



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"

EVALUATED FOR USE IN THE STATE OF TEXAS

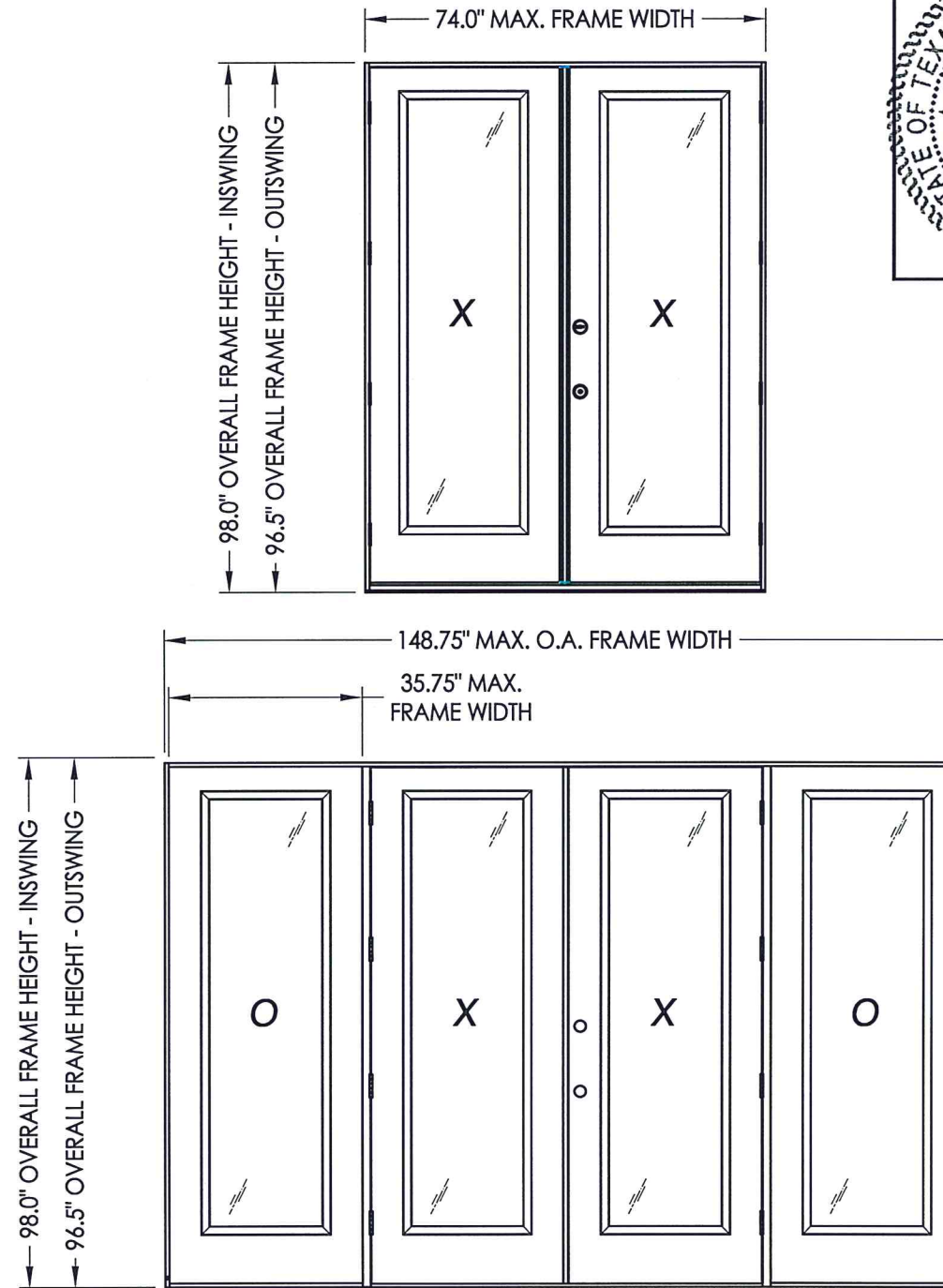
**TDI DR-625**

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	Astragal details
11	Bill of materials & components



CONFIGURATION	MAX. FRAME DIMENSION	ASTRAGAL	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
			POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XX	74.0" x 98.0"	COLUMBIA	+30.0	-30.0	+30.0	-30.0
	74.0" x 98.0"	DLP	+30.0	-35.0	+30.0	-30.0
OXXO	148.75" x 98.0"	DLP	+30.0	-30.0	+30.0	-30.0



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

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

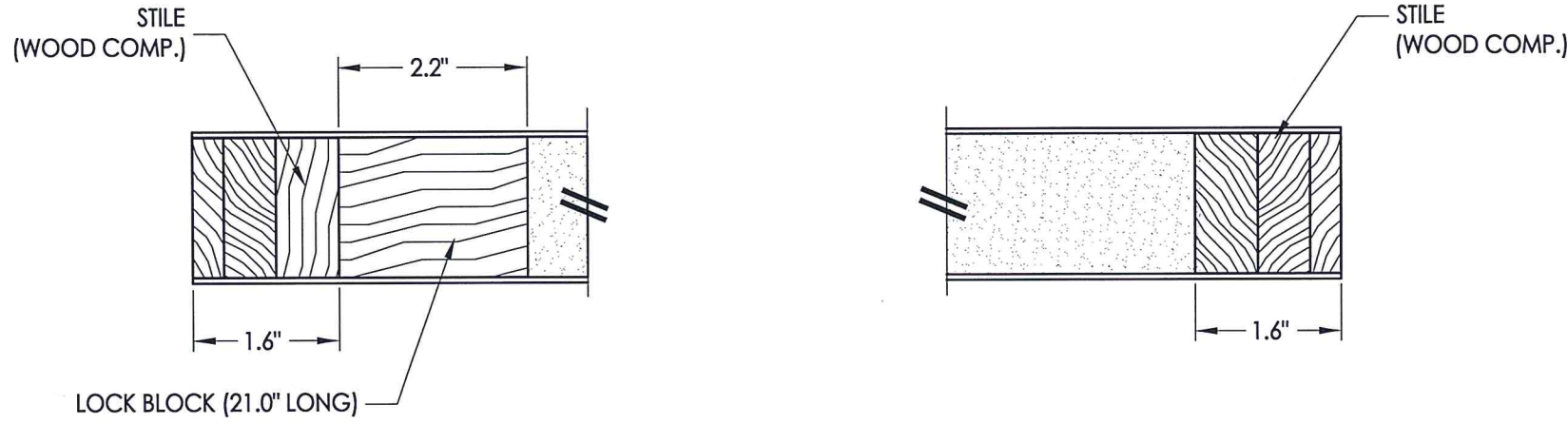
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: FIBERGLASS DOOR

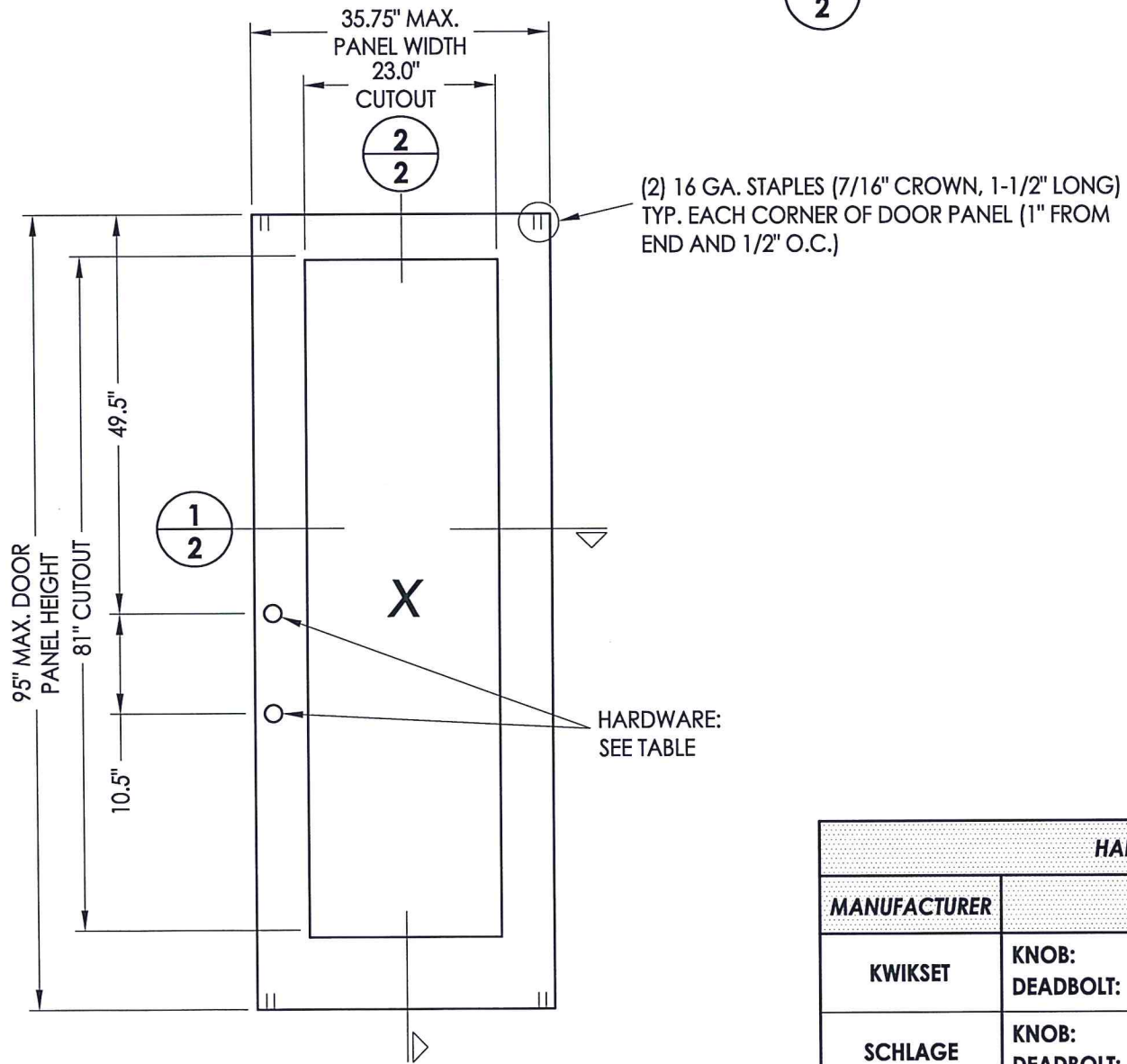
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

