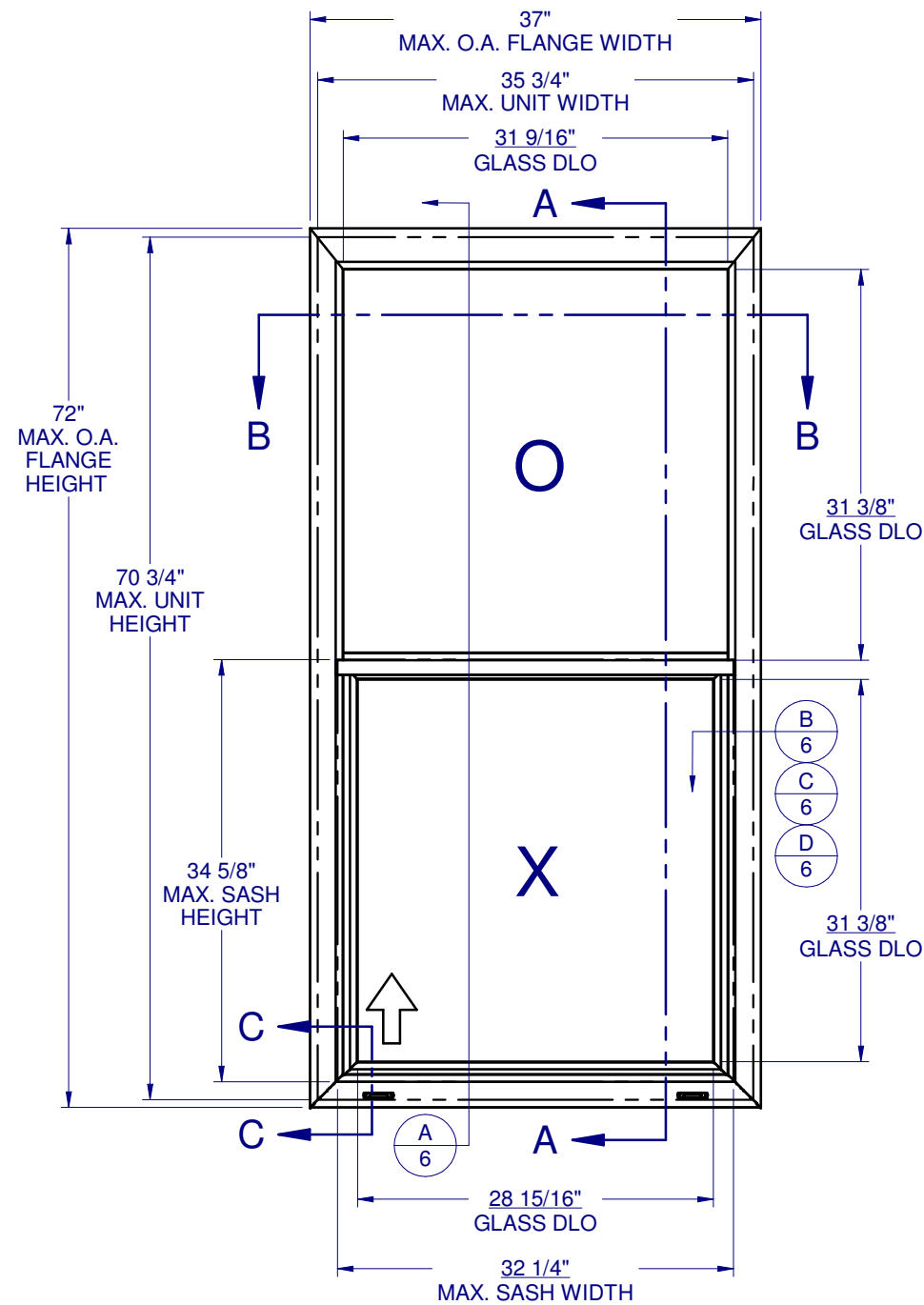


# SINGLE HUNG - LARGE MISSILE IMPACT



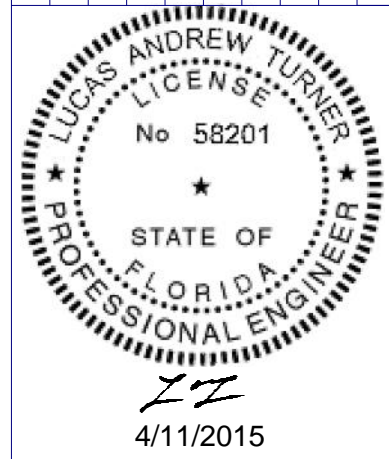
## GENERAL NOTES:

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-1300-04.  
-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  $C_d=1.6$  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. WEEP SLOTS = 1/4" x 1-1/4" LOCATED 4" FROM BOTH ENDS.

