

SINGLE HUNG - LARGE MISSILE IMPACT

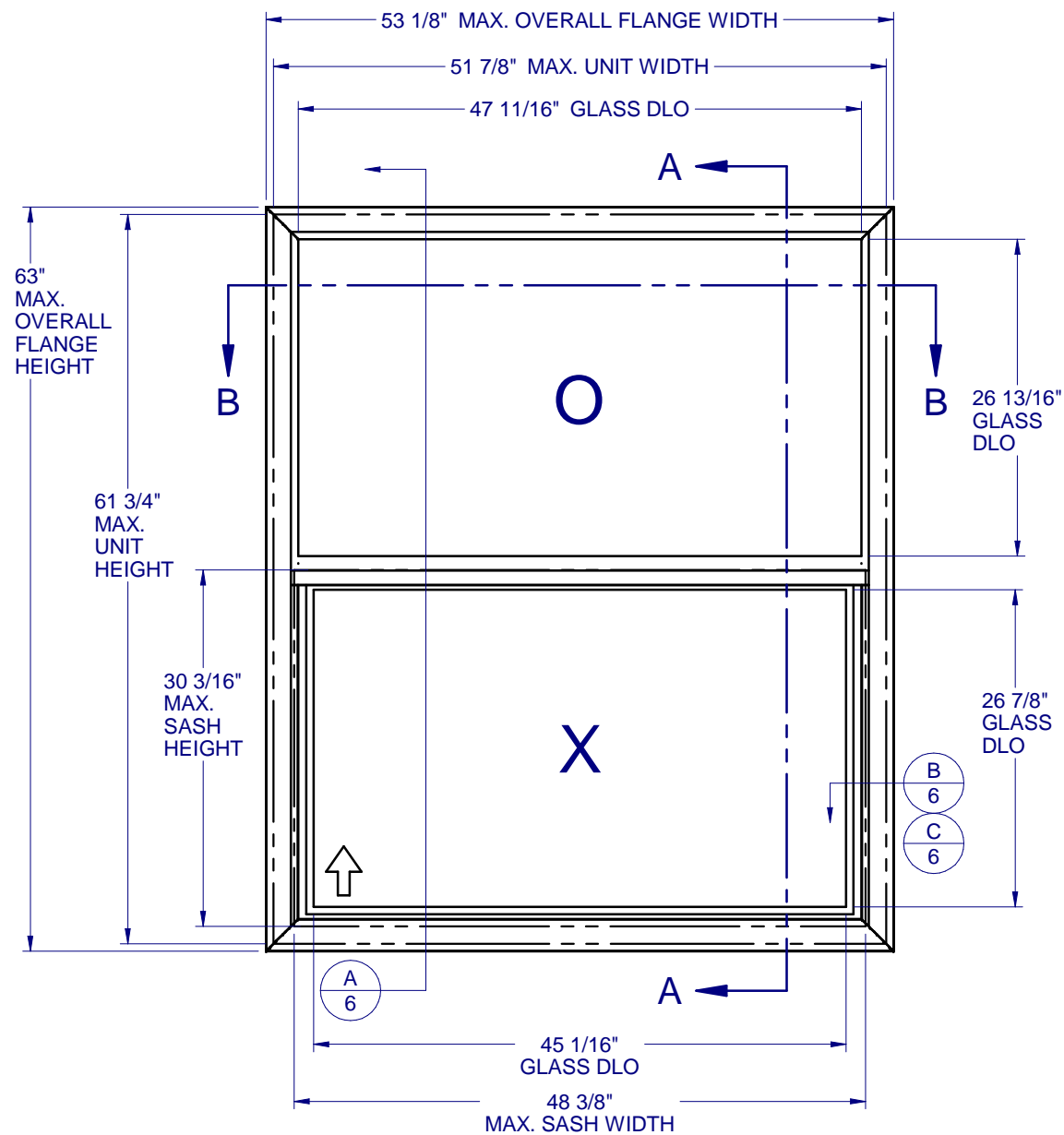


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MAX. UNIT SIZE	DESIGN PRESSURE RATING	IMPACT RATING
51-7/8" x 61-3/4"	+/- 70 PSF	LARGE MISSILE IMPACT

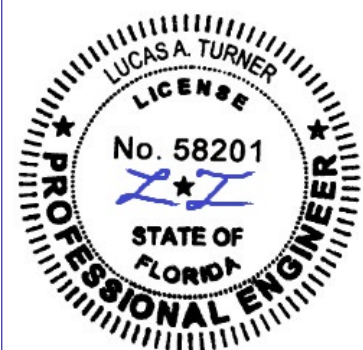
GENERAL NOTES:

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. SHUTTERS ARE NOT REQUIRED.
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.

