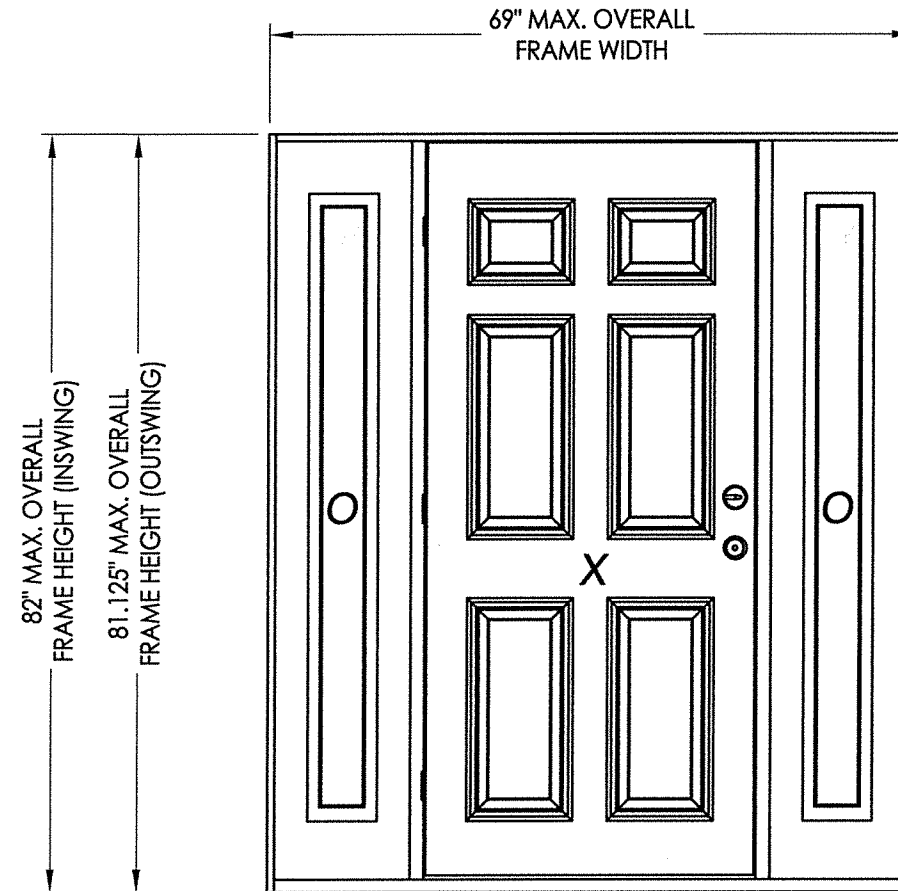


Opaque Steel Single Door w/ Sidelites

CONTINUOUS HEAD & SILL FRAME SYSTEM
INSWING / OUTSWING
"NON-IMPACT"



EVALUATED FOR USE IN THE STATE OF TEXAS

The Opaque 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:

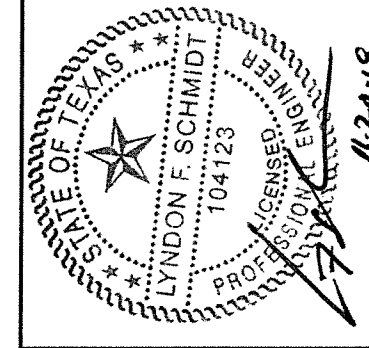
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. When used in areas requiring wind-borne debris protection this product is required to be protected with an impact resistant covering that complies with Section 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
3	Slidelite panel details
4	Horizontal cross sections
5	Vertical cross sections
6	Vertical cross sections
7	Frame anchoring

MODEL	DESIGN PRESSURE (PSF) w/ PINE FRAME & FATBOY PINE MULLIONS		DESIGN PRESSURE (PSF) w/ "FusionFrame" FRAME & MULLIONS	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
INSWING	+60.0	-65.0	+50.0	-50.0
OUTSWING	+55.0	-55.0	+50.0	-50.0

SEE SHEET 6 FOR THRESHOLD DESIGN PRESSURE LIMITATIONS

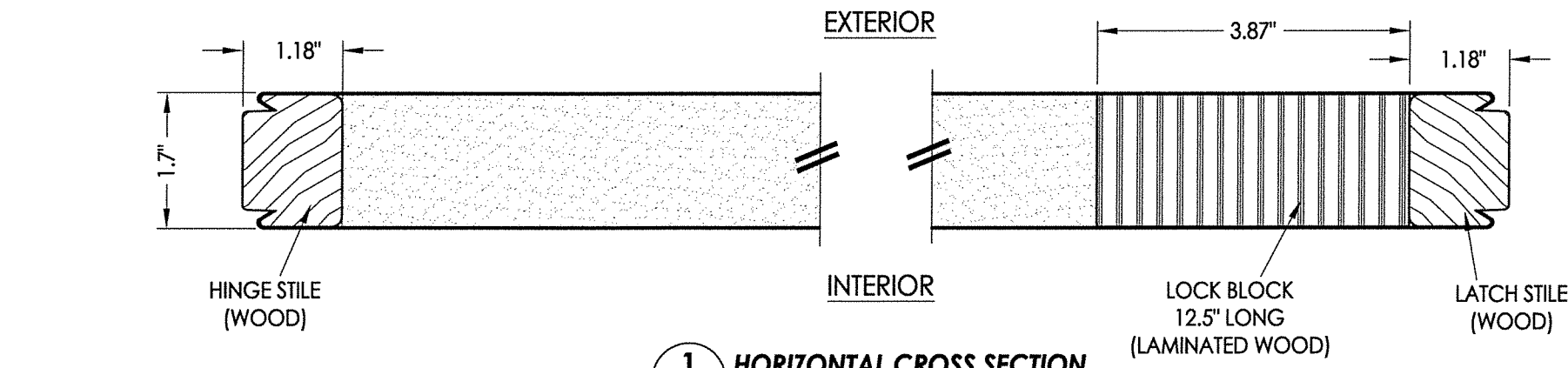


Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

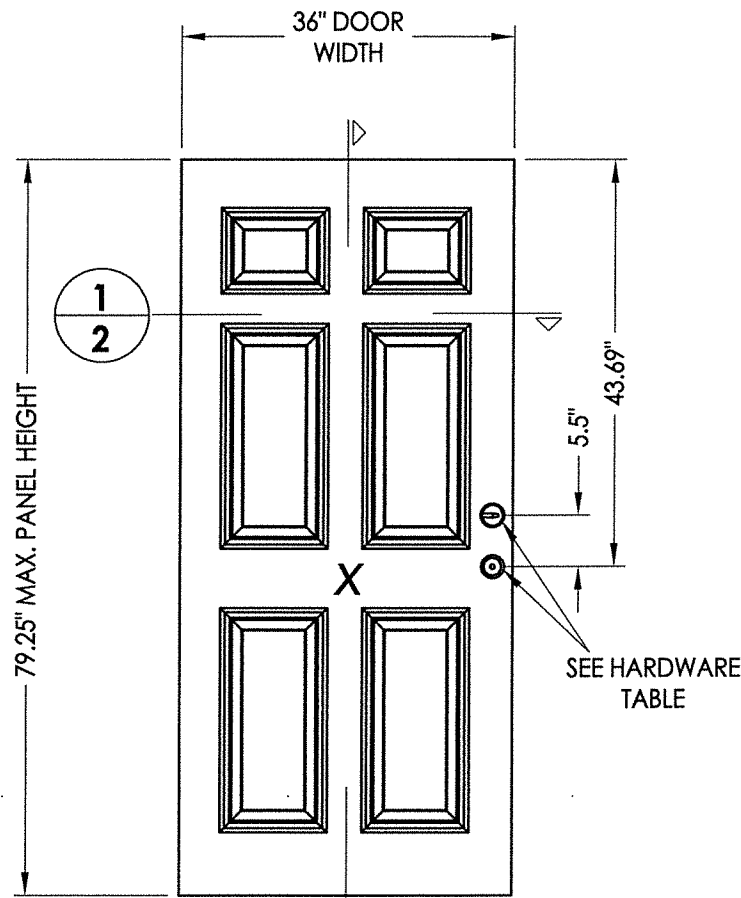
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA		
PART OR ASSEMBLY:	TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES		
NO.	DATE	BY	REVISIONS
1	11/20/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
DATE: 12/11/17			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4771			
SHEET 1 OF 7			

R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-958 Opaque Therma-Tru STL door OXO (LK, DB)\C - Drawings\TX-4771.72_recover.dwg, 2.3



