



# Glazed Fiberglass Door

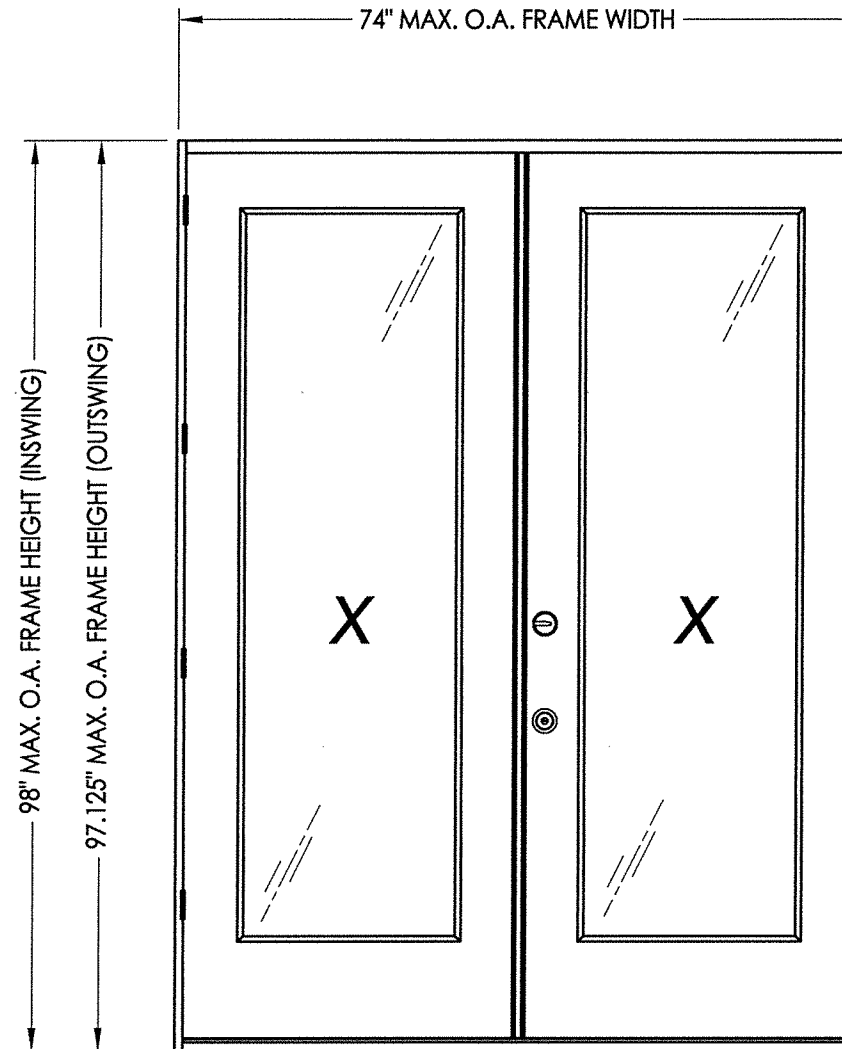
"NON-IMPACT"  
IN SWING / OUT SWING

### EVALUATED FOR USE IN THE STATE OF TEXAS

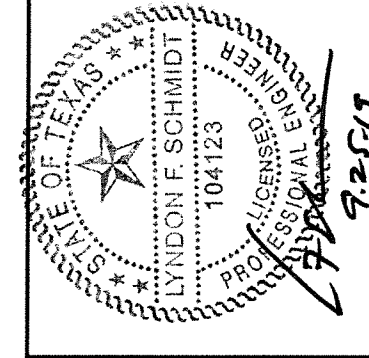
The Glazed Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

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 (Ultimate Flip Lever)
3	Astragal details (Ultimate Multi-point)
4	Astragal details (Ultimate Hurricane)
5	Door panel details (lip life insert glazing)
6	Horizontal & vertical cross sections
7	Vertical cross sections
8	Frame anchoring



CONFIG.	MODEL	DESIGN PRESSURE (PSF) ULTIMATE HURRICANE ASTRAGAL		DESIGN PRESSURE (PSF) ULTIMATE MULTIPOINT ASTRAGAL		DESIGN PRESSURE (PSF) ULTIMATE FLIP LEVER ASTRAGAL	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
		XX	IN SWING	+35.0	-35.0	+40.0	-45.0
XX	OUT SWING	+35.0	-35.0	+40.0	-40.0	+40.0	-40.0



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

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Phone No.: 813.659.9197

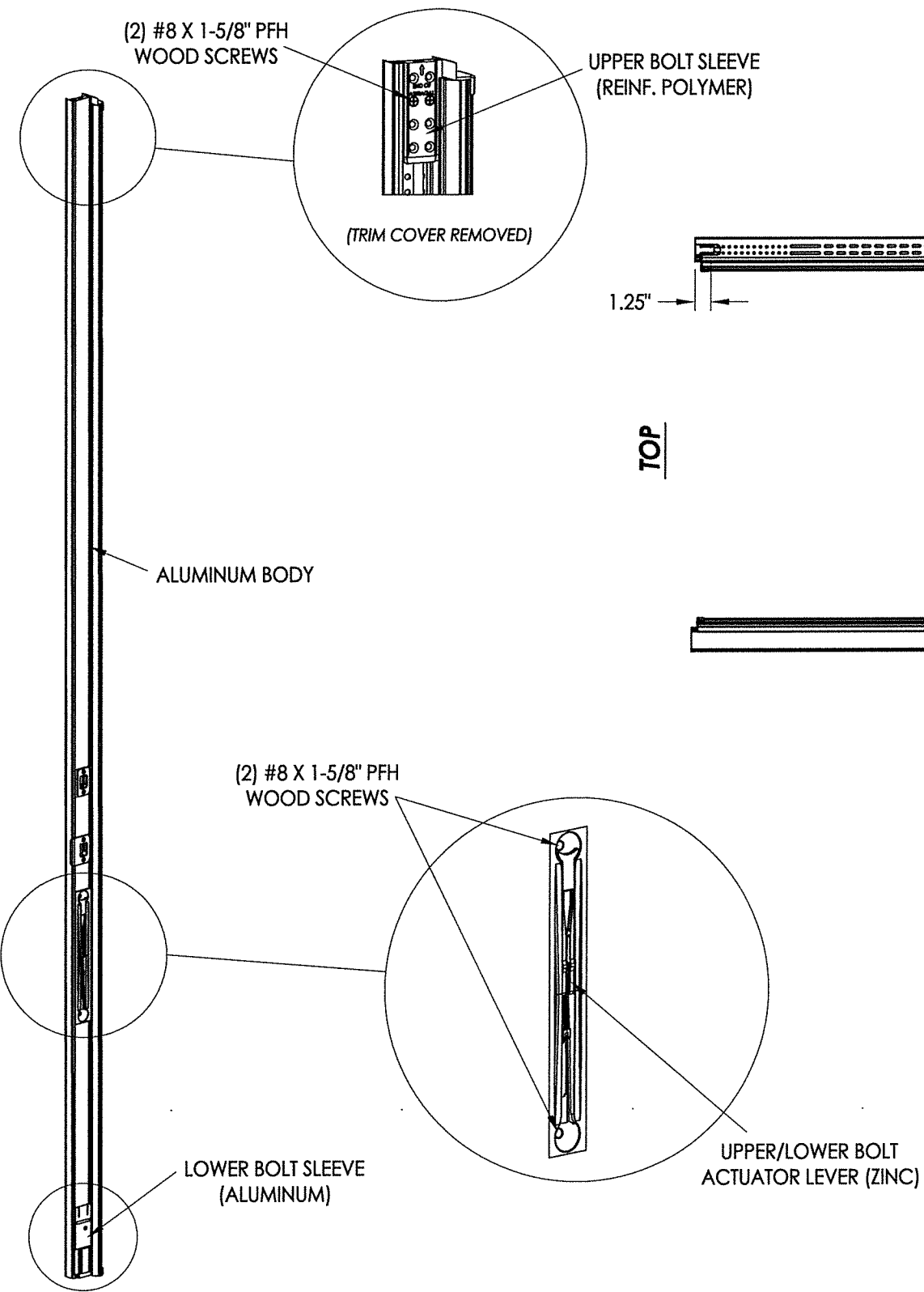
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: ENDURA

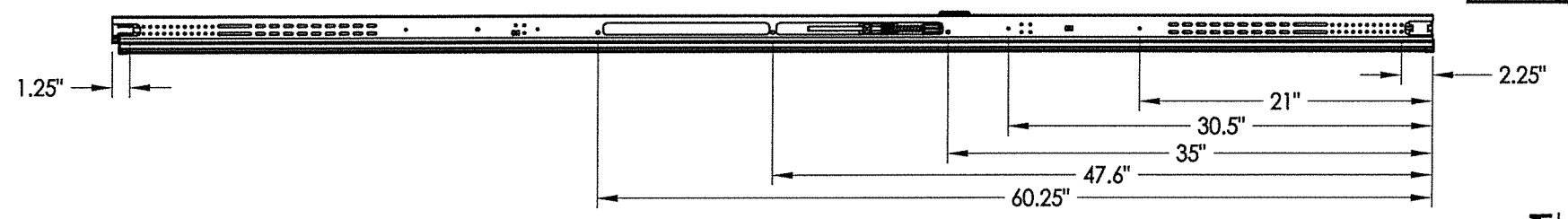
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	BY	REVISIONS
1	9/23/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE

