

# THERMA-TRU<sup>®</sup> DOORS

Fiber-Classic<sup>®</sup> & Smooth-Star<sup>®</sup>

## COMPOSITE EDGE OPAQUE FIBERGLASS SINGLE DOOR w/ SIDELITE(S) IN SWING/OUTSWING "IMPACT"

EVALUATED FOR USE IN THE STATE OF TEXAS

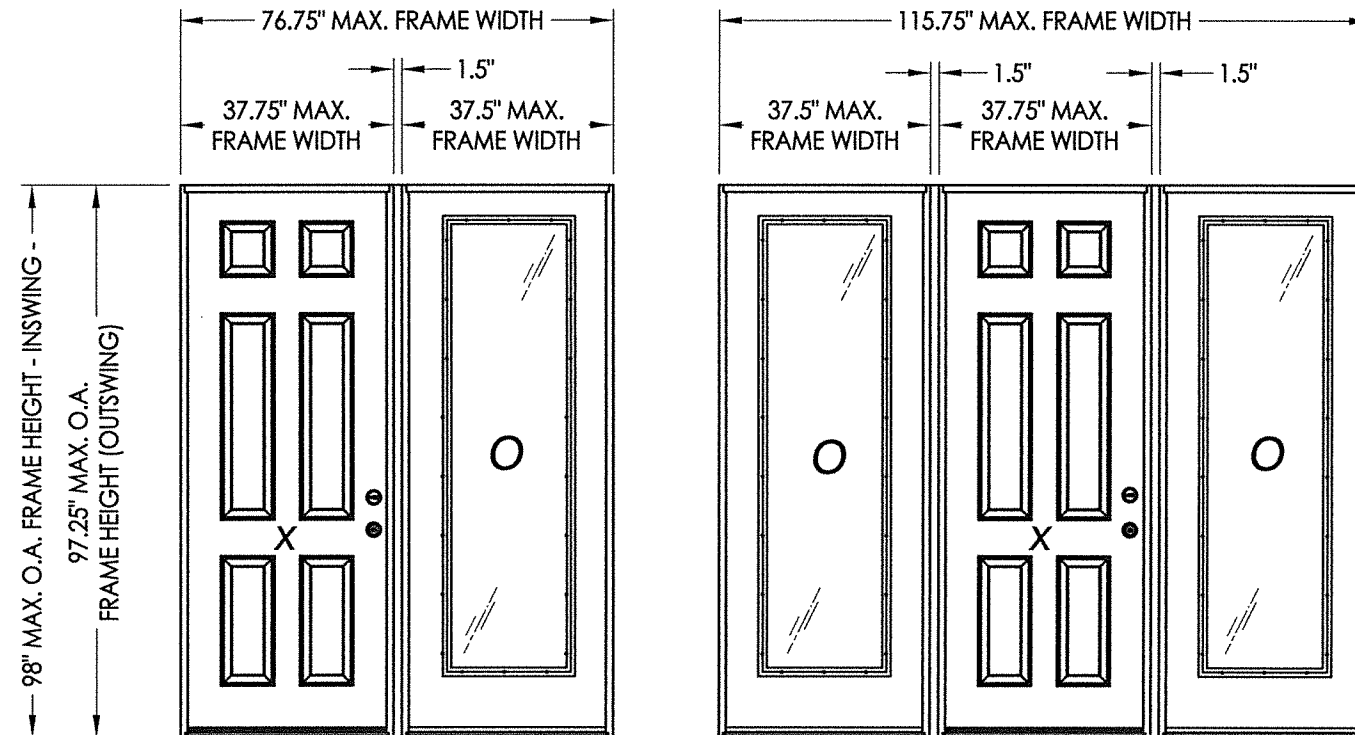
**TDI DR-951**

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.
5. Fiber-Classic and Smooth-Star Door & Sidelite panels require the use of "J" part numbers. These door panels must be stained or painted within six months of installation.

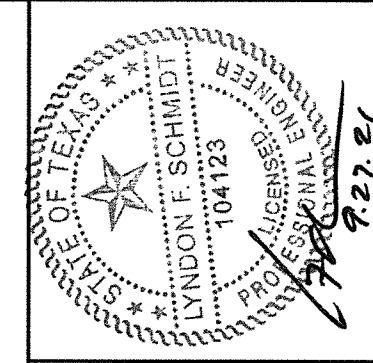
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1	Typical Elevations, Design Pressures & General Notes
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4	Elevations
5	Horizontal & Vertical Cross Sections
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7	Frame Anchoring
8	Hardware Details
9	Glazing Details
10	Components
11	Bill of Materials



CONFIGURATION	DESIGN PRESSURE (PSF) IN SWING		DESIGN PRESSURE (PSF) OUTSWING	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XO, OX, OXO	+50.0	-50.0	+50.0	-50.0

See Sheet 4 for Hardware Specifications



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

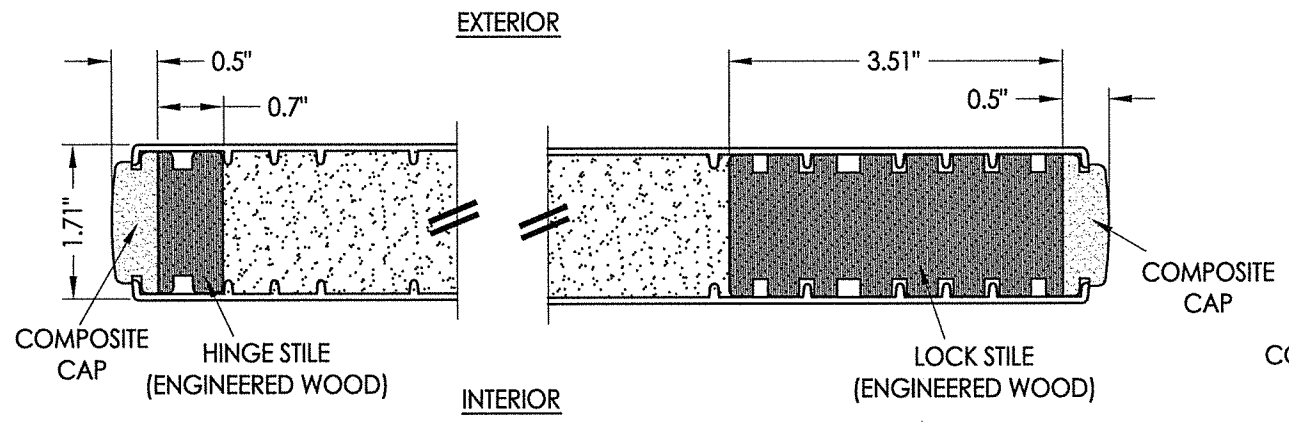
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU FIBERGLASS DOOR  
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

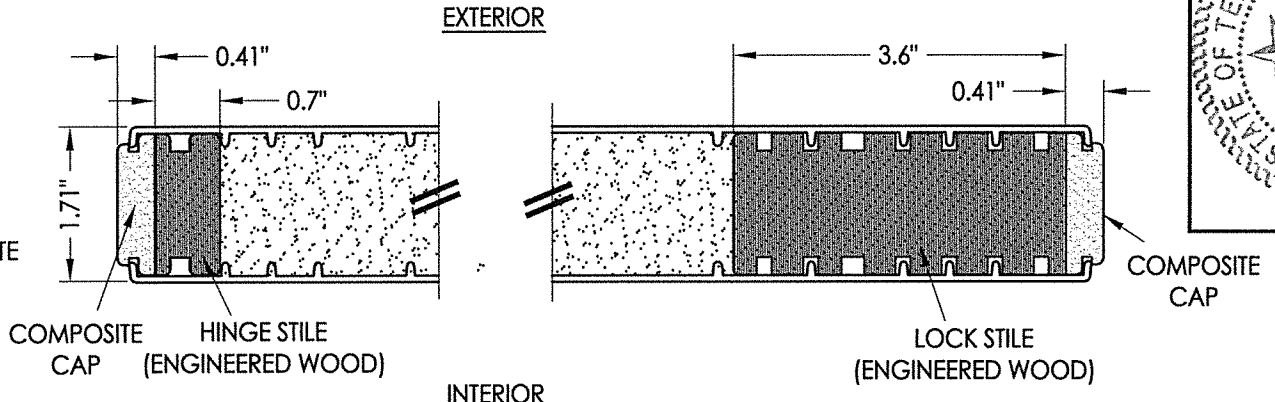
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1	9/27/21	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY

DATE: 10/24/17  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4709  
SHEET 1 OF 11

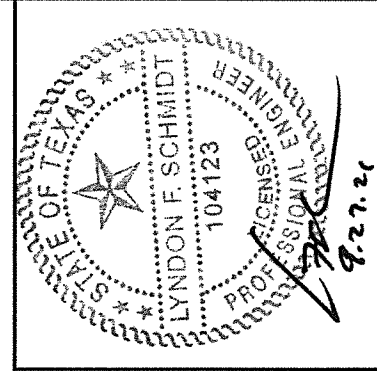
Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - DR 951 - 6'8 & 8'0 Opaque Comp Edge Impact (TX 4705 - 4710)\C - Drawings\TX-4708-10.dwg



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



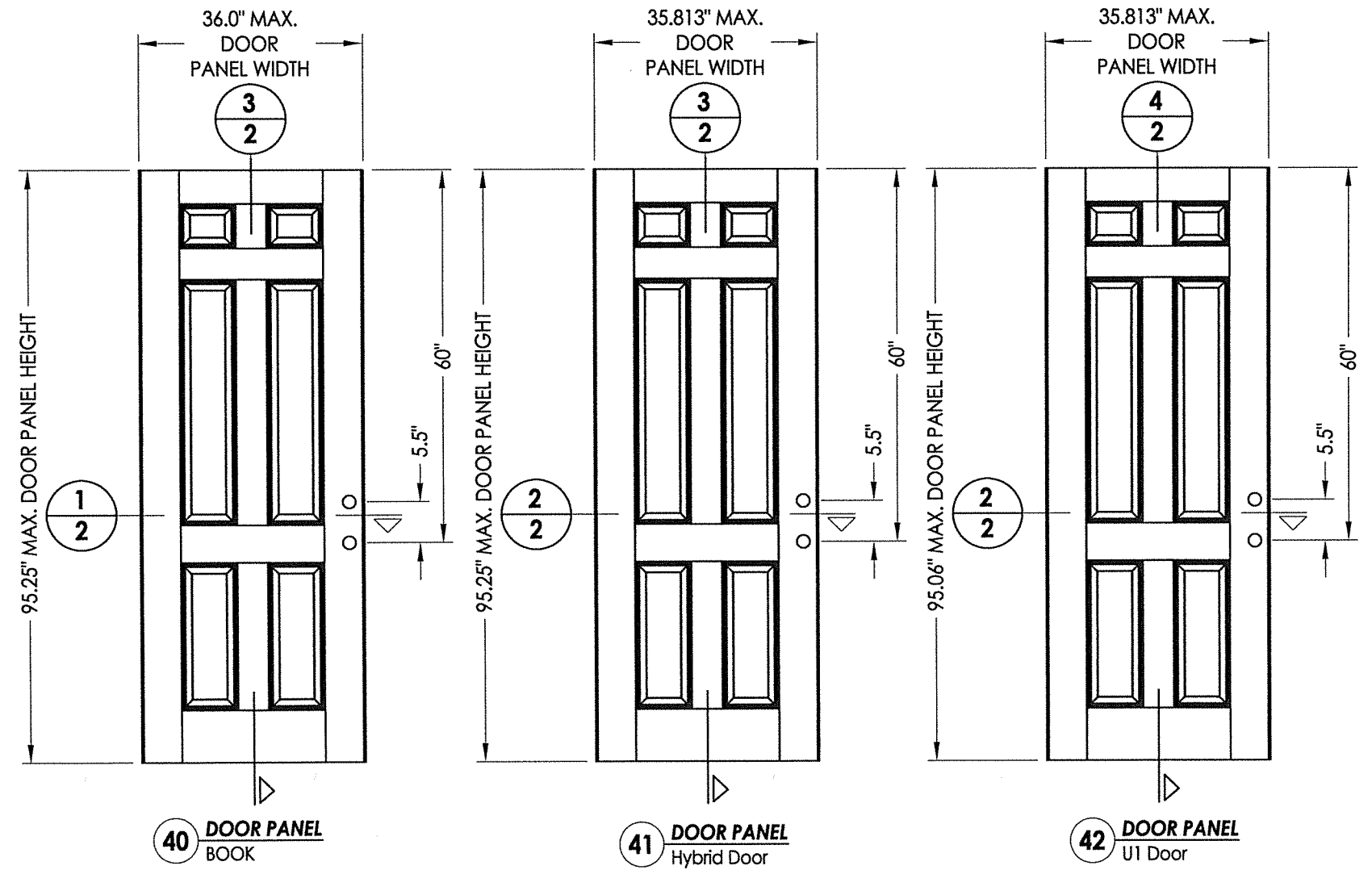
**2**  
**2** **HORIZONTAL CROSS SECTION**



