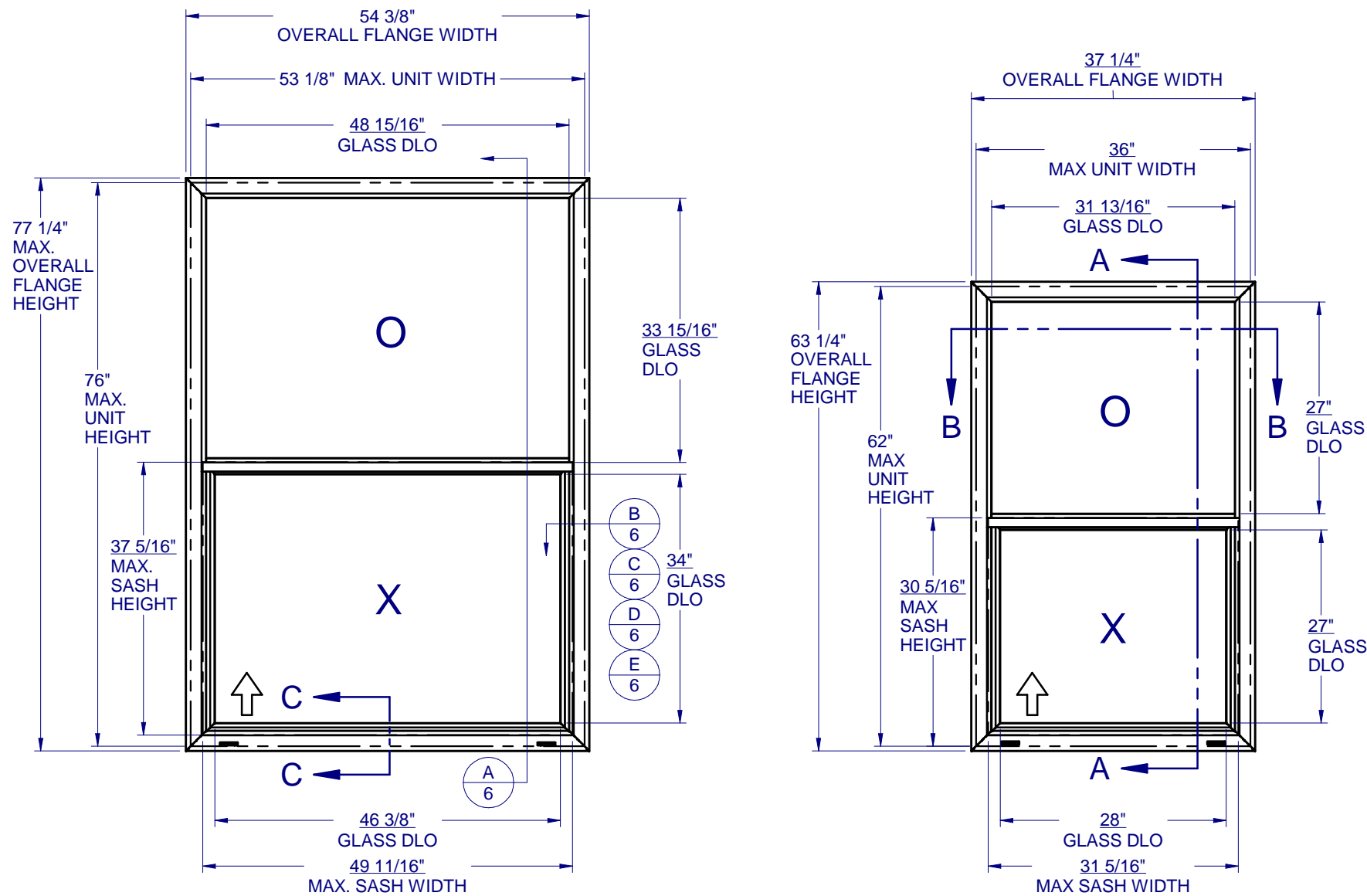


# SINGLE HUNG - LARGE MISSILE IMPACT

(SHOWN w/DIFFERENT OPTIONS)



**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 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.
11. SWEEP LOCKS INSTALLED ON WINDOWS OVER 36" x 62".



## 510 PVC SINGLE HUNG IMPACT

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 FL PE # 58201  
 Turner Engineering & Consulting, Inc.  
 2428 Old Natchez Trc Trl  
 Camden, TN 38320  
 PH. 941-380-1574

SHEET DESCRIPTION:  
 GENERAL NOTES AND ELEVATIONS

DRAWN BY: MCS	DATE: 10/6/2023
DWG #: PEL-155	REV.: C
SCALE: 1:20	SHEET 1 OF 6

**TABLE OF CONTENTS**

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

LOCATION	MAX. UNIT SIZE	DESIGN PRESSURE RATING	IMPACT RATING
NON-HVHZ	53-1/8" x 76"	+/- 65 PSF	LARGE MISSILE IMPACT
HVHZ		+/- 67.5 PSF	
NON-HVHZ	36" x 62"	+65 / -75 PSF	
HVHZ		+67.5 / -75 PSF	

