



# Opaque Steel Door

"NON-IMPACT"  
INSWING / OUTSWING

**TDI DR-852**

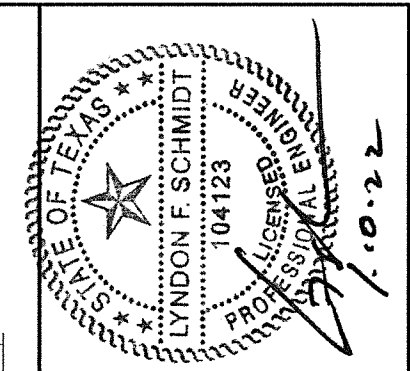
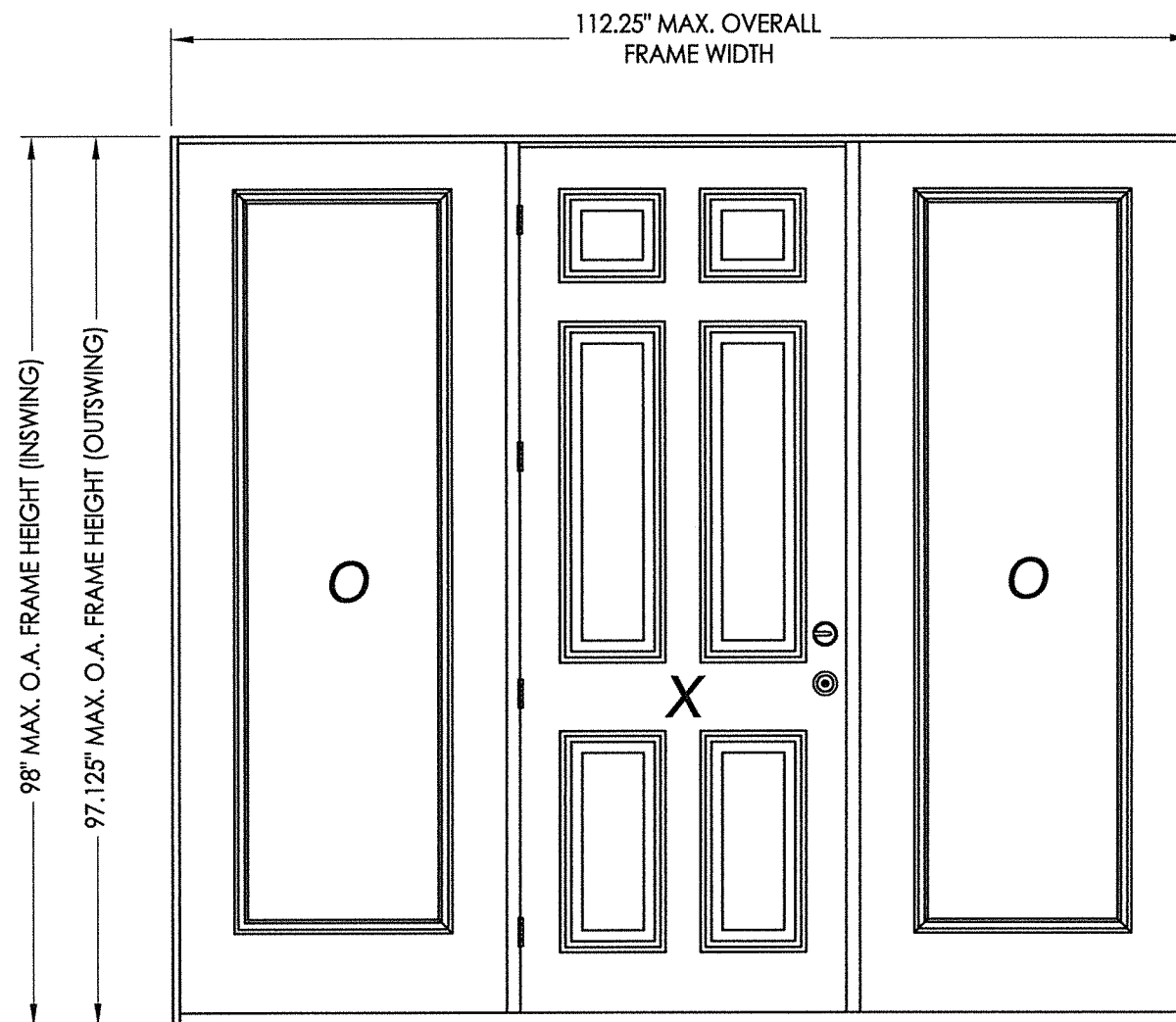
EVALUATED FOR USE IN THE STATE OF TEXAS

The 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 1609.1.2 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.

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SHEET #	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel details
3	Slidelite panel details (lip lite insert glazing)
4	Horizontal cross sections
5	Vertical cross sections
6	Vertical cross sections
7	Frame anchoring



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

PRODUCT: ENDURA

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

NO.	DATE	REVISIONS
1	11/10/21	UPDATE TO 2018 IBC/IRC CODE

DATE: 10/27/16

SCALE: N.T.S.