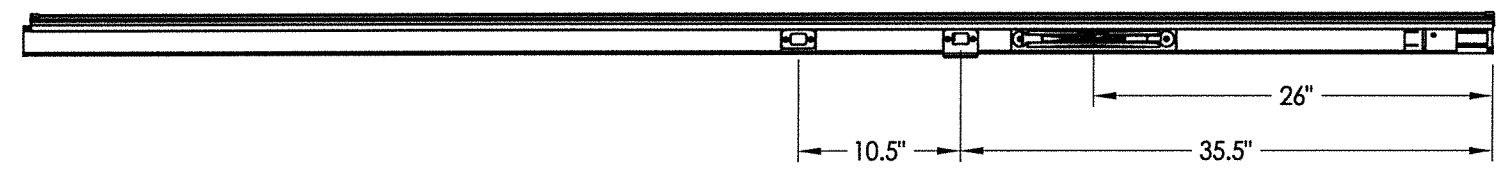
DATE: 11/8/18  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4909  
SHEET 1 OF 8



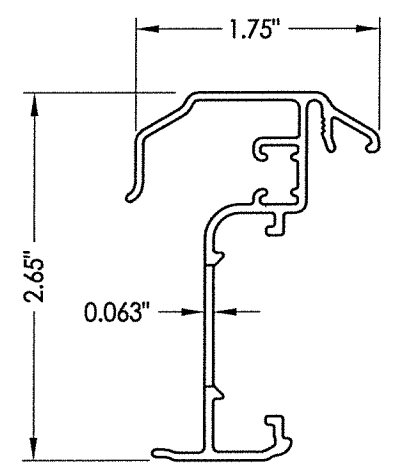
**ULTIMATE FLIP LEVER ASTRAGAL**



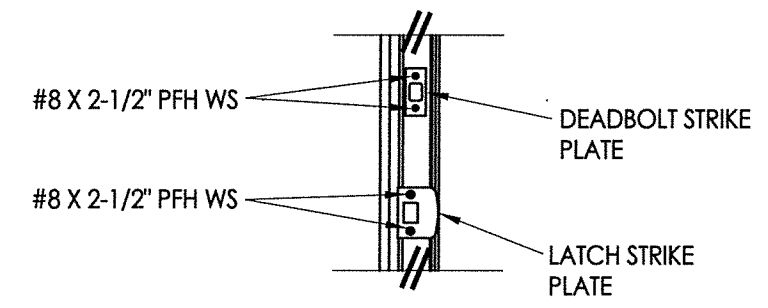
**ANCHOR SCREW LOCATIONS**



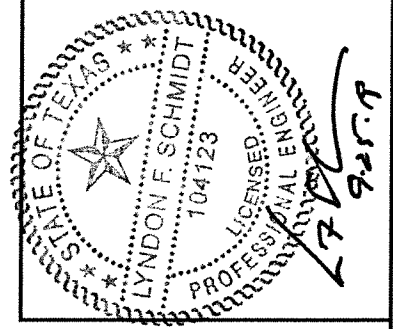
**HARDWARE LOCATIONS**



**ASTRAGAL SECTION**



**LATCH & DEADBOLT DETAIL**



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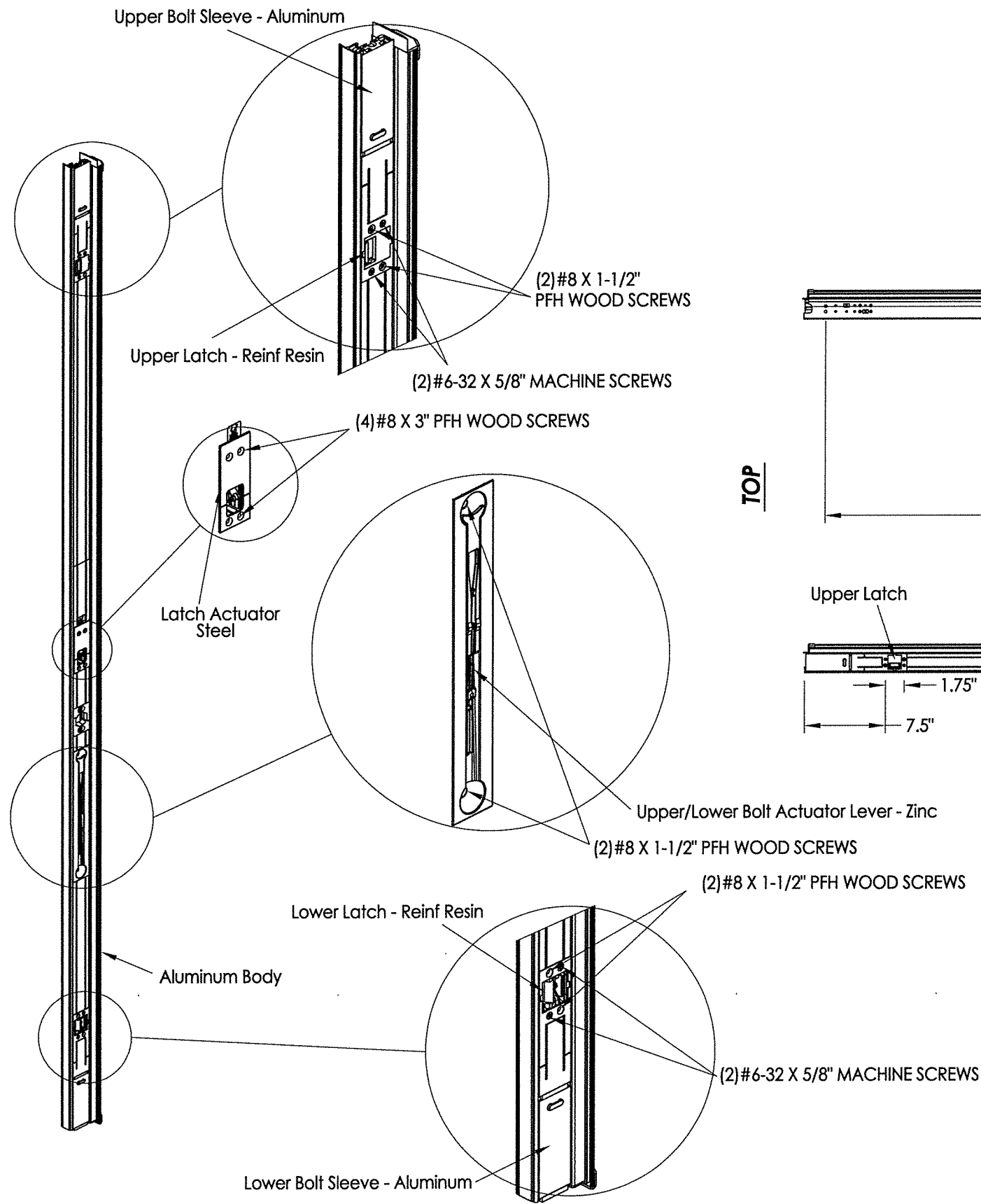
PRODUCT: ENDURA

PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE FLIP LEVER)

