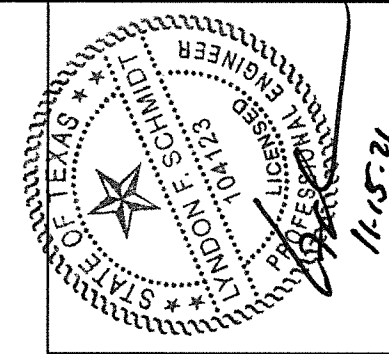
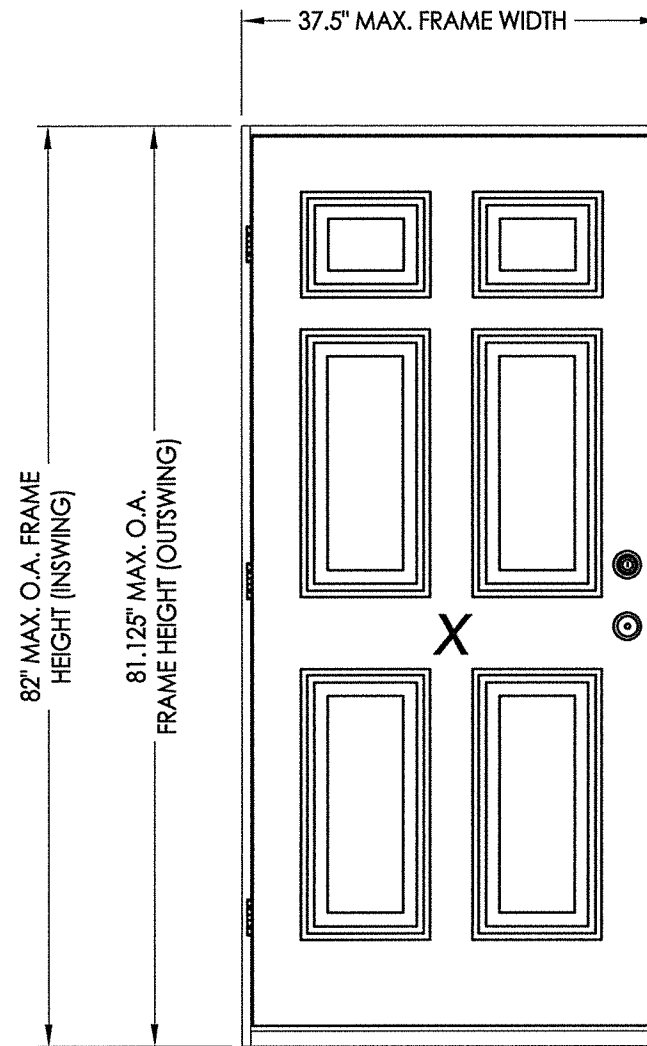


# Opaque Fiberglass Door

"NON-IMPACT"  
INSWING / OUTSWING



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

EVALUATED FOR USE IN THE STATE OF TEXAS

### TDI DR-851

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 1609.1.2 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.

