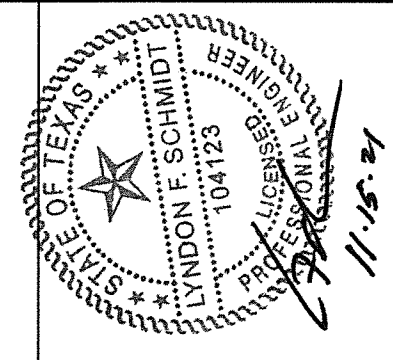
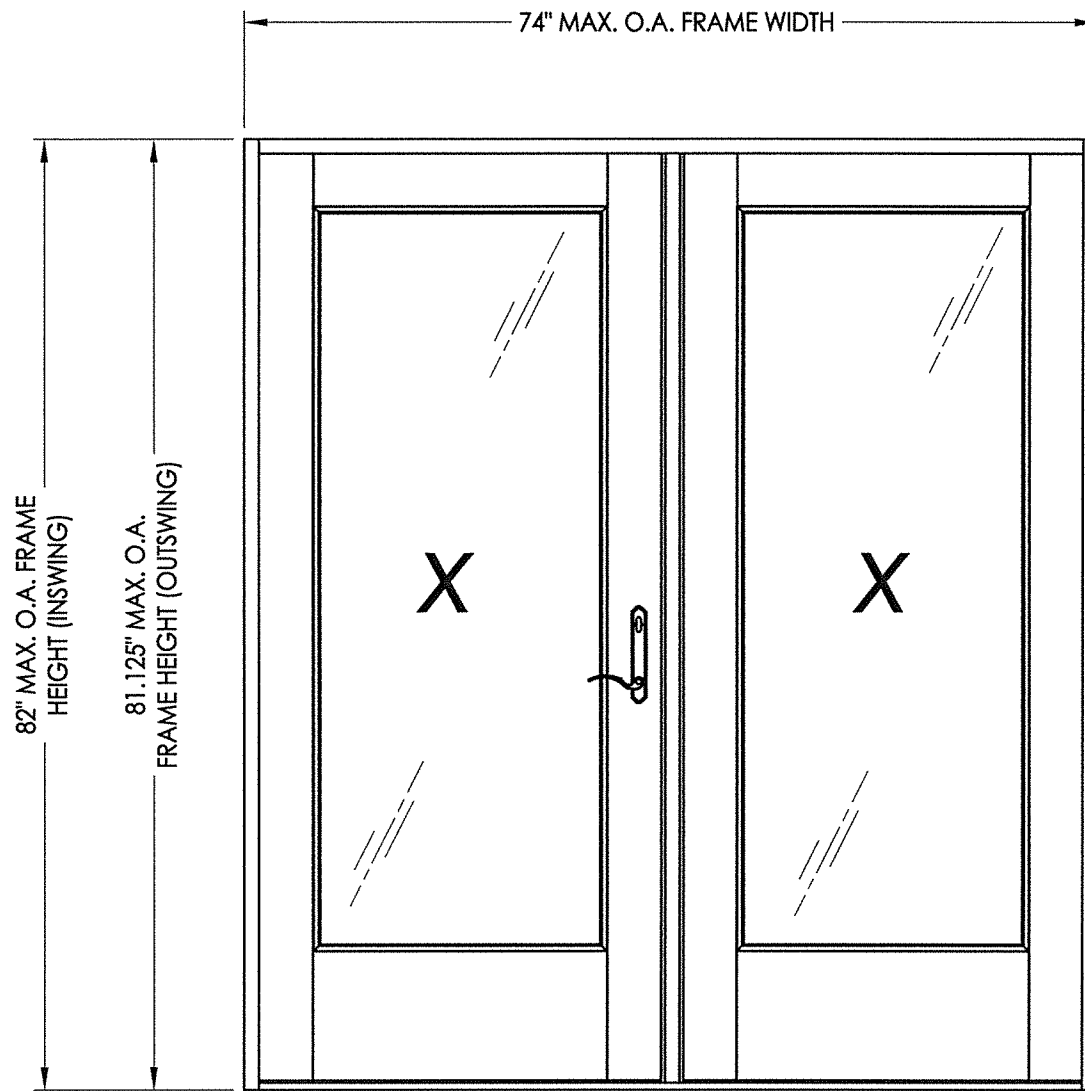




Glazed Fiberglass Door

"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-709

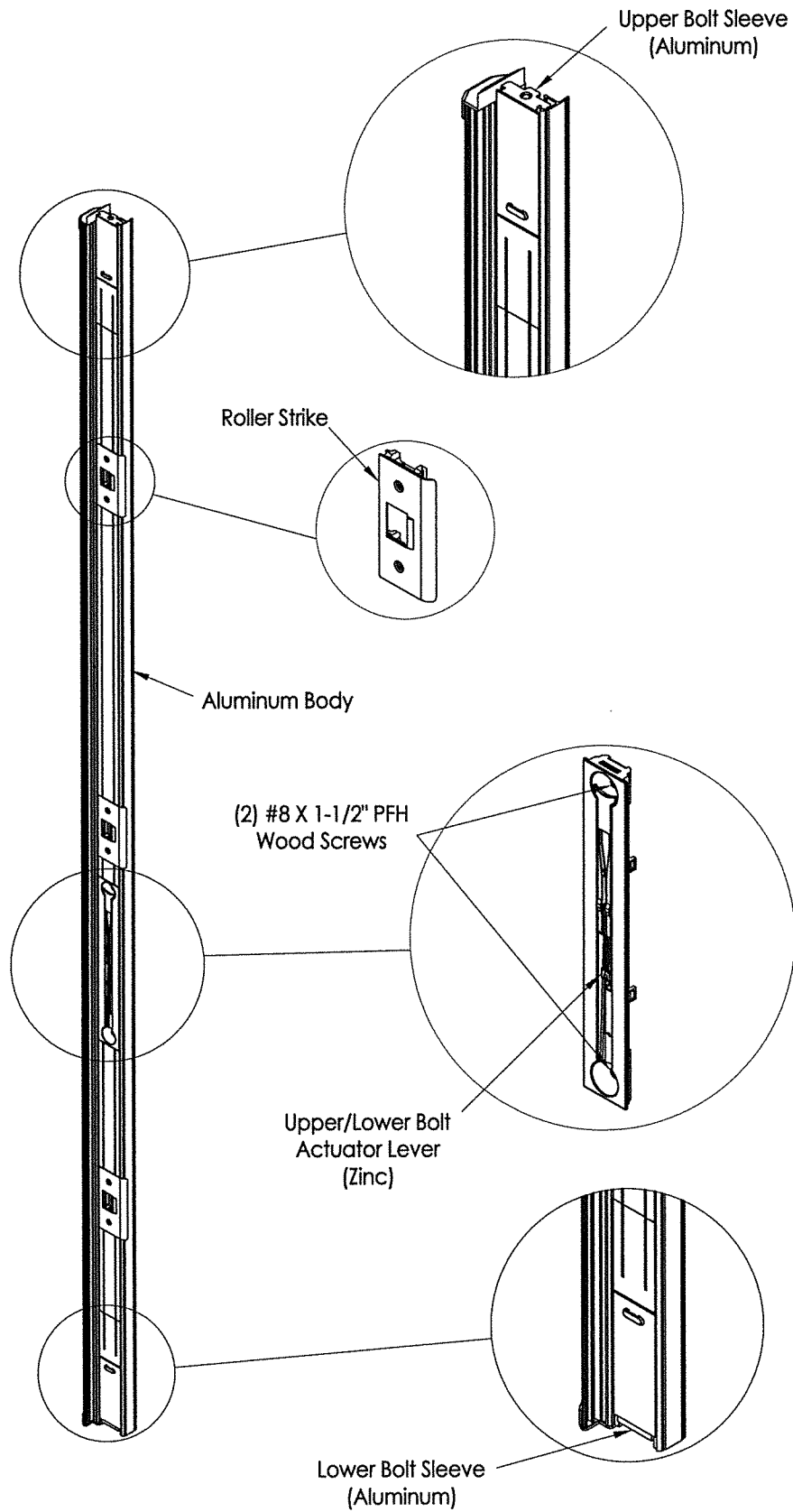
The Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

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.