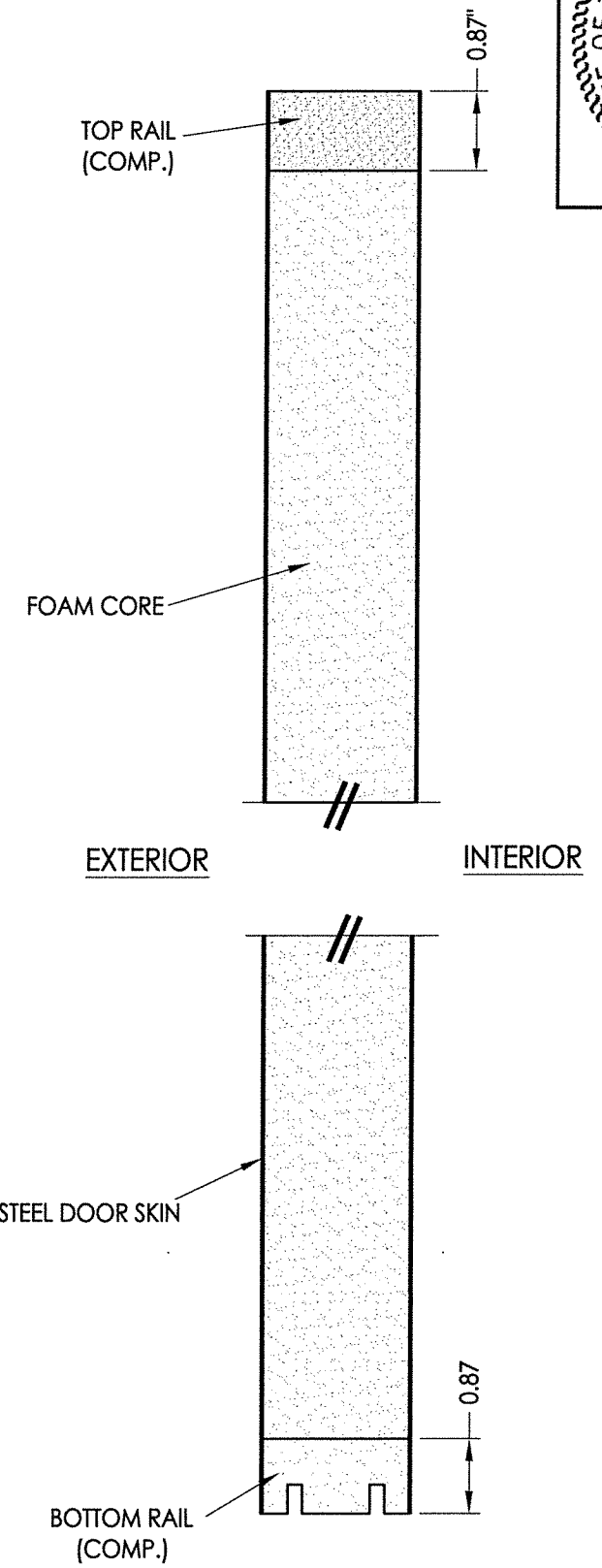
1
2 HORIZONTAL CROSS SECTION



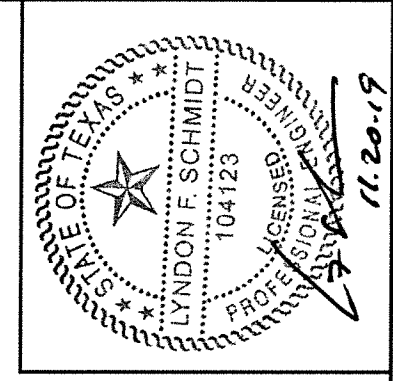
40 DOOR PANEL
Therma-Tru Steel (Wood Edge)

DOOR SKIN: STEEL 25 GA. (0.020\"/>

HARDWARE TABLE	
MANUFACTURER	MODEL
KWIKSET	KNOB: SIGNATURE SERIES DEADBOLT: SIGNATURE SERIES (980)



2
2 VERTICAL CROSS SECTION



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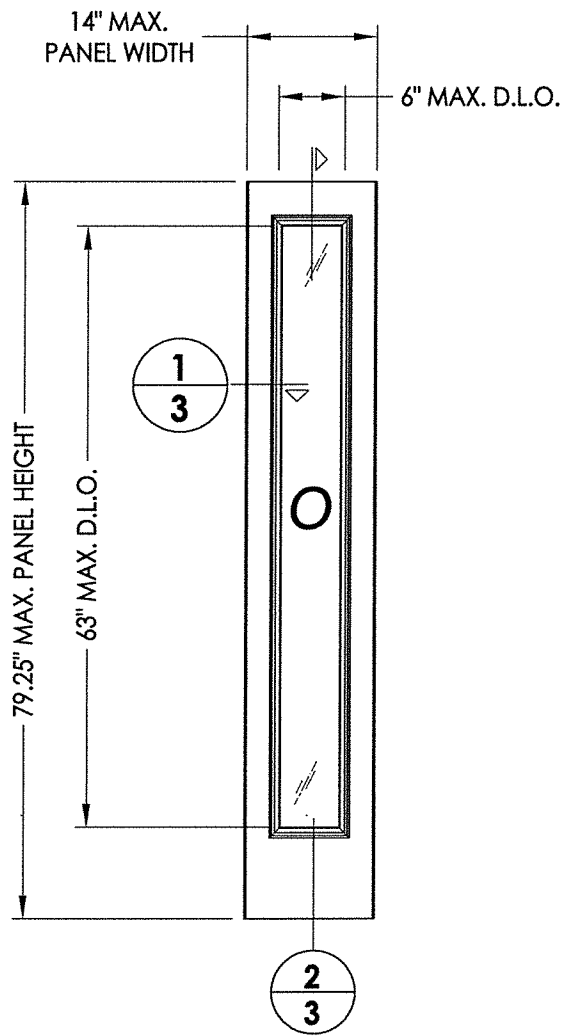
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Vairico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA
PART OR ASSEMBLY:	DOOR PANEL DETAILS

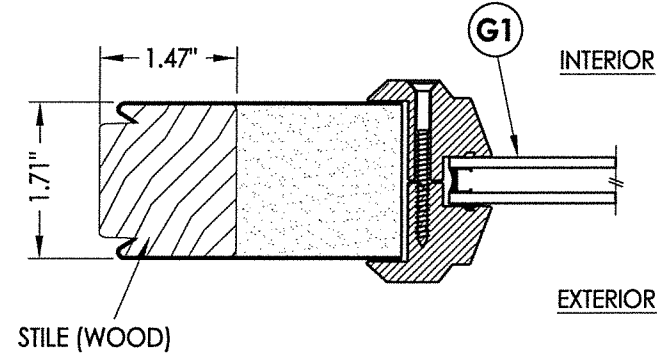
NO.	DATE	BY	REVISIONS
1	11/20/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE

DATE:	12/11/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4771
SHEET	2 OF 7

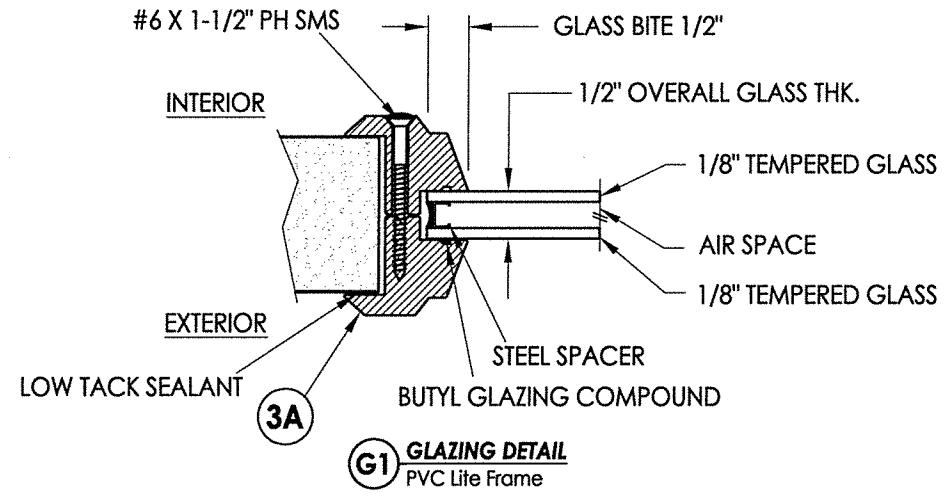
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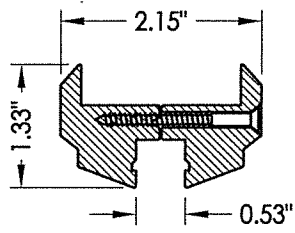
50 SIDELITE PANEL
Therma-Tru Steel (Wood Edge)



