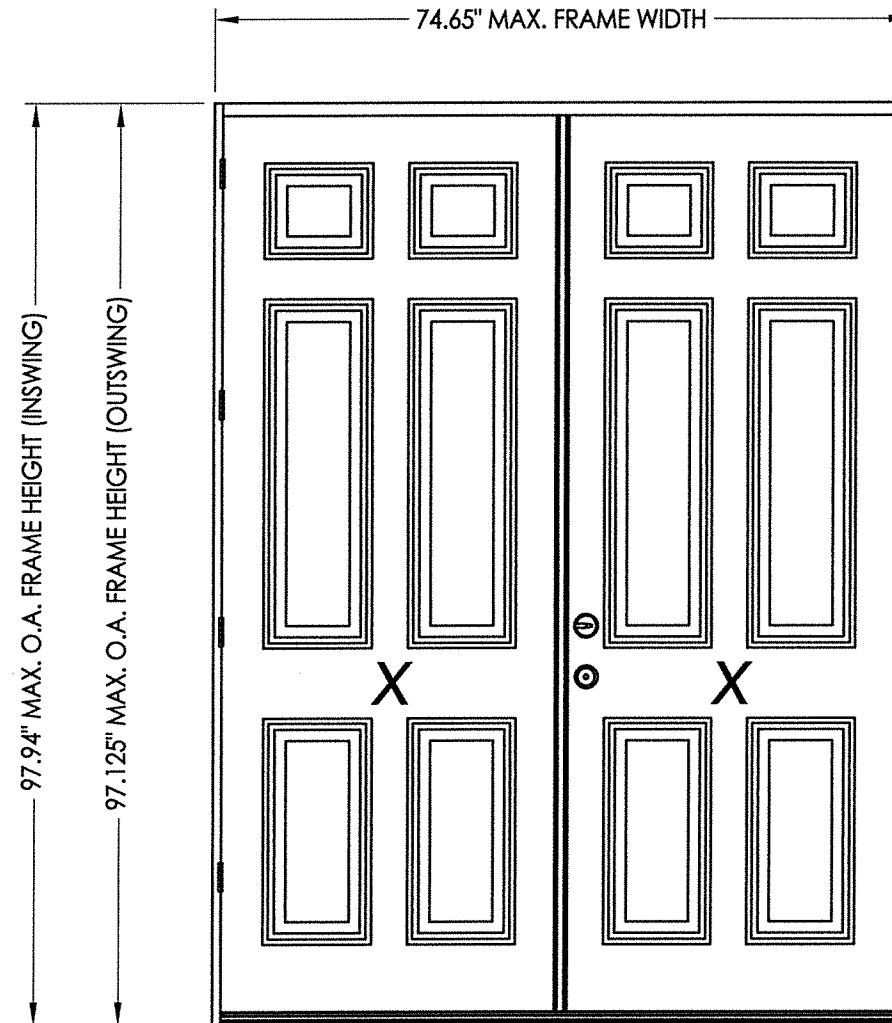




Opaque Fiberglass Door

"NON-IMPACT"
INSWING / OUTSWING



EVALUATED FOR USE IN THE STATE OF TEXAS

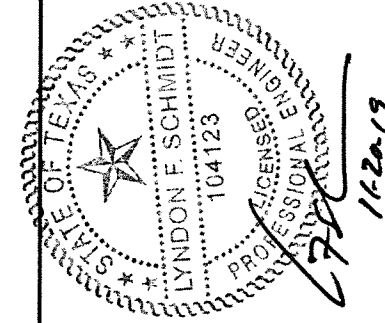
The Opaque Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

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.

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

MODEL	DESIGN PRESSURE (PSF) w/ PINE FRAME & FATBOY PINE MULLIONS		DESIGN PRESSURE (PSF) w/ "FusionFrame" FRAME & MULLIONS	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
INSWING	+40.0	-40.0	+40.0	-40.0
OUTSWING	+50.0	-55.0	+50.0	-50.0

SEE SHEET 5 FOR THRESHOLD DESIGN PRESSURE LIMITATIONS



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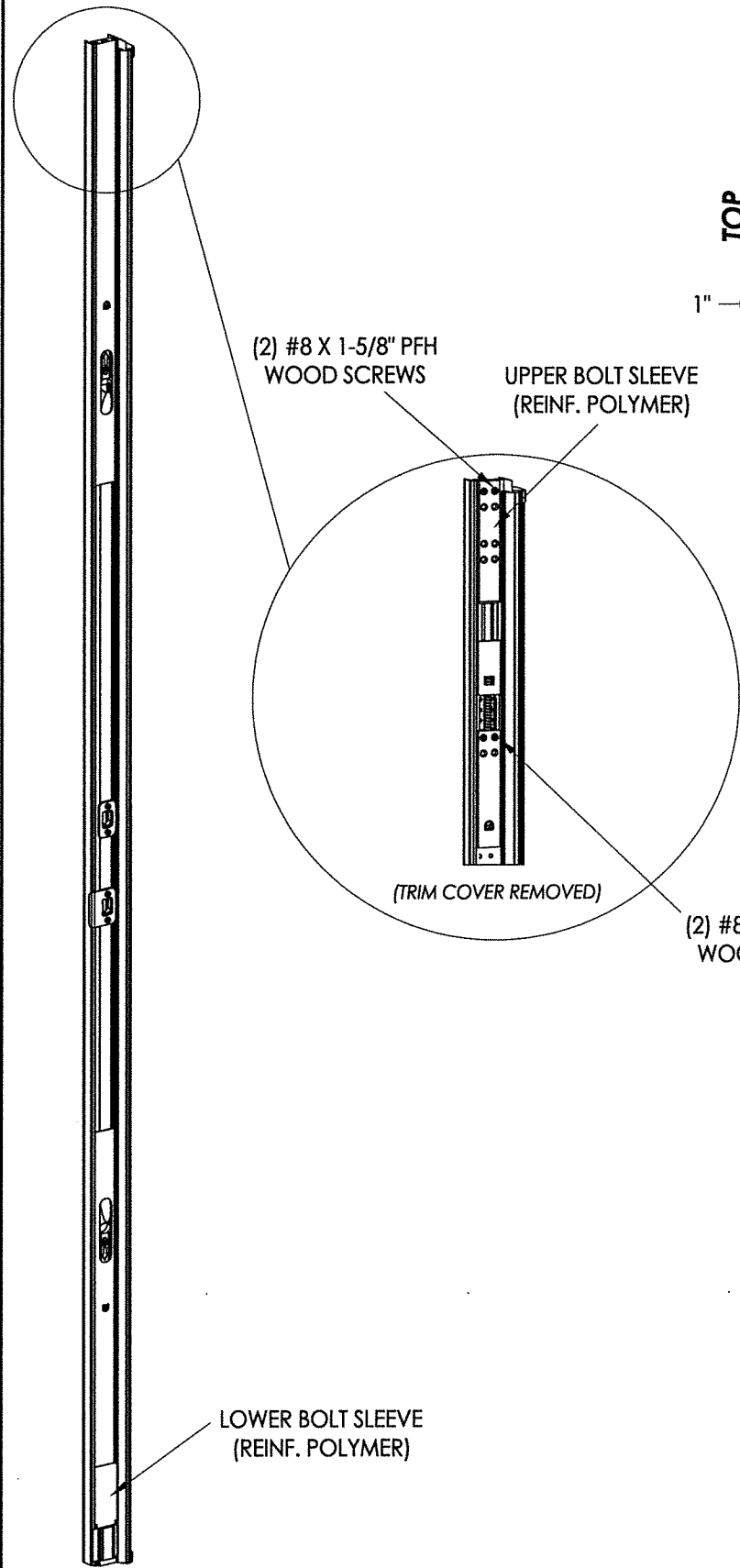
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: ENDURA

