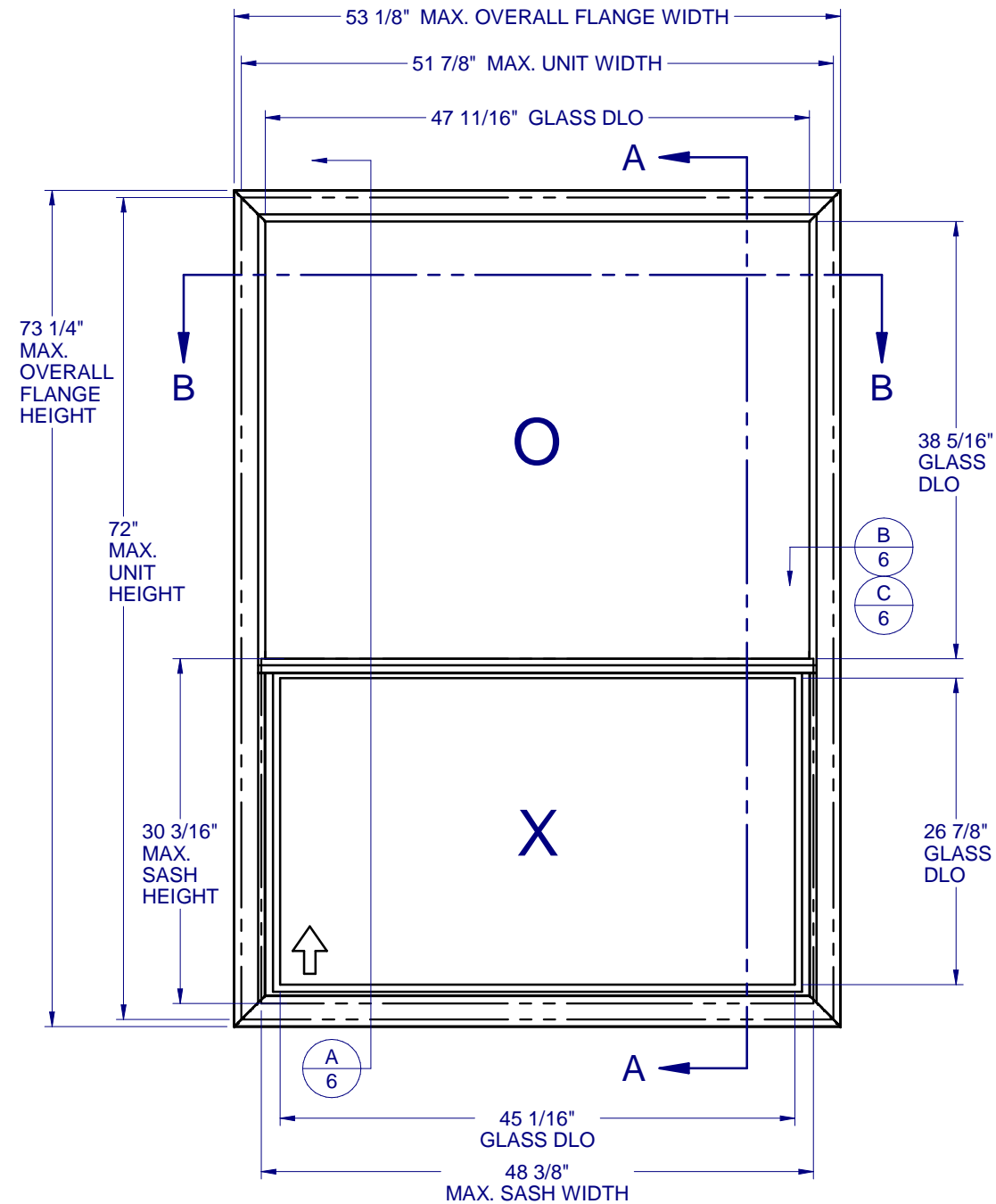


# MODEL 8100 SYSTEM 4 SINGLE HUNG ORIEL - LARGE MISSILE IMPACT



SYSTEM 4  
(CAR 138-507/138-1031)

### TABLE OF CONTENTS

GENERAL NOTES & ELEVATIONS.....	1
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EXTRUSIONS & B.O.M.....	4
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### GENERAL NOTES:

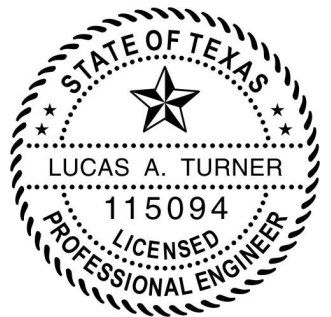
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND INTERNATIONAL RESIDENTIAL CODE (IRC), WITH TEXAS REVISIONS EFFECTIVE JANUARY 1, 2008.
2. GLAZING OPTIONS: (SEE SHEET 2)
3. CONFIGURATIONS: "O/X".
4. ANCHORAGE: THE 33 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. SHUTTERS ARE NOT REQUIRED.
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

