

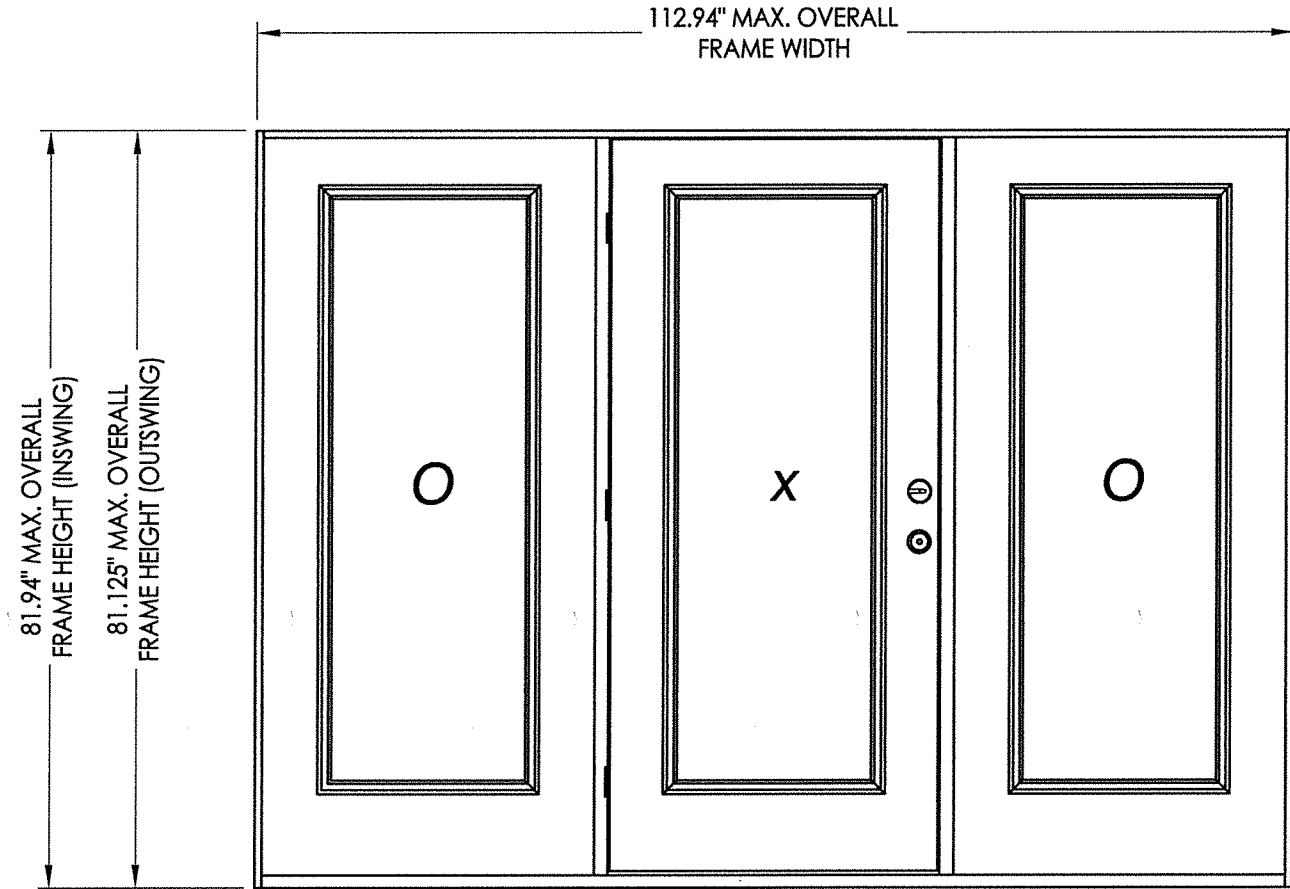
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

**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

# 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 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	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.	MODEL	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
OXO	IN SWING	+35.0	-40.0
	OUT SWING	+40.0	-40.0

PRODUCT: ENDURA

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

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

DATE: 8/08/12

SCALE: N.T.S.

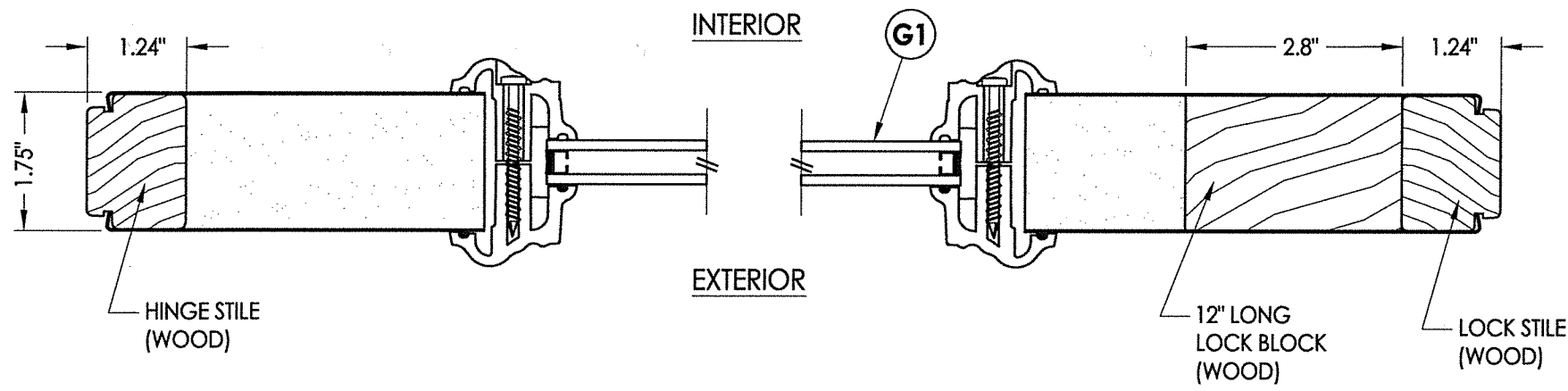
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CHK. BY: LFS