**510 PVC  
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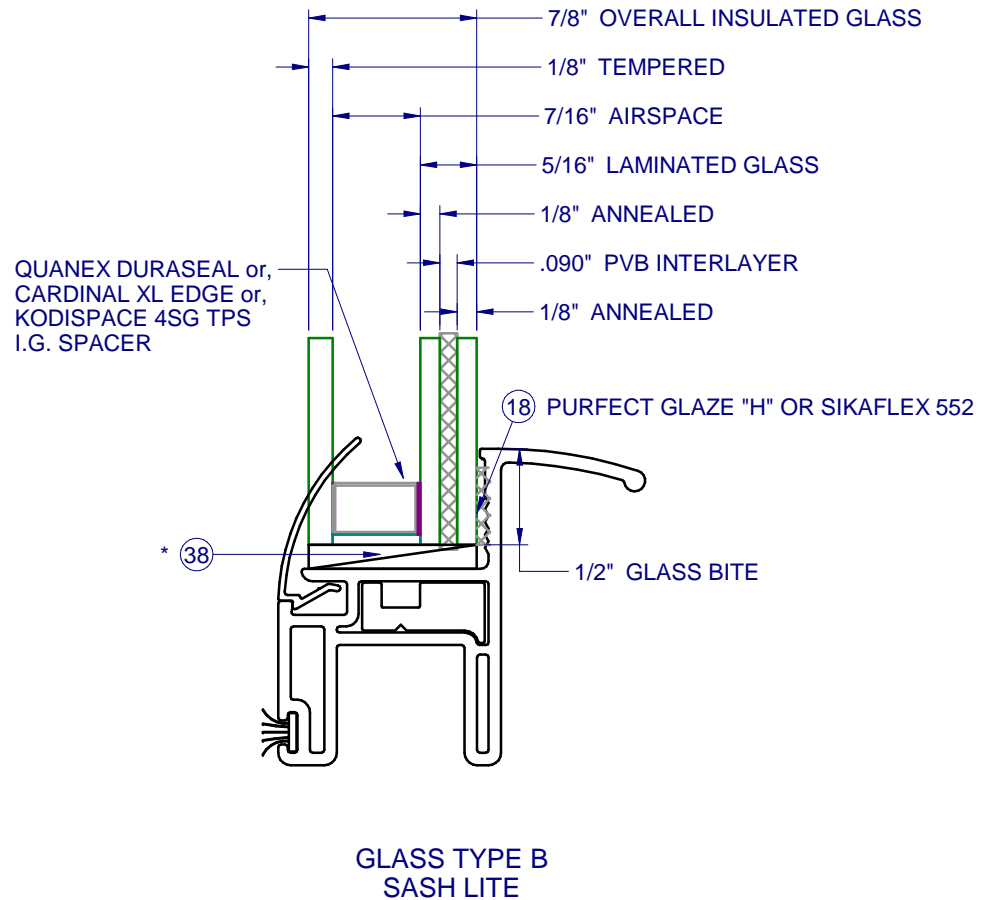
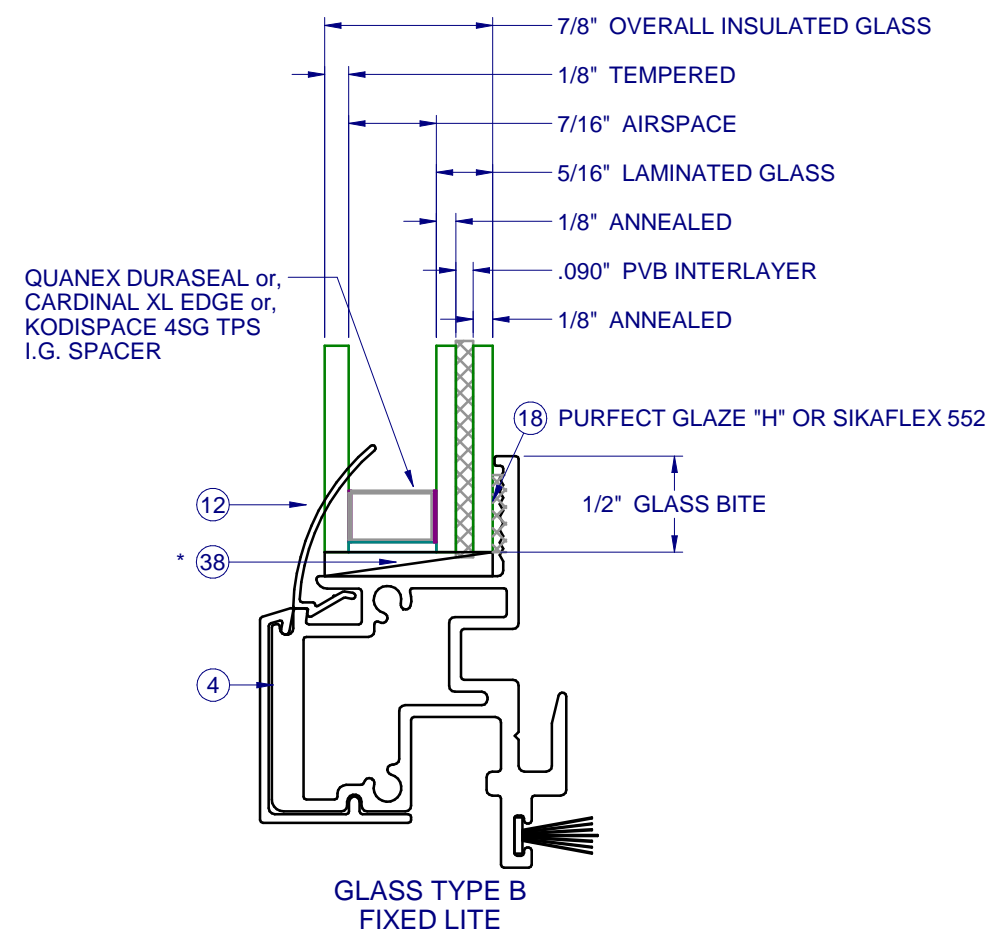
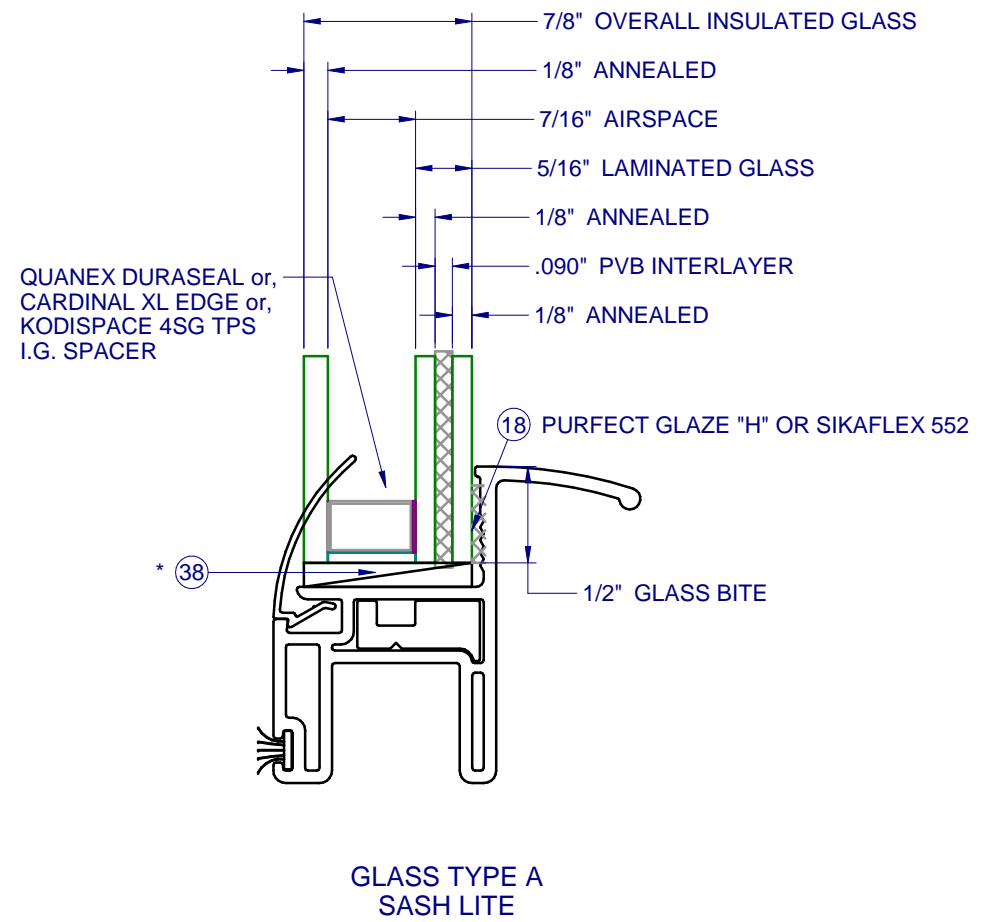
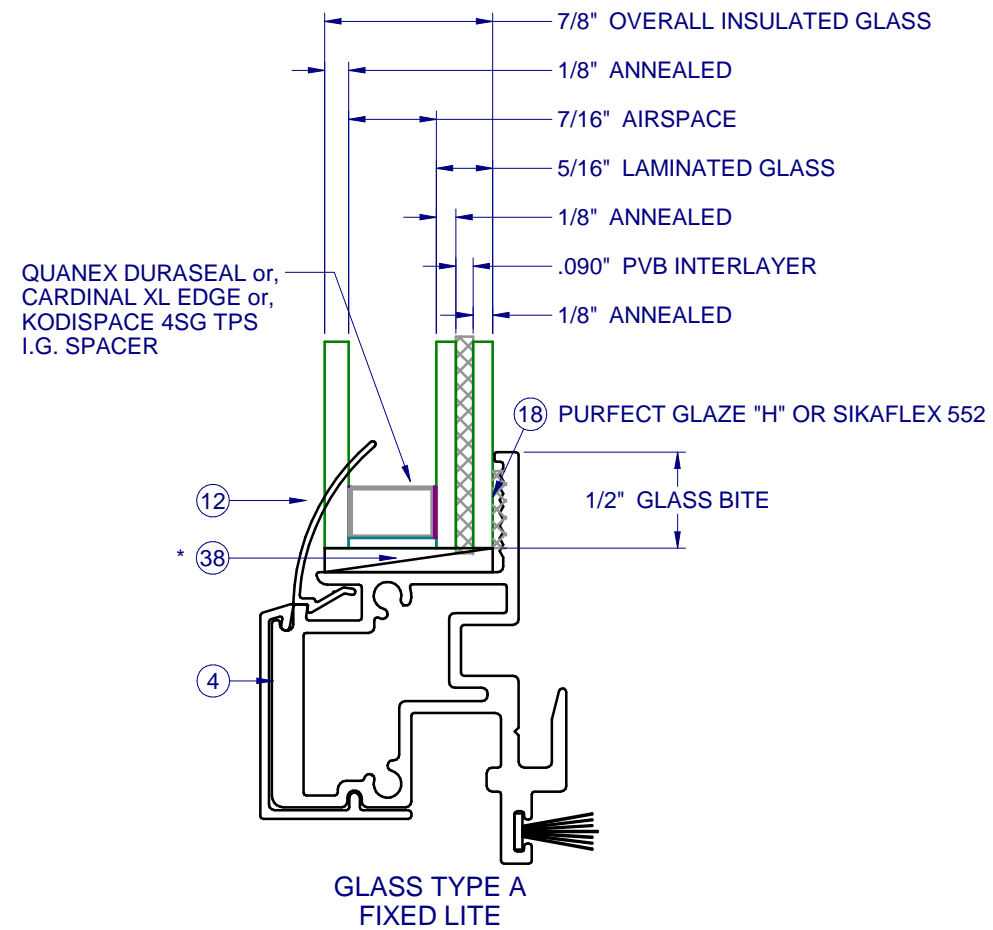
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SHEET DESCRIPTION:

**GLAZING DETAILS**

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DWG #: <b>PEL-155</b>	REV.: <b>C</b>
SCALE: <b>1:1</b>	<b>SHEET 2 OF 6</b>



\* SETTING BLOCKS PER FBC 2411.3.3.1

**510 PVC  
 SINGLE HUNG  
 IMPACT**

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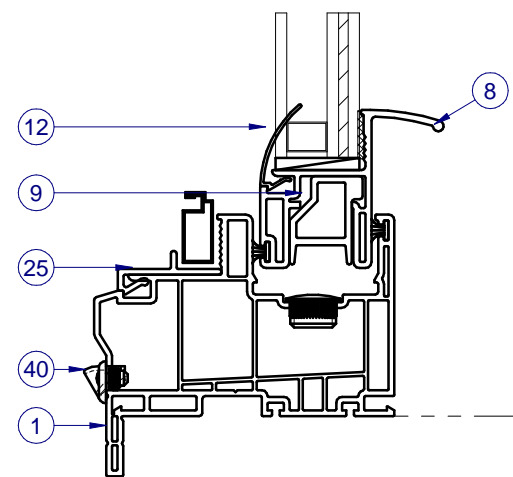
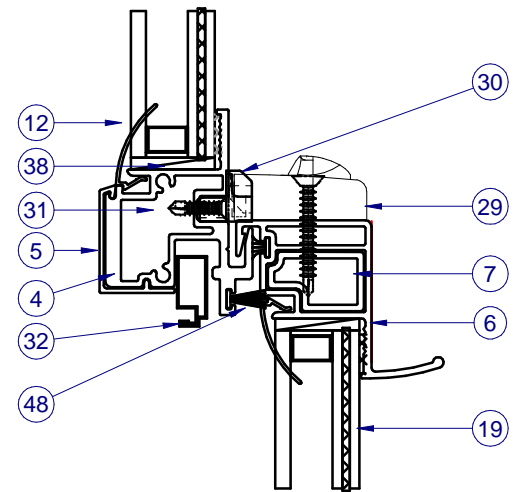
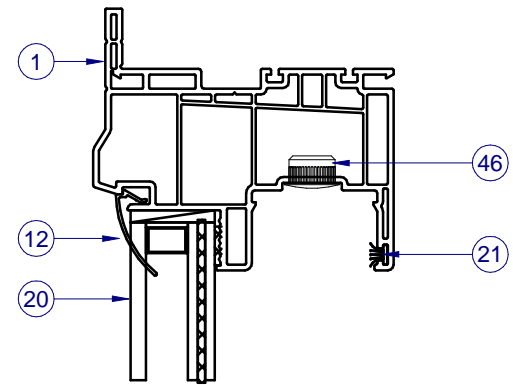
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SHEET DESCRIPTION:

**SECTION VIEWS**

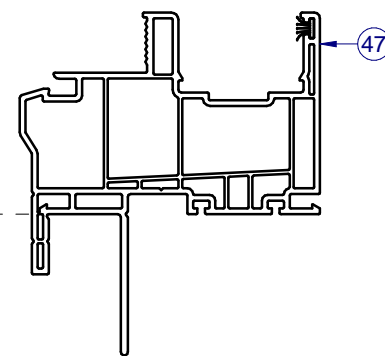
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DWG #: PEL-155	REV.: C
SCALE: 1:2	SHEET 3 OF 6



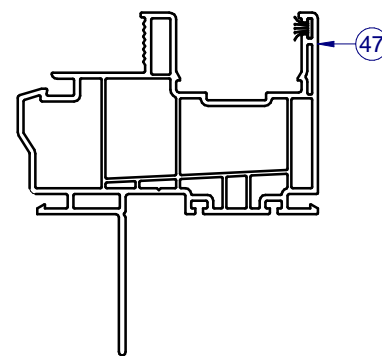
SECTION VIEW A-A

NO SWEEP LOCKS ALLOWED  
 FOR UNITS 36" x 62" AND UNDER.

INTERIOR

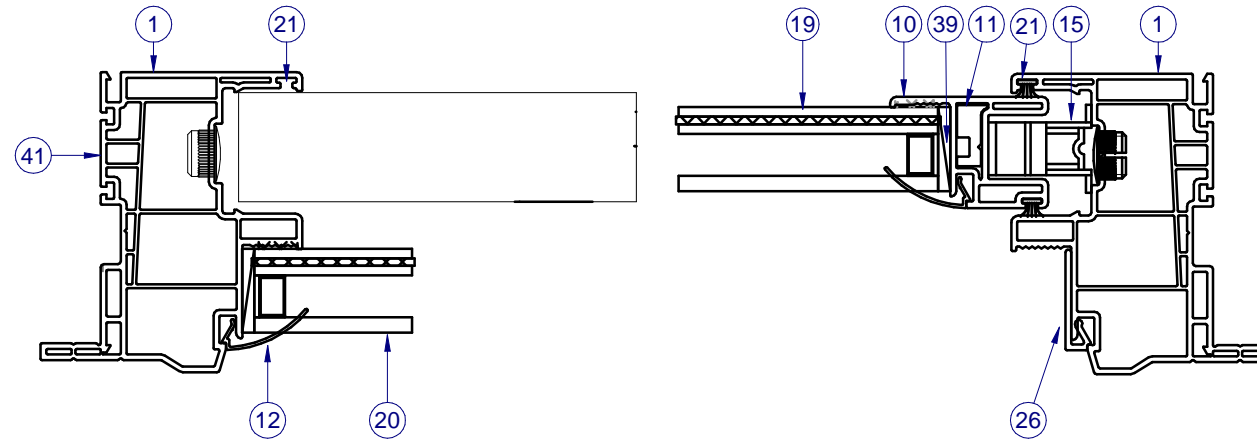


ALTERNATE FIN FRAME



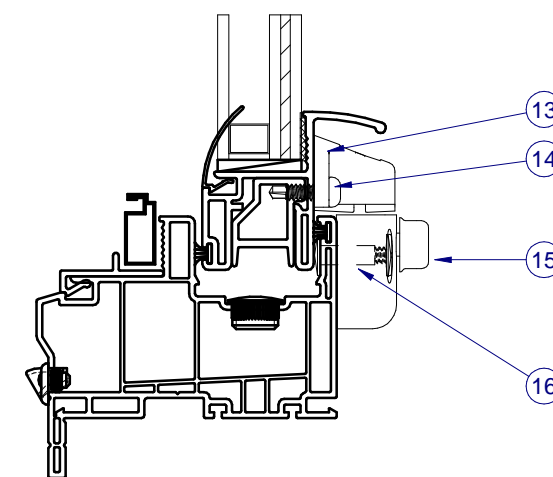
ALTERNATE FIN ONLY FRAME

INTERIOR



SECTION VIEW B-B

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

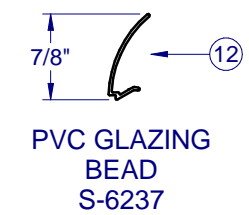
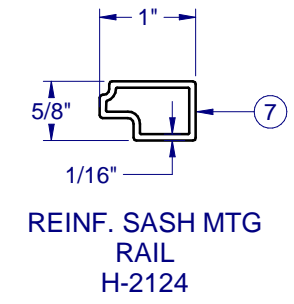
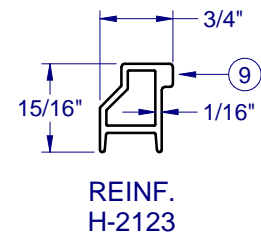
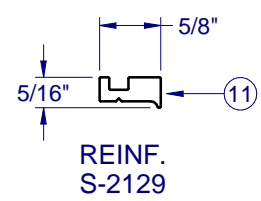
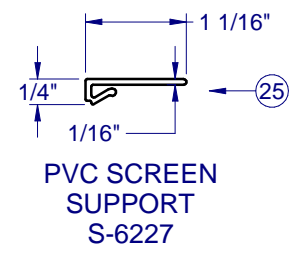
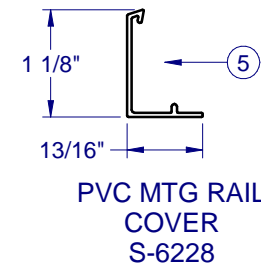
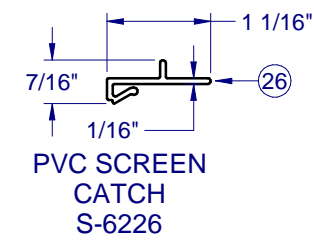
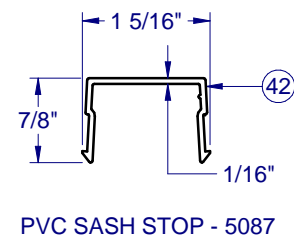
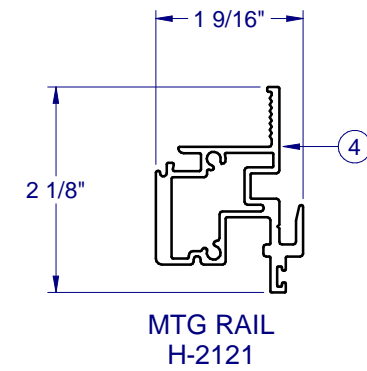
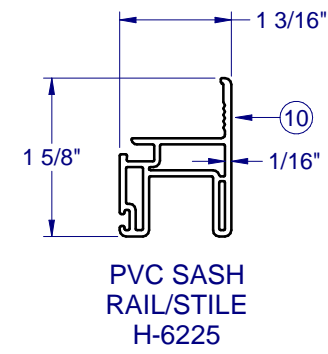
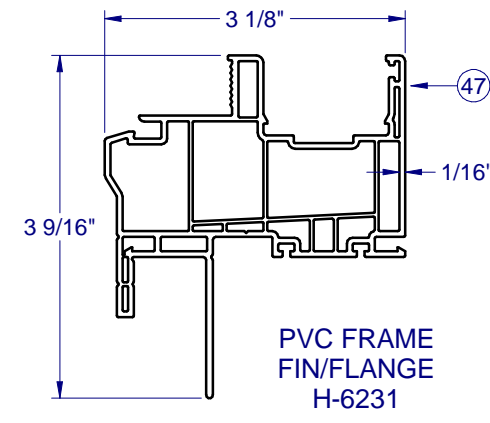
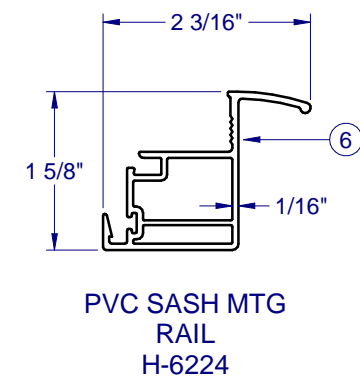
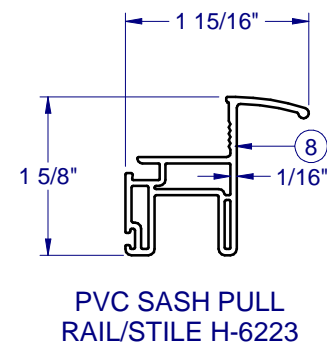
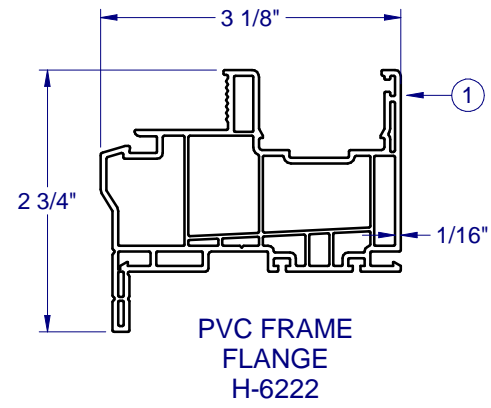


SECTION VIEW C-C

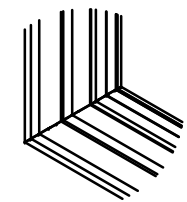
SWEEP LOCK REQUIRED  
 FOR SIZES OVER 36" x 62".

ITEMS NOT SHOWN FOR CLARITY:  
 22, 27-28, 33-37, 43-45

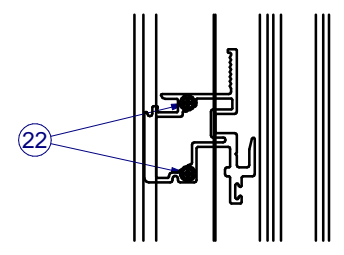
PARTS LIST			
ITEM	PART #	DESCRIPTION	MATERIAL
1	H-6222	Main Frame, Flg, Single Hung	PVC
4	H-2121	Alum. Fixed Meet. Rail	ALUMINUM
5	S-6228	Fixed Rail Cover	PVC
6	H-6224	Sash Top Rail	PVC
7	H-2124	Reinforcement for STR	ALUMINIUM
8	H-6223	Sash Bottom Rail	PVC
9	H-2123	Reinforcement for SBR	ALUMINIUM
10	H-6225	Sash Side Rail	PVC
