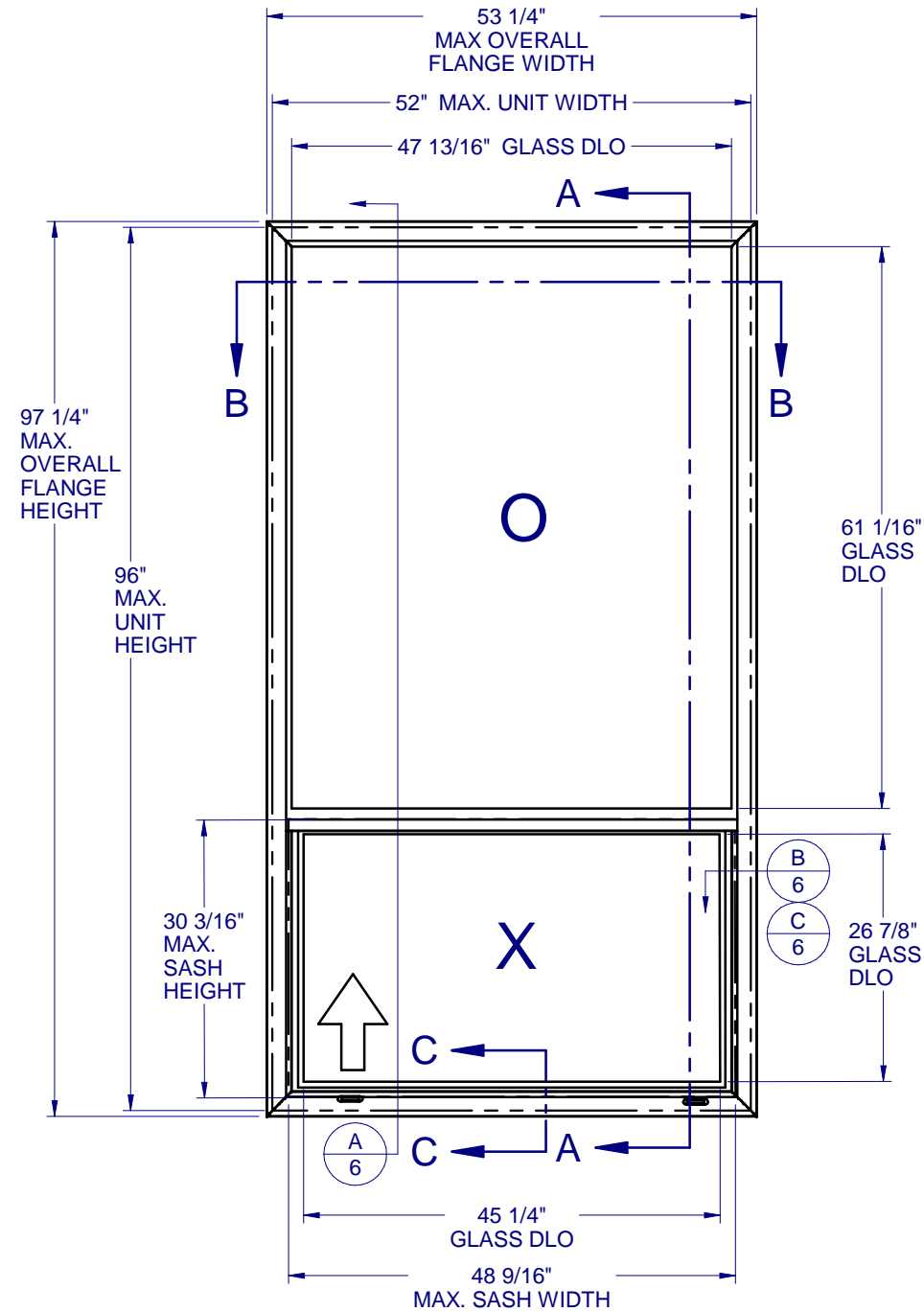


# SINGLE HUNG ORIEL - LARGE MISSILE IMPACT



## TABLE OF CONTENTS

GENERAL NOTES & ELEVATIONS.....	1
GLAZING DETAILS.....	2
SECTION VIEWS.....	3
BOM & EXTRUSIONS.....	4
ANCHOR SCHEDULE & NOTES.....	5
INSTALLATION DETAILS.....	6

MAX. UNIT SIZE	DESIGN PRESSURE RATING	IMPACT RATING
52" x 96"	+/- 70 PSF	LARGE MISSILE IMPACT

## GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE FLORIDA BUILDING CODE (FBC), CURRENT EDITION INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) AND IS RATED FOR WIND ZONE 4 MISSILE LEVEL D IMPACT USE AS DEFINED IN ASTM E 1996 PER THE FBC.
2. GLAZING OPTIONS: (SEE SHEET 2)
3. CONFIGURATIONS: "O/X".
4. DESIGN PRESSURE RATING:
  - NEGATIVE DESIGN LOADS BASED ON, TESTED PRESSURE AND GLASS TABLES ASTM E-1300-04e01/09.
  - POSITIVE DESIGN LOADS BASED ON, TESTED PRESSURE, WATER INFILTRATION TEST PRESSURE AND GLASS TABLES ASTM E-1300-04e01/09.
5. ANCHORAGE: THE 33 1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. SEE SHEET 6 FOR ANCHOR DETAILS. WINDLOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
6. PRODUCT APPROVED FOR IMPACT RESISTANCE. THE IMPACT SWEEP LOCKS ARE INTENDED TO BE LEFT UNLATCHED DURING NORMAL OPERATION OF THIS PRODUCT, BUT MUST BE ENGAGED PRIOR TO EXPOSURE TO HURRICANE WINDS AND FLYING DEBRIS.
7. ALL FRAMES AND VENTS FULLY WELDED. SMALL JOINT SEAM SEALANT USED AT FIXED MEETING RAIL AND JAMB.
8. THE DESIGNATION X AND O STAND FOR THE FOLLOWING:  
X = OPERABLE SASH, O = FIXED SASH
9. SECTION CALLOUTS APPLY TO ALL ELEVATIONS IN A SIMILAR LOCATION.
10. EXTERNAL WEEP SLOT = 1/4" x 1-1/4" LOCATED 4" FROM BOTH ENDS.