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-4282  
SHEET 1 OF 11

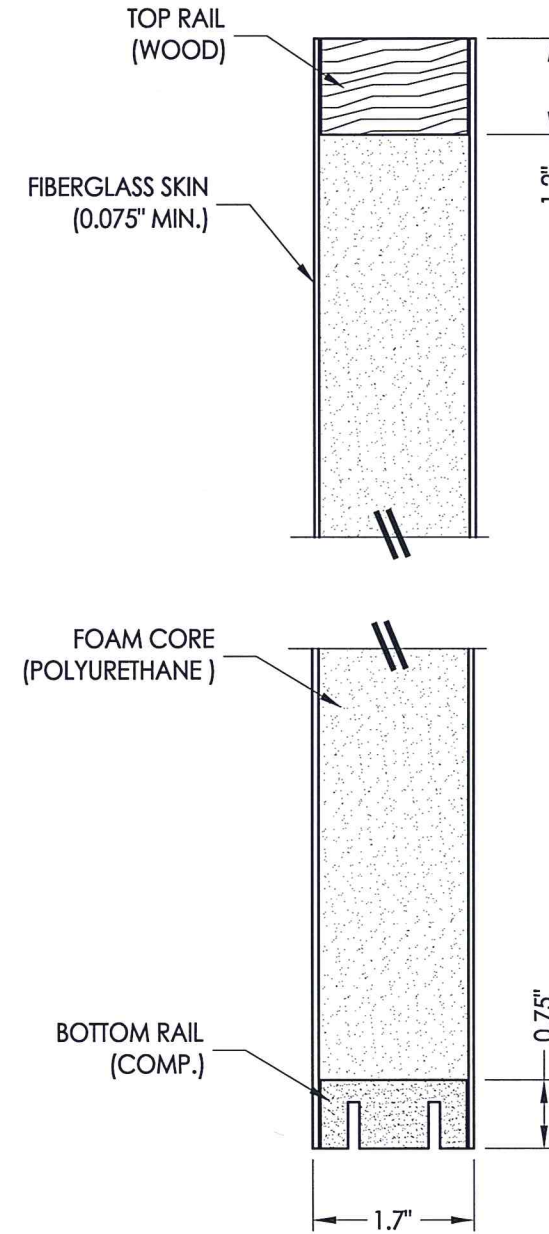


1  
2 **HORIZONTAL CROSS SECTION**



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	35 PSF
	Deadbolt:	B Series	
Pamex	Knob:	FT Series	30 PSF
	Deadbolt:	FD7 Series	



2  
2 **VERTICAL CROSS SECTION**



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PRODUCT: FIBERGLASS DOOR

PART OR ASSEMBLY: DOOR PANEL DETAILS

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

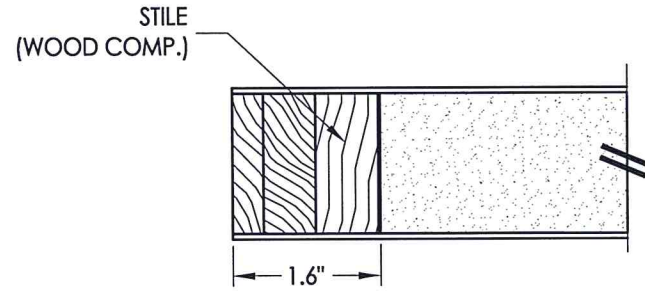
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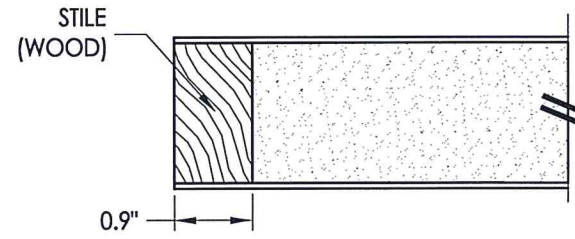
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DRAWING NO.: TX-4282

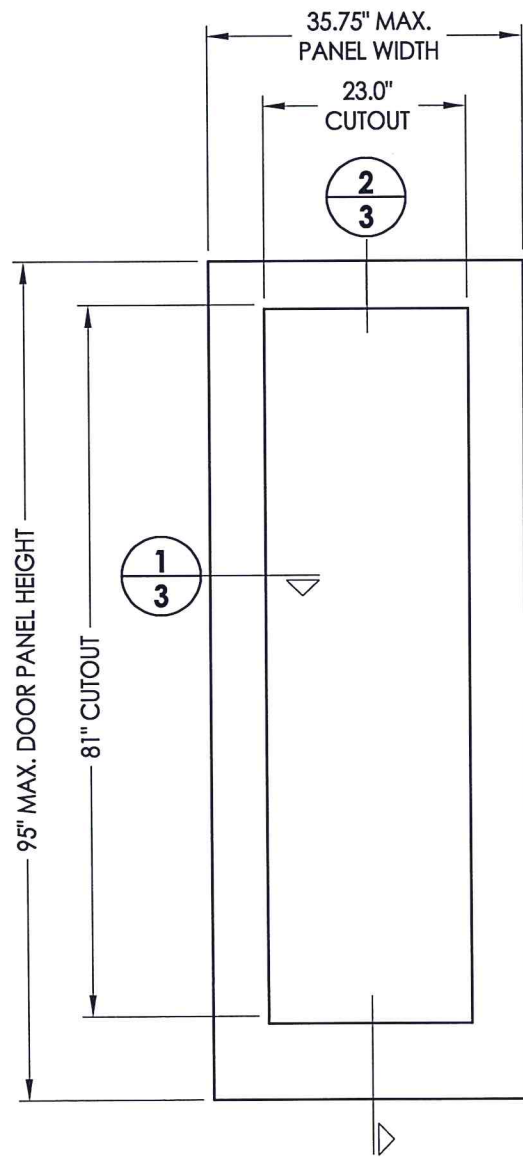
SHEET 2 OF 11



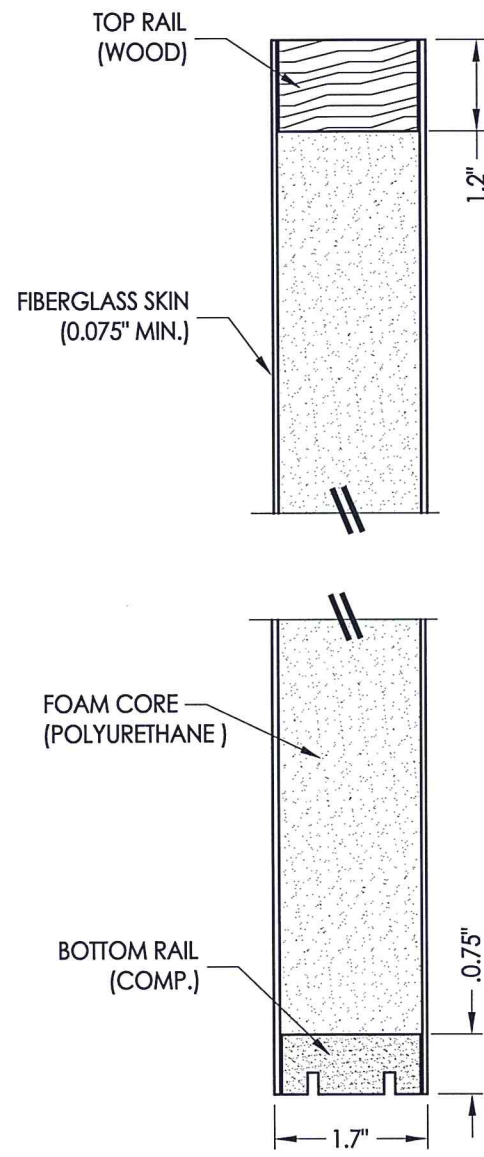
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**3** HORIZONTAL CROSS SECTION



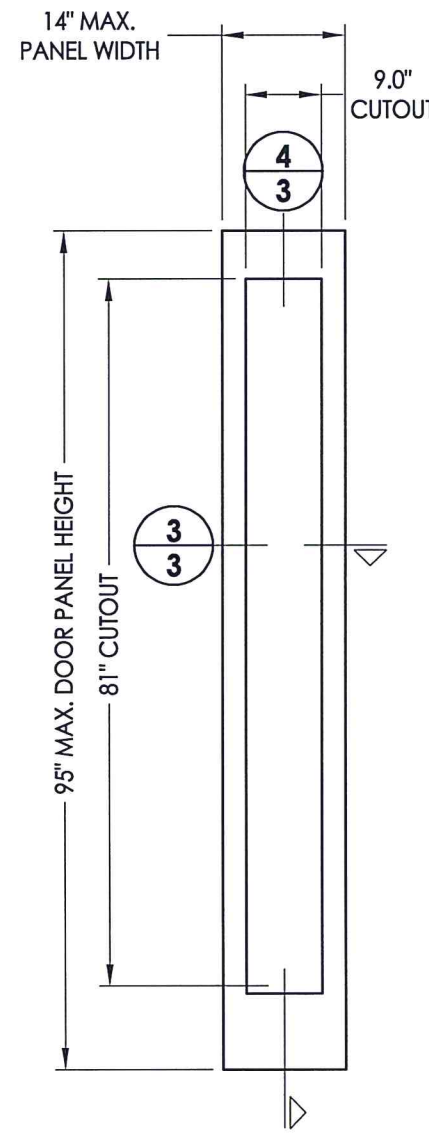
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**3** HORIZONTAL CROSS SECTION



