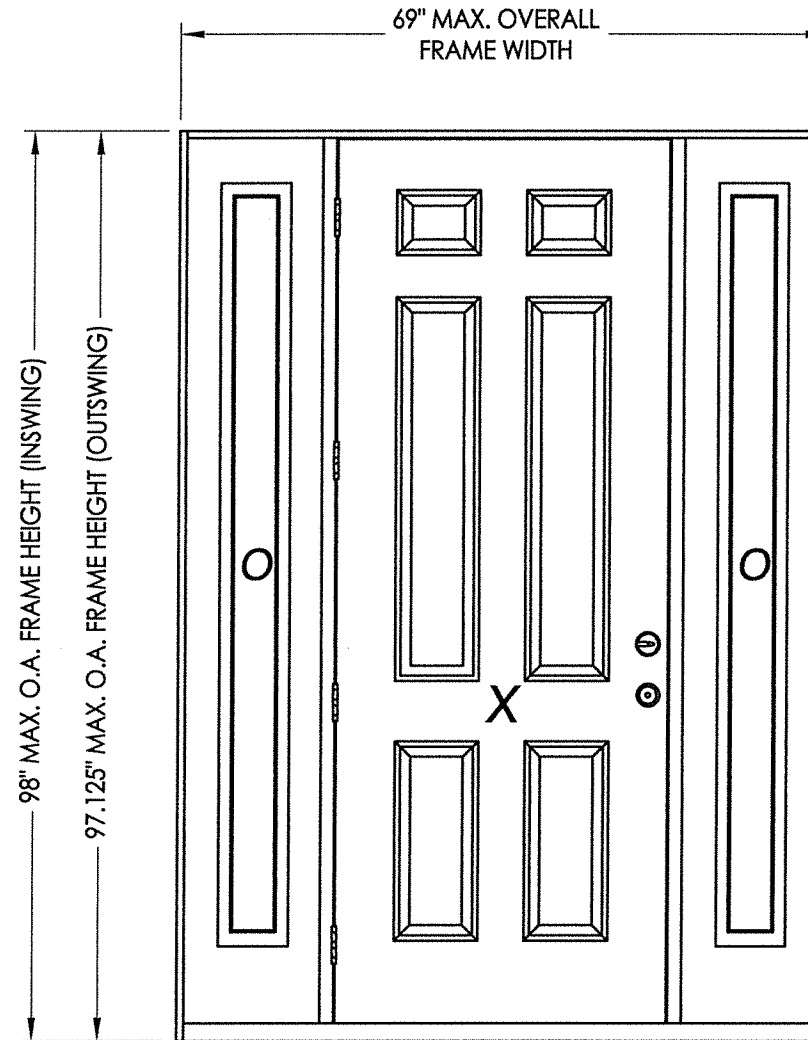




# Opaque Steel Single Door w/ Sidelites

CONTINUOUS HEAD & SILL FRAME SYSTEM  
IN SWING / OUT SWING  
"NON-IMPACT"



**EVALUATED FOR USE IN THE STATE OF TEXAS**

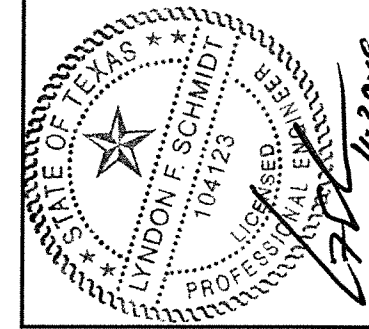
The Opaque Steel Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. When used in areas requiring wind-borne debris protection this product is required to be protected with an impact resistant covering that complies with Section R301.2.1.2 of the IRC and Section 1609.2 of the IBC.
3. Allowable design pressure requirements must be equal to or less than the design pressure rating shown in the design pressure chart, sheet 1 of this drawing.
4. Conditions not covered by this drawing are subject to further engineering analysis.

TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel details
3	Sidelite panel details
4	Horizontal cross sections
5	Vertical cross sections
6	Vertical cross sections
7	Frame anchoring

MODEL	DESIGN PRESSURE (PSF) w/ PINE FRAME & FATBOY PINE MULLIONS		DESIGN PRESSURE (PSF) w/ "FusionFrame" FRAME & MULLIONS	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
<b>IN SWING</b>	<b>+65.0</b>	<b>-65.0</b>	<b>+50.0</b>	<b>-50.0</b>
<b>OUT SWING</b>	<b>+55.0</b>	<b>-55.0</b>	<b>+50.0</b>	<b>-50.0</b>

SEE SHEET 6 FOR THRESHOLD DESIGN PRESSURE LIMITATIONS

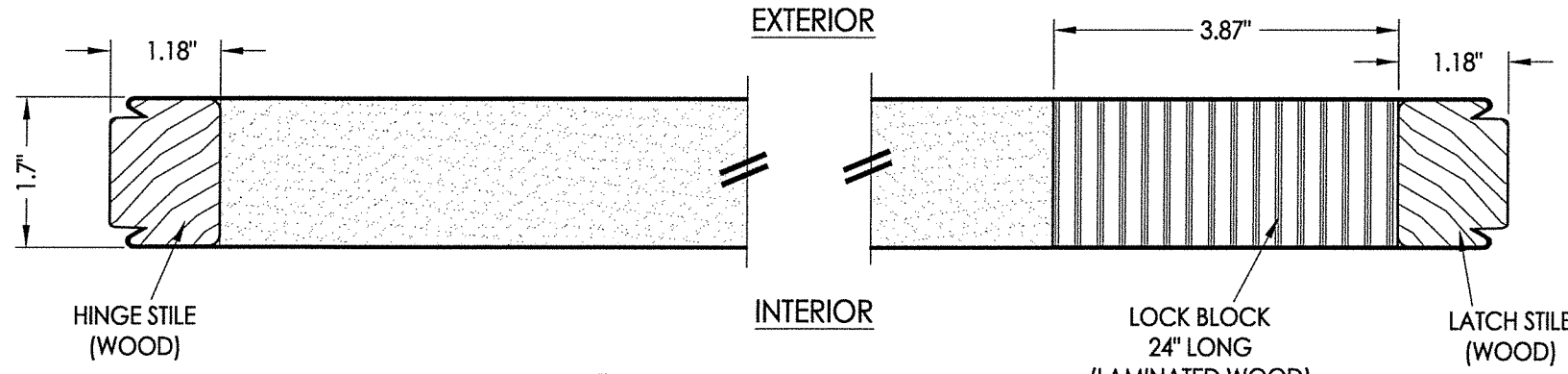


Documents Prepared By: Lyndon F. Schmidt, P.E.  
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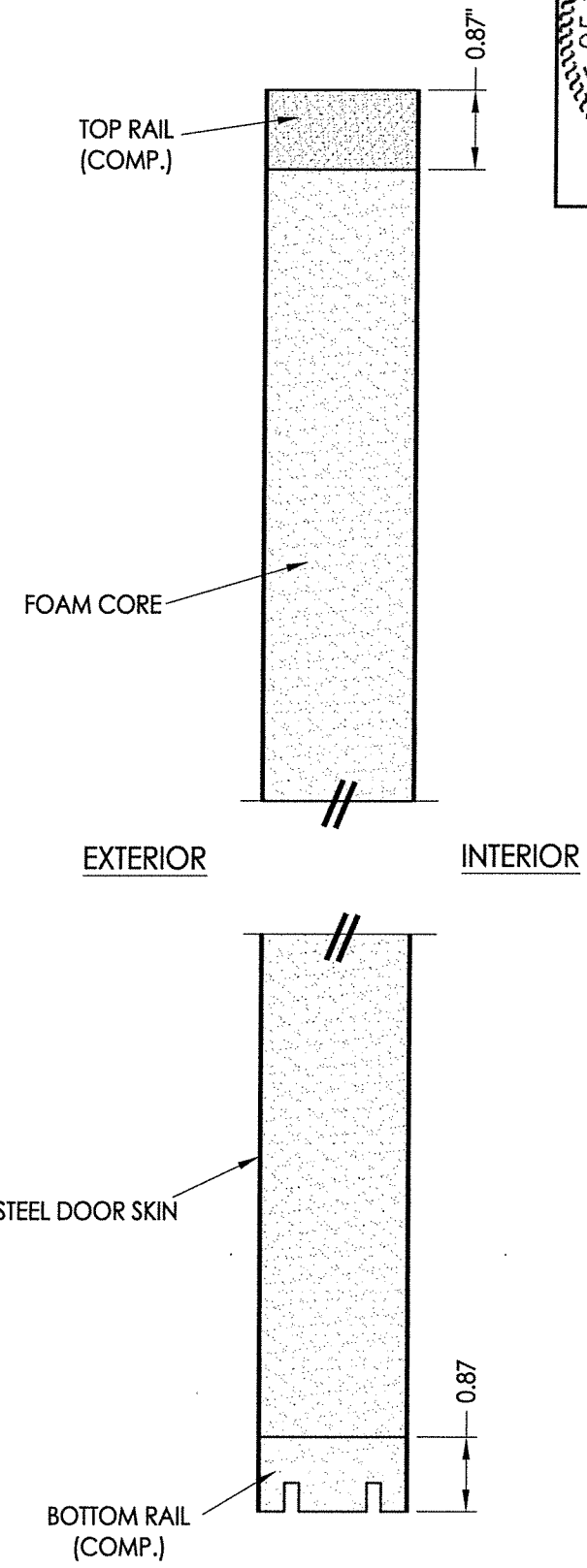
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA		
PART OR ASSEMBLY:	TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES		
NO.	DATE	BY	REVISIONS
1	11/20/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
DATE: 12/11/17			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4772			
SHEET 1 OF 7			

