



215 EAST ROOSEVELT AVE.  
ZEELAND, MI 49464

**Distributed by: McCoy's Building Supply**  
1350 I.H. 35 North  
San Marcos, TX 78677

# FIBERGLASS ENTRY DOOR INSWING / OUTSWING "IMPACT"

**TDI DR-625**

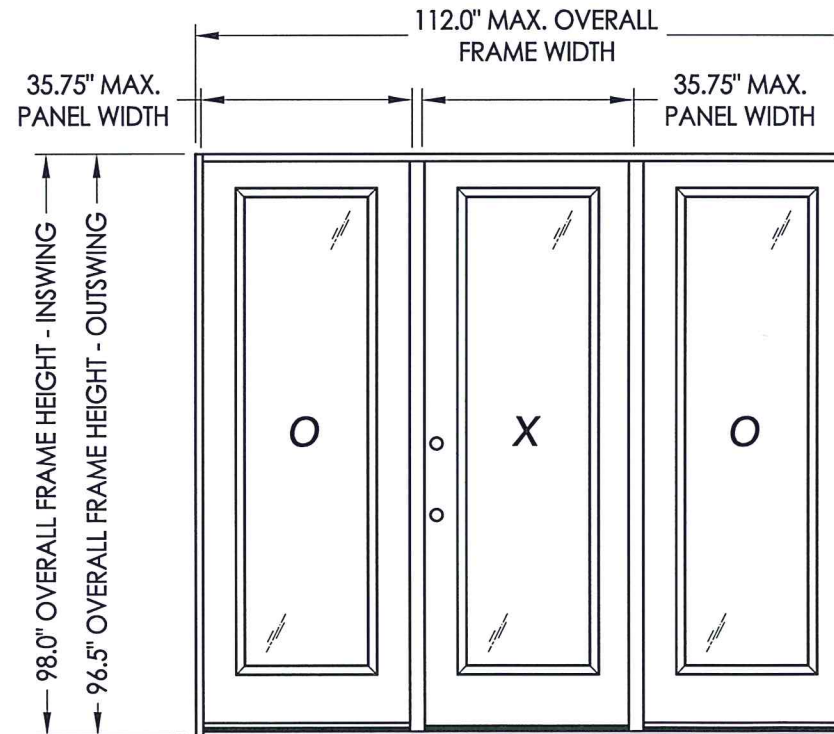
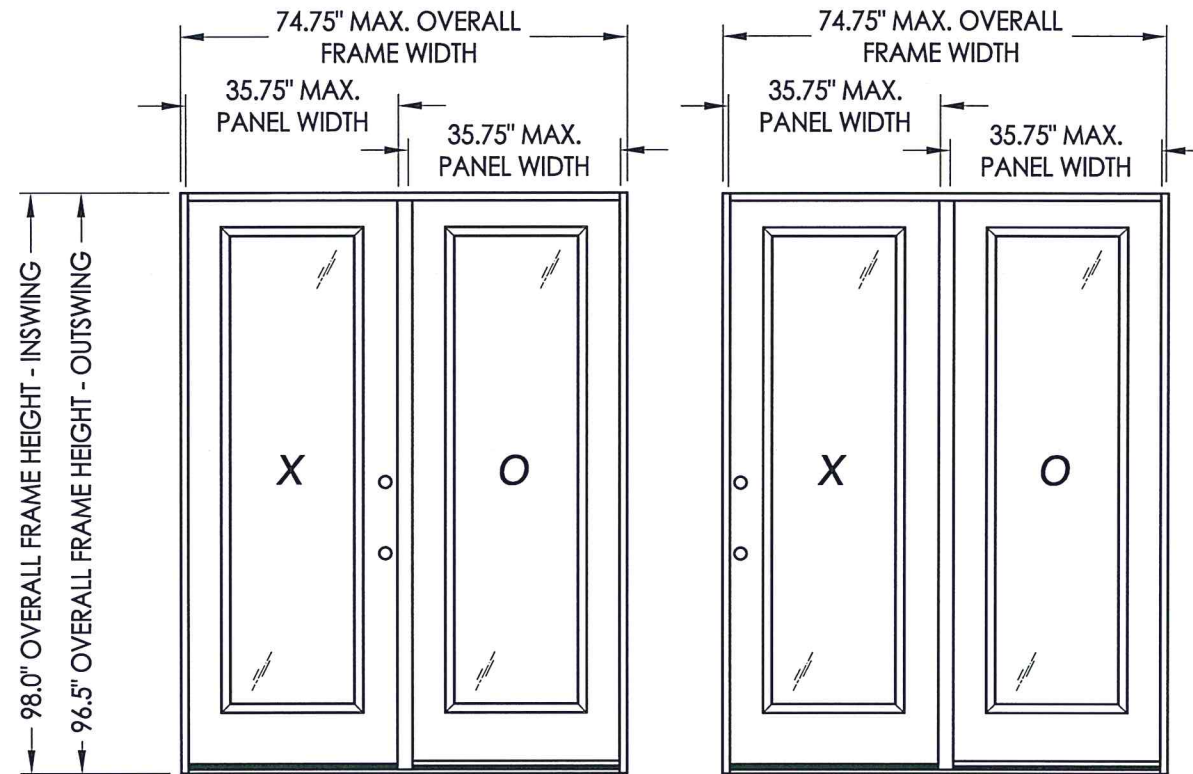
EVALUATED FOR USE IN THE STATE OF TEXAS

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:

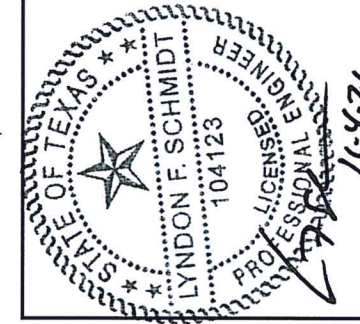
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. This system has been tested and evaluated as a large missile impact protective system for installation in areas that require wind borne debris protection. This product meets missile level "D" as defined in ASTM E 1996.
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	Sidelite panel details
4	Lite frame and glazing details
5	Elevations
6	Horizontal cross sections
7	Vertical cross sections
8	Vertical cross sections
9	Frame anchoring
10	Bill of materials & components



CONFIGURATION	MAX. FRAME DIMENSION	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
OX/XO	74.75" x 98.0"	+35.0	-40.0	+35.0	-35.0
OXO	112.0" x 98.0"	+35.0	-40.0	+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: FIBERGLASS DOOR

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

NO.	DATE	REVISIONS
3	10/21/21	UPDATE TO 2018 IRC/IBC
2	5/16/18	ADD FLAT FRAME LITE PROFILE
1	12/14/15	ADD H.S. GLAZING OPTION

DATE: 11/28/12

SCALE: N.T.S.

