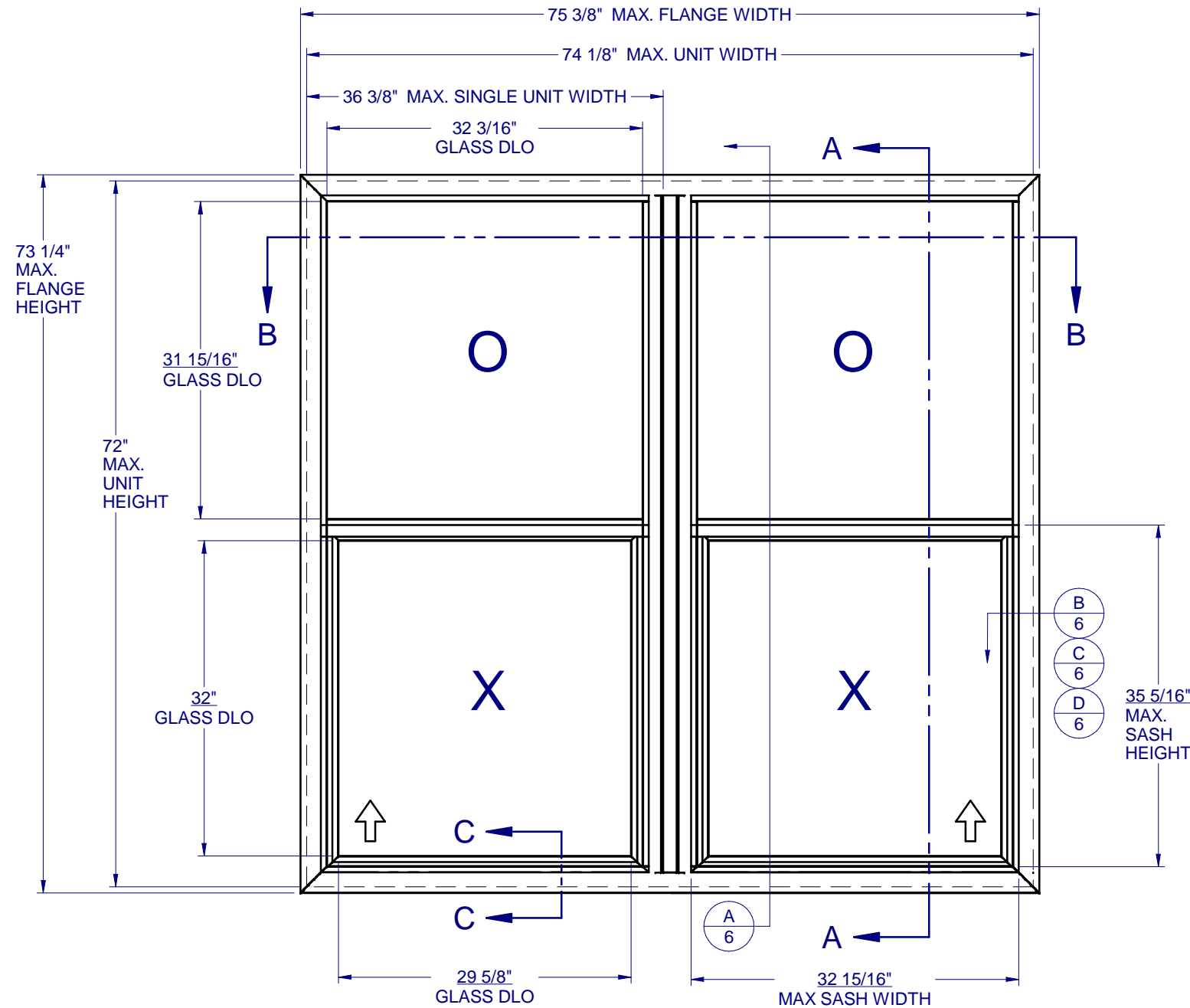


# MODEL 8100 SYSTEM 11 SINGLE HUNG - LARGE MISSILE IMPACT



SYSTEM 11  
(CAR 138-260/138-703)

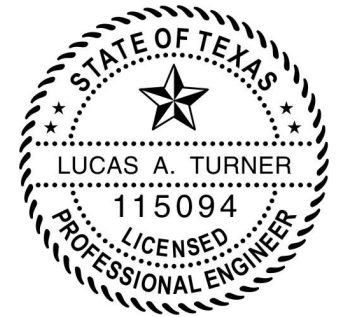
### GENERAL NOTES:

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 - 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  $C_d=1.6$  WAS USED FOR WOOD ANCHOR CALCULATIONS.
5. 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.
6. ALL FRAMES AND VENTS FULLY WELDED. SMALL JOINT SEAM SEALANT USED AT FIXED MEETING RAIL, INTERNAL MULL ENDS AND JAMBS.
7. SERIES / MODEL DESIGNATION SH-8100 CONTINUOUS FRAME.
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.