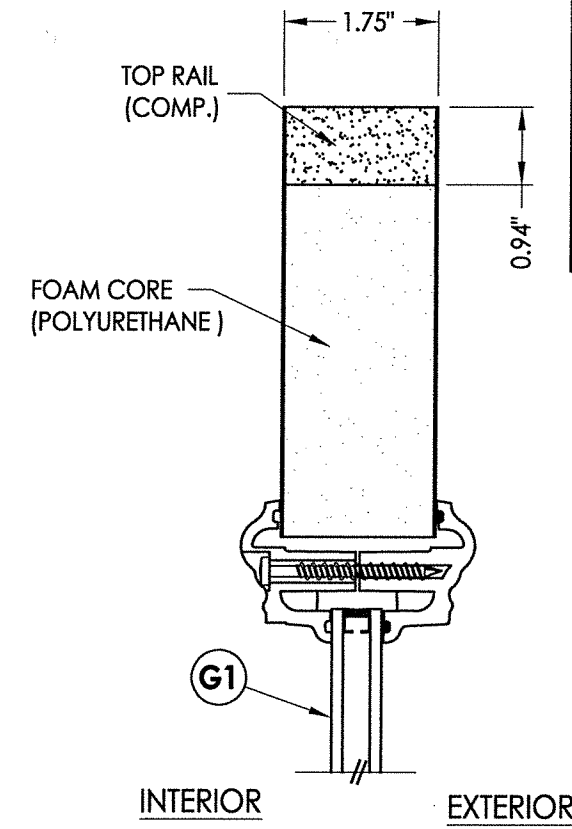
DRAWING NO.: TX-4210

SHEET 1 OF 7

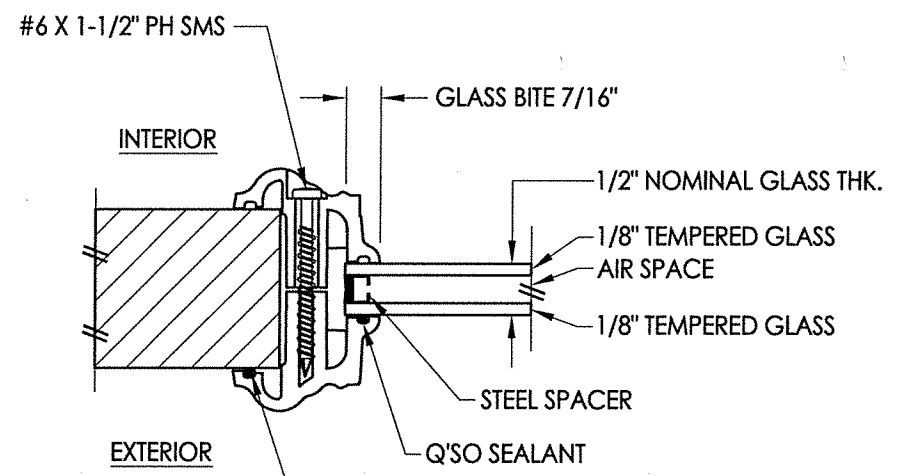
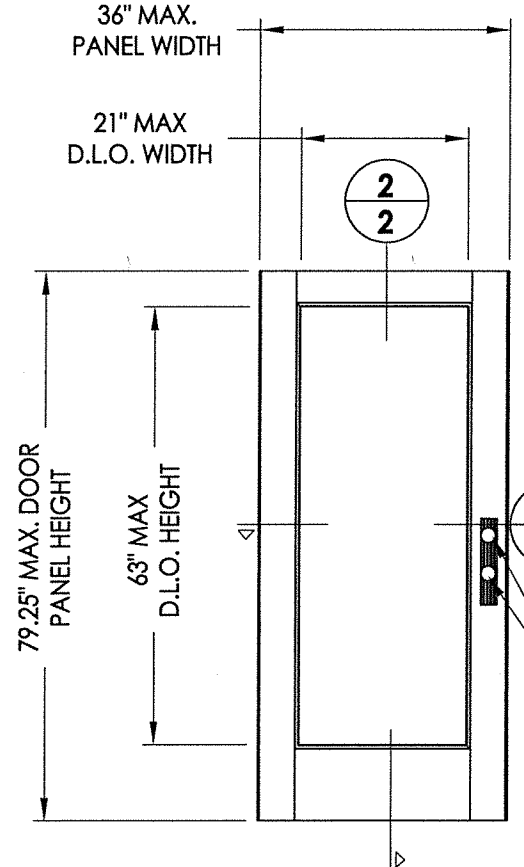
R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-586 Therma-Tru Steel\Drawings\REV 2018 IBC\TX-4210-11.dwg, 2.3



1 HORIZONTAL CROSS SECTION



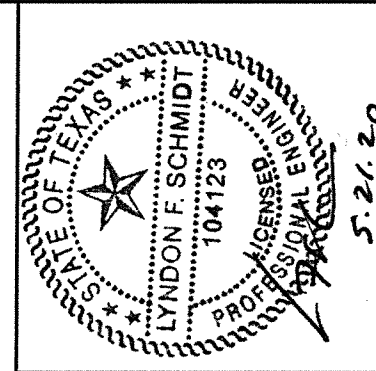
2 VERTICAL CROSS SECTION



G1 GLAZING DETAIL  
Lip Lite Insert Glazing

THERMA-TRU  
Insert glazed  
(steel)

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	BY	REVISIONS
3	12/19/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
2	9/05/18	LFS	ADD ADDITIONAL THRESHOLDS
1	1/06/14	LFS	ADDED ARTICULATING SILL

DATE: 8/08/12

SCALE: N.T.S.

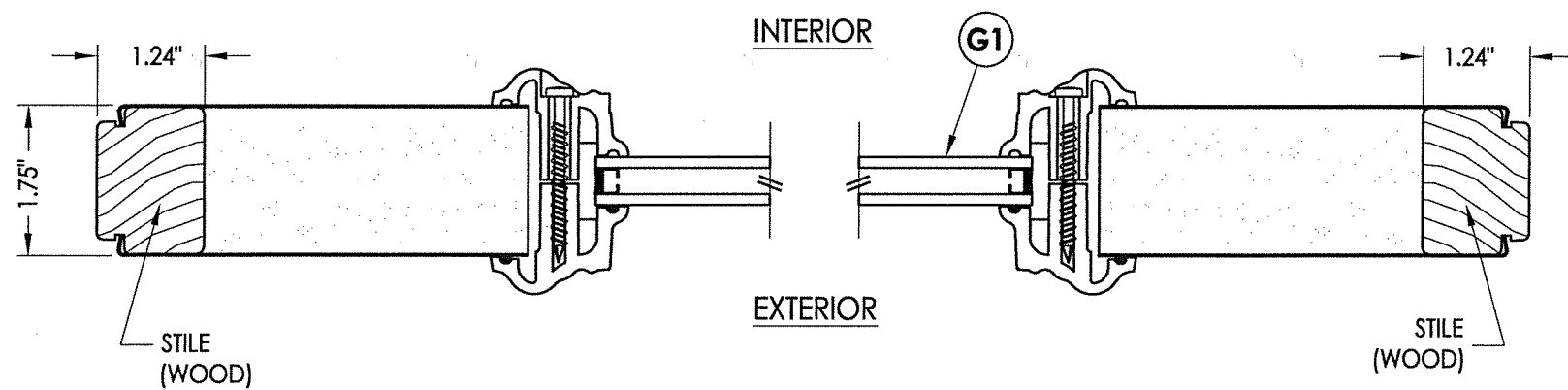
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CHK. BY: LFS