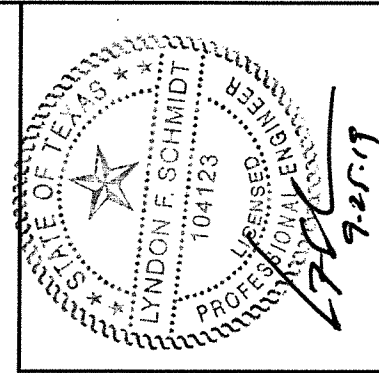
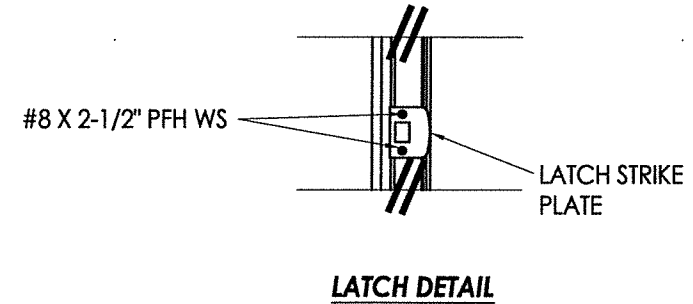
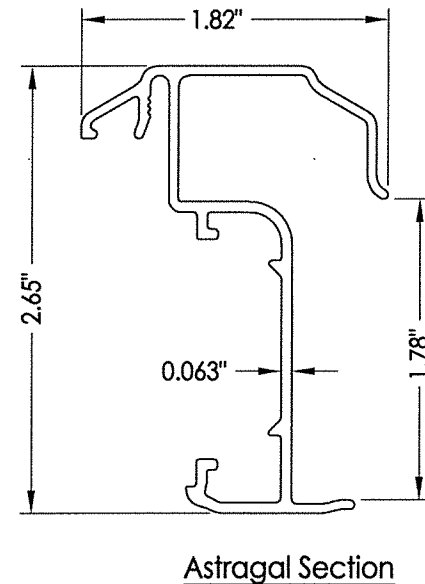
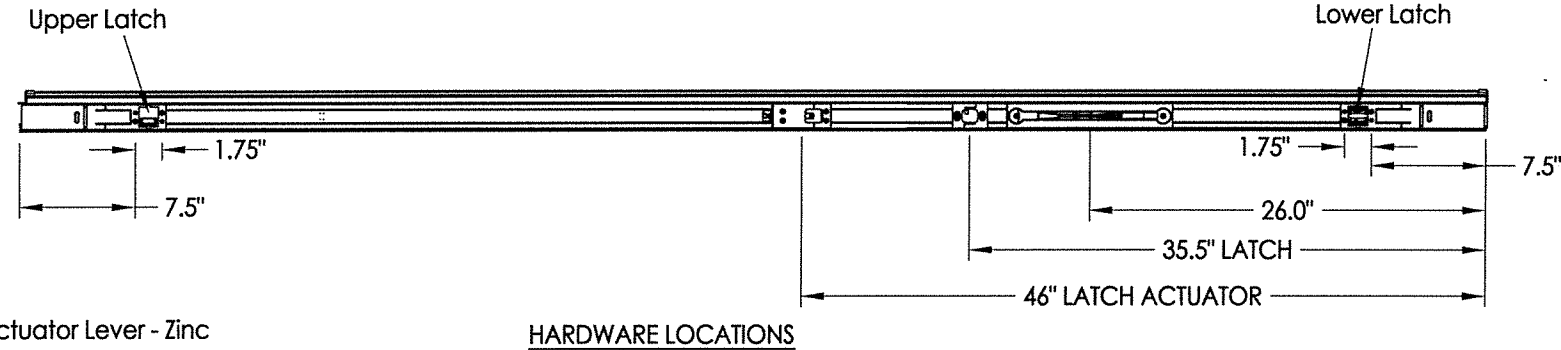
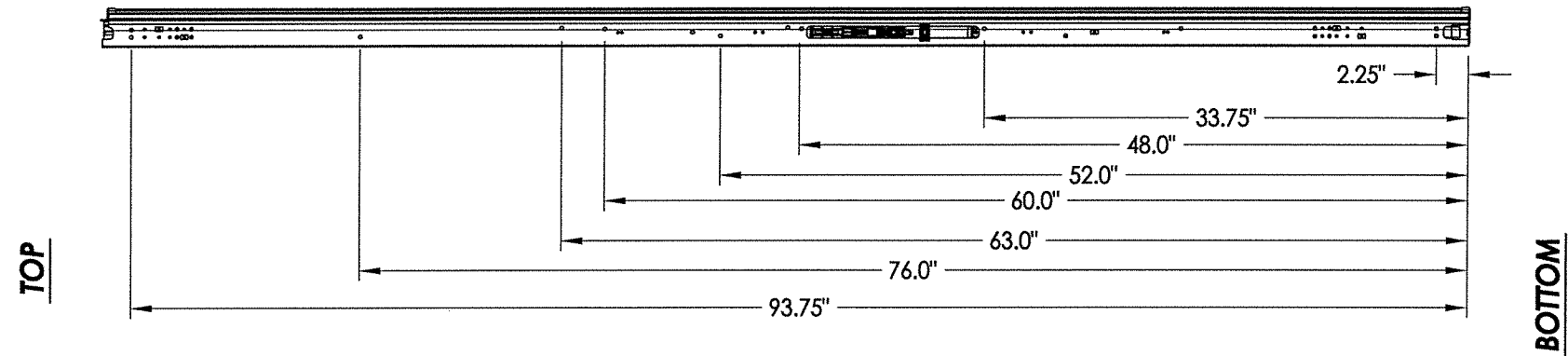
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DATE: 11/8/18  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4909  
SHEET 2 OF 8

R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-1018 Flush GLZ Masonite FG door (4904-4909)\C - Drawings\TX-4906-09.dwg, 3.2



**ULTIMATE MULTIPOINT ASTRAGAL**



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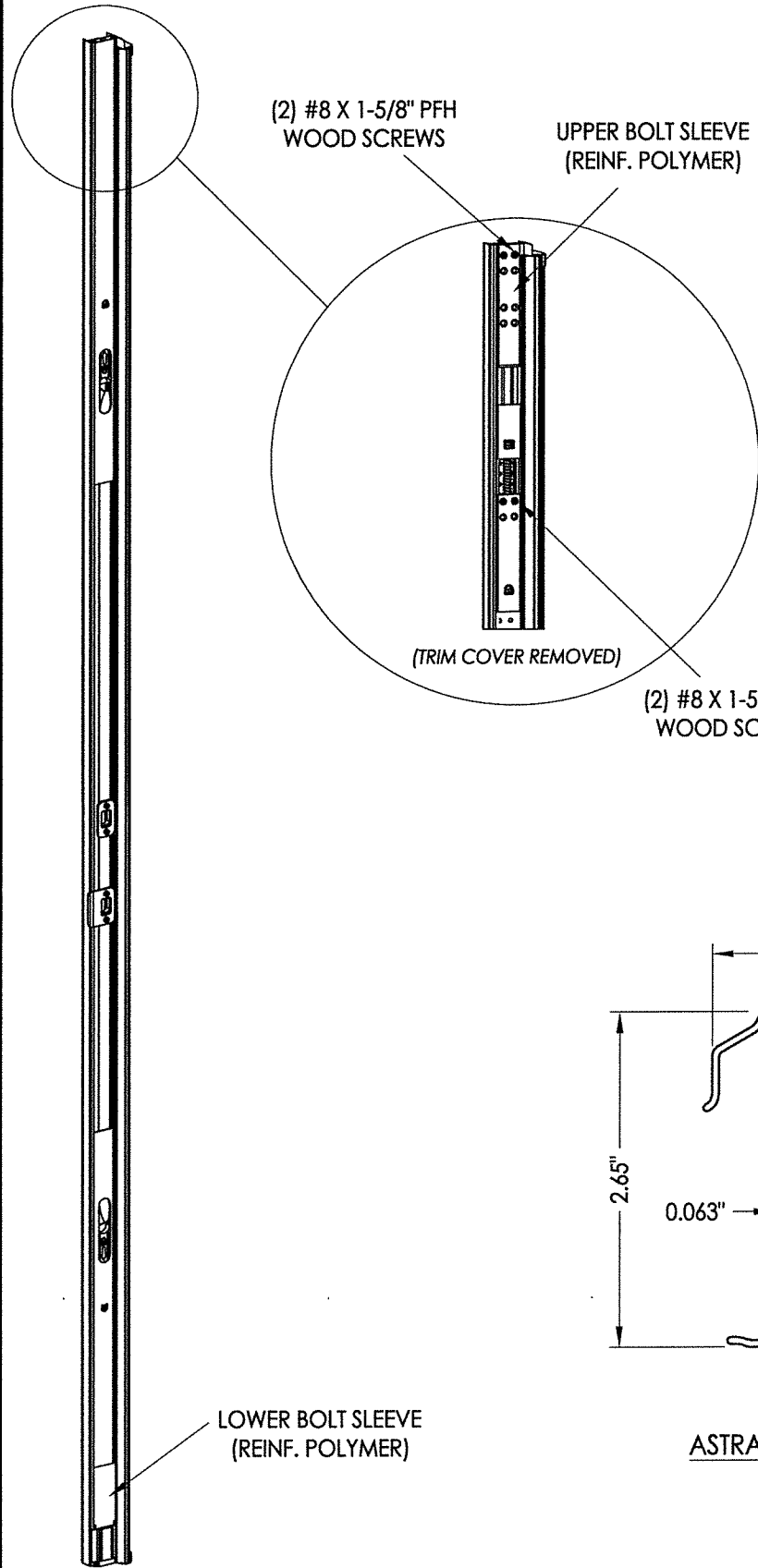
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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA
PART OR ASSEMBLY:	ASTRAGAL DETAILS (ULTIMATE MULTI-POINT)