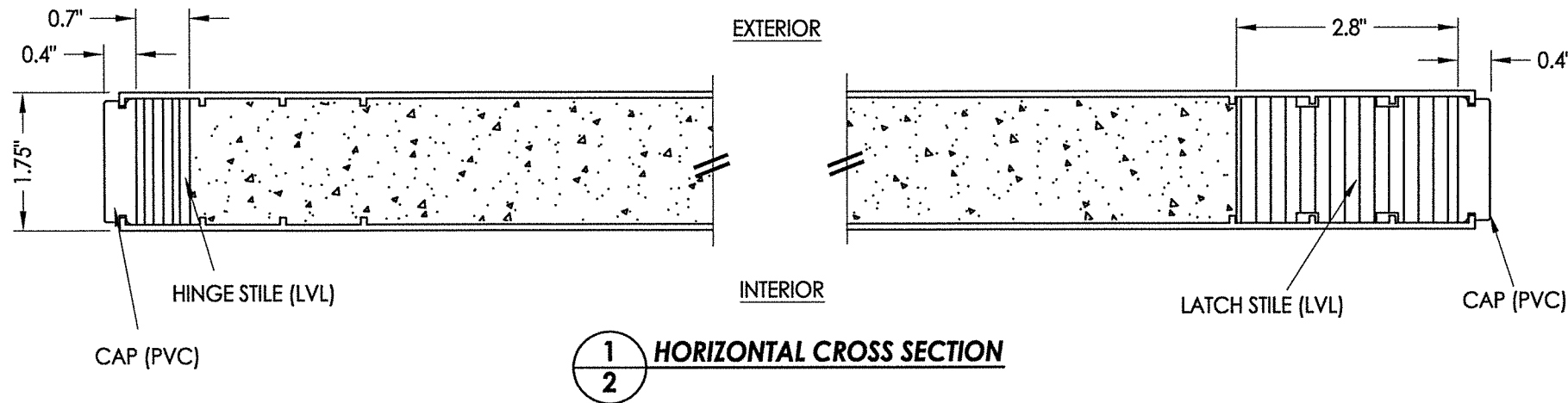
TABLE OF CONTENTS

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

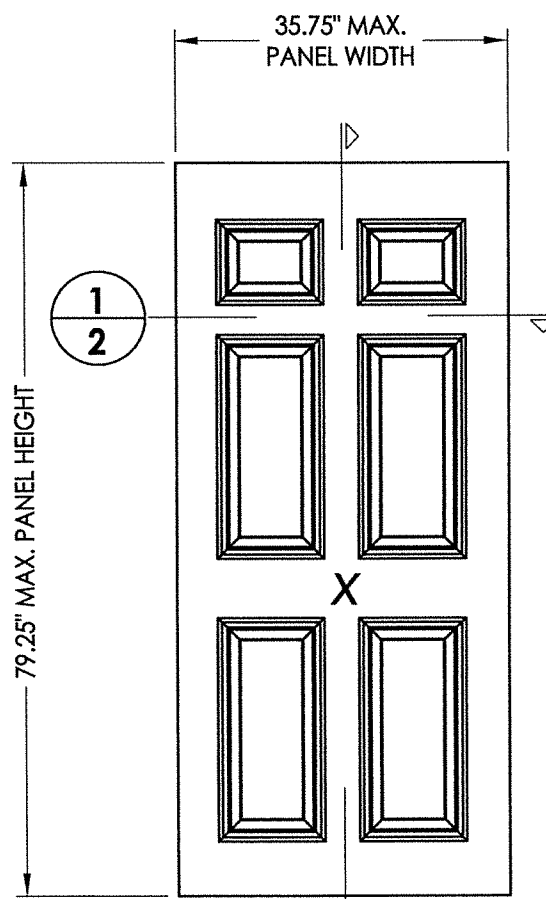
CONFIG.	MODEL	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
X	INSWING	+45.0	-45.0
X	OUTSWING	+60.0	-60.0

PRODUCT:	ENDURA
PART OR ASSEMBLY:	TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES
DATE:	11/02/16
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4645
SHEET	1 OF 5

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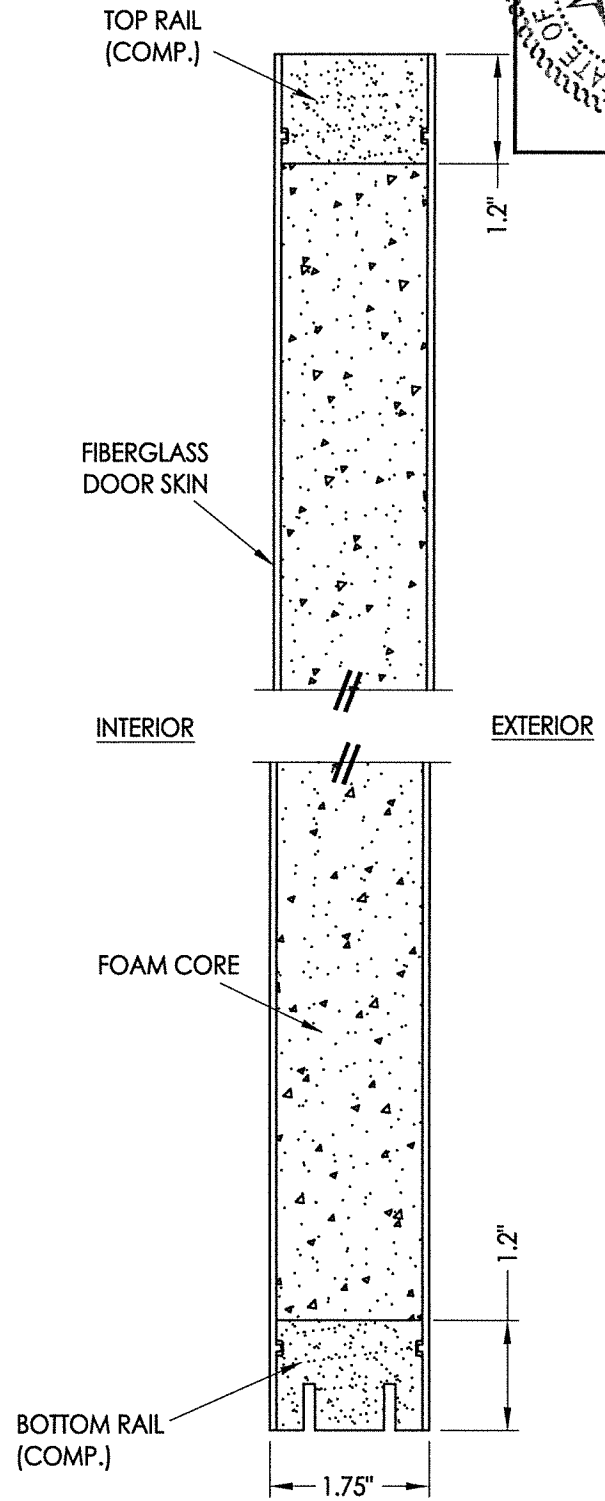


