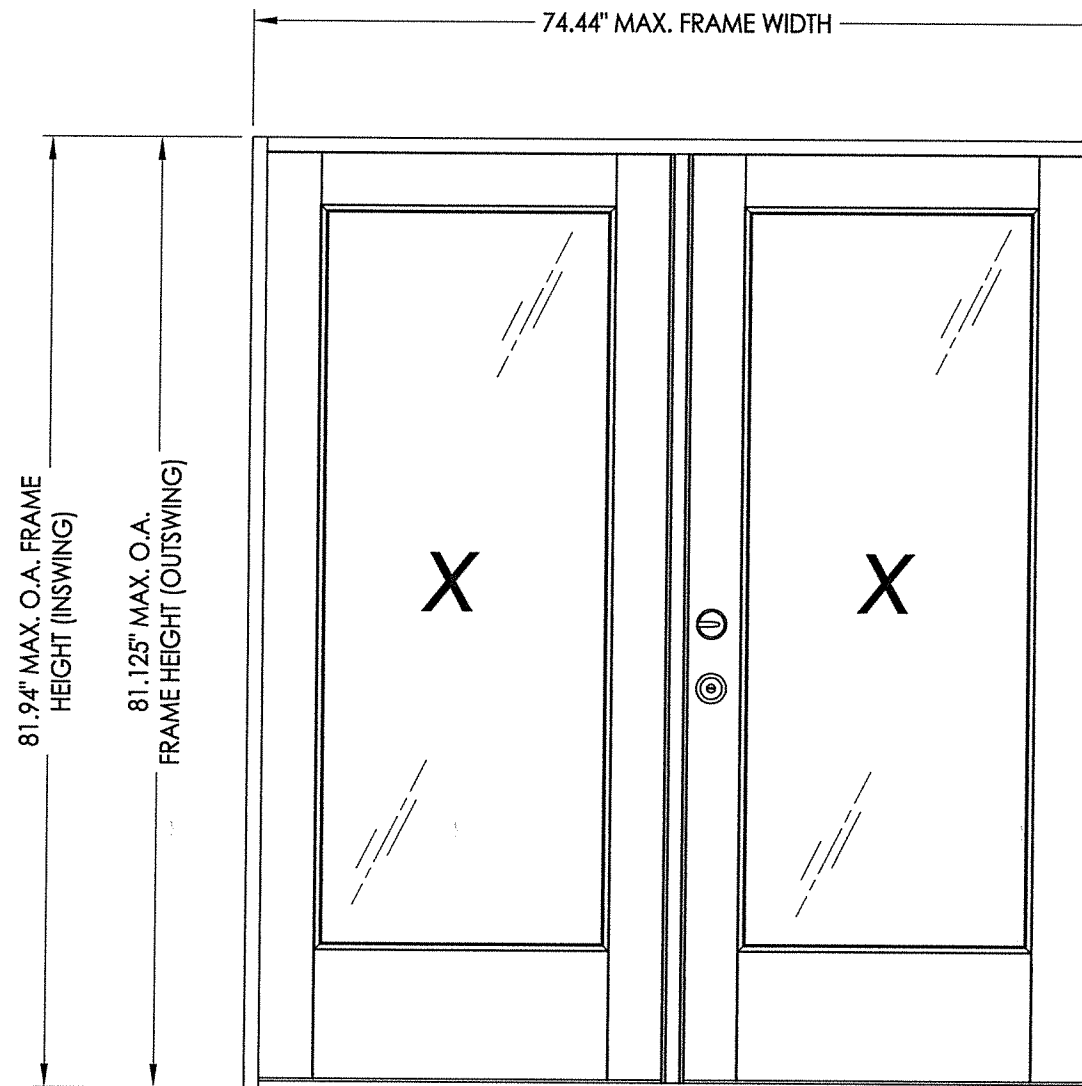




# Glazed Steel Door

"NON-IMPACT"  
INSWING / OUTSWING



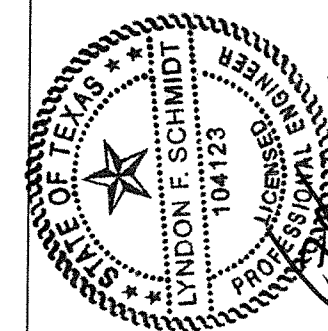
**EVALUATED FOR USE IN THE STATE OF TEXAS**

The Glazed 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	Astragal details (Ultimate Hurricane)
3	Door panel details (lip lite insert glazing)
4	Horizontal & vertical cross sections
5	Vertical cross sections
6	Frame anchoring

CONFIG.	MODEL	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
XX	INSWING	+50.0	-50.0
	OUTSWING	+50.0	-50.0



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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: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS
4	12/19/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
3	9/05/18	ADD ADDITIONAL THRESHOLDS
2	5/5/15	ADD NEW ASTRAGAL PIN CAPTURE
1	1/06/14	ADDED ARTICULATING SILL

