

# THERMA-TRU® DOORS

Fiber-Classic® & Smooth-Star®

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

EVALUATED FOR USE IN THE STATE OF TEXAS

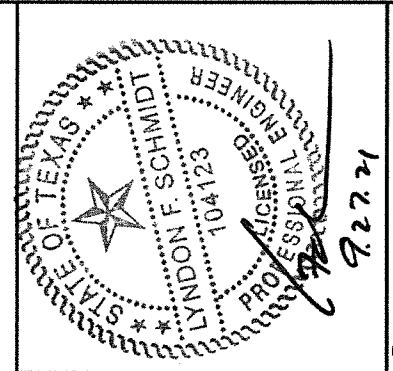
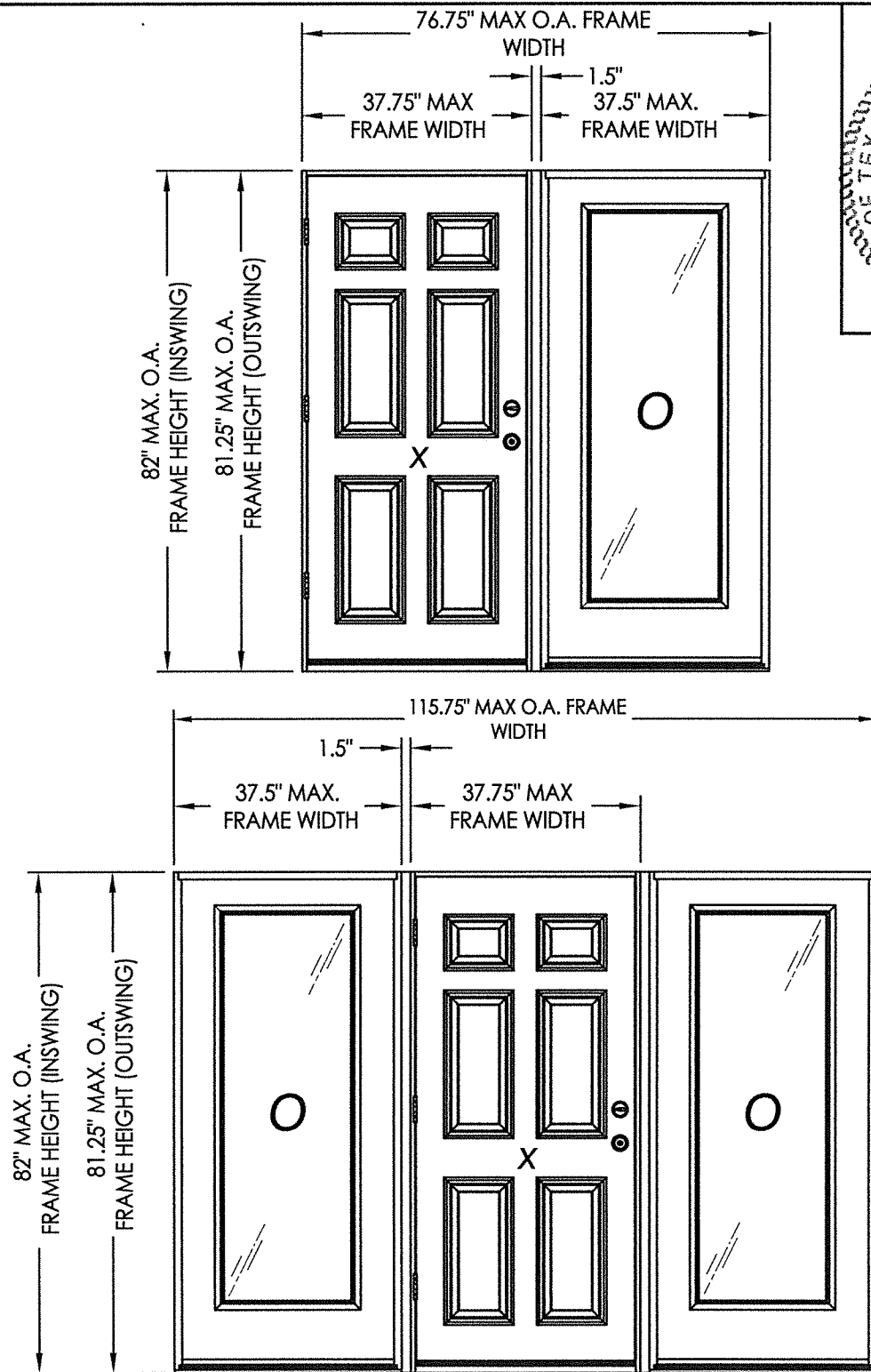
**TDI DR-951**

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.

**TABLE OF CONTENTS**

SHEET #	DESCRIPTION
1	Typical Elevations, Design Pressures & General Notes
2	Door Panel Details
3	Sidelite Panel Details
4	Elevations
5	Horizontal & Vertical Cross Sections
6	Vertical Cross Sections (Thresholds)
7	Frame Anchoring
8	Hardware Details
9	Glazing Details
10	Components
11	Bill of Materials



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

CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU FIBERGLASS DOOR

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

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

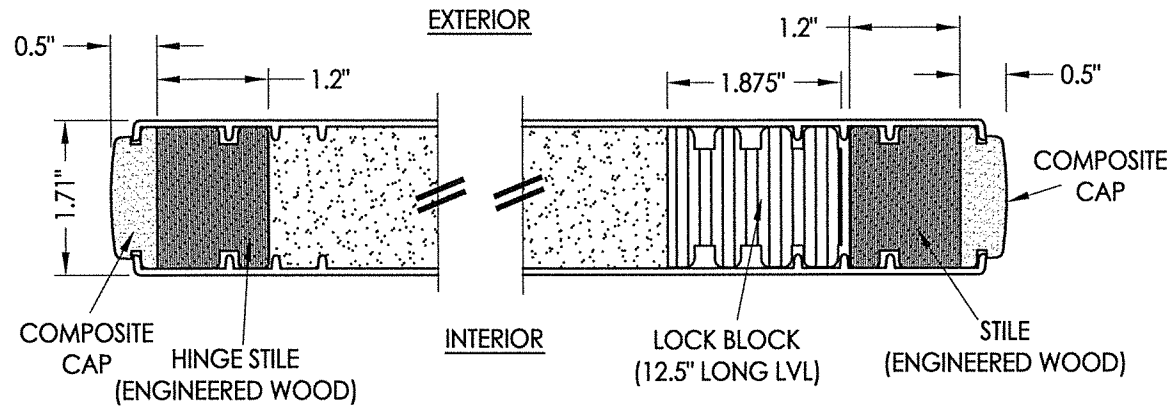
DRAWING NO.: TX-4706

SHEET 1 OF 11

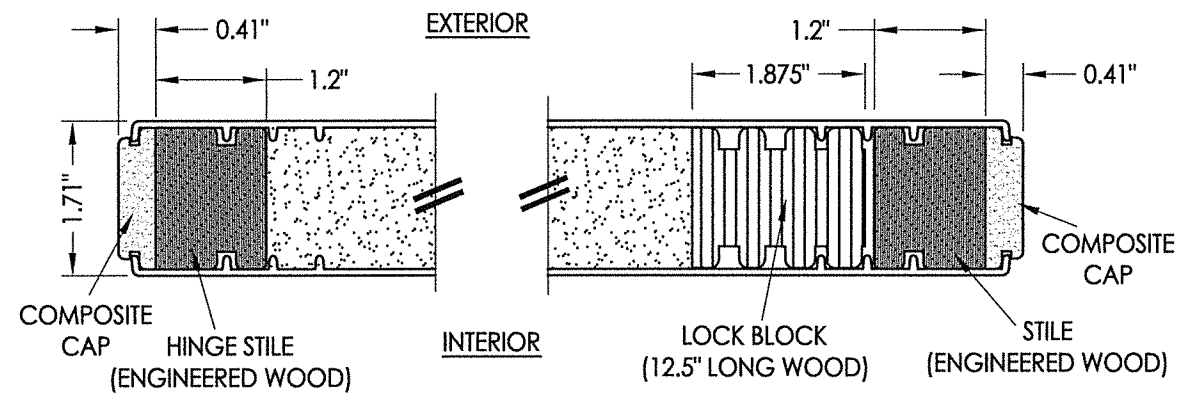
CONFIGURATION	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XO, OX, OXO	+50.0	-50.0	+50.0	-50.0

See Sheet 4 for Hardware Specifications

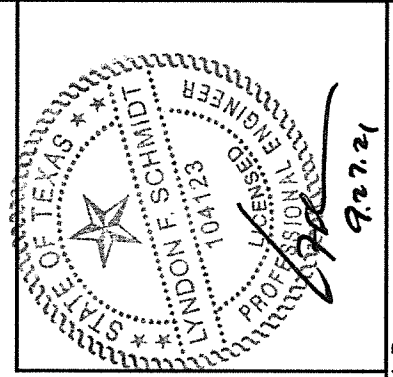
Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - DR 951 - 6'8 & 8'0 Opaque Comp Edge Impact (TX 4705 - 4710)\C - Drawings\TX-4705-7.dwg



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



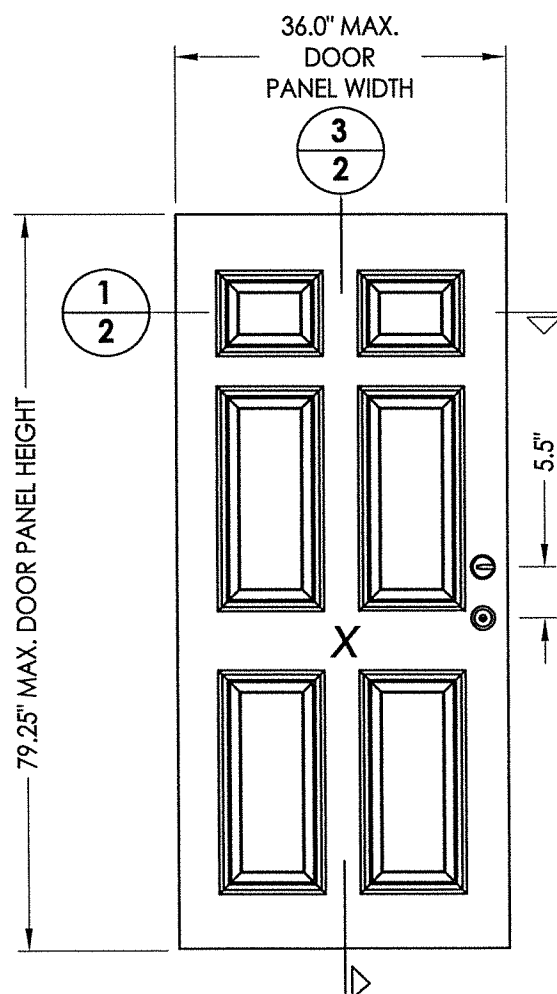
**2**  
**2** HORIZONTAL CROSS SECTION



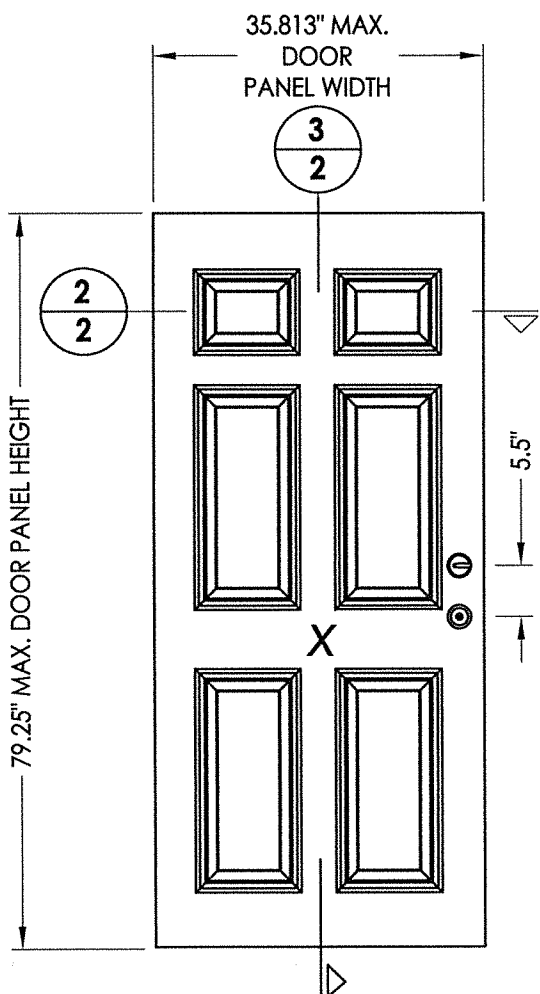
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