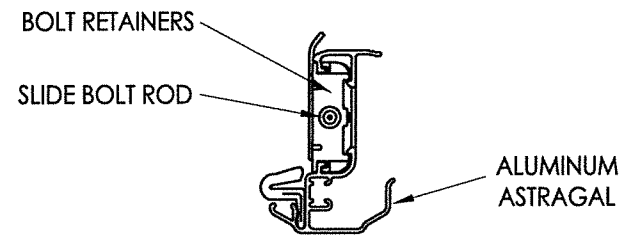
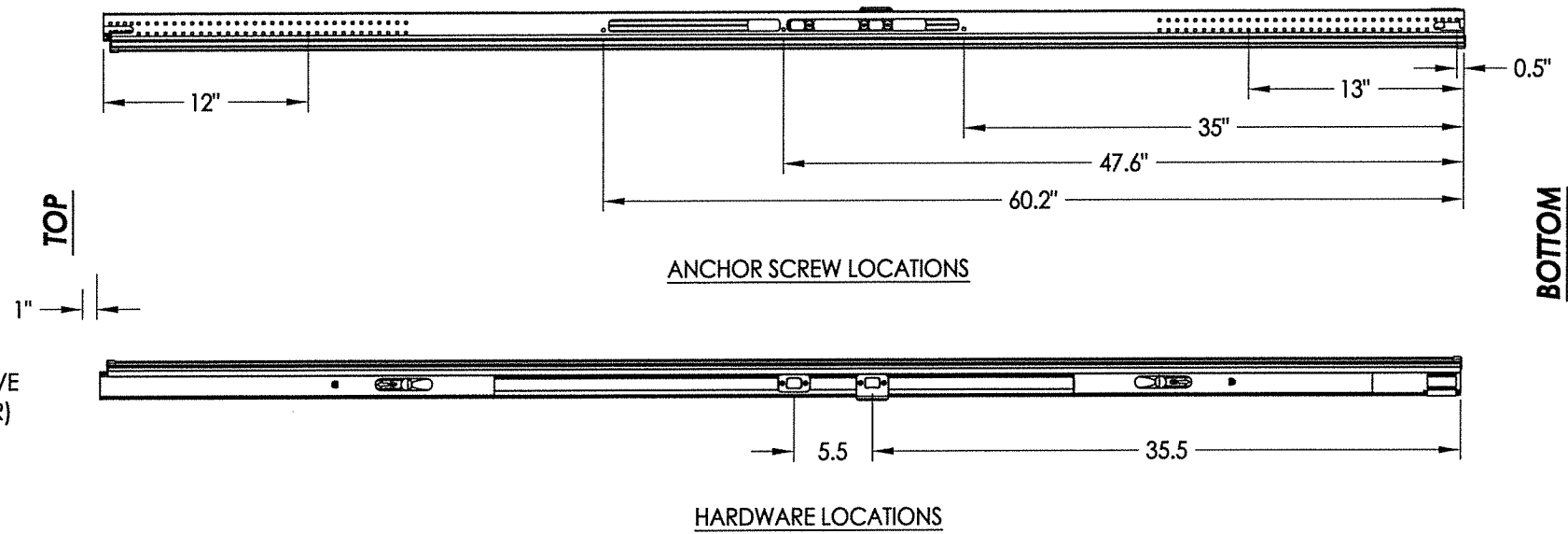
PART OR ASSEMBLY:
TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

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

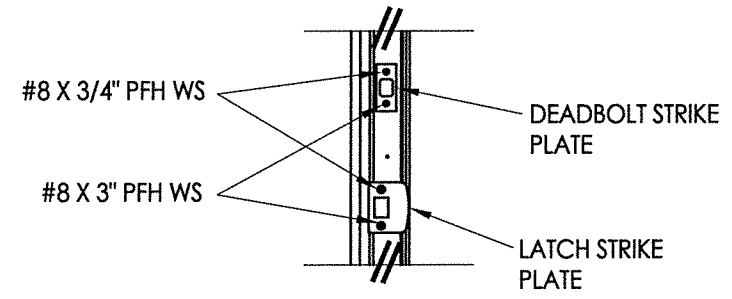
DATE: 10/31/18
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4895
SHEET 1 OF 6



