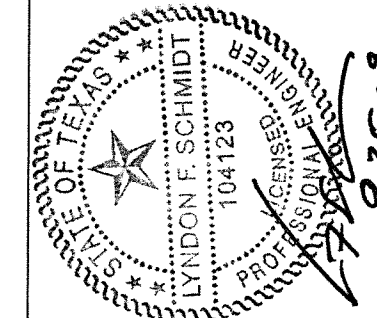
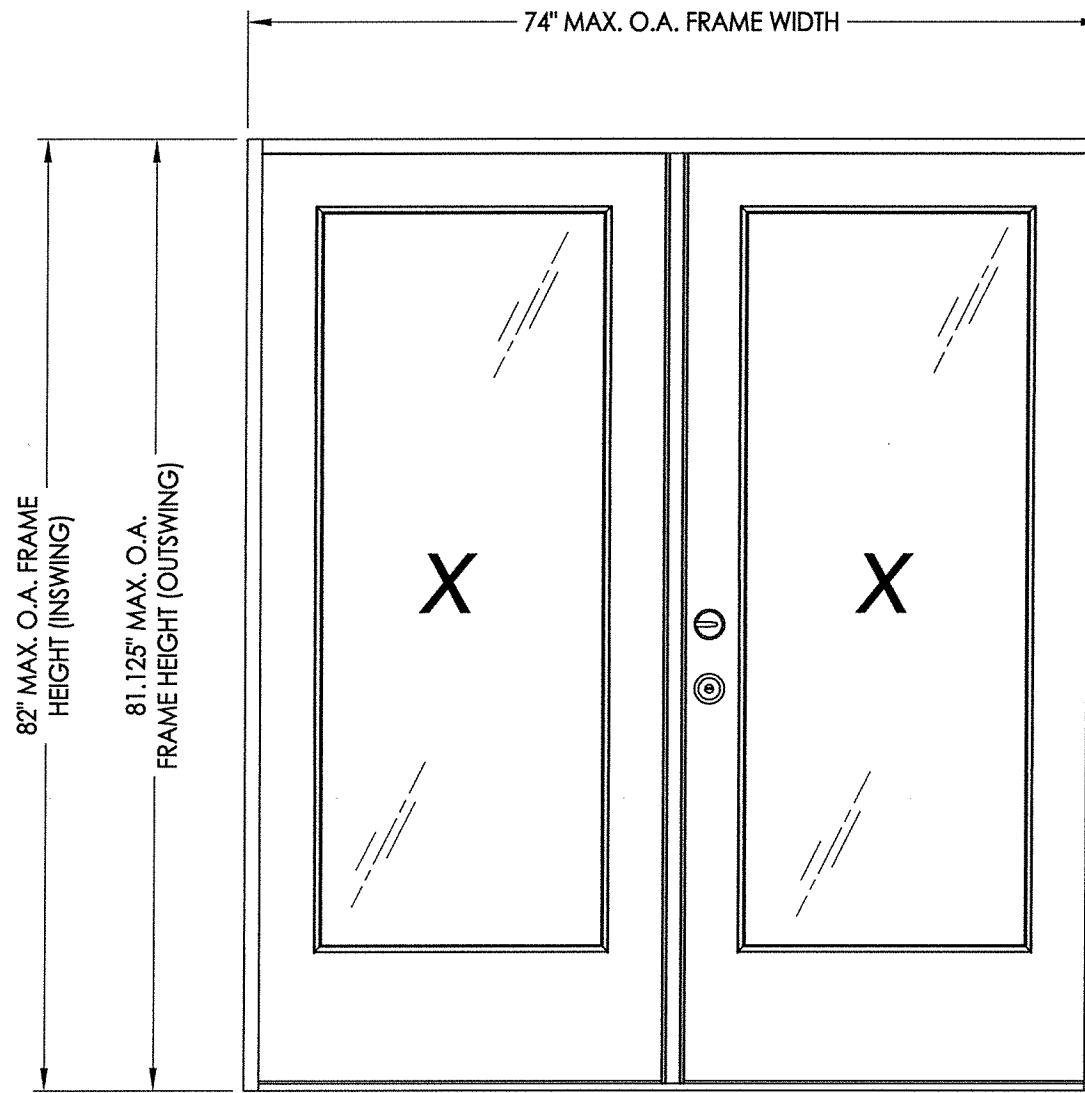




# Glazed Fiberglass Door

## "NON-IMPACT"

### INSWING / OUTSWING



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

**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 lite insert glazing)
6	Horizontal & vertical cross sections
7	Vertical cross sections
8	Frame anchoring

CONFIG.	FRAME TYPE	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	PINE	INSWING	+50.0	-50.0	+55.0	-55.0	+45.0	-50.0
XX		OUTSWING	+50.0	-50.0	+55.0	-55.0	+45.0	-45.0
XX	"FusionFrame"	INSWING	+50.0	-50.0	+50.0	-50.0	+45.0	-50.0
XX		OUTSWING	+50.0	-50.0	+50.0	-50.0	+45.0	-45.0

