

THERMA-TRU® DOORS

Fiber-Classic® & Smooth-Star®

GLAZED MOLDED OPEN FIBERGLASS DOUBLE DOOR w/ or w/out SIDELITES IN SWING/OUT SWING "IMPACT"

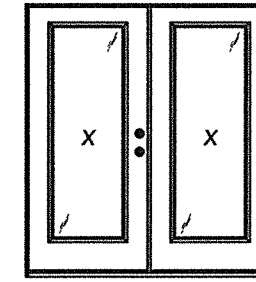
EVALUATED FOR USE IN THE STATE OF TEXAS

The Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

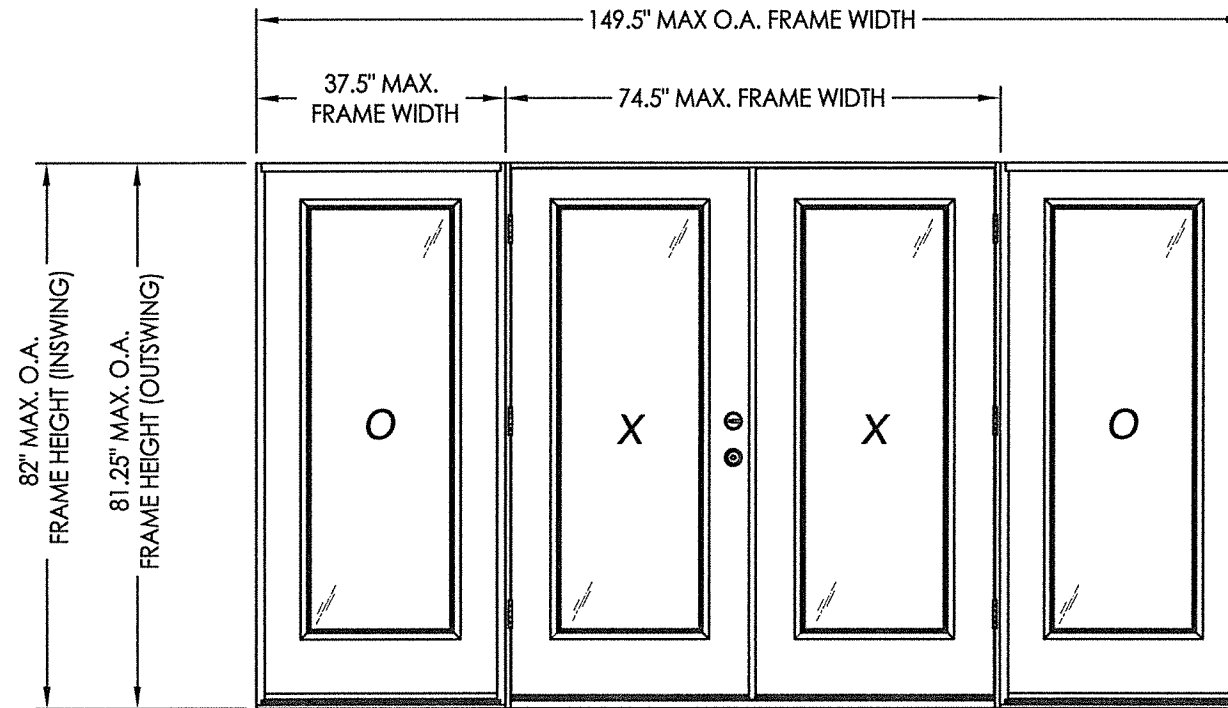
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. This system has been tested and evaluated as a large missile impact protective system for installation in areas that require wind borne debris protection. This product meets missile level "D" as defined in ASTM E 1996.
3. Allowable design pressure requirements must be equal to or less than the design pressure rating shown in the design pressure chart, sheet 1 of this drawing.
4. Conditions not covered by this drawing are subject to further engineering analysis.
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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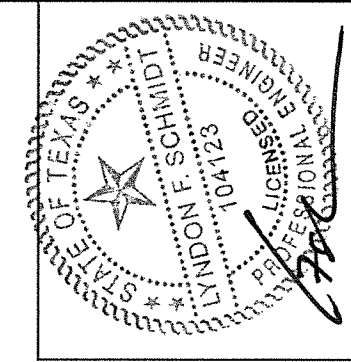
SHEET #	DESCRIPTION
1	Typical Elevations, Design Pressures & General Notes
2	Door Panel Details
3	Sidelite Panel Details
4	Elevations
5	Horizontal & Vertical Cross Sections (2X Buck)
6	Vertical Cross Sections (Thresholds)
7	Frame Anchoring
8	Hardware Details
9	Life Frame & Glazing Details
10	Bill of Materials & Components



XX



CONFIGURATION	LOCK TYPE	DESIGN PRESSURE (PSF) IN SWING		DESIGN PRESSURE (PSF) OUT SWING	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XX, OXXO	LATCH & DEADBOLT	+55.0	-65.0	+60.0	-60.0
	MULTIPOINT LOCK	+60.0	-65.0	+60.0	-60.0



Documents Prepared By: Lyndon F. Schmidt, P.E.
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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

