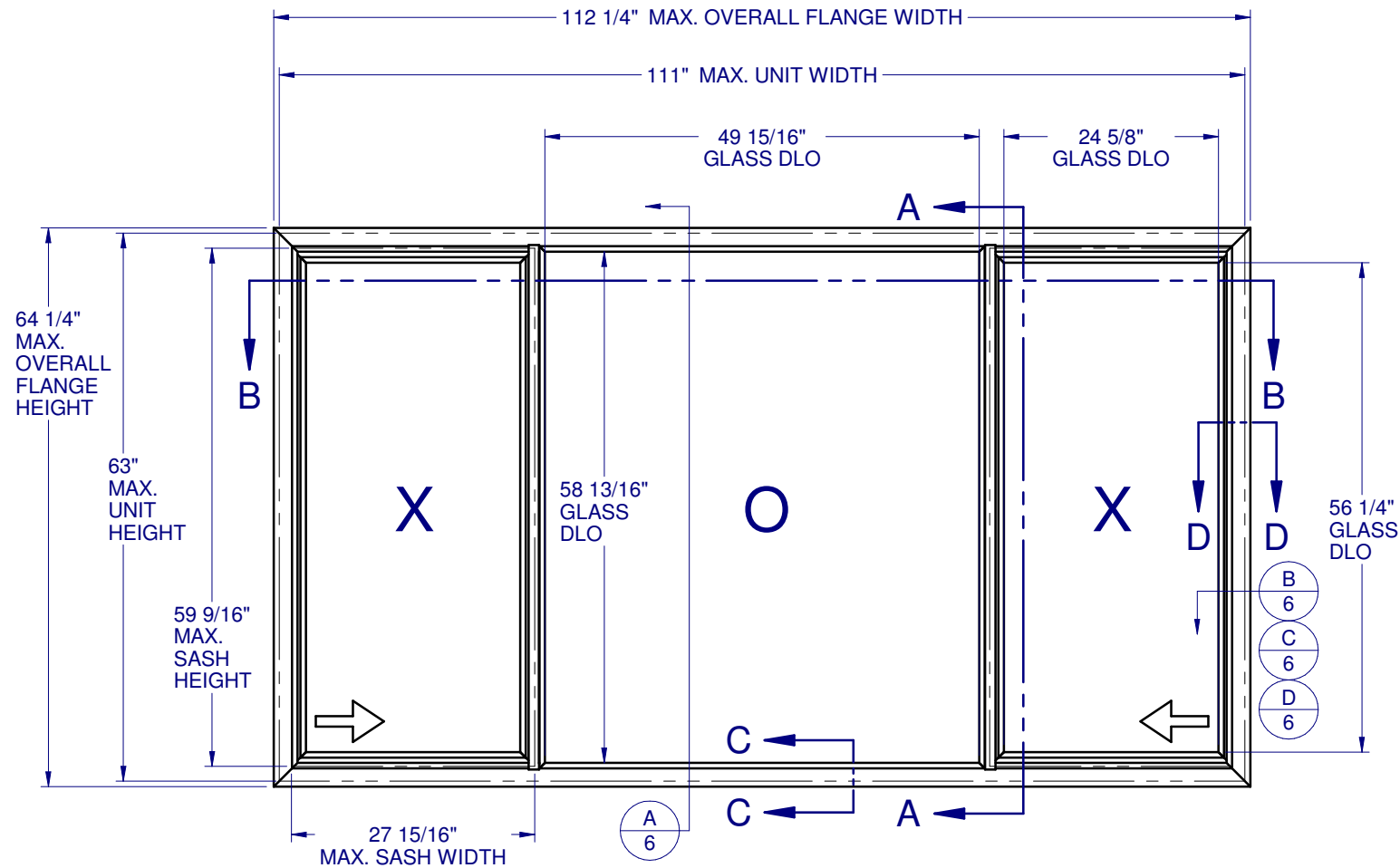


# HORIZONTAL SLIDER - LARGE MISSILE IMPACT



## 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: "OX", "XO".
4. DESIGN PRESSURE RATING:  
-NEGATIVE DESIGN LOADS BASED ON, TESTED PRESSURE AND GLASS TABLES ASTM E-1300-04.  
-POSITIVE DESIGN LOADS BASED ON, TESTED PRESSURE, WATER INFILTRATION TEST PRESSURE AND GLASS TABLES ASTM E-1300-04.
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. THE IMPACT ROTARY 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 HEAD/SILL.
8. SERIES / MODEL DESIGNATION HS-8200.
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" LOCATED 4" FROM BOTH ENDS.



