



PERFORMANCE STANDARD

# Glazed Steel Door

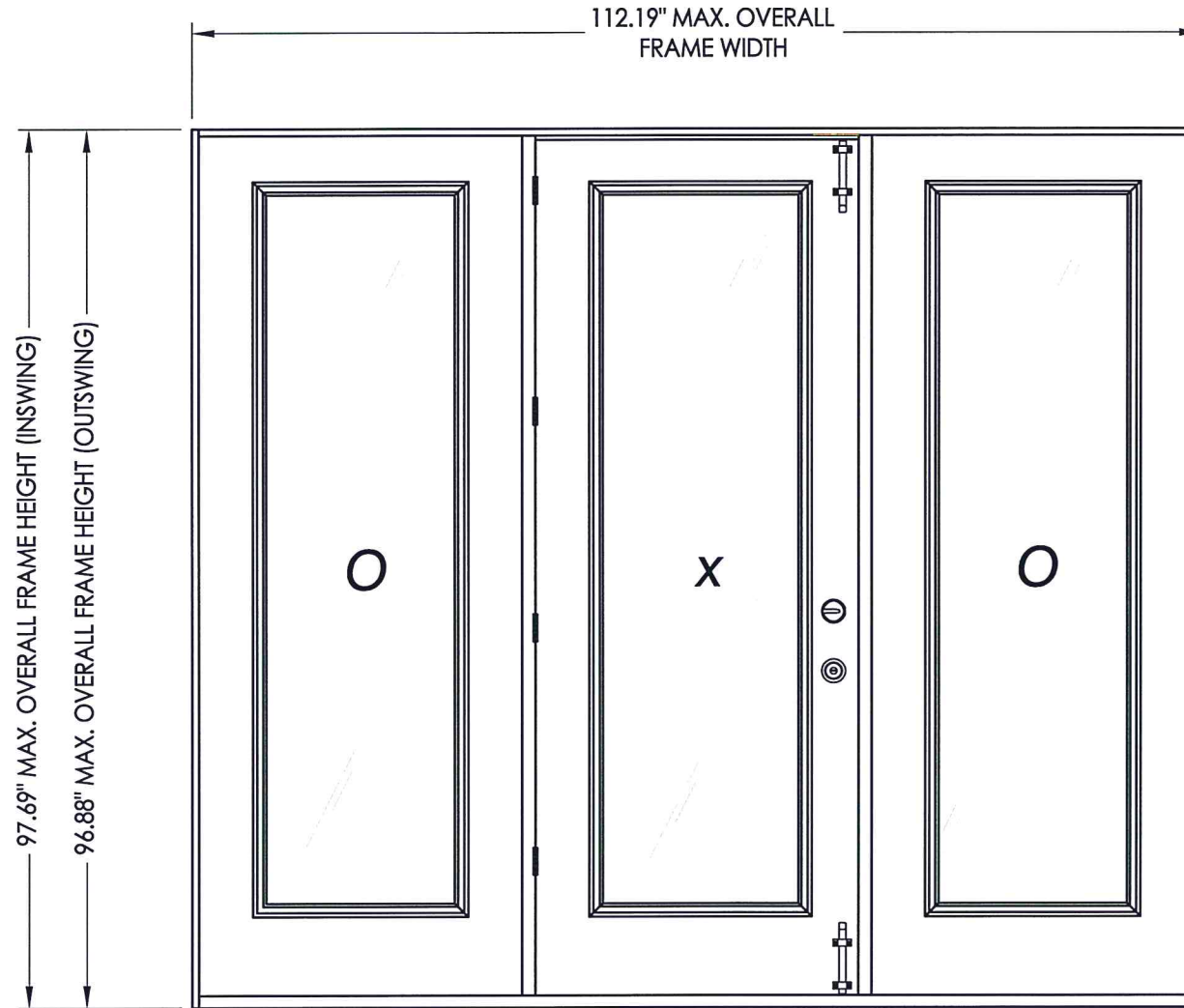
"NON-IMPACT"  
IN SWING / OUT SWING

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

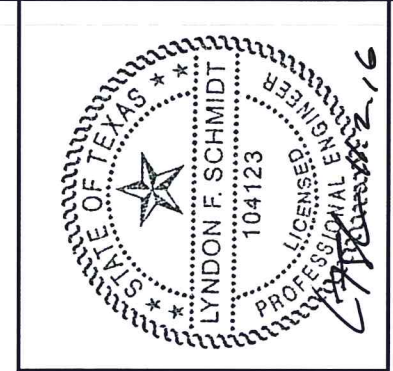
The Glazed Steel Door system described herein complies with the 2006 International Residential Code (IRC), Sections R301 & R613 and the 2006 International Building Code (IBC), Sections 1405.12, 1609, 1714.5, 2403 and 2404 (including Texas revisions) subject to the following conditions:

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 (lip lite insert glazing)
3	Slidelite panel details (lip lite insert glazing)
4	Horizontal cross sections
5	Vertical cross sections
6	Vertical cross sections
7	Frame anchoring



CONFIG.	SURFACE BOLTS	MODEL	DESIGN PRESSURE (PSF)	
			POSITIVE	NEGATIVE
OXO	NO	IN SWING	+35.0	-35.0
		OUT SWING	+30.0	-30.0
	YES	OUT SWING	+35.0	-35.0



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

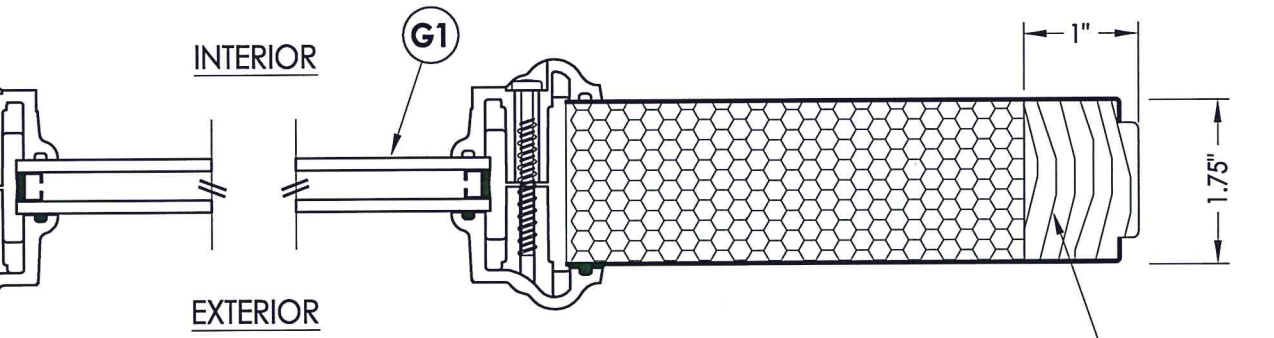
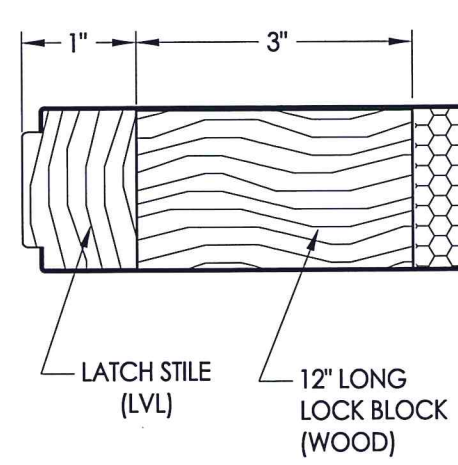
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