DWG. BY: JK

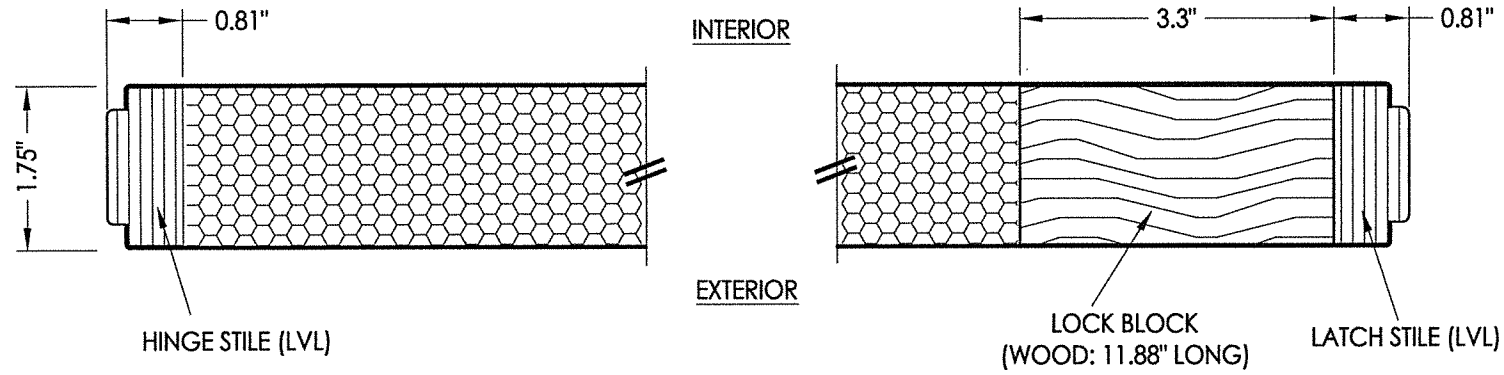
CHK. BY: LFS

DRAWING NO.: TX-4643

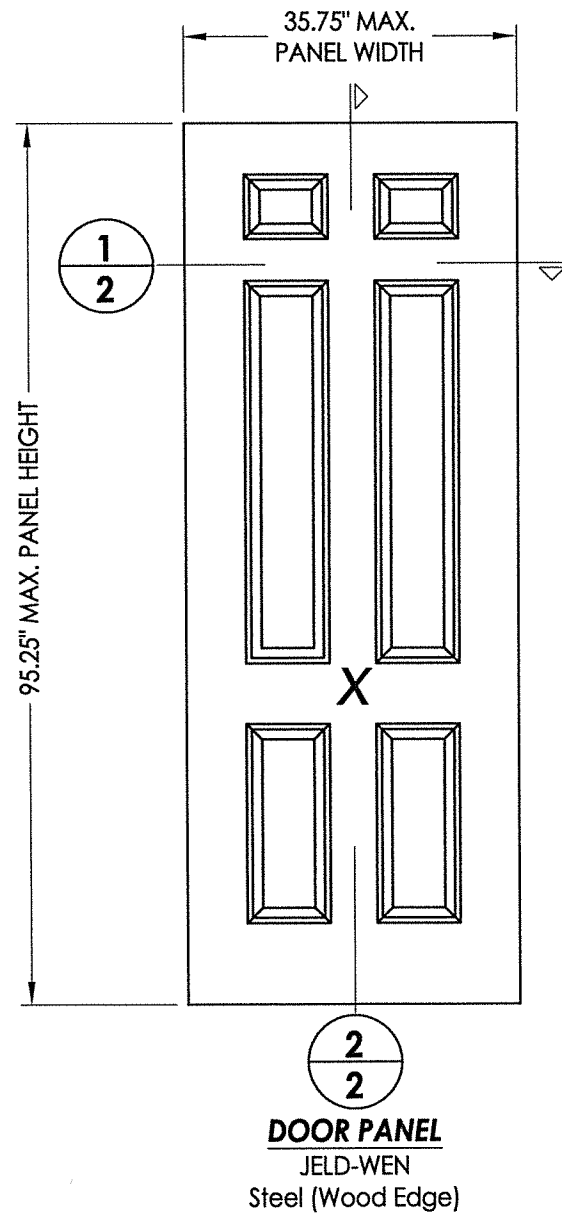
SHEET 1 OF 7

CONFIG.	MODEL	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
OXO	INSWING	+45.0	-50.0
OXO	OUTSWING	+40.0	-40.0

Z:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-852\_JELD-WEN Steel Opaque (L,K,DB)\C - Drawings\TX-4640.43.dwg

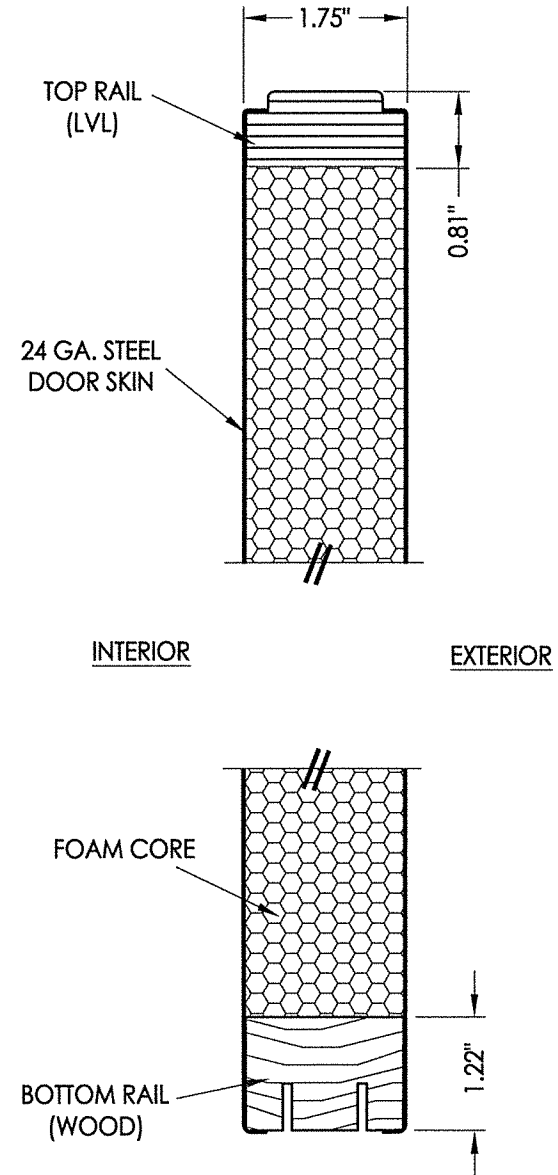


1  
2 **HORIZONTAL CROSS SECTION**

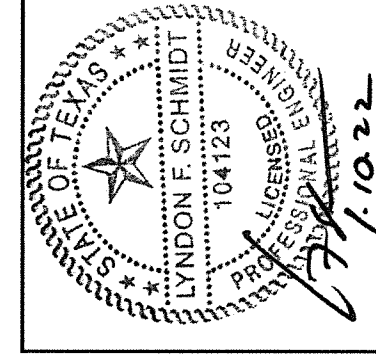


2  
2 **DOOR PANEL**  
JELD-WEN  
Steel (Wood Edge)

DOOR SKIN: 25 GA. STEEL (0.020" MIN. THICKNESS)  
CORE MATERIAL: POLYURETHANE FOAM (1.9 PCF MIN.)