**Custom**  
**WINDOW SYSTEMS**  
1900 SW 44TH AVE.  
OCALA, FLORIDA 34474  
WWW.CWS.CC

## 8100 PVC SINGLE HUNG IMPACT

NO.	DESCRIPTION:	BY:	DATE:



*LT*  
9/29/2016  
LUCAS A. TURNER, P.E.  
TX PE # 115094  
1239 JABARA AVE.  
NORTH PORT, FL 34288  
PH. 941-380-1574

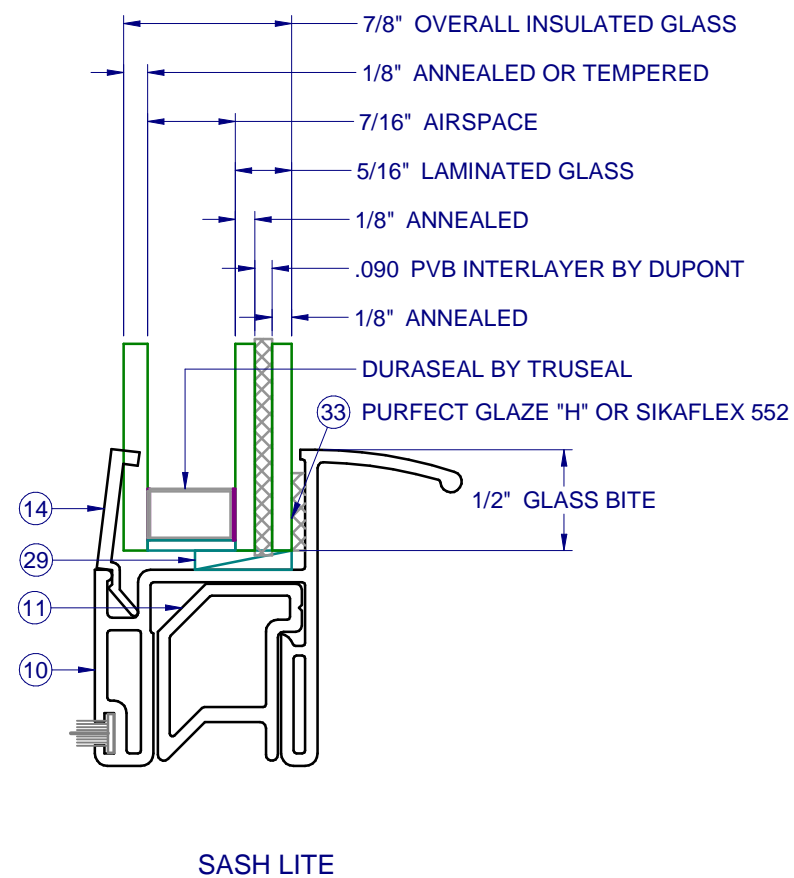
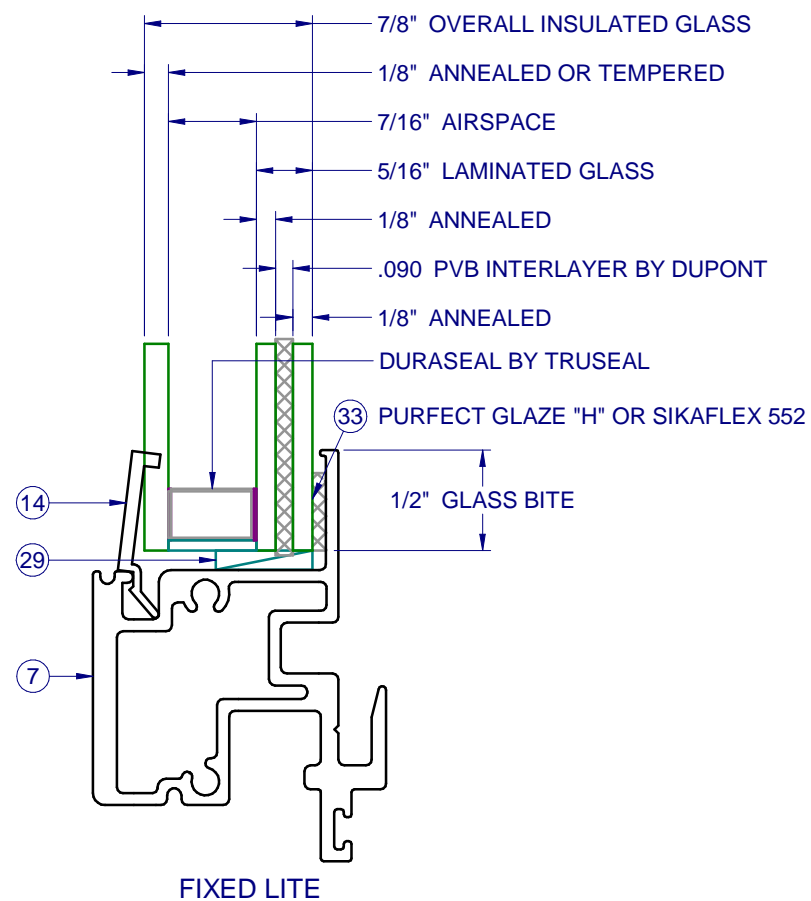
### SHEET DESCRIPTION: GENERAL NOTES AND ELEVATIONS