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

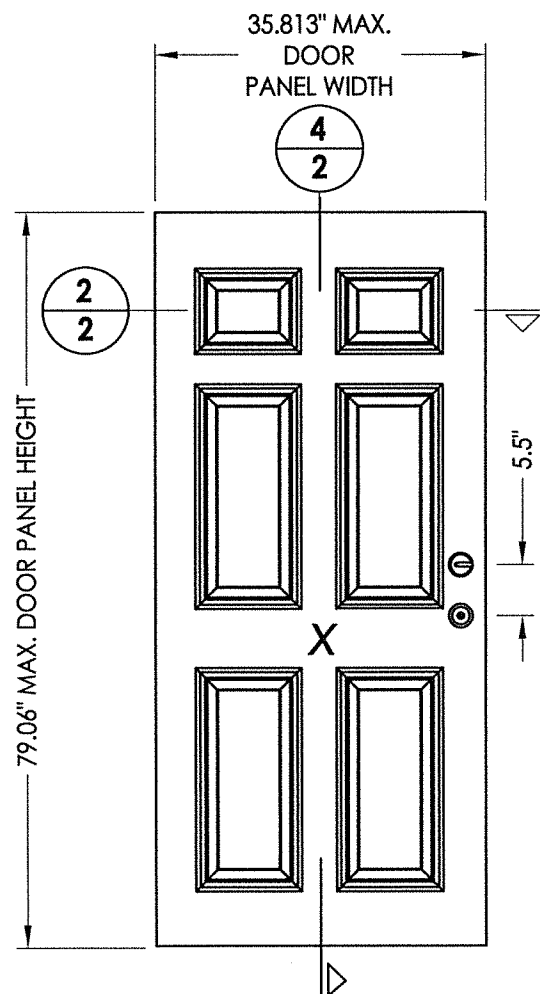
CERTIFICATE OF REGISTRATION # F-11852



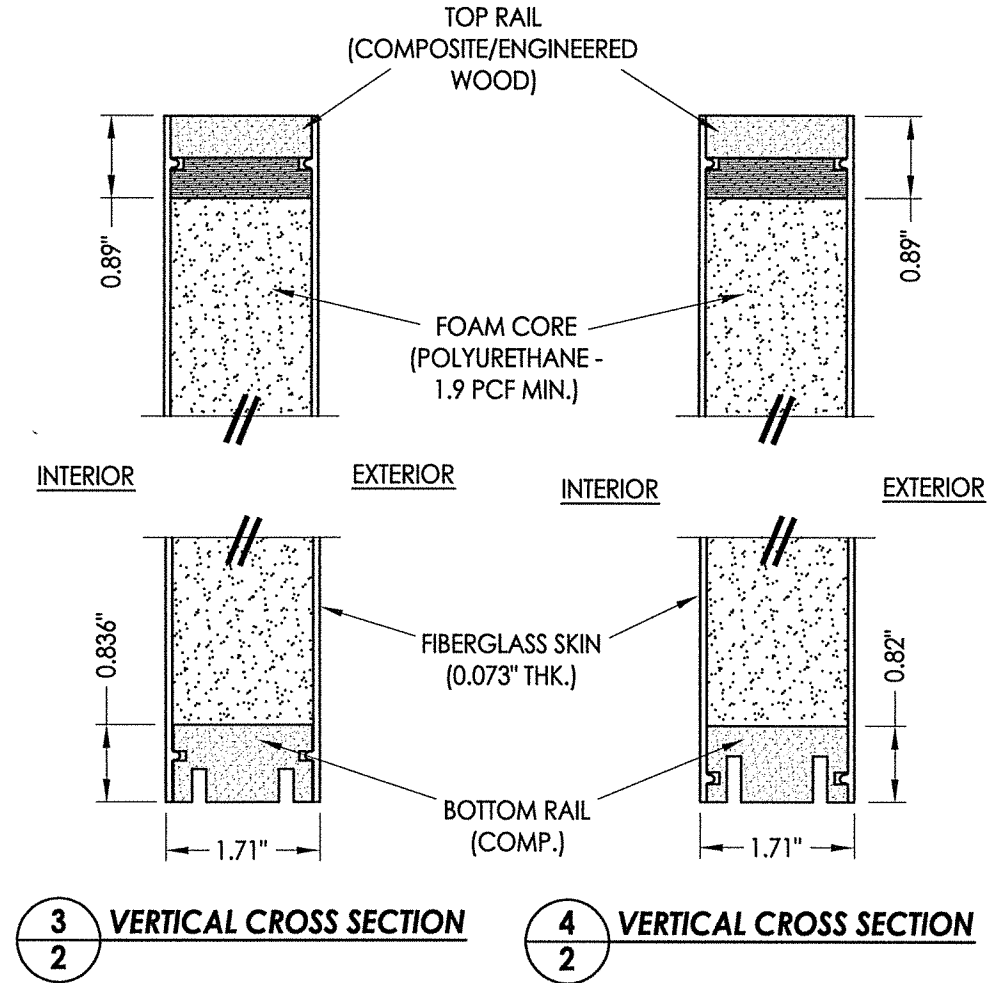
**40** DOOR PANEL BOOK



**41** DOOR PANEL Hybrid Door



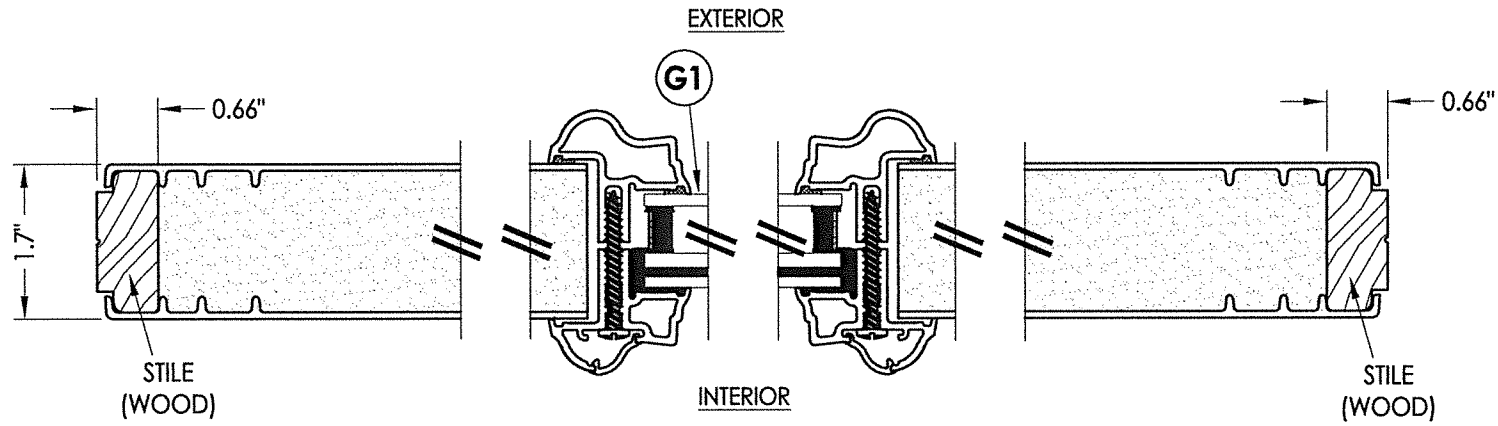
**42** DOOR PANEL UI Door



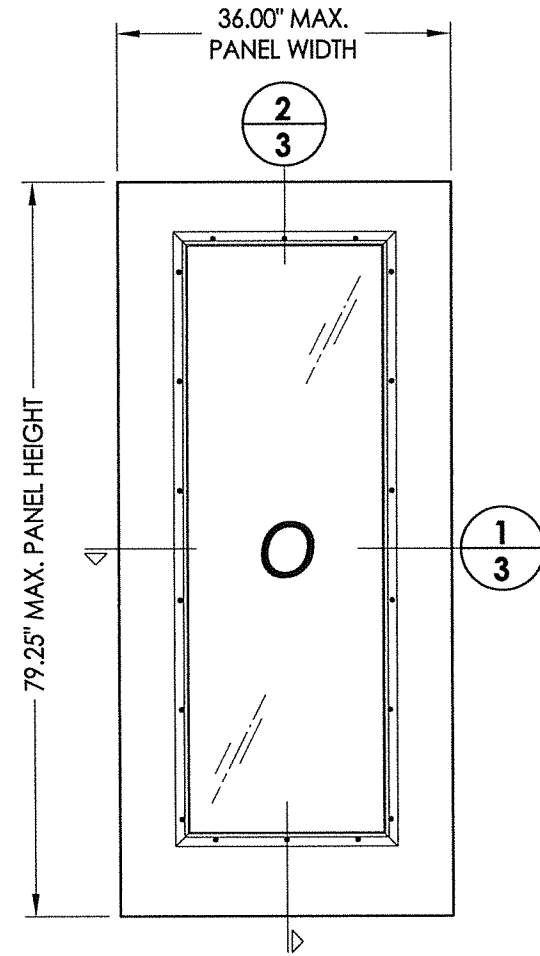
**3**  
**2** VERTICAL CROSS SECTION

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

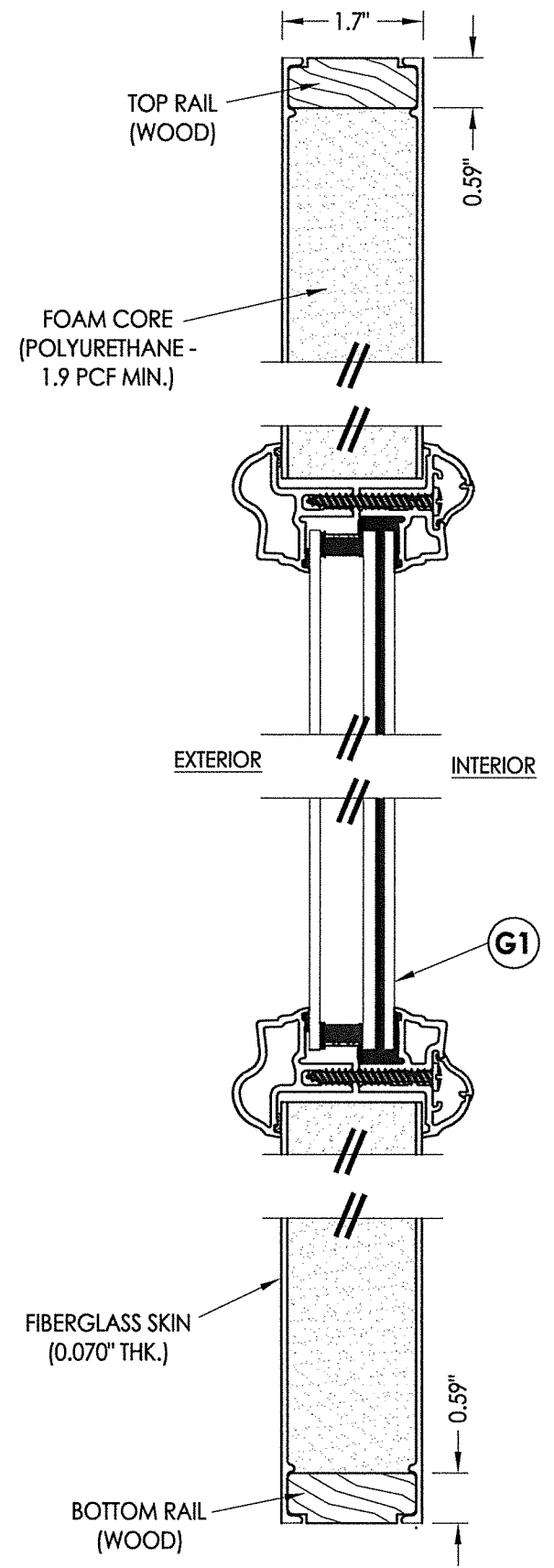
PRODUCT:	Therma-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY:	DOOR PANEL DETAILS	
DATE:	10/24/17	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4706	
SHEET	2 OF 11	
NO.	DATE	REVISIONS
1	9/27/21	UPDATE TO 2018 IBC/IRC CODE
LFS		
BY		