**Custom WINDOW SYSTEMS**  
1900 SW 44TH AVE.  
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## 8100 PVC SINGLE HUNG IMPACT

NO.:	DESCRIPTION:	BY:	DATE:
A	UPDATED PER 2014 FBC	EMK	04/03/15



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**

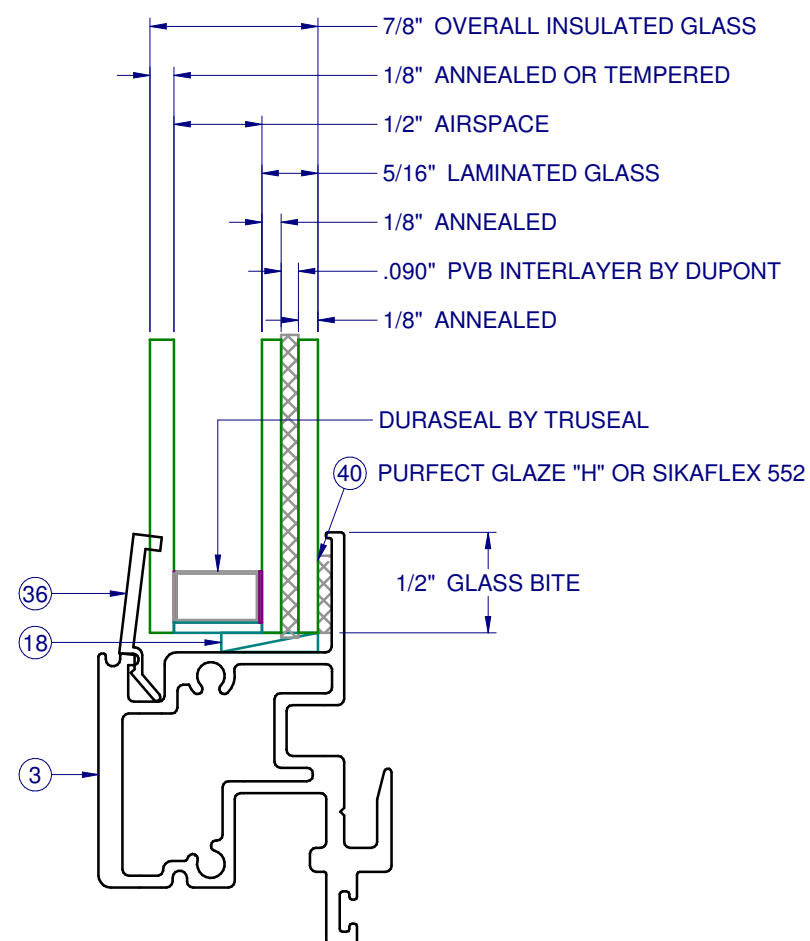
DRAWN BY: EMK	DATE: 09/18/14
DWG #: CWS-958	REV.: A
SCALE: 1:15	SHEET 1 OF 6

### TABLE OF CONTENTS

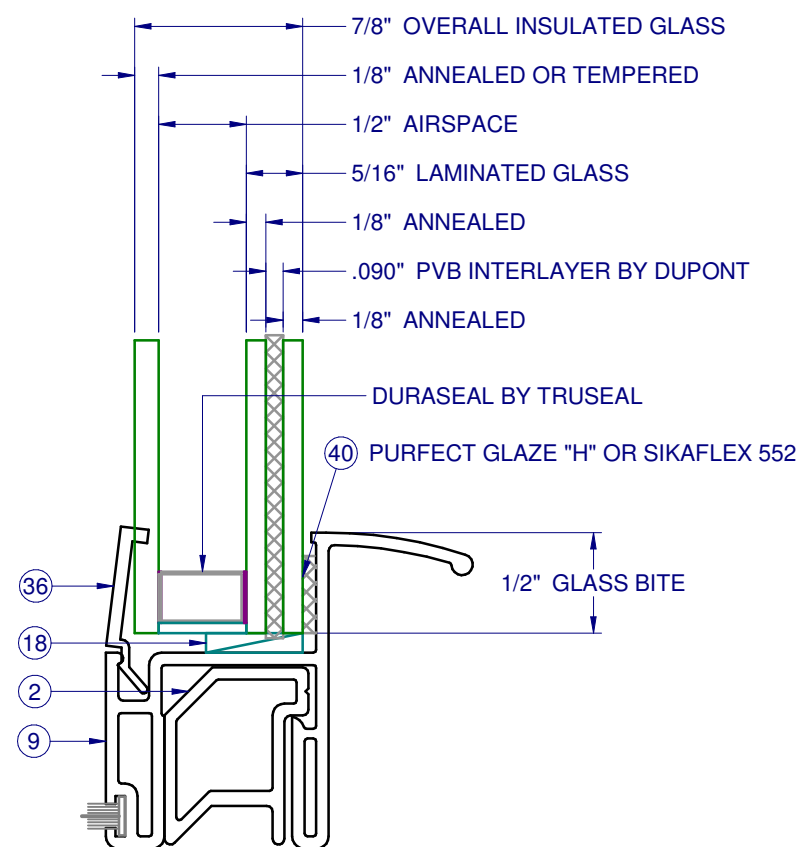
GENERAL NOTES & ELEVATIONS.....	1
GLAZING DETAILS.....	2
SECTION VIEWS & ALT. FRAME.....	3
EXTRUSIONS & B.O.M.....	4
ANCHOR SCHEDULE & NOTES.....	5
INSTALLATION DETAILS.....	6