DATE: 8/08/12

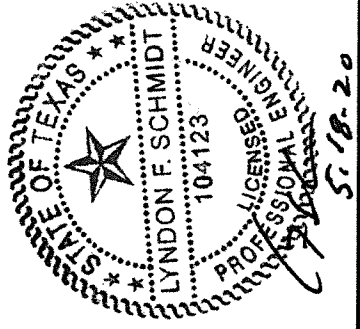
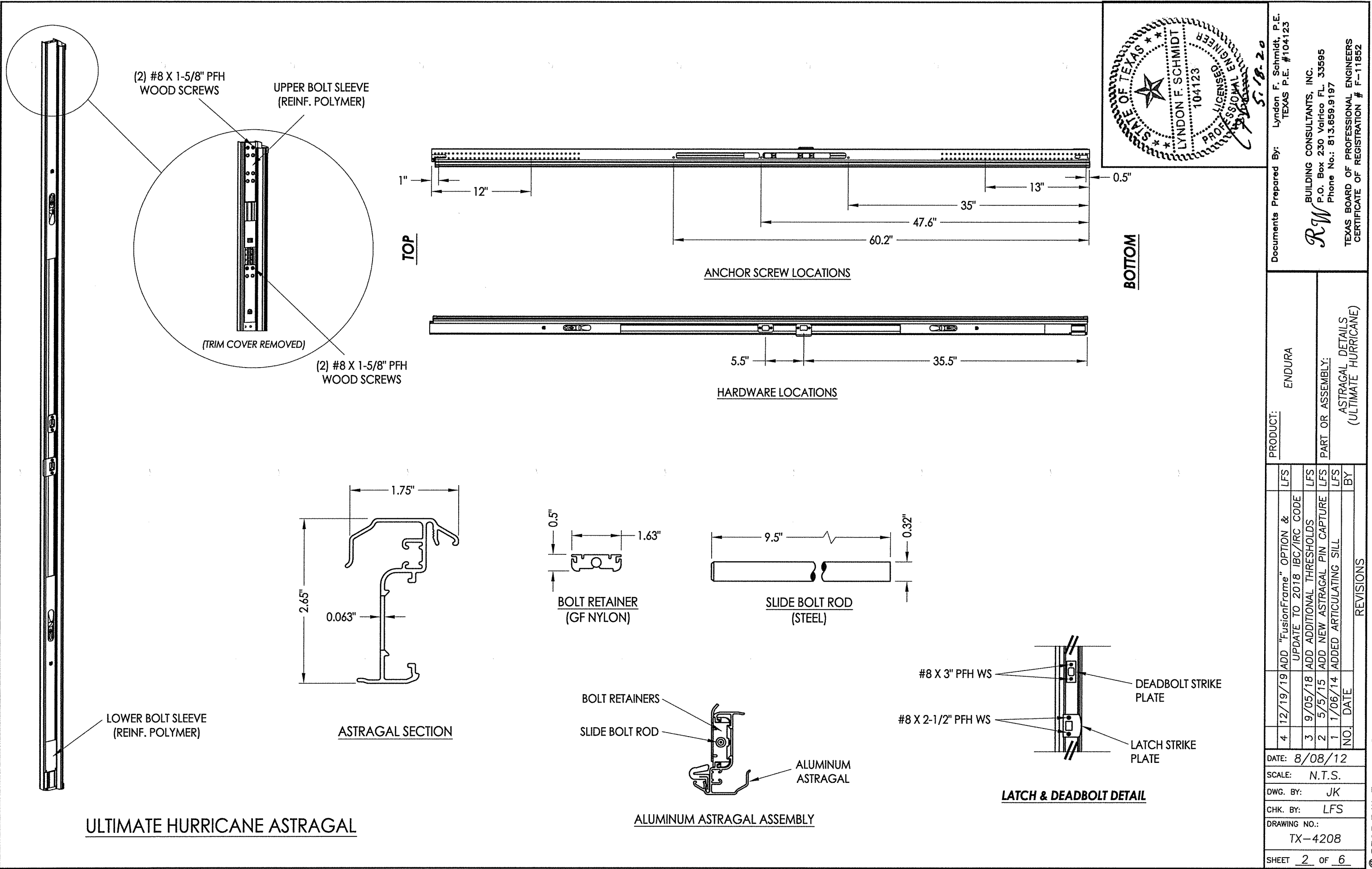
SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4208

SHEET 1 OF 6



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 Phone No.: 813.659.9197

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

PRODUCT: ENDURA

PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE HURRICANE)

NO.	DATE	REVISIONS
4	12/19/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
3	9/05/18	ADD ADDITIONAL THRESHOLDS
2	5/5/15	ADD NEW ASTRAGAL PIN CAPTURE
1	1/06/14	ADDED ARTICULATING SILL
		BY

DATE: 8/08/12

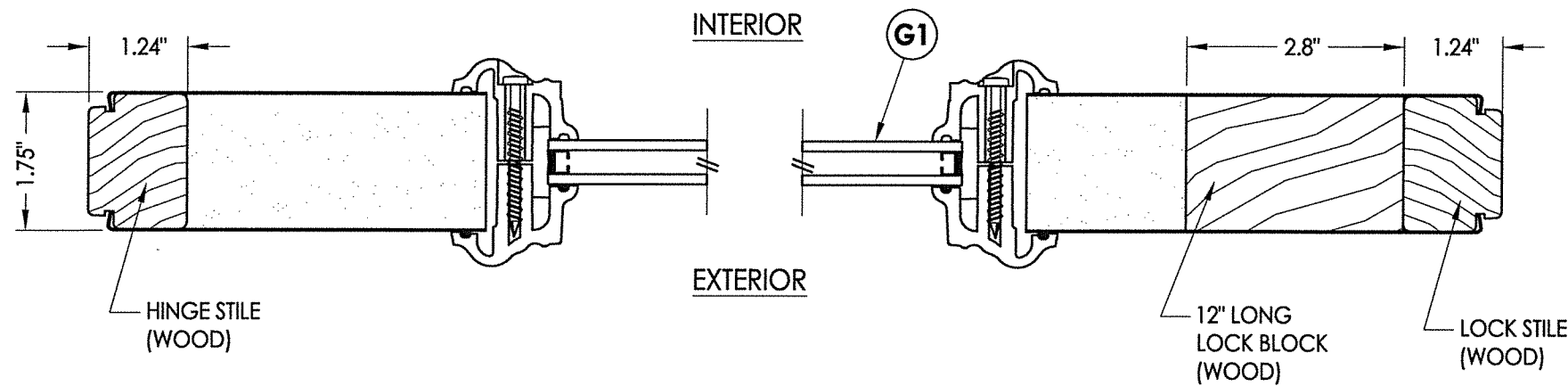
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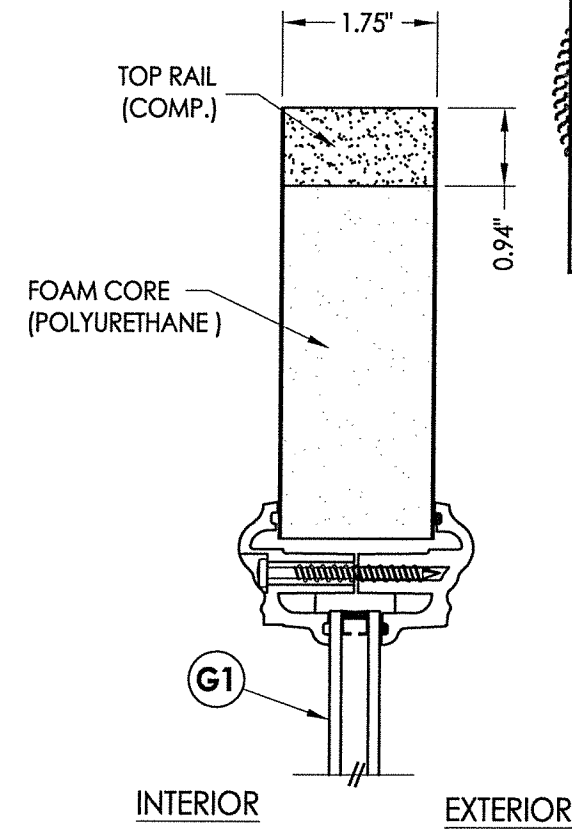
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DRAWING NO.: TX-4208