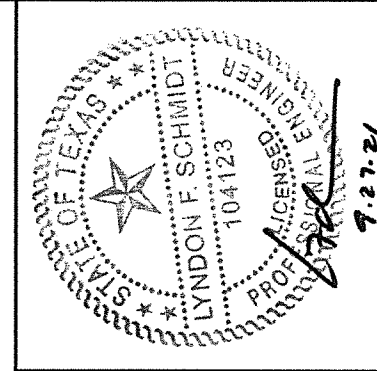
**1**  
**3** HORIZONTAL CROSS SECTION



**50** SIDELITE PANEL



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



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

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

CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU  
FIBERGLASS DOOR

PART OR ASSEMBLY:  
SIDELITE PANEL DETAILS

REVISIONS	
NO.	DATE
1	9/27/21
	DATE
	BY
	LFS
	DATE

DATE: 10/24/17

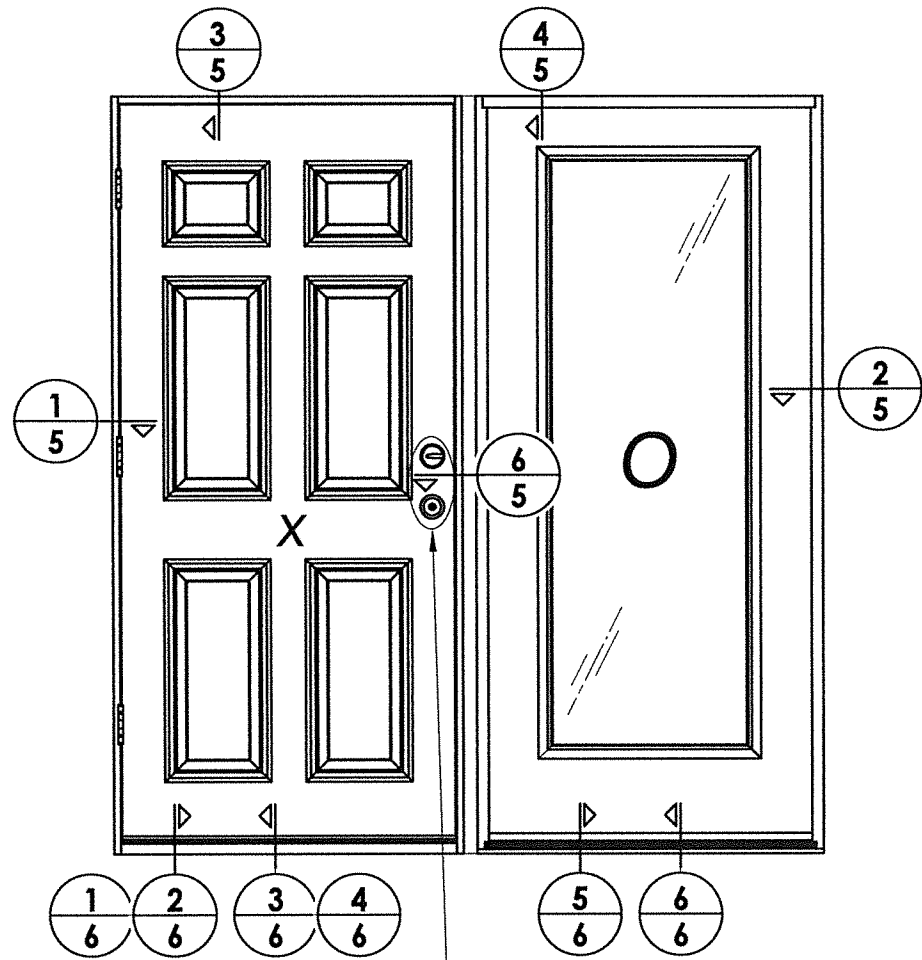
SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

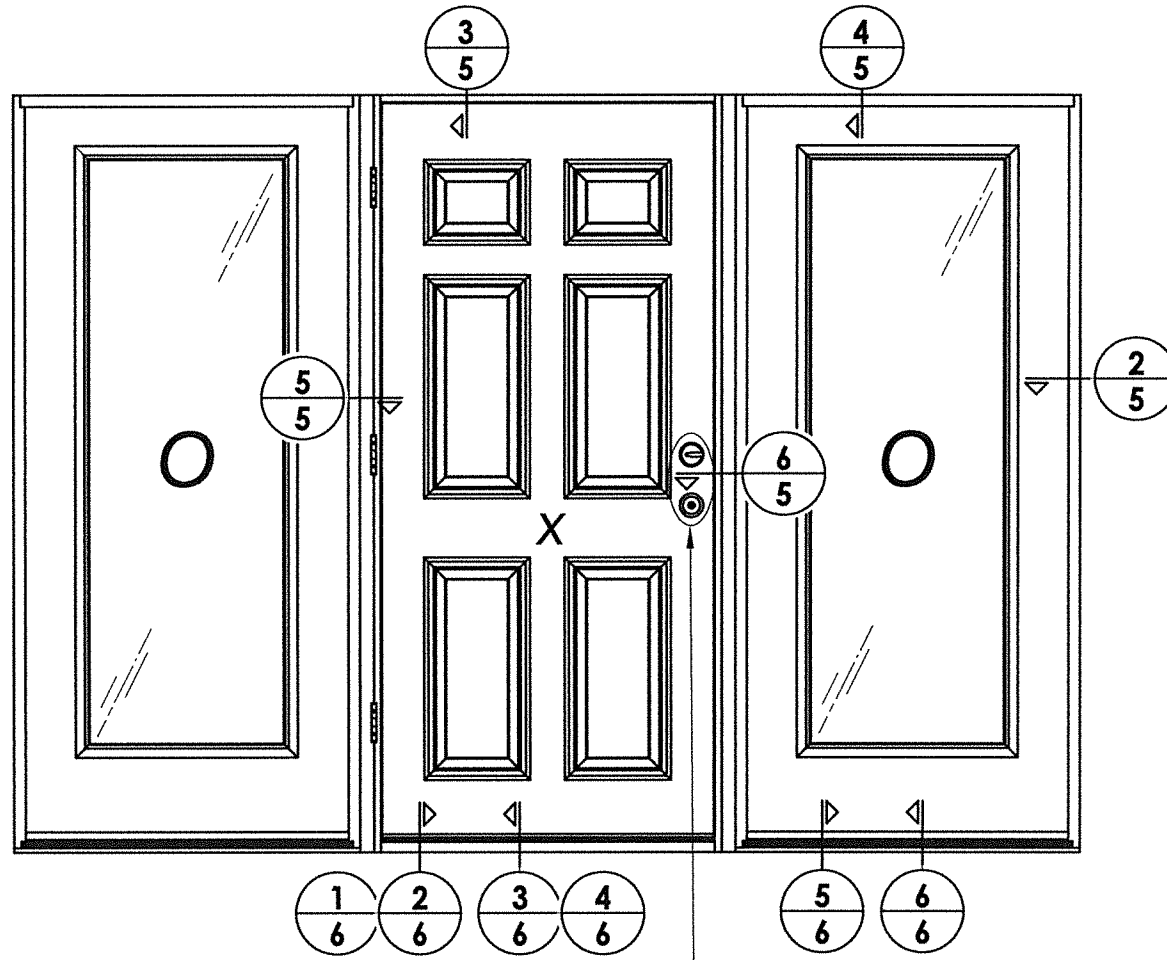
DRAWING NO.: TX-4706

SHEET 3 OF 11



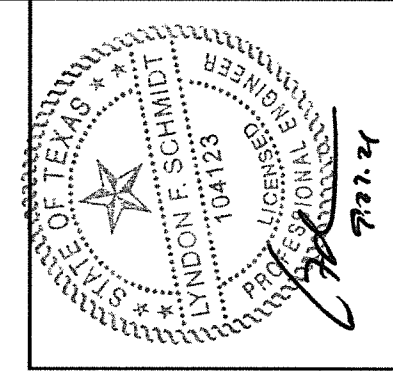
SEE HARDWARE CHART

ELEVATION  
XO



SEE HARDWARE CHART

ELEVATION  
OXO



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

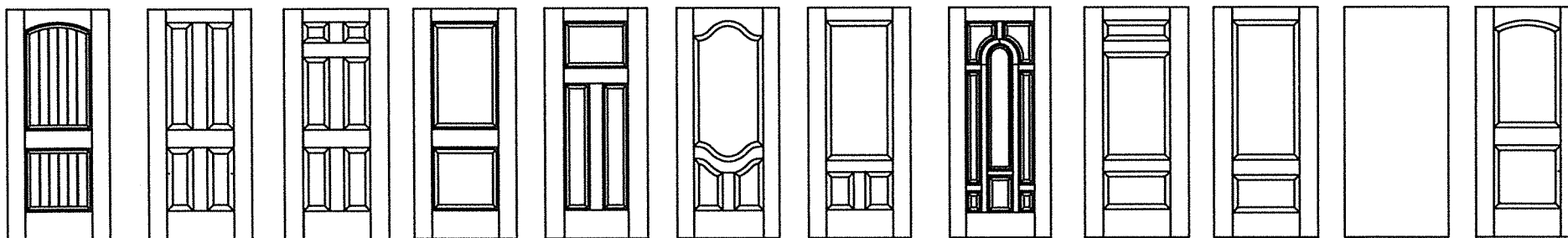
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU  
FIBERGLASS DOOR

PART OR ASSEMBLY:  
ELEVATIONS

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

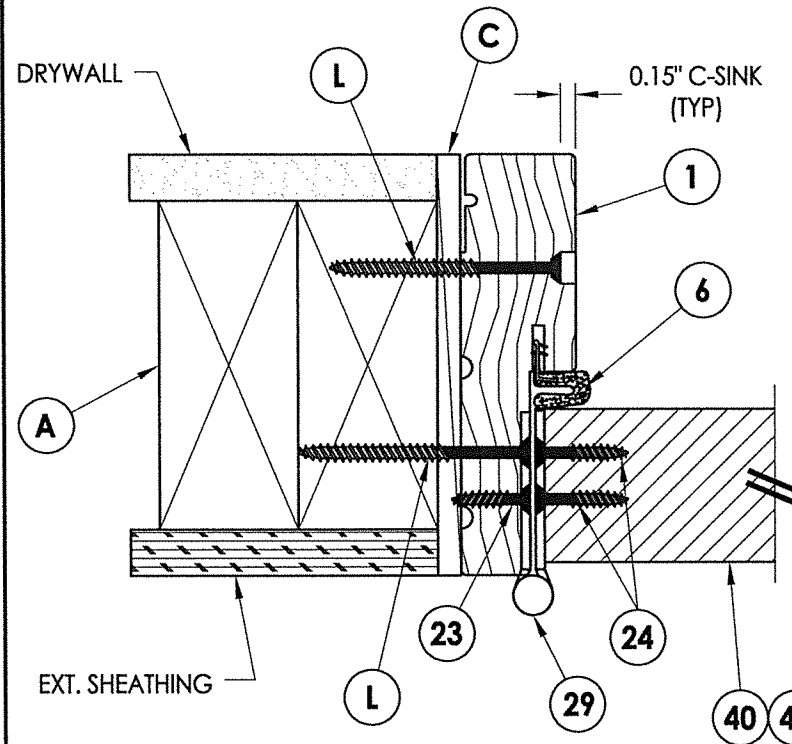
DATE: 10/24/17  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4706  
SHEET 4 OF 11



