



PERFORMANCE STANDARD

Opaque Fiberglass Door

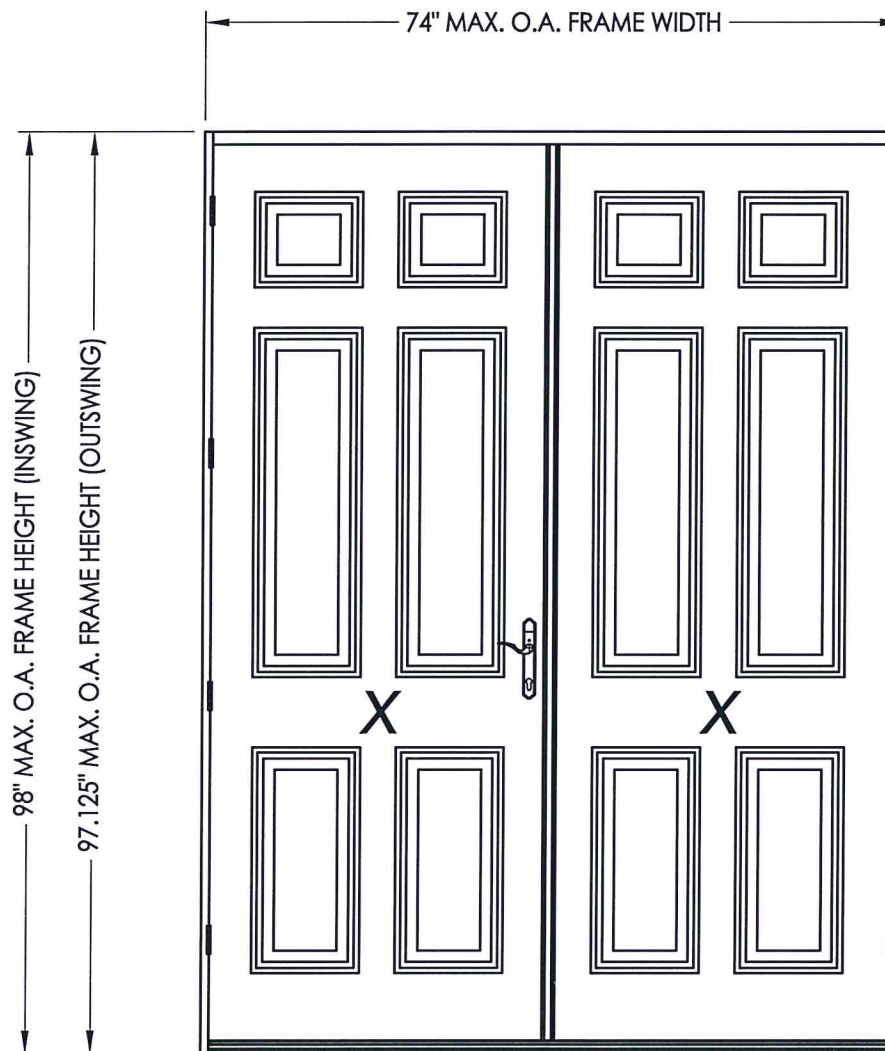
"NON-IMPACT"
IN SWING / OUT SWING

EVALUATED FOR USE IN THE STATE OF TEXAS

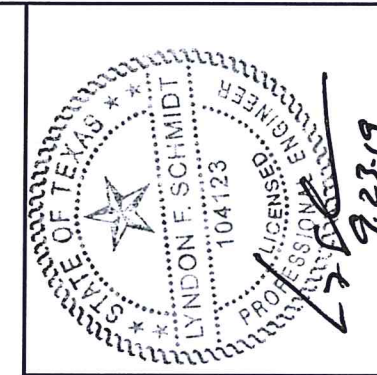
The Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

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.

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SHEET #	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Astragal details (Ultimate Trilennium)
3	Door panel details
4	Horizontal & vertical cross sections
5	Vertical cross sections
6	Frame anchoring



CONFIG.	FRAME TYPE	MODEL	DESIGN PRESSURE (PSF) ULTIMATE TRILENNIUM ASTRAGAL	
			POSITIVE	NEGATIVE
XX	PINE	IN SWING	+30.0	-30.0
XX		OUT SWING	+55.0	-55.0
XX	"FusionFrame"	IN SWING	+30.0	-30.0
XX		OUT SWING	+50.0	-50.0



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	9/19/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE

DATE: 11/09/16

SCALE: N.T.S.

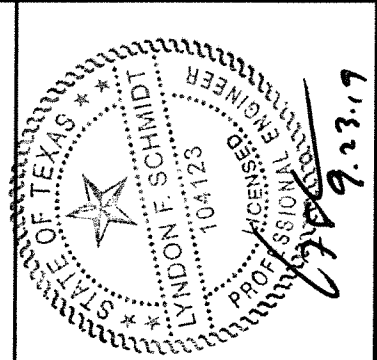
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4672