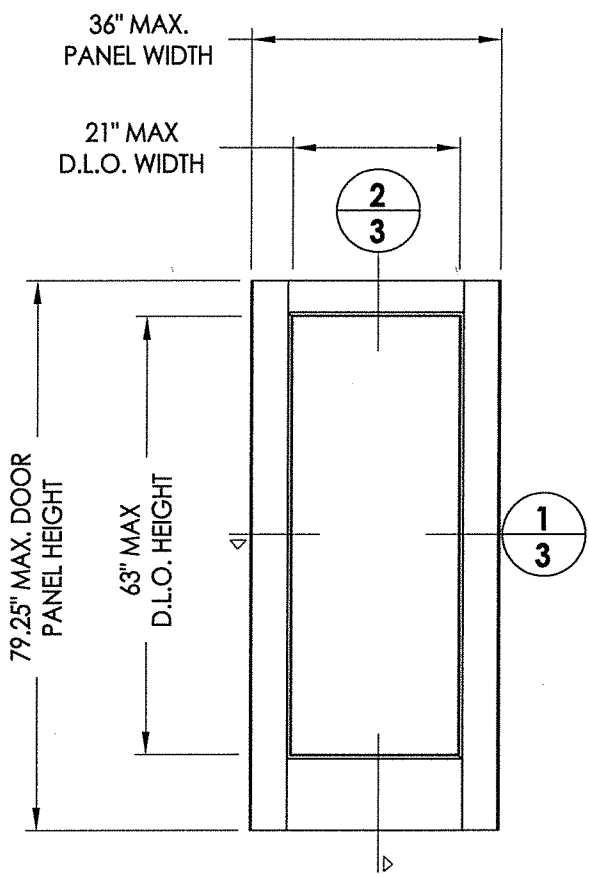
DRAWING NO.: TX-4210

SHEET 2 OF 7

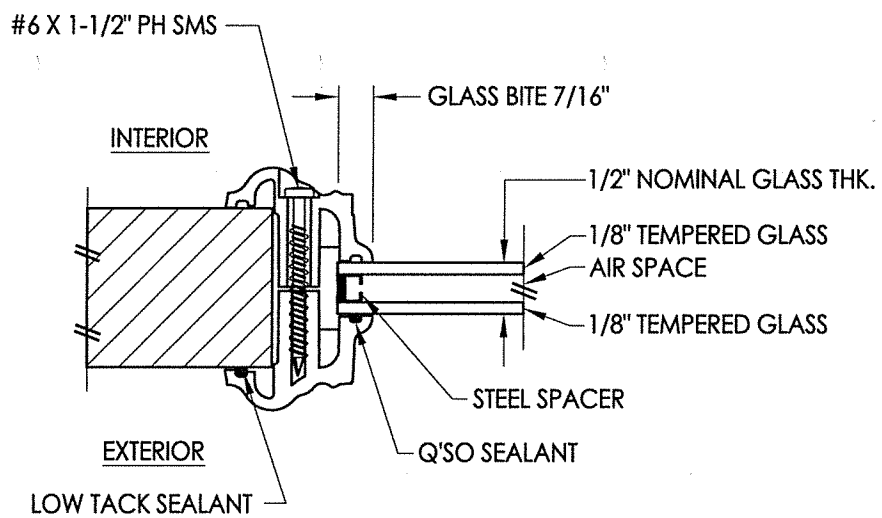
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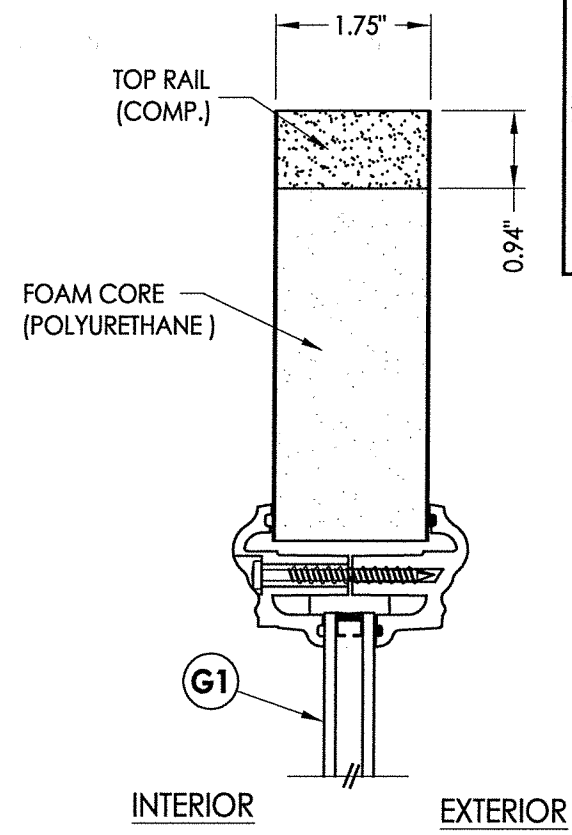
**1**  
**3** HORIZONTAL CROSS SECTION



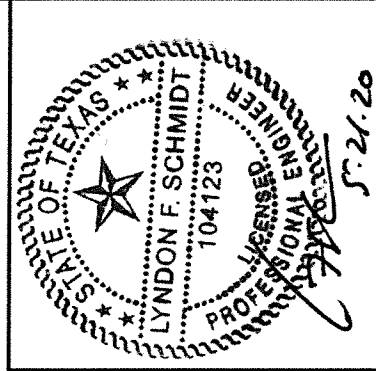
THERMA-TRU  
Insert glazed  
(steel)



**G1** GLAZING DETAIL  
Lip Lite Insert Glazing



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



Documents Prepared By: Lyndon F. Schmidt, P.E.  
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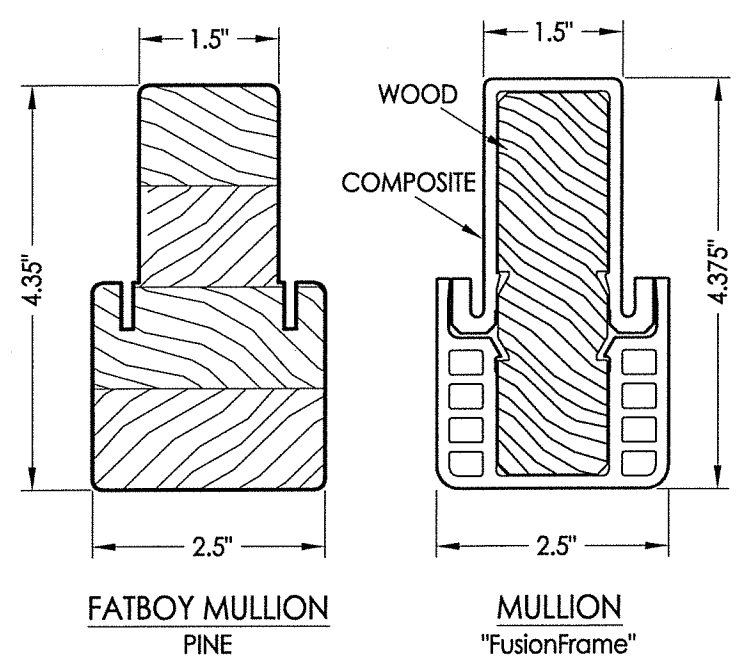
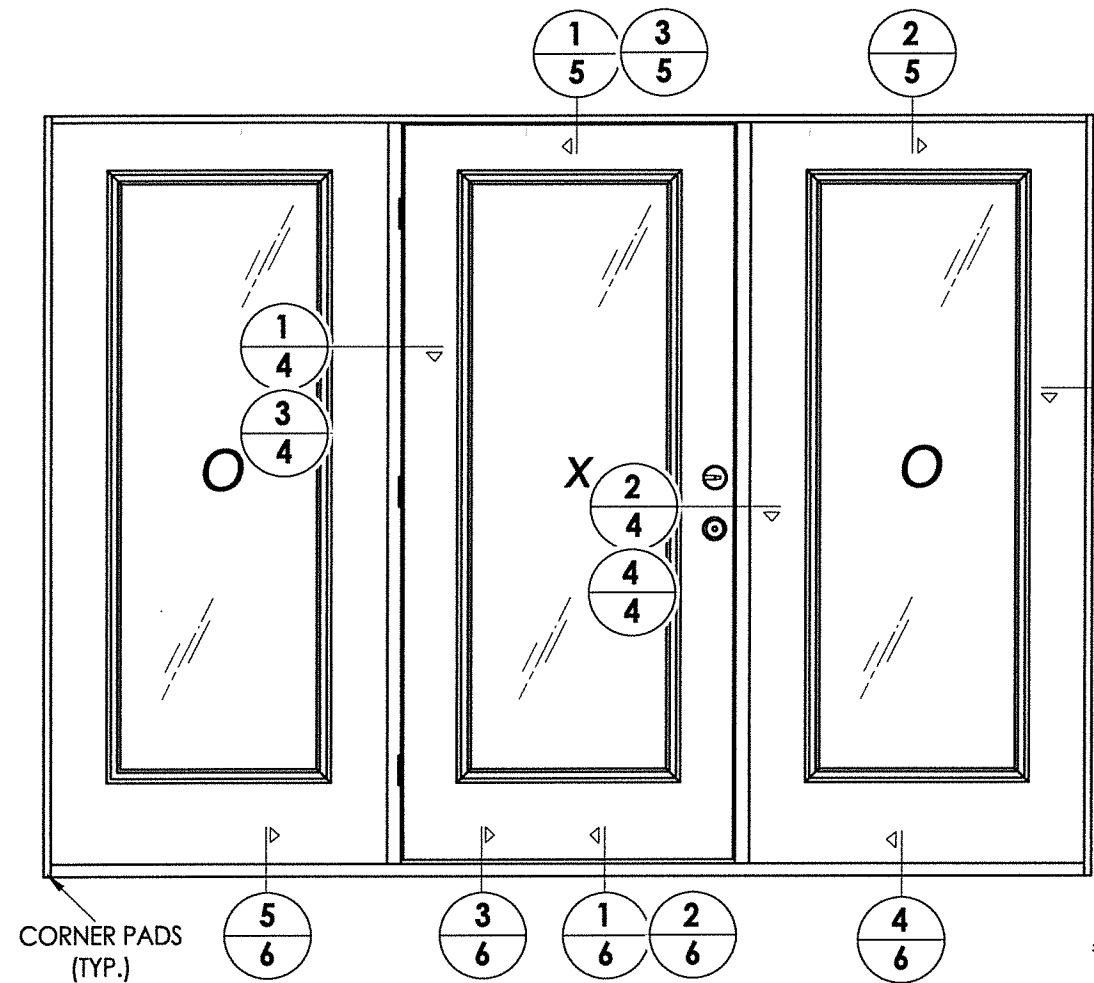
**RW** BUILDING CONSULTANTS, INC.  
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Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