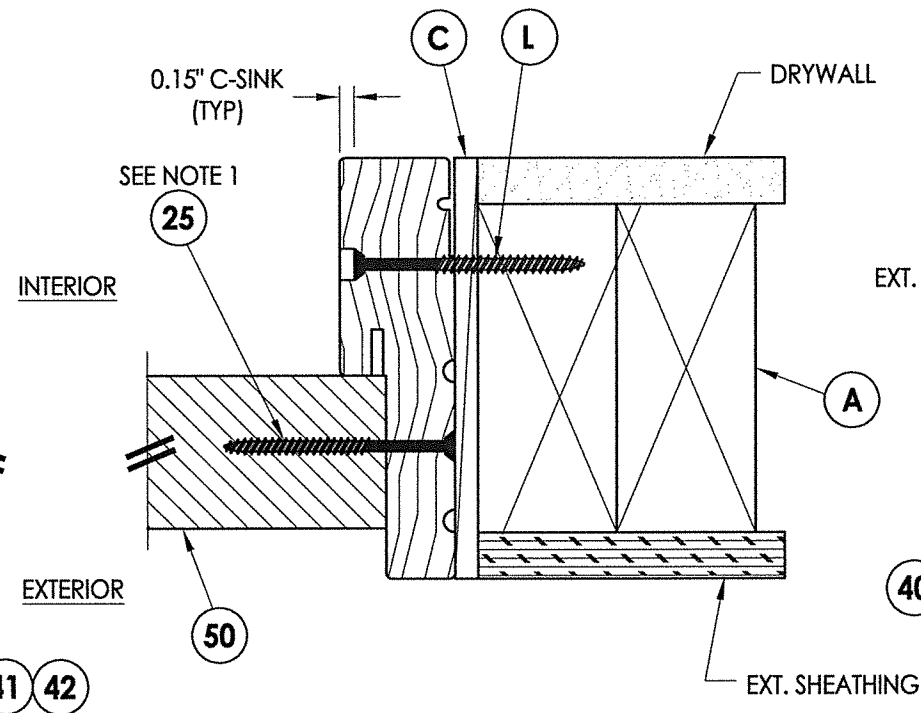
**Fiber-Classic/Smooth-Star Door Panel Options**

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

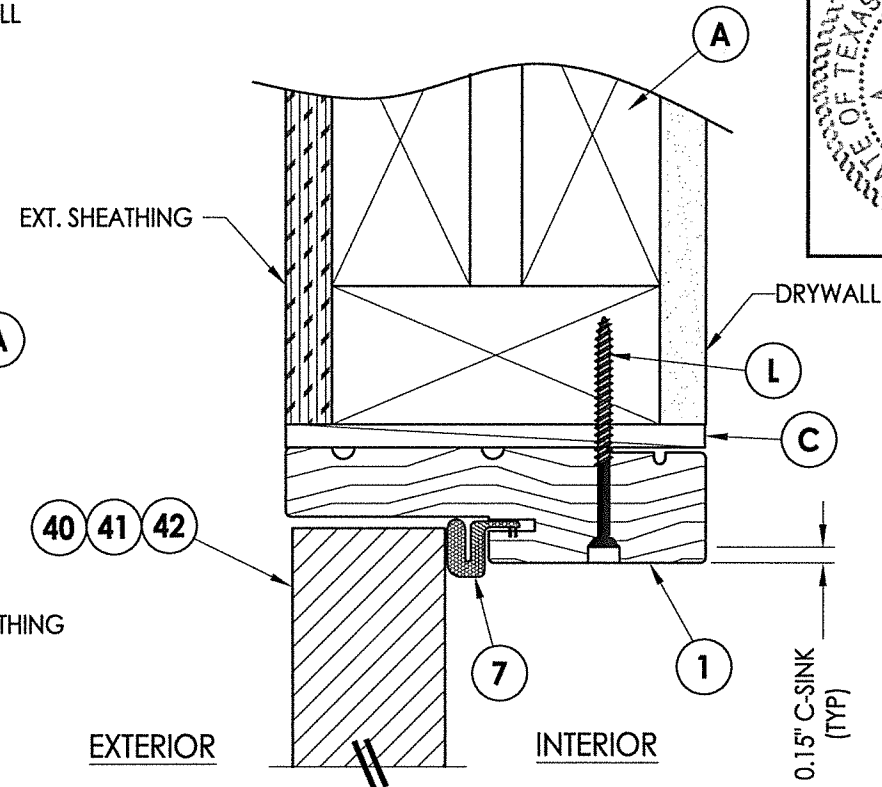
HARDWARE TABLE	
MANUFACTURER	MODEL
SCHLAGE	KNOB: F51 DEADBOLT: B60
KWIKSET	KNOB: SIGNATURE SERIES DEADBOLT: SIGNATURE SERIES (980)
HOPPE (THERMA-TRU)	MULTIPOINT: MPDGART (3 pt. Manual Tongue)



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

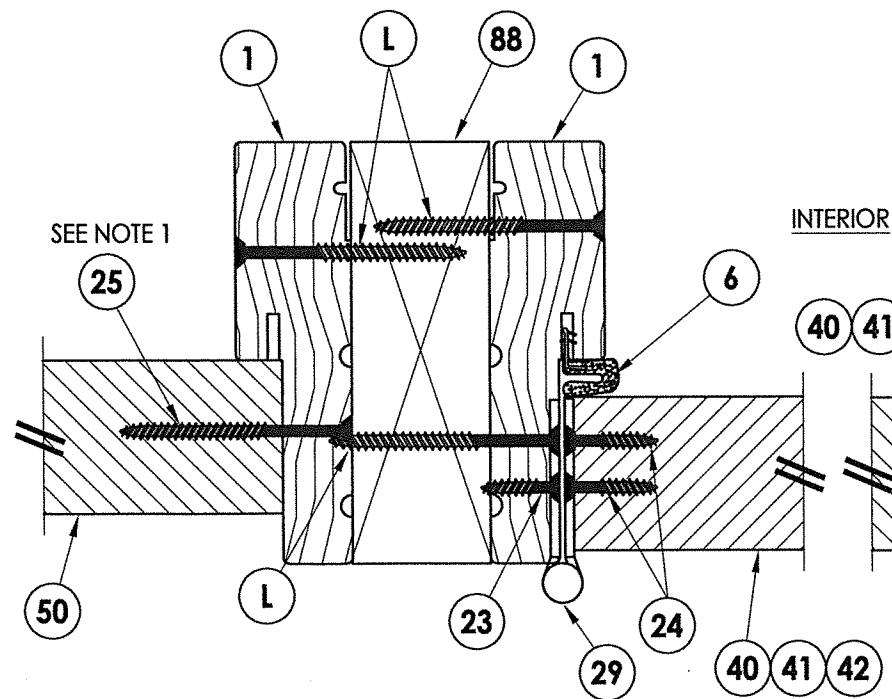


**2 HORIZONTAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)

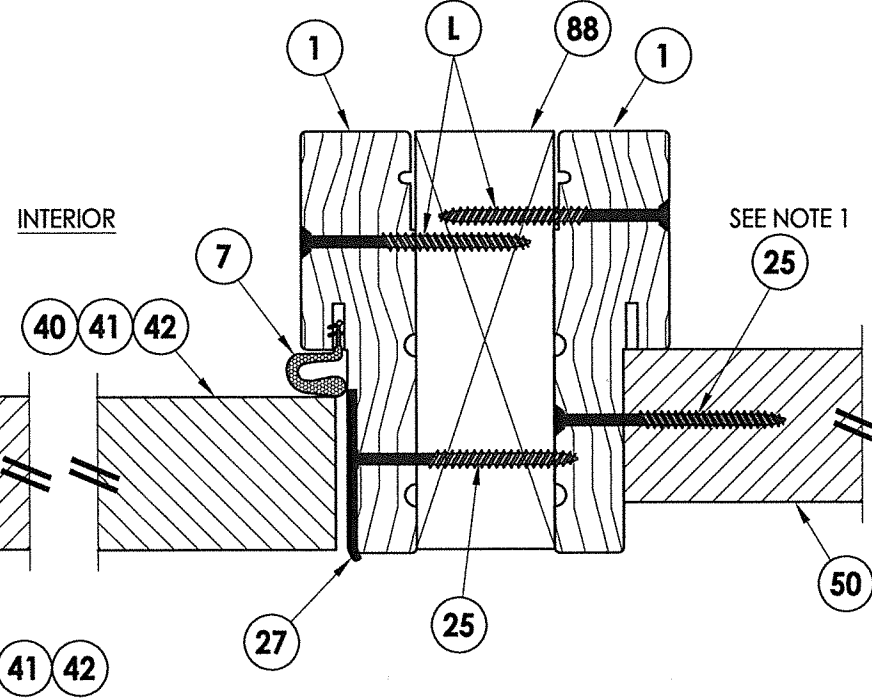


**3 VERTICAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)

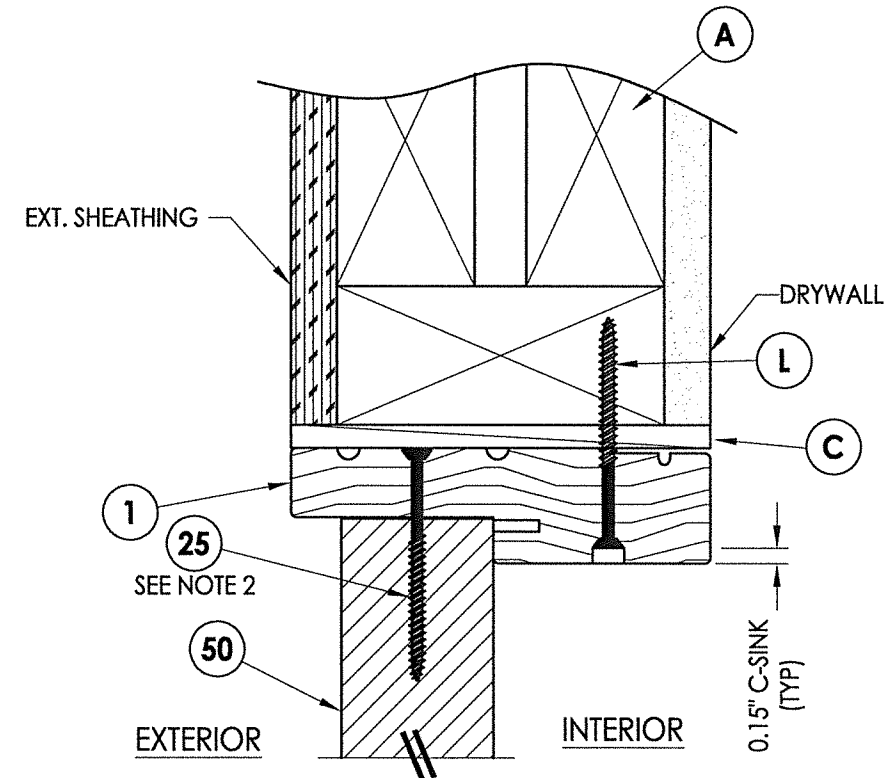
Notes:  
 1. Sidelite assembly screws located 6" from each end and 5 more screws equally spaced between (7 screws total per side jamb).  
 2. Sidelite assembly screws located 3" from each end & at centerline (3 screws along head jamb).