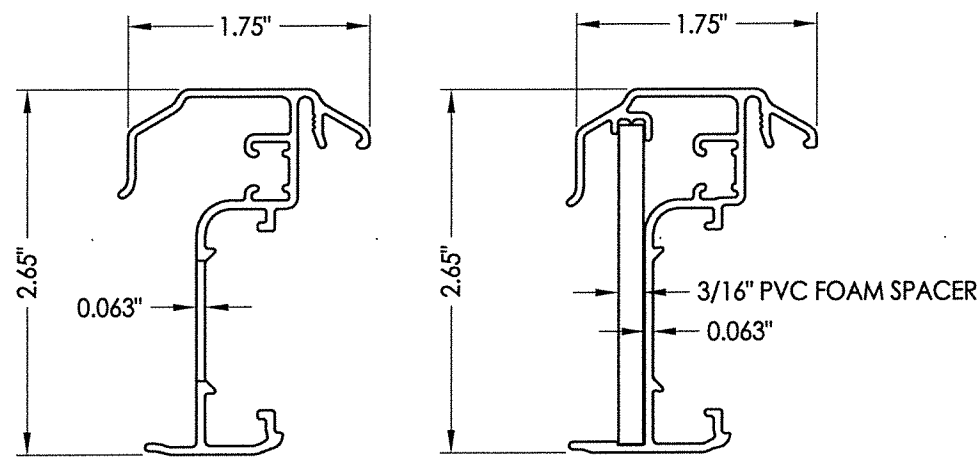
ULTIMATE/ULTIMATE COMPATIBLE HURRICANE ASTRAGAL



ALUMINUM ASTRAGAL ASSEMBLY

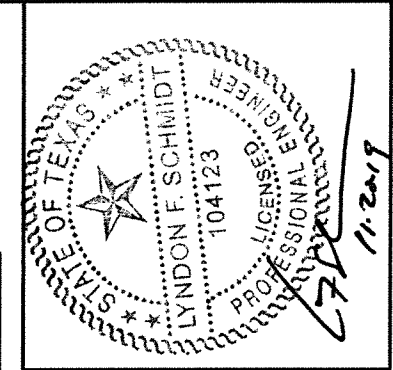
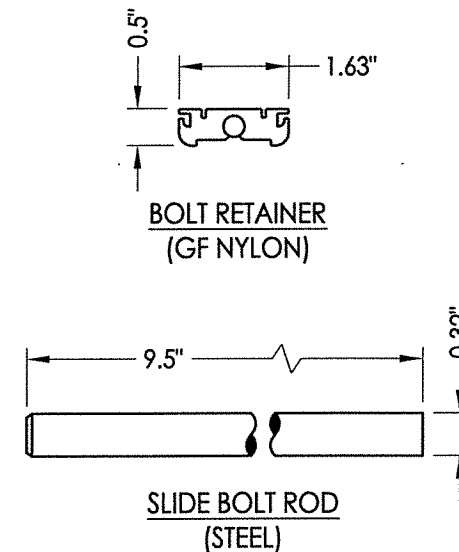


LATCH & DEADBOLT DETAIL



ASTRAGAL SECTIONS

*NOTE: INCREASE THE MAXIMUM FRAME WIDTH BY 3/16" TO ACCOMODATE THE OPTIONAL ULTIMATE COMPATIBLE HURRICANE ASTRAGAL WHEN USED.



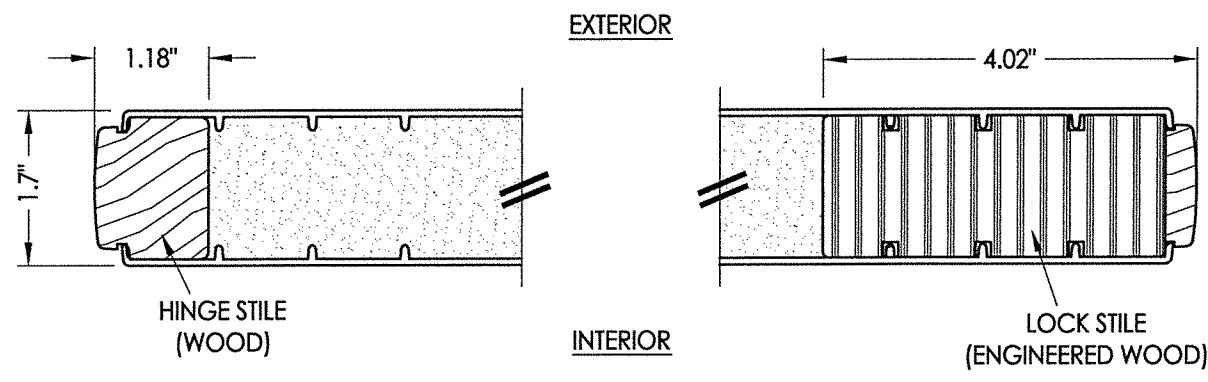
Documents Prepared By: Lyndon F. Schmidt, P.E.
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R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA
PART OR ASSEMBLY:	ASTRAGAL DETAILS

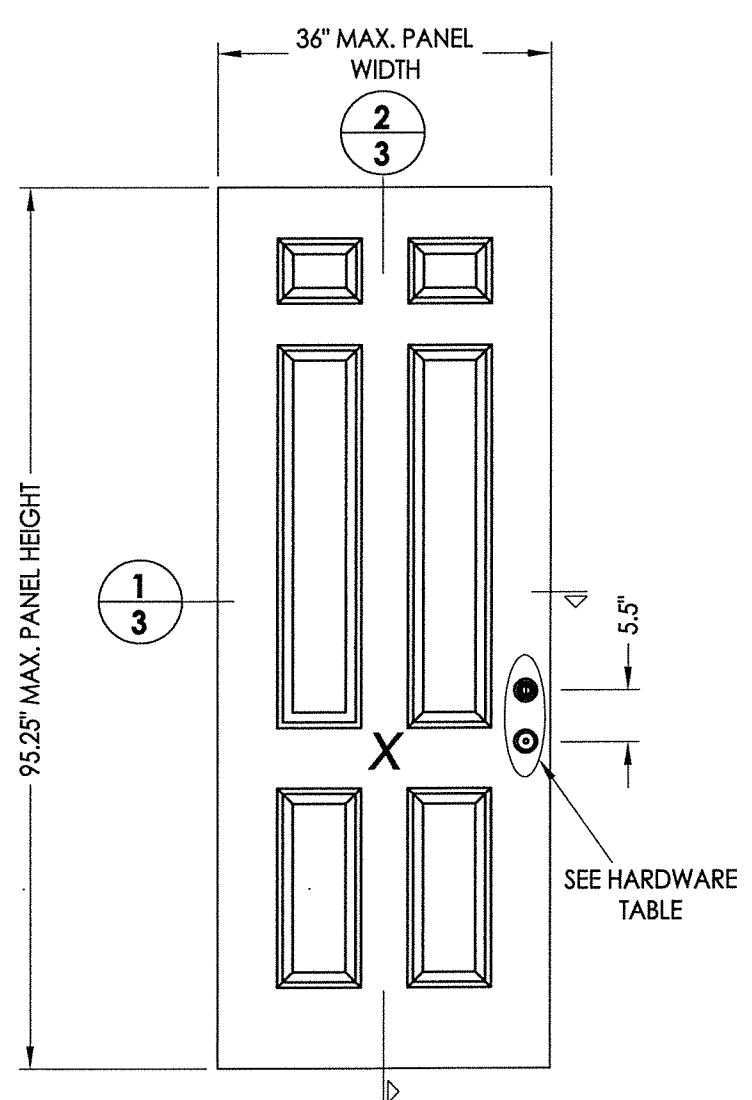
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ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		

DATE:	10/31/18
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4895
SHEET	2 OF 6

R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-1011 Opaque Therma-Tru FG door XX (LK, DB) (4894-4895)\C - Drawings\TX-4894-95.dwg, 2-3