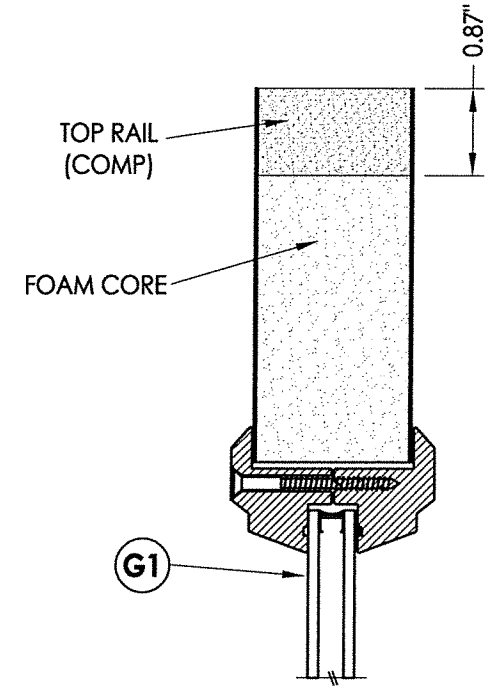
1 HORIZONTAL CROSS SECTION



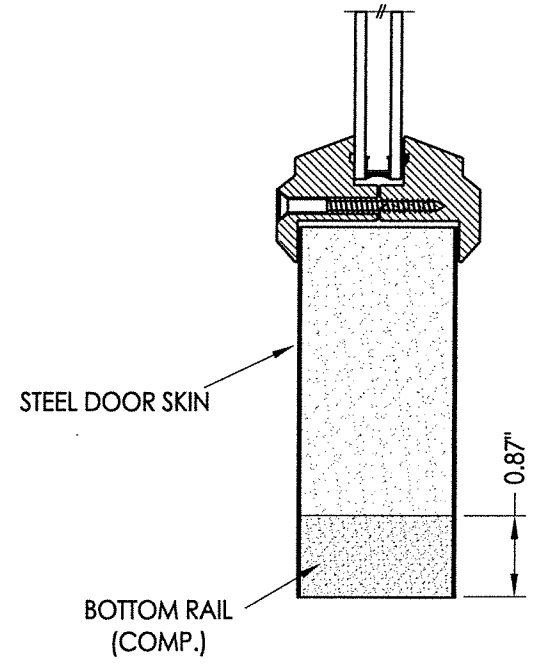
G1 GLAZING DETAIL
PVC Lite Frame



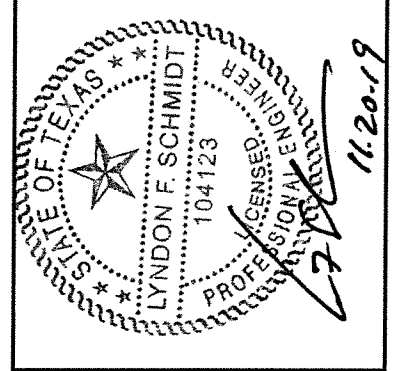
3A PVC LITE FRAME



2 VERTICAL CROSS SECTION



2 VERTICAL CROSS SECTION



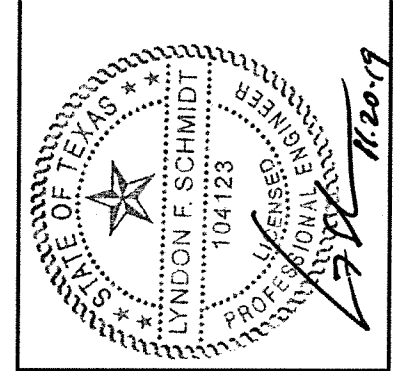
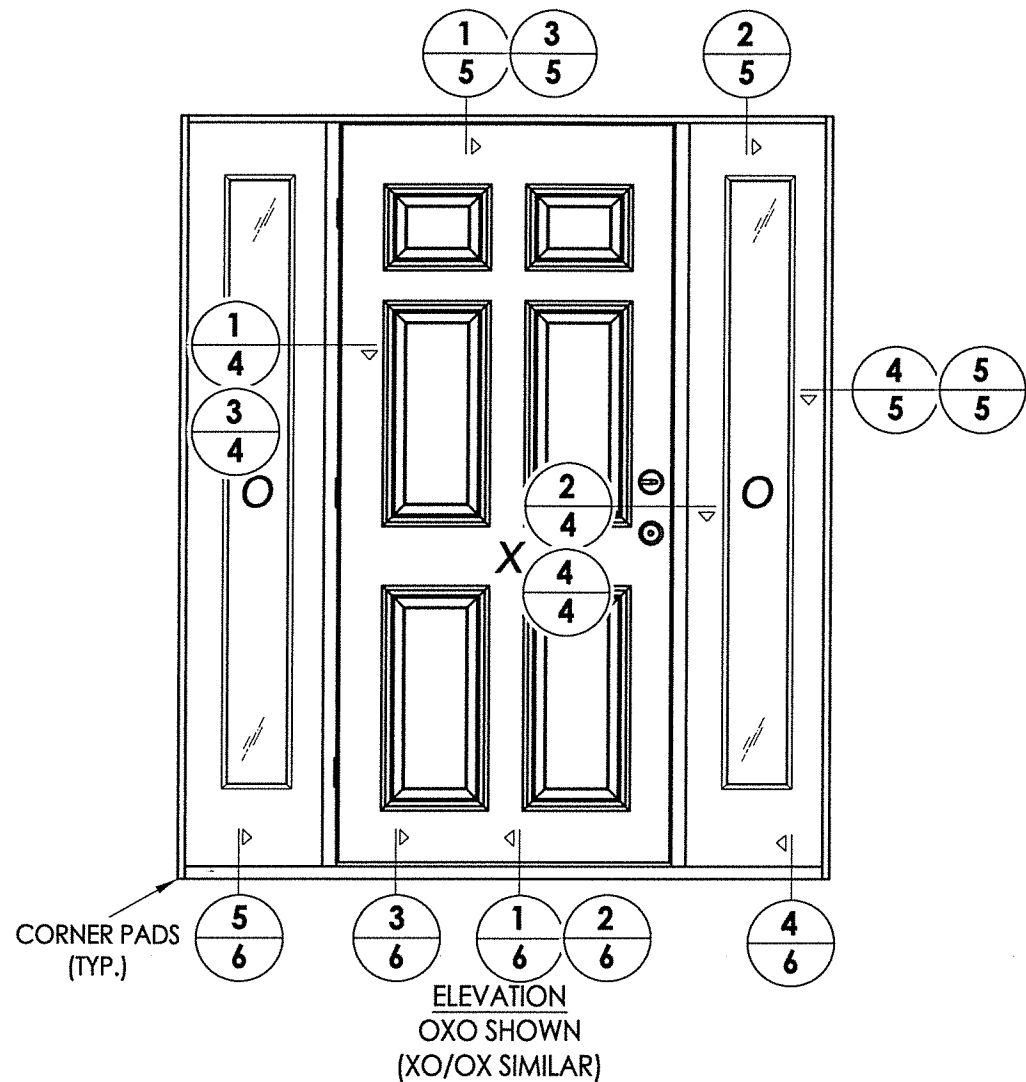
Documents Prepared By: Lyndon F. Schmidt, P.E.
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P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	SIDELITE PANEL DETAILS (LIP LITE INSERT GLAZING)	
NO.	DATE	BY
1	11/20/19	LFS
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		
DATE:	12/11/17	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4771	
SHEET	3	OF 7

