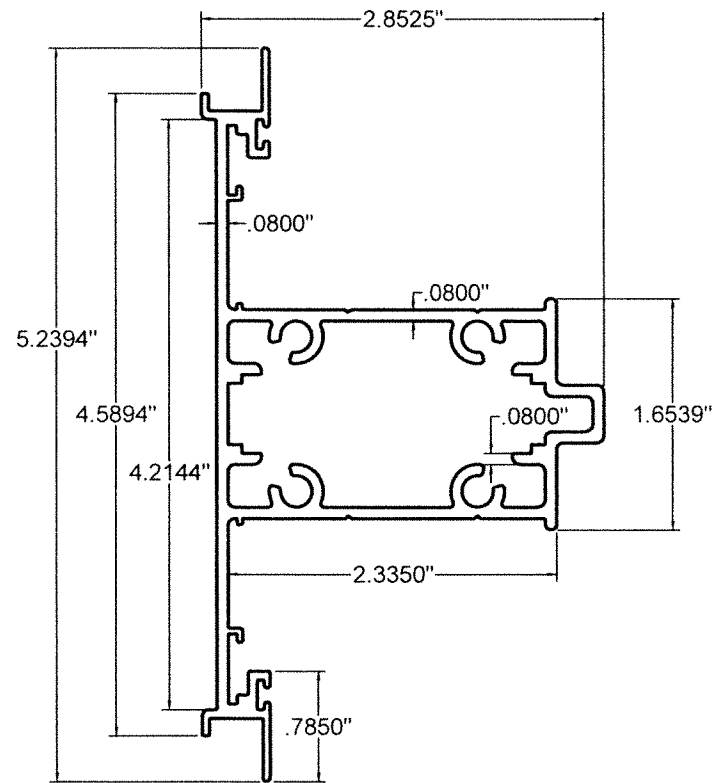
② **VENT FRAME**  
**(TYPICAL SYSTEM)**



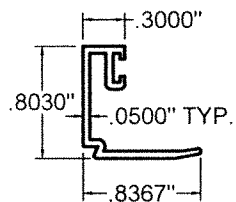
②A **ALTERNATE VENT FRAME**  
**(HEAVY SYSTEM)**



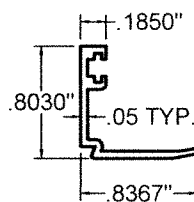
③ **CENTER POST**  
**(TYPICAL SYSTEM)**



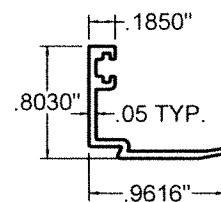
③A **ALTERNATE CENTER POST**  
**(HEAVY SYSTEM)**



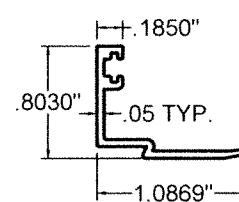
④A **GLAZING BEAD 5/16"**  
**(TYPICAL & HEAVY SYSTEM)**



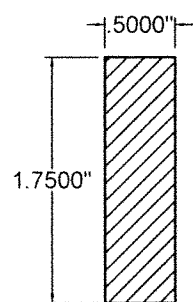
④B **GLAZING BEAD 7/16"**  
**(TYPICAL & HEAVY SYSTEM)**



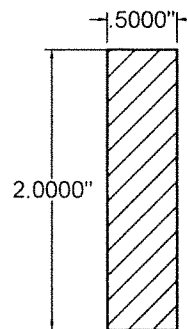
④C **GLAZING BEAD 9/16"**  
**(TYPICAL & HEAVY SYSTEM)**



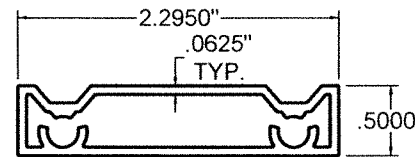
④D **GLAZING BEAD 11/16"**  
**(TYPICAL & HEAVY SYSTEM)**



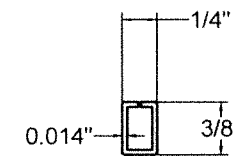
⑤ **ALUM. INSERT BAR**  
**(TYPICAL SYSTEM)**



⑤A **ALTERNATE ALUM. INSERT BAR**  
**(HEAVY SYSTEM)**



⑥ **EQUAL FRAME ADAPTOR**  
**(TYPICAL SYSTEM)**



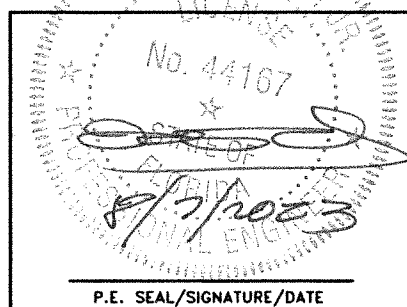
③9 **INSULATED GLASS UNIT SPACER**

## COMPONENTS

(TYPICAL & HEAVY SYSTEMS)\*

SCALE 3/4"=1"

\* TYPICAL & HEAVY SYSTEMS SHALL NOT BE COMBINED (MIXED) BETWEEN EACH OTHER.



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON 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  
CA-0006719

WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**



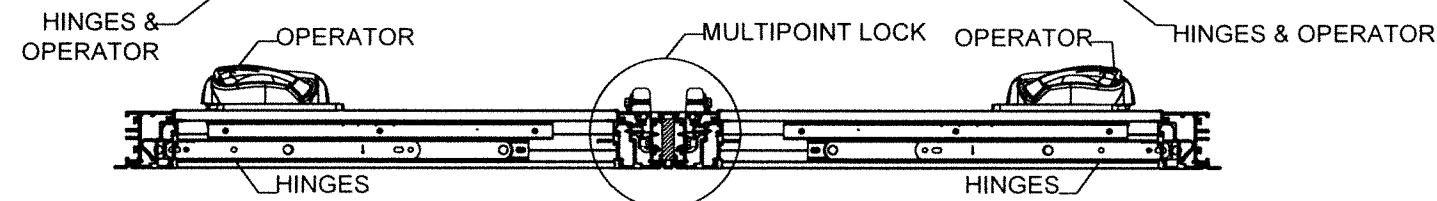
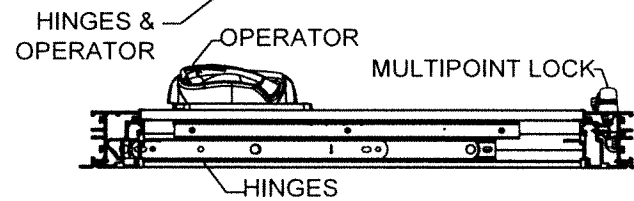
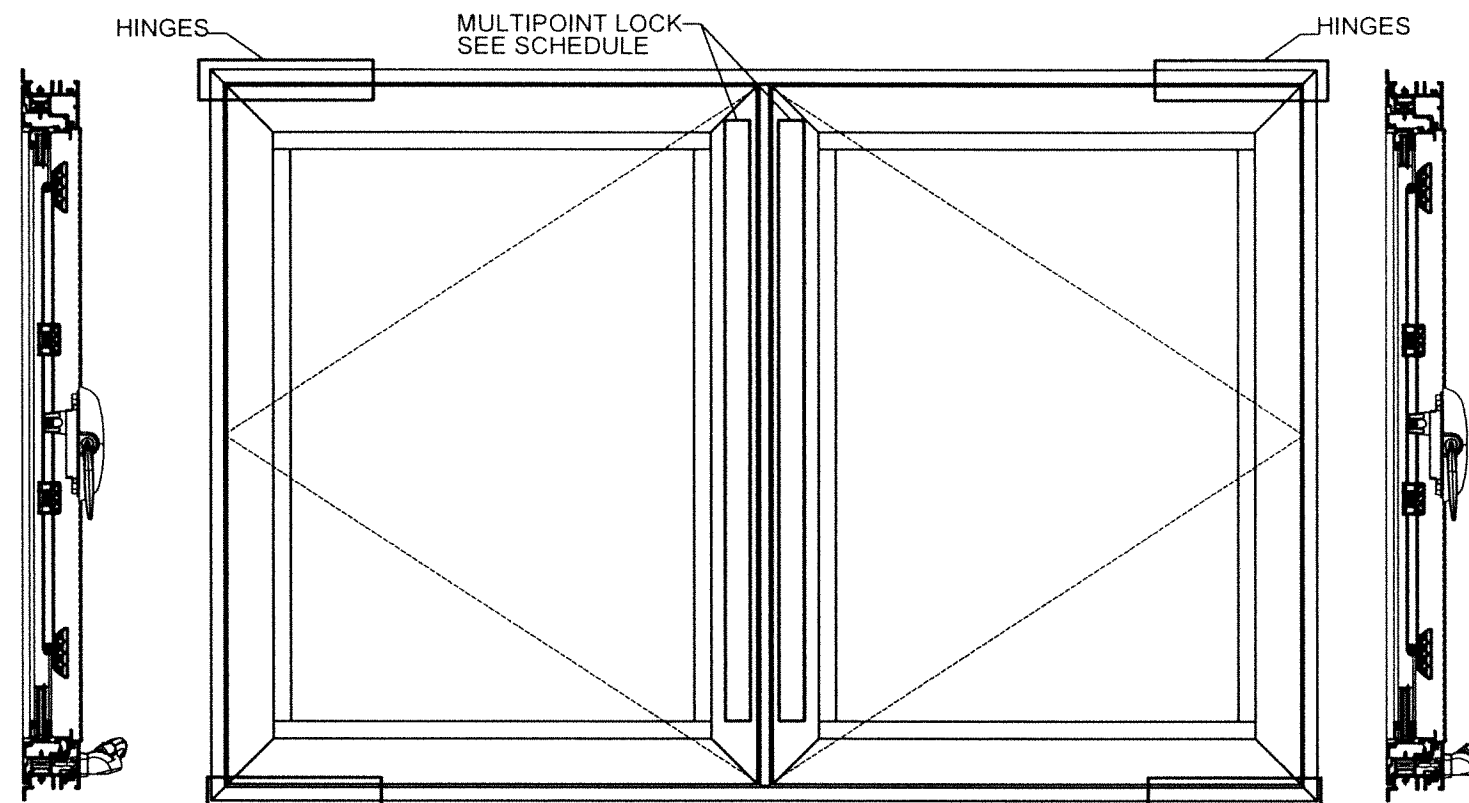
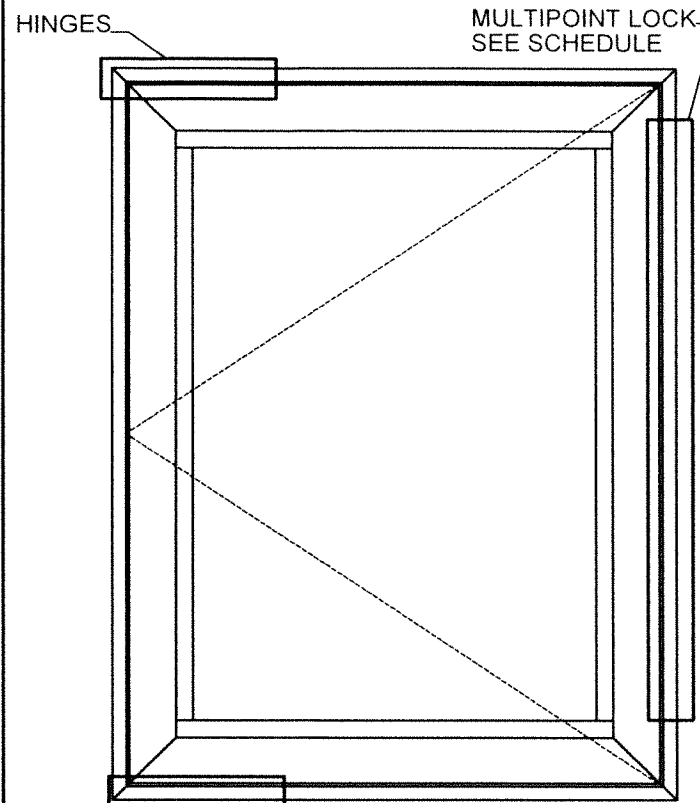
290 WEST 78 ROAD  
HIALEAH, FL 33014  
PH: (954)226-5555/(305)558-8103  
FAX: (305)558-6665  
www.gigwindows.com

W.H.  
DRAWN BY:

08/07/2023  
DATE:

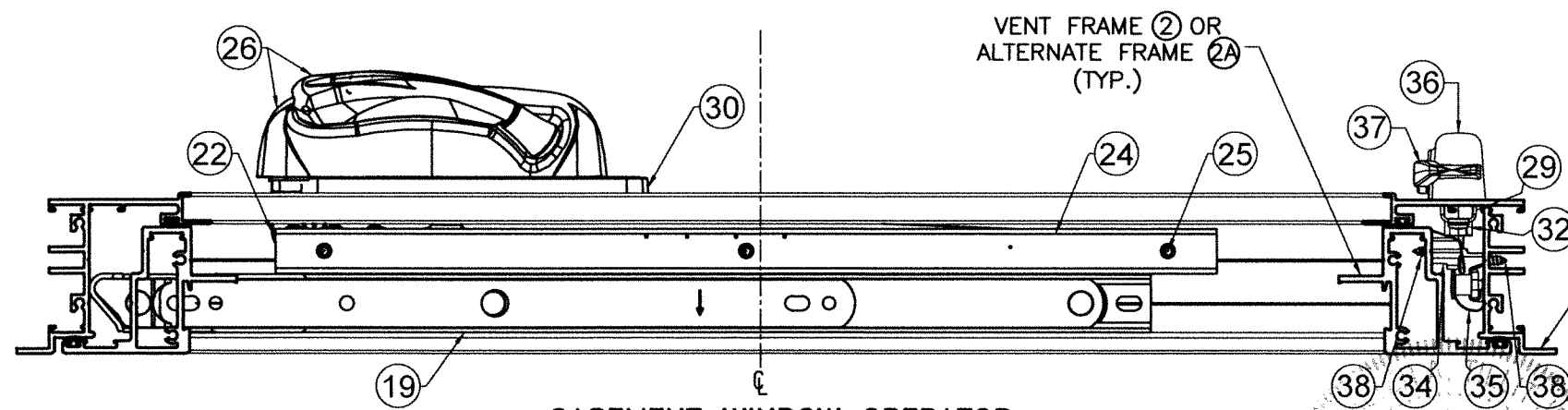
23-154  
DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		

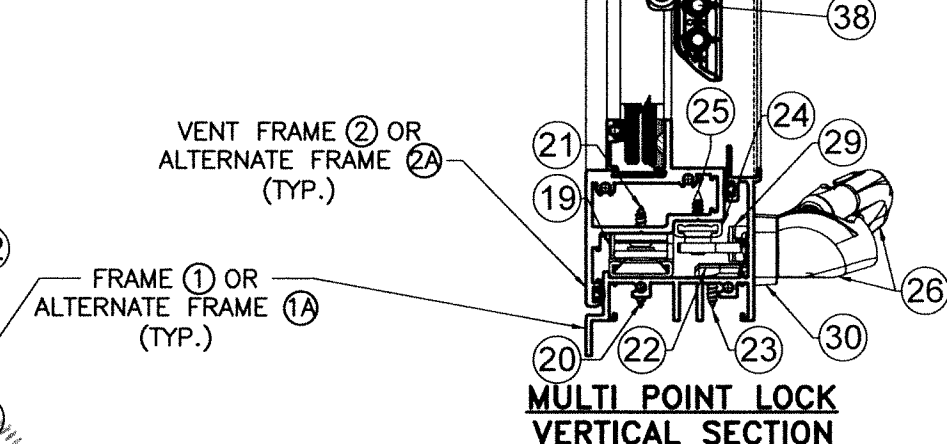


**HARDWARE LOCATION AT SINGLE CASEMENT WINDOW**

**HARDWARE LOCATION AT DOUBLE CASEMENT WINDOW**



**CASEMENT WINDOW OPERATOR**



**MULTI POINT LOCK VERTICAL SECTION**

MULTIPOINT LOCK SCHEDULE	
FRAME HEIGHT	# OF MULTIPOINT
33 1/4" TO 39 1/4"	2
39 1/4" TO 45 1/4"	3
45 1/4" TO 51 1/4"	4
51 1/4" TO 57 1/4"	4
57 1/4" TO 63 1/4"	5
63 1/4" TO 69 1/4"	5
69 1/4" TO 74"	5

**HARDWARE DETAILS FOR TYPICAL & HEAVY SYSTEMS: REQ'D. AT EA. VENT (TYP.): SEE SHEETS 2, 3, 6 & 7.**  
SCALE 3/8"=1"

No. 44167  
8/7/2023  
P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)

©2023 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  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**



290 WEST 78 ROAD  
HIALEAH, FL 33014  
PH: (954)228-5555/(305)558-8103  
FAX: (305)558-6665  
www.gigwindows.com

W.H. DRAWN BY:

08/07/2023 DATE:

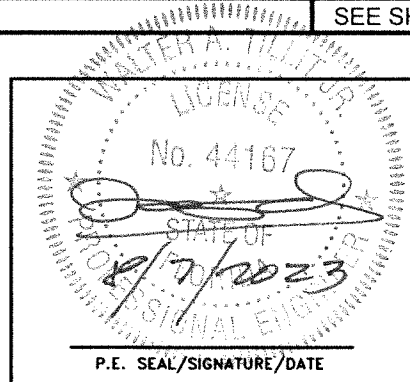
23-154 DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	08/07/23	2		

SHEET 3 OF 33

**BILL OF MATERIALS: SINGLE & DOUBLE CASEMENT WINDOW (SEE SHEETS 6 & 7): TYPICAL & HEAVY SYSTEMS**

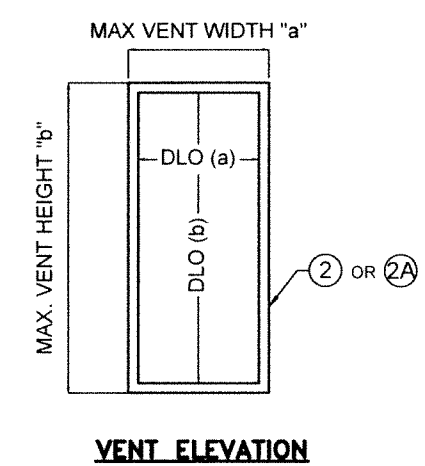
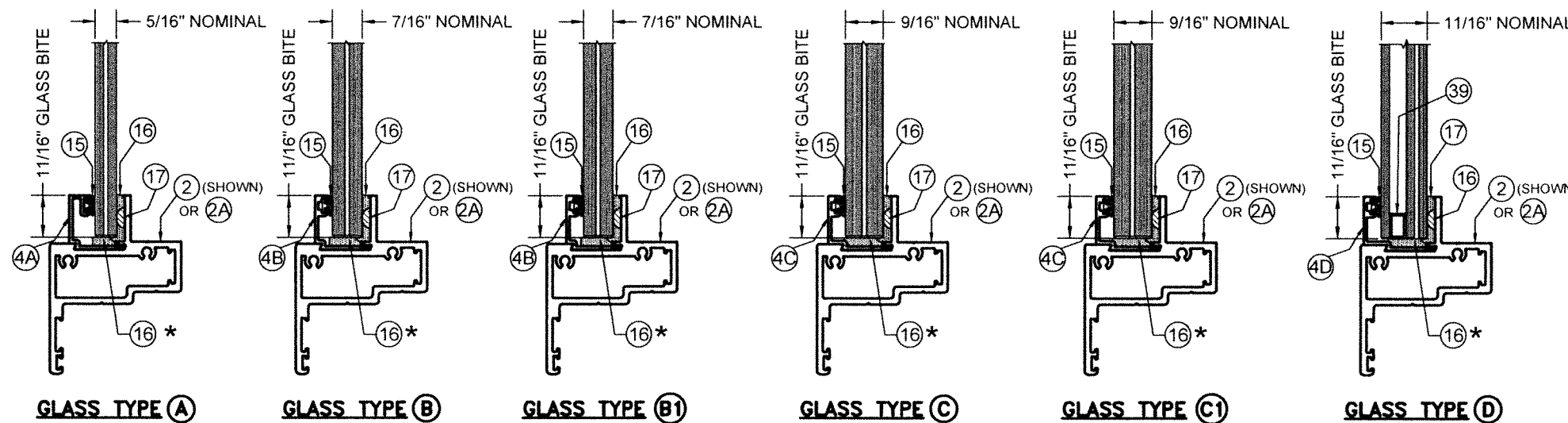
COMPONENT #	DESCRIPTION	DIMENSIONS/REMARKS	MATERIAL
1	FRAME (TYPICAL SYSTEM)	SHEET 2	6063-T6 ALUMINUM
1A	ALTERNATE FRAME WITH ADAPTOR (HEAVY SYSTEM)	SHEET 2	6063-T6 ALUMINUM
2	VENT FRAME (TYPICAL SYSTEM)	SHEET 2	6063-T6 ALUMINUM
2A	ALTERNATE VENT FRAME (HEAVY SYSTEM)	SHEET 2	6063-T6 ALUMINUM
3	CENTER POST (TYPICAL SYSTEM)	SHEET 2	6063-T6 ALUMINUM
3A	ALTERNATE CENTER POST (HEAVY SYSTEM)	SHEET 2	6063-T6 ALUMINUM
4A	GLAZING BEAD 5/16" (TYPICAL & HEAVY SYSTEMS)	SHEET 2	6063-T6 ALUMINUM
4B	GLAZING BEAD 7/16" (TYPICAL & HEAVY SYSTEMS)	SHEET 2	6063-T6 ALUMINUM
4C	GLAZING BEAD 9/16" (TYPICAL & HEAVY SYSTEMS)	SHEET 2	6063-T6 ALUMINUM
4D	GLAZING BEAD 11/16" (TYPICAL & HEAVY SYSTEMS)	SHEET 2	6063-T6 ALUMINUM
5	ALUMINUM INSERT BAR (TYPICAL SYSTEM)	SHEET 2	6063-T6 ALUMINUM
5A	ALTERNATE ALUMINUM INSERT BAR (HEAVY SYSTEM)	SHEET 2	6063-T6 ALUMINUM
6	EQUAL FRAME ADAPTOR	SHEET 2	6063-T6 ALUMINUM
8	FRAME & VENT ASSEMBLY SCREWS	#8-32 x 3/4" P.H. M.S.	ST. STEEL
9	CENTER POST ASSEMBLY SCREWS	#14 x 2-3/4" H.H. TEK SCREWS	STEEL
12	1/4"Ø TAPCON (ITW /BUILDEX)	1/4" Ø (SEE NOTE 9/1)	STEEL
12A	1/4"Ø-14 KWIK-CON II (HILTI)	1/4" Ø (SEE NOTE 9/1)	STEEL
13	1/4"Ø-14 TEK SCREW (ITW /BUILDEX)	1/4" Ø (SEE NOTE 9/1)	STEEL
14	CORNER LOCK, 0.050" THK. x 1.7430" x 1.7430" x 0.473"	SULLIVAN ASSOCIATES	ST. STEEL
15	GLAZING BULB	0.250"x0.345" (ULTRAFAB)	VINYL
16	STRUCTURAL SILICONE DOW CORNING 995	ALL AROUND GLASS	SILICONE
17	BUMPER SPHEAR	-	SILICONE
18	NON STRUCTURAL SILICONE DOW CORNING CONTRACTORS, CONCRETE SEALANT (CCS)	AS SHOWN	SILICONE
19	4 BAR HINGE HEAVY DUTY	INTERLOCK	304 S.S.
20	HINGE MOUNTING SCREWS AT FRAME	#10 x 5/8" PH SMS. SEE SHEET 3	ST. STEEL
21	HINGE MOUNTING SCREWS AT VENT	#10 x 5/8" PH SMS. SEE SHEET 3	ST. STEEL
22	SINGLE ARM OPERATOR LEFT HANDING FOR CASEMENT	SEE SHEET 3	ST. STEEL
23	SINGLE ARM OPERATOR LEFT HANDING SCREWS	#10-24 X 1/2" F.H. M.S.	ST. STEEL
24	SINGLE ARM OPERATOR TRACK	SEE SHEET 3	-
25	SINGLE ARM OPERATOR TRACK SCREWS & SASH BRACKET MOUNTING SCREW & AWNING OPERATOR NARROW-STAINLESS	#8-32 X 5/8" F.H. SCREWS	ST. STEEL
26	OPERATOR COVER AND HANDLE	SEE SHEET 3	-
29	RETAINER CLIP	SEE SHEET 3	ST. STEEL
30	CASEMENT & AWNING FACE SPACER	SEE SHEET 3	-
31	MULTI-POINT LOCK MECHANISM	SEE SHEET 3	ST. STEEL
32	MULTI-POINT LOCK MECHANISM MOUNTING SCREWS	#8-32 X 3/4" F.H. MS	ST. STEEL
33	LOCKING BARS	SEE SHEET 3	ST. STEEL
34	CASEMENT STRIKE	SEE SHEET 3	-
35	CASEMENT GUIDE	SEE SHEET 3	-
36	SNAP ON COVER	SEE SHEET 3	-
37	SNAP ON HANDLE	SEE SHEET 3	-
38	LOCK MOUNTING SCREW AT VENT AND FRAME	#8-32 X 3/4" F.H. MS	ST. STEEL
39	INSULATED GLASS UNIT SPACER	SEE SHEET 2	3105-H24 ALUMINUM



FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE) ©2023 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 CA-0006719 WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167		SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)  290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com	W.H. DRAWN BY: 08/07/2023 DATE: 23-154 DRAWING No.			
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	SHEET 4 OF 33
1	OLD 20-273	08/07/23	2			

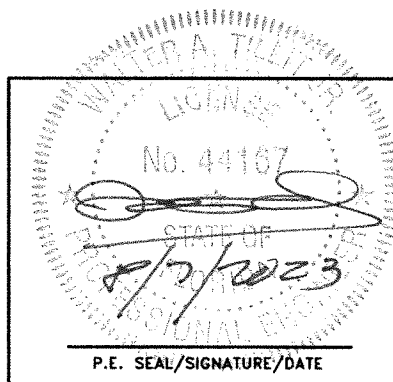
GLASS SCHEDULE		
COMPONENT #	DESCRIPTION	MATERIAL
(A)	5/16" NOMINAL LAMINATED GLASS W/ 1/8" H.S. GLASS +0.090" TROSIFOL PVB INTERLAYER BY KURARAY AMERICA, INC. + 1/8" H.S. GLASS.	GLASS
(B)	7/16" NOMINAL LAMINATED GLASS W/ 3/16" H.S. GLASS +0.090" TROSIFOL PVB INTERLAYER BY KURARAY AMERICA, INC. + 3/16" H.S. GLASS.	GLASS
(B1)	7/16" NOMINAL LAMINATED GLASS W/ 3/16" H.S. GLASS +0.090" SENTRYGLAS® INTERLAYER BY KURARAY AMERICA, INC. + 3/16" H.S. GLASS.	GLASS
(C)	9/16" NOMINAL LAMINATED GLASS W/ 1/4" H.S. GLASS +0.090" TROSIFOL PVB INTERLAYER BY KURARAY AMERICA, INC. + 1/4" H.S. GLASS.	GLASS
(C1)	9/16" NOMINAL LAMINATED GLASS W/ 1/4" H.S. GLASS +0.090" SENTRYGLAS® INTERLAYER BY KURARAY AMERICA, INC. + 1/4" H.S. GLASS.	GLASS
(D)	11/16" NOMINAL INSULATED-LAMINATED GLASS W/ 1/8" TEMPERED GLASS OUT BOARD -1/4 ARGON SPACER + 1/8 H.S. GLASS +0.090" TROSIFOL PVB INTERLAYER BY KURARAY AMERICA, INC. + 1/8" H.S. GLASS.	GLASS

TYPICAL & HEAVY SYSTEMS					
MAX. A.S.D. PRESSURE RATING FOR A GIVEN GLASS TYPE AND CORRESPONDING MAX. VENT WIDTHS AND VENT HEIGHTS					
GLASS TYPE	MAX. A.S.D. DESIGN PRESSURE RATING	MAX. VENT WIDTH "a"	MAX. VENT HEIGHT "b"	MAX. D.L.O. WIDTH (a)	MAX. D.L.O. HEIGHT (b)
(A), (B), (C), (D)	+72.0, -72.0 psf	41"	72 1/2"	35 5/8"	67 3/16"
(B1), (C1)	+105.0, -105.0 psf.	41"	53 3/8"	35 5/8"	48 1/16"
(B1), (C1)	+110.0, -110.0 psf.	39"	56 3/8"	33 5/8"	51 1/16"
(B1), (C1)	+120.0, -120.0 psf.	36"	61 3/8"	30 5/8"	56 1/16"

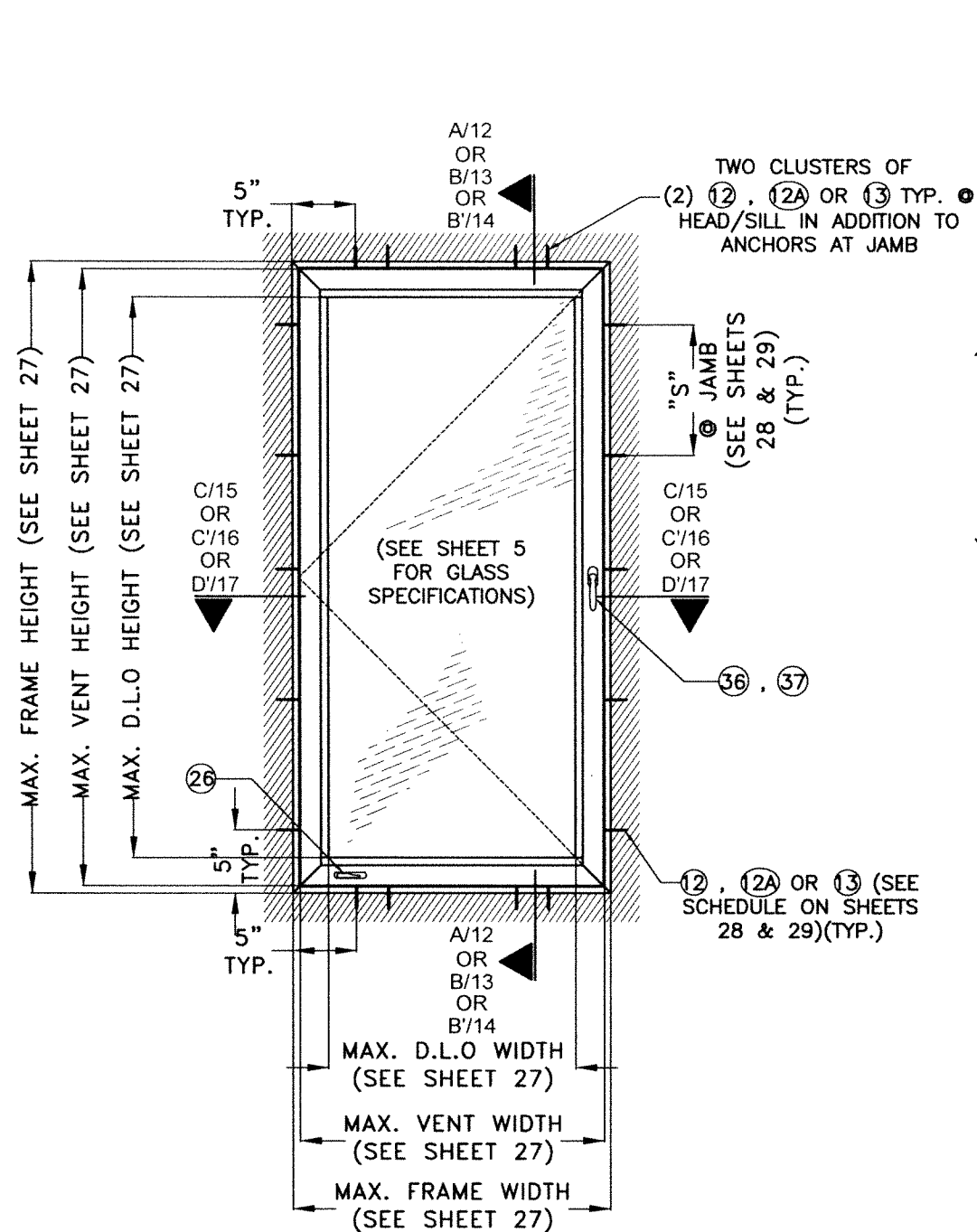


### GLASS CONFIGURATIONS

\*USE EPDM SETTING BLOCKS (GLASS THICKNESS X 1/16" THICK) AT 1/4 POINTS AT ALL GLASS. EACH LITE OF GLASS MORE THAN 3 FEET IN WIDTH SHALL HAVE TWO APPROVED SETTING BLOCKS, PER FBC.

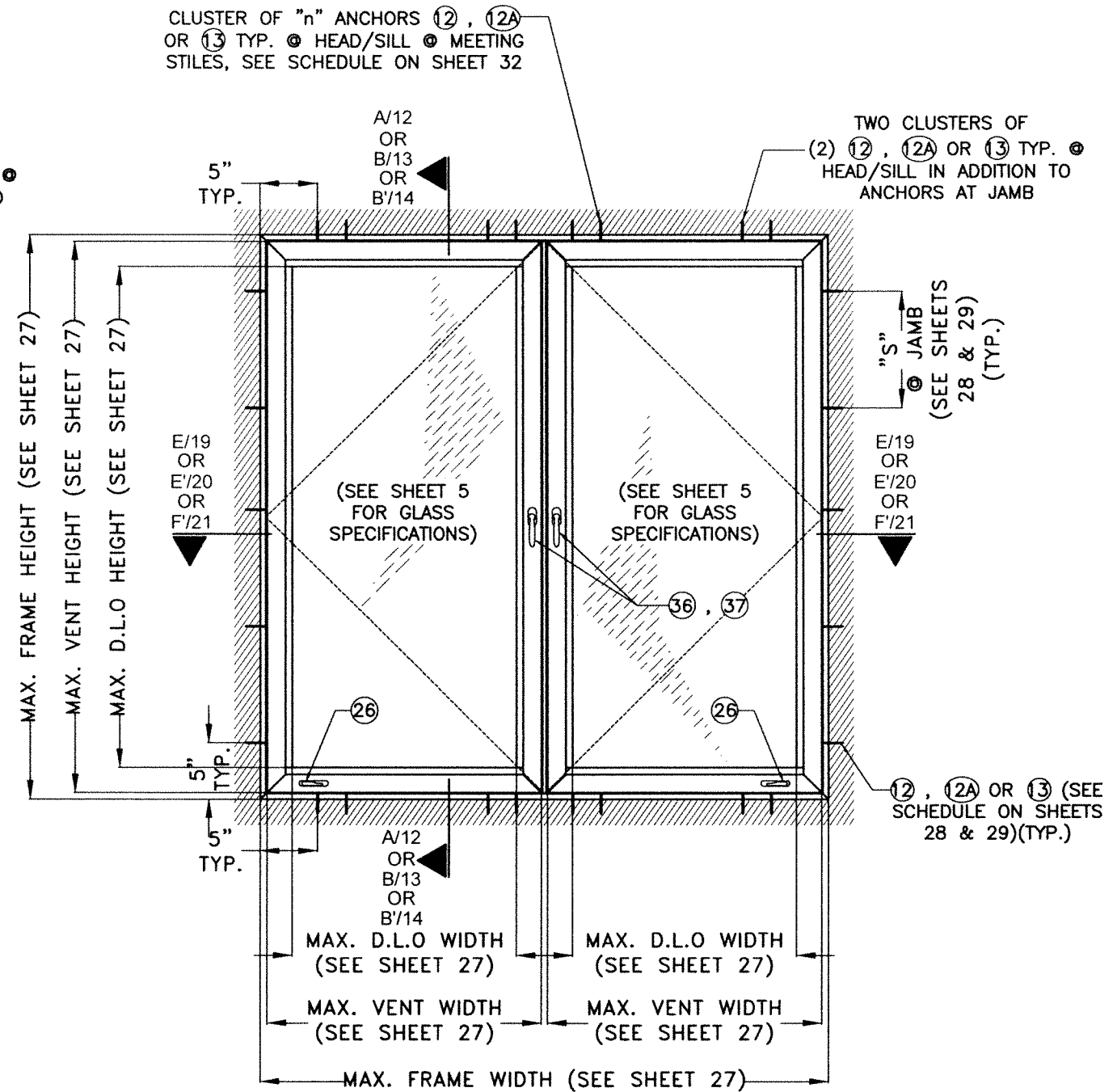


<p>FLORIDA BUILDING CODE (HIGH &amp; NON HIGH VELOCITY HURRICANE ZONE)</p> <p>©2023 TILTECO, INC.</p> <p><b>TILTECO inc.</b></p> <p>TILLIT TESTING &amp; ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone : (305)871-1530 Fax : (305)871-1531 CA-0006719 WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167</p>		<p>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</p> <p>290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)228-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com</p>	<p>W.H. DRAWN BY: 08/07/2023 DATE: 23-154 DRAWING No.</p>
<p>REV. NO</p> <p>1</p>	<p>MDC/COMMENTS</p> <p>6/5/17 MDC/COMMENTS 8/6/23</p>	<p>REV. No</p> <p>2</p>	<p>DESCRIPTION</p> <p>DATE</p>
<p>SHEET 5 OF 33</p>			<p>DATE</p>



**TYPICAL EXTERIOR ELEVATION  
 SINGLE VENT (TYPICAL OR HEAVY SYSTEMS)  
 CASEMENT WINDOW W/ ATTACHED JAMBS\***  
 SCALE: 3/4"=1'-0"

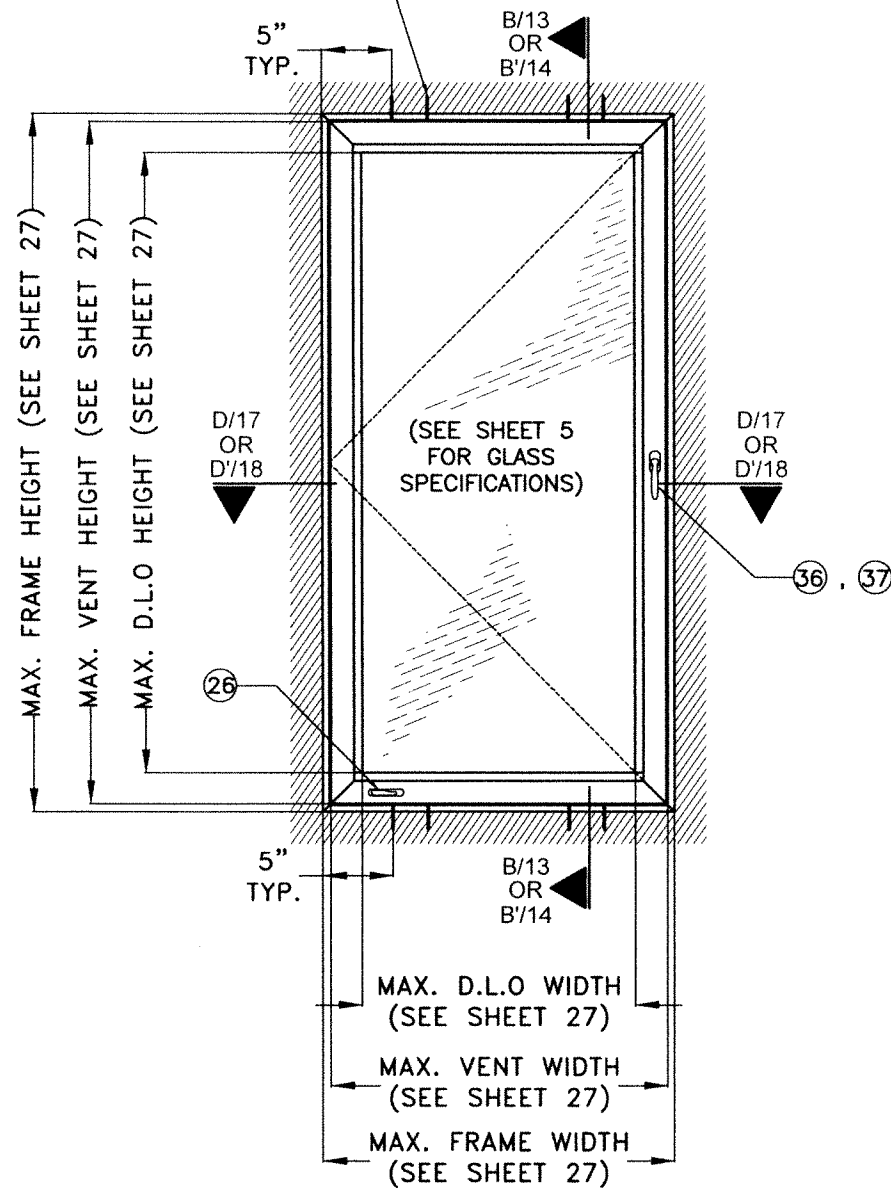
\* NOTE: JAMBS MAY ALSO BE ATTACHED ONLY ON ONE SIDE & FREE STANDING ON THE OTHER SIDE (W/ ADAPTOR # 6 FOR TYPICAL SYSTEM, OR 1A FRAME FOR HEAVY SYSTEM) AS PER DETAILS ON SHEETS 6, 7.



**TYPICAL EXTERIOR ELEVATION  
 DOUBLE VENT (TYPICAL OR HEAVY SYSTEMS)  
 CASEMENT WINDOW W/ ATTACHED JAMBS\***  
 SCALE: 3/4"=1'-0"

		FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)			
		©2023 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 CA-0006719 WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167	<b>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</b>  290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com	W.H. DRAWN BY: 08/07/2023 DATE: 23-154 DRAWING No.	
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	08/07/23	2		

TWO CLUSTERS OF "n" ANCHORS ⑫, ⑫A OR ⑬ TYP. ● HEAD/SILL, SEE SCHEDULE ON SHEET 30

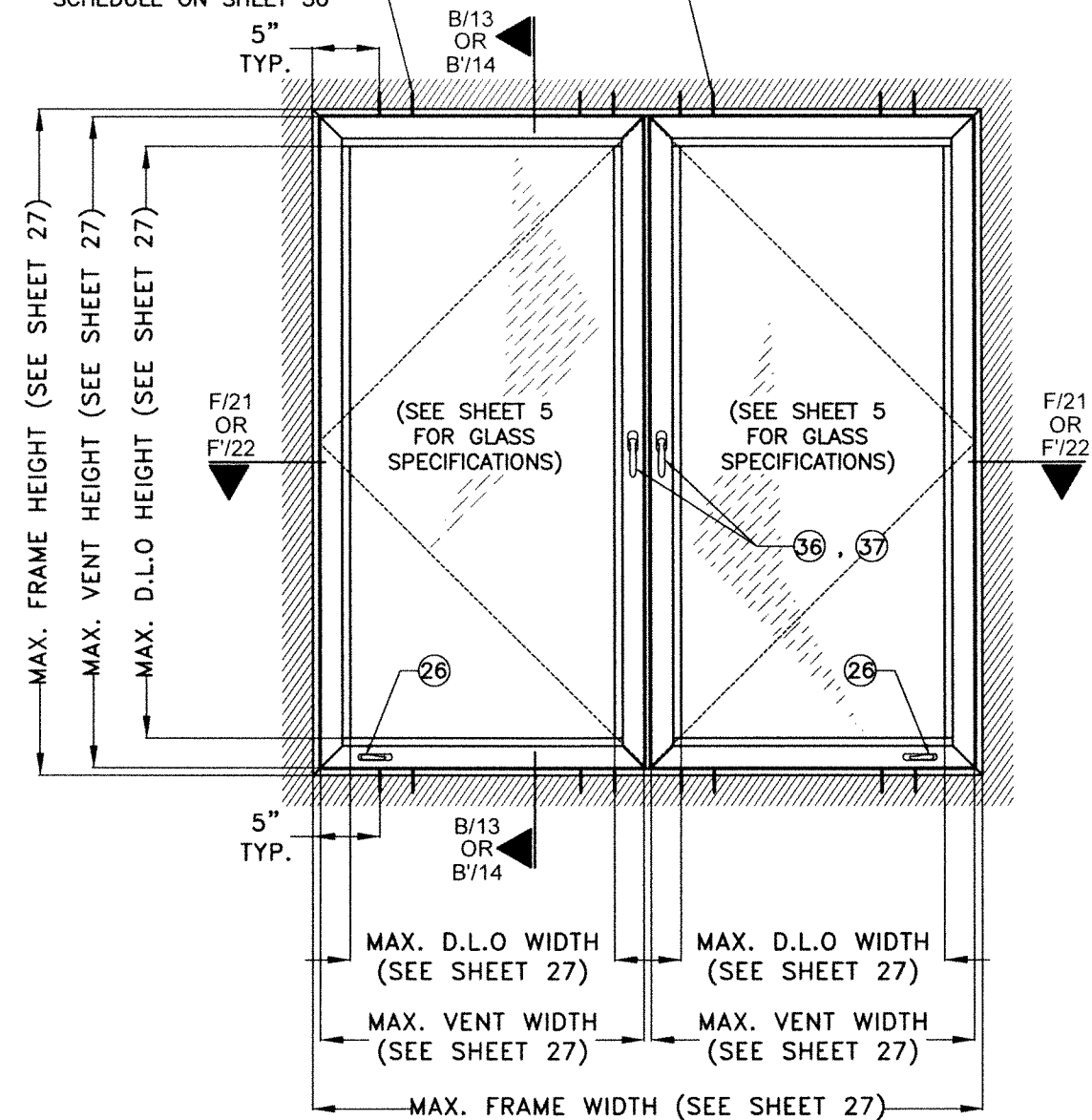


**TYPICAL EXTERIOR ELEVATION  
SINGLE VENT (TYPICAL OR HEAVY SYSTEMS)  
CASEMENT WINDOW W/ NOT ATTACHED JAMBS\***

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

CLUSTER OF "n" ANCHORS ⑫, ⑫A OR ⑬ TYP. ● HEAD/SILL ● MEETING STILES, SEE SCHEDULE ON SHEET 32

TWO CLUSTERS OF "n" ANCHORS ⑫, ⑫A OR ⑬ TYP. ● HEAD/SILL, SEE SCHEDULE ON SHEET 30



**TYPICAL EXTERIOR ELEVATION  
DOUBLE VENT (TYPICAL OR HEAVY SYSTEMS)  
CASEMENT WINDOW W/ NOT ATTACHED JAMBS\***

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

\* NOTE: JAMBS MAY ALSO BE ATTACHED ONLY ON ONE SIDE & FREE STANDING ON THE OTHER SIDE (W/ ADAPTOR # ⑥ FOR TYPICAL SYSTEM, OR ①A FRAME FOR HEAVY SYSTEM) AS PER DETAILS ON SHEETS 6, 7.

Professional Engineer Seal/Signature/Date for Walter A. Tillit Jr., P.E., Florida Lic. # 44167, dated 8/2/2023.

FLORIDA BUILDING CODE (HIGH & NON 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  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**



290 WEST 78 ROAD  
HALEAH, FL 33014  
PH: (954)226-5555/(305)558-8103  
FAX: (305)558-6665  
www.gigwindows.com

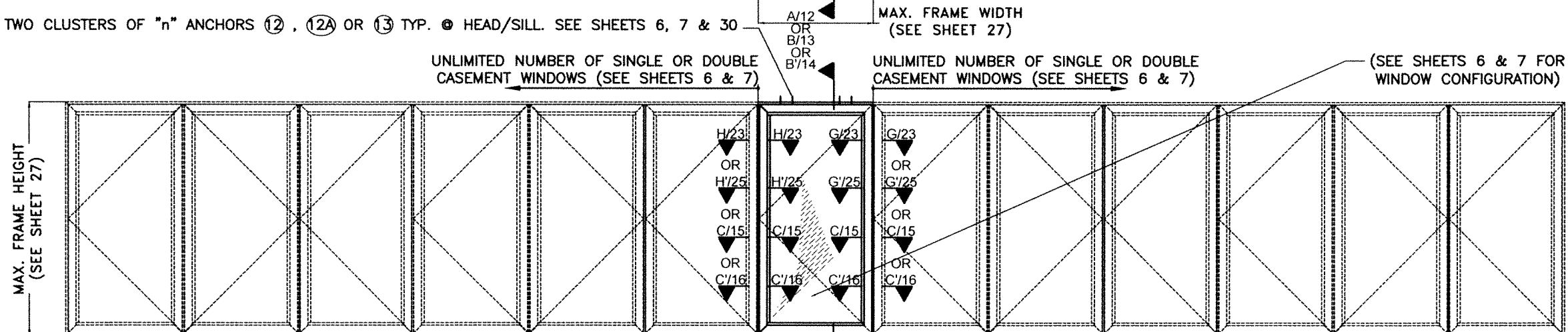
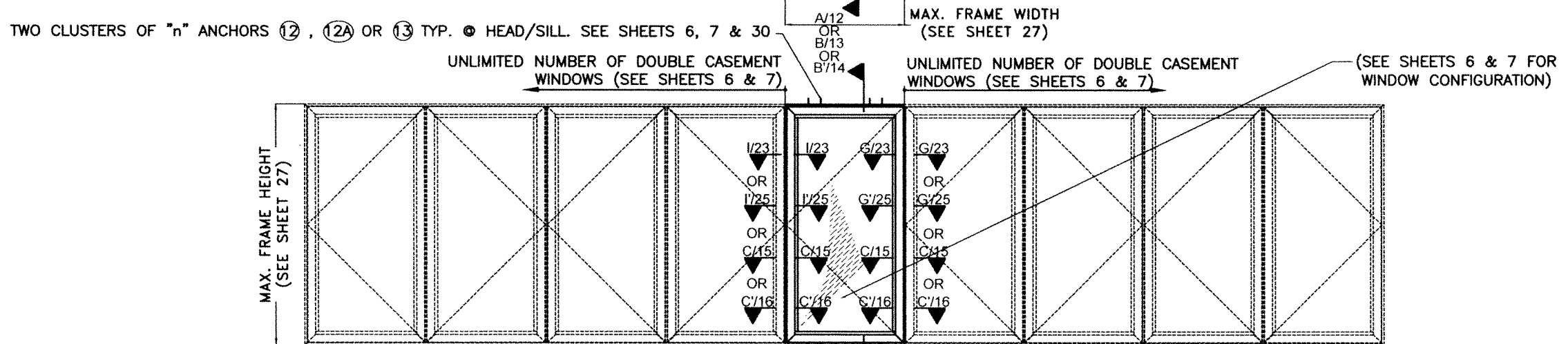
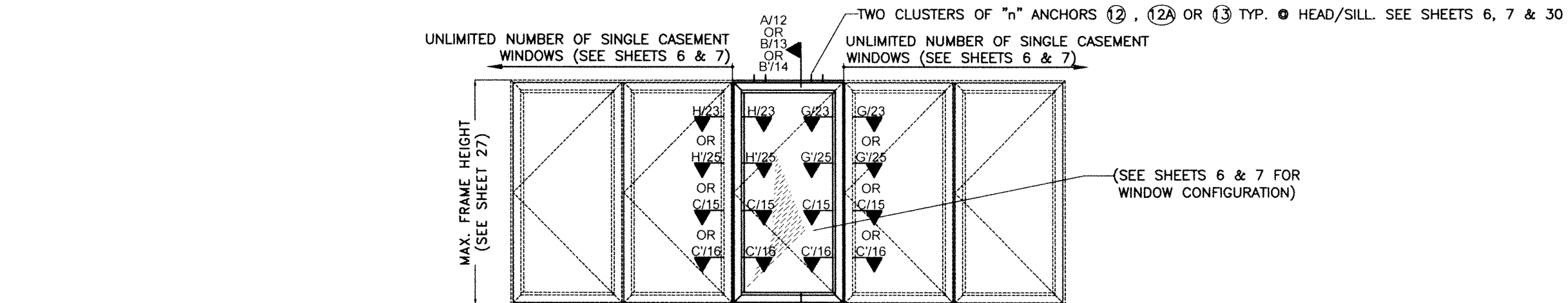
W.H.  
DRAWN BY:

08/07/2023  
DATE:

23-154  
DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		

SHEET 7 OF 33



**QUALIFIED CONFIGURATIONS FOR SINGLE VENT  
(TYPICAL OR HEAVY SYSTEMS) CASEMENT WINDOW  
W/ ACCOMPANYING SINGLE, DOUBLE OR  
COMBINATION OF SINGLE AND DOUBLE VENT  
(TYPICAL OR HEAVY SYSTEMS) CASEMENT WINDOWS  
TYPICAL EXTERIOR ELEVATIONS**

SCALE 3/8"=1'-0"

PROFESSIONAL SEAL  
No. 44167  
8/7/2023  
P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON 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  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**

290 WEST 78 ROAD  
HIALEAH, FL 33014  
PH: (954)226-5555/(305)558-8103  
FAX: (305)558-6665  
www.gigwindows.com

W.H.  
DRAWN BY:  
08/07/2023  
DATE:  
23-154  
DRAWING No.