Custom WINDOW SYSTEMS
 1900 SW 44TH AVE.
 OCALA, FLORIDA 34474
 WWW.CWS.CC

8100 PVC SINGLE HUNG IMPACT

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1/21/2022

LUCAS A. TURNER, P.E.
 FL PE # 58201
 2428 Old Natchez Trc Trl
 Camden, TN 38320
 PH. 941-380-1574

SHEET DESCRIPTION:

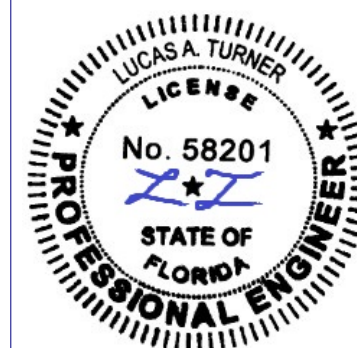
GENERAL NOTES AND ELEVATIONS

DRAWN BY:	DATE:
BAT	06/18/12
DWG #:	REV.:
CWS-812	E
SCALE:	SHEET
1:15	1 OF 6

FL# 16177

**8100 PVC
SINGLE HUNG
IMPACT**

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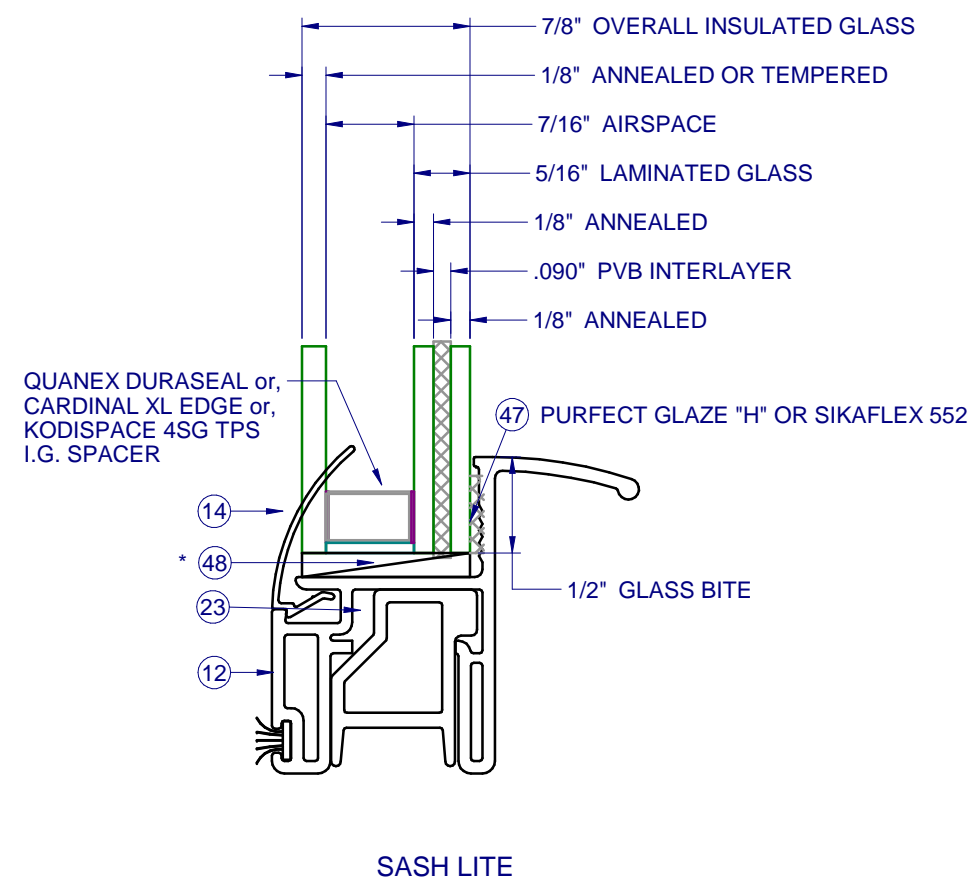
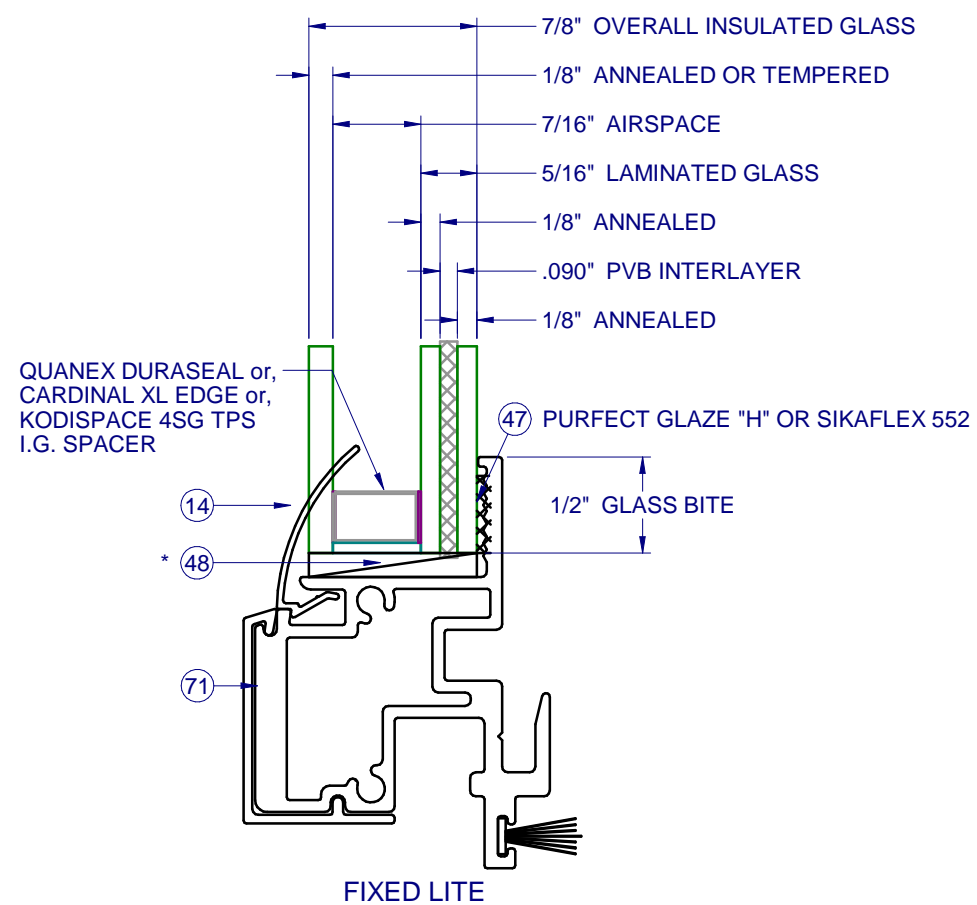
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GLAZING DETAILS

