

THERMA-TRU[®] DOORS

Fiber-Classic[®] & Smooth-Star[®]

COMPOSITE EDGE OPAQUE FIBERGLASS DOUBLE DOOR w/ or w/out SIDELITES INSWING/OUTSWING "NON-IMPACT"

EVALUATED FOR USE IN THE STATE OF TEXAS

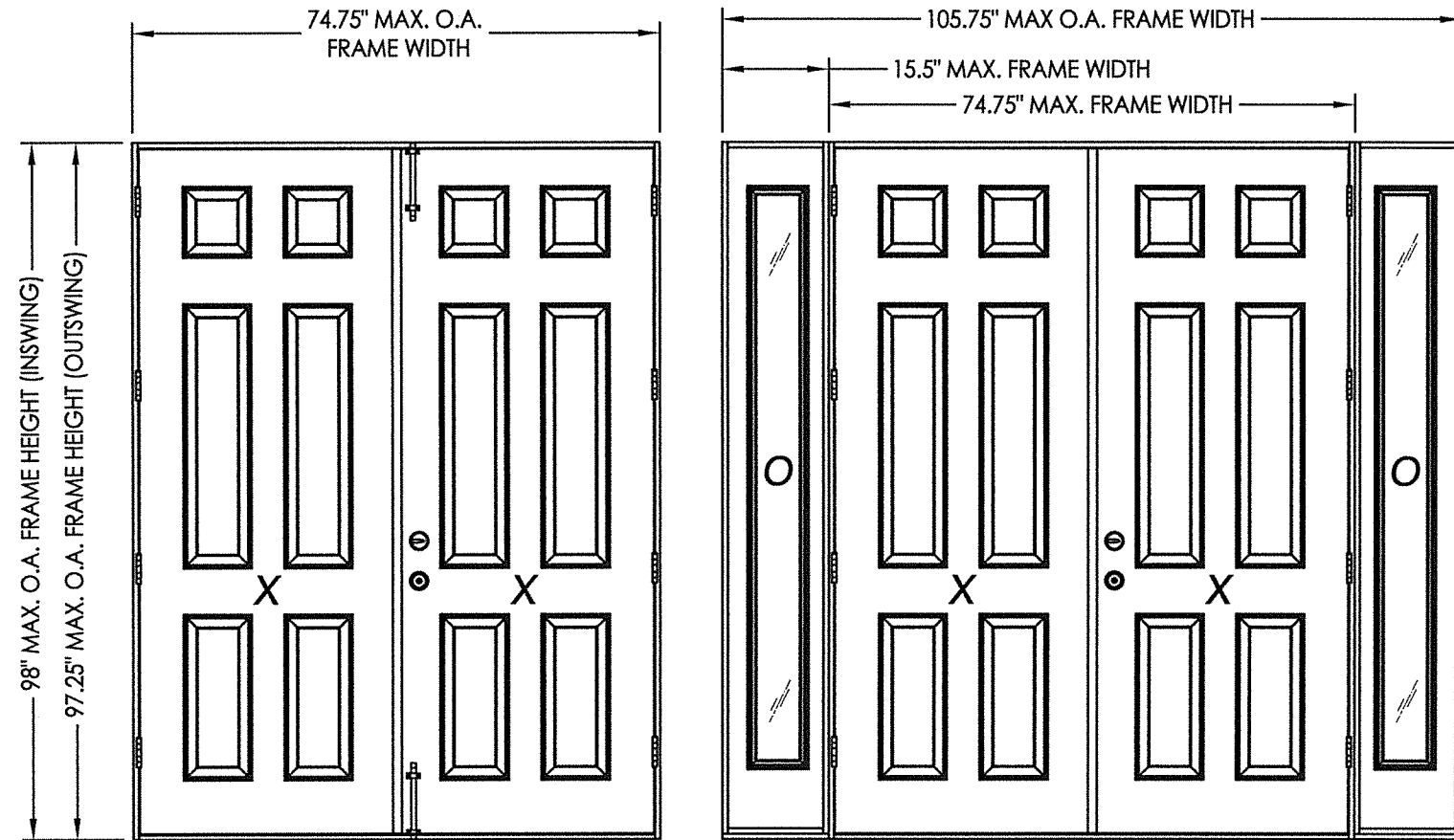
TDI DR-947

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. When used in areas requiring wind-borne debris protection this product is required to be protected with an impact resistant covering that complies with Section R301.2.1.2 of the IRC and Section 1609.1.2 of the IBC.
3. Allowable design pressure requirements must be equal to or less than the design pressure rating shown in the design pressure chart, sheet 1 of this drawing.
4. Conditions not covered by this drawing are subject to further engineering analysis.
5. Fiber-Classic and Smooth-Star Door and Sidelite panels require the use of "J" part numbers. These door and sidelite panels must be stained or painted within six months of installation.

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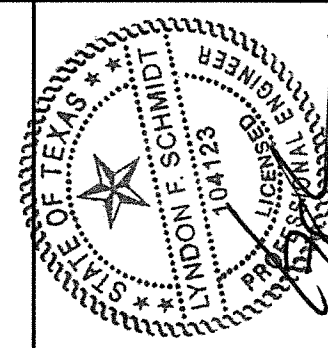
SHEET #	DESCRIPTION
1	Typical Elevations, Design Pressures & General Notes
2	Door Panel Details
3	Sidelite Panel Details
4	Elevations
5	Horizontal & Vertical Cross Sections
6	Vertical Cross Sections (Thresholds)
7	Frame Anchoring
8	Hardware Details
9	Glazing Details
10	Components
11	Bill of Materials



CONFIGURATION	ASTRAGAL	LOCK HARDWARE	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
			POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XX, OXXO	STANDARD	Latch & Deadbolt or Multipoint	+40.0	-45.0	+40.0	-40.0
OXXO	COASTAL		+47.0	-47.0	+47.0	-47.0
XX	COASTAL		+60.0*	-65.0*	+60.0*	-60.0*
XX	COASTAL	Latch & Deadbolt	+50.0	-50.0	+50.0	-50.0
XX	COASTAL	Multipoint	+55.0	-55.0	+55.0	-55.0

See Sheet 4 for Hardware Specifications

* Surface Bolts Required



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

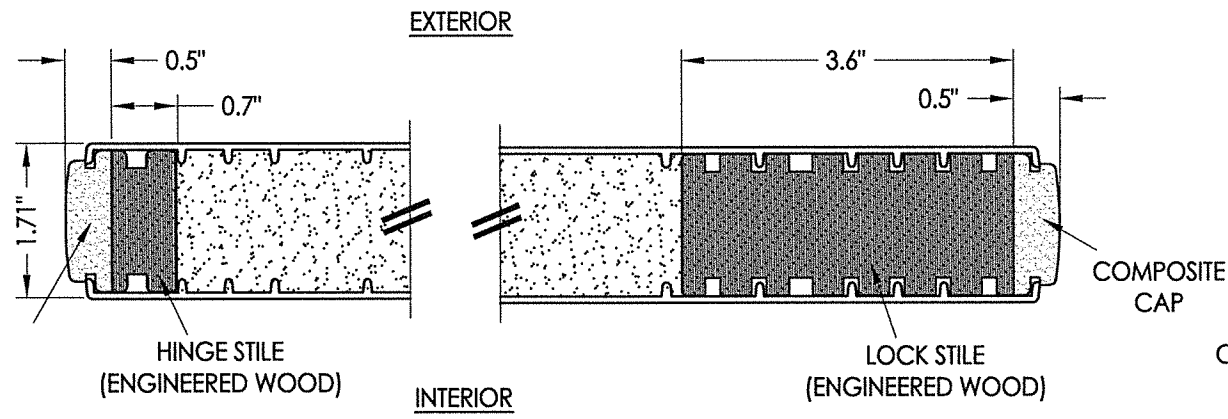
CERTIFICATE OF REGISTRATION # F-11852

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

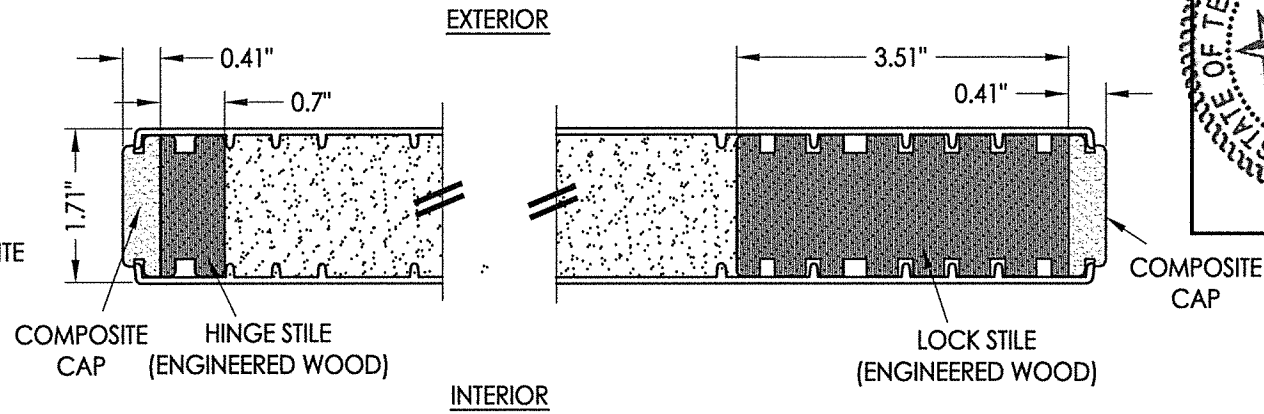
NO.	DATE	BY	REVISIONS
1	9/28/21	LFS	UPDATE TO 2018 IBC/IRC CODE

DATE: 11/14/17
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4723
SHEET 1 OF 11

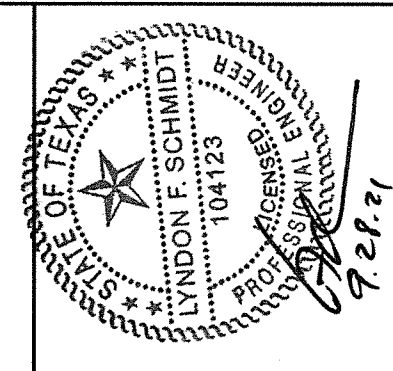
Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - DR 947 - 68 & 8'0 Opaque Comp Edge Non-Impact (TX 4716 - 4727)\C - Drawings\TX-4721-23.dwg