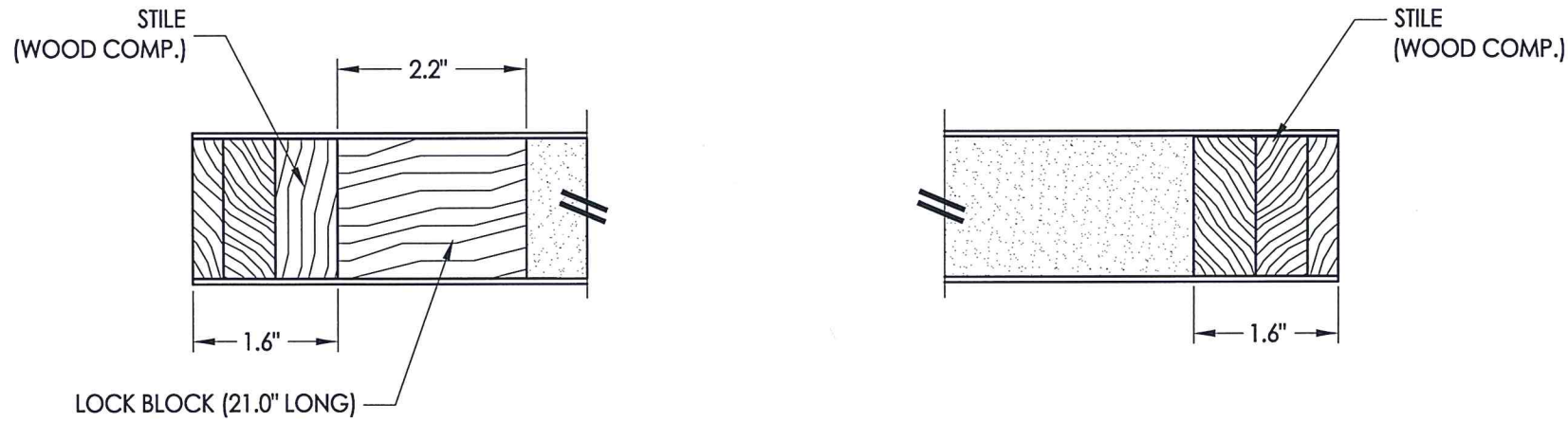
DWG. BY: JK

CHK. BY: LFS

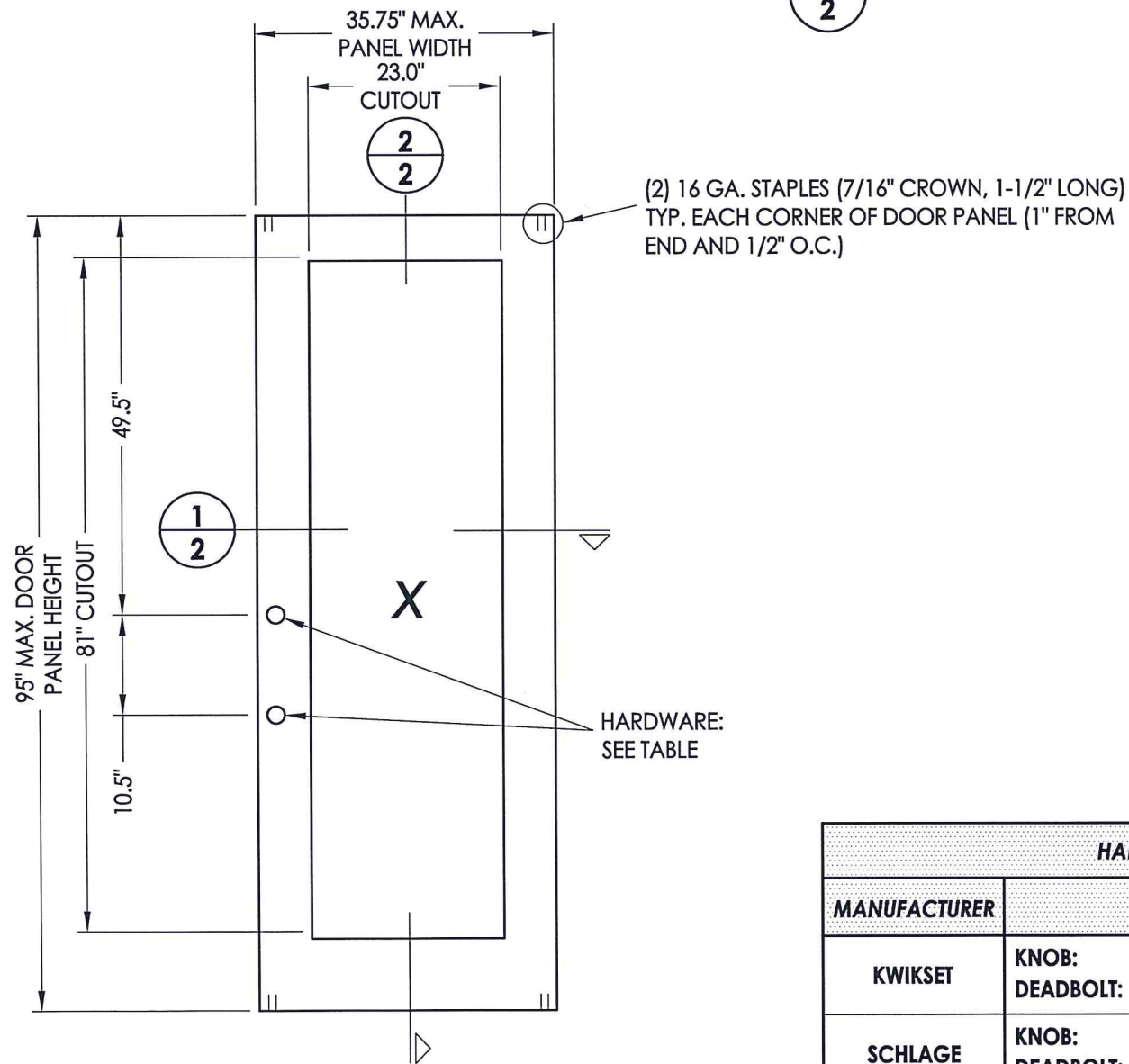
DRAWING NO.: TX-4281

SHEET 1 OF 10



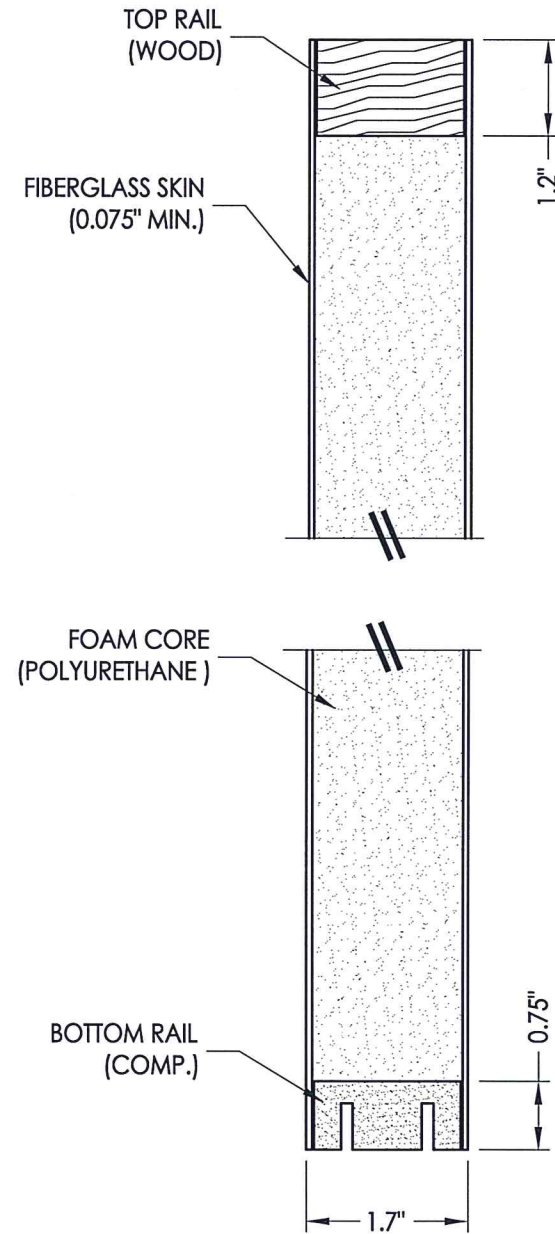


**1**  
**2** HORIZONTAL CROSS SECTION

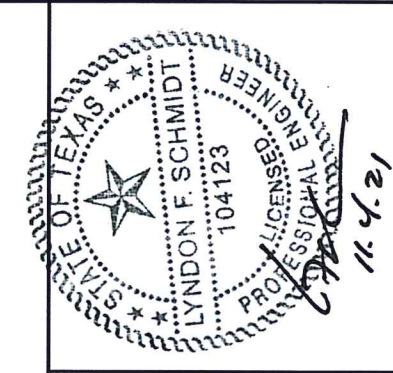


**40** DOOR PANEL  
Masonite Fiberglass Door

HARDWARE TABLE			
MANUFACTURER	MODEL		MAX. DESIGN PRESSURE
KWIKSET	KNOB:	SIGNATURE SERIES	35 PSF
	DEADBOLT:	SIGNATURE SERIES (980)	
SCHLAGE	KNOB:	F SERIES	40 PSF
	DEADBOLT:	B SERIES	
PAMEX	KNOB:	FT SERIES	30 PSF
	DEADBOLT:	FD7 SERIES	



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



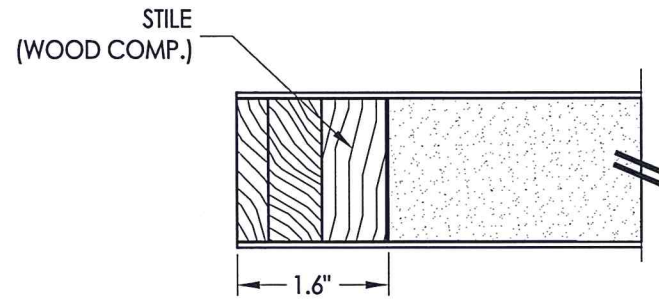
Documents Prepared By: Lyndon F. Schmidt, P.E.  
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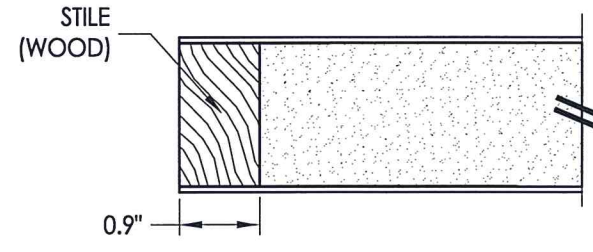
PRODUCT: FIBERGLASS DOOR  
PART OR ASSEMBLY: DOOR PANEL DETAILS

REVISIONS	
NO.	DATE
3	10/21/21
2	5/16/18
1	12/14/15

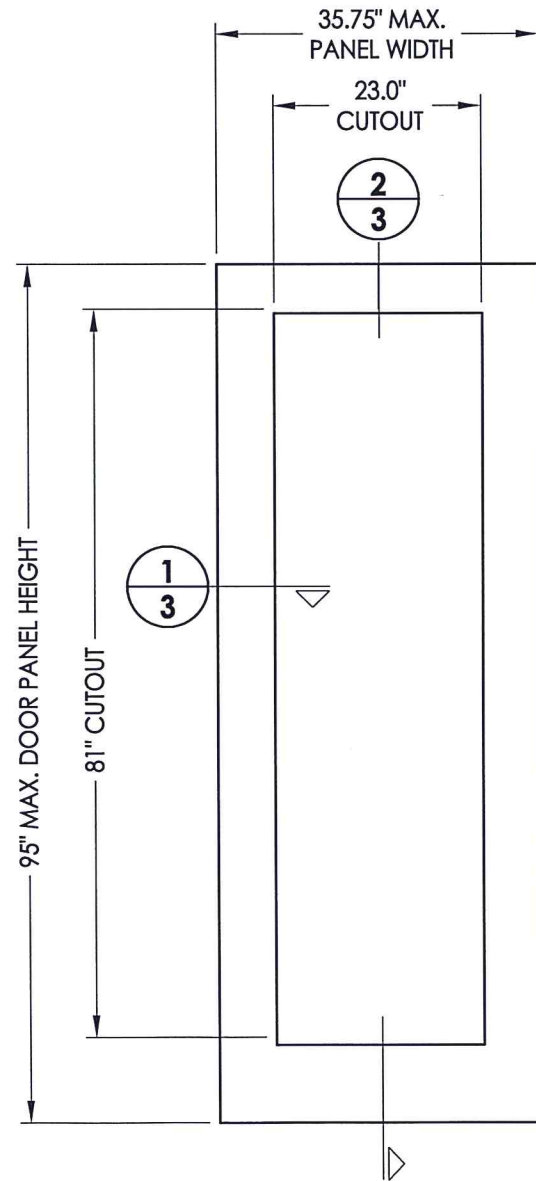
DATE: 11/28/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4281  
SHEET 2 OF 10



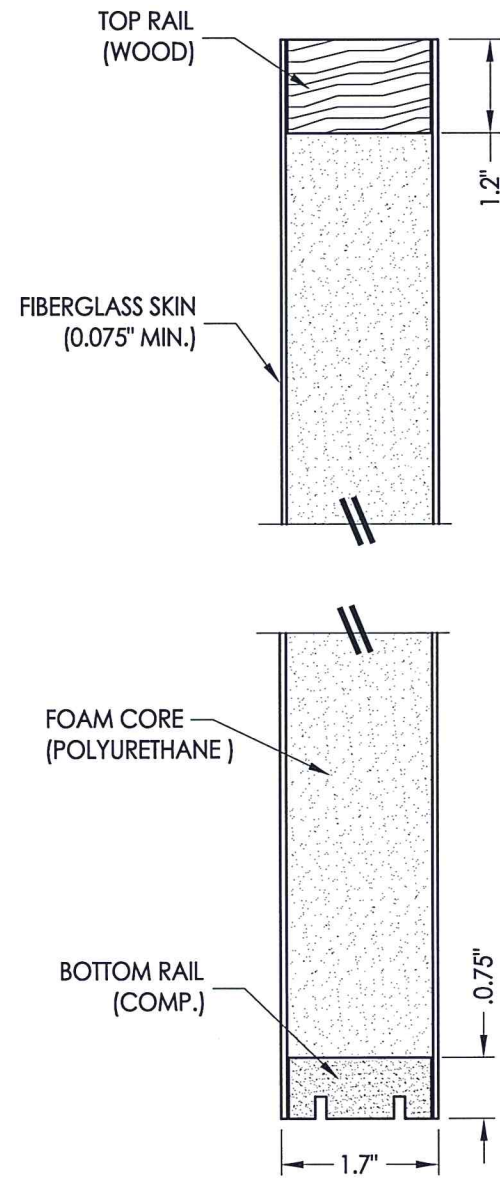
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**3** HORIZONTAL CROSS SECTION