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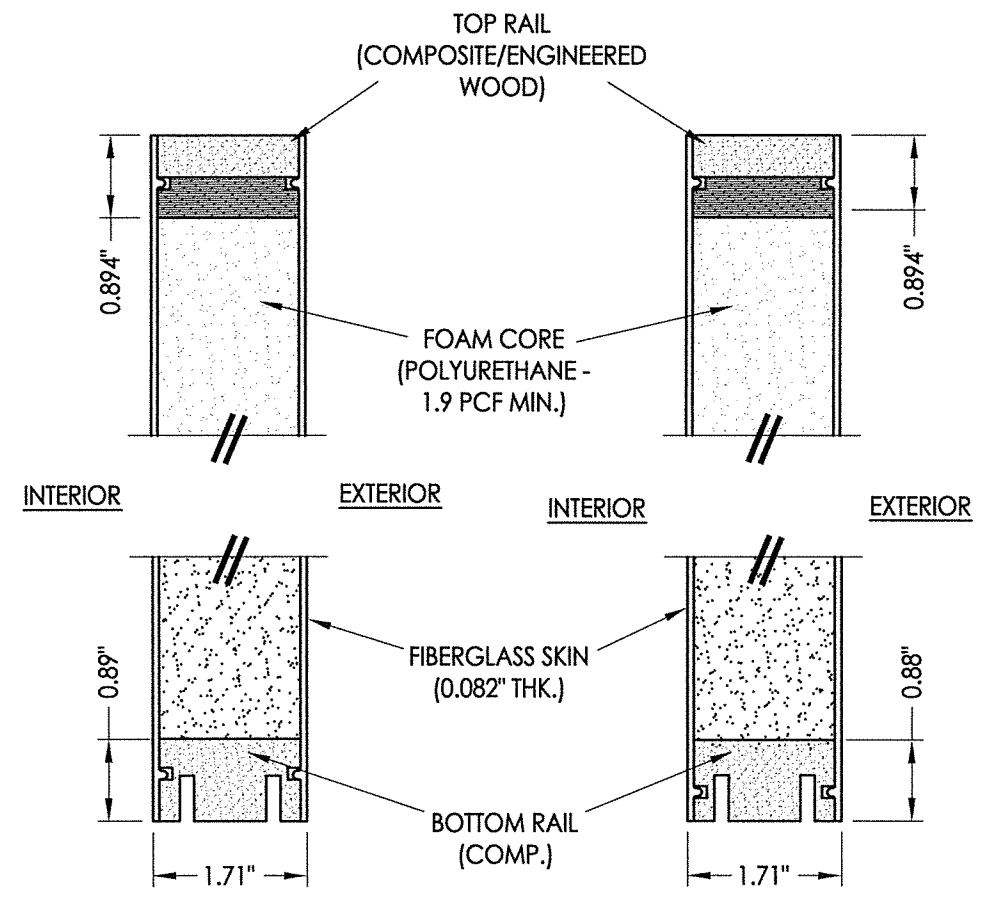
CERTIFICATE OF REGISTRATION # F-11852



**40** **DOOR PANEL BOOK**

**41** **DOOR PANEL Hybrid Door**

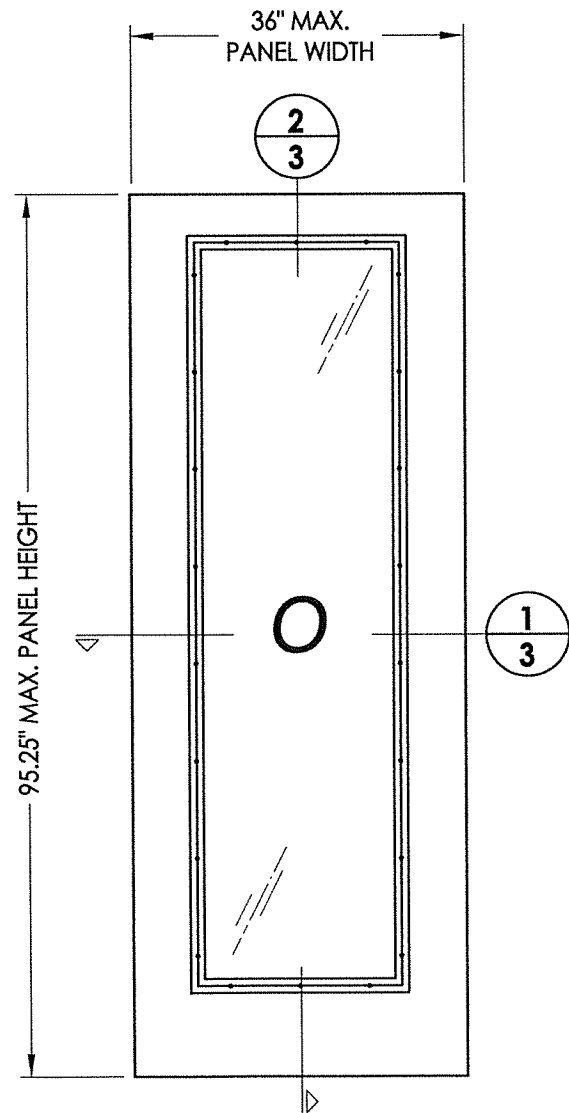
**42** **DOOR PANEL U1 Door**



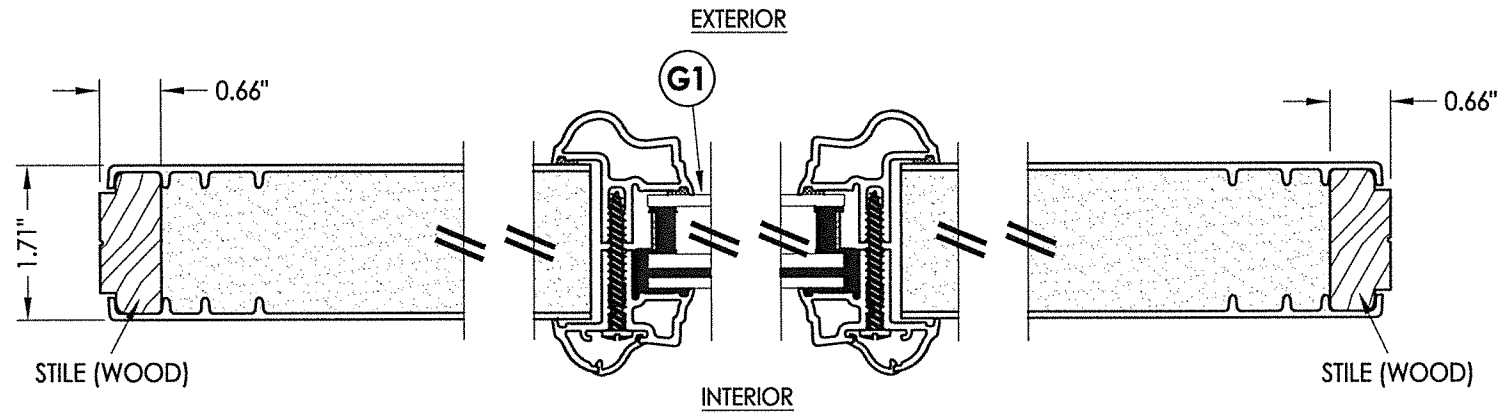
**3**  
**2** **VERTICAL CROSS SECTION**

**4**  
**2** **VERTICAL CROSS SECTION**

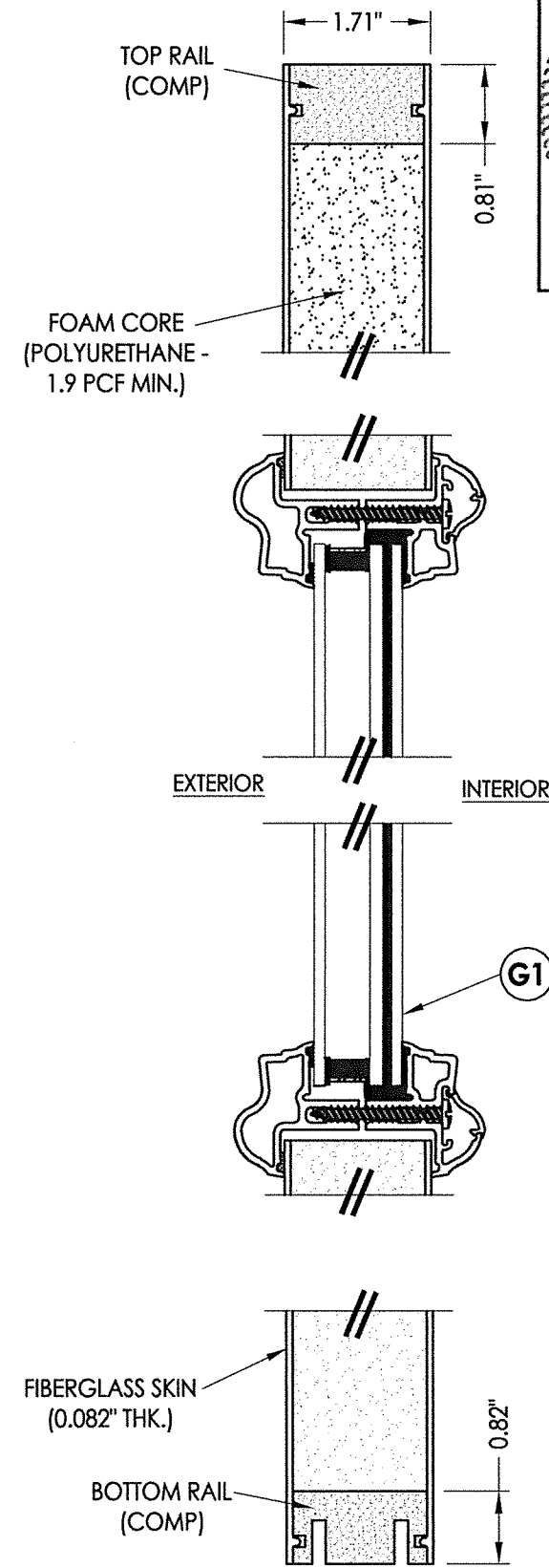
PRODUCT: THERMA-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY: DOOR PANEL DETAILS	
NO.	DATE
1	9/27/21
REVISIONS	
DATE:	10/24/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4709
SHEET	2 OF 11