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SCALE:	SHEET
1:1	2 OF 6

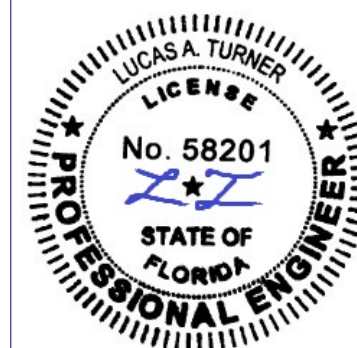
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* SETTING BLOCKS PER FBC 2411.3.3.1



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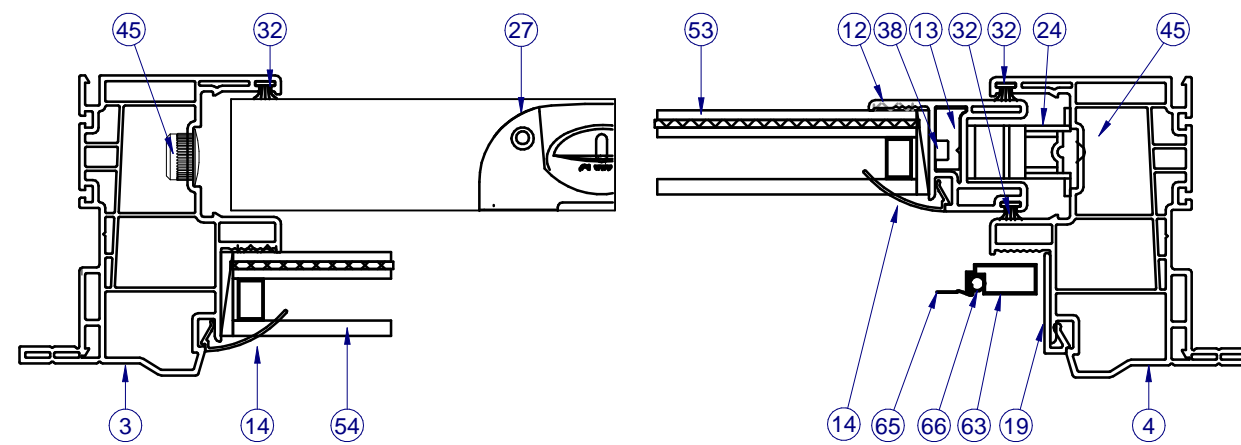
SHEET DESCRIPTION:

SECTION VIEWS

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CWS-812	E
SCALE:	SHEET
1:2	3 OF 6