1 HORIZONTAL CROSS SECTION
2



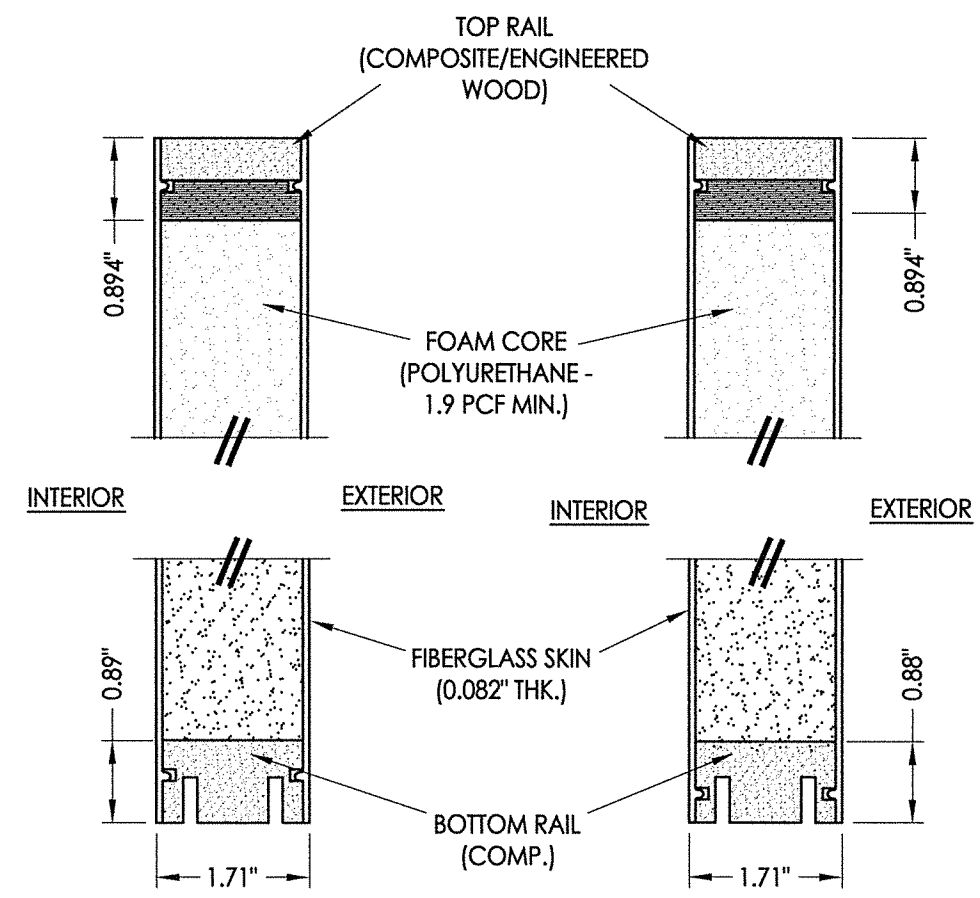
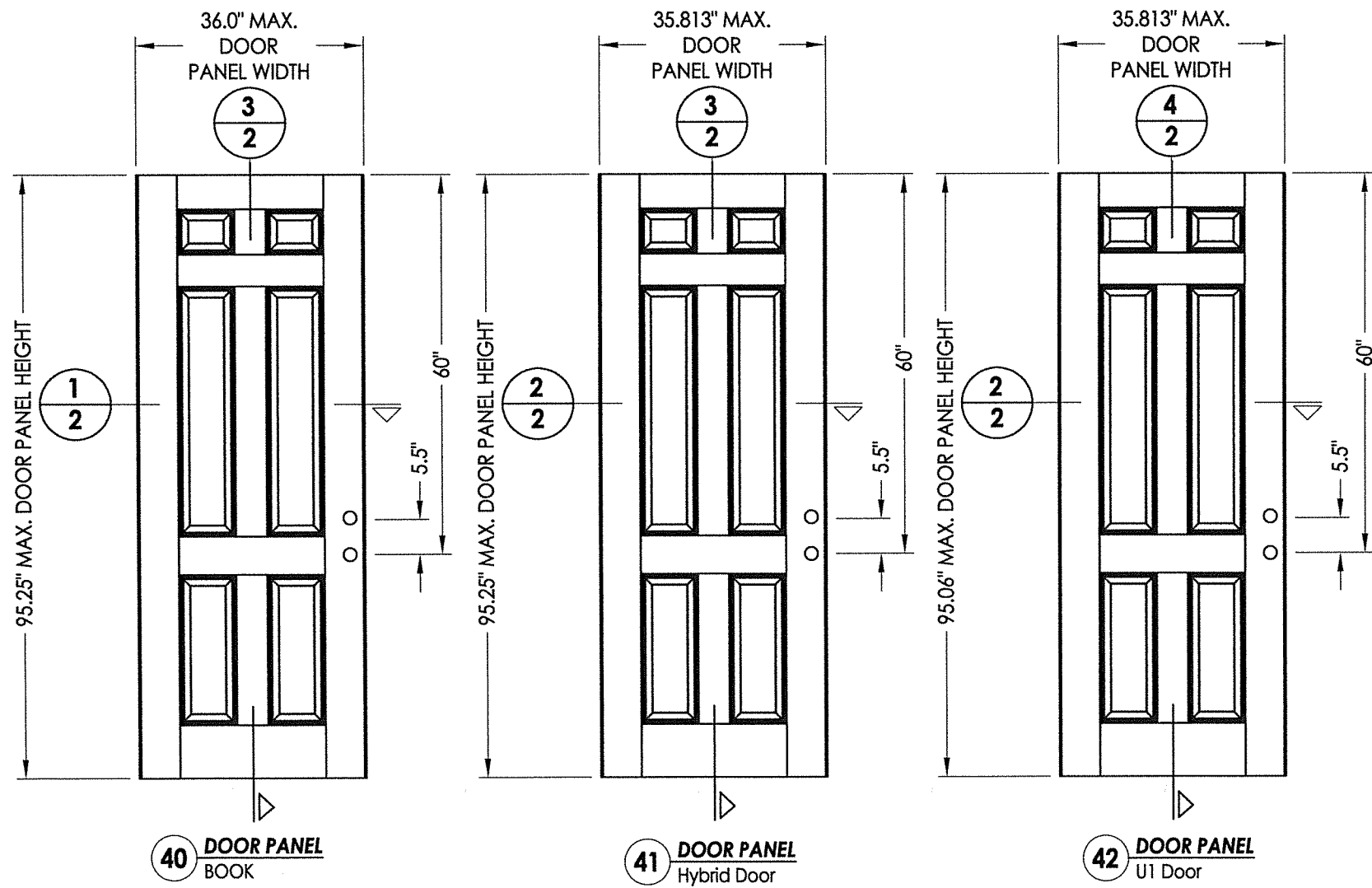
2 HORIZONTAL CROSS SECTION
2



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CERTIFICATE OF REGISTRATION # F-11852

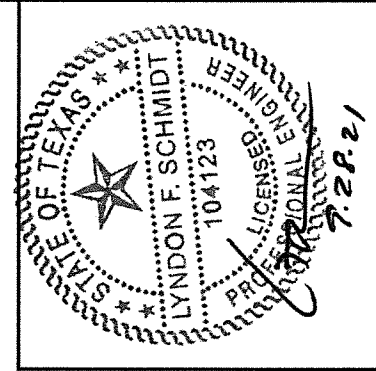
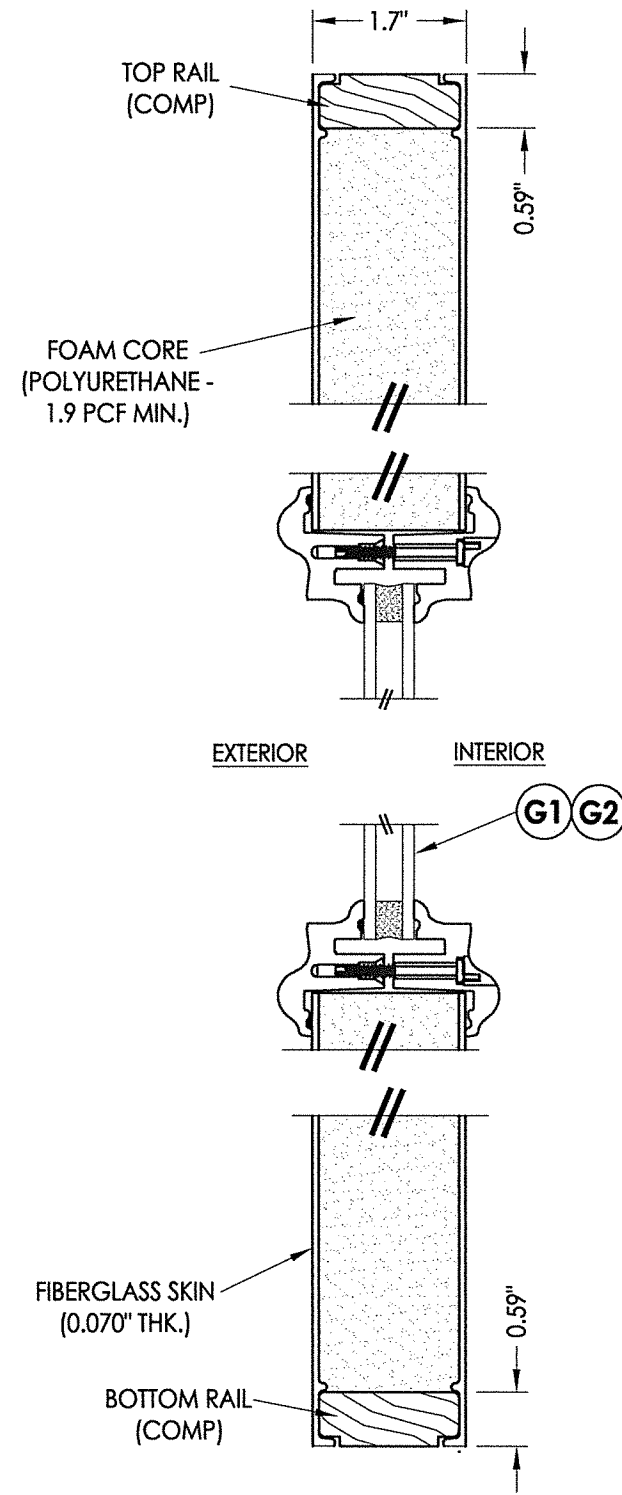
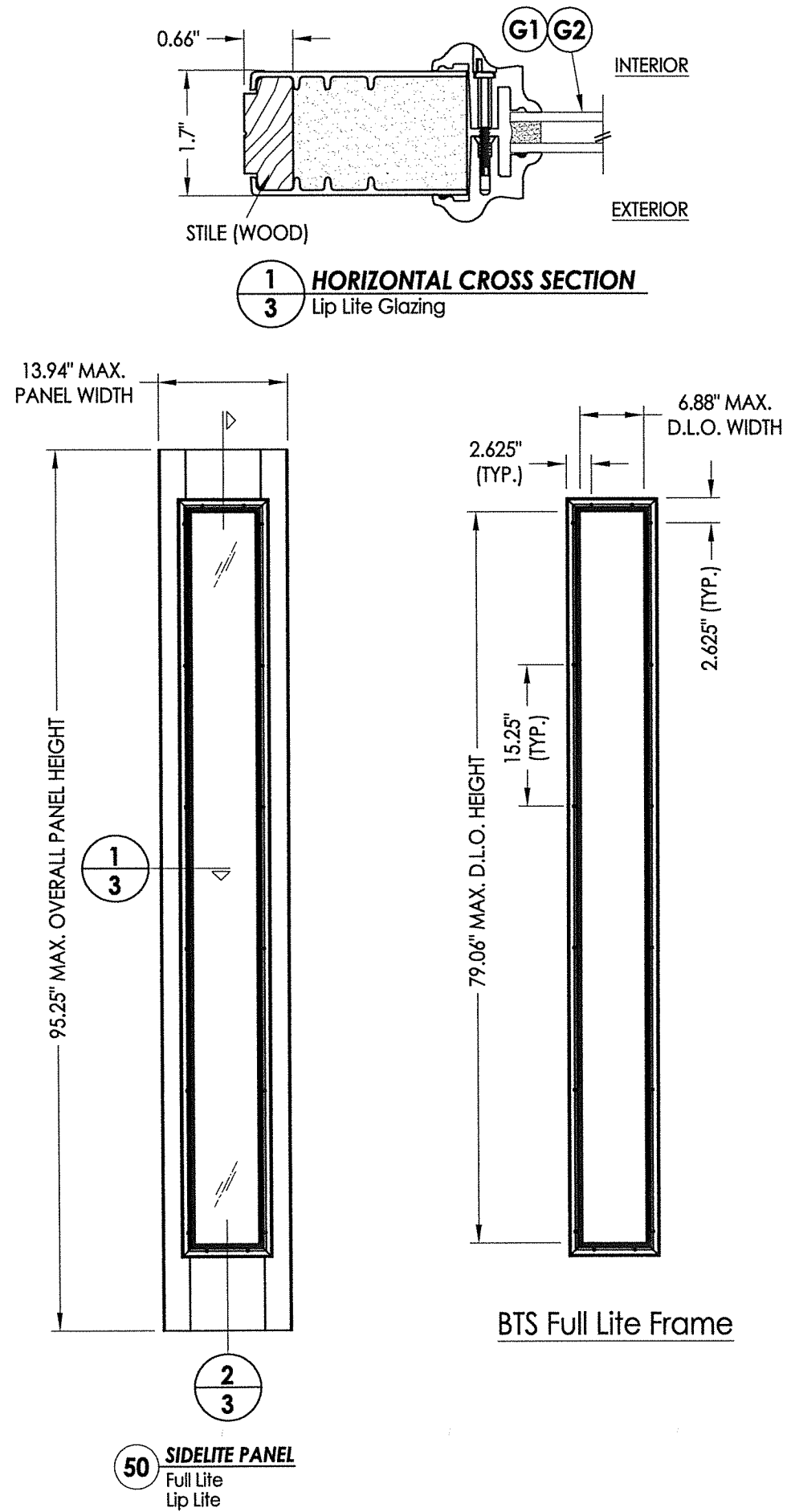