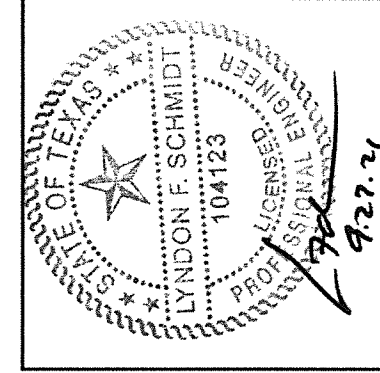
**50 SIDELITE PANEL**



**1 HORIZONTAL CROSS SECTION**



**2 VERTICAL CROSS SECTION**



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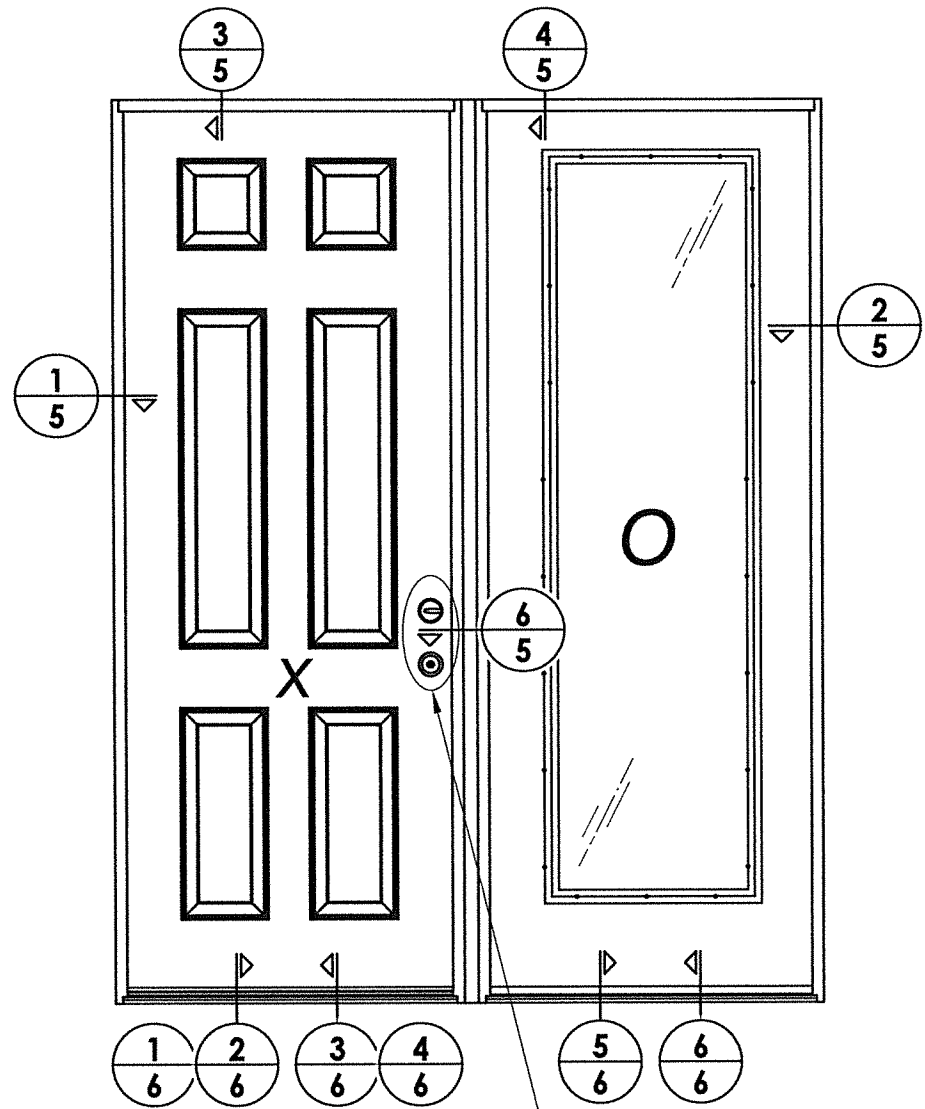
**RW** BUILDING CONSULTANTS, INC.  
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CERTIFICATE OF REGISTRATION # F-11852

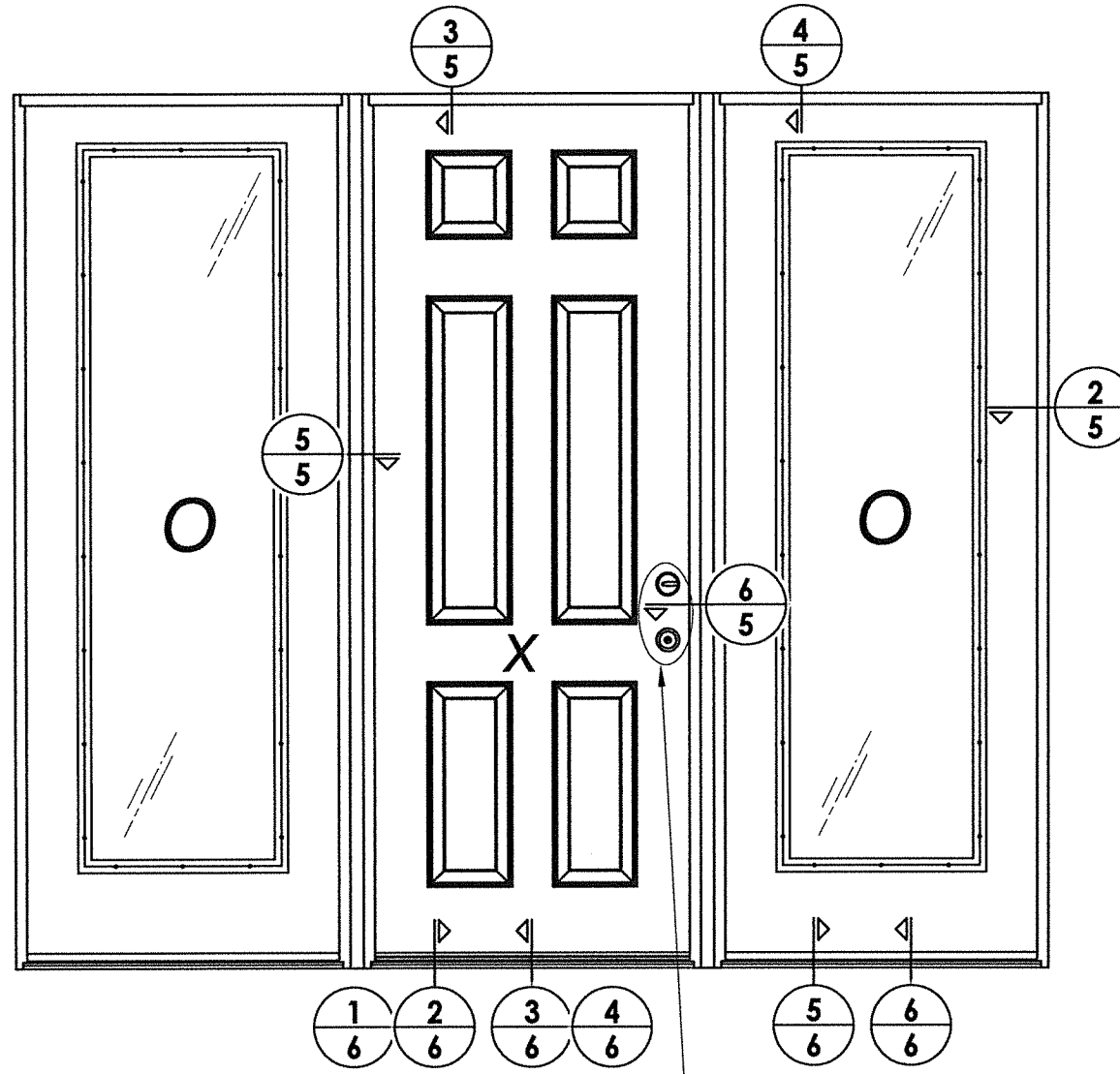
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PART OR ASSEMBLY: SIDELITE PANEL DETAILS

NO.	DATE	DESCRIPTION	BY
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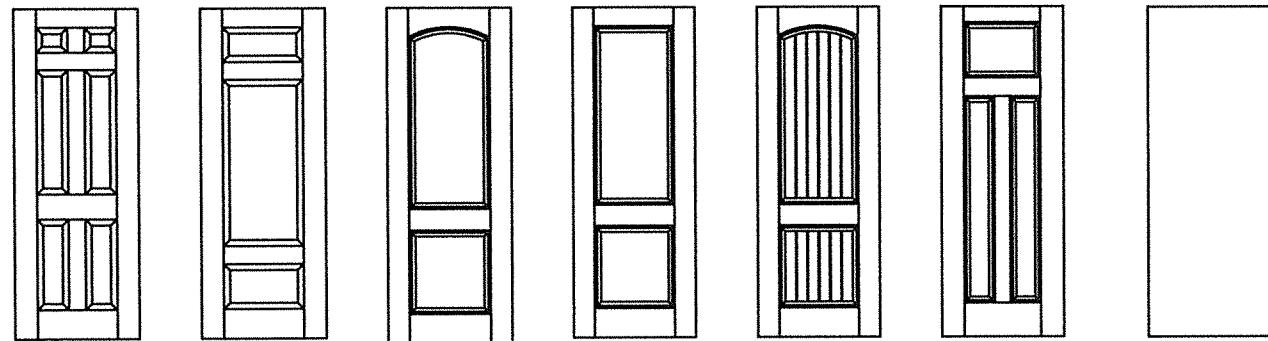
DATE: 10/24/17  
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DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4709  
SHEET 3 OF 11



SEE HARDWARE CHART



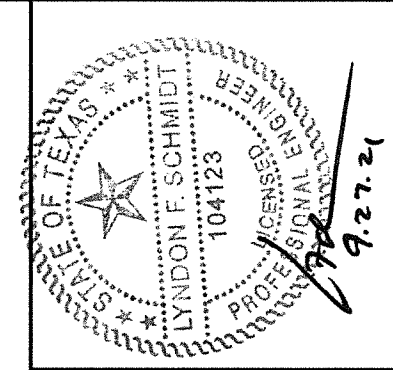
SEE HARDWARE CHART



**Fiber-Classic/Smooth-Star Door Panel Options**

Panel options shown are for illustration and are representative only  
(similar opaque panel configurations are allowed)

HARDWARE TABLE	
MANUFACTURER	MODEL
SCHLAGE	KNOB: F51 DEADBOLT: B60
KWIKSET	KNOB: SIGNATURE SERIES DEADBOLT: SIGNATURE SERIES (980)
HOPPE (THERMA-TRU)	MULTIPOINT : MPDGART (3 pt. Manual Tongue)



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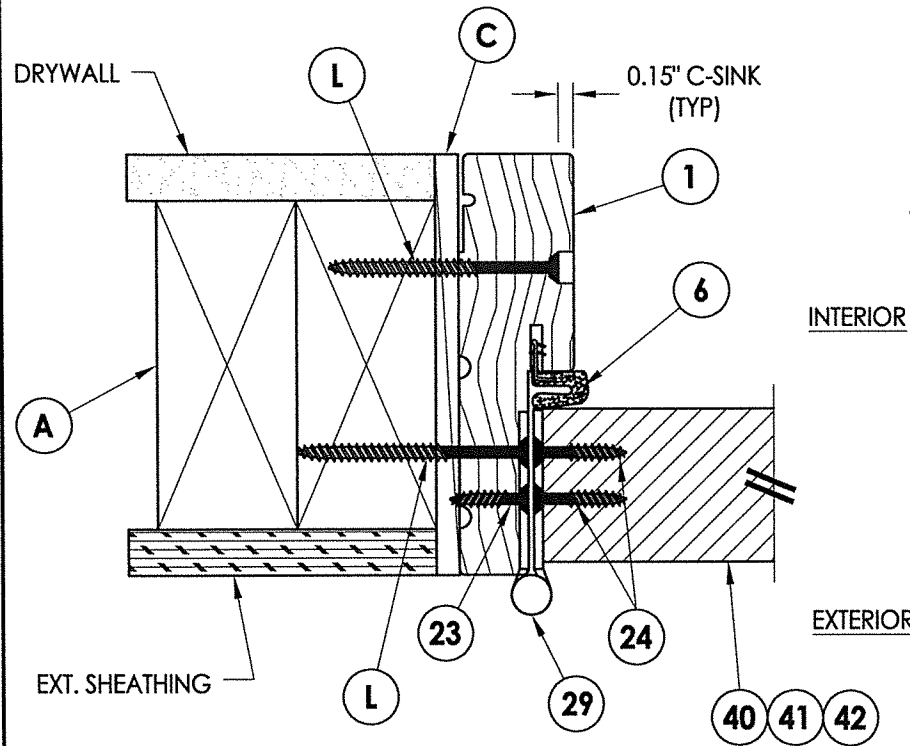
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CERTIFICATE OF REGISTRATION # F-11852

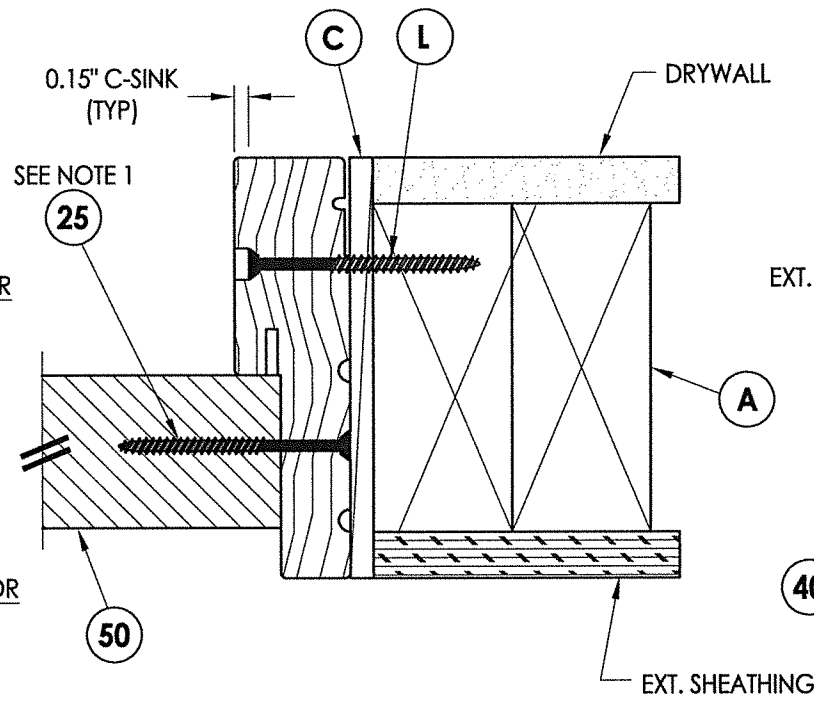
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PART OR ASSEMBLY: ELEVATIONS