NO.:	DESCRIPTION:	BY:	DATE:



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PH. 941-380-1574

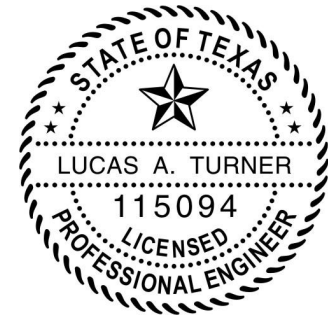
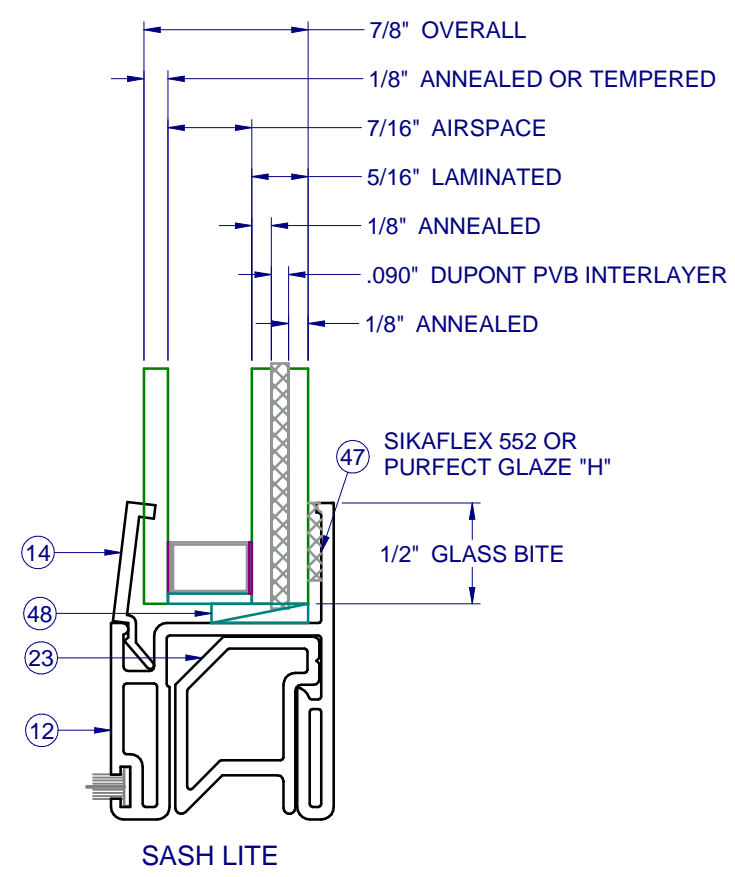
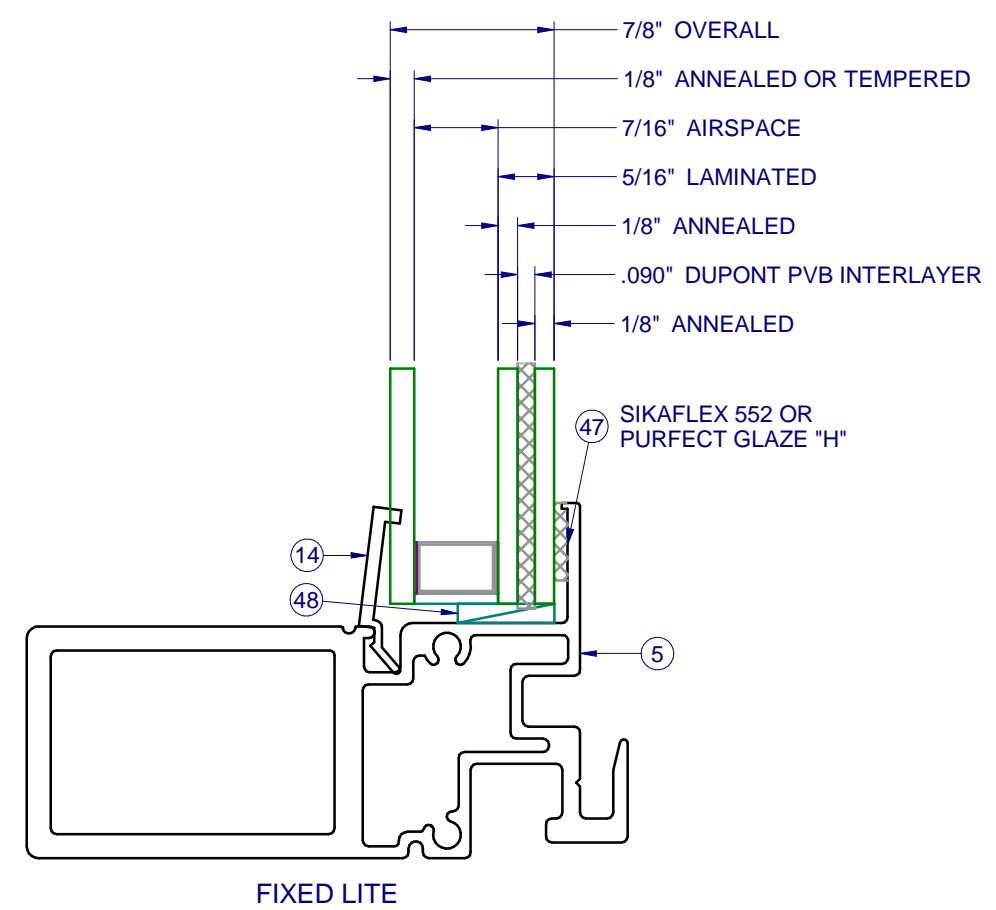
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### GENERAL NOTES AND ELEVATIONS