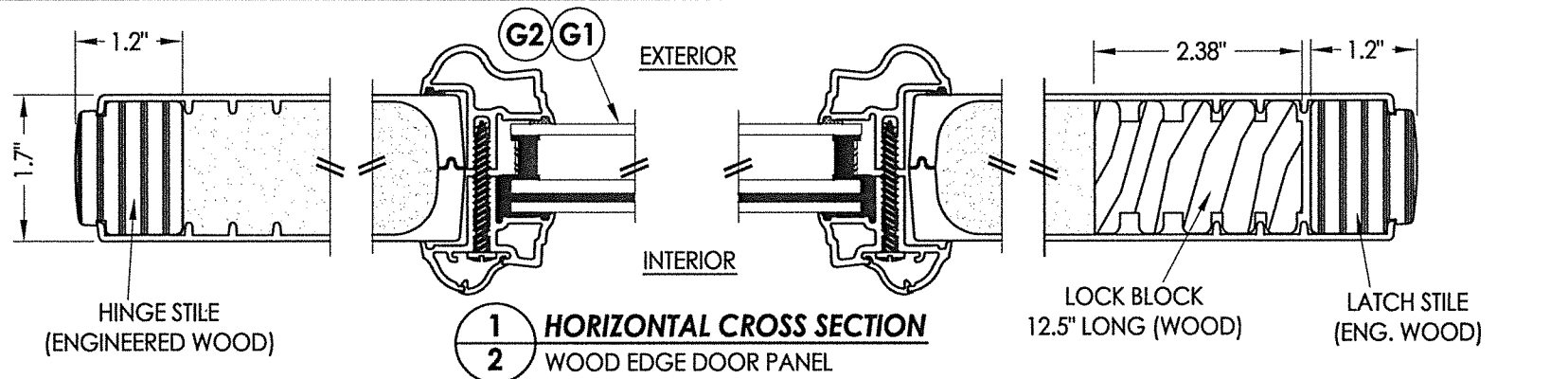
PRODUCT: THERMA-TRU
FIBERGLASS DOOR

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

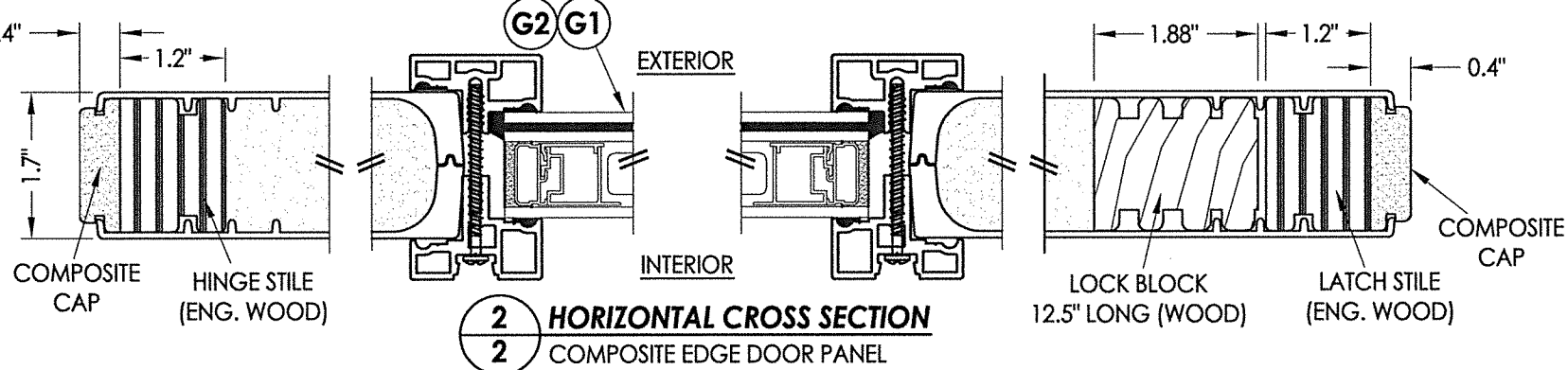
NO.	DATE	BY	REVISIONS

DATE: 5/27/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: TX-5211
SHEET 1 OF 10

Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - ID XXXX - 68 OP GLZ FG Imp Molded Open (TX 5209-5213)C - Drawings\TX-5209-5211.dwg

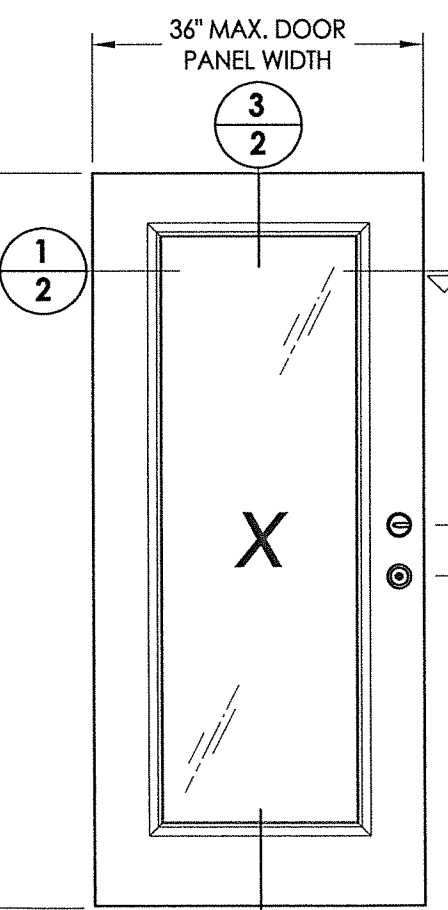
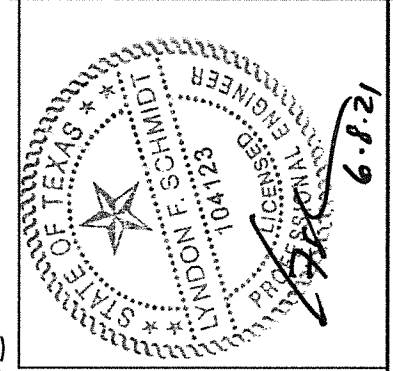