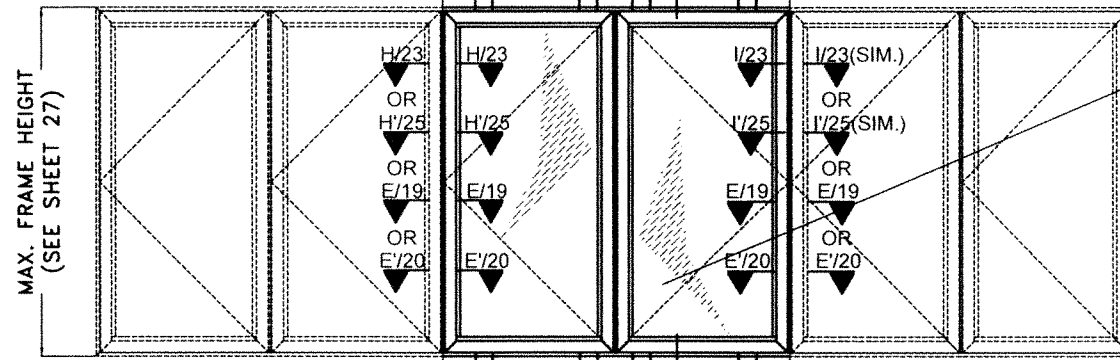
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		

CLUSTER OF "n" ANCHORS (12), (12A) OR (13) TYP. ● HEAD/SILL ● MEETING STILES. SEE SHEET 32

TWO CLUSTERS OF "n" ANCHORS (12), (12A) OR (13) TYP. ● HEAD/SILL. SEE SHEETS 6, 7 & 30

UNLIMITED NUMBER OF SINGLE CASEMENT WINDOWS (SEE SHEETS 6 & 7)

UNLIMITED NUMBER OF SINGLE CASEMENT WINDOWS (SEE SHEETS 6 & 7)



(SEE SHEETS 6 & 7 FOR WINDOW CONFIGURATION)

MAX. FRAME HEIGHT (SEE SHEET 27)

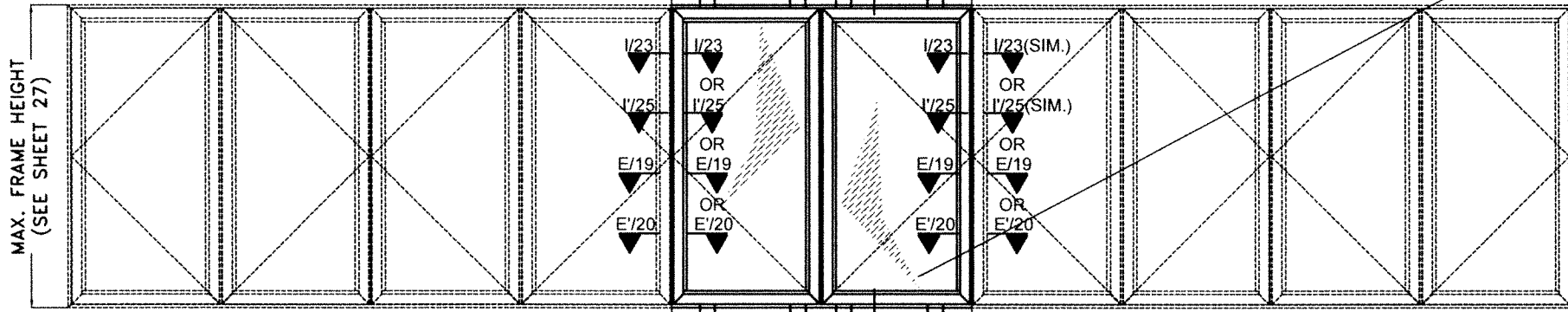
MAX. FRAME WIDTH (SEE SHEET 27)

CLUSTER OF "n" ANCHORS (12), (12A) OR (13) TYP. ● HEAD/SILL ● MEETING STILES. SEE SHEET 32

TWO CLUSTERS OF "n" ANCHORS (12), (12A) OR (13) TYP. ● HEAD/SILL. SEE SHEETS 6, 7 & 30

UNLIMITED NUMBER OF DOUBLE CASEMENT WINDOWS (SEE SHEETS 6 & 7)

UNLIMITED NUMBER OF DOUBLE CASEMENT WINDOWS (SEE SHEETS 6 & 7)



(SEE SHEETS 6 & 7 FOR WINDOW CONFIGURATION)

MAX. FRAME HEIGHT (SEE SHEET 27)

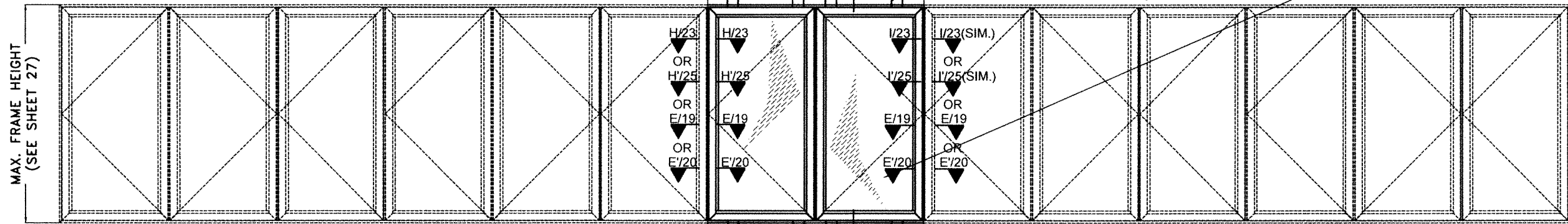
MAX. FRAME WIDTH (SEE SHEET 27)

CLUSTER OF "n" ANCHORS (12), (12A) OR (13) TYP. ● HEAD/SILL ● MEETING STILES. SEE SHEET 32

TWO CLUSTERS OF "n" ANCHORS (12), (12A) OR (13) TYP. ● HEAD/SILL. SEE SHEETS 6, 7 & 30

UNLIMITED NUMBER OF SINGLE OR DOUBLE CASEMENT WINDOWS (SEE SHEETS 6 & 7)

UNLIMITED NUMBER OF SINGLE OR DOUBLE CASEMENT WINDOWS (SEE SHEETS 6 & 7)



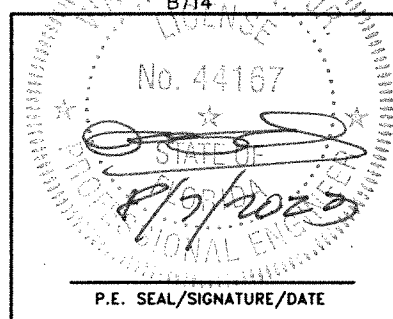
(SEE SHEETS 6 & 7 FOR WINDOW CONFIGURATION)

MAX. FRAME HEIGHT (SEE SHEET 27)

MAX. FRAME WIDTH (SEE SHEET 27)

**QUALIFIED CONFIGURATIONS FOR DOUBLE VENT (TYPICAL OR HEAVY SYSTEMS) CASEMENT WINDOW W/ ACCOMPANYING SINGLE, DOUBLE VENT OR COMBINATION OF SINGLE AND DOUBLE VENT (TYPICAL OR HEAVY SYSTEMS) CASEMENT WINDOWS**  
**TYPICAL EXTERIOR ELEVATIONS**

SCALE 3/8"=1'-0"



FLORIDA BUILDING CODE (HIGH & NON 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  
 CA-0006719  
 WALTER A. TILLIT Jr., P.E.  
 FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**



290 WEST 78 ROAD  
 HIALEAH, FL 33014  
 PH: (954)226-5555/(305)558-8103  
 FAX: (305)558-6665  
 www.glgwindows.com

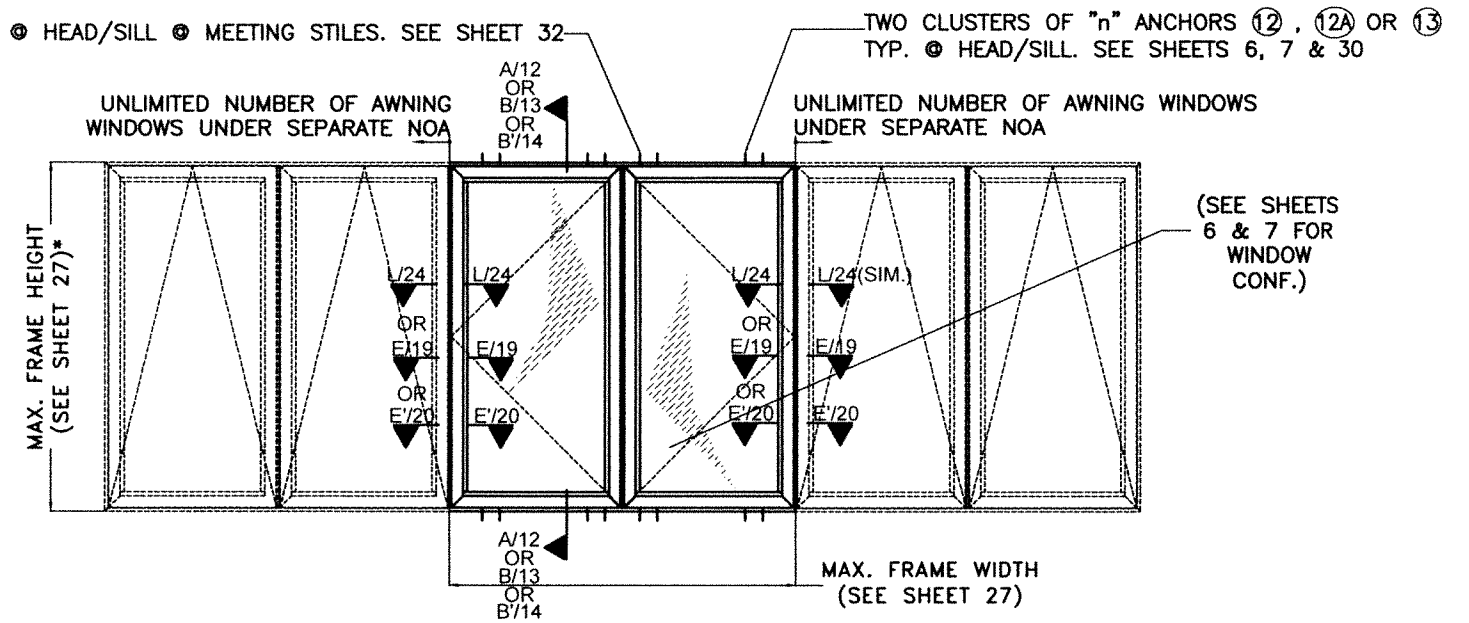
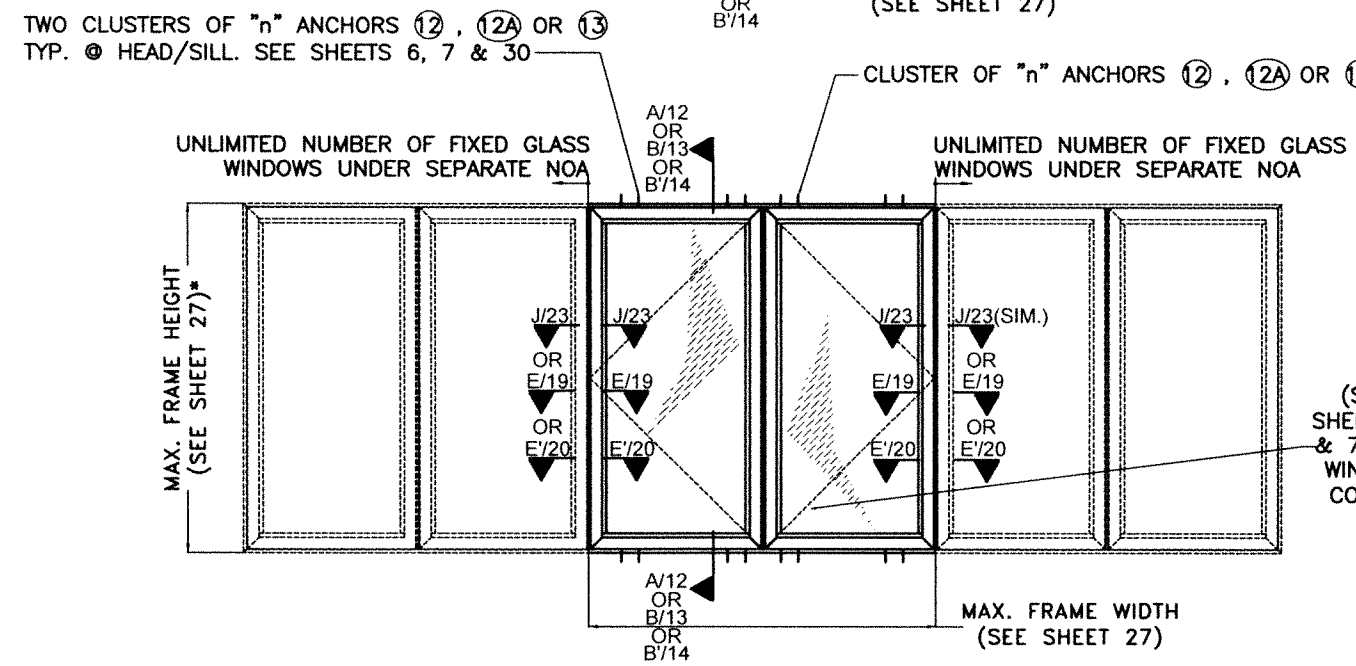
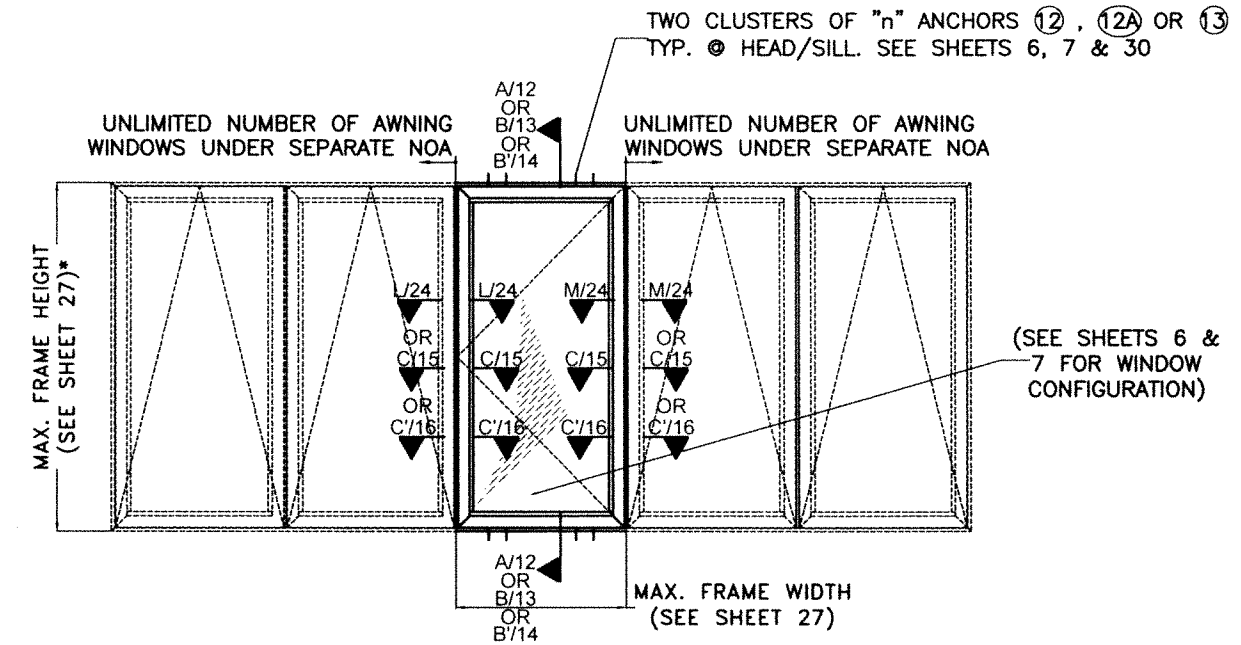
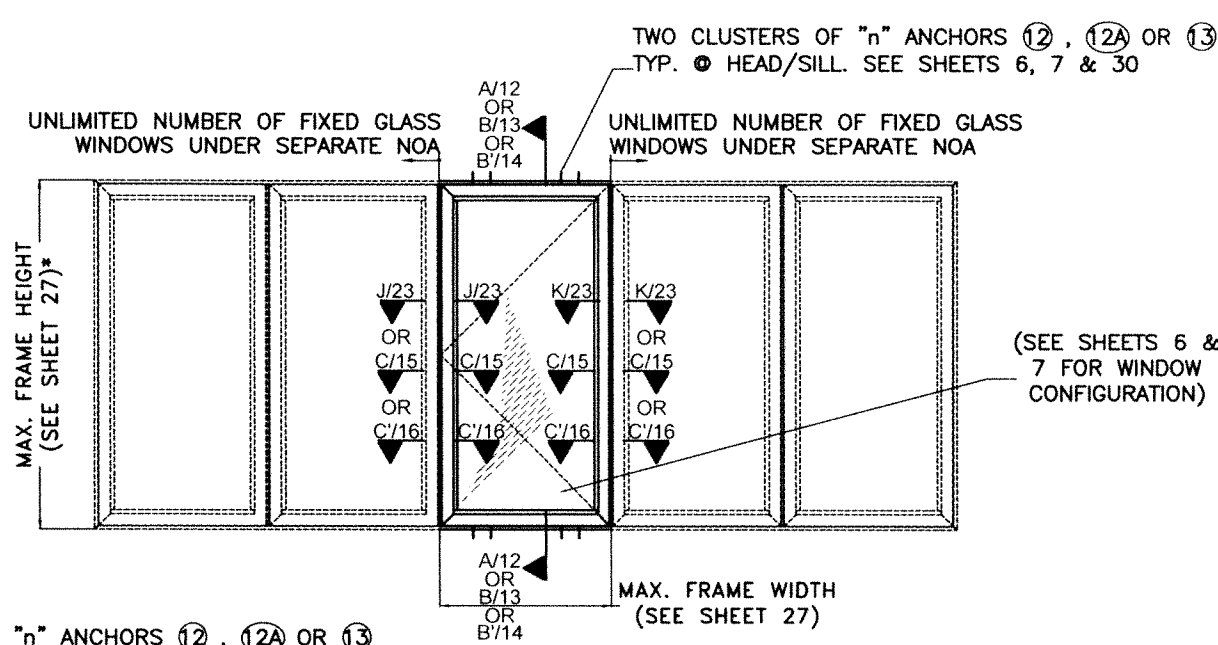
W.H. DRAWN BY:

08/07/2023 DATE:

23-154 DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		

SHEET 9 OF 33



**QUALIFIED CONFIGURATIONS FOR SINGLE/DOUBLE (TYPICAL SYSTEM ONLY) CASEMENT WINDOW W/ ACCOMPANYING FIXED WINDOWS (UNDER SEPARATE NOA) TYPICAL EXTERIOR ELEVATION**  
SCALE 3/8"=1'-0"

**QUALIFIED CONFIGURATIONS FOR SINGLE/DOUBLE (TYPICAL SYSTEM ONLY) CASEMENT WINDOW W/ ACCOMPANYING AWNING WINDOWS (UNDER SEPARATE NOA) TYPICAL EXTERIOR ELEVATION**  
SCALE 3/8"=1'-0"

\* MAX. FRAME HEIGHT & FRAME WIDTH OF ACCOMPANYING FIXED OR AWNING WINDOWS SHALL BE AS PER SEPARATE NOA AND THE SHORTEST FRAME HEIGHT OF EITHER WINDOW TYPE SHALL BE USED.

WALTER A. TILLIT JR.  
LICENSE  
No. 44167  
8/7/2023  
P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON 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  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

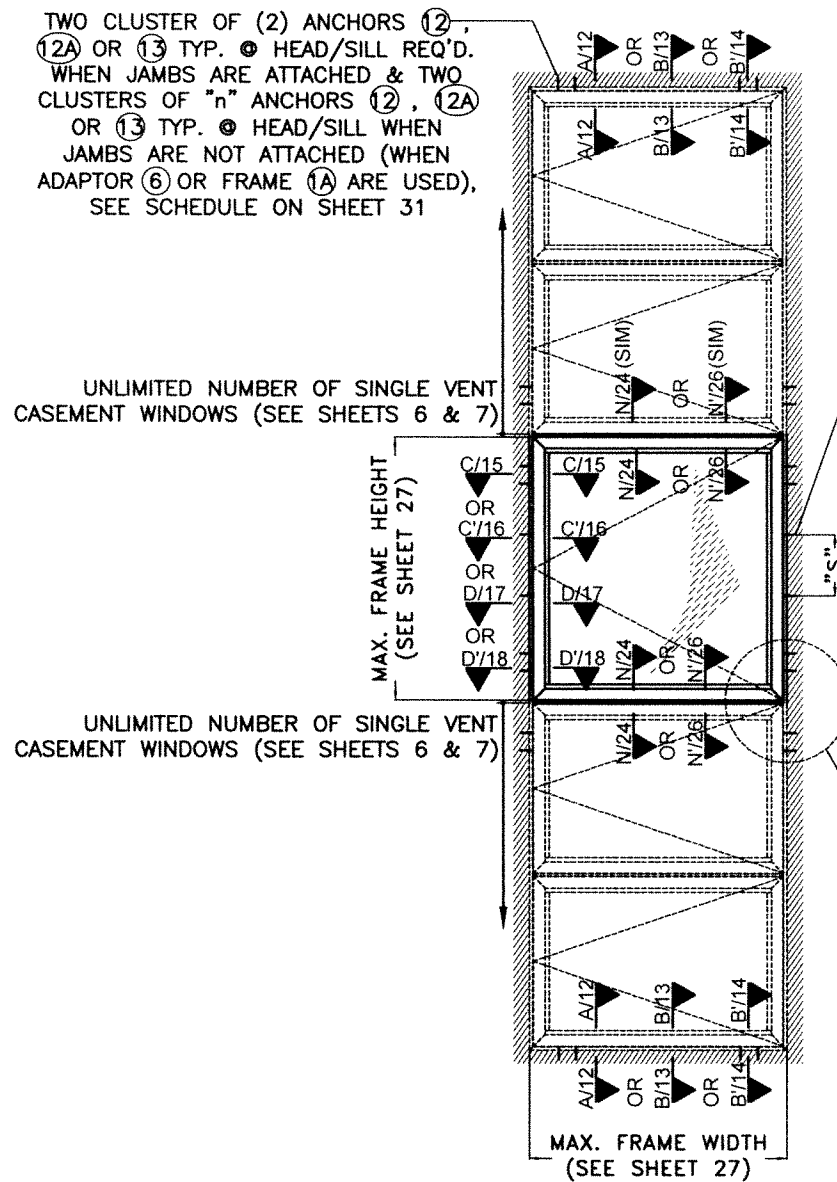
**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**

W.H. DRAWN BY:  
08/07/2023  
DATE:  
23-154  
DRAWING No.