FL# 16177

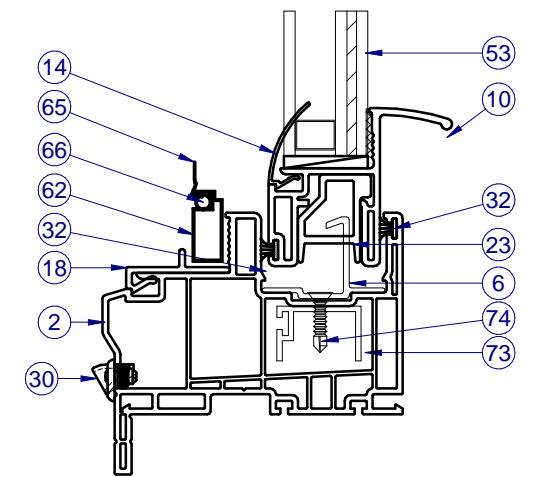
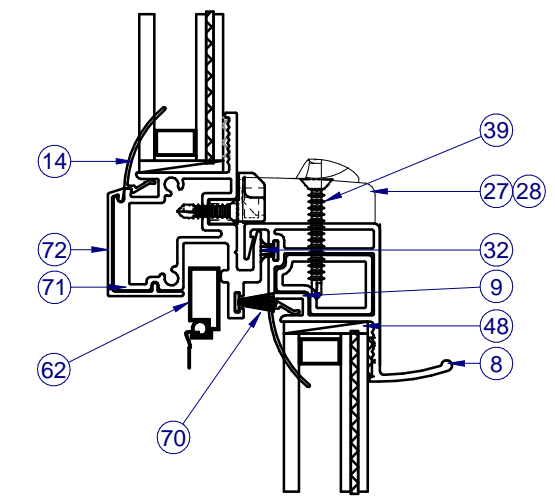
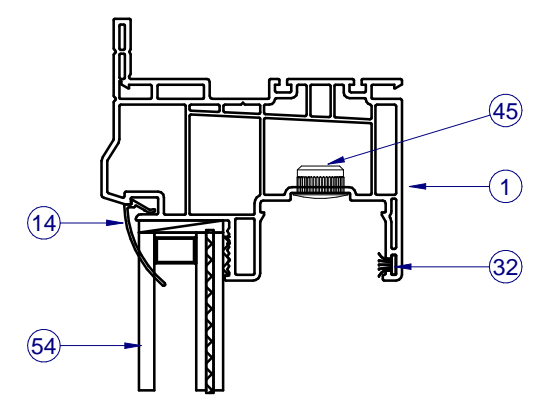
INTERIOR