1 HORIZONTAL CROSS SECTION
2 WOOD EDGE DOOR PANEL

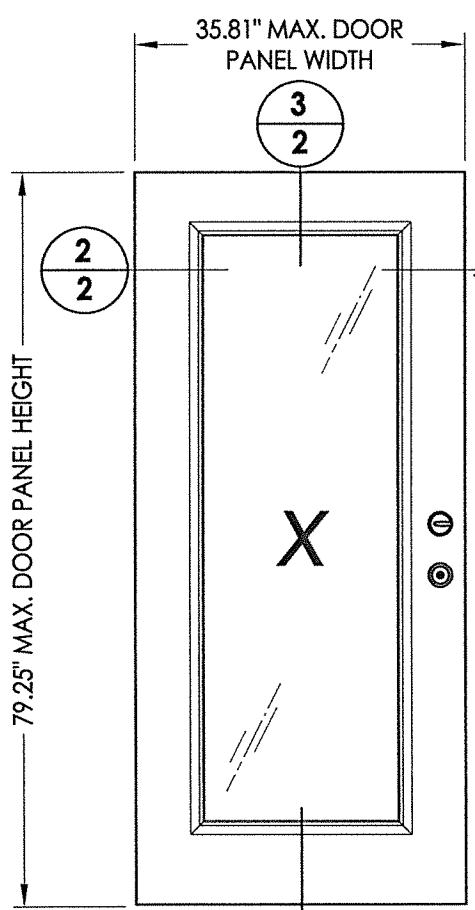


2 HORIZONTAL CROSS SECTION
2 COMPOSITE EDGE DOOR PANEL

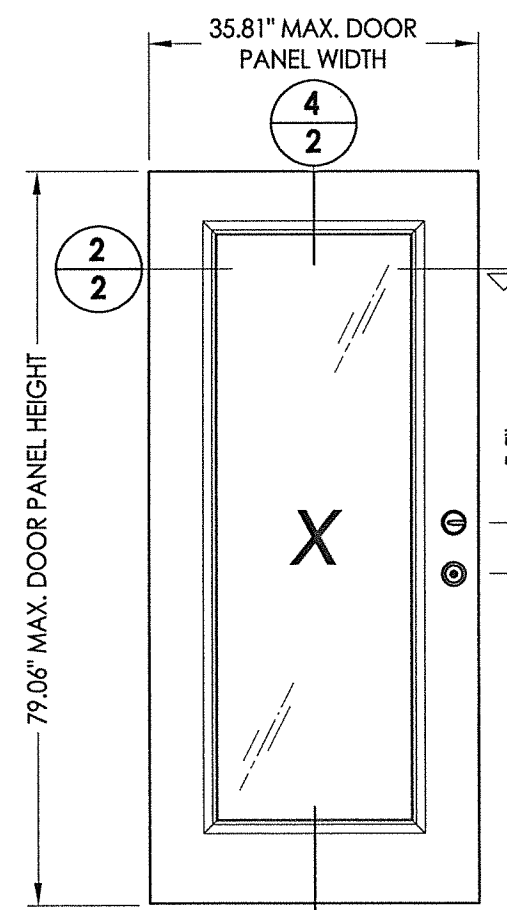
NOTE: BOOK, HYBRID & U1 DOORS MAY EACH BE FABRICATED AS WOOD OR COMPOSITE EDGE DOORS.



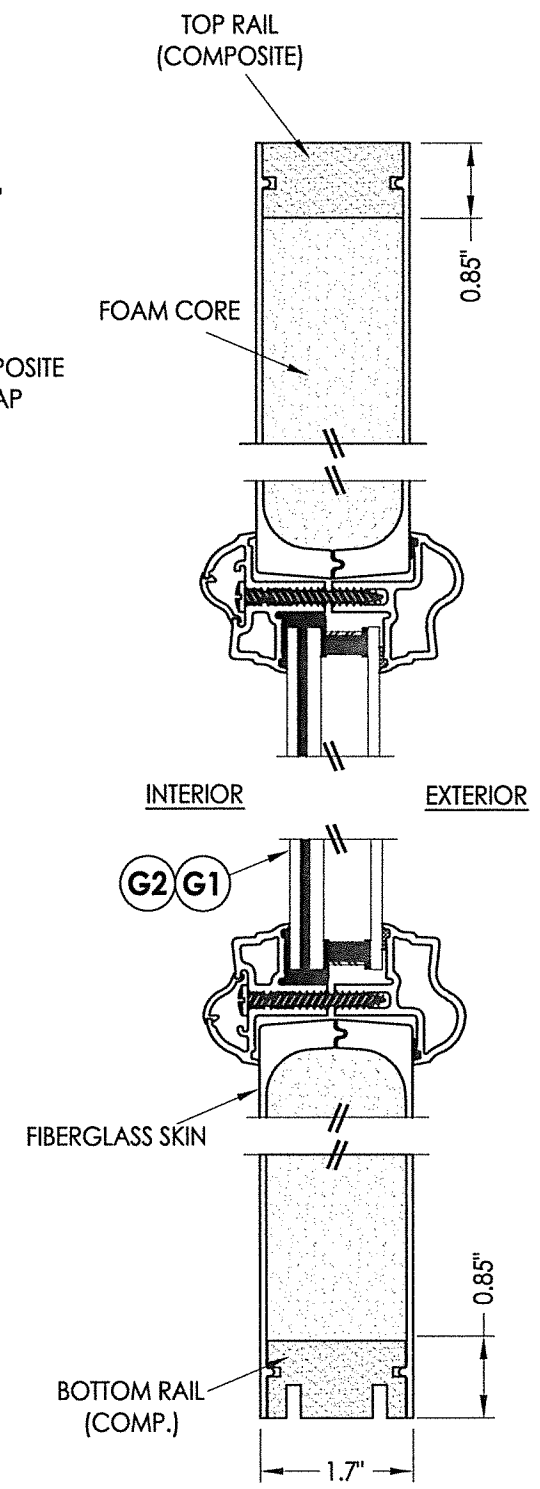
40 FIBERGLASS DOOR PANEL
BOOK DOOR
MOLDED OPEN



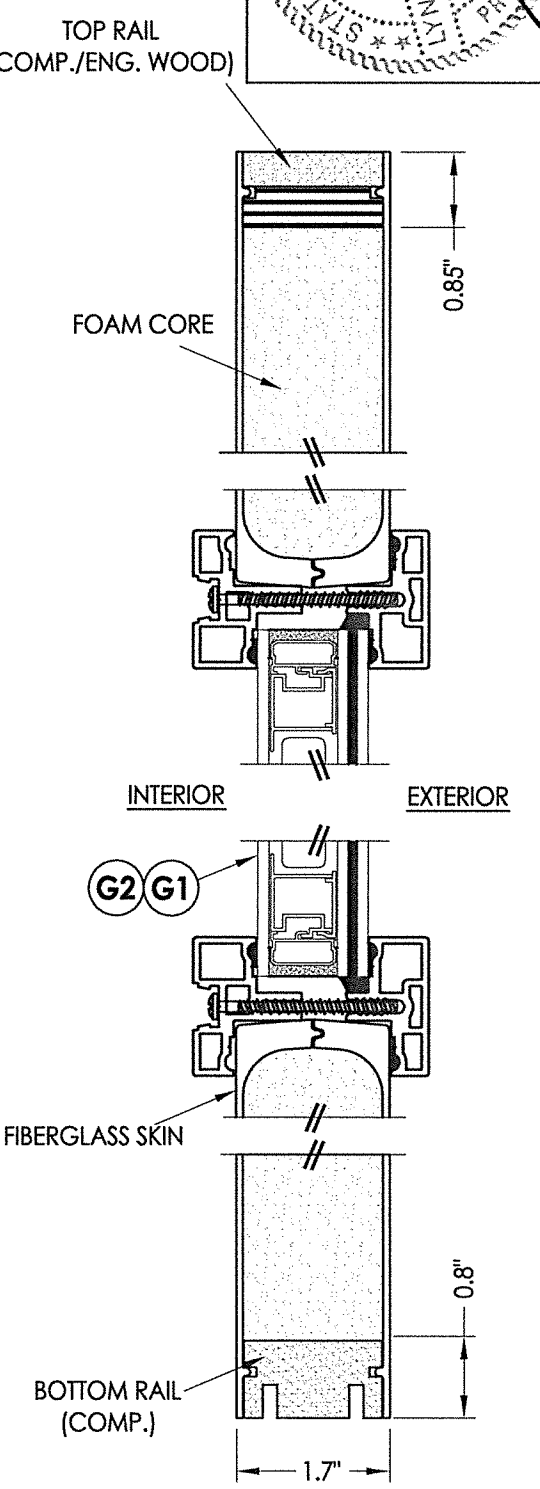
41 FIBERGLASS DOOR PANEL
HYBRID DOOR
MOLDED OPEN