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

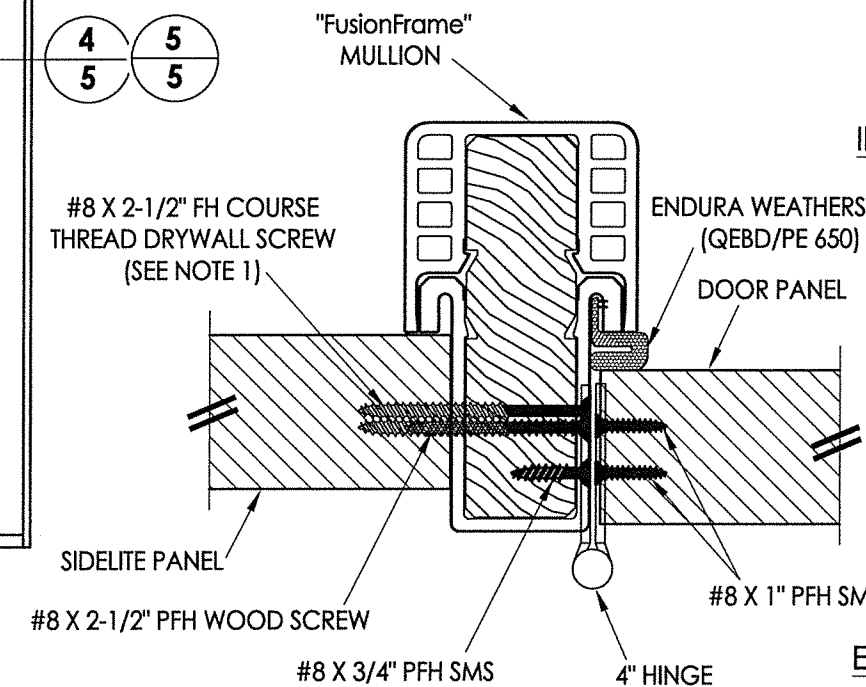
NO.	DATE	REVISIONS
3	12/19/19	ADD "FusionFrame" OPTION & LFS
2	9/05/18	UPDATE TO 2018 IBC/IRC CODE
1	1/06/14	ADD ADDITIONAL THRESHOLDS
		ADDED ARTICULATING SILL
		BY

DATE: 8/08/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4210  
SHEET 3 OF 7

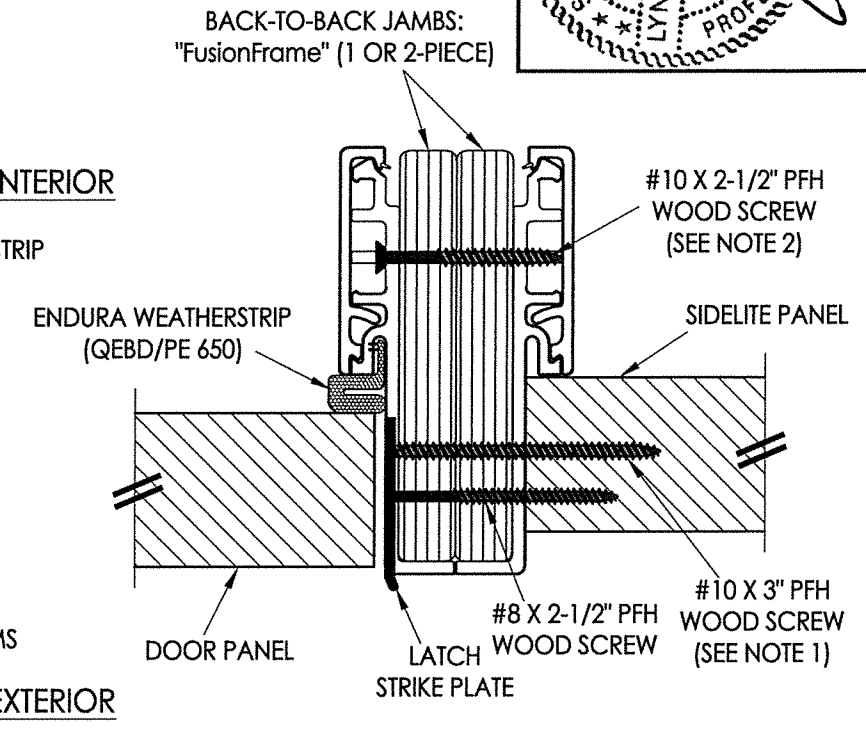
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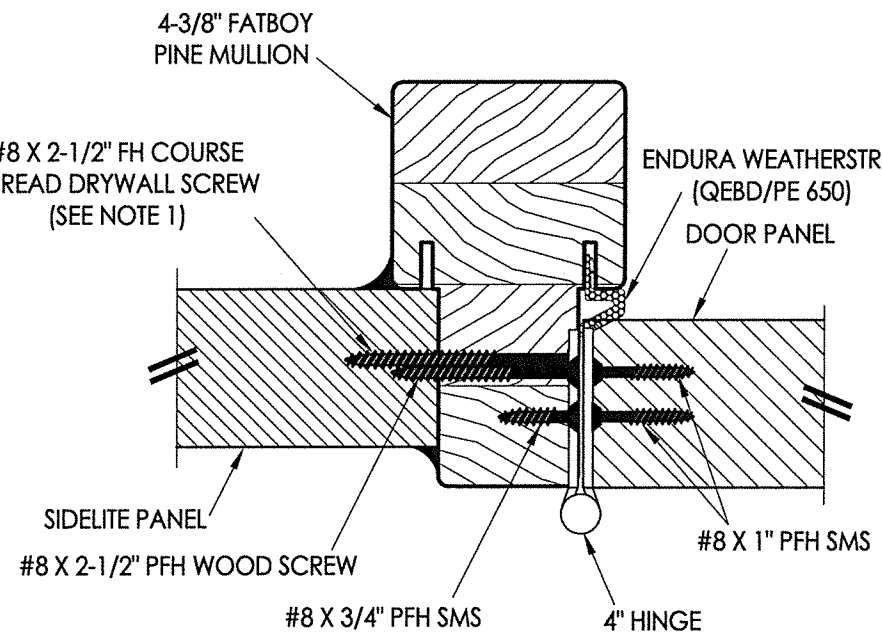
**NOTES:**  
 1. Spacing for sidelite screws: 6.5", 38.5" and 69" from head to sill (3 total).  
 2. Spacing for mullion screws: 6" from each end plus 3 more equally spaced (5 total).



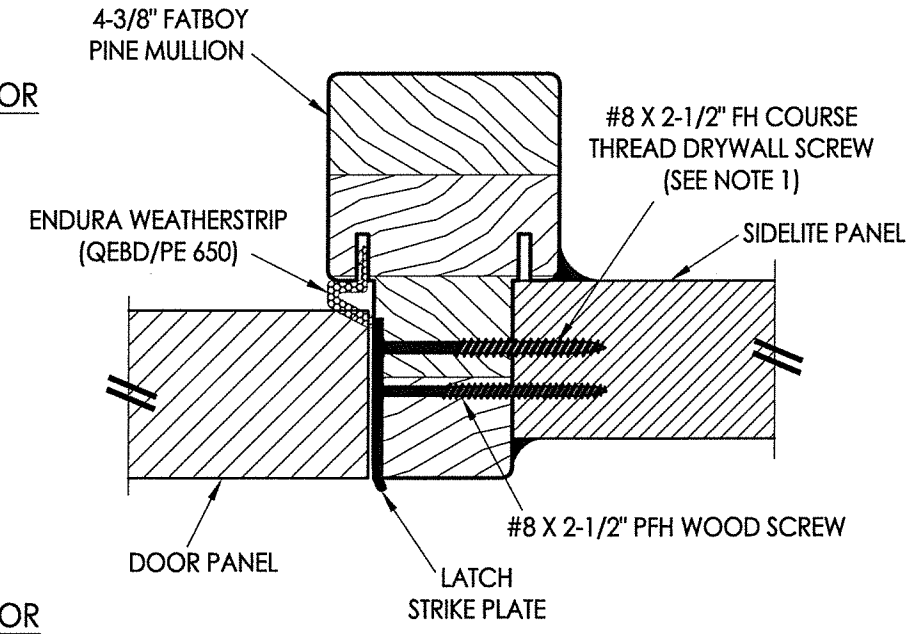
**3 HORIZONTAL CROSS SECTION**  
 4 Outswing shown - Inswing also approved



