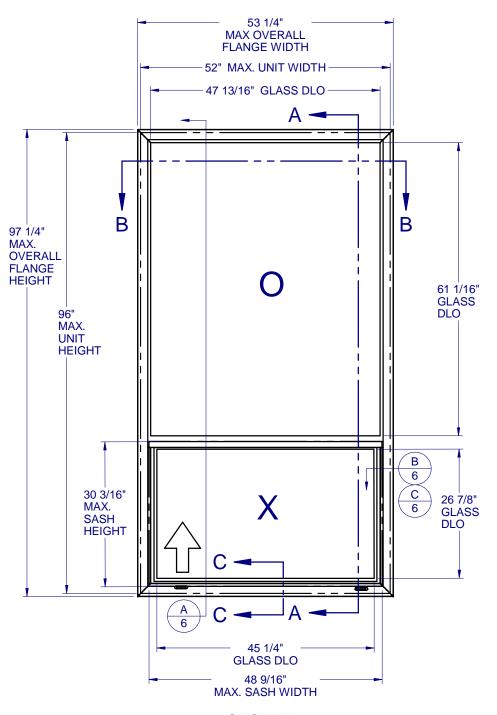
MODEL 8100 SYSTEM 3 SINGLE HUNG ORIEL - LARGE MISSILE IMPACT



SYSTEM 3 (CAR 138-563/138-1365)

TABLE OF CONTENTS

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GENERAL NOTES:

- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND INTERNATIONAL RESIDENTIAL CODE (IRC), WITH TEXAS REVISIONS EFFECTIVE JANUARY 1, 2008.
- 2. GLAZING OPTIONS: (SEE SHEET 2)
- 3. CONFIGURATIONS: "O/X".
- 4. 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.
- 5. PRODUCT APPROVED FOR IMPACT RESISTANCE. THE IMPACT SWEEP 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.
- 6. ALL FRAMES AND VENTS FULLY WELDED. SMALL JOINT SEAM SEALANT USED AT FIXED MEETING RAIL AND JAMB.
- 7. SERIES / MODEL DESIGNATION SH-8100.
- 8. THE DESIGNATION X AND O STAND FOR THE FOLLOWING: X = OPERABLE SASH, O = FIXED SASH
- 9. SECTION CALLOUTS APPLY TO ALL ELEVATIONS IN A SIMILAR LOCATION.
- 10. EXTERNAL WEEP SLOT = 1/4" x 1-1/4" LOCATED 4" FROM BOTH ENDS.



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8100 PVC SINGLE HUNG IMPACT

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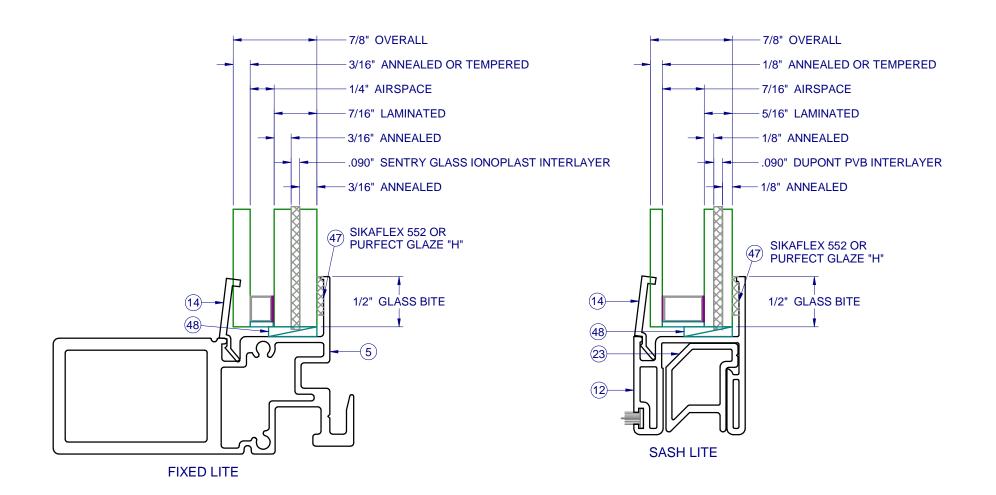
9/29/2016