11	S-2129	Reinforcement for SSR	ALUMINIUM
12	S-6237	Glazing Bead	PVC
13	P-4952	SWEEP KEEPER	ZINC
14	P-3541	#8 x 1/2", Pan Head, Tek	STEEL
15	P-4951	SWEEP LOCK	ZINC
16	P-4633	Barrel Fastener	STEEL
17		Sash Balance	STEEL
18		Purfect Glaze "H" or Sikaflex 552	SILICONE
19	Sash	SEE SHEET 2	GLASS
20	Fixed	SEE SHEET 2	GLASS
21	P-3305	Wstp., 0.270 x 0.187 High Density	NYLON
22	P-4638	#8 x 2-1/2 PH Mod. Truss, Type A, TEK	STEEL
25	S-6227	Screen Catch	PVC
26	S-6226	Screen Support	PVC
27	P-4051	#8 x 1 1/4" Ph Fh TEK, Wht.	ZINC
28	P-3748	#6 x 0.625" Quad Fh TEK, Wht.	ZINC
29	P-3783	Impact, Lock	STEEL
30	P-4069	Impact, Keeper	STEEL
31	P-3539	#8 x 3/4" Phillips Square SMS	STEEL
32	P-3218	Screen Frame	ALUMINIUM
33	P-4754	SCREEN CORNER KEY (Rollform Scree	PLASTIC
34	P-5576	Screen Spline, .125" Black PE Rib.	RUBBER
35	P-4770	30" BetterVue Insect Screen, 18 x 16	VINYL
36	P-3195	Screen Spring, SS	STEEL
37	P-4755	SCREEN CORNER KEY (Rollform Scrn	STEEL
38	P-5612	Setting Block, .12 x 1 x 2	RUBBER
39	P-3541	#8 x 1/2" Quadrex PH TEK	ZINC
40	P-4479	Weepcover	PLASTIC
42	P-5087	SASH STOP, PVC 8100 FRAME, PREC	PVC
43	P-4056	SASH CAM FOR PVC WINDOW	PLASTIC
44	P-3295	Take Out Clip	STEEL
45	P-3342	Seam Sealer	SILICONE
46	P-5588	Hole Plug	PLASTIC
47	H-6231	Frame Head, FIN, Single Hung	PVC
48	P-4959	Wstp., 0.420 x 0.187 back	NYLON



**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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 PH. 941-380-1574

SHEET DESCRIPTION:  
**BOM AND EXTRUSIONS**

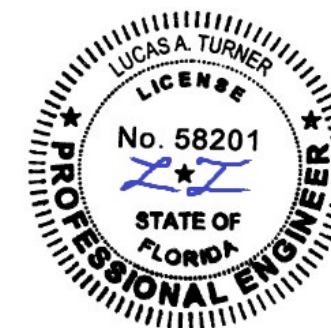
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DWG #: PEL-155	REV.: C
SCALE: 1:2	SHEET 4 OF 6