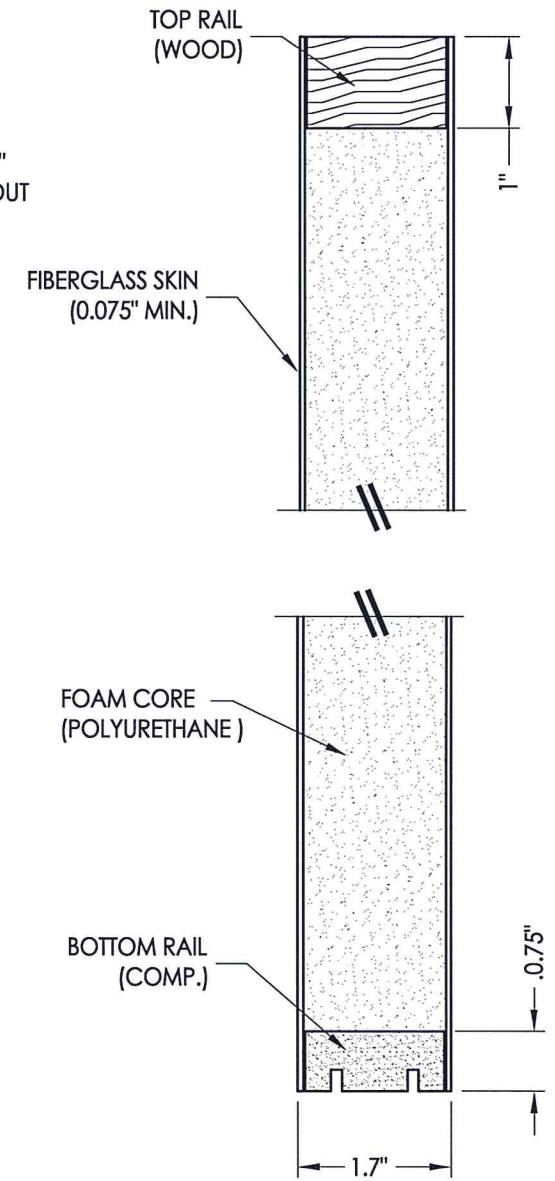
**50** SIDELITE PANEL (36" NOM.)  
Masonite



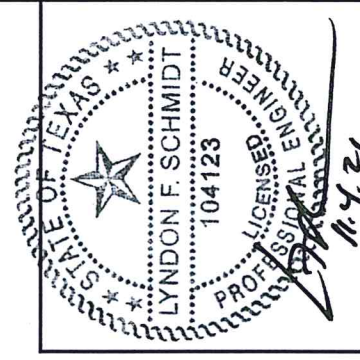
**2**  
**3** VERTICAL CROSS SECTION



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



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

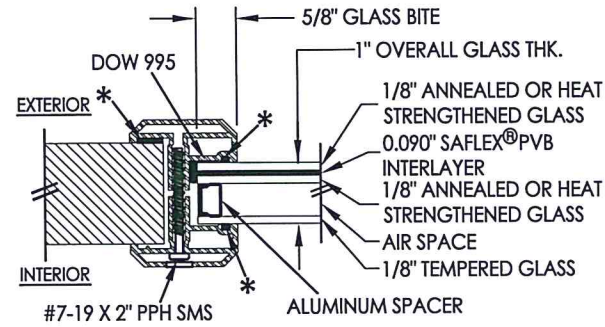


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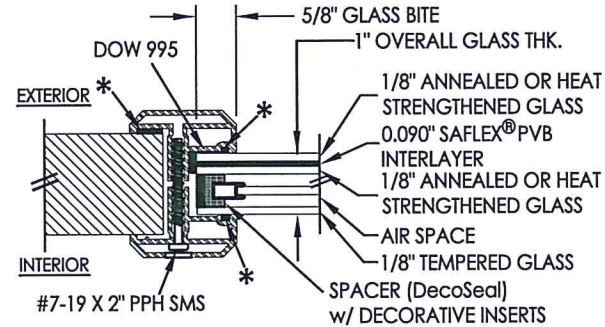
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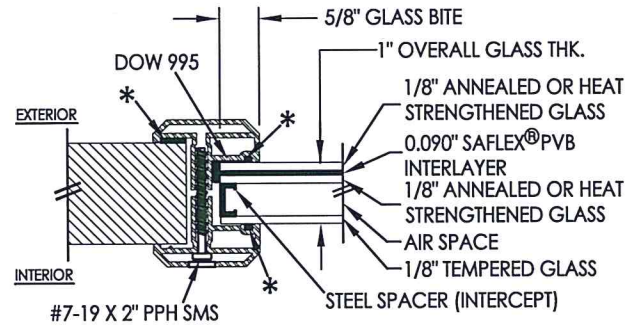
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PART OR ASSEMBLY:		SIDELITE PANEL DETAILS	
NO.	DATE	BY	REVISIONS
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2	5/16/18	LFS	ADD FLAT FRAME LITE PROFILE
1	12/14/15	JK	ADD H.S. GLAZING OPTION
DATE: 11/28/12		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: TX-4282		SHEET 3 OF 11	



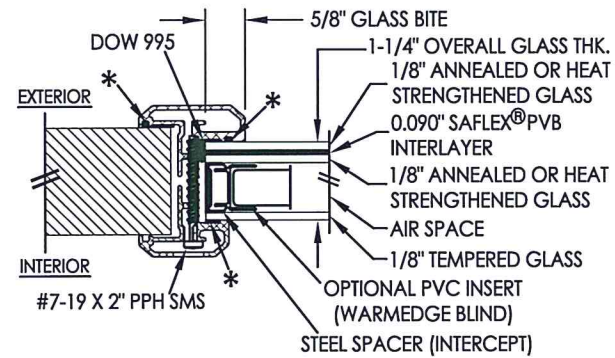
**G1 GLAZING DETAIL**  
Flat Frame Profile



**G3 GLAZING DETAIL**  
Flat Frame Profile

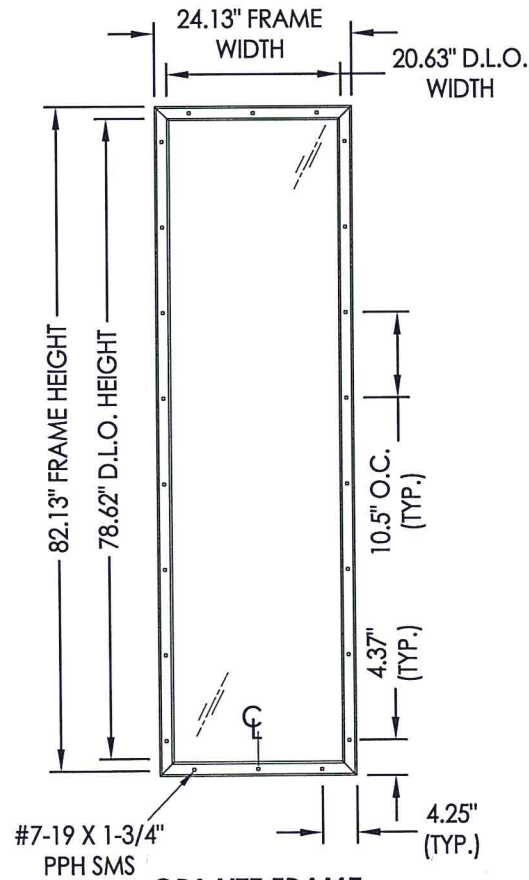


**G2 GLAZING DETAIL**  
Flat Frame Profile

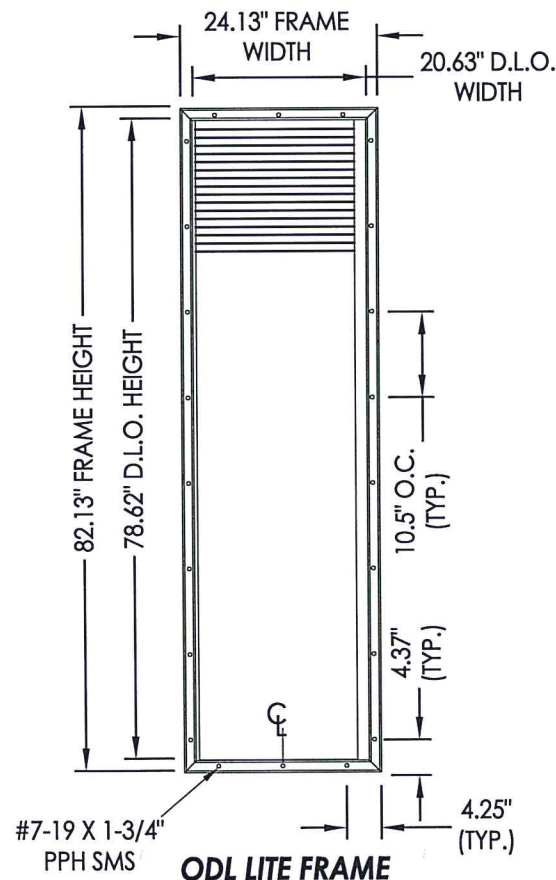


**G4 GLAZING DETAIL**  
Flat Frame Profile  
w/ Blinds Between Glass

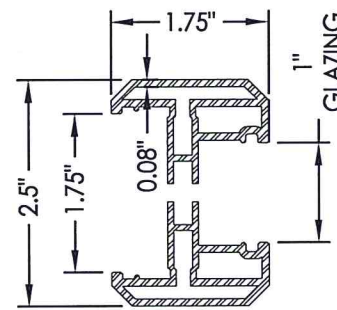
\* NON-STRUCTURAL  
BACKBEDDING  
(READI-SEAL)



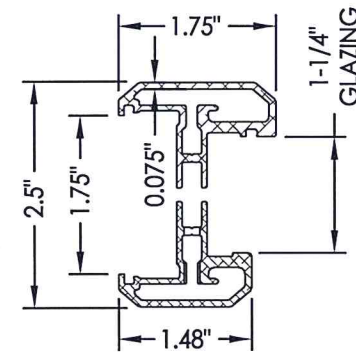
**ODL LITE FRAME**  
"Flat Frame" Aluminum



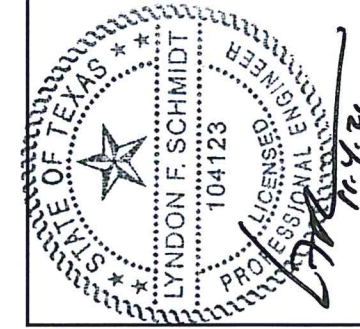
**ODL LITE FRAME**  
"Flat Frame" Aluminum  
w/ Blinds Between Glass