2  
2 **VERTICAL CROSS SECTION**

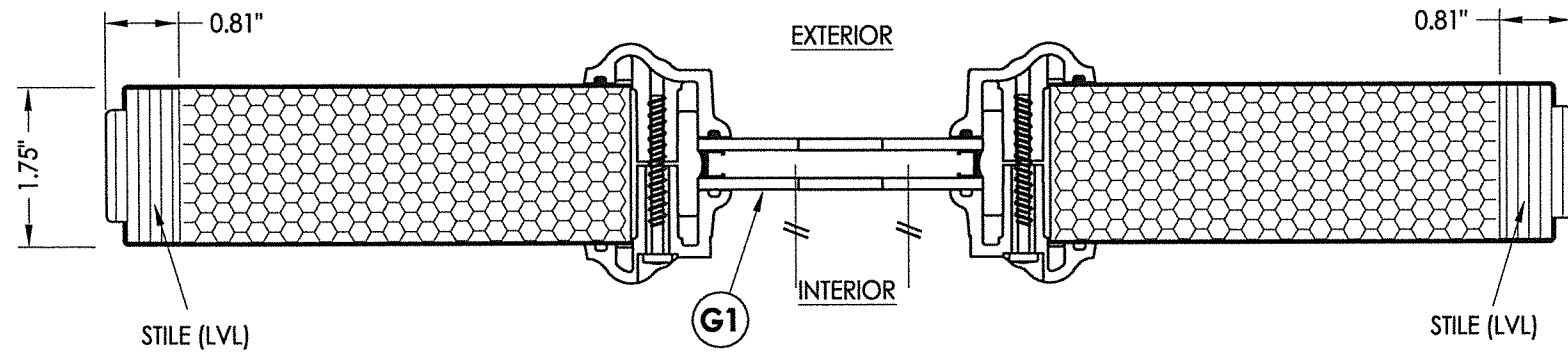


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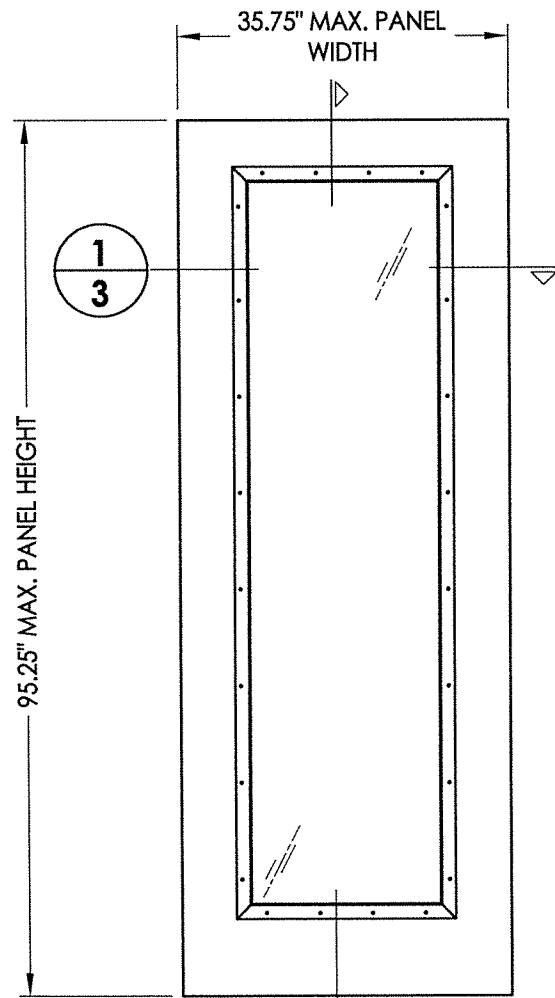
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	DOOR PANEL DETAILS & GLAZING DETAIL	
NO.	DATE	BY
1	11/10/21	LFS
DATE: 10/27/16		
SCALE: N.T.S.		
DWG. BY: JK		
CHK. BY: LFS		
DRAWING NO.: TX-4643		
SHEET 2 OF 7		

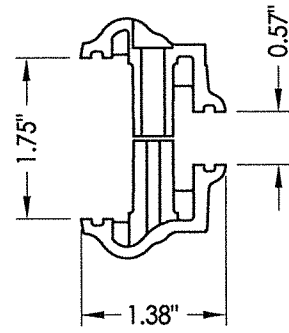
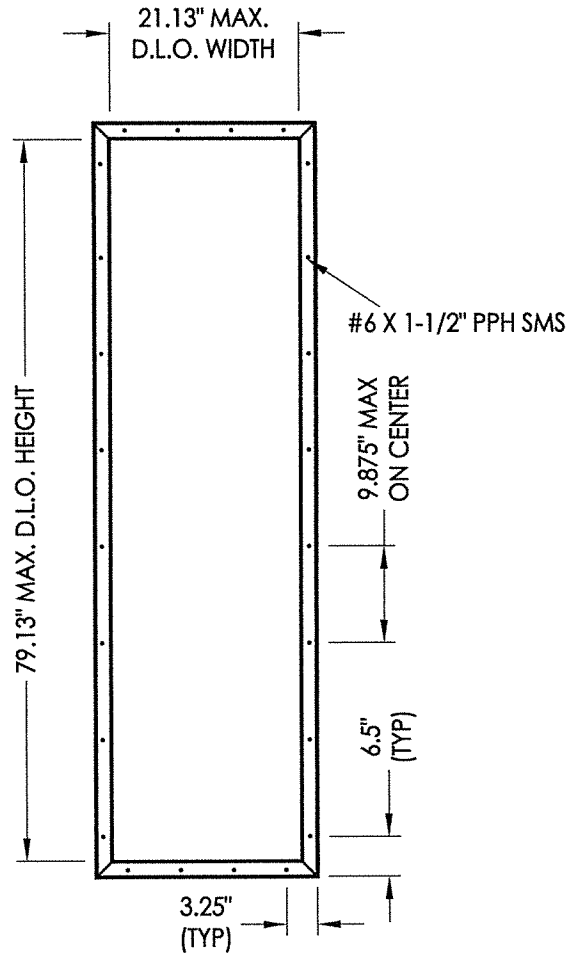
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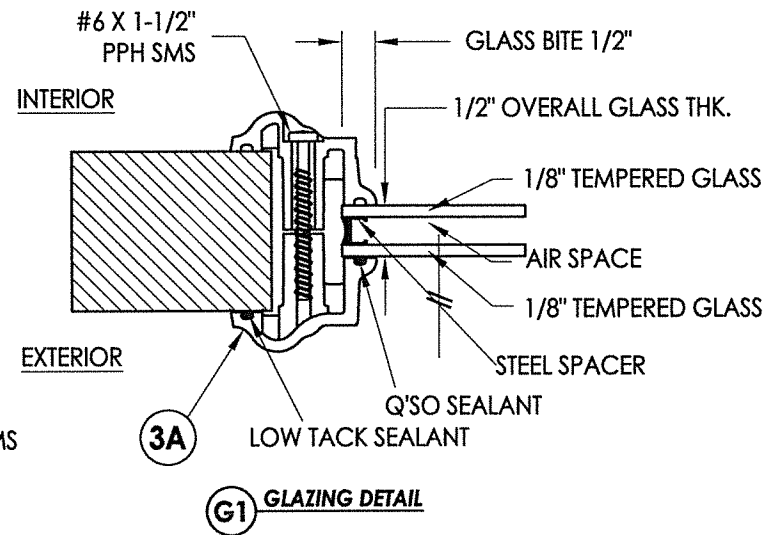
**1**  
**3** HORIZONTAL CROSS SECTION



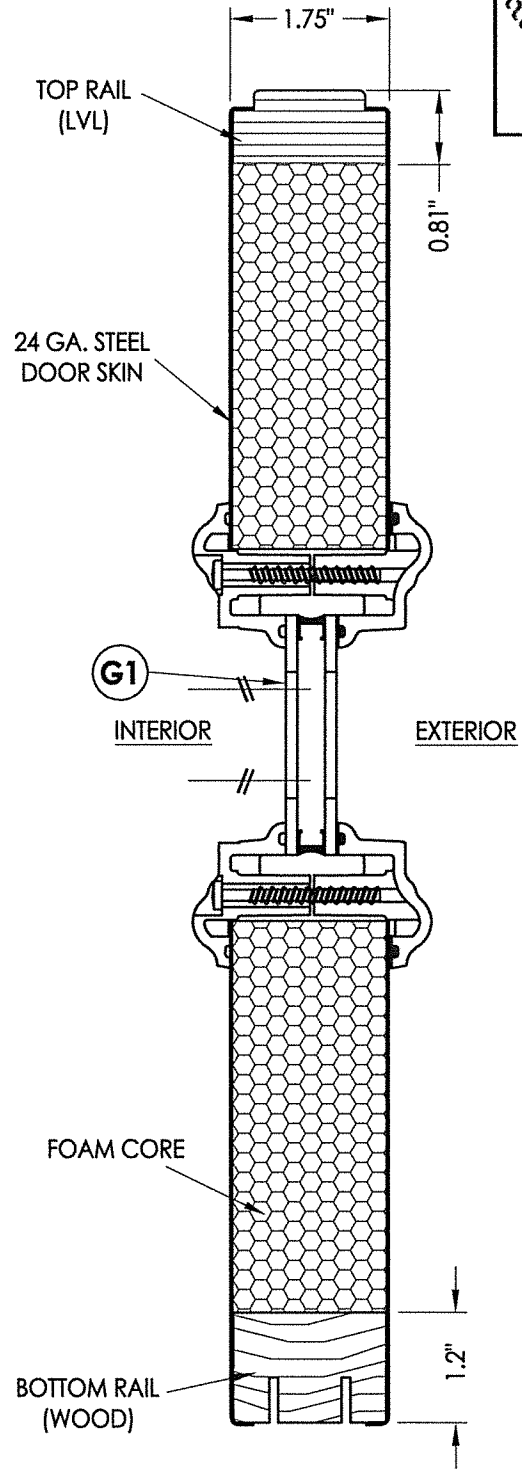
**50** SIDELITE PANEL  
JELD-WEN  
Steel (Wood Edge)



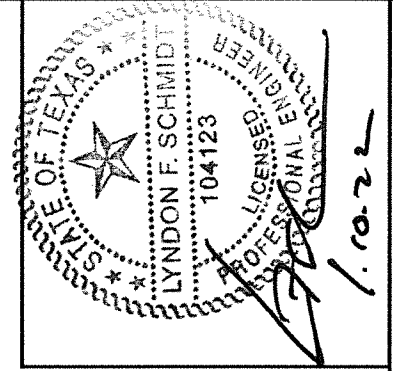
**3A** ODL LITE FRAME  
HP Polypropylene



**G1** GLAZING DETAIL



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



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

PRODUCT: ENDURA

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

NO.	DATE	DESCRIPTION	BY
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DATE: 10/27/16

SCALE: N.T.S.