DRAWN BY: EMK	DATE: 11/12/15
DWG #: TDI-882	REV.: -
SCALE: 1:15	SHEET 1 OF 6

**8100 PVC  
SINGLE HUNG  
IMPACT**

NO.:	DESCRIPTION:	BY:	DATE:



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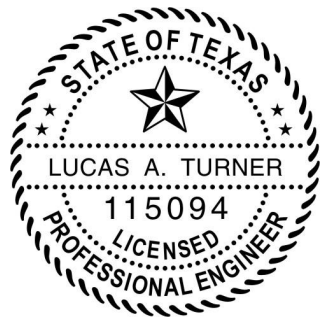
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SHEET DESCRIPTION:  
**GLAZING DETAILS**

DRAWN BY: <b>EMK</b>	DATE: <b>11/12/15</b>
DWG #: <b>TDI-882</b>	REV.: <b>-</b>
SCALE: <b>1:1</b>	<b>SHEET 2 OF 6</b>

**8100 PVC  
SINGLE HUNG  
IMPACT**

NO.:	DESCRIPTION:	BY:	DATE:



22  
9/29/2016

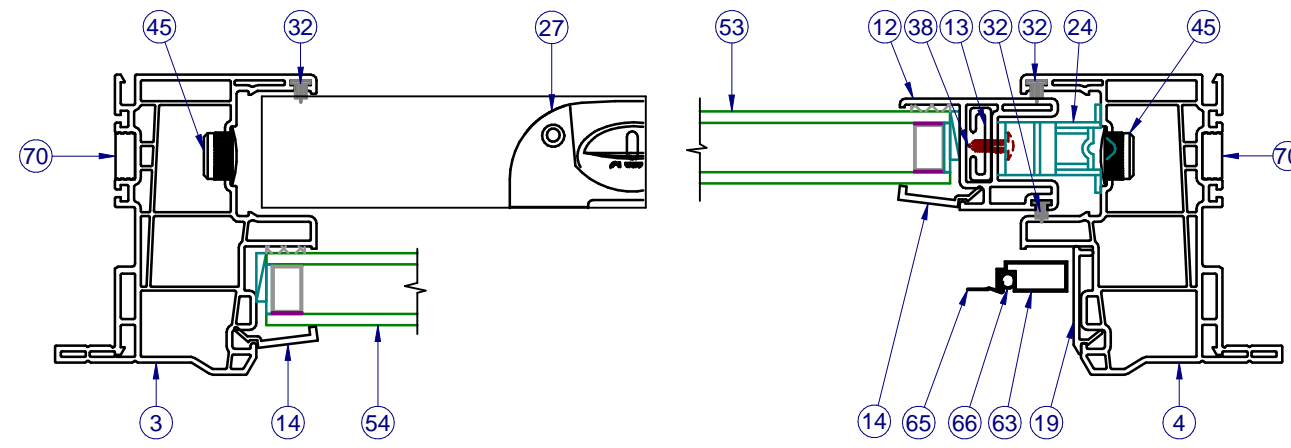
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PH. 941-380-1574

SHEET DESCRIPTION:

**SECTION VIEWS**

DRAWN BY: EMK	DATE: 11/12/15
DWG #: TDI-882	REV.: -
SCALE: 1:2	SHEET 3 OF 6

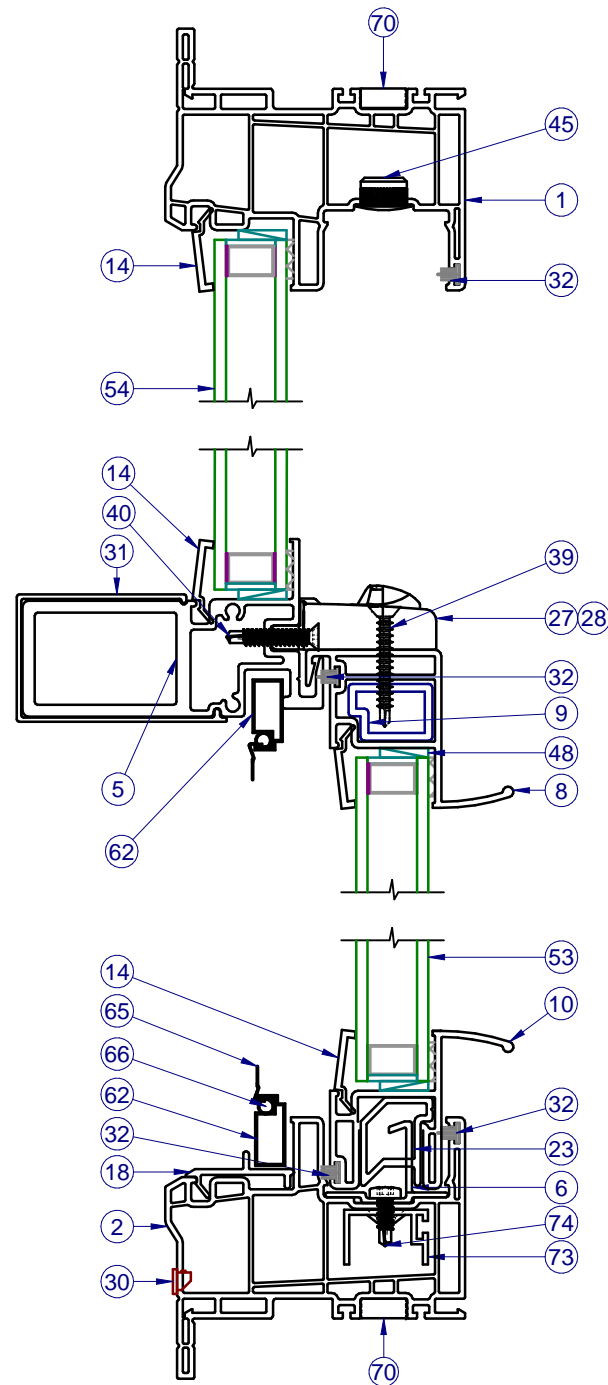
INTERIOR



SECTION B-B

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

INTERIOR



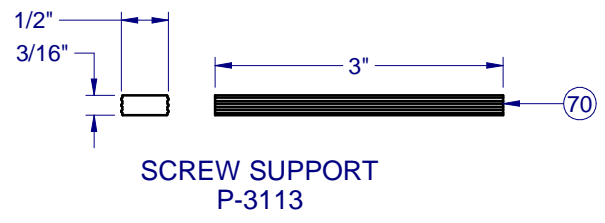
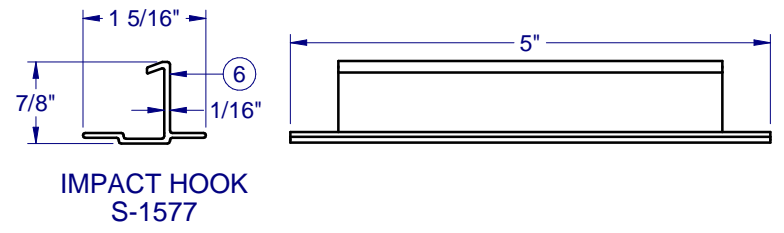
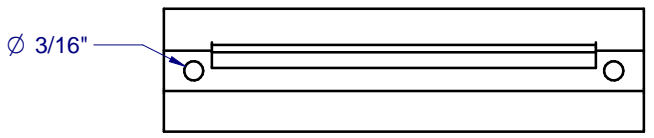
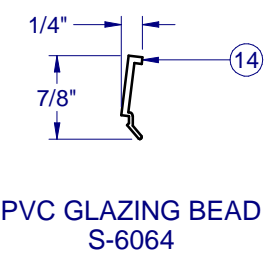
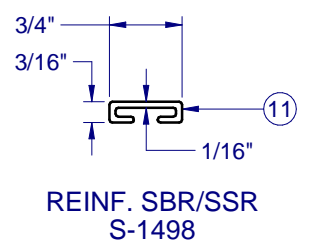
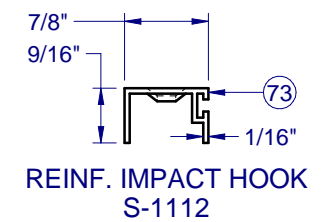
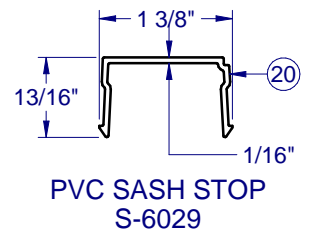
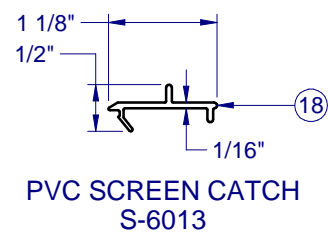
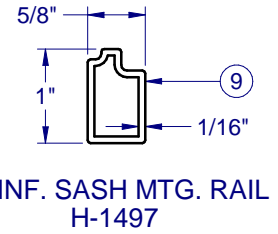
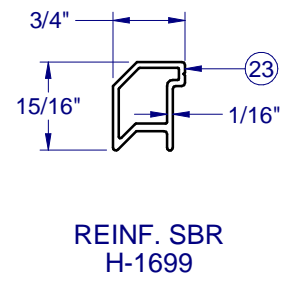
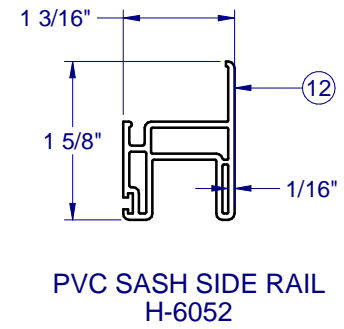
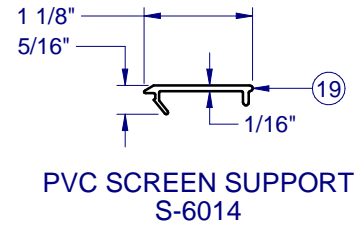
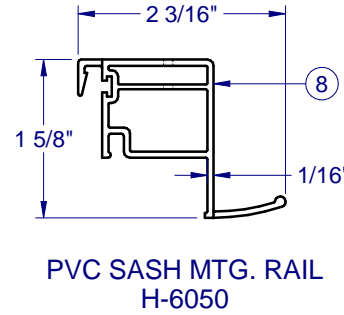
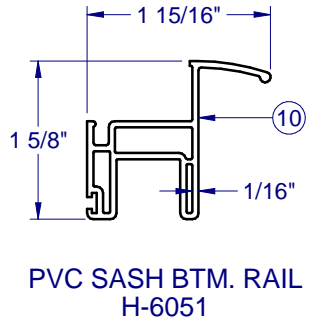
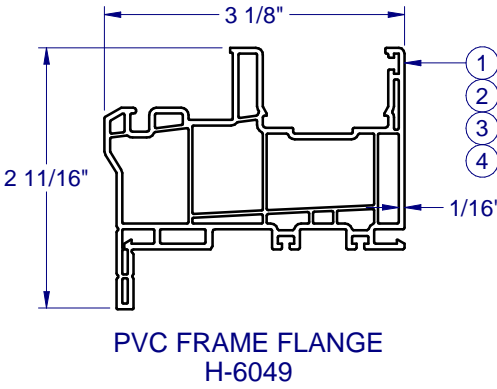
SECTION A-A

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

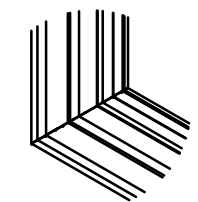
PARTS LIST				
ITEM	PART #	DESCRIPTION	VENDOR	MATERIAL
1	H-6049	Main Fr., SH, w/Flg., PVC, Head	Mikron	Vinyl