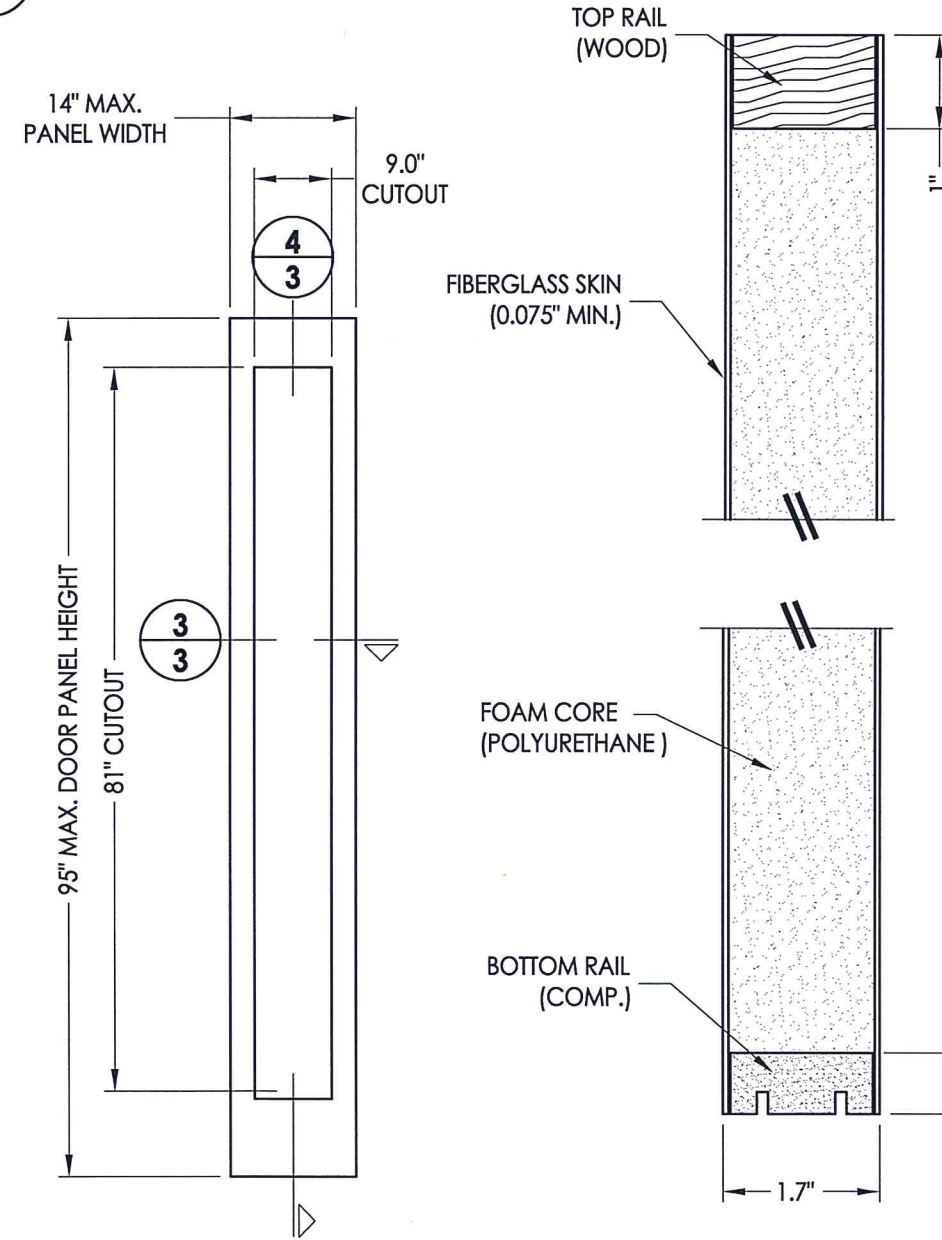
**3**  
**3** HORIZONTAL CROSS SECTION



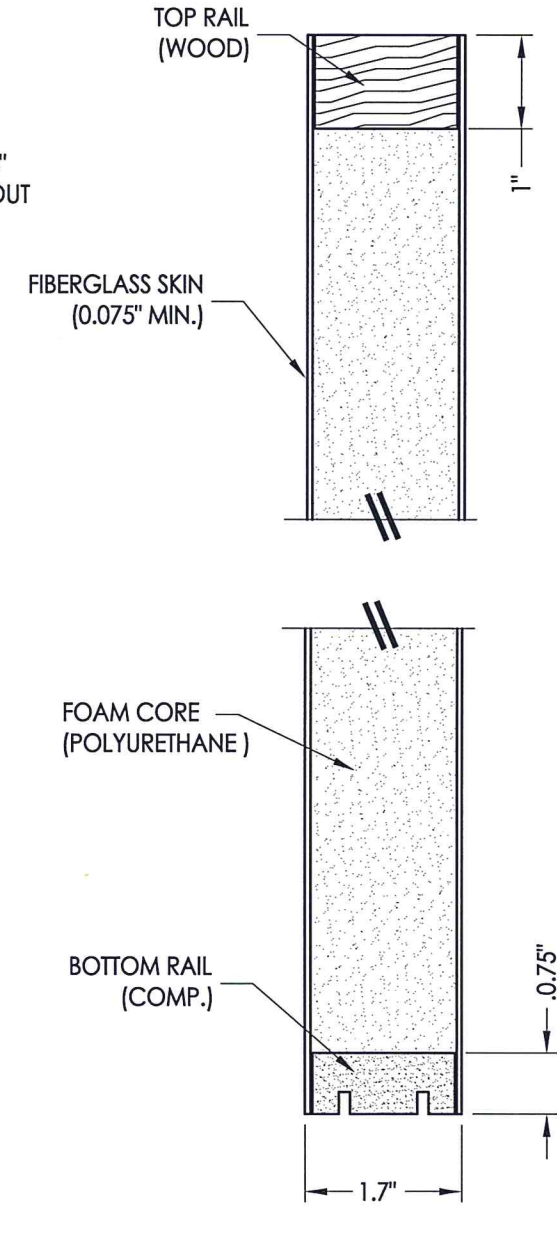
**50** SIDELITE PANEL (36" NOM.)  
Masonite



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



**51** SIDELITE PANEL (14" NOM.)  
Masonite



**4**  
**3** VERTICAL CROSS SECTION

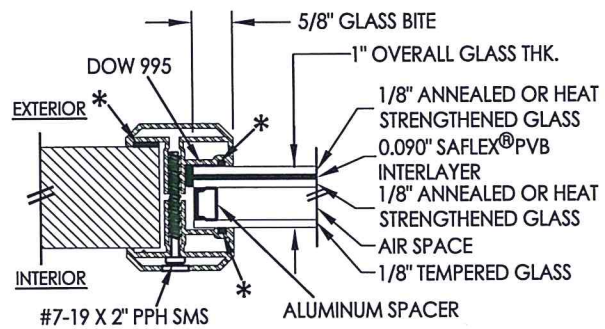


Documents Prepared By: Lyndon F. Schmidt, P.E.  
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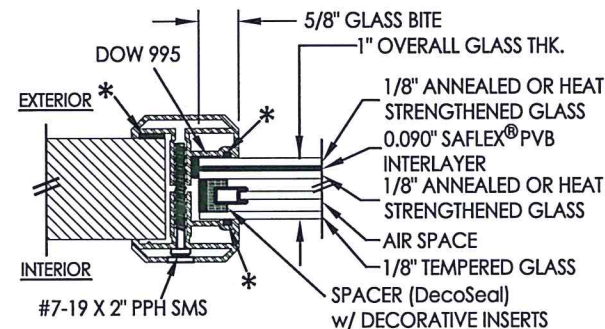
**RW** BUILDING CONSULTANTS, INC.  
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Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:		FIBERGLASS DOOR	
PART OR ASSEMBLY:		SIDELITE PANEL DETAILS	
NO.	DATE	BY	REVISIONS
3	10/21/21	LFS	UPDATE TO 2018 IBC/IRC
2	5/16/18	LFS	ADD FLAT FRAME LITE PROFILE
1	12/14/15	JK	ADD H.S. GLAZING OPTION
DATE: 11/28/12		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: TX-4281		SHEET 3 OF 10	



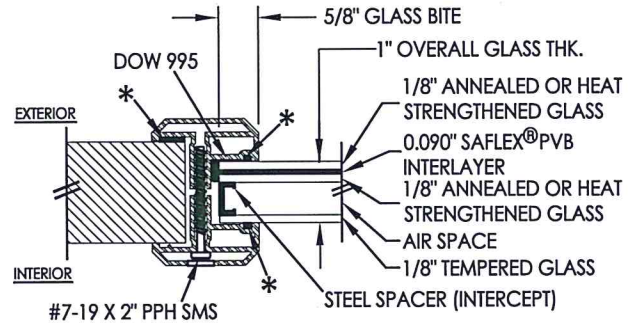


**G1 GLAZING DETAIL**  
Flat Frame Profile

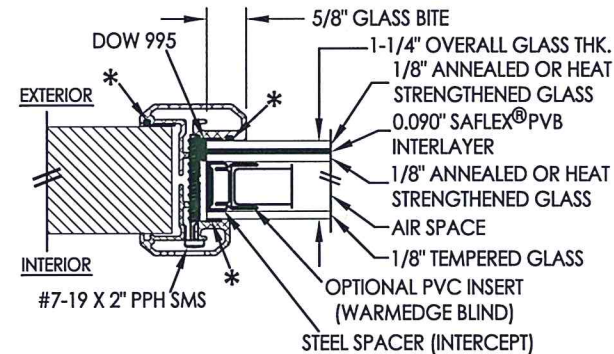


**G3 GLAZING DETAIL**  
Flat Frame Profile

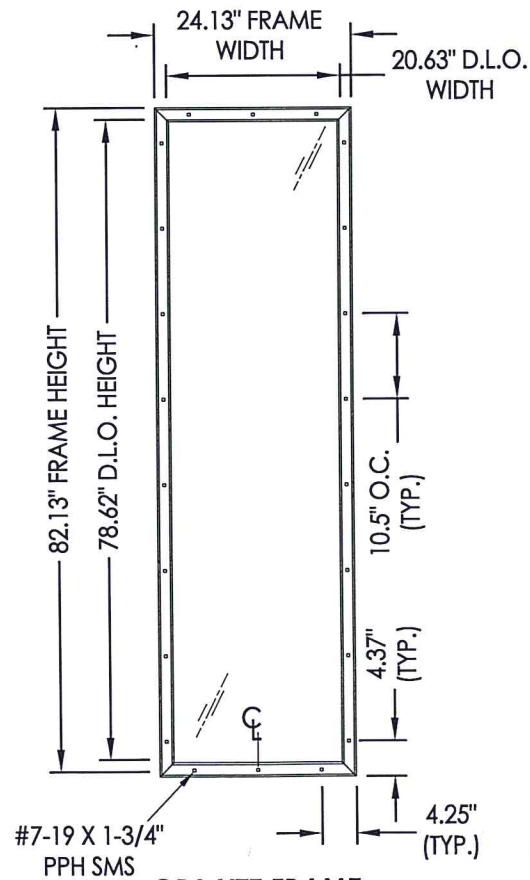
\* NON-STRUCTURAL  
BACKBEDDING  
(READI-SEAL)