FRAME TYPE	MAX. UNIT SIZE	DESIGN PRESSURE RATING	IMPACT RATING
FLANGE	35-3/4" x 70-3/4"	+/- 70 PSF	LARGE MISSILE IMPACT
FIN		+/- 65 PSF	

**8100 PVC  
SINGLE HUNG  
IMPACT**



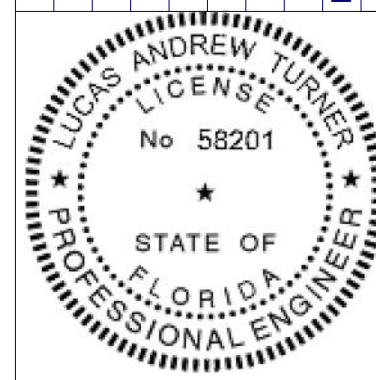
FIXED LITE



SASH LITE

NO.	DESCRIPTION	BY	DATE
A <td>UPDATED PER 2014 FBC <td>EMK <td>04/03/15</td> </td></td>	UPDATED PER 2014 FBC <td>EMK <td>04/03/15</td> </td>	EMK <td>04/03/15</td>	04/03/15

REVISIONS



ZZ  
4/11/2015

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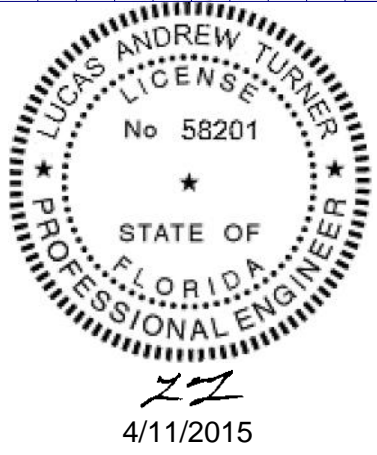
SHEET DESCRIPTION:  
**GLAZING DETAILS**