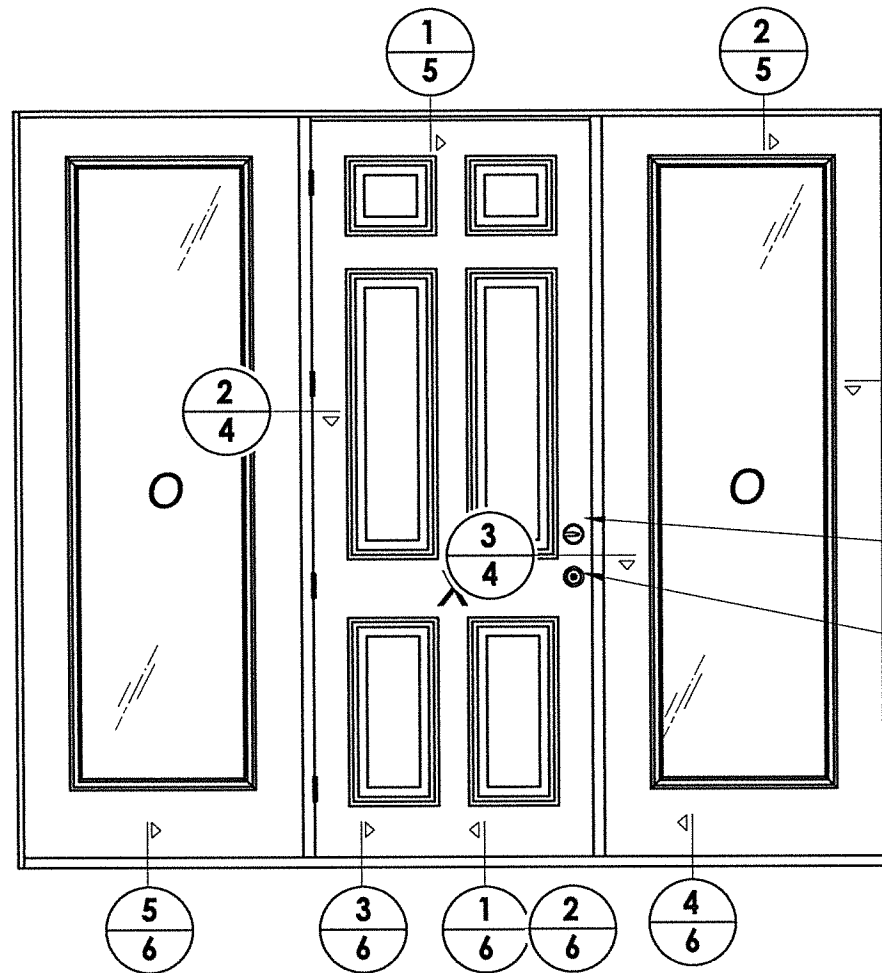
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CHK. BY: LFS