3 VERTICAL CROSS SECTION
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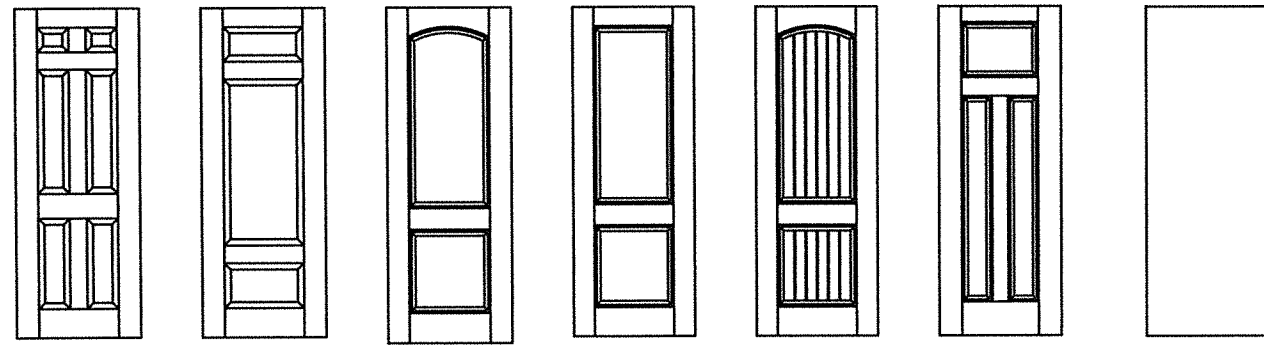
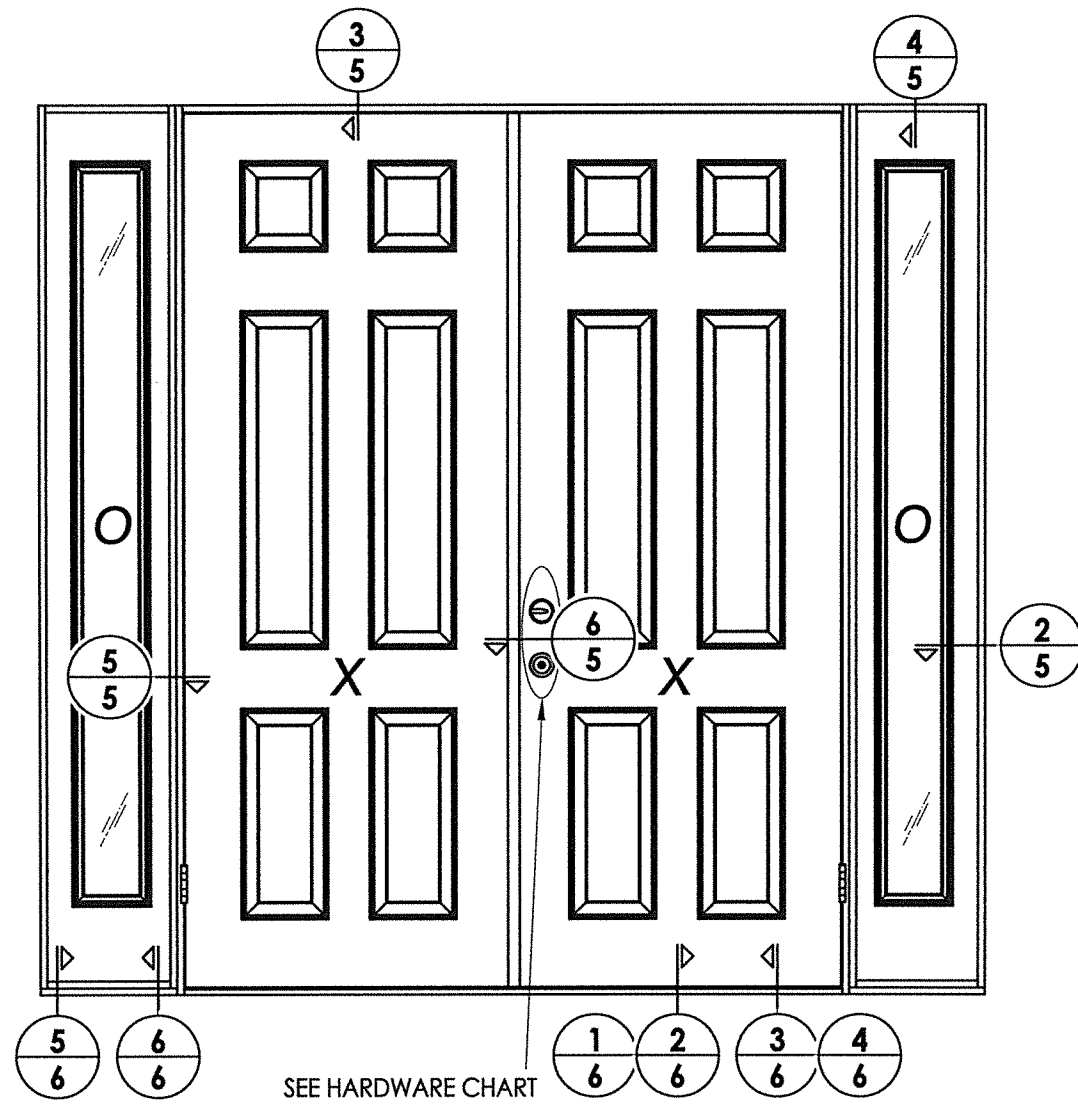
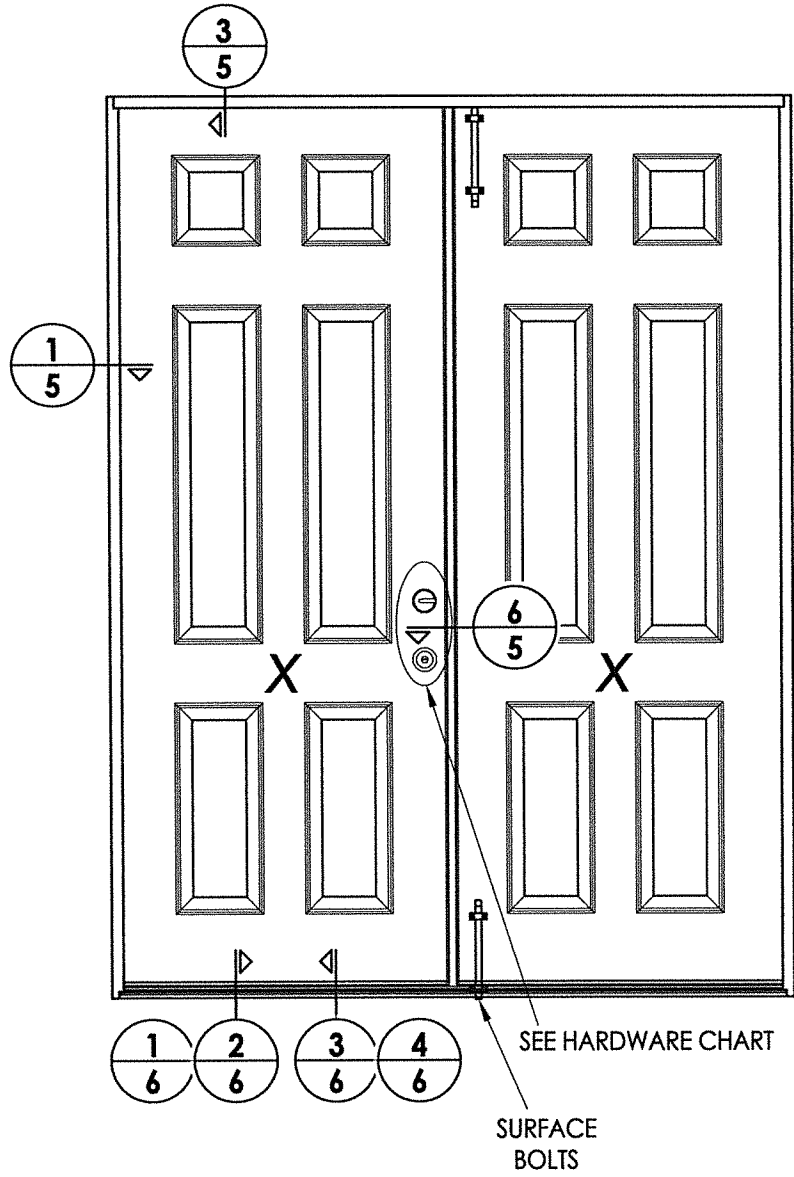
4 VERTICAL CROSS SECTION
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PRODUCT: THERMA-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY: DOOR PANEL DETAILS	
NO.	DATE
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UPDATE TO 2018 IBC/IRC CODE	
LFS	BY
REVISIONS	
DATE: 11/14/17	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: TX-4723	
SHEET 2 OF 11	