DRAWN BY: EMK	DATE: 09/18/14
DWG #: CWS-958	REV.: A
SCALE: 1:1	SHEET 2 OF 6

**8100 PVC  
SINGLE HUNG  
IMPACT**

NO.:	DESCRIPTION:	BY:	DATE:
A	UPDATED PER 2014 FBC	EMK	04/03/15

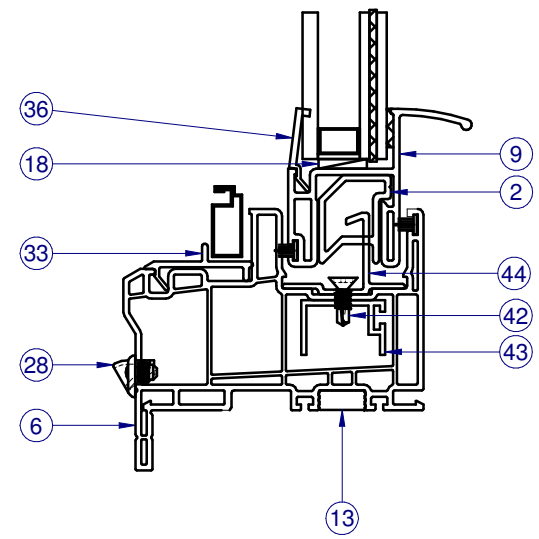
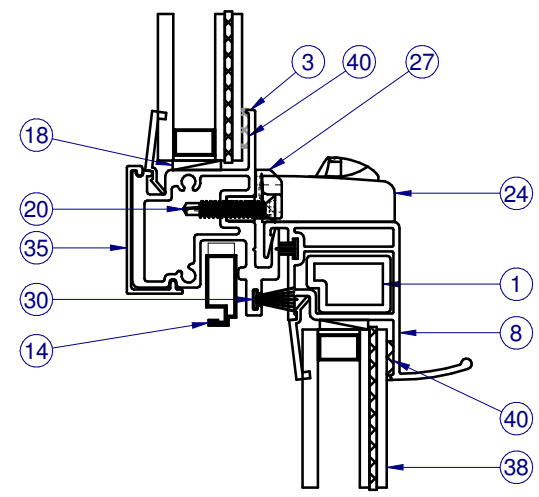
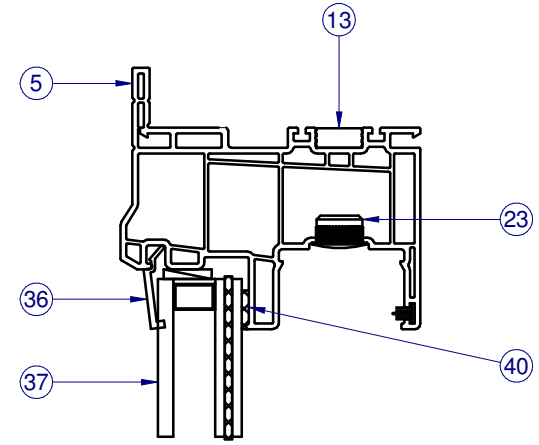
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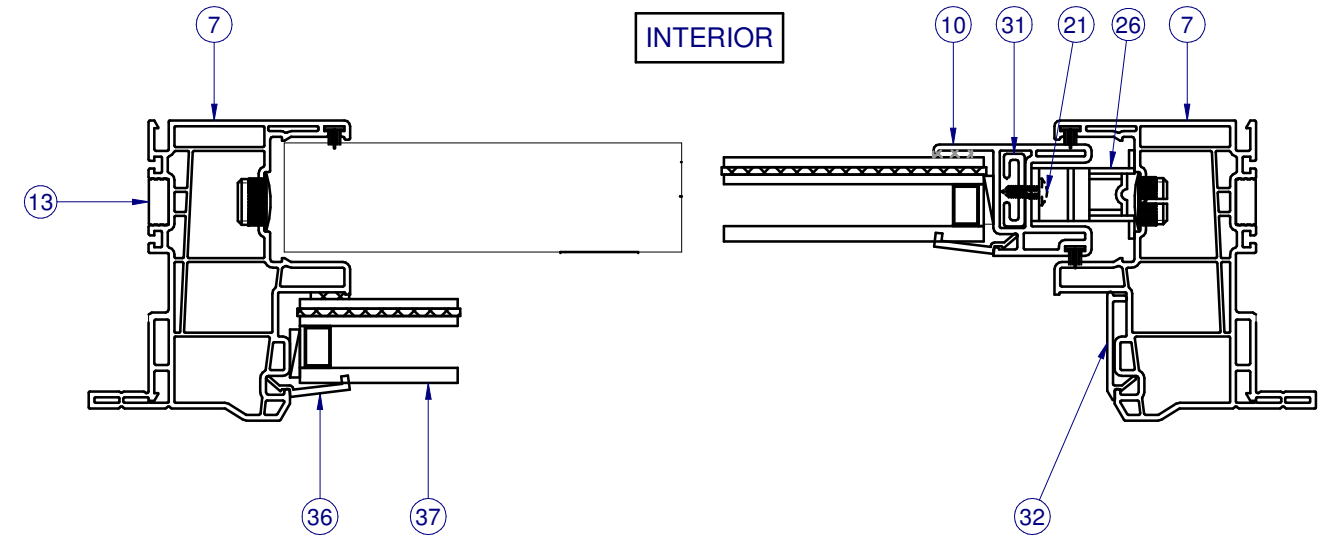
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**SECTION VIEWS**

