

MODEL 8400 SYSTEMS 1 AND 2 CASEMENT - LARGE MISSILE IMPACT

GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE (IBC) AND 2018 INTERNATIONAL RESIDENTIAL CODE (IRC).
2. GLAZING OPTIONS: (SEE SHEET 2)
3. CONFIGURATIONS: ALL WINDOWS ARE OPEN TO OUTSIDE LEFT OR RIGHT.
4. ANCHORAGE: THE 33 1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. SEE SHEET 6 FOR INSTALLATION DETAIL. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
5. PRODUCTS APPROVED FOR IMPACT RESISTANCE. SHUTTERS ARE NOT REQUIRED.
6. ALL FRAMES AND VENTS FULLY WELDED.
7. SERIES/MODEL DESIGNATION CA-8400.
8. THE DESIGNATION X STANDS FOR THE FOLLOWING:
X = OPERABLE SASH
9. SECTION CALLOUTS APPLY TO ALL ELEVATIONS IN A SIMILAR LOCATION.



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

8400 PVC CASEMENT IMPACT

NO.	DESCRIPTION	BY	DATE
B	IBC/IRC REF. 2018 UPDATE	JLD	4/09/20
A	REVISED TO TDI REQUEST	JML	3/29/17



5/15/2020

LUCAS A. TURNER, P.E.
TX PE # 115094
TBPE REG. #F-18075
2428 OLD NATCHEZ TRC TRL
CAMDEN, TN 38320
PH. 941-380-1574

SHEET DESCRIPTION:

GENERAL NOTES AND ELEVATIONS

DRAWN BY:	DATE:
EMK	11/12/15
DWG #:	REV.:
TDI-161	B
SCALE:	SHEET
1:15	1 OF 6

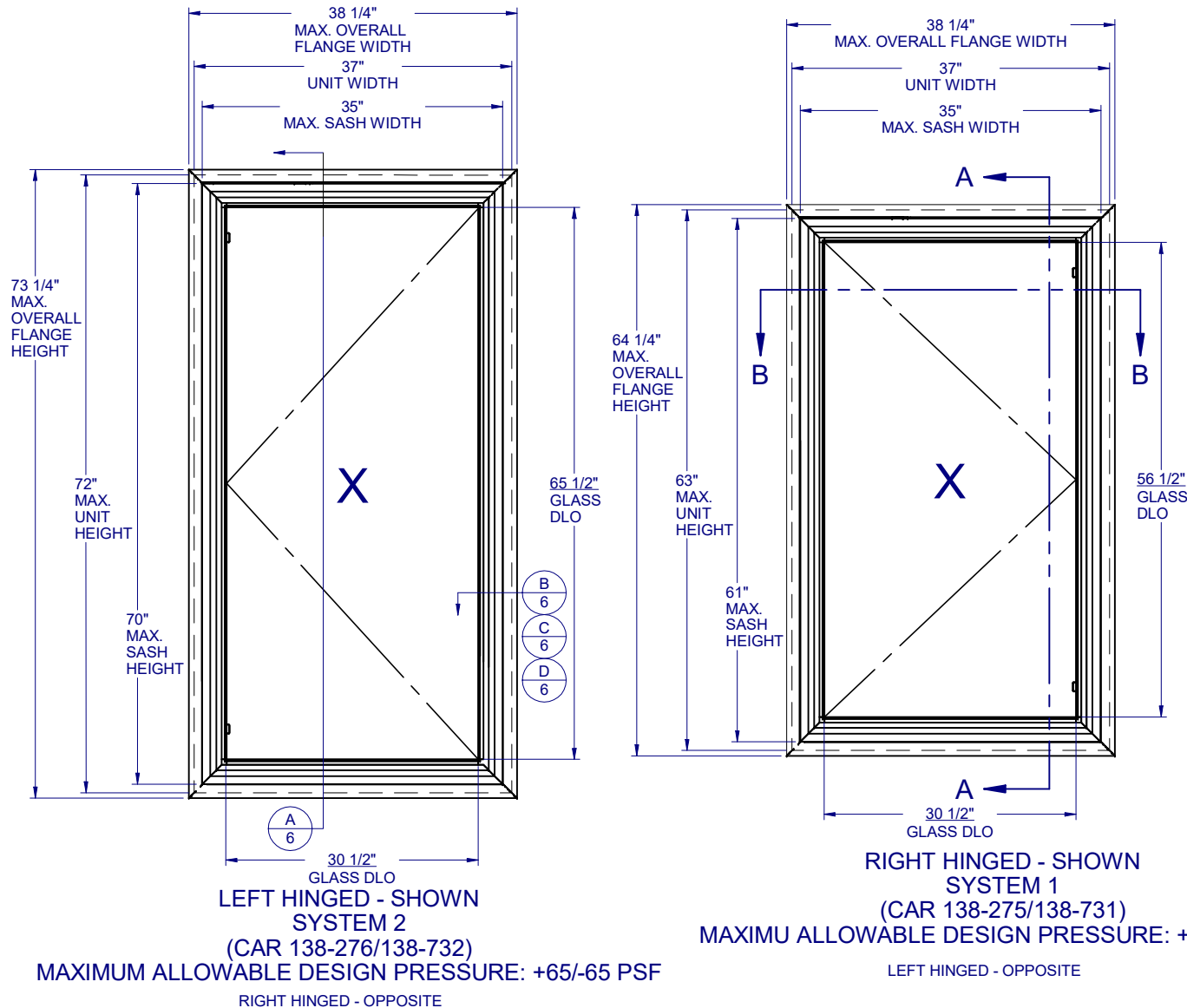
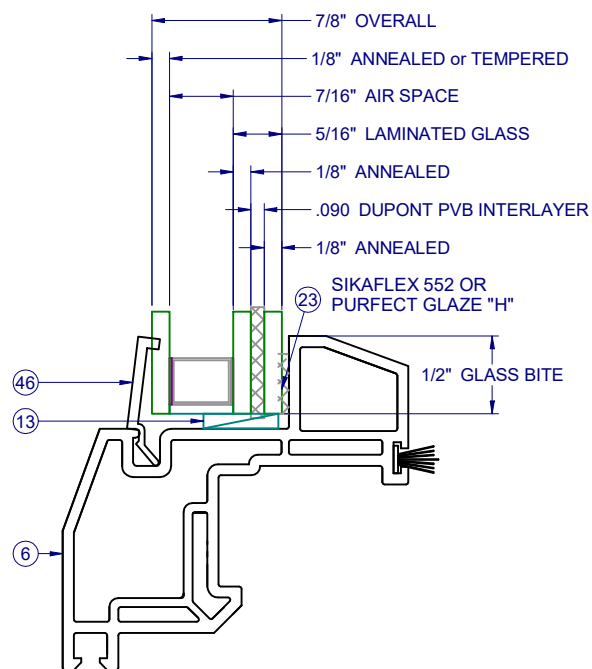


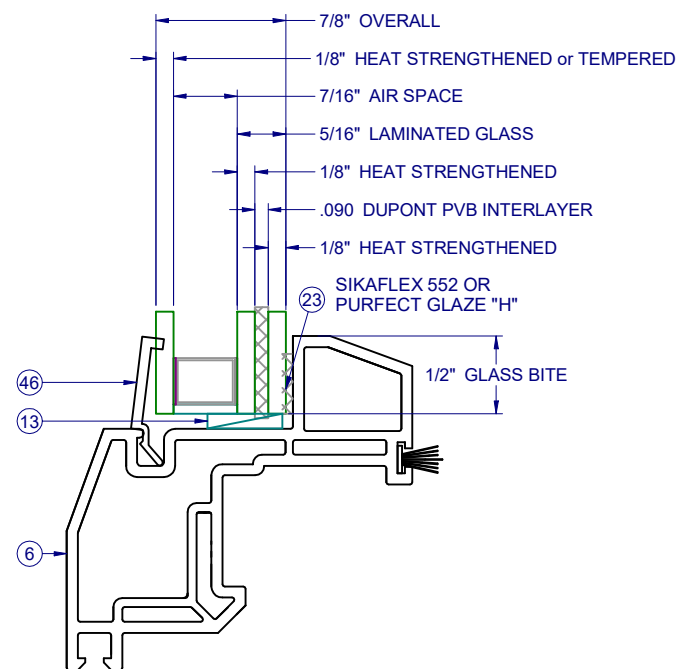
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**8400 PVC
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SYSTEM 1