2	H-6049	Main Fr., SH, w/Flg., PVC, Sill	Mikron	Vinyl
3	H-6049	Main Fr., SH, w/Flg., PVC, L. Jb.	Mikron	Vinyl
4	H-6049	Main Fr., SH, w/Flg., PVC, R. Jb.	Mikron	Vinyl
5	H-1681	Heavy Duty, Meet. Rail, Fxd. Aluminum	Keymark	Alum
6	S-1577	Impact Hook	Keymark	Alum
8	H-6050	Sash Meet. Rail, PVC	Mikron	Vinyl
9	H-1497	Reinf. Sash Meet. Rail	Keymark	Alum
10	H-6051	Sash Bottom Rail, PVC	Mikron	Vinyl
11	S-1498	Reinf. S.B.R./S.S.R	Keymark	Alum
12	H-6052	Sash Side/Top/Bot. Rail	Mikron	Vinyl
14	S-6064	Glz. Bd., 7/8"	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	
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
53	Sash	SEE SHEET 2		GLASS
54	Fixed	SEE SHEET 2		GLASS
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
73	S-1112	Reinforcement, Impact Hooks	Keymark	Alum
74	P-3541	#8 x 1/2", Pan Head, TEK	Fastenal	Steel

LINE ITEMS NOT USED:  
7, 13, 15-17, 21-22, 29, 33-36, 41-43, 46, 49-52, 55, 57-61, 69, 71-72

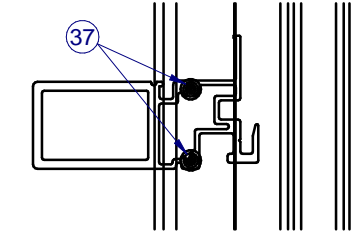
NOTE: ALL EXTRUSIONS ARE ALUMINUM 6063-T6 UNLESS OTHERWISE NOTED.