SHEET 1 OF 6

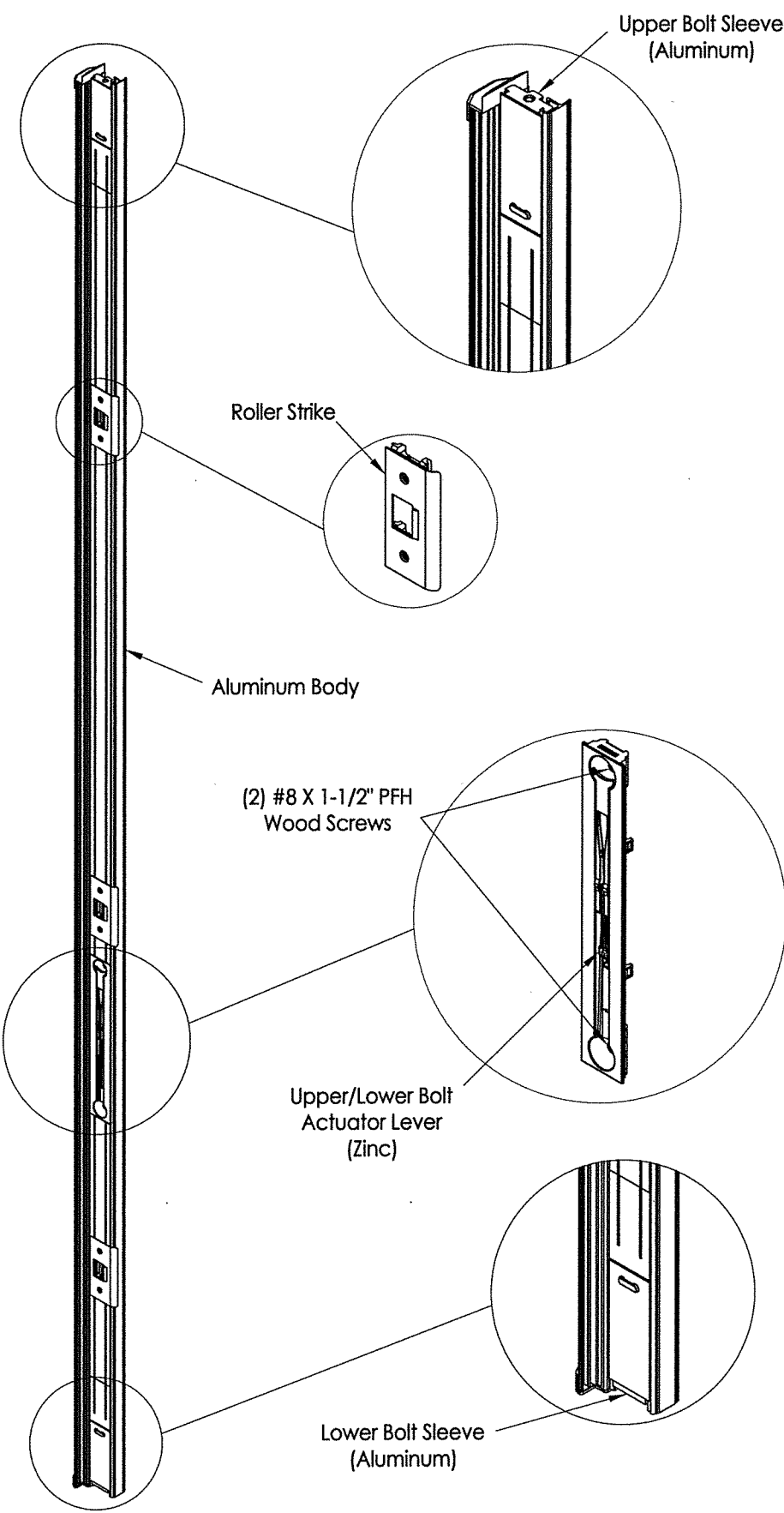
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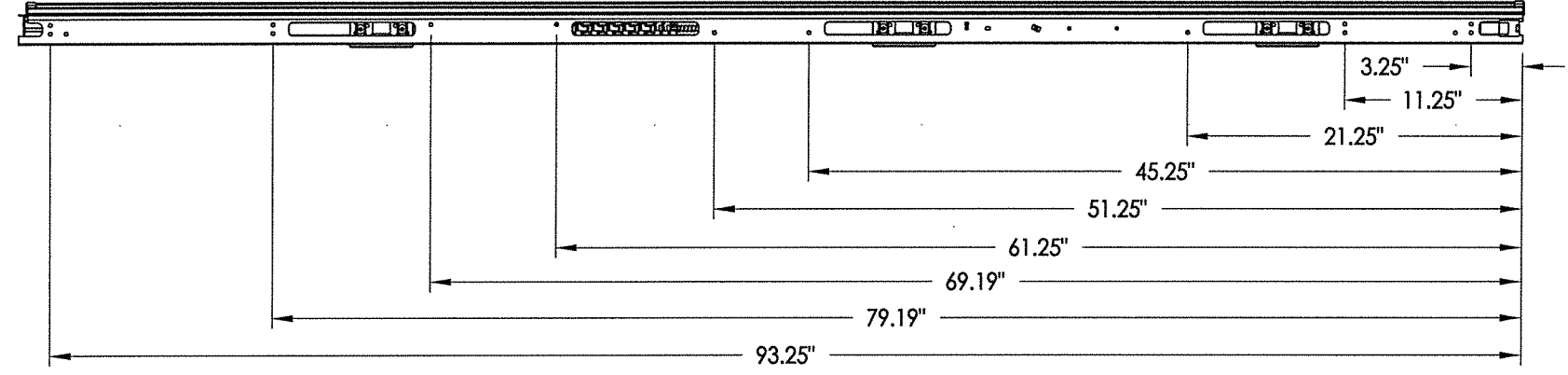
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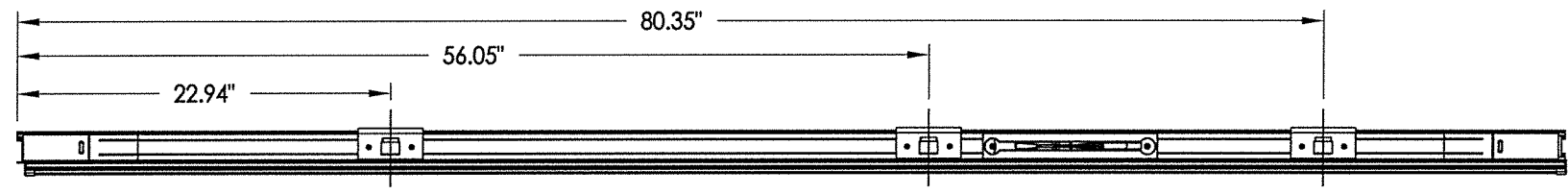
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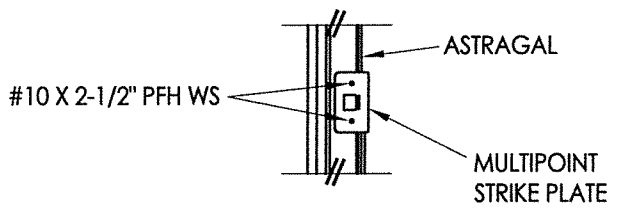
ULTIMATE TRIENNIUM ASTRAGAL