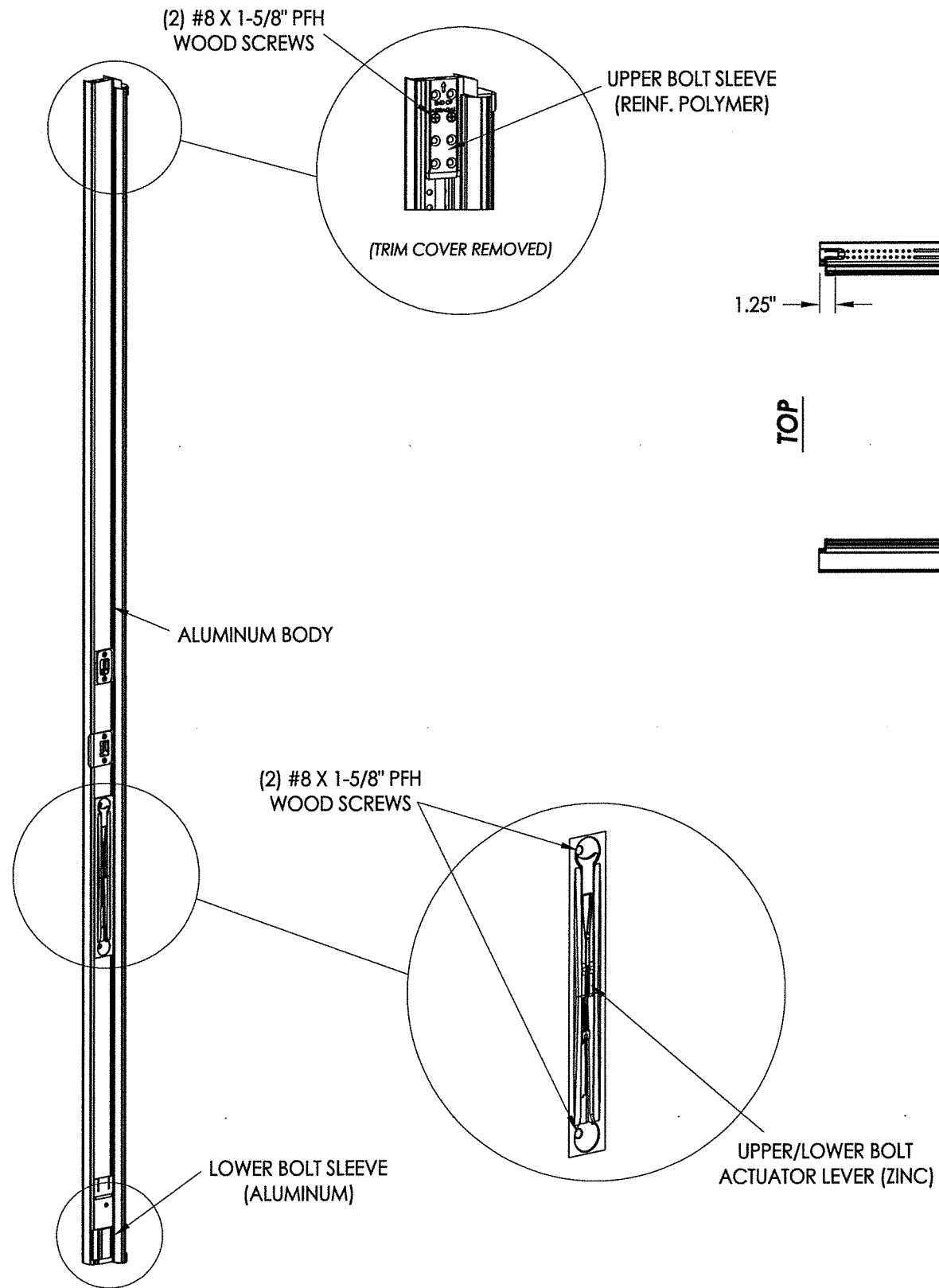
PRODUCT: ENDURA

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

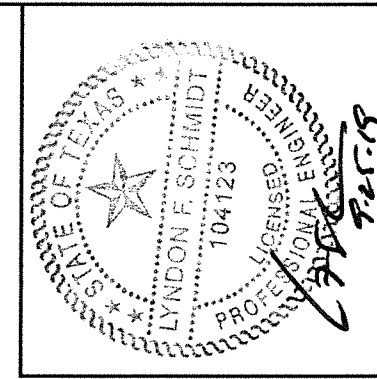
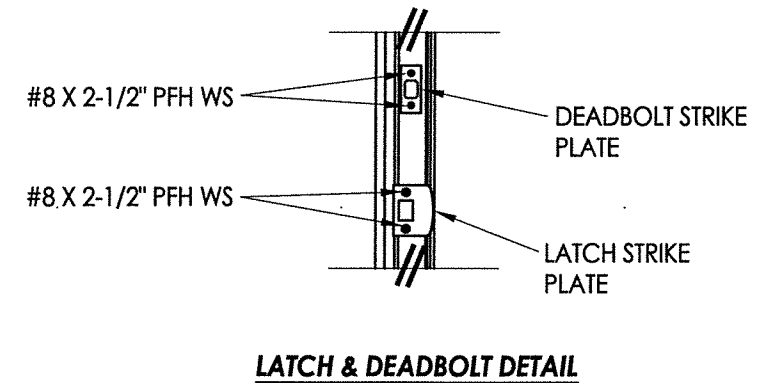
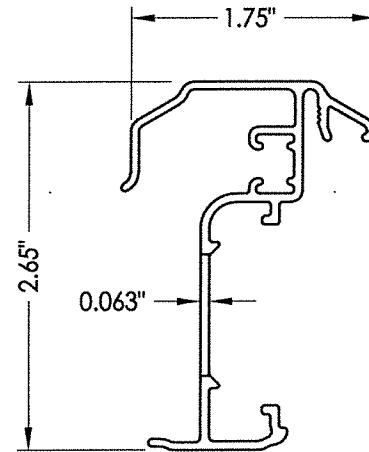
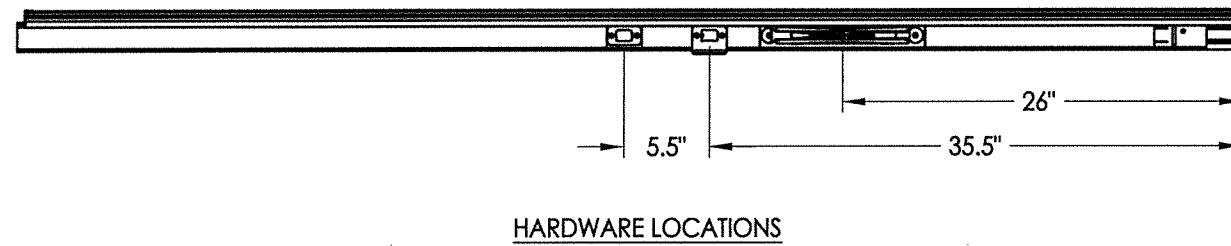
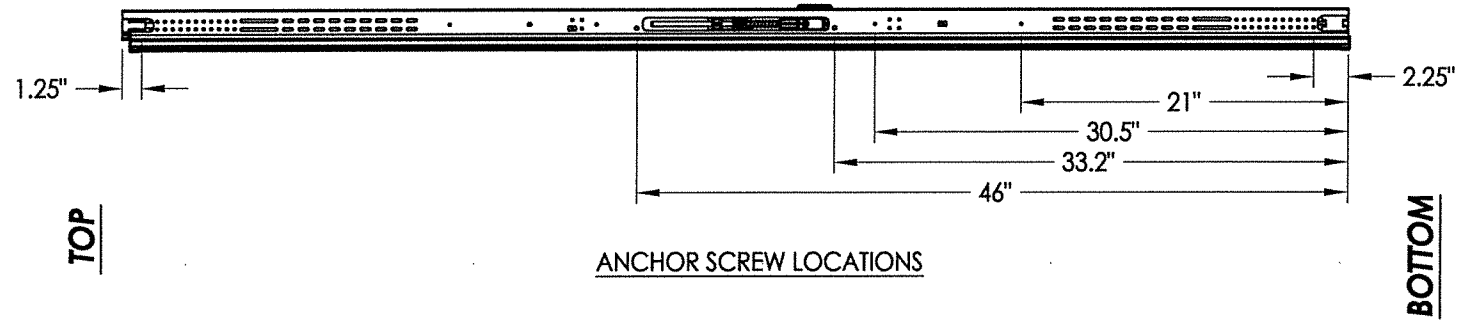
NO.	DATE	REVISIONS
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DATE: 11/8/18  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4906  
SHEET 1 OF 8

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, 1-2



**ULTIMATE FLIP LEVER ASTRAGAL**



Documents Prepared By: Lyndon F. Schmidt, P.E.  
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CERTIFICATE OF REGISTRATION # F-11852

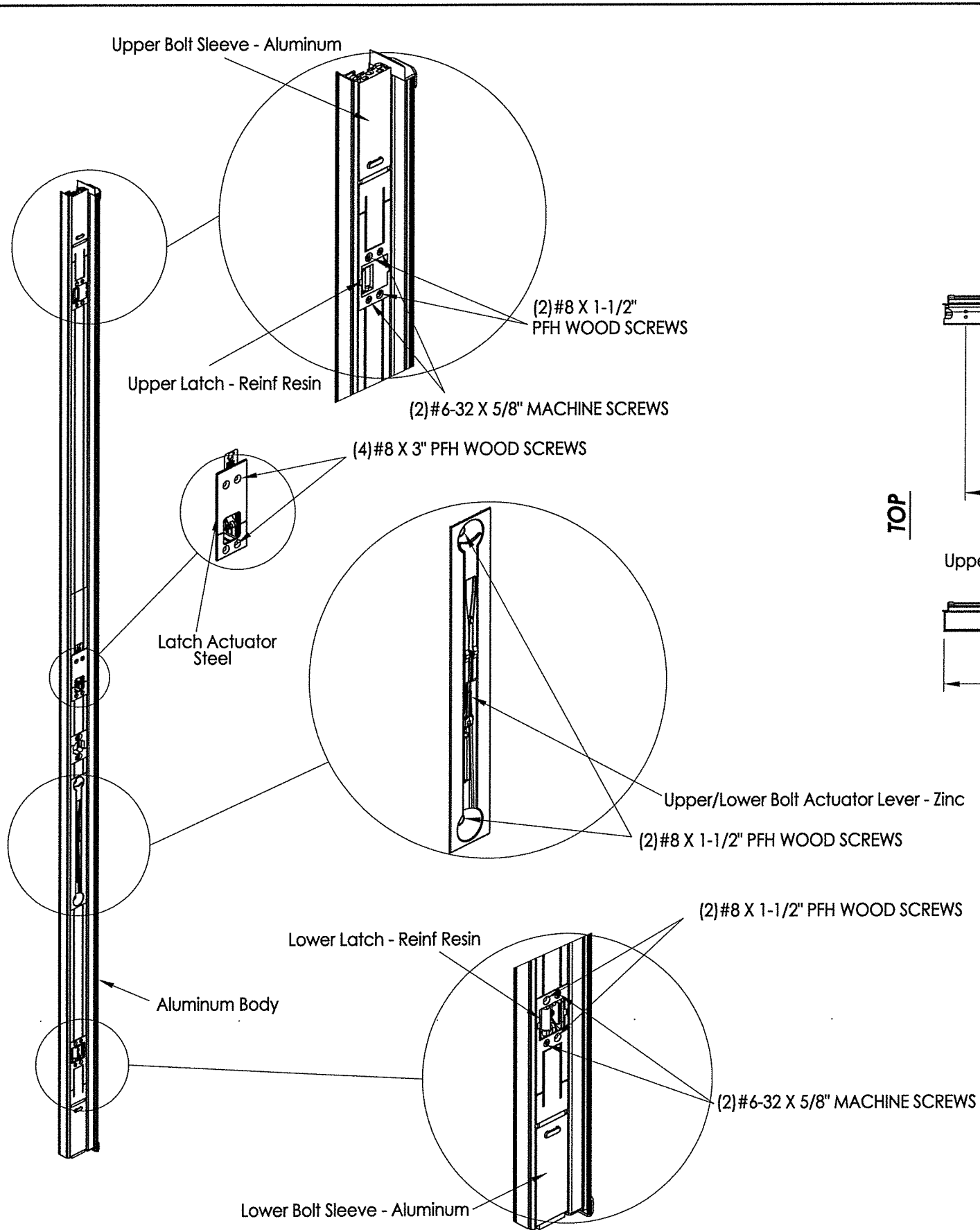
PRODUCT: ENDURA

PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE FLIP LEVER)