DRAWN BY:	DATE:
EMK	09/18/14
DWG #:	REV.:
CWS-958	A
SCALE:	SHEET
1:2	3 OF 6



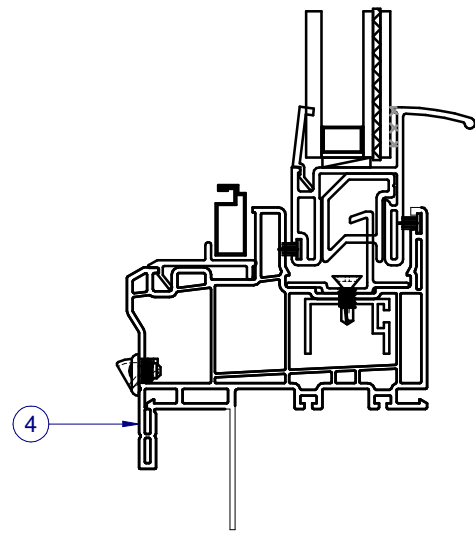
SECTION VIEW A-A

INTERIOR



SECTION VIEW B-B

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



SECTION VIEW C-C  
ALTERNATE FIN FRAME

**PARTS LIST**

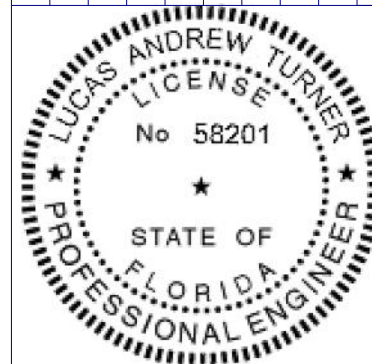
ITEM	PART #	DESCRIPTION	MATERIAL	VENDOR
1	H-1497	Reinforcement for STR	ALUMINUM	KEYMARK
2	H-1699	Reinforcement for SBR	ALUMINUM	KEYMARK
3	H-1836	Alum. Fixed Meet Rail	ALUMINUM	KEYMARK
4	H-6048	Main Frame, Fin, Single Hung	PVC	MIKRON
5	H-6049	Frame Head, Flg, Single Hung	PVC	MIKRON
6	H-6049	Frame Sill, Flg, Single Hung	PVC	MIKRON
7	H-6049	Frame Jamb, Flg, Single Hung	PVC	MIKRON
8	H-6050	Sash Top Rail	PVC	MIKRON
9	H-6051	Sash Bottom Rail	PVC	MIKRON
10	H-6052	Sash Side Rail	PVC	MIKRON
11	P-3029	Screen Pull tab	STEEL	HURLEY
12	P-3033	Screen Spring	STEEL	FLASCREEN
13	P-3113	Screw Support	RUBBER	TEAM PLASTIC
14	P-3218	Screen Frame	ALUMINUM	FLASCREEN
15	P-3228	Spline	VINYL FOAM	DAPA
16	P-3321	Screen Corner Key	NYLON	FLASCREEN
17	P-3342	Seam Sealer		SCHNEE
18	P-3352	Setting Block	RUBBER	FRANK LOWE
19	P-3429	Wsp., 0.270 x 0.187 back FinSeal	NYLON	ULTRAFAB
20	P-3539	#8 x 3/4" Ph PH TEK	STEEL	FASTENAL
21	P-3541	#8 x 3/8 Pan Phil Tek	STEEL	FASTENAL
22	P-3581	Screen Cloth	VINYL	WER
23	P-3752	Hole Plug, 1/2"	NYLON	M&M
24	P-3783	Lock, Impact		INTERLOCK
25	P-4051	#8 x 1 1/4" Ph Fh TEK, Wht	STEEL	FASTENAL
26	P-4056	Sash Cam	NYLON	M&M
27	P-4069	Keeper, Impact	ZAMAC	SULLIVAN
28	P-4479	Weep Housing & Flap Assm.	PVC	M&M
29	P-4638	#8 x 2 1/2 Phil Truss SMS	STEEL	FASTENAL
30	P-4959	Wsp., 0.420 x 0.187 back FinSeal	NYLON	ULTRAFAB
31	S-1498	Reinforcement for SSR	ALUMINUM	KEYMARK
32	S-6013	Screen Support	PVC	MIKRON
33	S-6014	Screen Adaptor	PVC	MIKRON
34	S-6025	Sash Stop	PVC	MIKRON
35	S-6063	Fixed Rail Cover	PVC	MIKRON
36	S-6064	Glazing Bead	PVC	MIKRON
37	FIXED	SEE SHEET 2	GLASS	CARDINAL
38	SASH	SEE SHEET 2	GLASS	CARDINAL
39		Block & Tackle Balance	STEEL	BSI
40		Purfect Glaze "H" or Sikaflex 552	SILICONE	HENKEL / SIKA
41		#10 x 2" Pan Phil sms	STEEL	FASTENAL
42	P-4657	#8 x 1 1/2" Phil Flat TEK	STEEL	FASTENAL
43	S-1112	Reinforcement, Hook	ALUMINUM	KEYMARK
44	S-1577	Frame Hook	ALUMINUM	KEYMARK



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**8100 PVC  
SINGLE HUNG  
IMPACT**