DRAWN BY: EMK	DATE: 11/12/15
DWG #: TDI-491	REV.: -
SCALE: 1:1	SHEET 1 OF 6

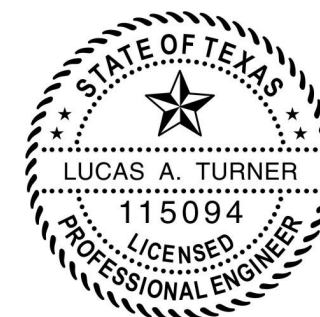
### TABLE OF CONTENTS

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

**8100 PVC  
SINGLE HUNG  
IMPACT**



NO.	DESCRIPTION:	BY:	DATE:



*LT*  
9/29/2016

LUCAS A. TURNER, P.E.  
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SHEET DESCRIPTION:

**GLAZING DETAIL**

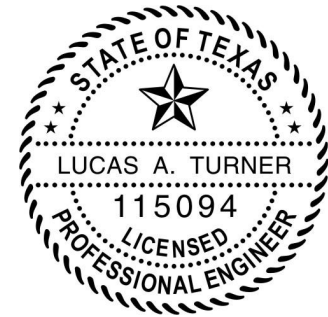
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DWG #: <b>TDI-491</b>	REV.: <b>-</b>
SCALE: <b>1:1</b>	<b>SHEET 2 OF 6</b>





**8100 PVC  
SINGLE HUNG  
IMPACT**

NO.:	DESCRIPTION:	BY:	DATE:

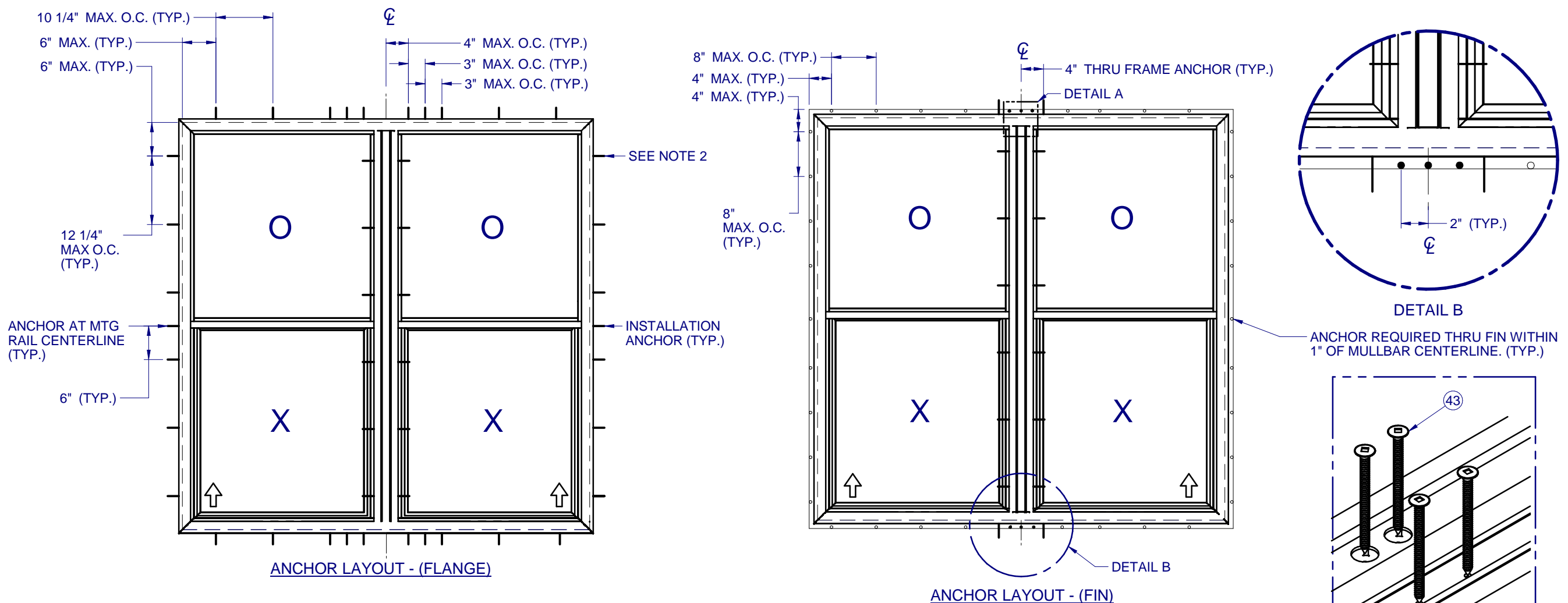


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9/29/2016

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TX PE # 115094  
1239 JABARA AVE.  
NORTH PORT, FL 34288  
PH. 941-380-1574

SHEET DESCRIPTION:  
**ANCHOR SCHEDULE AND  
NOTES**

DRAWN BY: <b>EMK</b>	DATE: <b>11/12/15</b>
DWG #: <b>TDI-491</b>	REV.: <b>-</b>
SCALE: <b>1:20</b>	<b>SHEET 5 OF 6</b>



- 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)

**8100 PVC  
SINGLE HUNG  
IMPACT**

NO.	DESCRIPTION:	BY:	DATE:



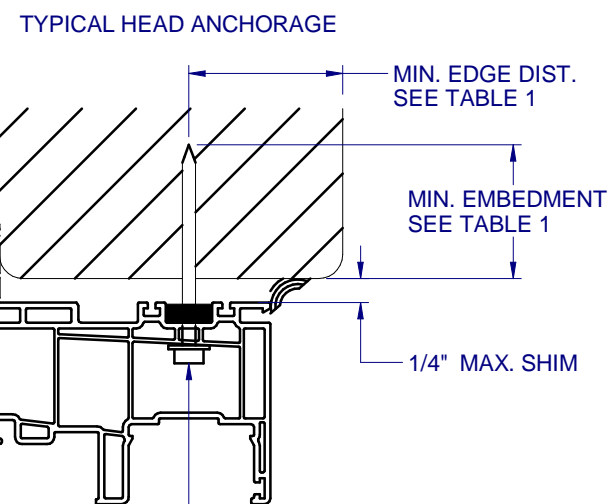
22  
9/29/2016

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

SHEET DESCRIPTION:

**INSTALLATION DETAILS**

DRAWN BY: <b>EMK</b>	DATE: <b>11/12/15</b>
DWG #: <b>TDI-491</b>	REV.: <b>-</b>
SCALE: <b>1:2</b>	SHEET <b>6 OF 6</b>