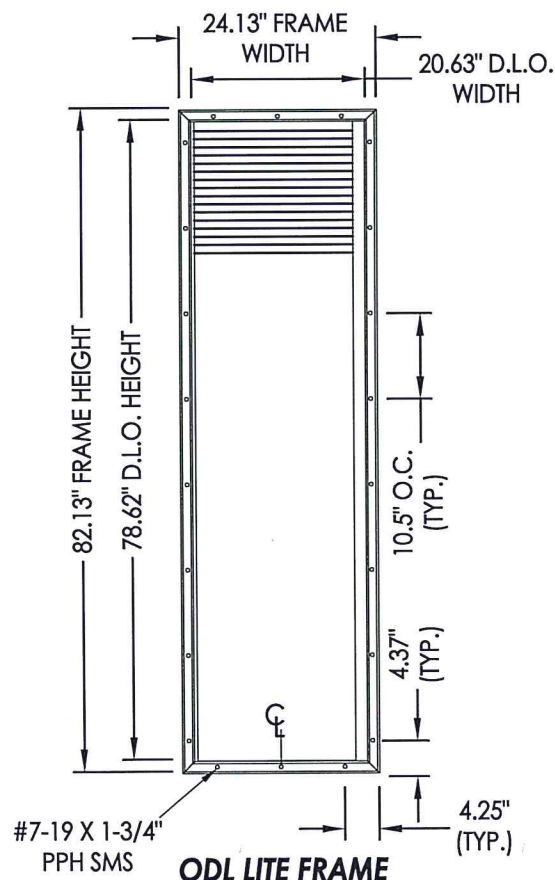
**G2 GLAZING DETAIL**  
Flat Frame Profile



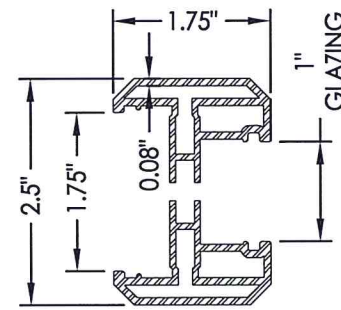
**G4 GLAZING DETAIL**  
Flat Frame Profile  
w/ Blinds Between Glass



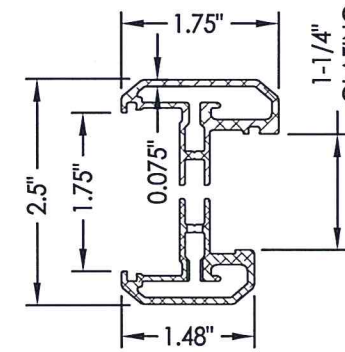
**ODL LITE FRAME**  
"Flat Frame" Aluminum



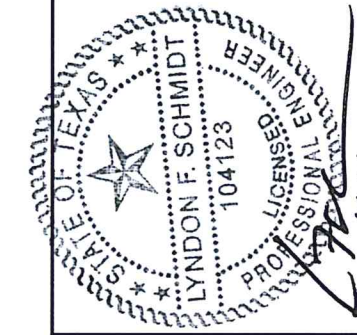
**ODL LITE FRAME**  
"Flat Frame" Aluminum  
w/ Blinds Between Glass



**ODL LITE FLAT FRAME**  
1" GLAZING



**ODL LITE FLAT FRAME**  
1-1/4" GLAZING



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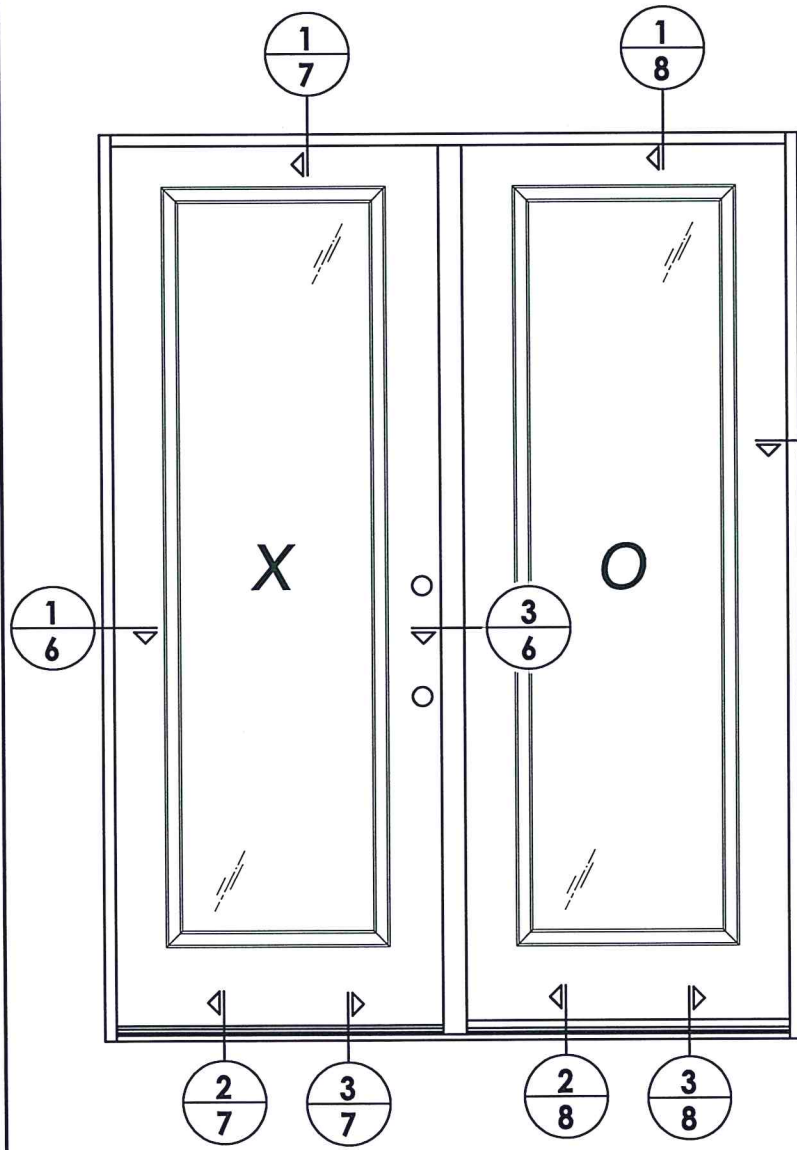
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

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CERTIFICATE OF REGISTRATION # F-11852

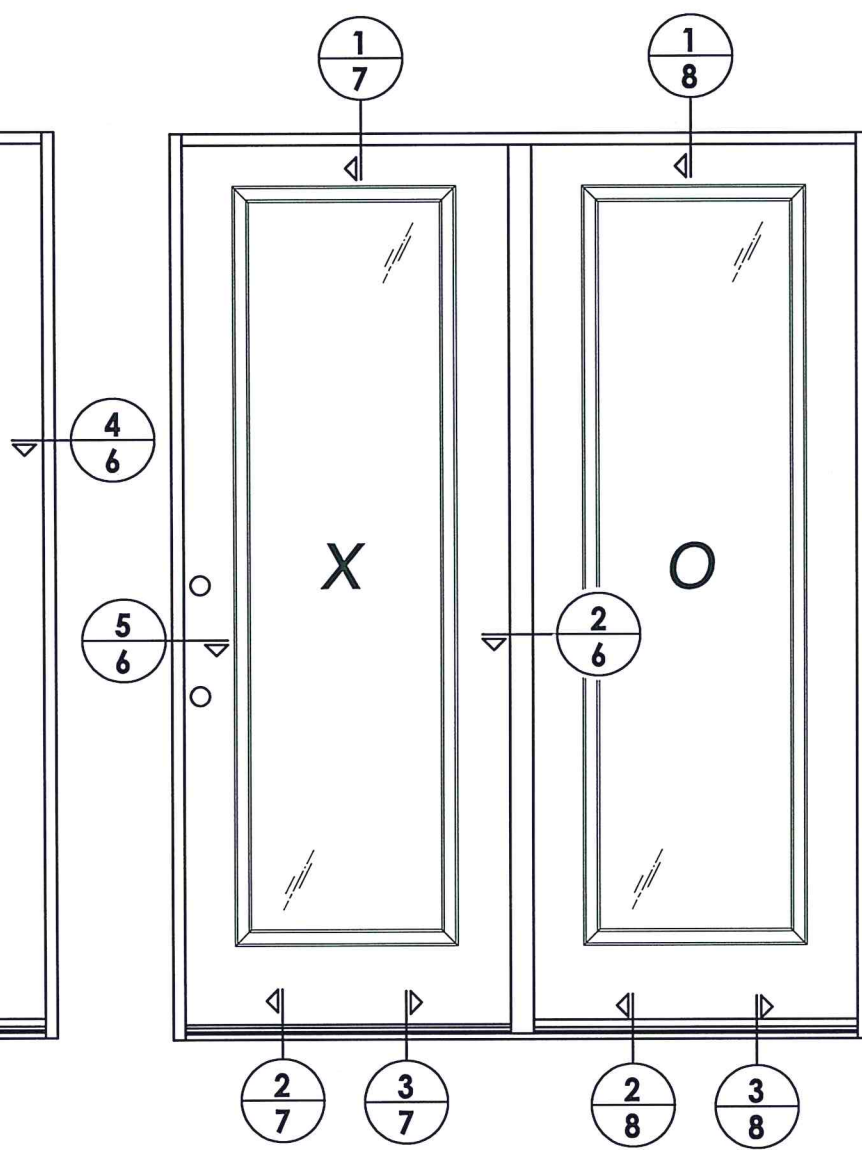
PRODUCT:	FIBERGLASS DOOR
PART OR ASSEMBLY:	LITE FRAME & GLAZING DETAILS

NO.	DATE	BY	REVISIONS
3	10/21/21	LFS	UPDATE TO 2018 IBC/IRC
2	5/16/18	JK	ADD FLAT FRAME LITE PROFILE
1	12/14/15	JK	ADD H.S. GLAZING OPTION