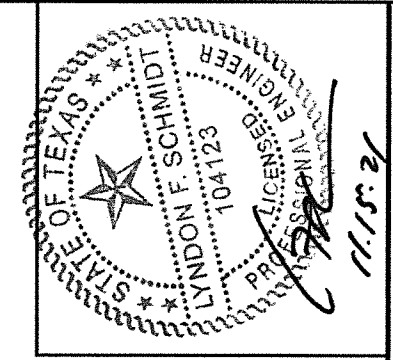
TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Astragal details (Ultimate Trilennium)
3	Door panel details (lip lite insert glazing)
4	Door panel details (flush glazing)
5	Horizontal cross sections
6	Vertical cross sections
7	Frame anchoring

CONFIG.	GLAZING	MODEL	DESIGN PRESSURE (PSF) ULTIMATE TRILENNIUM ASTRAGAL	
			POSITIVE	NEGATIVE
XX	LIP LITE INSERT	INSWING	+40.0	-40.0
XX	LIP LITE INSERT	OUTSWING	+35.0	-35.0
XX	FLUSH GLAZED	INSWING	+55.0	-55.0
XX	FLUSH GLAZED	OUTSWING	+65.0	-65.0

PRODUCT:	ENDURA
PART OR ASSEMBLY:	TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES
DATE:	12/4/13
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4415
SHEET	1 OF 7



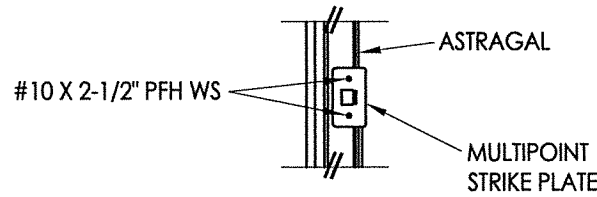
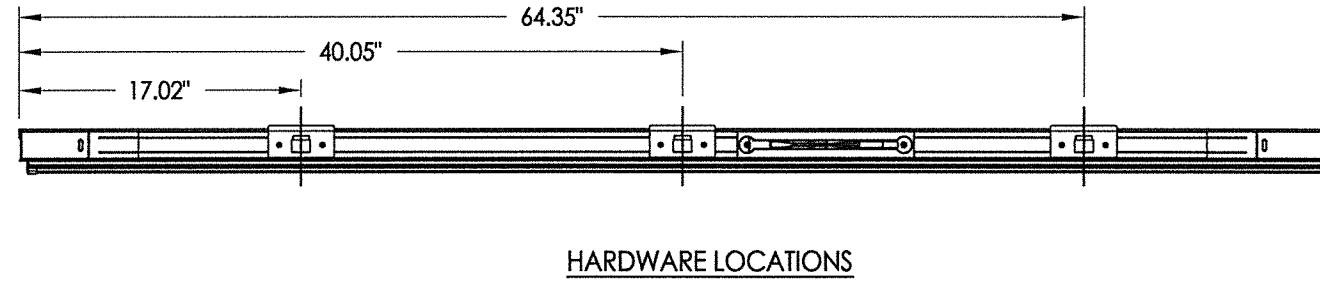
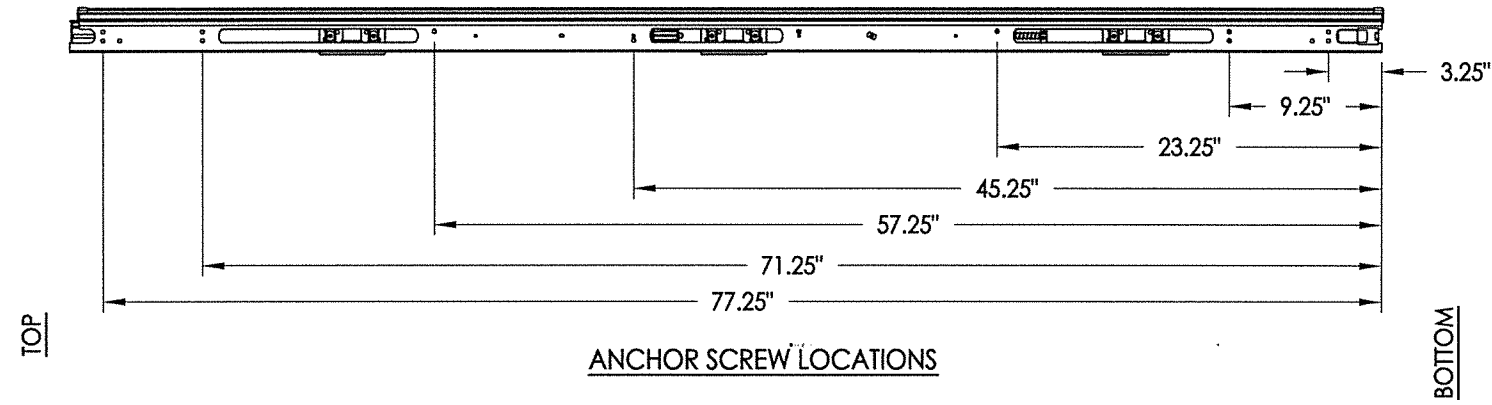
ULTIMATE TRIENNium ASTRAGAL



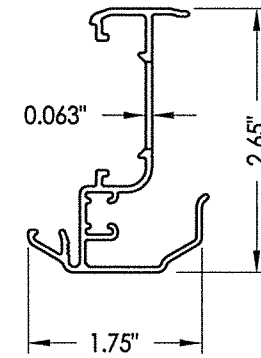
Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

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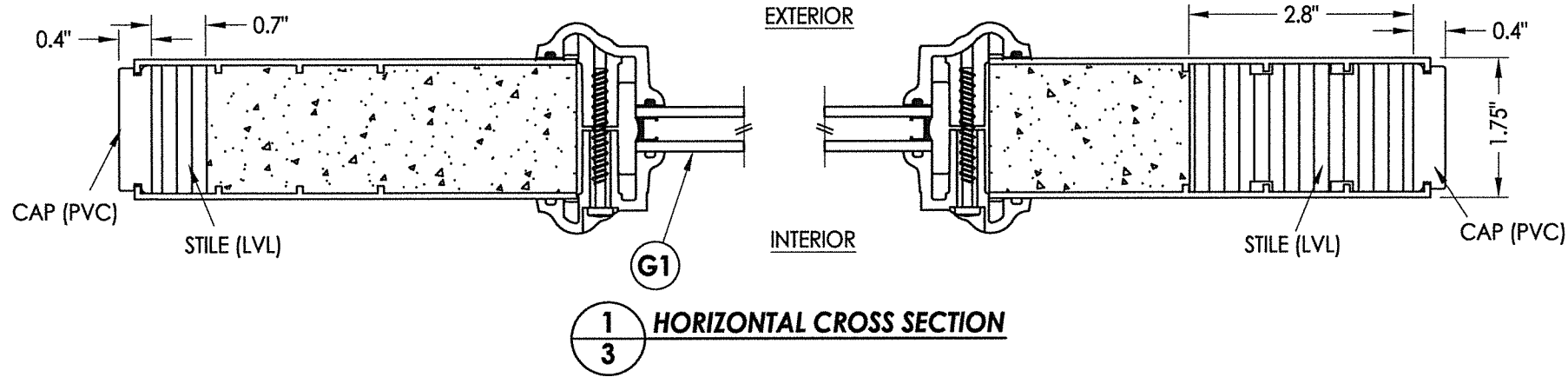
STRIKE PLATE DETAIL