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

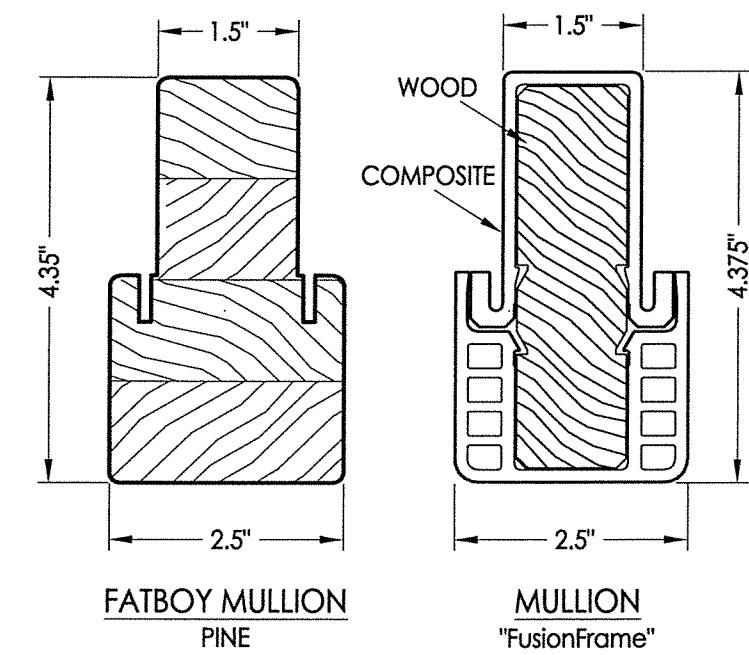
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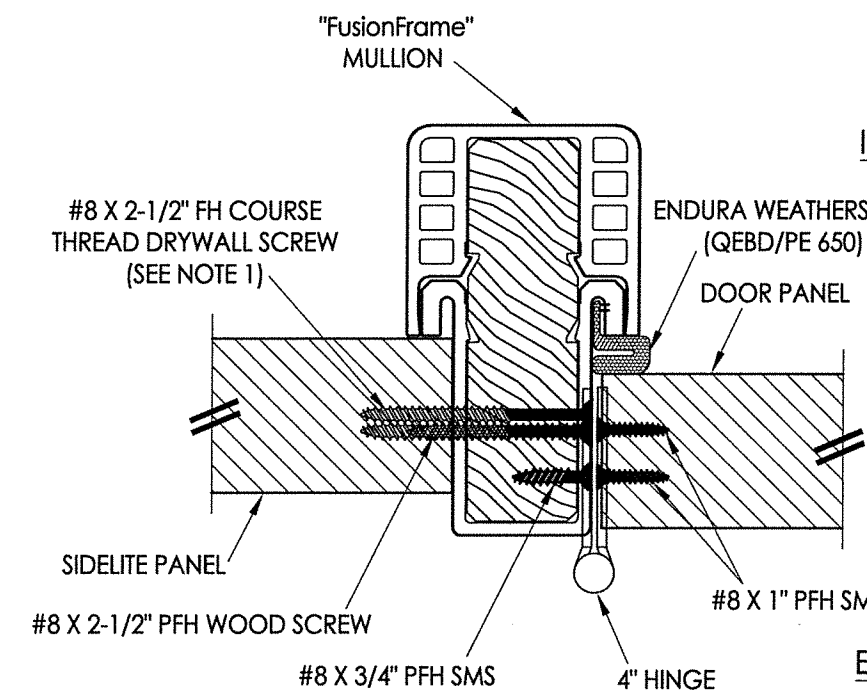
Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

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

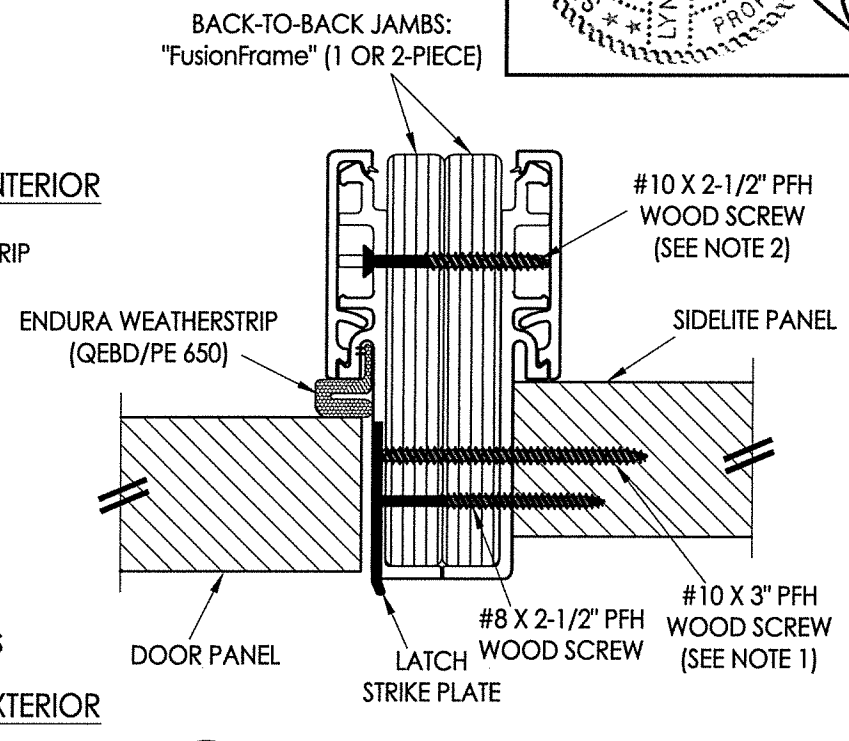
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852



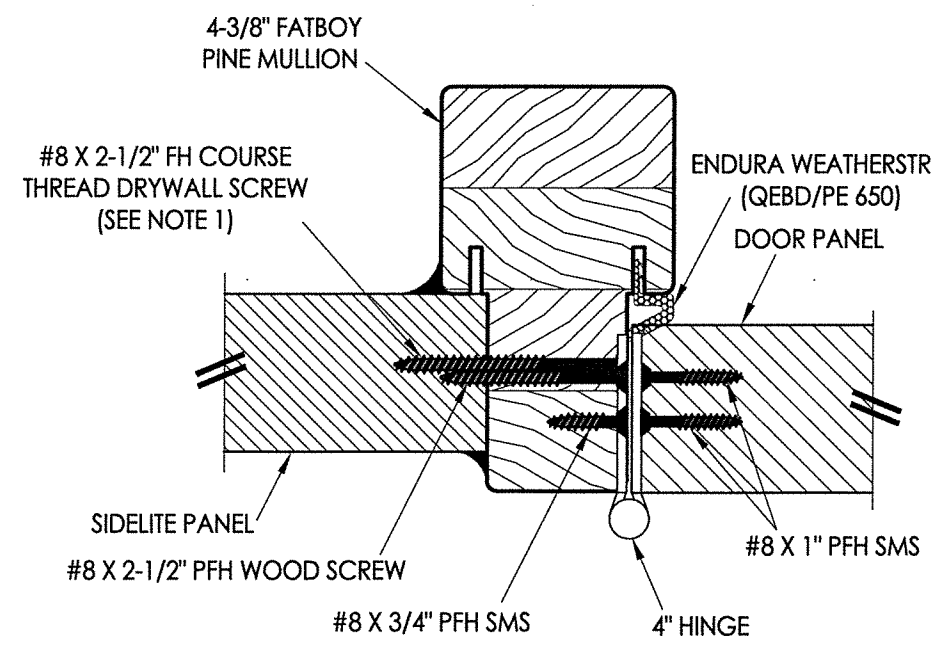
- NOTES:**
1. Spacing for sidelite screws: 6.5", 38.5" and 69" from head to sill (3 total).
 2. Spacing for mullion screws: 6" from each end plus 3 more equally spaced (5 total).



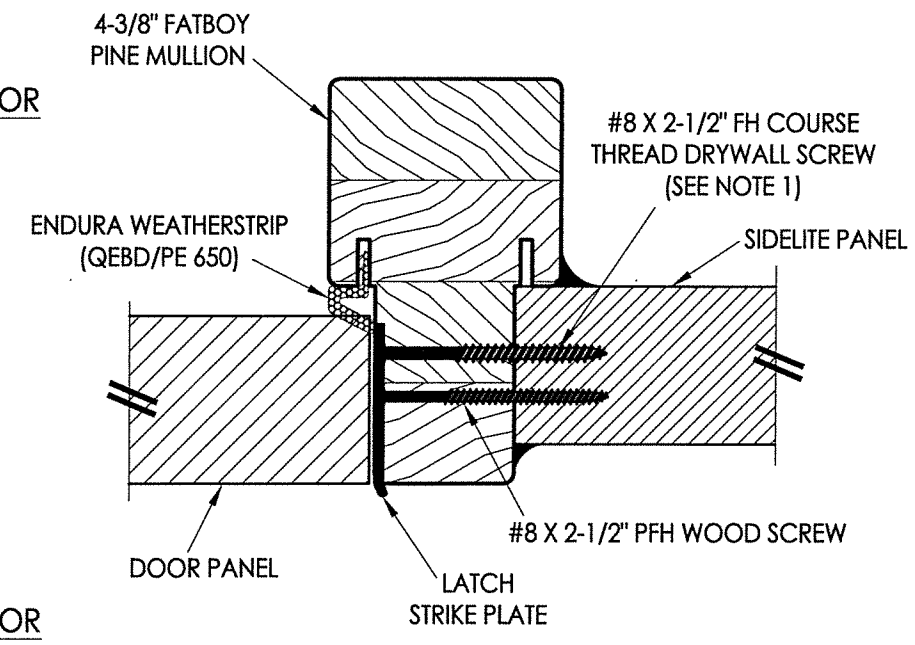
3 HORIZONTAL CROSS SECTION
4 Outswing shown - Inswing also approved