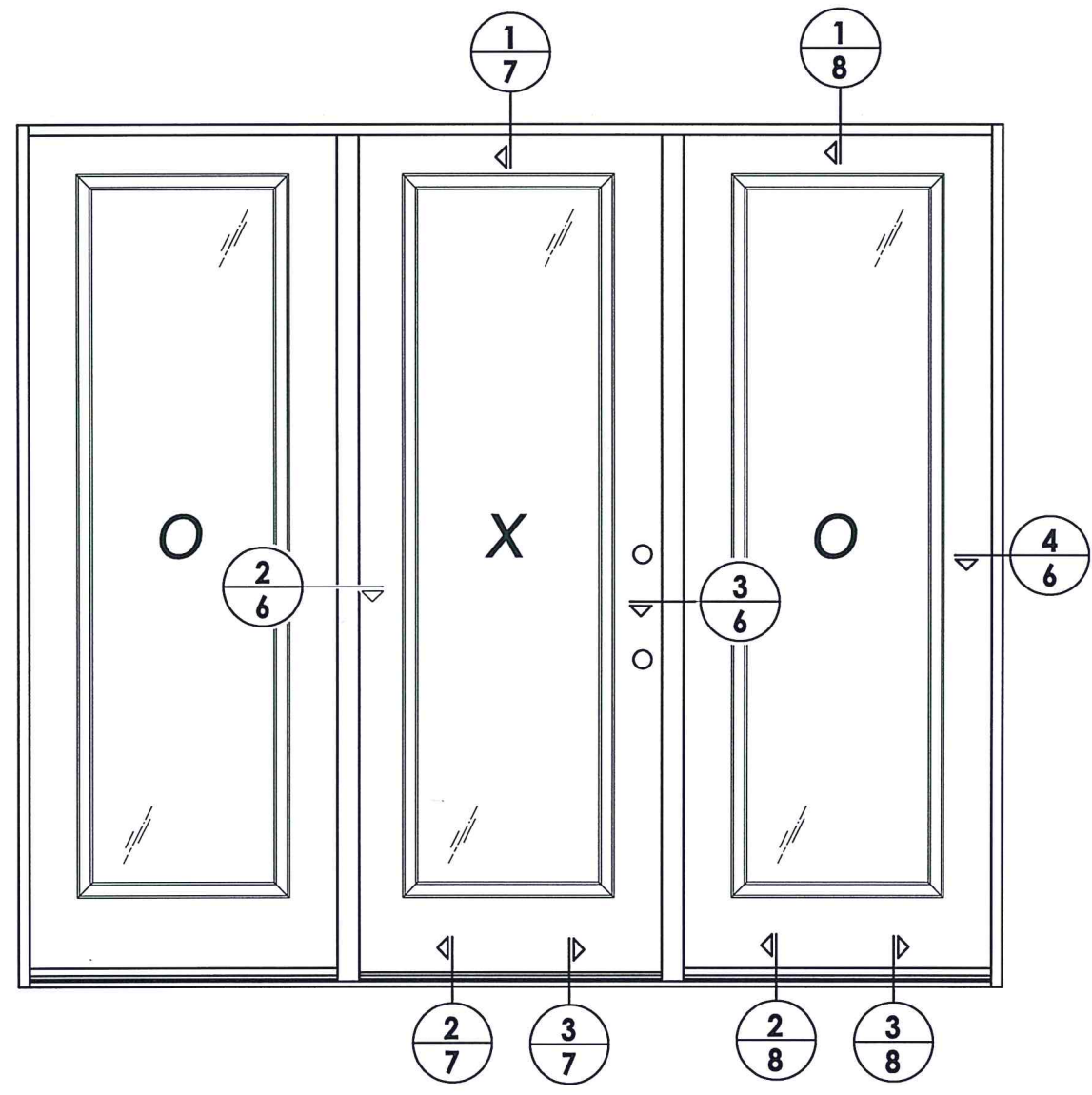
DATE:	11/28/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4281
SHEET	4 OF 10



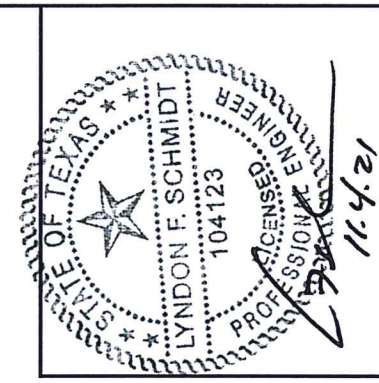
ELEVATION (XO - OX)



ELEVATION (XO - OX)  
center hinge



ELEVATION (OXO)



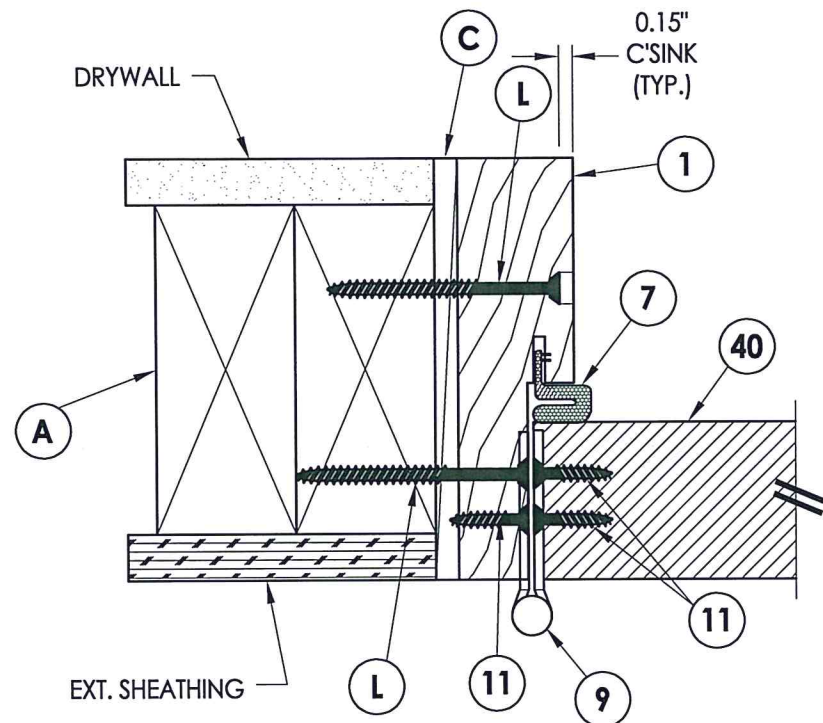
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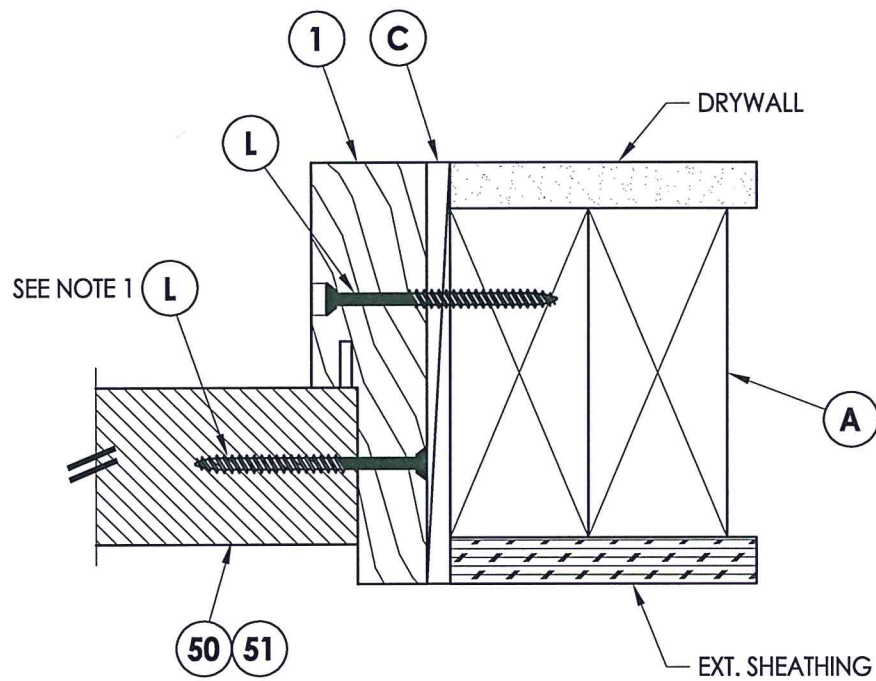
PRODUCT: FIBERGLASS DOOR	
PART OR ASSEMBLY: ELEVATIONS	
NO.	DATE
3	10/21/21
2	5/16/18
1	12/14/15
REVISIONS	
DATE: 11/28/12	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: TX-4281	
SHEET 5 OF 10	