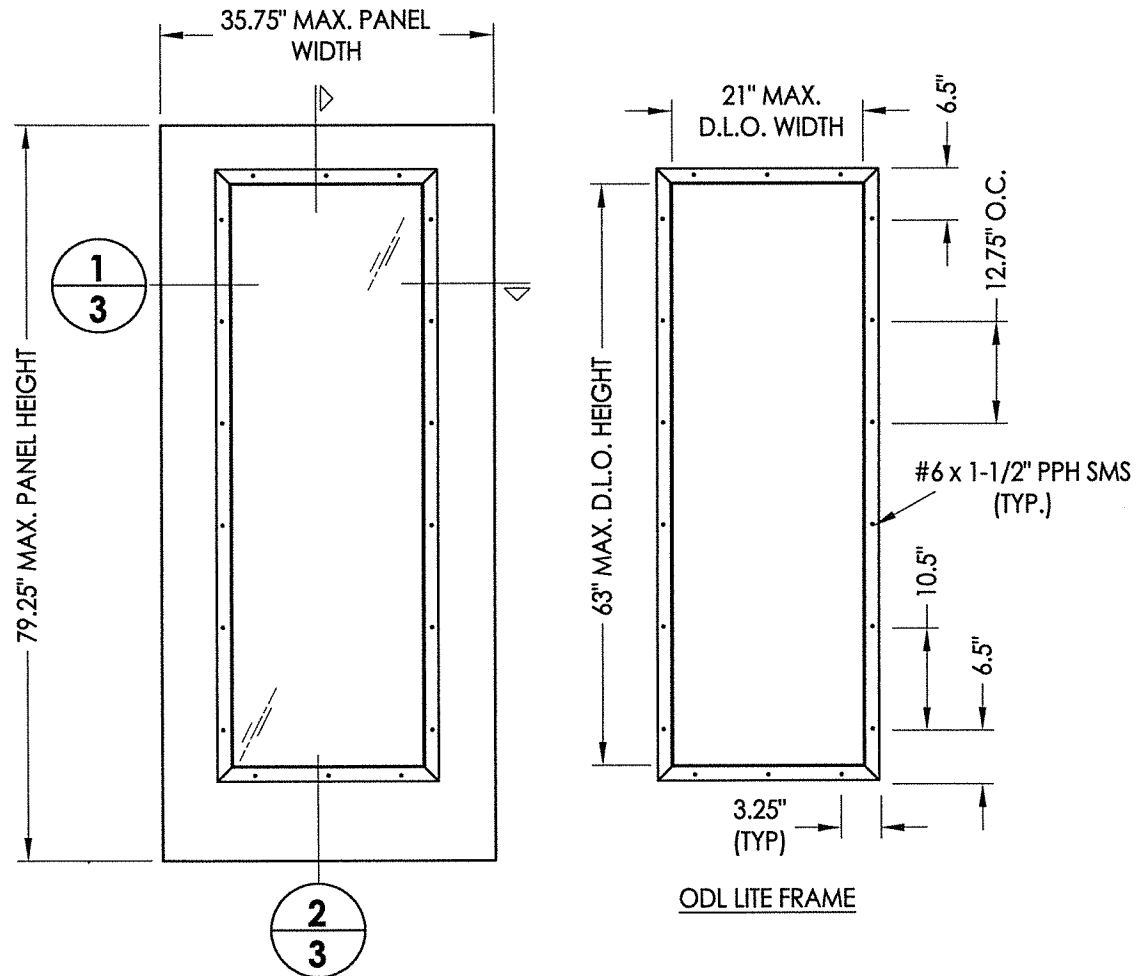
Astragal Section

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	ASTRAGAL DETAILS (ULTIMATE TRIENNium)	
NO.	DATE	BY
4	11/11/21	LFS
3	10/08/18	LFS
2	10/27/16	LFS
1	5/07/15	LFS
REVISIONS		
DATE:	12/4/13	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4415	
SHEET	2 OF 7	

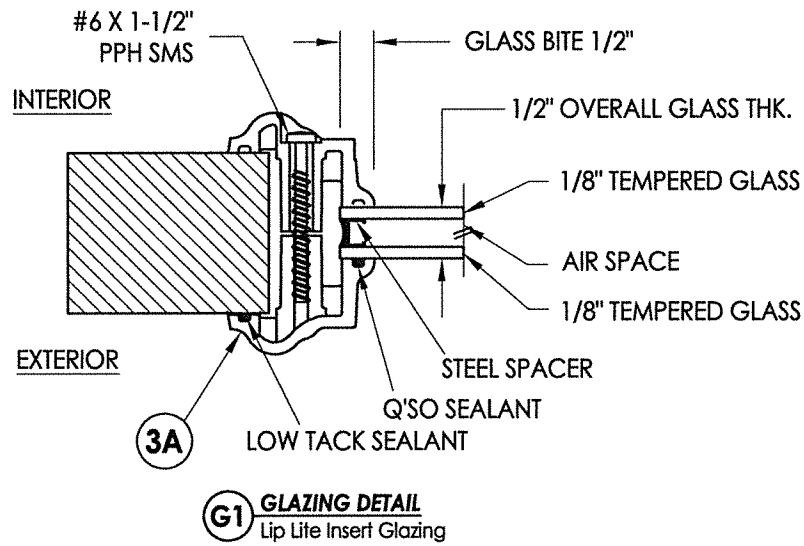
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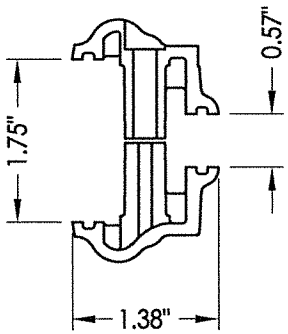
1
3 HORIZONTAL CROSS SECTION



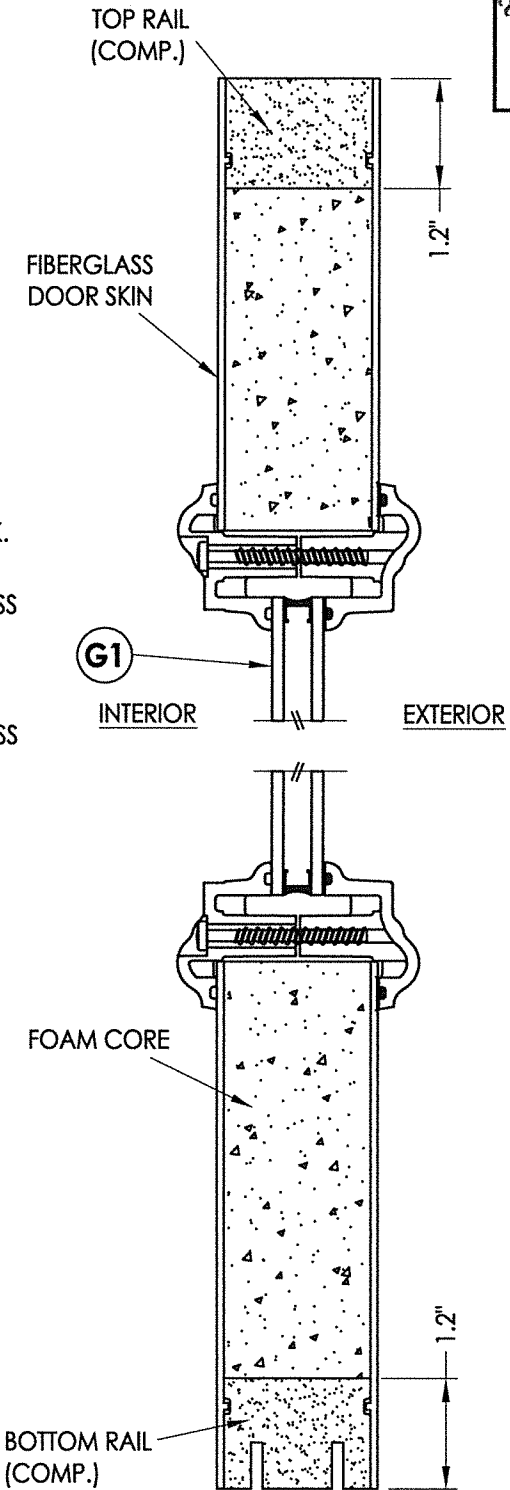
2
3 DOOR PANEL
Plastpro
Fiberglass



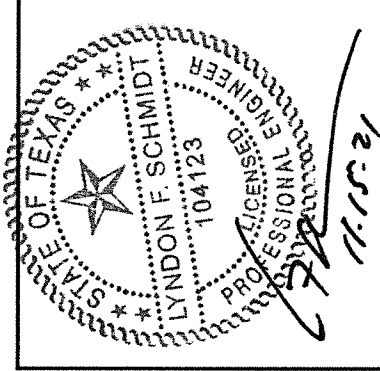
G1 GLAZING DETAIL
Lip Lite Insert Glazing