**ODL LITE FLAT FRAME**  
1" GLAZING



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



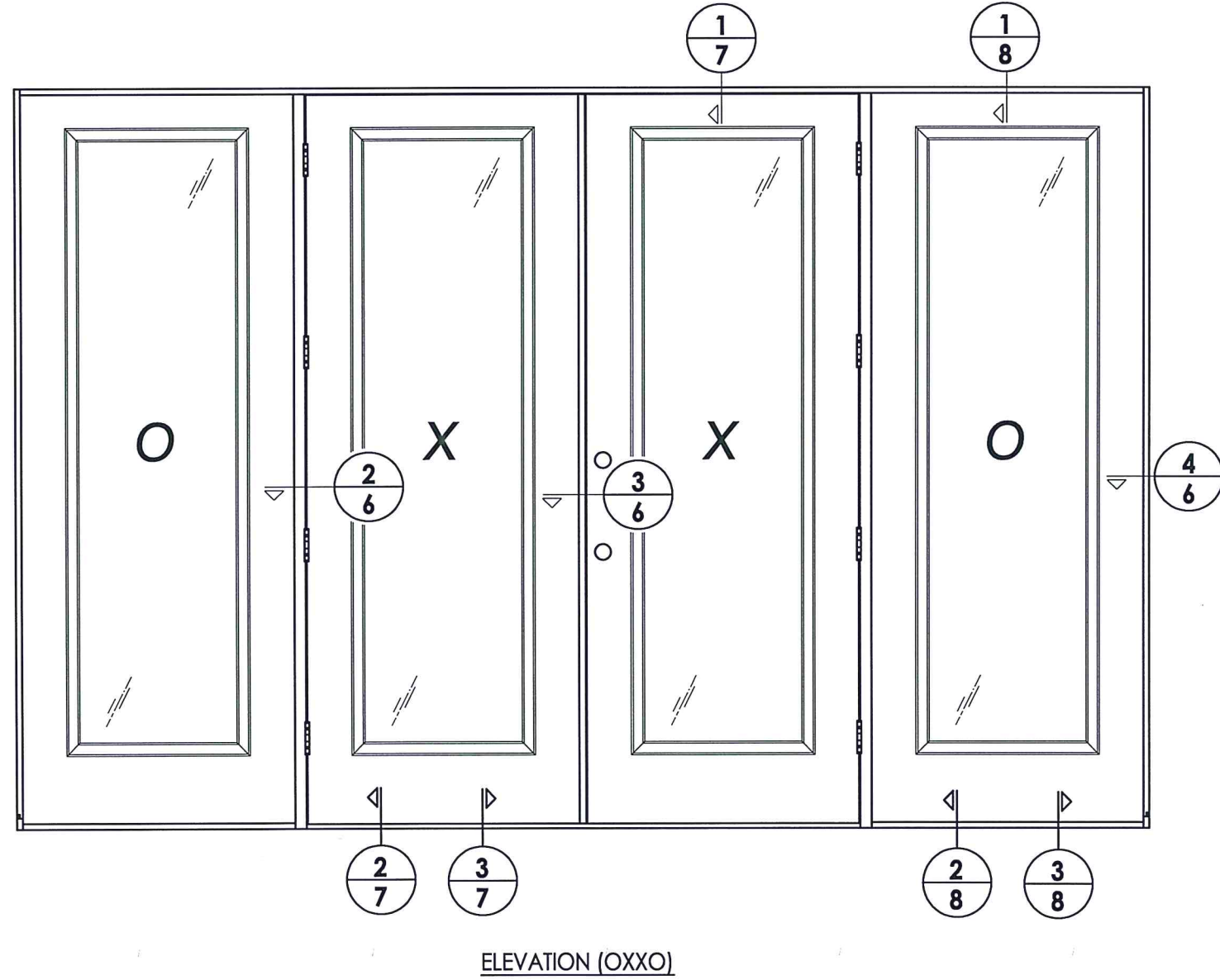
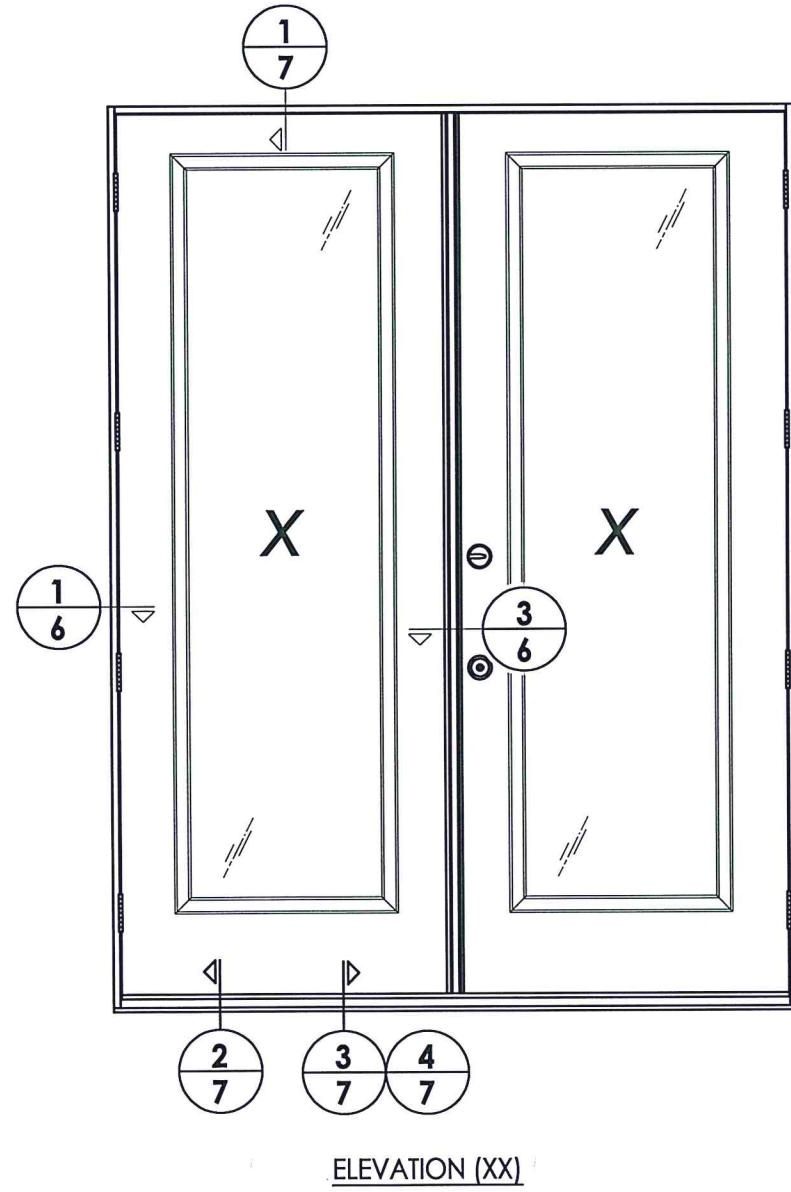
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Phone No.: 813.659.9197  
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CERTIFICATE OF REGISTRATION # F-11852

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	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-4282  
SHEET 4 OF 11



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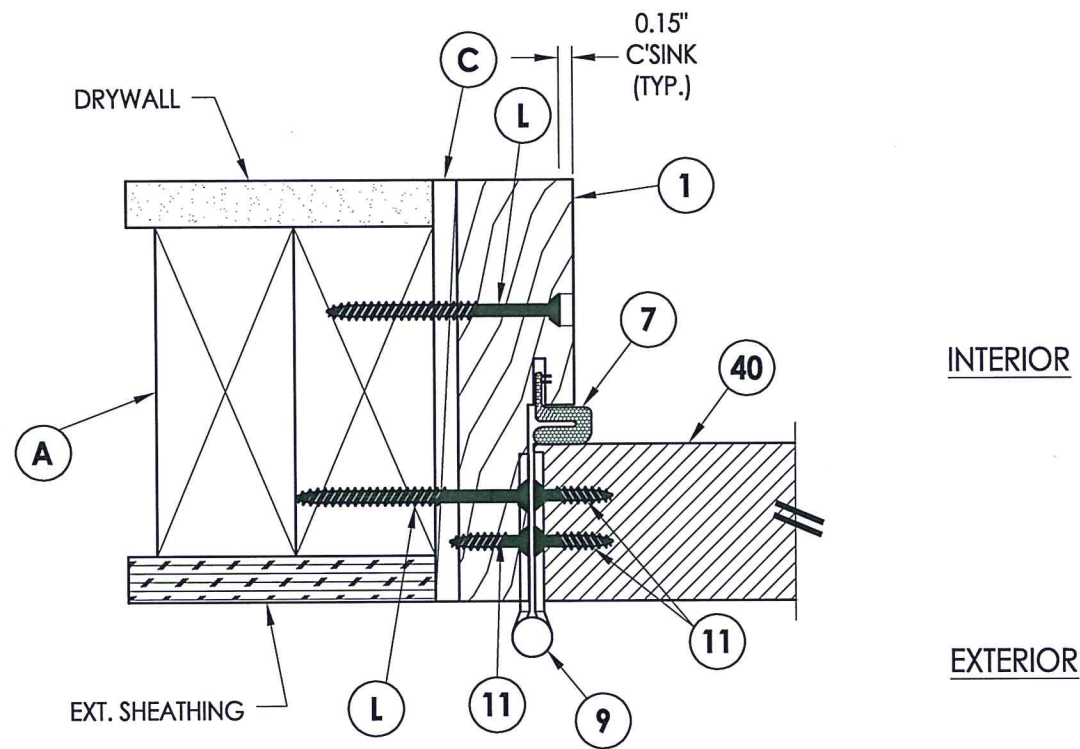
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL, 33595  
Phone No.: 813.659.9197

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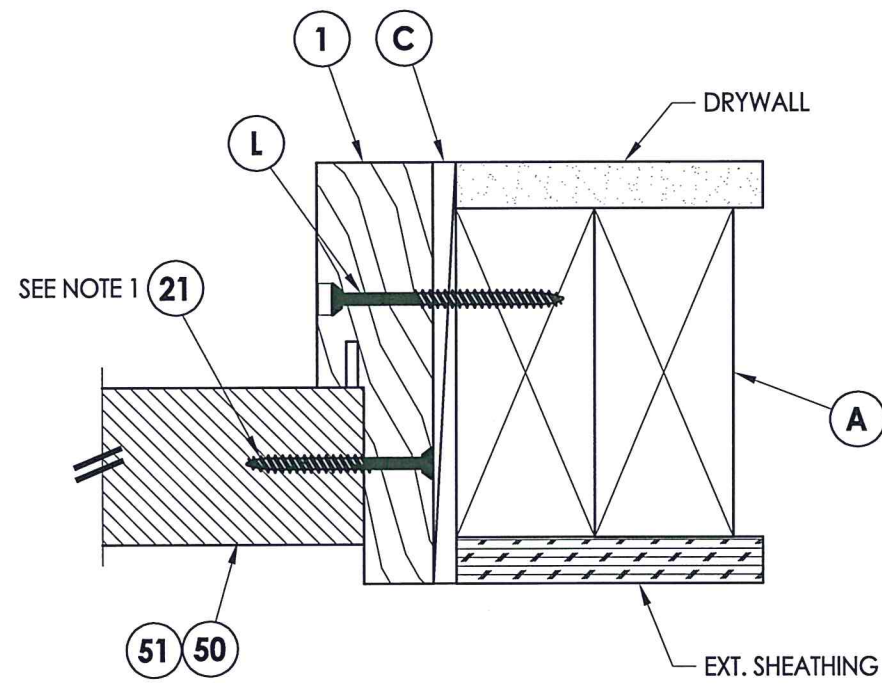
PRODUCT:		FIBERGLASS DOOR	
PART OR ASSEMBLY:		ELEVATIONS	
NO.	DATE	REVISIONS	BY
3	10/21/21	UPDATE TO 2018 IBC/IRC	LFS
2	5/16/18	ADD FLAT FRAME LITE PROFILE	LFS
1	12/14/15	ADD H.S. GLAZING OPTION	JK