4 HORIZONTAL CROSS SECTION
4 Outswing shown - Inswing also approved



1 HORIZONTAL CROSS SECTION
4 Outswing shown - Inswing also approved

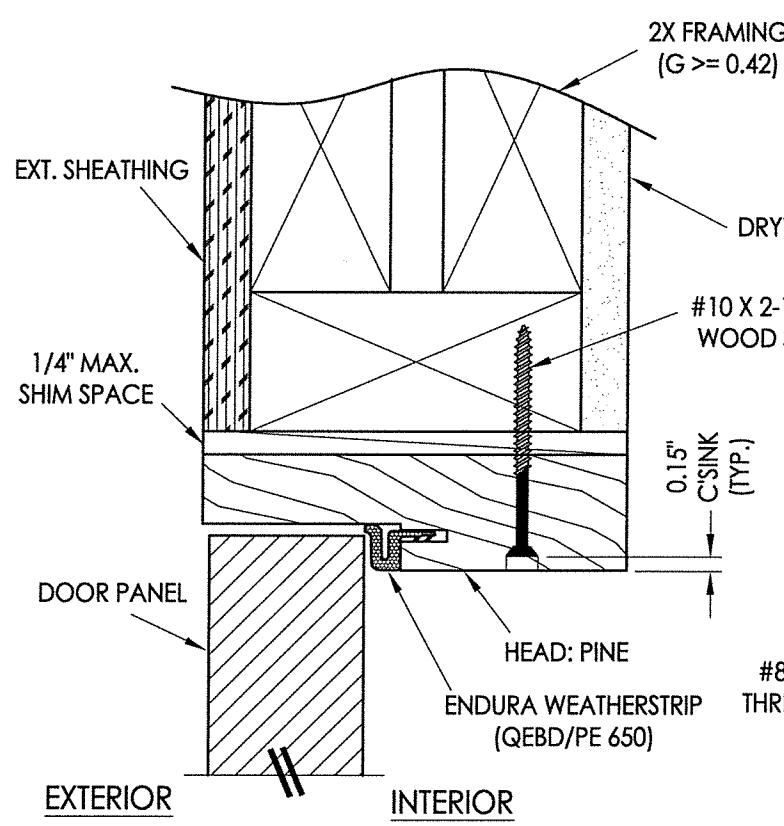


2 HORIZONTAL CROSS SECTION
4 Outswing shown - Inswing also approved

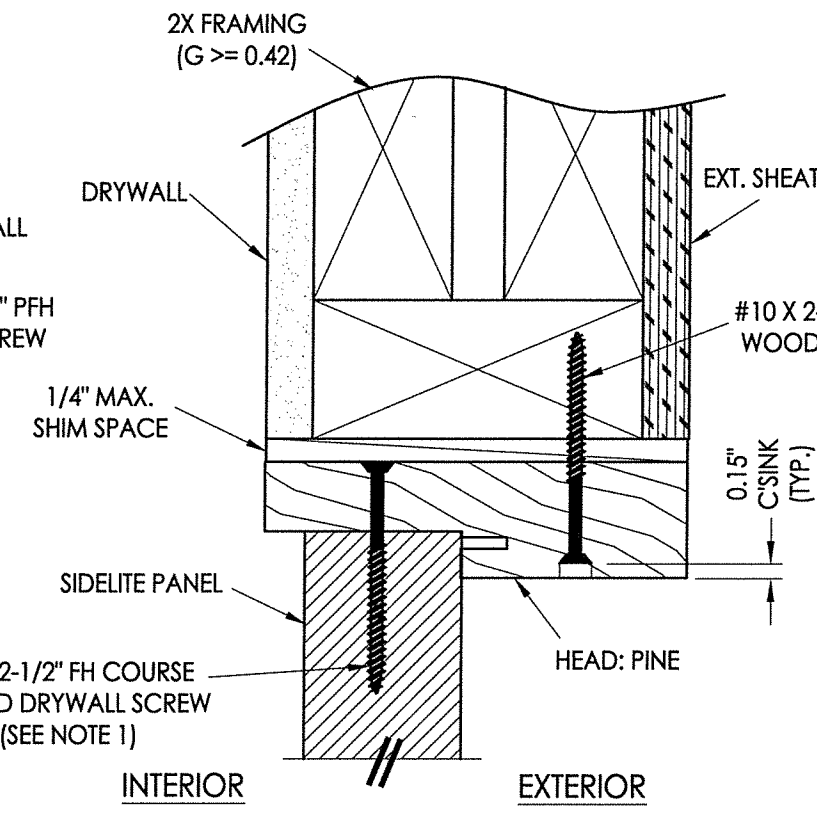
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	FIBERGLASS DOOR	
PART OR ASSEMBLY:	HORIZONTAL CROSS SECTIONS	
NO.	DATE	BY
1	11/20/19	LFS
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		
DATE:	12/11/17	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4771	
SHEET	4	OF 7

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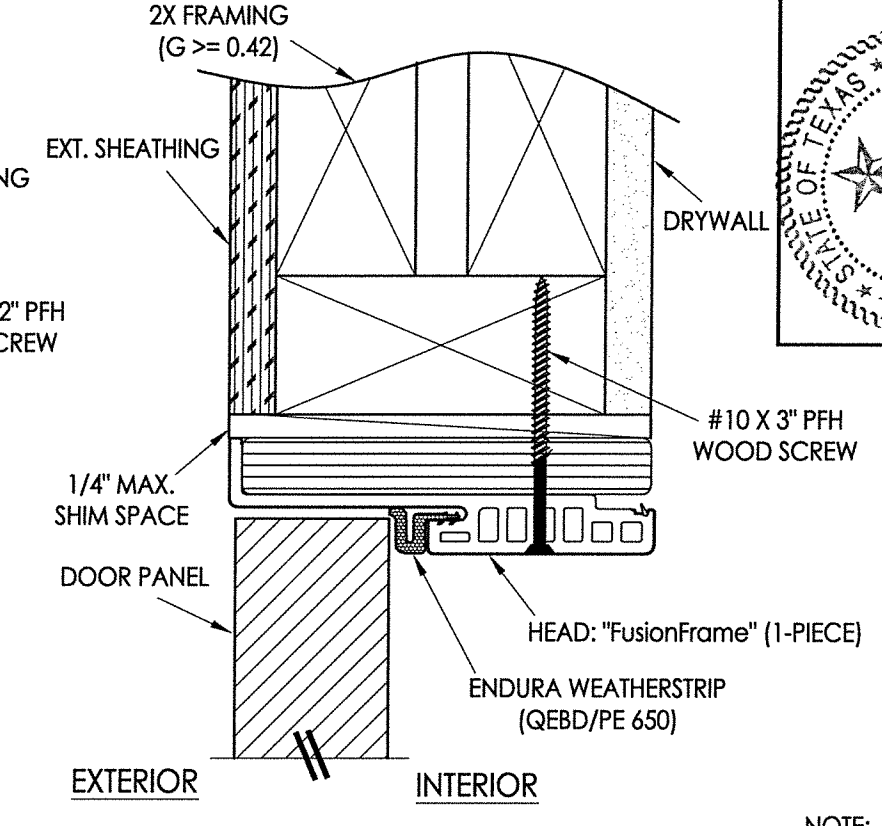
R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-958 Opaque Thermo-Tru STL door OXO (LK, DB)\C - Drawings\TX-4771.72_recover.dwg, 5.3



1 VERTICAL CROSS SECTION
5 Outswing shown - inswing also approved

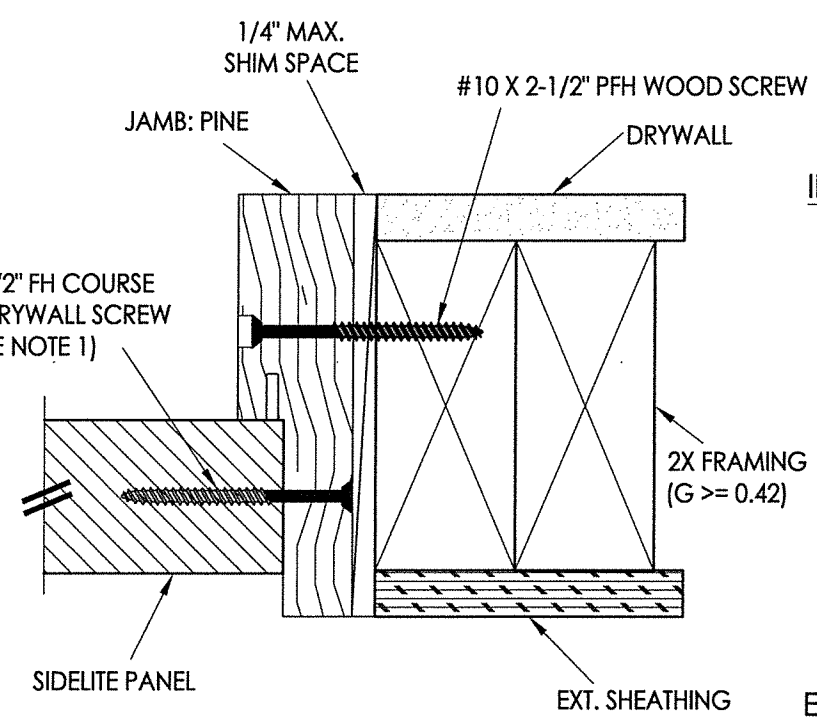
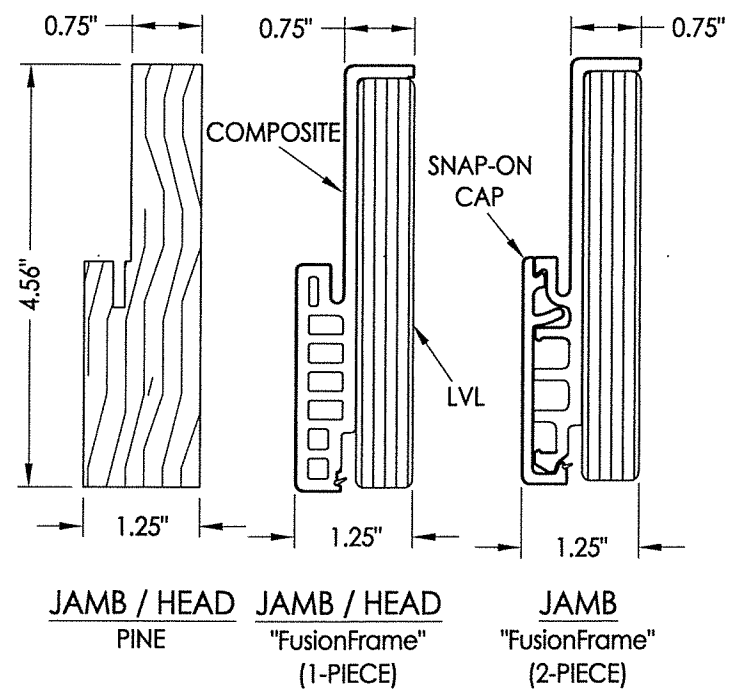