											04/03/15	DATE:
											EMK	BY:
											A	DESCRIPTION:
											UPDATED PER 2014 FBC	REVISIONS

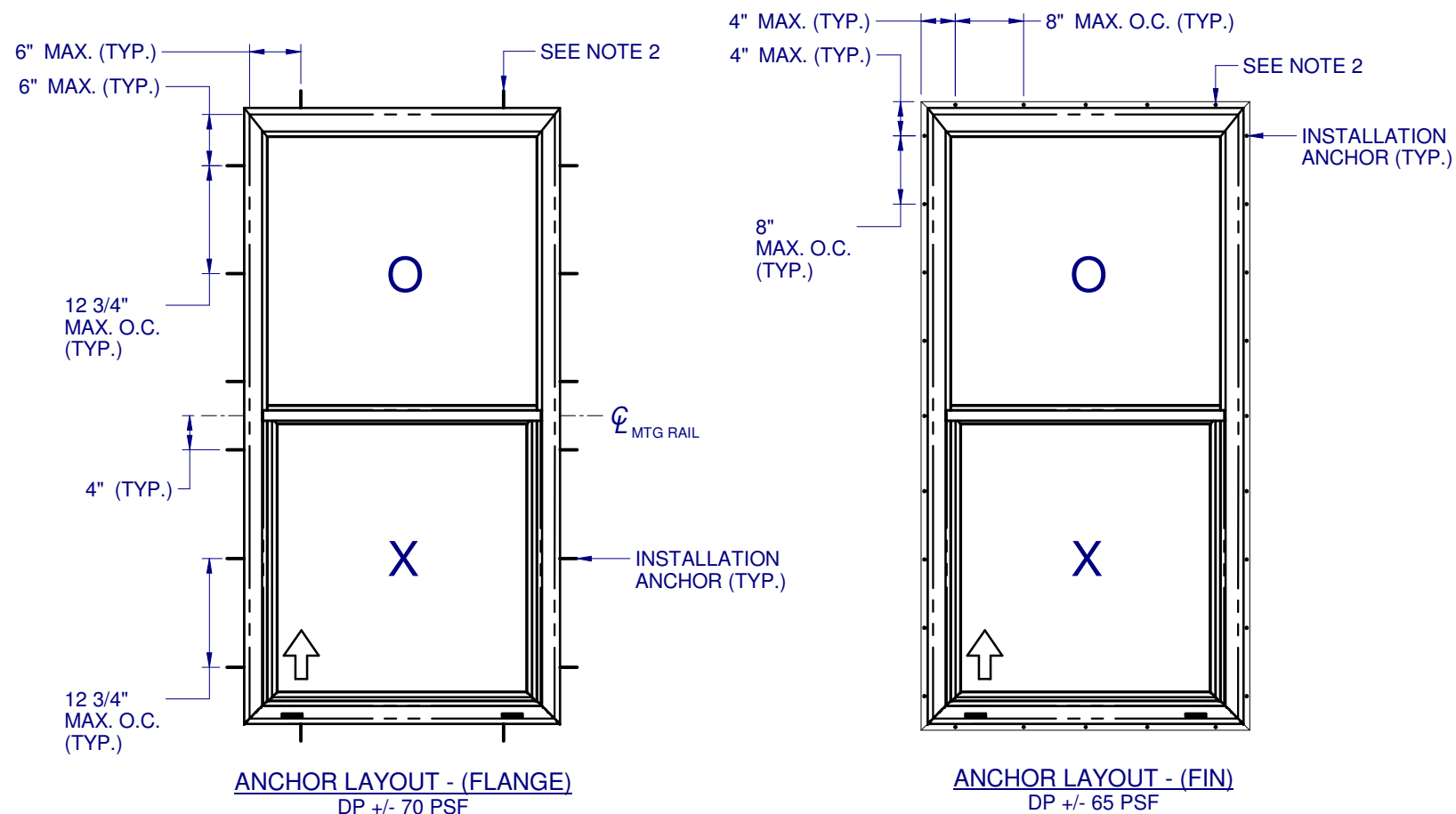


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SHEET DESCRIPTION:

DRAWN BY:	DATE:
EMK	09/18/14
DWG #:	REV.:
CWS-958	A
SCALE:	SHEET
1:2	4 OF 6

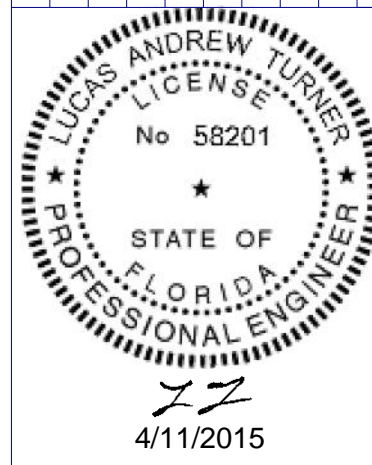
**8100 PVC  
SINGLE HUNG  
IMPACT**



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)

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A	UPDATED PER 2014 FBC	EMK	04/03/15