DATE: 11/28/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4282  
SHEET 5 OF 11

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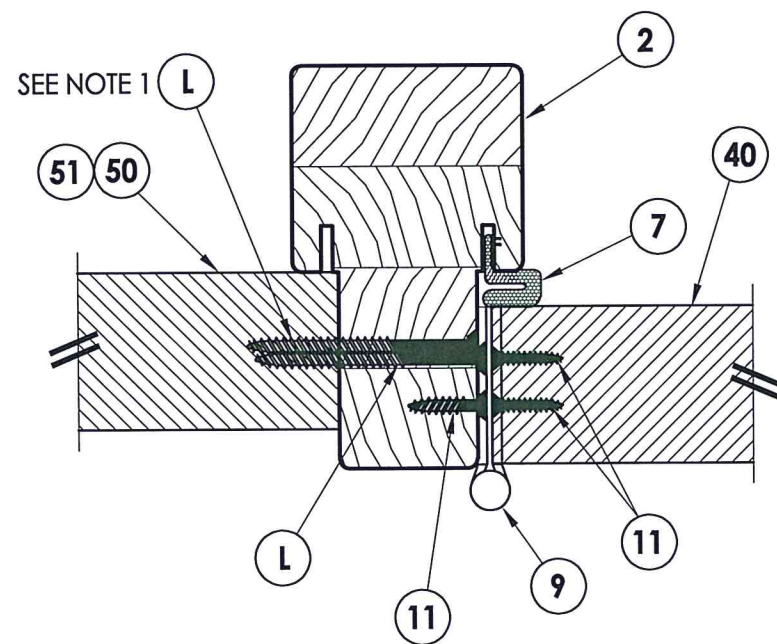


**1** HORIZONTAL CROSS SECTION  
**6** Outswing shown - Inswing also approved

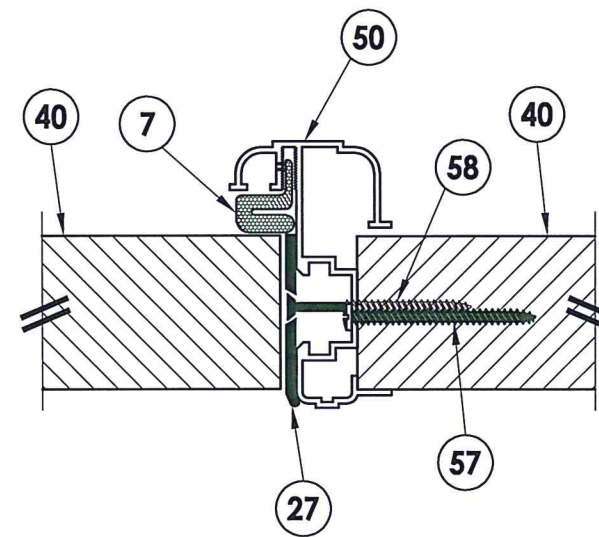


**4** HORIZONTAL CROSS SECTION  
**6** Outswing shown - Inswing also approved

NOTE:  
 1. Sidelite panel screws located 6" from each end plus 5 more equally spaced (7 screws total)



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



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

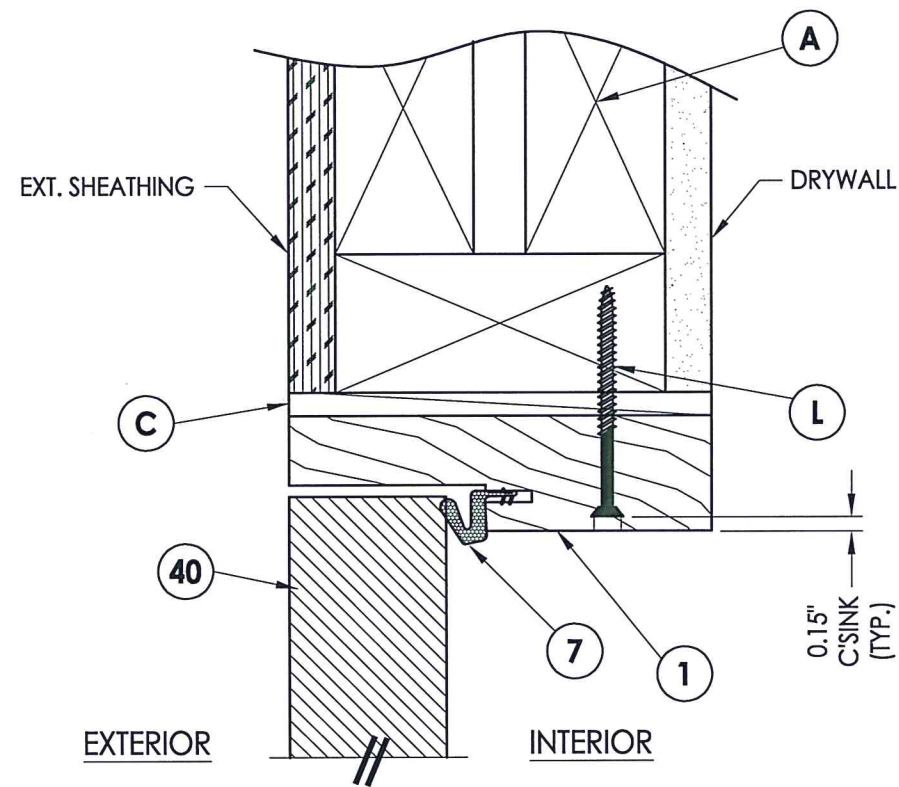


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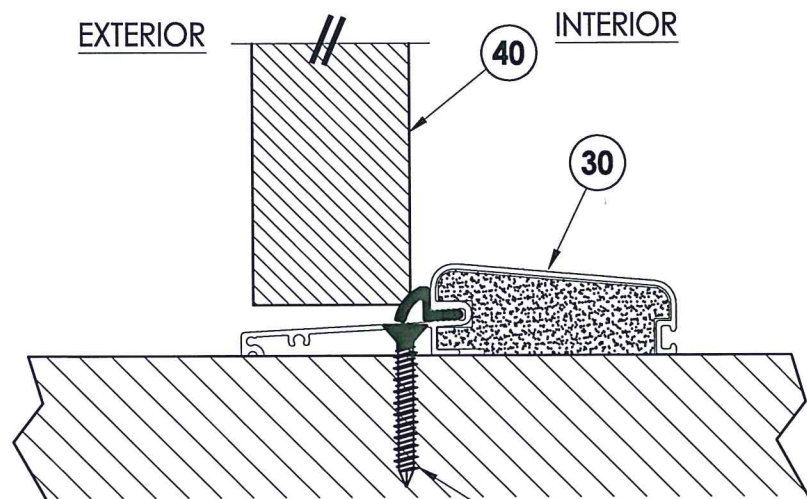
RW BUILDING CONSULTANTS, INC.  
 P.O. Box 230 Valrico FL, 33595  
 Phone No.: 813.659.9197  
 TEXAS BOARD OF PROFESSIONAL ENGINEERS  
 CERTIFICATE OF REGISTRATION # F-11852

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-4282		
SHEET 6 OF 11		

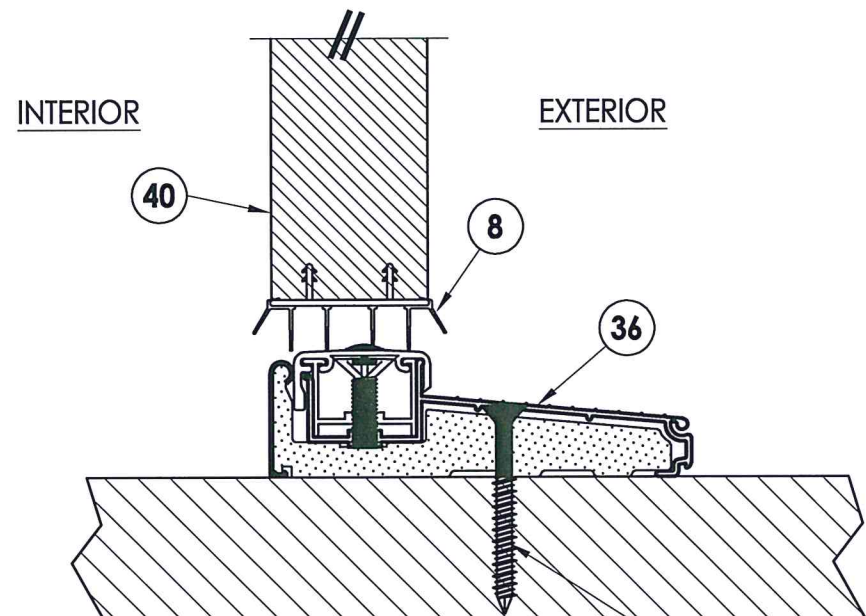
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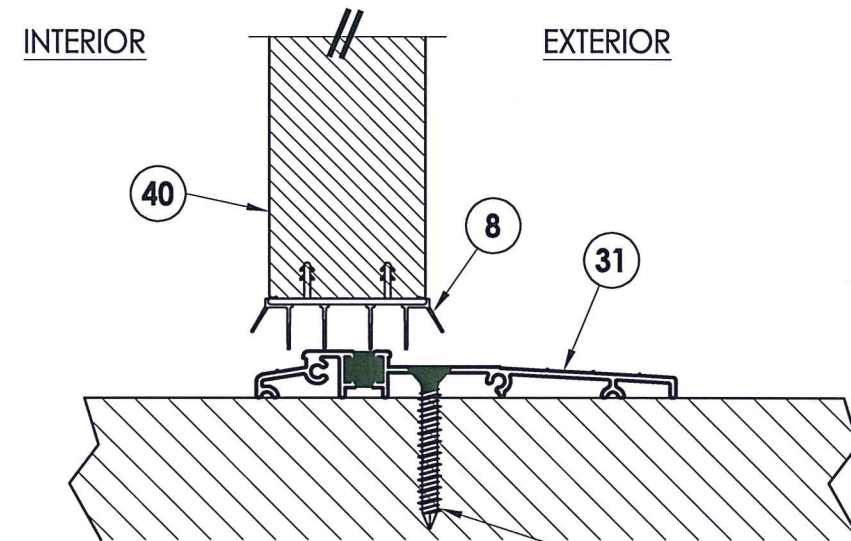
**1 VERTICAL CROSS SECTION**  
**7** Outswing shown - inswing also approved