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

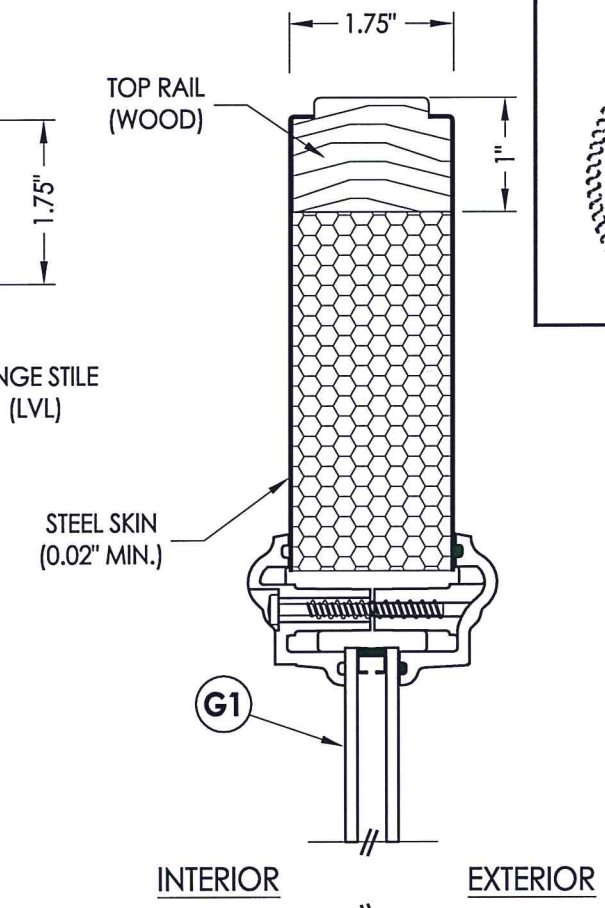
PRODUCT:	ENDURA
PART OR ASSEMBLY:	TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES
ADDED THRESHOLDS/REVISE D.P.	LFS
ADDED ARTICULATING SILL	LFS
NO. DATE	BY
REVISIONS	
DATE:	8/20/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4227
SHEET	1 OF 7



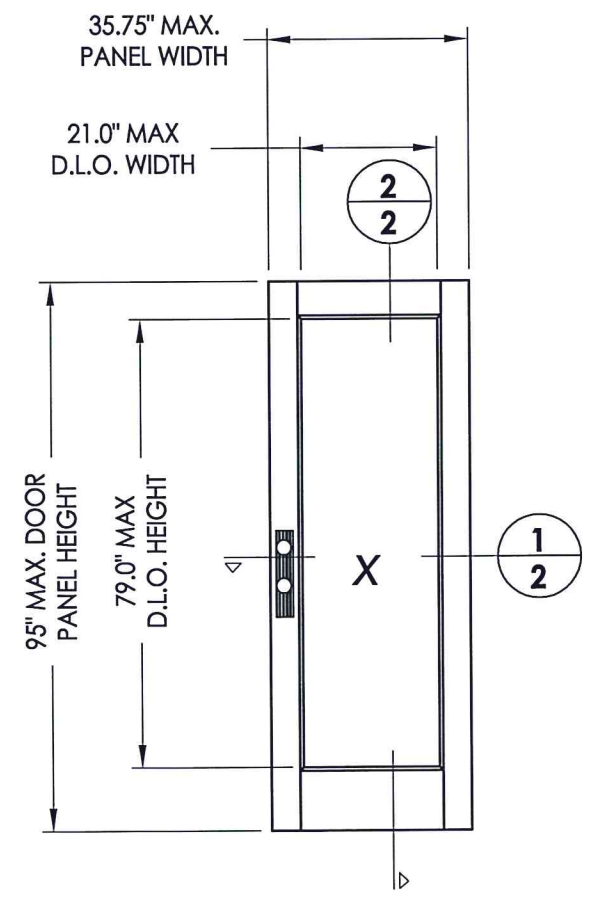
R:\Clients\Endura PERMANENT B - Texas Dept of Ins\TDI - 630 (Exp. 11-1-18)\C - Drawings\Current\TX-4224-27.dwg, 2.4



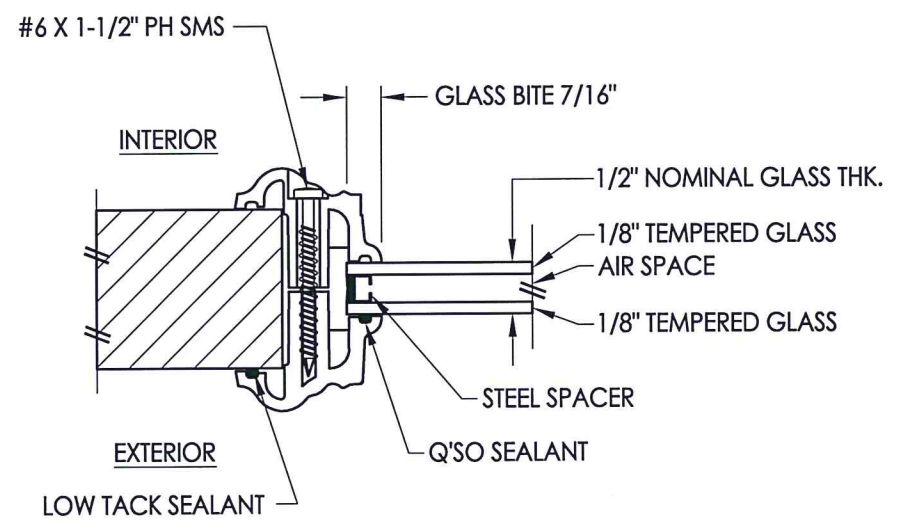
**1**  
**2** HORIZONTAL CROSS SECTION



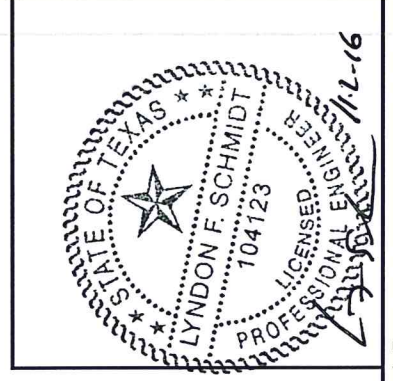
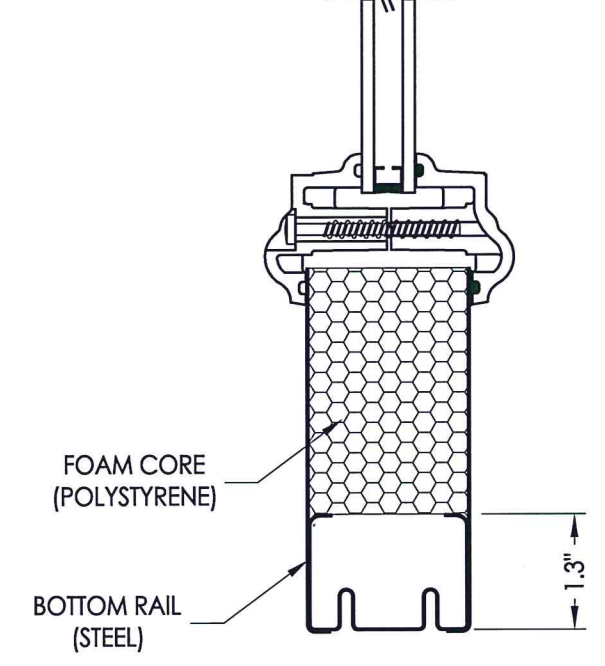
**2**  
**2** VERTICAL CROSS SECTION



JELD-WEN  
Insert Glazed  
(steel)



**G1** GLAZING DETAIL  
Lip Lite Insert Glazing



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: SIDELITE PANEL DETAILS (FLUSH GLAZING)