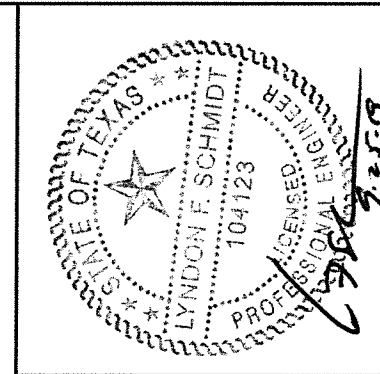
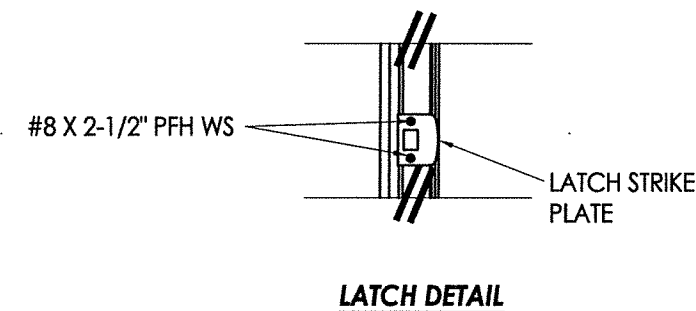
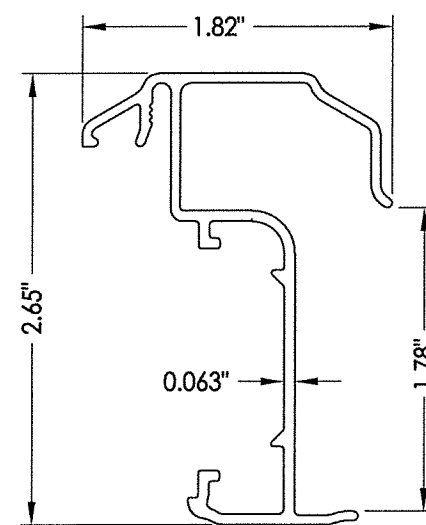
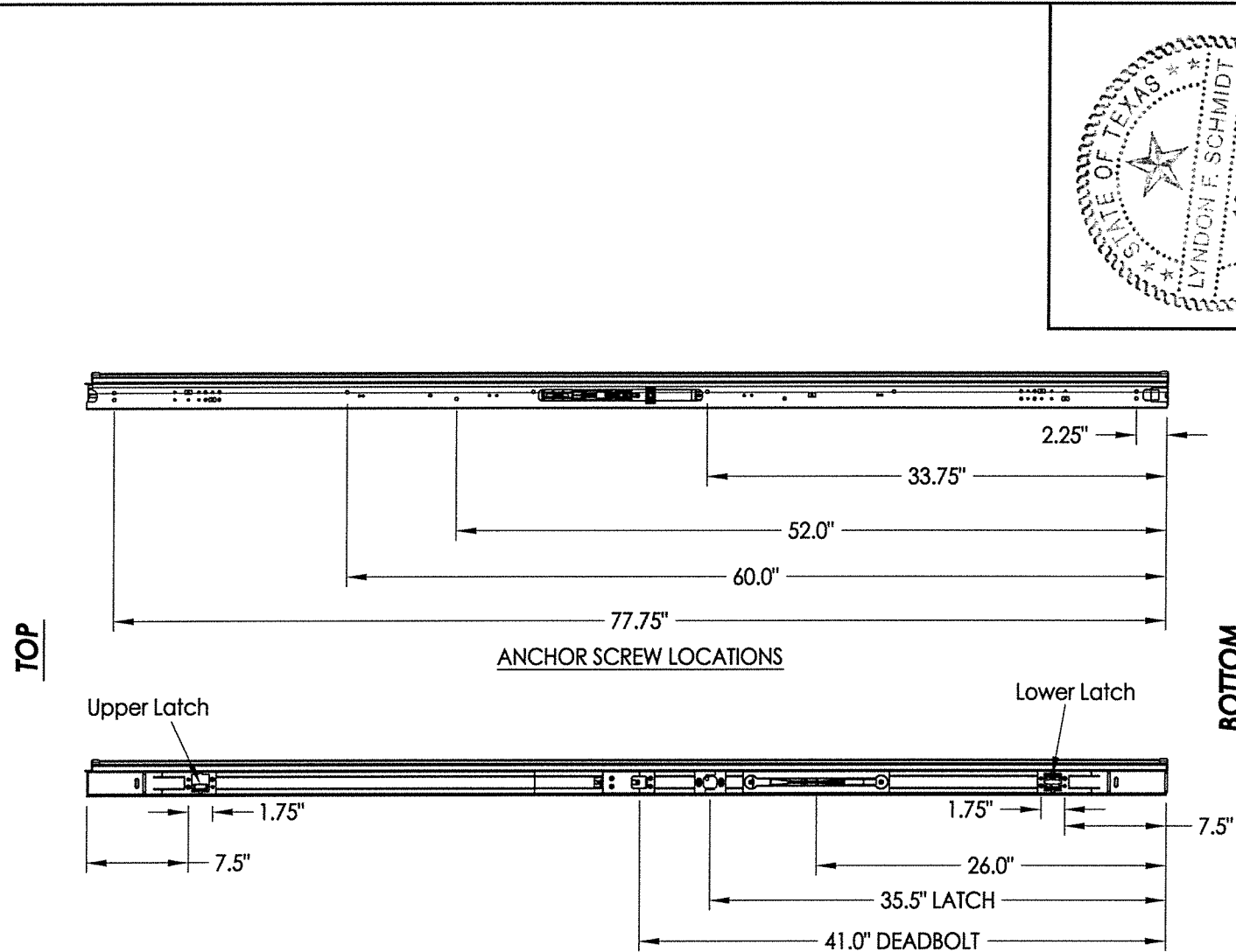
NO.	DATE	REVISIONS	BY
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DATE: 11/8/18  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4906  
SHEET 2 OF 8

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, 1-3



**ULTIMATE MULTIPOINT ASTRAGAL**



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

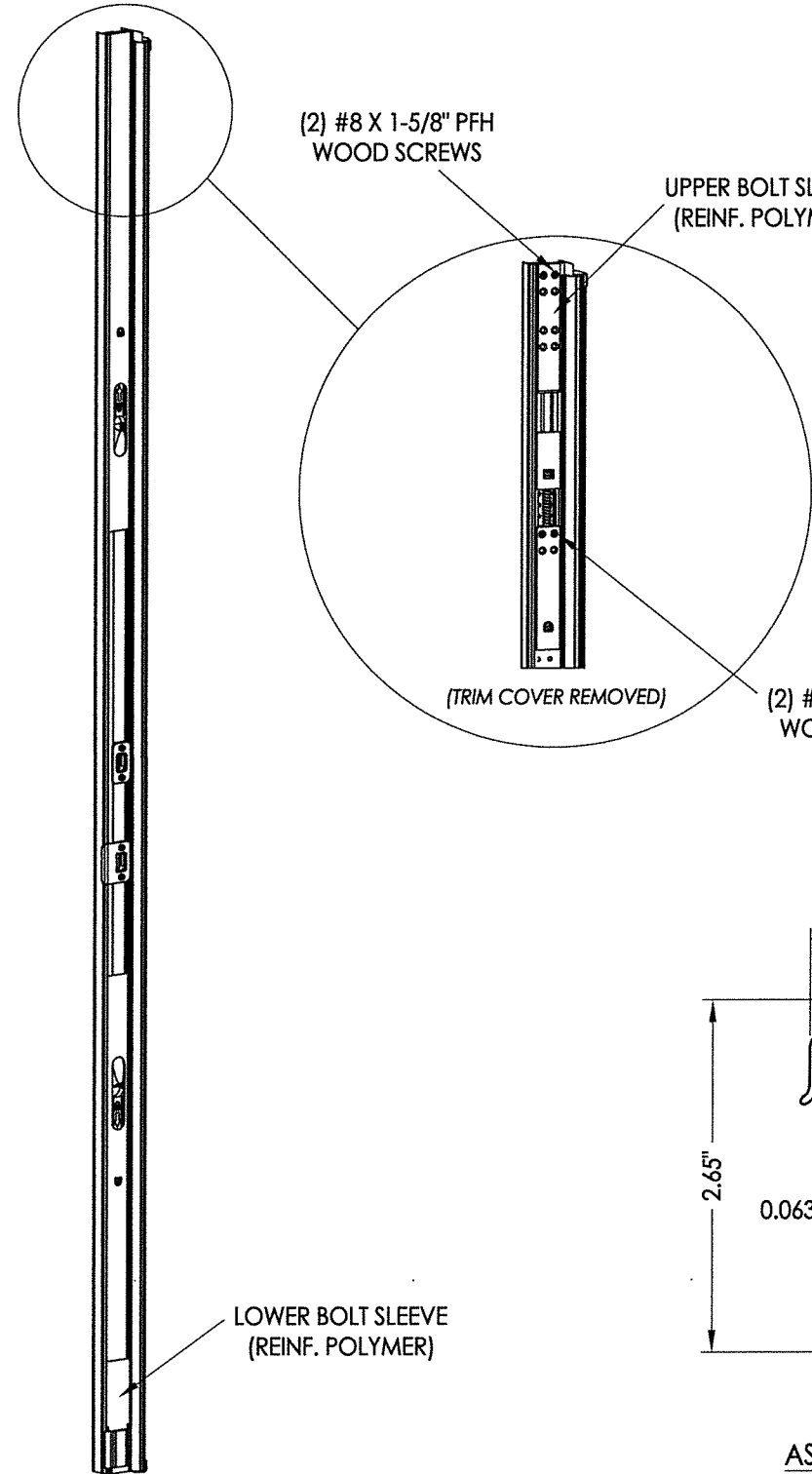
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Vairico FL 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: ENDURA