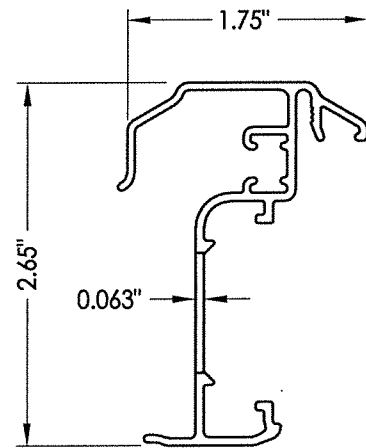
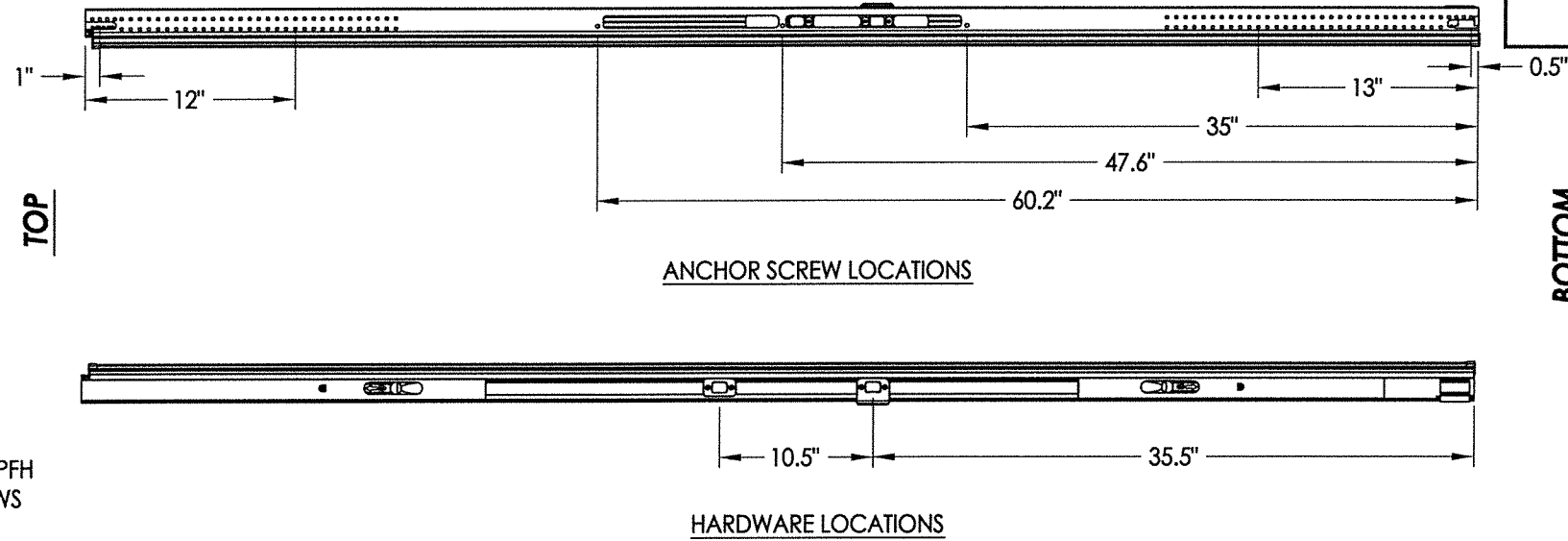
NO.	DATE	BY	REVISIONS
1	9/23/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE

DATE:	11/8/18
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4909
SHEET	3 OF 8

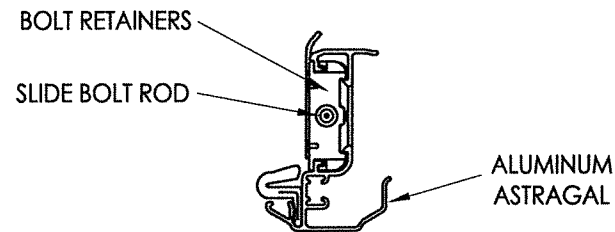
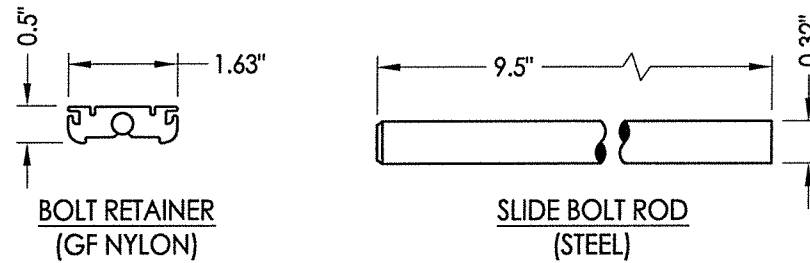
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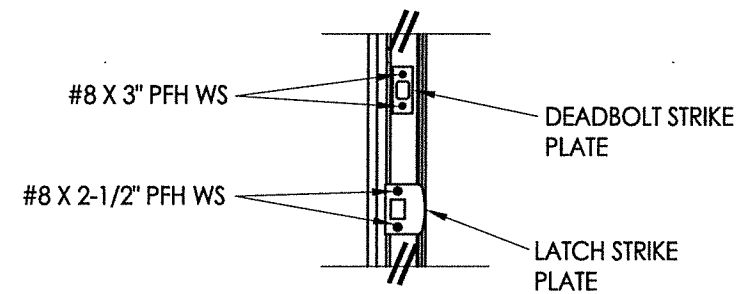
**ULTIMATE HURRICANE ASTRAGAL**



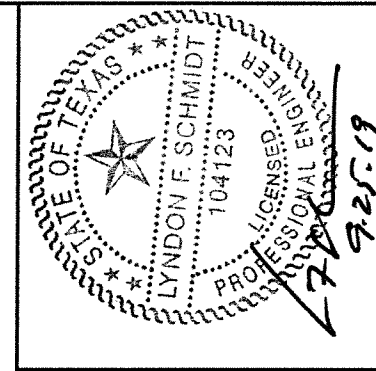
**ASTRAGAL SECTION**



**ALUMINUM ASTRAGAL ASSEMBLY**



**LATCH & DEADBOLT DETAIL**



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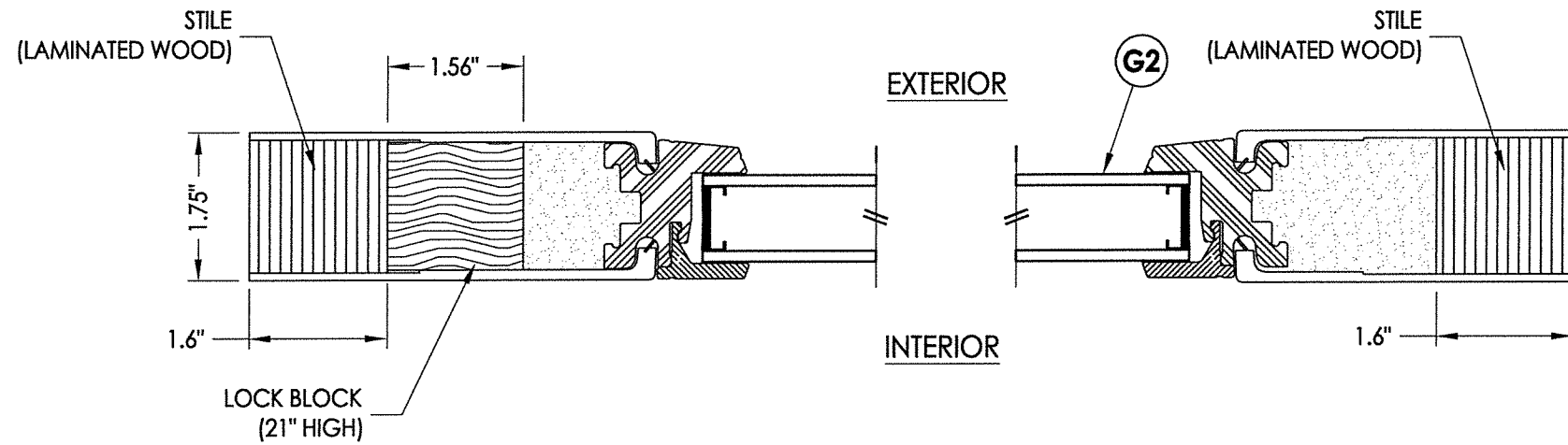
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
 CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: ENDURA

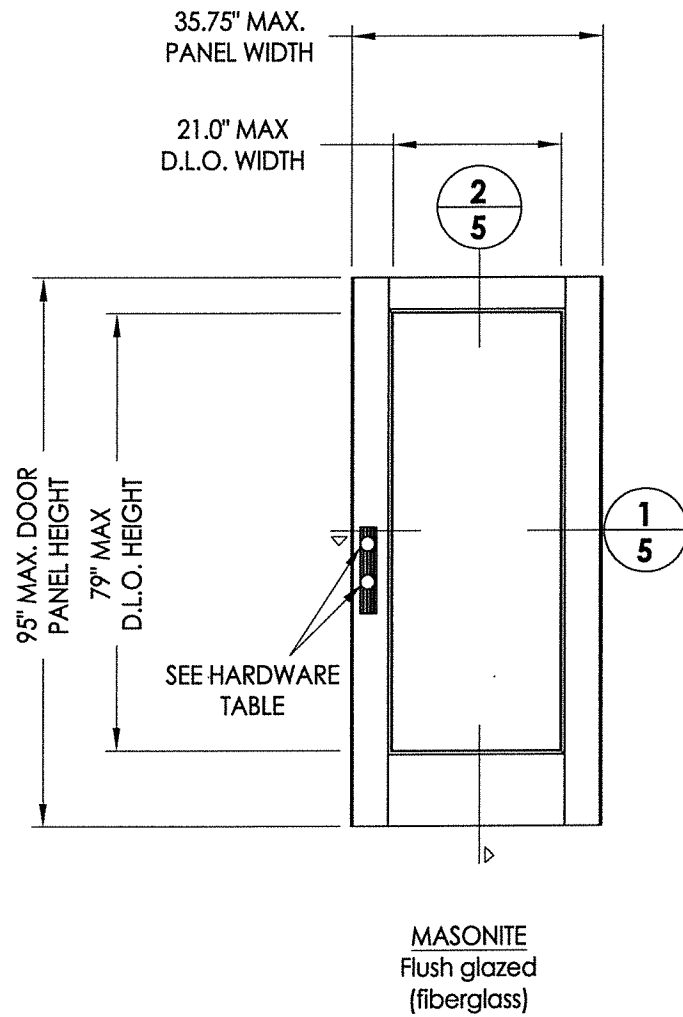
PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE HURRICANE)