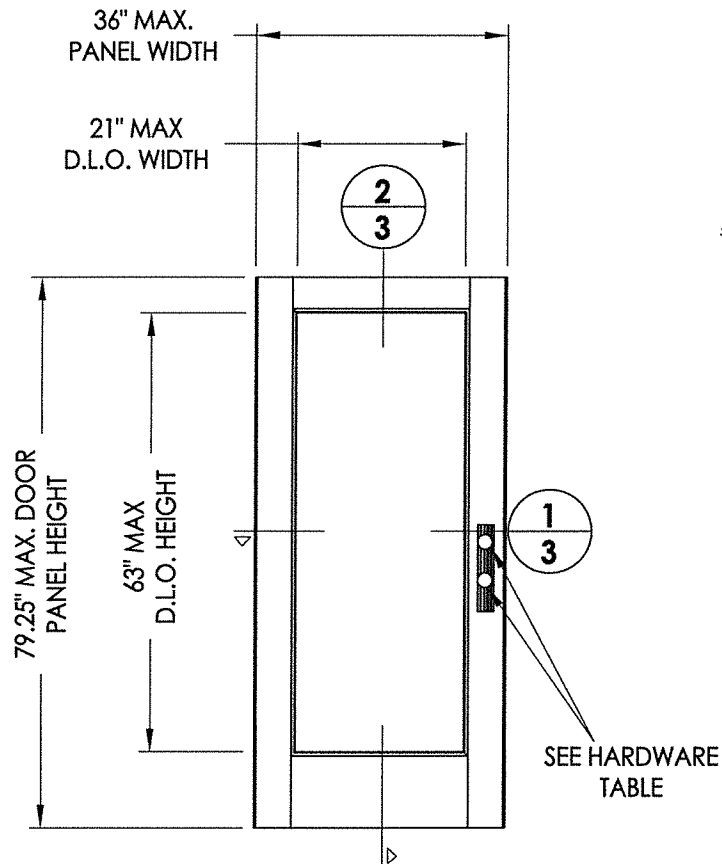
SHEET 2 OF 6



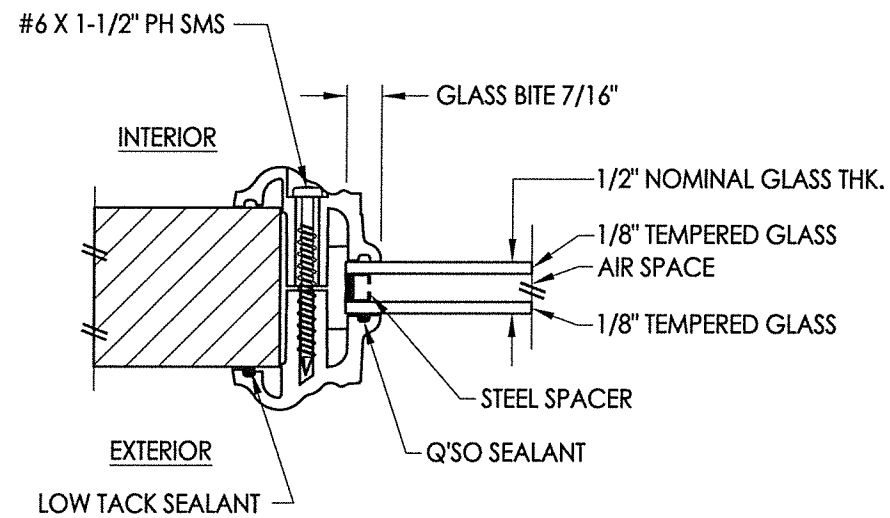
**1**  
**3** HORIZONTAL CROSS SECTION



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

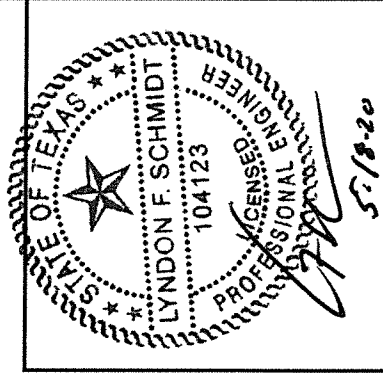


THERMA-TRU  
Insert glazed  
(steel)



**G1** GLAZING DETAIL  
Lip Lite Insert Glazing

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



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

PRODUCT: ENDURA

PART OR ASSEMBLY:  
DOOR PANEL DETAILS  
(LIP LITE INSERT GLAZING)

NO.	DATE	REVISIONS
4	12/19/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
3	9/05/18	ADD ADDITIONAL THRESHOLDS
2	5/5/15	ADD NEW ASTRAGAL PIN CAPTURE
1	1/06/14	ADDED ARTICULATING SILL
		BY

DATE: 8/08/12

SCALE: N.T.S.