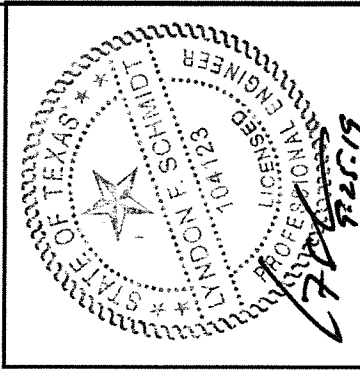
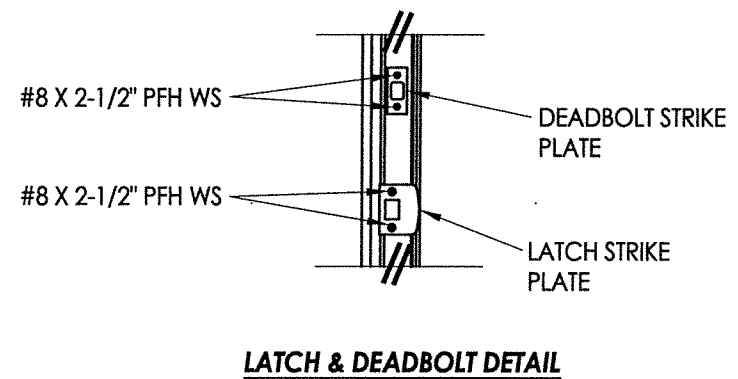
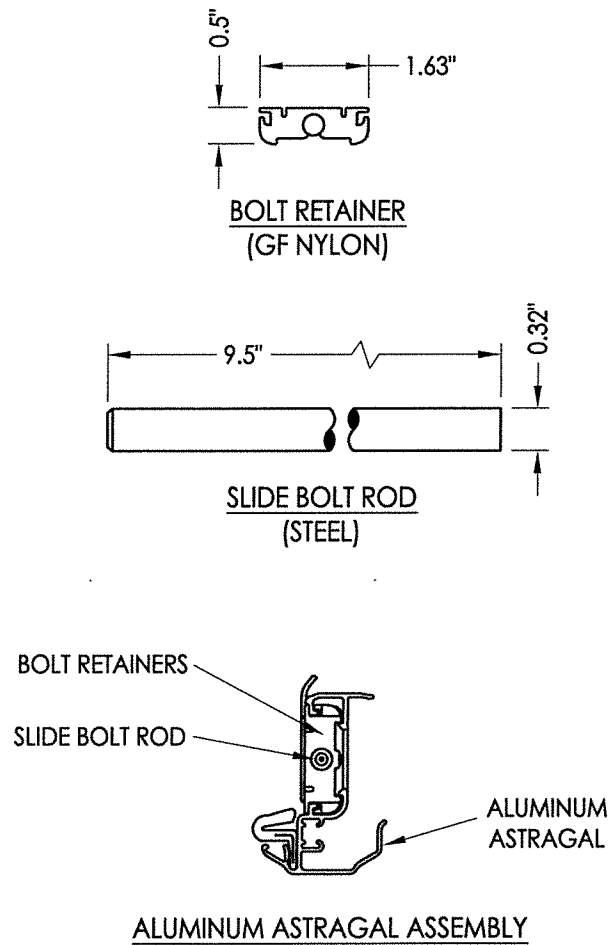
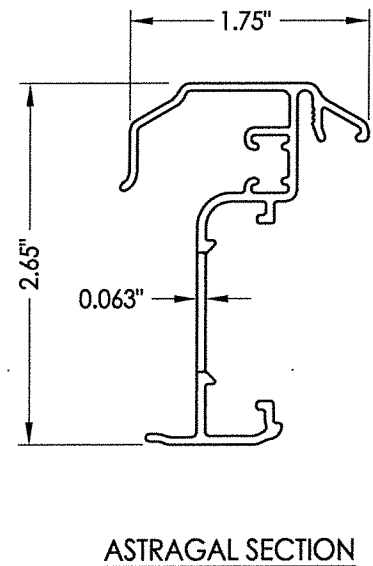
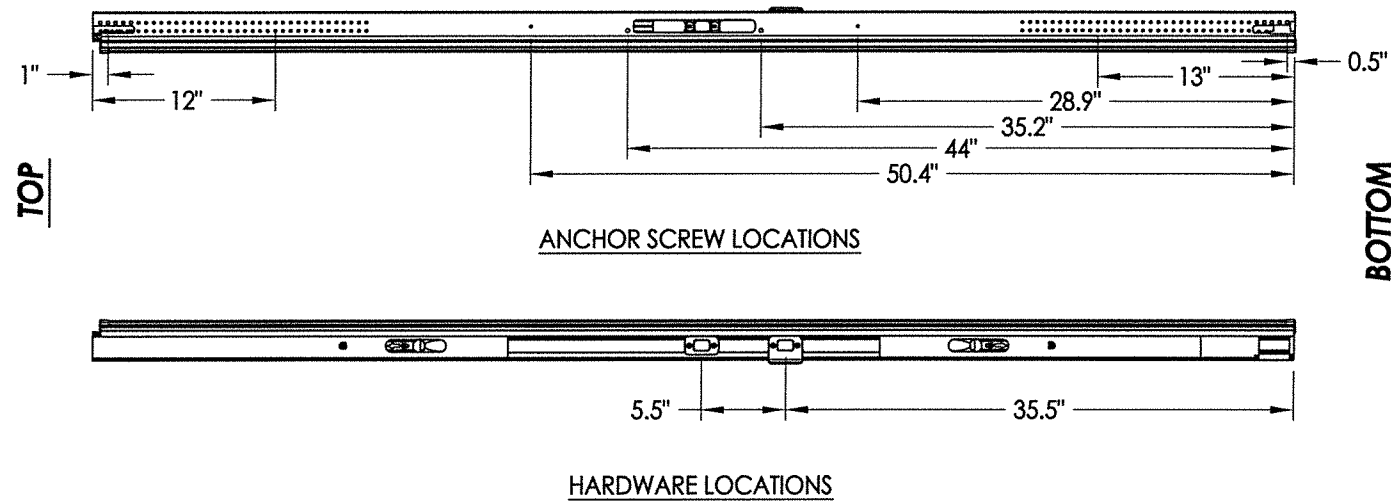
PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE MULTI-POINT)

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

DATE: 11/8/18  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4906  
SHEET 3 OF 8



**ULTIMATE HURRICANE ASTRAGAL**



Documents Prepared By: Lyndon F. Schmidt, P.E.  
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**RW** BUILDING CONSULTANTS, INC.  
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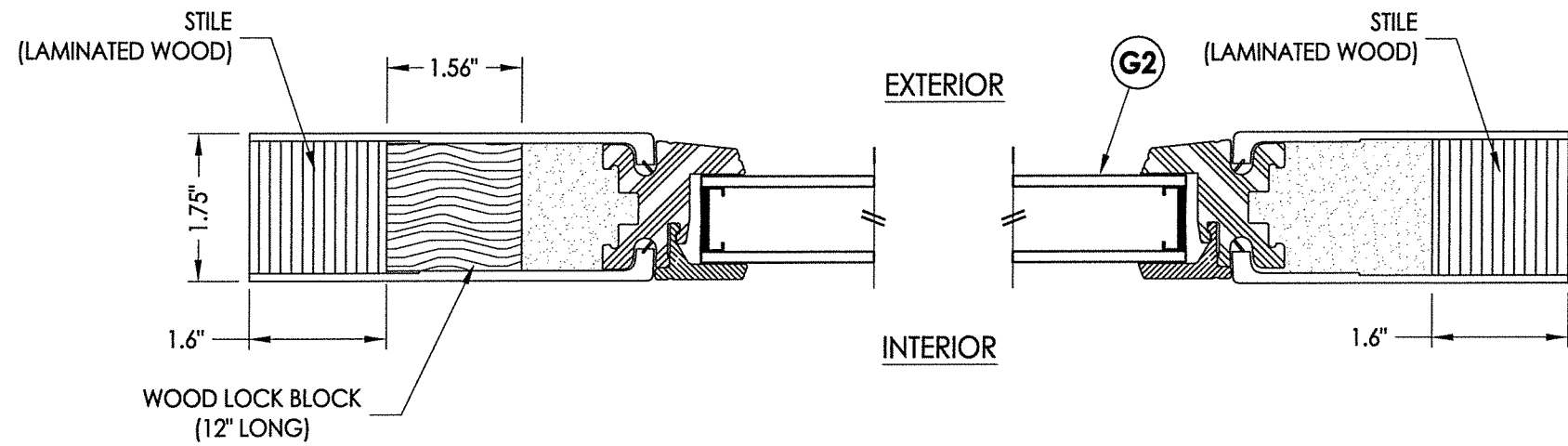
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: ENDURA

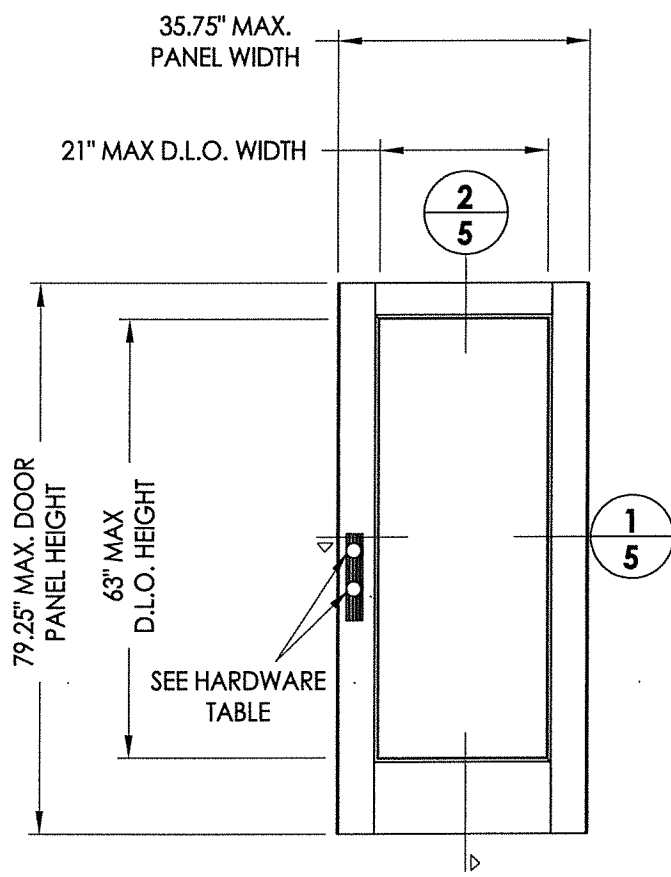
PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE HURRICANE)