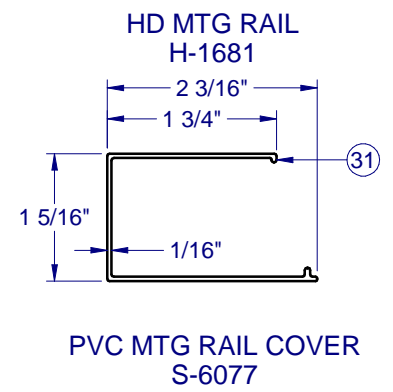
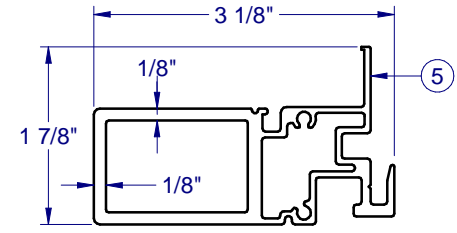
FRAME CORNER CONSTRUCTION



CORNER WELD (ALL SIDES)  
1:8



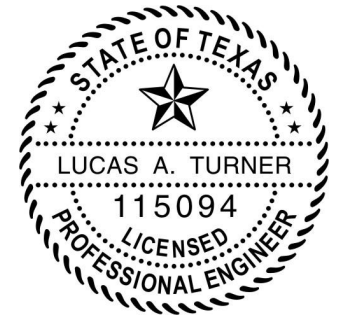
FIXED MEETING RAIL  
SCREWED TOGETHER WITH  
OUTERFRAME  
1:8



**Custom WINDOW SYSTEMS**  
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8100 PVC SINGLE HUNG IMPACT

NO.:	DESCRIPTION:	BY:	DATE:

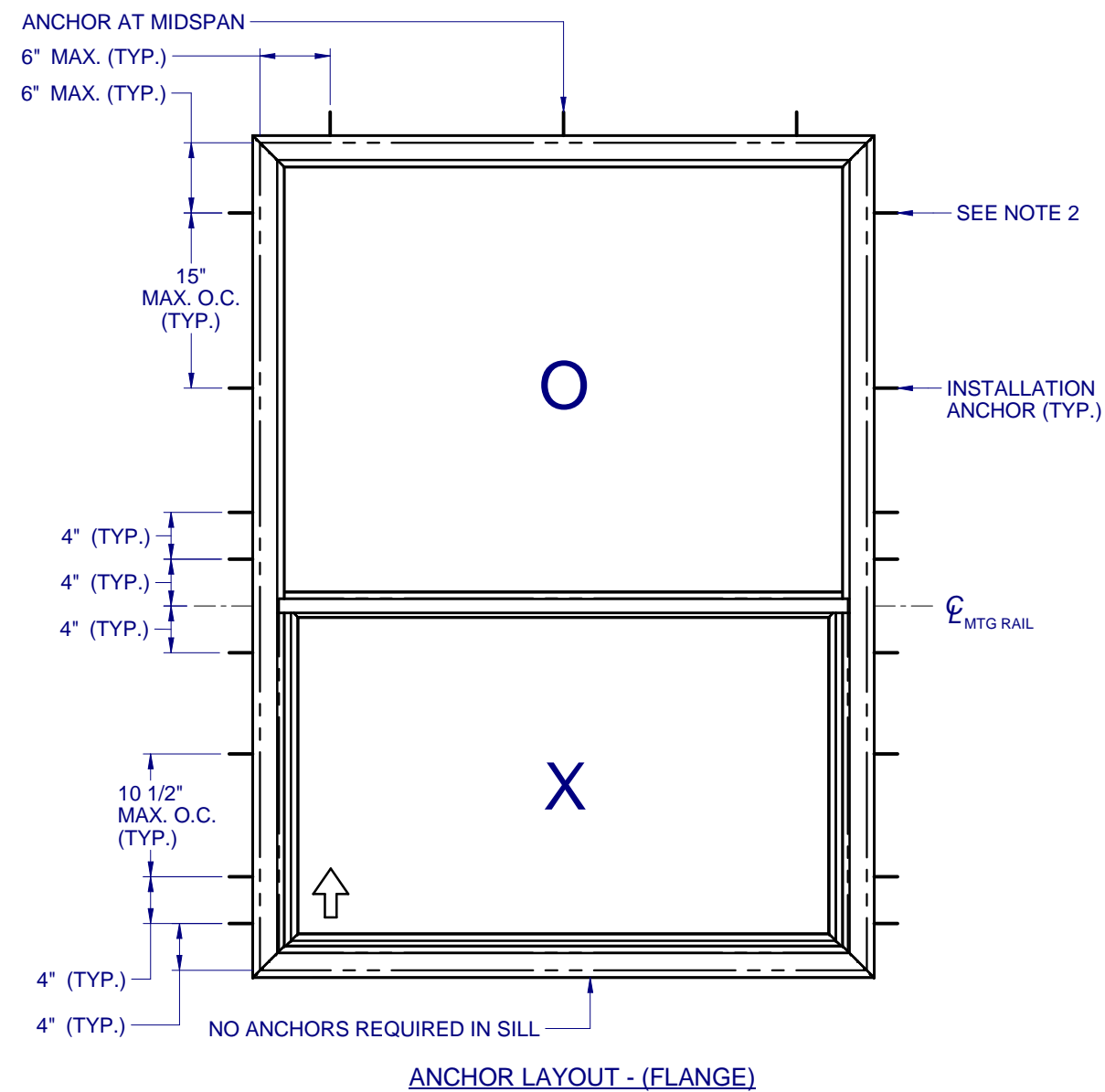


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SHEET DESCRIPTION:  
BOM AND EXTRUSIONS

DRAWN BY: EMK	DATE: 11/12/15
DWG #: TDI-882	REV.: -
SCALE: 1:2	SHEET 4 OF 6

**8100 PVC  
SINGLE HUNG  
IMPACT**

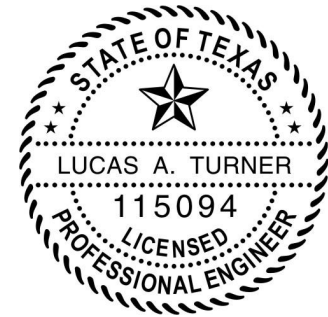


ANCHOR LAYOUT - (FLANGE)

**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)

NO.:	DESCRIPTION:	BY:	DATE:



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9/29/2016

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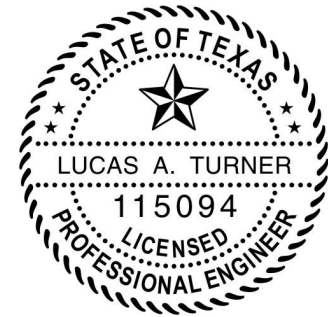
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**ANCHOR SCHEDULE AND NOTES**

DRAWN BY: <b>EMK</b>	DATE: <b>11/12/15</b>
DWG #: <b>TDI-882</b>	REV.: <b>-</b>
SCALE: <b>1:15</b>	<b>SHEET 5 OF 6</b>