DWG. BY: JK

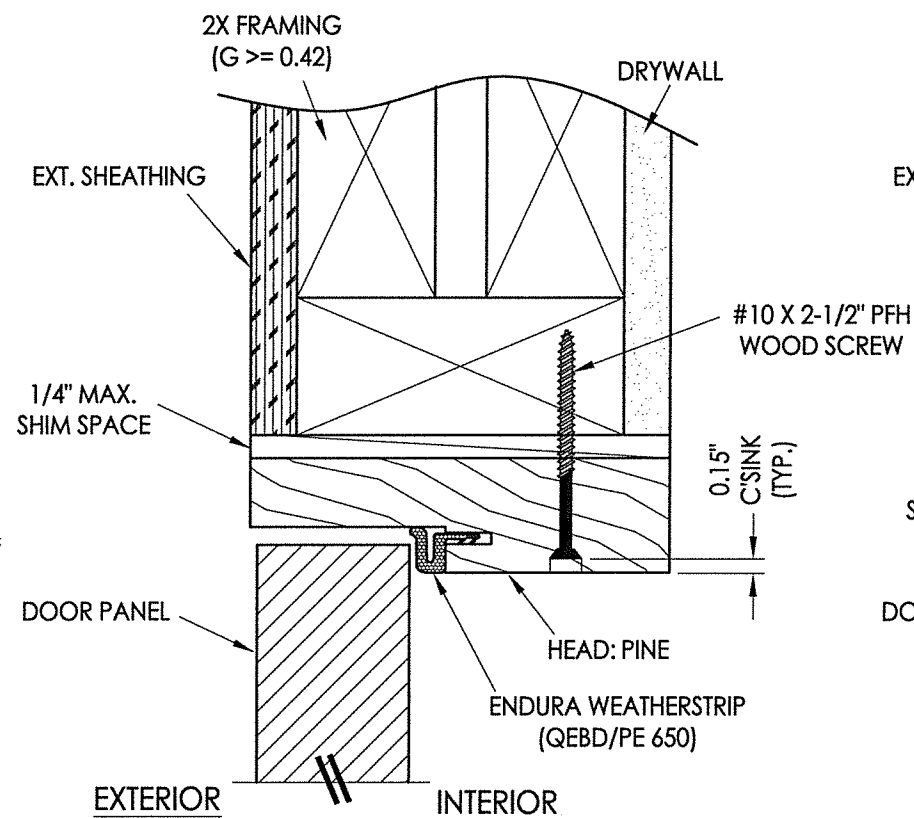
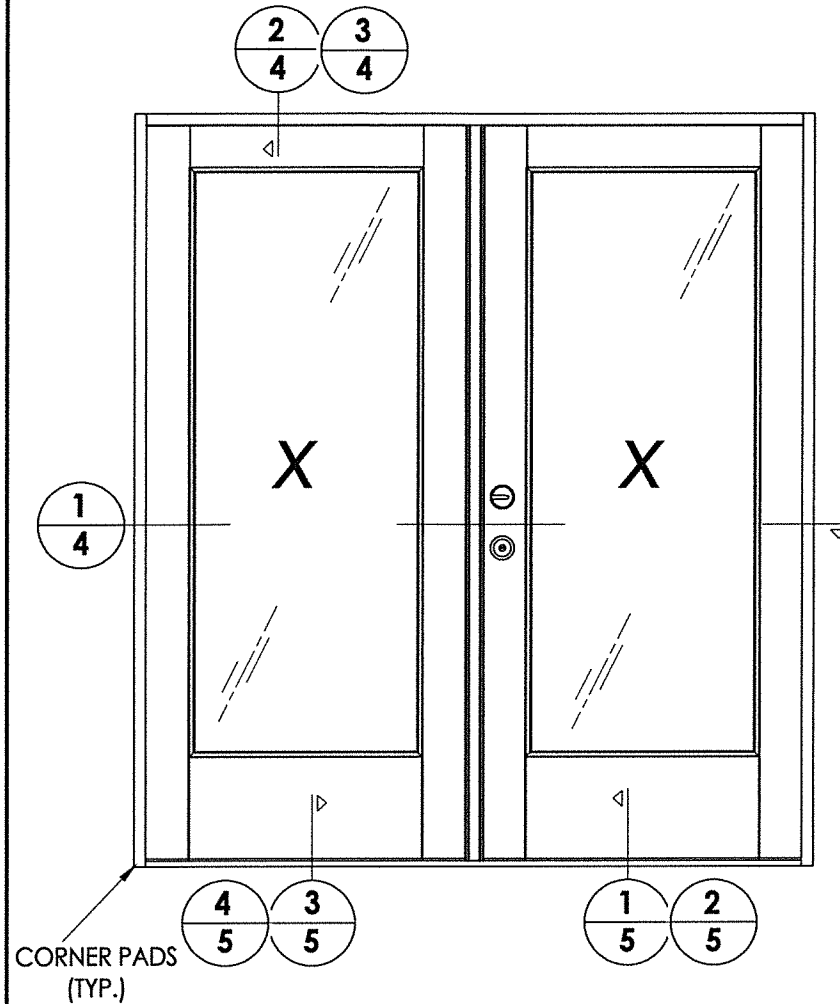
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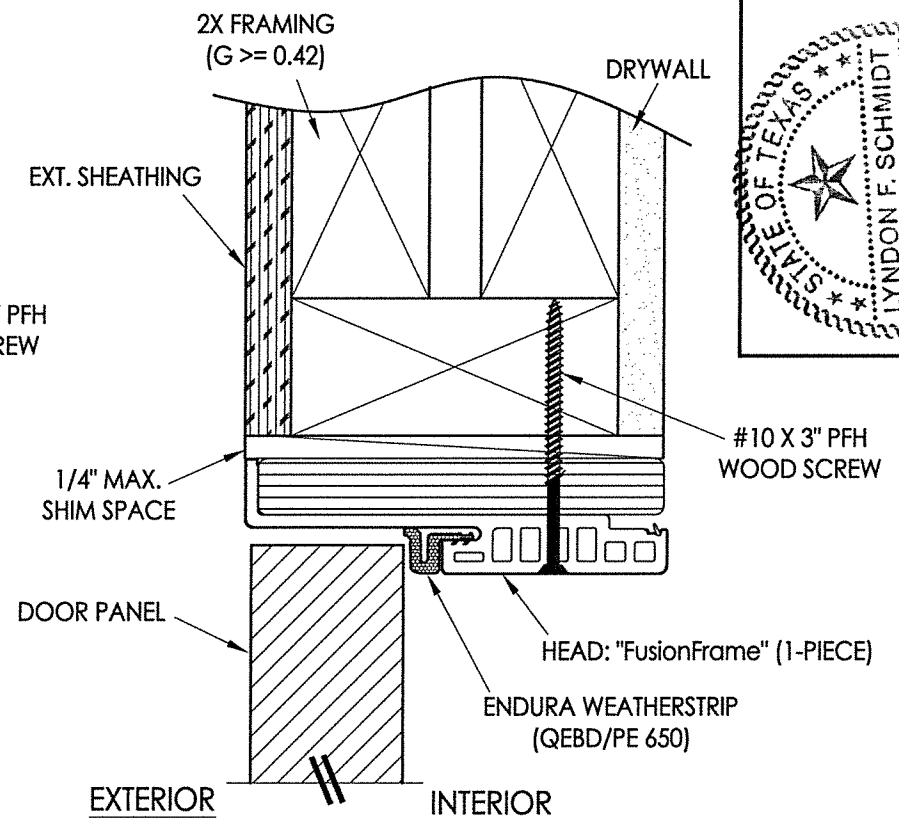
TX-4208