REVISIONS		
NO.	DATE	BY
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UPDATE TO 2018 IBC/IRC CODE		

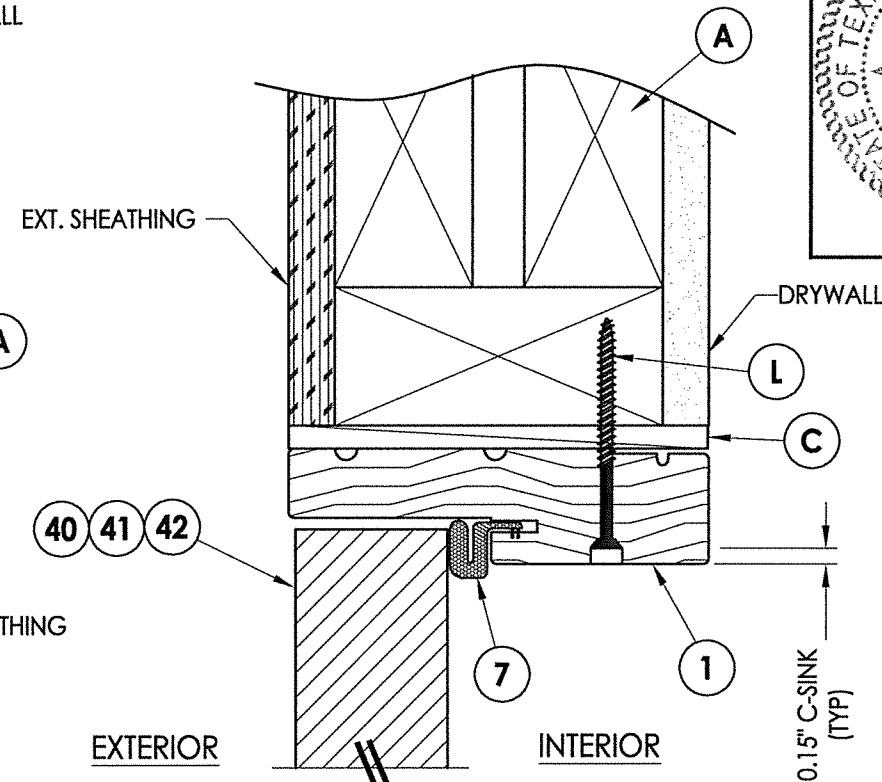
DATE: 10/24/17  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4709  
SHEET 4 OF 11



**1 HORIZONTAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)

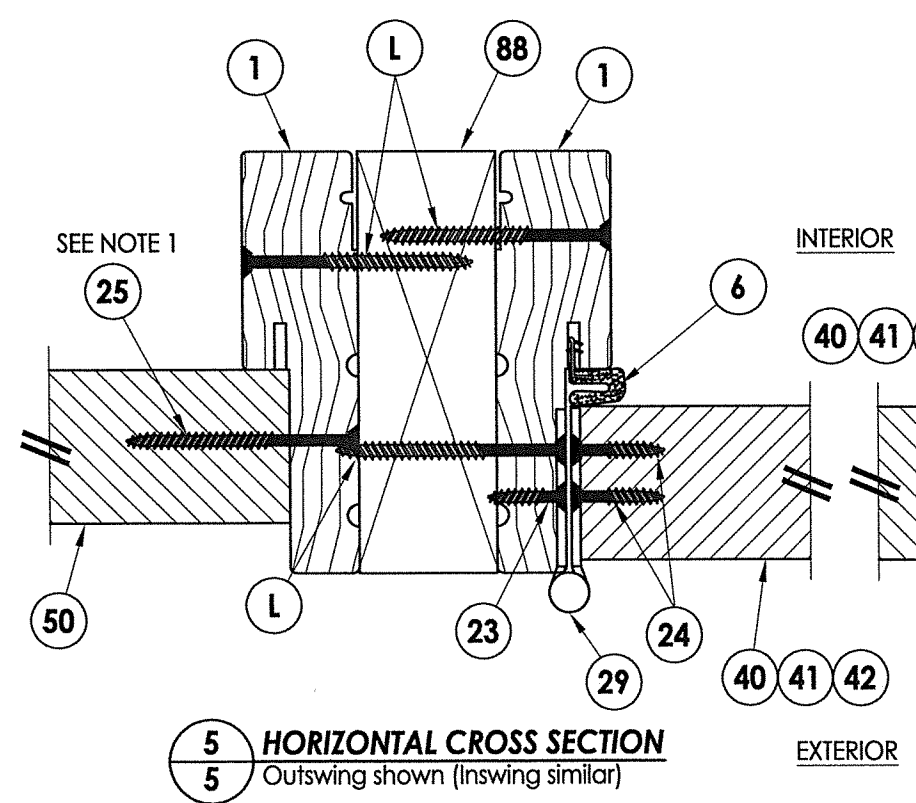


**2 HORIZONTAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)

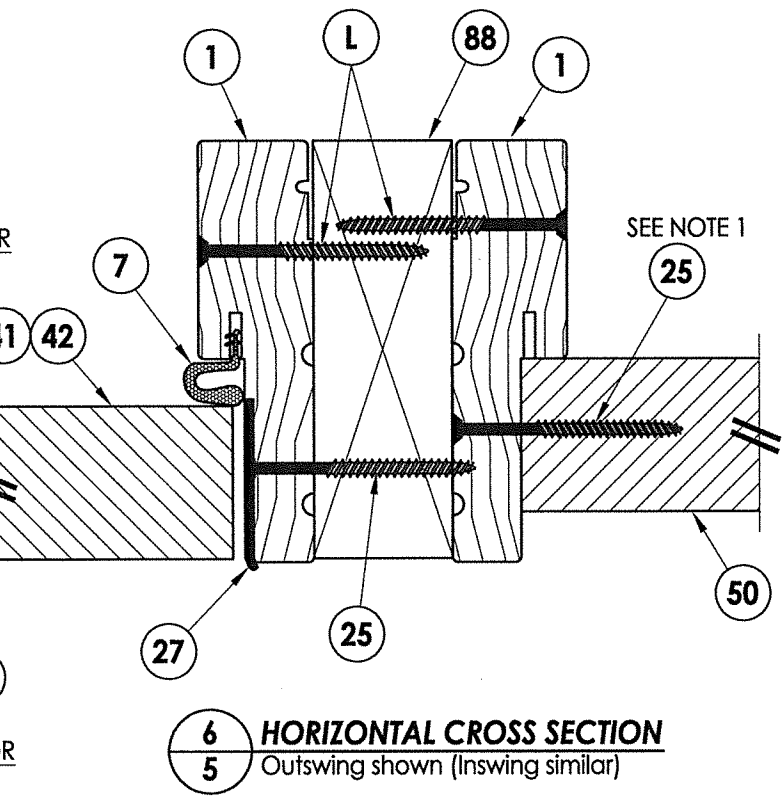


**3 VERTICAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)

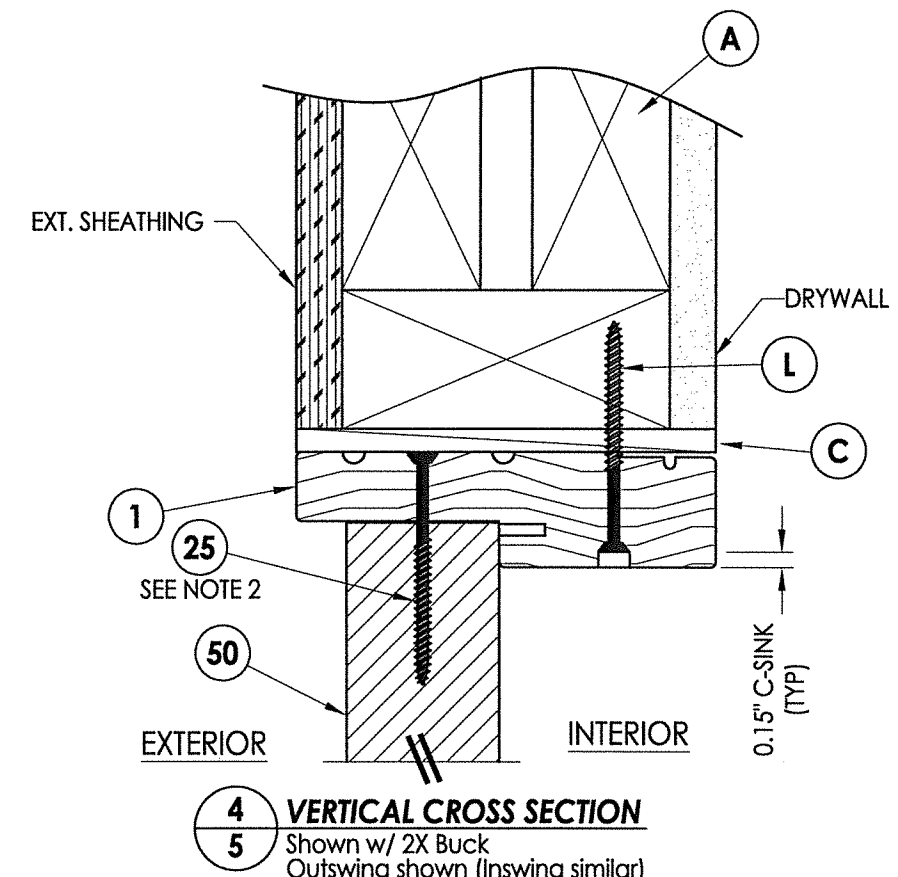
Notes:  
 1. Sidelite assembly screws located 6" from each end and 6 more screws equally spaced between (8 screws total per side jamb).  
 2. Sidelite assembly screws located 3" from each end & at centerline (3 screws along head jamb).



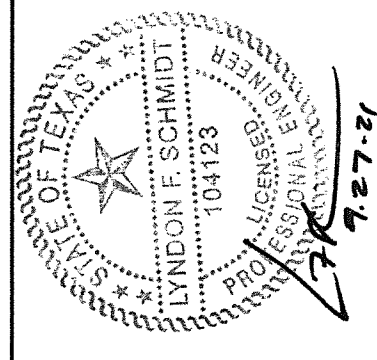
**5 HORIZONTAL CROSS SECTION**  
**5** Outswing shown (Inswing similar)



**6 HORIZONTAL CROSS SECTION**  
**5** Outswing shown (Inswing similar)



**4 VERTICAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)



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PRODUCT: THERMA-TRU FIBERGLASS DOOR  
 PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS

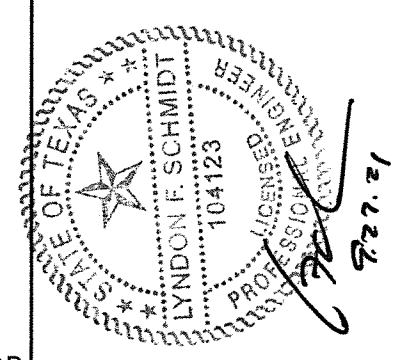
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DATE: 10/24/17  
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 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4709  
 SHEET 5 OF 11

Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - DR 951 - 6'8 & 8'0 Opaque Comp Edge Impact (TX 4705 - 4710)\C - Drawings\TX-4708-10.dwg