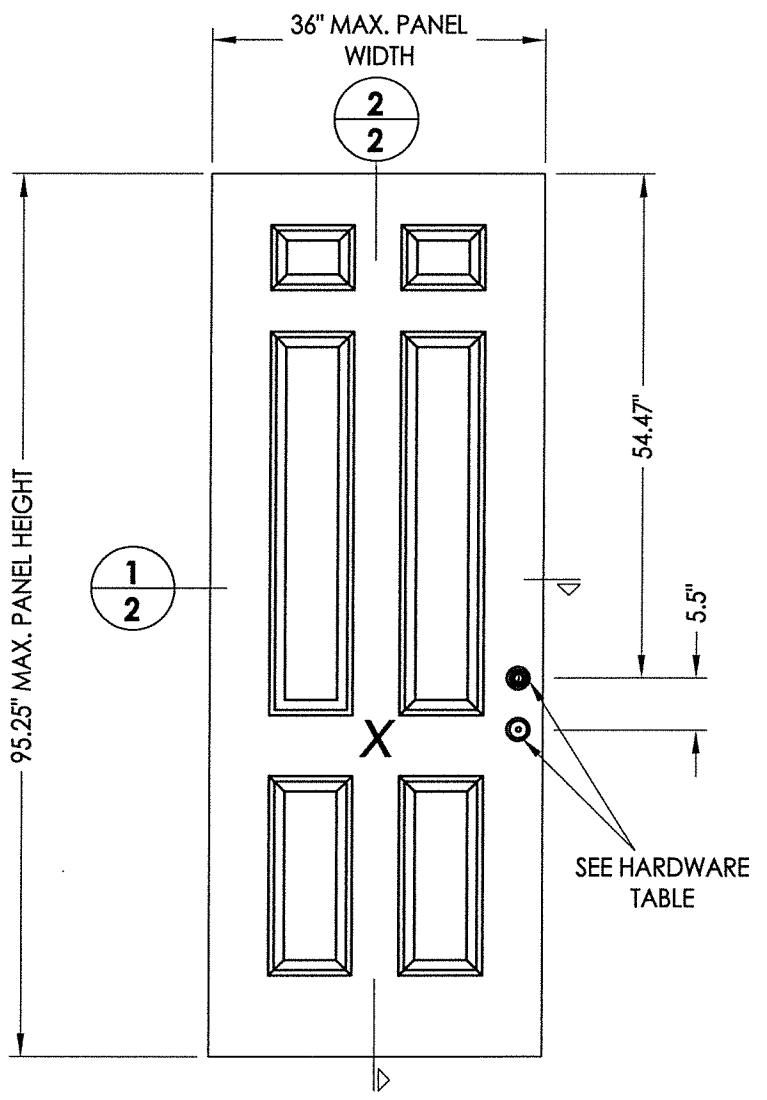
R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-958 Opaque Therma-Tru STL door OXO (LK, DB)\C - Drawings\TX-4771.72\_recover.dwg, 2.4



**1**  
**2** HORIZONTAL CROSS SECTION



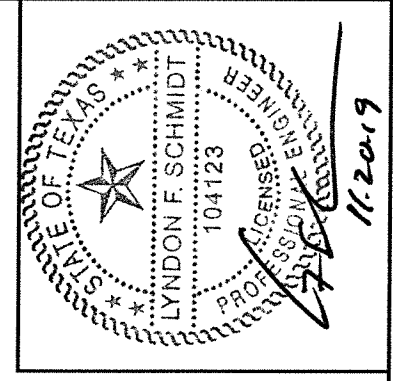
**2**  
**2** VERTICAL CROSS SECTION



**40** DOOR PANEL  
Therma-Tru Steel (Wood Edge)

HARDWARE TABLE	
MANUFACTURER	MODEL
KWIKSET	KNOB: SIGNATURE SERIES DEADBOLT: SIGNATURE SERIES (980)

DOOR SKIN: STEEL 25 GA. (0.020" MIN. THICKNESS)  
CORE MATERIAL: POLYURETHANE FOAM



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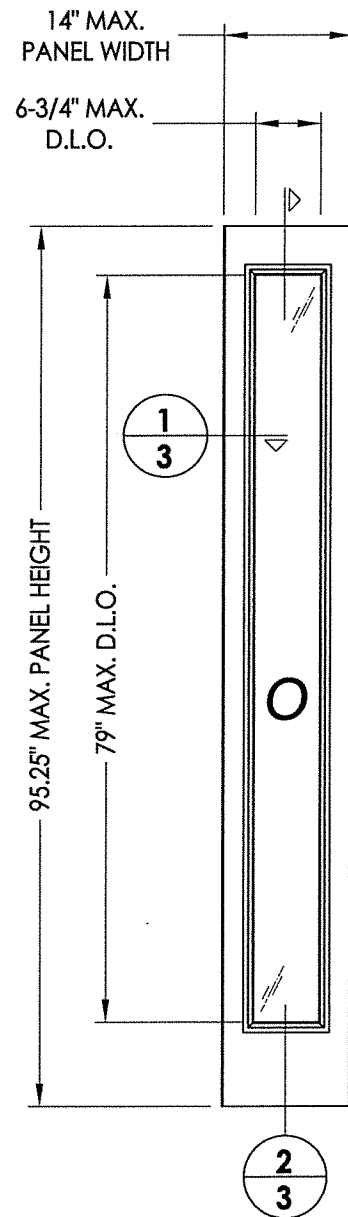
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL, 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA
PART OR ASSEMBLY:	DOOR PANEL DETAILS

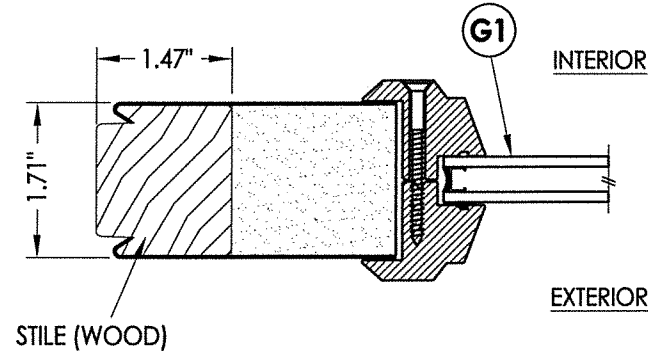
REVISIONS	
NO.	DATE
1	11/20/19
	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
	LFS
	BY

DATE:	12/11/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4772
SHEET	2 OF 7