2 VERTICAL CROSS SECTION
5 Inswing shown - Outswing also approved

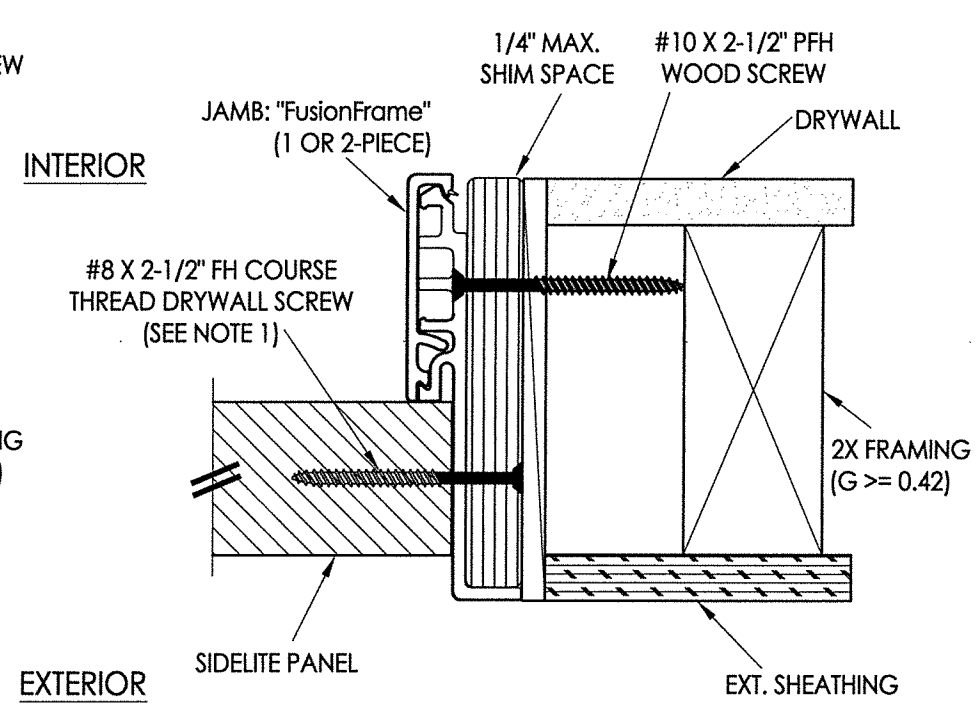


3 VERTICAL CROSS SECTION
5 Outswing shown - inswing also approved

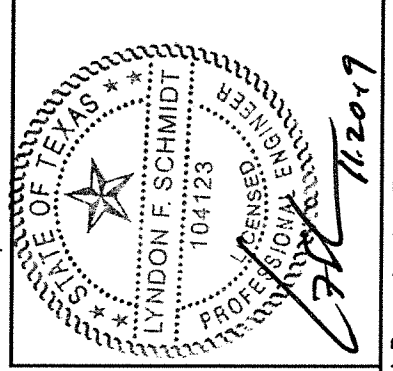
NOTE:
 1. Spacing for sidelite screws:
 4" from each end (2 total).



4 HORIZONTAL CROSS SECTION
5 Outswing shown - inswing also approved



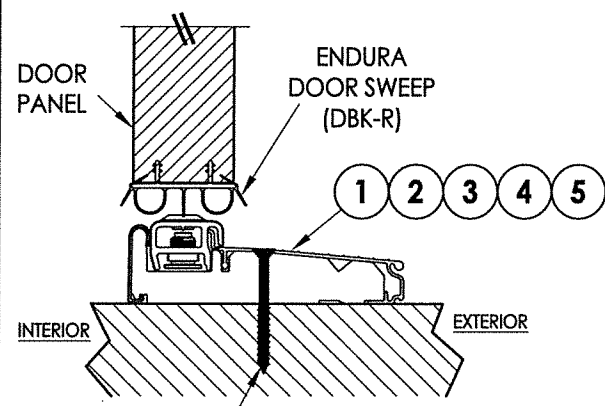
5 HORIZONTAL CROSS SECTION
5 Outswing shown - inswing also approved



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

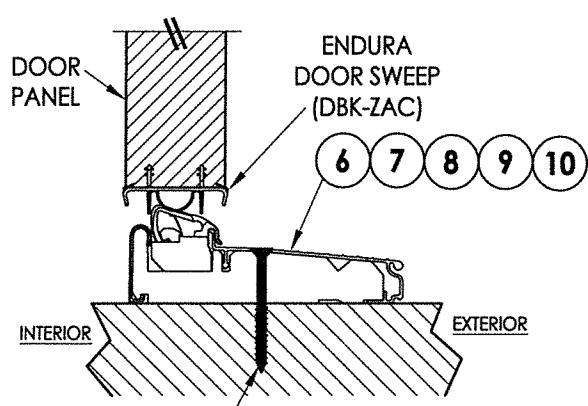
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PART OR ASSEMBLY:	VERTICAL CROSS SECTIONS	
NO.	DATE	BY
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ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		
DATE:	12/11/17	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4771	
SHEET	5 OF 7	

R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-958 Opaque Therma-Tru STL door OXO (L,K, DB)\C - Drawings\TX-4771.72_recover.dwg, 63



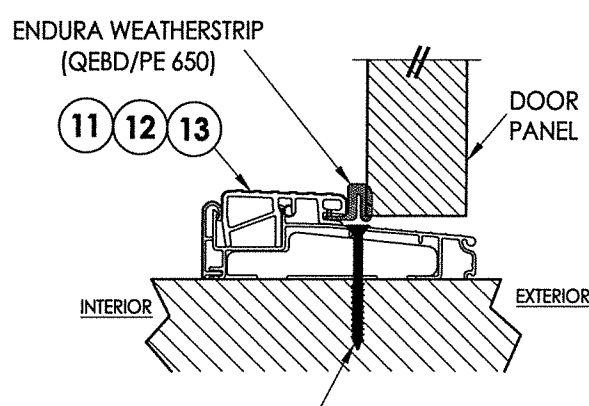
#10 X 2.5" PFH WOOD SCREW OR
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

1 VERTICAL CROSS SECTION
6 Inswing Adjustable Threshold



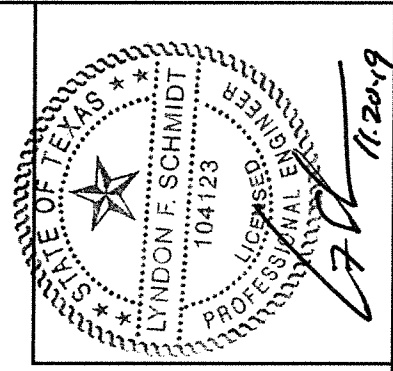
#10 X 2.5" PFH WOOD SCREW OR
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