NO.	DATE	REVISIONS
2	11/01/16	ADDED THRESHOLDS/REVISE D.P.
1	1/09/14	ADDED ARTICULATING SILL

DATE: 8/20/12

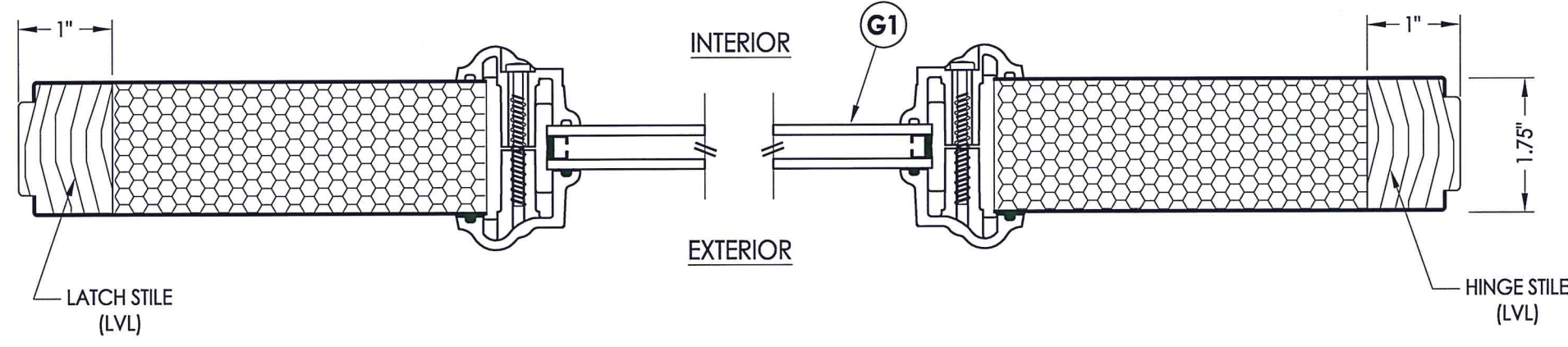
SCALE: N.T.S.

DWG. BY: JK

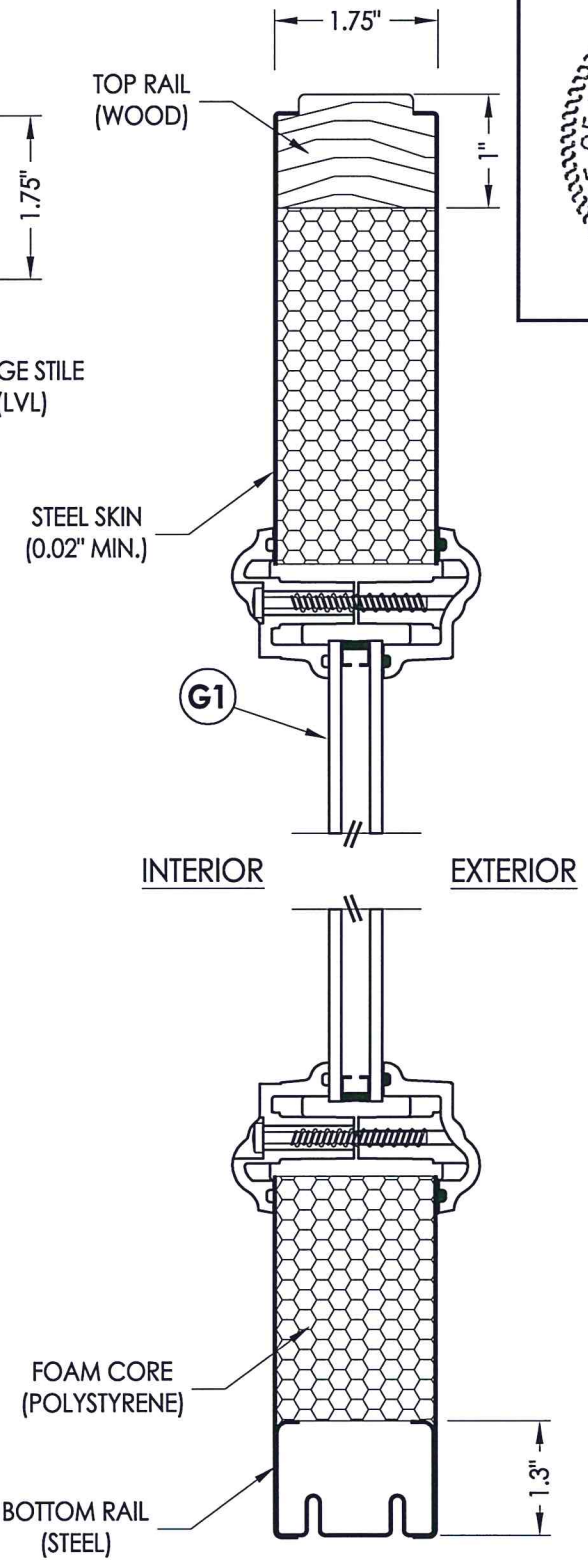
CHK. BY: LFS

DRAWING NO.: TX-4227

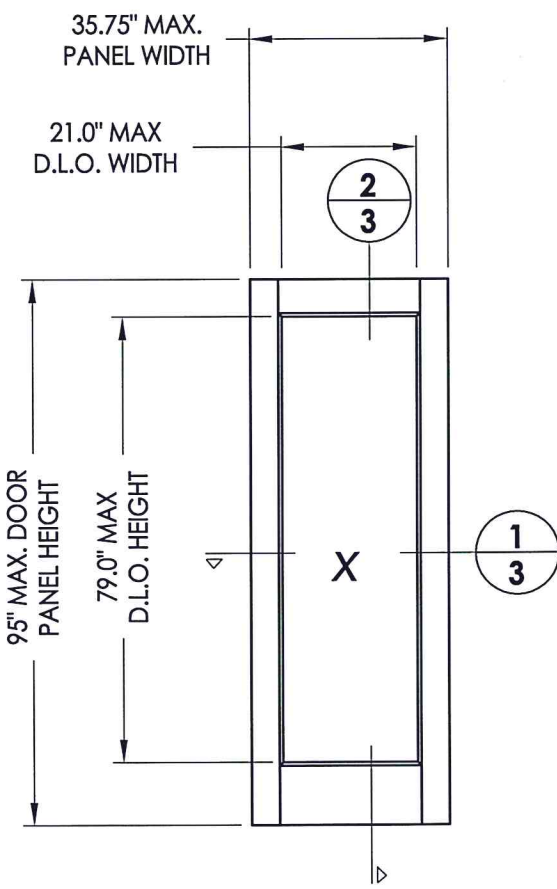
SHEET 2 OF 7



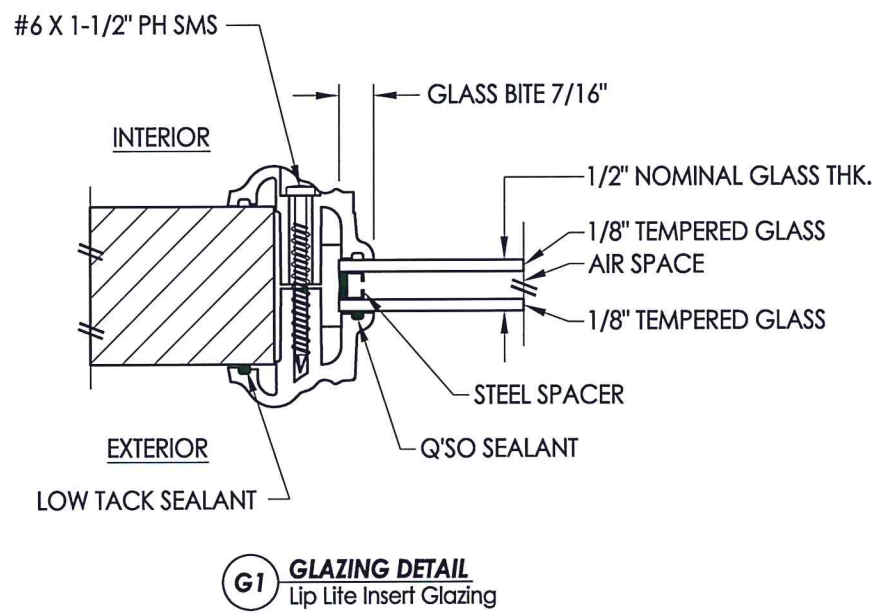
**1**  
**3** HORIZONTAL CROSS SECTION



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



JELD-WEN  
Insert Glazed  
(steel)