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SHEET DESCRIPTION:

GENERAL NOTES AND ELEVATIONS

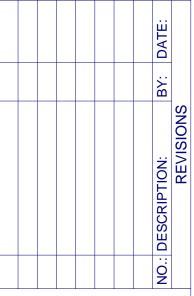
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EMK	12/16/15
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8100 PVC SINGLE HUNG IMPACT





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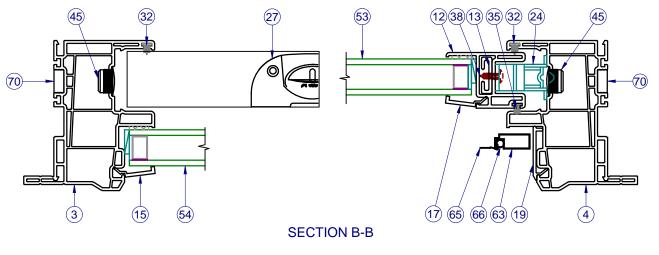
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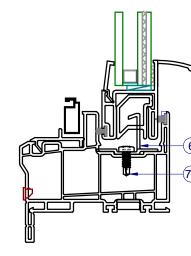
GLAZING DETAILS

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DWG #:	REV.:
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SCALE:	SHEET
1:1	2 OF 6

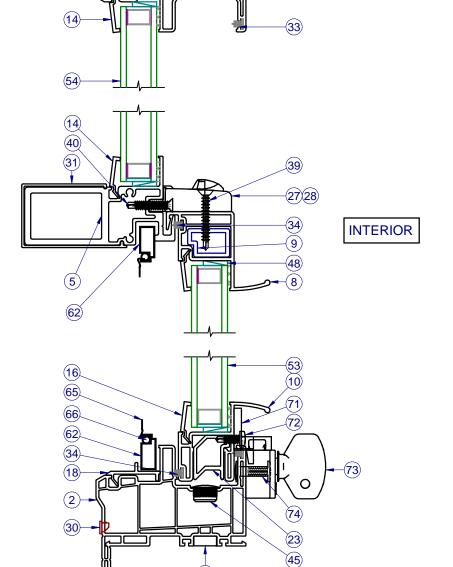
INTERIOR



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



SECTION C-C ALTERNATE IMPACT HOOK



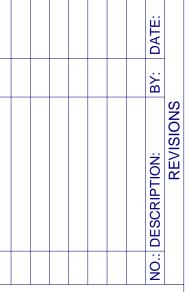
NOTE: ITEMS NOT SHOWN FOR CLARITY: 20, 25-26, 31, 36-37, 44, 51-52, 55-56, 64, 67-68

SECTION A-A



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8100 PVC SINGLE HUNG IMPACT





9/29/2016

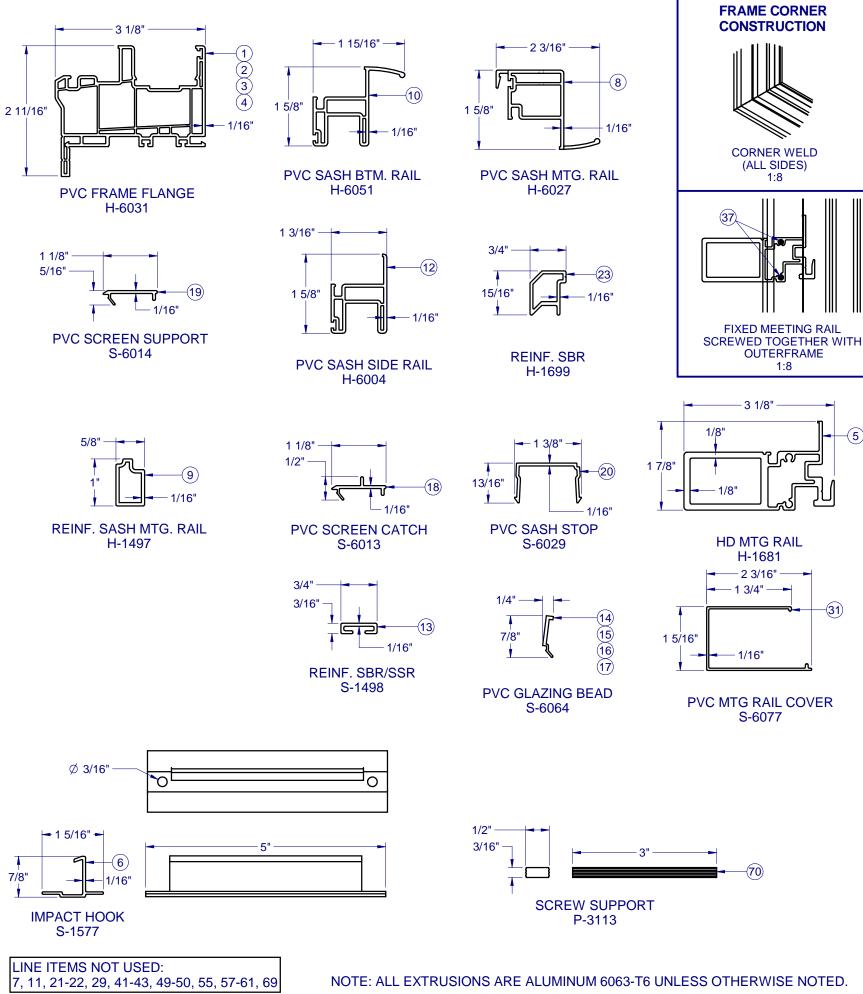
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SHEET DESCRIPTION:

SECTION VIEWS

DRAWN BY:	DATE:
EMK	12/16/15
DWG #:	REV.:
TDI-295	-
SCALE:	SHEET
1:2	3 OF 6

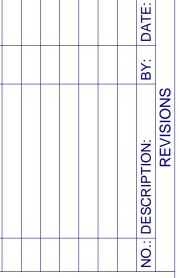
ltem	Part #	PARTS LIST Description	Vendor	Material
1	H-6031	Main Fr., SH, w/Flg., PVC, Head	Mikron	Vinyl
2	H-6031	Main Fr., SH, w/Flg., PVC, Sill	Mikron	Vinyl
3	H-6031	Main Fr., SH, w/Flg., PVC, L. Jb.	Mikron	Vinyl
4	H-6031	Main Fr., SH, w/Flg., PVC, R. Jb.	Mikron	Vinyl
5	H-1681	Heavy Duty, Meet. Rail, Fxd. Aluminum	Keymark	Alum
6	S-1577	Impact Hook	Keymark	Alum
8	H-6027	Sash Meet. Rail, PVC	Mikron	Vinyl
9	H-1497	Reinf. Sash Meet. Rail	Keymark	Alum
10	H-6028	Sash Bottom Rail, PVC	Mikron	Vinyl
12	H-6004	Sash Side/Top/Bot. Rail	Mikron	Vinyl
13	S-1498	Reinf. S.B.R./S.S.R		
14	S-6064	Glz. Bd., 7/8",Fxd., Horiz.	Mikron	Vinyl
15	S-6064	Glz. Bd., 7/8",Fxd., Vert.	Mikron	Vinyl
16	S-6064	Glz. Bd., 7/8",Sash, Horiz.	Mikron	Vinyl
17	S-6064	Glz. Bd., 7/8",Sash, Vert.	Mikron	Vinyl
18	S-6013	Scrn. Adapt., w/Nib, PVC, Horiz.	Mikron	Vinyl
19	S-6014	Scrn. Adapt., PVC, Vert.	Mikron	Vinyl
20	S-6029	Sash Stop / Filler, PVC, Vert.	Mikron	Vinyl
23	H-1699	Reinforcement, SBR	Keymark	Alum
24	P-2190	Balance	BSI	
25	P-3059	Sash Cam, PVC	BSI	Plastic
26	P-3046	Take Out Clip	BSI	SS
27	P-3783	Lock, Impact, PVC	Interlock	
28	P-4069	Keeper, Impact, PVC	Interlock	Zamac
30	P-3215	Weep Cover w/ Flap	Gaer	Plastic
31	S-6077	HD Fixed Meeting Rail Cover	Mikron	Vinyl
32	P-3429	Wstp., 0.270 x .187 back FinSeal, Gray	Ultrafab	
33	P-3429	Wstp., 0.270 x .187 back FinSeal, Gray	Ultrafab	
34	P-3429	Wstp., 0.270 x .187 back FinSeal, Gray	Ultrafab	
35	P-3429	Wstp., 0.270 x .187 back FinSeal, Gray	Ultrafab	
36	P-3429	Wstp., 0.270 x .187 back FinSeal, Gray	Ultrafab	
37	P-4638	#8 x 2-1/2 PH Mod. Truss, Type A, TEK 2	Fastenal	Steel
38	P-3768	#8 x 0.625 Ph PH SMS	Hub City	Steel
39	P-4051W	#8 x 1.250 Ph FH TEK, Wht.	Hub City	Steel
40	P-4264W	#8 x 3/4 FH PH w/#6 Head, TEK, Wht.	Hub City	Steel
44	P-3342	Seam Sealer, SM-5504	Schnee	
45	P-3752	Cap Plug, 1/2" Hole	M&M	Nylon
47	P-3438	Sikaflex 552 or Purfect Glaze "H"	Sika/Henkel	-
48	P-3352	Set. Blk., 85 Dur., 1/8" x 5/8" x 2" Lg.	F. Lowe	Rubber
51	P-3881	Temporary Lbl. (NFRC/DP)		
52	P-3613	CWS Lbl. (logo)	Pro Label	
53	Sash	See Glazing Chart (pg. 3)		
54	Fixed	See Glazing Chart (pg. 3)		
56	P-3281	Spacer	Duraseal	
62	P-3218	Screen Frame, Horiz.	Allmetal	Alum
63	P-3218	Screen Frame, Vert.	Allmetal	Alum
64	P-3321	Screen Frame Corner Key	Allmetal	Plastic
65	P-3581	Screen Cloth, 18 x 16 Fiberglass	Bettervue	Fiberglass
66	P-3228	Screen Spline, .155 Dia., Blk.	Dapa	Vinyl
67	P-3029	Screen Pull Tab	Summit	Alum
68	P-3033	Screen Spring, SS	Fl. Screen	SS
70	P-3113	Screw Support for PVC	T. Plastics	Nylon
71	P-3118	Keeper, Sweep Lock	Sullivan	Steel
72	P-3541	#8 x 1/2", Pan Head, TEK	Fastenal	Zinc
73	P-4632	Sweep Lock	Sullivan	Zinc
74	P-4633	Barrel Fastener	Fastenal	Steel