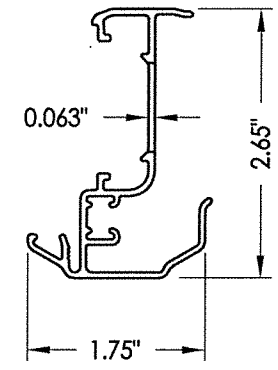
ANCHOR SCREW LOCATIONS



HARDWARE LOCATIONS



STRIKE PLATE DETAIL



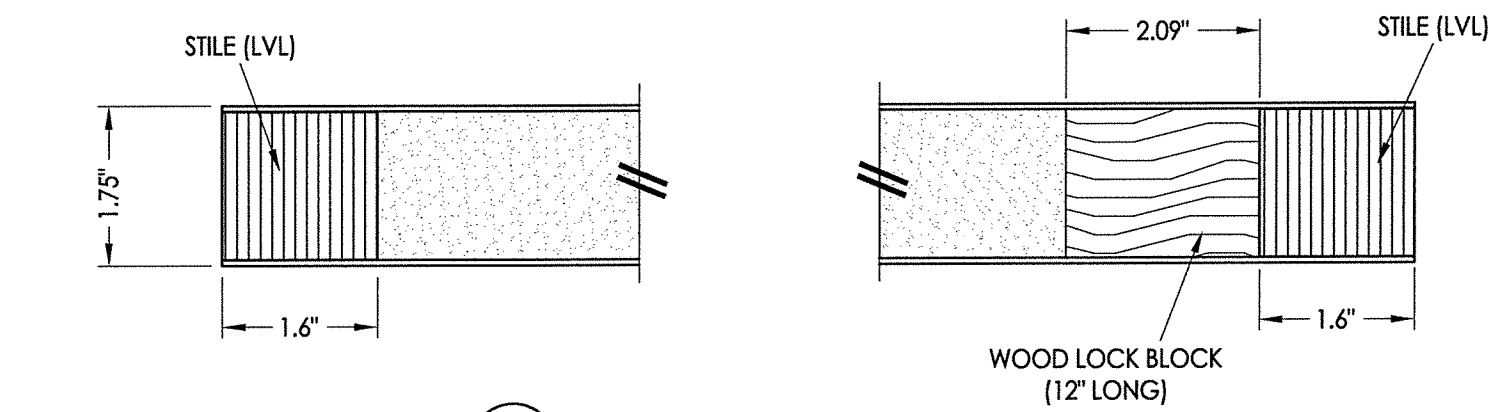
Astragal Section

TOP

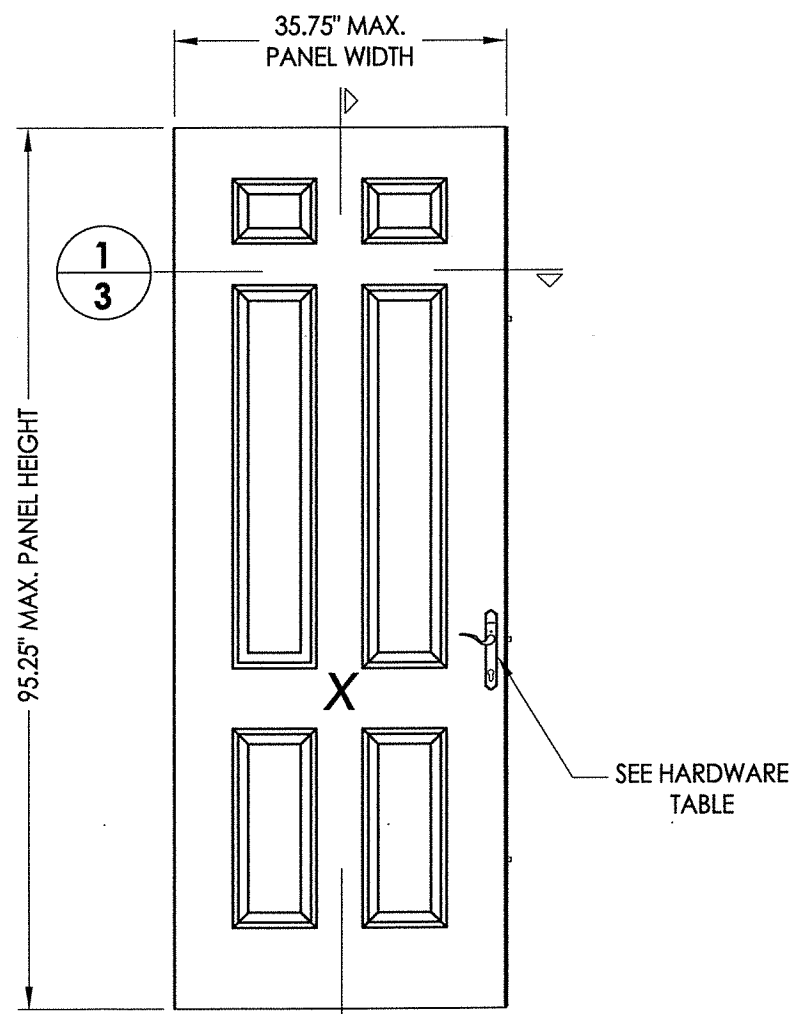
BOTTOM

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	ASTRAGAL DETAILS (ULTIMATE TRIENNIUM)	
NO.	DATE	BY
1	9/19/19	LFS
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		
DATE:	11/09/16	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4672	
SHEET	2 OF 6	

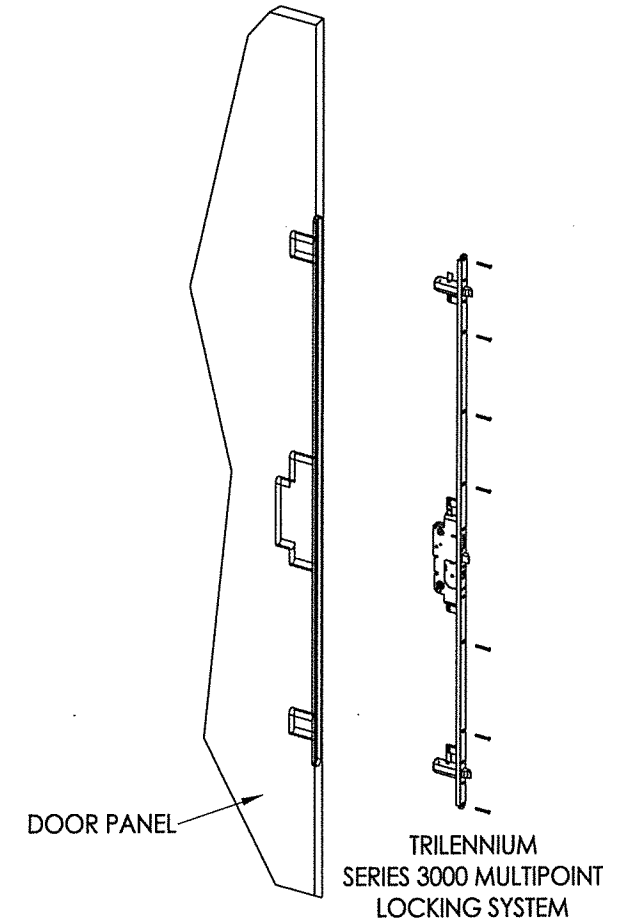
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1
3 HORIZONTAL CROSS SECTION

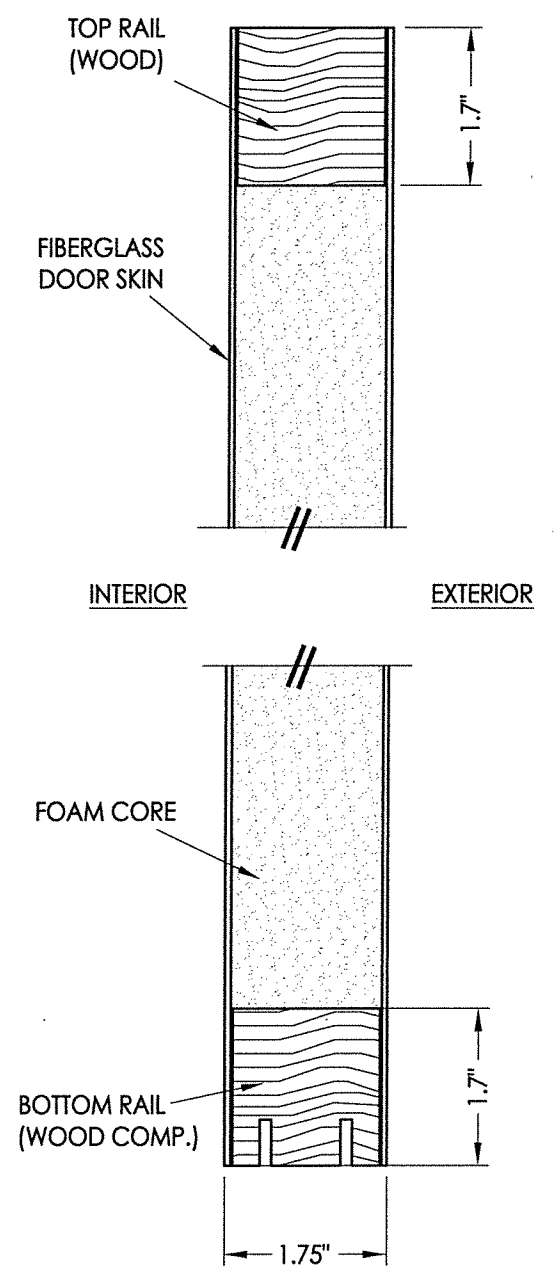


2
3 DOOR PANEL
Masonite
Fiberglass



HARDWARE TABLE	
MANUFACTURER	MODEL
Endura	Trilennium® 3000 Series Multipoint lock (3pt.)