**G1** GLAZING DETAIL  
Lip Lite Insert Glazing



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

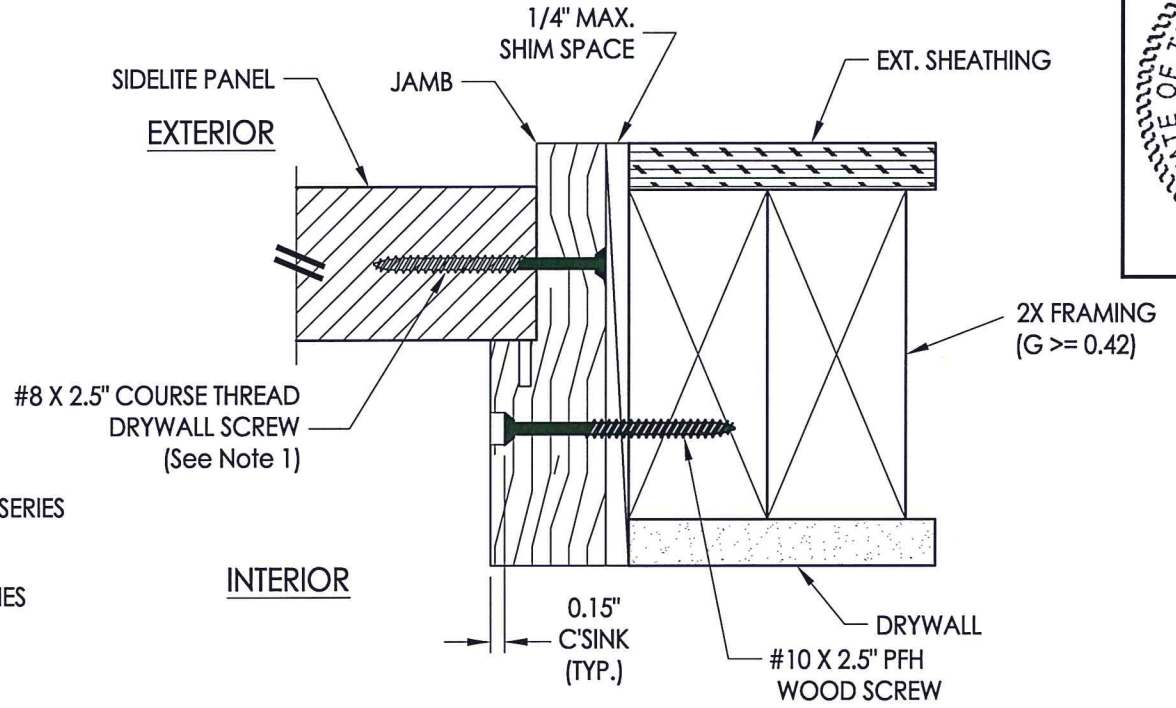
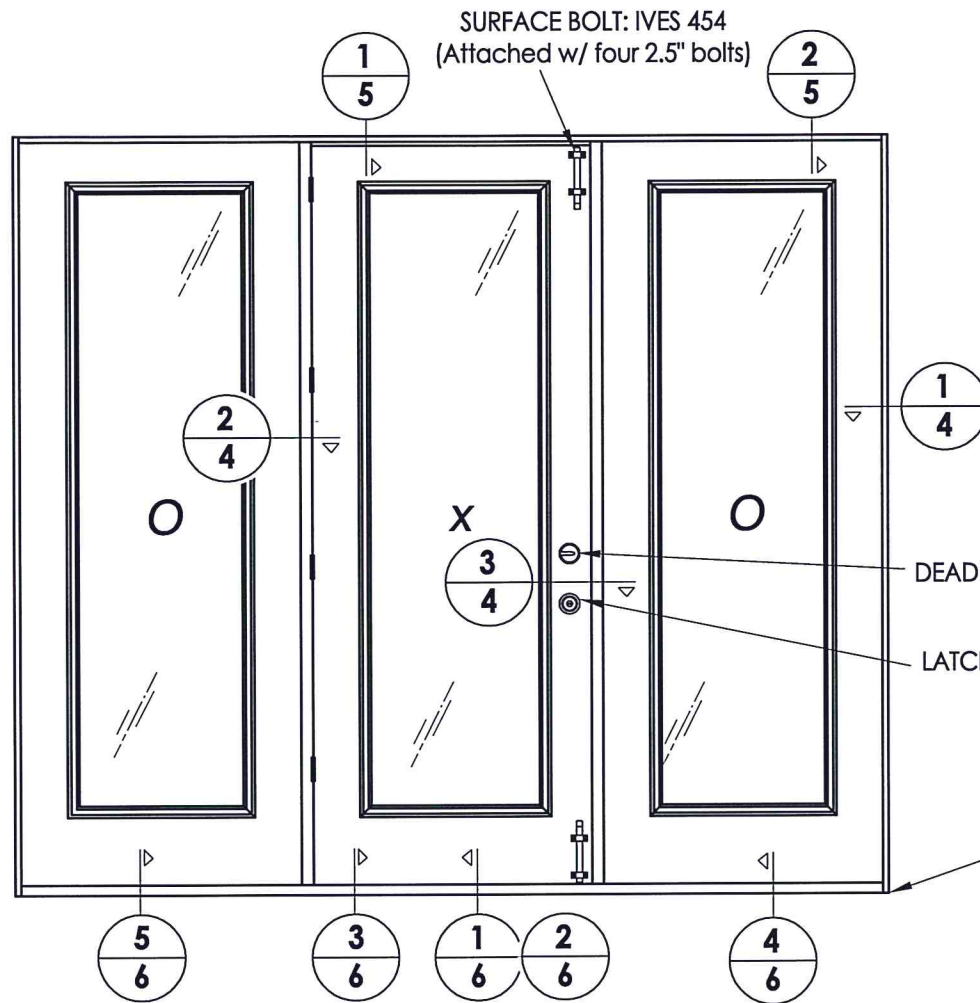
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