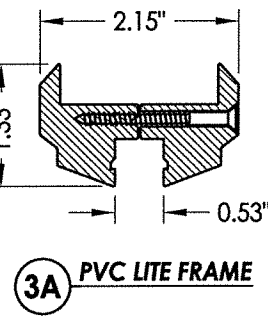
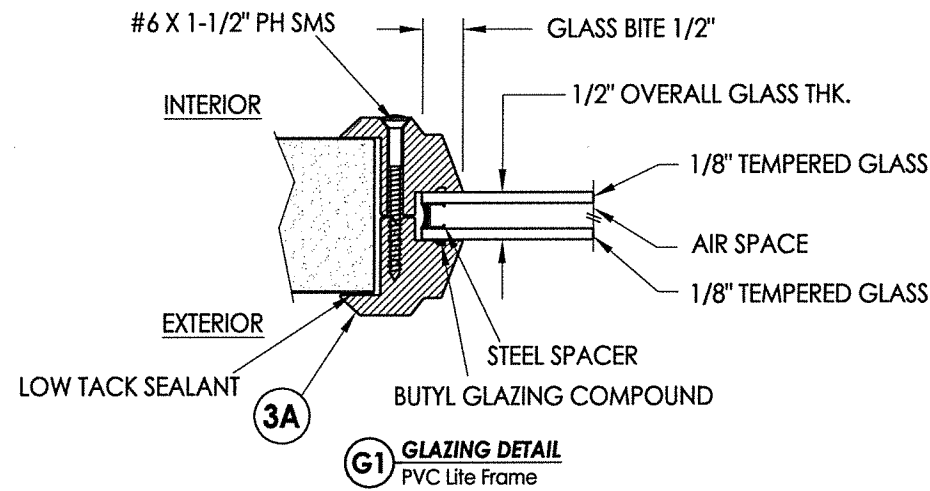
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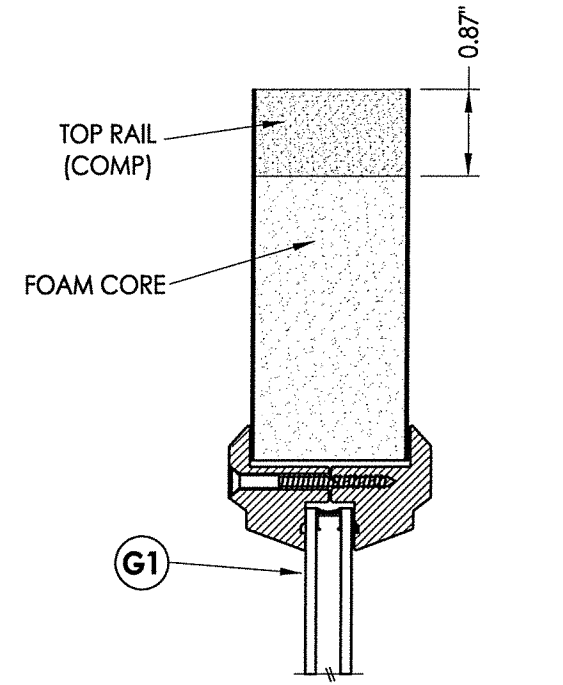
**50 SIDELITE PANEL**  
Therma-Tru Steel (Wood Edge)



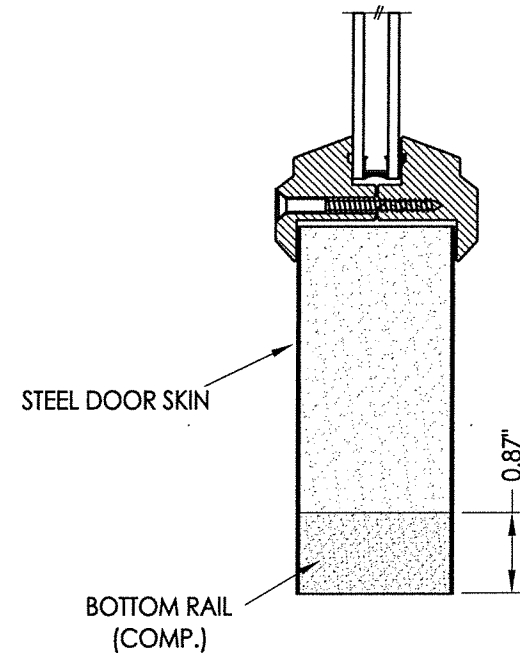
**1 HORIZONTAL CROSS SECTION**



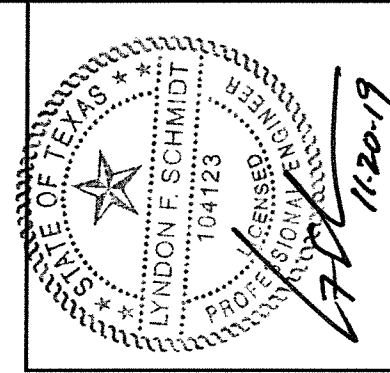
**3A PVC LITE FRAME**



**2 VERTICAL CROSS SECTION**



**2 VERTICAL CROSS SECTION**



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CERTIFICATE OF REGISTRATION # F-11852

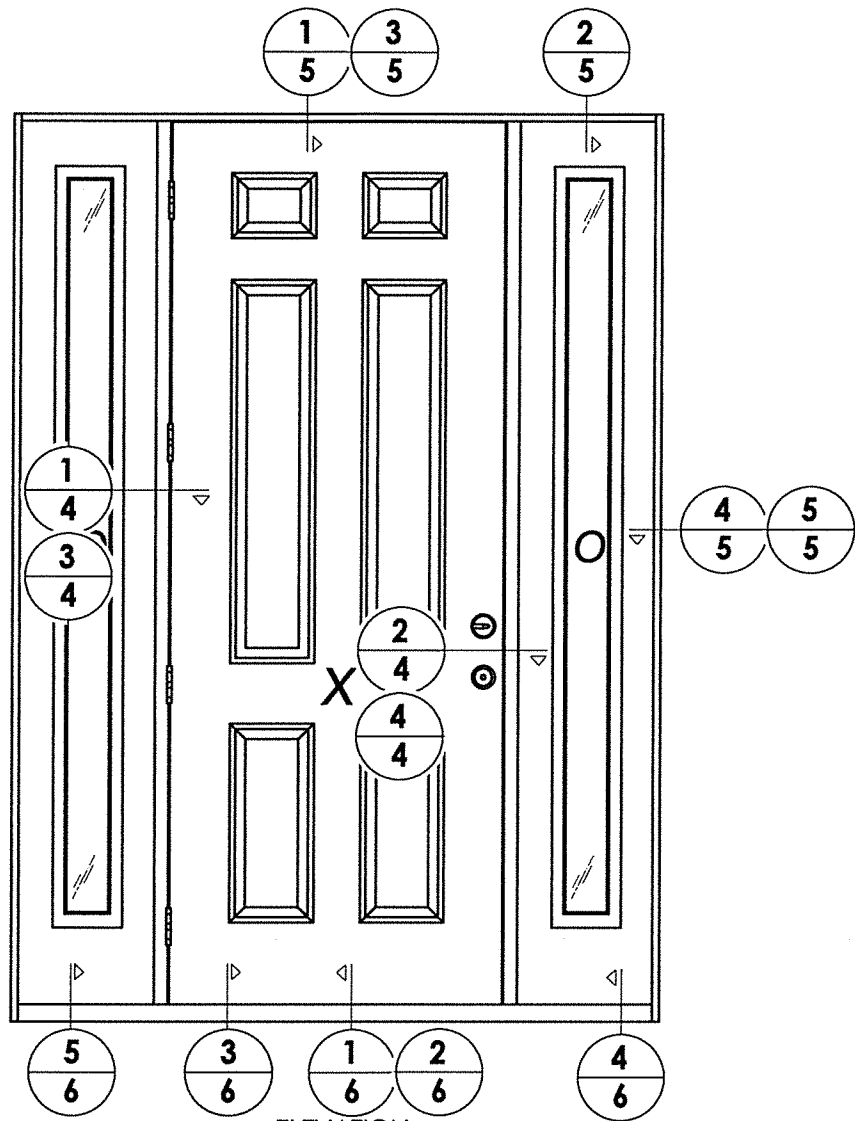
PRODUCT: ENDURA  
PART OR ASSEMBLY: SIDELITE PANEL DETAILS (LIP LITE INSERT GLAZING)