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## 8200 PVC HORZ. SLIDER IMPACT

NO.	DESCRIPTION:	BY:	DATE:
B	UPDATED PER 2014 FBC	EMK	04/09/15
A	CHANGED EDGE DIST.	ADE	02/06/14



LUCAS A. TURNER, P.E.  
FL PE # 58201  
1239 JABARA AVE.  
NORTH PORT, FL 34288  
PH. 941-380-1574

SHEET DESCRIPTION:

### GENERAL NOTES AND ELEVATIONS

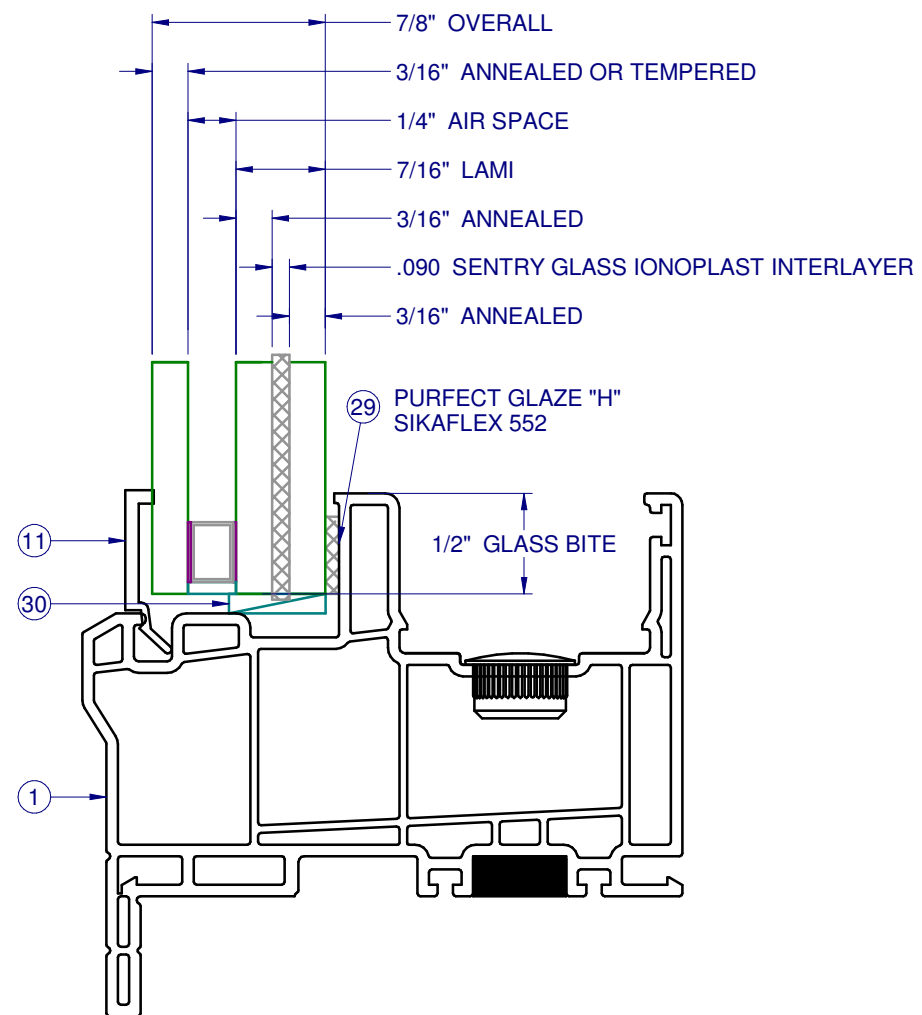
DRAWN BY: TEF	DATE: 10/11/13
DWG #: CWS-869	REV.: B
SCALE: 1:20	SHEET 1 OF 6

### TABLE OF CONTENTS

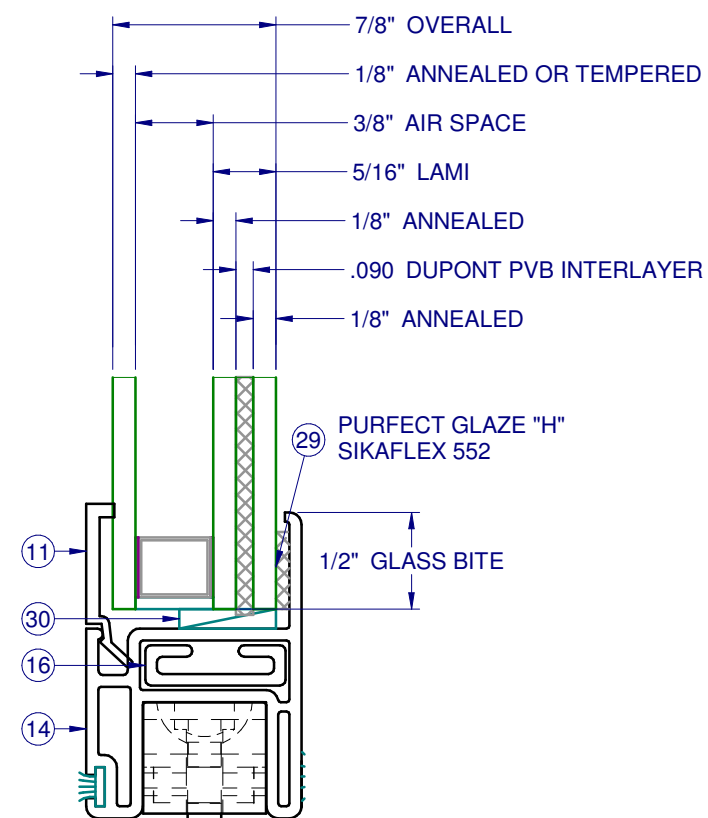
GENERAL NOTES & ELEVATIONS.....	1
GLAZING DETAILS.....	2
SECTION VIEWS & GLAZING DETAILS....	3
EXTRUSIONS & B.O.M.....	4
ANCHOR SCHEDULE & NOTES.....	5
INSTALLATION DETAILS.....	6