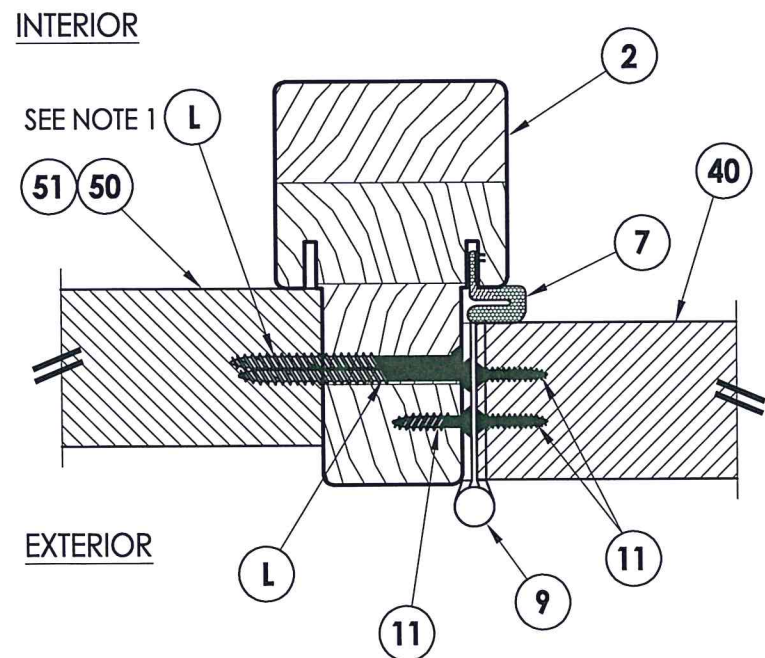
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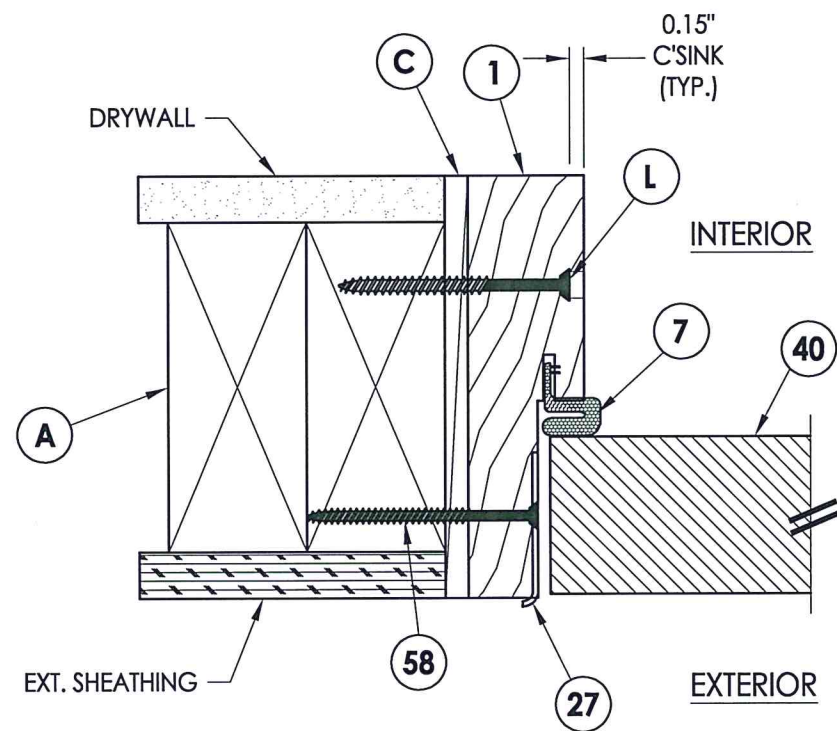
**1** HORIZONTAL CROSS SECTION  
6 Outswing shown - Inswing also approved



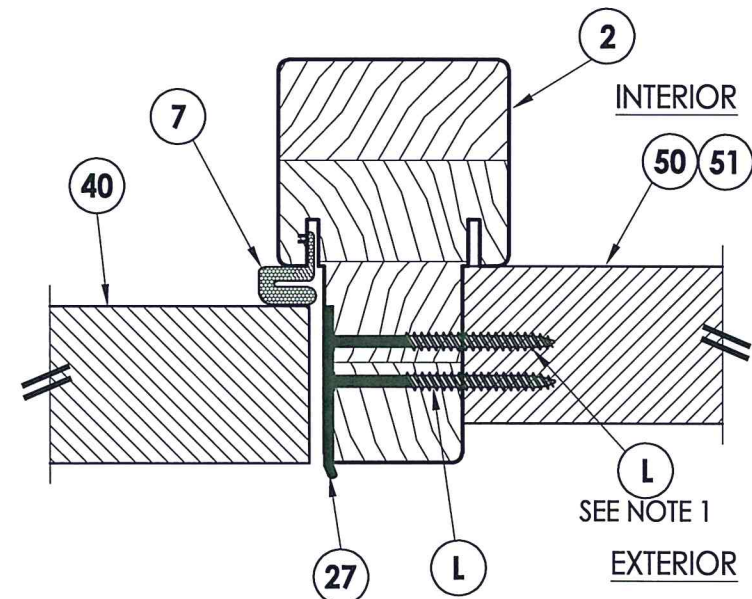
**4** HORIZONTAL CROSS SECTION  
6 Outswing shown - Inswing also approved



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

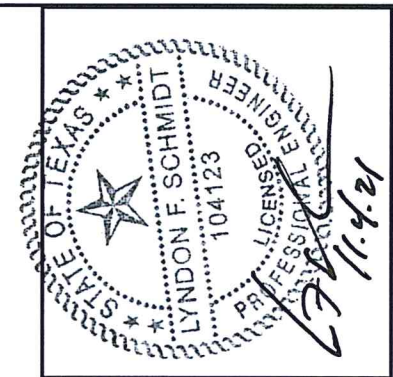


**5** HORIZONTAL CROSS SECTION  
6 Outswing shown - Inswing also approved



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

NOTE:  
1. Sidelite panel screws located 6" from each end and equally spaced (4 screws total)



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

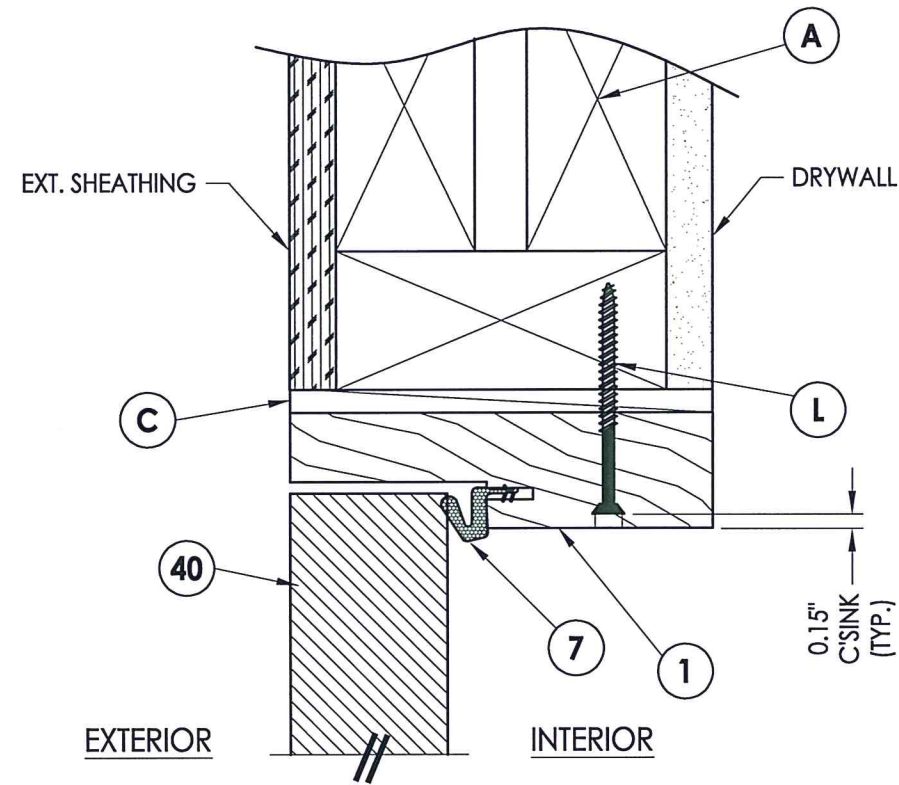
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL, 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: FIBERGLASS DOOR  
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

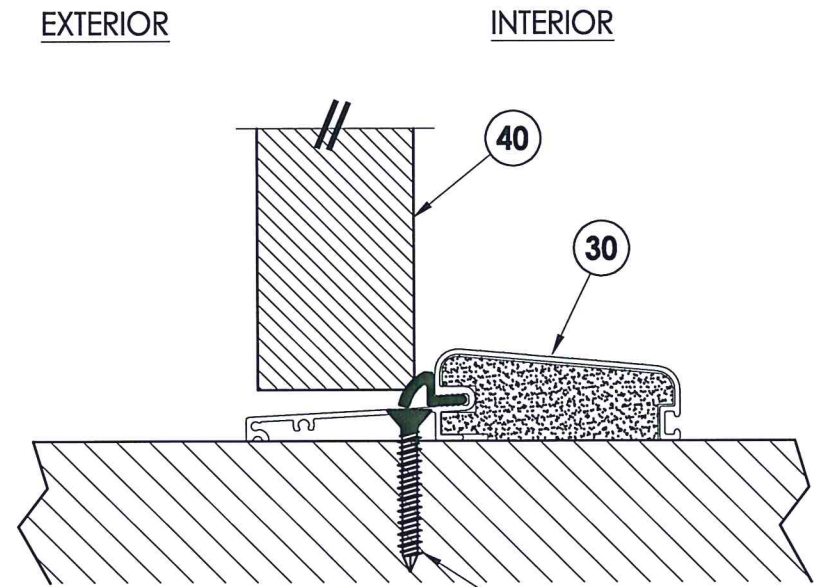
NO.	DATE	REVISIONS
3	10/21/21	UPDATE TO 2018 IBC/IRC
2	5/16/18	ADD FLAT FRAME LITE PROFILE
1	12/14/15	ADD H.S. GLAZING OPTION

DATE: 11/28/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4281  
SHEET 6 OF 10



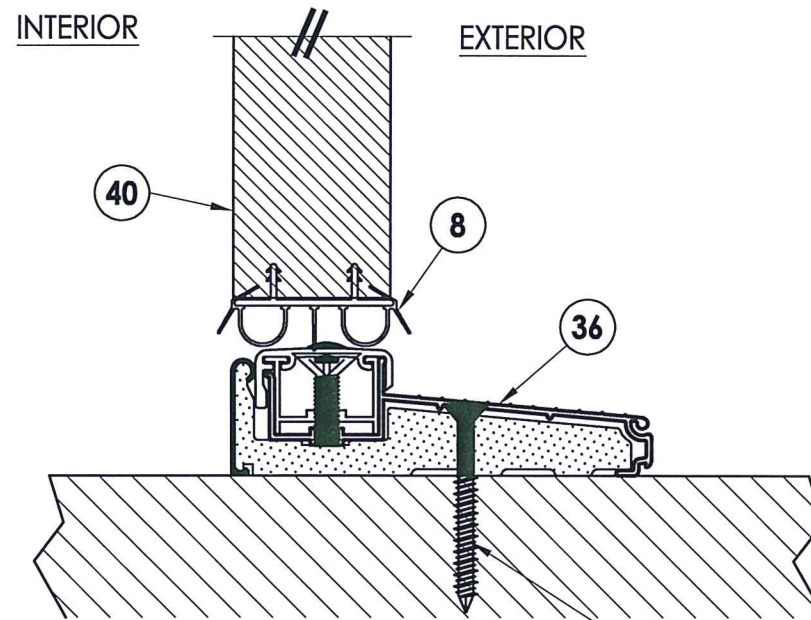


**1 VERTICAL CROSS SECTION**  
 7 Outswing shown - inswing also approved



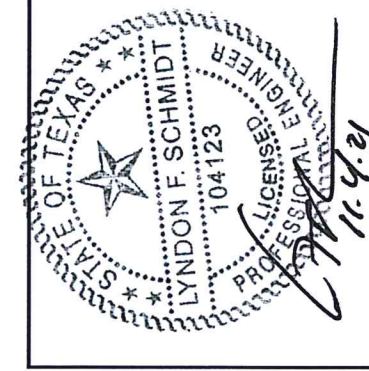
**2 VERTICAL CROSS SECTION**  
 7 Outswing configuration