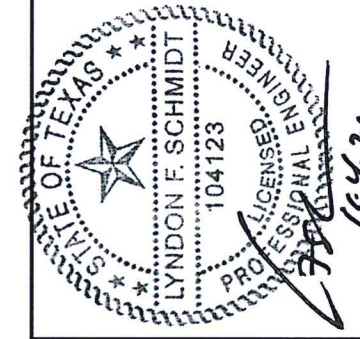
**2 VERTICAL CROSS SECTION**  
**7** Outswing configuration  
**J** WOOD  
**D** CONCRETE



**3 VERTICAL CROSS SECTION**  
**7** Inswing configuration  
**J** WOOD  
**D** CONCRETE



**4 VERTICAL CROSS SECTION**  
**7** Use ADA sill on Double door (XX) only  
**J** WOOD  
**D** CONCRETE



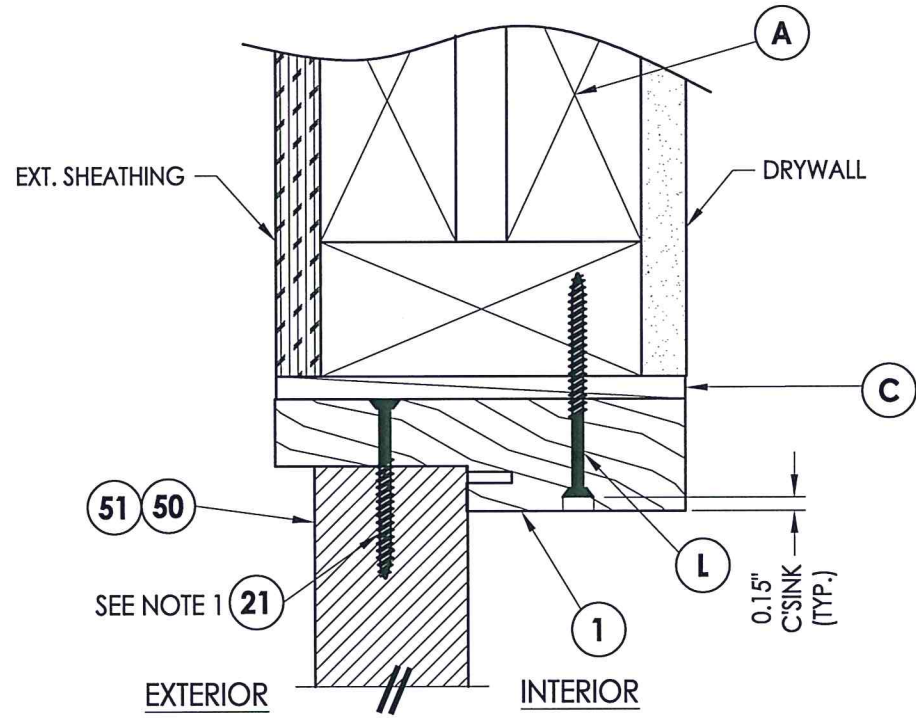
Documents Prepared By: Lyndon F. Schmidt, P.E.  
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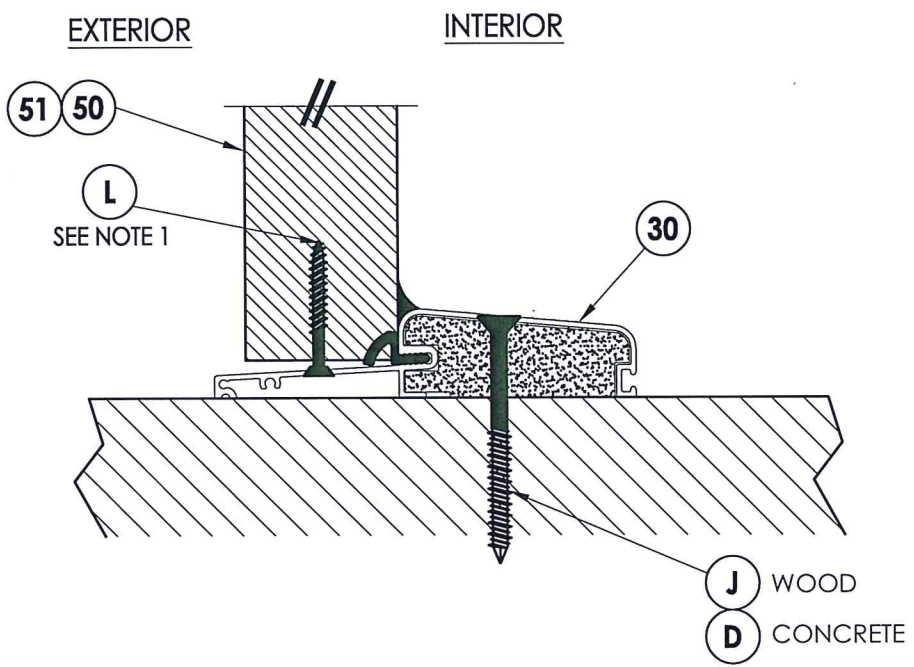
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 PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
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2	5/16/18	ADD FLAT FRAME LITE PROFILE
1	12/14/15	ADD H.S. GLAZING OPTION

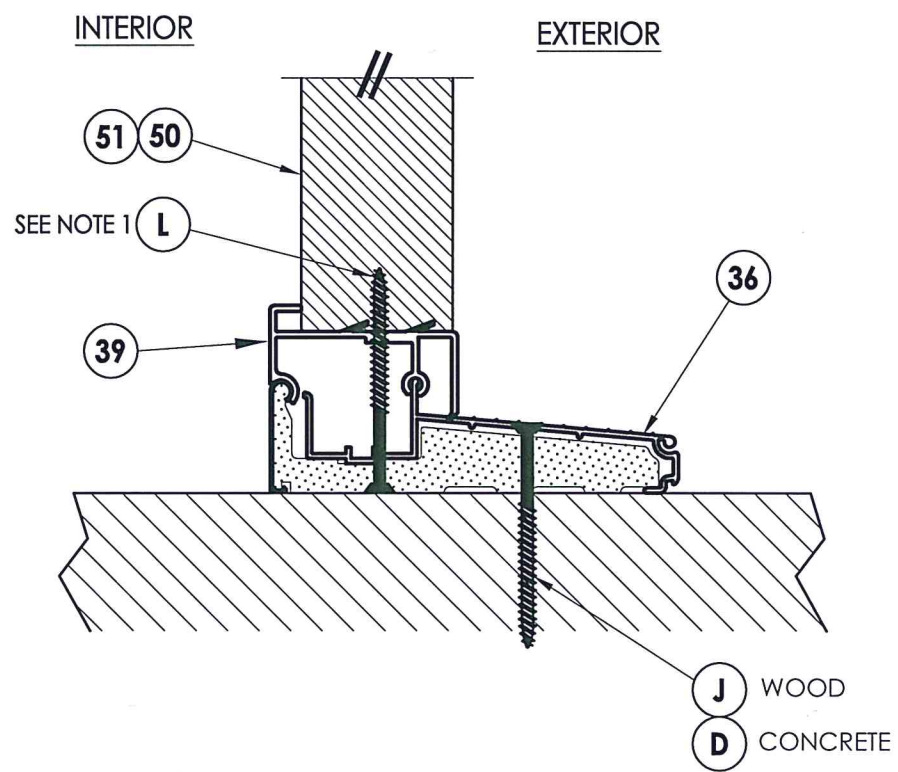
DATE: 11/28/12  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4282  
 SHEET 7 OF 11



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

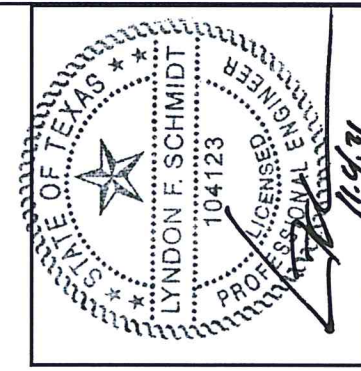


**2**  
**8** **VERTICAL CROSS SECTION**  
Outswing shown



**3**  
**8** **VERTICAL CROSS SECTION**  
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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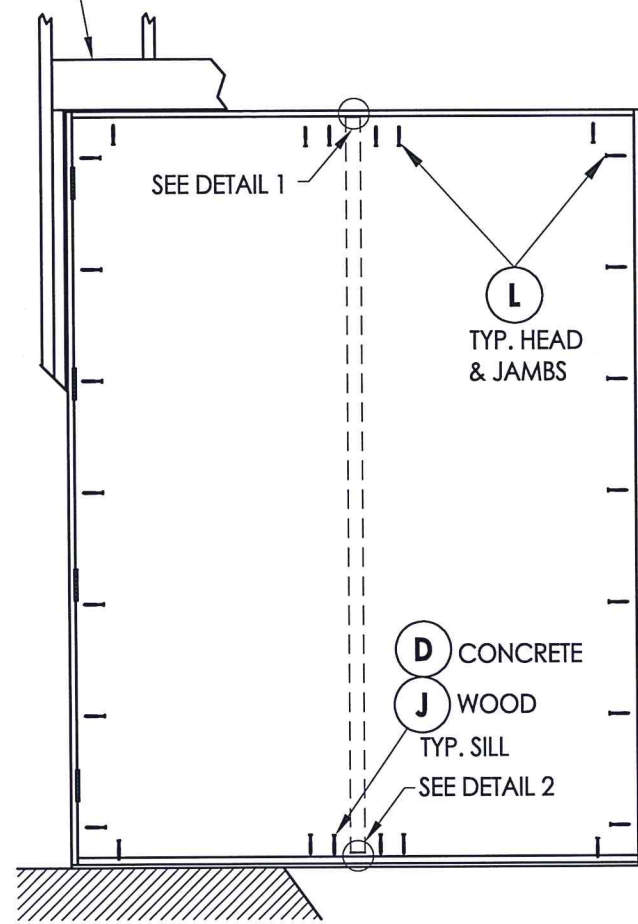
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PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
3	10/21/21	LFS	UPDATE TO 2018 IBC/IRC
2	5/16/18	LFS	ADD FLAT FRAME LITE PROFILE
1	12/14/15	JK	ADD H.S. GLAZING OPTION
DATE: 11/28/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4282			
SHEET 8 of 11			