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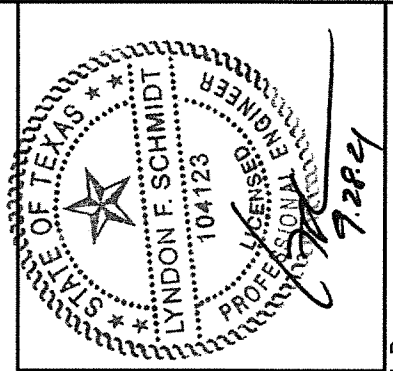


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RW BUILDING CONSULTANTS, INC. P.O. Box 230 Valrico FL 33595 Phone No.: 813.659.9197 CERTIFICATE OF REGISTRATION # F-11852		
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PART OR ASSEMBLY:	SIDELITE PANEL DETAILS	
NO.	DATE	REVISIONS
1	9/28/21	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY
DATE: 11/14/17		
SCALE: N.T.S.		
DWG. BY: JK		
CHK. BY: LFS		
DRAWING NO.: TX-4723		
SHEET 3 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 : MPDGSB (3 pt. Manual Shootbolt)



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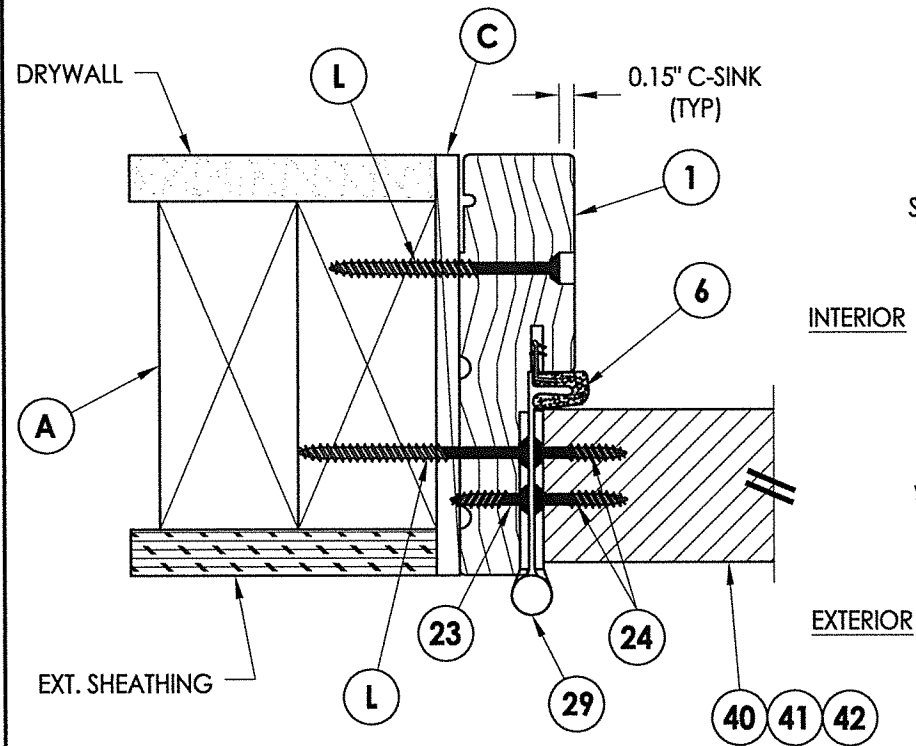
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PRODUCT: THERMA-TRU FIBERGLASS DOOR

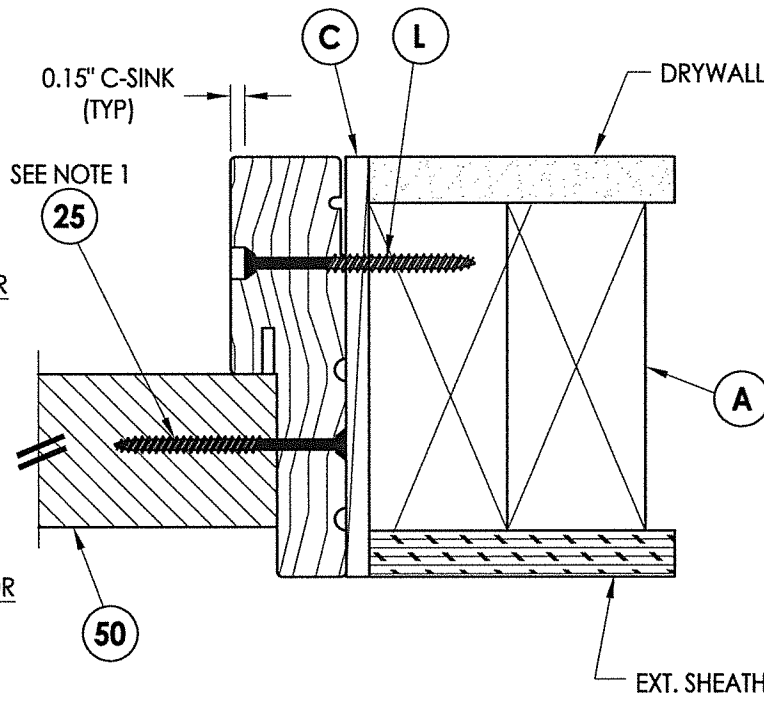
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NO.	DATE	REVISIONS
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		LFS
		BY

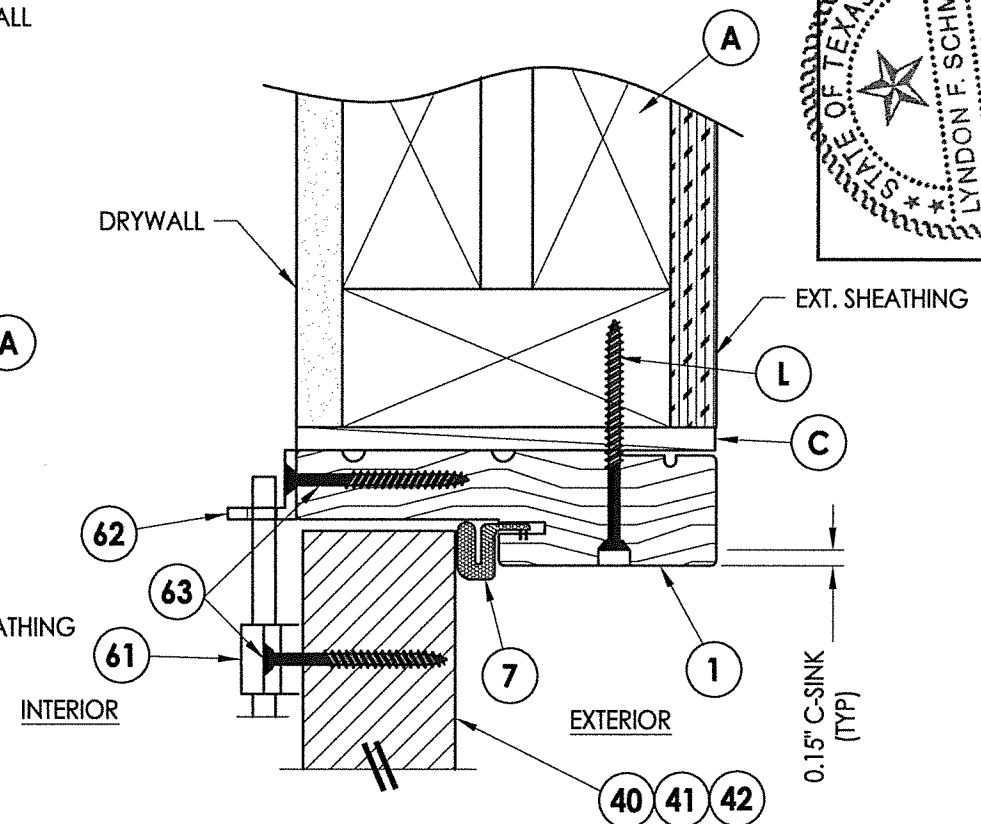
DATE: 11/14/17
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4723
 SHEET 4 of 11



