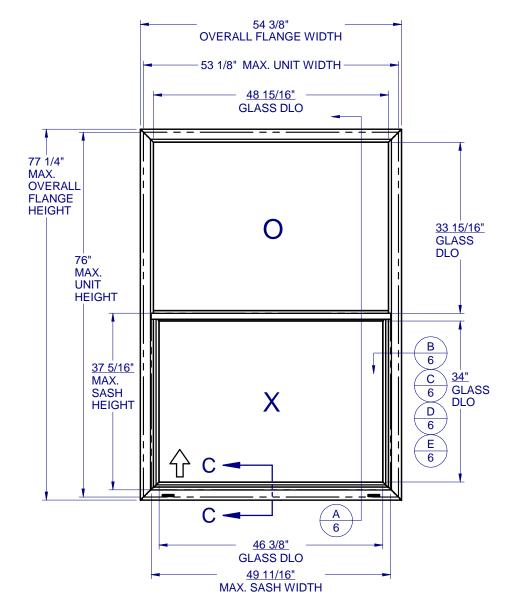
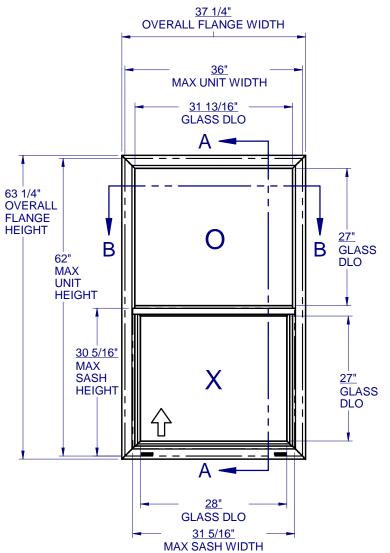
# SINGLE HUNG - LARGE MISSILE IMPACT (SHOWN W/DIFFERENT OPTIONS)





#### **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. SERIES / MODEL DESIGNATION SH-8100.
- 9. THE DESIGNATION X AND O STAND FOR THE FOLLOWING: X = OPERABLE SASH, O = FIXED SASH
- 10. SECTION CALLOUTS APPLY TO ALL ELEVATIONS IN A SIMILAR LOCATION.
- 11. EXTERNAL WEEP SLOT = 1/4" x 1-1/4" LOCATED 4" FROM BOTH ENDS.
- 12. SWEEP LOCKS INSTALLED ON WINDOWS OVER 36" x 62".

# OCALA, FLORIDA 34474

8100 PVC SINGLE HUNG **IMPACT** 

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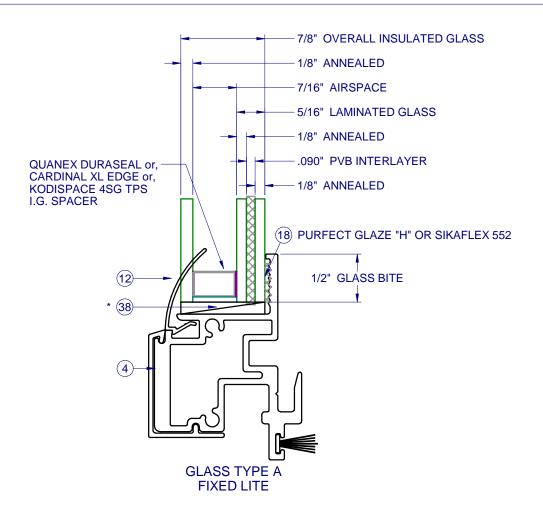
**GENERAL NOTES AND ELEVATIONS** 

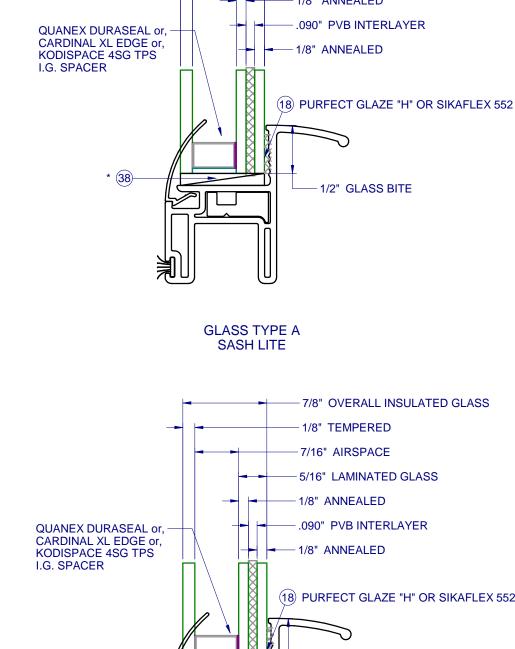
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#### TABLE OF CONTENTS