NO.	DATE	REVISIONS	BY
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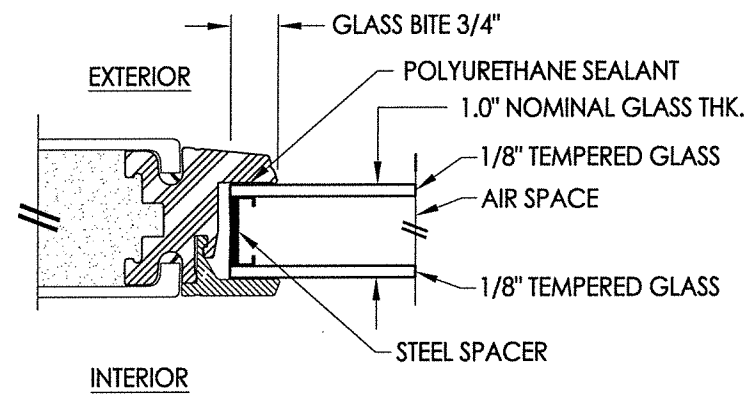
DATE: 11/8/18  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4909  
 SHEET 4 OF 8



**1**  
**5** **HORIZONTAL CROSS SECTION**

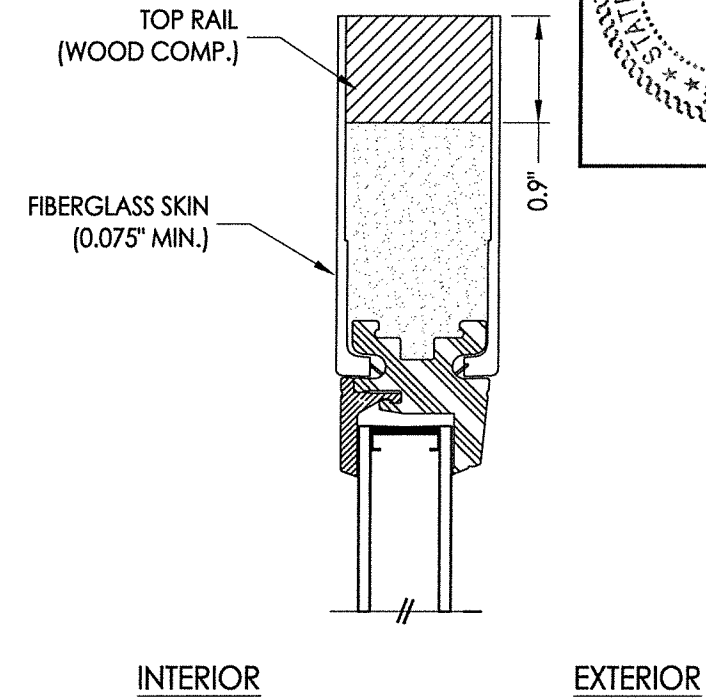


MASONITE  
Flush glazed  
(fiberglass)

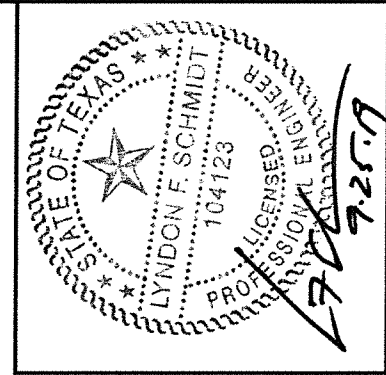


**G2** **GLAZING DETAIL**  
Flush Glazing

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



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



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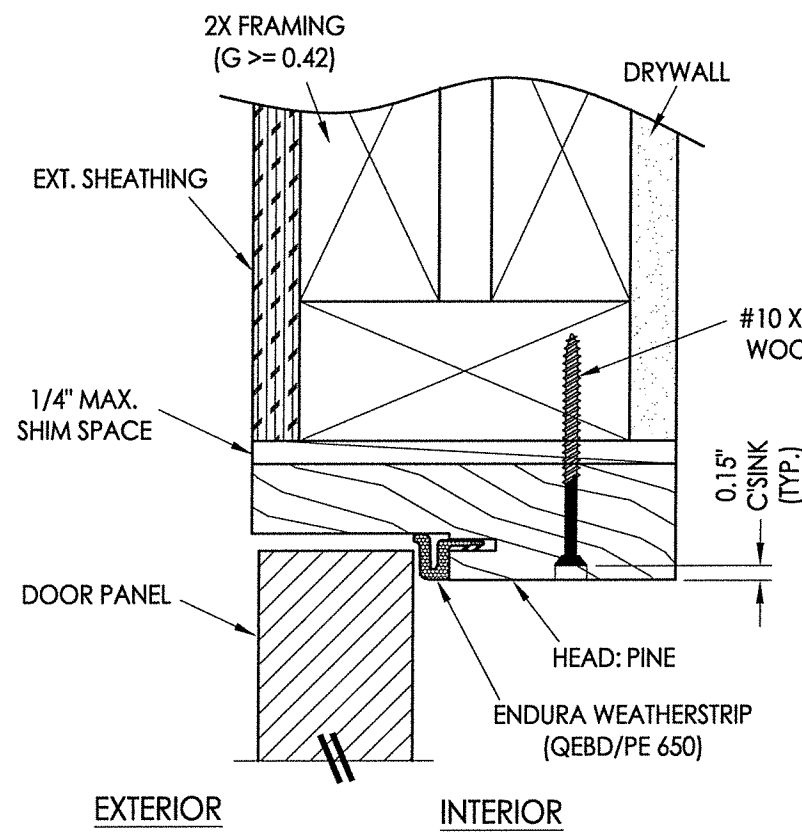
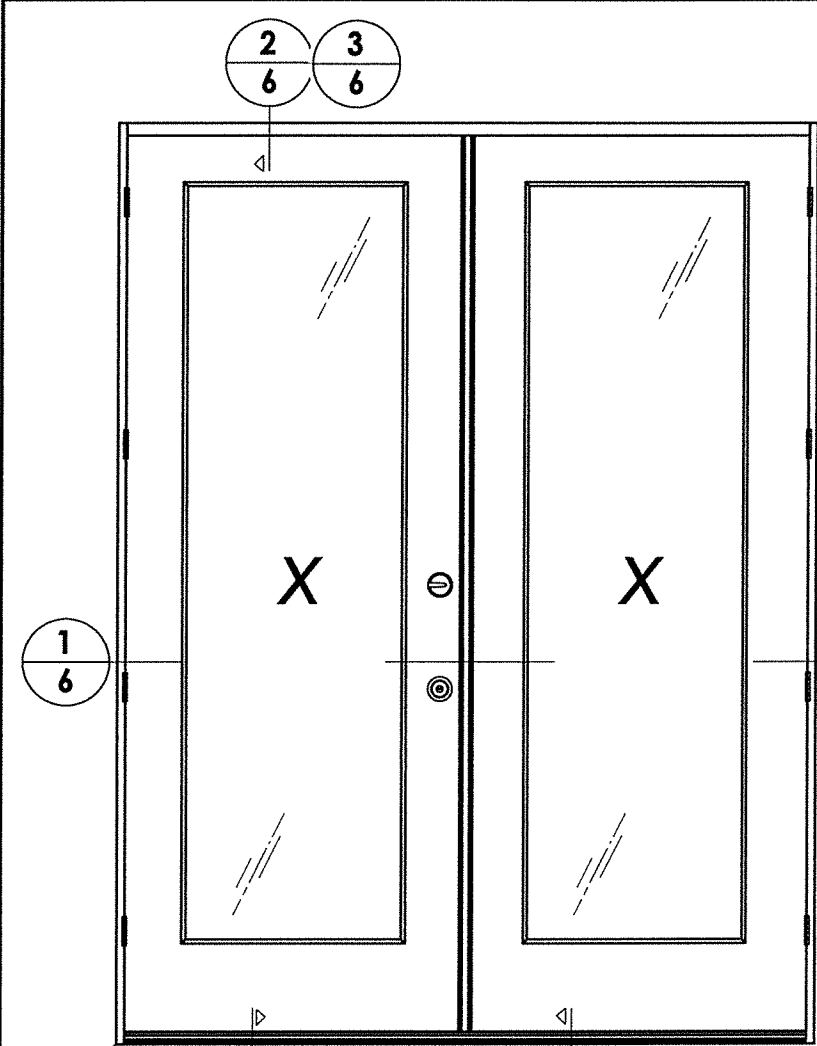
PRODUCT: ENDURA