290 WEST 78 ROAD  
HIALEAH, FL 33014  
PH: (954)226-5555/(305)558-8103  
FAX: (305)558-6665  
www.gjwindows.com

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		

SHEET 10 OF 33



**QUALIFIED CONFIGURATIONS FOR SINGLE VENT (TYPICAL OR HEAVY SYSTEMS) CASEMENT WINDOW W/ COMBINATION OF VERTICAL ACCOMPANYING SINGLE VENT (TYPICAL OR HEAVY SYSTEMS) CASEMENTS WINDOWS TYPICAL EXTERIOR ELEVATION**

SCALE 3/8"=1'-0"

ANCHORS ⑫, ⑫A OR ⑬ TYP. REQ'D. WHEN ADAPTOR (COMP. ⑥ AT TYPICAL SYSTEM) IS NOT USED AT JAMBS, AS DETAILED ON SHEET C/15 SEE SCHEDULE ON SHEETS 28 & 29 FOR ANCHOR SPACING. NO ANCHOR IS REQ'D. IF ADAPTOR (COMP. ⑥ AT TYPICAL SYSTEM OR FRAME ①A AT HEAVY SYSTEM) ARE USED AT JAMBS, AS PER DETAIL ON SHEET D/17 & D'/18

UNLIMITED NUMBER OF AWNING & FIXED GLASS WINDOWS IN ANY SEQUENCE UNDER SEPARATE NOA

UNLIMITED NUMBER OF AWNING & FIXED GLASS WINDOWS IN ANY SEQUENCE UNDER SEPARATE NOA

CLUSTER OF "n" ANCHORS ⑫, ⑫A OR ⑬ TYP. ④ EA. END OF HORIZONTAL CENTER POST ③ TYP. EA. JAMB, SEE SCHEDULE ON SHEET 33

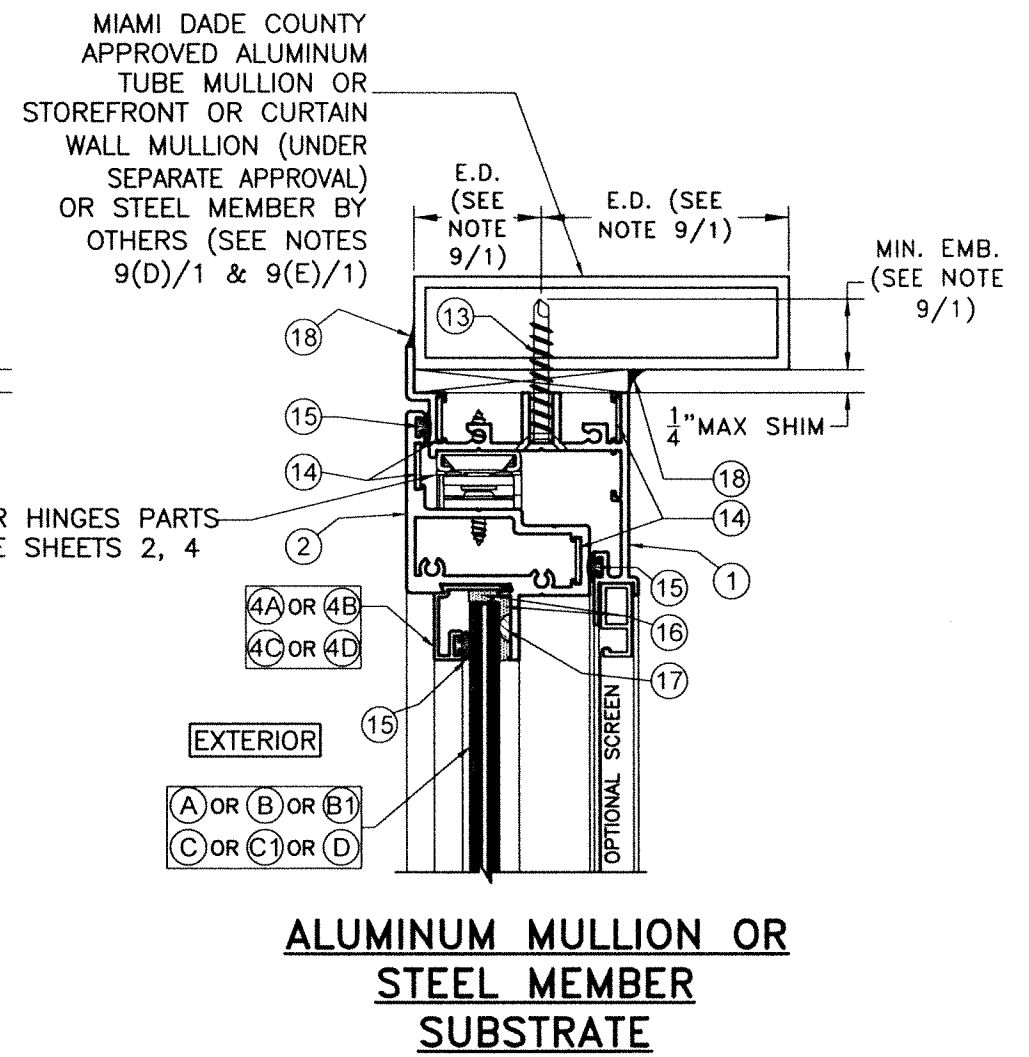
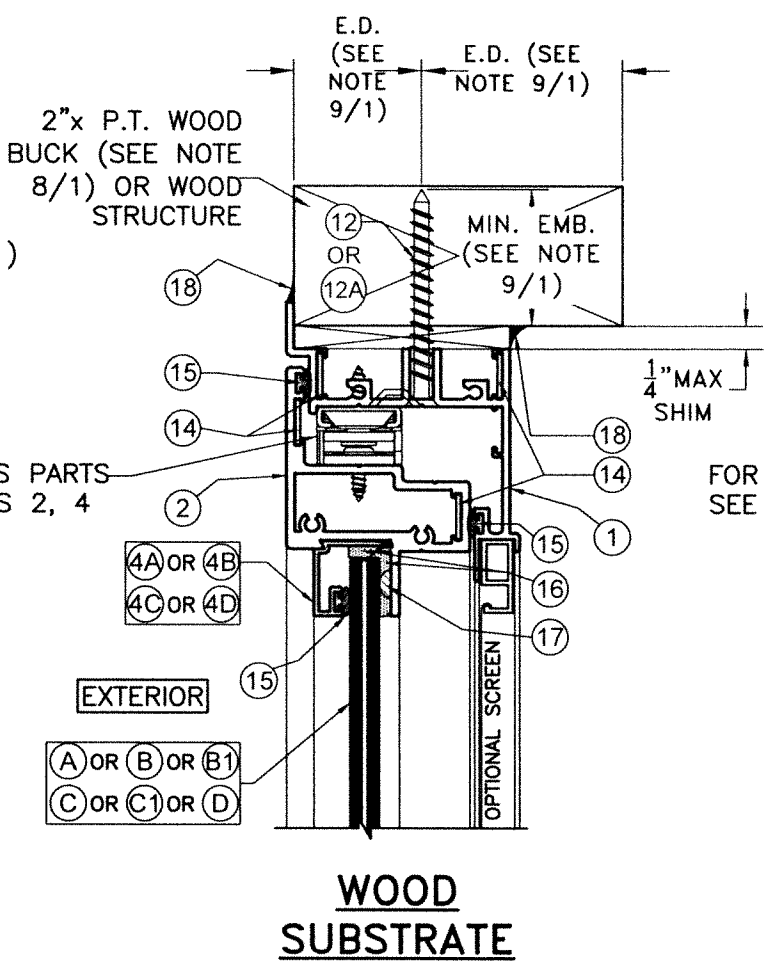
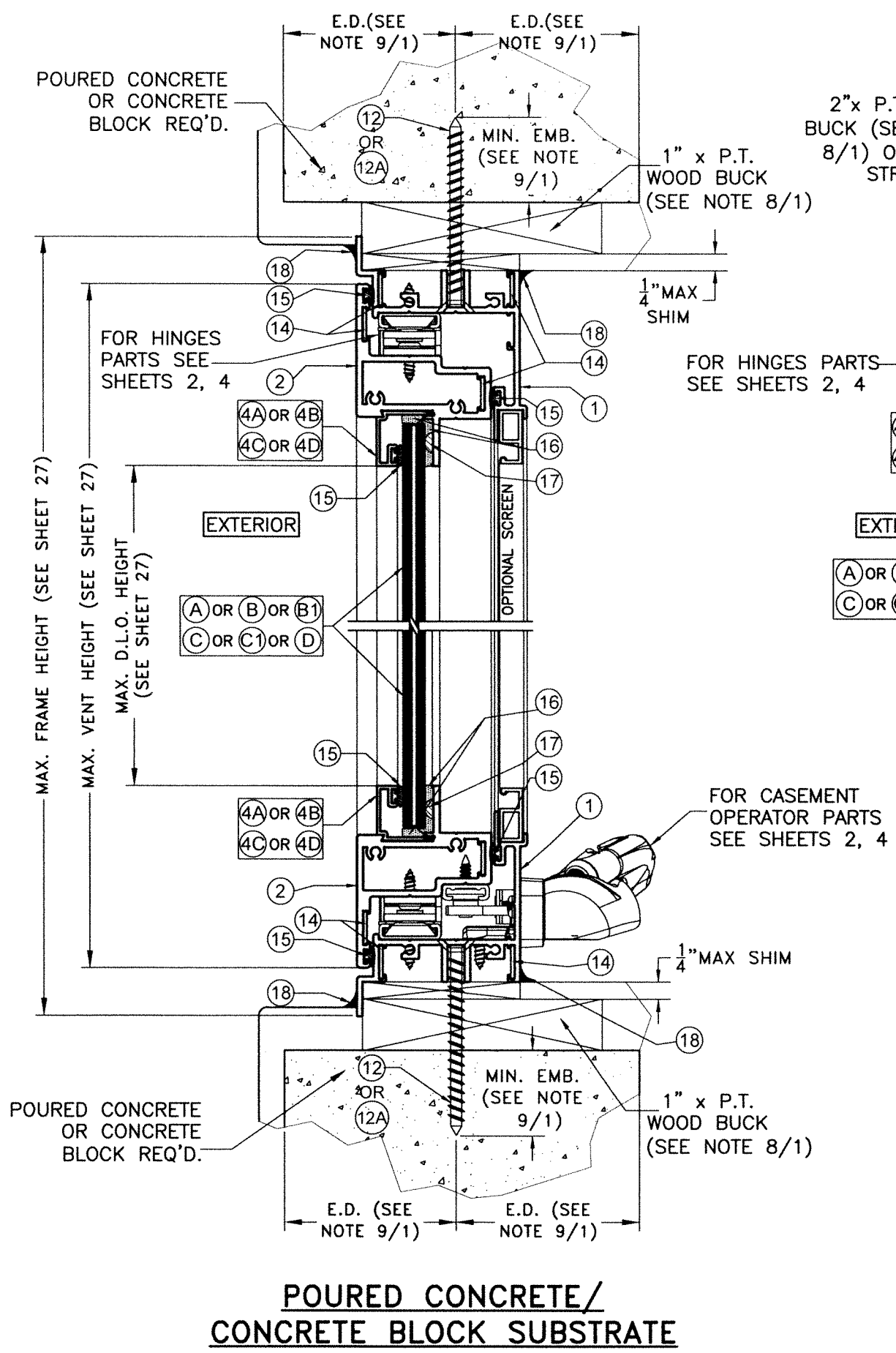
**QUALIFIED CONFIGURATIONS FOR SINGLE VENT (TYPICAL SYSTEM ONLY) CASEMENT WINDOW W/ COMBINATION OF VERTICAL ACCOMPANYING FIXED & AWNING WINDOWS (UNDER SEPARATE NOA) TYPICAL EXTERIOR ELEVATION**

SCALE 3/8"=1'-0"

ANCHORS ⑫, ⑫A OR ⑬ TYP. REQ'D. WHEN ADAPTOR (COMP. ⑥ AT TYPICAL SYSTEM) IS NOT USED AT JAMBS, AS DETAILED ON SHEET C/15 SEE SCHEDULE ON SHEETS 28 & 29 FOR ANCHOR SPACING. NO ANCHOR IS REQ'D. IF ADAPTOR (COMP. ⑥ AT TYPICAL SYSTEM) IS USED AT JAMBS, AS PER DETAIL D/17

CLUSTER OF "n" ANCHORS ⑫, ⑫A OR ⑬ TYP. ④ EA. END OF HORIZONTAL CENTER POST ③ TYP. EA. JAMB, SEE SCHEDULE ON SHEET 33

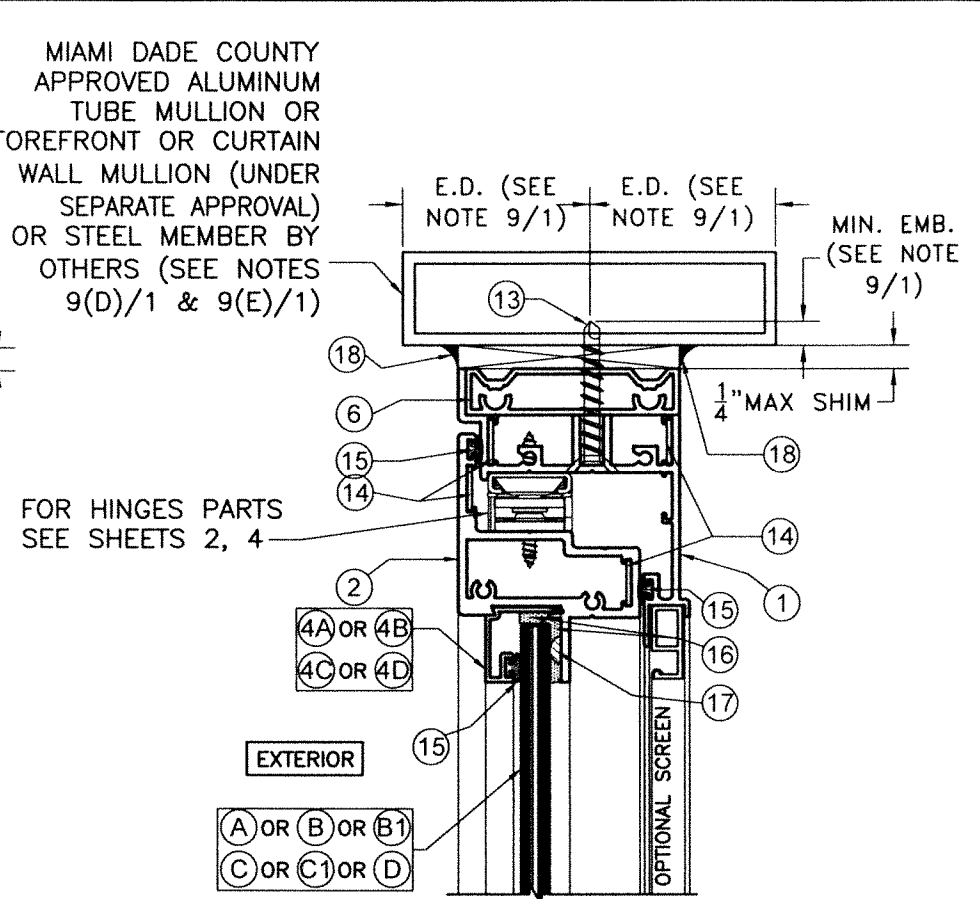
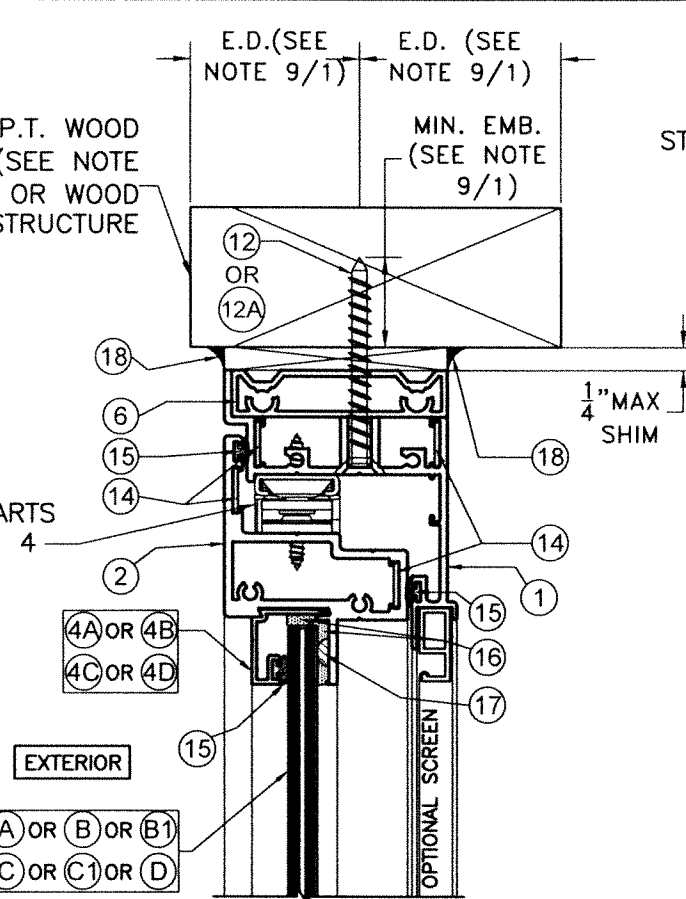
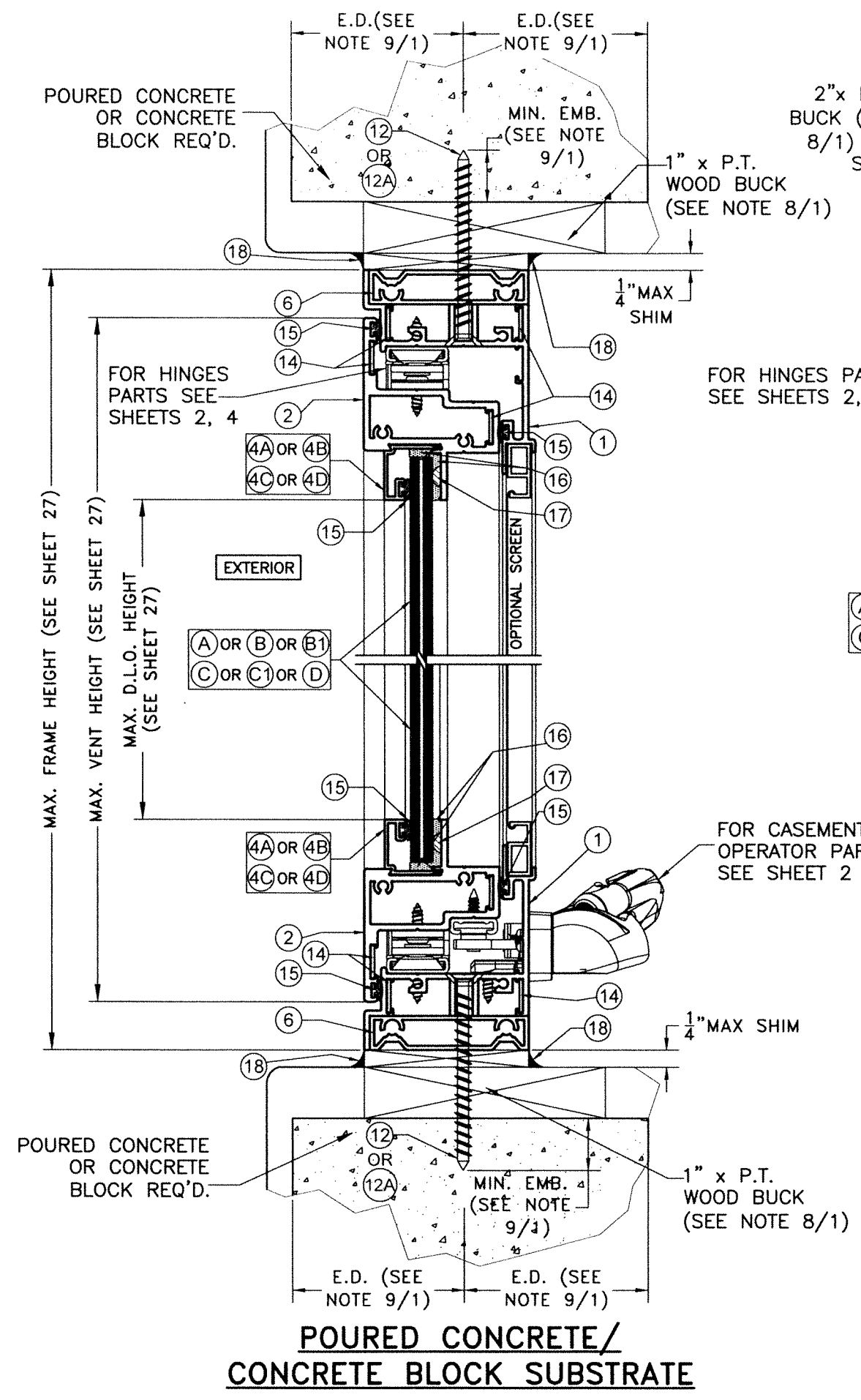
<p>P.E. SEAL/SIGNATURE/DATE</p>		<p>FLORIDA BUILDING CODE (HIGH &amp; NON HIGH VELOCITY HURRICANE ZONE)</p> <p>©2023 TILTECO, INC.</p> <p>TILLIT TESTING &amp; ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 CA-0006719 WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167</p>		<p><b>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</b></p> <p>W.H. DRAWN BY:</p> <p>08/07/2023 DATE:</p> <p>23-154 DRAWING No.</p>											
		<p>290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com</p>		<table border="1"> <thead> <tr> <th>REV. NO</th> <th>DESCRIPTION</th> <th>DATE</th> <th>REV. No</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OLD 20-273</td> <td>06/07/23</td> <td>2</td> <td></td> <td></td> </tr> </tbody> </table> <p>SHEET 11 OF 33</p>		REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	1	OLD 20-273	06/07/23	2
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE										
1	OLD 20-273	06/07/23	2												