INSTALLATION ANCHOR  
SEE TABLE 1

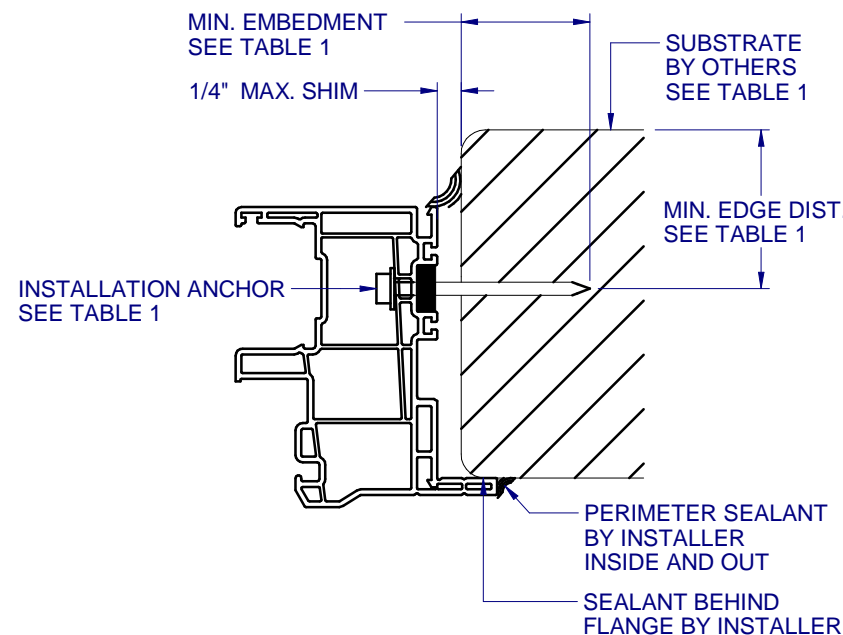
SEALANT BEHIND  
FLANGE BY INSTALLER

PERIMETER SEALANT  
BY INSTALLER  
INSIDE AND OUT

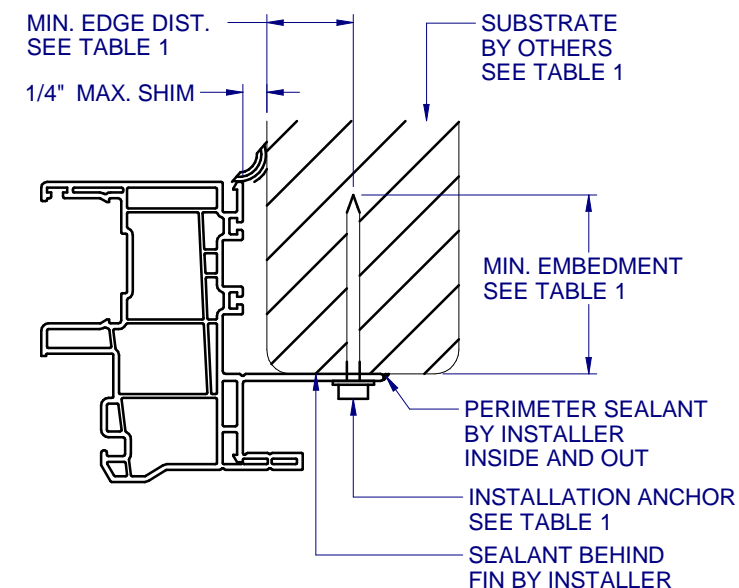
SUBSTRATE BY OTHERS  
SEE TABLE 1

SEALANT UNDER SCREW  
HEAD BY INSTALLER

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

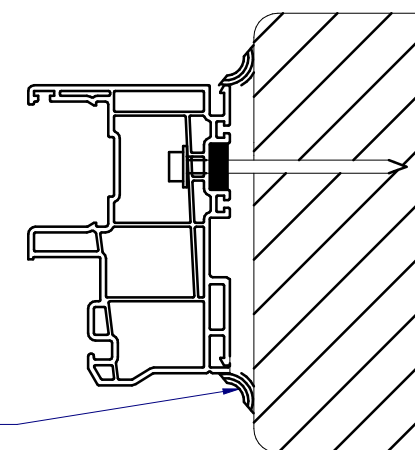


**B** HORIZONTAL SECTION  
**6** TYPICAL JAMB ANCHORAGE



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

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



**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.

**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"	1-1/8"
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. SPRUCE-PINE-FIR (G=0.42)	3/16" ITW TAPCON OR ELCO ULTRACON	1-3/8"	7/8"
FLANGE	2X MIN. SPRUCE-PINE-FIR (G=0.42)	#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. SPRUCE-PINE-FIR (G=0.42)	#8 WOOD SCREW	1-1/2"	7/16"