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

**510 PVC  
SINGLE HUNG  
IMPACT**

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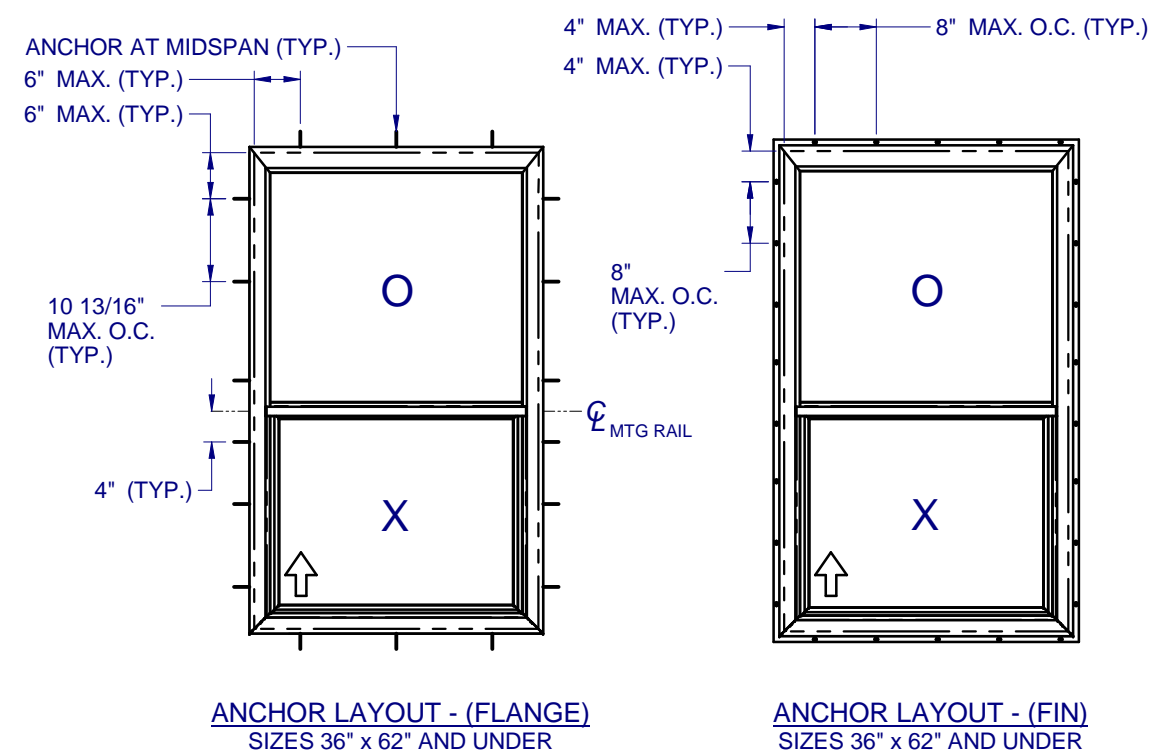
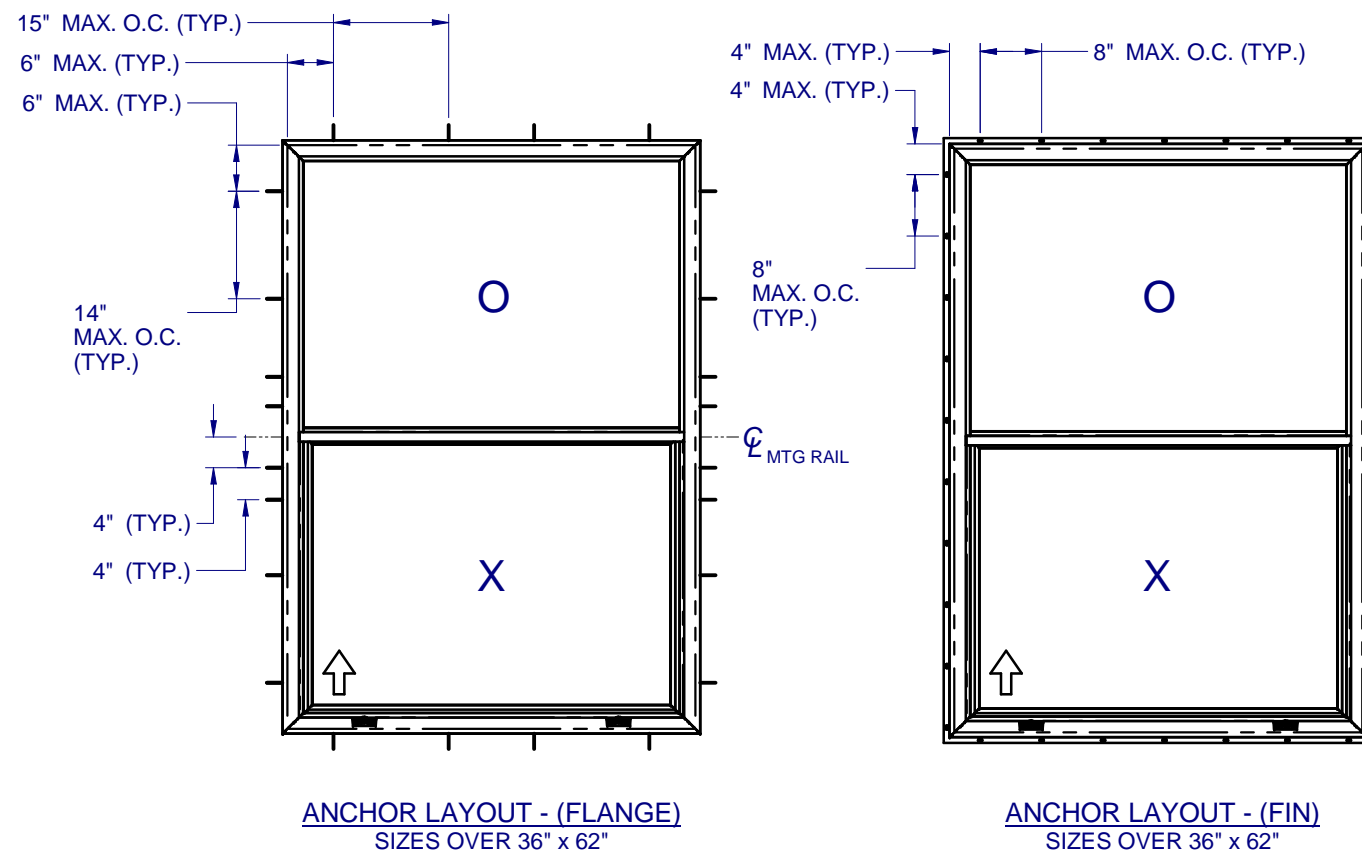