**SECTION A-A**  
**(TYPICAL SYSTEM)**  
SCALE 1/2"=1"

WALTER A. TILLIT JR.  
P.E. SEAL/SIGNATURE/DATE  
No. 44167  
8/2/2023

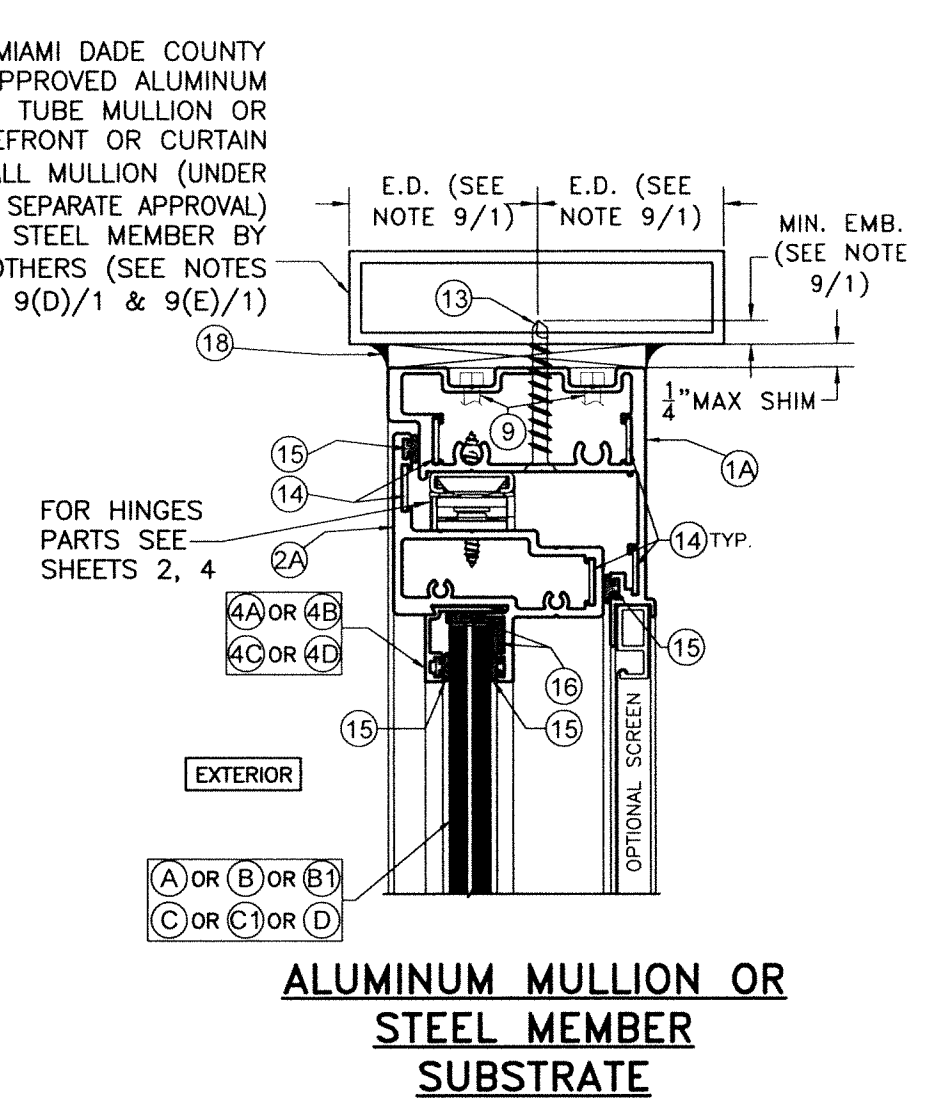
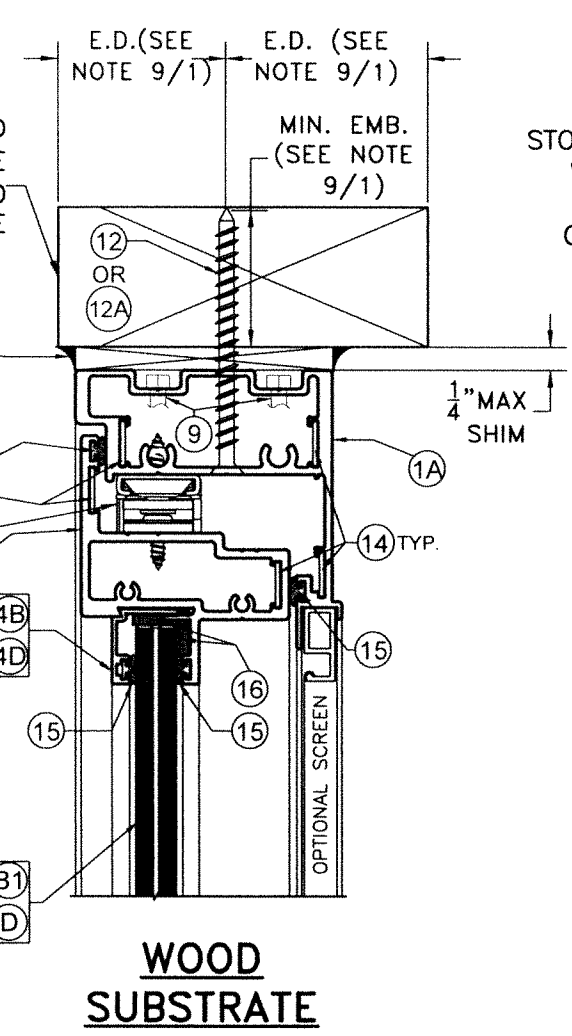
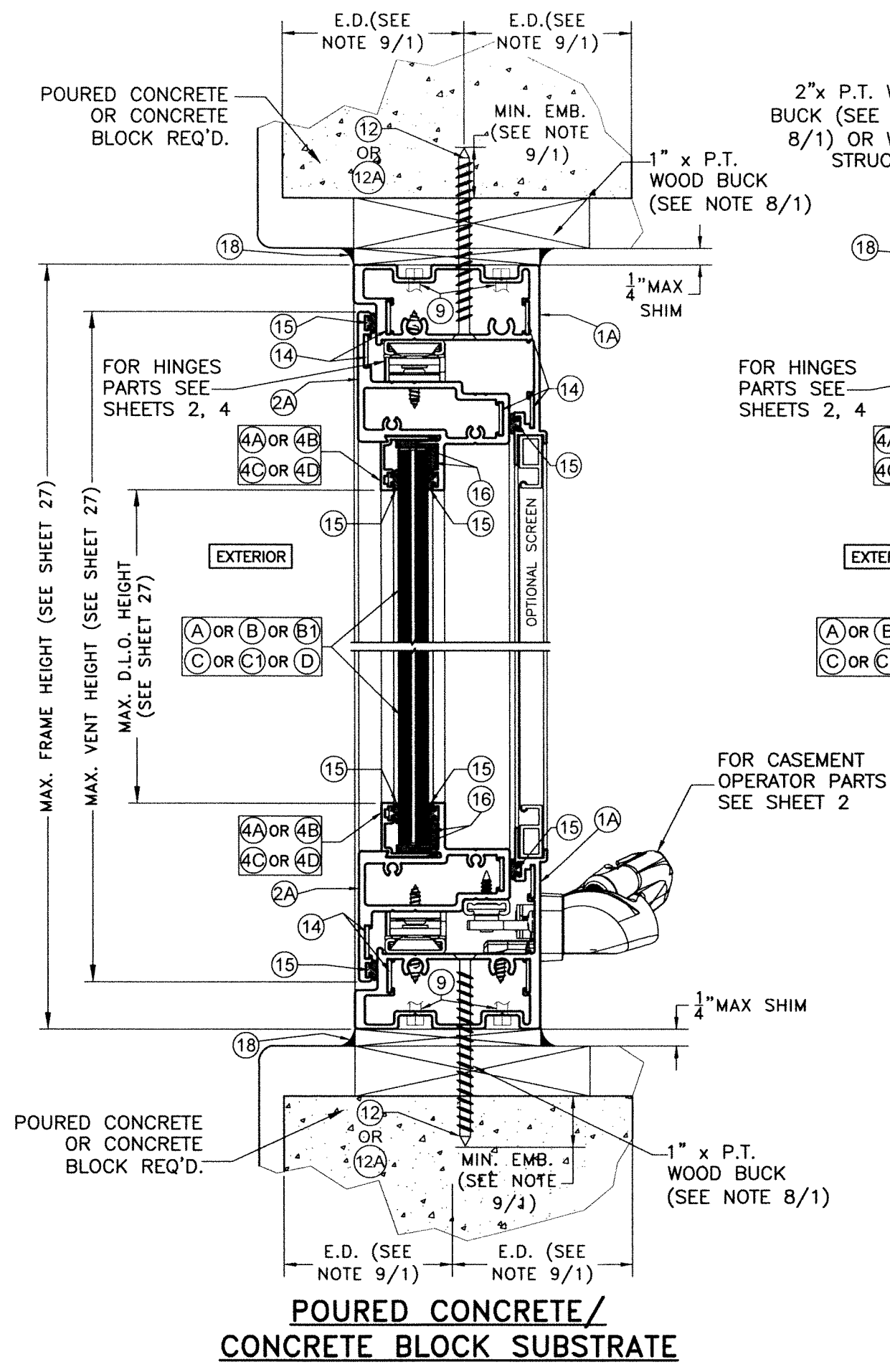
<p>FLORIDA BUILDING CODE (HIGH &amp; NON HIGH VELOCITY HURRICANE ZONE)</p> <p>©2023 TILTECO, INC.</p> <p><b>TILTECO inc.</b></p> <p>TILLIT TESTING &amp; ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 CA-0006719 WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167</p>		<p><b>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</b></p> <p>290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com</p>	<p>W.H. DRAWN BY:</p> <p>08/07/2023 DATE:</p> <p>23-154 DRAWING No.</p>												
<table border="1"> <thead> <tr> <th>REV. NO</th> <th>DESCRIPTION</th> <th>DATE</th> <th>REV. No</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OLD 20-273</td> <td>06/07/23</td> <td>2</td> <td></td> <td></td> </tr> </tbody> </table>	REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	1	OLD 20-273	06/07/23	2			<p>SHEET 12 OF 33</p>		
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE										
1	OLD 20-273	06/07/23	2												



**SECTION B-B**  
**(TYPICAL SYSTEM)**  
SCALE 1/2"=1"

WALTER A. TILLIT JR. P.E.  
 FLORIDA Lic. # 44167

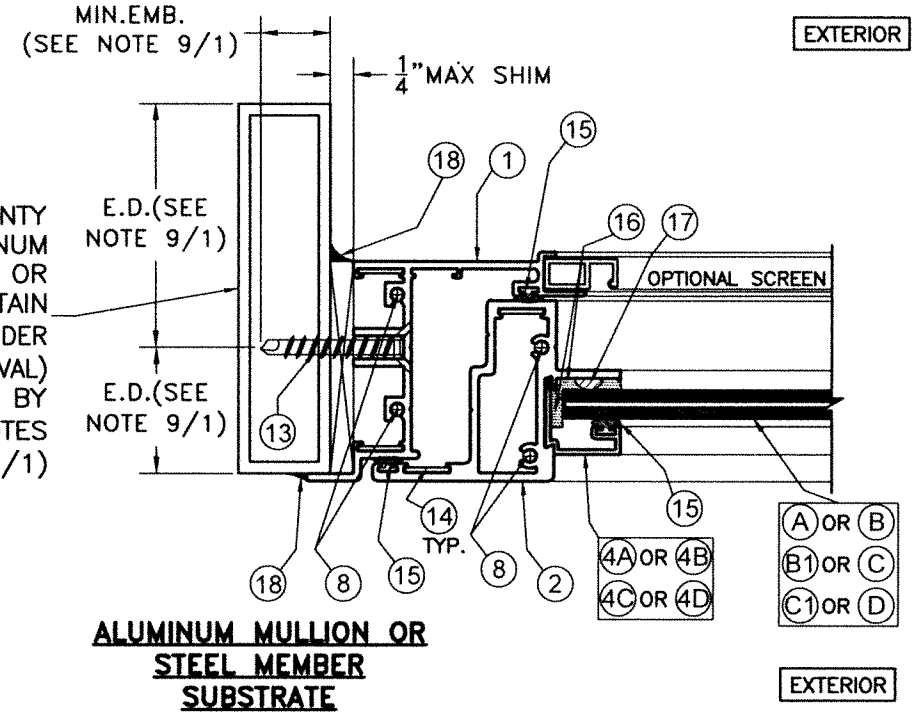
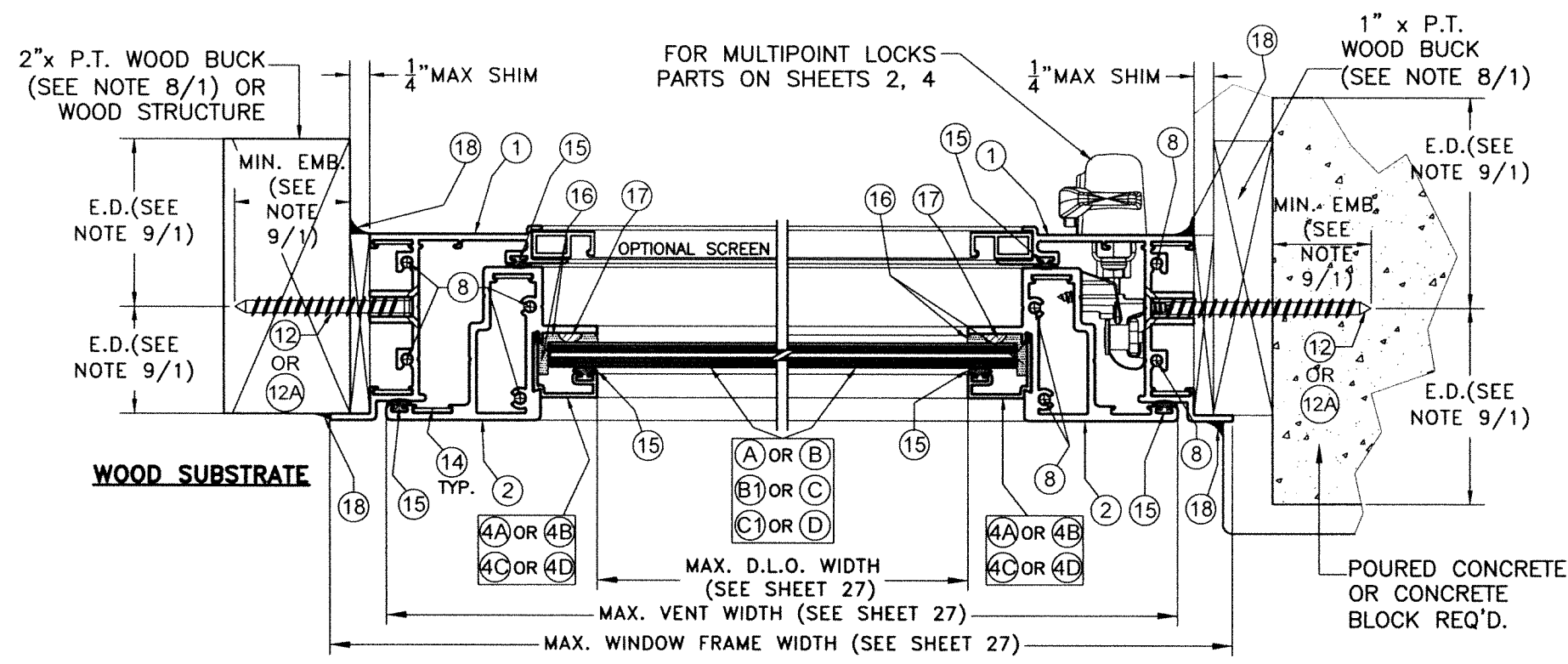
FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE) ©2023 TILTECO, INC.		SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)		W.H. DRAWN BY:
 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 CA-0006719		 290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com		08/07/2023 DATE:
WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167		23-154 DRAWING No.		SHEET 13 OF 33
REV. NO 1	DESCRIPTION OLD 20-273	DATE 06/07/23	REV. No 2	DESCRIPTION DATE



**SECTION B'-B'**  
**(HEAVY SYSTEM)**  
SCALE 1/2"=1"

P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)			
©2023 TILTECO, INC.		<b>TILTECO inc.</b>	
TILLET TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 CA-0006719		290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com	
WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167		<b>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</b>	W.H. DRAWN BY: 08/07/2023 DATE: 23-154 DRAWING No.
REV. NO	DESCRIPTION	DATE	REV. No
1	OLD 20-273	06/07/23	2



MIAMI DADE COUNTY APPROVED ALUMINUM TUBE MULLION OR STOREFRONT OR CURTAIN WALL MULLION (UNDER SEPARATE APPROVAL) OR STEEL MEMBER BY OTHERS (SEE NOTES 9(D)/1 & 9(E)/1)

## SECTION C-C (TYPICAL SYSTEM)

SCALE 1/2"=1"

WALTER A. TILLIT JR.  
LICENSE  
No. 44167  
Professional Engineer  
08/07/2023  
P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)

©2023 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  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

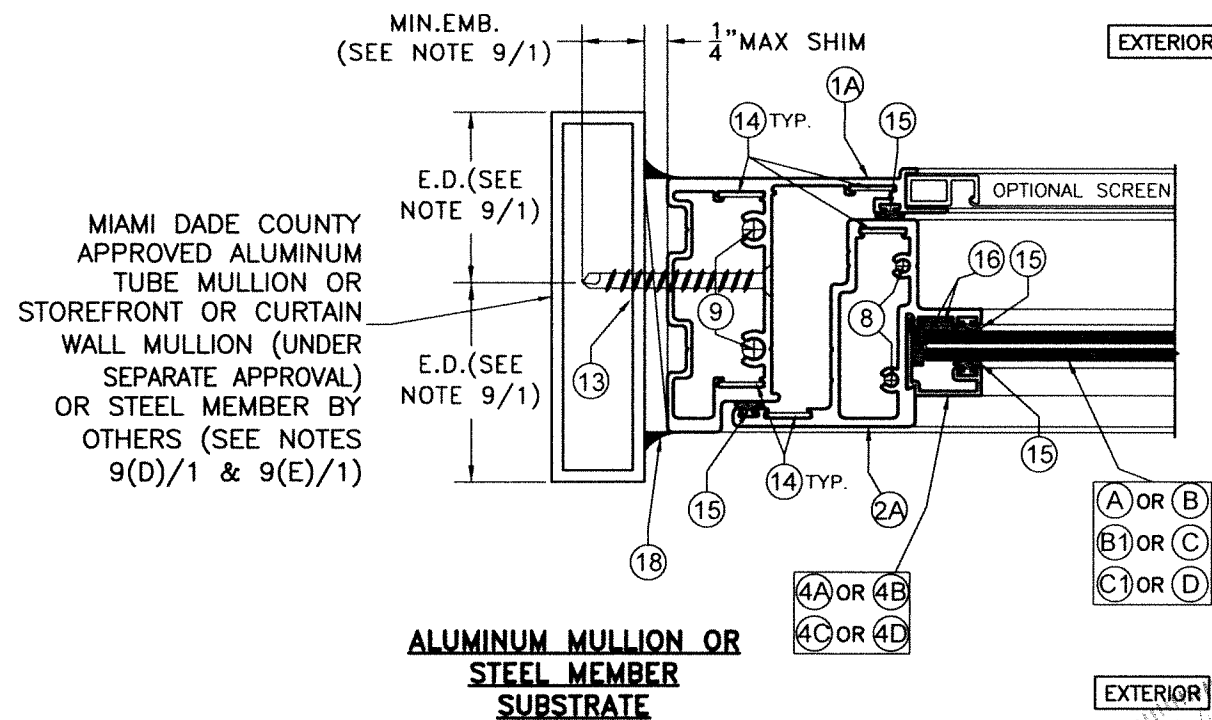
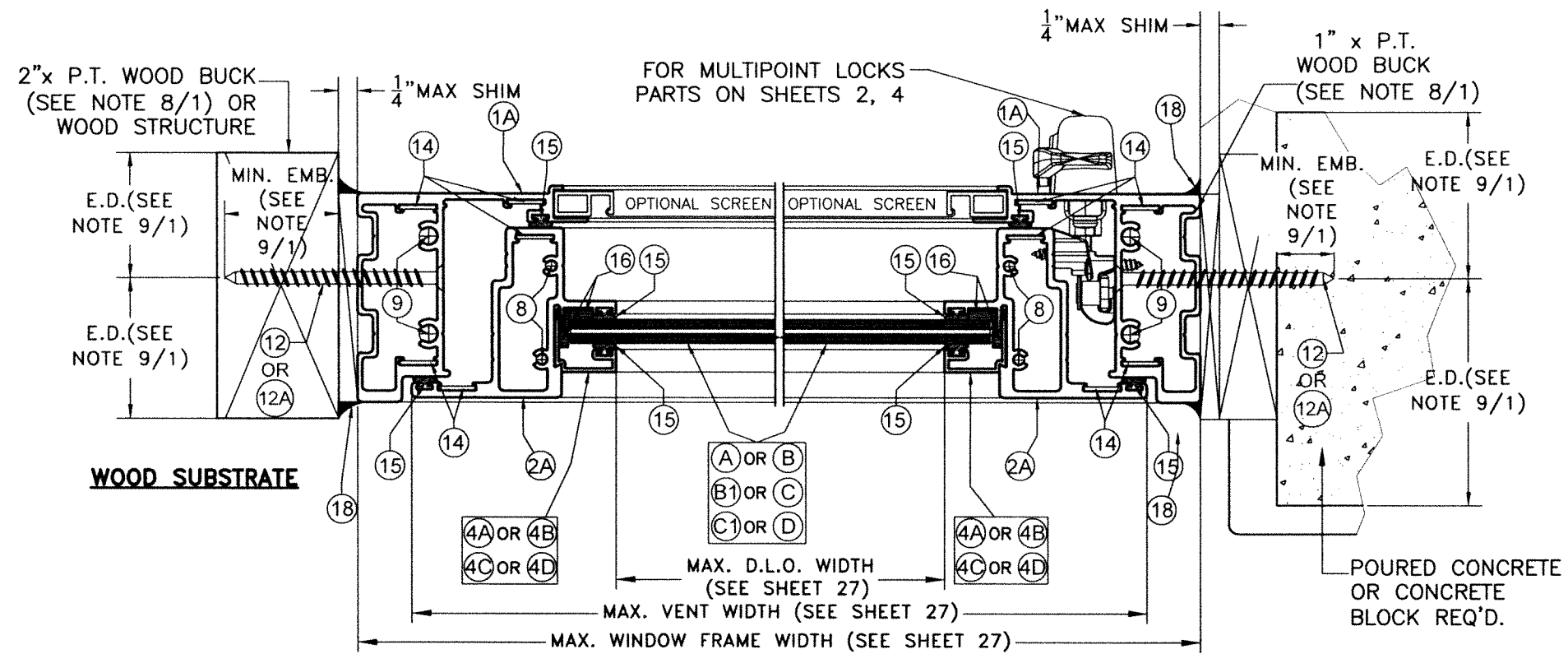
**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**



290 WEST 78 ROAD  
HIALEAH, FL 33014  
PH: (954)226-5555/(305)558-8103  
FAX: (305)558-6665  
www.gigwindows.com

W.H.  
DRAWN BY:  
08/07/2023  
DATE:  
23-154  
DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	08/07/23	2		



**SECTION C'-C'**  
**(HEAVY SYSTEM)**  
 SCALE 1/2"=1"

Professional Engineer Seal/Signature/Date  
 License No. 44167  
 State of Florida  
 P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)

©2023 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  
 CA-0006719

WALTER A. TILLIT Jr. P.E.  
 FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**



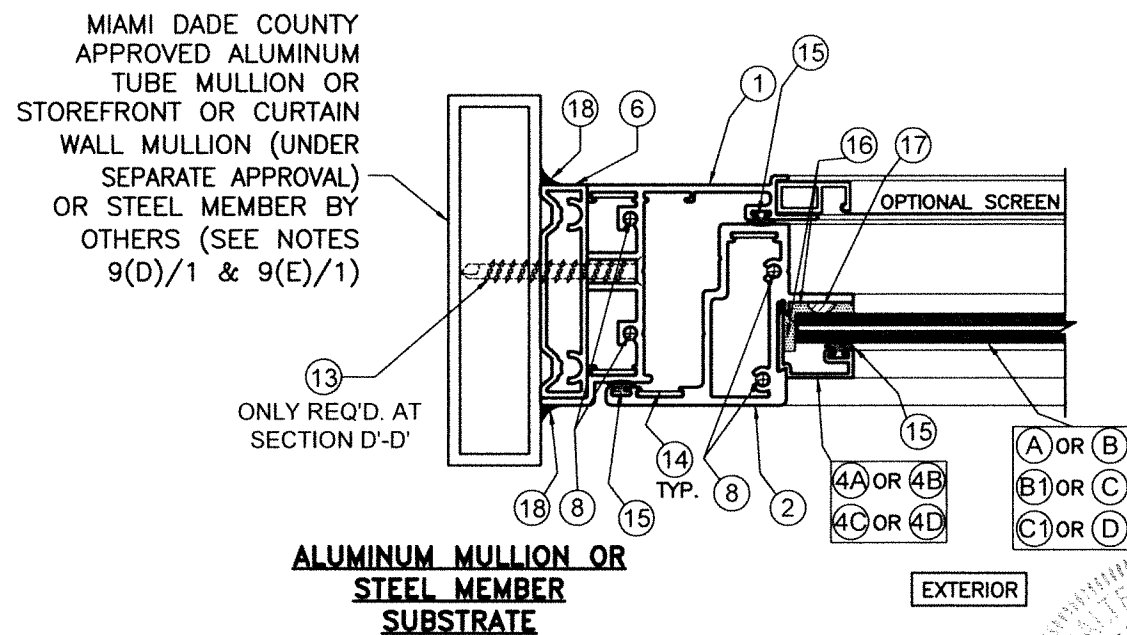
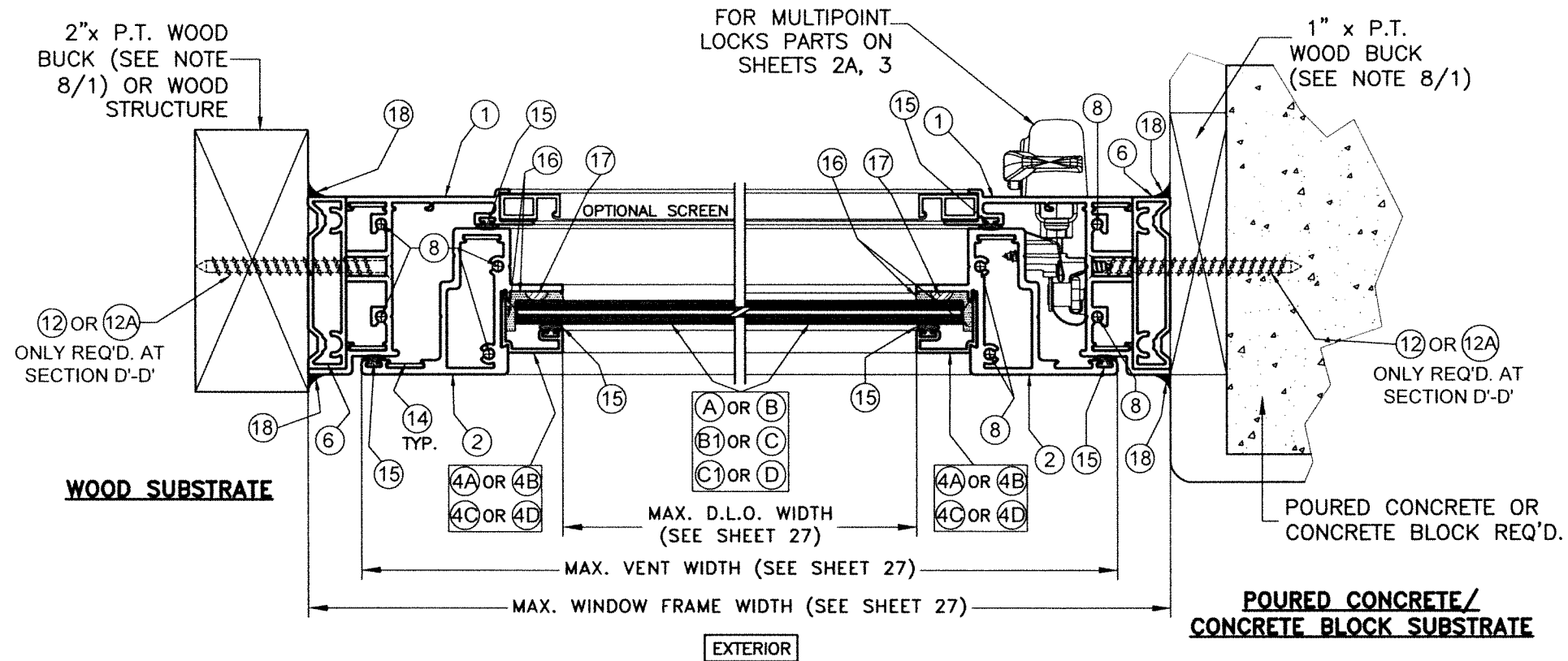
290 WEST 78 ROAD  
 HIALEAH, FL 33014  
 PH: (954)226-5555/(305)558-8103  
 FAX: (305)558-6665  
 www.gigwindows.com