3A OD LITE FRAME
HP Polypropylene



2
3 VERTICAL CROSS SECTION



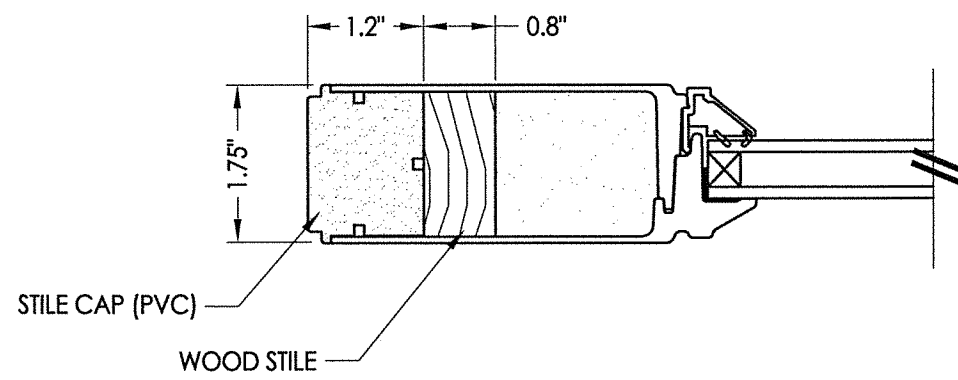
Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

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Phone No.: 813.659.9197

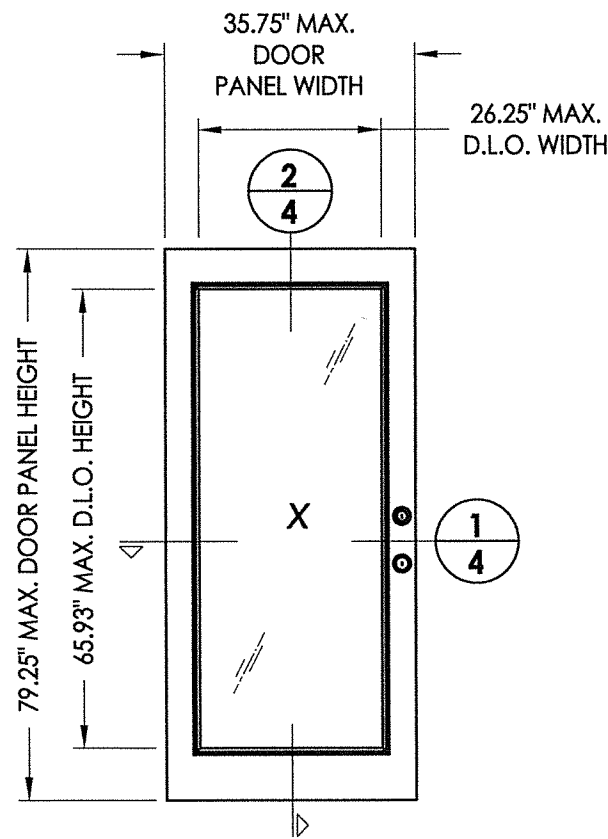
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	DOOR PANEL DETAILS (LIP LITE INSERT GLAZING)	
NO.	DATE	BY
4	11/11/21 UPDATE TO 2018 IBC/IRC CODE	LFS
3	10/08/18 REVISE FOR NEW TESTING	LFS
2	10/27/16 ADDED THRESHOLDS	LFS
1	5/07/15 ADD NEW ASTRAGAL PIN CAPTURE	LFS
REVISIONS		
DATE:	12/4/13	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4415	
SHEET	3	OF 7

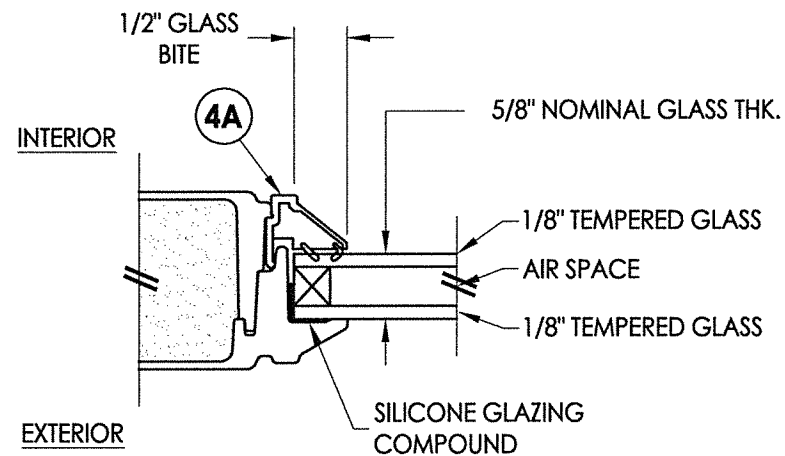
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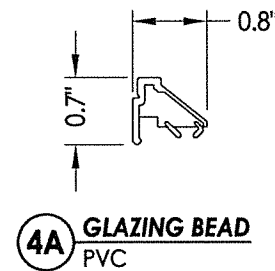
1
4 HORIZONTAL CROSS SECTION