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

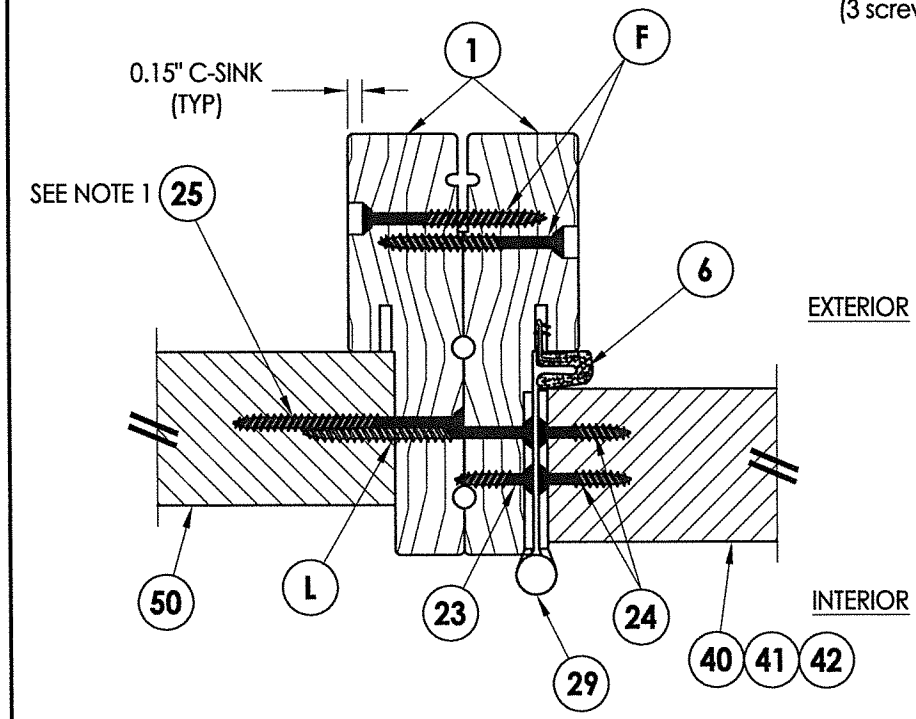


2 HORIZONTAL CROSS SECTION
5 Shown w/ 2X Buck
 Outswing shown (Inswing similar)

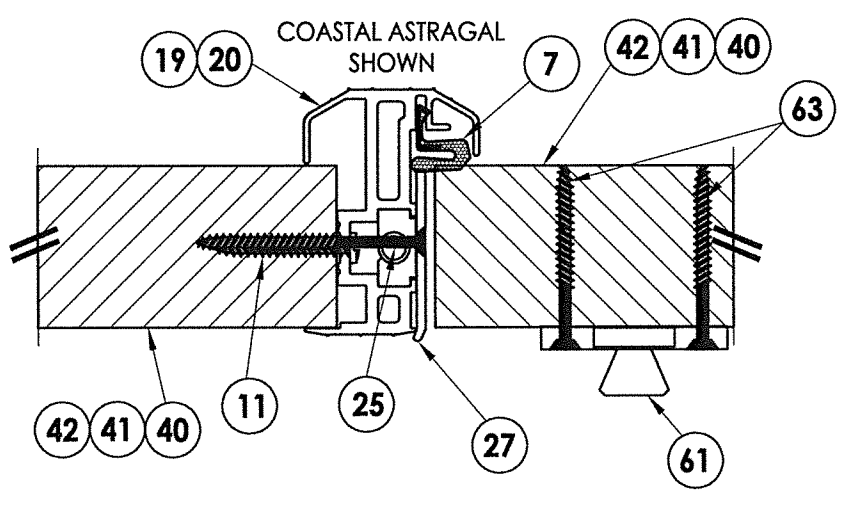


3 VERTICAL CROSS SECTION
5 Shown w/ 2X Buck
 Inswing shown w/ Surface Bolt

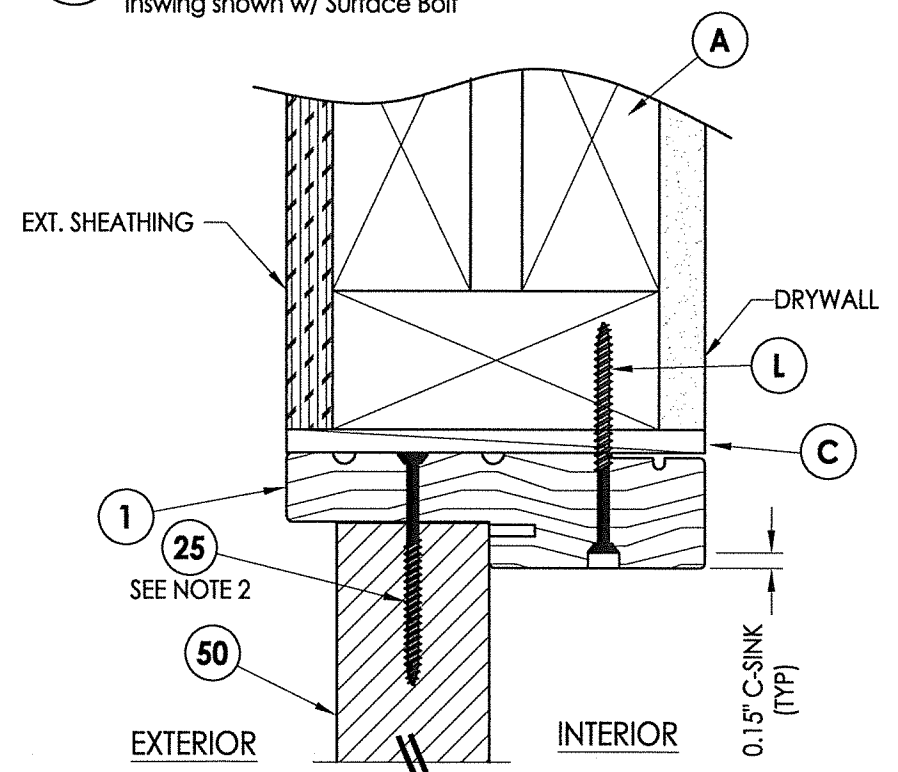
Notes:
 1. Sidelite assembly screws located 6" from each end and 6 more screws equally spaced between (8 screws total per side jamb).
 2. Sidelite assembly screws located 3" from each end & at centerline (3 screws along head jamb).



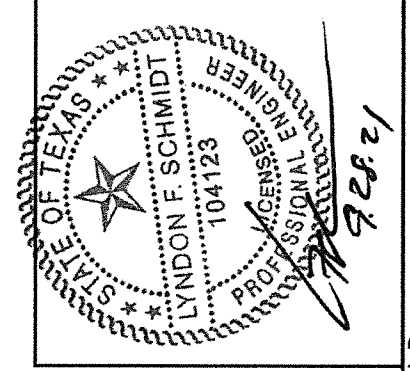
5 HORIZONTAL CROSS SECTION
5 Inswing shown (Outswing similar)



6 HORIZONTAL CROSS SECTION
5 Inswing shown (Outswing similar)



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



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

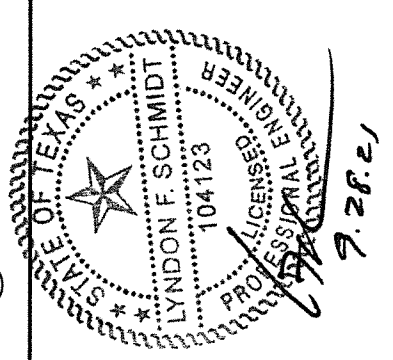
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 PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS

NO.	DATE	DESCRIPTION	LFS	BY
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DATE: 11/14/17
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4723
 SHEET 5 OF 11

Notes:

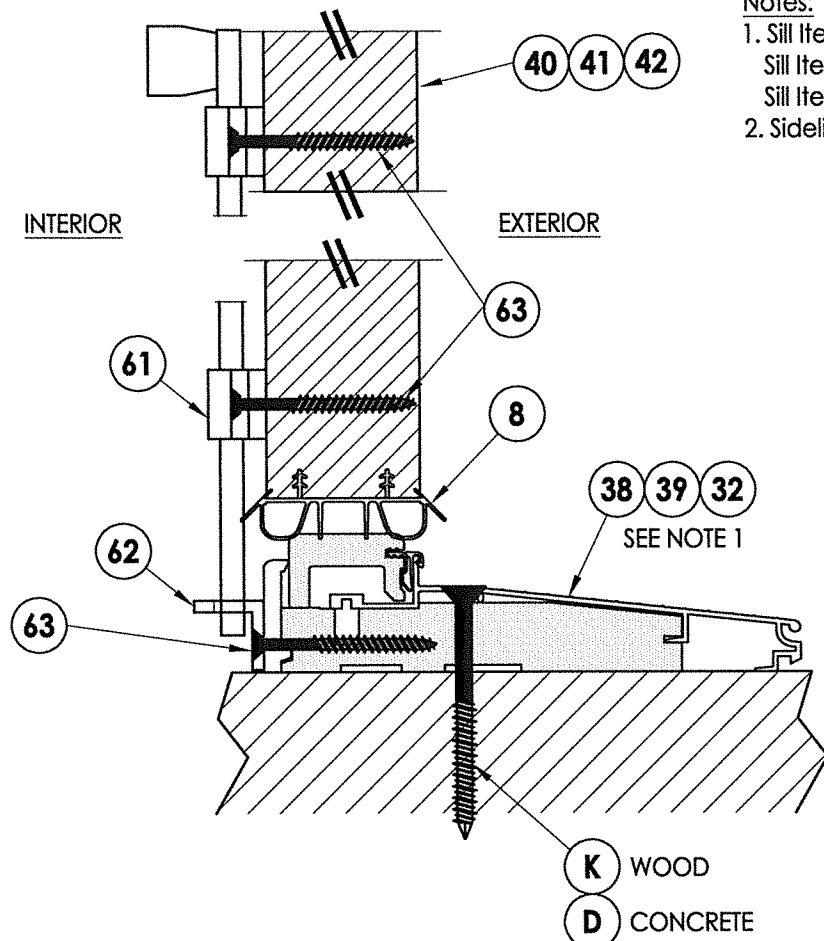
- Sill Item #'s 16, 32, 33, 34, 35, 36, 37, 38 & 39 are attached to jambs w/ (3) #8 X 2-1/2" pph screws at each end.
Sill Item #'s 17 & 18 are attached to jambs w/ (2) #8 X 2-1/2" pph screws at each end.
Sill Item #15 is attached to jambs utilizing (2) #10 X 1-1/2" pph screws at each end.
- Sidelite assembly screws located 4" from each end (2 screws along sill).



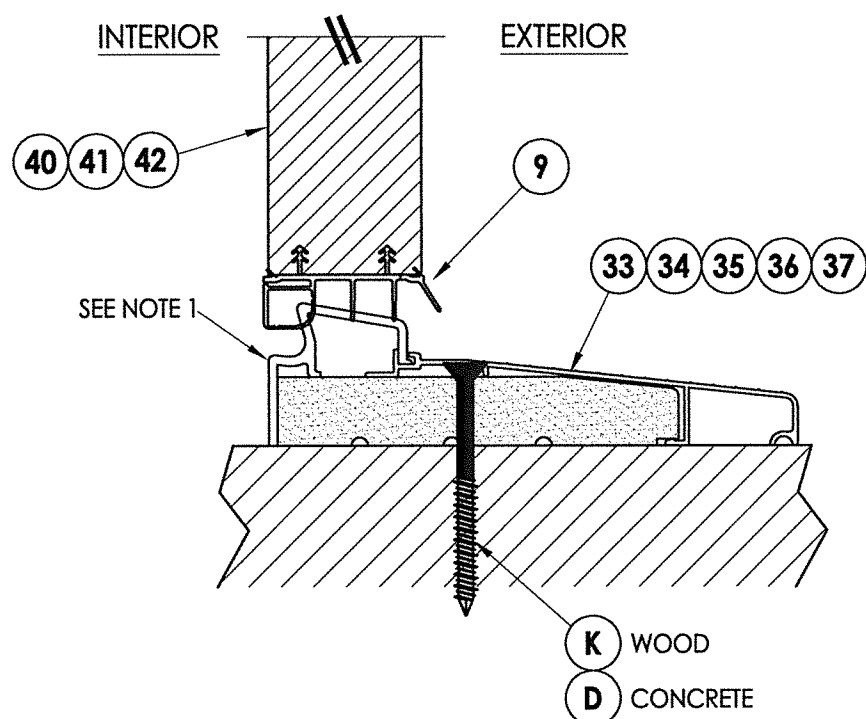
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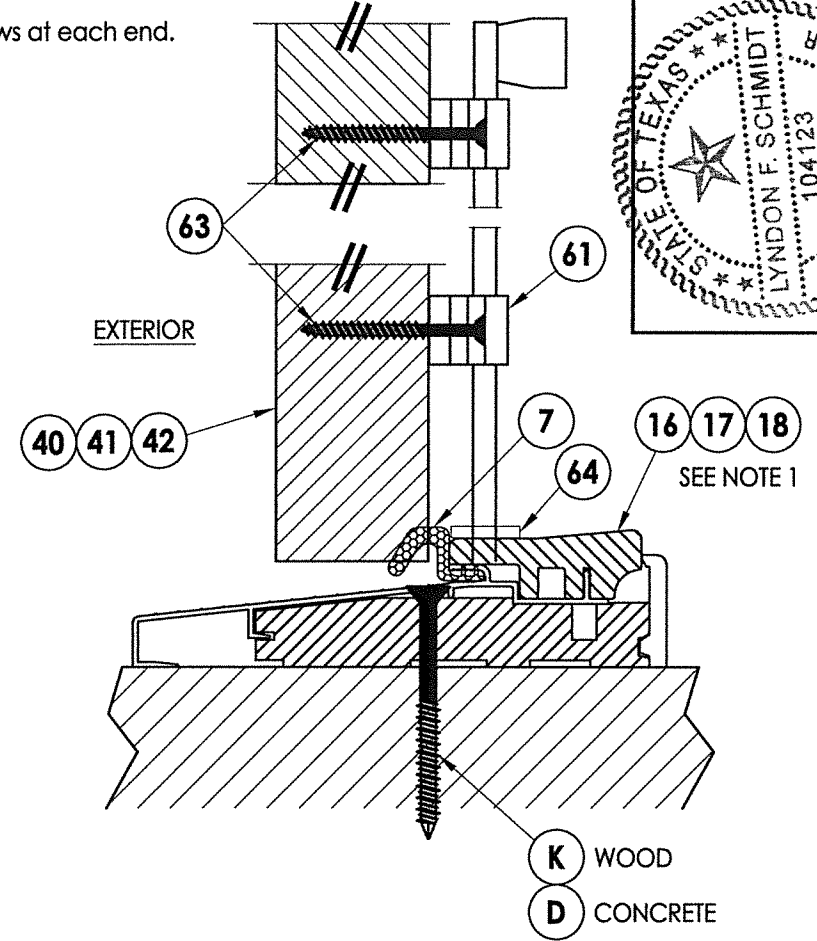
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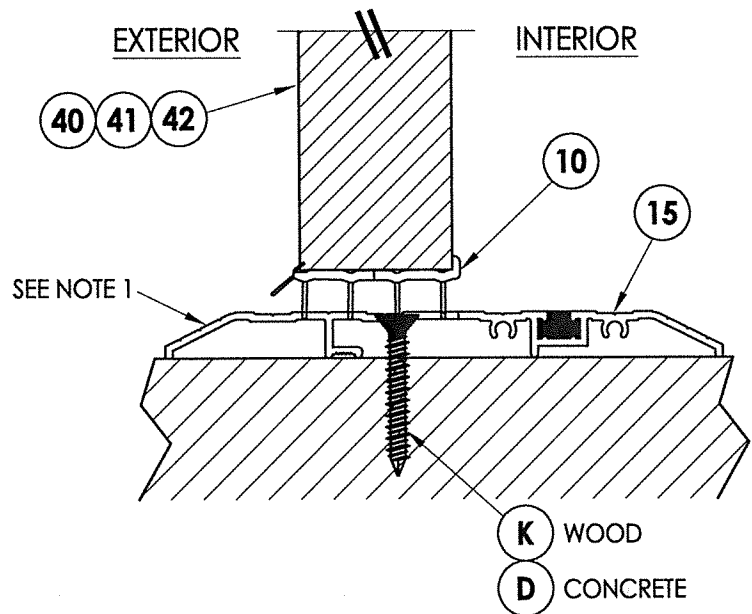
1 VERTICAL CROSS SECTION
6 Inswing Sill
Shown w/ Surface Bolt