PART OR ASSEMBLY: DOOR PANEL DETAILS  
(FLUSH GLAZING)

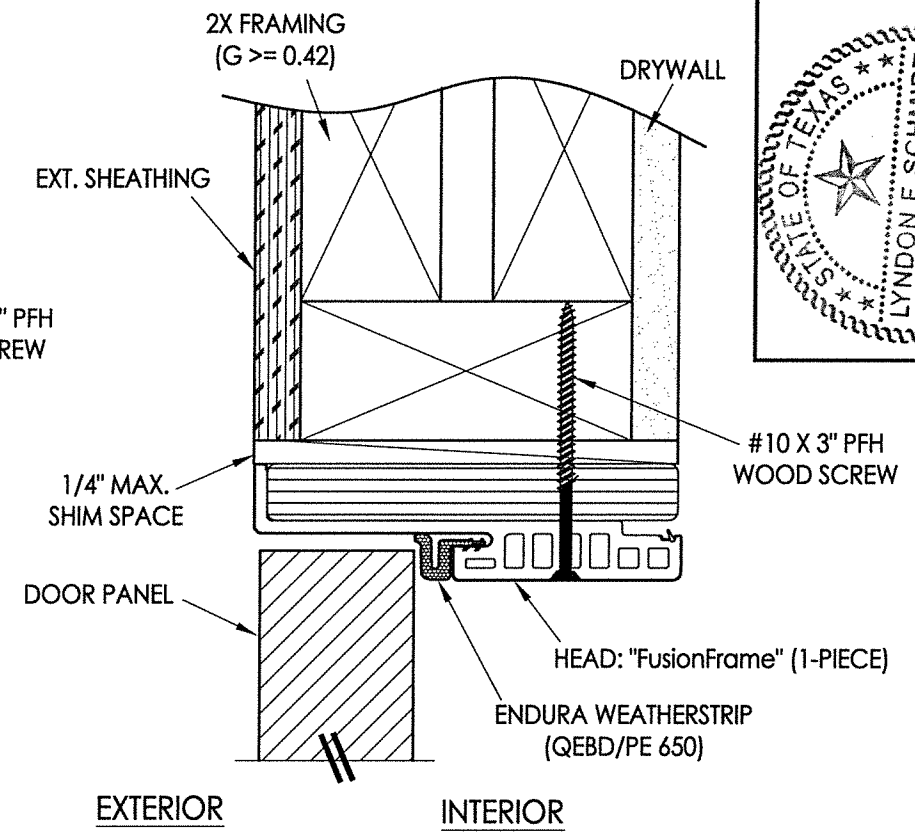
NO.	DATE	REVISIONS	BY
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DATE: 11/8/18  
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DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4909  
SHEET 5 OF 8

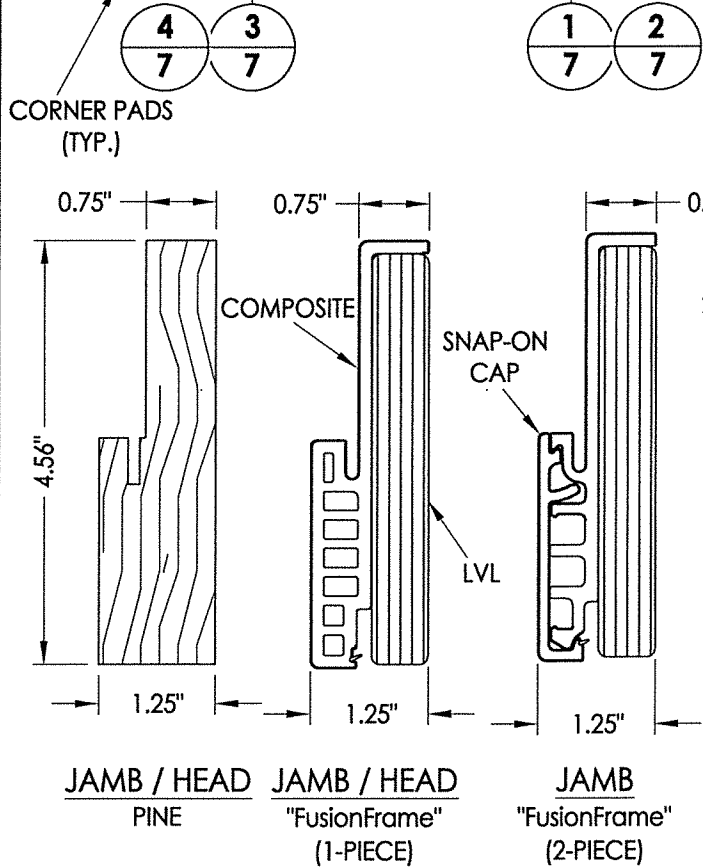
R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-1018 Flush GLZ Masonite FG door (4904-4909)\C - Drawings\TX-4906-09.dwg, 6.2



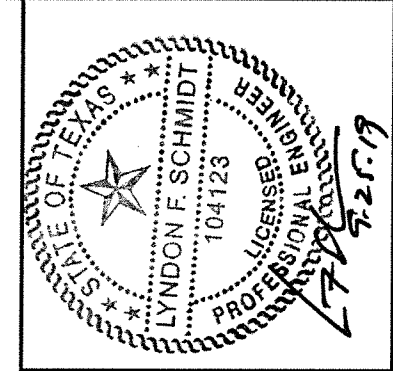
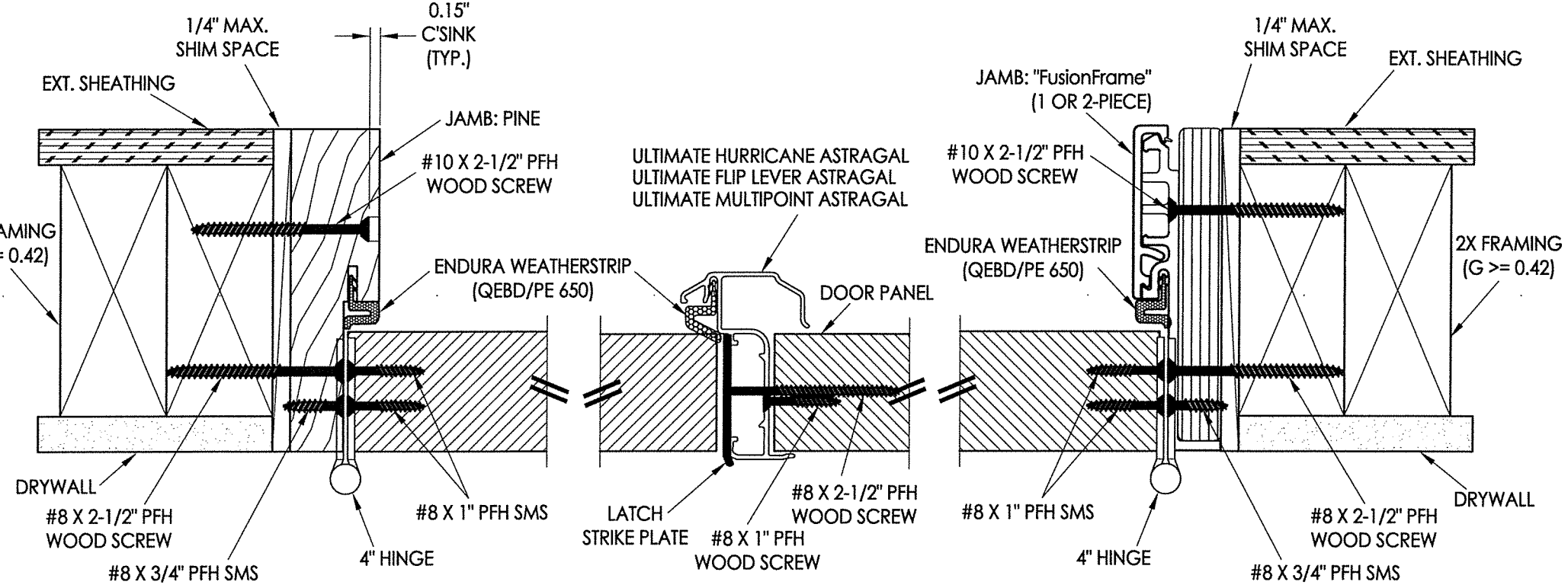
**2** VERTICAL CROSS SECTION  
6 Outswing shown - inswing also approved