1  
2 **HORIZONTAL CROSS SECTION**

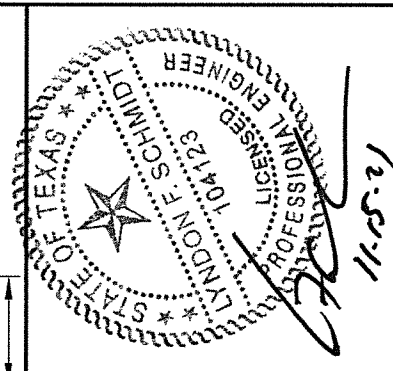


2  
2 **DOOR PANEL**  
Plastpro  
Fiberglass

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



2  
2 **VERTICAL CROSS SECTION**



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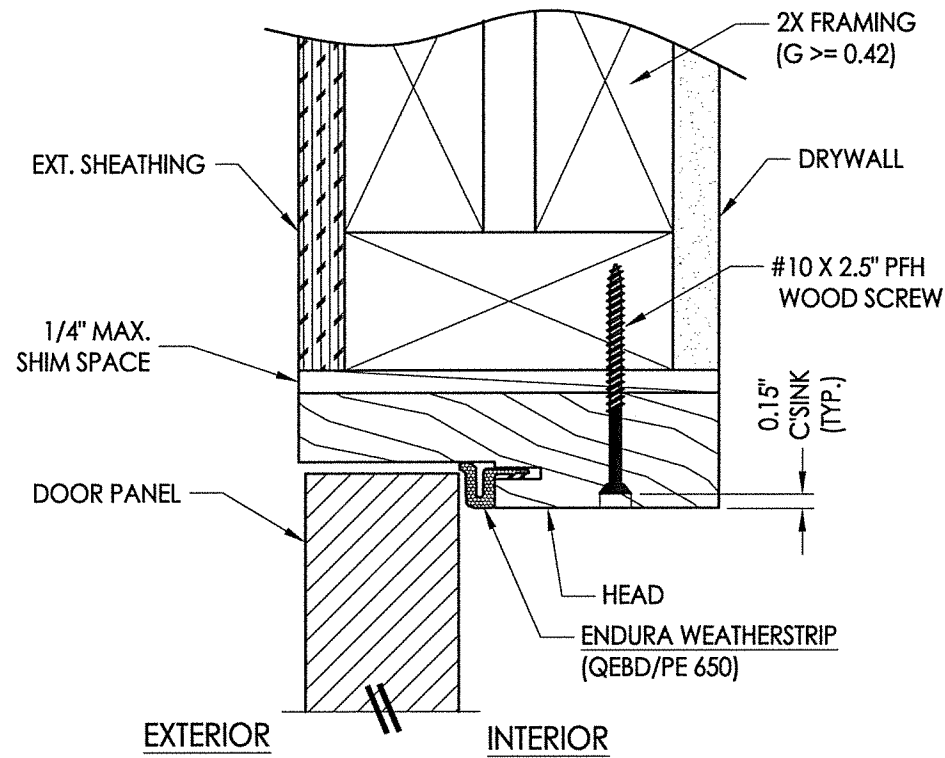
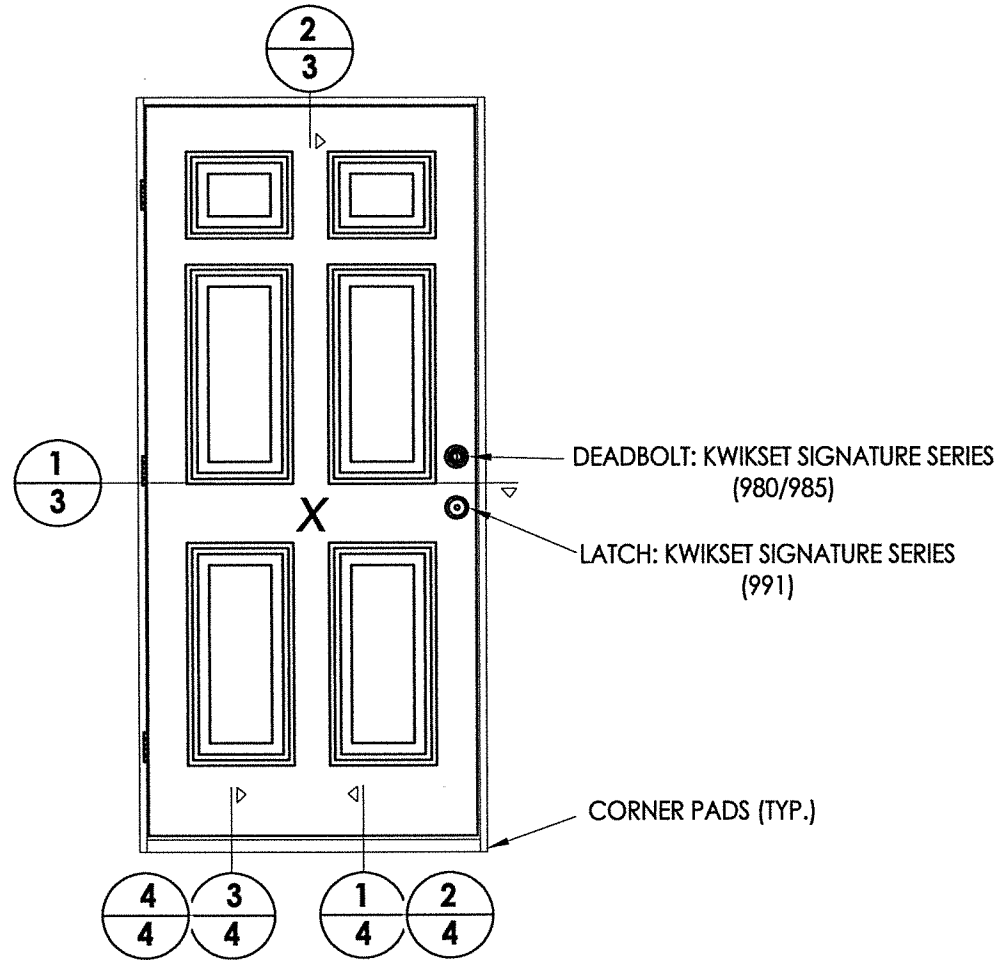
PRODUCT: ENDURA