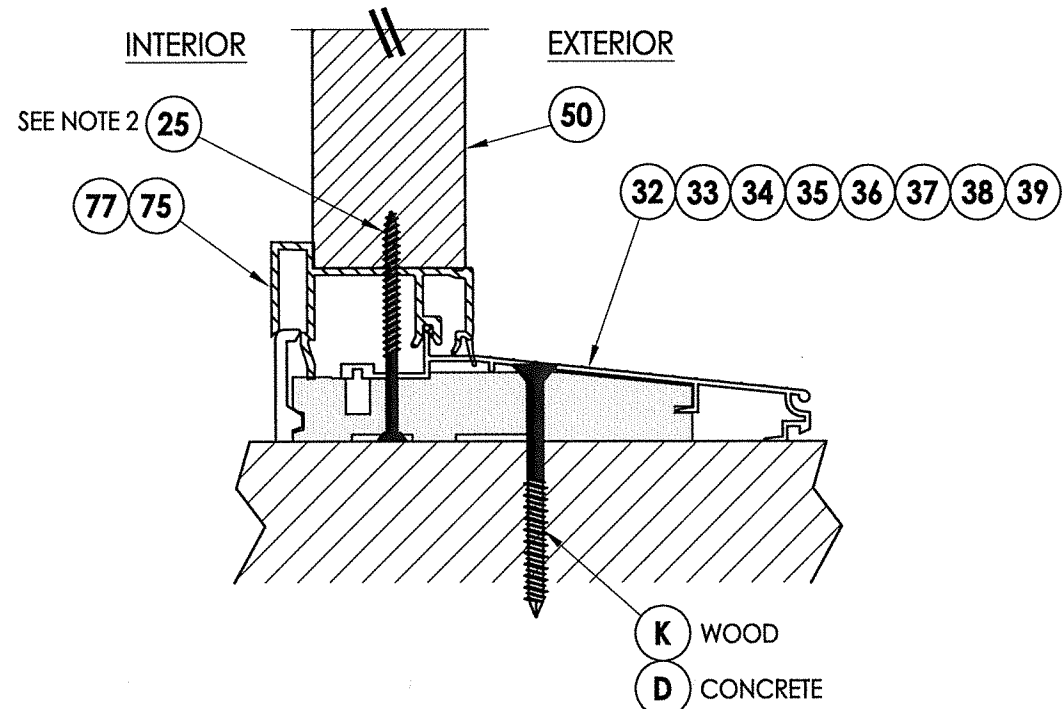
2 VERTICAL CROSS SECTION
6 Inswing Sill



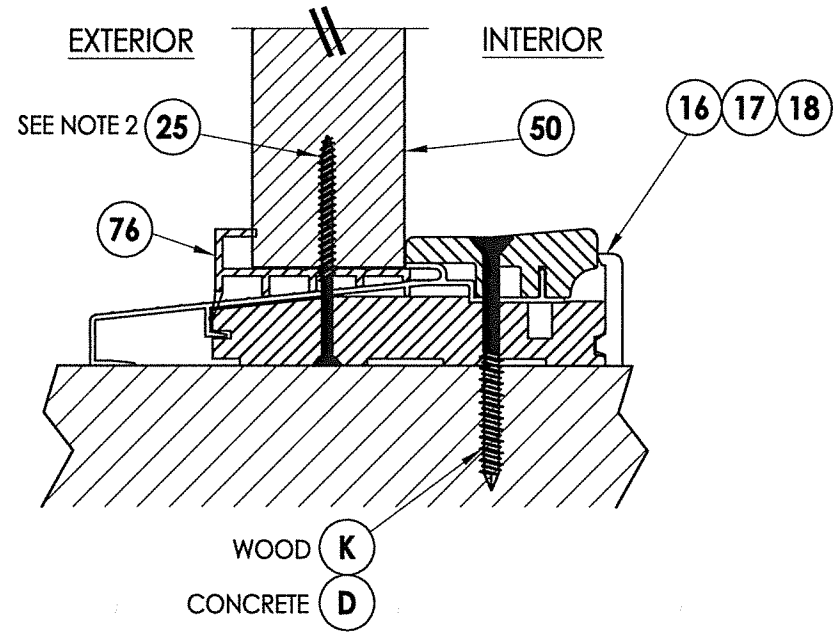
3 VERTICAL CROSS SECTION
6 Outswing Sill
Shown w/ Surface Bolt



4 VERTICAL CROSS SECTION
6 Public Access Sill



5 VERTICAL CROSS SECTION
6 Inswing Sill



6 VERTICAL CROSS SECTION
6 Outswing Sill

PRODUCT: THERMA-TRU FIBERGLASS DOOR

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS (THRESHOLDS)

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1	9/28/21	DATE	BY

DATE: 11/14/17

SCALE: N.T.S.

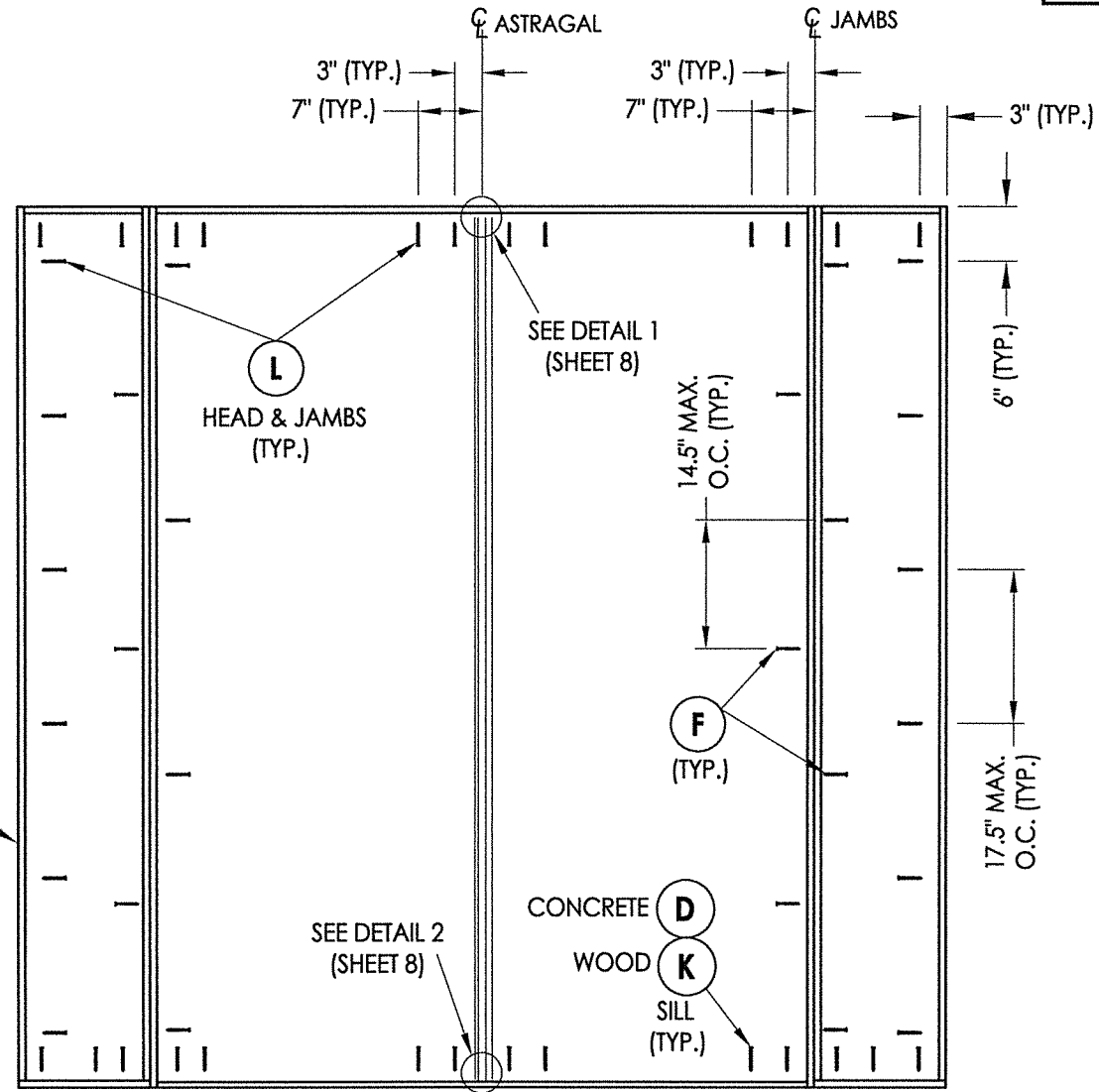
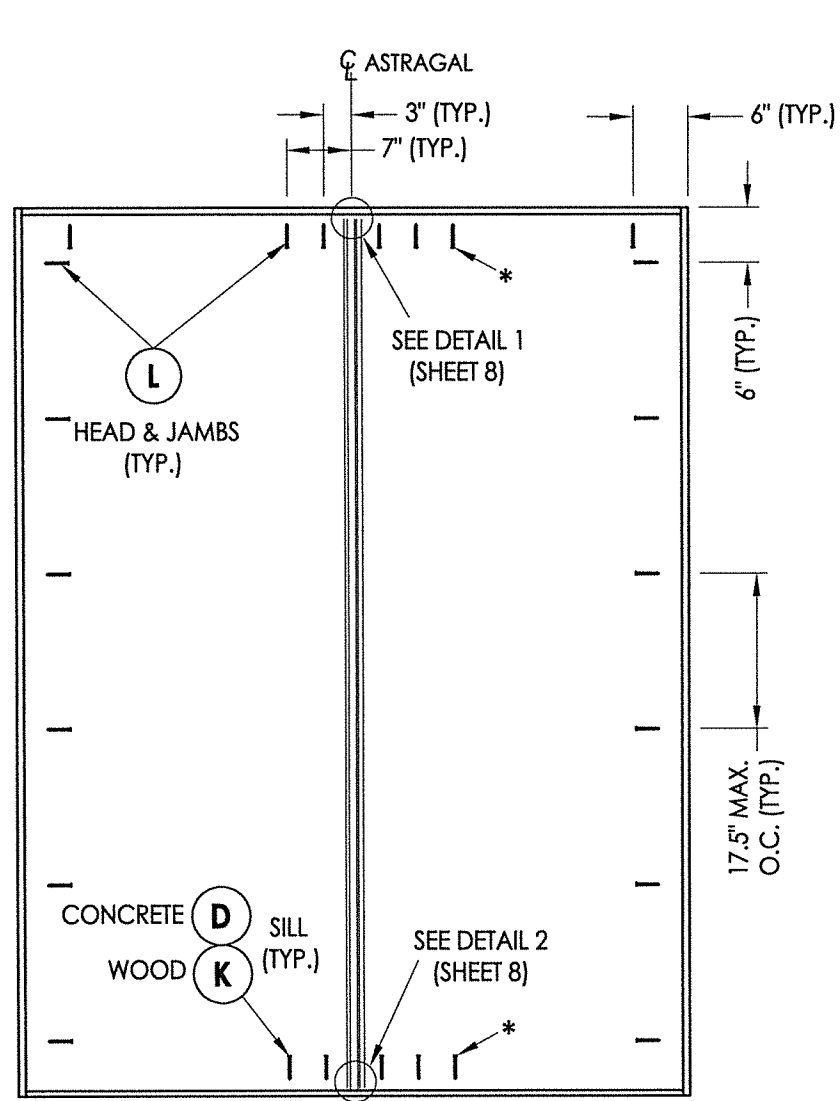
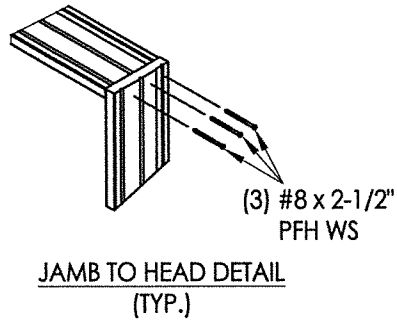
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CHK. BY: LFS