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

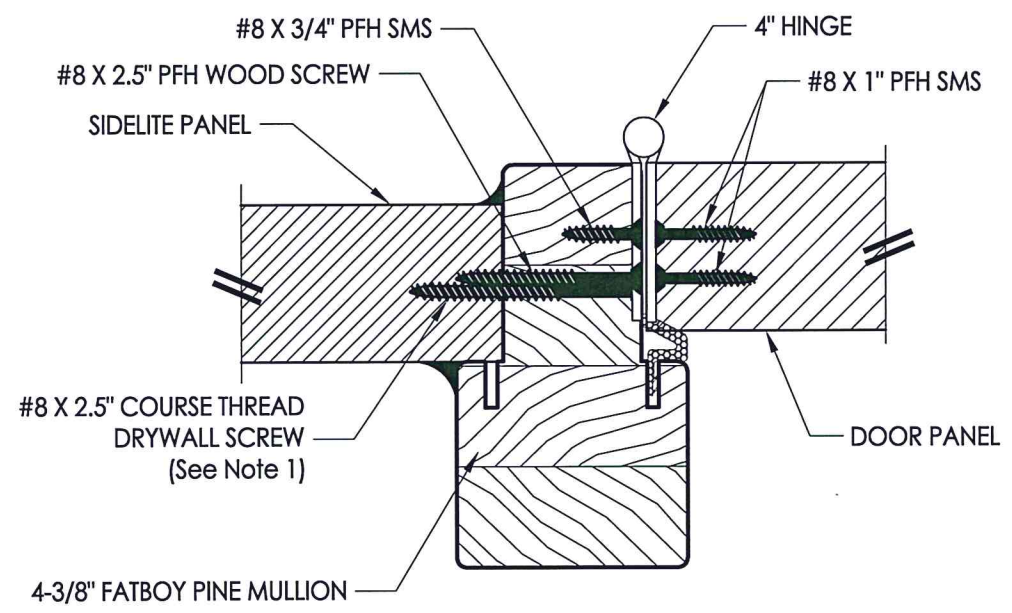
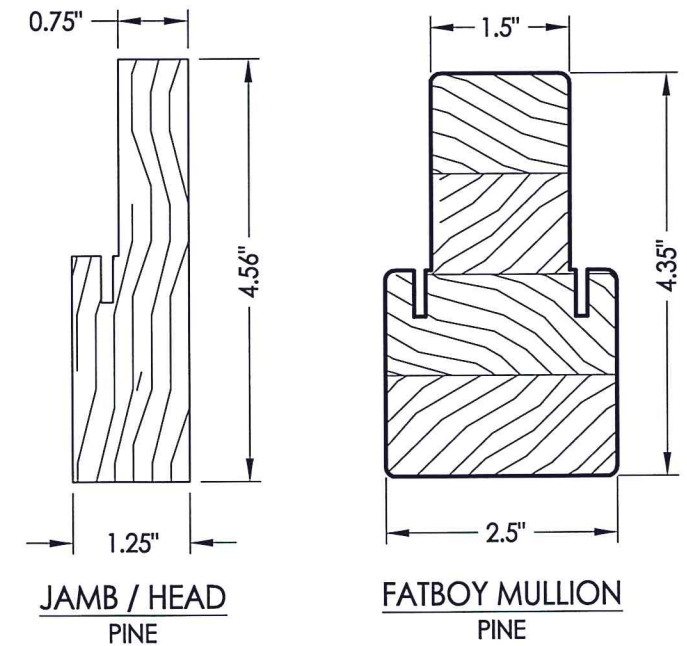
PRODUCT:	ENDURA	
PART OR ASSEMBLY:	SIDELITE PANEL DETAILS (LIP LITE INSERT GLAZING)	
NO.	DATE	BY
2	11/01/16	LFS
1	1/09/14	LFS
REVISIONS		
DATE: 8/20/12		
SCALE: N.T.S.		
DWG. BY: JK		
CHK. BY: LFS		
DRAWING NO.: TX-4227		
SHEET 3 OF 7		



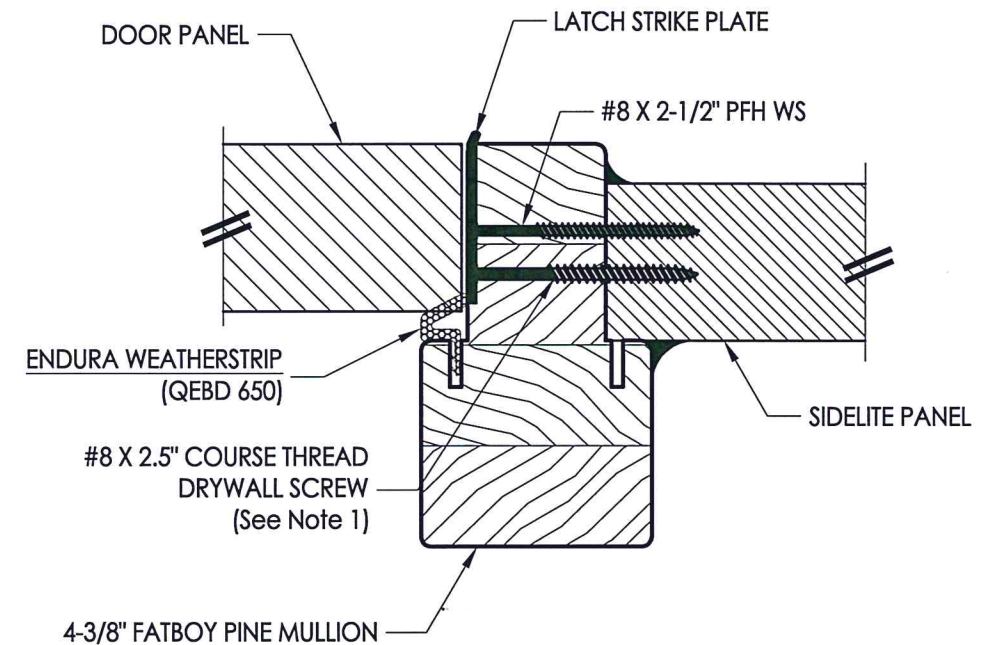
R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - 630 (Exp. 11-1-18)\C - Drawings\Current\TX-4224-27.dwg, 4.4



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

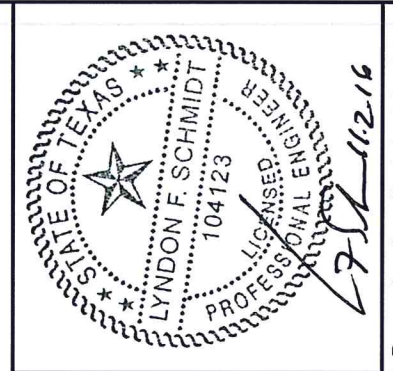


**2** **HORIZONTAL CROSS SECTION**  
**4** Outswing shown - Inswing also approved



**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).



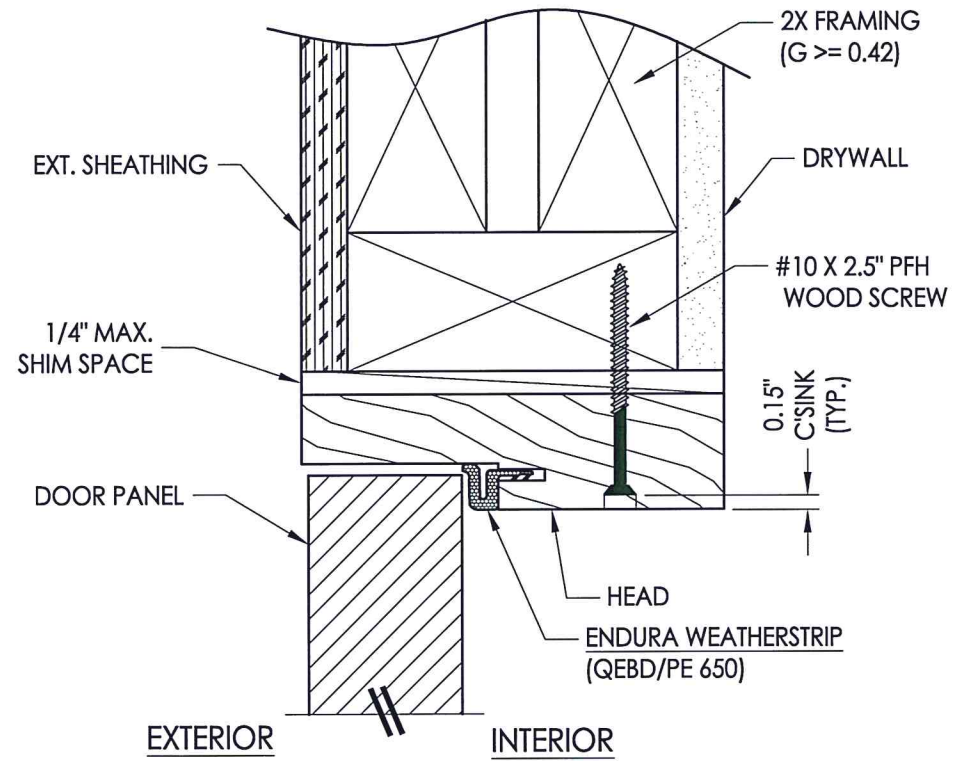
Documents Prepared By: Lyndon F. Schmidt, P.E.  
 TEXAS P.E. #104123