PART OR ASSEMBLY: DOOR PANEL DETAILS

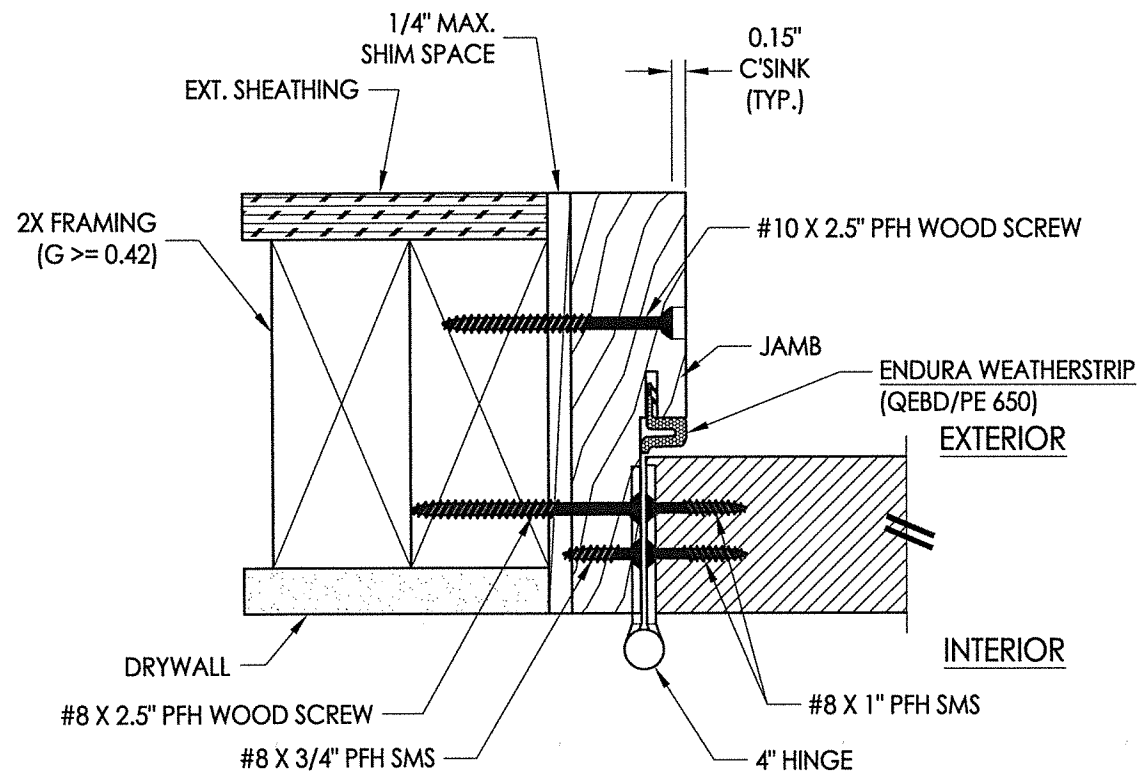
NO.	DATE	REVISIONS
1	11/11/21	UPDATE TO 2018 IBC/IRC CODE
LFS		BY