DRAWING NO.: TX-4723

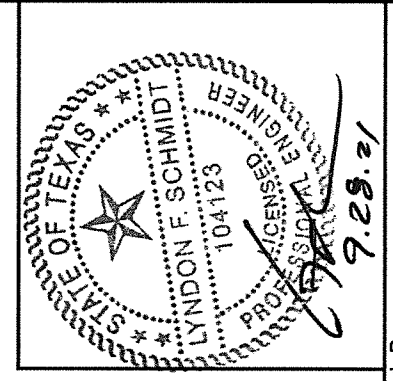
SHEET 6 OF 11

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* THIS ANCHOR REQ'D FOR DESIGN PRESSURE > 55 PSF ONLY

FRAME ANCHORING



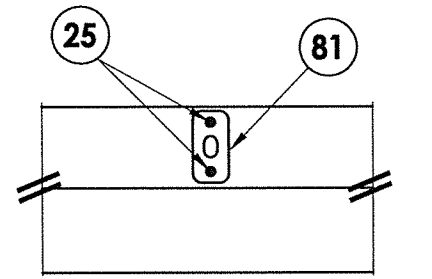
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P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197

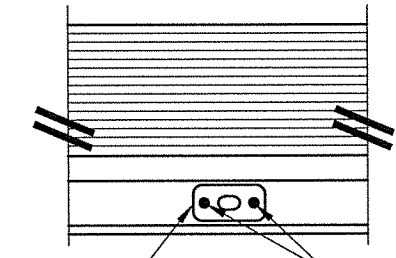
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NO.	DATE
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UPDATE TO 2018 IBC/IRC CODE	
LFS	BY
REVISIONS	
DATE: 11/14/17	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: TX-4723	
SHEET 7 OF 11	

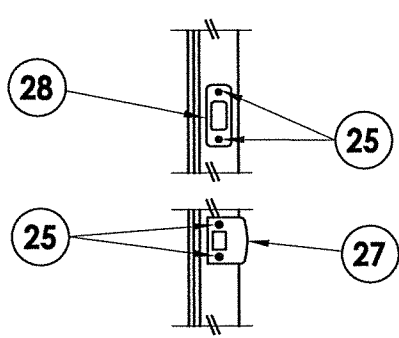
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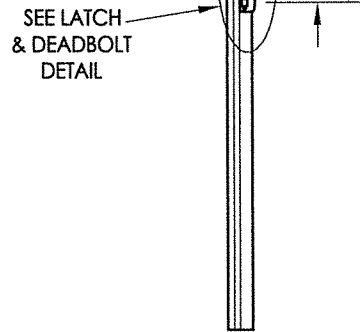
DETAIL 1
Standard Astragal Strike Plate @ Head



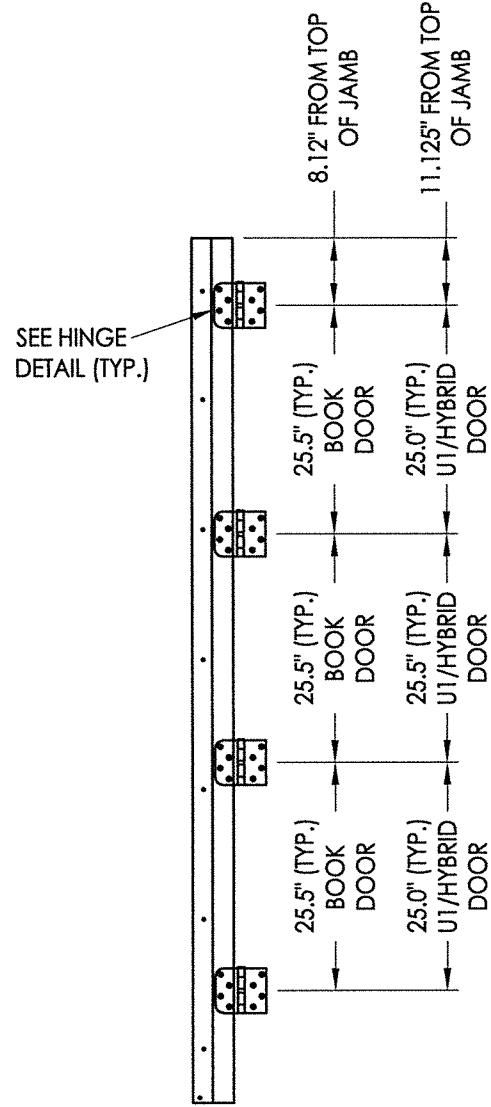
DETAIL 2
Inswing
Standard Astragal Strike Plate @ Sill
WOOD (25)
CONCRETE (G)



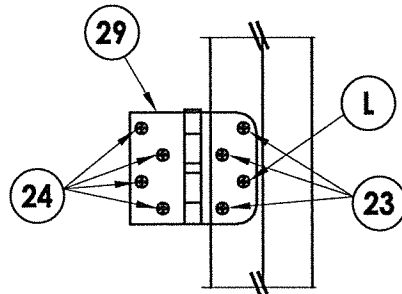
LATCH & DEADBOLT DETAIL
Schlage / Kwikset



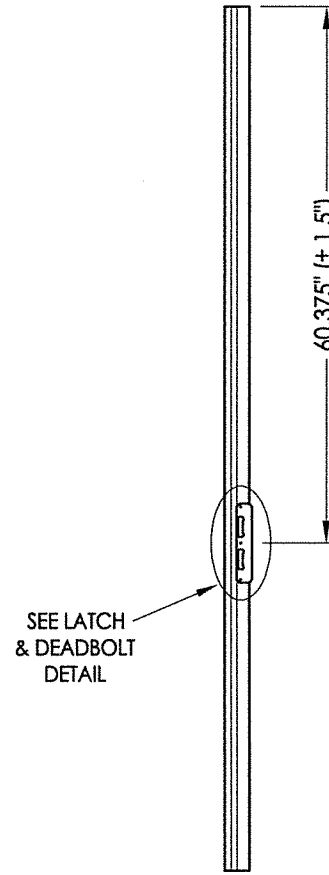
ASTRAGAL
Latch and Deadbolt



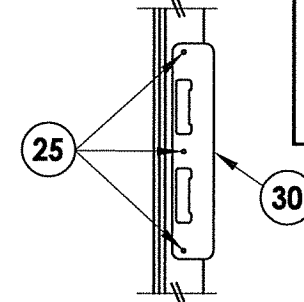
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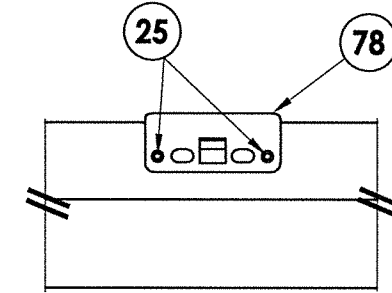
HINGE DETAIL