## 510 PVC SINGLE HUNG IMPACT

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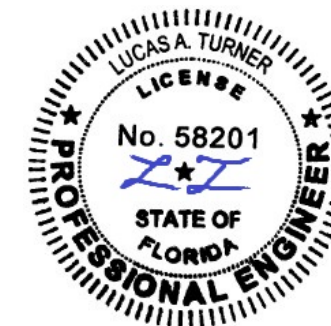
SHEET DESCRIPTION:  
**GENERAL NOTES AND ELEVATIONS**

DRAWN BY: MCS	DATE: 10/6/2023
DWG #: PEL-295	REV.: C
SCALE: 1:20	SHEET 1 OF 6

**510 PVC  
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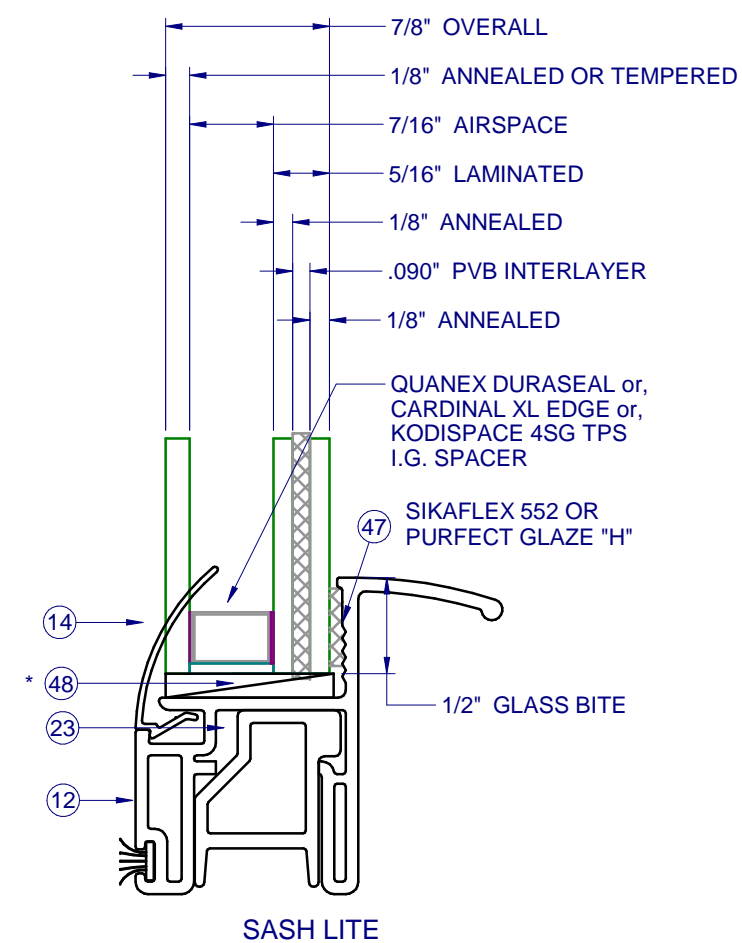
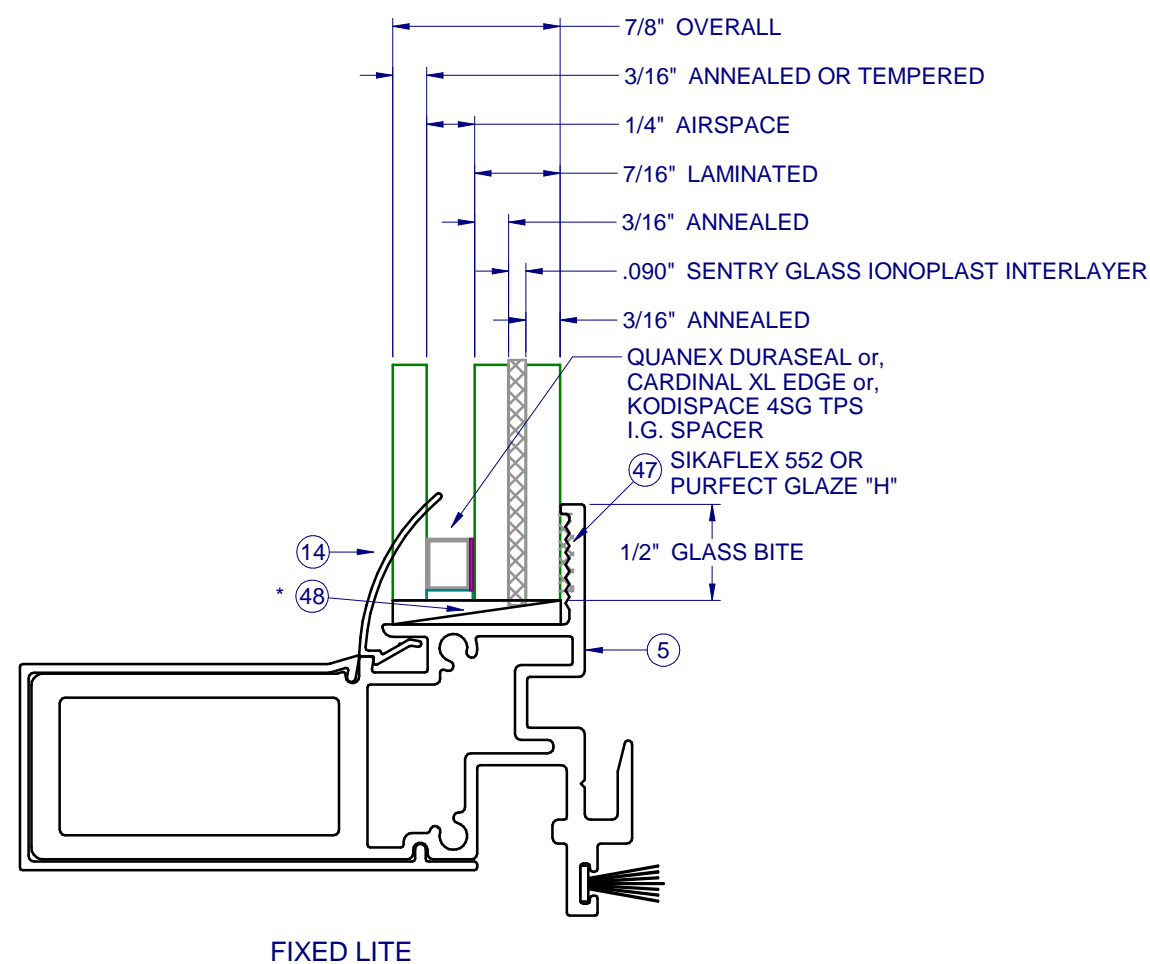
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SHEET DESCRIPTION:

**GLAZING DETAILS**

DRAWN BY: MCS	DATE: 10/6/2023
DWG #: PEL-295	REV.: C
SCALE: 1:1	SHEET 2 OF 6

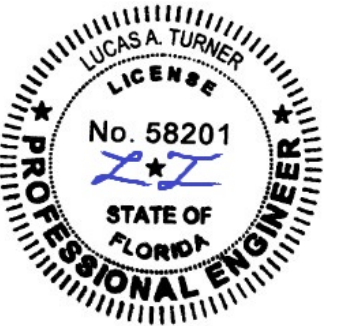


\* SETTING BLOCKS PER FBC 2411.3.3.1

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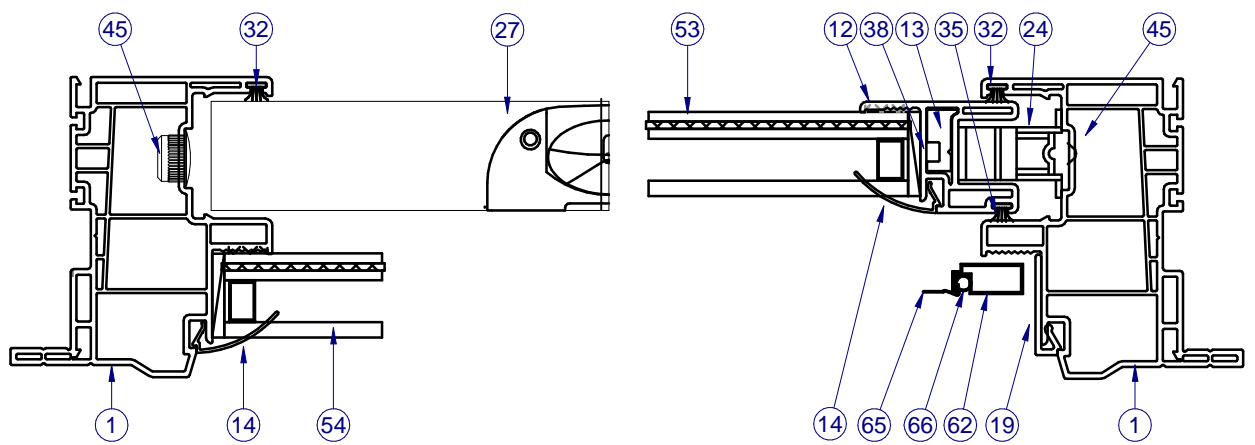
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SHEET DESCRIPTION:

**SECTION VIEWS**

DRAWN BY:	DATE:
MCS	10/6/2023
DWG #:	REV.:
PEL-295	C
SCALE:	SHEET
1:2	3 OF 6

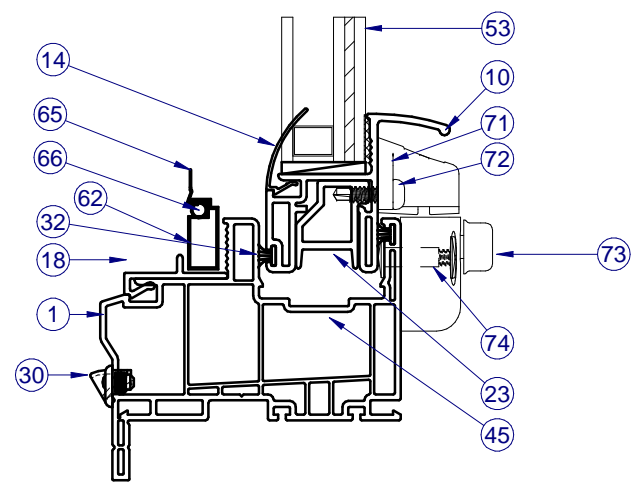
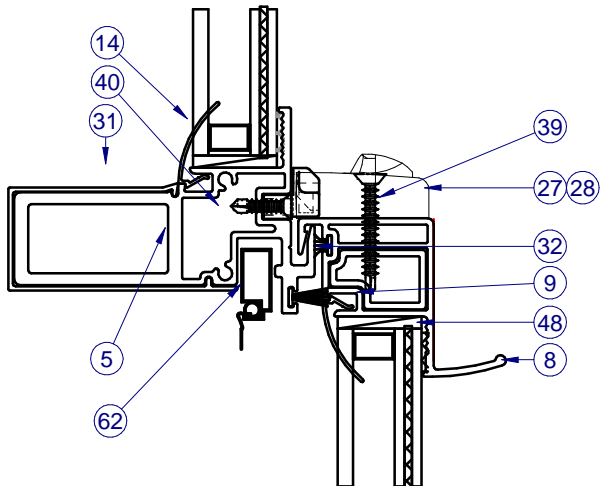
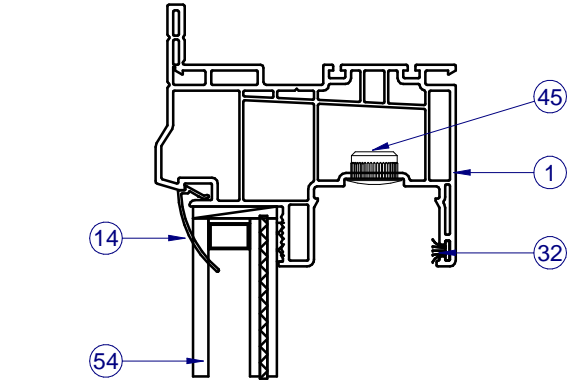
INTERIOR



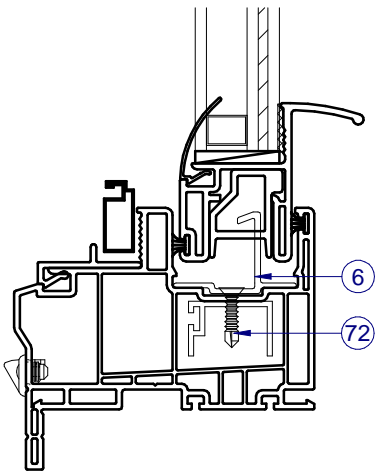
SECTION B-B

NOTE: LEFT SIDE SHOWS FIXED SECTION VIEW,  
 RIGHT SIDE SHOWS SASH SECTION VIEW.

INTERIOR



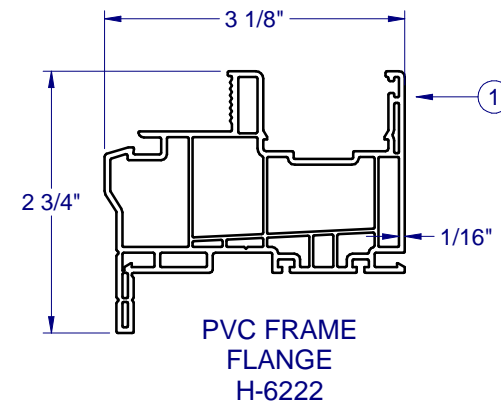
SECTION A-A



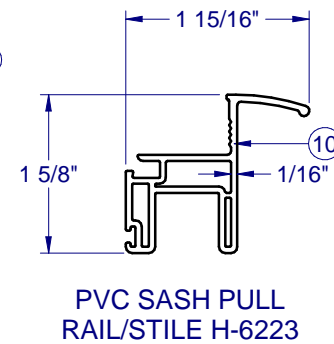
SECTION C-C  
 ALTERNATE IMPACT HOOK

NOTE: ITEMS NOT SHOWN FOR CLARITY:  
 20, 25-26, 31, 36-37, 44, 51-52, 55-56, 64, 67-68

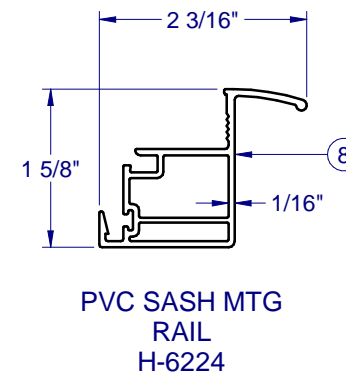
PARTS LIST			
Item	Part #	Description	Material
1	H-6222	Main Frame., SH, w/Flg., PVC	Vinyl
5	H-2122	Heavy Duty, Meet. Rail, Fxd. Aluminum	Alum
6	S-1577	Impact Hook	Alum
8	H-6224	Sash Meet. Rail, PVC	Vinyl
9	H-2124	Reinf. Sash Meet. Rail	Alum
10	H-6223	Sash Bottom Rail, PVC	Vinyl
12	H-6225	Sash Side/Top/Bot. Rail	Vinyl
13	S-2129	Reinf. S.B.R./S.S.R	
14	S-6237	Glz. Bd., 7/8", Fxd., Horiz.	Vinyl
18	S-6226	Scm. Adapt., w/Nib, PVC, Horiz.	Vinyl
19	S-6227	Scm. Adapt., PVC, Vert.	Vinyl
20	S-5087	SASH STOP, PVC 8100 FRAME, PRECUT	Vinyl
23	H-2123	Reinforcement, SBR	Alum
24		Sash Balance	
25	P-4056	SASH CAM FOR PVD WINDOW	Plastic
26	P-3295	Take Out Clip	SS
27	P-3783	Lock, Impact, PVC	
28	P-4069	Keeper, Impact, PVC	Zamac
30	P-4479	WEEP HOLE COVER	Plastic
31	S-6229	HD Fixed Meeting Rail Cover	Vinyl
32	P-3305	Wstp., 0.270 x .187 High Density	
37	P-4638	#8 x 2-1/2 PH Mod. Truss, Type A, TEK 2	Steel
38	P-3541	#8 x 1/2" Quadrex PH TEK	Steel
39	P-4051W	#8 x 1.250 Ph FH TEK, Wht.	Steel
40	P-3539	#8 x 3/4" Phillips Square SMS	Steel
44	P-3342	Seam Sealer, SM-5504	
45	P-5588	Cap Plug, 1/2" Hole	Nylon
47		Sikaflex 552 or Purfect Glaze "H"	
48	P-5612	Setting Block, .12 x 1 x 2	Rubber
53	Sash	See Glazing Chart (pg. 3)	
54	Fixed	See Glazing Chart (pg. 3)	
56		Spacer	
62	P-3218	Screen Frame	Alum
64	P-4754	SCREEN CORNER KEY (Rollform Screen	Plastic
65	P-4770	30" BetterVue Insect Screen, 18 x 16	Fiberglass
66	P-5576	Screen Spline, .125 Black PE Ribbed	Vinyl
67	P-4755	SCREEN CORNER KEY (Rollform scm 1"	Alum
68	P-3195	Screen Spring, SS	SS
70	P-4959	Wstp., 0.420 x .187 back FinSeal, Gray	Nylon
71	P-4952	SWEEP KEEPER	Steel
72	P-3541	#8 x 1/2", Pan Head, TEK	Zinc
73	P-4951	SWEEP LOCK	Zinc
74	P-4633	Barrel Fastener	Steel