**J** WOOD  
**D** CONCRETE



**3 VERTICAL CROSS SECTION**  
 7 Inswing configuration

**J** WOOD  
**D** CONCRETE



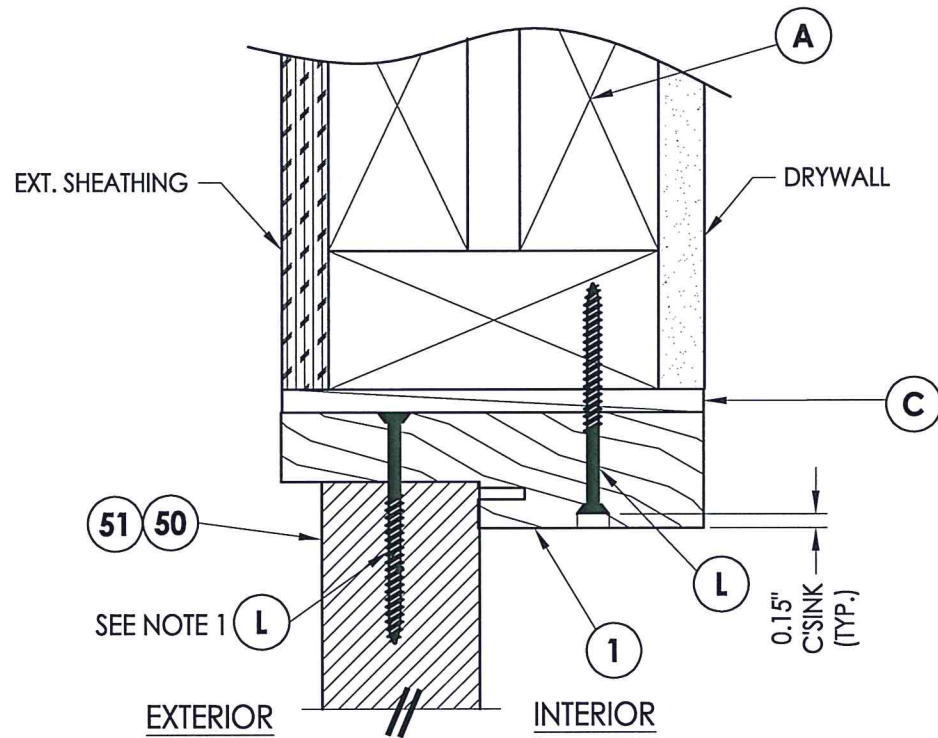
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 TEXAS P.E. #104123

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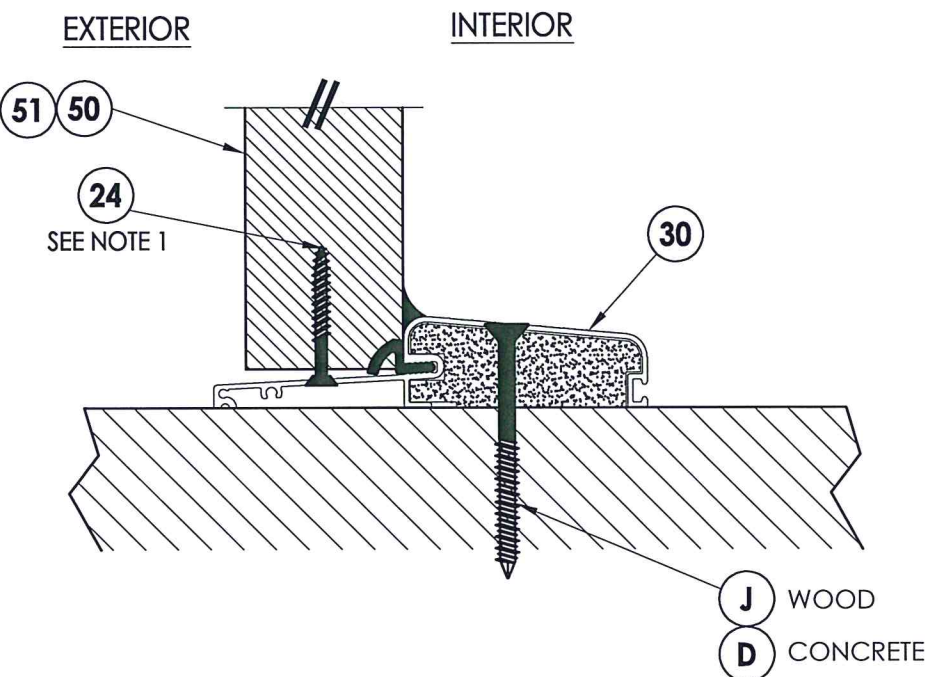
PRODUCT: FIBERGLASS DOOR  
 PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
3	10/21/21	UPDATE TO 2018 IBC/IRC
2	5/16/18	ADD FLAT FRAME LITE PROFILE
1	12/14/15	ADD H.S. GLAZING OPTION

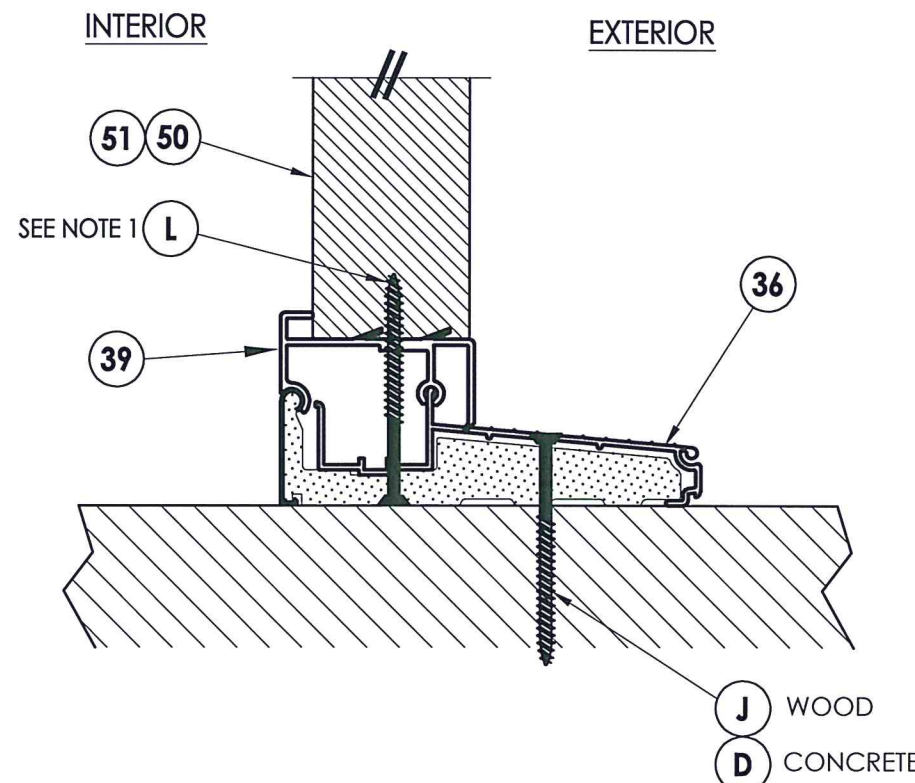
DATE: 11/28/12  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4281  
 SHEET 7 of 10



**1** VERTICAL CROSS SECTION  
**8** Outswing shown - Inswing also approved

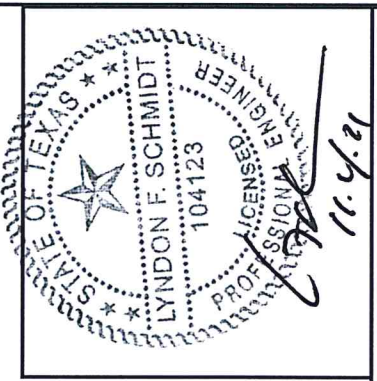


**2** VERTICAL CROSS SECTION  
**8** Outswing shown



**3** VERTICAL CROSS SECTION  
**8** Inswing shown

**NOTE:**  
 1. Sidelite panel screws located 3" from each end (2 Total). Not required for Sidelites less than 14" in width.



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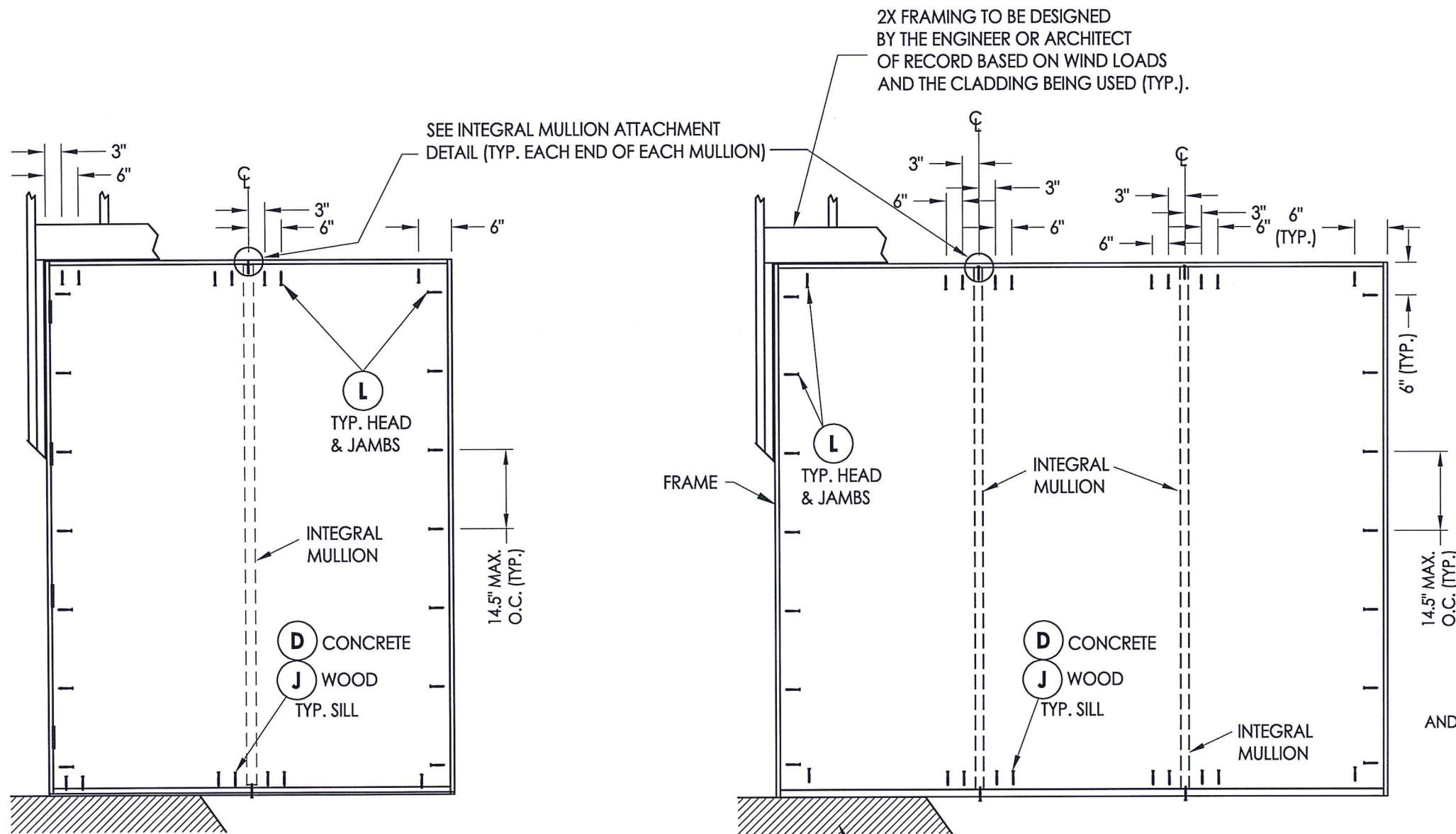
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 CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: FIBERGLASS DOOR  
 PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
3	10/21/21	UPDATE TO 2018 IBC/IRC
2	5/16/18	ADD FLAT FRAME LITE PROFILE
1	12/14/15	ADD H.S. GLAZING OPTION