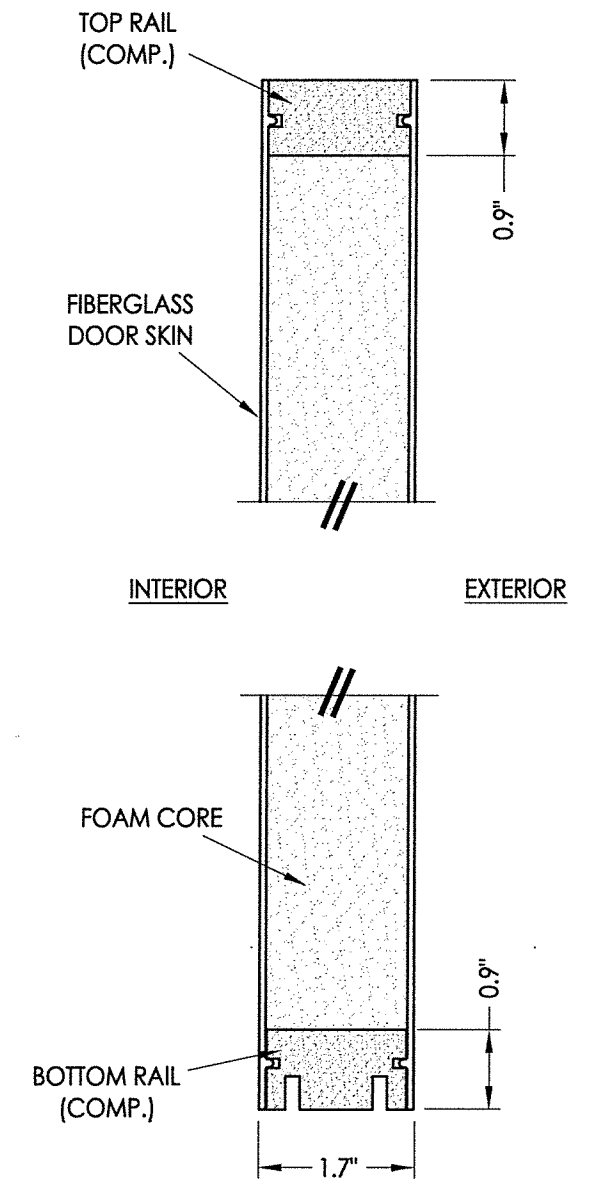
1
3 HORIZONTAL CROSS SECTION



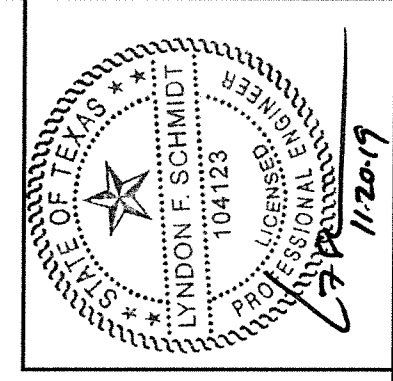
40 DOOR PANEL
Therma-Tru Fiberglass

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

HARDWARE TABLE	
MANUFACTURER	MODEL
KWIKSET	LATCH: KWIKSET SIGNATURE SERIES (991) DEADBOLT: KWIKSET SIGNATURE SERIES (980/985)



2
3 VERTICAL CROSS SECTION



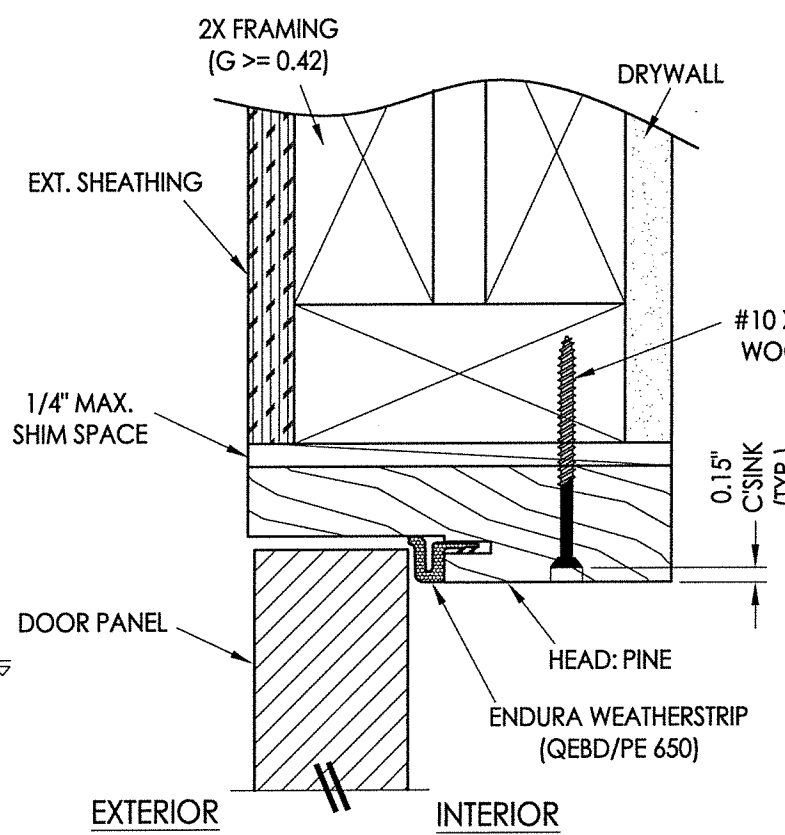
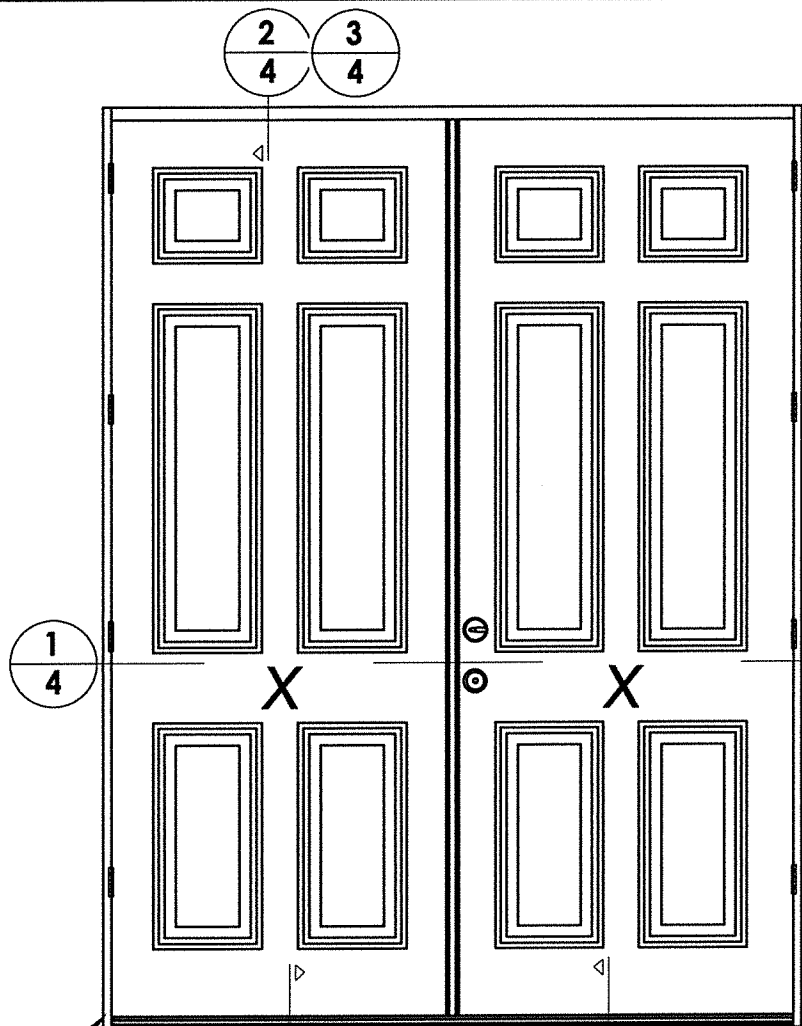
Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197