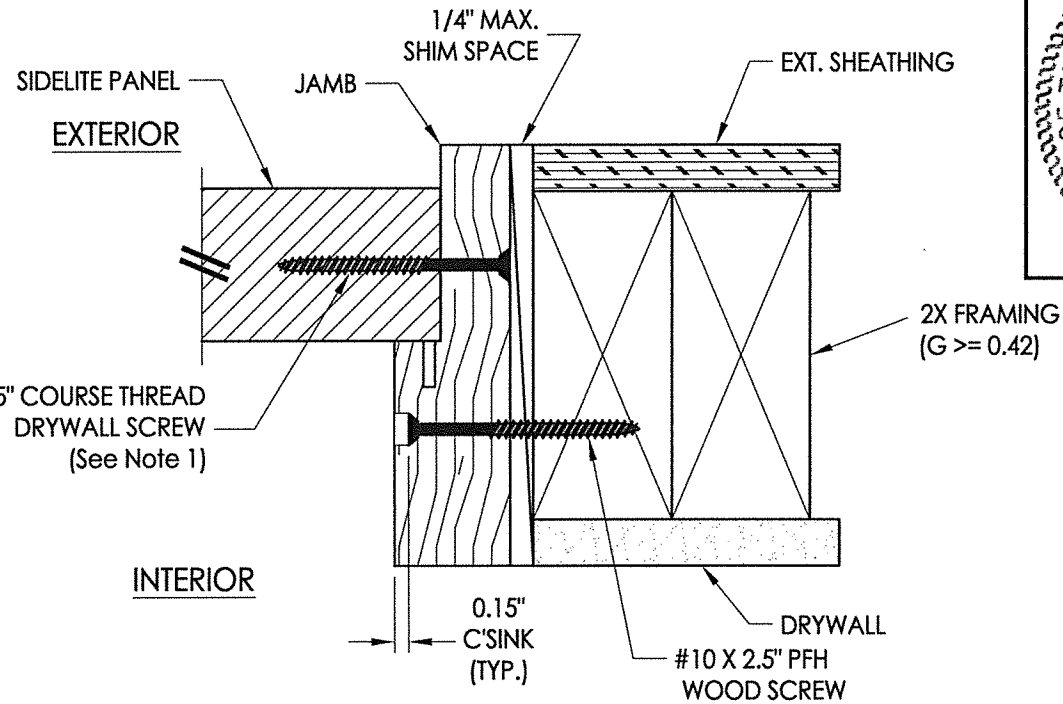
DRAWING NO.: TX-4643

SHEET 3 OF 7

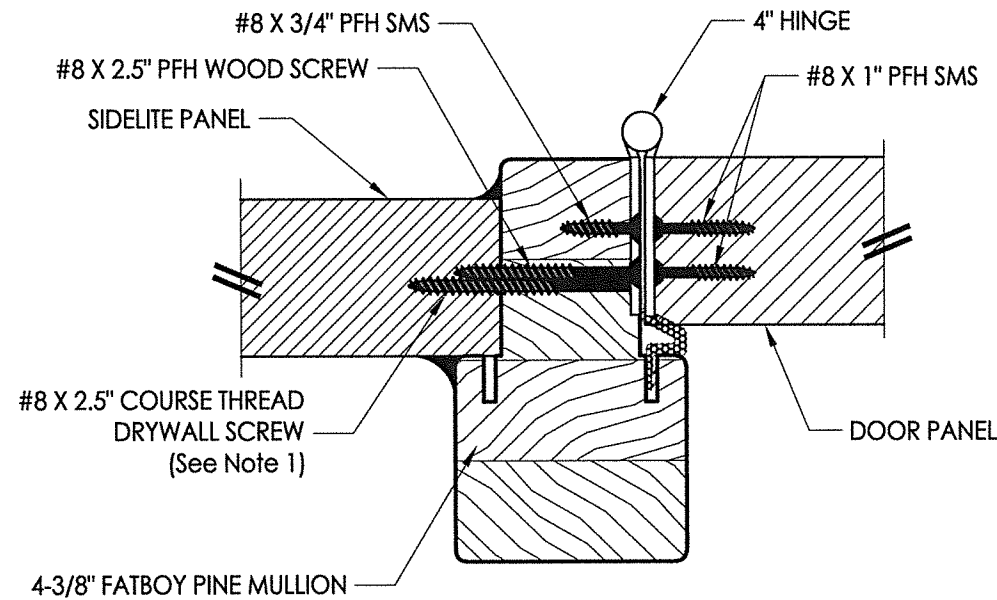
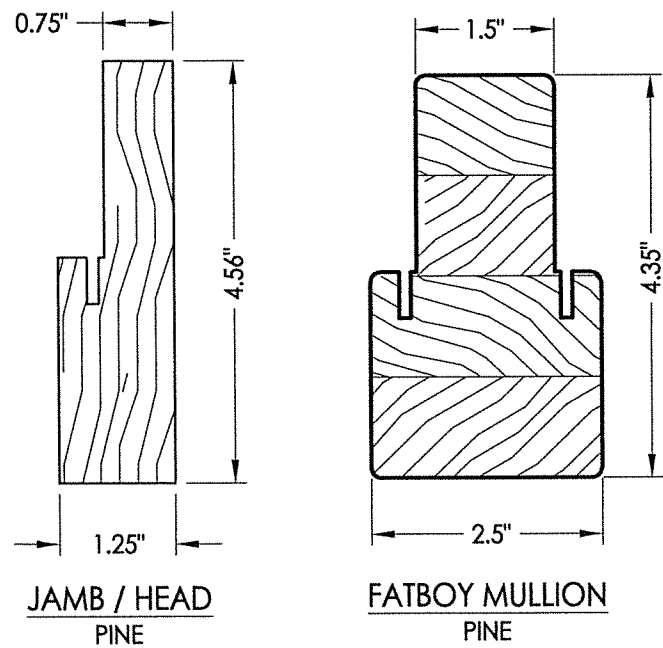
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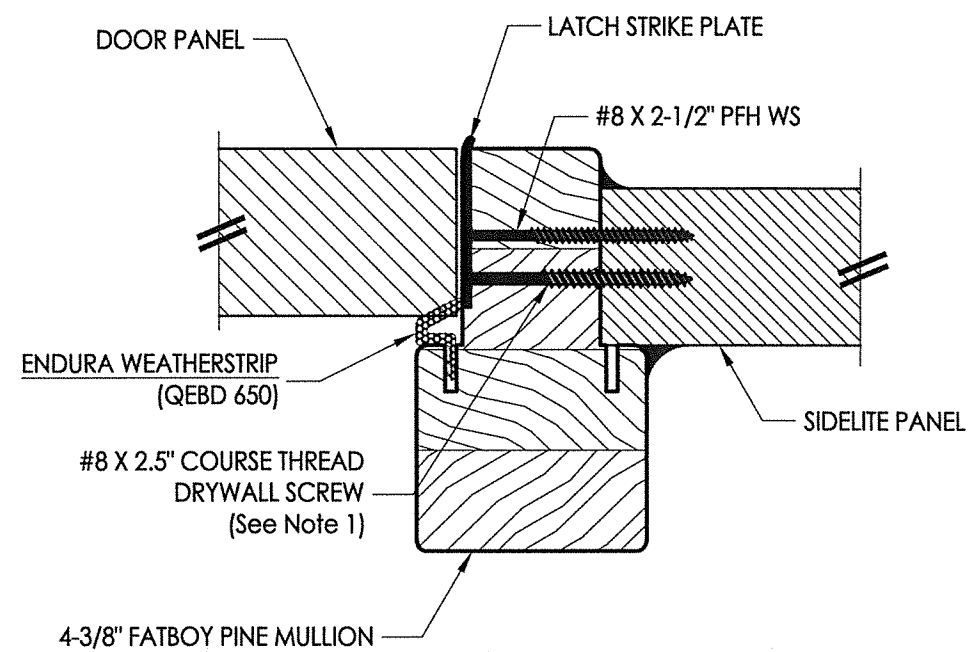
DEADBOLT: KWIKSET SIGNATURE SERIES (980/985)  
 LATCH: KWIKSET SIGNATURE SERIES (991)  
 CORNER PADS (TYP.)



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

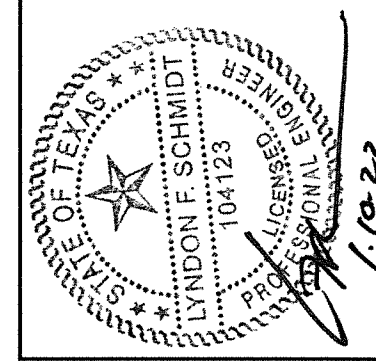


**2 HORIZONTAL CROSS SECTION**  
 4 Outswing shown - Inswing also approved



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

**NOTE:**  
 1. Spacing for sidelite screws: 6.5", 35.5", 57.25" and 85" from head to sill (4 total).



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

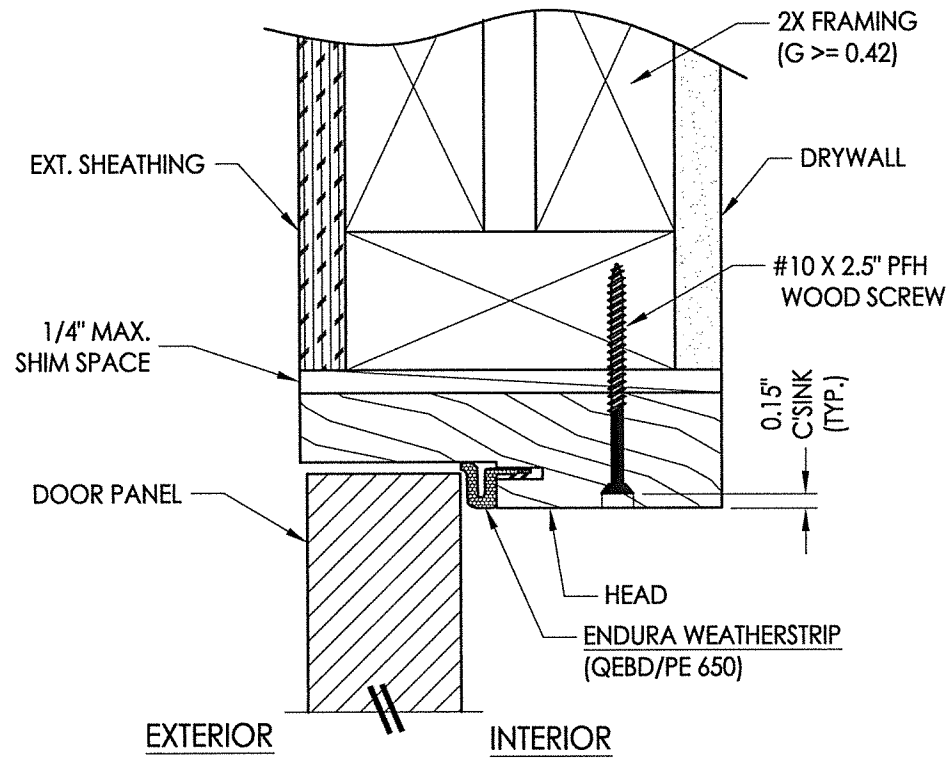
PRODUCT: ENDURA  
 FIBERGLASS DOOR  
 PART OR ASSEMBLY:  
 HORIZONTAL  
 CROSS SECTIONS