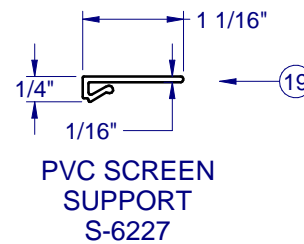
PVC FRAME FLANGE H-6222



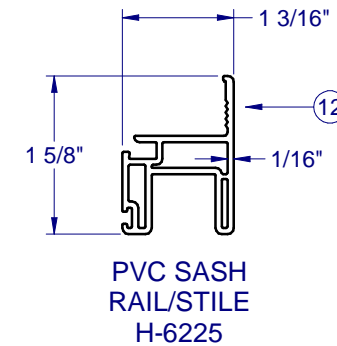
PVC SASH PULL RAIL/STILE H-6223



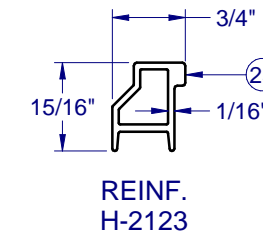
PVC SASH MTG RAIL H-6224



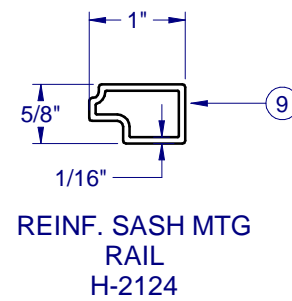
PVC SCREEN SUPPORT S-6227



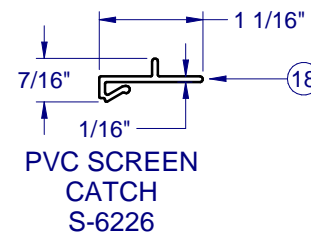
PVC SASH RAIL/STILE H-6225



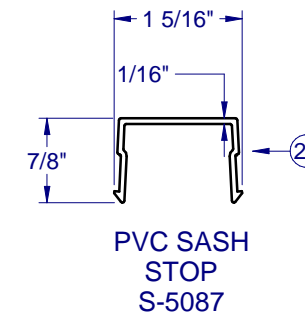
REINF. H-2123



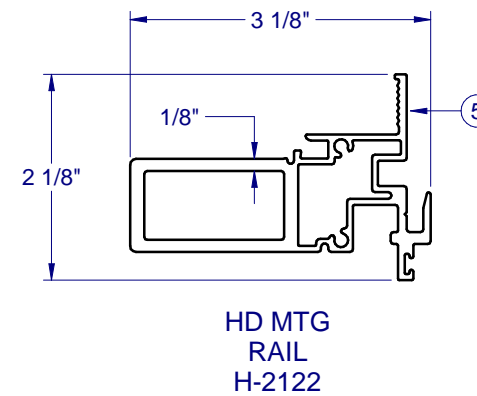
REINF. SASH MTG RAIL H-2124



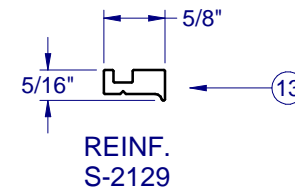
PVC SCREEN CATCH S-6226



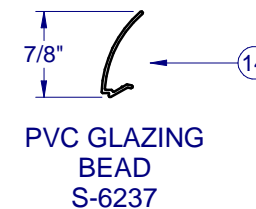
PVC SASH STOP S-5087



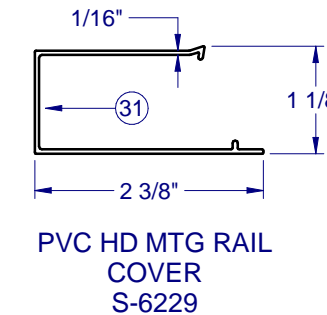
HD MTG RAIL H-2122



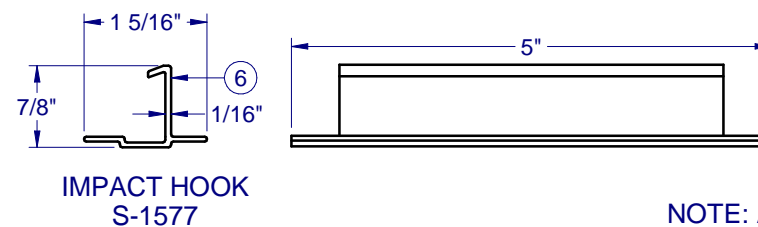
REINF. S-2129



PVC GLAZING BEAD S-6237



PVC HD MTG RAIL COVER S-6229

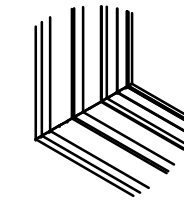


IMPACT HOOK S-1577