SHEET 3 OF 6

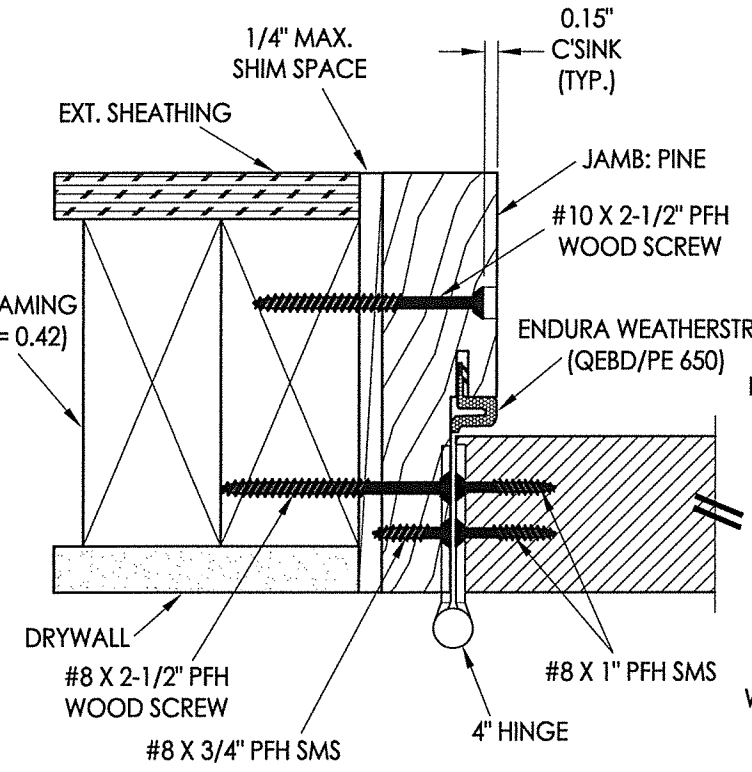
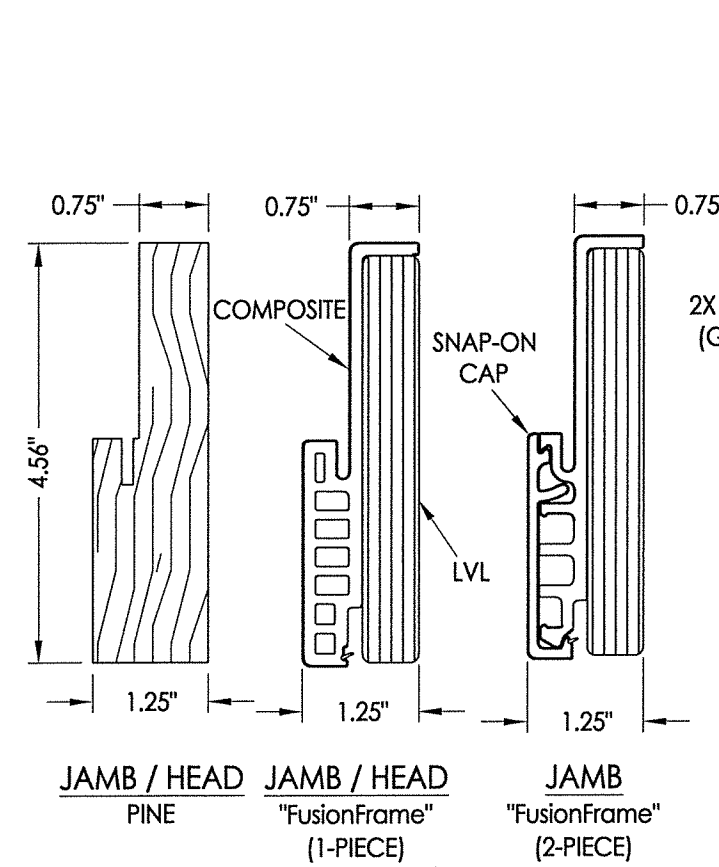
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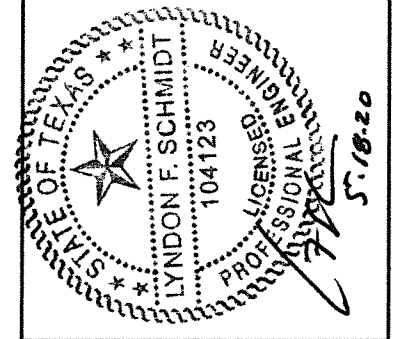
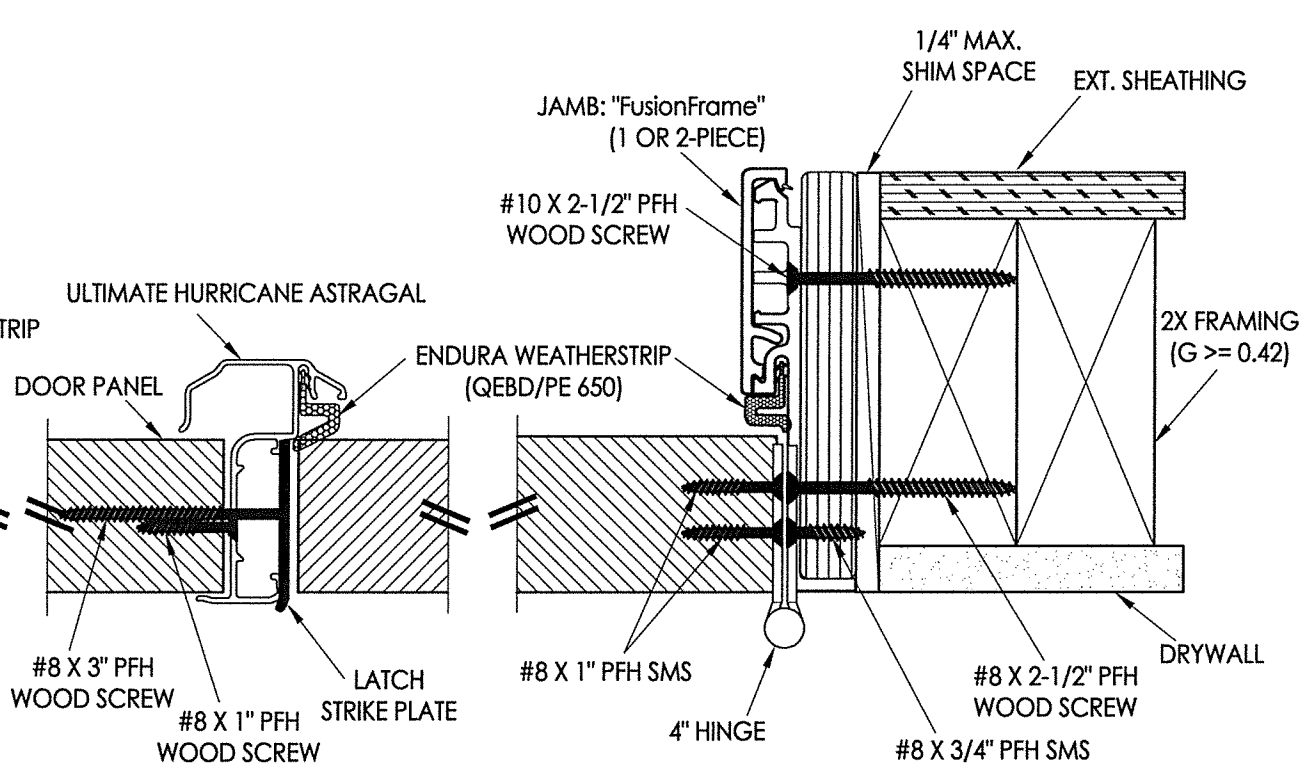
**2 VERTICAL CROSS SECTION**  
4 Outswing shown - inswing also approved