NO.	DATE	BY	REVISIONS
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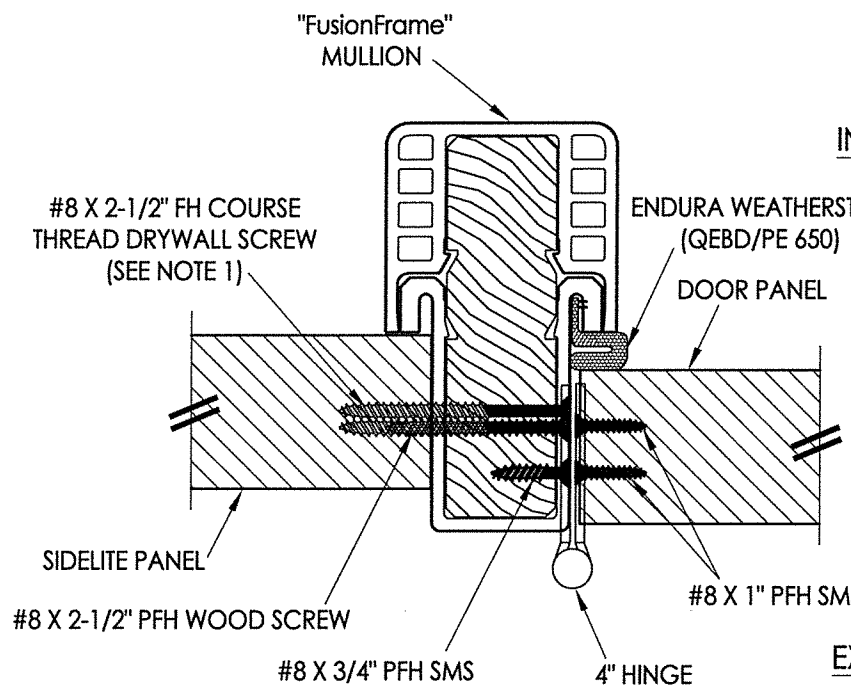
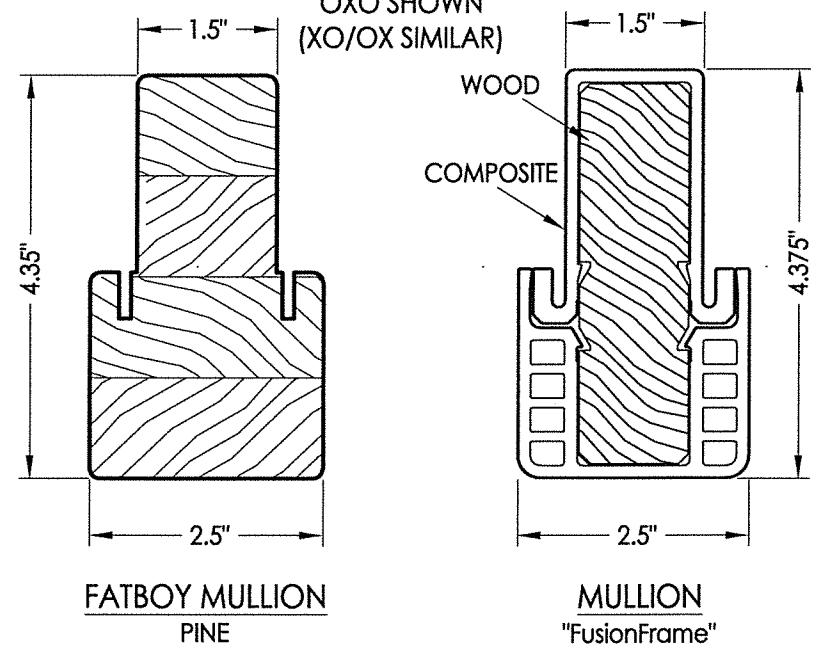
DATE: 12/11/17  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4772  
SHEET 3 OF 7

DOOR SKIN: STEEL 25 GA. (0.020" MIN. THICKNESS)  
CORE MATERIAL: POLYURETHANE FOAM

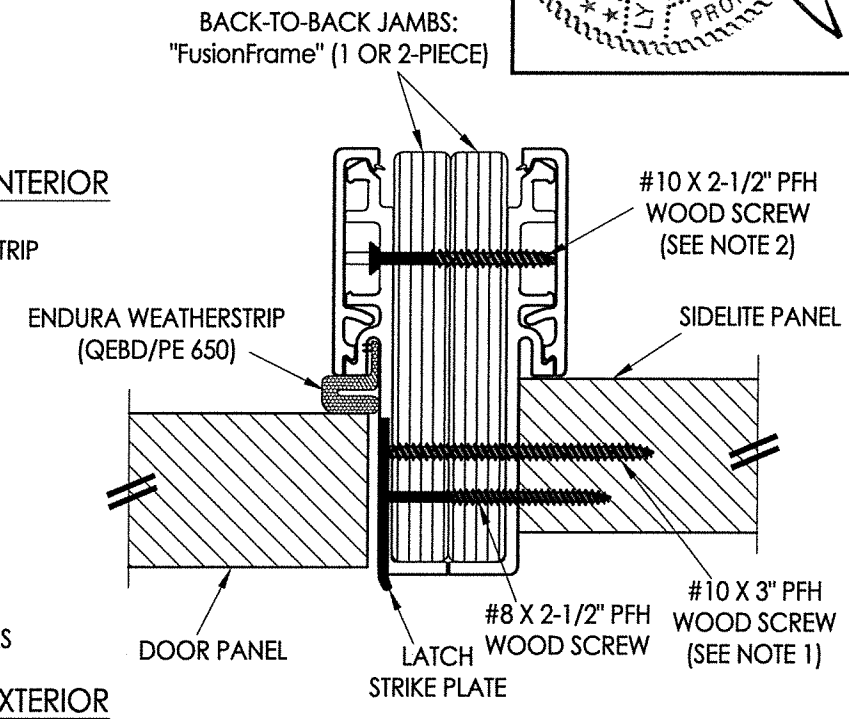
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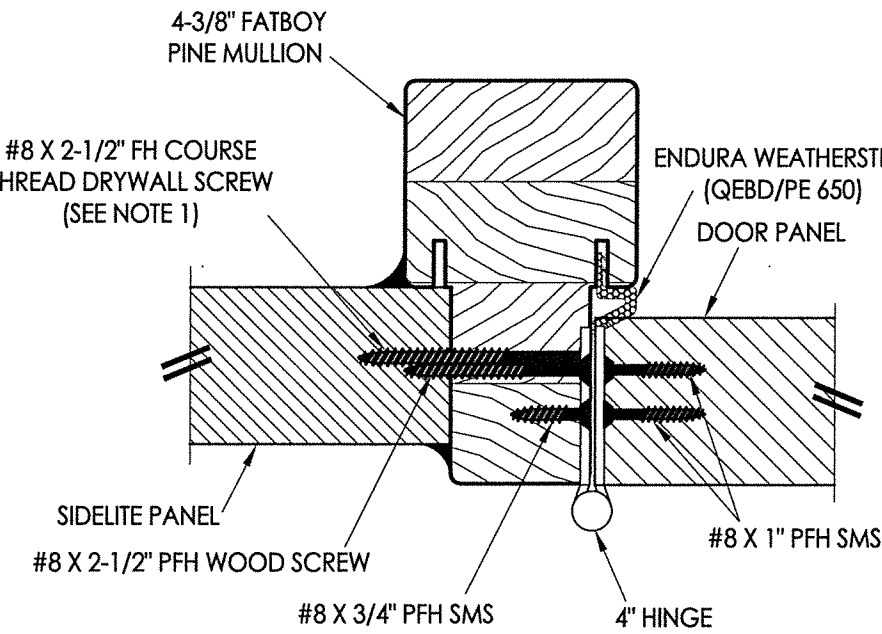
ELEVATION  
OXO SHOWN  
(XO/OX SIMILAR)



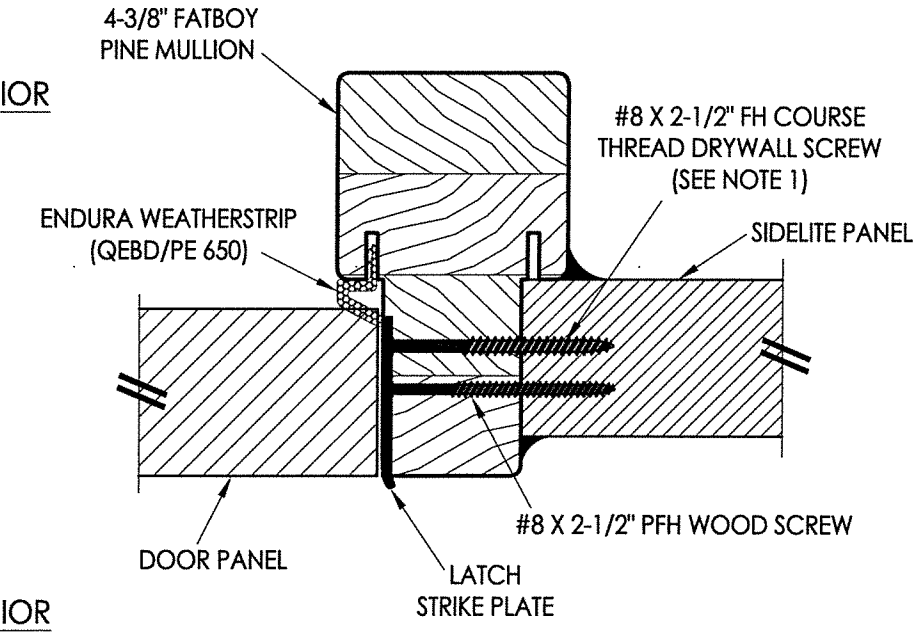
**3 HORIZONTAL CROSS SECTION**  
Outswing shown - Inswing also approved



**4 HORIZONTAL CROSS SECTION**  
Outswing shown - Inswing also approved

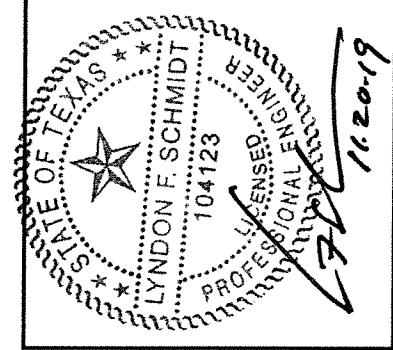


**1 HORIZONTAL CROSS SECTION**  
Outswing shown - Inswing also approved



**2 HORIZONTAL CROSS SECTION**  
Outswing shown - Inswing also approved

- NOTES:**
1. Spacing for sidelite screws: 6.5", 35.5", 57.25" and 85" from head to sill (4 total).
  2. Spacing for mullion screws: 6" from each end plus 3 more equally spaced (5 total).