DOOR SKIN: FIBERGLASS (0.075" MIN. THICKNESS)
CORE MATERIAL: POLYURETHANE FOAM (1.9 PCF MIN.)

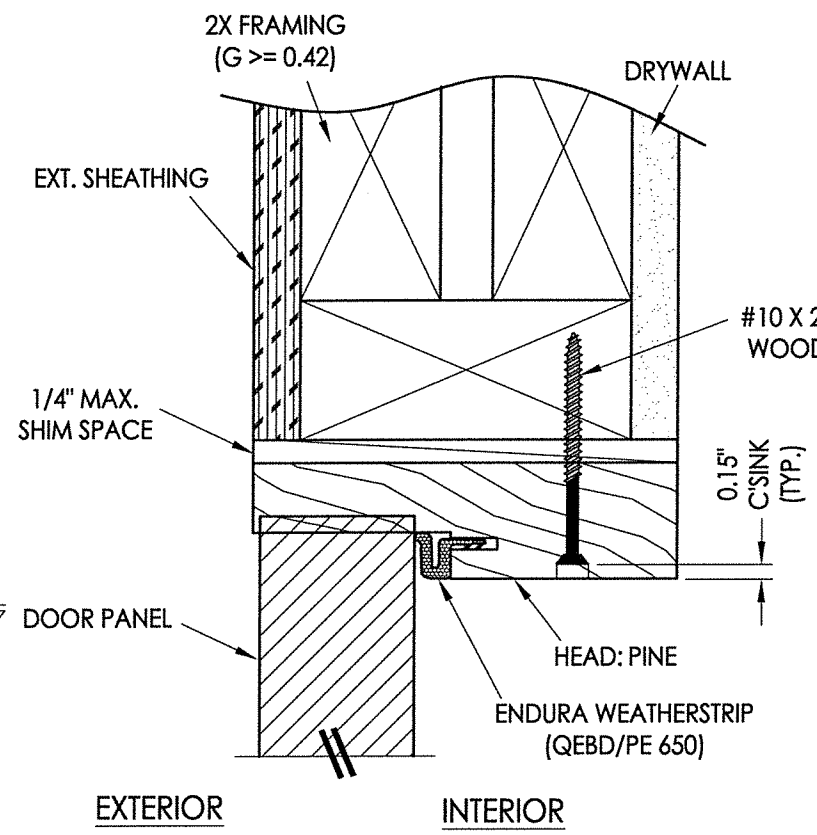
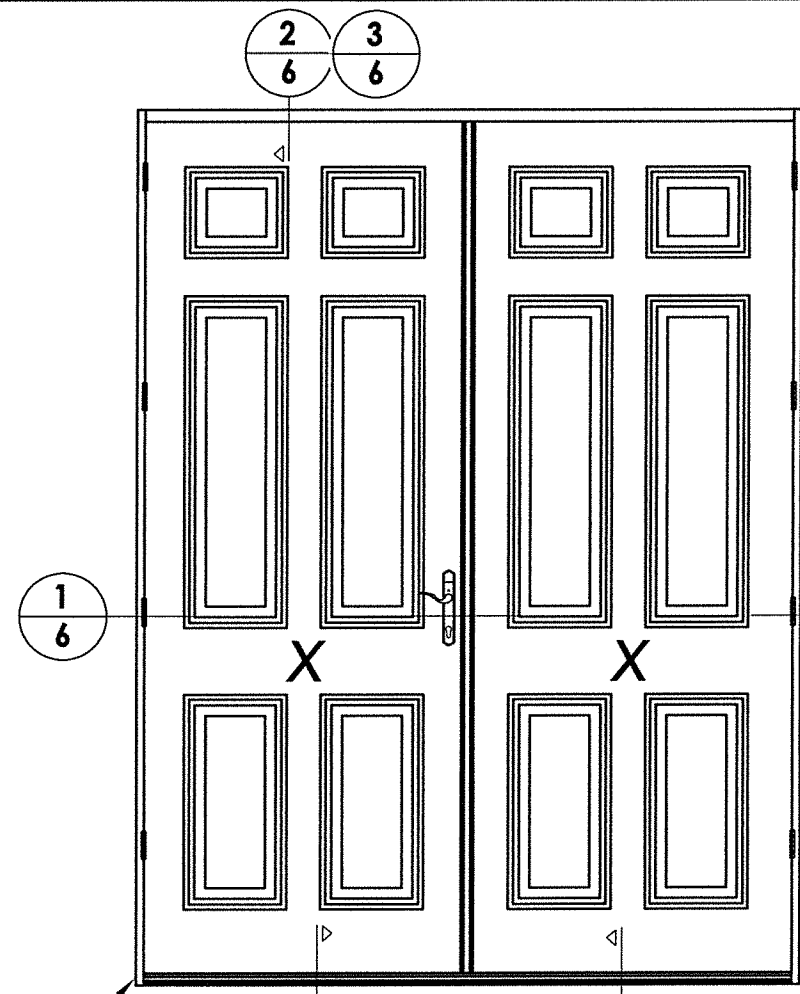


2
3 VERTICAL CROSS SECTION

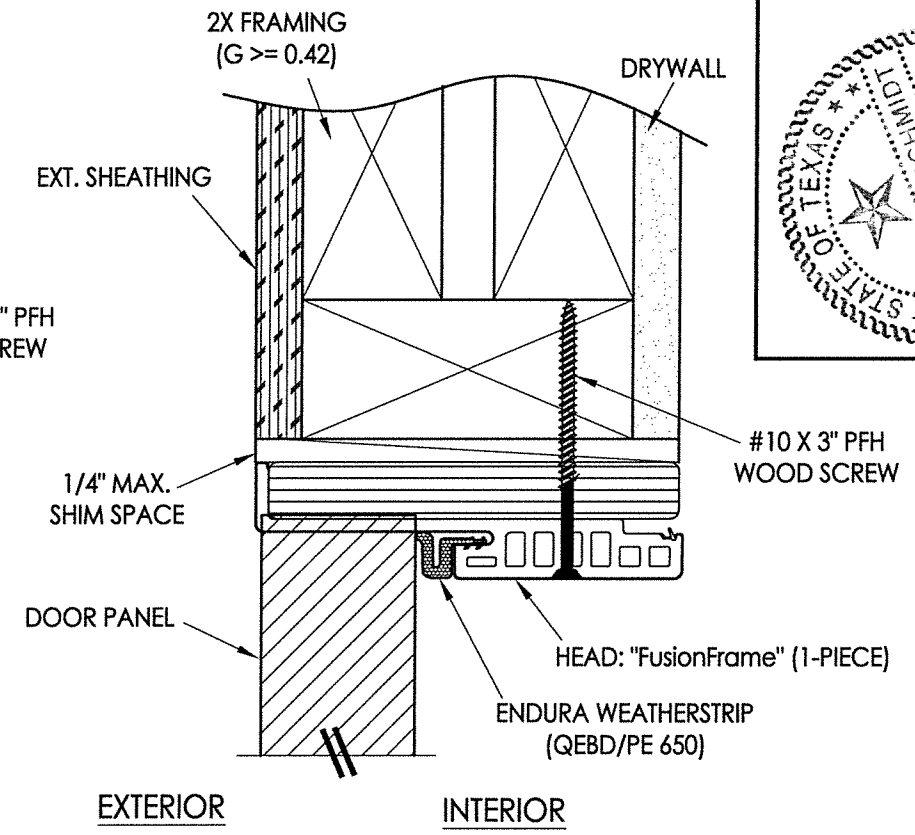
9.23.19
 Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123
 R.W. BUILDING CONSULTANTS, INC.
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 TEXAS BOARD OF PROFESSIONAL ENGINEERS
 CERTIFICATE OF REGISTRATION # F-11852