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



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



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

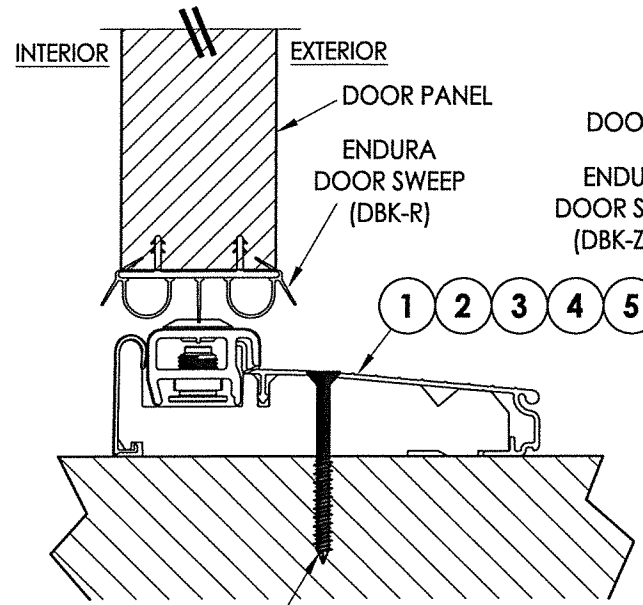
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PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
4	12/19/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
3	9/05/18	ADD ADDITIONAL THRESHOLDS
2	5/5/15	ADD NEW ASTRAGAL PIN CAPTURE
1	1/06/14	ADDED ARTICULATING SILL

DATE: 8/08/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4208  
SHEET 4 OF 6

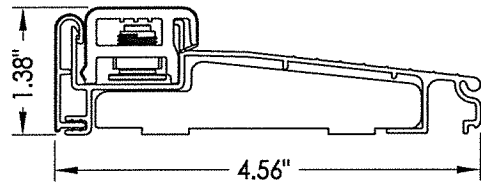
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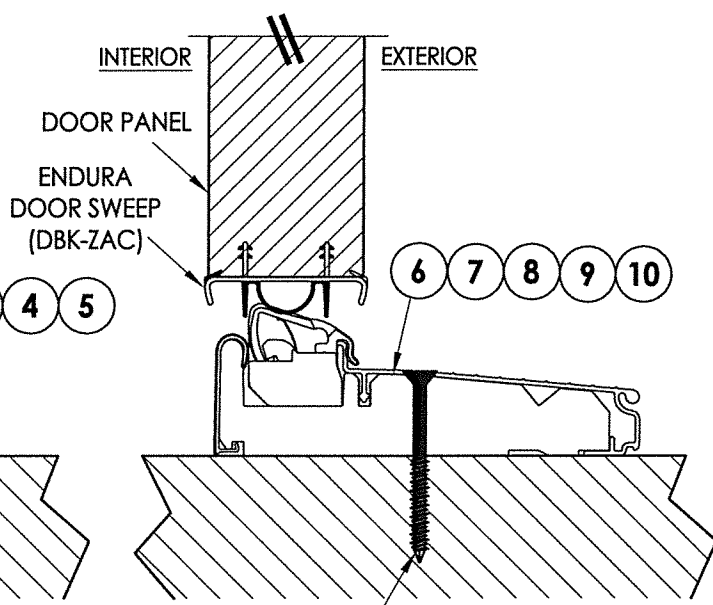


#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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

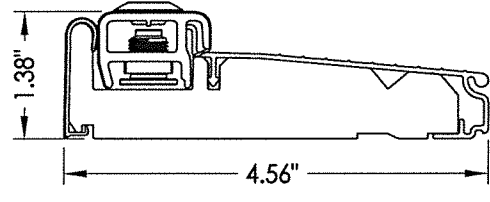


**1 INSWING ADJUSTABLE THRESHOLD**  
ZAIL4565

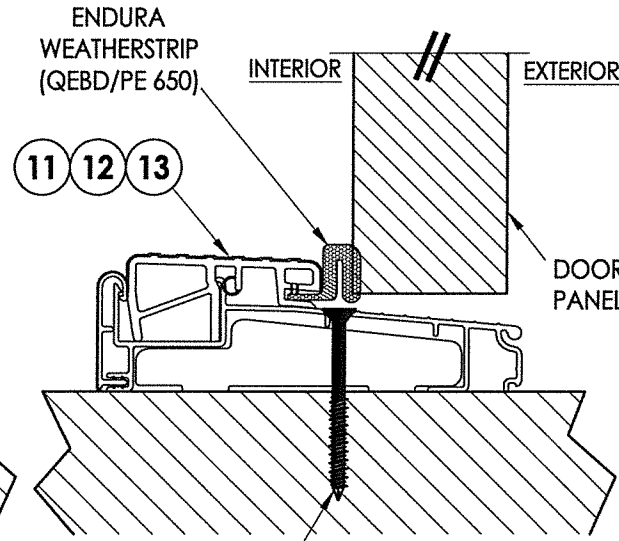


#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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

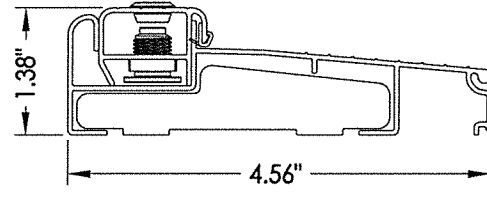


**2 INSWING ADJUSTABLE THRESHOLD**  
ZAI4565FN  
MAX. DESIGN PRESSURE = +35/-40 PSF

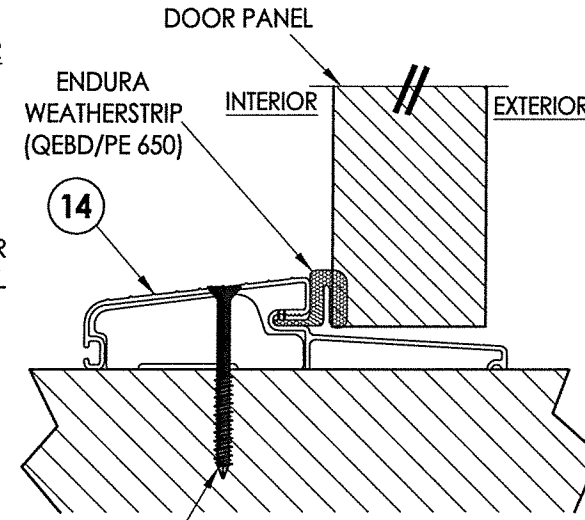


#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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