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Phone No.: 813.659.9197

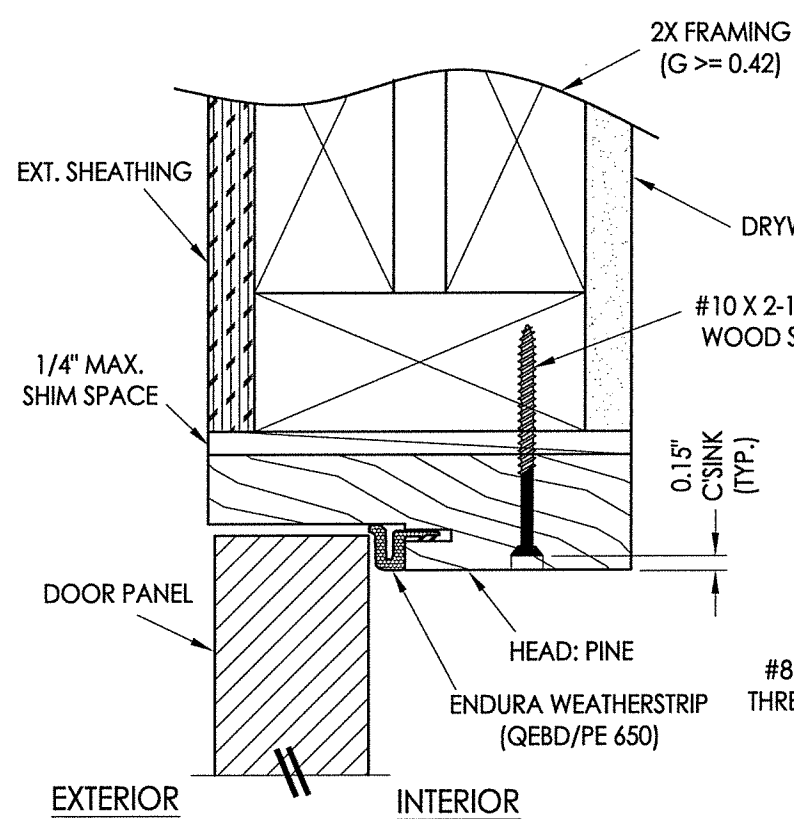
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA
PART OR ASSEMBLY:	FIBERGLASS DOOR
REVISIONS	

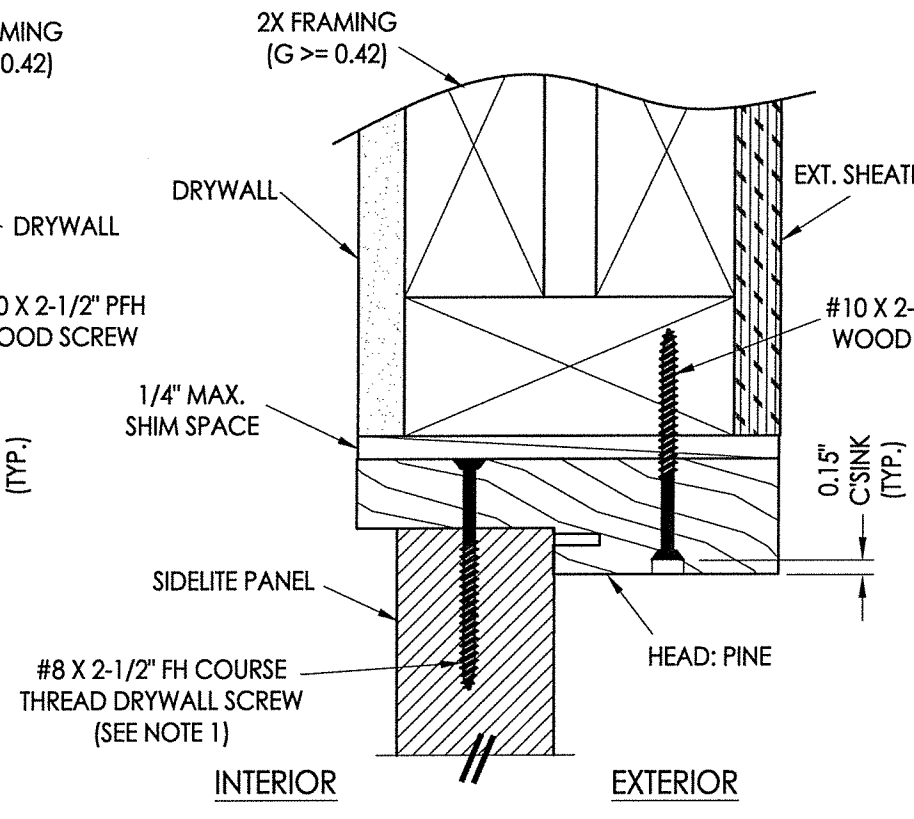
NO.	DATE	BY
1	11/20/19	LFS
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		

DATE:	12/11/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4772
SHEET	4 OF 7

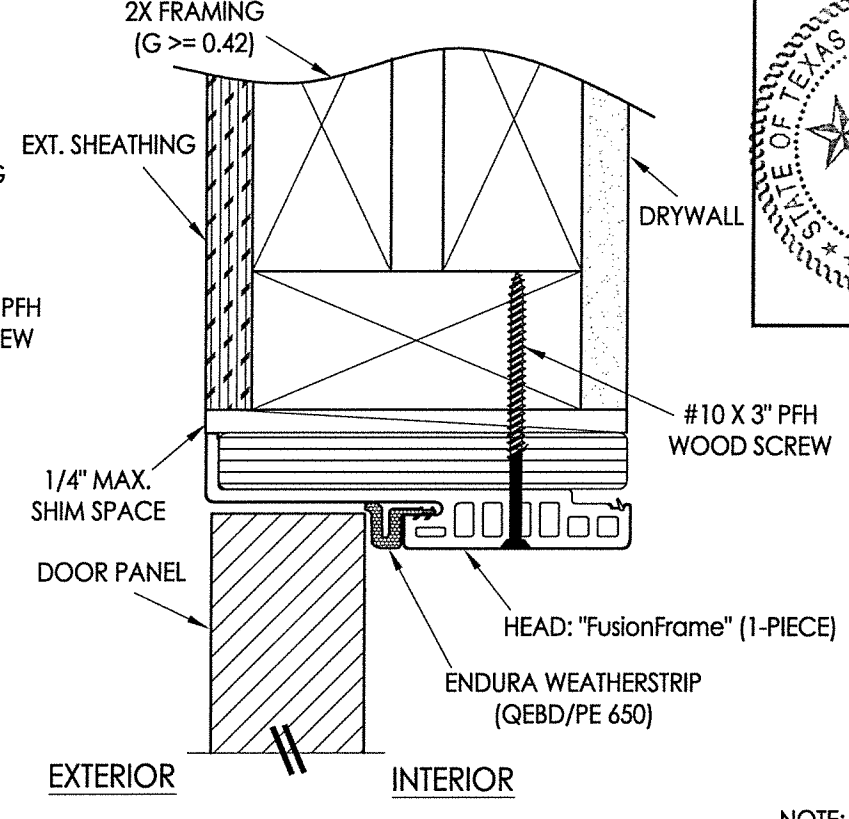
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**1 VERTICAL CROSS SECTION**  
**5** Outswing shown - inswing also approved