W.H.  
 DRAWN BY:

08/07/2023  
 DATE:

23-154  
 DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	08/07/23	2		



## SECTIONS D-D & D'-D'

(TYPICAL SYSTEM)

SCALE 1/2"=1"

WALTER A. TILLIT JR.  
 LICENSE  
 No. 44167  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 8/7/2023  
 P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON 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  
 CA-0006719

WALTER A. TILLIT Jr. P.E.  
 FLORIDA Lic. # 44167

SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)



290 WEST 78 ROAD  
 HIALEAH, FL 33014  
 PH: (954)226-5555/(305)558-8103  
 FAX: (305)558-6665  
 www.gigwindows.com

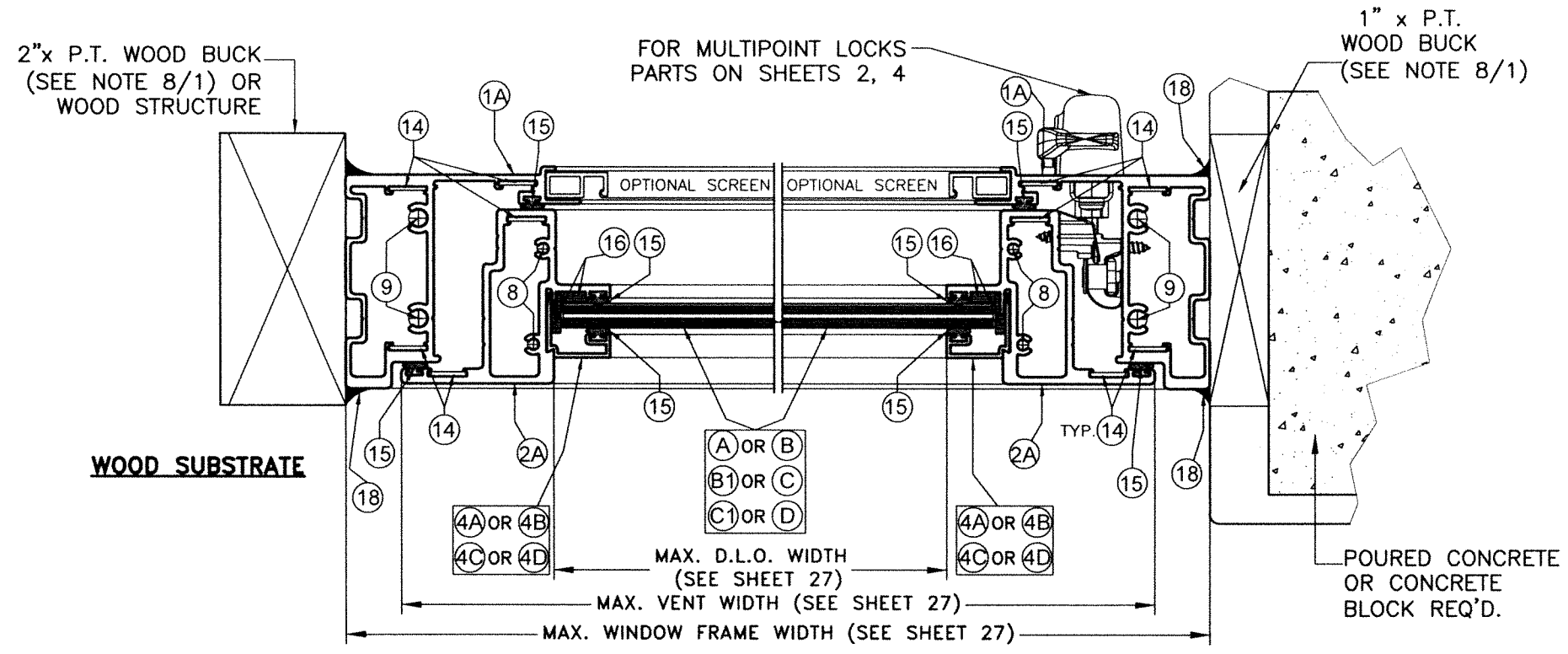
W.H.  
 DRAWN BY:

08/07/2023  
 DATE:

23-154  
 DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		

SHEET 17 OF 33



**WOOD SUBSTRATE**

**POURED CONCRETE/  
CONCRETE BLOCK SUBSTRATE**

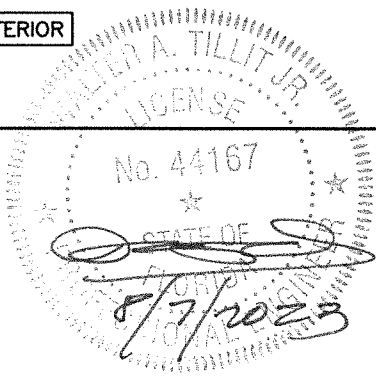
EXTERIOR

MIAMI DADE COUNTY  
APPROVED ALUMINUM  
TUBE MULLION OR  
STOREFRONT OR CURTAIN  
WALL MULLION (UNDER  
SEPARATE APPROVAL)  
OR STEEL MEMBER BY  
OTHERS (SEE NOTES  
9(D)/1 & 9(E)/1)

**ALUMINUM MULLION OR  
STEEL MEMBER  
SUBSTRATE**

EXTERIOR

**SECTION D'-D'**  
**(HEAVY SYSTEM)**  
SCALE 1/2"=1"



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON 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  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

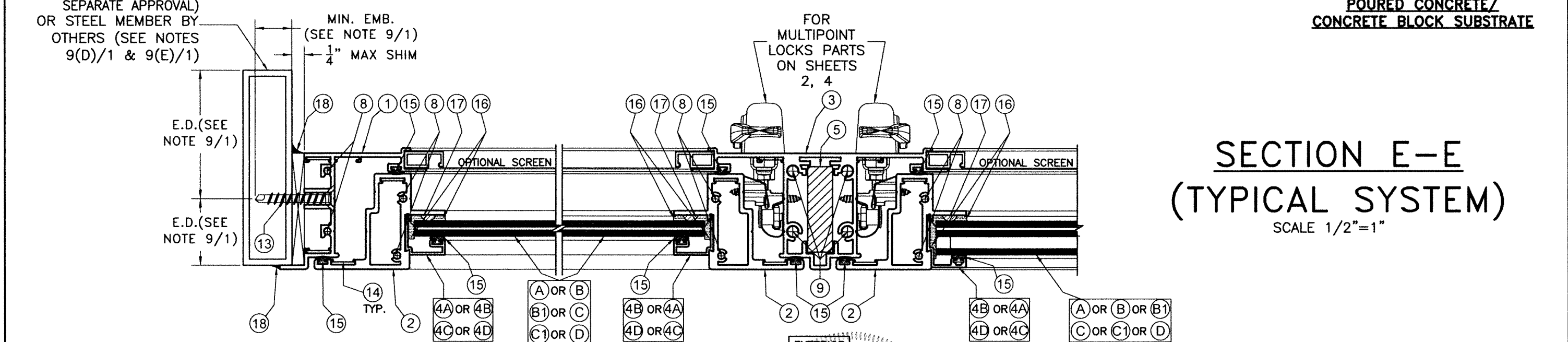
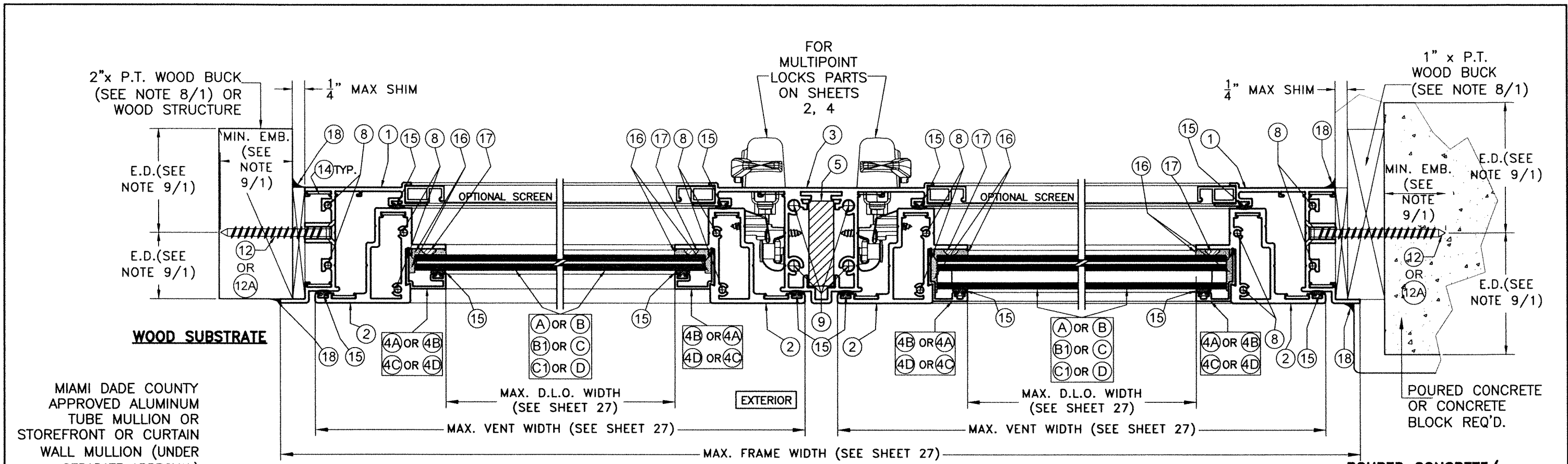
**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT  
WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**



290 WEST 78 ROAD  
HALEAH, FL. 33014  
PH: (954)228-5555/(305)558-8103  
FAX: (305)558-6665  
www.glgwindows.com

W.H.  
DRAWN BY:  
08/07/2023  
DATE:  
23-154  
DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	08/07/23	2		



**SECTION E-E**  
**(TYPICAL SYSTEM)**  
 SCALE 1/2"=1"

Professional Engineer Seal/Signature/Date  
 WALTER A. TILLIT JR.  
 No. 44167  
 STATE OF FLORIDA  
 8/7/2023  
 P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON 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  
 CA-0006719  
 WALTER A. TILLIT Jr. P.E.  
 FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**

W.H. DRAWN BY:  
 08/07/2023 DATE:  
 23-154 DRAWING No.

290 WEST 78 ROAD  
 HIALEAH, FL 33014  
 PH: (954)226-5555/(305)558-8103  
 FAX: (305)558-6665  
 www.gigwindows.com

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	08/07/23	2		

SHEET 19 OF 33

FOR  
MULTIPOINT  
LOCKS PARTS  
ON SHEETS  
2, 4

2" x P.T. WOOD BUCK  
(SEE NOTE 8/1) OR  
WOOD STRUCTURE

1" x P.T.  
WOOD BUCK  
(SEE NOTE 8/1)

MIN. EMB.  
(SEE  
NOTE  
9/1)

E.D.(SEE  
NOTE 9/1)

WOOD SUBSTRATE

MIAMI DADE  
COUNTY APPROVED  
ALUMINUM TUBE  
MULLION OR  
STOREFRONT OR  
CURTAIN WALL  
MULLION (UNDER  
SEPARATE  
APPROVAL)  
OR STEEL MEMBER  
BY OTHERS (SEE  
NOTES 9(D)/1 &  
9(E)/1)

E.D.(SEE  
NOTE 9/1)

E.D.(SEE  
NOTE 9/1)

ALUMINUM MULLION OR  
STEEL MEMBER  
SUBSTRATE

MIN. EMB.  
(SEE NOTE 9/1)

1/4" MAX SHIM

OPTIONAL SCREEN

MAX. D.L.O. WIDTH  
(SEE SHEET 27)

MAX. VENT WIDTH (SEE SHEET 27)

MAX. WINDOW FRAME WIDTH (SEE SHEET 27)

MAX. D.L.O. WIDTH  
(SEE SHEET 27)

MAX. VENT WIDTH (SEE SHEET 27)

1/4" MAX SHIM

MIN. EMB.  
(SEE  
NOTE  
9/1)

E.D.(SEE  
NOTE 9/1)

MIN. EMB.  
(SEE  
NOTE  
9/1)

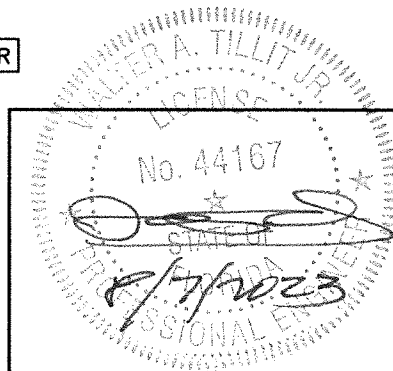
E.D.(SEE  
NOTE 9/1)

POURED CONCRETE  
OR CONCRETE  
BLOCK REQ'D.

POURED CONCRETE/  
CONCRETE BLOCK SUBSTRATE

SECTION E'-E'  
(HEAVY SYSTEM)  
SCALE 1/2"=1"

EXTERIOR



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON 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  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT  
WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)



290 WEST 78 ROAD  
HALEAH, FL 33014  
PH: (954)226-5555/(305)558-8103  
FAX: (305)558-6665  
www.gigwindows.com

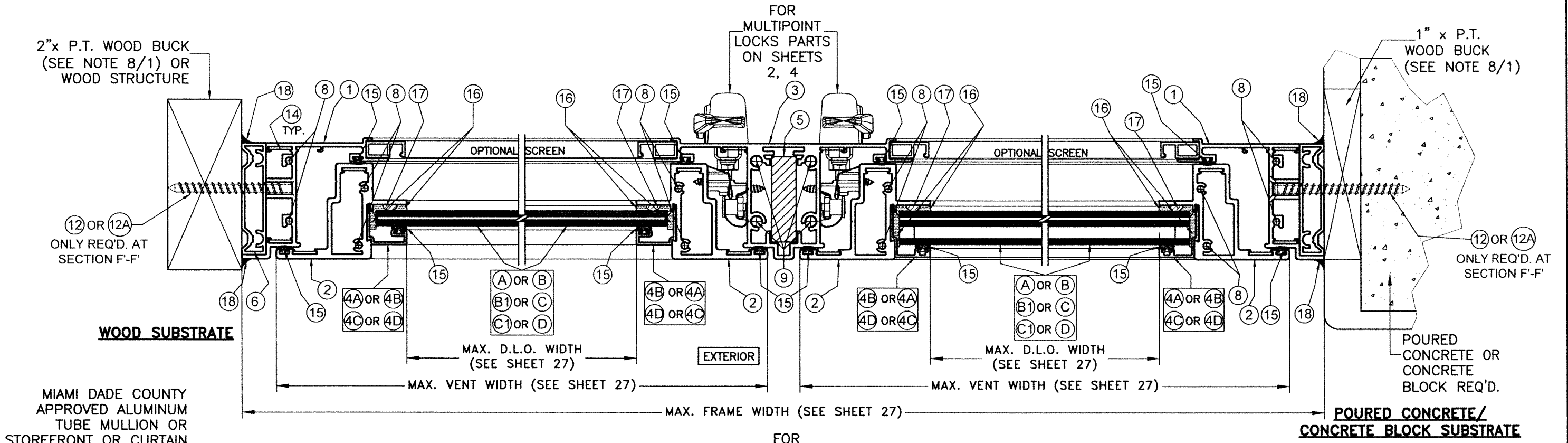
W.H.  
DRAWN BY:

08/07/2023  
DATE:

23-154  
DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	08/07/23	2		

SHEET 20 OF 33



MIAMI DADE COUNTY APPROVED ALUMINUM TUBE MULLION OR STOREFRONT OR CURTAIN WALL MULLION (UNDER SEPARATE APPROVAL) OR STEEL MEMBER BY OTHERS (SEE NOTES 9(D)/1 & 9(E)/1)

ONLY REQ'D. AT SECTION F'-F'

**ALUMINUM MULLION OR STEEL MEMBER SUBSTRATE**

**SECTIONS F-F & F'-F'**  
**(TYPICAL SYSTEM)**  
 SCALE 1/2"=1"

WALTER A. TILLIT JR.  
 LICENSE No. 44167  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 8/7/2023  
 P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON 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  
 CA-0006719  
 WALTER A. TILLIT Jr. P.E.  
 FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**

W.H. DRAWN BY:  
 08/07/2023 DATE:  
 23-154 DRAWING No.

290 WEST 78 ROAD  
 HIALEAH, FL 33014  
 PH: (954)226-5555/(305)558-8103  
 FAX: (305)558-6665  
 www.gigwindows.com

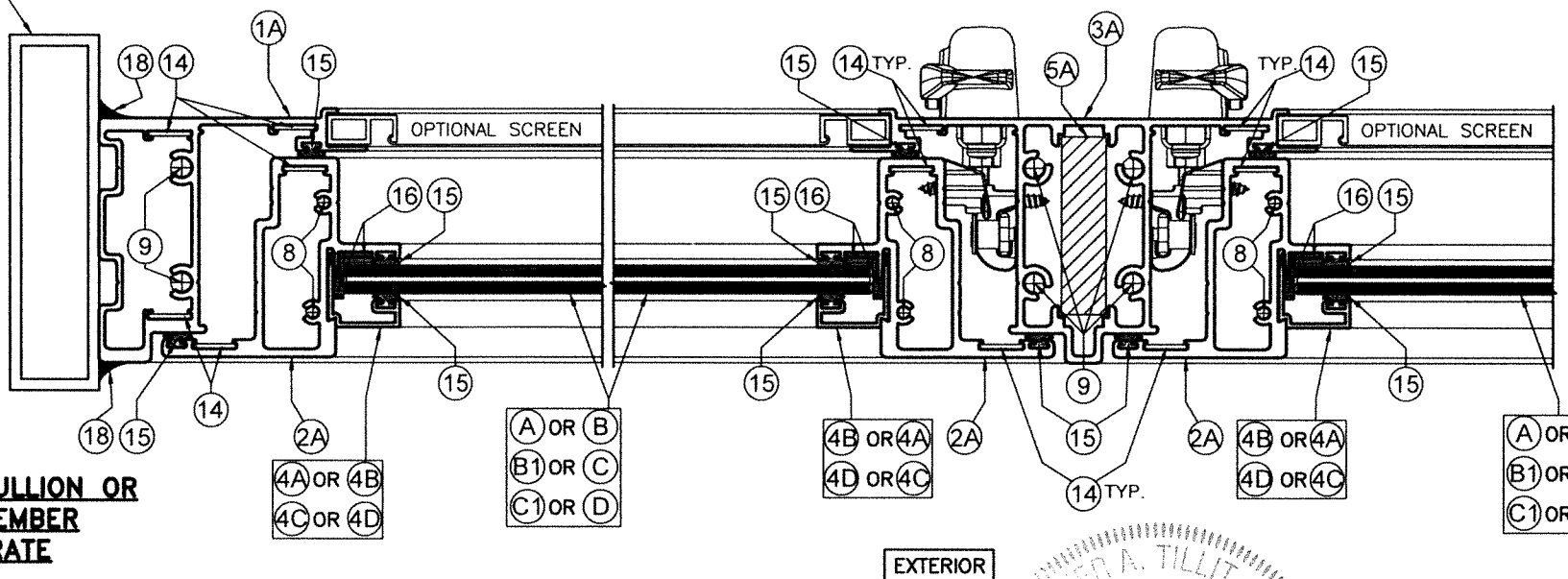
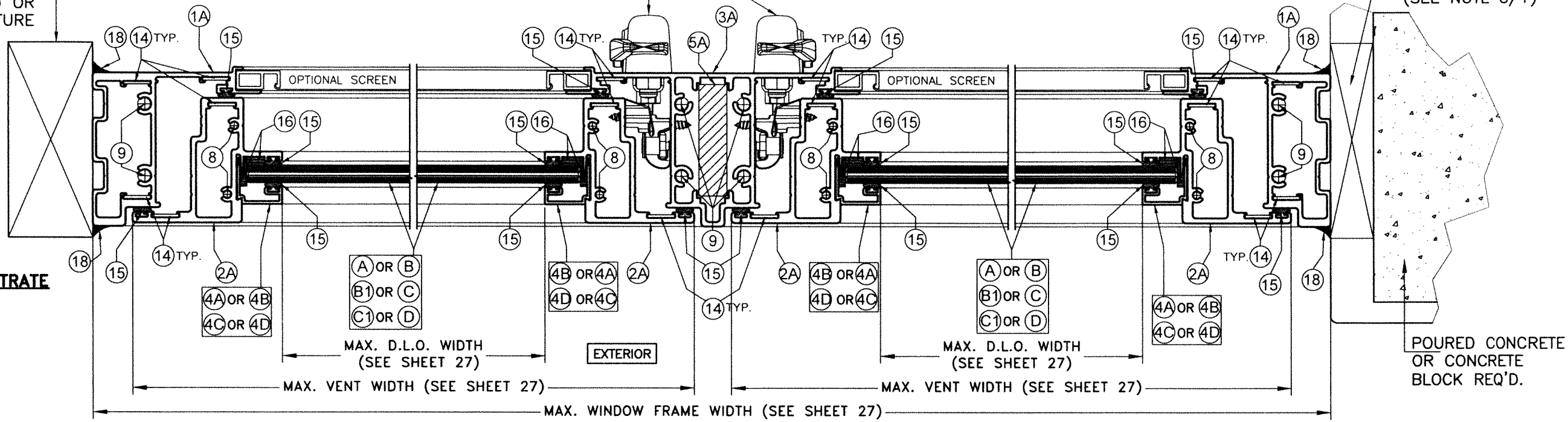
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	08/07/23	2		

SHEET 21 OF 33

FOR  
MULTIPOINT  
LOCKS PARTS  
ON SHEETS  
2, 4

1" x P.T.  
WOOD BUCK  
(SEE NOTE 8/1)

2" x P.T. WOOD BUCK  
(SEE NOTE 8/1) OR  
WOOD STRUCTURE



**SECTION F'-F'**  
**(HEAVY SYSTEM)**  
SCALE 1/2"=1"

WALTER A. TILLIT JR.  
No. 44167  
P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON 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  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

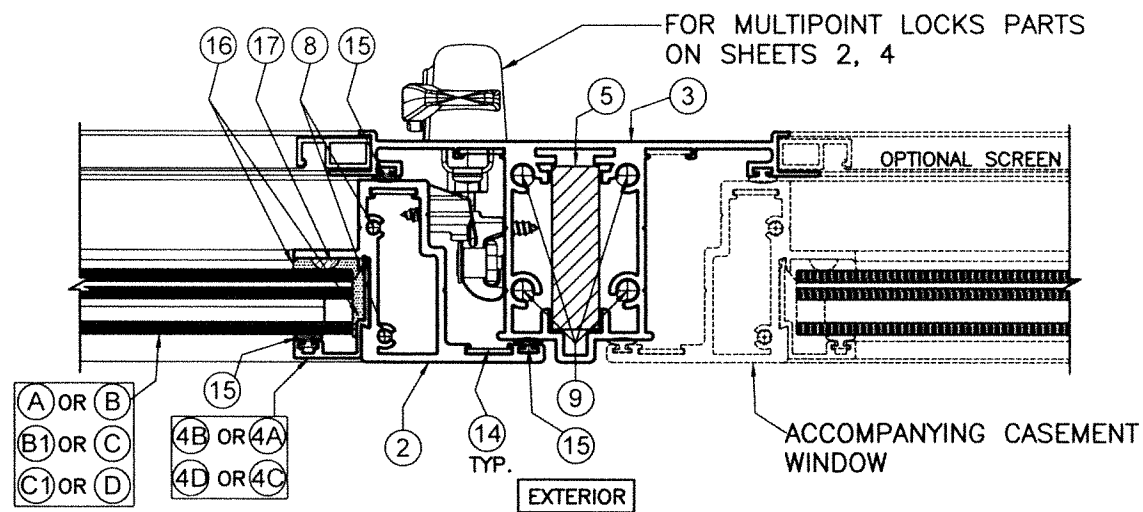
**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT  
WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**