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



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



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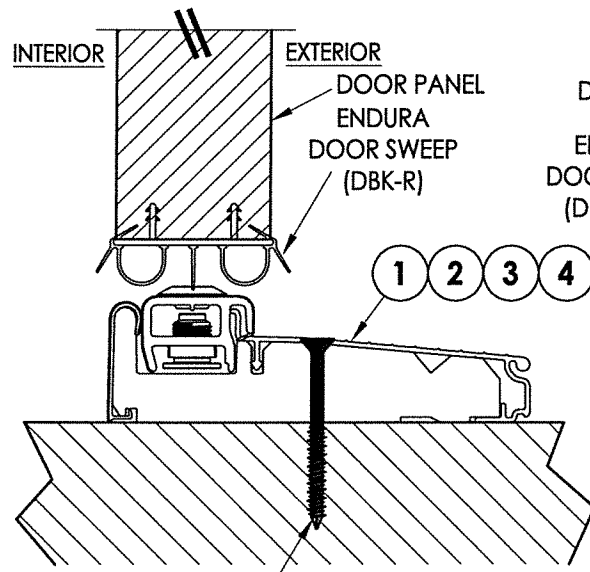
PRODUCT:	ENDURA
PART OR ASSEMBLY:	HORIZONTAL & VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS

DATE:	11/8/18
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4909
SHEET	6 OF 8

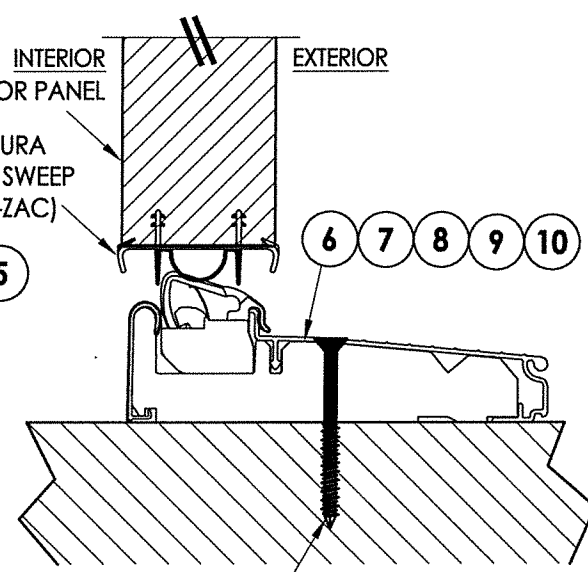
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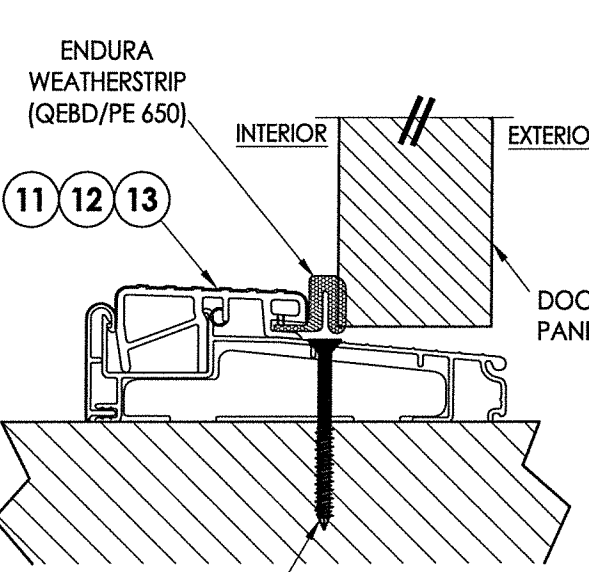
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



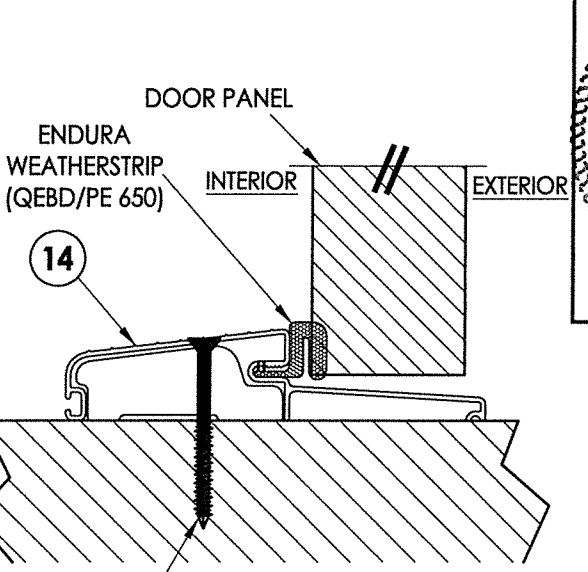
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

**2 VERTICAL CROSS SECTION**  
7 Inswing Articulating Threshold  
w/ Pin Capture



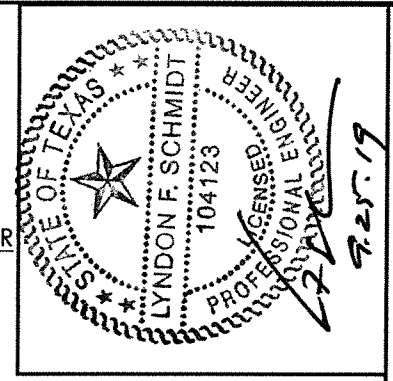
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



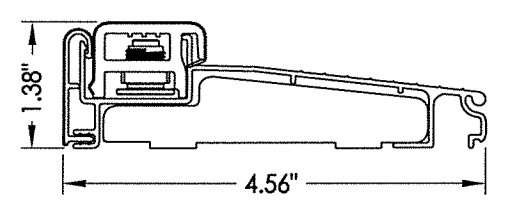
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

**4 VERTICAL CROSS SECTION**  
7 Outswing Bump Threshold

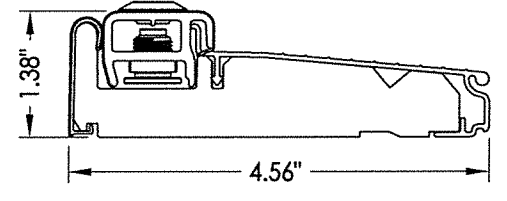


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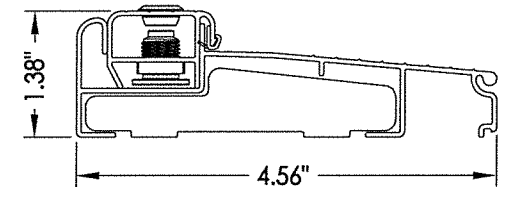
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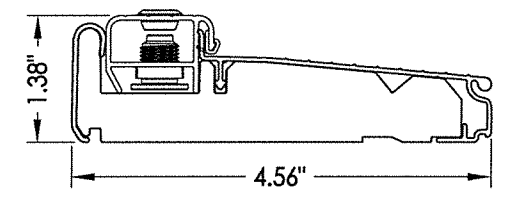
**1 INSWING ADJUSTABLE THRESHOLD**  
ZAIL4565



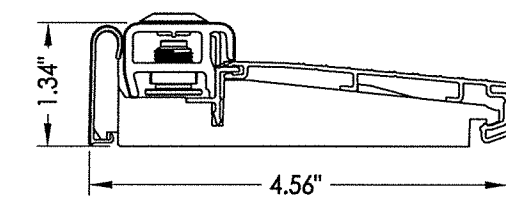
**2 INSWING ADJUSTABLE THRESHOLD**  
ZAI4565FN



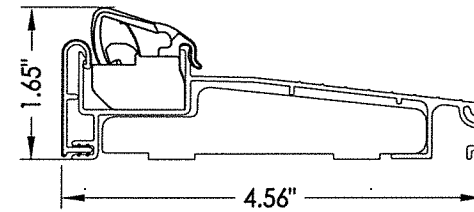
**3 INSWING ADJUSTABLE THRESHOLD**  
ZAILAA4565



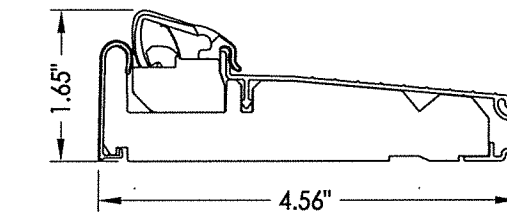
**4 INSWING ADJUSTABLE THRESHOLD**  
ZIAA4565FN



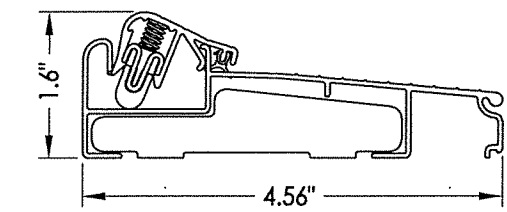
**5 INSWING ADJUSTABLE THRESHOLD**  
ZAI4565RDS  
MAX. DESIGN PRESSURE = ±40 PSF



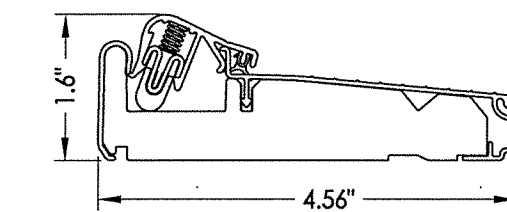
**6 INSWING ARTICULATING THRESHOLD**  
ZACL4565