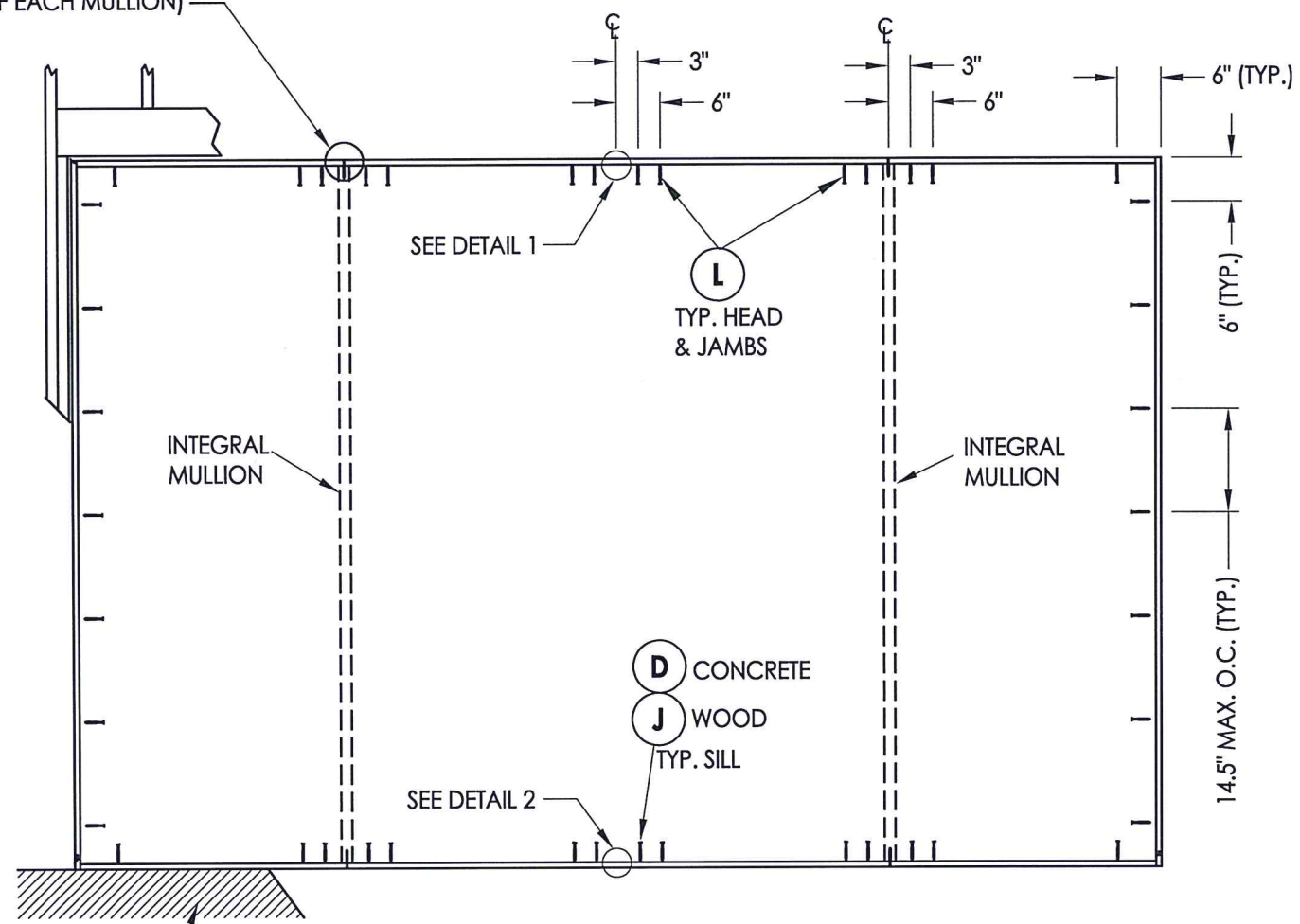
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2X FRAMING TO BE DESIGNED BY THE ENGINEER OR ARCHITECT OF RECORD BASED ON WIND LOADS AND THE CLADDING BEING USED (TYP.).

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

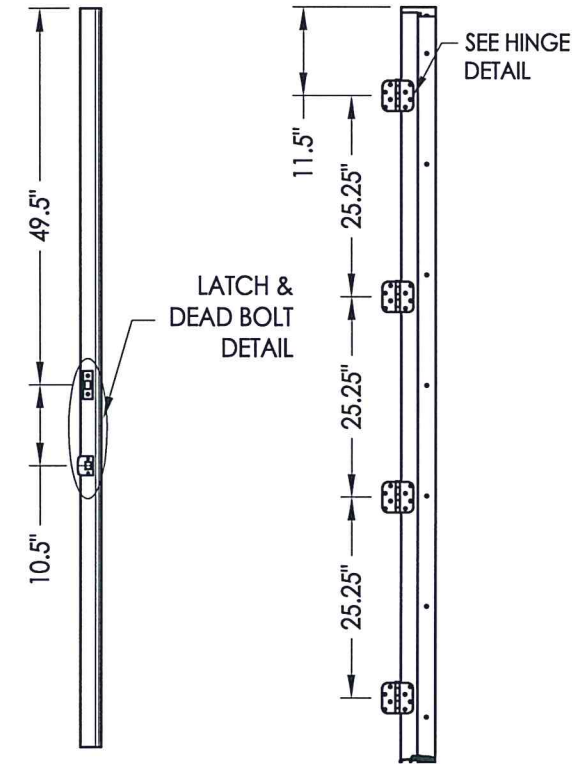


**FRAME ANCHORING**  
XX



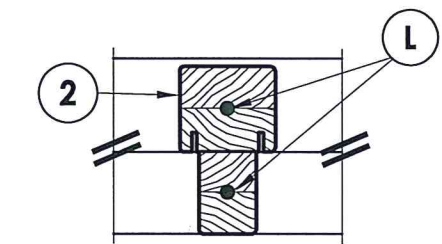
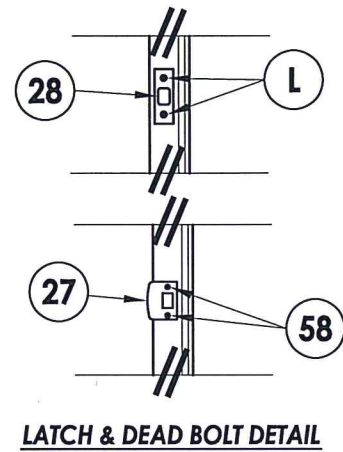
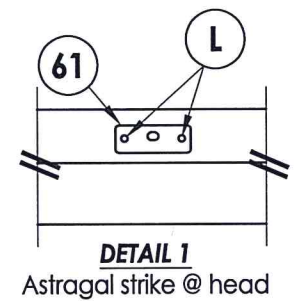
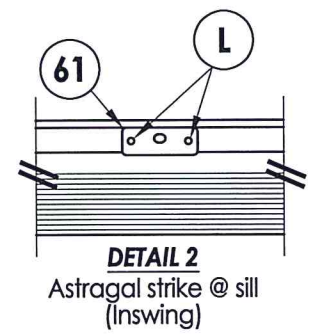
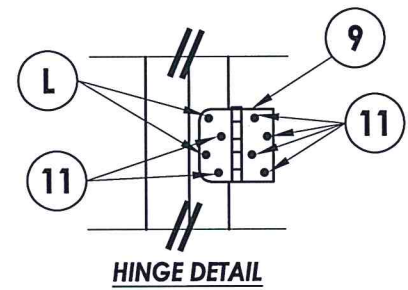
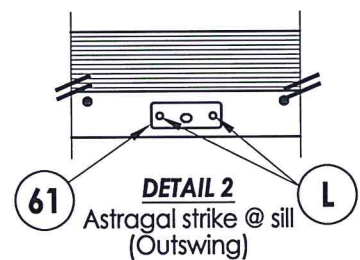
**FRAME ANCHORING**  
OXXO

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



**ASTRALGAL STRIKE JAMB**

**HINGE LOCATIONS**

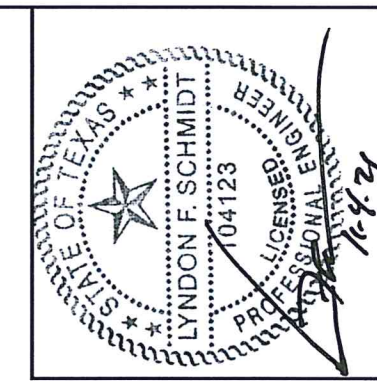


**INTEGRAL MULLION ATTACHMENT DETAIL**

**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"
DeWALT ULTRACON+®	1/4"	1-3/4"	1"	3"

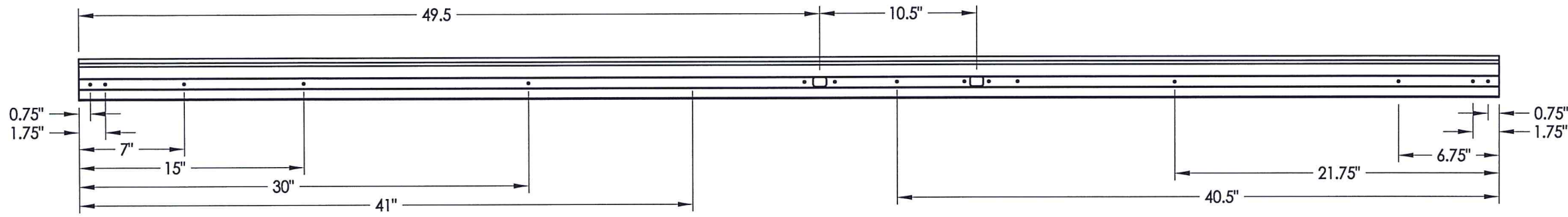


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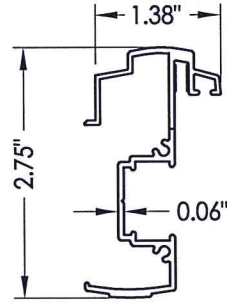
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	FIBERGLASS DOOR	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	BY
3	10/21/21	LFS
2	5/16/18	JK
1	12/14/15	JK
REVISIONS		
DATE:	11/28/12	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4282	
SHEET	9 of 11	