290 WEST 78 ROAD  
HIALEAH, FL 33014  
PH: (954)226-5555/(305)558-8103  
FAX: (305)558-6665  
www.glgwindows.com

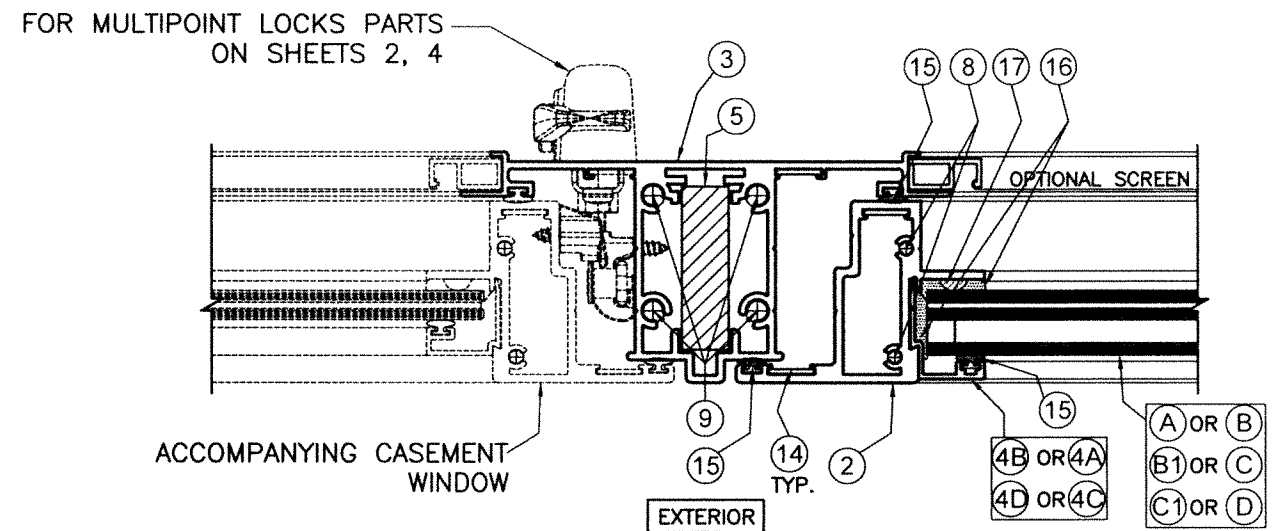
W.H.  
DRAWN BY:  
08/07/2023  
DATE:  
23-154  
DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		



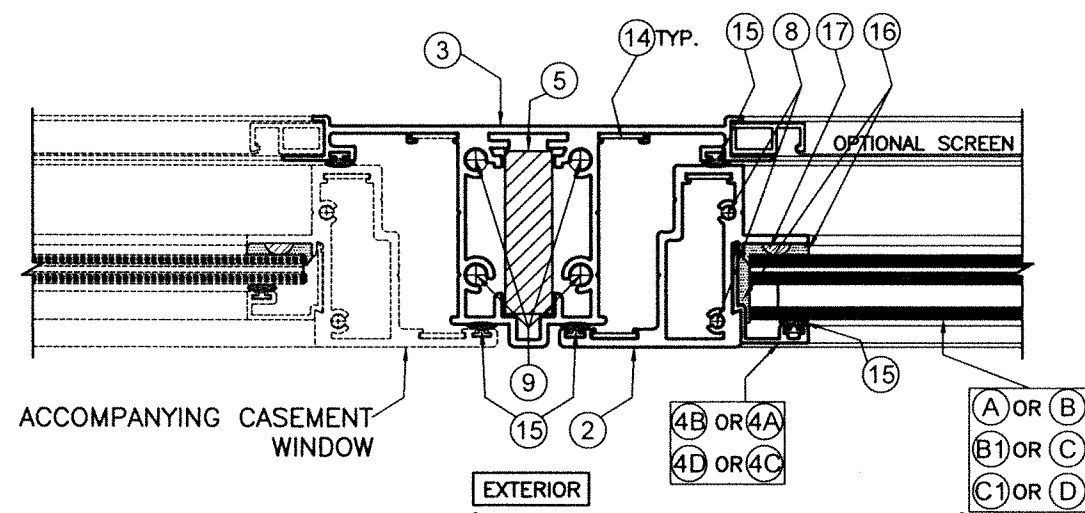
**SECTION G-G (TYPICAL SYSTEM)**

SCALE 1/2"=1"



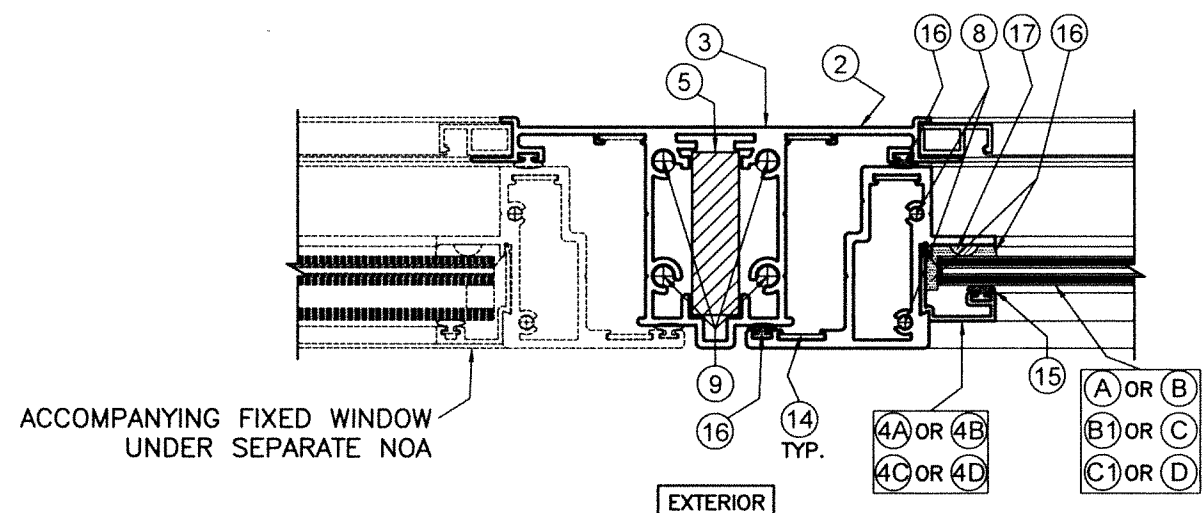
**SECTION H-H (TYPICAL SYSTEM)**

SCALE 1/2"=1"



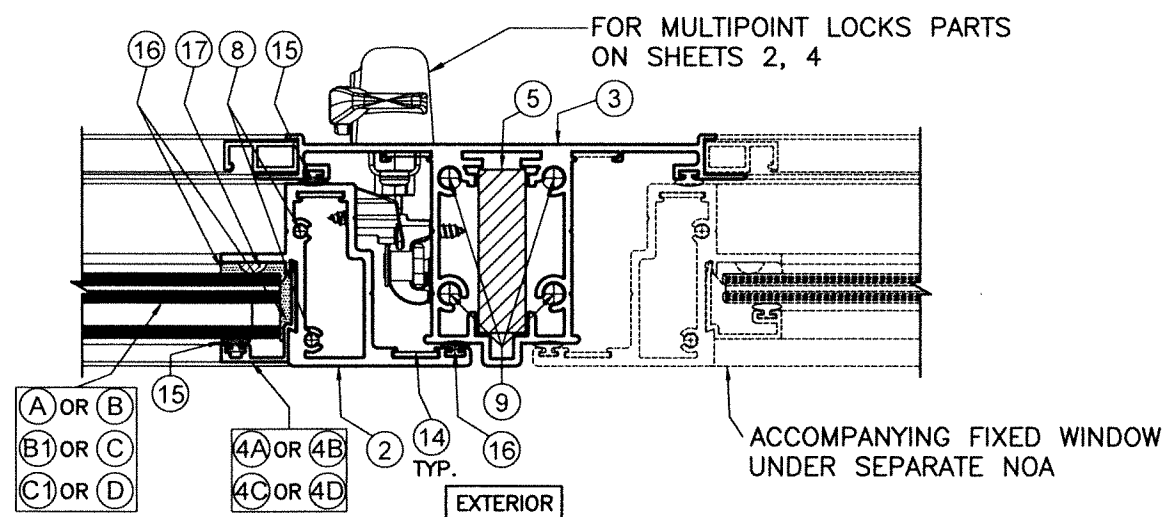
**SECTION I-I (TYPICAL SYSTEM)**

SCALE 1/2"=1"



**SECTION J-J (TYPICAL SYSTEM)**

SCALE 1/2"=1"



**SECTION K-K (TYPICAL SYSTEM)**

SCALE 1/2"=1"

WALTER A. TILLIT JR.  
LICENSE  
No. 44167  
8/7/2023  
P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON 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  
CA-006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**



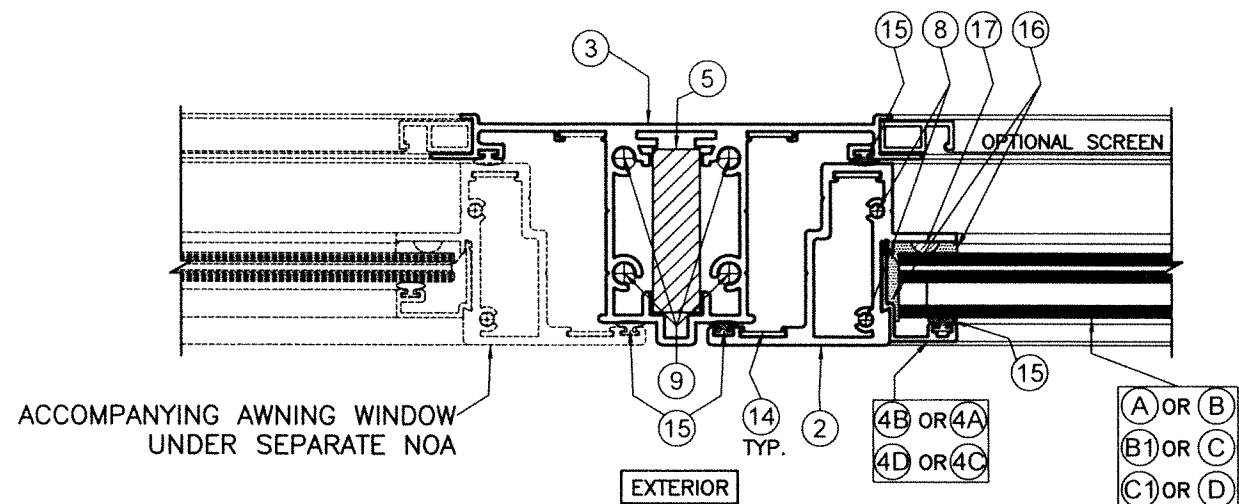
290 WEST 78 ROAD  
HALEAH, FL 33014  
PH: (954)226-5555/(305)558-8103  
FAX: (305)558-6665  
www.gigwindows.com

W.H.  
DRAWN BY:  
08/07/2023  
DATE:

23-154  
DRAWING No.

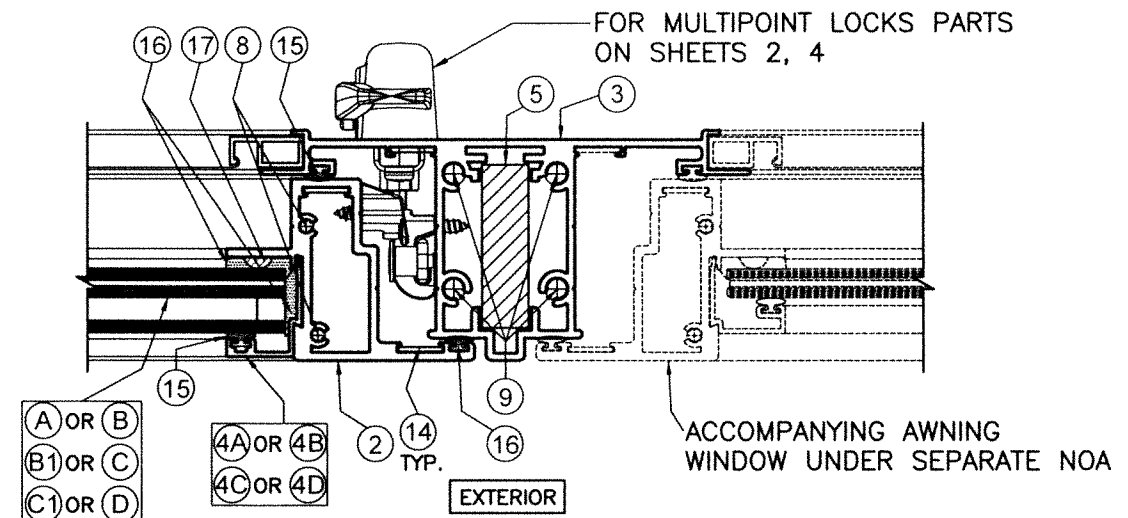
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		

SHEET 23 OF 33



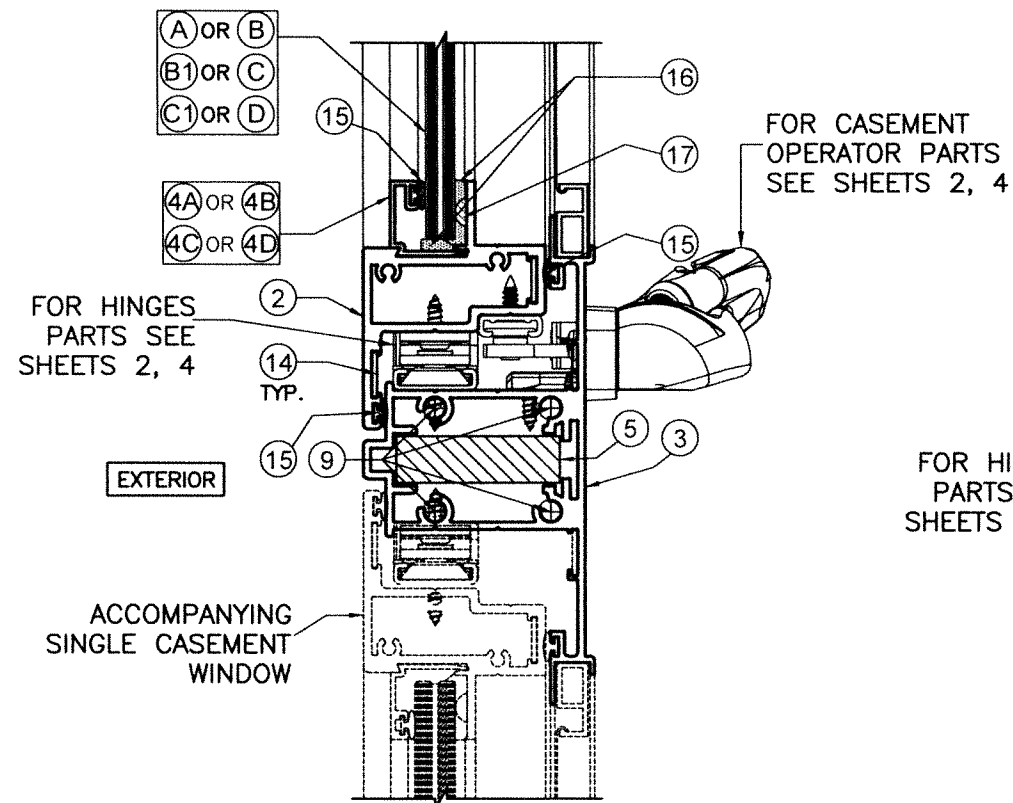
**SECTION L-L (TYPICAL SYSTEM)**

SCALE 1/2"=1"



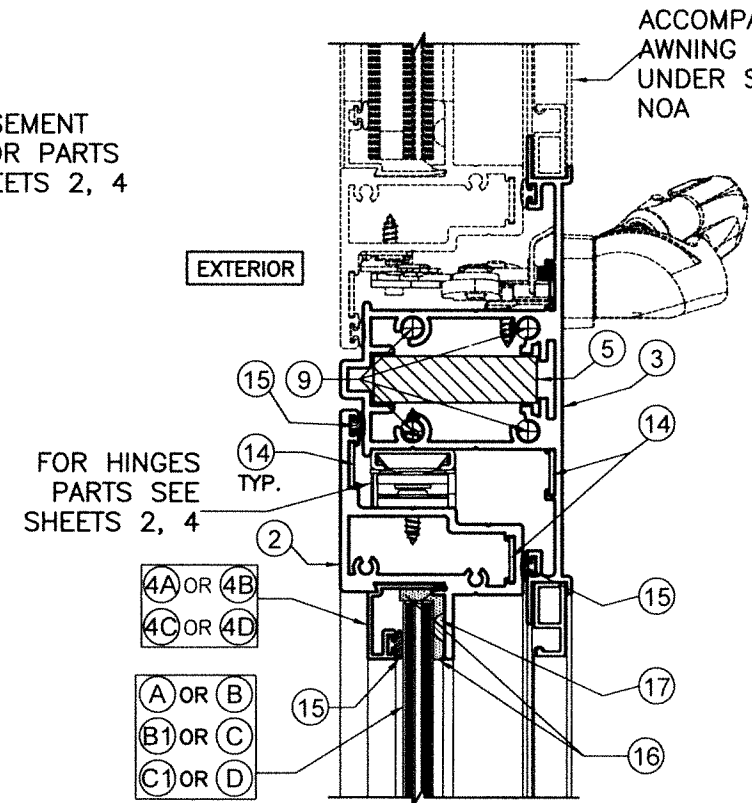
**SECTION M-M (TYPICAL SYSTEM)**

SCALE 1/2"=1"



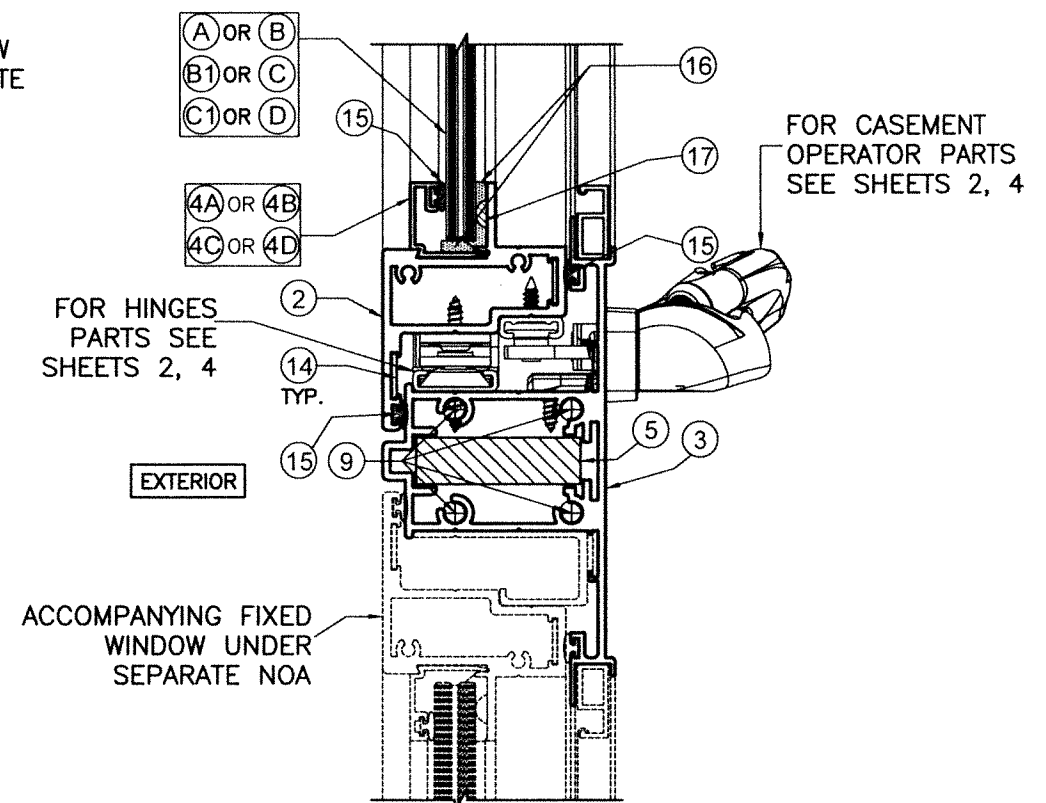
**SECTION N-N (TYPICAL SYSTEM)**

SCALE 1/2"=1"



**SECTION O-O (TYPICAL SYSTEM)**

SCALE 1/2"=1"



**SECTION P-P (TYPICAL SYSTEM)**

SCALE 1/2"=1"

Professional Engineer Seal/Signature/Date for Walter A. Tilljt Jr., P.E., Florida License No. 44167, dated 8/7/2023.

FLORIDA BUILDING CODE (HIGH & NON 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  
CA-0006719  
WALTER A. TILLJT Jr. P.E.  
FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**

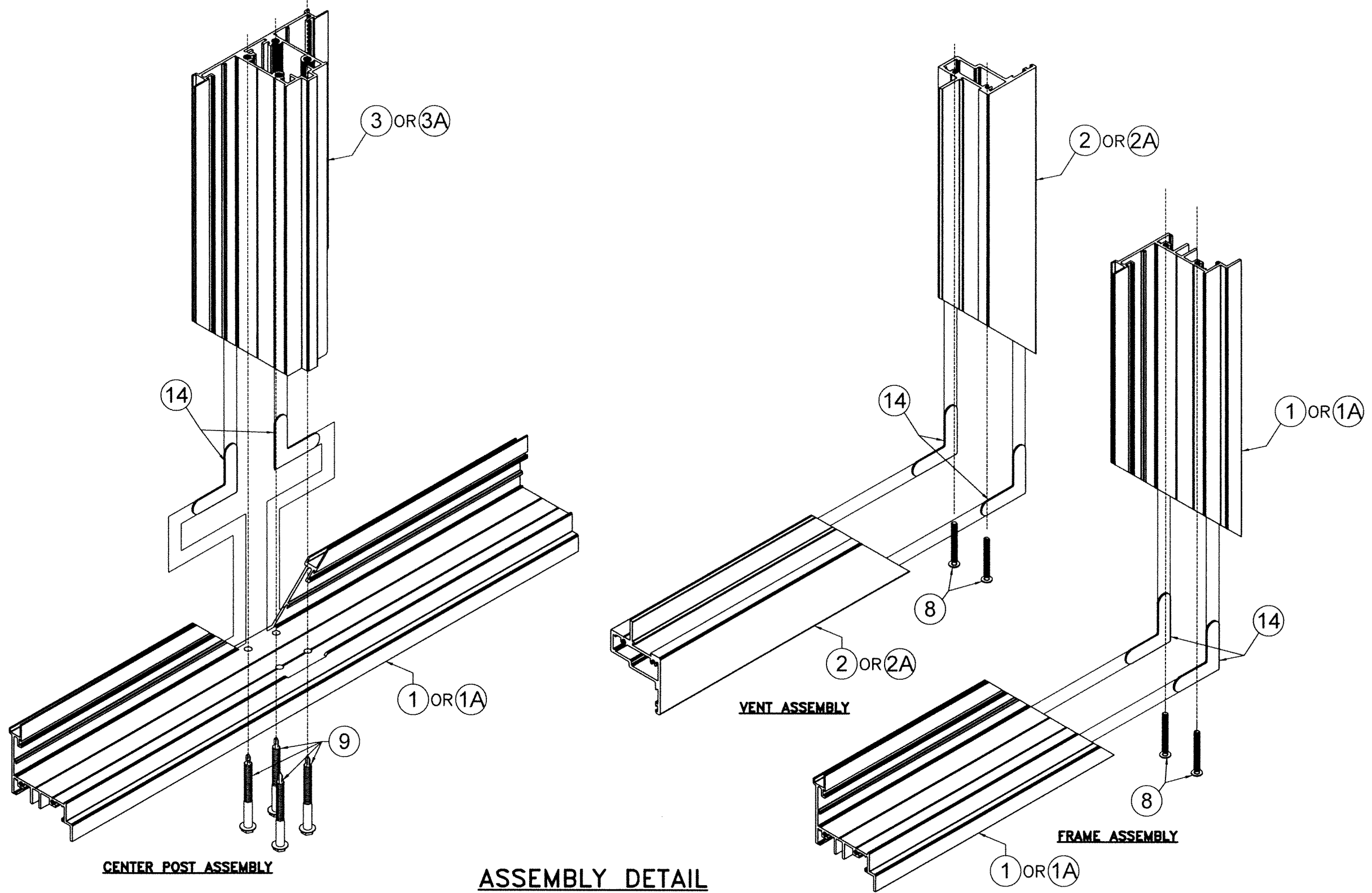
W.H. DRAWN BY:  
08/07/2023  
DATE:  
23-154  
DRAWING No.