**8100 PVC  
SINGLE HUNG  
IMPACT**

NO.	DESCRIPTION	BY	DATE



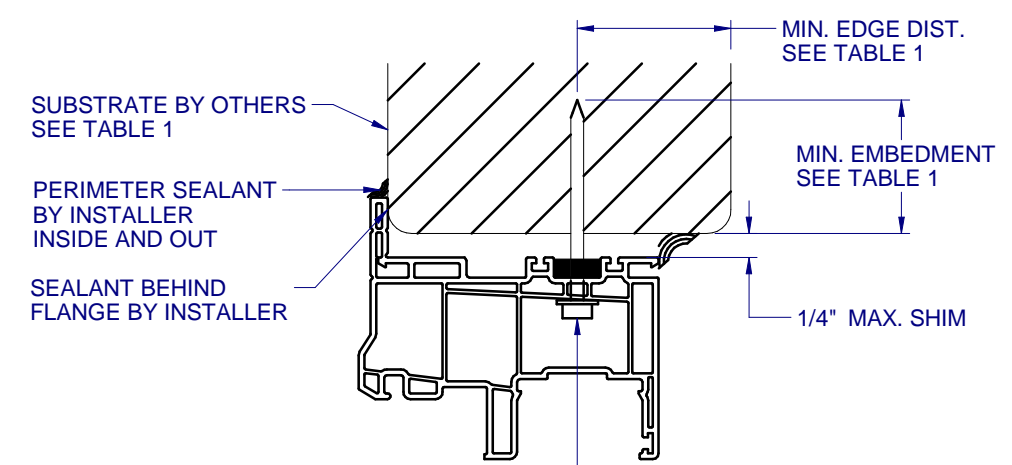
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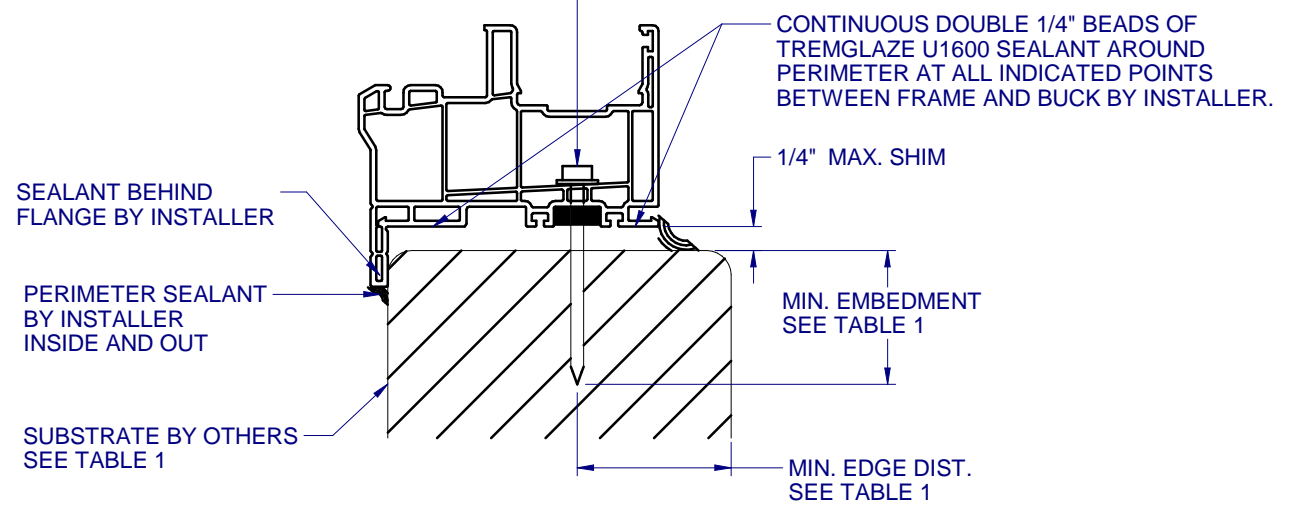
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**INSTALLATION DETAILS**

DRAWN BY: <b>EMK</b>	DATE: 11/12/15
DWG #: <b>TDI-882</b>	REV.: -
SCALE: 1:2	SHEET 6 OF 6

TYPICAL HEAD ANCHORAGE

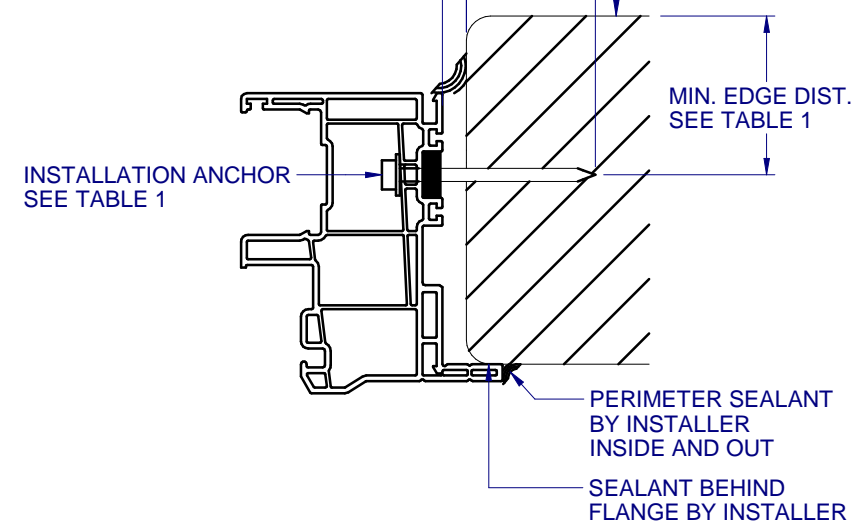


INSTALLATION ANCHOR SEE TABLE 1



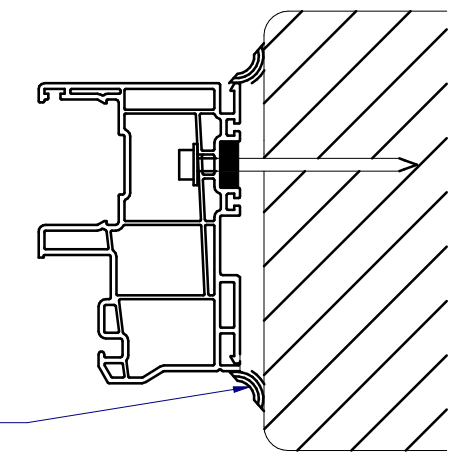
**A** VERTICAL SECTION  
**6** TYPICAL SILL ANCHORAGE

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



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

PERIMETER SEALANT BY INSTALLER INSIDE AND OUT



**C** 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.

**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"