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-4906  
SHEET 4 OF 8

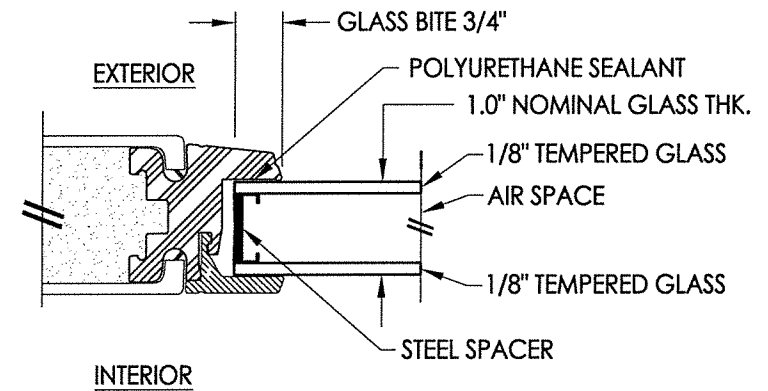


**1**  
**5** HORIZONTAL CROSS SECTION

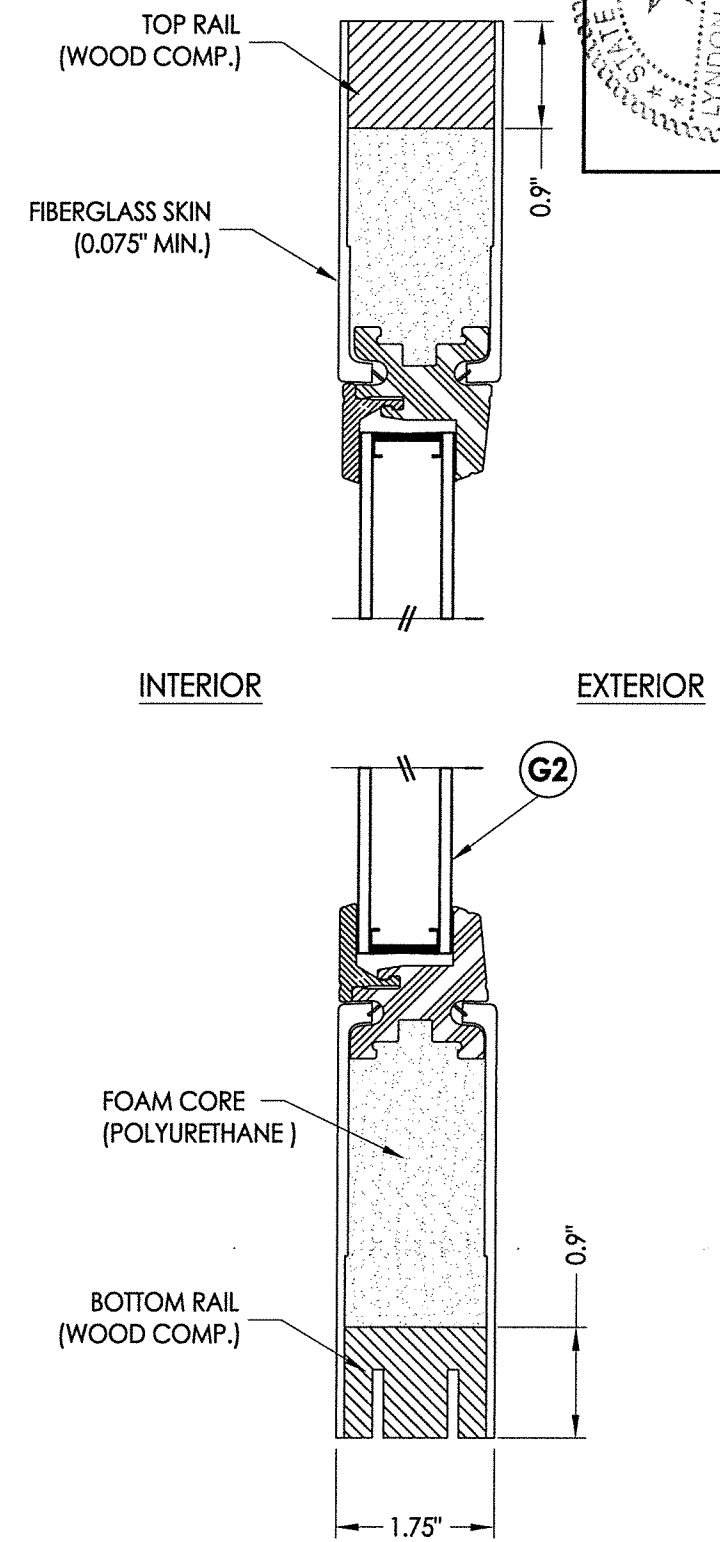


MASONITE  
Flush glazed  
(fiberglass)

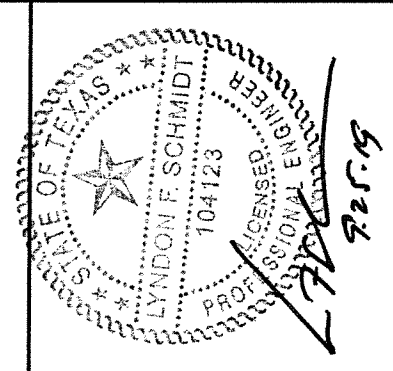
HARDWARE TABLE	
MANUFACTURER	MODEL
KWIKSET	LATCH: KWIKSET SIGNATURE SERIES (991) DEADBOLT: KWIKSET SIGNATURE SERIES (980/985)



**G2** GLAZING DETAIL  
Flush Glazing



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



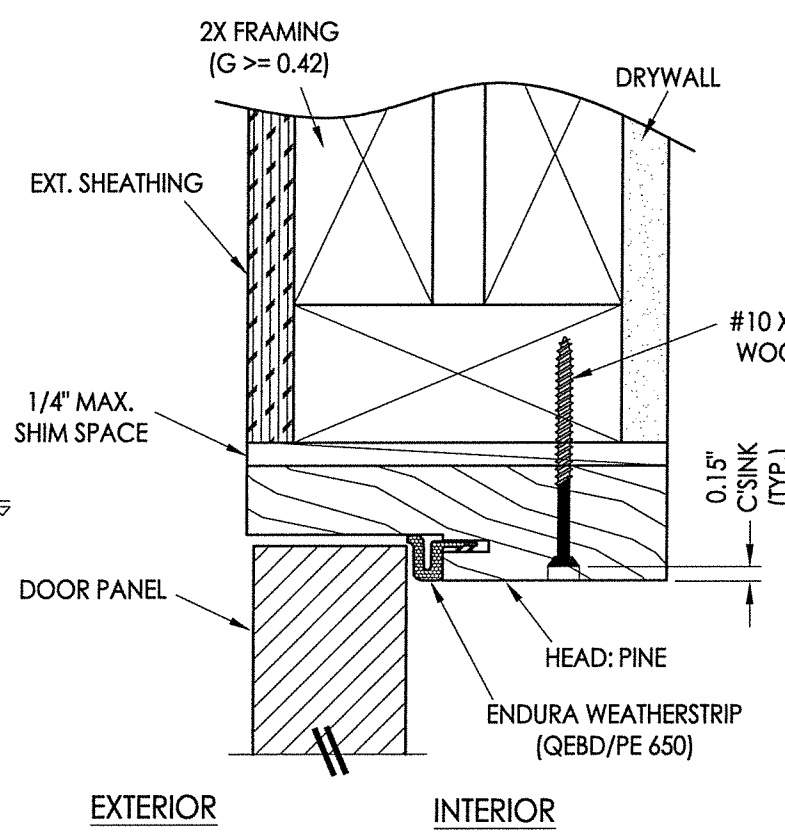
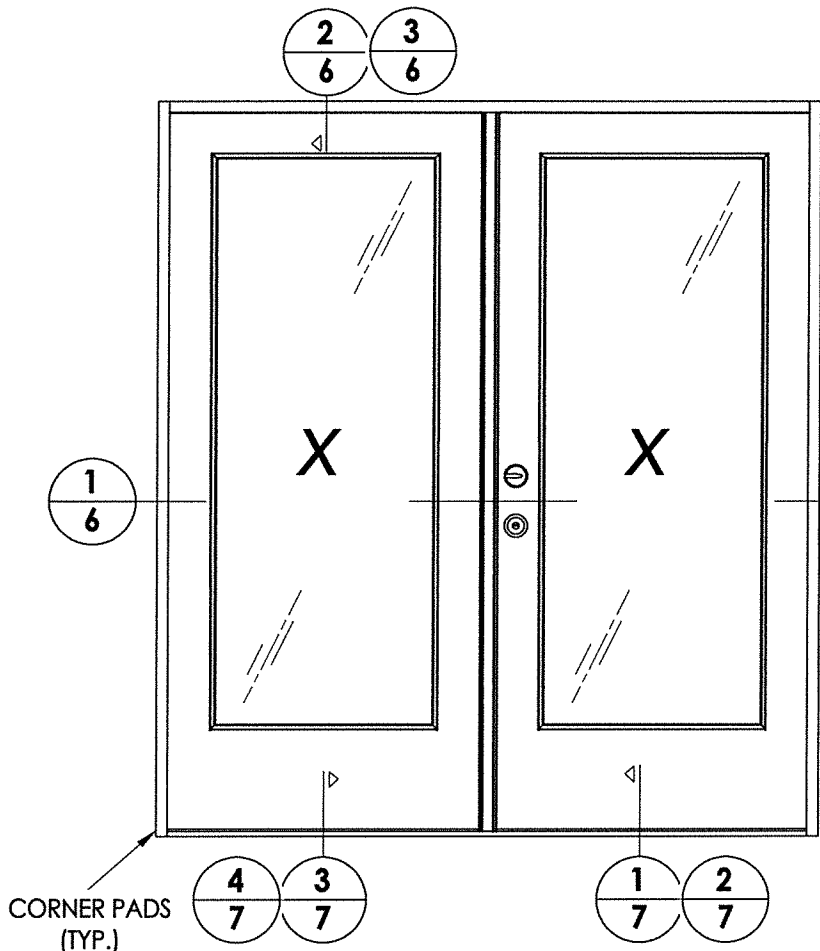
Documents Prepared By: Lyndon F. Schmidt, P.E.  
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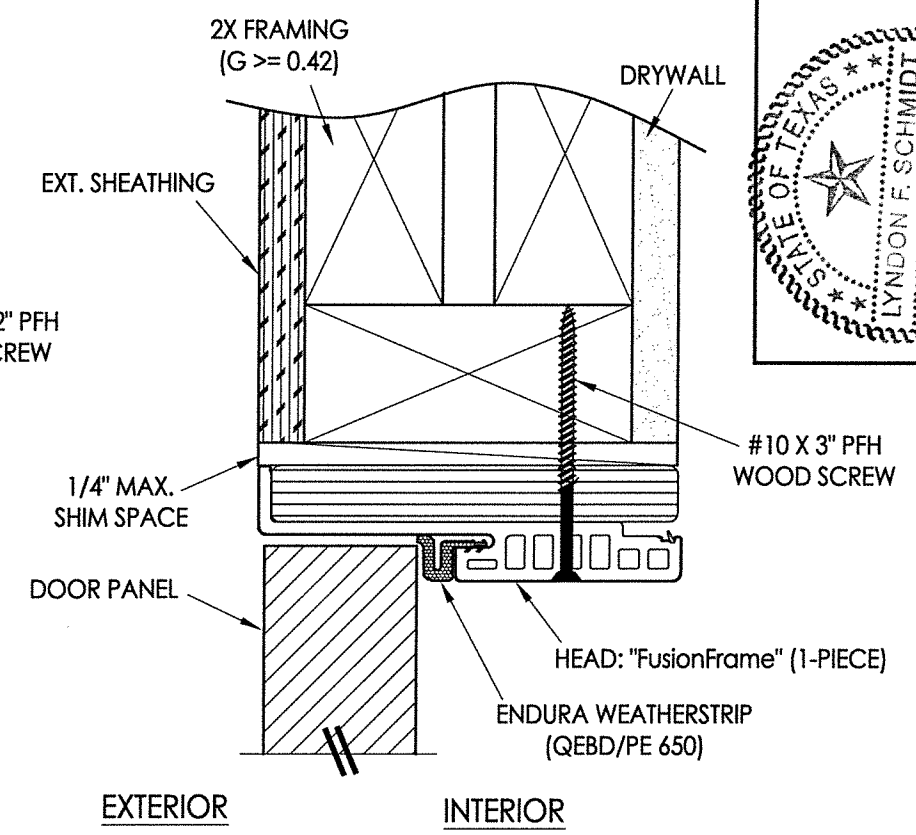
PRODUCT: ENDURA  
PART OR ASSEMBLY: DOOR PANEL DETAILS (FLUSH GLAZING)