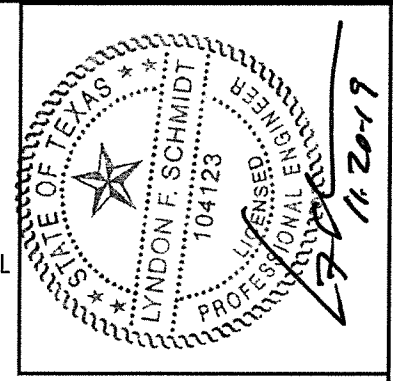


**2 VERTICAL CROSS SECTION**  
**5** Inswing shown - Outswing also approved

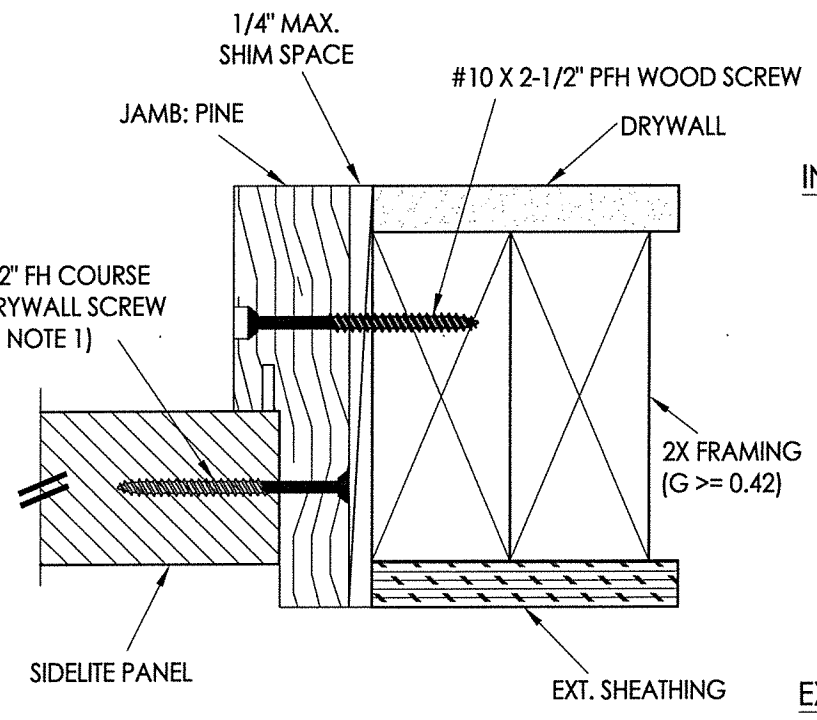
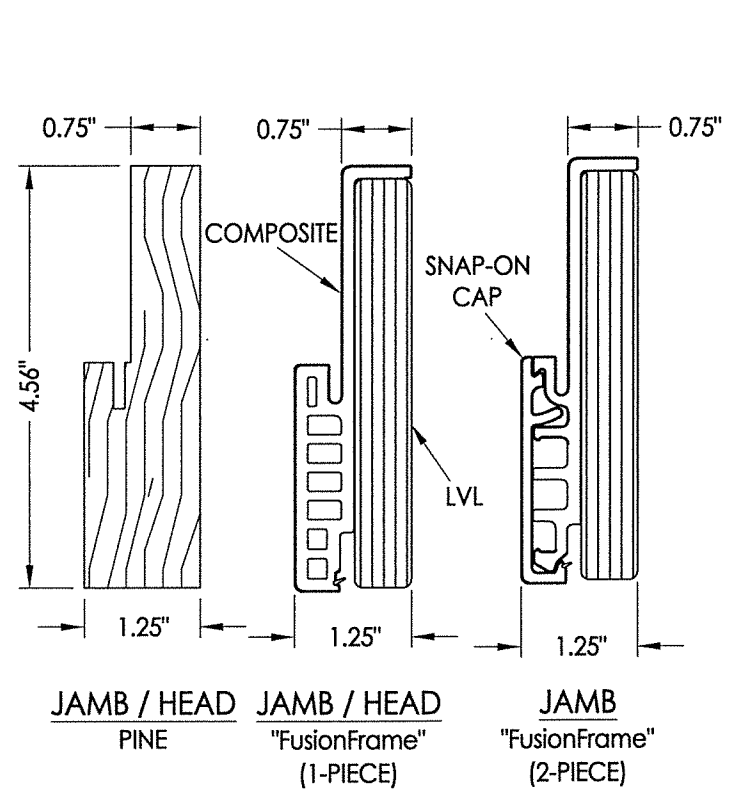


**3 VERTICAL CROSS SECTION**  
**5** Outswing shown - inswing also approved

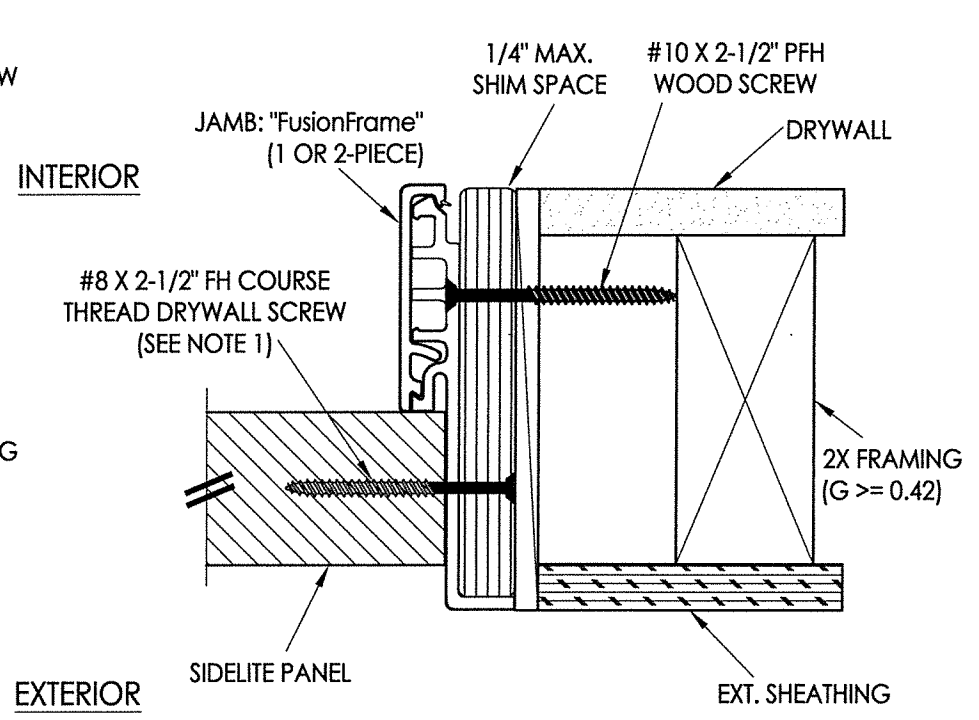
**NOTE:**  
 1. Spacing for sidelite screws:  
 4" from each end (2 total).



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 Phone No.: 813.659.9197  
 TEXAS BOARD OF PROFESSIONAL ENGINEERS  
 CERTIFICATE OF REGISTRATION # F-11852



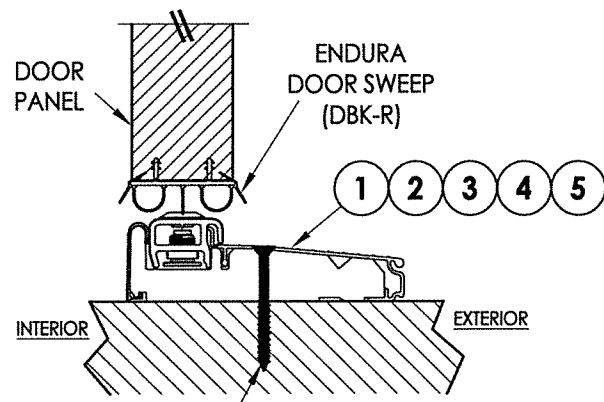
**4 HORIZONTAL CROSS SECTION**  
**5** Outswing shown - Inswing also approved



**5 HORIZONTAL CROSS SECTION**  
**5** Outswing shown - Inswing also approved

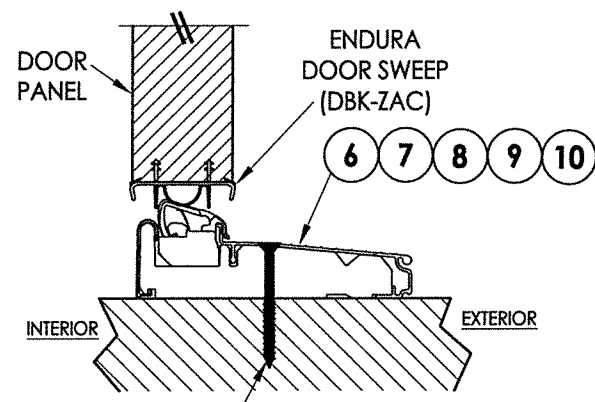
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PART OR ASSEMBLY:	VERTICAL CROSS SECTIONS	
NO.	DATE	BY
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ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		
DATE:	12/11/17	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4772	
SHEET	5	OF 7

R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-958 Opaque Thermo-Tru STL door OXO (LK, DB)\C - Drawings\TX-4771.72\_recover.dwg, 6.4