Z:\Clients\ODL, Inc. PERMANENT\B - Texas Dept of Ins\TDI - 625\Drawings\TX-4280-82.dwg

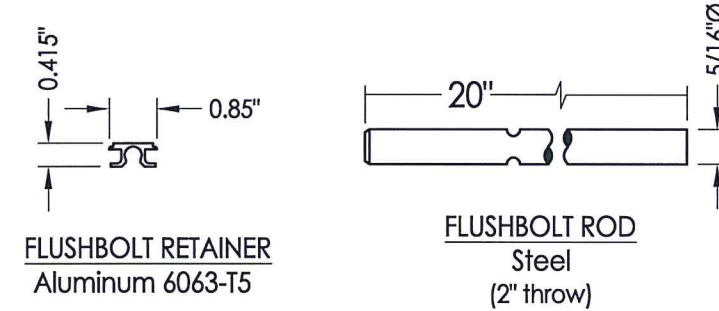


ASTRAGAL SCREW LOCATIONS



60 ASTRAGAL  
Columbia

8'0 ALUMINUM ASTRAGAL ASSEMBLY  
By Columbia



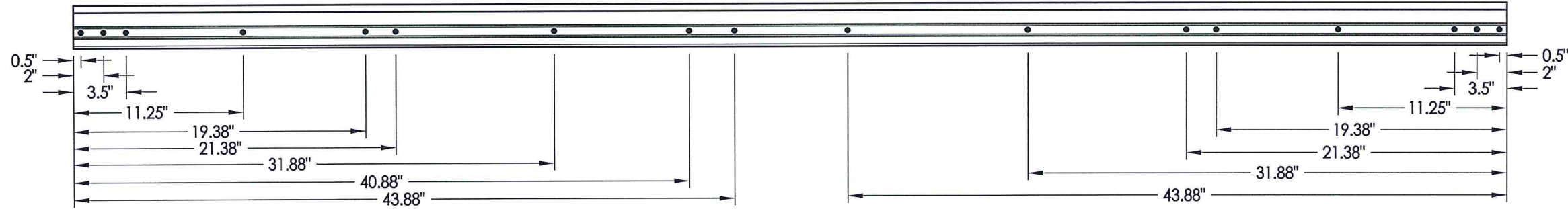
FLUSHBOLT RETAINER  
Aluminum 6063-T5

FLUSHBOLT ROD  
Steel  
(2" throw)

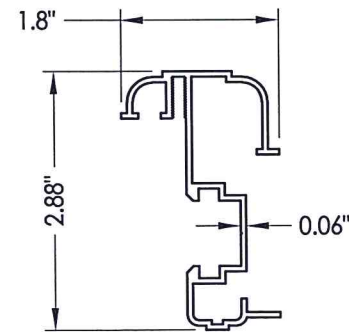


Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

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CERTIFICATE OF REGISTRATION # F-11852

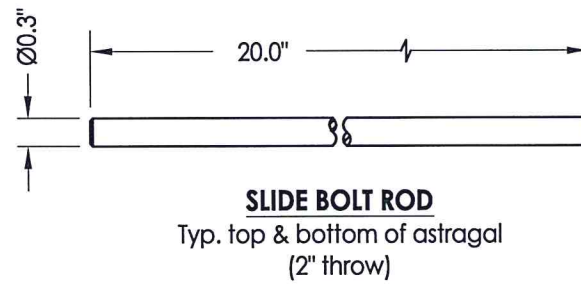


ASTRAGAL SCREW LOCATIONS

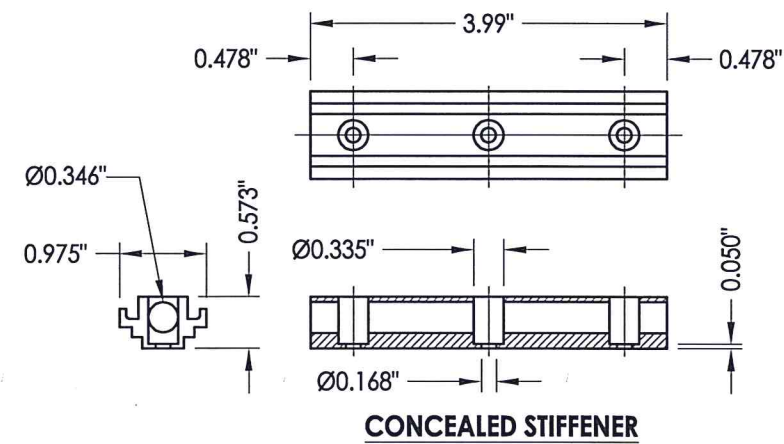


60 ASTRAGAL  
DLP

8'0 ALUMINUM ASTRAGAL ASSEMBLY  
By DLP



SLIDE BOLT ROD  
Typ. top & bottom of astragal  
(2" throw)

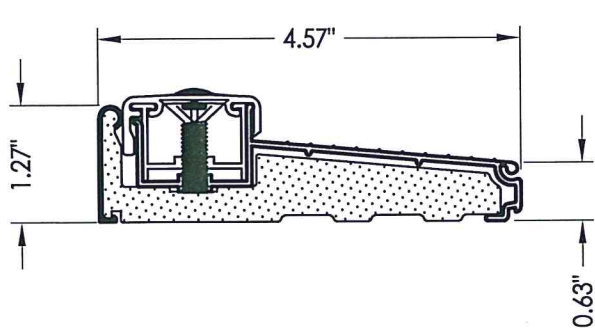


CONCEALED STIFFENER

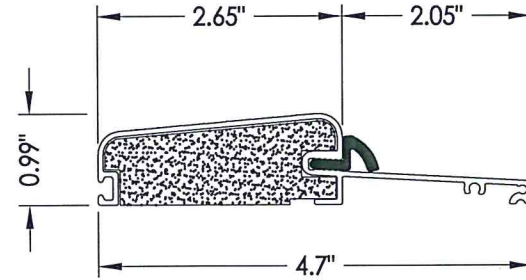
PRODUCT:	FIBERGLASS DOOR	
PART OR ASSEMBLY:	ASTRAGAL DETAILS	
REVISIONS		
NO.	DATE	BY
3	10/21/21	LFS
2	5/16/18	LFS
1	12/14/15	JK
DATE: 11/28/12		
SCALE: N.T.S.		
DWG. BY: JK		
CHK. BY: LFS		
DRAWING NO.: TX-4282		
SHEET 10 OF 11		

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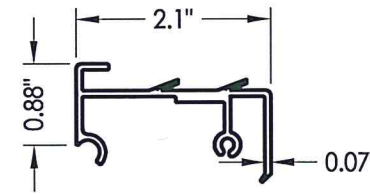
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	2X FRAMING (G >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" PFH ITW CONCRETE SCREW (1-3/4" MIN. EMB.)	STEEL
J	#10 X 3" PFH WOOD SCREW	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW	STEEL
1	HEAD & JAMB - FINGER-JOINT PINE	WOOD
2	INTEGRAL MULLION - FAT BOY (PINE)	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
21	#10 X 2" PFH WOOD SCREW	STEEL
27	LATCH STRIKE PLATE	STEEL
28	DEADBOLT STRIKE PLATE	STEEL
30	OUTSWING THRESHOLD	ALUM/COMP
31	ADA THRESHOLD	ALUM
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	-
57	#8 X 2" PPH SMS	STEEL
58	#8 X 2-1/2" PFH WOOD SCREW	STEEL
60	ASTRAGAL (COLUMBIA OR DLP)	ALUM
61	ASTRAGAL STRIKE PLATE	STEEL



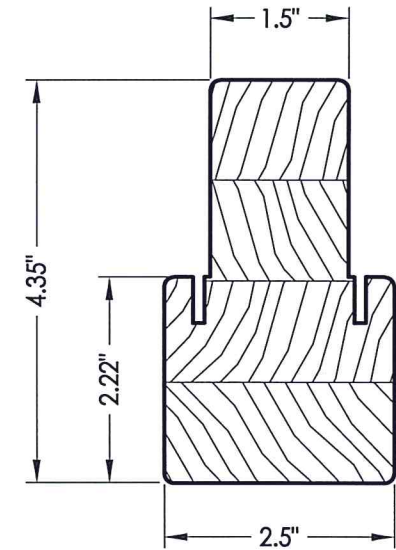
**36 INSWING THRESHOLD**  
Columbia 900 Series



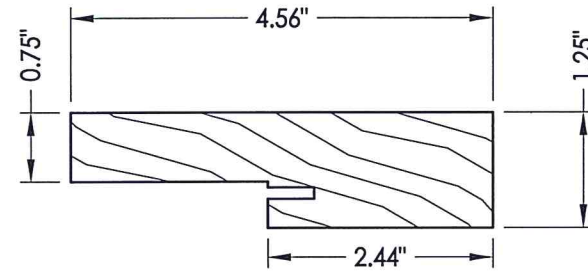
**30 OUTSWING THRESHOLD**  
Columbia 775 Series  
w/ Composite Substrate



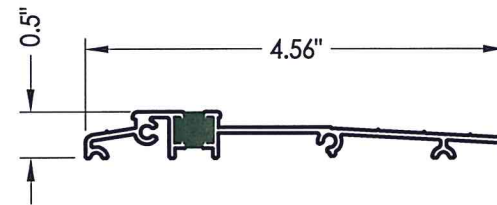
**39 SIDELITE SPACER**  
Inswing



**2 INTEGRAL MULLION**



**1 HEAD & JAMB**  
Finger joint pine



**31 ADA THRESHOLD**  
Columbia



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

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

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
JK		
LFS		

DATE: 11/28/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4282  
SHEET 11 OF 11