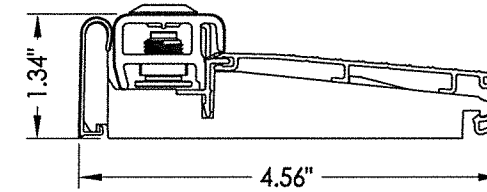


**3 INSWING ADJUSTABLE THRESHOLD**  
ZAILAA4565

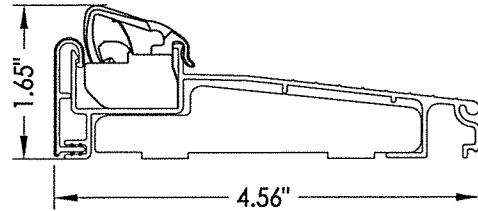


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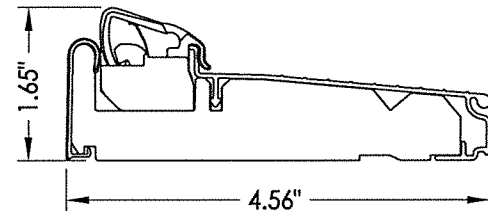
**4 VERTICAL CROSS SECTION**  
**5** Outswing Bump Threshold



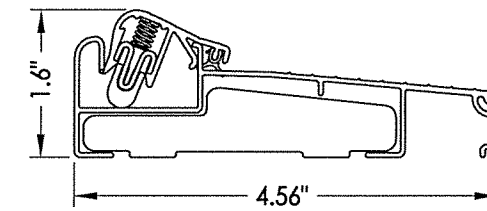
**5 INSWING ADJUSTABLE THRESHOLD**  
ZAI4565RDS



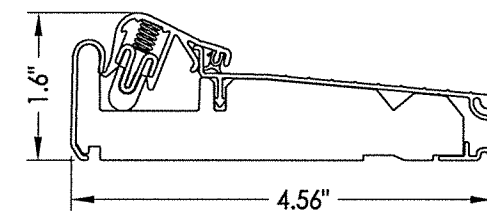
**6 INSWING ARTICULATING THRESHOLD**  
ZACL4565  
MAX. DESIGN PRESSURE = ±45 PSF



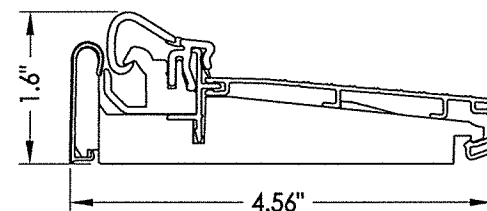
**7 INSWING ARTICULATING THRESHOLD**  
ZAC4565FN  
MAX. DESIGN PRESSURE = +35/-40 PSF



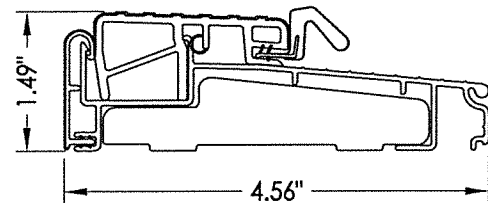
**8 INSWING ARTICULATING THRESHOLD**  
ZACLA4565  
MAX. DESIGN PRESSURE = ±45 PSF



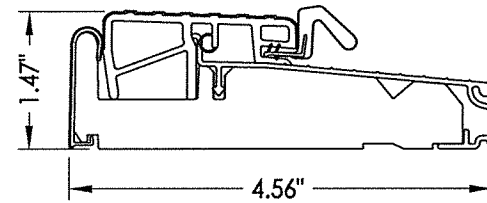
**9 INSWING ARTICULATING THRESHOLD**  
ZACAA4565FN  
MAX. DESIGN PRESSURE = +35/-40 PSF



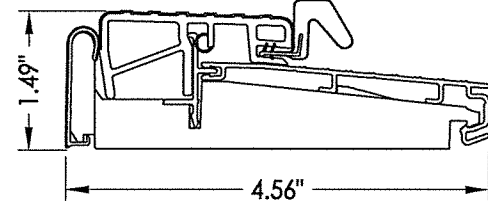
**10 INSWING ARTICULATING THRESHOLD**  
ZAC4565RDS  
MAX. DESIGN PRESSURE = ±45 PSF



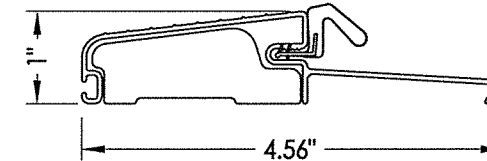
**11 OUTSWING THRESHOLD**  
ZOBL4565



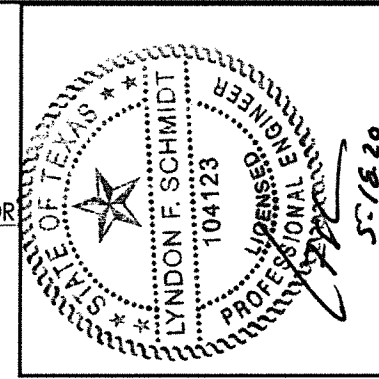
**12 OUTSWING THRESHOLD**  
ZOB4565FN



**13 OUTSWING THRESHOLD**  
ZOB4565RDS



**14 OUTSWING THRESHOLD**  
FOB4566



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:  
VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY
4	12/19/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE	LFS
3	9/05/18	ADD ADDITIONAL THRESHOLDS	LFS
2	5/5/15	ADD NEW ASTRAGAL PIN CAPTURE	LFS
1	1/06/14	ADDED ARTICULATING SILL	LFS