**RW** BUILDING CONSULTANTS, INC.  
 P.O. Box 230 Valrico FL 33595  
 Phone No.: 813.659.9197

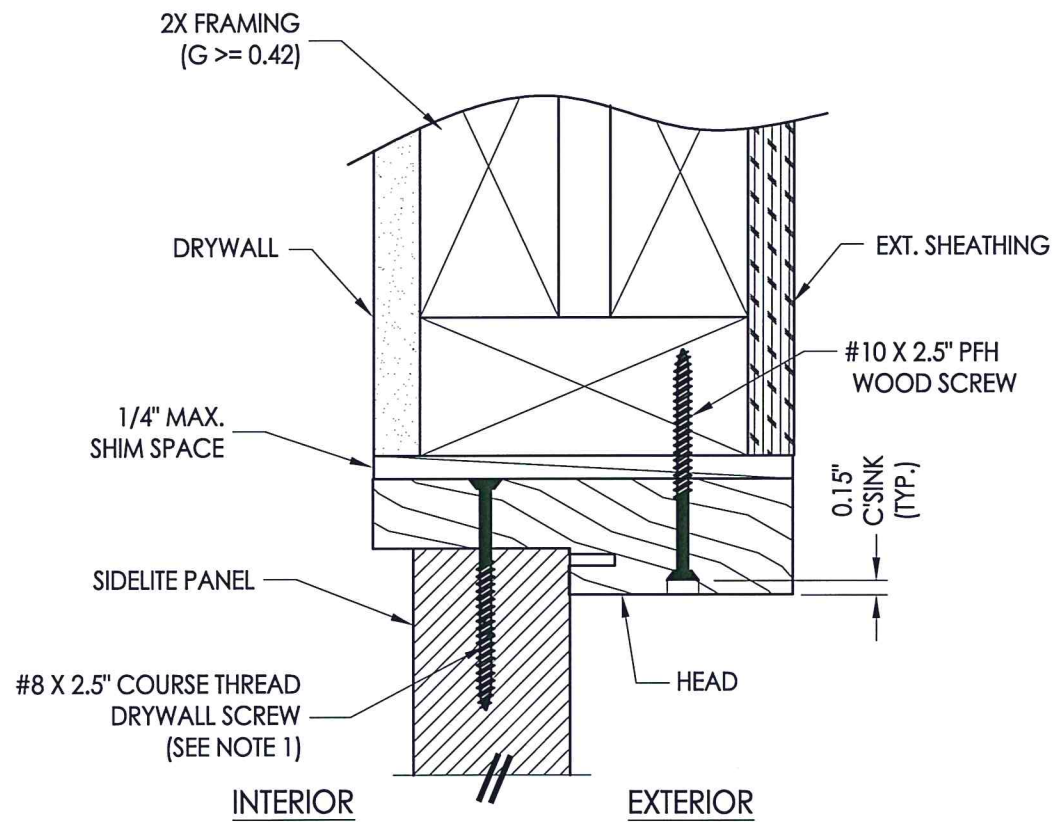
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
 CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	HORIZONTAL CROSS SECTIONS	
NO.	DATE	BY
2	11/01/16	LFS
1	1/09/14	LFS
REVISIONS		
DATE:	8/20/12	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4227	
SHEET	4 OF 7	



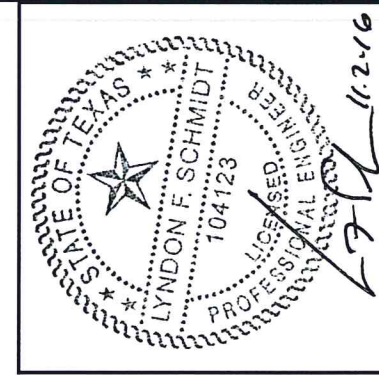


**1 VERTICAL CROSS SECTION**  
 5 Outswing shown - inswing also approved



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

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



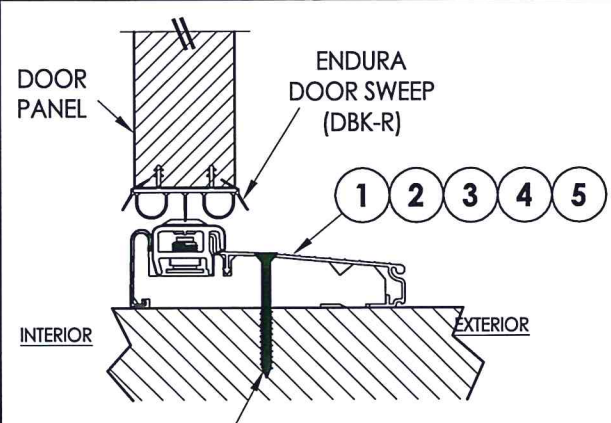
Documents Prepared By: Lyndon F. Schmidt, P.E.  
 TEXAS P.E. #104123

**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

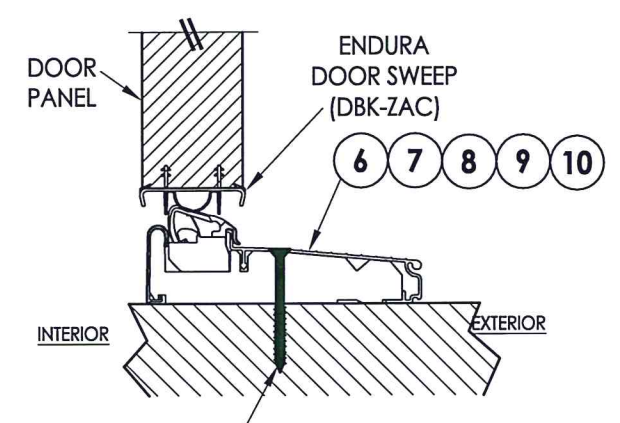
PRODUCT: ENDURA		PART OR ASSEMBLY: VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
2	11/01/16	LFS	ADDED THRESHOLDS/REVISE D.P.
1	1/09/14	LFS	ADDED ARTICULATING SILL
DATE: 8/20/12		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: TX-4227		SHEET 5 OF 7	





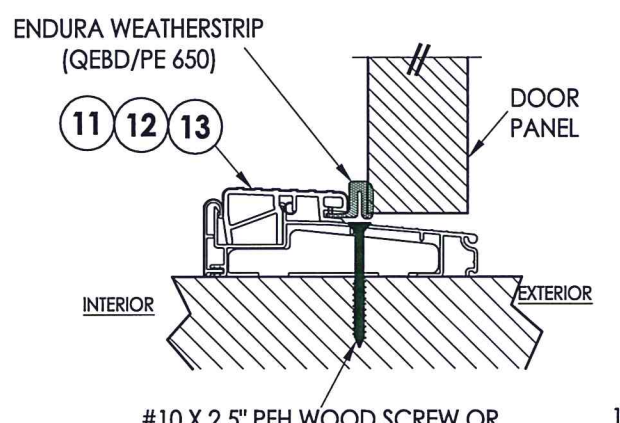
#10 X 2.5" PFH WOOD SCREW OR 1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



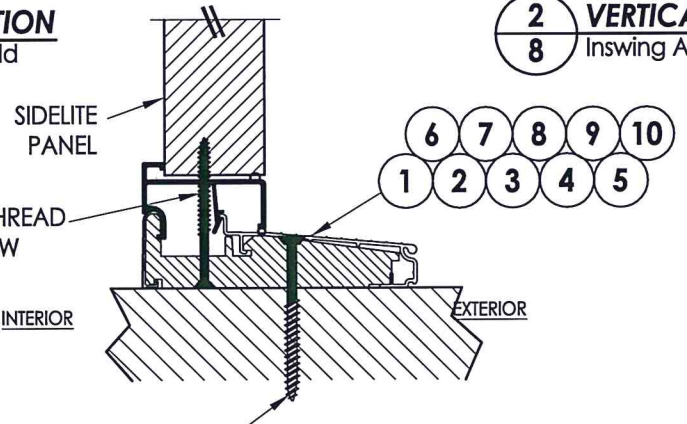
#10 X 2.5" PFH WOOD SCREW OR 1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