DATE: 11/02/16  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4645  
SHEET 2 OF 5

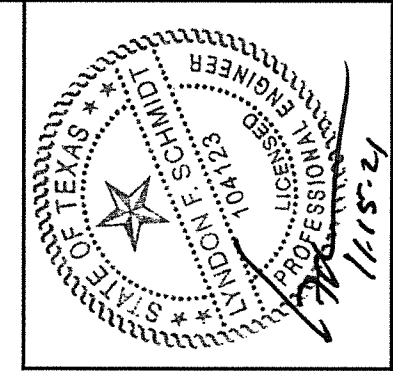
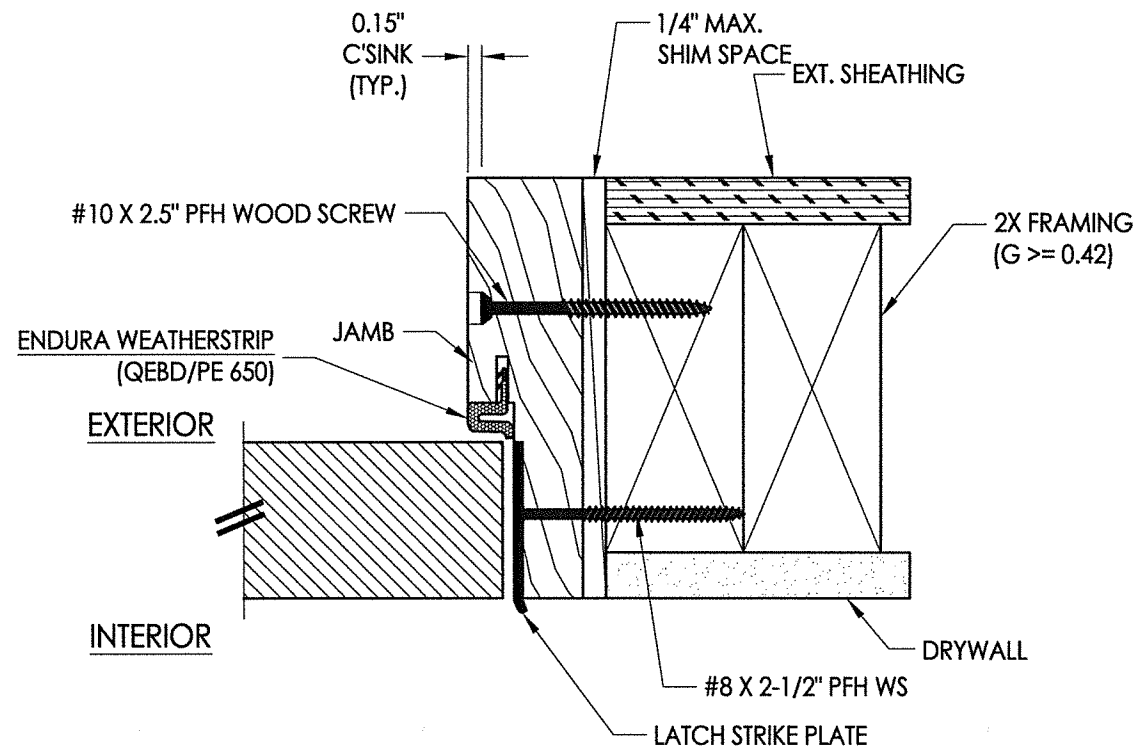
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**2 VERTICAL CROSS SECTION**  
 3 Outswing shown - inswing also approved



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



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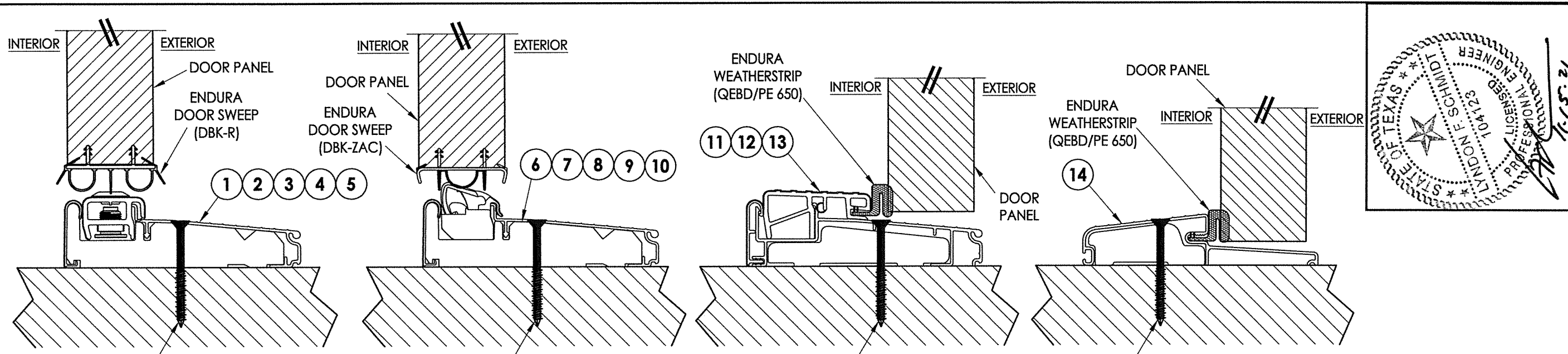
PRODUCT:	ENDURA
PART OR ASSEMBLY:	HORIZONTAL & VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS
1	11/11/21	LFS	UPDATE TO 2018 IBC/IRC CODE