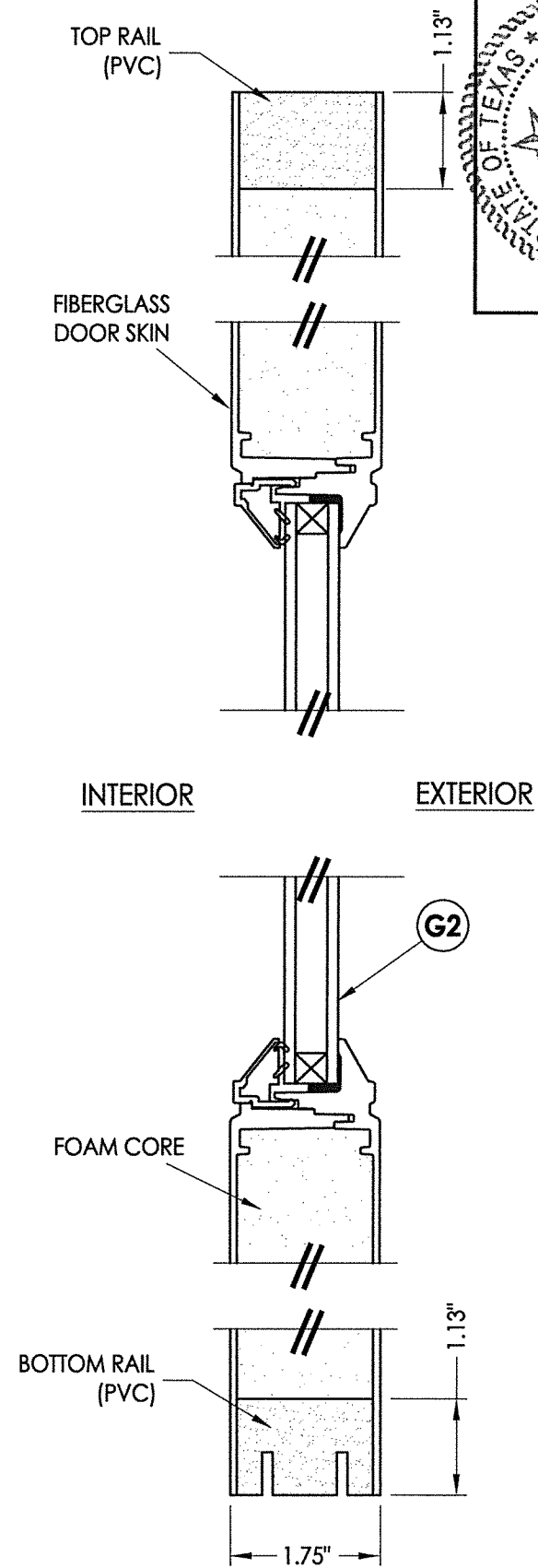
DOOR PANEL
Plastpro
Fiberglass



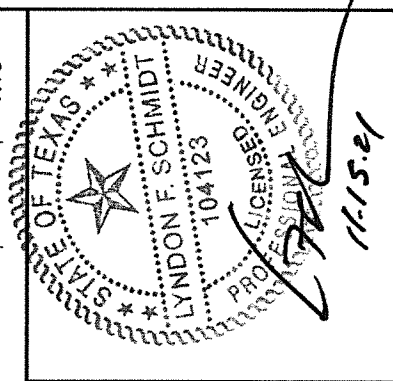
G2 GLAZING DETAIL
Flush Glazing



4A GLAZING BEAD
PVC



2
4 VERTICAL CROSS SECTION



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TEXAS P.E. #104123

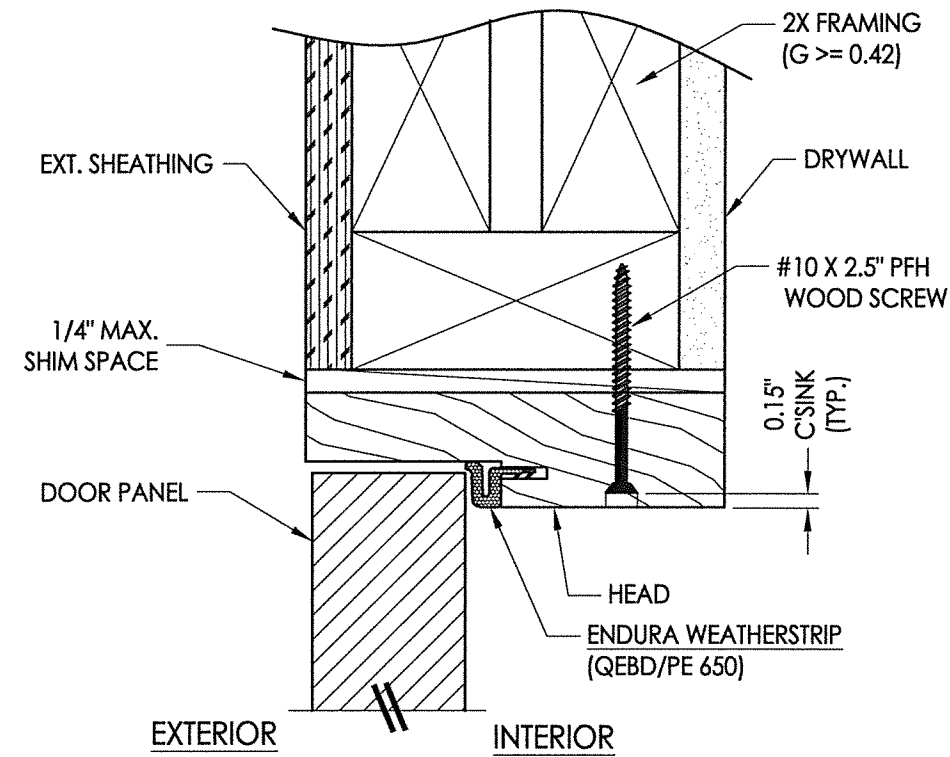
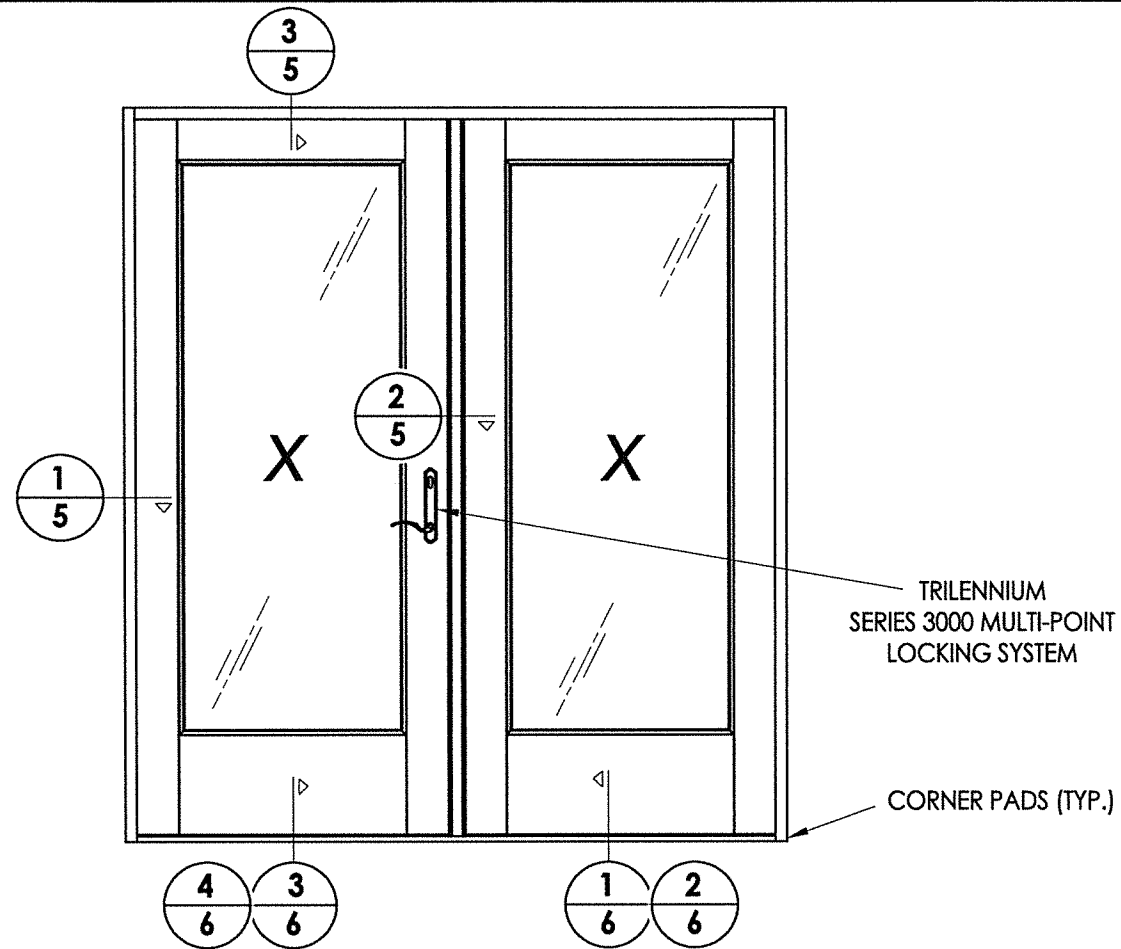
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: ENDURA
PART OR ASSEMBLY: DOOR PANEL DETAILS (FLUSH GLAZING)