SECTION B-B

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

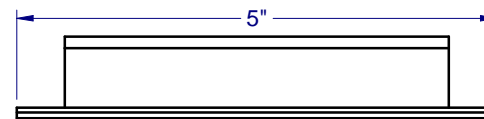
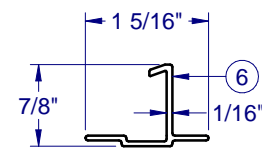
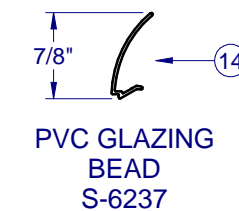
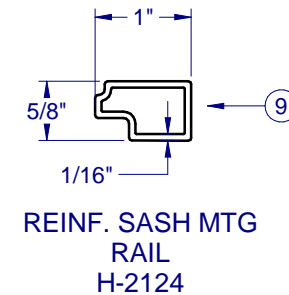
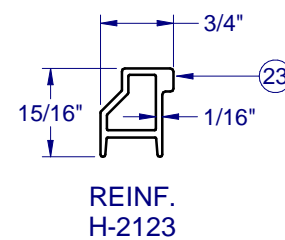
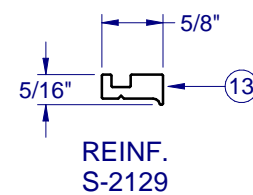
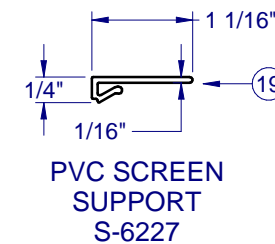
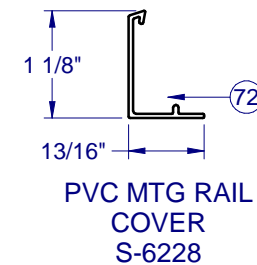
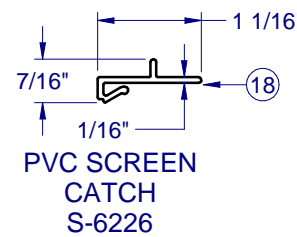
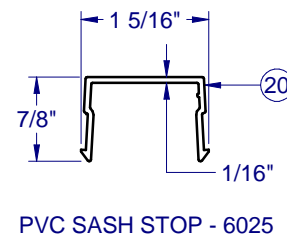
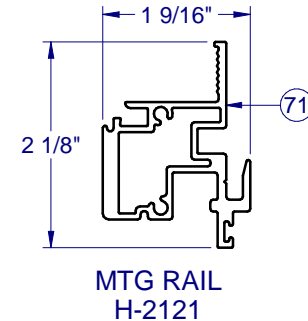
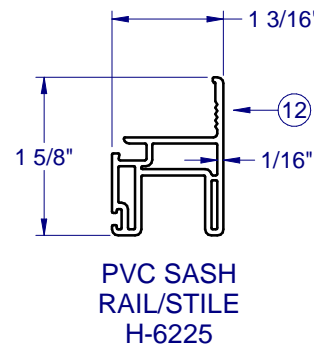
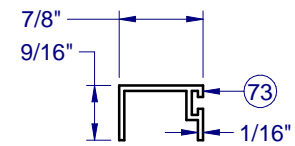
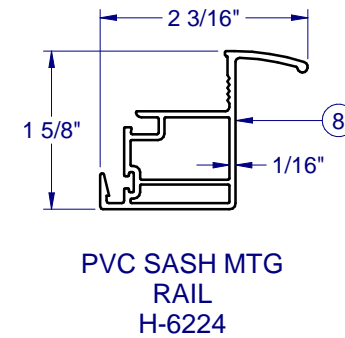
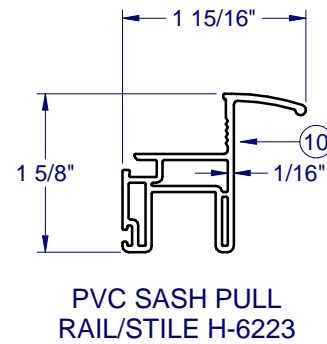
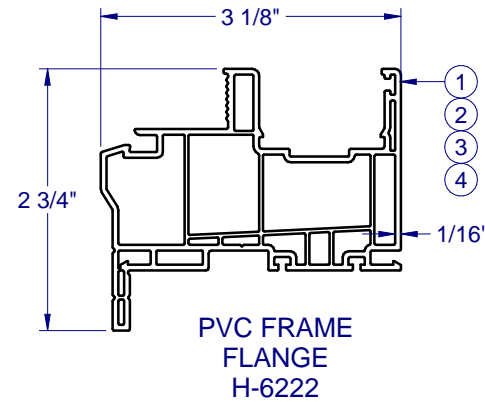
INTERIOR



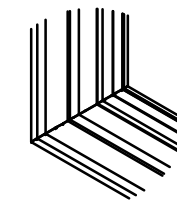
SECTION A-A

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

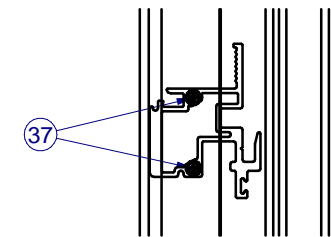
PARTS LIST			
ITEM	PART #	DESCRIPTION	MATERIAL
1	H-6222	Main Fr., SH, w/Flg., PVC, Head	Vinyl
2	H-6222	Main Fr., SH, w/Flg., PVC, Sill	Vinyl
3	H-6222	Main Fr., SH, w/Flg., PVC, L. Jb.	Vinyl
4	H-6222	Main Fr., SH, w/Flg., PVC, R. Jb.	Vinyl
6	S-1577	Impact Hook	Alum
8	H-6224	Sash Meet. Rail, PVC	Vinyl
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"	Vinyl
18	S-6226	Scrm. Adapt., w/Nib, PVC, Horiz.	Vinyl
19	S-6227	Scrm. Adapt., PVC, Vert.	Vinyl
20	S-6025	Sash Stop / Filler, PVC, Vert.	Vinyl
23	H-2123	Reinforcement, SBR	Alum
24		Balance	
25	P-3059	Sash Cam, PVC	Plastic
26	P-3046	Take Out Clip	SS
27	P-3783	Lock, Impact, PVC	
28	P-4069	Keeper, Impact, PVC	Zamac
30	P-3215	Weep Cover w/ Flap	Plastic
32	P-3429	Wstp., 0.270 x .187 back FinSeal, Gray	
37	P-4638	#8 x 2-1/2 PH Mod. Truss, Type A, TEK 2	Steel
38	P-3768	#8 x 0.625 Ph PH SMS	Steel
39	P-4051W	#8 x 1.250 Ph FH TEK, Wht.	Steel
40	P-4264W	#8 x 3/4 FH PH w/#6 Head, TEK, Wht.	Steel
44	P-3342	Seam Sealer, SM-5504	
45	P-5588	Cap Plug, 1/2" Hole	Nylon
47	P-3438	Sikaflex 552 or Purfect Glaze "H"	
48	P-5615	Set. Blk., 85 Dur., 1/8" x 1" x 2" Lg.	Rubber
51	P-3881	Temporary Lbl. (NFRC/DP)	
52	P-3613	CWS Lbl. (logo)	
53	Sash	SEE SHEET 2	
54	Fixed	SEE SHEET 2	
56	P-3281	Spacer	
62	P-3218	Screen Frame, Horiz.	Alum
63	P-3218	Screen Frame, Vert.	Alum
64	P-3321	Screen Frame Corner Key	Plastic
65	P-3581	Screen Cloth, 18 x 16 Fiberglass	Fiberglass
66	P-3228	Screen Spline, .155 Dia., Blk.	Vinyl
67	P-3029	Screen Pull Tab	Alum
68	P-3033	Screen Spring, SS	SS
70	P-4959	Wstp., 0.270 x .187 back FinSeal, Gray	
71	H-2121	Alum. Fixed Rail	Alum
72	S-6228	Cover, Fixed Rail	Vinyl
73	S-1112	Reinforcement, Impact Hook	Alum
74	P-3541	#8 x 1/2", Pan Head, TEK	Steel