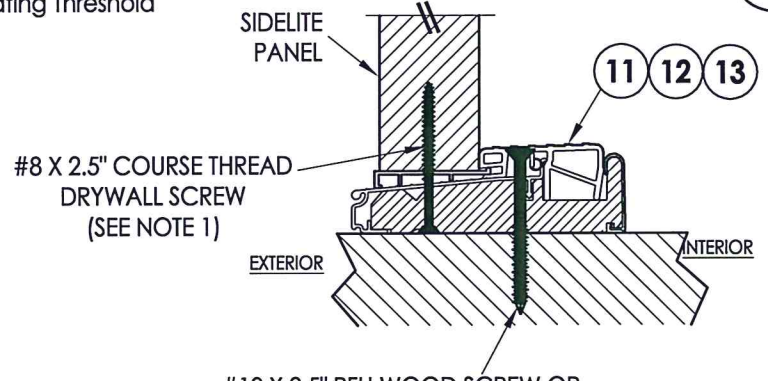
#10 X 2.5" PFH WOOD SCREW OR 1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



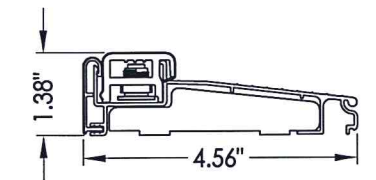
#10 X 2.5" PFH WOOD SCREW OR 1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

**4** VERTICAL CROSS SECTION  
**8** Inswing configuration

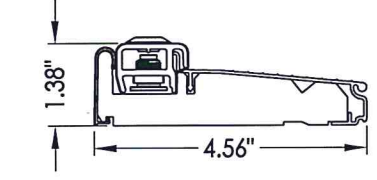


#10 X 2.5" PFH WOOD SCREW OR 1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

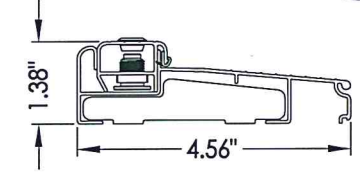
**5** VERTICAL CROSS SECTION  
**8** Outswing configuration



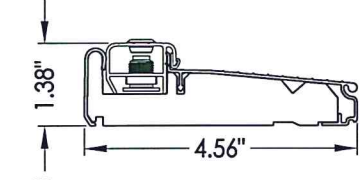
**1** INSWING ADJUSTABLE THRESHOLD  
ZAIL4565



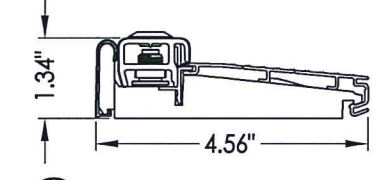
**2** INSWING ADJUSTABLE THRESHOLD  
ZAI4565FN



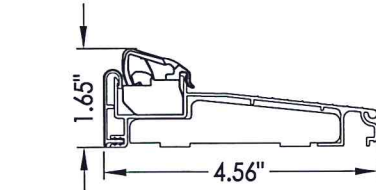
**3** INSWING ADJUSTABLE THRESHOLD  
ZAILAA4565



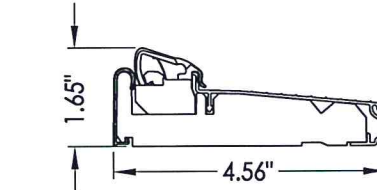
**4** INSWING ADJUSTABLE THRESHOLD  
ZIAAA4565FN



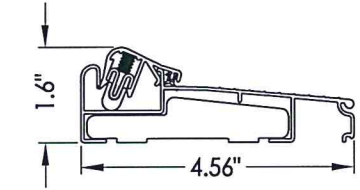
**5** INSWING ADJUSTABLE THRESHOLD  
ZAI4565RDS



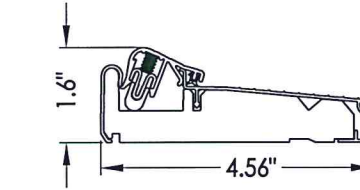
**6** INSWING ARTICULATING THRESHOLD  
ZACL4565



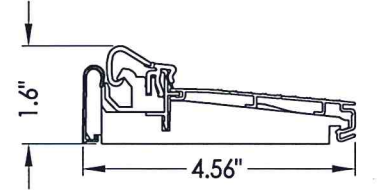
**7** INSWING ARTICULATING THRESHOLD  
ZAC4565FN



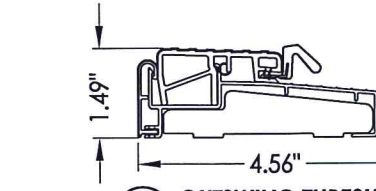
**8** INSWING ARTICULATING THRESHOLD  
ZACLAA4565



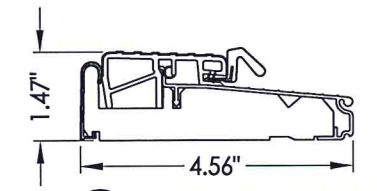
**9** INSWING ARTICULATING THRESHOLD  
ZACAA4565FN



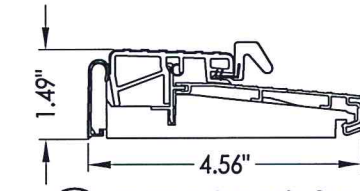
**10** INSWING ARTICULATING THRESHOLD  
ZAC4565RDS