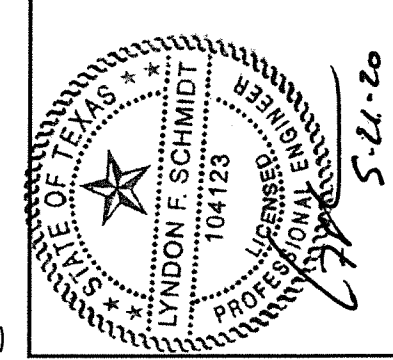
**4 HORIZONTAL CROSS SECTION**  
 4 Outswing shown - Inswing also approved



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



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



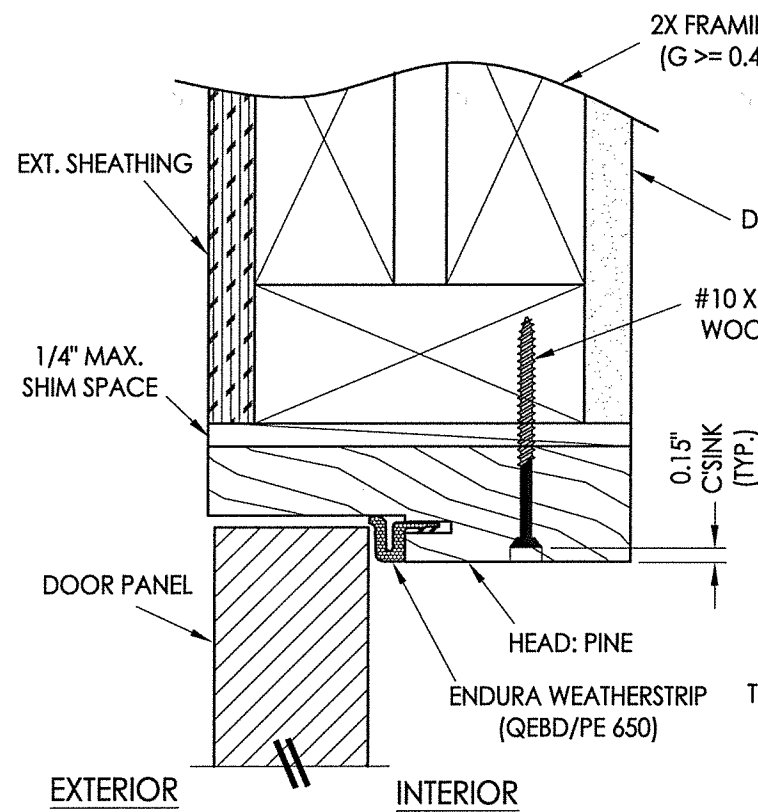
Documents Prepared By: Lyndon F. Schmidt, P.E.  
 TEXAS P.E. #104123

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 Phone No.: 813.659.9197

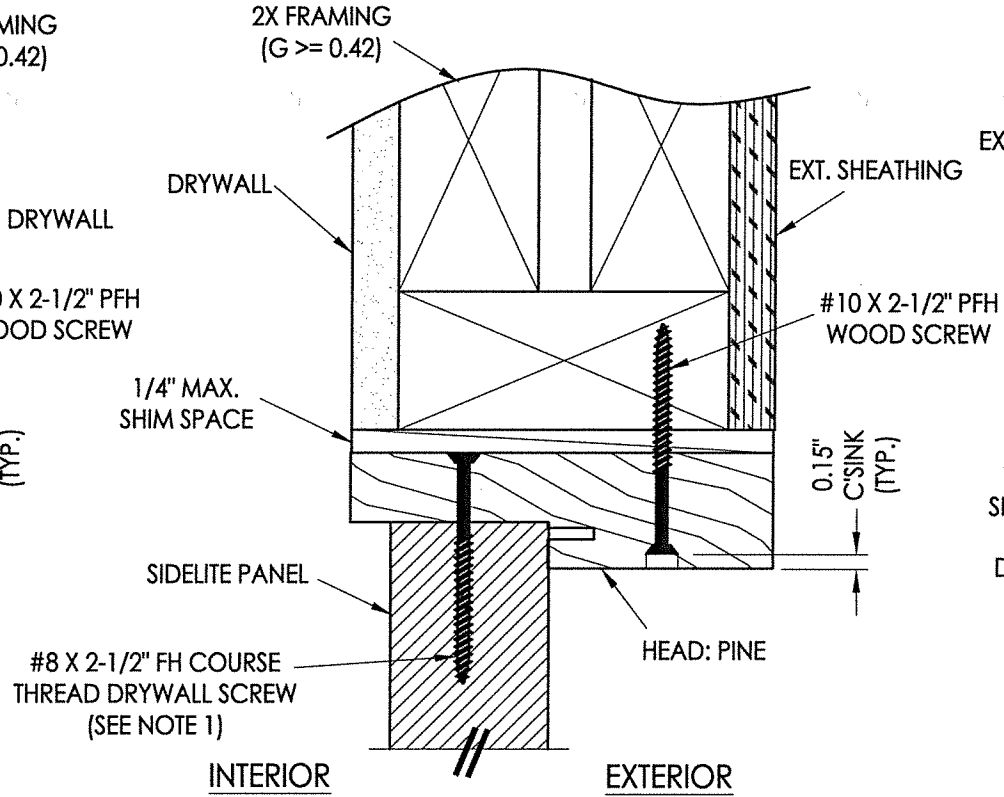
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
 CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	HORIZONTAL CROSS SECTIONS	
NO.	DATE	BY
3	12/19/19	LFS
2	9/05/18	LFS
1	1/06/14	LFS
REVISIONS		
DATE:	8/08/12	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4210	
SHEET	4	OF 7

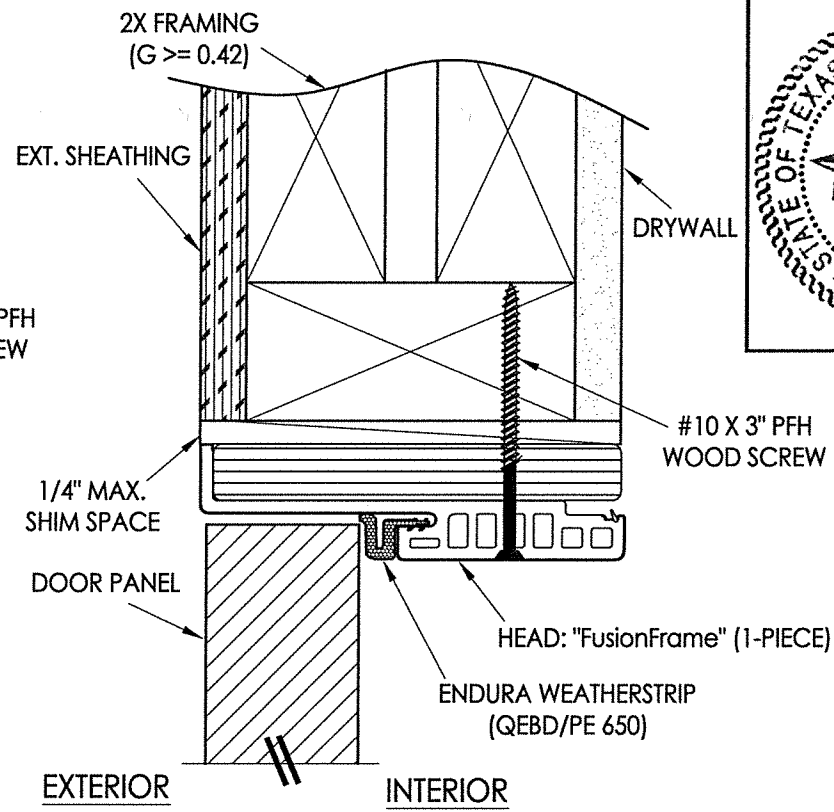
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**1 VERTICAL CROSS SECTION**  
**5** Outswing shown - inswing also approved