Documents Prepared By:	Lyndon F. Schmidt, P.E. TEXAS P.E. #104123		
PRODUCT:	ENDURA		
PART OR ASSEMBLY:	DOOR PANEL DETAILS & GLAZING DETAIL		
DATE:	11/09/16		
SCALE:	N.T.S.		
DWG. BY:	JK		
CHK. BY:	LFS		
DRAWING NO.:	TX-4672		
SHEET	3 OF 6		
NO.	DATE	BY	REVISIONS
1	9/19/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE

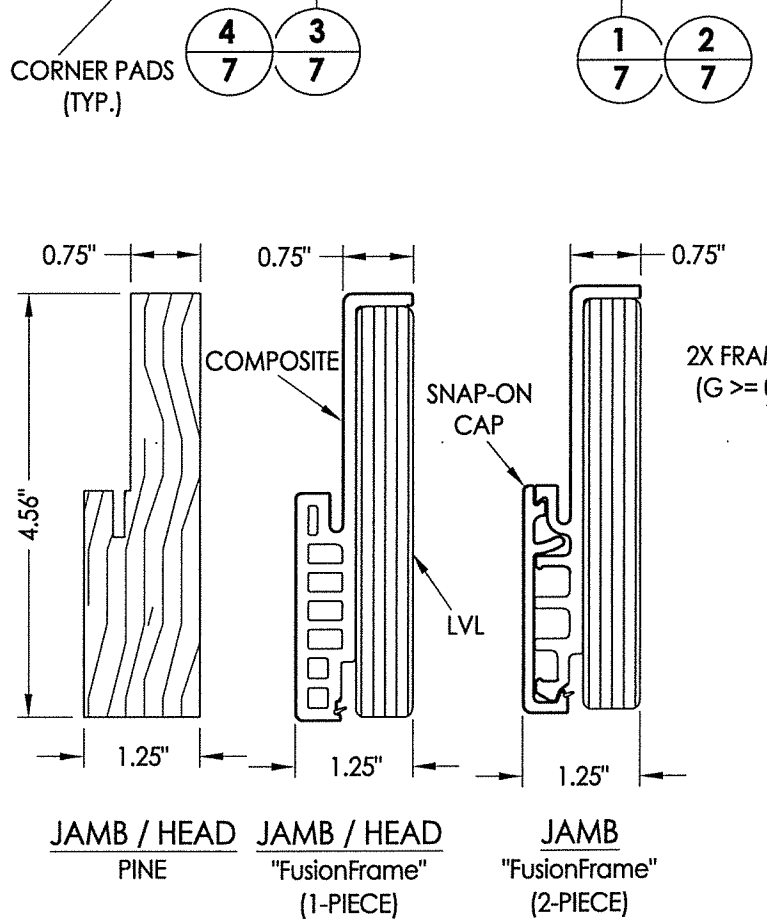
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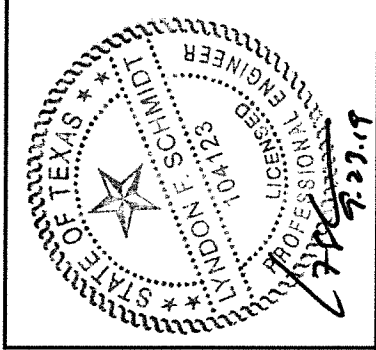
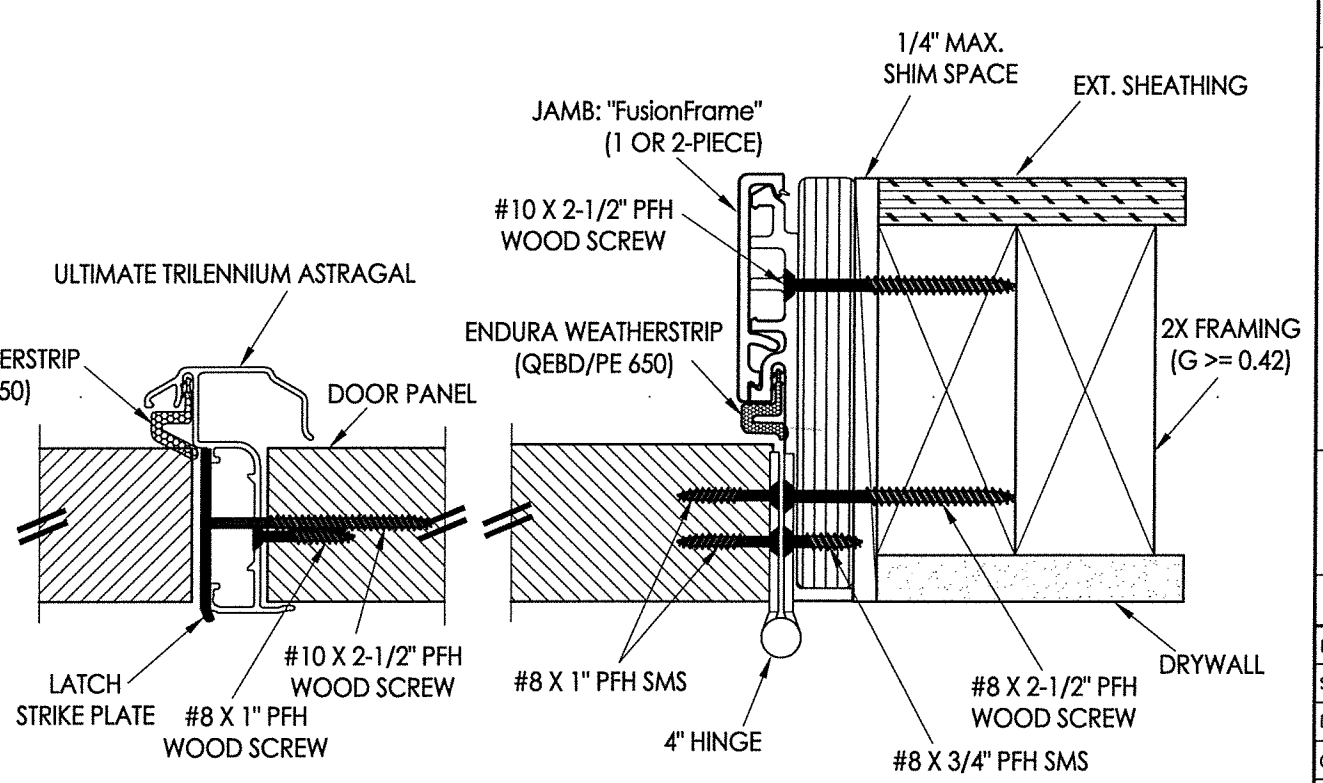
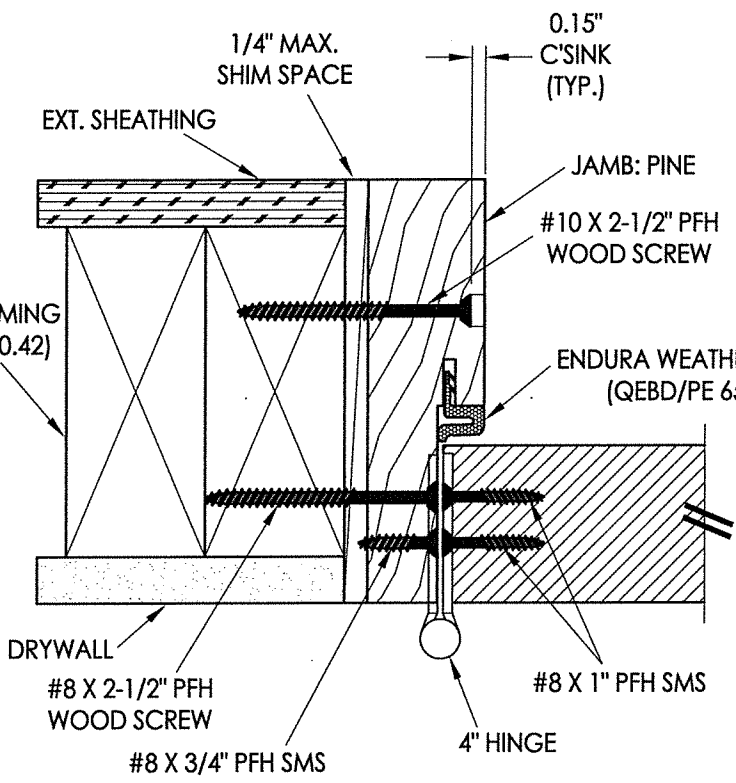
2 **VERTICAL CROSS SECTION**
6 Outswing shown - inswing also approved