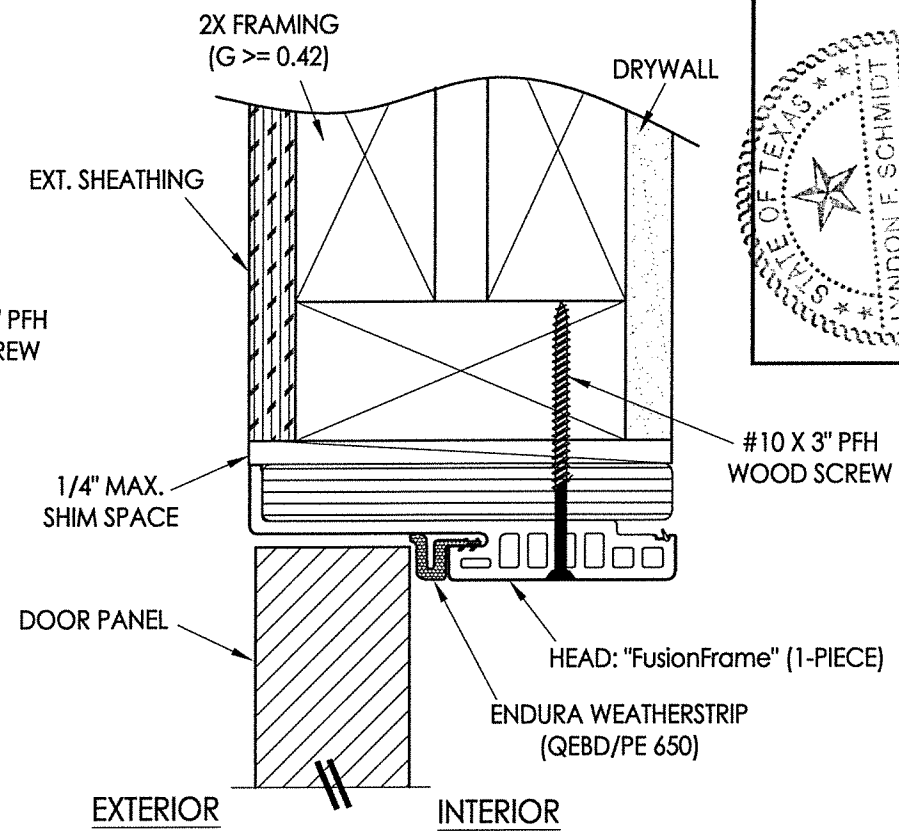
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	DOOR PANEL DETAILS	
NO.	DATE	BY
1	11/20/19	LFS
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		
DATE:	10/31/18	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4895	
SHEET	3	OF 6

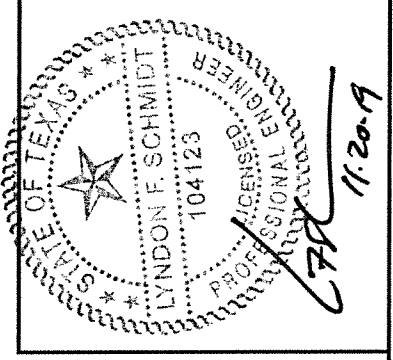
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2 VERTICAL CROSS SECTION
 4 Outswing shown - inswing also approved



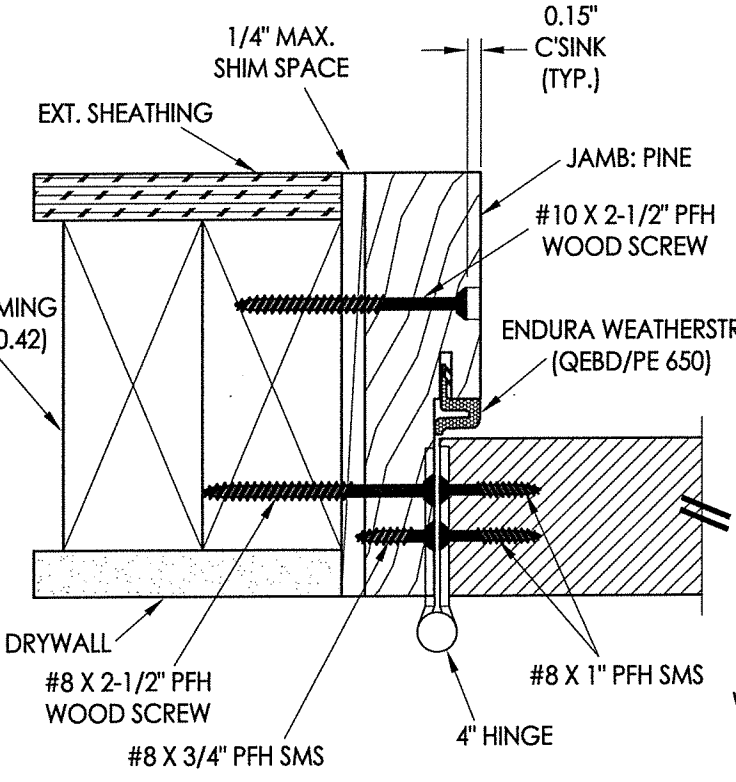
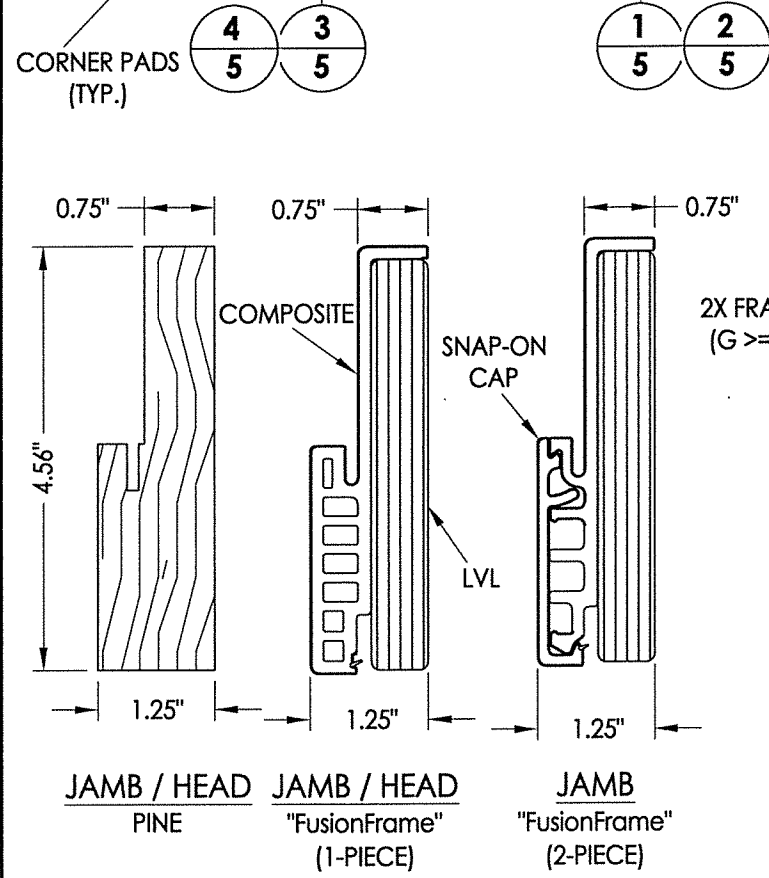
3 VERTICAL CROSS SECTION
 4 Outswing shown - inswing also approved