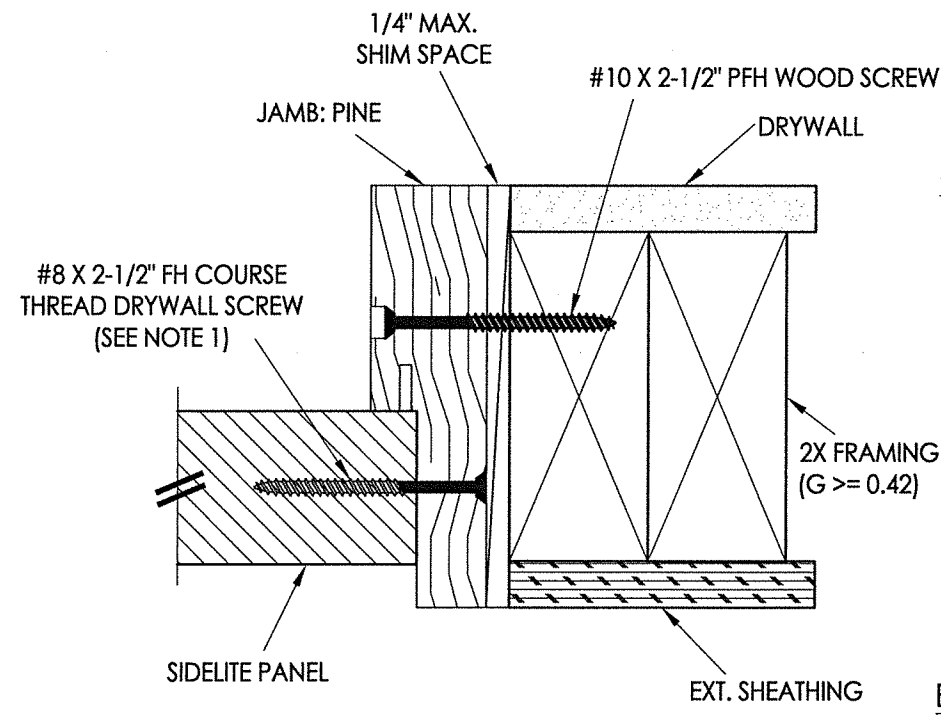
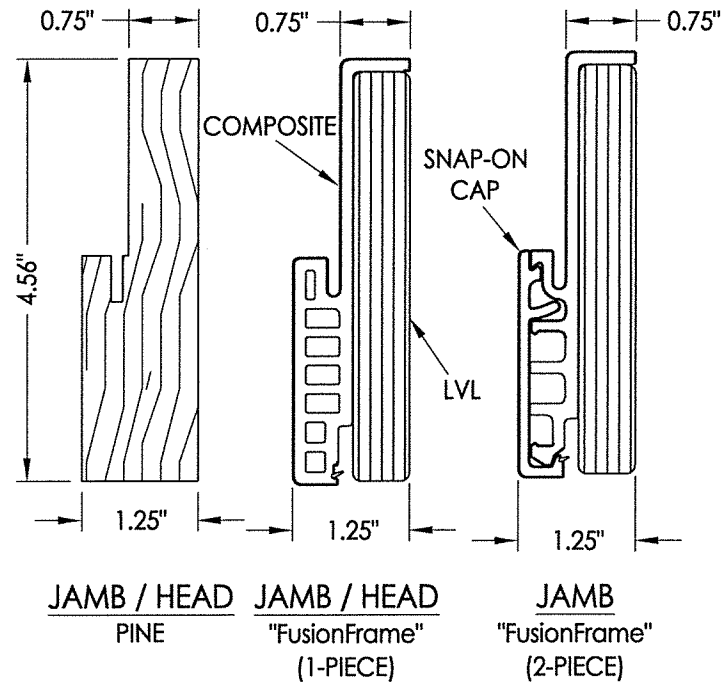


**2 VERTICAL CROSS SECTION**  
**5** Inswing shown - Outswing also approved

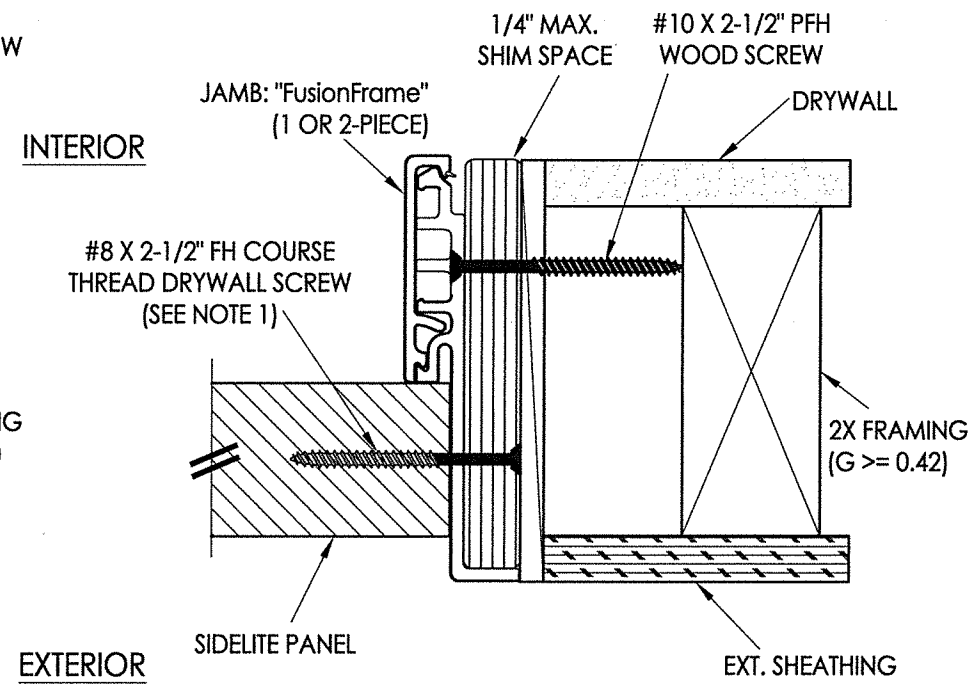


**3 VERTICAL CROSS SECTION**  
**5** Outswing shown - inswing also approved

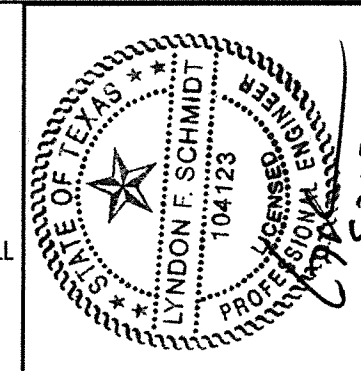
**NOTE:**  
 1. Spacing for sidelite screws: 6" from each end (2 total).



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



**5 HORIZONTAL CROSS SECTION**  
**5** Outswing shown - Inswing also approved



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

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 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	REVISIONS
3	12/19/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
2	9/05/18	ADD ADDITIONAL THRESHOLDS
1	1/06/14	ADDED ARTICULATING SILL
		BY

DATE: 8/08/12

SCALE: N.T.S.