DATE: 11/28/12  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4281  
 SHEET 8 OF 10





2X FRAMING TO BE DESIGNED BY THE ENGINEER OR ARCHITECT OF RECORD BASED ON WIND LOADS AND THE CLADDING BEING USED (TYP.).

SEE INTEGRAL MULLION ATTACHMENT DETAIL (TYP. EACH END OF EACH MULLION)

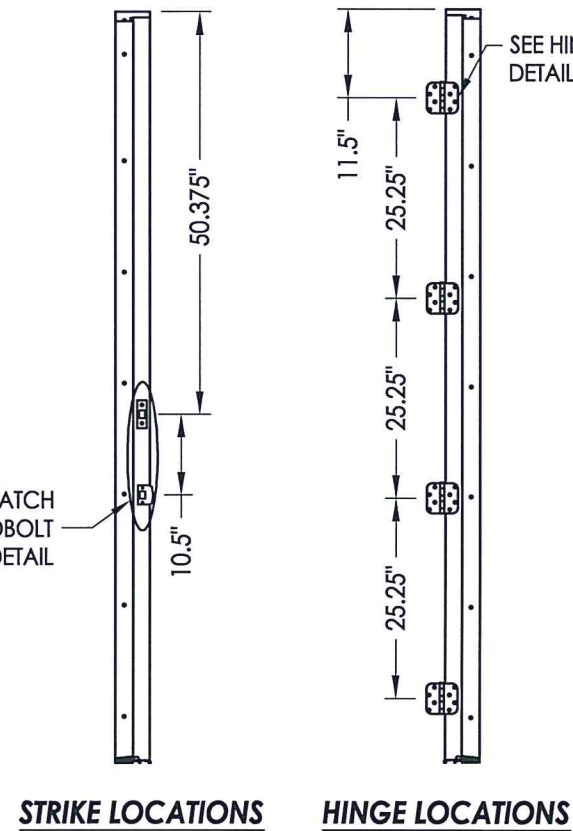
**FRAME ANCHORING**

XO (Shown)  
OX (Similar)

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

**FRAME ANCHORING**

OXO



**STRIKE LOCATIONS**

**HINGE LOCATIONS**



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

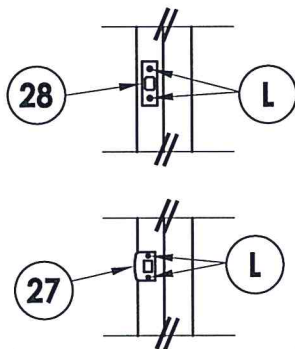
**R.W.** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Vairico FL 33595  
Phone No.: 813.659.9197

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

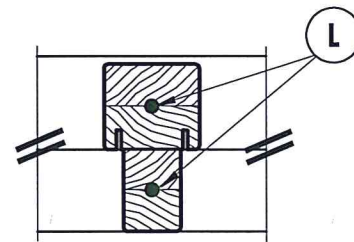
**CONCRETE ANCHOR NOTES:**

- 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:

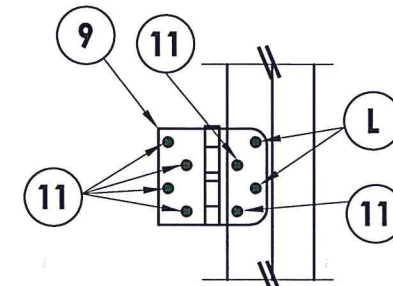
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-3/4"	2-1/2"	3"
DeWALT ULTRACON+®	1/4"	1-3/4"	1"	3"



**LATCH AND DEADBOLT DETAIL**



**INTEGRAL MULLION ATTACHMENT DETAIL**



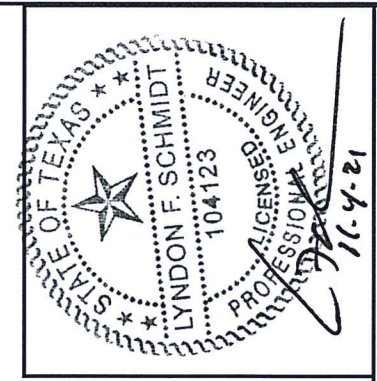
**HINGE DETAIL**

PRODUCT:	FIBERGLASS DOOR	
PART OR ASSEMBLY:	FRAME ANCHORING	
REVISIONS		
NO.	DATE	BY
3	10/21/21	LFS
2	5/16/18	LFS
1	12/14/15	JK
DATE: 11/28/12		
SCALE: N.T.S.		
DWG. BY: JK		
CHK. BY: LFS		
DRAWING NO.: TX-4281		
SHEET 9 OF 10		



**BILL OF MATERIALS**

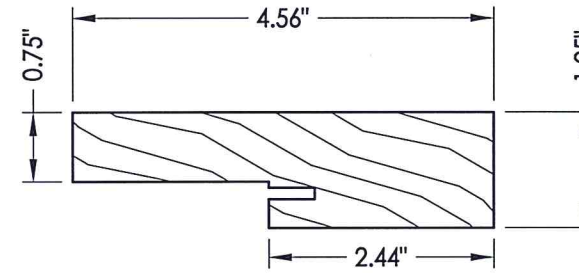
ITEM #	DESCRIPTION	MATERIAL
A	2X FRAMING (G >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" PFH DeWALT OR ITW CONCRETE SCREW (1-3/4" MIN. EMB.)	STEEL
J	#10 X 3" PFH WOOD SCREW (1-1/2" MIN. EMB.)	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMB.)	STEEL
1	HEAD & JAMB - FINGER-JOINT PINE	WOOD
2	INTEGRAL MULLION - FAT BOY (PINE)	WOOD
7	WEATHERSTRIP (Q'LON QEBD-650)	FOAM
8	DOOR BOTTOM SWEEP	VINYL
9	4" X 4" BUTT HINGE	STEEL
11	#9 X 3/4" PFH WOOD SCREW	STEEL
24	#10 X 1-1/2" PFH WOOD SCREW	STEEL
25	#10 X 2" PFH WOOD SCREW	STEEL
27	LATCH STRIKE PLATE	STEEL
28	DEADBOLT STRIKE PLATE	STEEL
30	OUTSWING THRESHOLD	ALUM/COMP
36	INSWING THRESHOLD	ALUM/COMP
39	SIDELITE SPACER - INSWING	PVC
40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR DETAILS	-
50	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR DETAILS	-
51	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR DETAILS	-
58	#8 X 2-1/2" PFH WOOD SCREW	STEEL



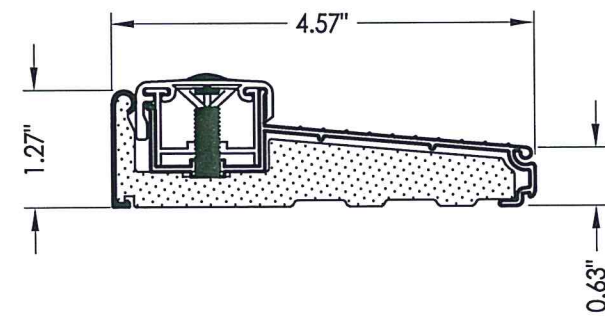
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

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

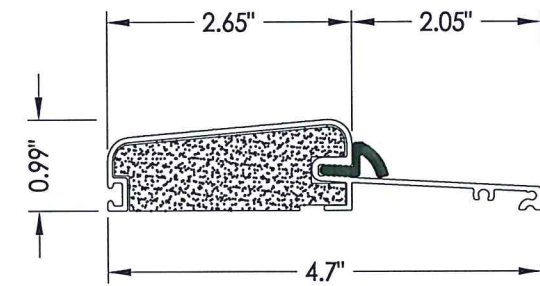
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852



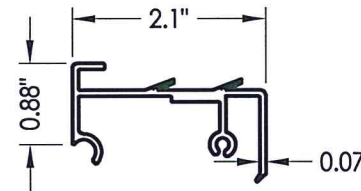
**1 HEAD & JAMB**  
Wood



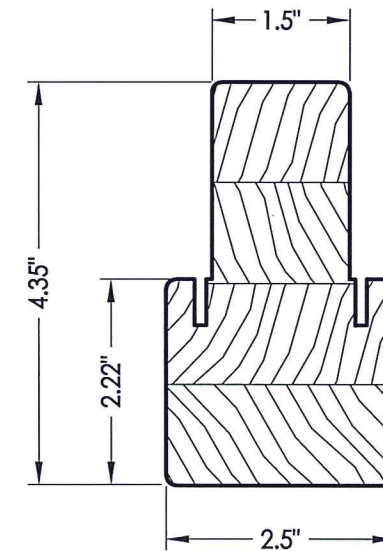
**36 INSWING THRESHOLD**  
Columbia 900 Series



**30 OUTSWING THRESHOLD**  
Columbia 775 Series  
w/ Composite Substrate



**39 SIDELITE SPACER**  
Inswing



**2 INTEGRAL MULLION**

PRODUCT: FIBERGLASS DOOR

PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS

NO.	DATE	REVISIONS
3	10/21/21	UPDATE TO 2018 IBC/IRC
2	5/16/18	ADD FLAT FRAME LITE PROFILE
1	12/14/15	ADD H.S. GLAZING OPTION

DATE: 11/28/12

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4281

SHEET 10 OF 10