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8100 PVC SINGLE HUNG IMPACT





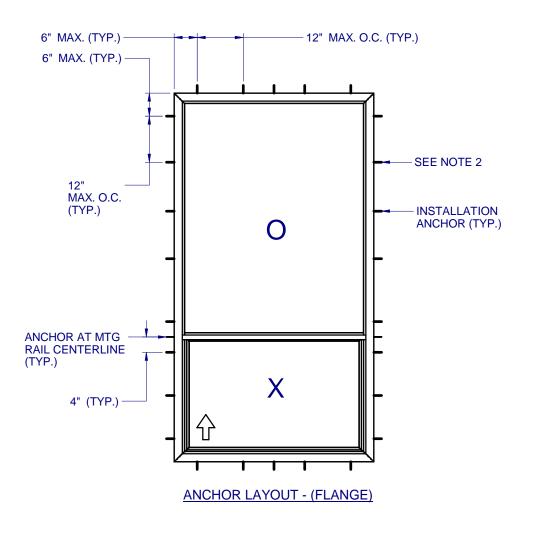
9/29/2016

LUCAS A. TURNER, P.E. TX PE # 115094 1239 JABARA AVE. NORTH PORT, FL 34288 PH. 941-380-1574

SHEET DESCRIPTION:

BOM AND EXTRUSIONS

DRAWN BY:	DATE:
EMK	12/16/15
DWG #:	REV.:
TDI-295	-
SCALE:	SHEET
1:2	4 OF 6



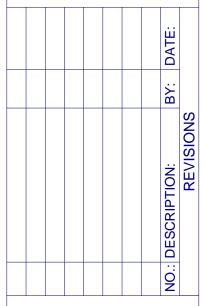
NOTES:

- 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)



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8100 PVC SINGLE HUNG IMPACT





9/29/2016

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SHEET DESCRIPTION:

ANCHOR SCHEDULE AND NOTES

DRAWN BY:	DATE:
EMK	12/16/15
DWG #:	REV.:
TDI-295	-
SCALE:	SHEET
1:25	5 OF 6

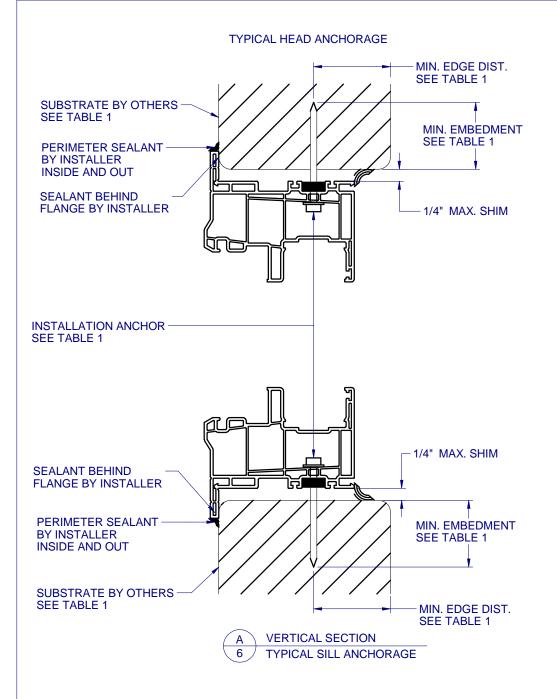
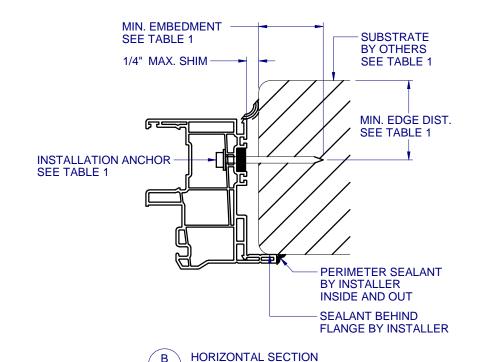
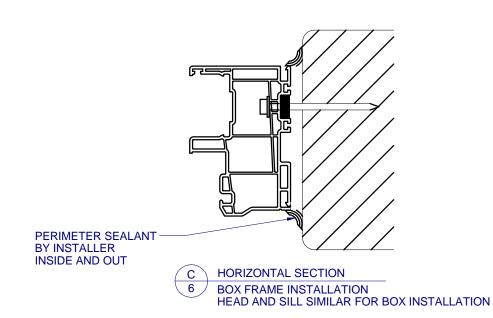


TABLE 1: APP	ROVED INSTALLATION FASTENE	RS	
SUBSTRATE TYPE	ANCHOR TYPE	MIN. EMBEDMENT	MIN. EDGE DIST.
CONCRETE (2.0 KSI MIN.)	3/16" ITW TAPCON	1-1/2"	1-1/8"
HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.)	3/16" ITW TAPCON	1"	2"
CONCRETE (2.85 KSI MIN.)	3/16" ELCO ULTRACON	1"	1"
GROUT-FILLED CMU (ASTM C-90)	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"



TYPICAL JAMB ANCHORAGE



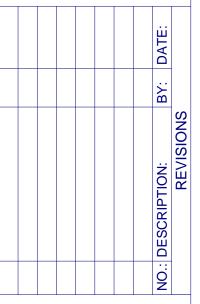
FLANGE REMOVAL NOTE: PARTIALLY OR FULLY REMOVING THE FLANGE, UP TO AND INCLUDING A BOX-FRAME APPLICATION IS ACCEPTABLE PROVIDED:

- 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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8100 PVC SINGLE HUNG IMPACT





LUCAS A. TURNER, P.E. TX PE # 115094 1239 JABARA AVE. NORTH PORT, FL 34288

PH. 941-380-1574

9/29/2016

SHEET DESCRIPTION:

INSTALLATION DETAILS

	DRAWN BY:	DATE:
•	EMK	12/16/15
	DWG #:	REV.:
	TDI-295	-
	SCALE:	SHEET
	1:2	6 OF 6