NO.	DATE	REVISIONS
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		LFS BY

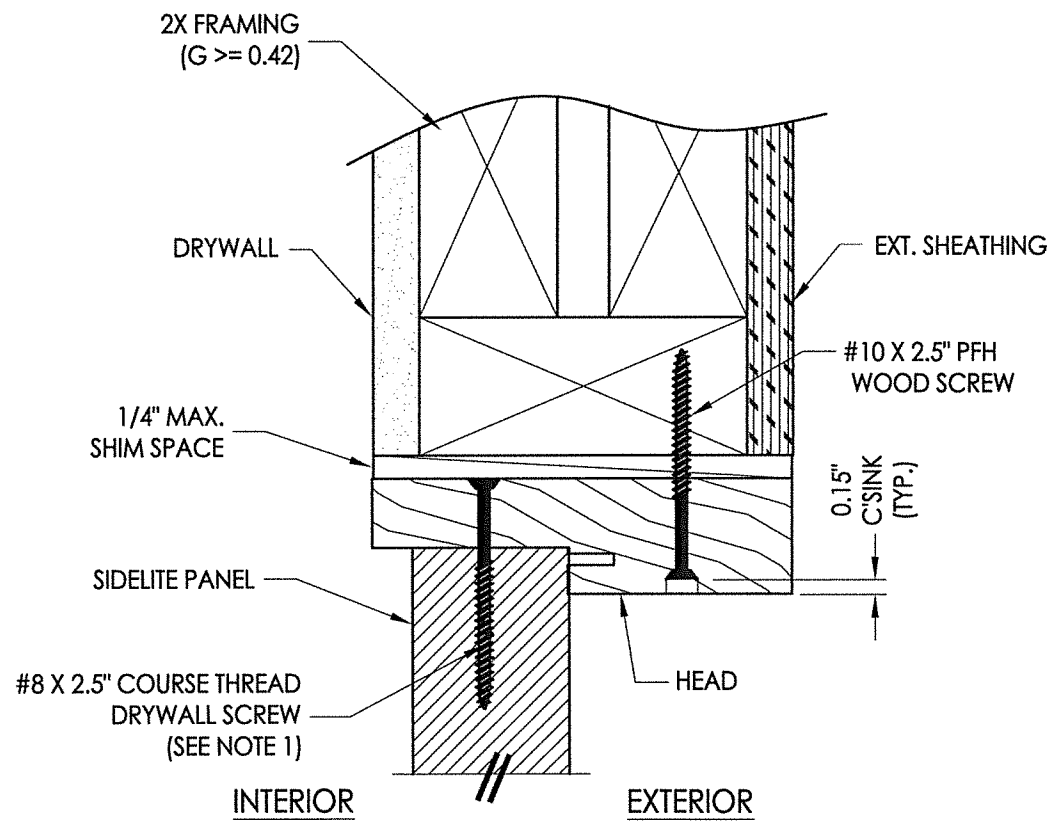
DATE: 10/27/16  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4643

SHEET 4 OF 7

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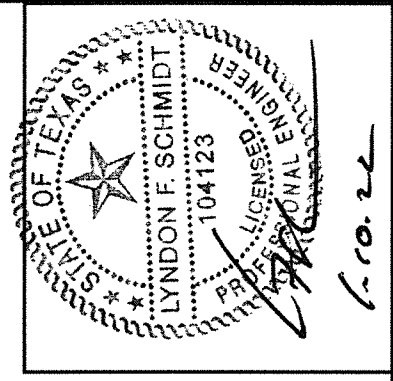


**1** **VERTICAL CROSS SECTION**  
**5** Outswing shown - inswing also approved



**2** **VERTICAL CROSS SECTION**  
**5** Inswing shown - Outswing also approved

**NOTE:**  
 1. Spacing for sidelite screws:  
 6" from each end (2 total).



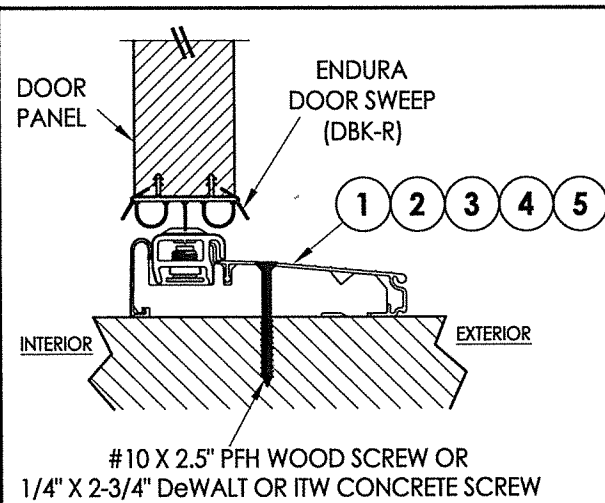
Documents Prepared By: Lyndon F. Schmidt, P.E.  
 TEXAS P.E. #104123

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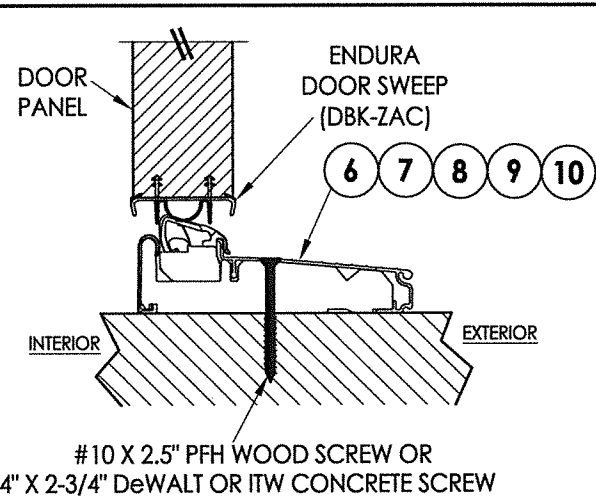
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PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
1	11/10/21	LFS	UPDATE TO 2018 IBC/IRC CODE
DATE: 10/27/16		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: TX-4643		SHEET 5 OF 7	

Z:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-852 JELD-WEN Steel Opaque (L,K,DB)C - Drawings\TX-4640.43.dwg



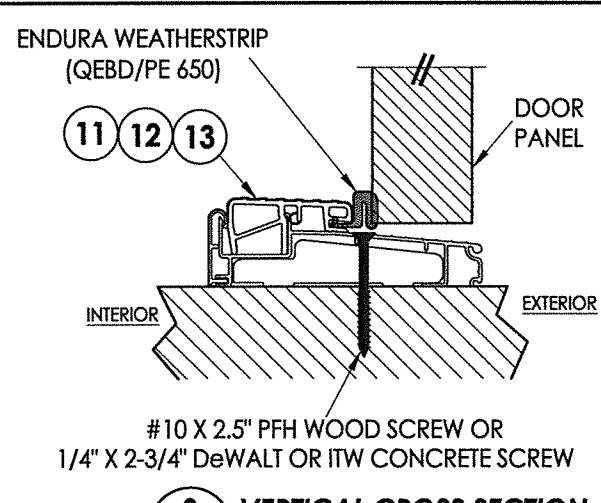
**1** VERTICAL CROSS SECTION  
**6** Inswing Adjustable Threshold