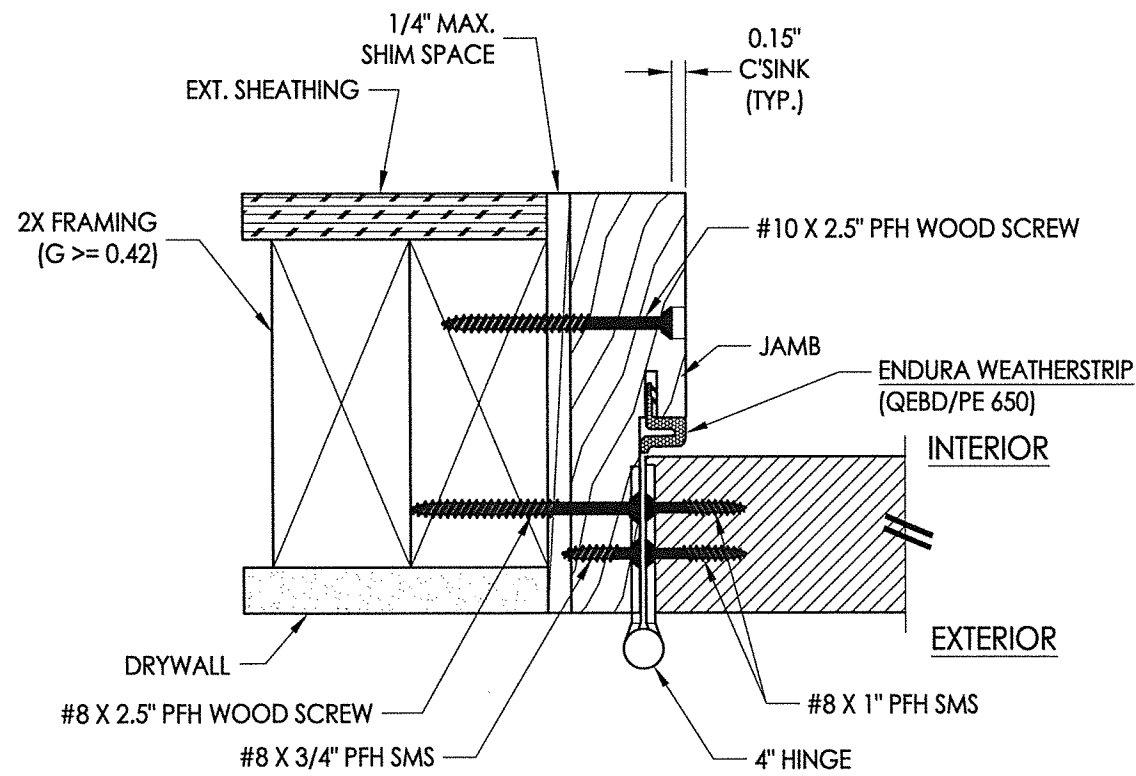
NO.	DATE	REVISIONS	BY
4	11/11/21	UPDATE TO 2018 IBC/IRC CODE	LFS
3	10/08/18	REVISE FOR NEW TESTING	LFS
2	10/27/16	ADDED THRESHOLDS	LFS
1	5/07/15	ADD NEW ASTRAGAL PIN CAPTURE	LFS

DATE: 12/4/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4415
SHEET 4 OF 7

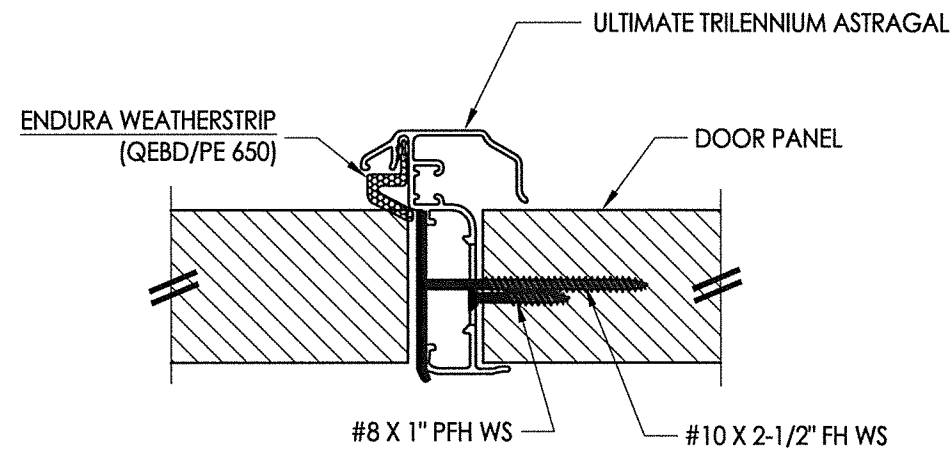
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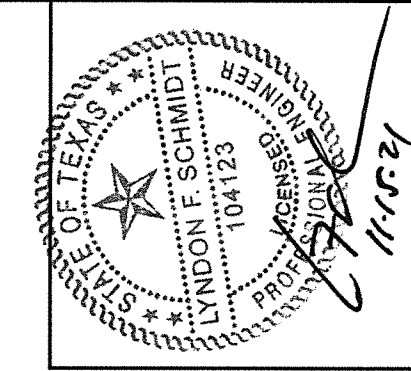
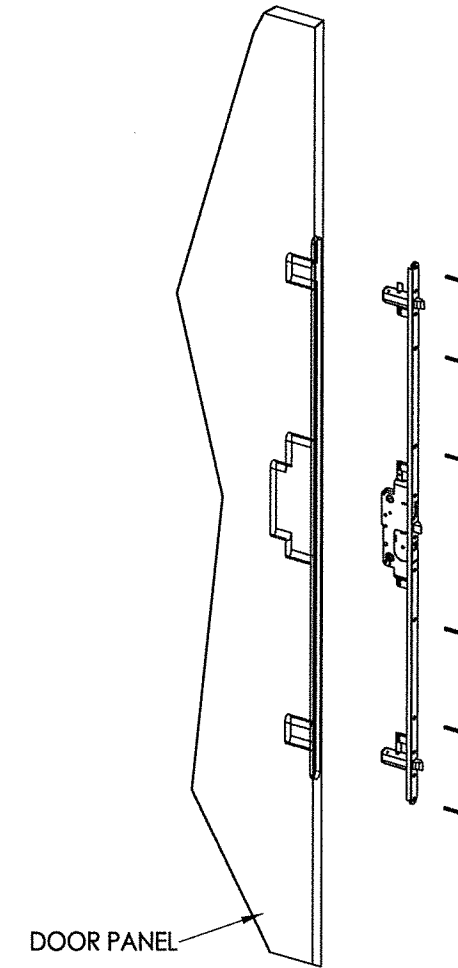
3 VERTICAL CROSS SECTION
 5 Outswing shown - inswing also approved



1 HORIZONTAL CROSS SECTION
 5 Inswing shown - Outswing also approved



2 HORIZONTAL CROSS SECTION
 5



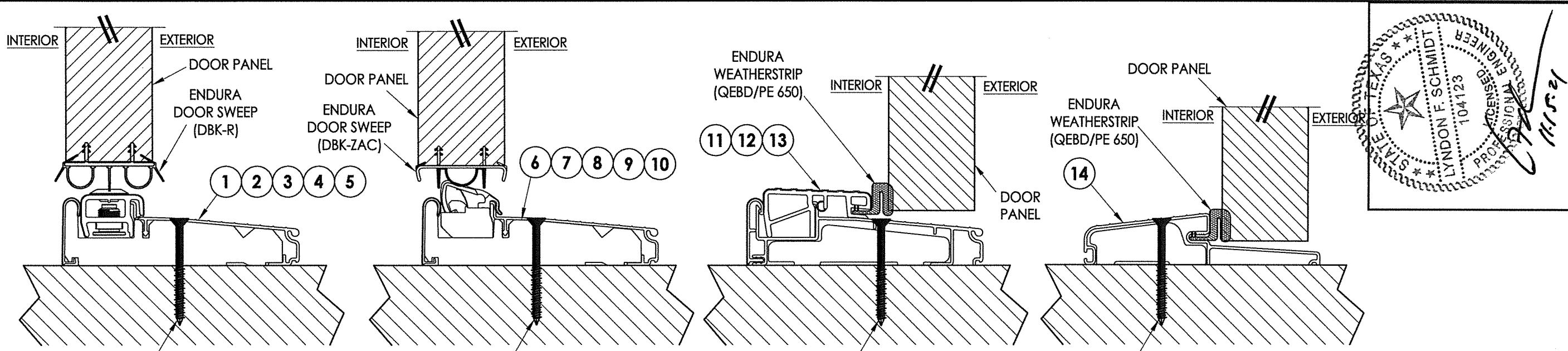
Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123

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
4	11/11/21	LFS
3	10/08/18	LFS
2	10/27/16	LFS
1	5/07/15	LFS
REVISIONS		
DATE:	12/4/13	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4415	
SHEET	5	OF 7

Z:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-709 Plastpro FG Glazed\C - Drawings\TX-4415.16.dwg



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

1 VERTICAL CROSS SECTION
6 Inswing Adjustable Threshold

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

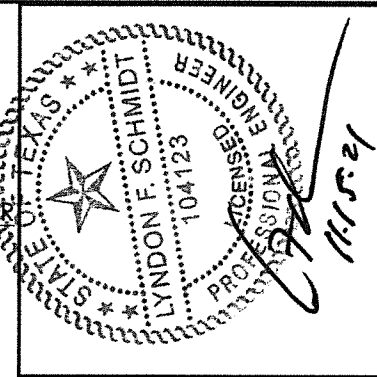
2 VERTICAL CROSS SECTION
6 Inswing Articulating Threshold
w/ Pin Capture