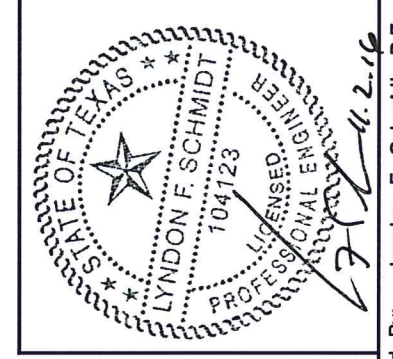
**11** OUTSWING THRESHOLD  
ZOBL4565



**12** OUTSWING THRESHOLD  
ZOB4565FN



**13** OUTSWING THRESHOLD  
ZOB4565RDS



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

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

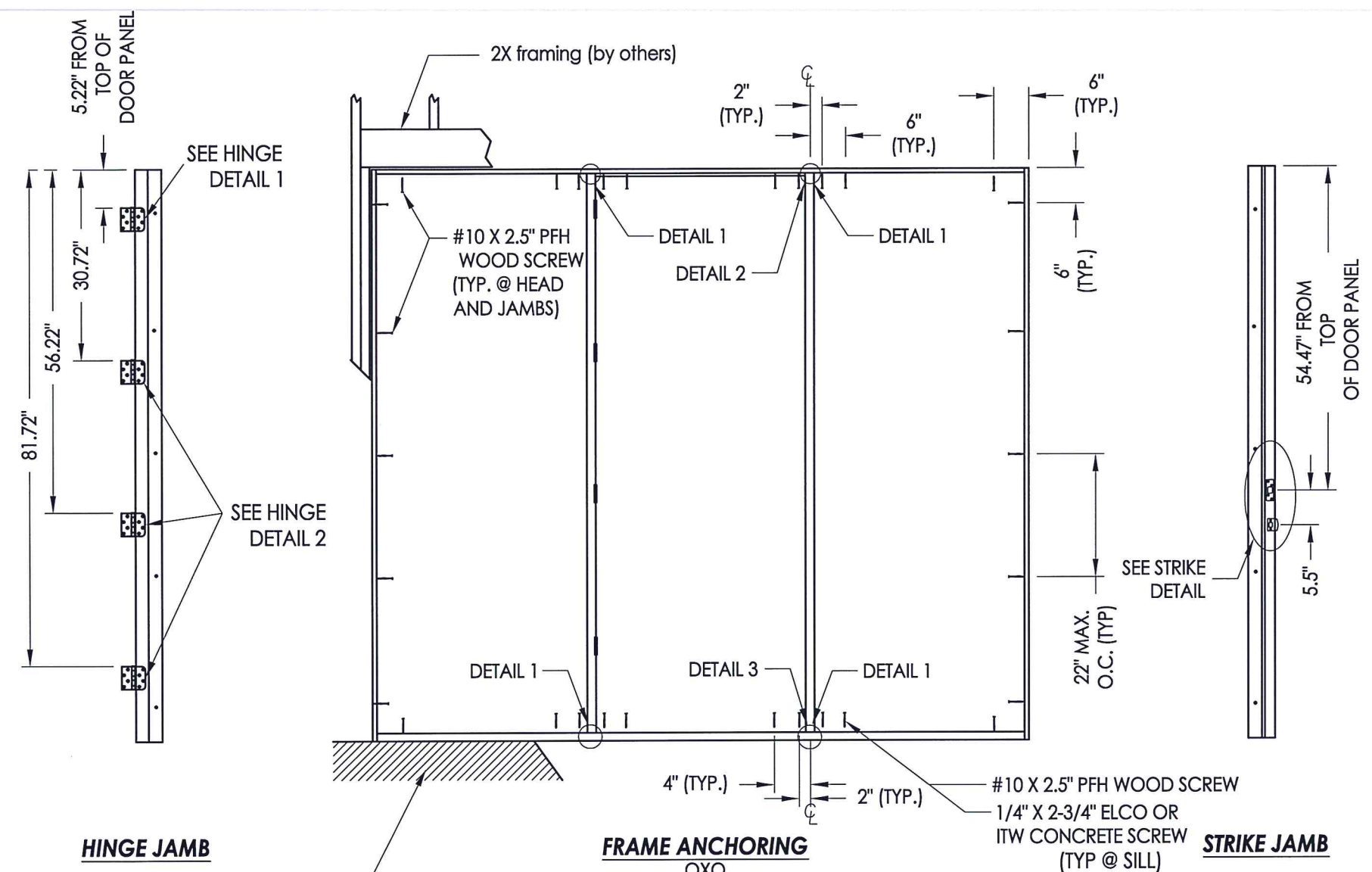
PRODUCT:	ENDURA
PART OR ASSEMBLY:	FIBERGLASS DOOR
VERTICAL CROSS SECTIONS	

NO.	DATE	REVISIONS
2	11/01/16	ADDED THRESHOLDS/REVISE D.P.
1	1/09/14	ADDED ARTICULATING SILL

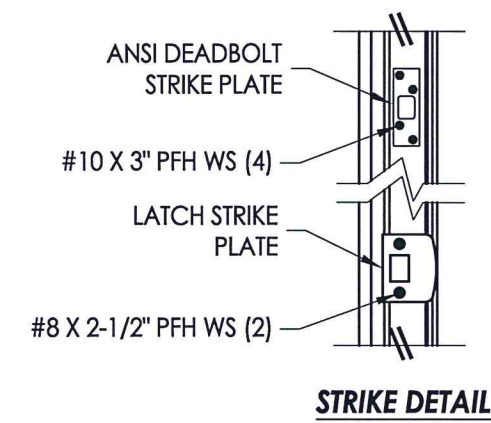
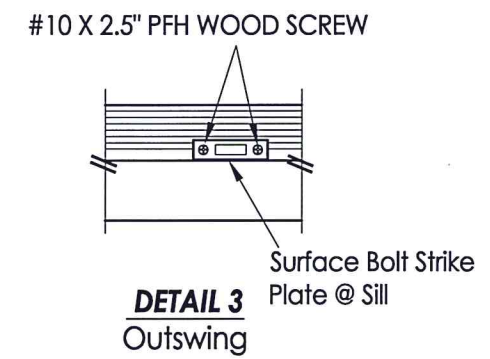
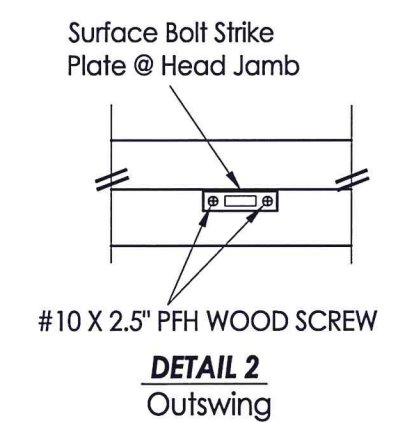
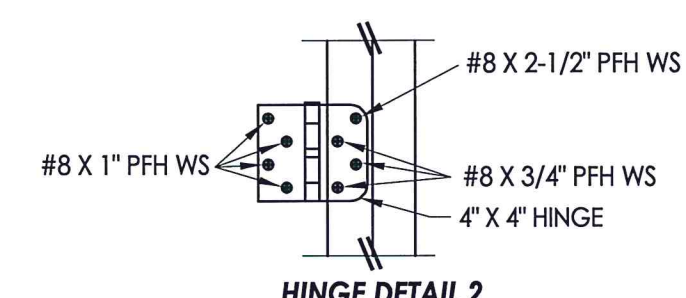
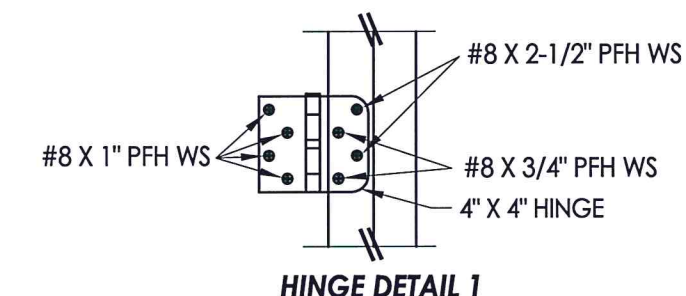
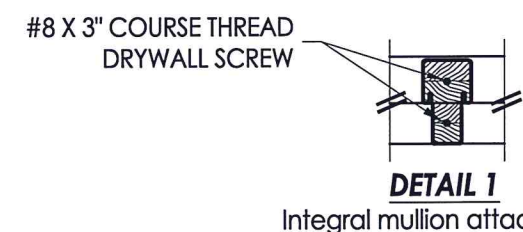
DATE:	8/20/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4227
SHEET	6 OF 7



R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - 630 (Exp. 11-1-18)\C - Drawings\Current\TX-4224-27.dwg, 7.4



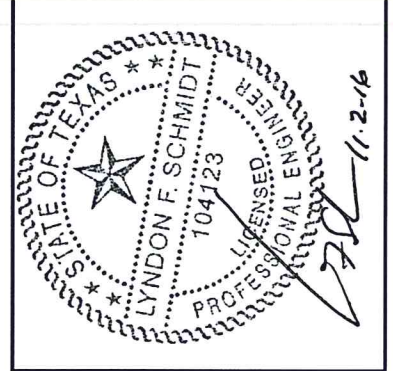
FLOOR SUBSTRATE MATERIAL (TYP.)  
 CONCRETE (MIN. 3000 PSI)  
 WOOD (G >= 0.42)



**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"	2-1/2"	3"
ELCO ULTRACON®	1/4"	1-3/4"	1"	3"



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:	FRAME ANCHORING	
NO.	DATE	REVISIONS
2	11/01/16	ADDED THRESHOLDS/REVISE D.P.
1	1/09/14	ADDED ARTICULATING SILL
LFS		BY
LFS		
DATE		
DATE	8/20/12	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4227	
SHEET	7	OF 7