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



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

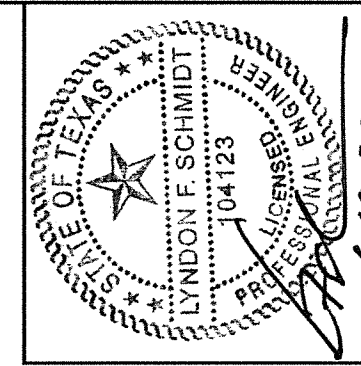
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" DeWALT OR ITW CONCRETE SCREW



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

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

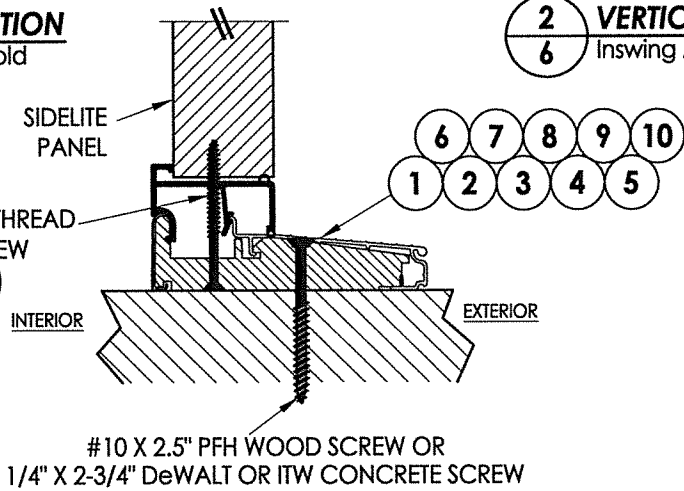
NOTE:  
1. Spacing for sidelite screws:  
6" from each end (2 total).



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TEXAS P.E. #104123

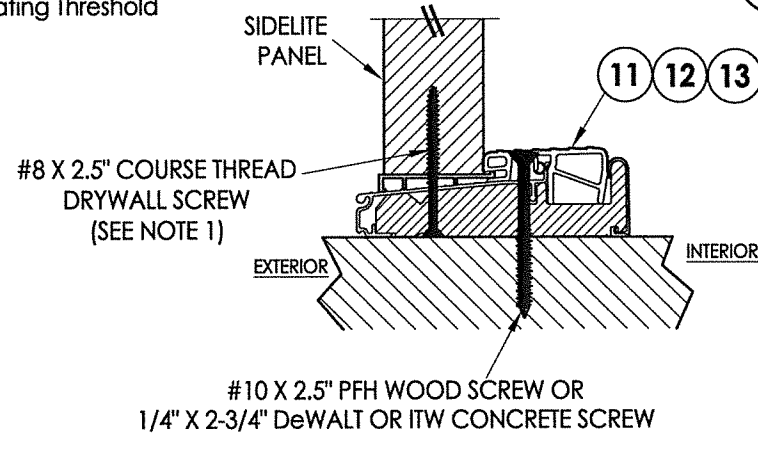
**RW** BUILDING CONSULTANTS, INC.  
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CERTIFICATE OF REGISTRATION # F-11852



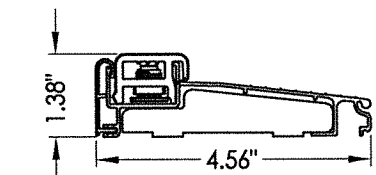
**4** VERTICAL CROSS SECTION  
**6** Inswing configuration

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

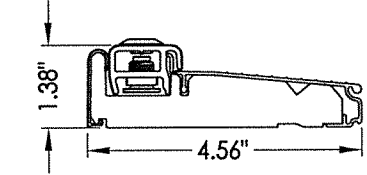


**5** VERTICAL CROSS SECTION  
**6** Outswing configuration

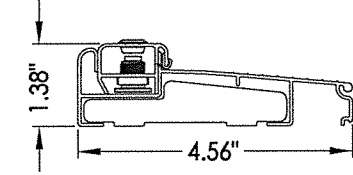
#10 X 2.5" PFH WOOD SCREW OR  
1/4" X 2-3/4" DeWALT OR ITW CONCRETE SCREW



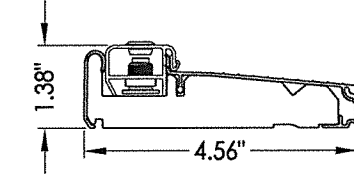
**1** INSWING ADJUSTABLE THRESHOLD  
ZAI4565



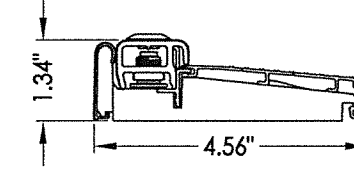
**2** INSWING ADJUSTABLE THRESHOLD  
ZAI4565FN



**3** INSWING ADJUSTABLE THRESHOLD  
ZAILAA4565

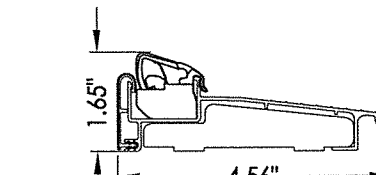


**4** INSWING ADJUSTABLE THRESHOLD  
ZAI4565RDS

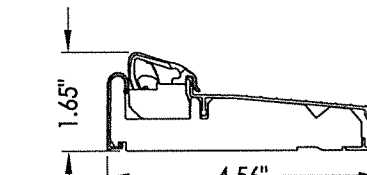


**5** INSWING ADJUSTABLE THRESHOLD  
ZAI4565RDS

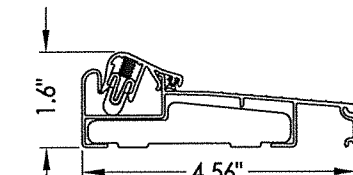
MAX. DESIGN PRESSURE = ±40 PSF



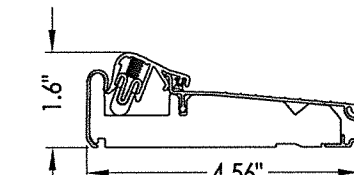
**6** INSWING ARTICULATING THRESHOLD  
ZACL4565



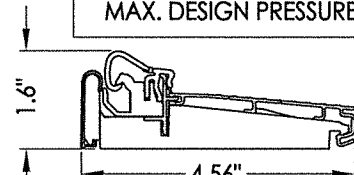
**7** INSWING ARTICULATING THRESHOLD  
ZAC4565FN



**8** INSWING ARTICULATING THRESHOLD  
ZACLAA4565

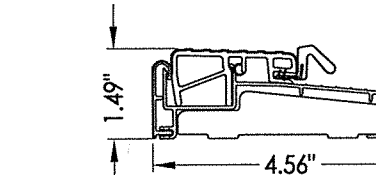


**9** INSWING ARTICULATING THRESHOLD  
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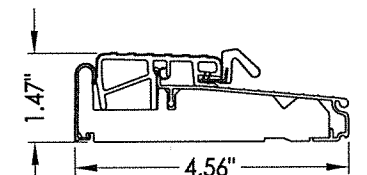