DATE:	11/02/16
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4645
SHEET	3 OF 5

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

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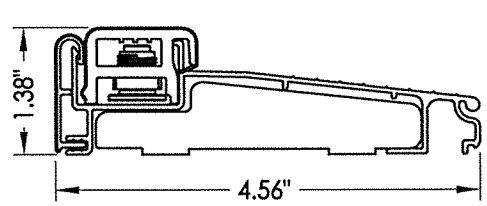
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" DeWALT OR ITW CONCRETE SCREW

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

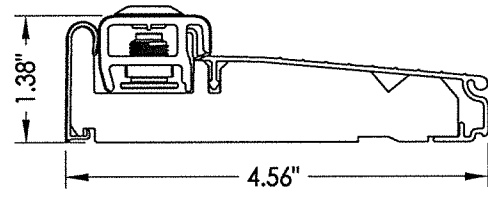
**2** VERTICAL CROSS SECTION  
**4** Inswing Articulating Threshold

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

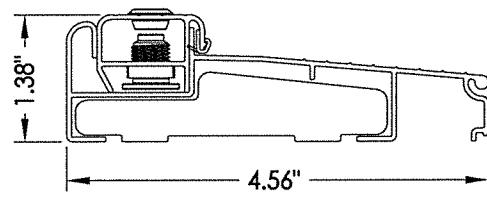
**4** VERTICAL CROSS SECTION  
**4** Outswing Bump Threshold



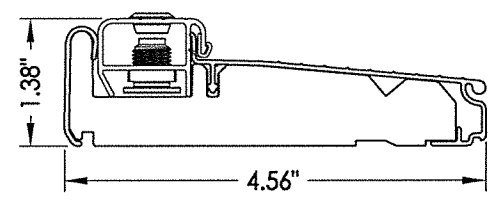
**1** INSWING ADJUSTABLE THRESHOLD  
ZAIL4565



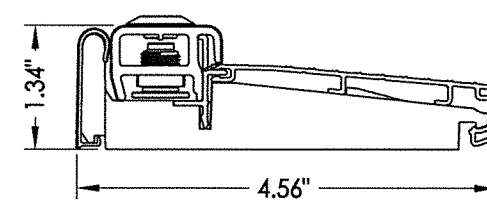
**2** INSWING ADJUSTABLE THRESHOLD  
ZAI4565FN



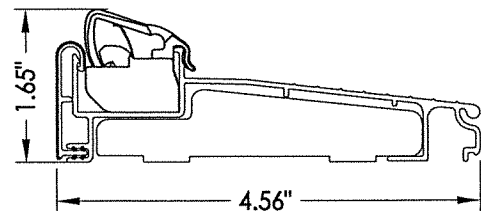
**3** INSWING ADJUSTABLE THRESHOLD  
ZAILAA4565



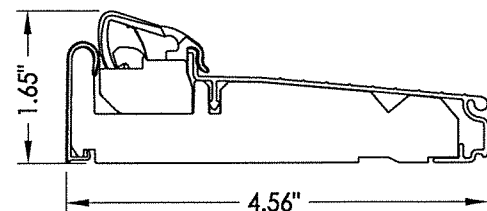
**4** INSWING ADJUSTABLE THRESHOLD  
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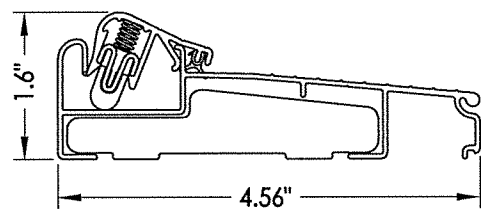
**5** INSWING ADJUSTABLE THRESHOLD  
ZAI4565RDS