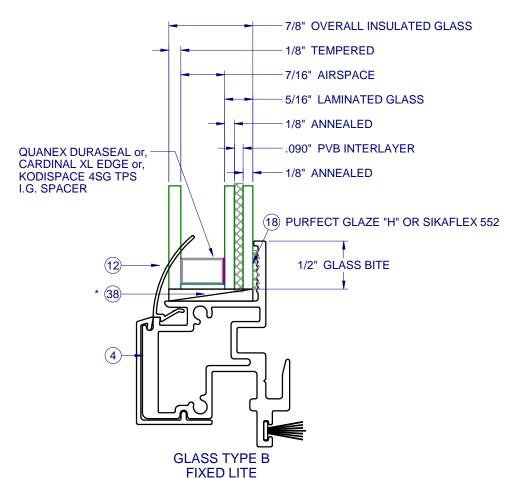
**GENERAL NOTES & ELEVATIONS.....1 GLAZING DETAILS..** SECTION VIEWS.. **BOM & EXTRUSIONS.** ANCHOR SCHEDULE & NOTES. INSTALLATION DETAILS.

LOCATION	MAX. UNIT SIZE	DESIGN PRESSURE RATING	IMPACT RATING	
NON-HVHZ	53-1/8" x 76"	+/- 65 PSF		
HVHZ	55-1/6 X / 6	+/- 67.5 PSF	LARGE MISSILE IMPACT	
NON-HVHZ	36" x 62"	+65 / -75 PSF	LARGE MISSILE IMPACT	
HVHZ	30 X 02	+67.5 / -75 PSF		





\* (38)





0/22/2022

OCALA, FLORIDA 34474 WWW.CWS.CC 8100 PVC SINGLE HUNG **IMPACT** 

7/8" OVERALL INSULATED GLASS

1/8" ANNEALED

-7/16" AIRSPACE

1/8" ANNEALED

1/8" ANNEALED

-5/16" LAMINATED GLASS

.090" PVB INTERLAYER

1/2" GLASS BITE

7/8" OVERALL INSULATED GLASS

(18) PURFECT GLAZE "H" OR SIKAFLEX 552

1/8" TEMPERED

-7/16" AIRSPACE

1/8" ANNEALED

- 1/8" ANNEALED

5/16" LAMINATED GLASS

.090" PVB INTERLAYER

1/2" GLASS BITE

**GLASS TYPE B** SASH LITE

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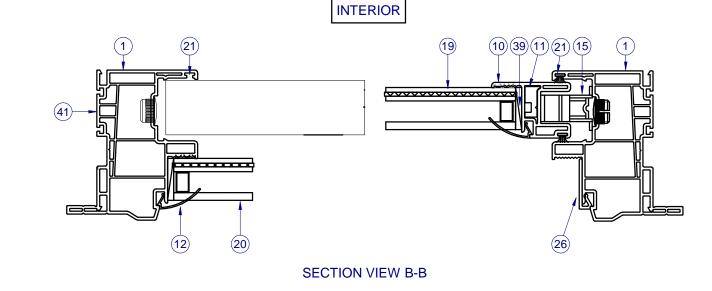
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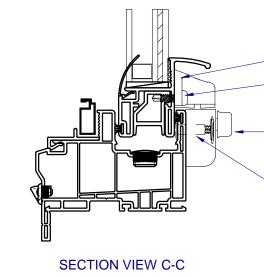
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**GLAZING DETAILS** 

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* SETTING BLOCKS PER FBC 2411.3.3.1	SCALE: 1:1	SHEET 2 OF 6



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



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



# 8100 PVC SINGLE HUNG IMPACT

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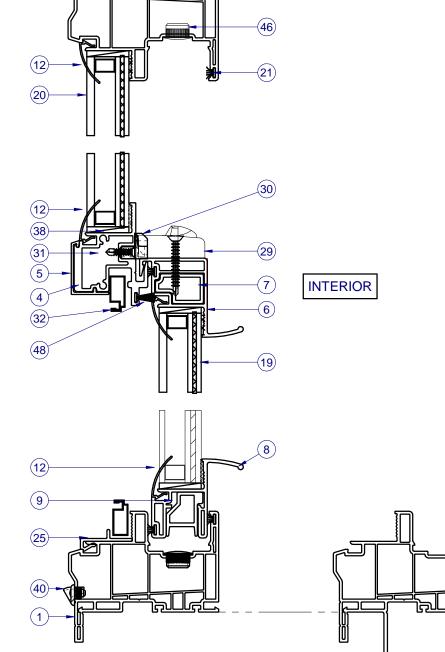
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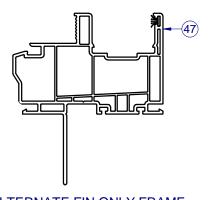
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#### SECTION VIEWS