**Notes:**

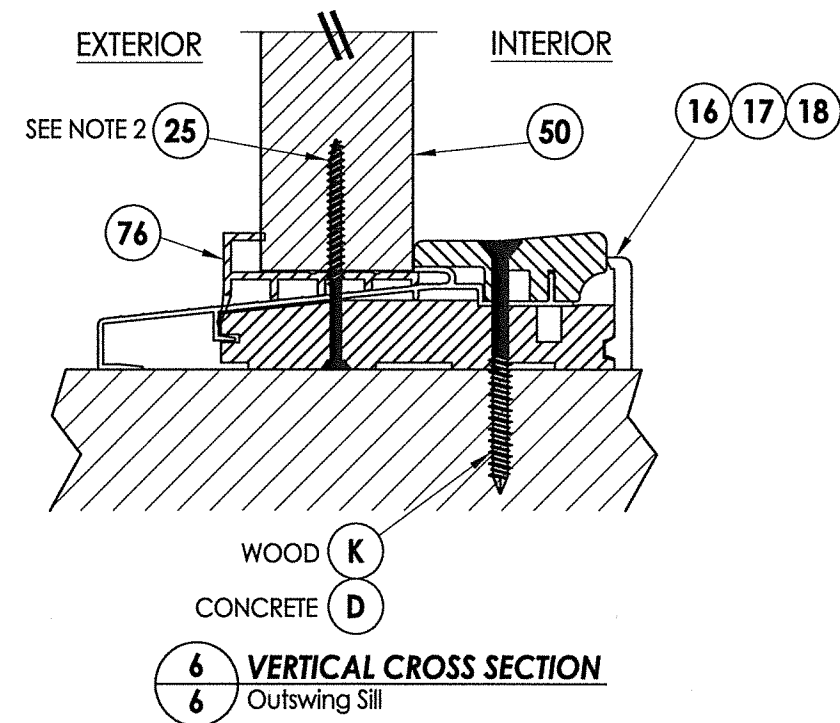
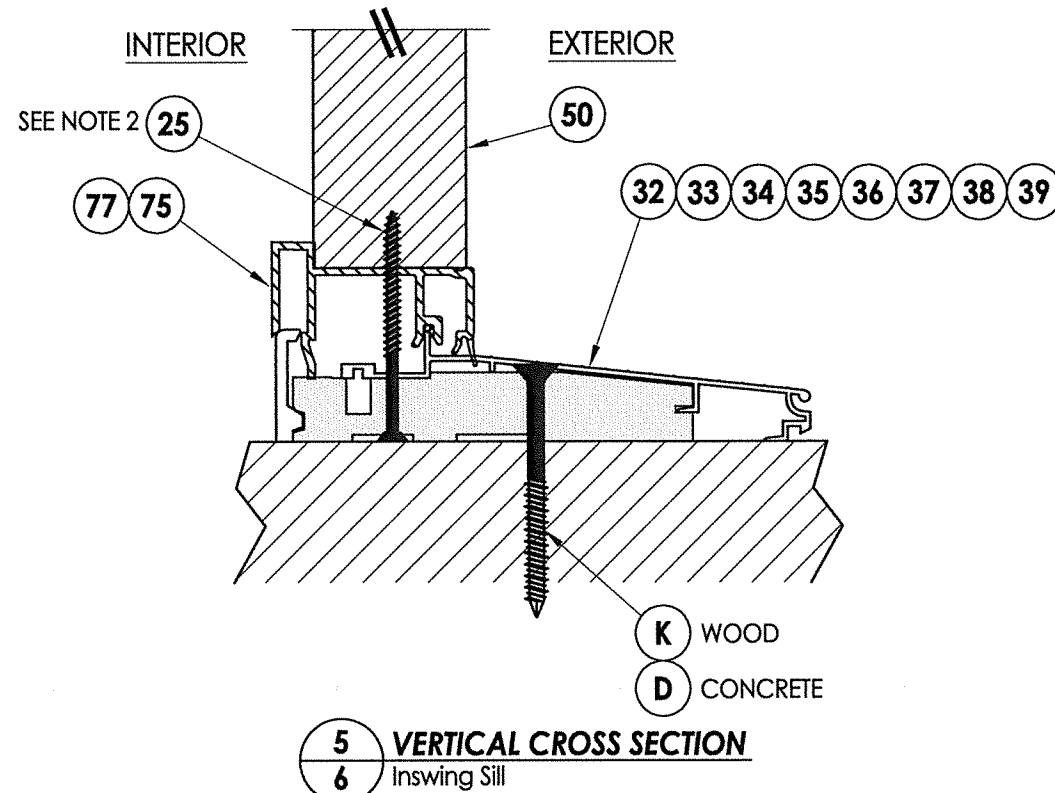
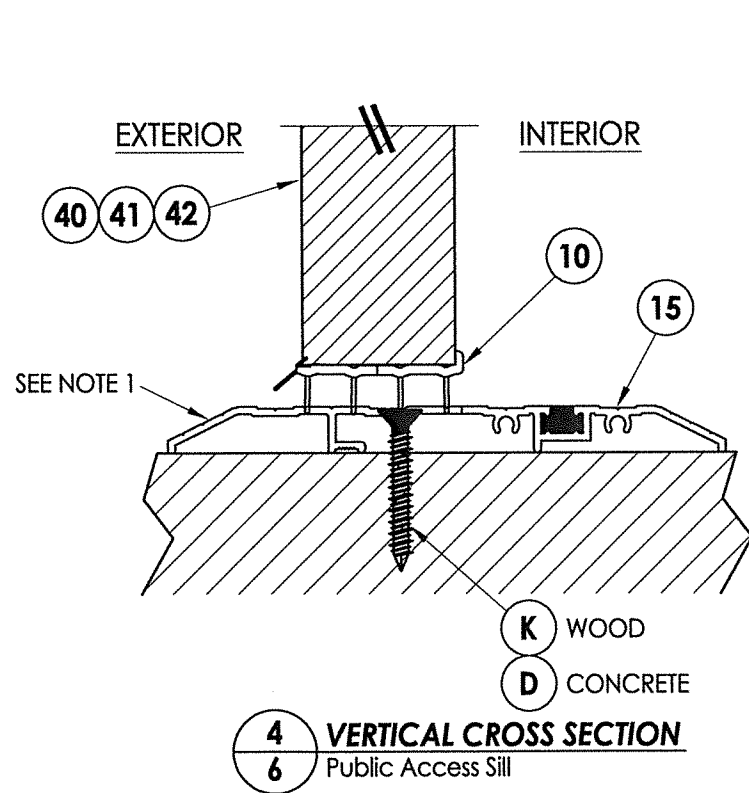
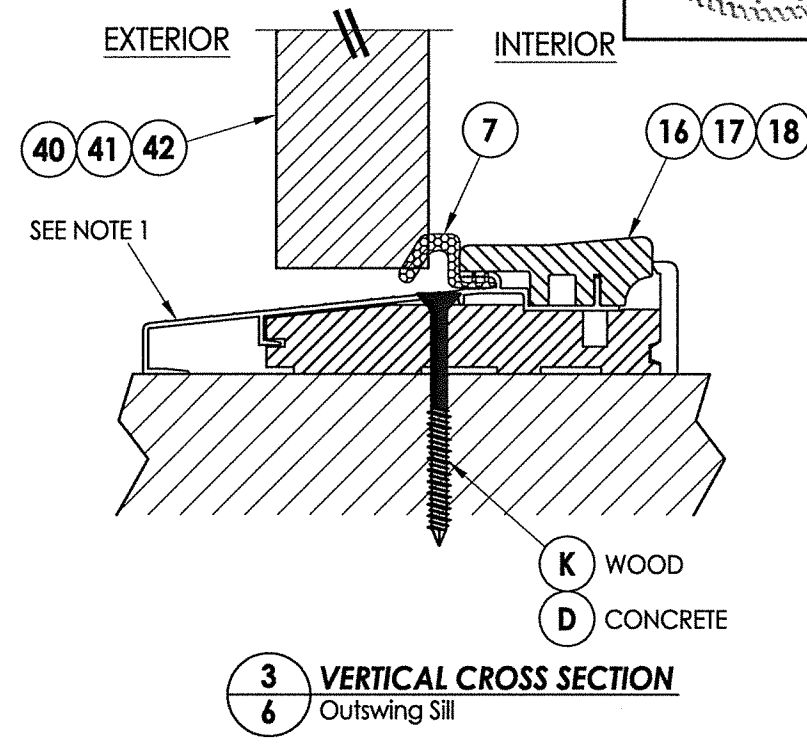
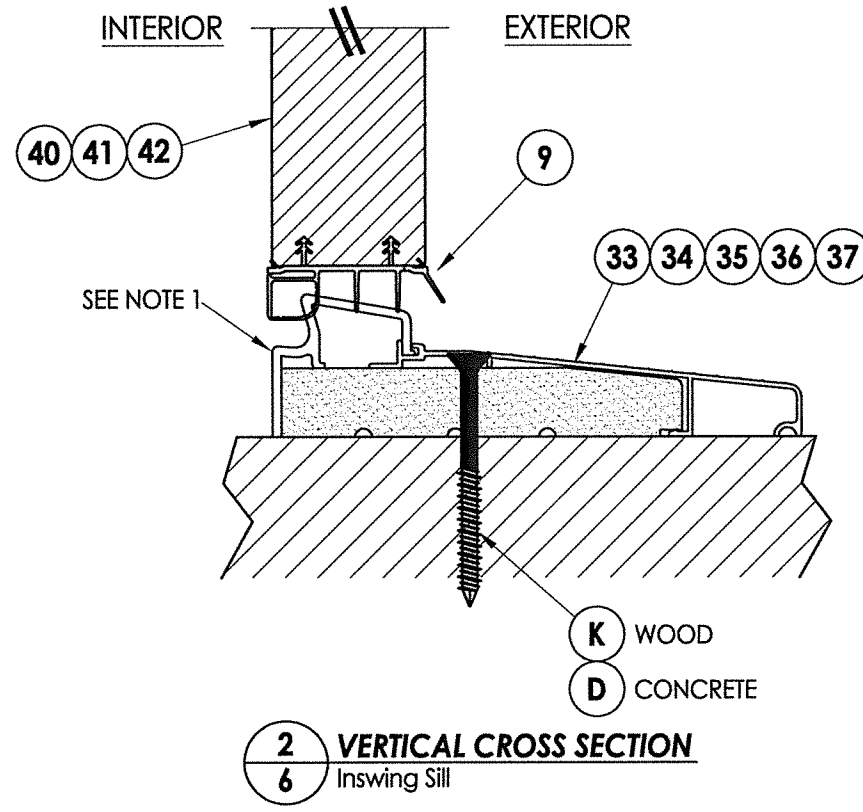
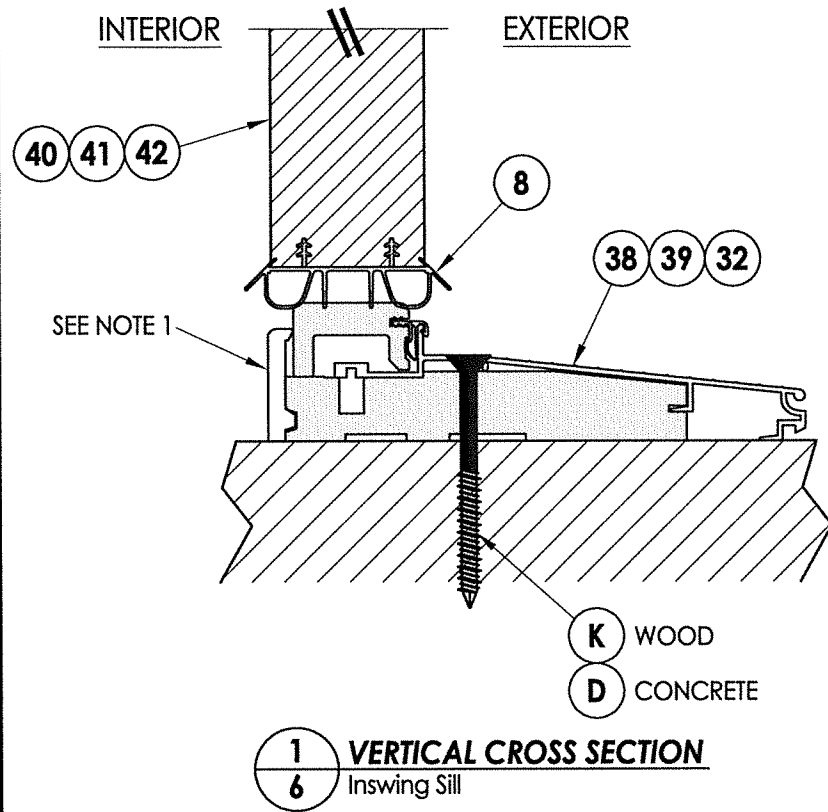
- Sill Item #'s 16, 32, 33, 34, 35, 36, 37, 38 & 39 are attached to jambs w/ (3) #8 X 2-1/2" pfh screws at each end.  
Sill Item #'s 17 & 18 are attached to jambs w/ (2) #8 X 2-1/2" pfh screws at each end.  
Sill Item #15 is attached to jambs utilizing (2) #10 X 1-1/2" pph screws at each end.
- Sidelite assembly screws located 3" from each end & at centerline (3 screws along sill).