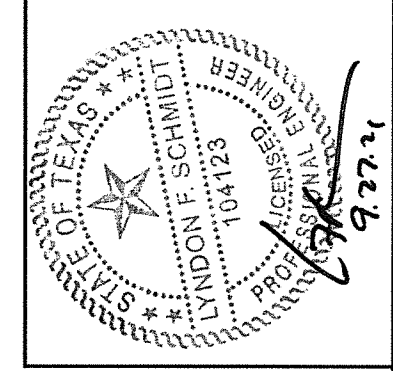
**5 HORIZONTAL CROSS SECTION**  
**5** Outswing shown (Inswing similar)



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



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



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

CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU  
 FIBERGLASS DOOR

PART OR ASSEMBLY:  
 HORIZONTAL & VERTICAL  
 CROSS SECTIONS

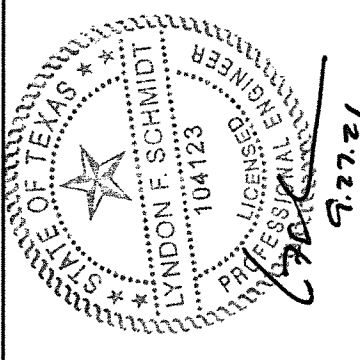
NO.	DATE	BY
1	9/27/21	LFS
UPDATE TO 2018 IBC/IRC CODE		

DATE:	10/24/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4706
SHEET	5 OF 11

Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDL - DR 951 - 68 & 810 Opaque Comp Edge Impact (TX 4705 - 4710)\C - Drawings\TX-4705-7.dwg

**Notes:**

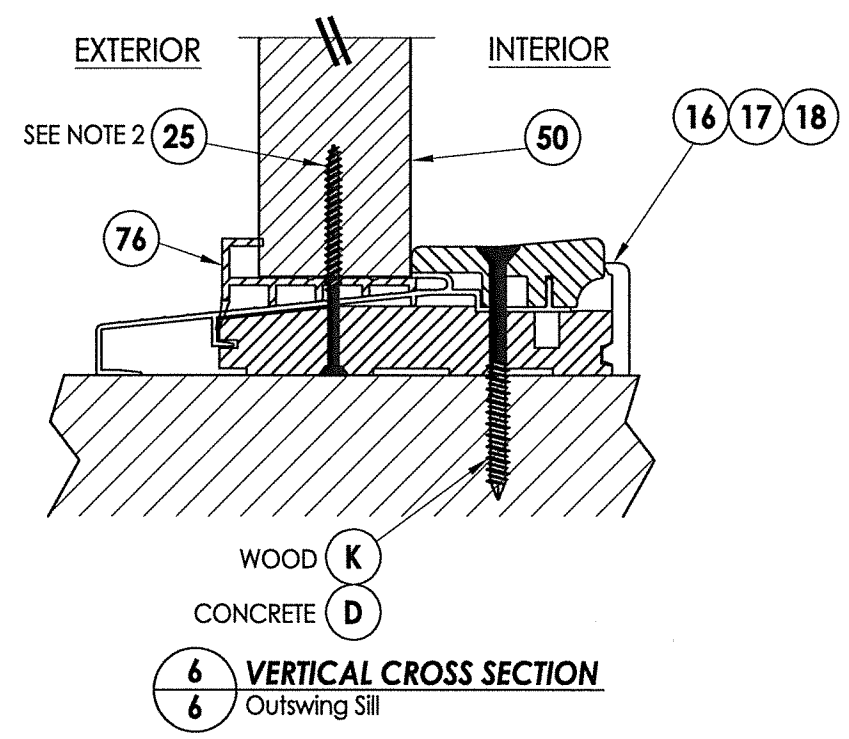
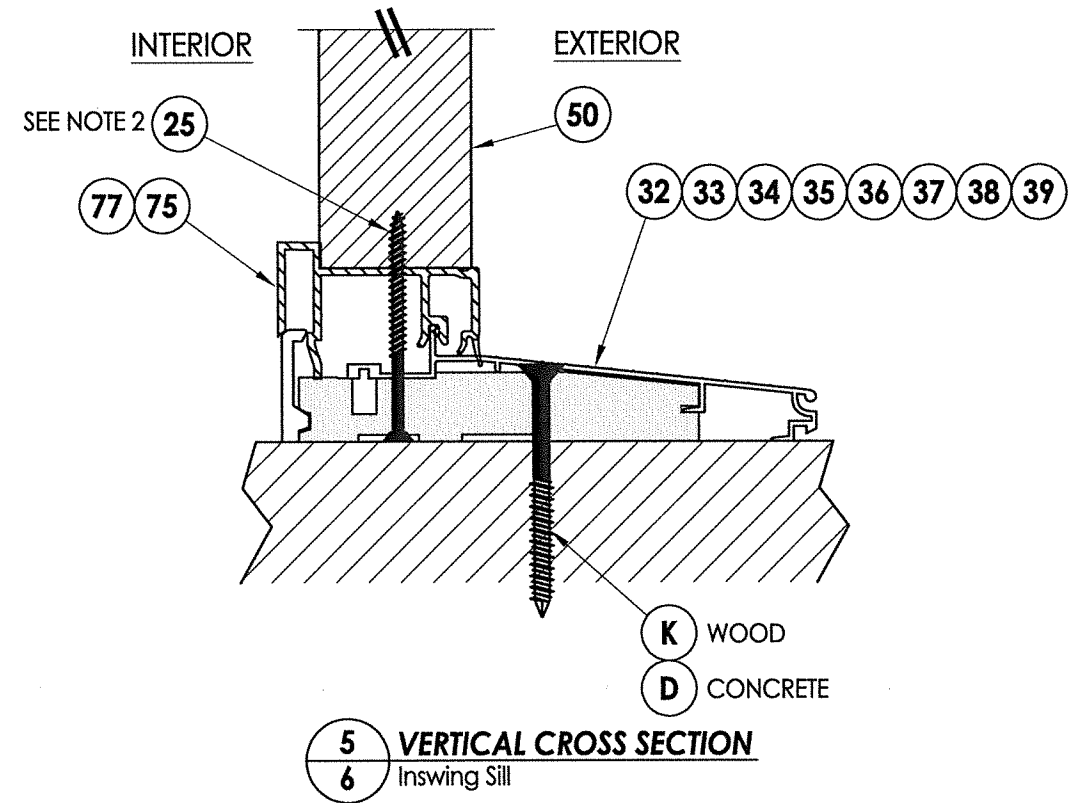
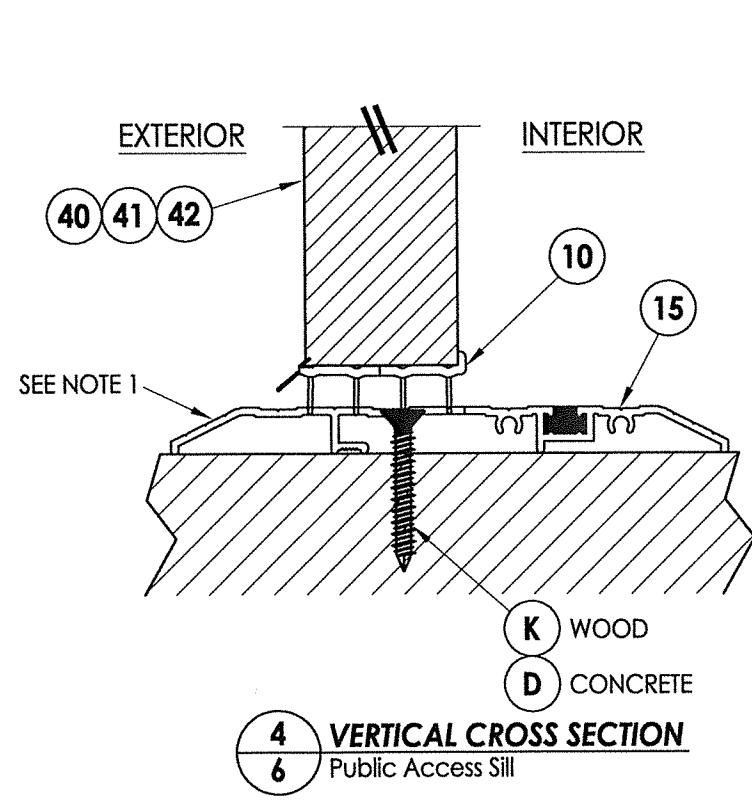
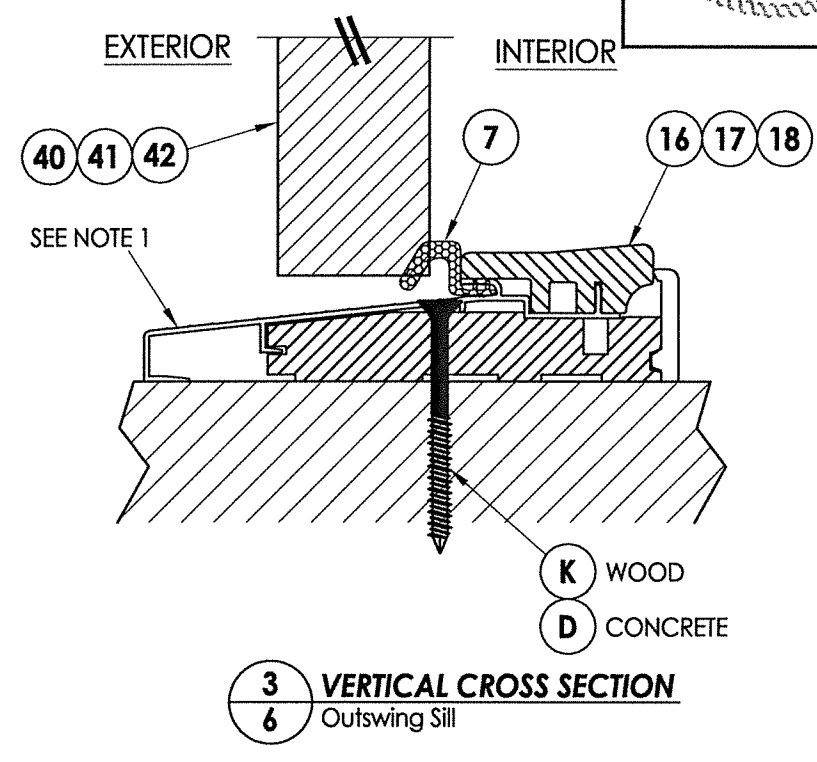
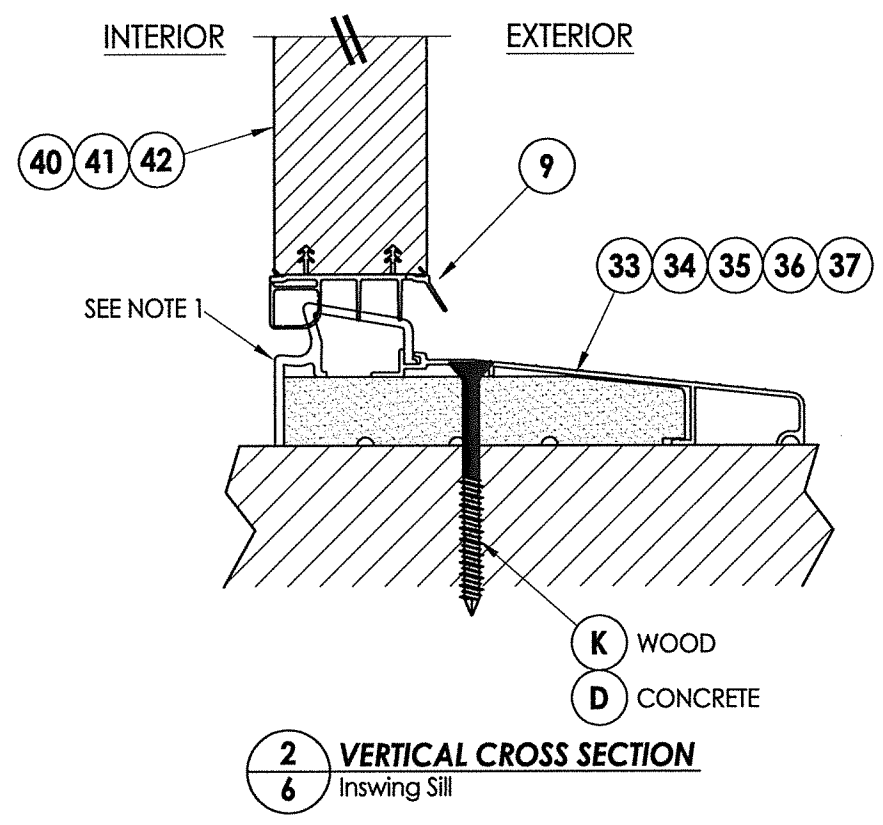
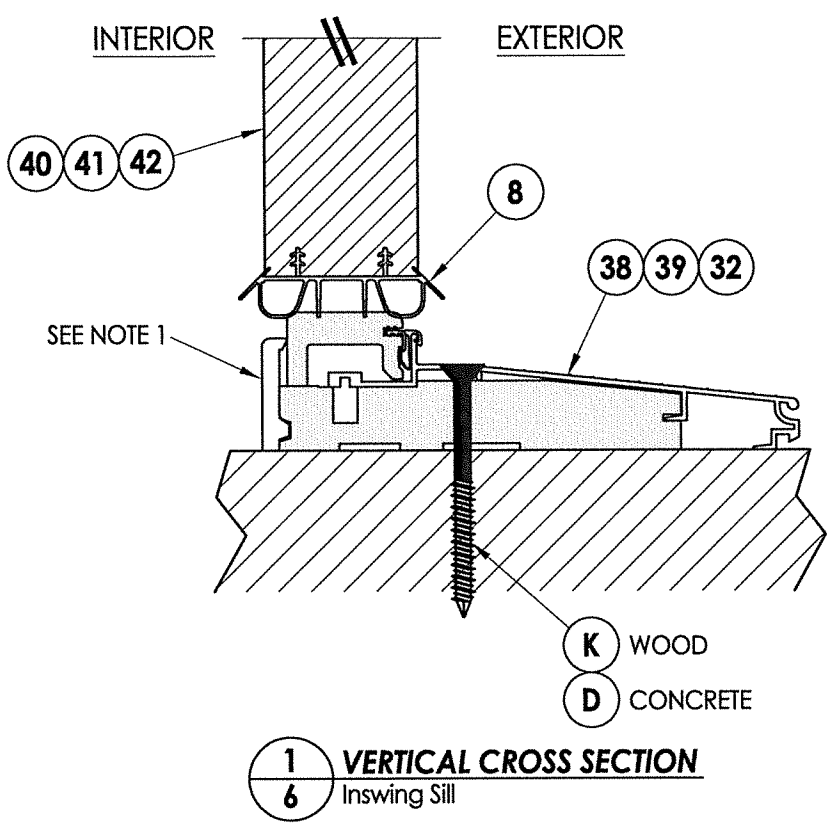
- Sill Item #'s 16, 32, 33, 34, 35, 36, 37, 38 & 39 are attached to jambs w/ (3) #8 X 2-1/2" pfh screws at each end.  
Sill Item #'s 17 & 18 are attached to jambs w/ (2) #8 X 2-1/2" pfh screws at each end.  
Sill Item #15 is attached to jambs utilizing (2) #10 X 1-1/2" pph screws at each end.
- Sidelite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