REVISIONS		
NO.	DATE	BY
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ADD. "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		

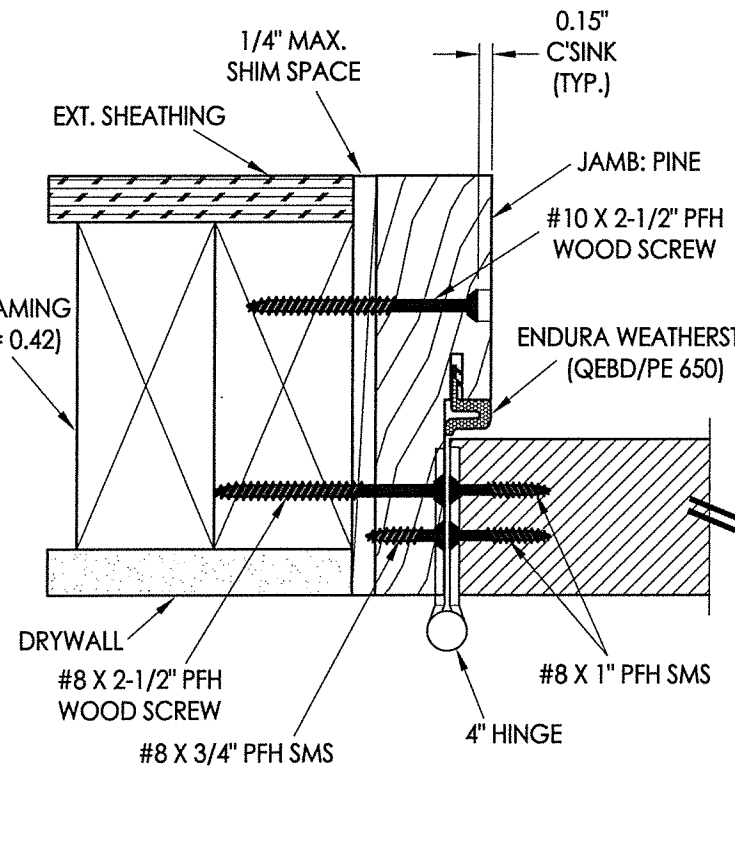
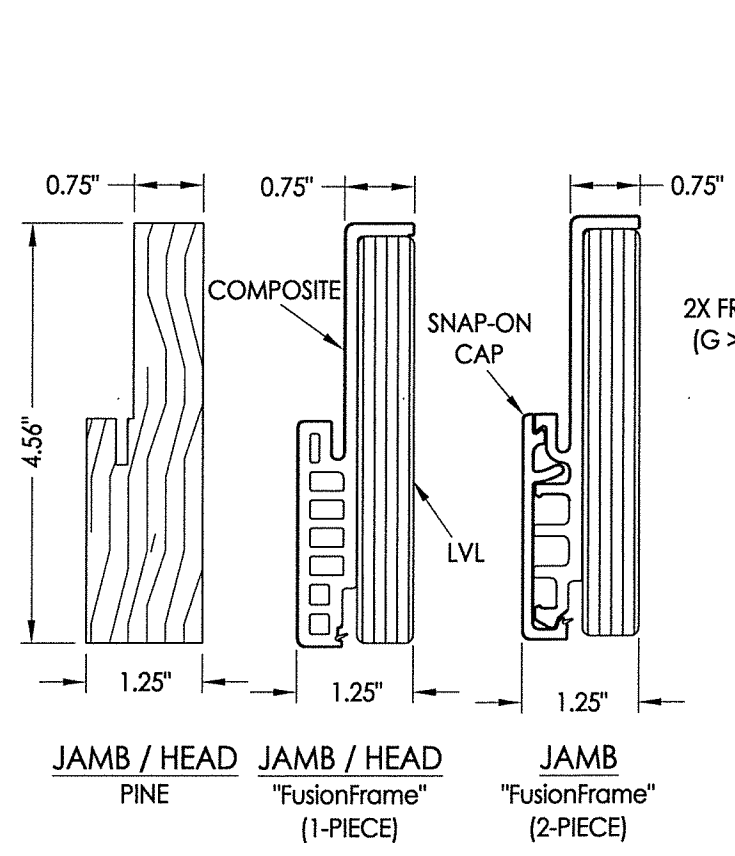
DATE: 11/8/18  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4906  
SHEET 5 OF 8



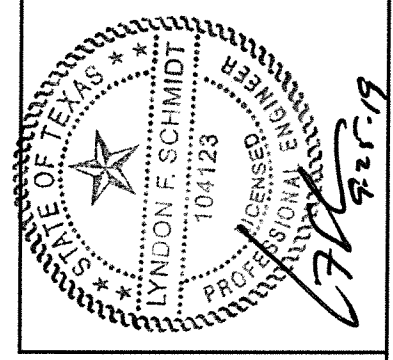
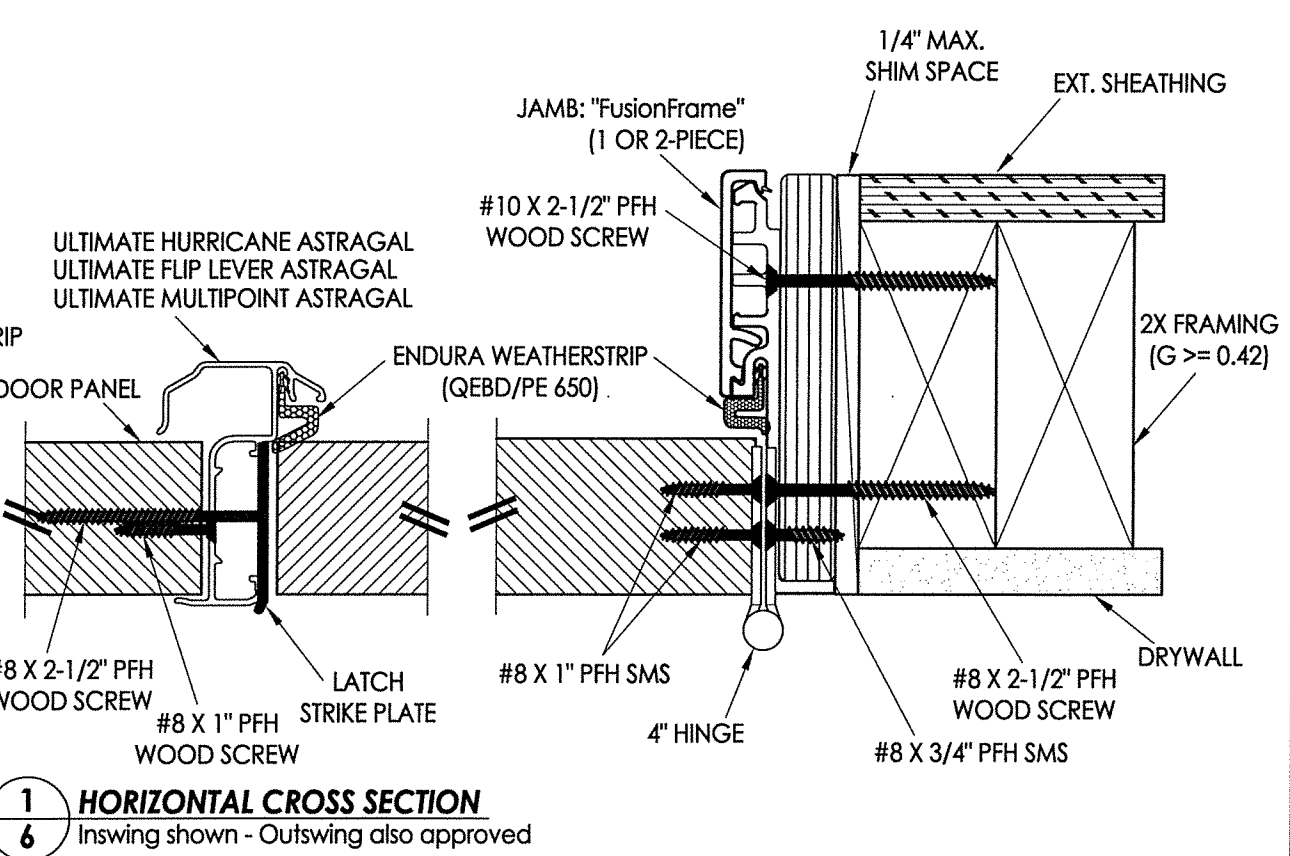
**2** VERTICAL CROSS SECTION  
6 Outswing shown - inswing also approved