SYSTEM 2

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REVISIONS



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GLAZING DETAILS

DRAWN BY: EMK	DATE: 11/12/15
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SCALE: 1:1	SHEET 2 OF 6

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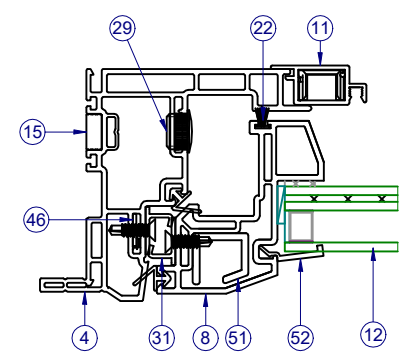
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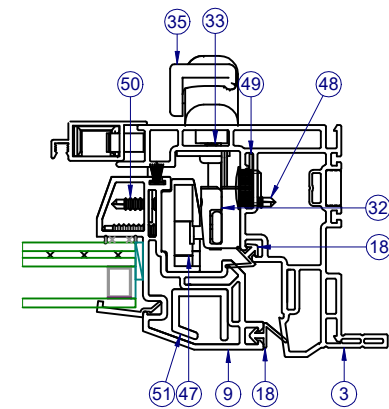
SECTION VIEWS

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TDI-161	B
SCALE:	SHEET
1:2	3 OF 6