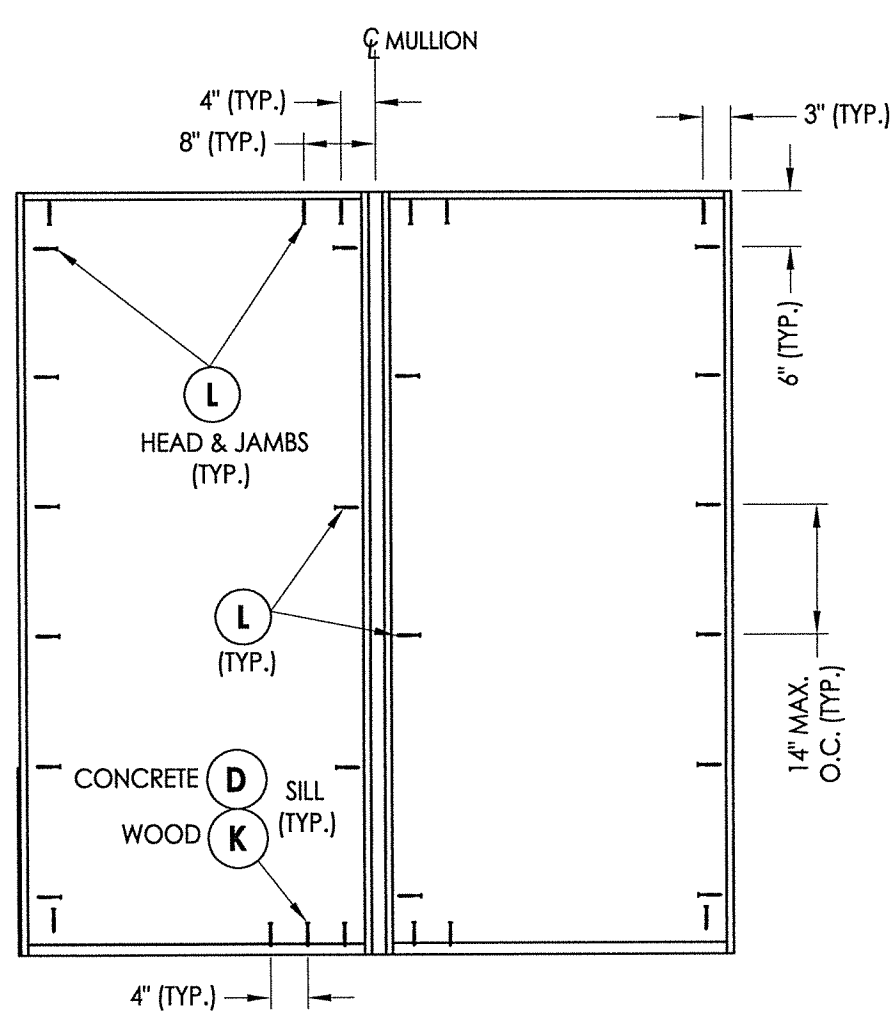
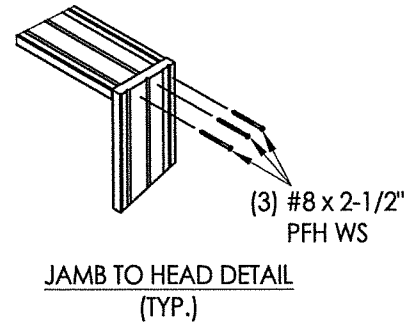
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

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

CERTIFICATE OF REGISTRATION # F-11852

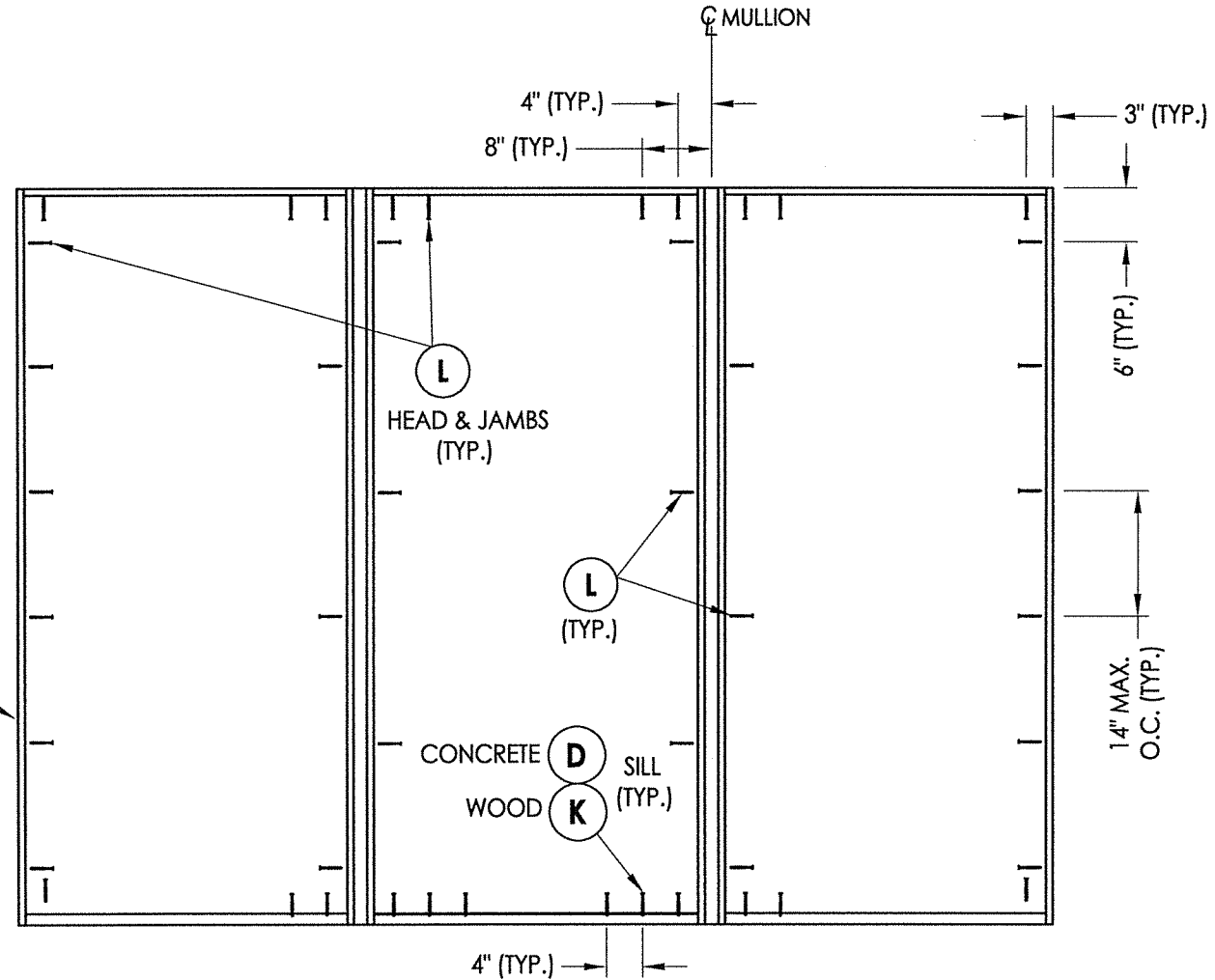


PRODUCT: THERMA-TRU FIBERGLASS DOOR		PART OR ASSEMBLY: VERTICAL CROSS SECTIONS (THRESHOLDS)	
NO.	DATE	BY	REVISIONS
1	9/27/21	LFS	UPDATE TO 2018 IBC/IRC CODE
DATE: 10/24/17			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4706			
SHEET 6 OF 11			



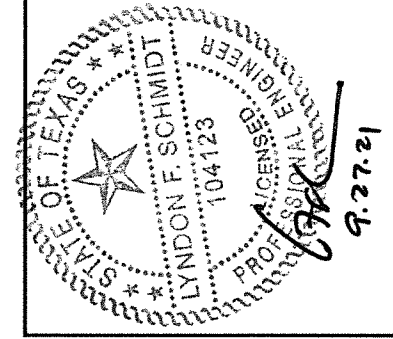
XO/OX

FRAME (TYP.)