2 VERTICAL CROSS SECTION
6 Inswing Articulating Threshold

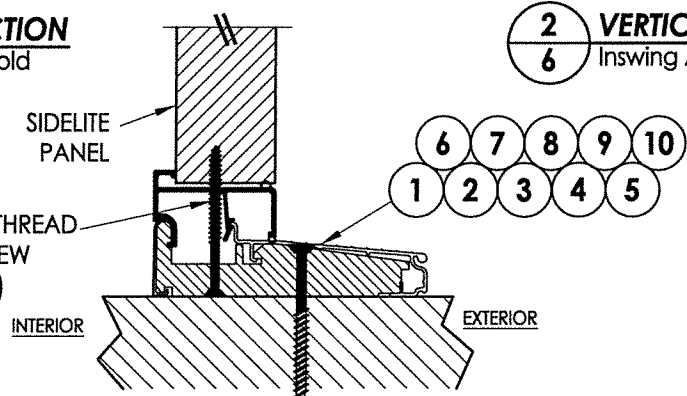


#10 X 2.5" PFH WOOD SCREW OR
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

3 VERTICAL CROSS SECTION
6 Outswing Bump Threshold

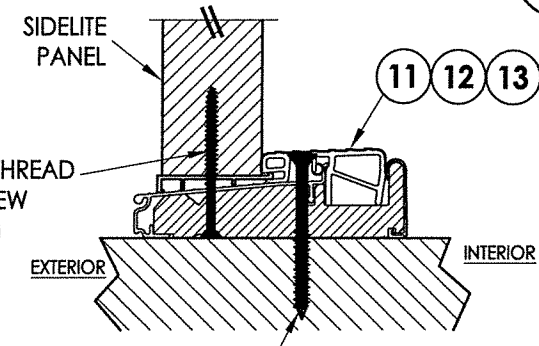


NOTE:
1. Spacing for sidelite screws:
4" from each end (2 total).



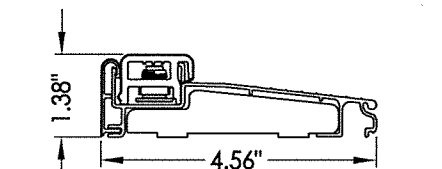
#10 X 2.5" PFH WOOD SCREW OR
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

4 VERTICAL CROSS SECTION
6 Inswing configuration

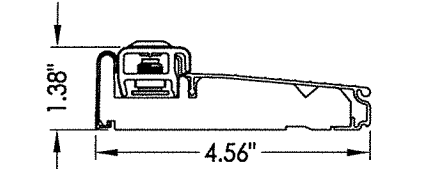


#10 X 3" PFH WOOD SCREW OR
1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW

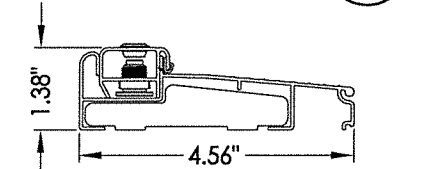
5 VERTICAL CROSS SECTION
6 Outswing configuration



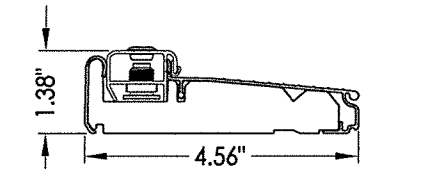
1 INSWING ADJUSTABLE THRESHOLD
ZAIL4565



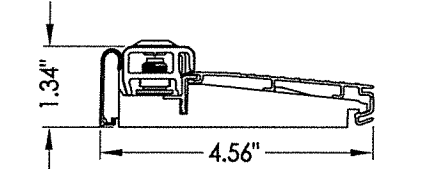
2 INSWING ADJUSTABLE THRESHOLD
ZAI4565FN



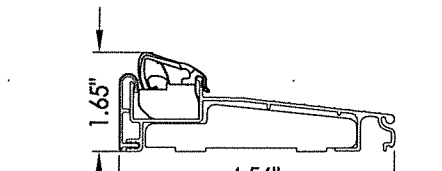
3 INSWING ADJUSTABLE THRESHOLD
ZAILAA4565



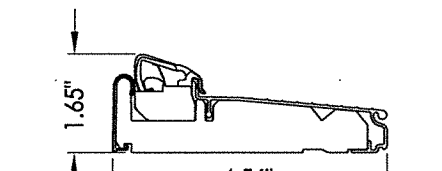
4 INSWING ADJUSTABLE THRESHOLD
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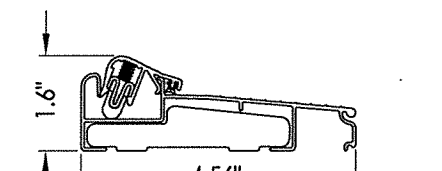
5 INSWING ADJUSTABLE THRESHOLD
ZAI4565RDS
MAX. DESIGN PRESSURE = +55/-60 PSF



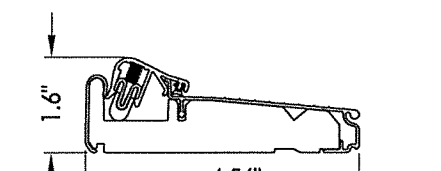
6 INSWING ARTICULATING THRESHOLD
ZA4565
MAX. DESIGN PRESSURE = +60/-60 PSF



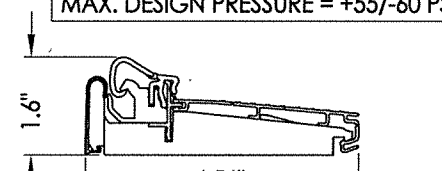
7 INSWING ARTICULATING THRESHOLD
ZAC4565FN
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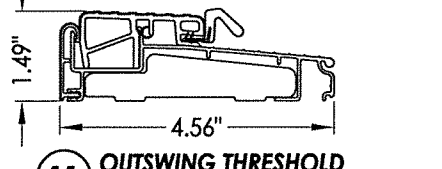
8 INSWING ARTICULATING THRESHOLD
ZACAA4565
MAX. DESIGN PRESSURE = +60/-60 PSF