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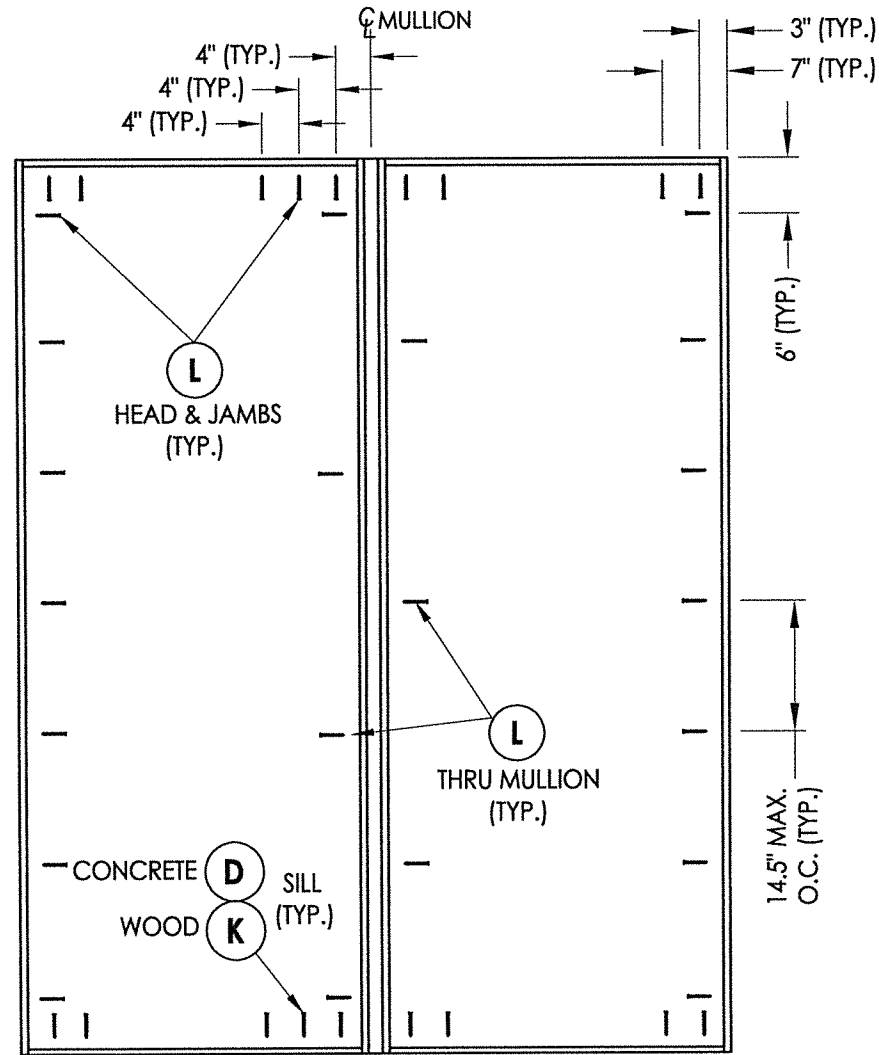
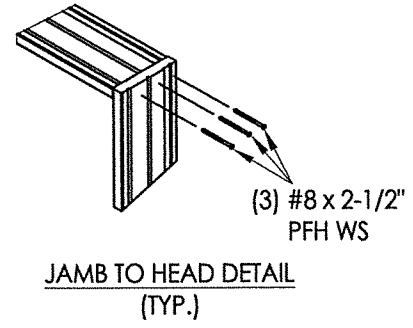
CERTIFICATE OF REGISTRATION # F-11852



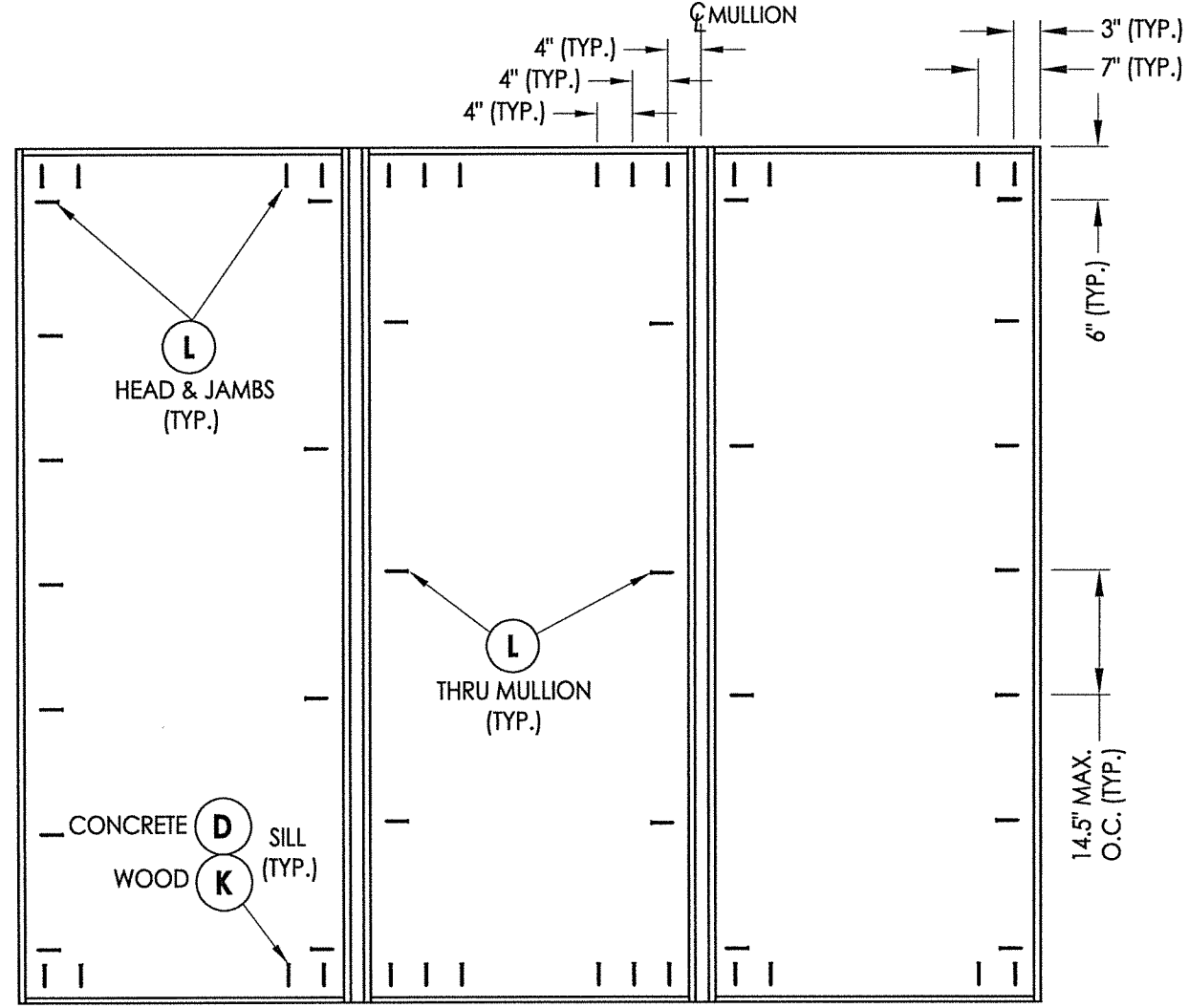
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PART OR ASSEMBLY:	VERTICAL CROSS SECTIONS (THRESHOLDS)	
NO.	DATE	BY
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UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		
DATE:	10/24/17	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4709	
SHEET	6 OF 11	

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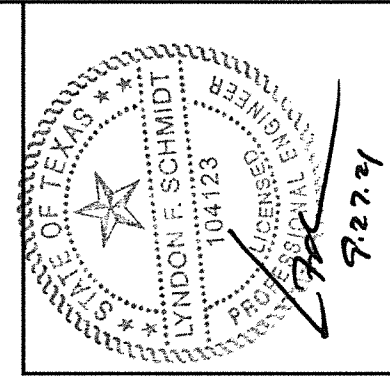


XO/OX



OXO

**FRAME ANCHORING**

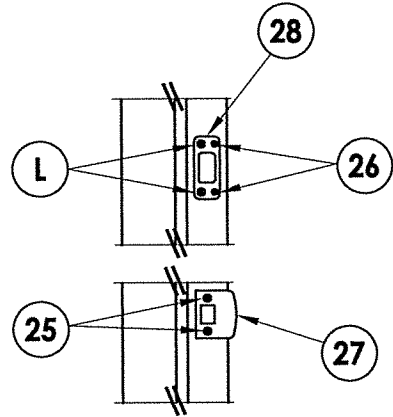


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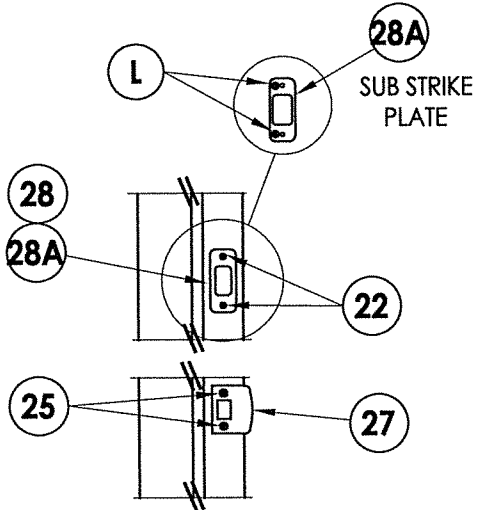
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.699.9197

CERTIFICATE OF REGISTRATION # F-11852

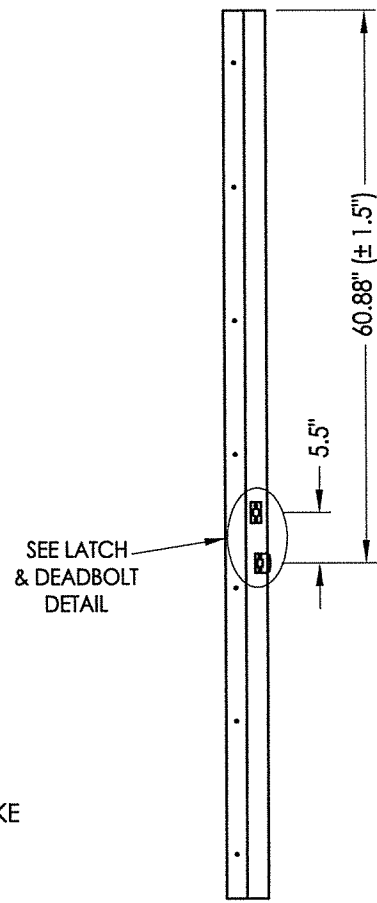
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PART OR ASSEMBLY: FRAME ANCHORING	
NO.	DATE
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UPDATE TO 2018 IBC/IRC CODE	
LFS	BY
REVISIONS	
DATE: 10/24/17	
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CHK. BY: LFS	
DRAWING NO.: TX-4709	
SHEET 7 OF 11	