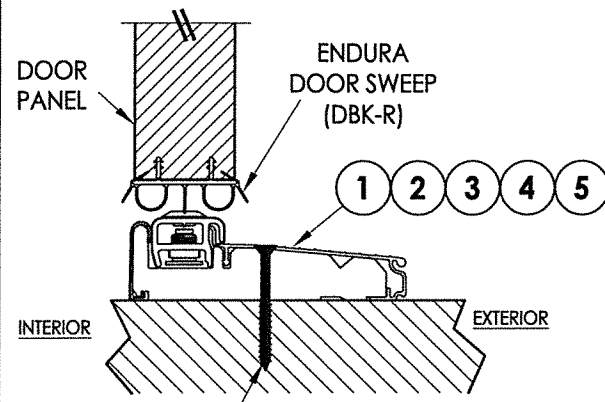
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4210

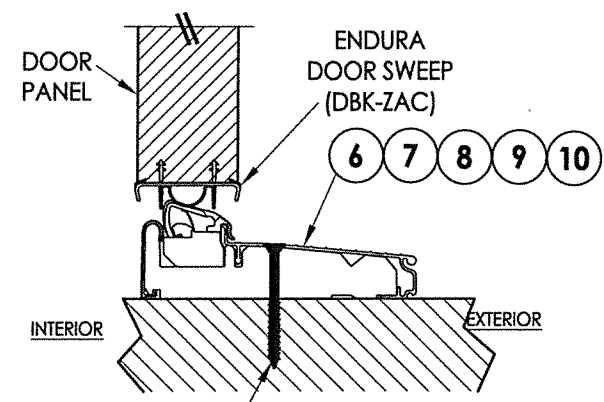
SHEET 5 OF 7

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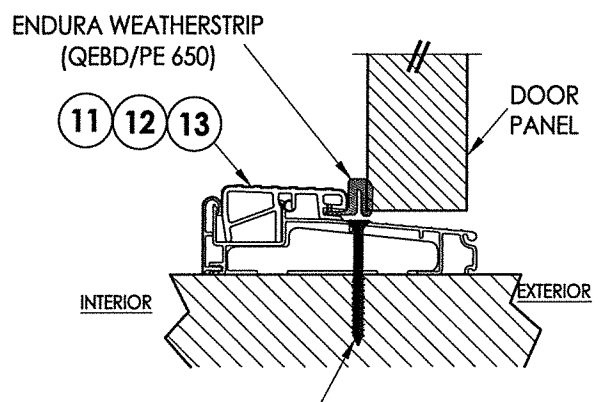
#10 X 2.5" PFH WOOD SCREW OR 1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



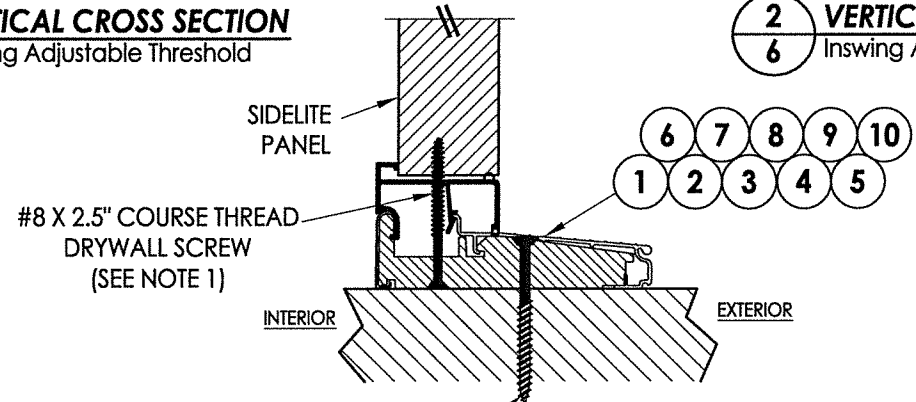
#10 X 2.5" PFH WOOD SCREW OR 1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



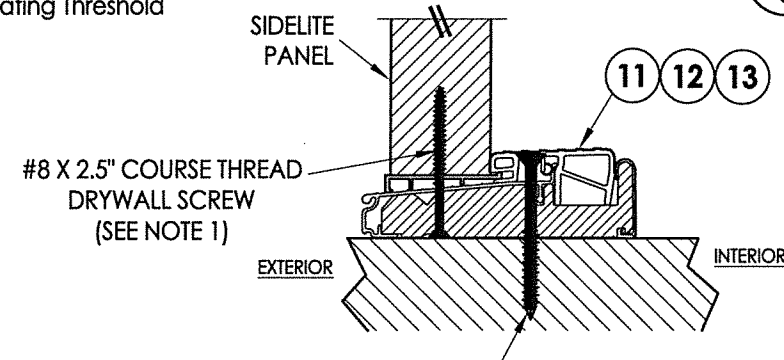
#10 X 2.5" PFH WOOD SCREW OR 1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



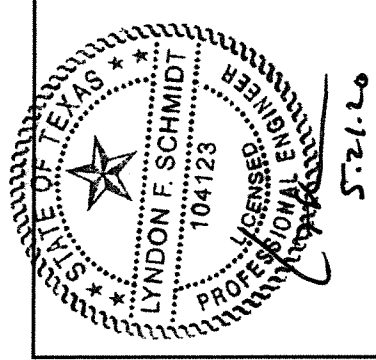
#10 X 2.5" PFH WOOD SCREW OR 1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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



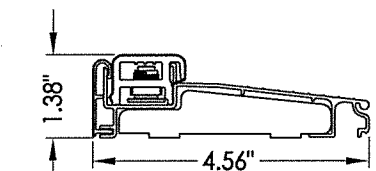
#10 X 2.5" PFH WOOD SCREW OR 1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

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

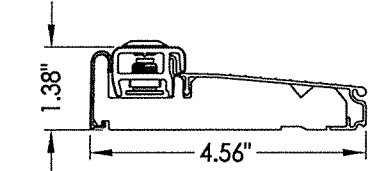


NOTE:  
1. Spacing for sidelite screws: 6" from each end (2 total).

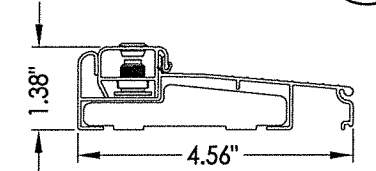
Documents Prepared By: Lyndon F. Schmidt, P.E. TEXAS P.E. #104123  
R.W. BUILDING CONSULTANTS, INC. P.O. Box 230 Valrico FL 33595 Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS CERTIFICATE OF REGISTRATION # F-11852



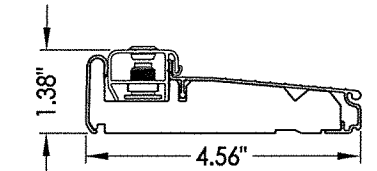
**1** INSWING ADJUSTABLE THRESHOLD  
ZAIL4565



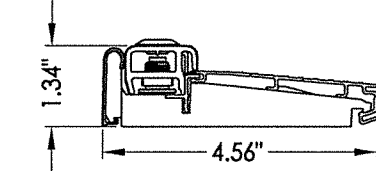
**2** INSWING ADJUSTABLE THRESHOLD  
ZAI4565FN



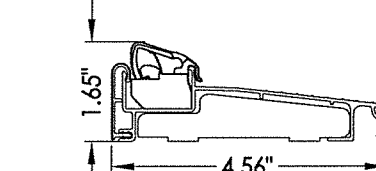
**3** INSWING ADJUSTABLE THRESHOLD  
ZAILAA4565



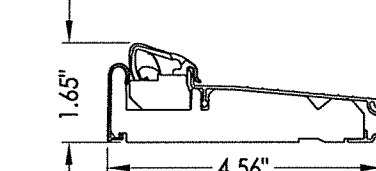
**4** INSWING ADJUSTABLE THRESHOLD  
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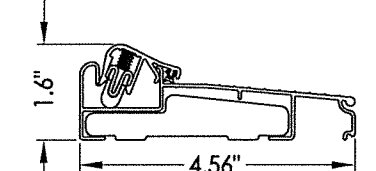
**5** INSWING ADJUSTABLE THRESHOLD  
ZAI4565RDS



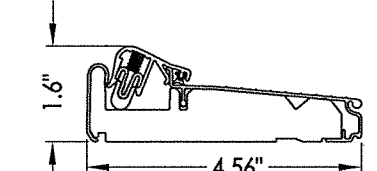
**6** INSWING ARTICULATING THRESHOLD  
ZACL4565