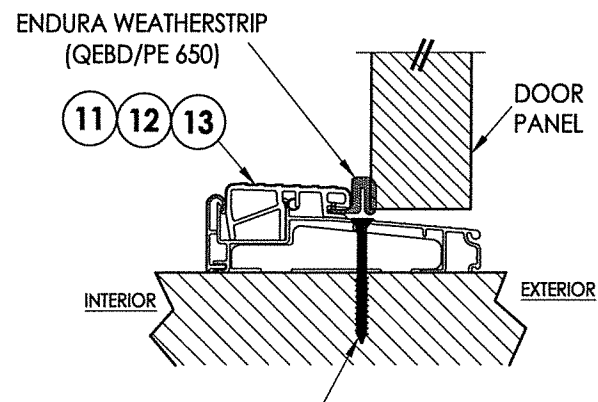
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

**1** VERTICAL CROSS SECTION  
**6** Inswing Adjustable Threshold



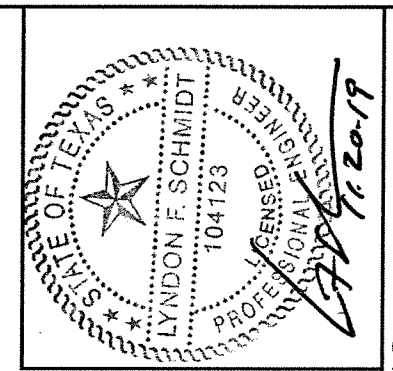
#10 X 2.5" PFH WOOD SCREW OR  
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**2** VERTICAL CROSS SECTION  
**6** Inswing Articulating Threshold

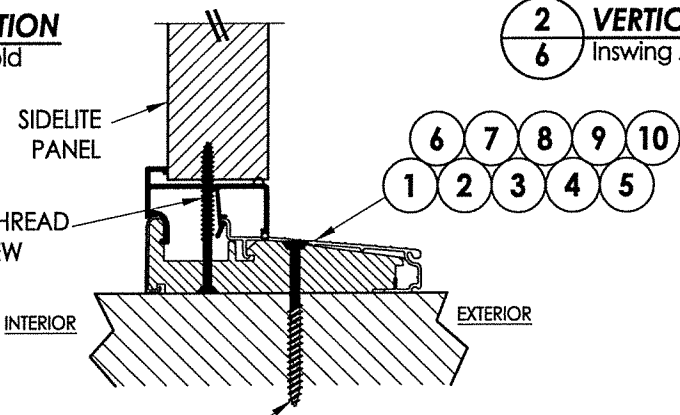


#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

**3** VERTICAL CROSS SECTION  
**6** Outswing Bump Threshold



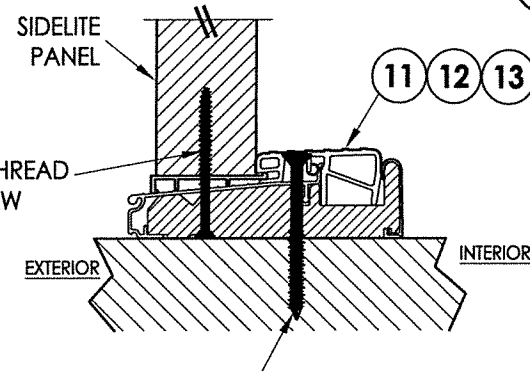
NOTE:  
1. Spacing for sidelite screws:  
4" from each end (2 total).



#8 X 2.5" COURSE THREAD  
DRYWALL SCREW  
(SEE NOTE 1)

#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

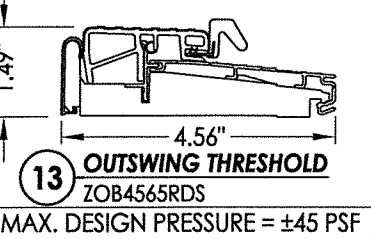
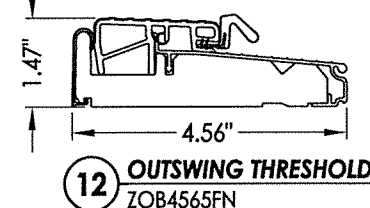
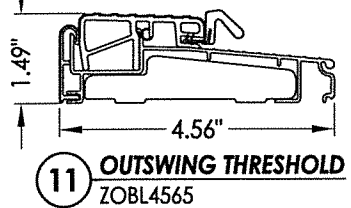
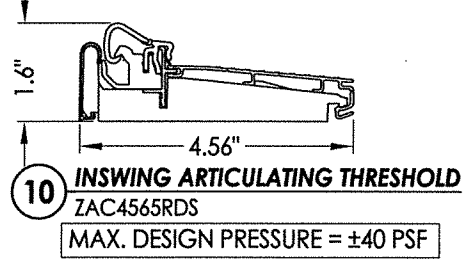
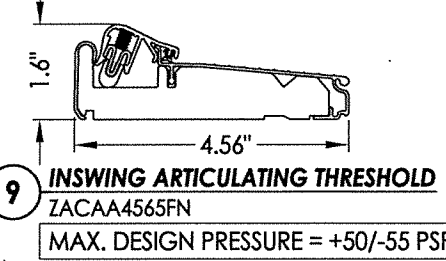
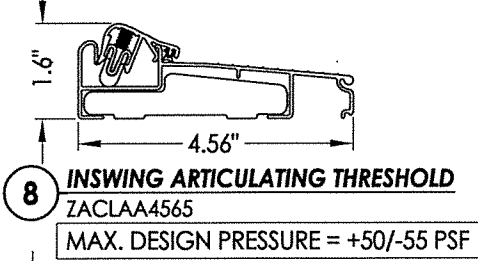
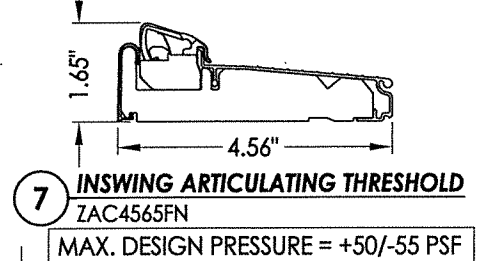
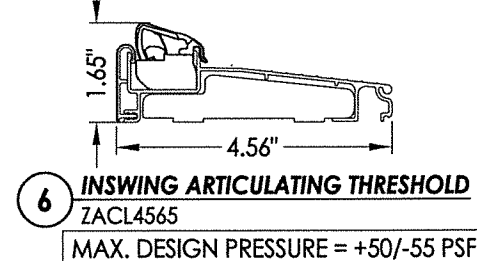
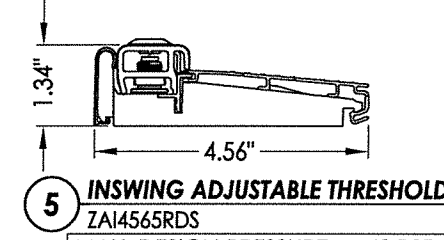
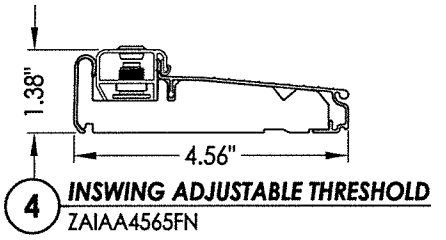
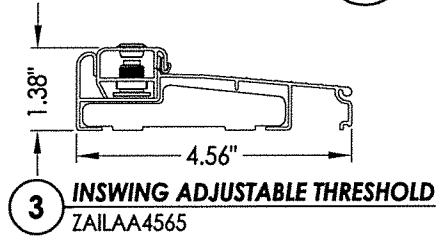
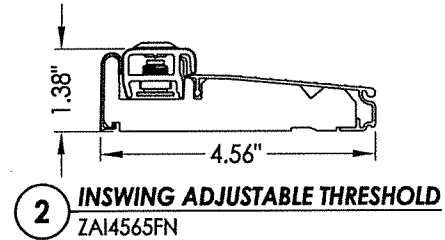
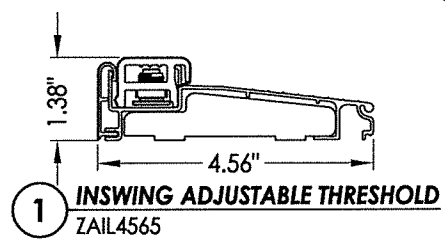
**4** VERTICAL CROSS SECTION  
**6** Inswing configuration



#8 X 2.5" COURSE THREAD  
DRYWALL SCREW  
(SEE NOTE 1)