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



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



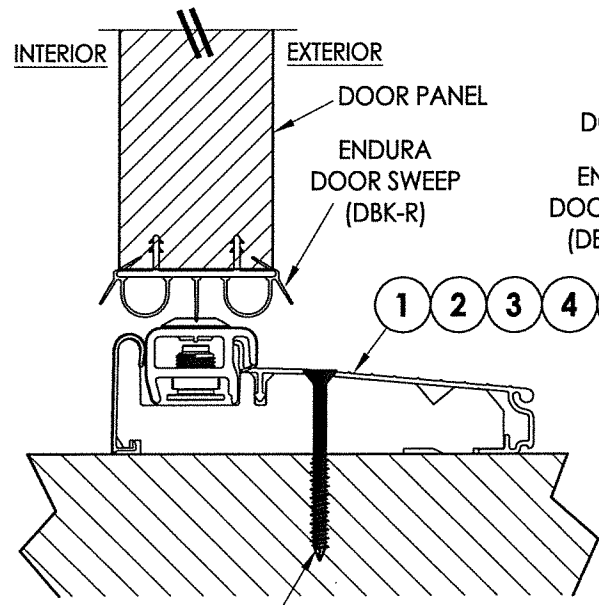
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TEXAS BOARD OF PROFESSIONAL ENGINEERS
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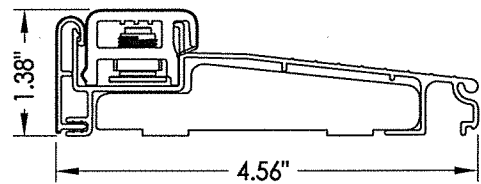
PRODUCT:	ENDURA	
PART OR ASSEMBLY:	HORIZONTAL & VERTICAL CROSS SECTIONS	
NO.	DATE	BY
1	9/19/19	LFS
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		
DATE:	11/09/16	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4672	
SHEET	4 OF 6	

R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-865 (Sub ID 6622) Masonite FG Opaque (Triennium)\C - Drawings\TX-4668.69.71.72.dwg, 5.2

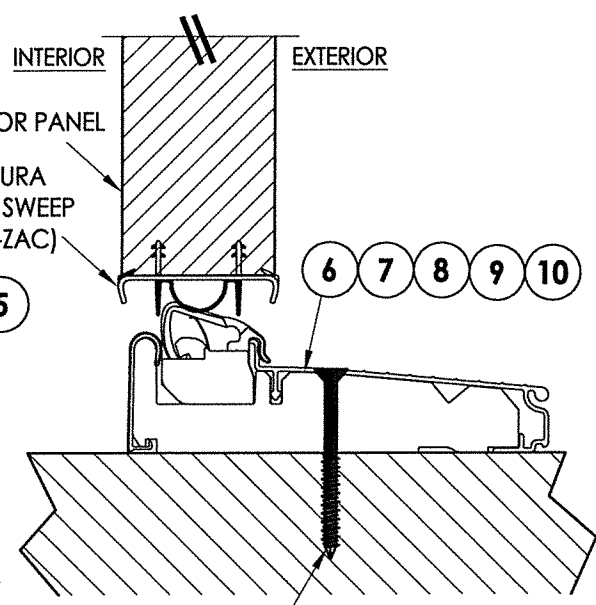


#10 X 2.5" PFH WOOD SCREW OR
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

1 VERTICAL CROSS SECTION
5 Inswing Adjustable Threshold

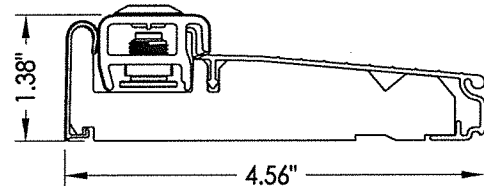


1 INSWING ADJUSTABLE THRESHOLD
ZAIL4565

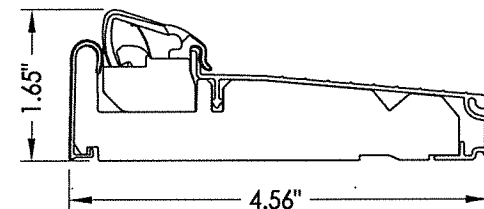


#10 X 2.5" PFH WOOD SCREW OR
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