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



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



Documents Prepared By: Lyndon F. Schmidt, P.E.  
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TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

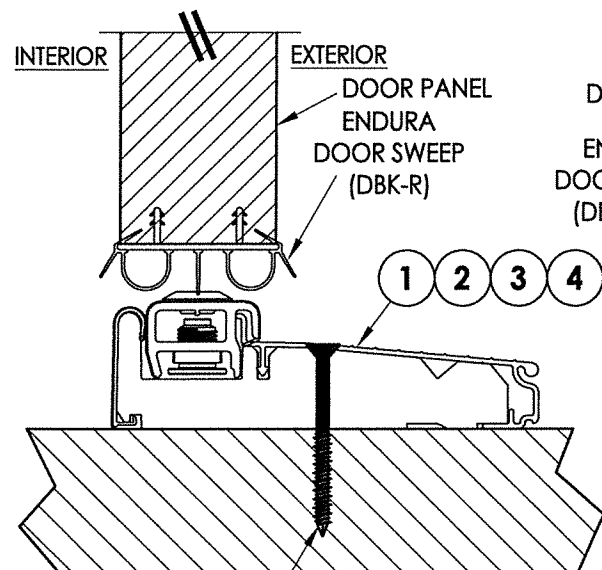
PRODUCT: ENDURA

PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS

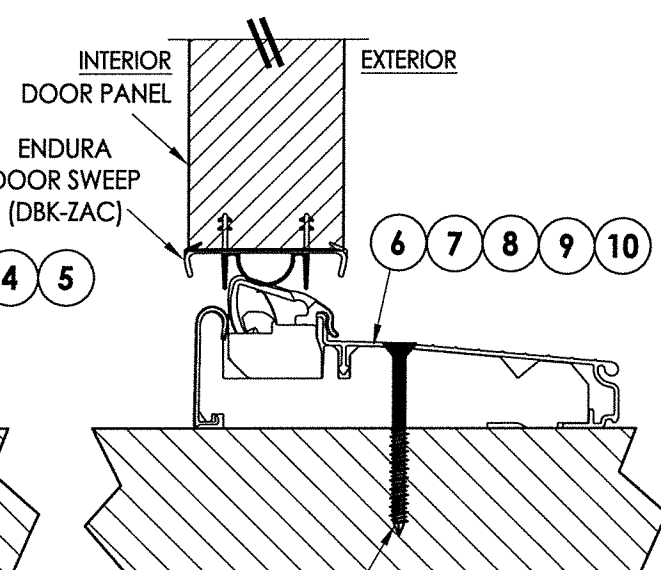
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SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4906  
SHEET 6 OF 8

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, 1-7



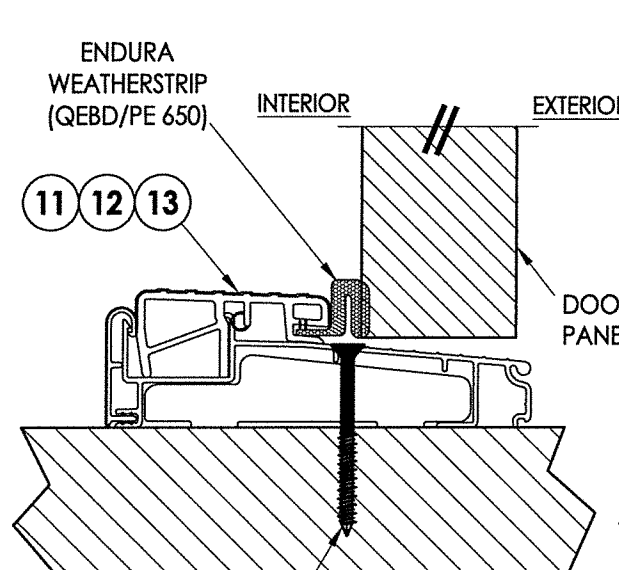
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



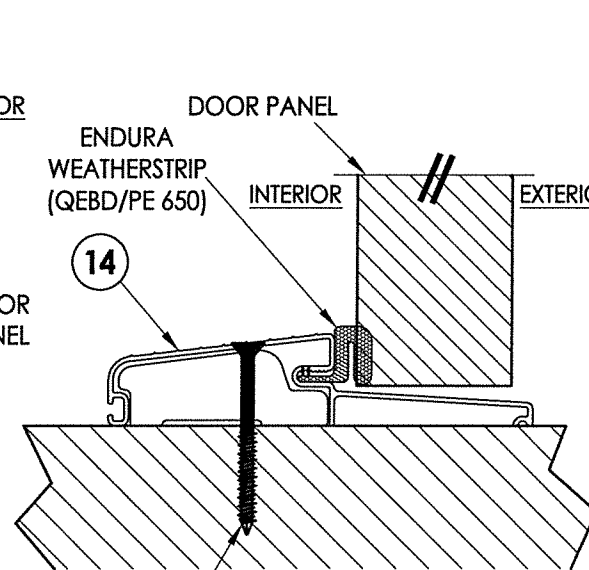
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**2 VERTICAL CROSS SECTION**  
7 Inswing Articulating Threshold  
w/ Pin Capture



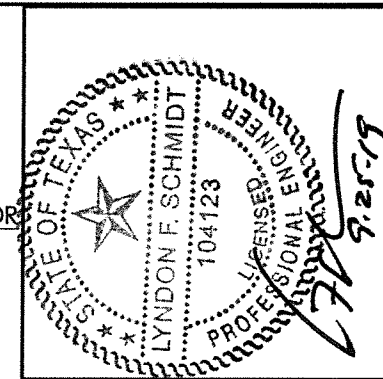
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



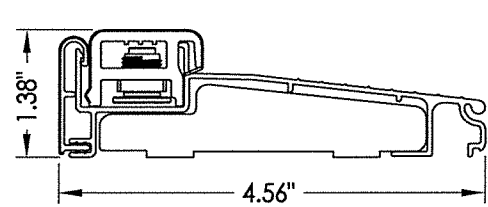
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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

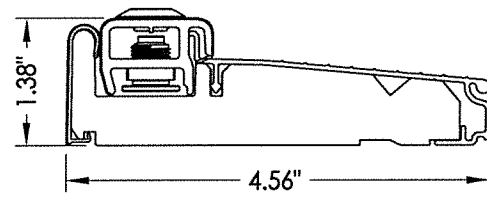


Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

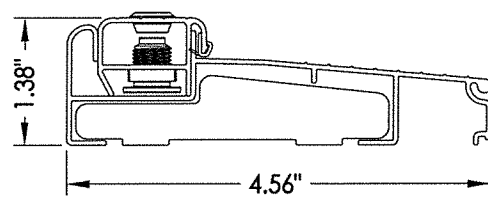
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852



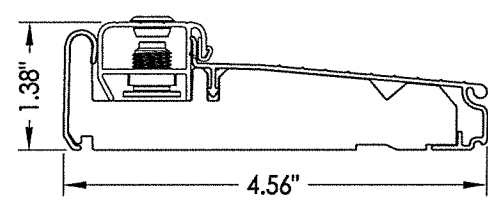
**1 INSWING ADJUSTABLE THRESHOLD**  
ZAI14565