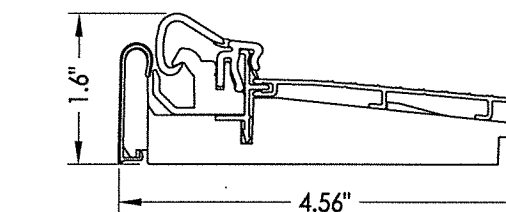
**7 INSWING ARTICULATING THRESHOLD**  
ZAC4565FN



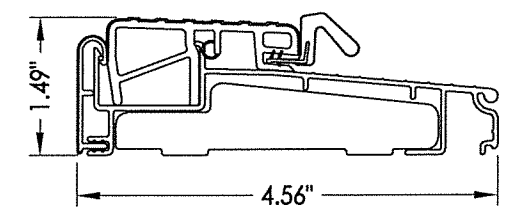
**8 INSWING ARTICULATING THRESHOLD**  
ZACLAA4565



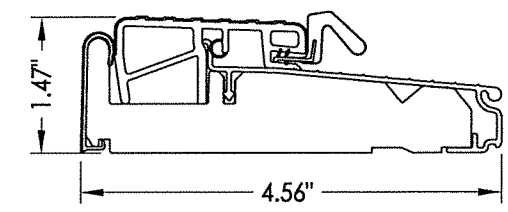
**9 INSWING ARTICULATING THRESHOLD**  
ZACAA4565FN



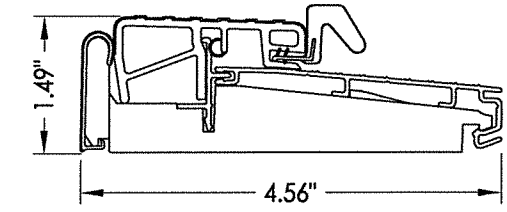
**10 INSWING ARTICULATING THRESHOLD**  
ZAC4565RDS  
MAX. DESIGN PRESSURE = ±35 PSF



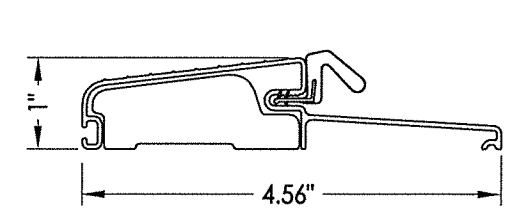
**11 OUTSWING THRESHOLD**  
ZOBL4565



**12 OUTSWING THRESHOLD**  
ZOB4565FN



**13 OUTSWING THRESHOLD**  
ZOB4565RDS

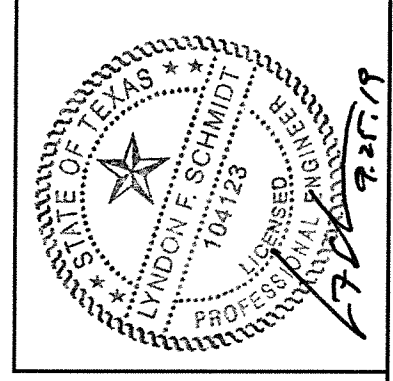
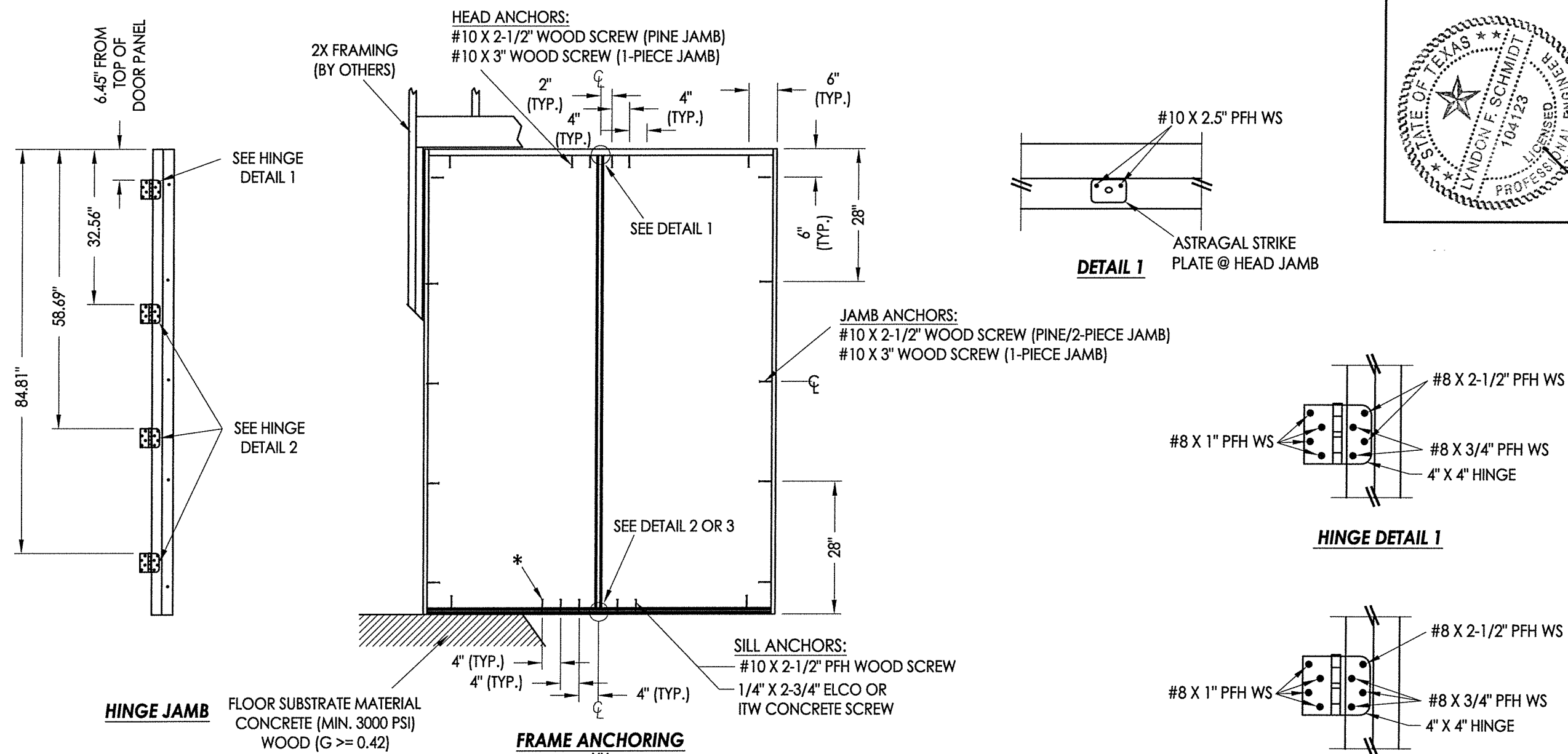


**14 OUTSWING THRESHOLD**  
FOB4566

PRODUCT: ENDURA		PART OR ASSEMBLY: VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
1	9/23/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
DATE: 11/8/18		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: TX-4909		SHEET 7 OF 8	

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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.

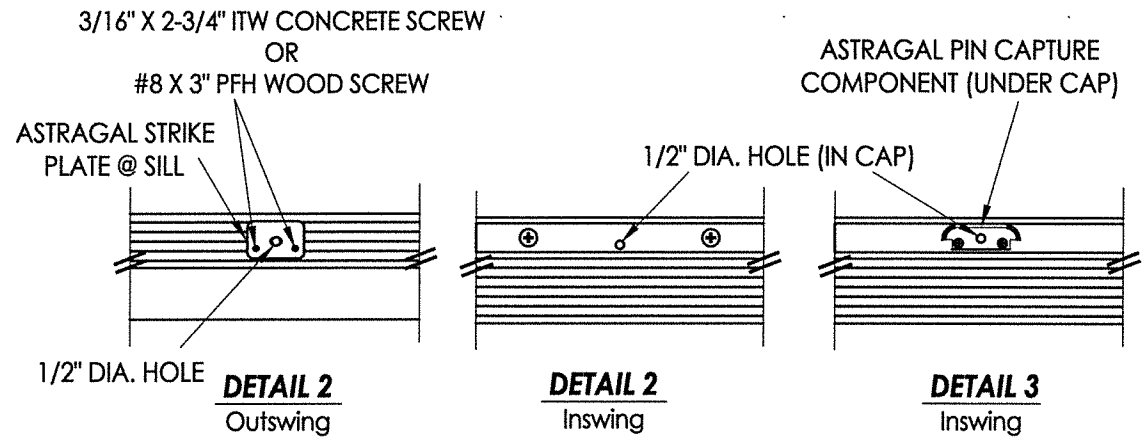
\* NOTE: THIS ADDITIONAL ANCHOR IS REQUIRED FOR D.P. > 40 PSF.

- 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.



PRODUCT:	ENDURA
PART OR ASSEMBLY:	FRAME ANCHORING
DATE:	11/8/18
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4909
SHEET	8 OF 8

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