2 VERTICAL CROSS SECTION
5 Inswing Articulating Threshold w/ Pin Capture

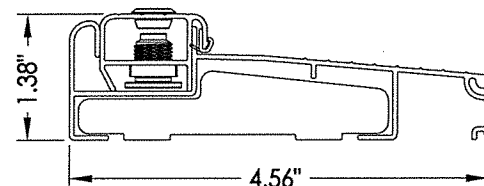


2 INSWING ARTICULATING THRESHOLD
ZAI4565FN

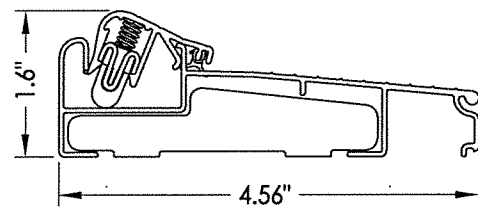


7 INSWING ARTICULATING THRESHOLD
ZAC4565FN

MAX. DESIGN PRESSURE = ±25 PSF

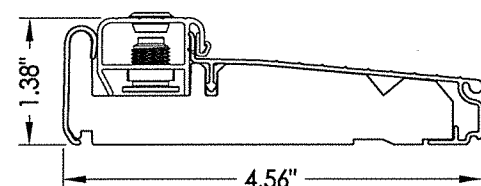


8 INSWING ARTICULATING THRESHOLD
ZAILAA4565

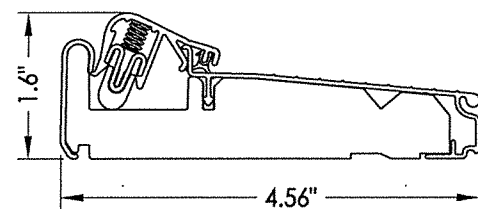


9 INSWING ARTICULATING THRESHOLD
ZACAA4565FN

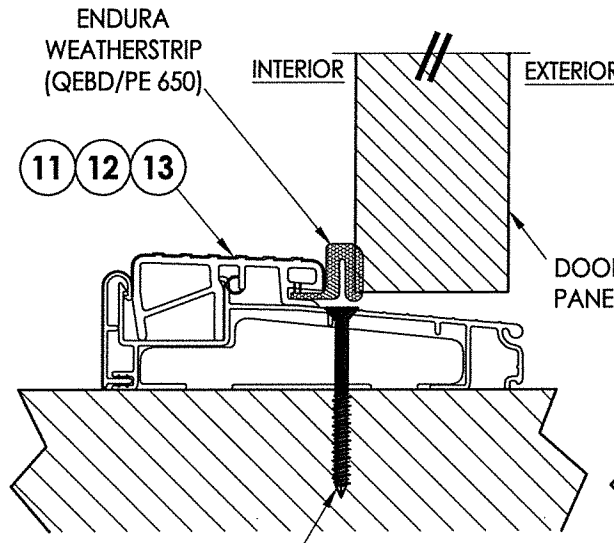
MAX. DESIGN PRESSURE = ±25 PSF



4 INSWING ADJUSTABLE THRESHOLD
ZAAA4565FN

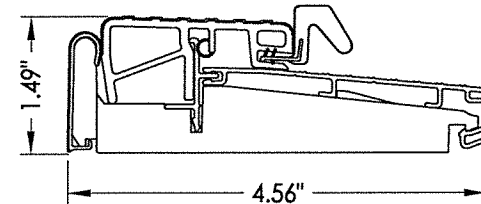


10 INSWING ARTICULATING THRESHOLD
ZAC4565RDS

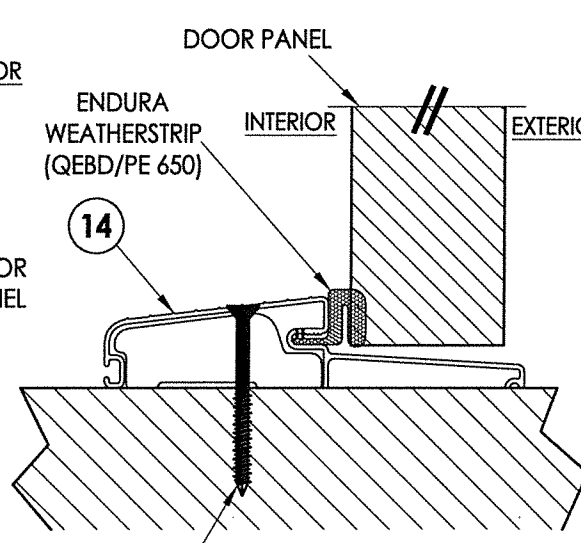


#10 X 2.5" PFH WOOD SCREW OR
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

3 VERTICAL CROSS SECTION
5 Outswing Bump Threshold

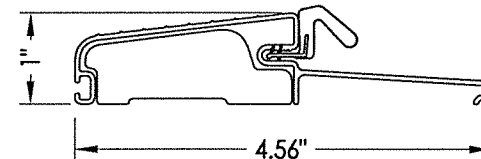


13 OUTSWING THRESHOLD
ZOB4565RDS

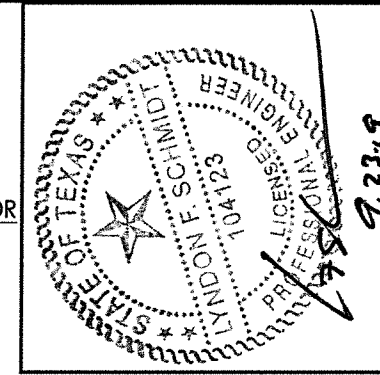


#10 X 2.5" PFH WOOD SCREW OR
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