OXO

**FRAME ANCHORING**



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

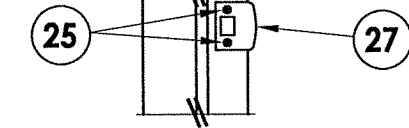
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	Therma-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	BY
1	9/27/21	LFS
UPDATE TO 2018 IBC/IRC CODE		

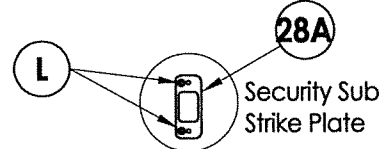
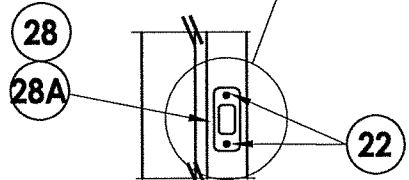
REVISIONS

DATE:	10/24/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4706
SHEET	7 OF 11

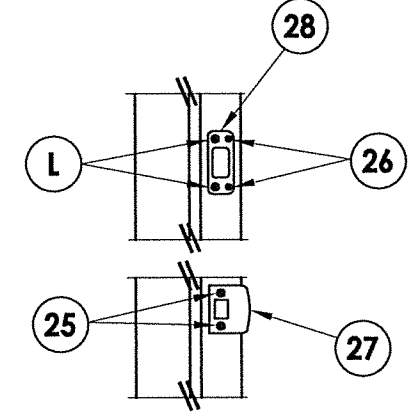
**LATCH & DEADBOLT STRIKE DETAILS**



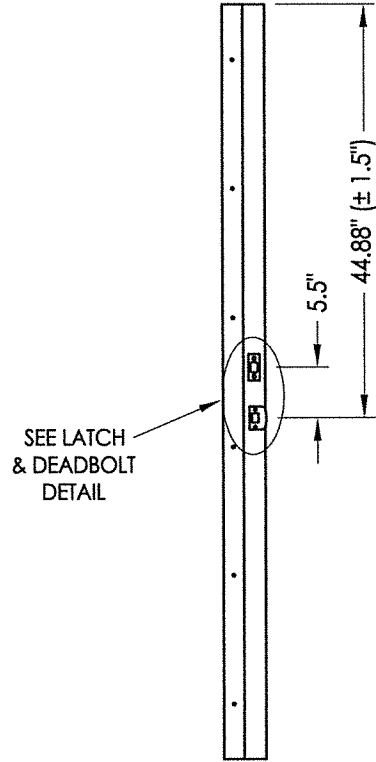
**LATCH & DEADBOLT DETAIL**  
Schlage



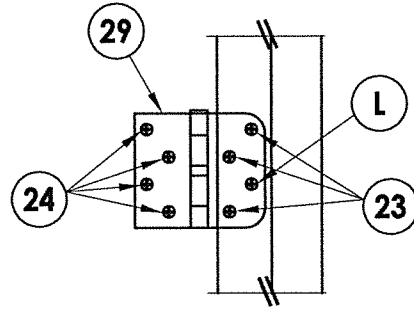
Security Sub Strike Plate



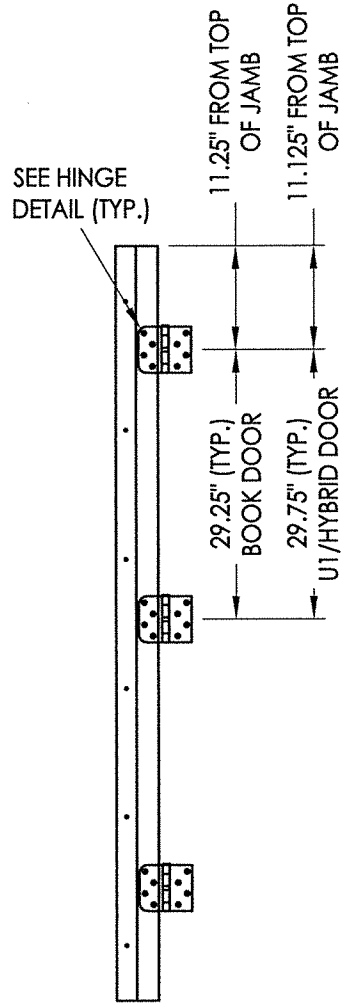
**LATCH & DEADBOLT DETAIL**  
Kwikset



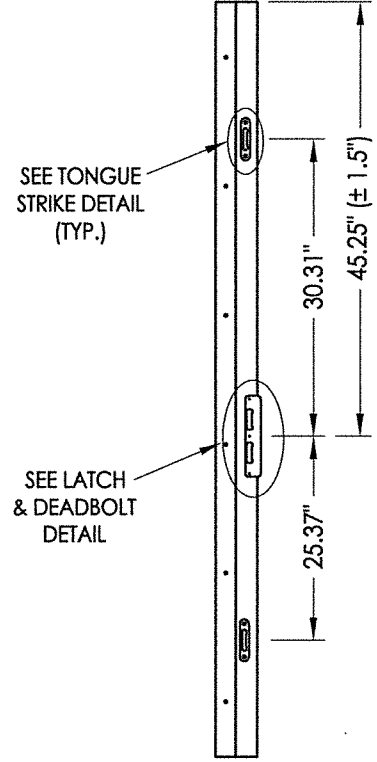
**STRIKE JAMB**  
Latch and Deadbolt



**HINGE DETAIL**

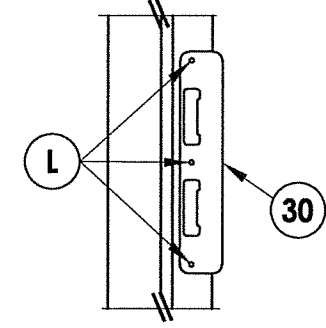


**HINGE JAMB**

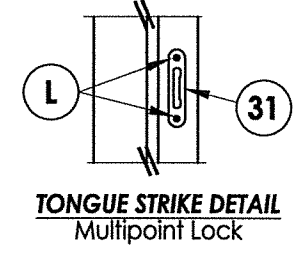


**STRIKE JAMB**  
Multipoint Lock

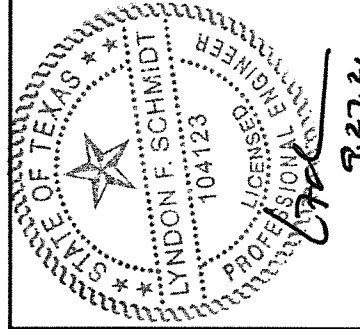
**MULTIPOINT LOCK STRIKE DETAILS**



**LATCH & DEADBOLT DETAIL**  
Multipoint Lock



**TONGUE STRIKE DETAIL**  
Multipoint Lock



9.27.21

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

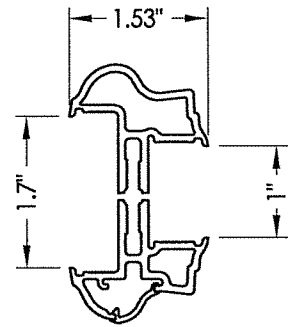
**R.W.** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

CERTIFICATE OF REGISTRATION # F-11852

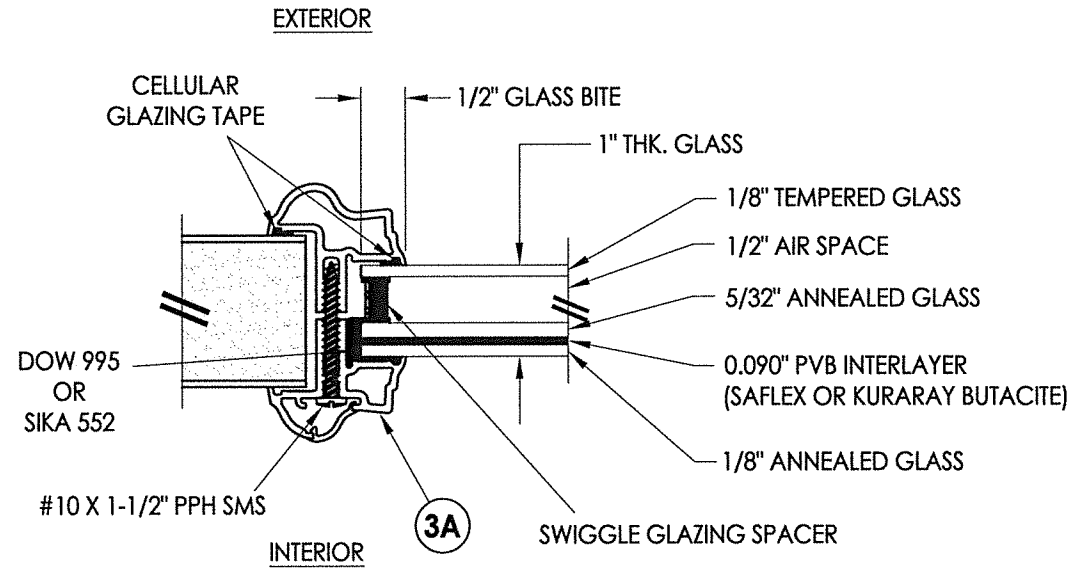
PRODUCT:	Therma-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY:	HARDWARE DETAILS	
NO.	DATE	BY
1	9/27/21	LFS
UPDATE TO 2018 IBC/IRC CODE		

DATE:	10/24/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4706
SHEET	8 OF 11

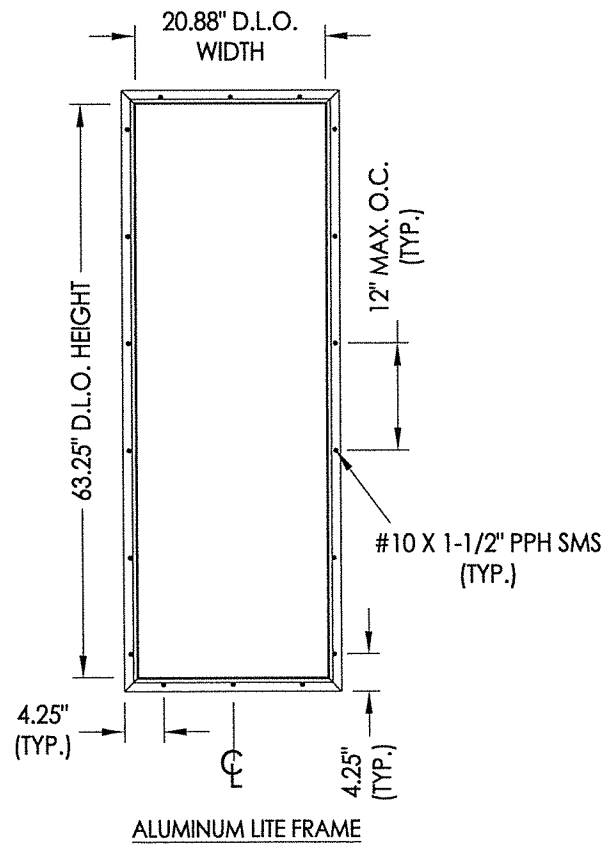




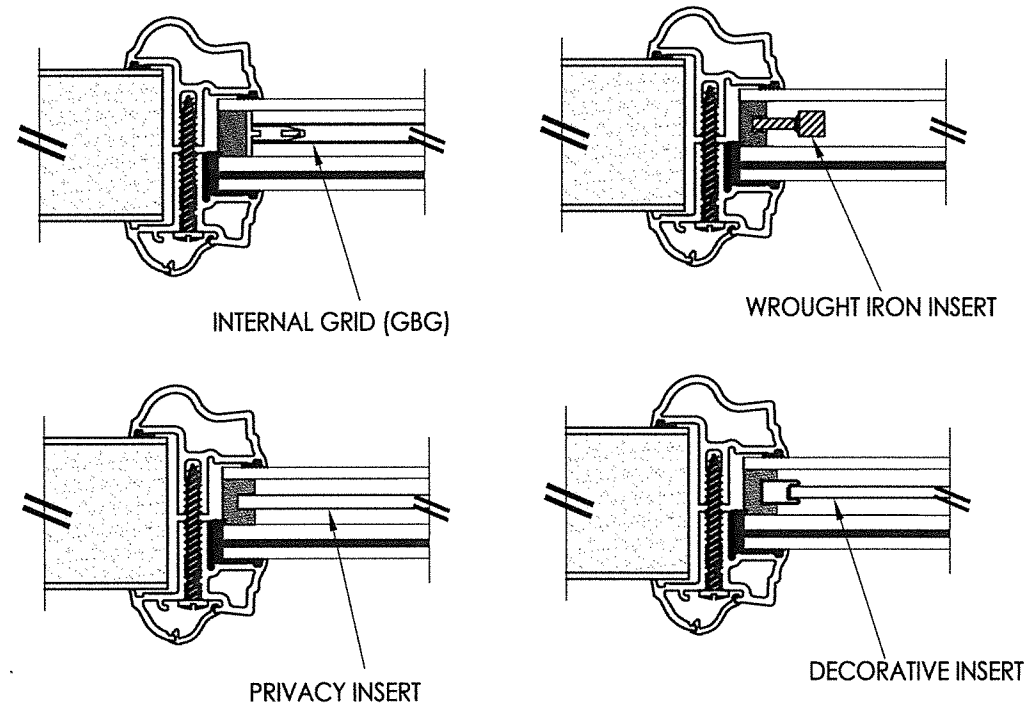
**3A ALUMINUM FRAME**  
Aluminum Impact Lite Frame  
Door Panels & Sidelites