MAX. UNIT SIZE	DESIGN PRESSURE RATING	IMPACT RATING
111" x 63"	+/- 60 PSF	LARGE MISSILE IMPACT

**8200 PVC  
HORZ. SLIDER  
IMPACT**



GLASS TYPE A  
FIXED GLASS



GLASS TYPE B  
SASH GLASS

NO.	DESCRIPTION:	BY:	DATE:
B	UPDATED PER 2014 FBC	EMK	04/09/15
A	CHANGED EDGE DIST.	ADE	02/06/14

*LT*  
 4/11/2015

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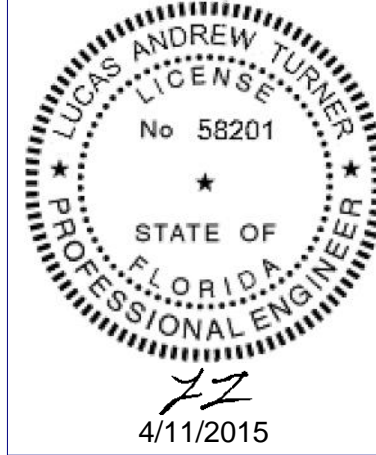
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**GLAZING DETAILS**

DRAWN BY: <b>TEF</b>	DATE: <b>10/11/13</b>
DWG #: <b>CWS-869</b>	REV.: <b>B</b>
SCALE: <b>1:1</b>	SHEET <b>2 OF 6</b>

**8200 PVC  
HORZ. SLIDER  
IMPACT**

NO.	DESCRIPTION	BY	DATE
B	UPDATED PER 2014 FBC	EMK	04/09/15
A	CHANGED EDGE DIST.	ADE	02/06/14

REVISIONS



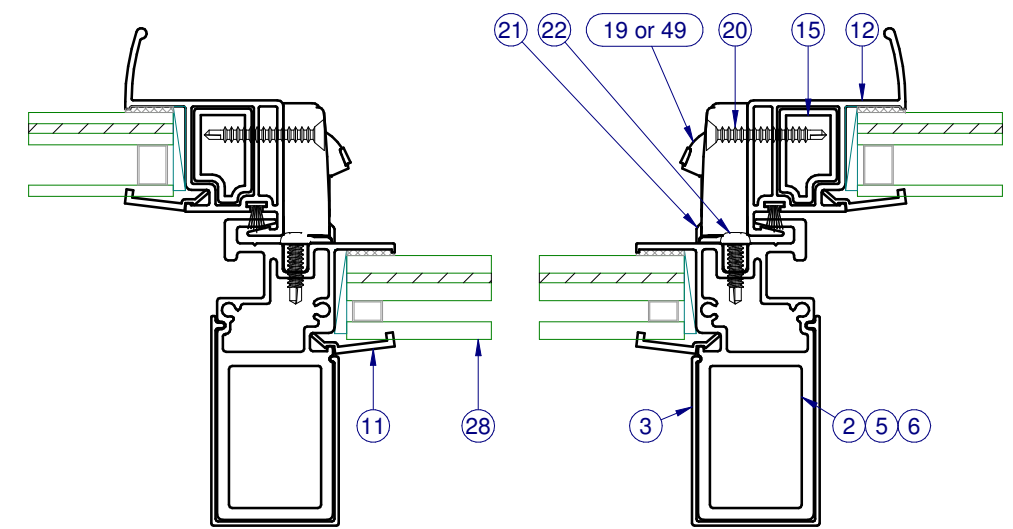
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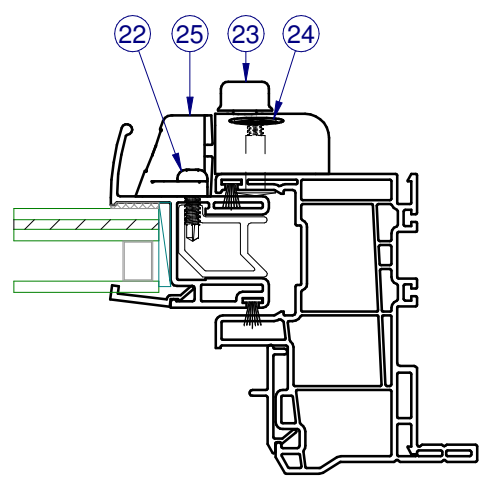
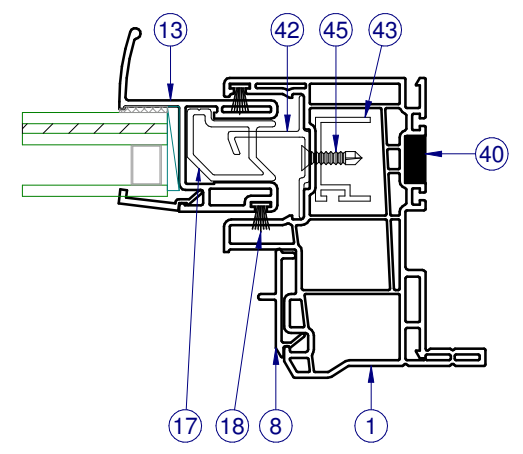
**SECTION VIEWS**