**10** INSWING ARTICULATING THRESHOLD  
ZAC4565RDS

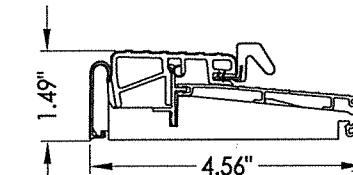
MAX. DESIGN PRESSURE = ±35 PSF



**11** OUTSWING THRESHOLD  
ZOBL4565



**12** OUTSWING THRESHOLD  
ZOB4565FN



**13** OUTSWING THRESHOLD  
ZOB4565RDS

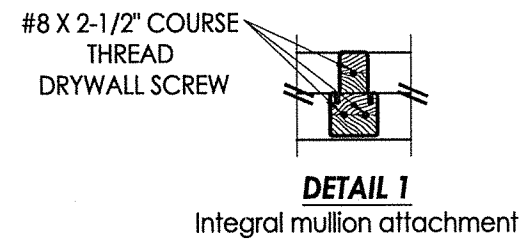
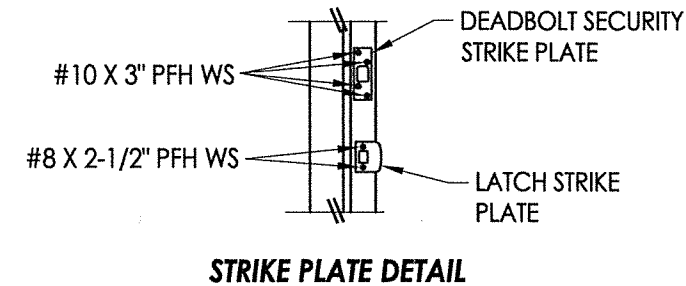
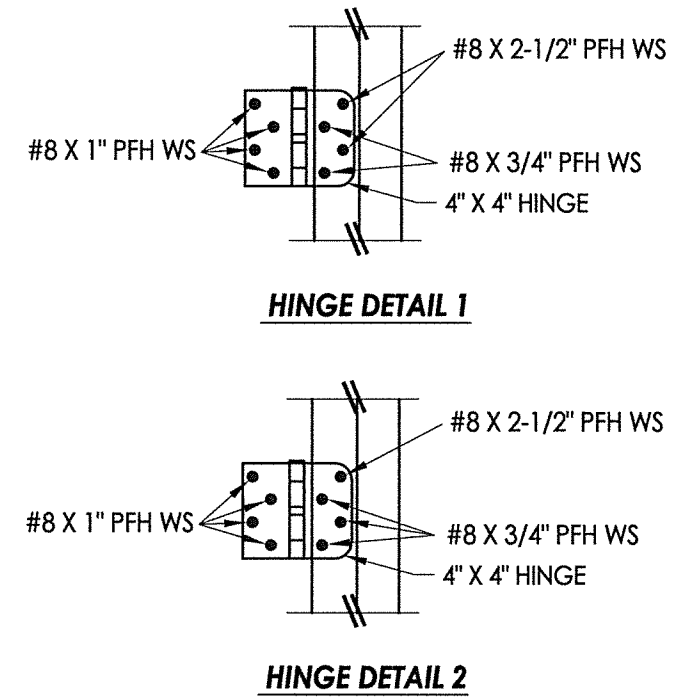
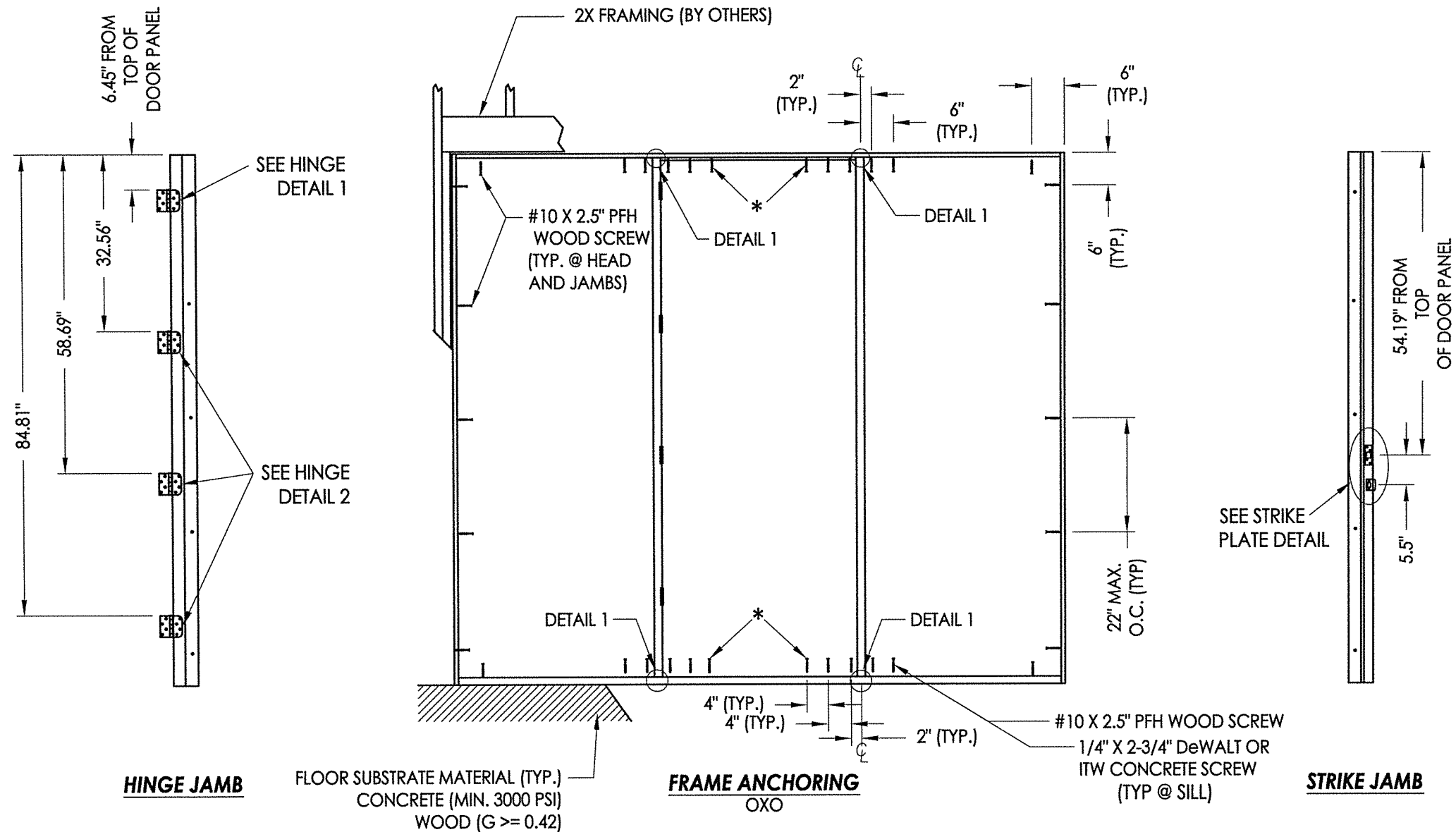
PRODUCT: ENDURA  
FIBERGLASS DOOR  
PART OR ASSEMBLY:  
VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	LFS	BY
1	11/10/21	UPDATE TO 2018 IBC/IRC CODE	LFS	BY

DATE: 10/27/16  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4643  
SHEET 6 OF 7

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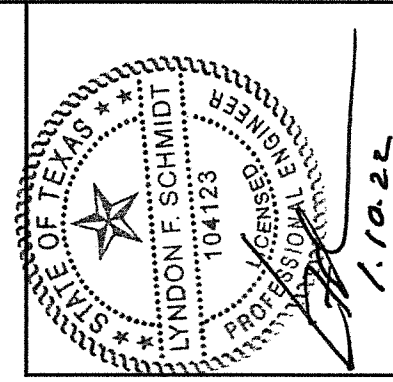


\* NOTE: These additional anchors are required for D.P. > 40 PSF.

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

PRODUCT: ENDURA

PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	REVISIONS
1	11/10/21	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY

DATE: 10/27/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4643

SHEET 7 OF 7