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SHEET DESCRIPTION:  
**ANCHOR SCHEDULE AND NOTES**

DRAWN BY: EMK	DATE: 09/18/14
DWG #: CWS-958	REV.: A
SCALE: 1:20	SHEET 5 OF 6



**8100 PVC  
SINGLE HUNG  
IMPACT**

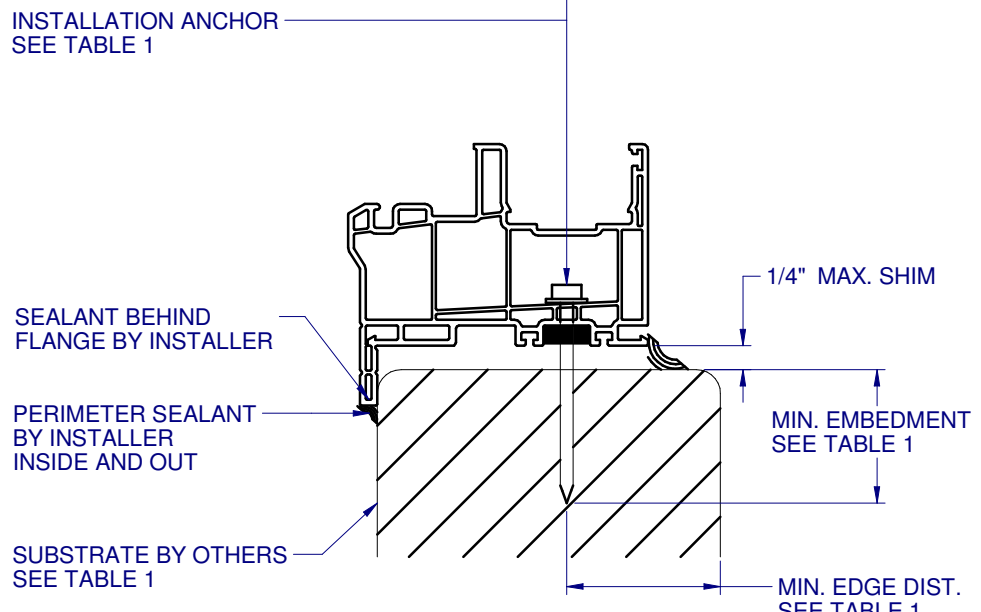
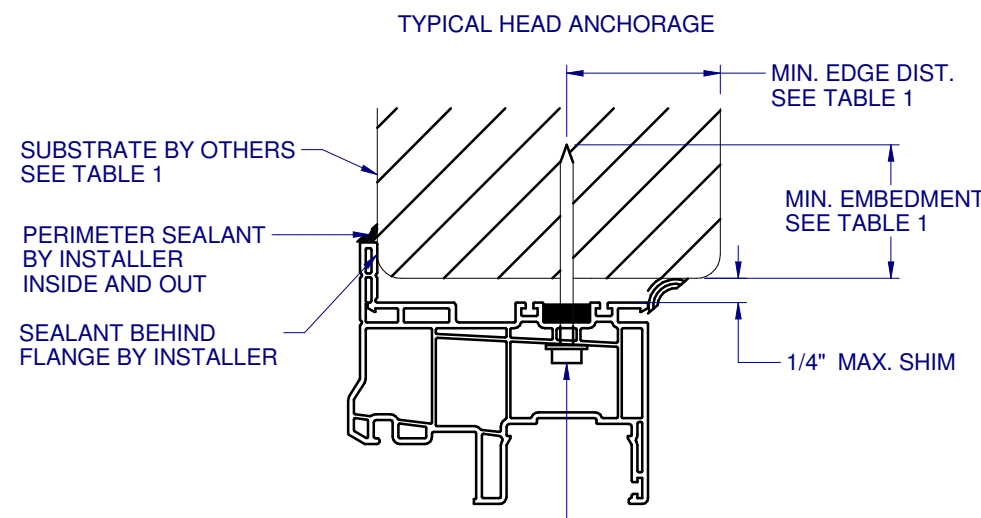
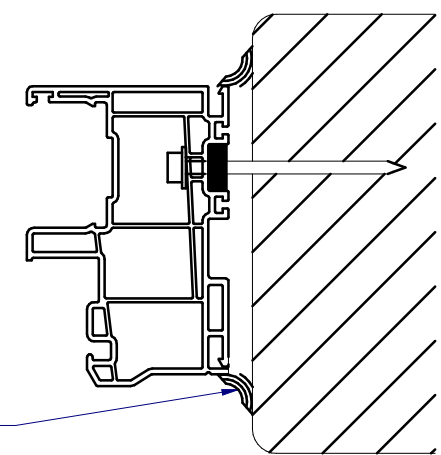
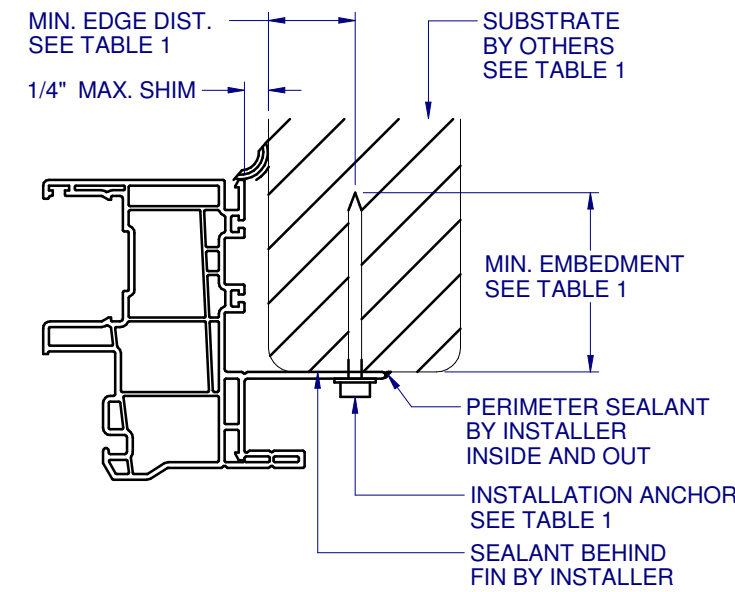
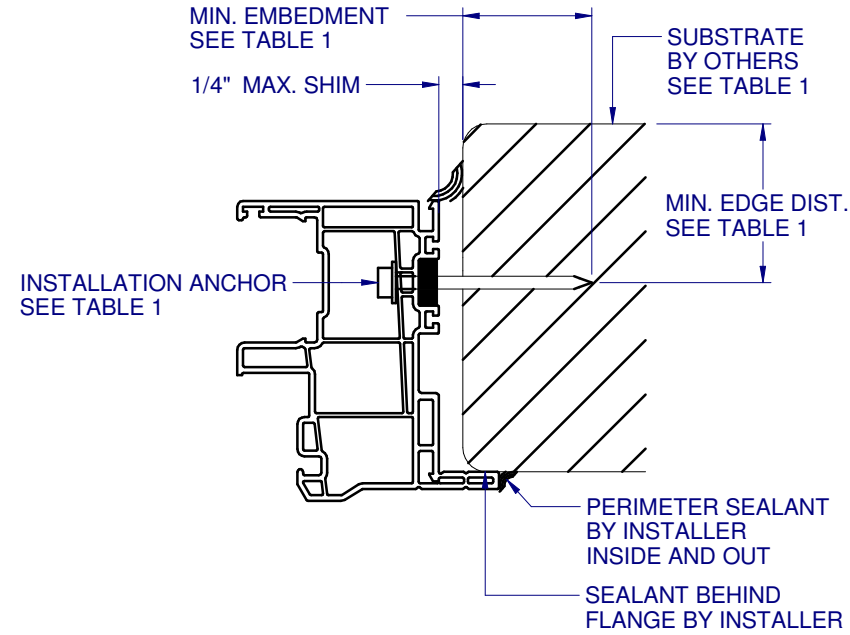