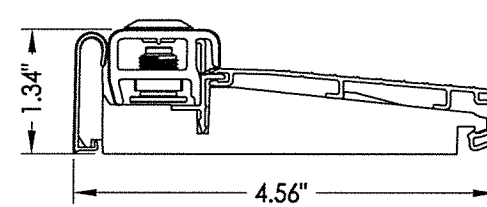
**2 INSWING ADJUSTABLE THRESHOLD**  
ZAI4565FN  
MAX. DESIGN PRESSURE = ±45 PSF



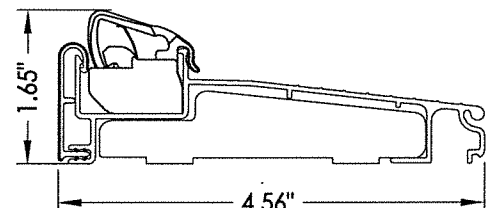
**3 INSWING ADJUSTABLE THRESHOLD**  
ZAI1AA4565



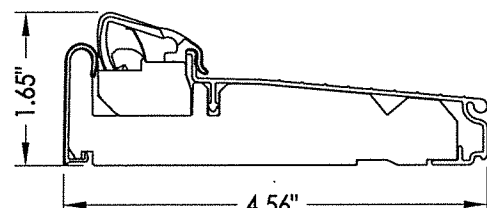
**4 INSWING ADJUSTABLE THRESHOLD**  
ZAI1AA4565FN



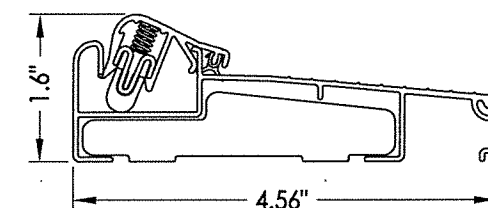
**5 INSWING ADJUSTABLE THRESHOLD**  
ZAI4565RDS  
MAX. DESIGN PRESSURE = ±50 PSF



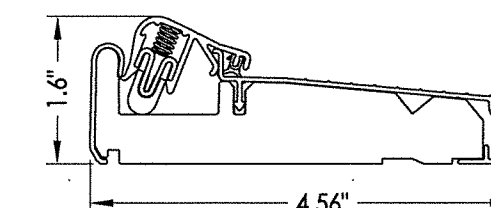
**6 INSWING ARTICULATING THRESHOLD**  
ZAC14565



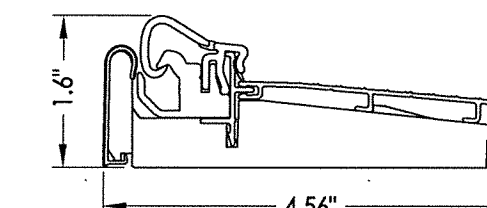
**7 INSWING ARTICULATING THRESHOLD**  
ZAC4565FN



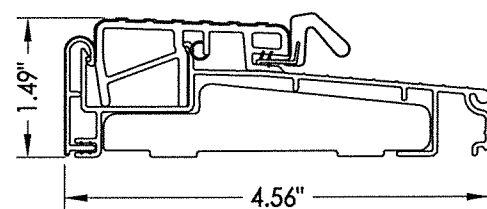
**8 INSWING ARTICULATING THRESHOLD**  
ZAC1AA4565



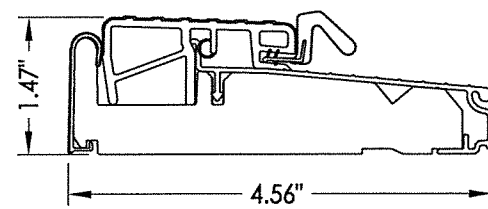
**9 INSWING ARTICULATING THRESHOLD**  
ZAC1AA4565FN



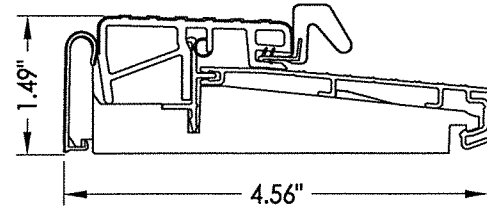
**10 INSWING ARTICULATING THRESHOLD**  
ZAC4565RDS  
MAX. DESIGN PRESSURE = ±45 PSF



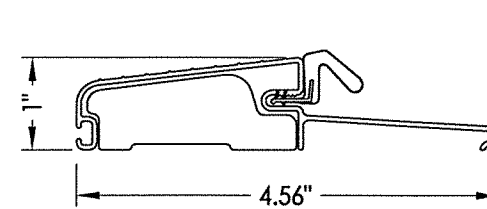
**11 OUTSWING THRESHOLD**  
ZOB14565



**12 OUTSWING THRESHOLD**  
ZOB4565FN



**13 OUTSWING THRESHOLD**  
ZOB4565RDS



**14 OUTSWING THRESHOLD**  
FOB4566

PRODUCT: ENDURA

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

1 9/23/19 ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE

LFS NO. DATE BY REVISIONS

DATE: 11/8/18

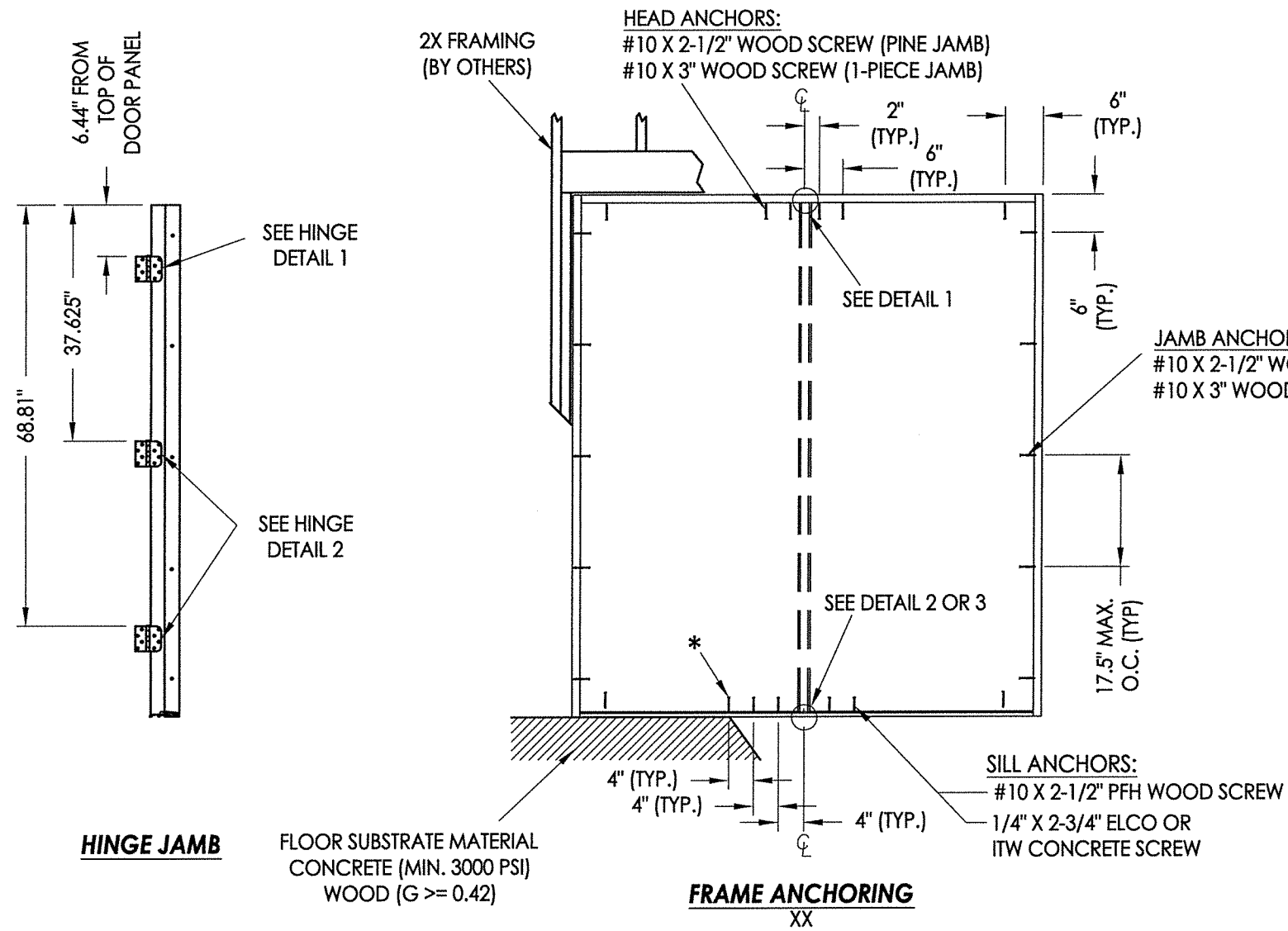
SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4906

SHEET 7 OF 8



\* NOTE: THIS ADDITIONAL ANCHOR IS REQUIRED FOR D.P. > 45 PSF.

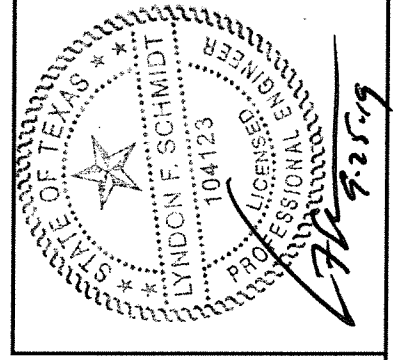
**JAMB NOTES:**  
 THE PINE OR "FusionFrame" 1-PIECE JAMB MAY BE INSTALLED @ THE HEAD OR SIDE JAMB.  
 THE FusionFrame" 2-PIECE JAMB MAY BE INSTALLED @ THE SIDE JAMBS ONLY.

- 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.



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

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

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	BY
1	9/23/19	LFS
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		
DATE:	11/8/18	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4906	
SHEET	8 OF 8	