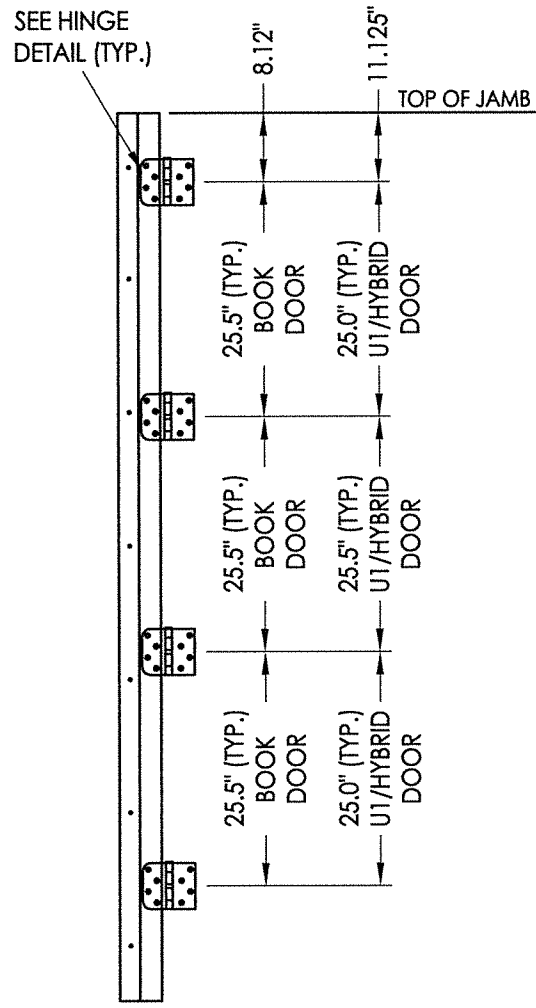
**LATCH & DEADBOLT DETAIL**  
Kwikset



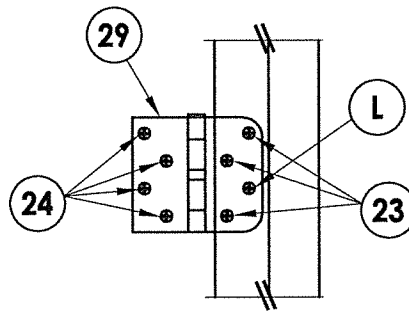
**LATCH & DEADBOLT DETAIL**  
Schlage



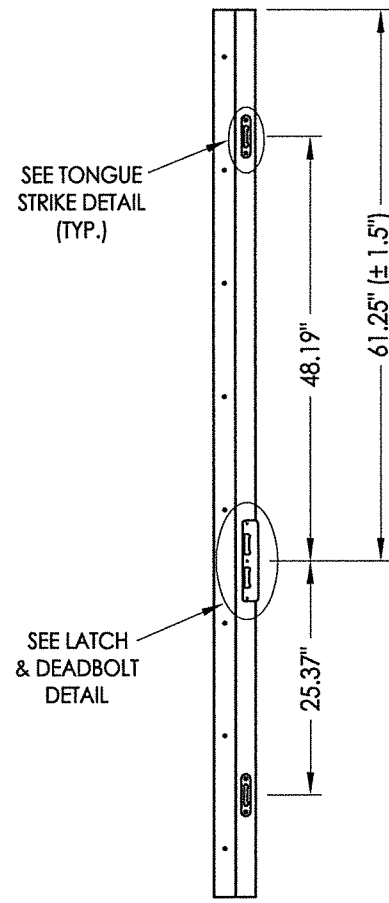
**STRIKE JAMB**  
Latch and Deadbolt



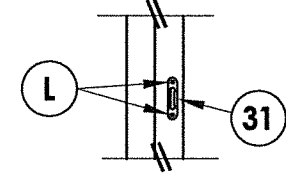
**HINGE JAMB**



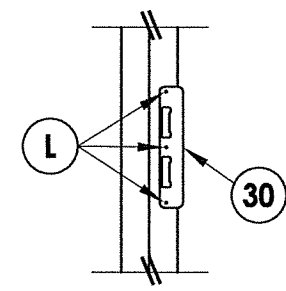
**HINGE DETAIL**



**STRIKE JAMB**  
Multipoint Lock



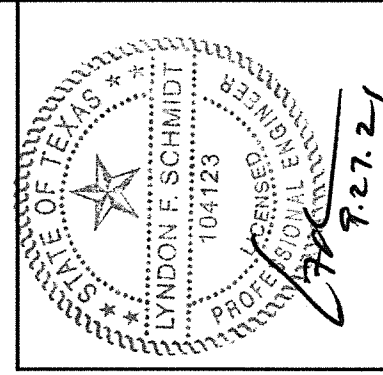
**TONGUE STRIKE DETAIL**  
Multipoint Lock



**LATCH & DEADBOLT DETAIL**  
Multipoint Lock

**LATCH & DEADBOLT STRIKE DETAILS**

**MULTIPOINT LOCK STRIKE DETAILS**



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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:		THERMA-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY:		HARDWARE DETAILS	
NO.	DATE	BY	REVISIONS
1	9/27/21	LFS	UPDATE TO 2018 IBC/IRC CODE

DATE: 10/24/17

SCALE: N.T.S.

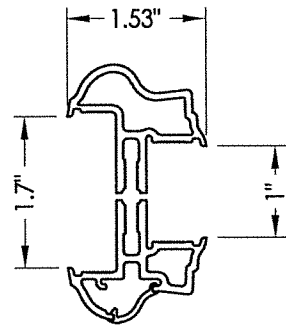
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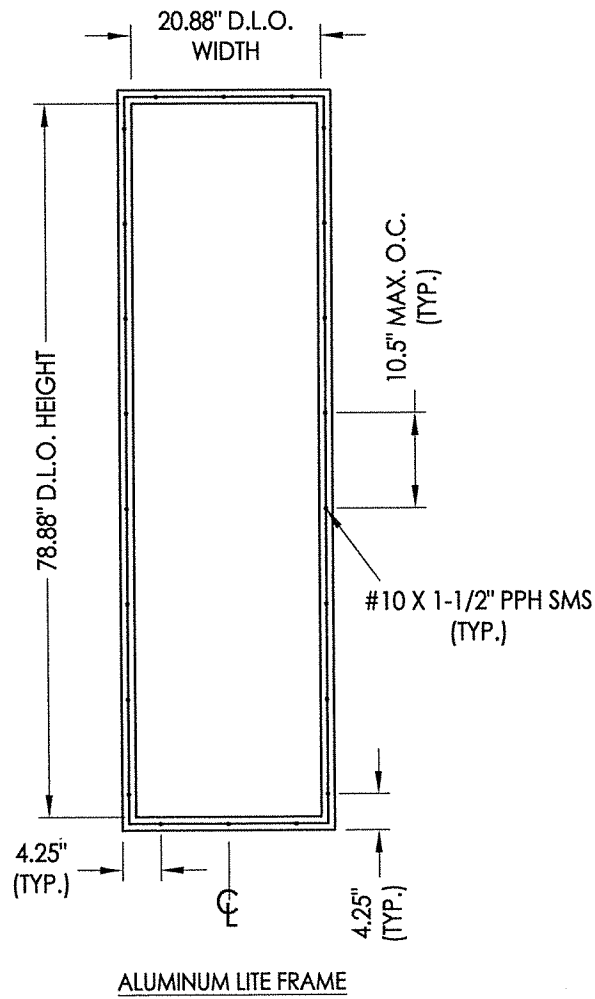
DRAWING NO.:  
TX-4709

SHEET 8 OF 11

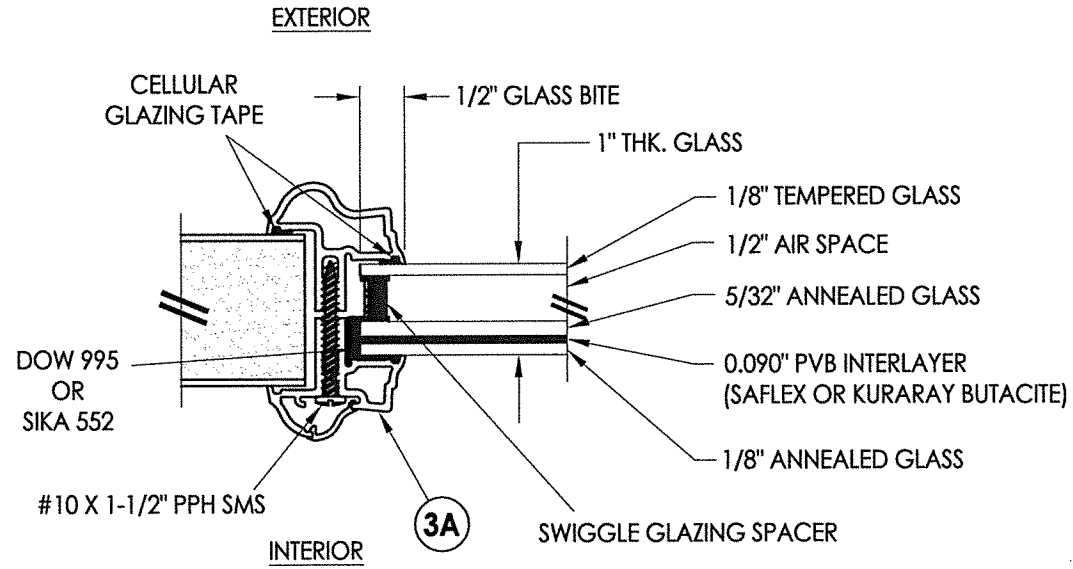




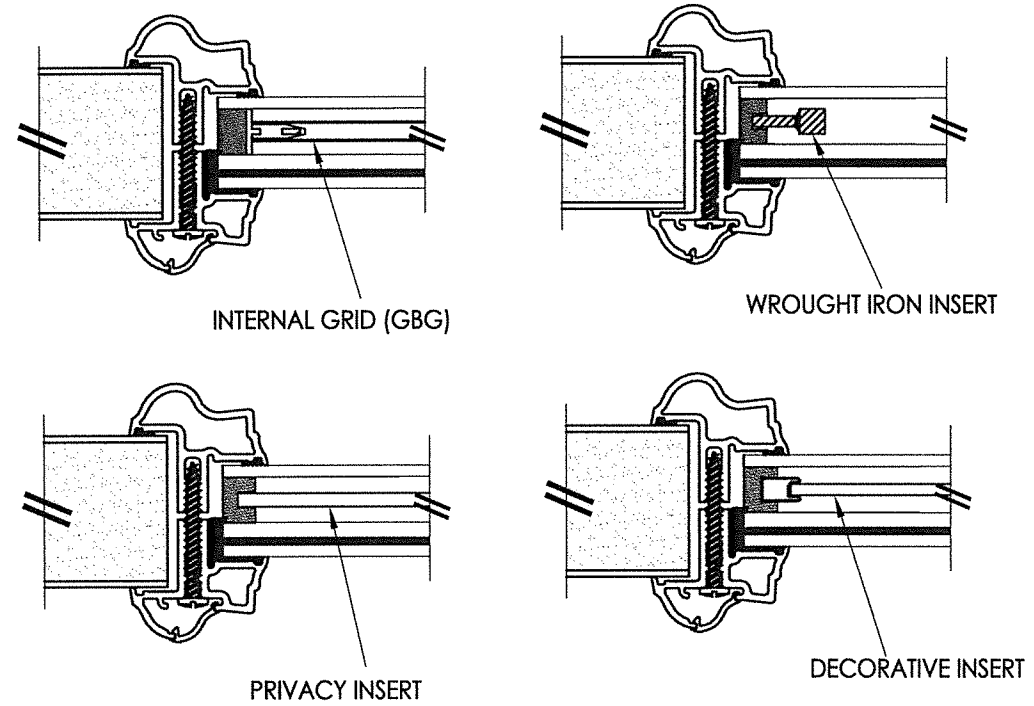
**3A ALUMINUM FRAME**  
Aluminum Impact Lite Frame  
Door Panels & Sidelites



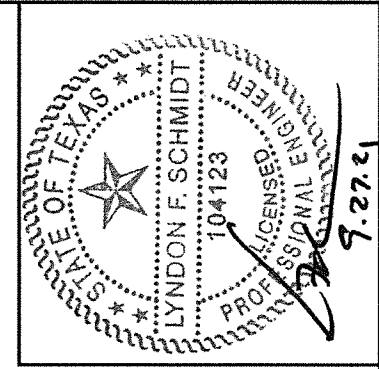
ALUMINUM LITE FRAME



**G1 GLAZING DETAIL**  
Aluminum Impact Lite Frame  
Door Panels & Sidelites



1" LAMINATED INSULATED IMPACT GLASS INSERT OPTIONS



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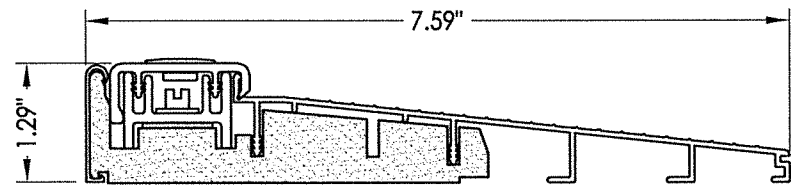
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P.O. Box 230 Valrico FL 33595  
Phone No.: 813.689.9197