DRAWN BY: <b>TEF</b>	DATE: <b>10/11/13</b>
DWG #: <b>CWS-869</b>	REV.: <b>B</b>
SCALE: <b>1:2</b>	SHEET <b>3 OF 6</b>

INTERIOR

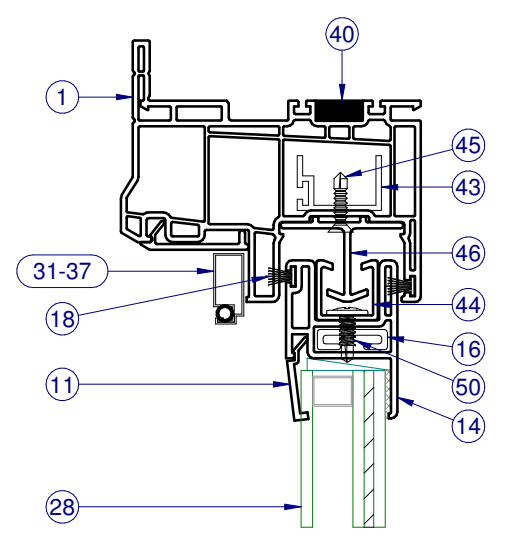


SECTION VIEW B-B



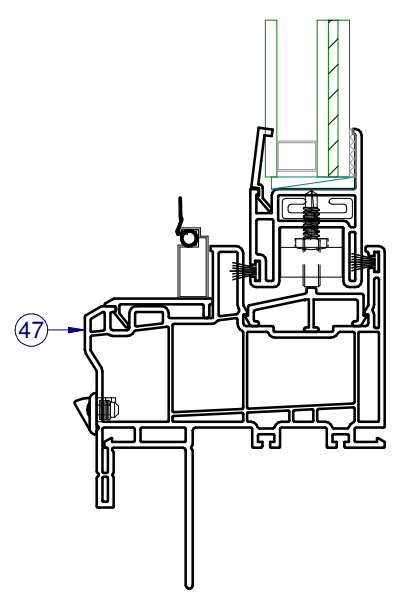
SECTION VIEW D-D  
JAMB ROTARY LOCKS

JAMB ROTARY LOCKS:  
- MAY BE SUBSTITUTED FOR JAMB  
IMPACT LOCKS ON FLANGE UNITS.  
- REQUIRED ON FIN UNITS.



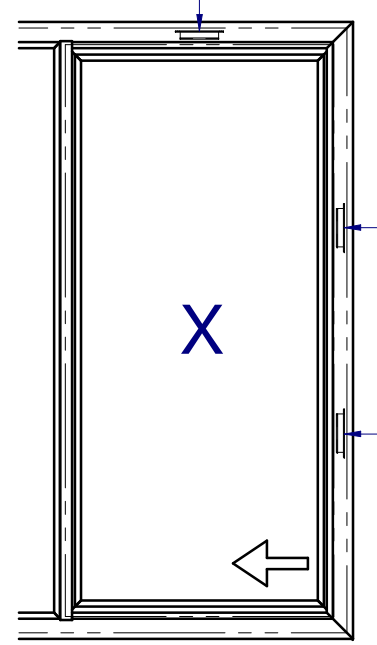
SECTION VIEW A-A

INTERIOR



SECTION VIEW C-C  
ALTERNATE FIN FRAME

HEAD IMPACT HOOK (TYP.)  
MIDSPAN OF SASHES  
(ITEMS 44 & 46)



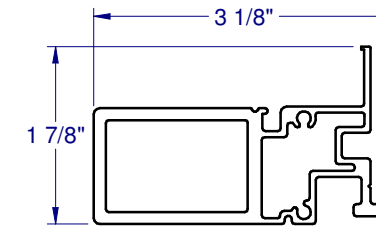
HEAD IMPACT HOOK AND  
JAMB IMPACT HOOK/ROTARY LOCK LOCATIONS  
1:20

JAMB IMPACT HOOKS (ITEM 42)  
OR ROTARY LOCKS (ITEM 23)  
LOCATED AT THIRD POINTS.