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

3 VERTICAL CROSS SECTION
6 Outswing Bump Threshold

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

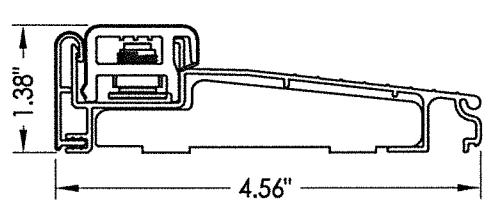
4 VERTICAL CROSS SECTION
6 Outswing Bump Threshold



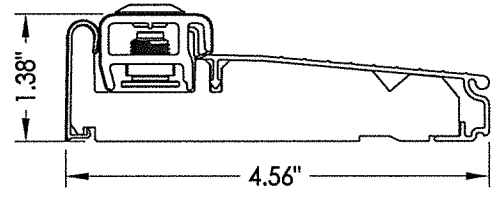
Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

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Phone No.: 813.659.9197

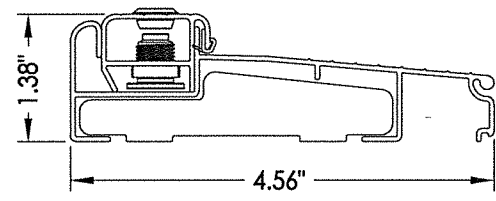
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852



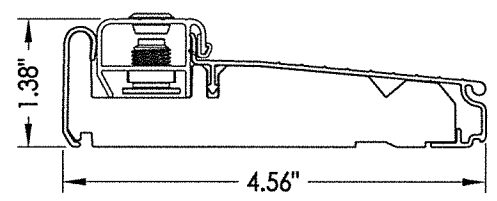
1 INSWING ADJUSTABLE THRESHOLD
ZAIL4565
MAX. DESIGN PRESSURE = ±50 PSF



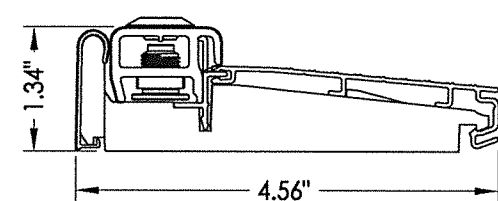
2 INSWING ADJUSTABLE THRESHOLD
ZAI4565FN
MAX. DESIGN PRESSURE = ±50 PSF



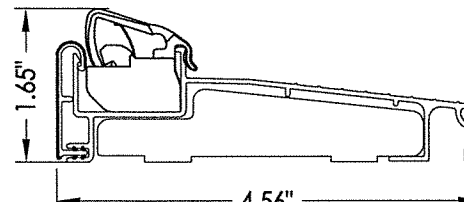
3 INSWING ADJUSTABLE THRESHOLD
ZAILAA4565
MAX. DESIGN PRESSURE = ±50 PSF



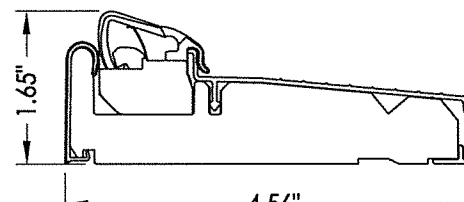
4 INSWING ADJUSTABLE THRESHOLD
ZAIAA4565FN
MAX. DESIGN PRESSURE = ±50 PSF



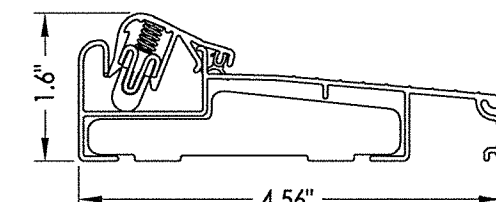
5 INSWING ADJUSTABLE THRESHOLD
ZAI4565RDS
MAX. DESIGN PRESSURE = ±50 PSF



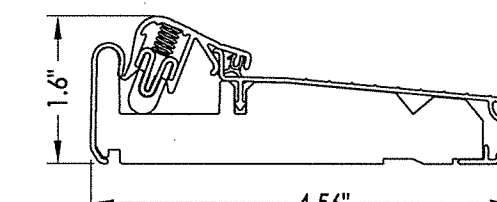
6 INSWING ARTICULATING THRESHOLD
ZACL4565



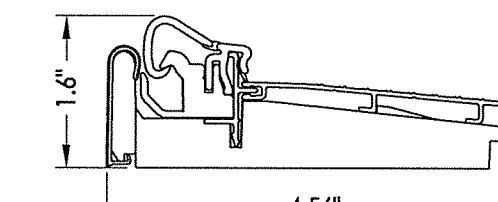
7 INSWING ARTICULATING THRESHOLD
ZAC4565FN
MAX. DESIGN PRESSURE = +45/-50 PSF



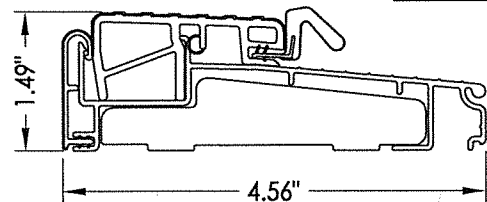
8 INSWING ARTICULATING THRESHOLD
ZACLAA4565



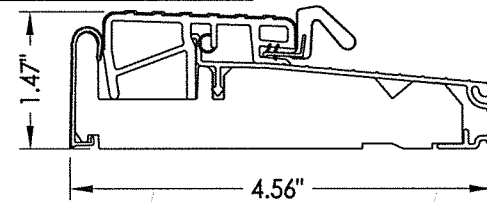
9 INSWING ARTICULATING THRESHOLD
ZACAA4565FN
MAX. DESIGN PRESSURE = +45/-50 PSF



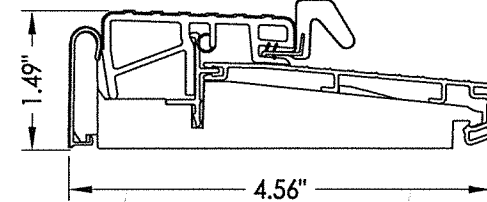
10 INSWING ARTICULATING THRESHOLD
ZAC4565RDS
MAX. DESIGN PRESSURE = ±45 PSF



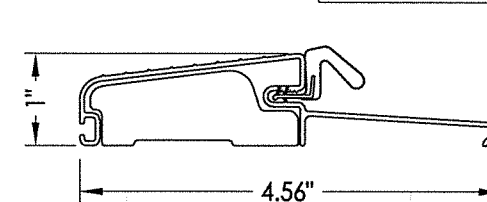
11 OUTSWING THRESHOLD
ZOBL4565



12 OUTSWING THRESHOLD
ZOB4565FN



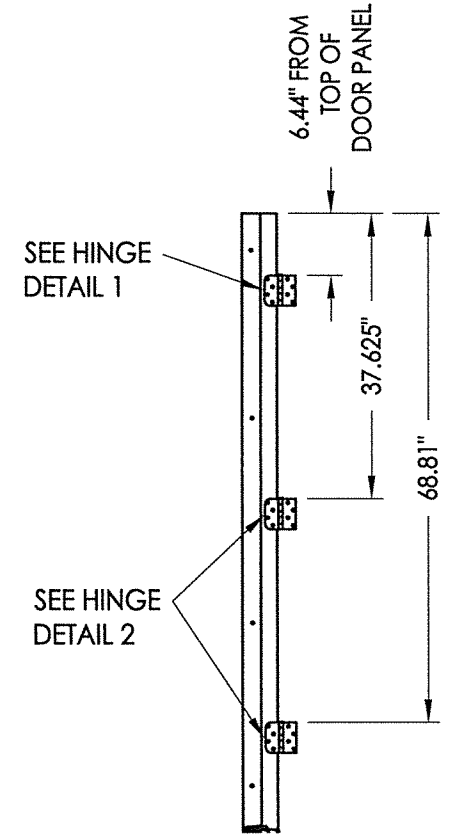
13 OUTSWING THRESHOLD
ZOB4565RDS
MAX. DESIGN PRESSURE = ±55 PSF