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ALTERNATE FIN ONLY FRAME

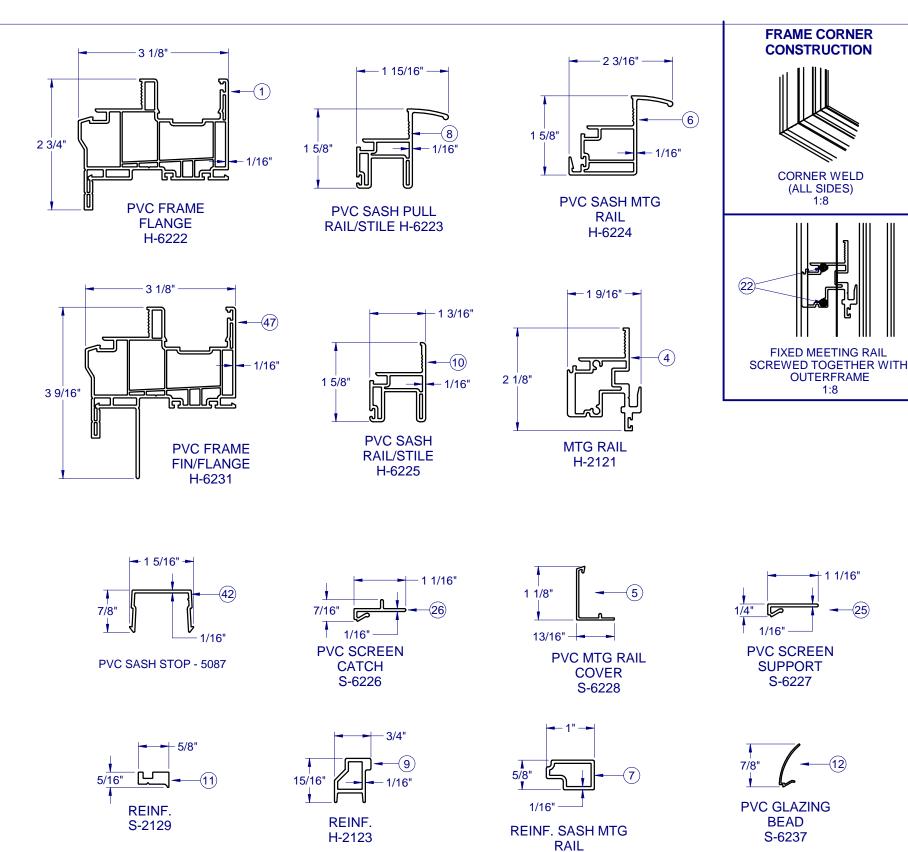
NO SWEEP LOCKS ALLOWED FOR UNITS 36" x 62" AND UNDER.

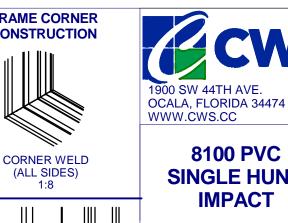
ALTERNATE FIN FRAME

**SECTION VIEW A-A** 

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	ALUMINUM	
8	H-6223	Sash Bottom Rail	PVC	
9	H-2123	Reinforcement for SBR	ALUMINUM	
10	H-6225	Sash Side Rail	PVC	
11	S-2129	Reinforcement for SSR	ALUMINUM	
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	ALUMINUM	
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	42 P-5087 SASH STOP, PVC 8100 FRAME, PREC		PVC	
43	43 P-4056 SASH CAM FOR PVC WINDOW		PLASTIC	
44			STEEL	
45	· ·		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	





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8100 PVC **SINGLE HUNG IMPACT** 

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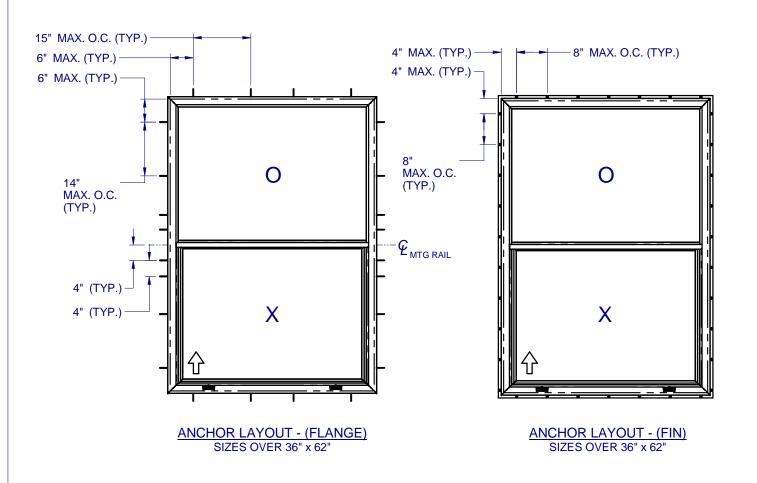
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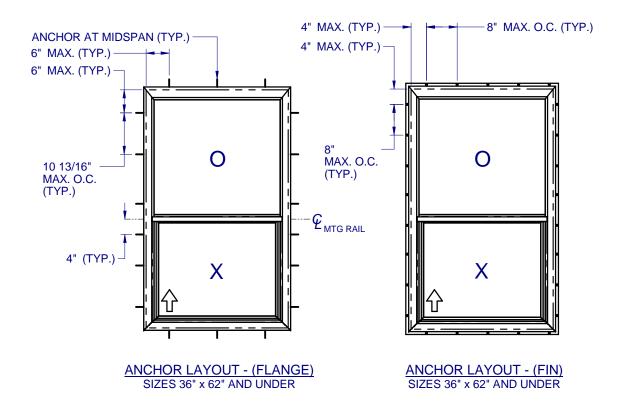
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#### **BOM AND EXTRUSIONS**