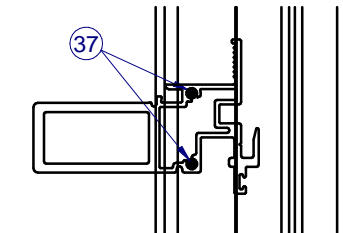
NOTE: ALL ALUMINUM EXTRUSIONS ARE 6063-T6 UNLESS OTHERWISE NOTED.

LINE ITEMS NOT USED:  
7, 11, 21-22, 29, 41-43, 49-50, 55, 57-61, 69

FRAME CORNER CONSTRUCTION



CORNER WELD (ALL SIDES) 1:8



FIXED MEETING RAIL SCREWED TOGETHER WITH OUTERFRAME 1:8



510 PVC SINGLE HUNG IMPACT

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SHEET DESCRIPTION:  
BOM AND EXTRUSIONS

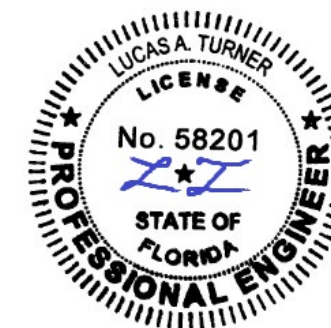
DRAWN BY: MCS	DATE: 10/6/2023
DWG #: PEL-295	REV.: C
SCALE: 1:2	SHEET 4 OF 6



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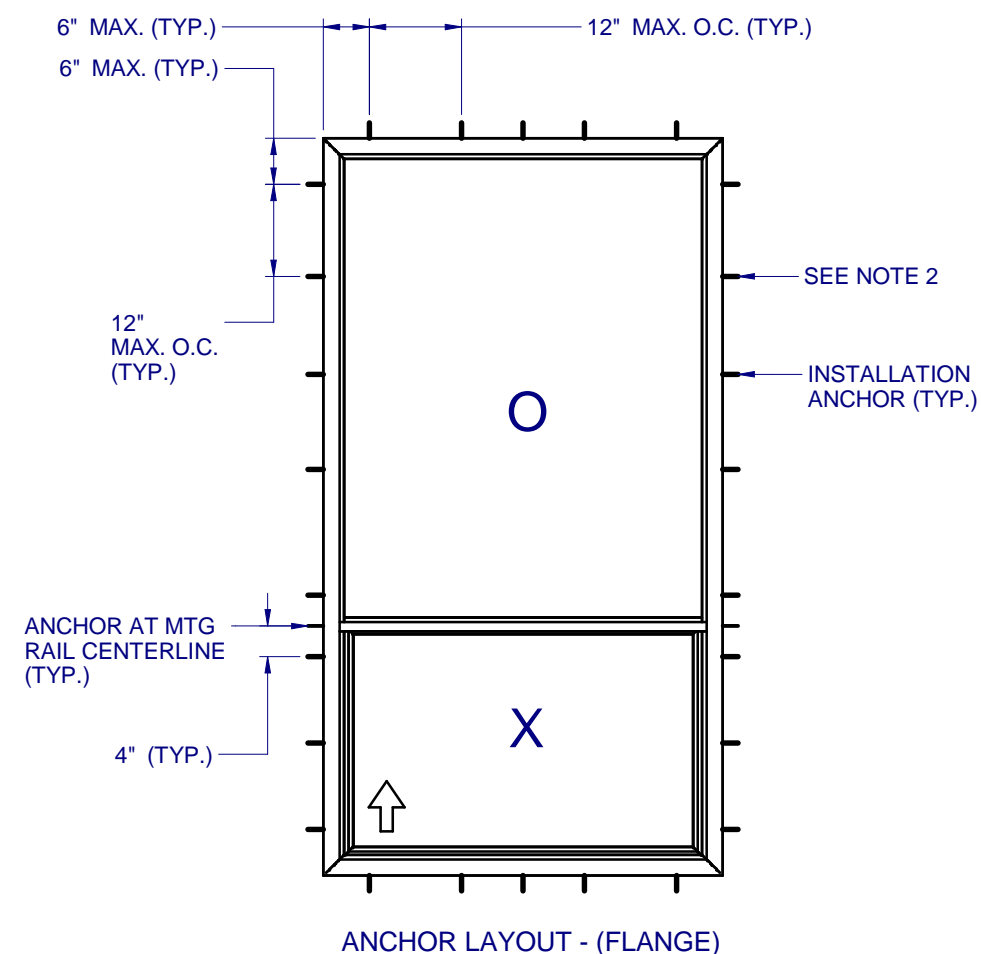


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SHEET DESCRIPTION:  
**ANCHOR SCHEDULE AND  
 NOTES**

DRAWN BY: MCS	DATE: 10/6/2023
DWG #: PEL-295	REV.: C
SCALE: 1:25	SHEET 5 OF 6



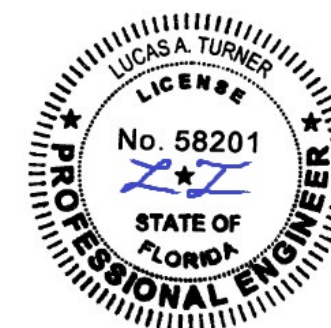
NOTES:

1. INSTALL ONE ANCHOR AT EACH INSTALLATION LOCATION. SILL ANCHOR SPACING SAME AS HEAD.
2. SHIM AS REQ AT EACH INSTALLATION ANCHOR USING LOAD BEARING SHIMS. MAX. ALLOWABLE SHIM STACK TO BE 1/4". USE SHIMS WHERE SPACE GREATER THAN 1/16" IS PRESENT. LOAD BEARING SHIMS SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER. WOOD SHIMS ARE NOT ALLOWED.
3. ANCHOR TYPE, SIZE, SPACING AND EMBEDMENT SHALL BE AS SPECIFIED IN THESE DRAWINGS, SEE TABLE 1, SHEET 6.
4. ALL INSTALLATION ANCHORS MUST BE MADE OF OR PROTECTED WITH A CORROSION RESISTANT MATERIAL OR COATING. DISSIMILAR METALS OR MATERIALS IN CONTACT WITH PRESSURE TREATED WOOD MUST BE PROTECTED TO PREVENT REACTION.
5. INSTALLATION ANCHORS SHALL BE IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM SPECIFIED IN TABLE 1, SHEET 6.
6. ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL DRESSING OR STUCCO. FOR CONCRETE/CMU OPENINGS, EMBEDMENT SHALL BE BEYOND WOOD BUCKS, IF USED, INTO SUBSTRATE. INSTALLATIONS TO SOLID CONCRETE OR GROUT-FILLED CMU MAY INCLUDE BUT DO NOT REQUIRE 1X WOOD BUCKS BETWEEN THE PRODUCT AND THE SUBSTRATE. INSTALLATIONS TO HOLLOW CMU REQUIRE THE USE OF 1X BUCKS BETWEEN THE PRODUCT AND SUBSTRATE.
7. A MINIMUM CENTER-TO-CENTER SPACING SHALL BE MAINTAINED BETWEEN ALL FASTENERS: 3" FOR MASONRY, 1" FOR WOOD AND METAL.
8. WOOD OR MASONRY OPENINGS, BUCKS AND BUCK FASTENERS SHALL BE PROPERLY DESIGNED BY THE ARCHITECT OR ENGINEER OF RECORD AND INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE. SUBSTRATES SHALL MEET THE MINIMUM STRENGTH REQUIREMENTS AS SHOWN IN TABLE1, SHEET 6. CONCRETE AND MASONRY SUBSTRATES MAY NOT BE CRACKED.
9. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS FOLLOWING THE CURRENT VERSION OF THE REFERENCE DOCUMENTS:  
 FMA/AAMA 100(FIN WINDOWS), FMA/AAMA 200(FLANGE WINDOWS), FMA/WDMA 250(BOX WINDOWS), FMA/AAMA/WDMA 300(EXTERIOR DOORS)

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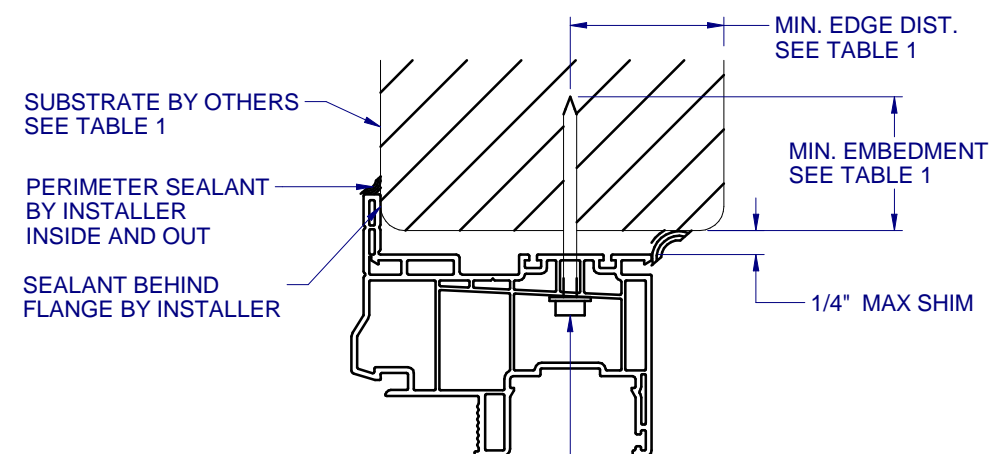
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PH. 941-380-1574

SHEET DESCRIPTION:

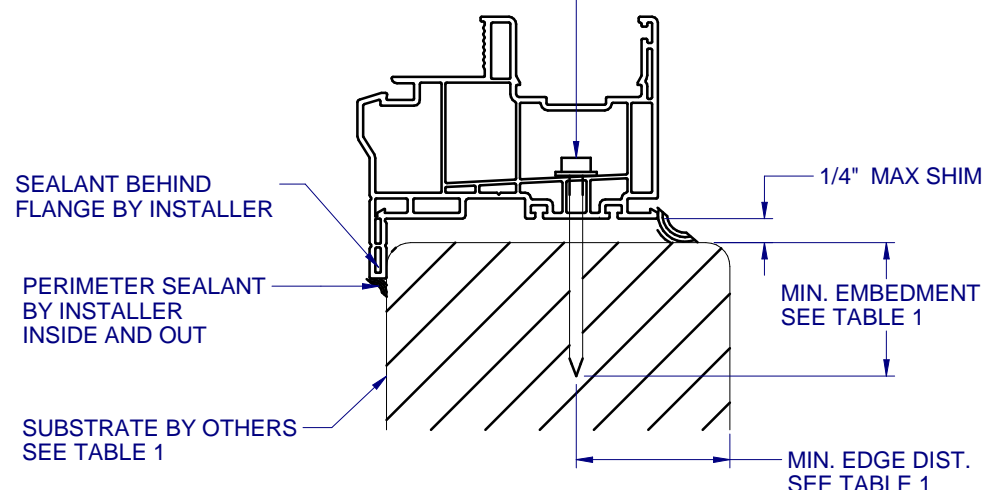
### INSTALLATION DETAILS

DRAWN BY: MCS	DATE: 10/6/2023
DWG #: PEL-295	REV.: C
SCALE: 1:2	SHEET 6 OF 6

#### TYPICAL HEAD ANCHORAGE



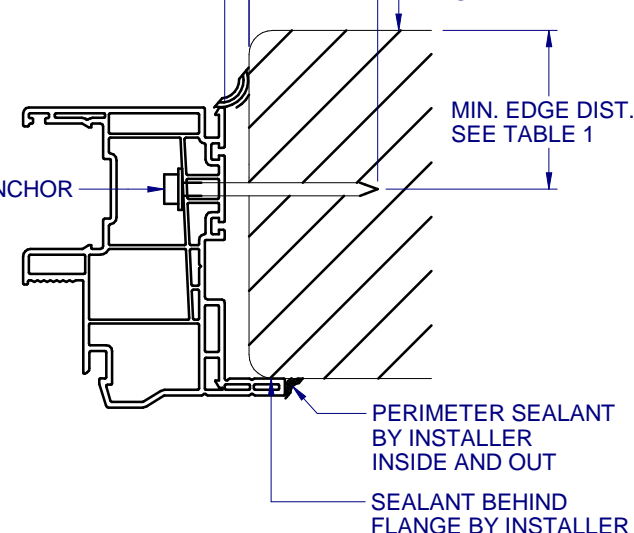
INSTALLATION ANCHOR  
SEE TABLE 1



**A**  
6 VERTICAL SECTION  
TYPICAL SILL ANCHORAGE

MIN. EMBEDMENT  
SEE TABLE 1  
1/4" MAX SHIM

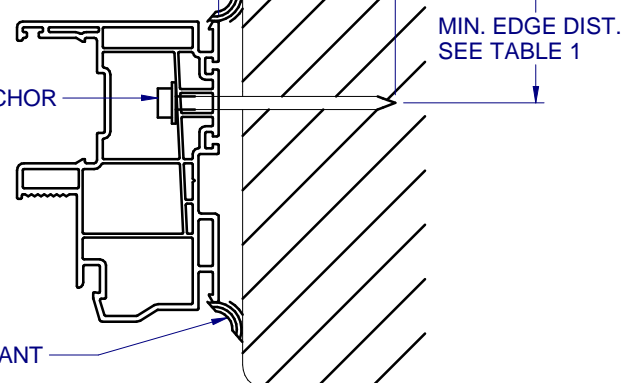
INSTALLATION ANCHOR  
SEE TABLE 1



**B**  
6 HORIZONTAL SECTION  
TYPICAL JAMB ANCHORAGE

MIN. EMBEDMENT  
SEE TABLE 1  
1/4" MAX SHIM

INSTALLATION ANCHOR  
SEE TABLE 1



**C**  
6 HORIZONTAL SECTION  
BOX FRAME INSTALLATION  
HEAD AND SILL SIMILAR FOR BOX INSTALLATION

**TABLE 1: APPROVED INSTALLATION FASTENERS**

SUBSTRATE TYPE	ANCHOR TYPE	MIN. EMBEDMENT	MIN. EDGE DIST.
CONCRETE (2.0 KSI MIN.)	3/16" ITW TAPCON	1-1/2"	1-1/8"
HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.)	3/16" ITW TAPCON	1"	2"
CONCRETE (3.05 KSI MIN.)	3/16" DEWALT ULTRACON+	1-3/4"	1"
HOLLOW OR GROUT-FILLED CMU (ASTM C-90)	3/16" DEWALT ULTRACON+	1-1/4"	2-1/2"
2X MIN. SOUTHERN PINE (G=0.55)	3/16" ITW TAPCON OR DEWALT ULTRACON+	1-3/8"	7/8"
2X MIN. SOUTHERN PINE (G=0.55)	#10 WOOD SCREW	1-3/8"	7/8"
16 GAUGE (0.060") MIN. STEEL STUD (33 KSI YIELD MIN)	#10-16 HILTI KWIK-FLEX OR ITW TEKS SELF-DRILLING SCREW	FULL THREAD THRU 0.060"	7/16"
1/8" ALUM. (6063-T5 MIN.) OR 1/8" STEEL (33 KSI MIN.)	#10 GRADE 5 SELF-TAPPING / DRILLING SCREW	FULL THREAD THRU 0.125"	7/16"

FLANGE REMOVAL NOTE: PARTIALLY OR FULLY REMOVING THE FLANGE, UP TO AND INCLUDING A BOX-FRAME APPLICATION IS ACCEPTABLE PROVIDED:

- MIN. 1/4" FILLET OF CONSTRUCTION-GRADE ADHESIVE CAULK IS APPLIED INSIDE AND OUT, FULL PERIMETER, BY INSTALLER.
- PRODUCT ANCHORAGE IS IN ACCORDANCE WITH REQUIREMENTS AS SHOWN FOR FLANGE WINDOWS.