4 VERTICAL CROSS SECTION
5 Outswing Bump Threshold



14 OUTSWING THRESHOLD
FOB4566



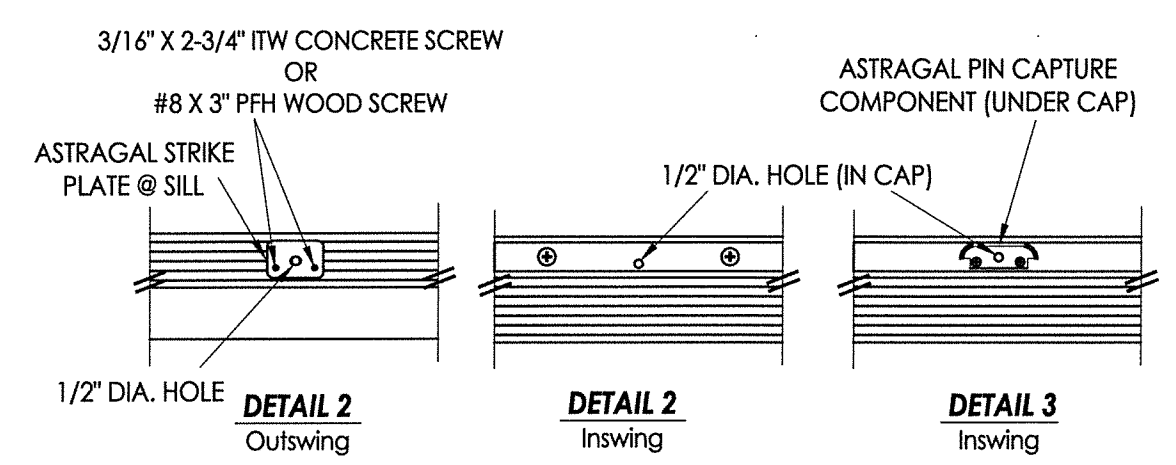
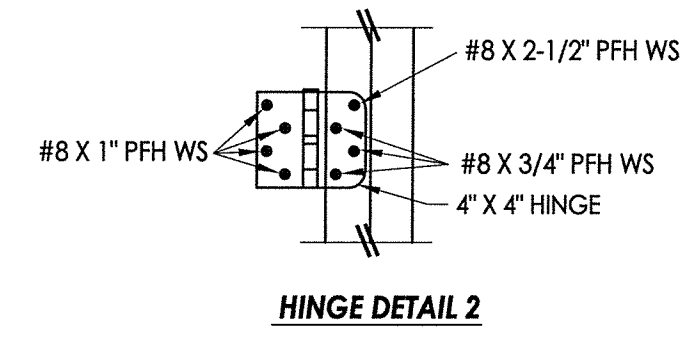
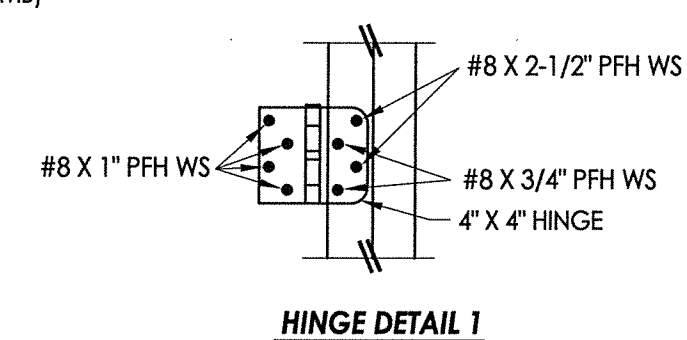
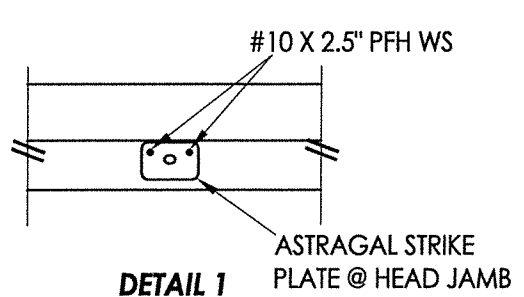
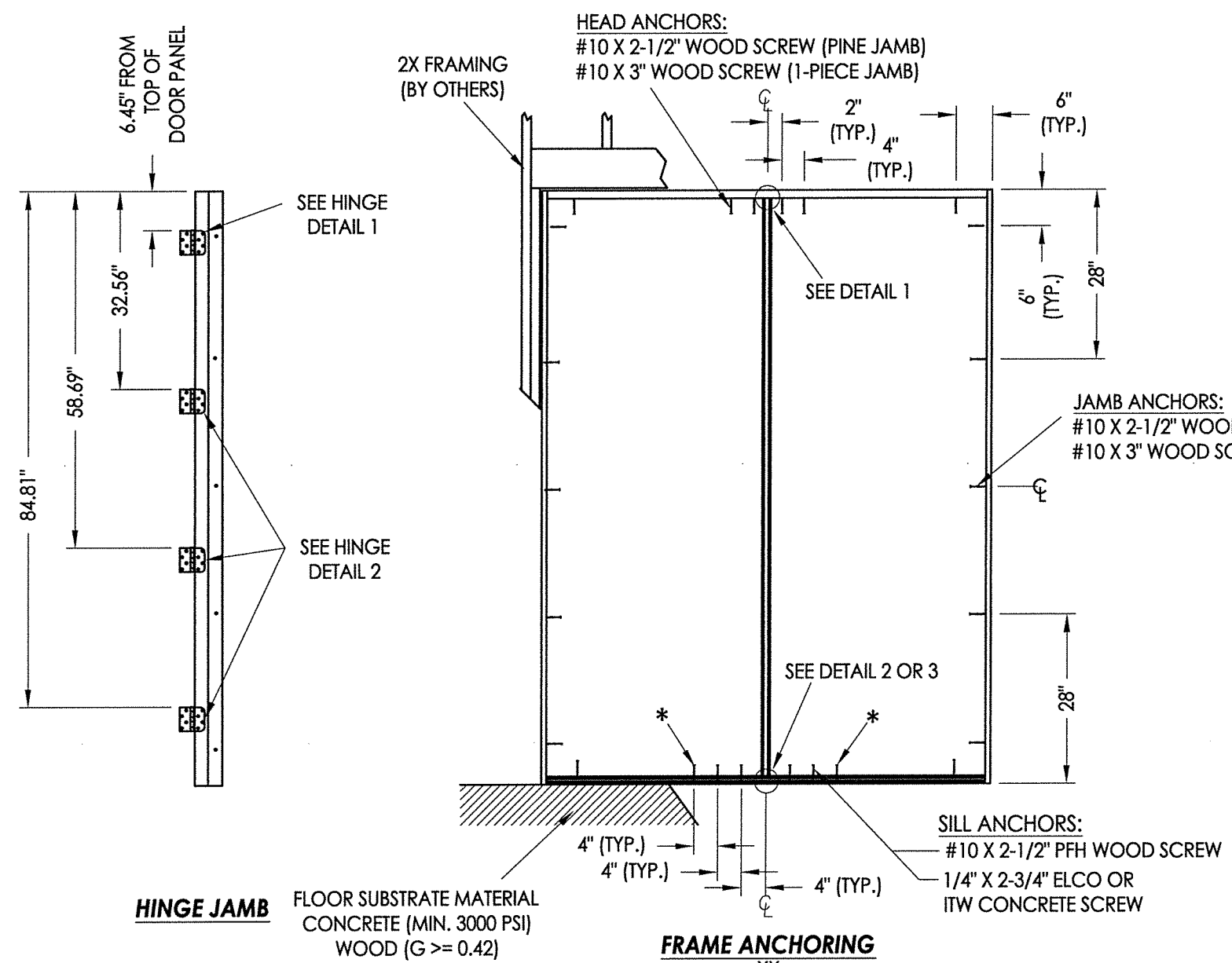
9.23.19

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

PRODUCT: ENDURA		PART OR ASSEMBLY: VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
1	9/19/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
DATE: 11/09/16		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: TX-4672		SHEET 5 OF 6	

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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.

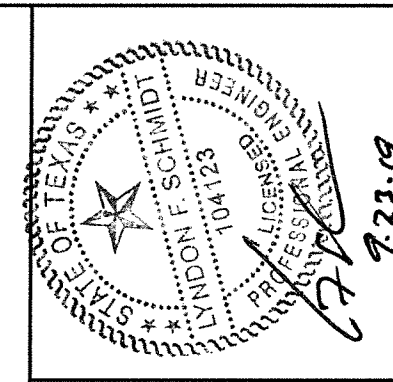
- CONCRETE ANCHOR NOTES:**
- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
 - Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required 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®	3/16"	1-3/4"	3"	1-1/2"
ITW TAPCON®	1/4"	1-3/4"	1-1/2"	4"
ELCO ULTRACON®	1/4"	1-3/4"	1"	4"

WOOD SCREW INSTALLATION NOTES:

- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.

* NOTE: THESE ANCHORS REQUIRED FOR D.P. > 40 PSF.



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PRODUCT:	ENDURA
PART OR ASSEMBLY:	FRAME ANCHORING
DATE:	11/09/16
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4672
SHEET	6 OF 6