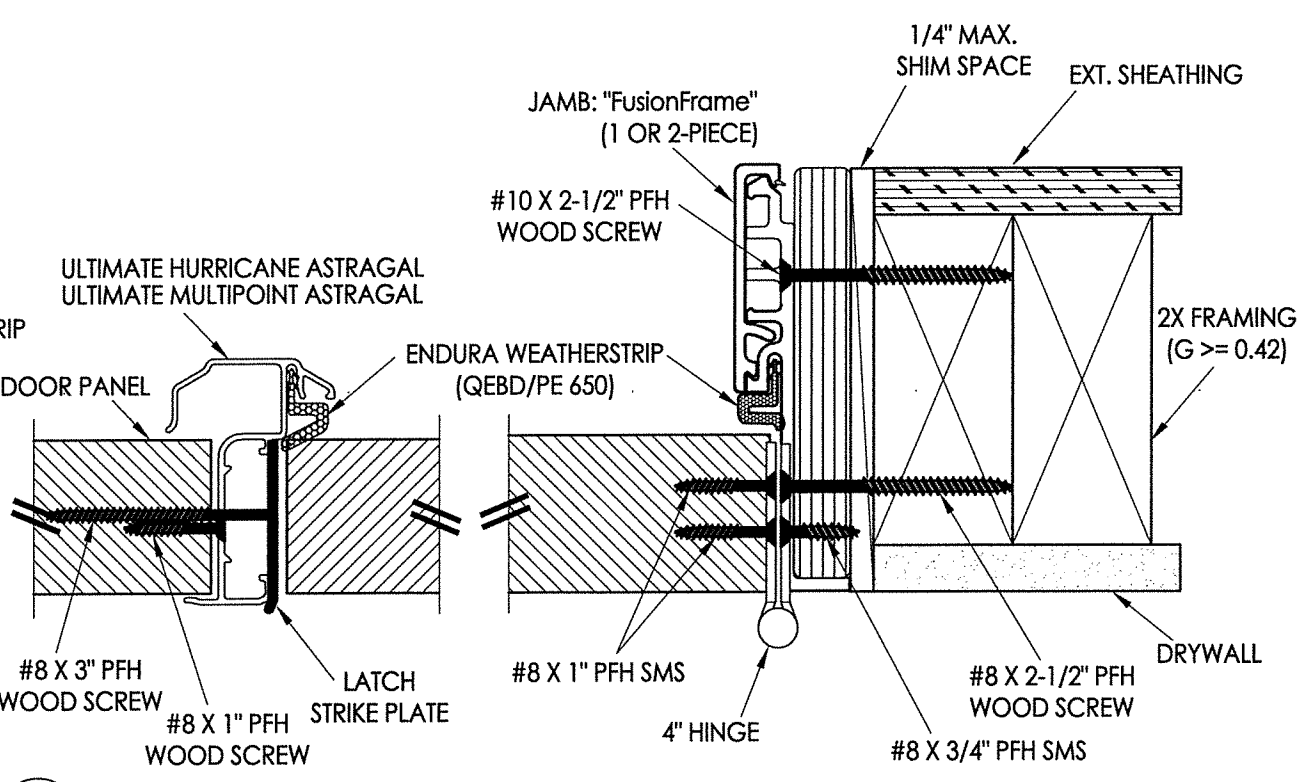
Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123

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 Phone No.: 813.659.9197

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



1 HORIZONTAL CROSS SECTION
 4 Inswing shown - Outswing also approved



PRODUCT: ENDURA

PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS
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DATE: 10/31/18

SCALE: N.T.S.

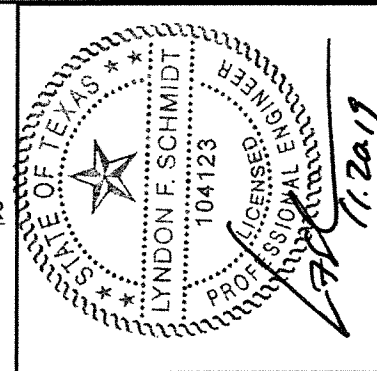
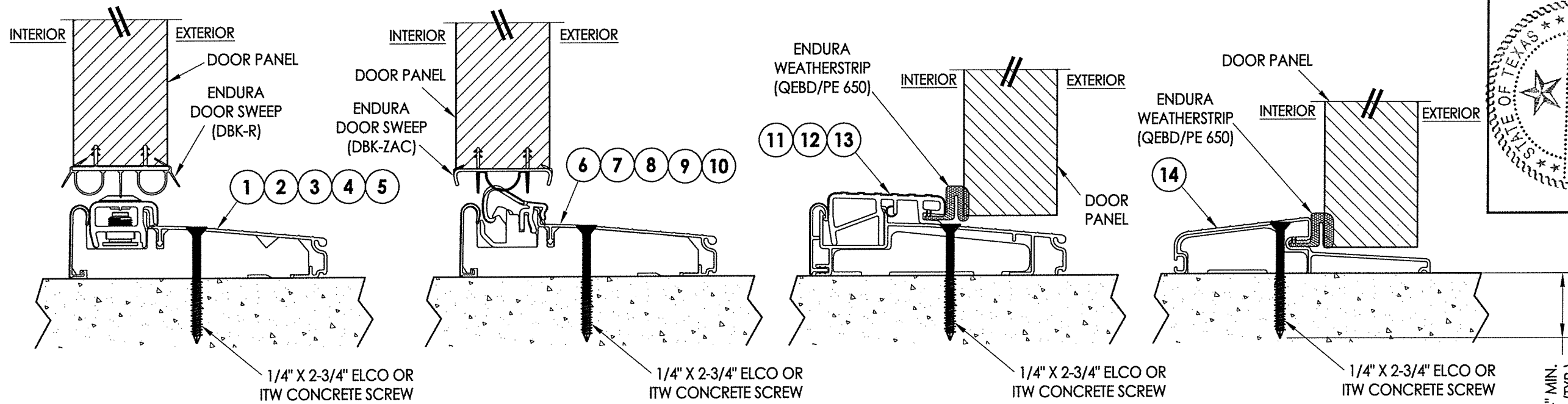
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4895