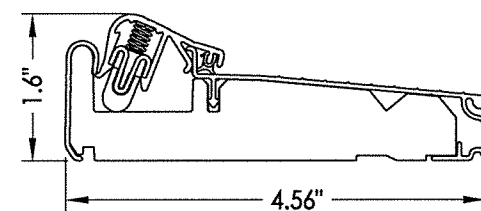
**6** INSWING ARTICULATING THRESHOLD  
ZACL4565



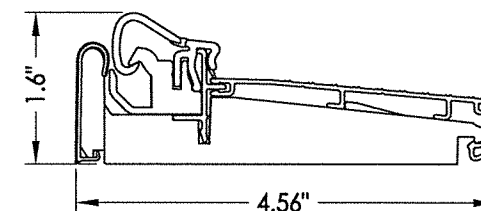
**7** INSWING ARTICULATING THRESHOLD  
ZAC4565FN



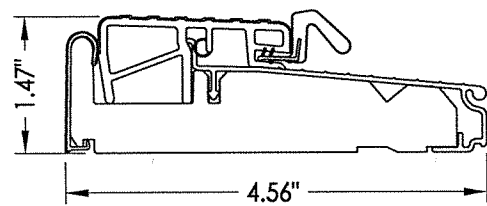
**8** INSWING ARTICULATING THRESHOLD  
ZACLA4565



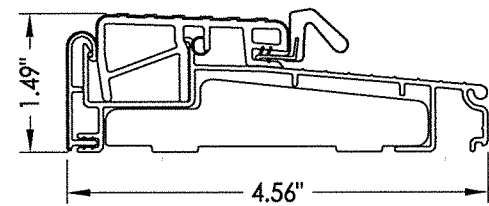
**9** INSWING ARTICULATING THRESHOLD  
ZACAA4565FN



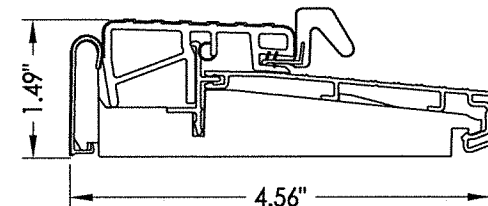
**10** INSWING ARTICULATING THRESHOLD  
ZAC4565RDS



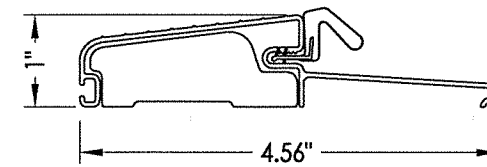
**11** OUTSWING THRESHOLD  
ZOB4565FN



**12** OUTSWING THRESHOLD  
ZOBL4565

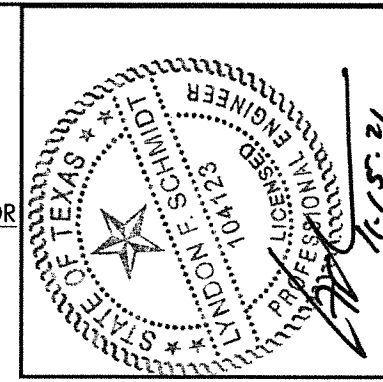


**13** OUTSWING THRESHOLD  
ZOB4565RDS



**14** OUTSWING THRESHOLD  
FOB4566

MAX. DESIGN PRESSURE = ±55 PSF



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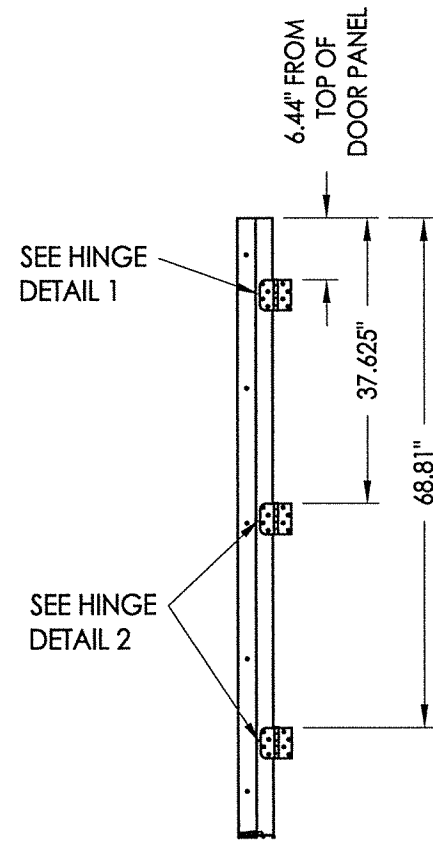
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Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: ENDURA  
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