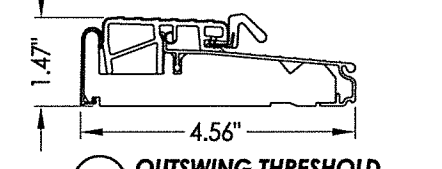
9 INSWING ARTICULATING THRESHOLD
ZACAA4565FN
MAX. DESIGN PRESSURE = +60/-60 PSF



10 INSWING ARTICULATING THRESHOLD
ZAC4565RDS
MAX. DESIGN PRESSURE = +55/-60 PSF



11 OUTSWING THRESHOLD
ZOB4565



12 OUTSWING THRESHOLD
ZOB4565FN

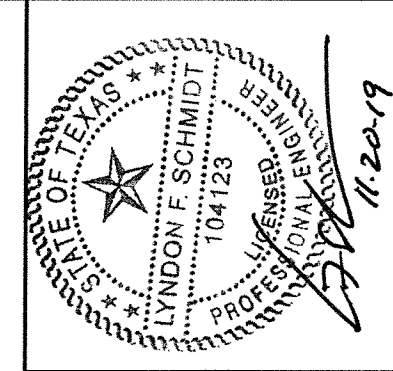
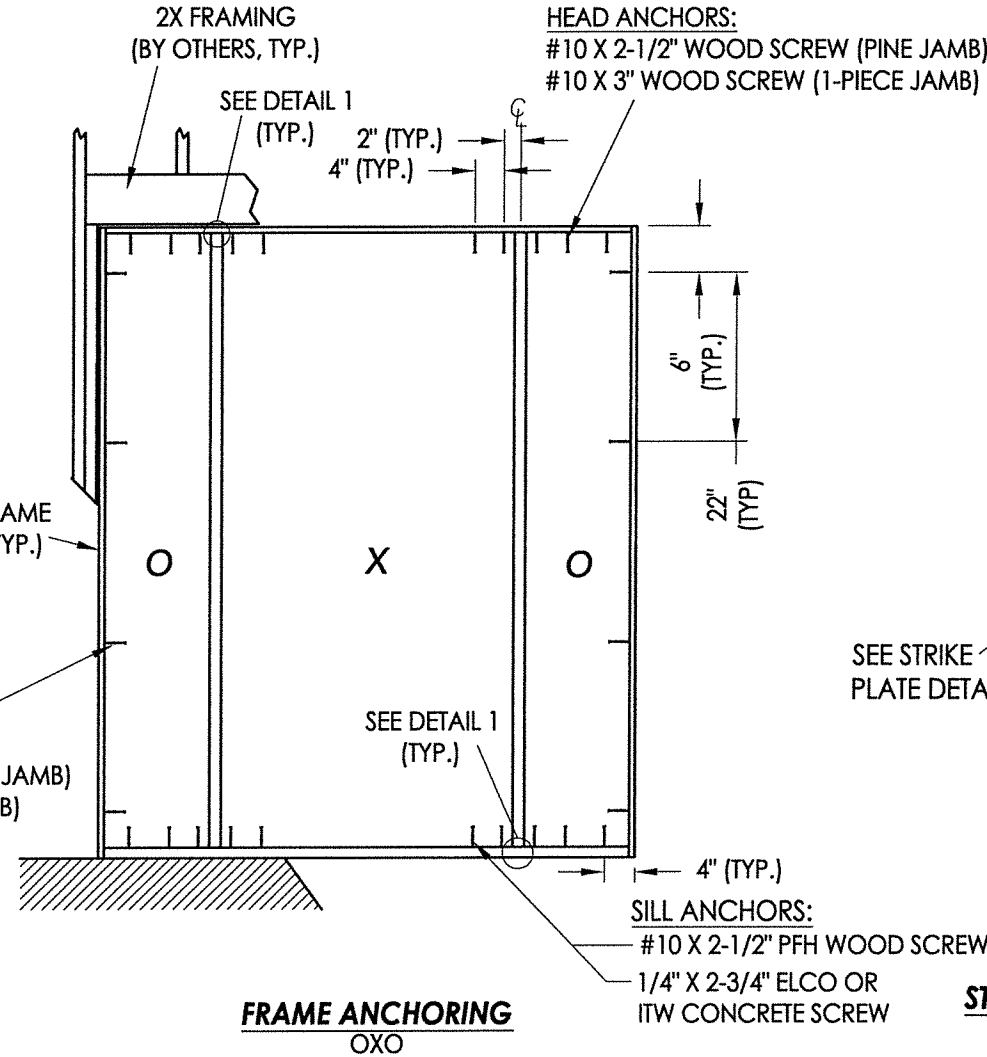
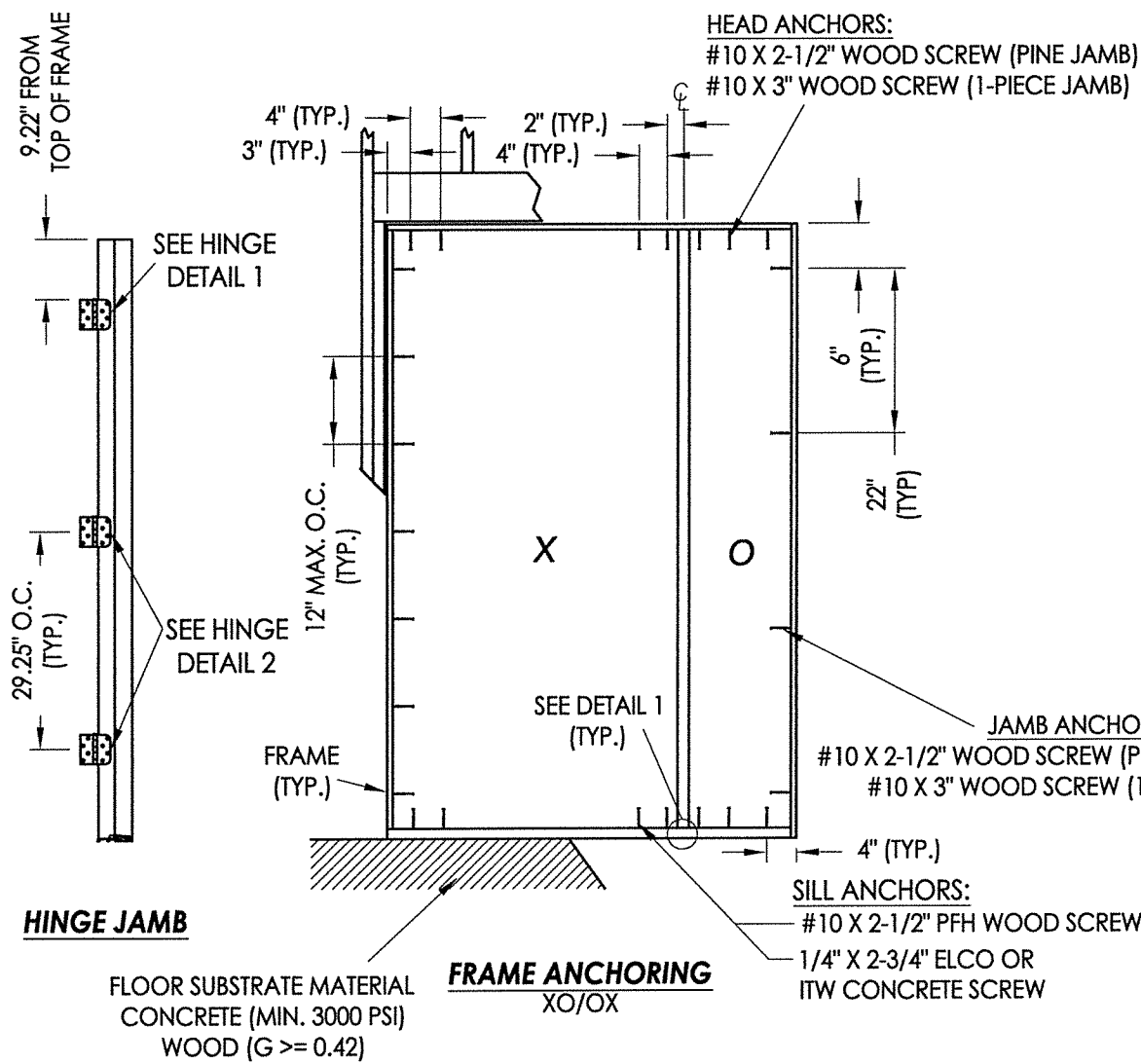


13 OUTSWING THRESHOLD
ZOB4565RDS

Documents Prepared By:	Lyndon F. Schmidt, P.E. TEXAS P.E. #104123									
PRODUCT:	ENDURA									
PART OR ASSEMBLY:	FIBERGLASS DOOR									
DATE:	12/11/17									
SCALE:	N.T.S.									
DWG. BY:	JK									
CHK. BY:	LFS									
DRAWING NO.:	TX-4771									
SHEET	6 OF 7									
REVISIONS	<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>11/20/19</td> <td>LFS</td> </tr> <tr> <td colspan="3">ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE</td> </tr> </tbody> </table>	NO.	DATE	BY	1	11/20/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
NO.	DATE	BY								
1	11/20/19	LFS								
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE										
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									

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

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P.O. Box 230 Vairico FL, 33595
Phone No.: 813.659.9197

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

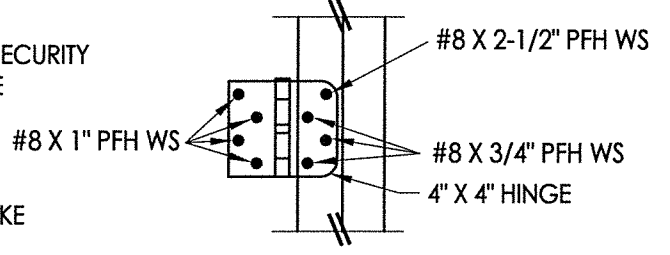
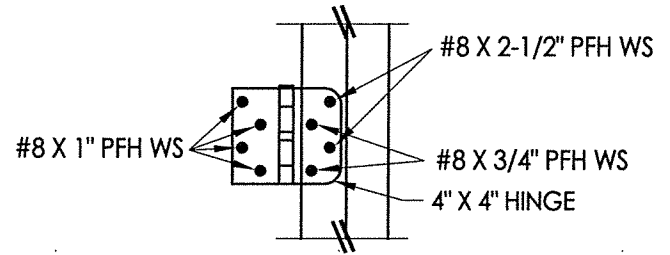
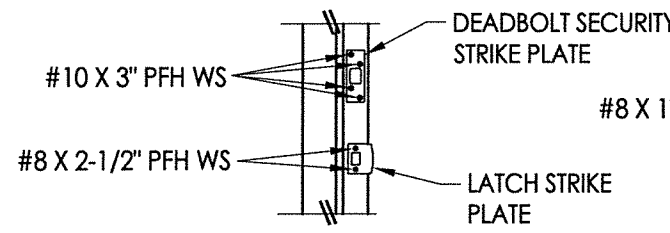
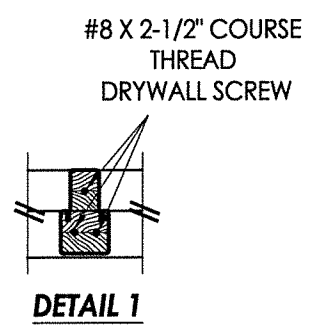
JAMB NOTES:
THE PINE OR "FusionFrame" 1-PIECE JAMB MAY BE INSTALLED @ THE HEAD OR SIDE JAMB.
THE FusionFrame" 2-PIECE JAMB MAY BE INSTALLED @ THE SIDE JAMBS ONLY.

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:

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"
ELCO ULTRACON®	1/4"	1-3/4"	1"	4"



PRODUCT:	ENDURA	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	BY
1	11/20/19	LFS
ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE		
DATE:	12/11/17	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4771	
SHEET	7 OF 7	

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