290 WEST 78 ROAD  
HIALEAH, FL. 33014  
PH: (954)226-5555/(305)558-8103  
FAX: (305)558-6665  
www.gigwindows.com

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		

SHEET 24 OF 33





**ASSEMBLY DETAIL  
ISOMETRIC (TYPICAL & HEAVY SYSTEMS)**

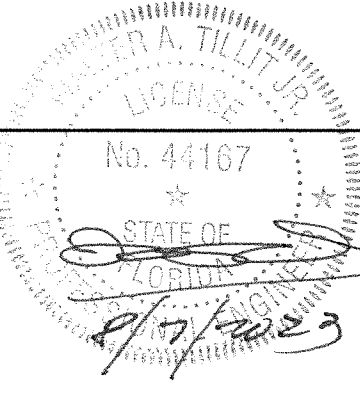
P.E. SEAL/SIGNATURE/DATE


FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)  
 ©2023 TILTECO, INC.  
  
 TILLIT TESTING & ENGINEERING COMPANY  
 6355 N.W. 38th St., Ste. 305, VIRGINIA GARDENS, FL 33166  
 Phone: (305)871-1530 Fax: (305)871-1531  
 CA-0006719  
 WALTER A. TILLIT Jr. P.E.  
 FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)				SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)		W.H. DRAWN BY:	
©2023 TILTECO, INC.						08/07/2023	
290 WEST 78 ROAD HIALEAH, FL. 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com				DATE:		23-154	
DRAWING No.				SHEET 26 OF 33			
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE		
1	OLD 20-273	06/07/23	2				

TYPICAL & HEAVY SYSTEMS								
SCHEDULE #1: VALID FOR INSTALLATIONS ON SHEETS 6, 7, 8, 9, 10								
MAX. ASD. DESIGN PRESSURE RATING AND CORRESPONDING MAX. FRAME, VENT & DLO. DIMENSIONS FOR SINGLE & DOUBLE VENT CASEMENT WINDOWS								
MAX. ASD DESIGN PRESSURE RATING	MAX. FRAME WIDTH ● SINGLE VENT WINDOW	MAX. FRAME WIDTH ● DOUBLE VENT WINDOW	MAX. FRAME HEIGHT	MAX. VENT WIDTH	MAX. VENT HEIGHT	MAX. D.L.O. WIDTH	MAX. D.L.O. HEIGHT	REQ'D. GLASS TYPE
+72.0, -72.0	42"	84"	74"	41"	72 1/2"	35 5/8"	67 3/16"	(A) (B) (C) (D)
+105.0, -105.0	42"	84"	55"	41"	53 3/8"	35 5/8"	48 1/16"	(B) (C)
+110.0, -110.0	40"	80"	58"	39"	56 3/8"	33 5/8"	51 1/16"	(B) (C)
+120.0, -120.0	37"	74"	63"	36"	61 3/8"	30 5/8"	56 1/16"	(B) (C)

TYPICAL & HEAVY SYSTEMS							
SCHEDULE #2: VALID FOR INSTALLATIONS ON SHEET 11							
MAX. ASD. DESIGN PRESSURE RATING AND CORRESPONDING MAX. FRAME, VENT & DLO. DIMENSIONS FOR VERTICAL COMBINATIONS OF SINGLE VENT CASEMENT, AWNING OR FIXED WINDOWS							
MAX. ASD DESIGN PRESSURE RATING	MAX. FRAME WIDTH ● SINGLE VENT WINDOW	MAX. FRAME HEIGHT	MAX. VENT WIDTH	MAX. VENT HEIGHT	MAX. D.L.O. WIDTH	MAX. D.L.O. HEIGHT	REQ'D. GLASS TYPE
+72.0, -72.0	42"	74"	41"	72 1/2"	35 5/8"	67 3/16"	(A) (B) (C) (D)
+105.0, -105.0	42"	55"	41"	53 3/8"	35 5/8"	48 1/16"	(B) (C)
+110.0, -110.0	40"	58"	39"	56 3/8"	33 5/8"	51 1/16"	(B) (C)
+120.0, -120.0	37"	63"	36"	61 3/8"	30 5/8"	56 1/16"	(B) (C)

  
 P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)			
©2023 TILTECO, INC.		<b>TILTECO inc.</b>	
TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone : (305)871-1530 . Fax : (305)871-1531 CA-0006719		WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167	
<b>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</b>		 290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com	
REV. NO    DESCRIPTION    DATE		REV. No    DESCRIPTION    DATE	
1    OLD 20-273    08/07/23		2	
W.H. DRAWN BY:		DATE:	
23-154		DRAWING No.	
SHEET 27 OF 33			

TYPICAL & HEAVY SYSTEMS						
MAXIMUM ANCHOR SPACING "S" AT ATTACHED JAMB FOR SINGLE & DOUBLE VENT CASEMENT WINDOWS VALID FOR INSTALLATIONS SHEETS 6, 8, 9, 10 & 11 (AS APPLICABLE)						
SUBSTRATE	ANCHOR TYPE	MAX. ASD DESIGN PRESSURE RATING (psf.)	MAX. FRAME WIDTH ● SINGLE VENT WINDOW	MAX. FRAME WIDTH ● DOUBLE VENT WINDOW *	MAX. FRAME HEIGHT	"S" (O.C.) AT JAMB
POURED CONCRETE f'c=3000psi	⑫ OR ⑫A	+72.0, -72.0	42"	84"	74"	15"
		+75.0, -75.0	42"	84"	55"	14"
			40"	80"	58"	15"
		+80.0, -80.0	37"	74"	63"	16"
			42"	84"	55"	13"
		+85.0, -85.0	40"	80"	58"	14"
			37"	74"	63"	15"
		+90.0, -90.0	42"	84"	55"	12"
			40"	80"	58"	13"
		+95.0, -95.0	37"	74"	63"	14"
			42"	84"	55"	11"
		+100.0, -100.0	40"	80"	58"	12"
			37"	74"	63"	13"
		+105.0, -105.0	42"	84"	55"	11"
			40"	80"	58"	12"
		+110.0, -110.0	37"	74"	63"	11"
			40"	80"	58"	10"
		+115.0, -115.0	37"	74"	63"	11"
			40"	80"	58"	10"
		+120.0, -120.0	37"	74"	63"	10"
40"	80"		58"	10"		

CONTINUED						
CONCRETE BLOCK	⑫ OR ⑫A	+72.0, -72.0	42"	84"	74"	12"
		+75.0, -75.0	42"	84"	55"	12"
			40"	80"	58"	12"
		+80.0, -80.0	37"	74"	63"	13"
			42"	84"	55"	11"
		+85.0, -85.0	40"	80"	58"	12"
			37"	74"	63"	13"
		+90.0, -90.0	42"	84"	55"	10"
			40"	80"	58"	11"
		+95.0, -95.0	37"	74"	63"	11"
			42"	84"	55"	9"
		+100.0, -100.0	40"	80"	58"	10"
			37"	74"	63"	10"
		+105.0, -105.0	42"	84"	55"	9"
			40"	80"	58"	9"
		+110.0, -110.0	37"	74"	63"	10"
			42"	84"	55"	8"
		+115.0, -115.0	40"	80"	58"	9"
			37"	74"	63"	9"
		+120.0, -120.0	40"	80"	58"	8"
37"	74"		63"	9"		

\* THIS COLUMN NOT APPLICABLE TO INSTALLATIONS SHEET 11.

WALTER A. TILLIT JR.  
LICENSE  
No. 44167  
STATE OF FLORIDA  
Professional Engineer  
8/27/2023  
P.E. SEAL/SIGNATURE/DATE



<p>FLORIDA BUILDING CODE (HIGH &amp; NON HIGH VELOCITY HURRICANE ZONE)</p> <p>©2023 TILTECO, INC.</p> <p><b>TILTECO inc.</b></p> <p>TILLIT TESTING &amp; ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone : (305)871-1530 Fax : (305)871-1531 CA-0006719</p> <p>WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167</p>				<p>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</p> <p>W.H. DRAWN BY:</p> <p>08/07/2023 DATE:</p> <p>23-154 DRAWING No.</p>	
<p>290 WEST 78 ROAD HALEAH, FL 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com</p>		<p>REV. NO. DESCRIPTION DATE REV. No. DESCRIPTION DATE</p> <p>1 OLD 20-273 06/07/23 2</p>			
<p>SHEET 28 OF 33</p>					

TYPICAL & HEAVY SYSTEMS						
MAXIMUM ANCHOR SPACING "S" AT ATTACHED JAMB FOR SINGLE & DOUBLE VENT CASEMENT WINDOWS VALID FOR INSTALLATIONS SHEETS 6, 8, 9, 10 & 11 (AS APPLICABLE)						
SUBSTRATE	ANCHOR TYPE	MAX. ASD DESIGN PRESSURE RATING (psf.)	MAX. FRAME WIDTH ● SINGLE VENT WINDOW	MAX. FRAME WIDTH ● DOUBLE VENT WINDOW *	MAX. FRAME HEIGHT	"S" AT JAMB
ALUMINUM OR STEEL	⑬	+72.0, -72.0	42"	84"	74"	16"
		+75.0, -75.0	42"	84"	55"	16"
			40"	80"	58"	16"
		+80.0, -80.0	37"	74"	63"	16"
			42"	84"	55"	16"
			40"	80"	58"	16"
		+85.0, -85.0	37"	74"	63"	16"
			42"	84"	55"	15"
			40"	80"	58"	16"
		+90.0, -90.0	37"	74"	63"	16"
			42"	84"	55"	14"
			40"	80"	58"	15"
		+95.0, -95.0	37"	74"	63"	16"
			42"	84"	55"	13"
			40"	80"	58"	14"
		+100.0, -100.0	37"	74"	63"	15"
			42"	84"	55"	13"
			40"	80"	58"	13"
		+105.0, -105.0	37"	74"	63"	14"
			42"	84"	55"	12"
40"	80"		58"	13"		
+110.0, -110.0	37"	74"	63"	14"		
	40"	80"	58"	12"		
+115.0, -115.0	37"	74"	63"	12"		
+120.0, -120.0	37"	74"	63"	12"		

CONTINUED						
WOOD	⑫ OR ⑫A	+72.0, -72.0	42"	84"	74"	15"
		+75.0, -75.0	42"	84"	55"	14"
			40"	80"	58"	15"
		+80.0, -80.0	37"	74"	63"	16"
			42"	84"	55"	13"
			40"	80"	58"	14"
		+85.0, -85.0	37"	74"	63"	15"
			42"	84"	55"	12"
			40"	80"	58"	13"
		+90.0, -90.0	37"	74"	63"	14"
			42"	84"	55"	12"
			40"	80"	58"	12"
		+95.0, -95.0	37"	74"	63"	13"
			42"	84"	55"	11"
			40"	80"	58"	12"
		+100.0, -100.0	37"	74"	63"	13"
			42"	84"	55"	11"
			40"	80"	58"	11"
		+105.0, -105.0	37"	74"	63"	12"
			42"	84"	55"	10"
40"	80"		58"	11"		
+110.0, -110.0	37"	74"	63"	11"		
	40"	80"	58"	10"		
+115.0, -115.0	37"	74"	63"	10"		
+120.0, -120.0	37"	74"	63"	10"		

\* THIS COLUMN NOT APPLICABLE TO INSTALLATIONS SHEET 11.

WALTER A. TILLIT JR.  
LICENSE  
No. 44167  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
08/23/2023  
P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)			
©2023 TILTECO, INC.		SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)	
 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 38th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 CA-0006719 WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167		 290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)228-5555/(305)558-8103 FAX: (305)558-6865 www.gigwindows.com	
W.H. DRAWN BY:	08/07/2023		
DATE:	23-154		
DRAWING No.	SHEET 29 OF 33		
REV. NO	DESCRIPTION	DATE	REV. No
1	OLD 20-273	08/07/23	2

**TYPICAL & HEAVY SYSTEMS**  
**SCHEDULE #3: VALID FOR INSTALLATIONS PER SHEETS 7, 8, 9, 10 (AS APPLICABLE)**

**MAXIMUM # OF ANCHORS "n" AT EA. OF TWO CLUSTERS AT HEAD OR SILL FOR SINGLE AND DOUBLE VENT CASEMENT WINDOWS WHEN JAMBS ARE NOT ATTACHED TO WALL**

SUBSTRATE	ANCHOR TYPE	MAX. ASD DESIGN PRESSURE RATING (psf.)	MAX. FRAME WIDTH ● SINGLE VENT WINDOW	MAX. FRAME WIDTH ● DOUBLE VENT WINDOW	MAX. FRAME HEIGHT	"n"
POURED CONCRETE f'c=3000psi	⑫ OR ⑫A	+72.0, -72.0	42"	84"	74"	3
		+75.0, -75.0 TO +80.0, -80.0	42"	84"	55"	2
			40"	80"	58"	2
			37"	74"	63"	2
		+85.0, -85.0 TO +115.0, -115.0	42"	84"	55"	3
			40"	80"	58"	3
37"	74"		63"	3		
+120.0, -120.0	37"	74"	63"	3		
ALUMINUM OR STEEL	⑬	+72.0, -72.0	42"	84"	74"	2
		+75.0, -75.0 TO +95.0, -95.0	42"	84"	55"	2
			40"	80"	58"	2
			37"	74"	63"	2
		+100.0, -100.0 TO +115.0, -115.0	42"	84"	55"	3
			40"	80"	58"	3
37"	74"		63"	3		
+120.0, -120.0	37"	74"	63"	3		

**SCHEDULE #3 (CONTINUED)**

SUBSTRATE	ANCHOR TYPE	MAX. ASD DESIGN PRESSURE RATING (psf.)	MAX. FRAME WIDTH ● SINGLE VENT WINDOW	MAX. FRAME WIDTH ● DOUBLE VENT WINDOW	MAX. FRAME HEIGHT	"n"
CONCRETE BLOCK	⑫ OR ⑫A	+72.0, -72.0	42"	84"	74"	3
		+75.0, -75.0 TO +100.0, -100.0	42"	84"	55"	3
			40"	80"	58"	3
			37"	74"	63"	3
		+105.0, -105.0 TO +115.0, -115.0	42"	84"	55"	4
			40"	80"	58"	4
37"	74"		63"	4		
+120.0, -120.0	37"	74"	63"	4		
WOOD	⑫ OR ⑫A	+72.0, -72.0	42"	84"	74"	3
		+75.0, -75.0 TO +80.0, -80.0	42"	84"	55"	2
			40"	80"	58"	2
			37"	74"	63"	2
		+85.0, -85.0 TO +115.0, -115.0	42"	84"	55"	3
			40"	80"	58"	3
37"	74"		63"	3		
+120.0, -120.0	37"	74"	63"	3		

WALTER A. TILLIT JR.  
 LICENSE  
 No. 44167  
 STATE OF  
 FLORIDA  
 PROFESSIONAL ENGINEER  
 08/07/2023  
 P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE) ©2023 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 CA-0006719 WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167				<b>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</b>  290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com		W.H. DRAWN BY: 08/07/2023 DATE: 23-154 DRAWING No. SHEET 30 OF 33
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	
1	OLD 20-273	08/07/23	2			

TYPICAL & HEAVY SYSTEMS SCHEDULE #4: VALID FOR INSTALLATIONS PER SHEET 11					
MAXIMUM # OF ANCHORS "n" AT EA. OF TWO CLUSTERS AT HEAD OR SILL FOR COMBINATION OF SINGLE VENT CASEMENT WINDOWS WHEN JAMBS ARE NOT ATTACHED TO WALL EXCEPT AT HORIZONTAL CENTER POST ③					
SUBSTRATE	ANCHOR TYPE	MAX. ASD DESIGN PRESSURE RATING (psf.)	MAX. FRAME WIDTH ● SINGLE VENT WINDOW	MAX. FRAME HEIGHT	"n"
POURED CONCRETE f'c=3000psi	⑫ OR ⑫A	+72.0, -72.0	42"	74"	3
		+75.0, -75.0 TO +80.0, -80.0	42"	55"	2
			40"	58"	2
			37"	63"	2
		+85.0, -85.0 TO +115.0, -115.0	42"	55"	3
			40"	58"	3
			37"	63"	3
+120.0, -120.0	37"	63"	3		
ALUMINUM OR STEEL	⑬	+72.0, -72.0	42"	74"	2
		+75.0, -75.0 TO +95.0, -95.0	42"	55"	2
			40"	58"	2
			37"	63"	2
		+100.0, -100.0 TO +115.0, -115.0	42"	55"	3
			40"	58"	3
			37"	63"	3
+120.0, -120.0	37"	63"	3		

SCHEDULE #4 (CONTINUED)					
SUBSTRATE	ANCHOR TYPE	MAX. ASD DESIGN PRESSURE RATING (psf.)	MAX. FRAME WIDTH ● SINGLE VENT WINDOW	MAX. FRAME HEIGHT	"n"
CONCRETE BLOCK	⑫ OR ⑫A	+72.0, -72.0	42"	74"	3
		+75.0, -75.0 TO +100.0, -100.0	42"	55"	3
			40"	58"	3
			37"	63"	3
		+105.0, -105.0 TO +115.0, -115.0	42"	55"	4
			40"	58"	4
			37"	63"	4
+120.0, -120.0	37"	63"	4		
WOOD	⑫ OR ⑫A	+72.0, -72.0	42"	74"	3
		+75.0, -75.0 TO +80.0, -80.0	42"	55"	2
			40"	58"	2
			37"	63"	2
		+85.0, -85.0 TO +115.0, -115.0	42"	55"	3
			40"	58"	3
			37"	63"	3
+120.0, -120.0	37"	63"	3		

WALTER A. TILLIT JR.  
 LICENSE  
 No. 44167  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 8/7/2023  
 P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)			
©2023 TILTECO, INC.		<b>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</b>	
 <b>TILTECO inc.</b> <small>TILLIT TESTING &amp; ENGINEERING COMPANY          6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166          Phone: (305)871-1530 Fax: (305)871-1531          CA-0006719          WALTER A. TILLIT Jr. P.E.          FLORIDA Lic. # 44167</small>		 <small>290 WEST 78 ROAD          HIALEAH, FL 33014          PH: (954)226-5555/(305)558-8103          FAX: (305)558-6665          www.gigwindows.com</small>	
W.H. DRAWN BY:		DATE:	
8/7/2023		08/07/2023	
P.E. SEAL/SIGNATURE/DATE		DRAWING No.	
8/7/2023		23-154	
P.E. SEAL/SIGNATURE/DATE		SHEET 31 OF 33	
P.E. SEAL/SIGNATURE/DATE		SHEET 31 OF 33	

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		

**TYPICAL & HEAVY SYSTEMS**  
**SCHEDULE #5: VALID FOR INSTALLATIONS PER SHEETS 6, 7, 8, 9, 10 (AS APPLICABLE)**

**MAXIMUM # OF ANCHORS "n" AT CLUSTER AT HEAD OR SILL AT MEETING STILES\* FOR DOUBLE CASEMENT WINDOWS**

SUBSTRATE	ANCHOR TYPE	MAX. ASD DESIGN PRESSURE RATING (psf.)	MAX. FRAME WIDTH ● DOUBLE VENT WINDOW	MAX. FRAME HEIGHT	"n"		
POURED CONCRETE f'c=3000psi	(12) OR (12A)	+72.0, -72.0	84"	74"	6		
		+75.0, -75.0 TO +80.0, -80.0	84"	55"	4		
			80"	58"	4		
			74"	63"	4		
		+85.0, -85.0 TO +115.0, -115.0	84"	55"	6		
			80"	58"	6		
			74"	63"	6		
		+120.0, -120.0	74"	63"	6		
		ALUMINUM OR STEEL	(13)	+72.0, -72.0	84"	74"	4
				+75.0, -75.0 TO +95.0, -95.0	84"	55"	4
80"	58"				4		
74"	63"				4		
+100.0, -100.0 TO +115.0, -115.0	84"			55"	6		
	80"			58"	6		
	74"			63"	6		
+120.0, -120.0	74"			63"	6		

\* TOTAL NUMBER OF ANCHORS SHALL BE UNIFORMLY DISTRIBUTED AT (n/2) ANCHORS AT EITHER SIDE OF MEETING STILES AT HEAD AND ALSO AT SILL

**SCHEDULE #5 (CONTINUED)**

SUBSTRATE	ANCHOR TYPE	MAX. ASD DESIGN PRESSURE RATING (psf.)	MAX. FRAME WIDTH ● DOUBLE VENT WINDOW	MAX. FRAME HEIGHT	"n"		
CONCRETE BLOCK	(12) OR (12A)	+72.0, -72.0	84"	74"	6		
		+75.0, -75.0 TO +100.0, -100.0	84"	55"	6		
			80"	58"	6		
			74"	63"	6		
		+105.0, -105.0 TO +115.0, -115.0	84"	55"	8		
			80"	58"	8		
			74"	63"	8		
		+120.0, -120.0	74"	63"	8		
		WOOD	(12) OR (12A)	+72.0, -72.0	84"	74"	6
				+75.0, -75.0 TO +80.0, -80.0	84"	55"	4
80"	58"				4		
74"	63"				4		
+85.0, -85.0 TO +115.0, -115.0	84"			55"	6		
	80"			58"	6		
	74"			63"	6		
+120.0, -120.0	74"			63"	6		

WALTER A. TILLIT JR.  
 LICENSE  
 No. 44167  
 STATE OF FLORIDA  
 8/7/2023  
 P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)			
©2023 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 CA-0006719		<b>SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL &amp; HEAVY SYSTEMS)</b> 	
WALTER A. TILLIT Jr. P.E. FLORIDA Lic. # 44167		290 WEST 78 ROAD HIALEAH, FL 33014 PH: (954)226-5555/(305)558-8103 FAX: (305)558-6665 www.gigwindows.com	
REV. NO	DESCRIPTION	DATE	REV. No
1	OLD 20-273	08/07/23	2
W.H. DRAWN BY: 08/07/2023 DATE: 23-154 DRAWING No.			SHEET 32 OF 33

**TYPICAL & HEAVY SYSTEMS**  
**SCHEDULE #6: VALID FOR INSTALLATIONS PER SHEET 11**

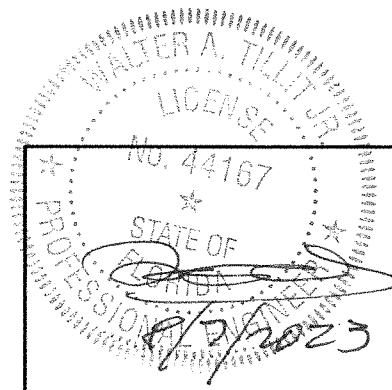
**MAXIMUM # OF ANCHORS "n" AT CLUSTER AT EA. END OF HORIZONTAL CENTER POST ③ OR ③A AT JAMBS FOR VERTICAL COMBINATION OF SINGLE VENT CASEMENT, AWNING & FIXED WINDOWS**

SUBSTRATE	ANCHOR TYPE	MAX. ASD DESIGN PRESSURE RATING (psf.)	MAX. FRAME WIDTH ● SINGLE VENT WINDOW	MAX. FRAME HEIGHT	"n"
POURED CONCRETE f'c=3000psi	⑫ OR ⑫A	+72.0, -72.0	42"	74"	6
		+75.0, -75.0 TO +80.0, -80.0	42"	55"	4
			40"	58"	4
		+85.0, -85.0 TO +115.0, -115.0	37"	63"	4
			42"	55"	6
		40"	58"	6	
37"	63"	6			
ALUMINUM OR STEEL	⑬	+72.0, -72.0	42"	74"	4
		+75.0, -75.0 TO +95.0, -95.0	42"	55"	4
			40"	58"	4
		+100.0, -100.0 TO +115.0, -115.0	37"	63"	4
			42"	55"	6
		40"	58"	6	
37"	63"	6			
		+120.0, -120.0	37"	63"	6

**SCHEDULE #6 (CONTINUED)**

SUBSTRATE	ANCHOR TYPE	MAX. ASD DESIGN PRESSURE RATING (psf.)	MAX. FRAME WIDTH ● SINGLE VENT WINDOW	MAX. FRAME HEIGHT	"n"
CONCRETE BLOCK	⑫ OR ⑫A	+72.0, -72.0	42"	74"	6
		+75.0, -75.0 TO +100.0, -100.0	42"	55"	6
			40"	58"	6
		+105.0, -105.0 TO +115.0, -115.0	37"	63"	6
			42"	55"	8
		40"	58"	8	
37"	63"	8			
WOOD	⑫ OR ⑫A	+72.0, -72.0	42"	74"	6
		+75.0, -75.0 TO +80.0, -80.0	42"	55"	4
			40"	58"	4
		+85.0, -85.0 TO +115.0, -115.0	37"	63"	4
			42"	55"	6
		40"	58"	6	
37"	63"	6			
		+120.0, -120.0	37"	63"	6

\* TOTAL NUMBER OF ANCHORS SHALL BE UNIFORMLY DISTRIBUTED AT (n/2) ANCHORS ABOVE & BELOW OF HORIZONTAL CENTER POST ③ OR ③A AT JAMBS




FLORIDA BUILDING CODE (HIGH & NON 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  
 CA-0006719  
 WALTER A. TILLIT Jr. P.E.  
 FLORIDA Lic. # 44167

**SERIES VPF 8000 OUTSWING ALUMINUM CASEMENT WINDOW-LMI (TYPICAL & HEAVY SYSTEMS)**

  
 290 WEST 78 ROAD  
 HIALEAH, FL 33014  
 PH: (954)226-5555/(305)558-8103  
 FAX: (305)558-6665  
 www.gigwindows.com

W.H.  
DRAWN BY:  
08/07/2023  
DATE:  
23-154  
DRAWING No.

REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-273	06/07/23	2		