SHEET 4 OF 6

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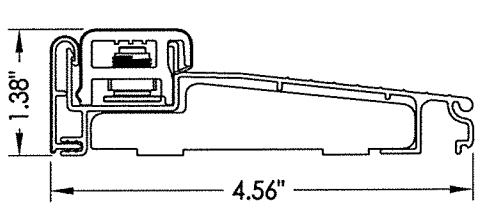
1 VERTICAL CROSS SECTION
5 Inswing Adjustable Threshold

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

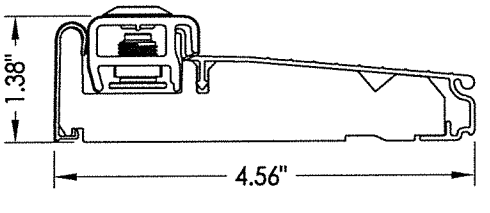
3 VERTICAL CROSS SECTION
5 Outswing Bump Threshold

4 VERTICAL CROSS SECTION
5 Outswing Bump Threshold

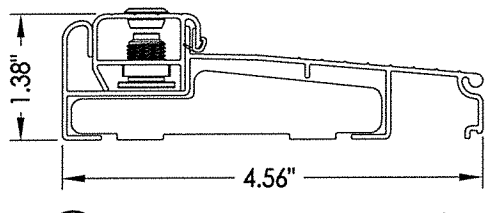
1-1/4" MIN.
EMB. (TYP.)



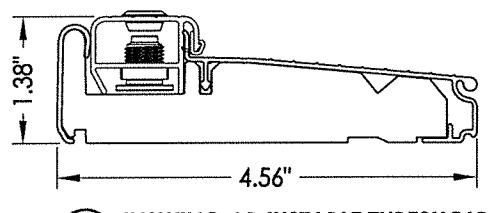
1 INSWING ADJUSTABLE THRESHOLD
ZAIL4565



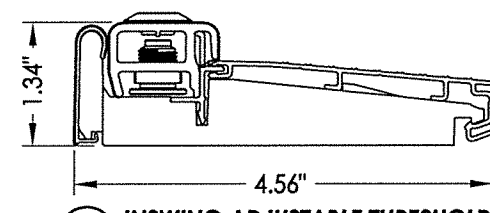
2 INSWING ADJUSTABLE THRESHOLD
ZAI4565FN
MAX. DESIGN PRESSURE = ±35 PSF



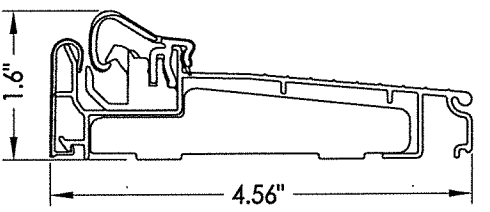
3 INSWING ADJUSTABLE THRESHOLD
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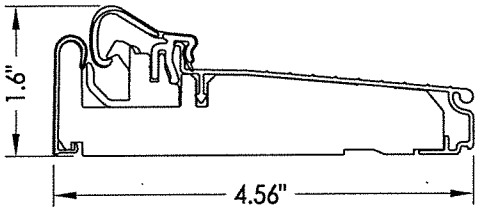
4 INSWING ADJUSTABLE THRESHOLD
ZAIAA4565FN
MAX. DESIGN PRESSURE = ±35 PSF



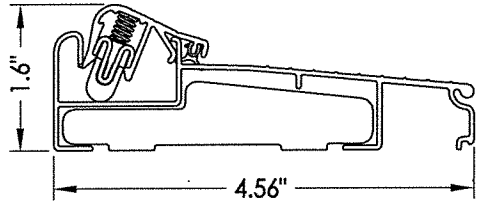
5 INSWING ADJUSTABLE THRESHOLD
ZAI4565RDS