42 FIBERGLASS DOOR PANEL
U1 DOOR
MOLDED OPEN



3 VERTICAL CROSS SECTION
2 WOOD EDGE DOOR PANEL



4 VERTICAL CROSS SECTION
2 COMPOSITE EDGE DOOR PANEL

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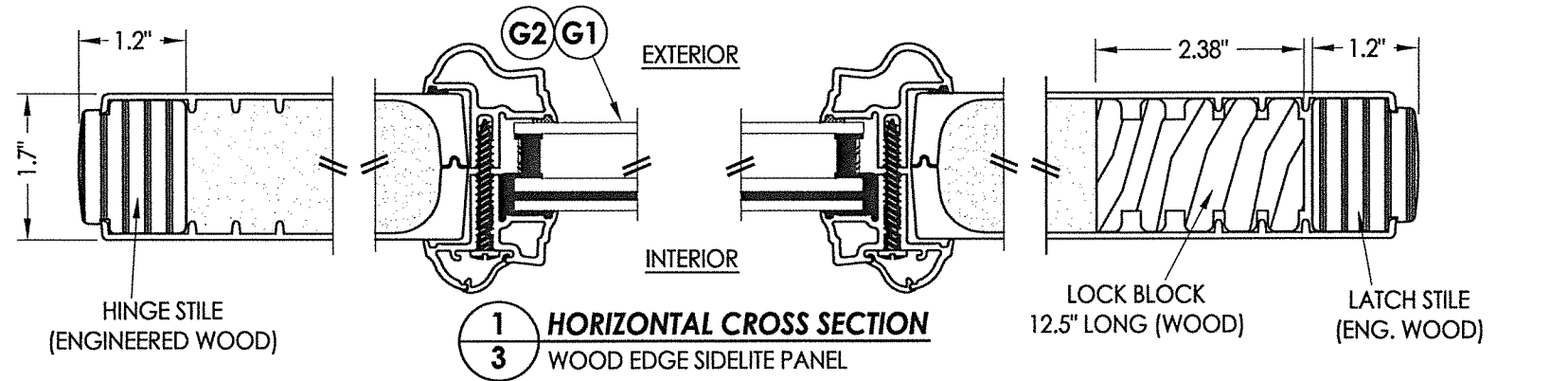
PRODUCT: THERMA-TRU
FIBERGLASS DOOR

PART OR ASSEMBLY: DOOR PANEL DETAILS

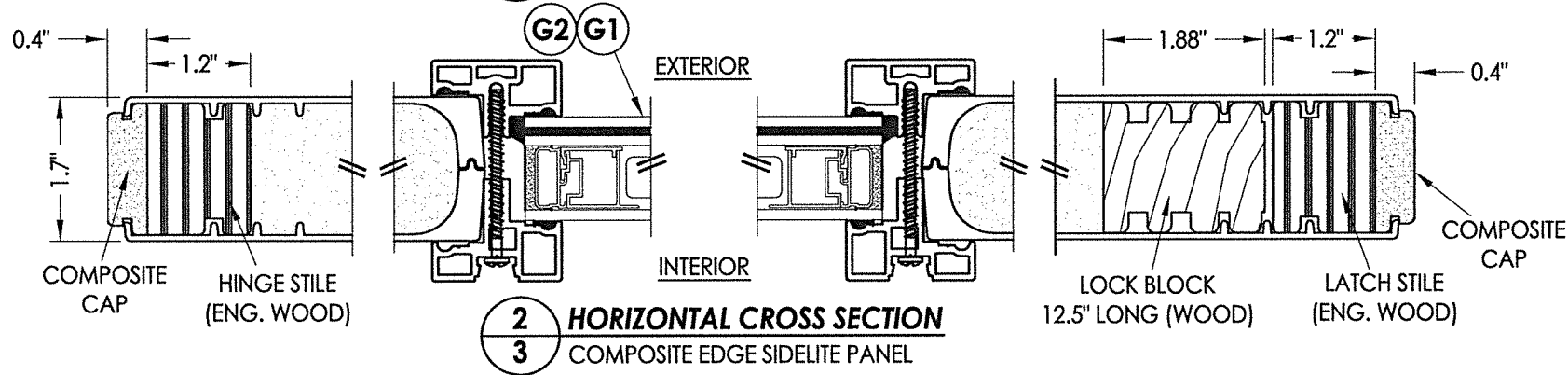
NO.	DATE	BY

DATE: 5/27/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: TX-5211
SHEET 2 OF 10