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SHEET DESCRIPTION:  
**ANCHOR SCHEDULE AND  
NOTES**

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MCS	10/6/2023
DWG #:	REV.:
PEL-155	C
SCALE:	SHEET
1:25	5 OF 6



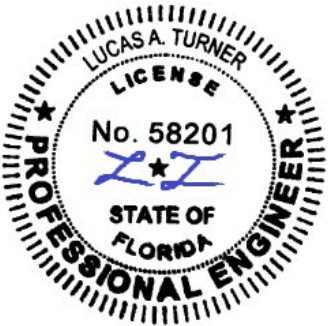
**NOTES:**

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 TABLE 1, 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)

**510 PVC  
 SINGLE HUNG  
 IMPACT**

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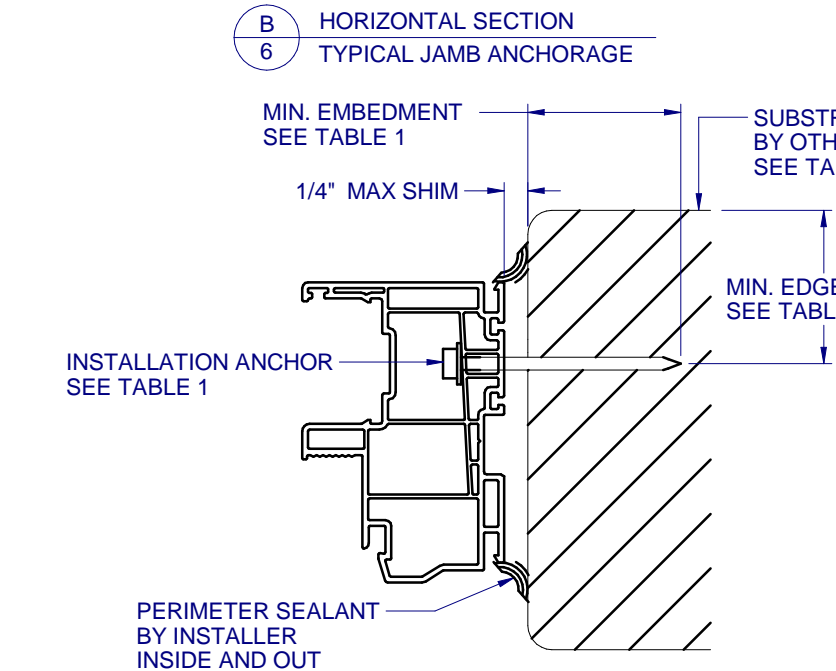
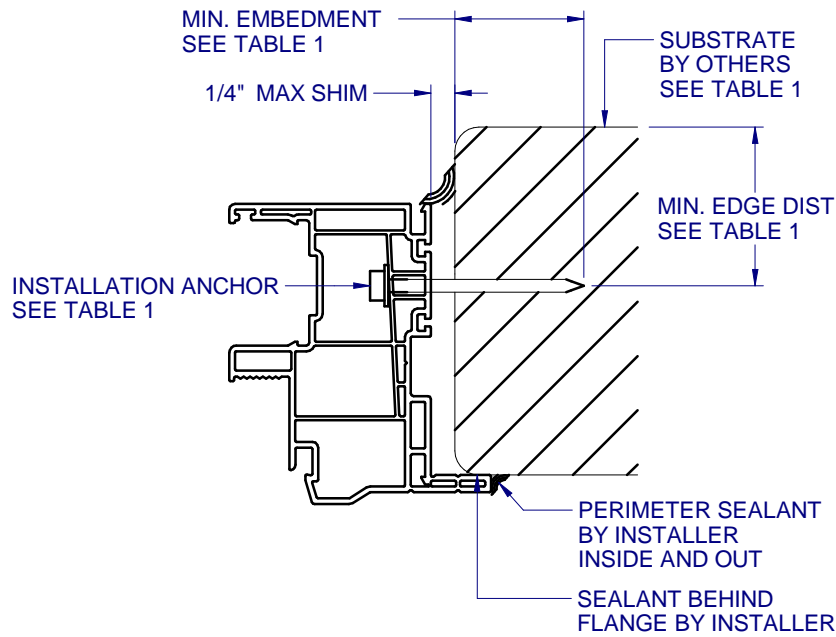
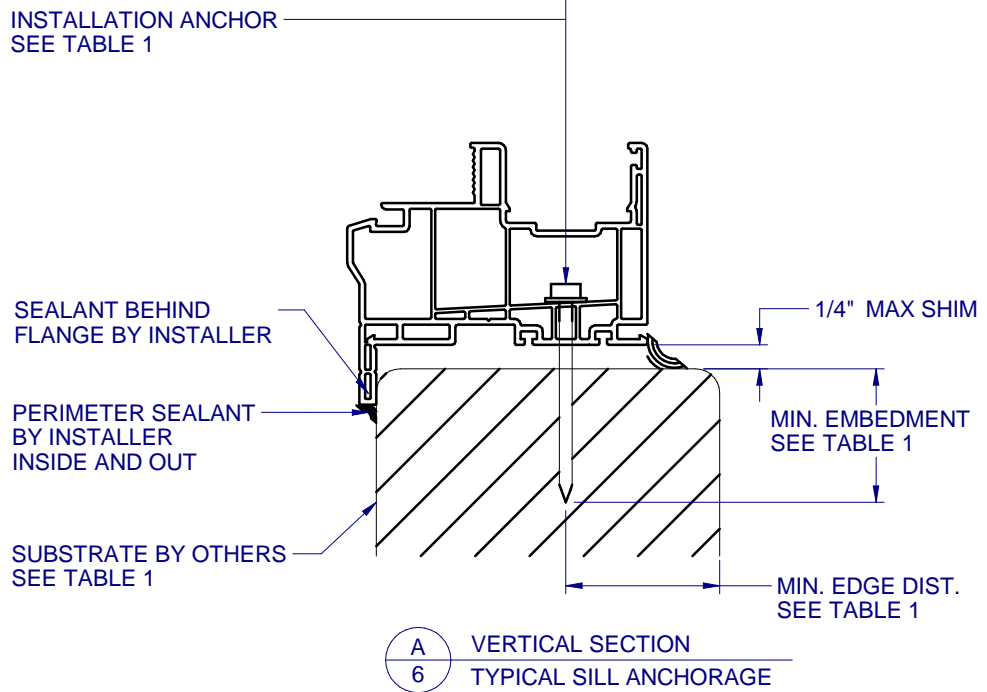
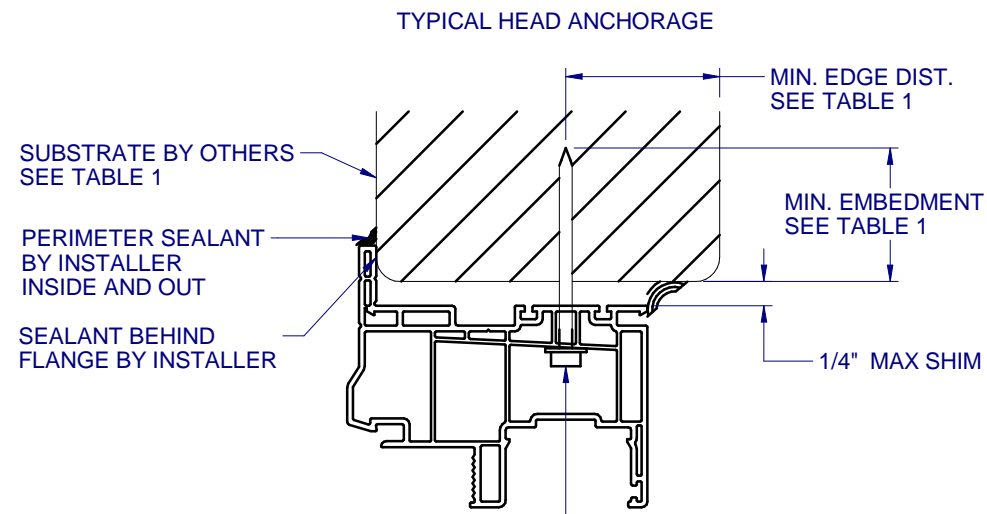
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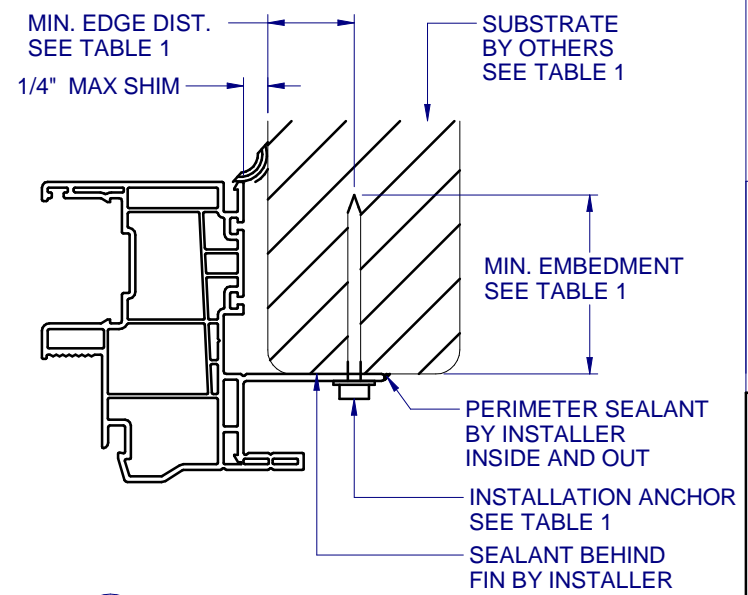
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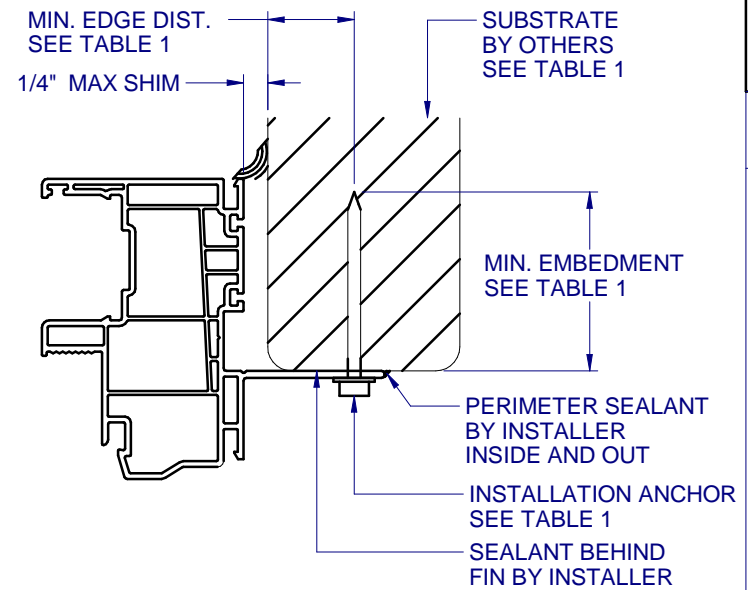
DRAWN BY:	DATE:
MCS	10/6/2023
DWG #:	REV.:
PEL-155	C
SCALE:	SHEET
1:2	6 OF 6