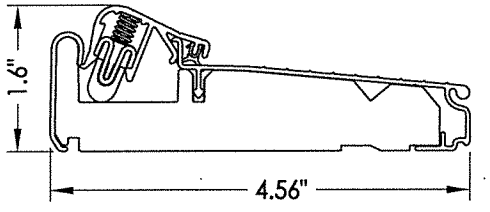
6 INSWING ARTICULATING THRESHOLD
ZACL4565
MAX. DESIGN PRESSURE = ±35 PSF



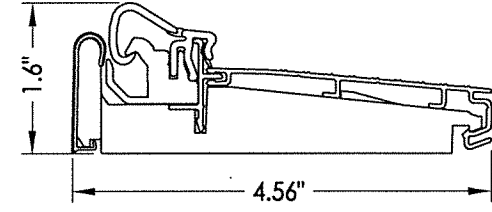
7 INSWING ARTICULATING THRESHOLD
ZAC4565FN
MAX. DESIGN PRESSURE = ±35 PSF



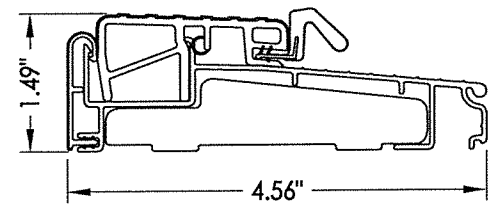
8 INSWING ARTICULATING THRESHOLD
ZACLA4565
MAX. DESIGN PRESSURE = ±35 PSF



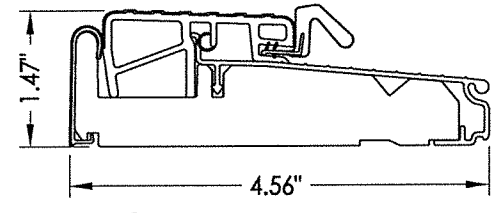
9 INSWING ARTICULATING THRESHOLD
ZACAA4565FN
MAX. DESIGN PRESSURE = ±35 PSF



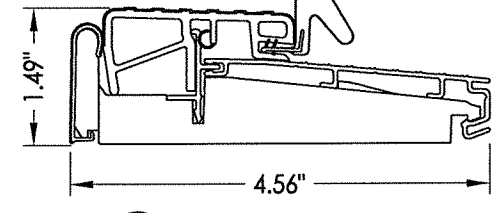
10 INSWING ARTICULATING THRESHOLD
ZAC4565RDS
MAX. DESIGN PRESSURE = ±35 PSF



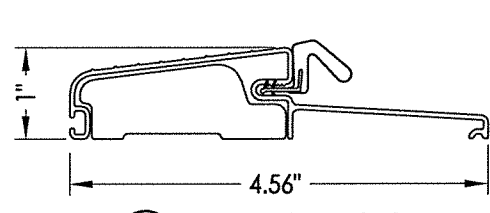
11 OUTSWING THRESHOLD
ZOBL4565



12 OUTSWING THRESHOLD
ZOB4565FN

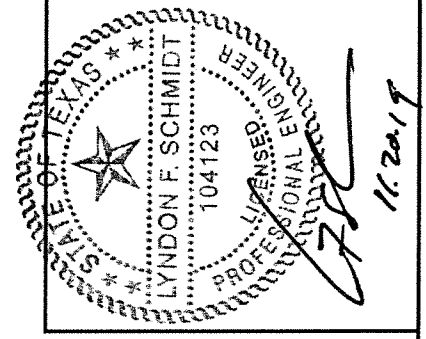
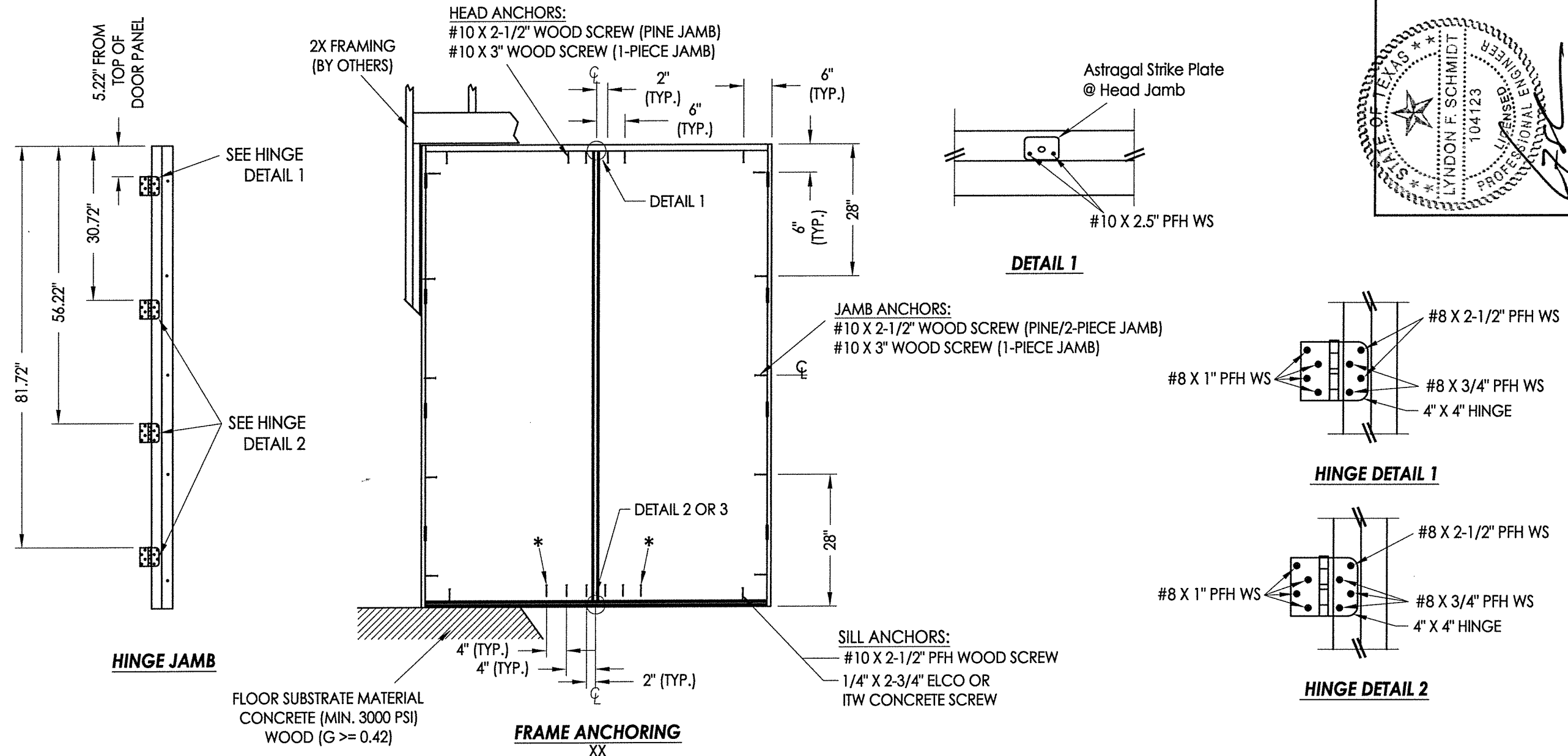


13 OUTSWING THRESHOLD
ZOB4565RDS



14 OUTSWING THRESHOLD
FOB4566

PRODUCT: ENDURA	
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS	
NO.	DATE
1	11/20/19
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE	
BY	REVISIONS
LFS	
DATE: 10/31/18	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: TX-4895	
SHEET 5 OF 6	



Documents Prepared By: Lyndon F. Schmidt, P.E.
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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.

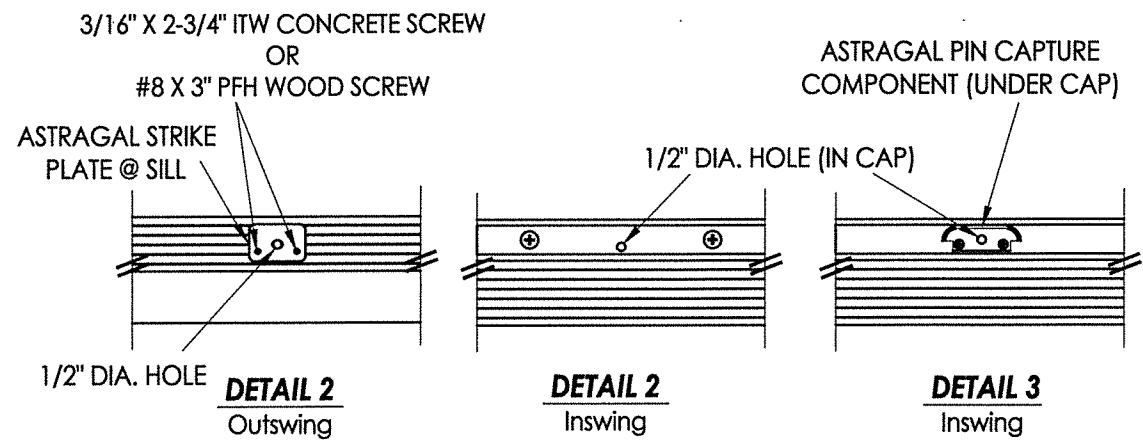
- CONCRETE ANCHOR NOTES:**
- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
 - Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required 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.



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:	10/31/18	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4895	
SHEET	6	OF 6