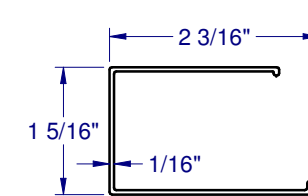
NOTES:  
- EITHER IMPACT HOOKS OR ROTARY LOCKS  
MUST BE USED IN BOTH JAMBS OF FLANGE UNITS.  
- ONLY ROTARY LOCKS MUST BE USED IN BOTH  
JAMBS OF FIN UNITS.

PARTS LIST				
ITEM	PART #	DESCRIPTION	VENDOR	MATERIAL
1	H-6049	Main Frame, SH/HS, Flange, PVC	Mikron	PVC
2	H-1681	Fixed Rail, Heavy Duty, Aluminum	Keymark	Alum
3	S-6077	Cover, HD Fixed Rail, PVC	Mikron	PVC
5	P-4638	#8 x 2 1/2" Ph Mod Truss Type A TEK	Ajax	Steel
6	P-3342	Seam Sealer, SM-5504	Schnee	Silicone
7	S-1776	Roller Track	Keymark	Alum
8	S-6013	Screen Adapter, Jamb, PVC	Mikron	PVC
9	S-6014	Screen Adapter, Head & Sill, PVC	Mikron	PVC
10	P-4479	Weep Cover w/ Flap	M&M	Nylon
11	S-6064	Glazing Bead	Mikron	PVC
12	H-6050	Sash Meeting Rail, PVC	Mikron	PVC
13	H-6051	Sash Pull Rail, PVC	Mikron	PVC
14	H-6052	Sash Top/Bot. Rail, PVC	Mikron	PVC
15	H-1497	Reinf. Sash Meet. Rail	Keymark	Alum
16	H-1498	Reinforcement, Sash, Side Rail	Keymark	Alum
17	H-1699	Reinforcement, Sash Pull Rail	Keymark	Alum
18	P-3429	Wstp., 0.270 x .187 back FinSeal, Gra	Ultrafab	
19	P-3783	Lock, Impact, PVC	Interlock	
20	P-4051	#8 x 1 1/4" Ph Flat Tek, Wht.	Fastenal	Steel
21	P-4069	Keeper, Impact, PVC	Interlock	
22	P-3539	#8 x 3/4" Square PH Tek, Wht.	Fastenal	Steel
23	P-4958	Rotary Lock	Interlock	
24	P-4633	8-32 x 1/2" Barrel Fastener	Interlock	
25	P-4952	Keeper, Rotary Lock	Interlock	
26	P-4779	Roller, Tandem	M&M	Nylon
27	P-3541	#8 x 1/2" Quad PH TEK 2 Zinc	Fastenal	Steel
28	GLASS	SEE SHEET 2	CARDINAL	GLASS
29		Purfect Glaze "H" or Sikaflex 552	Henkel/Sika	Silicone
30	P-3028	Set. Blk., 85 Dur., 1/8" x 7/8" x 2" Lg.	Frank Lowe	Rubber
31	P-3218	Screen Frame	Allmetal	RollForm
32	P-4754	Screen Corner Key	Allmetal	Nylon
33	P-4755	Screen Corner Key w/Safety Tab	Allmetal	Nylon
34	P-3029	Screen Pull tab	Summit	
35	P-3033	Screen Spring	Fla. Spring	SS
36	P-3228	Screen Spline	Dapa	
37	P-4772	Screen Cloth, Fiberglass		
40	P-3113	Screw Support, PVC	Team Plastics	Rubber
41	P-3752	Cap Plug, 1/2" Hole	M&M	Nylon
42	S-1577	Impact Hook, Frame, Jamb	Keymark	Alum
43	S-1112	Reinforcement, Head, Jamb	Keymark	Alum
44	S-2000	Impact Channel, Sash	Keymark	Alum
45	P-3748	#6 X 5/8 Ph FH TEK, Zinc, Painted	Ajax	Steel
46	S-1999	Impact Hook, Frame, Head	Keymark	Alum
47	H-6048	Main Frame, SH/HS, Fin, PVC	Mikron	PVC
48	S-6055	Roller Track, PVC, (Anti-lift)	Mikron	PVC
49	P-5250	Lock, Impact, PVC, w/Flipper	Interlock	
50	P-4730	#8 x 1/2" Ph Mod Truss TEK	Fastenal	Steel