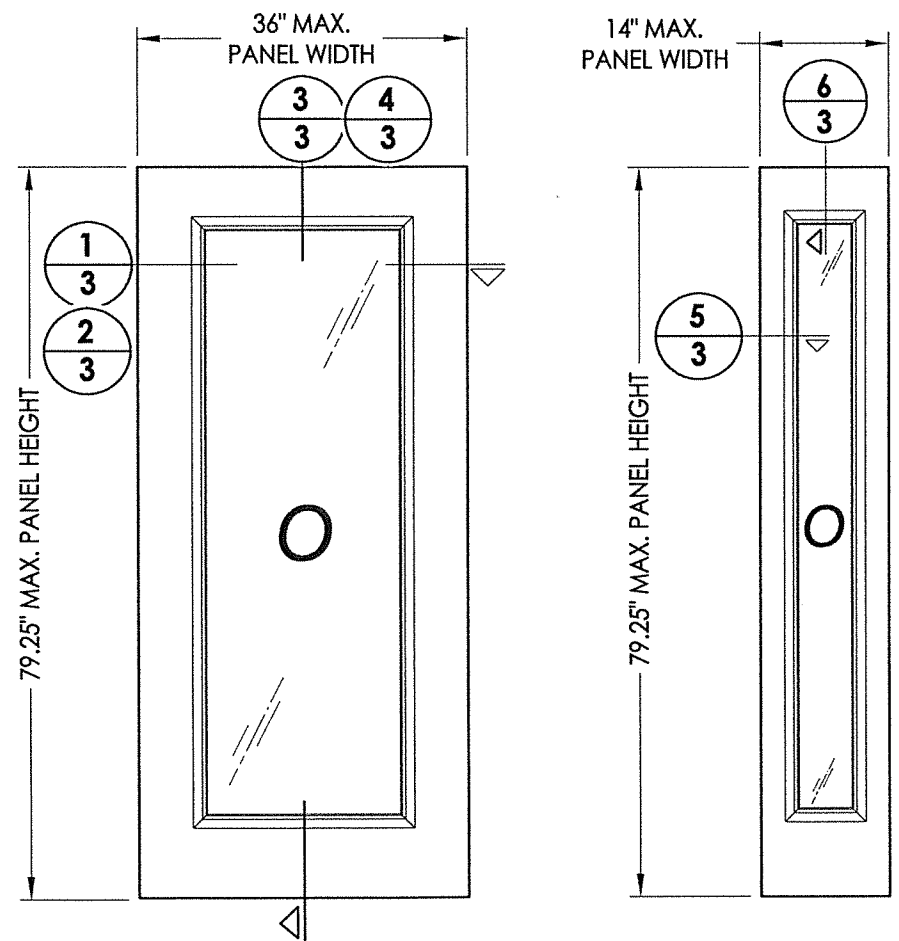
Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - ID XXXX - 68 OP GLZ FG Imp Molded Open (TX 5209-5213)\C - Drawings\TX-5209-5211.dwg