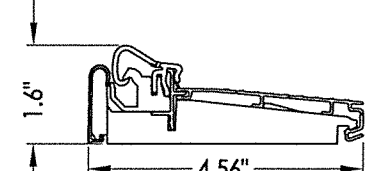
**7** INSWING ARTICULATING THRESHOLD  
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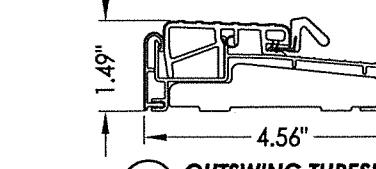
**8** INSWING ARTICULATING THRESHOLD  
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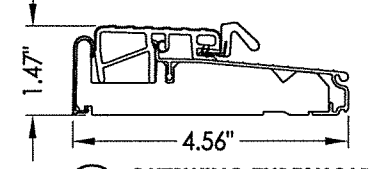
**9** INSWING ARTICULATING THRESHOLD  
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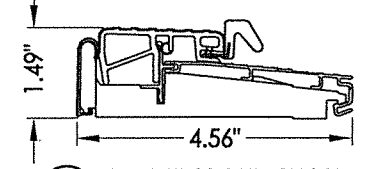
**10** INSWING ARTICULATING THRESHOLD  
ZAC4565RDS



**11** OUTSWING THRESHOLD  
ZOBL4565



**12** OUTSWING THRESHOLD  
ZOB4565FN

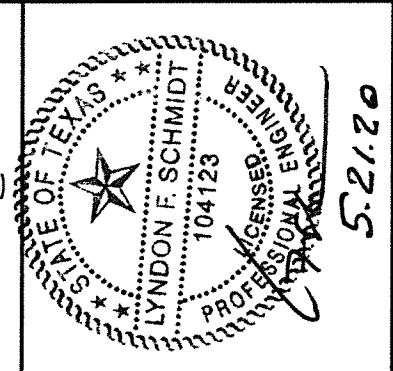
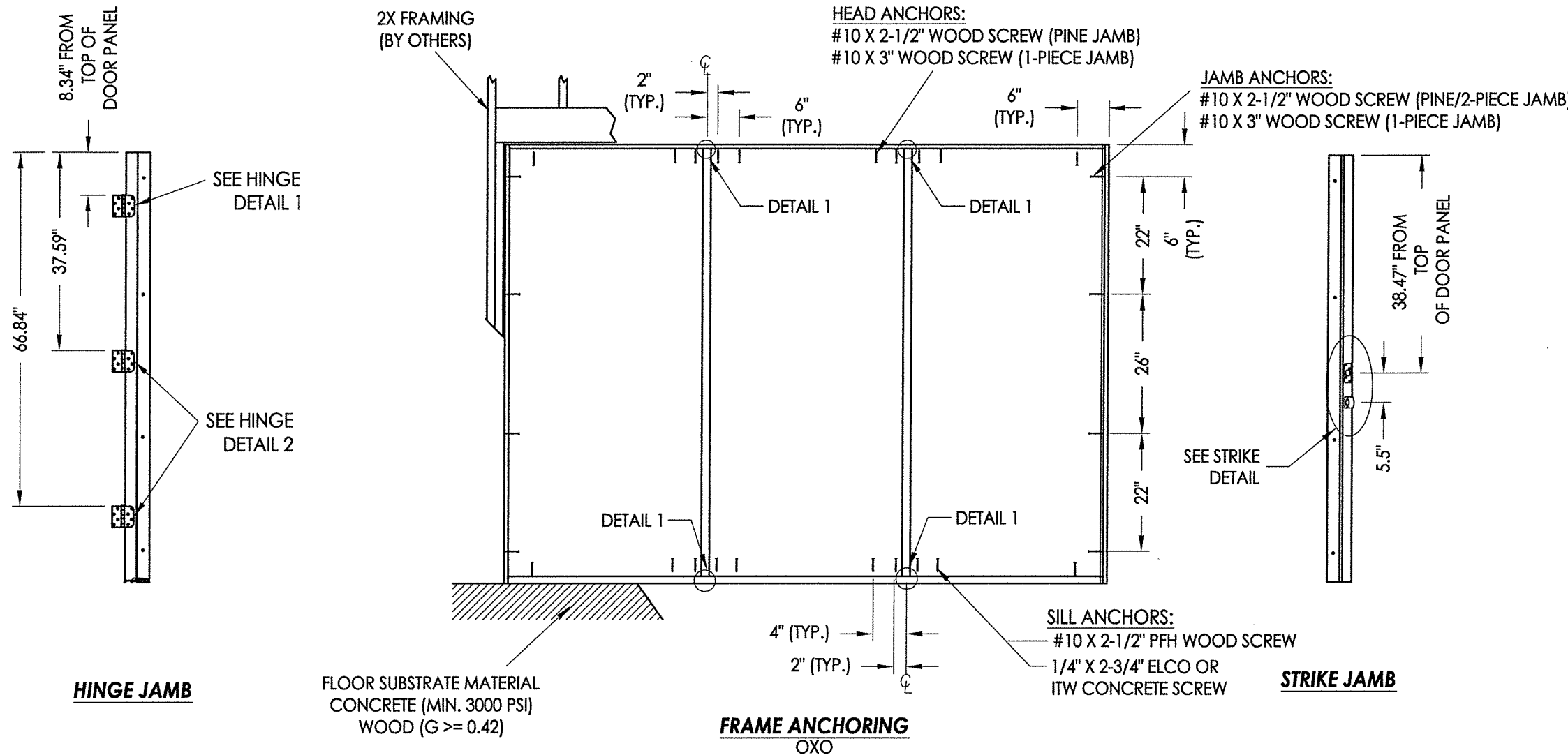


**13** OUTSWING THRESHOLD  
ZOB4565RDS

PRODUCT: ENDURA		PART OR ASSEMBLY: VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
3	12/19/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
2	9/05/18	LFS	ADD ADDITIONAL THRESHOLDS
1	1/06/14	LFS	ADD ARTICULATING SILL
DATE: 8/08/12		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: TX-4210		SHEET 6 OF 7	

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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: FRAME ANCHORING

NO.	DATE	REVISIONS	BY
3	12/19/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE	LFS
2	9/05/18	ADD ADDITIONAL THRESHOLDS	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-4210

SHEET 7 OF 7

**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.

**INTEGRAL MULLION NOTES:**

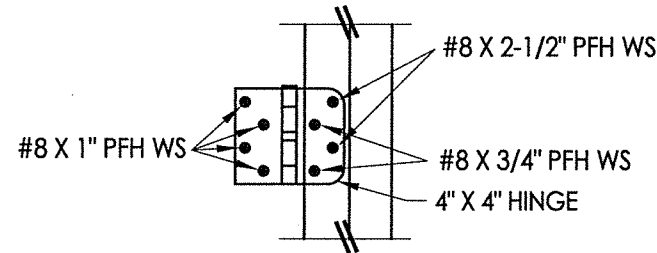
THE FATBOY PINE MULLION, "FusionFrame" MULLION, OR THE "FusionFrame" BACK-TO-BACK JAMB (1-PIECE OR 2-PIECE) MAY ALL BE USED AS THE INTEGRAL MULLION.

**CONCRETE ANCHOR NOTES:**

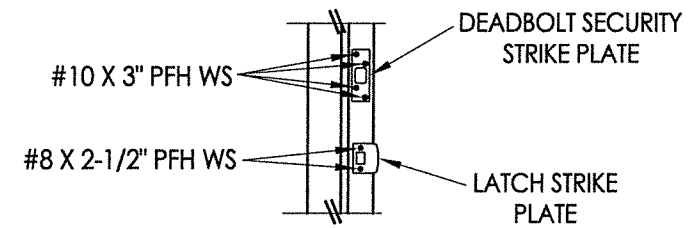
- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON 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®	1/4"	1-3/4"	2-1/2"	3"
ELCO ULTRACON®	1/4"	1-3/4"	1"	3"

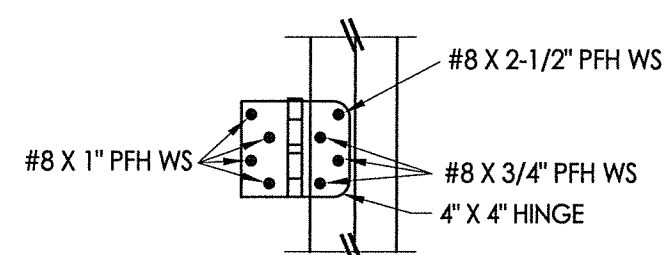
**DETAIL 1**  
Integral mullion attachment



**HINGE DETAIL 1**



**STRIKE PLATE DETAIL**



**HINGE DETAIL 2**