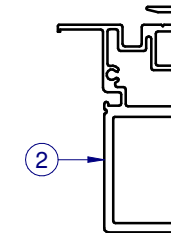
LINE ITEMS NOT USED:  
4, 38-39



HD MTG RAIL-1681



PVC HD MTG RAIL COVER - 6077



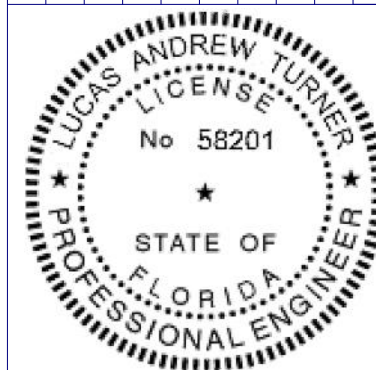
SCREW SUPPORT - 3113



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### 8200 PVC HORZ. SLIDER IMPACT

NO.	DESCRIPTION	BY	DATE
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A	CHANGED EDGE DIST.	ADE	02/06/14

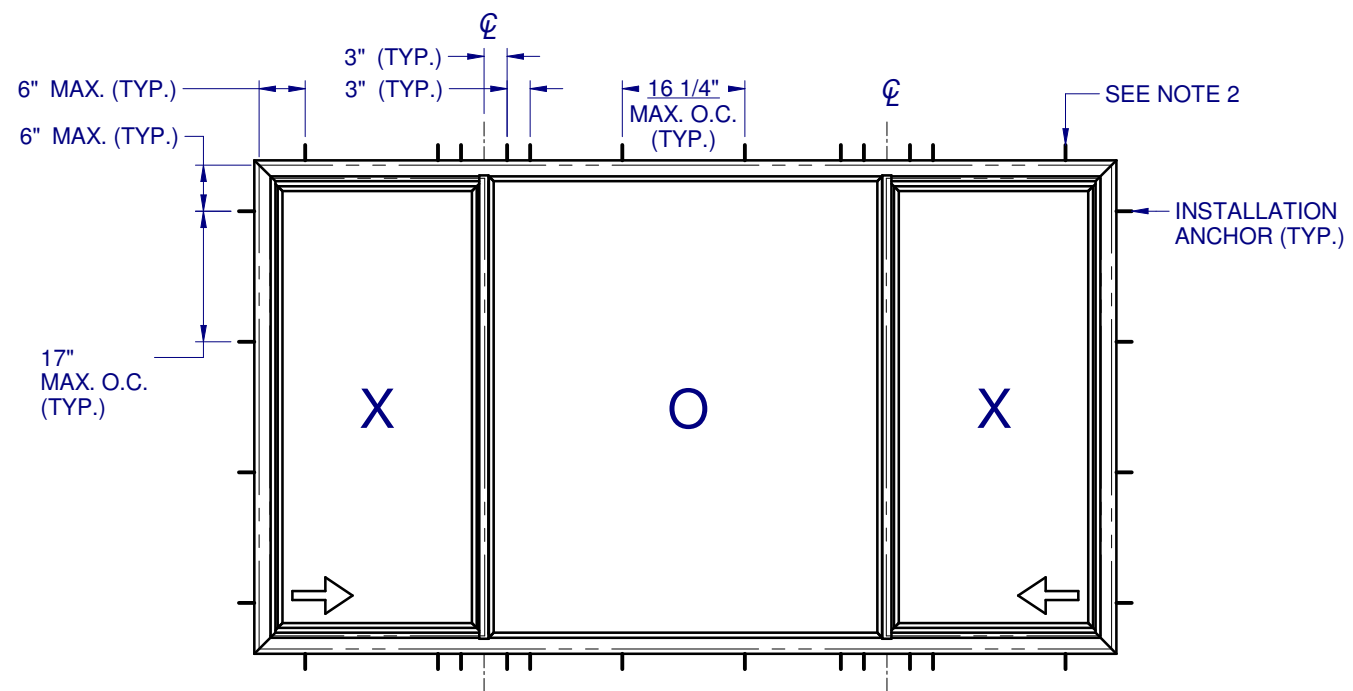


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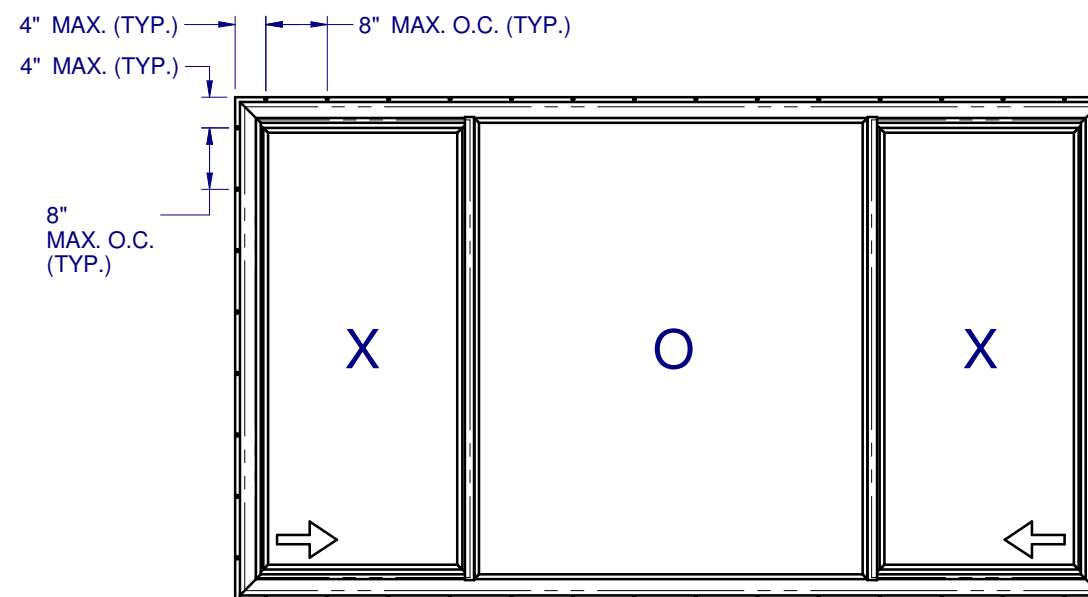
SHEET DESCRIPTION:

DRAWN BY: TEF	DATE: 10/11/13
DWG #: CWS-869	REV.: B
SCALE: 1:2	SHEET 4 OF 6

**8200 PVC  
HORZ. SLIDER  
IMPACT**



ANCHOR LAYOUT - (FLANGE)

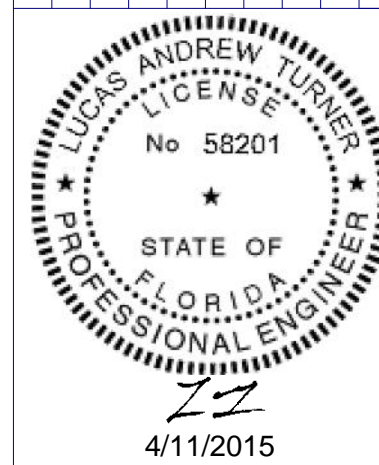


ANCHOR LAYOUT - (FIN)

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 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)

NO.:	DESCRIPTION:	BY:	DATE:
B	UPDATED PER 2014 FBC	EMK	04/09/15
A	CHANGED EDGE DIST.	ADE	02/06/14



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SHEET DESCRIPTION:  
**ANCHOR SCHEDULE AND NOTES**

DRAWN BY: TEF	DATE: 10/11/13
DWG #: CWS-869	REV.: B
SCALE: 1:25	SHEET 5 OF 6

**8200 PVC  
HORZ. SLIDER  
IMPACT**

NO.	DESCRIPTION	BY	DATE
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REVISIONS



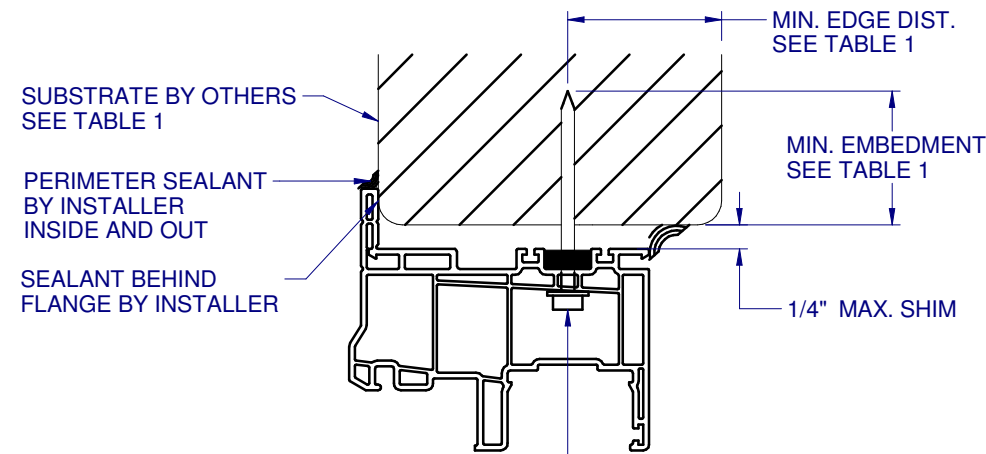
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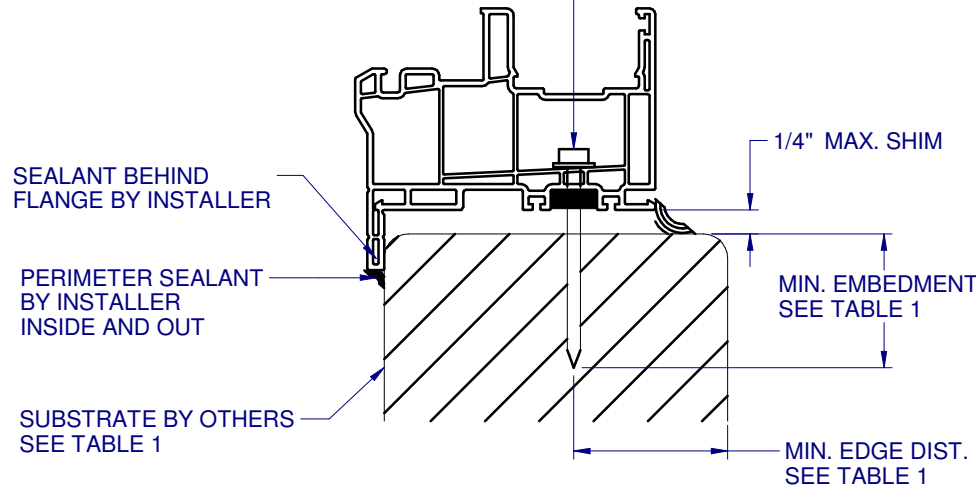
**INSTALLATION DETAILS**