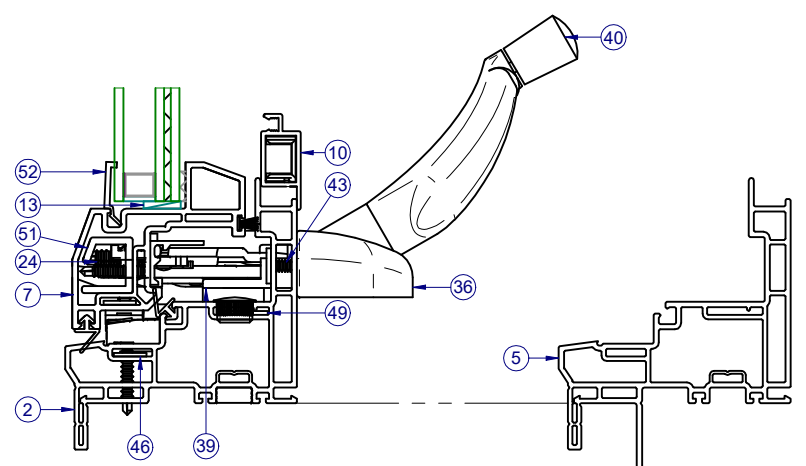
INTERIOR



SECTION VIEW B-B



INTERIOR



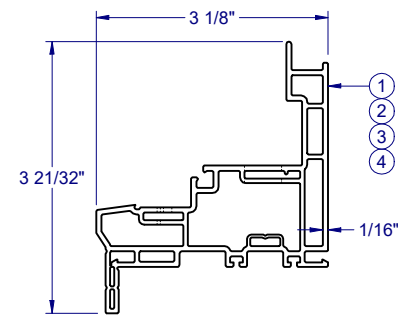
SECTION VIEW A-A

ALTERNATE FIN FRAME

ITEMS NOT SHOWN FOR CLARITY:
14, 16-17, 19-20, 25, 27, 32, 34, 37-38, 42, 44-45, 50

PARTS LIST				
ITEM	PART #	DESCRIPTION	VENDOR	MATERIAL
1	H-6030B	FR., CASE., MAIN, HEAD	MIKRON	PVC
2	H-6030B	FR., CASE., MAIN, SILL	MIKRON	PVC
3	H-6030B	FR., CASE., MAIN, JB., RIGHT	MIKRON	PVC
4	H-6030B	FR., CASE., MAIN, JB., LEFT	MIKRON	PVC
5	H-6030A	FR., CASE., W/ FIN	MIKRON	PVC
6	H-6008	SASH, CASE., TOP RAIL	MIKRON	PVC
7	H-6008	SASH, CASE., BOT. RAIL	MIKRON	PVC
8	H-6008	SASH, CASE., SIDE RAIL, HINGE	MIKRON	PVC
9	H-6008	SASH, CASE., SIDE RAIL, LOCK	MIKRON	PVC
10	H-1592	SCREEN RAIL, SIDE/BTM	KEYMARK	ALUM
11	H-1593	SCREEN RAIL, TOP/SIDE	KEYMARK	ALUM
12	GLASS	SEE SHEET 2		
13	P-3028	SET. BLK., 85 DUR., 1/8" X 7/8" X 2" LG.	FRANK LOWE	RUBBER
14	P-3029	SCREEN LIFT-OUT	SUMMIT	
15	P-3113	SCREW SUPPORT FOR PVC	TEAM PLASTICS	RUBBER
16	P-3195	SCREEN SPRING, NO HOLE TENSION		
17	P-3197	SCREEN CORNER KEY	M&M	NYLON
18	P-3217	WSTP., WHITE LEAF SEAL, FRAME	AMESBURY	RUBBER
19	P-3228	SCREEN SPLINE, .155 DIA, BLK	DAPA	
20	P-3281	SPACER, DURASEAL, SEE SHEET 3	DURASEAL	TRUSEAL
21	P-3342	SEAM SEALER, SM-5504	SCHNEE	SILICONE
22	P-3429	WSTP., .270 X .187 BACK, ULTRA FIN, BLACK, SASH	ULTRAFAB	
23		PURFECT GLAZE "H" , SIKAFLEX 552	HENKEL, SIKA	
24	P-3539	#8 X 3/4" QUAD PH TEK, ZINC, SCREW		
25	P-3581	SCREEN CLOTH, 18 X 16 FIBERGLASS	PHIFER	