1 HORIZONTAL CROSS SECTION
3 WOOD EDGE SIDELITE PANEL



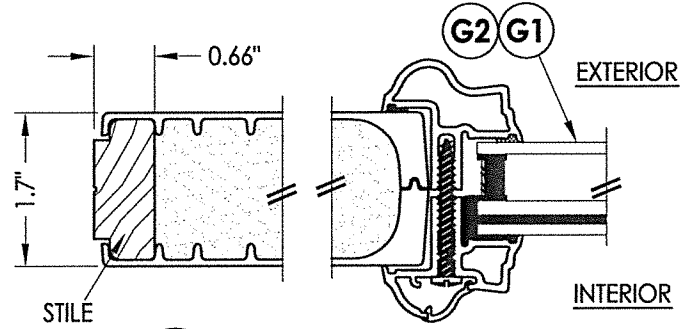
2 HORIZONTAL CROSS SECTION
3 COMPOSITE EDGE SIDELITE PANEL



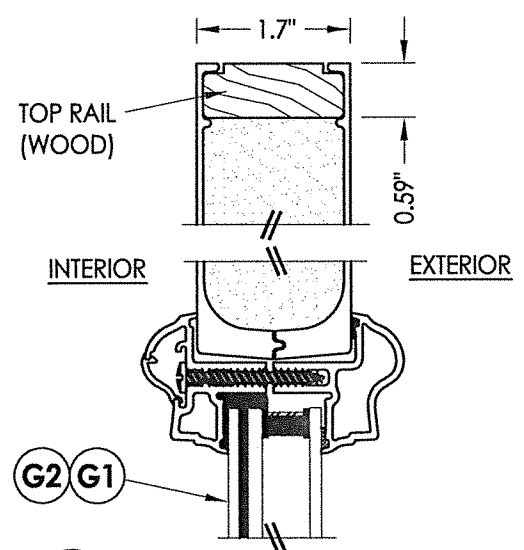
50 FIBERGLASS SIDELITE PANEL
36\"/>

50 SIDELITE PANEL
14\"/>

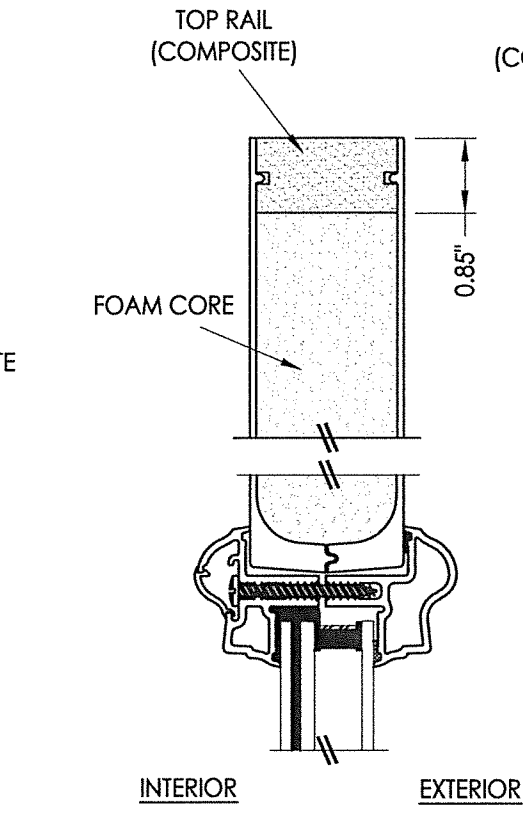
FIBERGLASS SKIN: 0.073\"/>



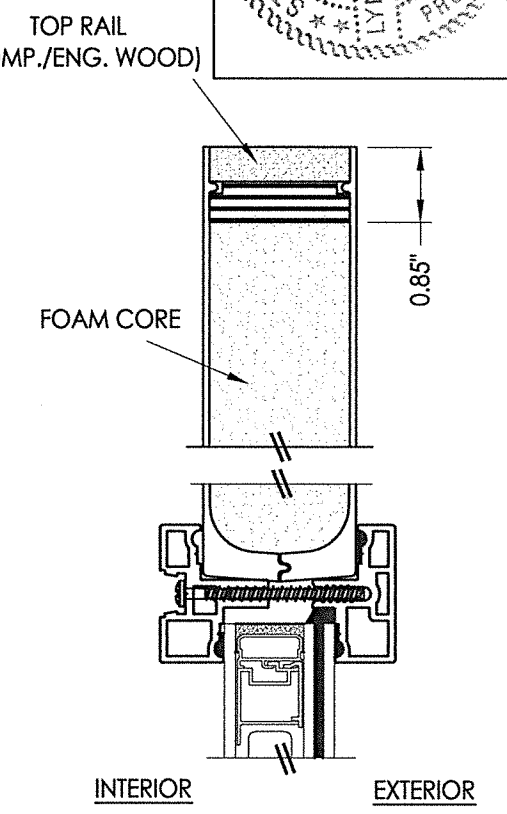
5 HORIZONTAL CROSS SECTION
3 14\"/>



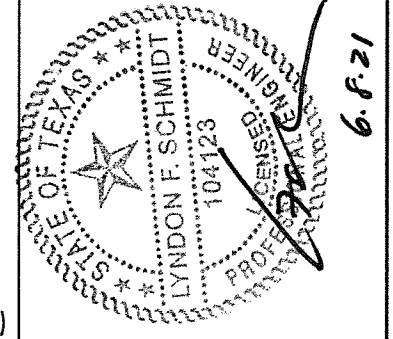
6 VERTICAL CROSS SECTION
3 14\"/>



3 VERTICAL CROSS SECTION
3 WOOD EDGE SIDELITE PANEL



4 VERTICAL CROSS SECTION
3 COMPOSITE EDGE SIDELITE PANEL

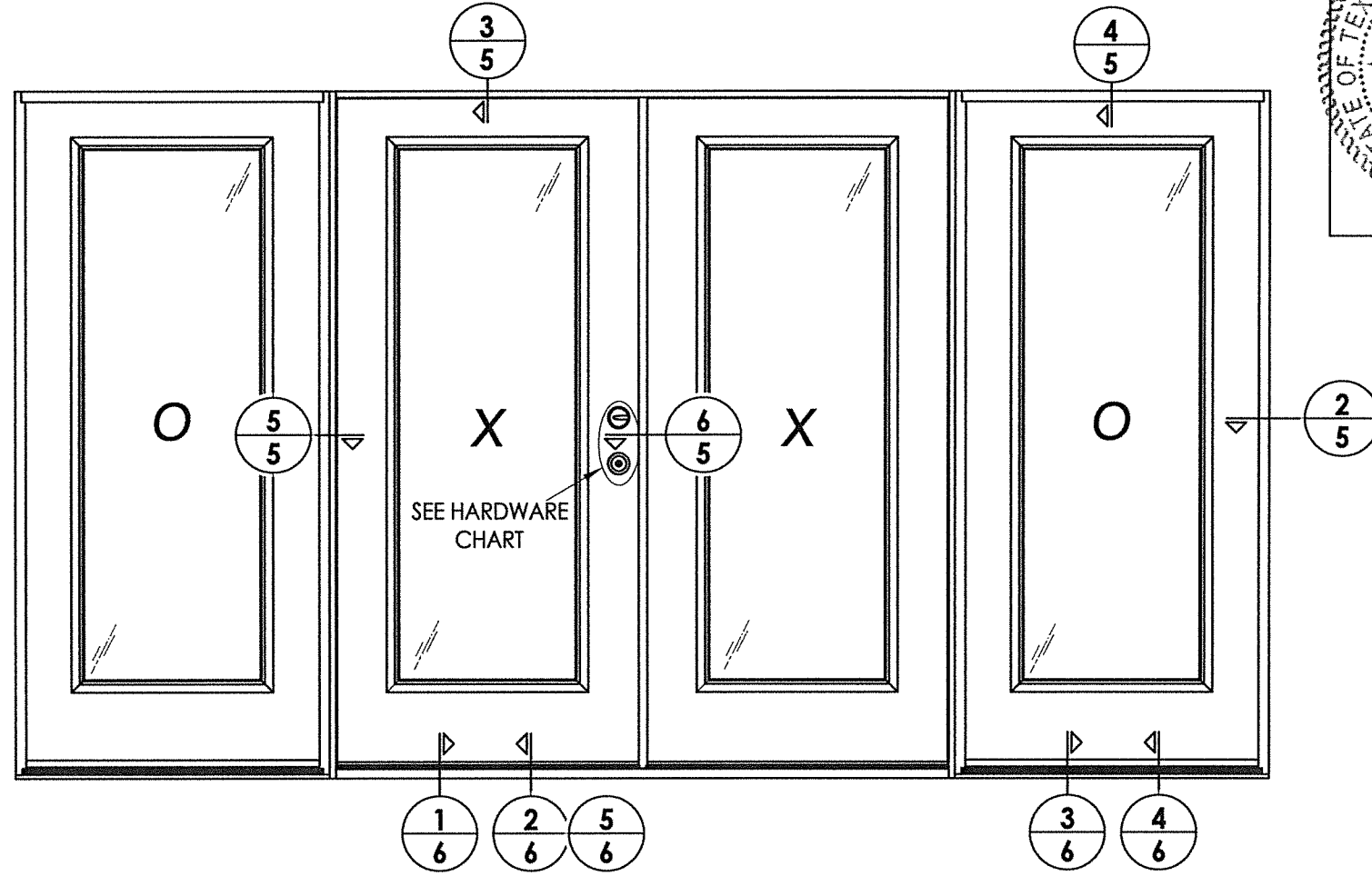
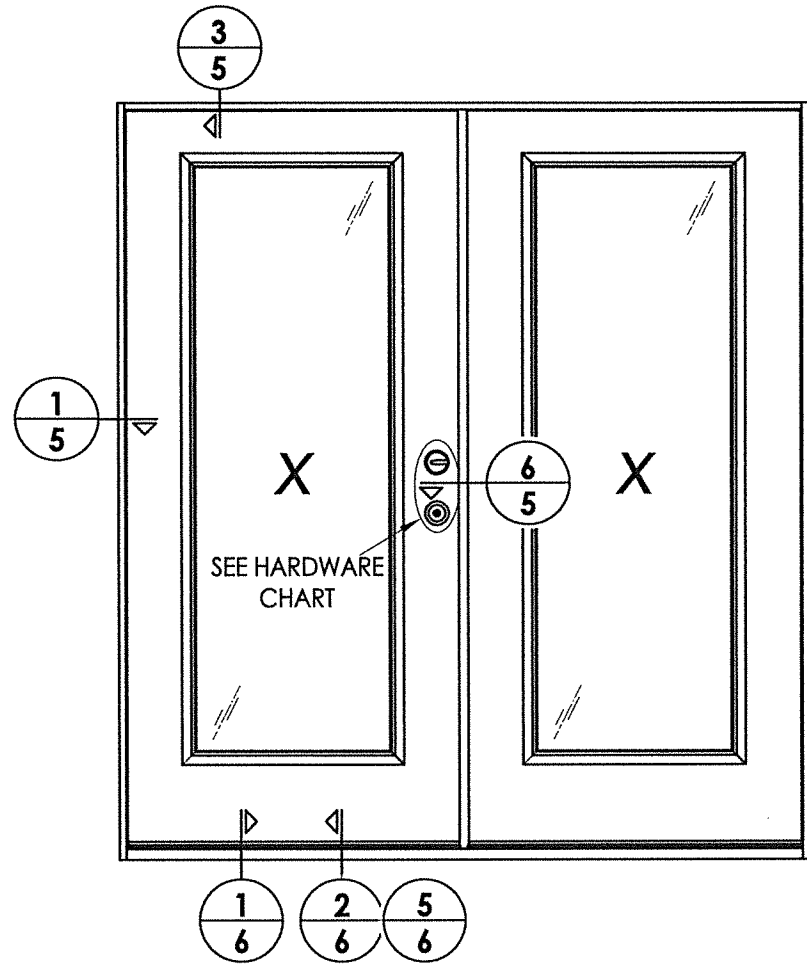