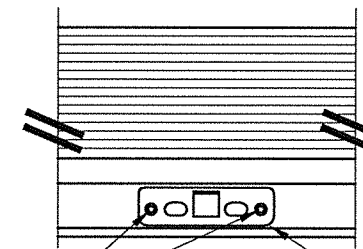
ASTRAGAL
Multipoint Lock



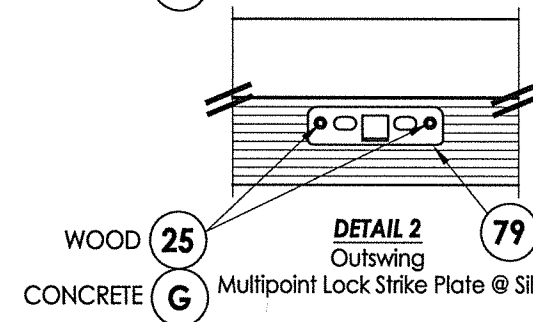
LATCH & DEADBOLT DETAIL
Multipoint Lock



DETAIL 1
Multipoint Lock Strike Plate @ Head

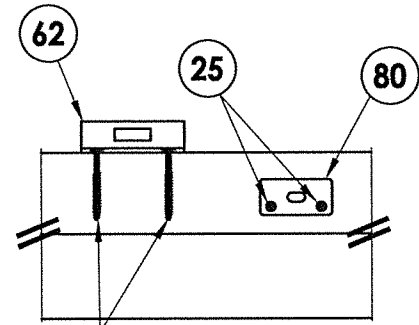


WOOD (25)
CONCRETE (G)
DETAIL 2
Inswing
Multipoint Lock Strike Plate @ Sill

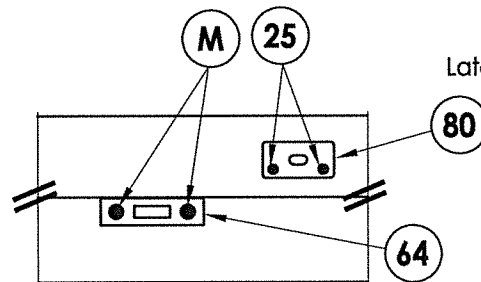


WOOD (25)
CONCRETE (G)
DETAIL 2
Outswing
Multipoint Lock Strike Plate @ Sill

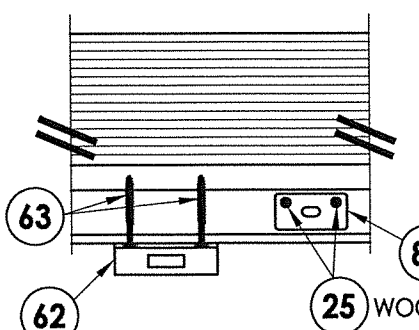
MULTIPOINT LOCK STRIKE DETAILS



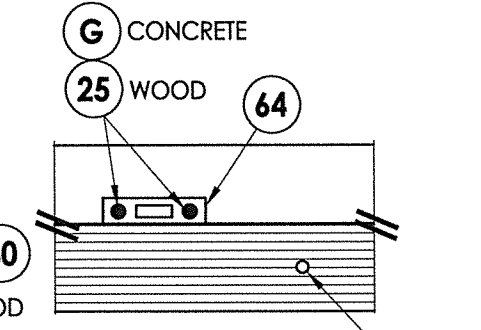
DETAIL 1
Inswing
Coastal Astragal Strike Plate @ Head
Shown w/ Surface Bolt Strike Plate



DETAIL 1
Outswing
Coastal Astragal Strike Plate @ Head
Shown w/ Surface Bolt Strike Plate

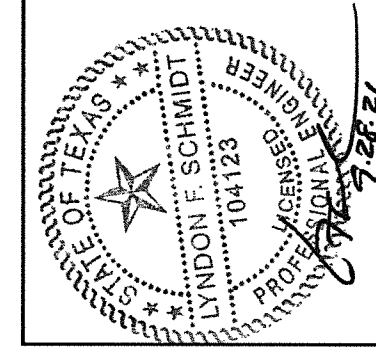


WOOD (25)
CONCRETE (G)
DETAIL 2
Inswing
Coastal Astragal Strike Plate @ Sill
Shown w/ Surface Bolt Strike Plate



CONCRETE (G)
WOOD (25)
64
DETAIL 2
Outswing
Astragal Bolt Hole @ Sill
Shown w/ Surface Bolt Strike Plate
1/2" Ø HOLE

LATCH & DEADBOLT STRIKE DETAILS

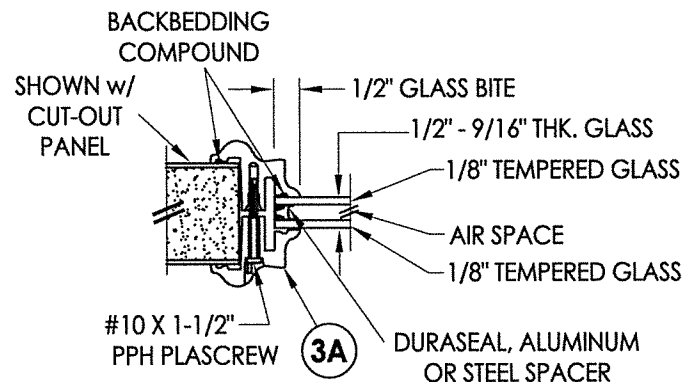


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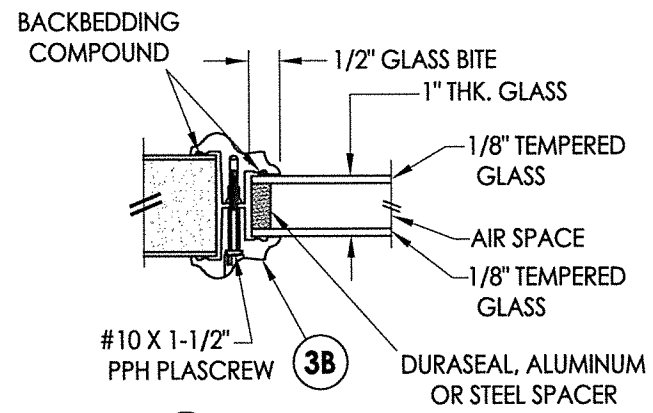
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Phone No.: 813.659.9197

CERTIFICATE OF REGISTRATION # F-11852

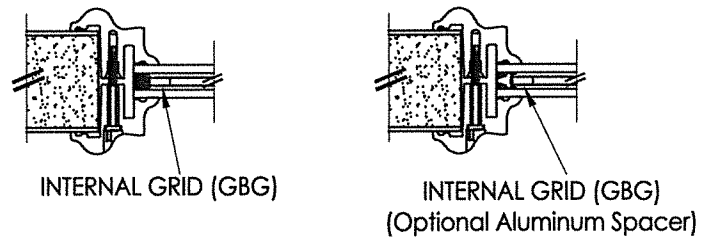
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DATE: 11/14/17			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4723			
SHEET 8 OF 11			



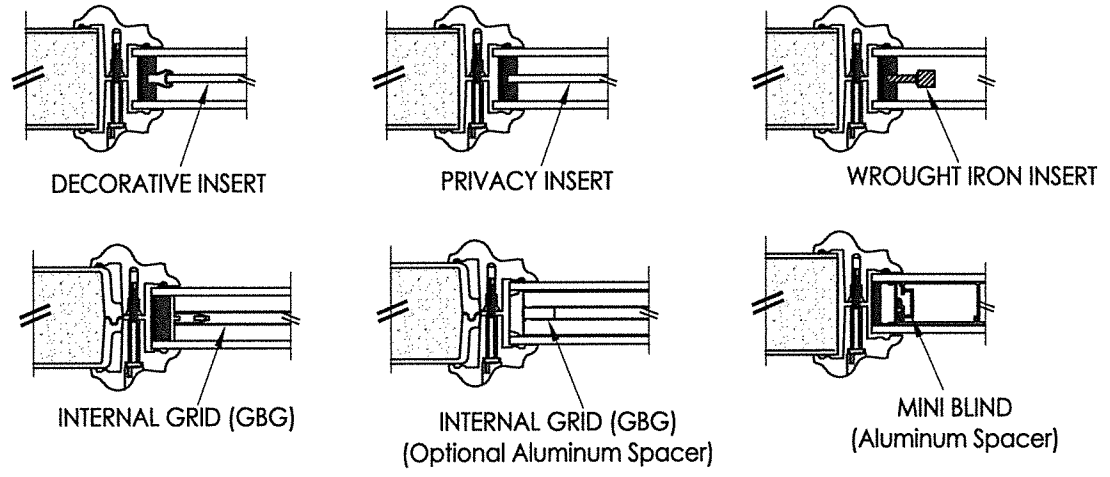
G1 GLAZING DETAIL
BTS Lite Frame
Sidelites



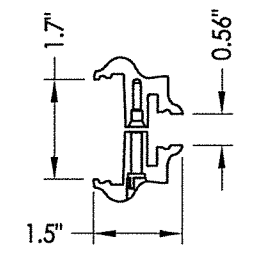
G2 GLAZING DETAIL
BTS Lite Frame
Sidelites



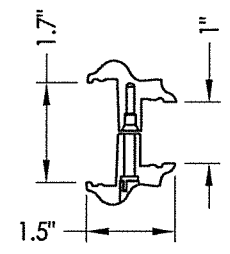
9/16\"/>



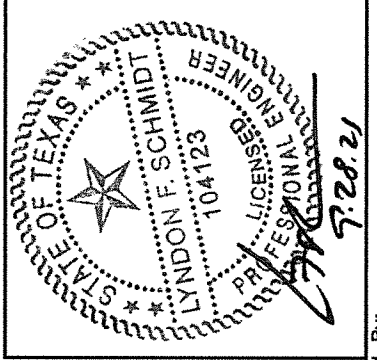
1\"/>



3A BTS LITE FRAME
1/2\"/>



3B BTS LITE FRAME
1\"/>



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

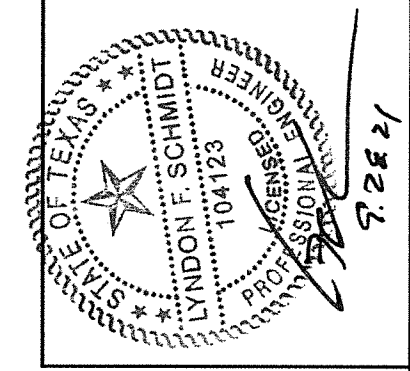
PRODUCT:	THERMA-TRU FIBERGLASS DOOR
PART OR ASSEMBLY:	GLAZING DETAILS

REVISIONS	
NO.	DATE
1	9/28/21
	UPDATE TO 2018 IBC/IRC CODE
	LFS
	BY

DATE:	11/14/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4723
SHEET	9 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
G	3/16" 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
M	#8 x 3" PFH WOOD SCREW	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
11	#10 X 1-1/2" PPH SMS	STEEL
15	PUBLIC ACCESS THRESHOLD	ALUM
16	OUTSWING THRESHOLD	ALUM/COMP
17	OUTSWING THRESHOLD	ALUM/COMP
18	OUTSWING THRESHOLD	ALUM/COMP
19	STANDARD ALUMINUM ASTRAGAL	ALUM
20	COASTAL ALUMINUM ASTRAGAL	ALUM
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
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	-
61	IVES #454 SURFACE BOLT (8" LONG)	STEEL
62	SURFACE BOLT STRIKE PLATE (INSWING)	STEEL
63	#10 x 2" PFH WOOD SCREW	STEEL
64	SURFACE BOLT STRIKE PLATE (OUTSWING)	STEEL
75	SIDELITE SPACER (INSWING)	PVC
76	SIDELITE SPACER (OUTSWING)	PVC
77	SIDELITE SPACER (INSWING) - MODERATE CLIMATE SILL	PVC
78	MULTIPOINT LOCK STRIKE PLATE @ HEAD	STEEL
79	MULTIPOINT LOCK STRIKE PLATE @ SILL	STEEL
80	COASTAL ASTRAGAL STRIKE PLATE	STEEL
81	STANDARD ASTRAGAL STRIKE PLATE	STEEL



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CERTIFICATE OF REGISTRATION # F-11852

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

NO.	DATE	REVISIONS
1	9/28/21	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY

DATE: 11/14/17
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4723
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"
ITW TAPCON®	3/16"	1-3/4"	3"	1-1/2"

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.