#10 X 3" PFH WOOD SCREW OR  
1/4" X 3-1/4" ELCO OR ITW CONCRETE SCREW

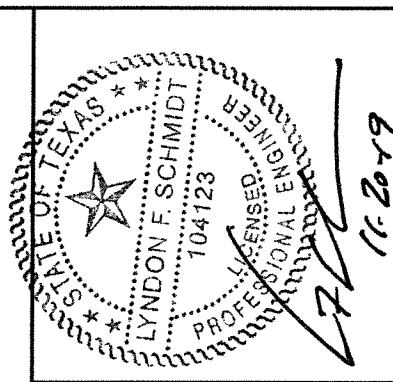
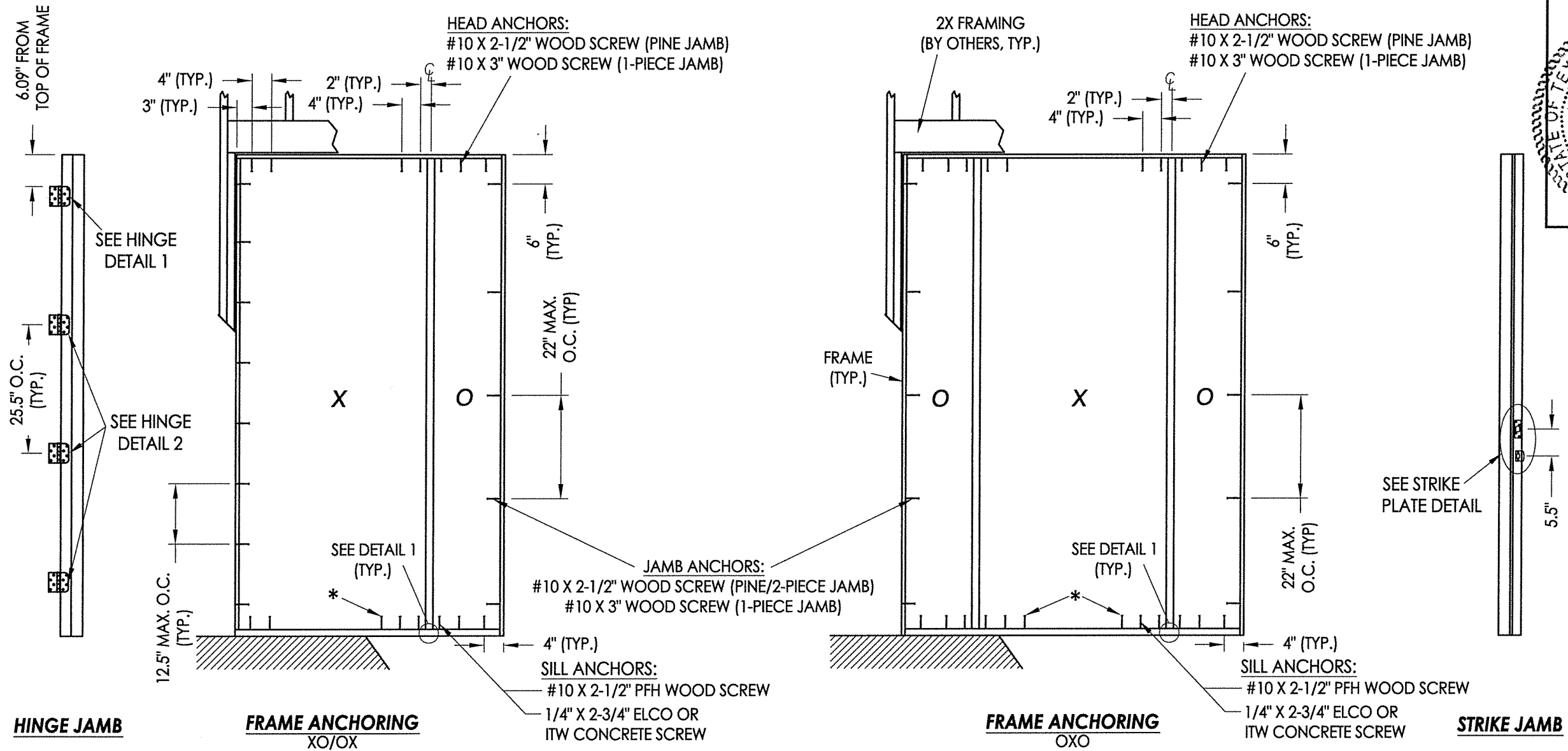
**5** VERTICAL CROSS SECTION  
**6** Outswing configuration



Documents Prepared By: Lyndon F. Schmidt, P.E. TEXAS P.E. #104123		R.W. BUILDING CONSULTANTS, INC. P.O. Box 230 Valrico FL 33595 Phone No.: 813.659.9197	
PRODUCT:	ENDURA	PART OR ASSEMBLY:	FIBERGLASS DOOR
NO.		DATE	
BY		REVISIONS	
1	11/20/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE	LFS
DATE: 12/11/17		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: TX-4772		SHEET 6 OF 7	

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 TEXAS P.E. #104123

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 P.O. Box 230 Valrico FL, 33595  
 Phone No.: 813.659.9197

TEXAS BOARD OF PROFESSIONAL ENGINEERS  
 CERTIFICATE OF REGISTRATION # F-11852

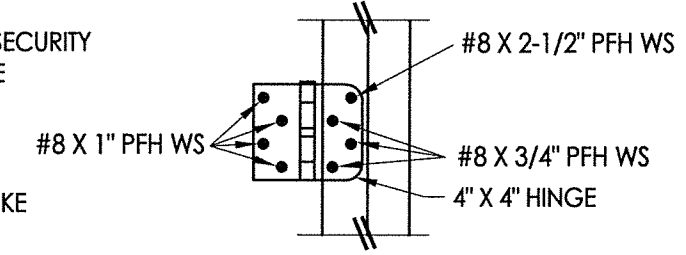
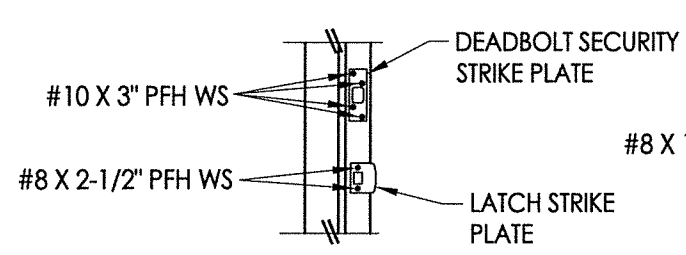
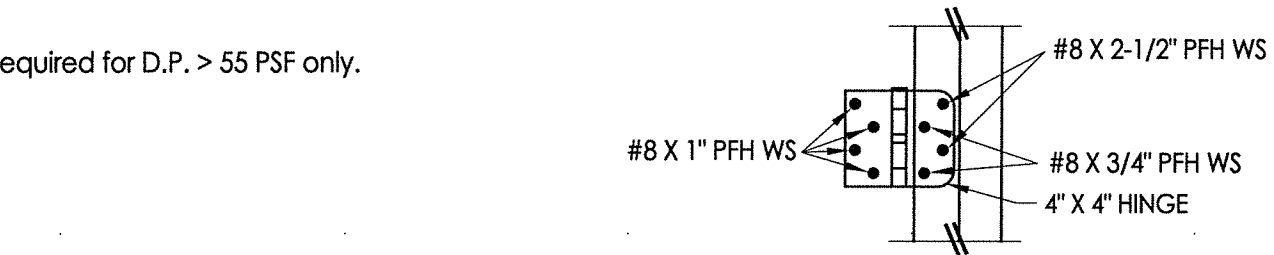
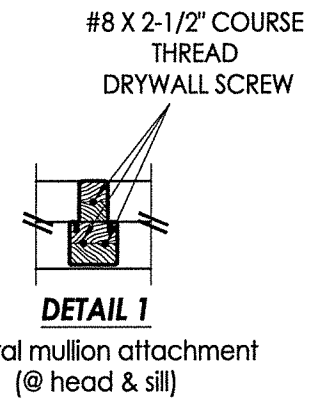
**JAMB NOTES:**  
 THE PINE OR "FusionFrame" 1-PIECE JAMB MAY BE INSTALLED @ THE HEAD OR SIDE JAMB.  
 THE FusionFrame" 2-PIECE JAMB MAY BE INSTALLED @ THE SIDE JAMBS ONLY.

**INTEGRAL MULLION NOTES:**  
 THE FATBOY PINE MULLION, "FusionFrame" MULLION, OR THE "FusionFrame" BACK-TO-BACK JAMB (1-PIECE OR 2-PIECE) MAY ALL BE USED AS THE INTEGRAL MULLION.

- CONCRETE ANCHOR NOTES:**
- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
  - Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimension are not exceeded.
  - Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-3/4"	1-1/2"	4"
ELCO ULTRACON®	1/4"	1-3/4"	1"	4"

\* NOTE: These additional anchors required for D.P. > 55 PSF only.



PRODUCT:	ENDURA	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	BY
1	11/20/19	LFS
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		
DATE:	12/11/17	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4772	
SHEET	7 OF 7	

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