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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU FIBERGLASS DOOR
PART OR ASSEMBLY: SIDELITE PANEL DETAILS

NO.	DATE	BY	REVISIONS

DATE: 5/27/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: TX-5211
SHEET 3 of 10

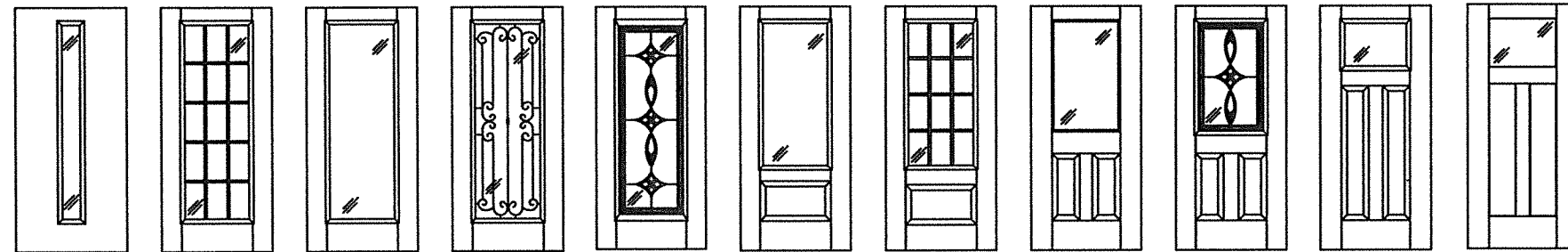


6-P-21

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
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Fiber-Classic/Smooth-Star Door Panel Options

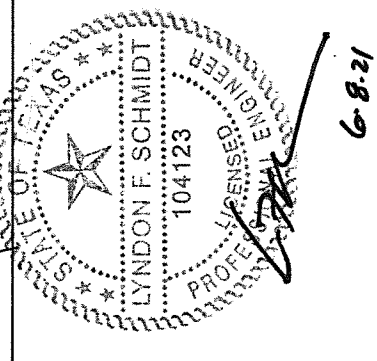
Products approved include all embossed and recessed panel doors.
 Similar glazed panel configurations are allowed.
 Panels shown are for illustration and are representative only.

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)

PRODUCT:		PART OR ASSEMBLY:	
THERMA-TRU		FIBERGLASS DOOR	
ELEVATIONS		ELEVATIONS	
NO.	DATE	BY	REVISIONS
	5/27/21		
SCALE: N.T.S.		DRAWING NO.: TX-5211	
DWG. BY: RW		SHEET 4 OF 10	
CHK. BY: LFS			

Notes:

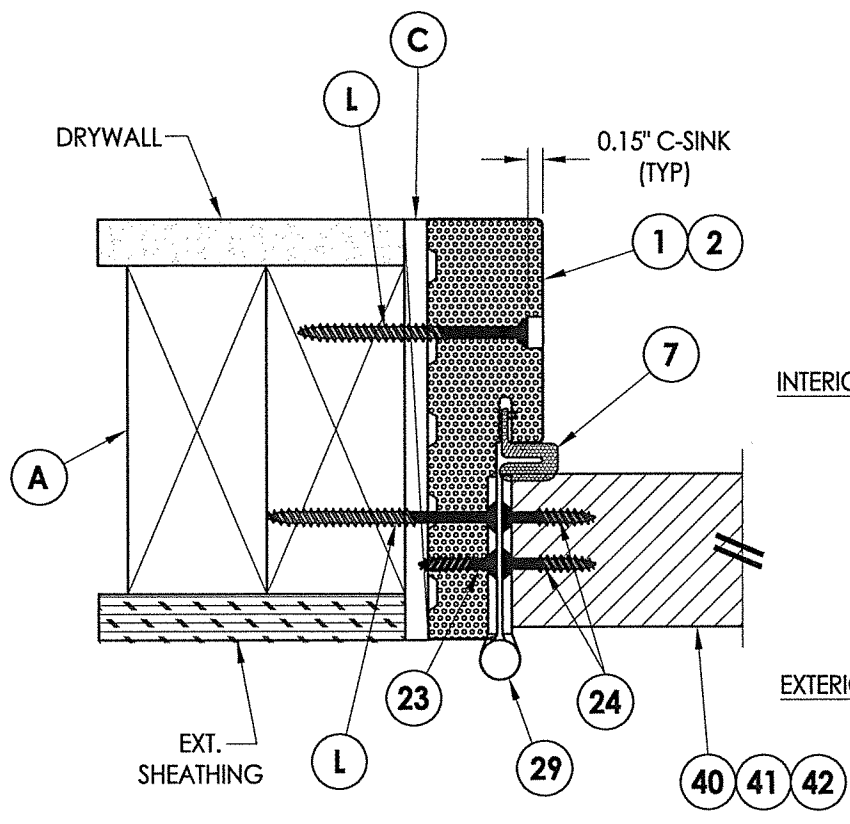
1. Sidelite assembly screws located 6" from each end and 5 more screws equally spaced between (7 screws total per side jamb).
2. Sidelite assembly screws located 3" from each end and @ centerline (3 screws along head jamb).
3. PVC/Wood Moulding secured w/ 16 GA. X 1" brad nails located 1" from ends & 10" o.c. max.