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H-2124





#### 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)



## 8100 PVC SINGLE HUNG IMPACT

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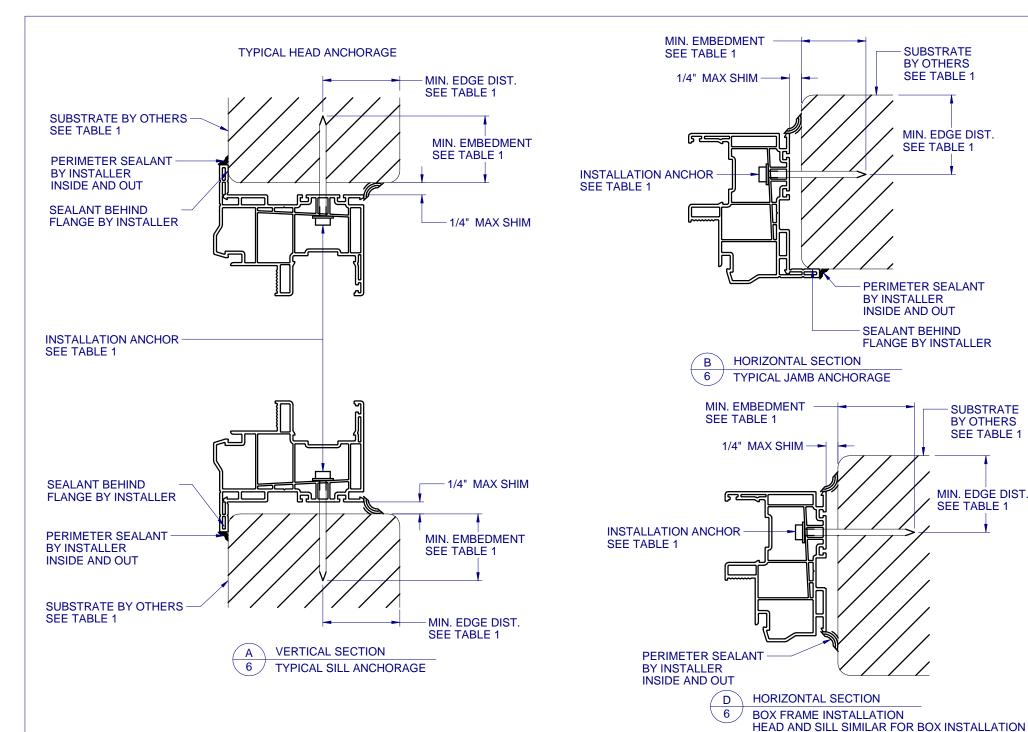
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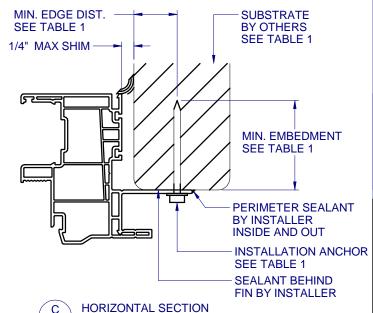
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# ANCHOR SCHEDULE AND NOTES

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SUBSTRATE

BY OTHERS

SEE TABLE 1

MIN. EDGE DIST.

**SUBSTRATE** 

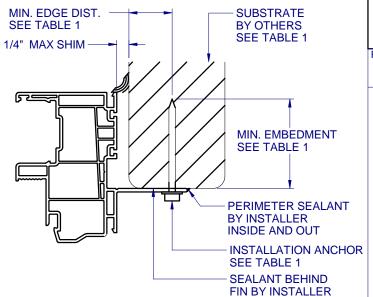
BY OTHERS SEE TABLE 1

MIN. EDGE DIST.

SEE TABLE 1

SEE TABLE 1

TYPICAL FIN ANCHORAGE HEAD AND SILL SIMILAR FOR FIN INSTALLATION



HORIZONTAL SECTION

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.



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