FRAME CORNER CONSTRUCTION



CORNER WELD (ALL SIDES) 1:8



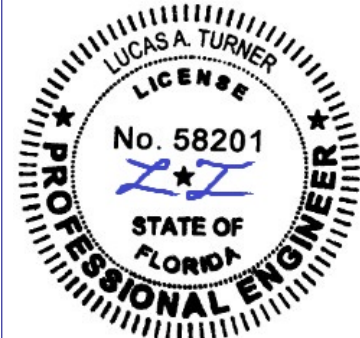
FIXED MEETING RAIL SCREWED TOGETHER WITH OUTERFRAME 1:8



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Camden, TN 38320
PH. 941-380-1574

SHEET DESCRIPTION:

BOM AND EXTRUSIONS

DRAWN BY:	DATE:
BAT	06/18/12
DWG #:	REV.:
CWS-812	E
SCALE:	SHEET
1:2	4 OF 6

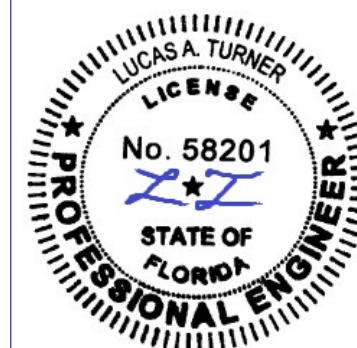
LINE ITEMS NOT USED:
5, 7, 11, 15-17, 21-22, 29, 31, 33-36, 41-43, 46, 49-50, 55, 57-61, 69

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

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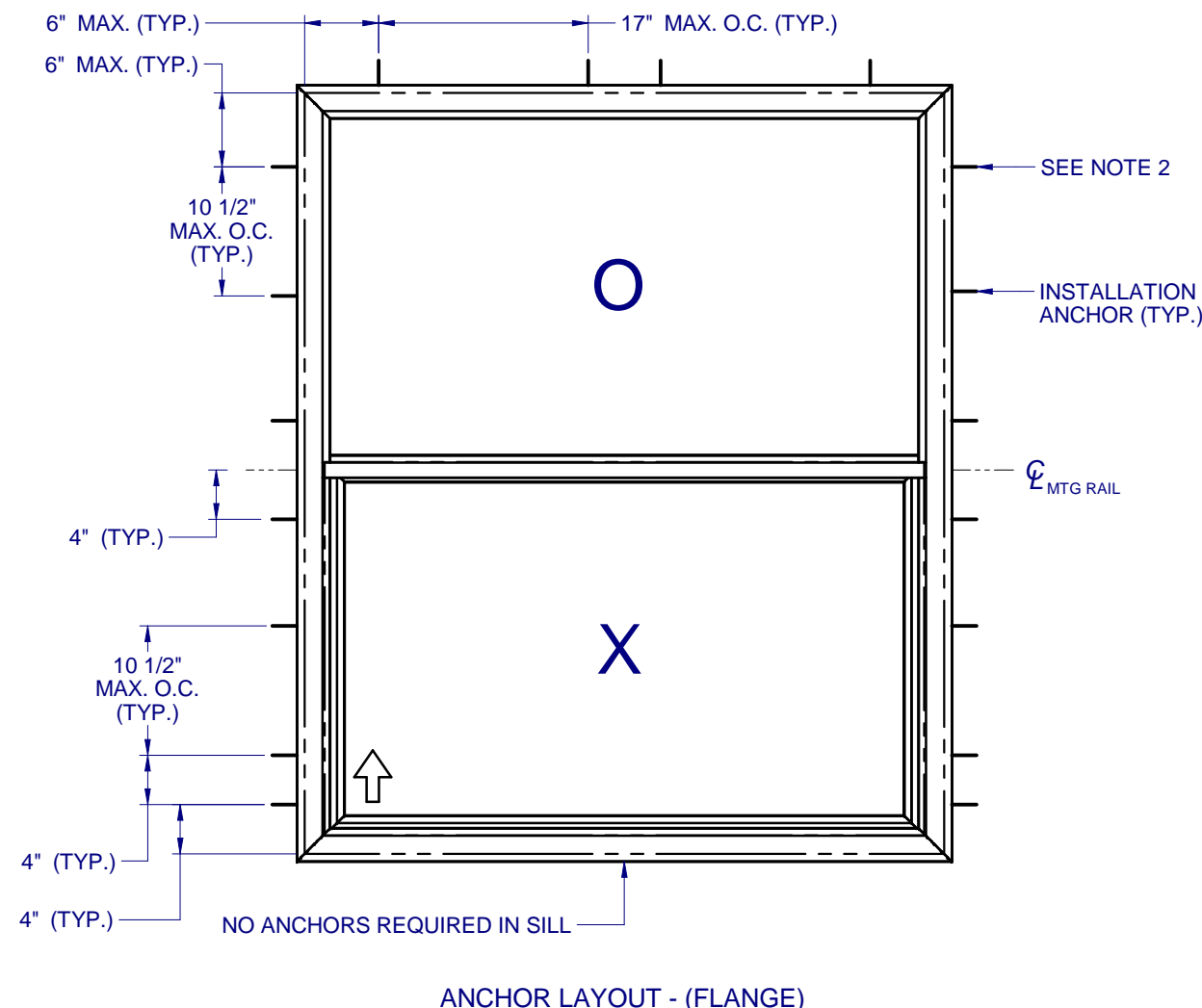