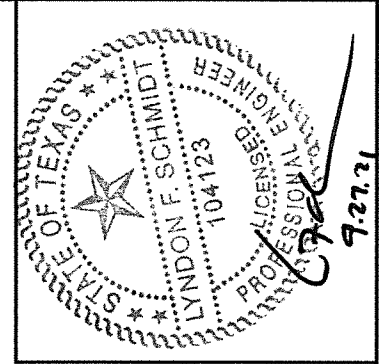
**G1 GLAZING DETAIL**  
Aluminum Impact Lite Frame  
Door Panels & Sidelites



ALUMINUM LITE FRAME



1" LAMINATED INSULATED IMPACT GLASS INSERT OPTIONS



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

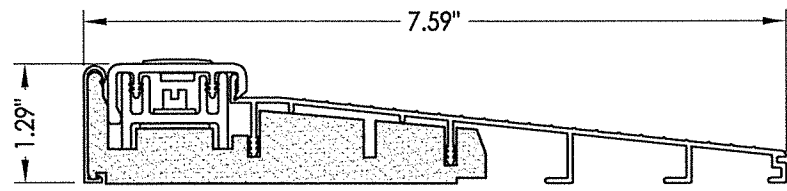
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

CERTIFICATE OF REGISTRATION # F-11852

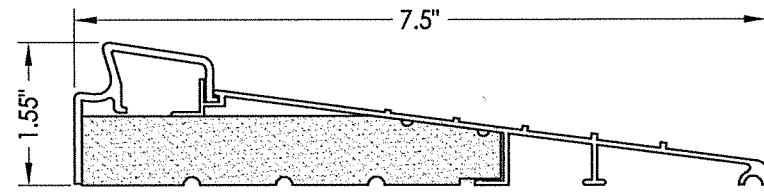
PRODUCT:	THERMA-TRU FIBERGLASS DOOR
PART OR ASSEMBLY:	
GLAZING DETAILS	

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

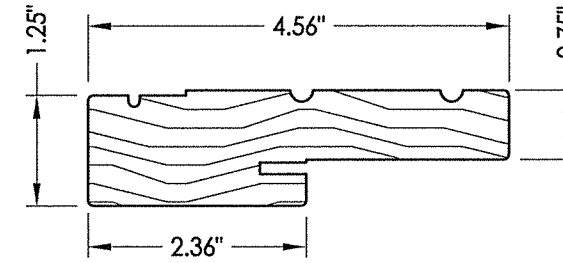
DATE:	10/24/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4706
SHEET	9 OF 11



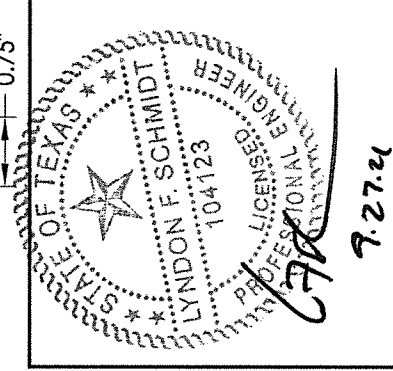
**32 INSWING THRESHOLD**  
Inswing Basic Composite Adjustable Sill 7-1/2"



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



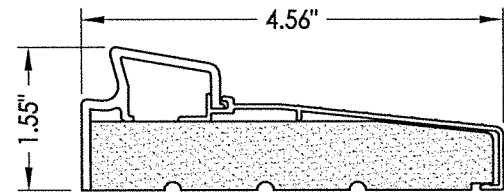
**1 WOOD JAMB**



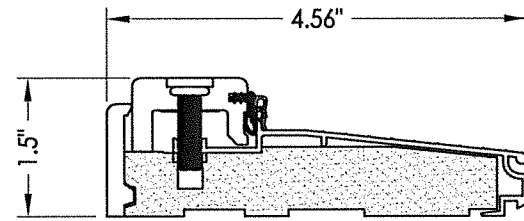
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

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

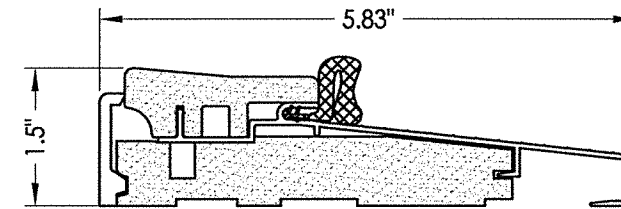
CERTIFICATE OF REGISTRATION # F-11852



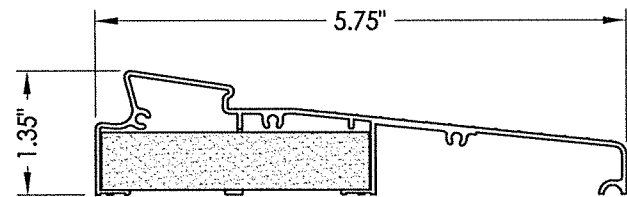
**33 INSWING THRESHOLD**  
Inswing Basic Fixed Sill



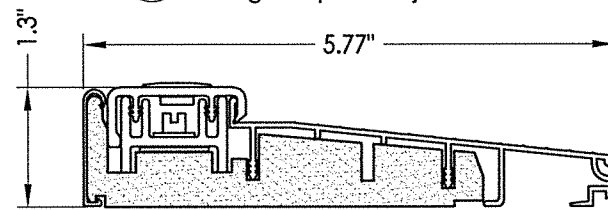
**38 INSWING THRESHOLD**  
Inswing Composite Adjustable Sill



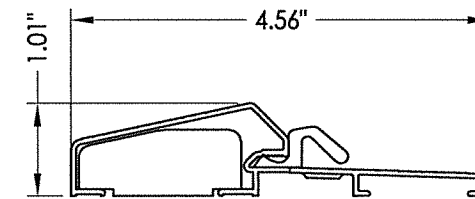
**16 OUTSWING THRESHOLD**  
Composite Sill



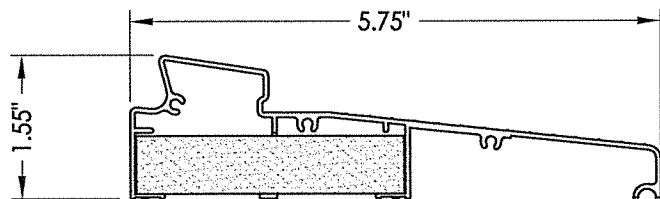
**34 INSWING THRESHOLD**  
Inswing Moderate Climate Sill 1-3/8"



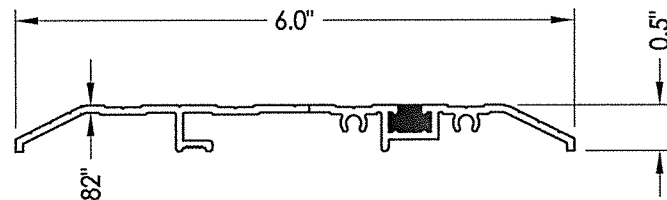
**39 INSWING THRESHOLD**  
Inswing Basic Composite Adjustable Sill



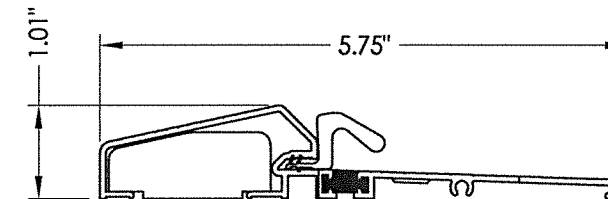
**17 OUTSWING THRESHOLD**  
Composite / Aluminum Sill



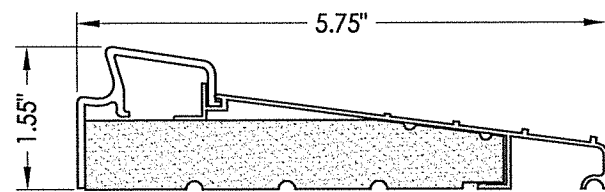
**35 INSWING THRESHOLD**  
Inswing Moderate Climate Sill



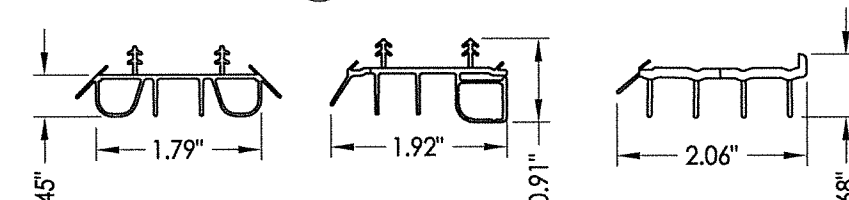
**15 PUBLIC ACCESS THRESHOLD**



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



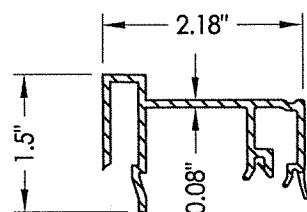
**36 INSWING THRESHOLD**  
Inswing Basic Fixed 5-3/4" Sill



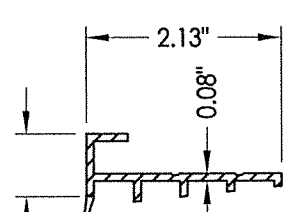
**8 SWEEP**

**9 SWEEP**

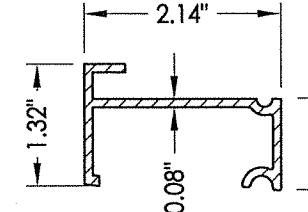
**10 SWEEP**



**75 SIDELITE SPACER**  
Inswing



**76 SIDELITE SPACER**  
Outswing

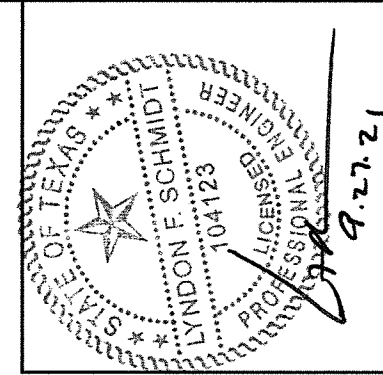


**77 SIDELITE SPACER**  
Inswing  
Moderate Climate Threshold

PRODUCT:		THERMA-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY:		COMPONENTS	
DATE:	10/24/17	SCALE:	N.T.S.
DWG. BY:	JK	CHK. BY:	LFS
DRAWING NO.:	TX-4706	NO.:	1
SHEET	10	OF	11
REVISIONS		DATE	BY
		9/27/21	LFS
		UPDATE TO 2018 IBC/IRC CODE	BY

**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

**RW** BUILDING CONSULTANTS, INC.  
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:  
BILL OF MATERIALS

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

DATE: 10/24/17  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4706  
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.