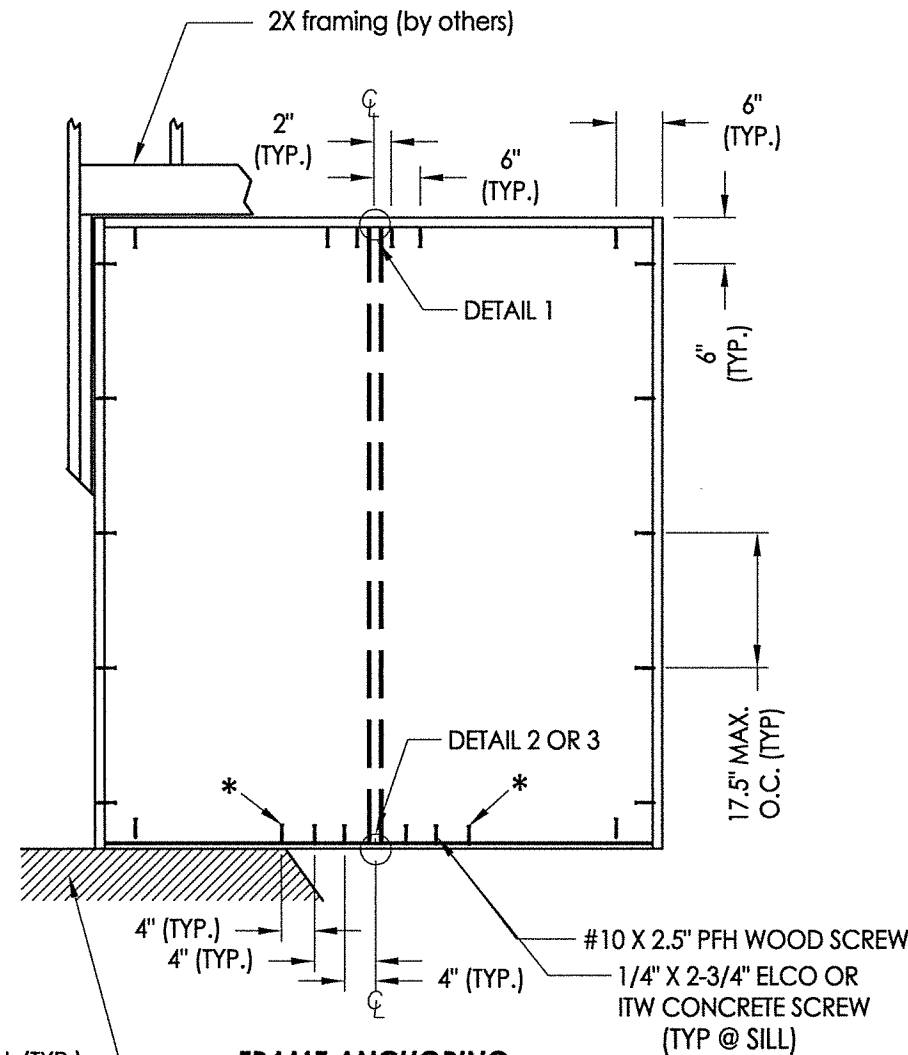
14 OUTSWING THRESHOLD
FOB4566

PRODUCT: ENDURA		PART OR ASSEMBLY: VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
4	11/11/21	LFS	UPDATE TO 2018 IBC/IRC CODE
3	10/08/18	LFS	REVISE FOR NEW TESTING
2	10/27/16	LFS	ADDED THRESHOLDS
1	5/07/15	LFS	ADD NEW ASTRAGAL PIN CAPTURE
DATE: 12/4/13			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4415			
SHEET 6 OF 7			

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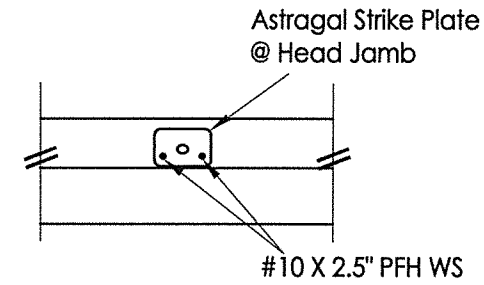
HINGE JAMB



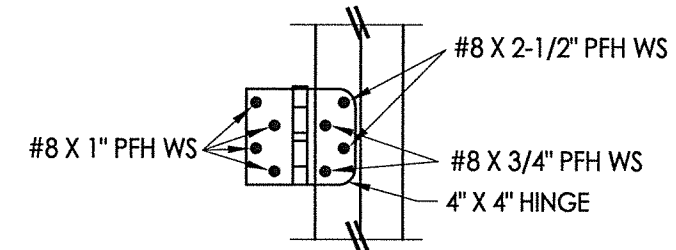
FRAME ANCHORING
XX

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

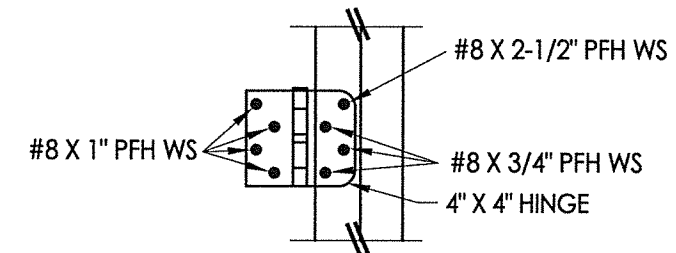
* NOTE: Additional anchors are required for D.P. > 50 PSF.



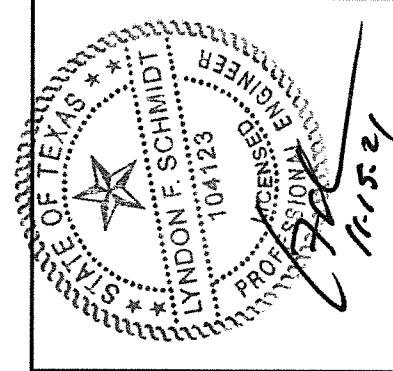
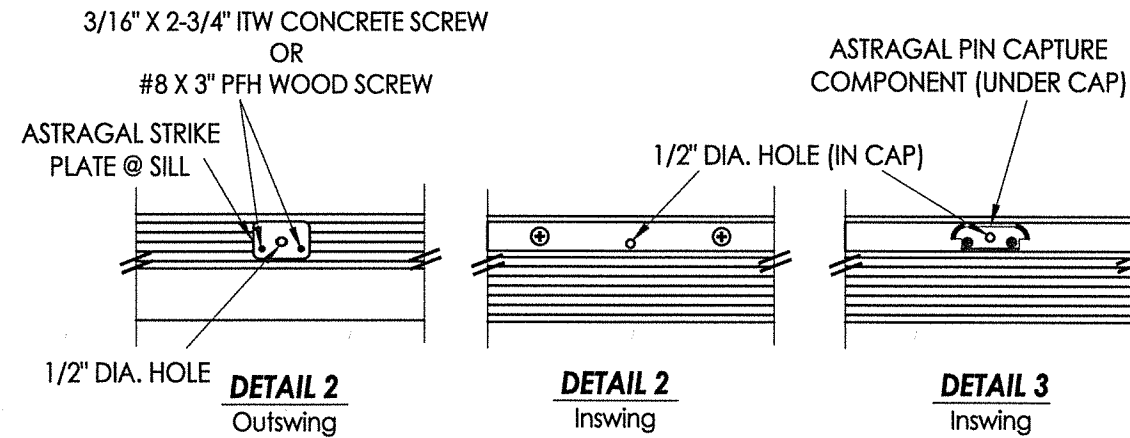
DETAIL 1



HINGE DETAIL 1



HINGE DETAIL 2



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: FRAME ANCHORING

NO.	DATE	REVISIONS
4	11/11/21	UPDATE TO 2018 IBC/IRC CODE
3	10/08/18	REVISE FOR NEW TESTING
2	10/27/16	ADDED THRESHOLDS
1	5/07/15	ADD NEW ASTRAGAL PIN CAPTURE

DATE: 12/4/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4415
SHEET 7 OF 7

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"
	1/4"	1-3/4"	1-1/2"	4"
DeWALT ULTRACON®	1/4"	1-3/4"	1"	4"