26	P-3587	#8 X 1" PH FH TEK 2, SS, SCREW	FASTENAL	SS
27	P-3613	CWS LBL. (LOGO)		
28	P-3685	CS-8400 GOLD CERT. LABEL, NFRC TAB		
29	P-3752	CAP PLUG, 1/2" HOLE	M&M	NYLON
30	P-3881	TEMPORARY LBL. (NFRC/DP)		
31	P-3940	SNUBBER, SS, PVC		
32	P-4003	TIE BAR GUIDE, ROTO. HDWE.	ROTO	SS
33	P-4004	#8-32 X 1/2" PH PH, MS, SS (ROTO HDWE. LOCK)	FASTENAL	SS
34	P-4005	SUPPORT PLATE, LOCK, SS, ROTO HDWE. (Use w/ P-4006)	ROTO	SS
35	P-4006	LOCK, MULTI-POINT, ROTO HDWE., WHITE	ROTO	SS
36	P-4007	ROTO. OPERATORS (FOR LEFT/RIGHT OPEN CASEMENT)	ROTO	SS
37	P-4009	TRACK & SLIDER ASSM., ROTO OPER., ROTO HDWE., (13")	ROTO	SS
38	P-4010	STUD BRKT., ROTO OPER., L.H., ROTO HDWE.	ROTO	SS
39	P-4012	SHIM, ROTO OPERATOR, ROTO HDWE. (4.8mm)	ROTO	NYLON
40	P-4014	HANDLE, STD, ROTO OPER, ROTO HDWE. (WHITE)	ROTO	ZINC
41	P-4018	HINGES (LEFT/RIGHT FOR LEFT OR RIGHT OPEN CASEMENT)	ROTO	SS
42	P-4020	SUPPORT WASHER, ROTO OPER, ROTO HDWE. (SS)	ROTO	SS
43	P-4021	#8-32 x 3/4" Quad FH W/ 1/16" Lead, MS, SS, ROTO OP., ROTO	FASTENAL	SS
44	P-4024	GASKET, ROTO OPER., ROTO HDWE., 1/16"	HOP	
45	P-4031-P-4040	TIE-BARS, ROTO HDWE. 1-5 LOCKPOINTS, SS (BY OA HGT.)	ROTO	SS
46	P-4050	REINF. COIL-ALUMINUM, 5052-H32 (.050 X .437), HD	PRECISION STEEL	ALUM
47	P-4043	STRIKE, MULTIPOINT	M&M	NYLON
48	P-4146	#8 x 3/4" PH FLAT TEK, SS	FASTENAL	SS
49	P-4491	REINF. COIL-ALUMINUM, 5052-H32 (.062 X .656), HD	PRECISION STEEL	ALUM
50	P-4641	#8 x 5/8" PH FLAT TEK, #7 HEAD, SS	FASTENAL	SS
51	S-1505	REINF. CASE. SASH	KEYMARK	ALUM
52	S-6064	GLZ. BD., 7/8"	MIKRON	PVC