DATE: 8/08/12

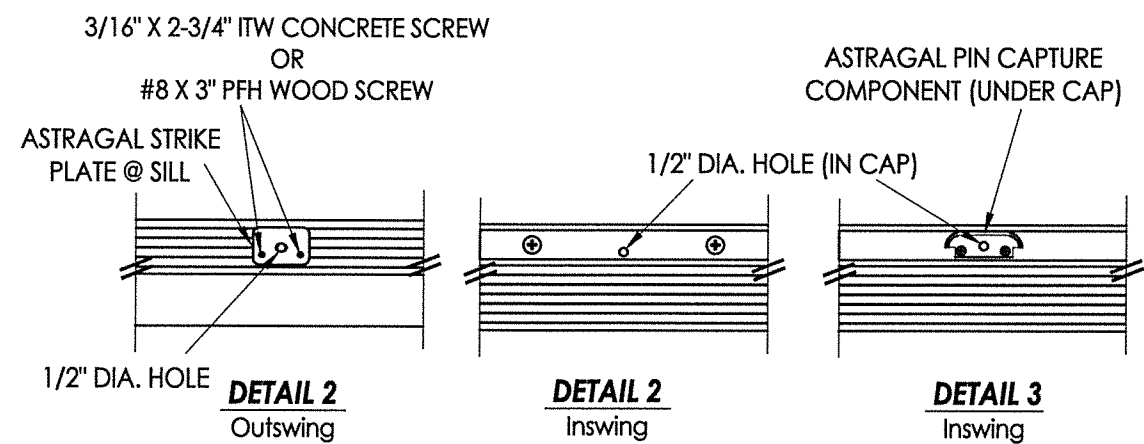
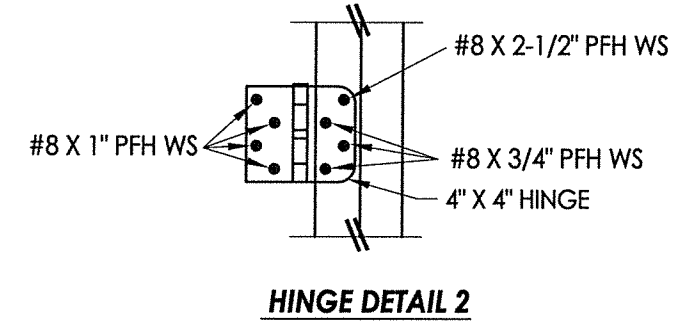
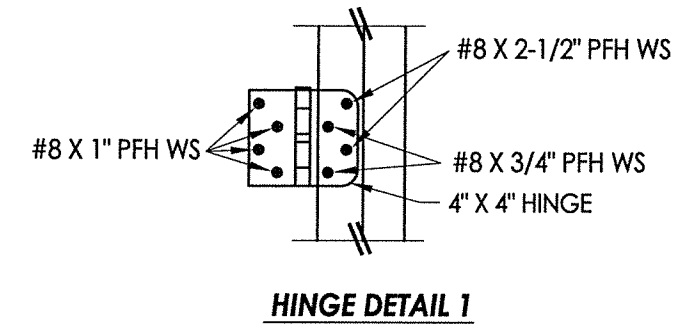
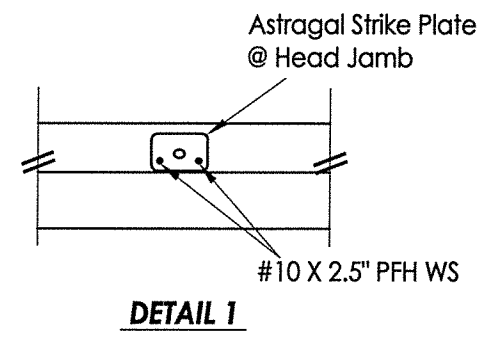
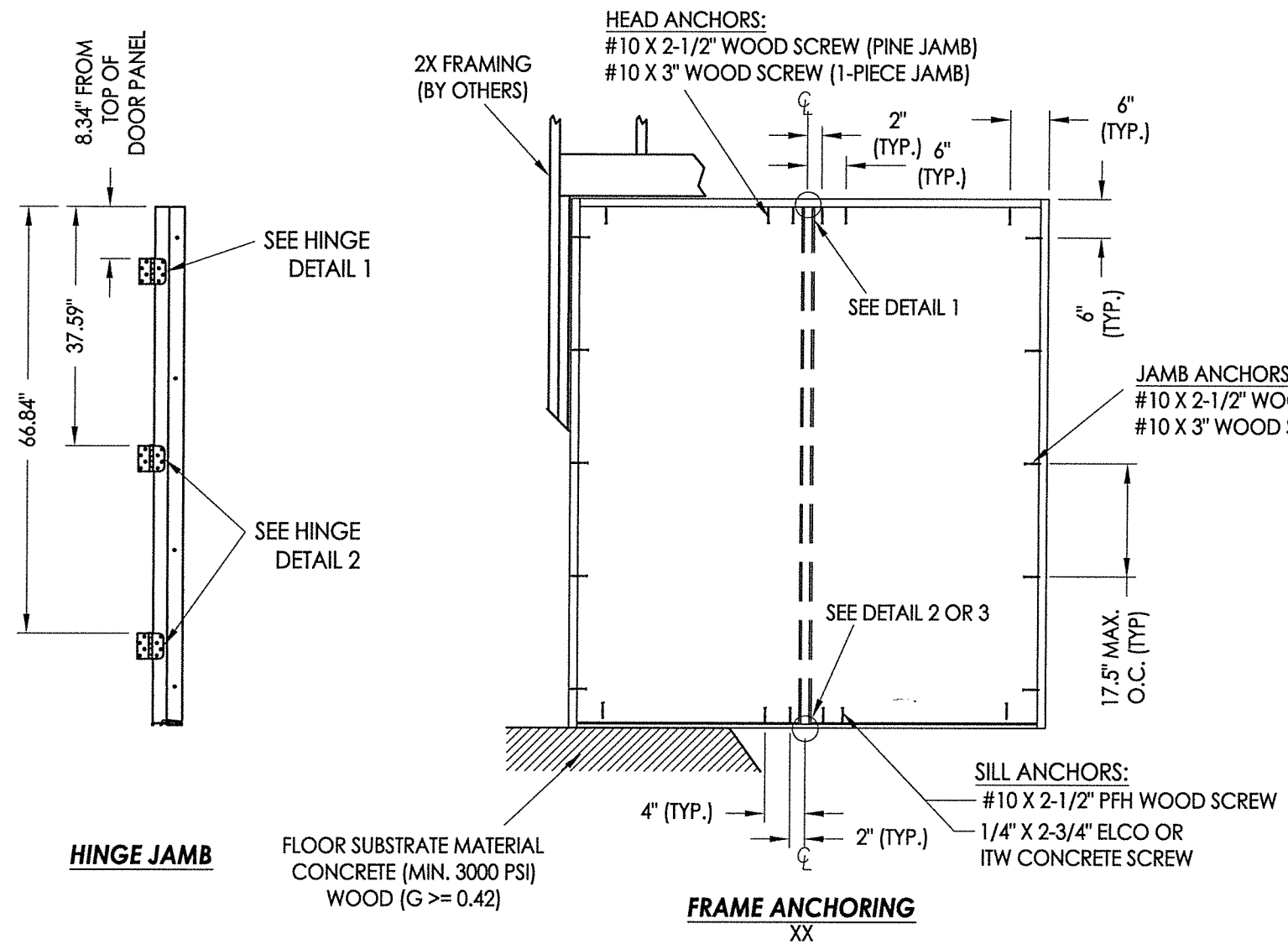
SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4208

SHEET 5 OF 6



**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.

5.18.20

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: FRAME ANCHORING	
LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE	LFS	ADD ADDITIONAL THRESHOLDS
LFS	ADD NEW ASTRAGAL PIN CAPTURE	LFS	ADD NEW ASTRAGAL PIN CAPTURE
LFS	ADDED ARTICULATING SILL	LFS	ADDED ARTICULATING SILL
NO.	DATE	BY	REVISIONS
4	12/19/19		ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
3	9/05/18		ADD ADDITIONAL THRESHOLDS
2	5/5/15		ADD NEW ASTRAGAL PIN CAPTURE
1	1/06/14		ADDED ARTICULATING SILL
DATE: 8/08/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4208			
SHEET 6 OF 6			