DRAWN BY:	DATE:
TEF	10/11/13
DWG #:	REV.:
CWS-869	B
SCALE:	SHEET
1:2	6 OF 6

TYPICAL HEAD ANCHORAGE



INSTALLATION ANCHOR  
SEE TABLE 1

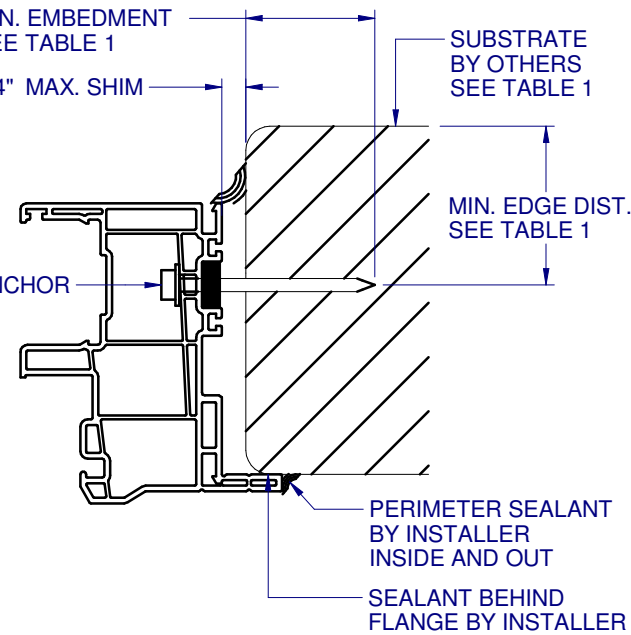


**A**  
6 VERTICAL SECTION  
TYPICAL SILL ANCHORAGE

MIN. EMBEDMENT  
SEE TABLE 1

1/4" MAX. SHIM

INSTALLATION ANCHOR  
SEE TABLE 1



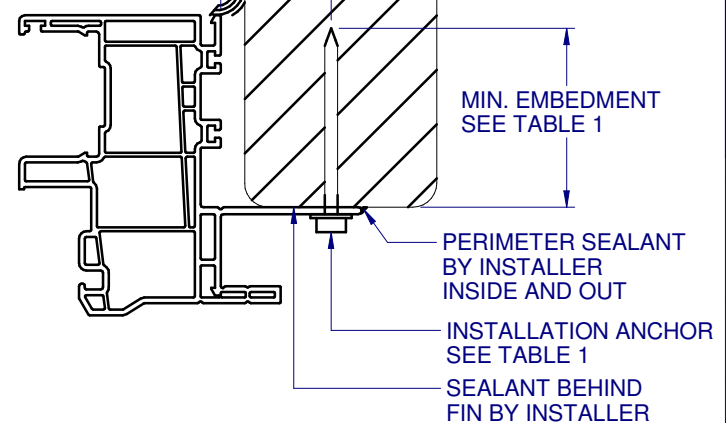
**B**  
6 HORIZONTAL SECTION  
TYPICAL JAMB ANCHORAGE

MIN. EDGE DIST.  
SEE TABLE 1

1/4" MAX. SHIM

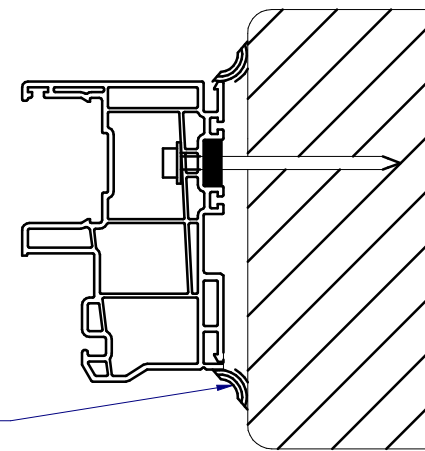
SUBSTRATE BY OTHERS  
SEE TABLE 1

MIN. EMBEDMENT  
SEE TABLE 1



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

PERIMETER SEALANT  
BY INSTALLER  
INSIDE AND OUT



**D**  
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**

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 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"	1/2"