**B** HORIZONTAL SECTION  
**6** TYPICAL JAMB ANCHORAGE



**C** HORIZONTAL SECTION  
**6** TYPICAL FIN ANCHORAGE  
 HEAD AND SILL SIMILAR FOR FIN INSTALLATION



**C** HORIZONTAL SECTION  
**6** TYPICAL FIN ANCHORAGE  
 HEAD AND SILL SIMILAR FOR FIN INSTALLATION

**TABLE 1: APPROVED INSTALLATION FASTENERS**

FRAME TYPE	SUBSTRATE TYPE	ANCHOR TYPE	MIN. EMBEDMENT	MIN. EDGE DIST.
FLANGE	CONCRETE (2.0 KSI MIN.)	3/16" ITW TAPCON	1-1/2"	1-1/8"
FLANGE	HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.)	3/16" ITW TAPCON	1"	2"
FLANGE	CONCRETE (3.05 KSI MIN.)	3/16" DEWALT ULTRACON+	1-3/4"	1"
FLANGE	HOLLOW OR GROUT-FILLED CMU (ASTM C-90)	3/16" DEWALT ULTRACON+	1-1/4"	2-1/2"
FLANGE	2X MIN. SOUTHERN PINE (G=0.55)	3/16" ITW TAPCON OR DEWALT ULTRACON+	1-3/8"	7/8"
FLANGE	2X MIN. SOUTHERN PINE (G=0.55)	#10 WOOD SCREW	1-3/8"	7/8"
FLANGE	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"
FLANGE	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"
FIN	2X MIN. SOUTHERN PINE (G=0.55)	#8 WOOD SCREW	1-1/2"	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.