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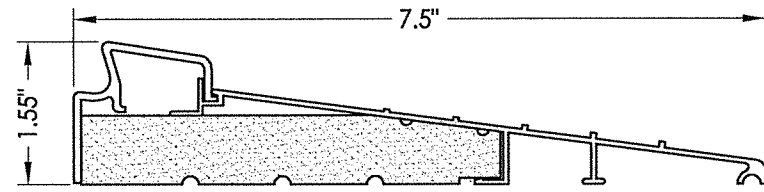
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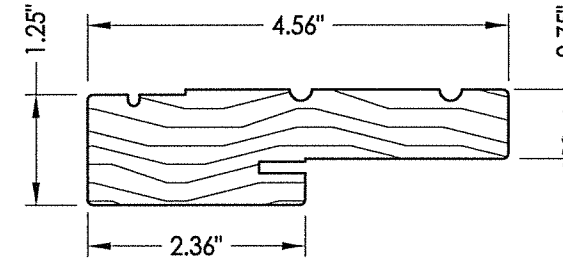
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CHK. BY:	LFS
DRAWING NO.:	TX-4709
SHEET	9 OF 11



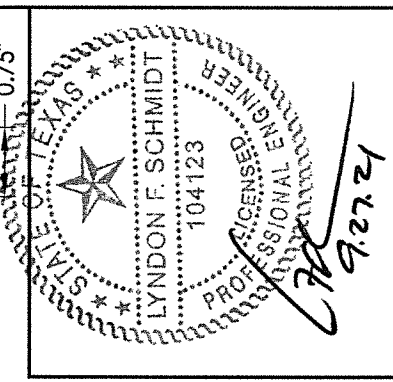
**32 INSWING THRESHOLD**  
Inswing Basic Composite Adjustable Sill 7-1/2"



**37 INSWING THRESHOLD**  
Inswing Basic Fixed 7-1/2" Sill



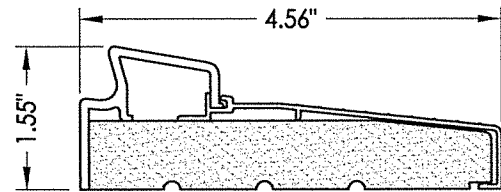
**1 WOOD JAMB**



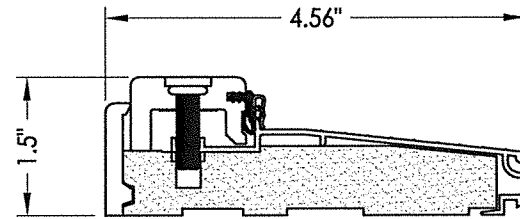
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

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Phone No.: 813.659.9197

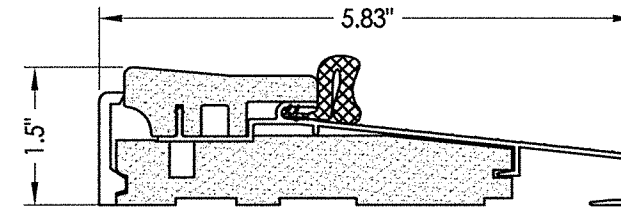
CERTIFICATE OF REGISTRATION # F-11852



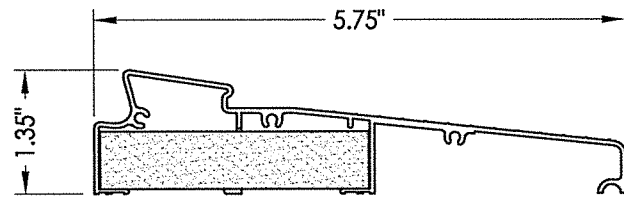
**33 INSWING THRESHOLD**  
Inswing Basic Fixed Sill



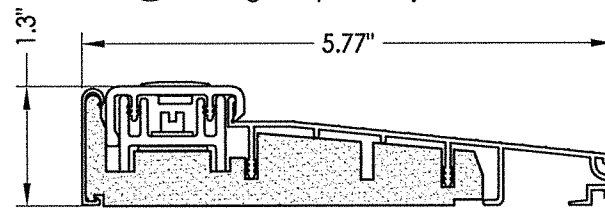
**38 INSWING THRESHOLD**  
Inswing Composite Adjustable Sill



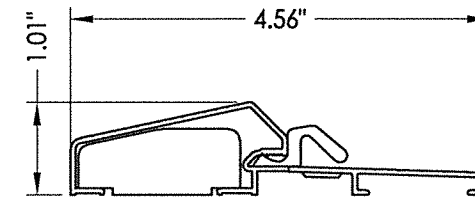
**16 OUTSWING THRESHOLD**  
Composite Sill



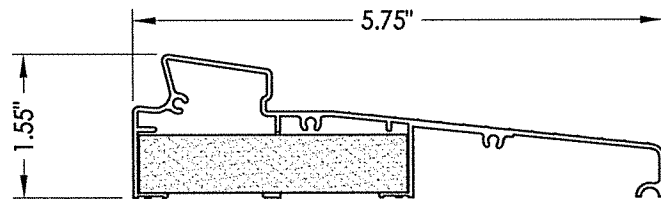
**34 INSWING THRESHOLD**  
Inswing Moderate Climate Sill 1-3/8"



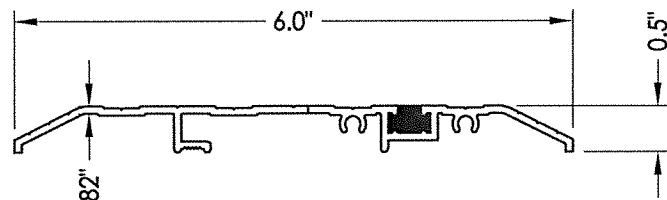
**39 INSWING THRESHOLD**  
Inswing Basic Composite Adjustable Sill



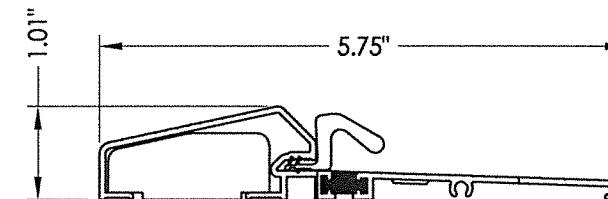
**17 OUTSWING THRESHOLD**  
Composite / Aluminum Sill



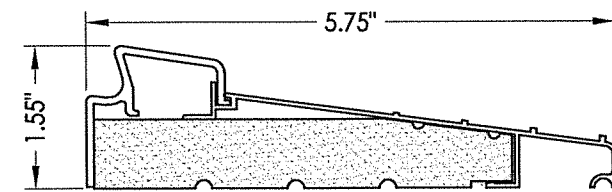
**35 INSWING THRESHOLD**  
Inswing Moderate Climate Sill



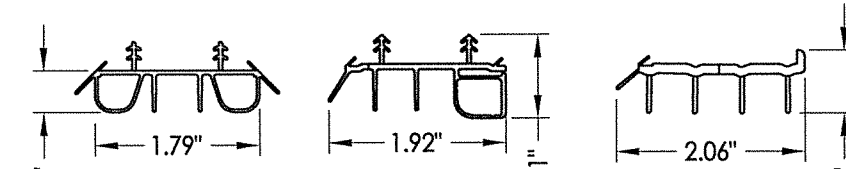
**15 PUBLIC ACCESS THRESHOLD**



**18 OUTSWING THRESHOLD**  
Composite / Aluminum Sill  
(Thermal Break)



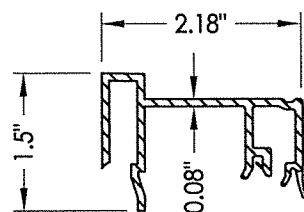
**36 INSWING THRESHOLD**  
Inswing Basic Fixed 5-3/4" Sill



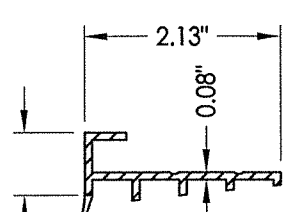
**8 SWEEP**

**9 SWEEP**

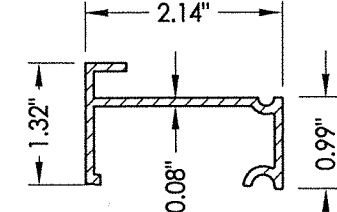
**10 SWEEP**



**75 SIDELITE SPACER**  
Inswing



**76 SIDELITE SPACER**  
Outswing



**77 SIDELITE SPACER**  
Inswing  
Moderate Climate Threshold

PRODUCT: THERMA-TRU FIBERGLASS DOOR

PART OR ASSEMBLY: COMPONENTS

REVISIONS	
NO.	DATE
1	9/27/21
	UPDATE TO 2018 IBC/IRC CODE
	LFS
	BY

DATE: 10/24/17

SCALE: N.T.S.

DWG. BY: JK

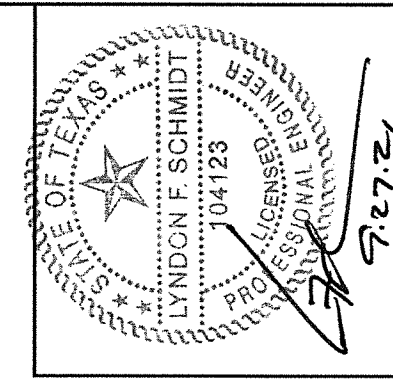
CHK. BY: LFS

DRAWING NO.: TX-4709

SHEET 10 OF 11

**BILL OF MATERIALS**

ITEM #	DESCRIPTION	MATERIAL
A	2X FRAMING (SG >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" PFH DeWALT OR ITW CONCRETE SCREW (1-3/4" MIN. EMBEDMENT)	STEEL
K	#12 PFH WOOD SCREW (1-1/2" MIN. EMBEDMENT)	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL
1	JAMB (FINGER JOINT PINE)	WOOD
6	WEATHERSTRIP (MEDIUM REACH)	FOAM
7	WEATHERSTRIP (LONG REACH)	FOAM
8	SWEEP	VINYL
9	SWEEP (USE w/ MODERATE CLIMATE THRESHOLD)	VINYL
10	SWEEP (USE w/ PUBLIC ACCESS THRESHOLD)	VINYL
15	PUBLIC ACCESS THRESHOLD	ALUM
16	OUTSWING THRESHOLD	ALUM/COMP
17	OUTSWING THRESHOLD	ALUM/COMP
18	OUTSWING THRESHOLD	ALUM/COMP
22	#8 x 3/4" PFH WOOD SCREW	STEEL
23	#10 x 3/4" PFH WOOD SCREW	STEEL
24	#10 x 1" PFH WOOD SCREW	STEEL
25	#8 x 2-1/2" PFH WOOD SCREW	STEEL
26	#8 x 5/8" PFH WOOD SCREW	STEEL
27	LATCH STRIKE PLATE	STEEL
28	DEADBOLT SUB STRIKE PLATE	STEEL
28A	DEADBOLT SUB STRIKE PLATE	STEEL
29	4" X 4" HINGE	STEEL
30	LATCH & DEADBOLT STRIKE PLATE (TONGUE SYSTEM)	ALUM/COMP
31	MULTIPOINT STRIKE PLATE (TONGUE SYSTEM)	ALUM/COMP
32	INSWING THRESHOLD	ALUM/COMP
33	INSWING THRESHOLD	ALUM/COMP
34	INSWING THRESHOLD	ALUM/COMP
35	INSWING THRESHOLD	ALUM/COMP
36	INSWING THRESHOLD	ALUM/COMP
37	INSWING THRESHOLD	ALUM/COMP
38	INSWING THRESHOLD	ALUM/COMP
39	INSWING THRESHOLD	ALUM/COMP
40	DOOR PANEL (BOOK)	-
41	DOOR PANEL (HYBRID)	-
42	DOOR PANEL (U1)	-
50	SIDELITE	-
75	SIDELITE SPACER (INSWING)	PVC
76	SIDELITE SPACER (OUTSWING)	PVC
77	SIDELITE SPACER (INSWING) - MODERATE CLIMATE SILL	PVC
88	2X MULLION (SG >= 0.55)	WOOD



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

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Phone No.: 813.659.9197

CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU FIBERGLASS DOOR  
PART OR ASSEMBLY: BILL OF MATERIALS

NO.	DATE	REVISIONS
1	9/27/21	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY

DATE: 10/24/17  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4709  
SHEET 11 OF 11

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

**WOOD SCREW INSTALLATION NOTES:**

- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.