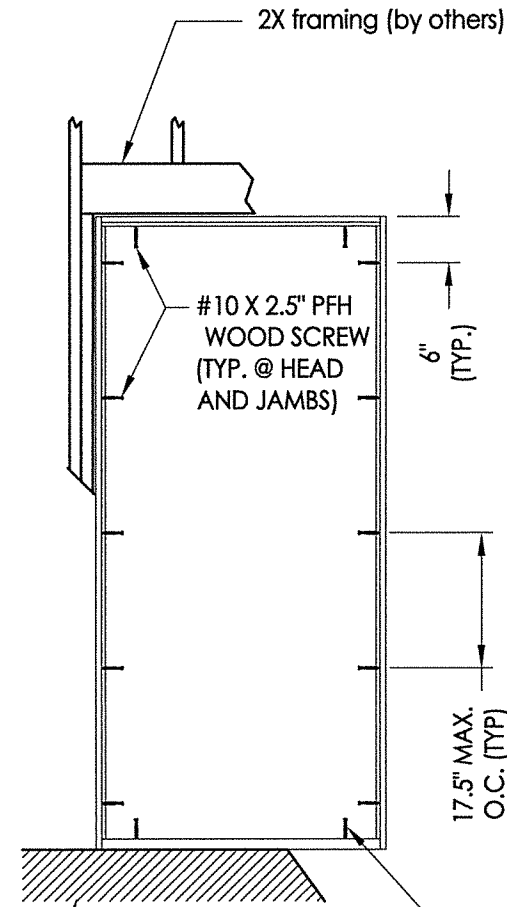
NO.	DATE	REVISIONS
1	11/11/21	UPDATE TO 2018 IBC/IRC CODE
LFS		
BY		

DATE: 11/02/16  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4645  
SHEET 4 OF 5

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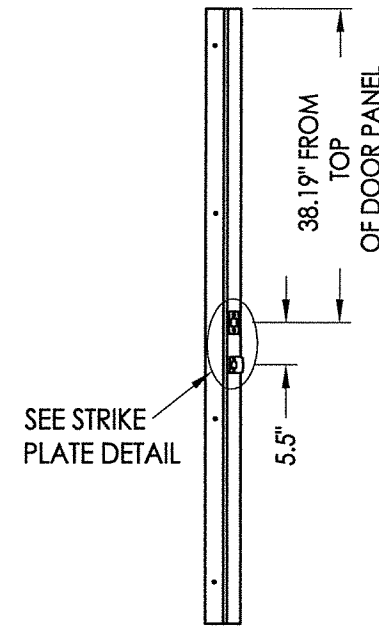


**HINGE JAMB**

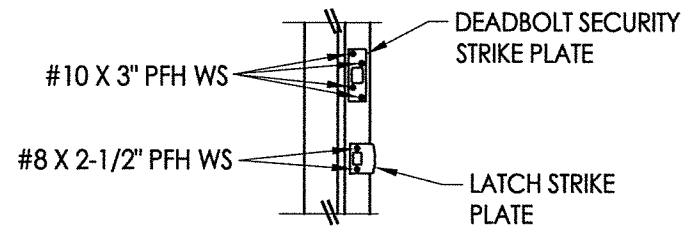


**FRAME ANCHORING**

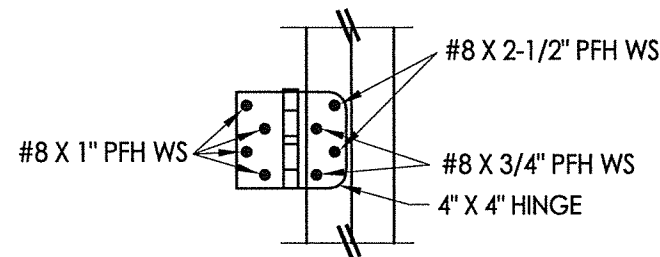
FLOOR SUBSTRATE MATERIAL (TYP.)  
 CONCRETE (MIN. 3000 PSI)  
 WOOD (G >= 0.42)



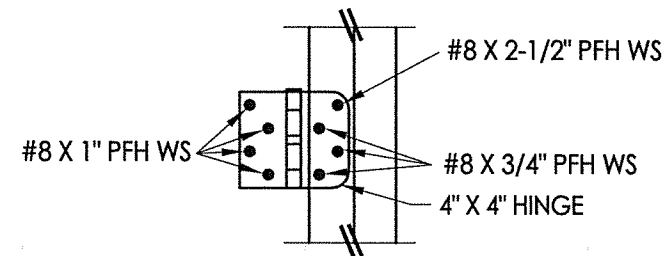
**STRIKE JAMB**



**STRIKE PLATE DETAIL**



**HINGE DETAIL 1**



**HINGE DETAIL 2**

**CONCRETE ANCHOR NOTES:**

1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. 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.
3. Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-3/4"	1-1/2"	4"
DeWALT ULTRACON®	1/4"	1-3/4"	1"	4"



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 CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	REVISIONS
1	11/11/21	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY
DATE:	11/02/16	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4645	
SHEET	5	OF 5