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SHEET DESCRIPTION:
ANCHOR SCHEDULE AND NOTES

DRAWN BY: BAT	DATE: 06/18/12
DWG #: CWS-812	REV.: E
SCALE: 1:15	SHEET 5 OF 6



ANCHOR LAYOUT - (FLANGE)

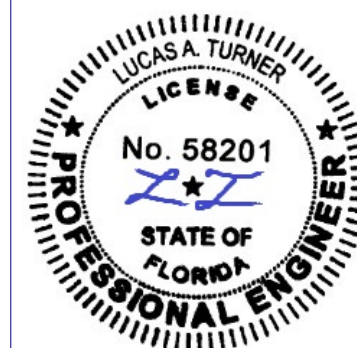
NOTES:

1. INSTALL ONE ANCHOR AT EACH INSTALLATION LOCATION. NO ANCHORS REQUIRED IN SILL.
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)

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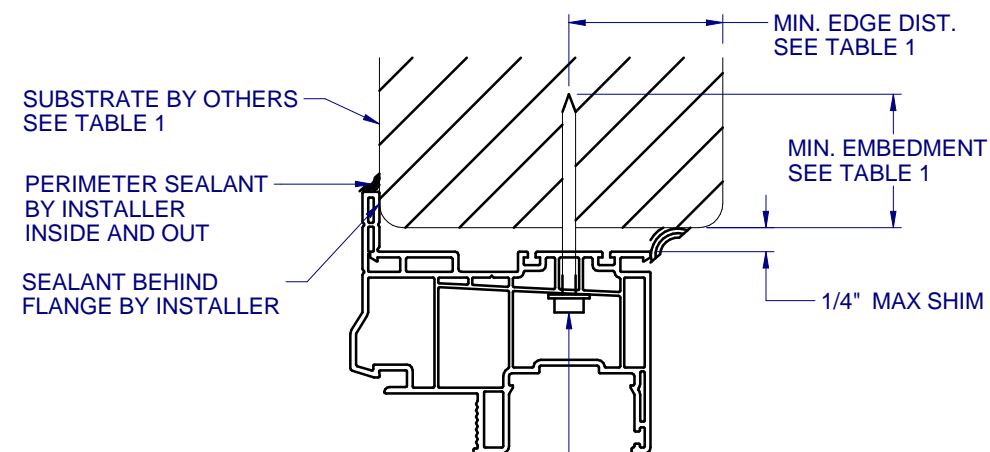
SHEET DESCRIPTION:

INSTALLATION DETAILS

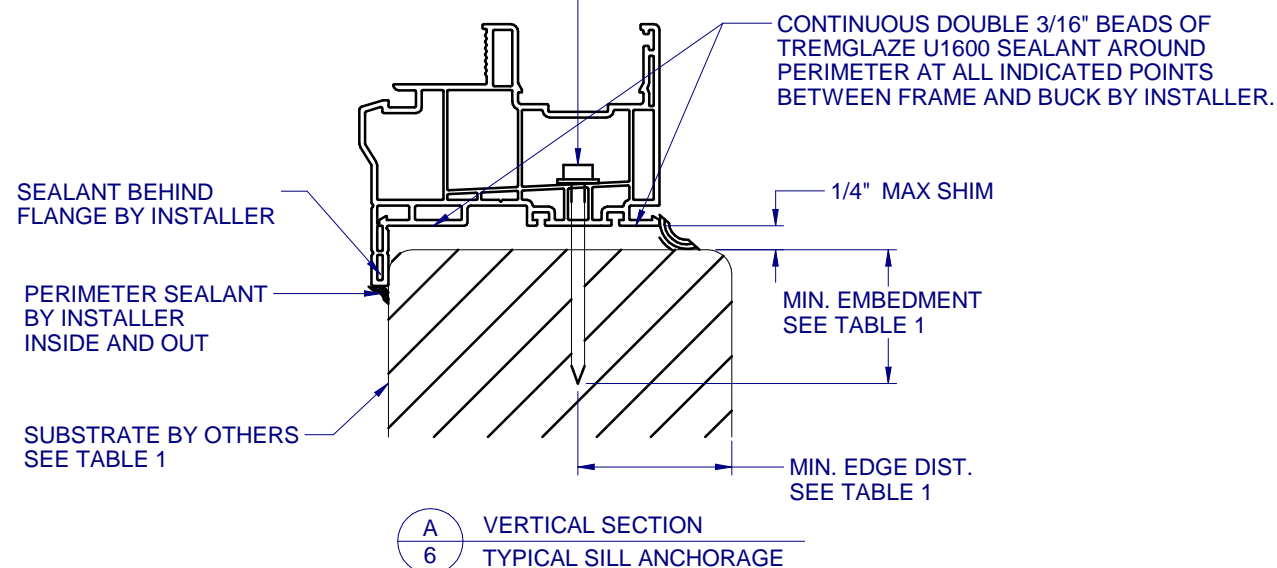
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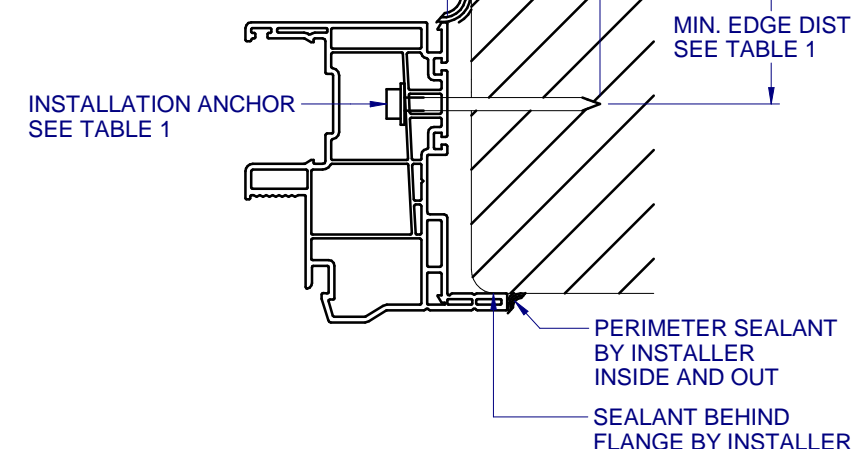
TYPICAL HEAD ANCHORAGE



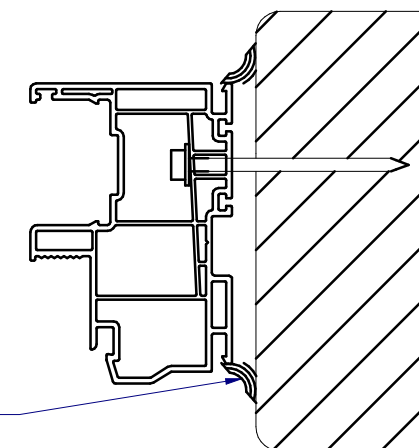
INSTALLATION ANCHOR SEE TABLE 1



MIN. EMBEDMENT SEE TABLE 1
1/4" MAX SHIM
SUBSTRATE BY OTHERS SEE TABLE 1



B
6 HORIZONTAL SECTION
TYPICAL JAMB ANCHORAGE



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

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.

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 (2.85 KSI MIN.)	3/16" ELCO ULTRACON	1"	1"
GROUT-FILLED CMU (ASTM C-90)	3/16" ELCO ULTRACON	1-1/4"	2-1/2"
2X MIN. SOUTHERN PINE (G=0.55)	3/16" ITW TAPCON OR ELCO 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"