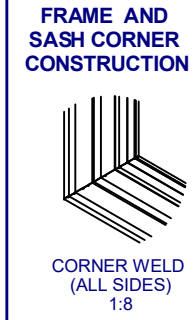
NOTE: ALL EXTRUSIONS ARE ALUMINUM 6063-T6 UNLESS OTHERWISE NOTED.



PVC FLANGE FRAME
H-6030B

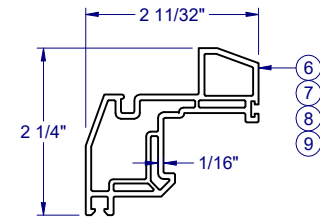


PVC GLAZING BEAD
S-6064

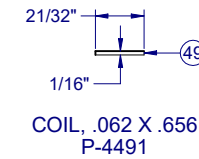


FRAME AND
SASH CORNER
CONSTRUCTION

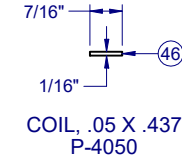
CORNER WELD
(ALL SIDES)
1:8



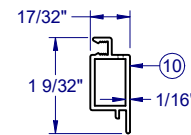
PVC SASH
H-6008



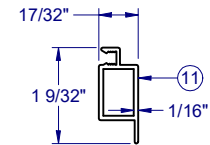
COIL, .062 X .656
P-4491



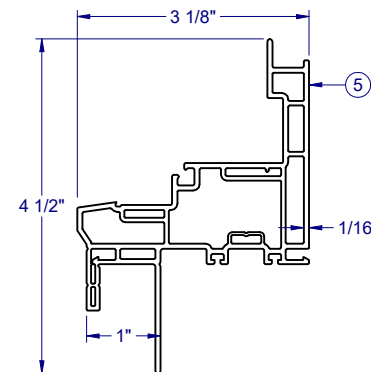
COIL, .05 X .437
P-4050



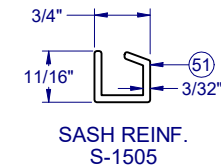
SCREEN RAIL SIDE/BTM
H-1592



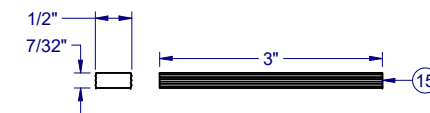
SCREEN RAIL TOP/SIDE
H-1593



PVC FIN FRAME
H-6030A



SASH REINF.
S-1505



SCREW SUPPORT
P-3113



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BOM AND EXTRUSIONS

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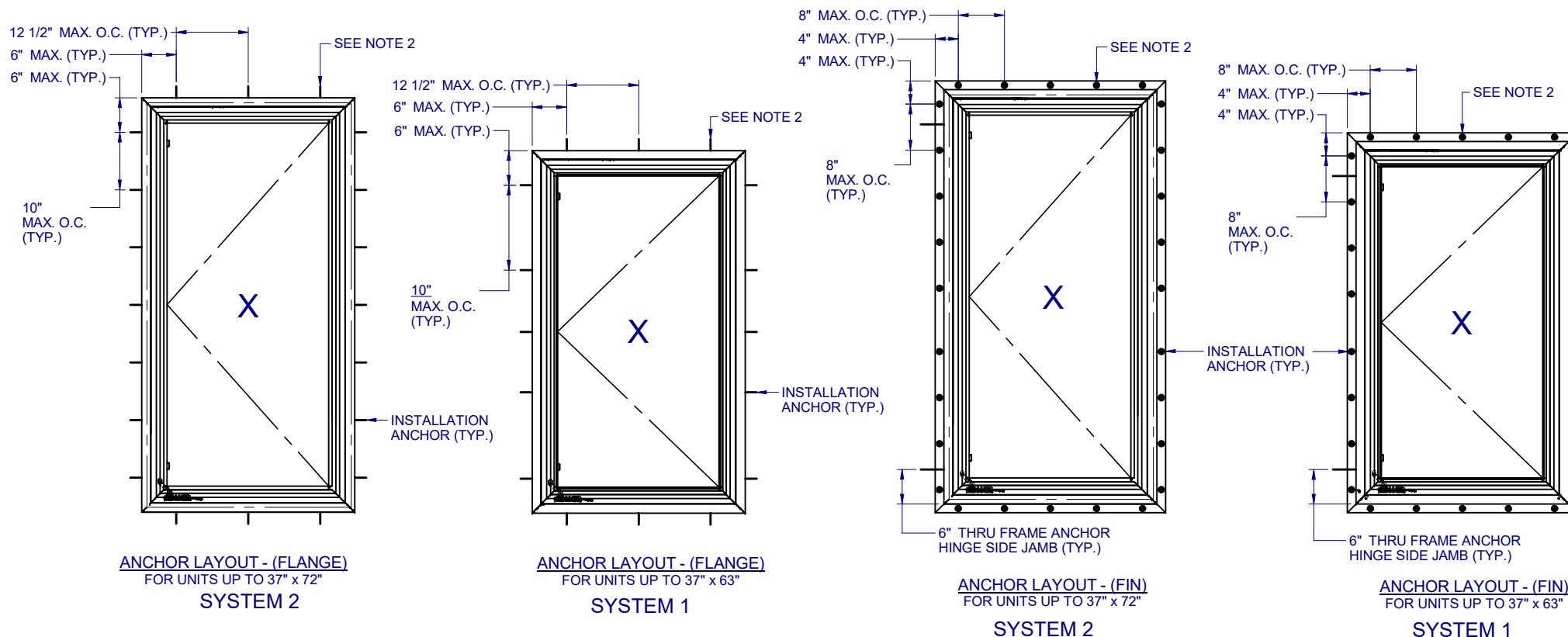
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ANCHOR SCHEDULE & NOTES

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SCALE:	SHEET
1:20	5 OF 6



NOTES:

1. INSTALL ONE ANCHOR AT EACH INSTALLATION LOCATION. SILL ANCHOR SPACING SAME AS HEAD. LEFT HINGE SHOWN, RIGHT HINGE SIMILAR.
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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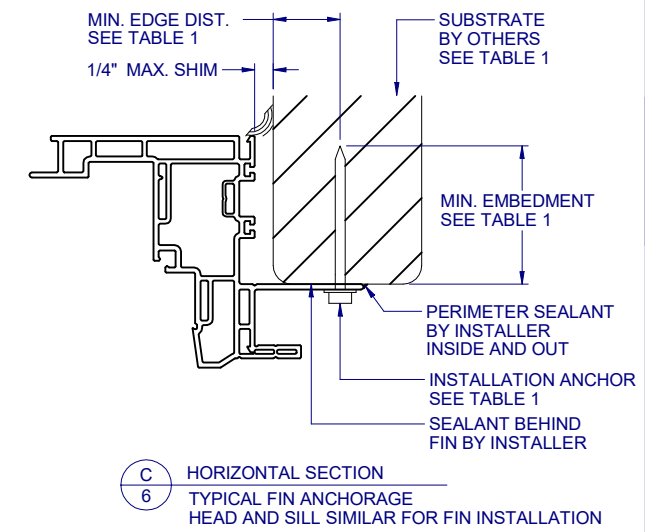
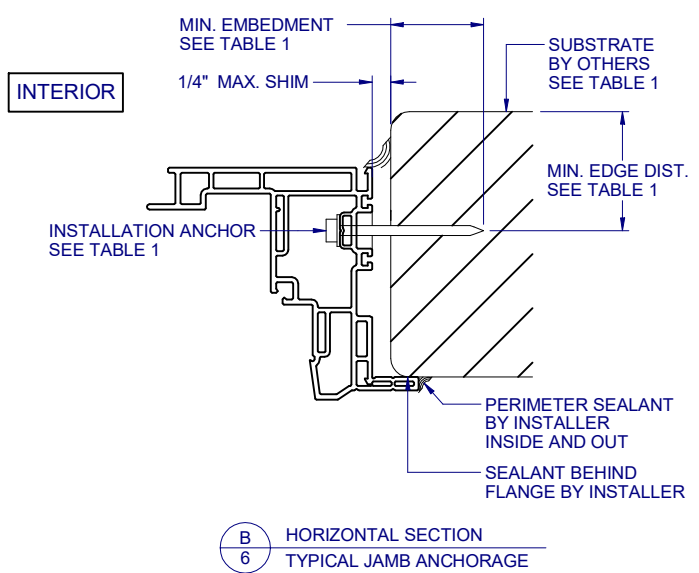
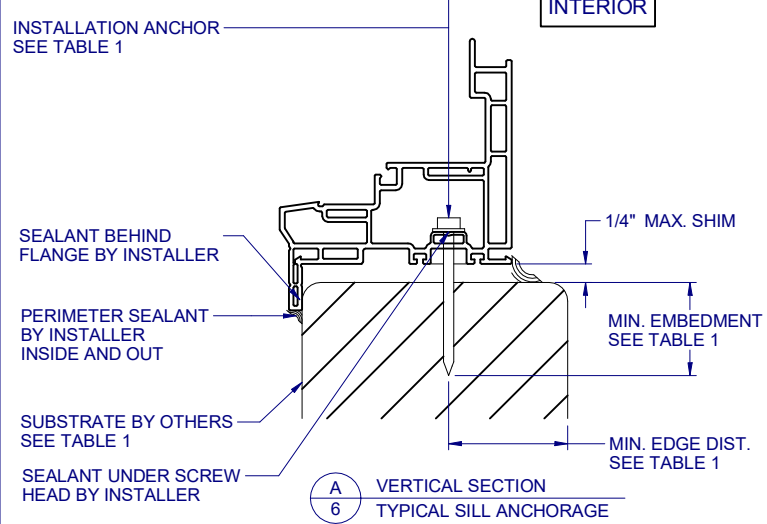
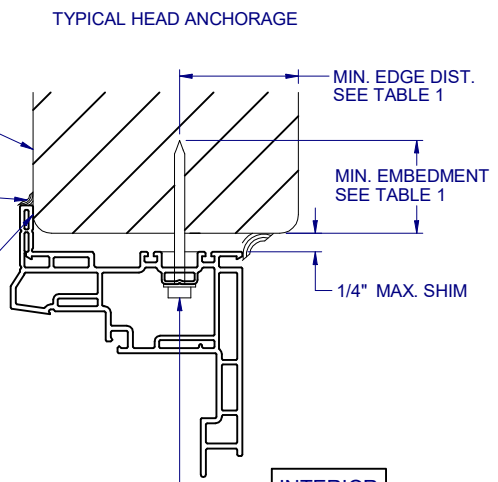
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1:2	6 OF 6



NOTE: ADDITIONAL THRU-FRAME ANCHORS (AS SHOWN IN DET. B/6) REQ'D AT THE HINGE SIDE JAMB, SEE SHEET 5 ANCHOR LAYOUT.

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 (2.85 KSI MIN.)	3/16" ELCO ULTRACON	1"	1"
FLANGE	GROUT-FILLED CMU (ASTM C-90)	3/16" ELCO ULTRACON	1-1/4"	2-1/2"
FLANGE	2X MIN. SOUTHERN PINE (G=0.55)	3/16" ITW TAPCON OR ELCO ULTRACON	1-3/8"	7/8"
FLANGE	2X MIN. SOUTHERN PINE (G=0.55)	#10 PHILLIPS PH SHEET METAL SCREW W/ WASHER COMBO	2"	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. SPRUCE-PINE-FIR (G=0.42)	#8 PHILLIPS PH SHEET METAL SCREW W/ WASHER COMBO	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.