TABLE 1: APPROVED INSTALLATION FASTENERS				
FRAME TYPE	SUBSTRATE TYPE	ANCHOR TYPE	MIN. EMBEDMENT	MIN. EDGE DIST.
FLANGE	CONCRETE (2.0 KSI MIN.)	3/16" ITW TAPCON	1-1/2"	1-1/8"
FLANGE	HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.)	3/16" ITW TAPCON	1"	2"
FLANGE	CONCRETE (2.85 KSI MIN.)	3/16" ELCO ULTRACON	1"	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"	7/16"



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

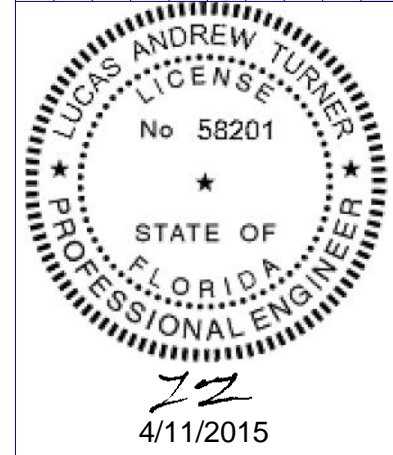
**C** HORIZONTAL SECTION  
**6** TYPICAL FIN ANCHORAGE  
HEAD AND SILL SIMILAR FOR FIN INSTALLATION

**D** HORIZONTAL SECTION  
**6** 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.

NO.	DESCRIPTION	BY	DATE
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SHEET DESCRIPTION:  
**INSTALLATION DETAILS**

DRAWN BY: <b>EMK</b>	DATE: <b>09/18/14</b>
DWG #: <b>CWS-958</b>	REV.: <b>A</b>
SCALE: <b>1:2</b>	<b>SHEET 6 OF 6</b>