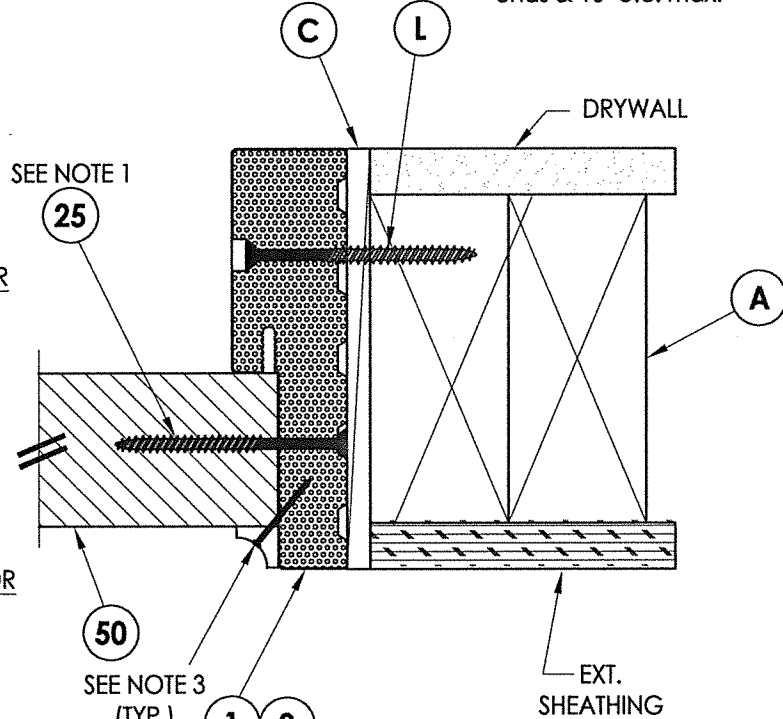
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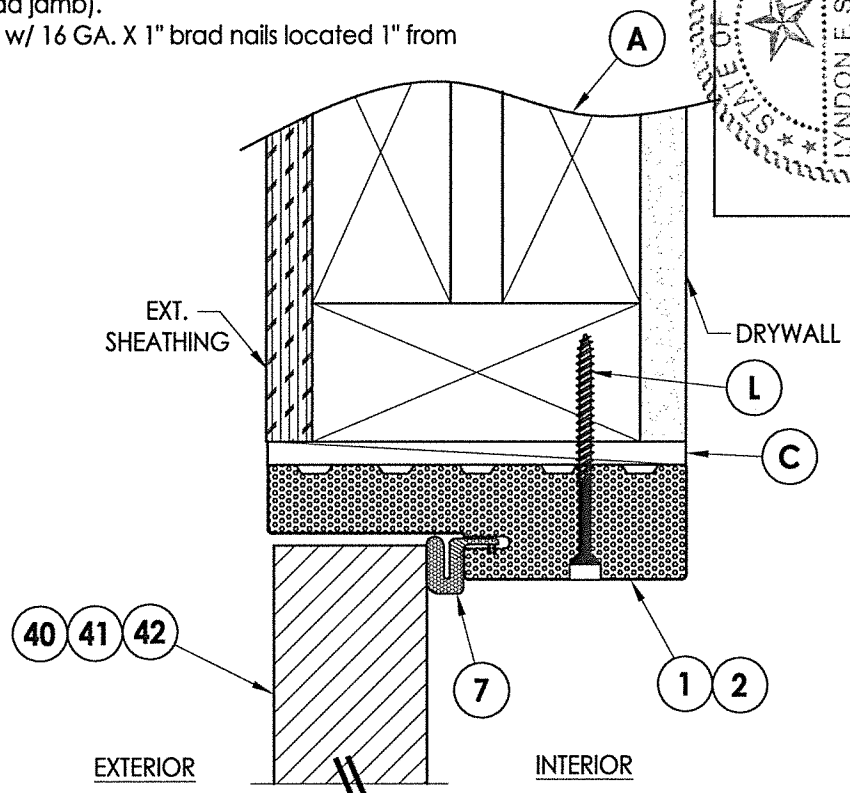
TEXAS BOARD OF PROFESSIONAL ENGINEERS
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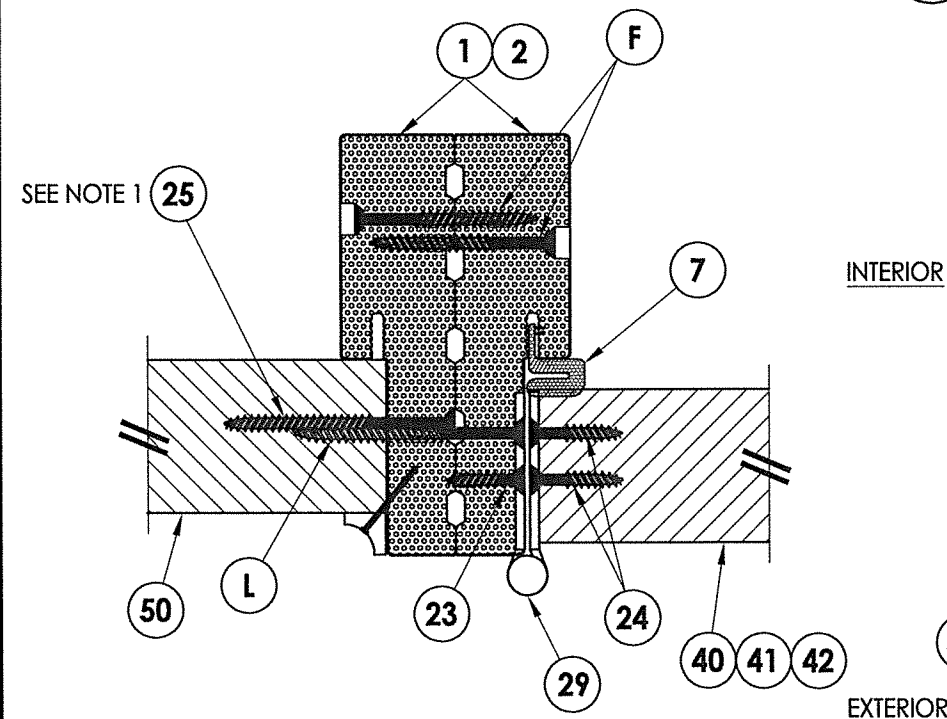
1 HORIZONTAL CROSS SECTION
5 Outswing shown (Inswing similar)



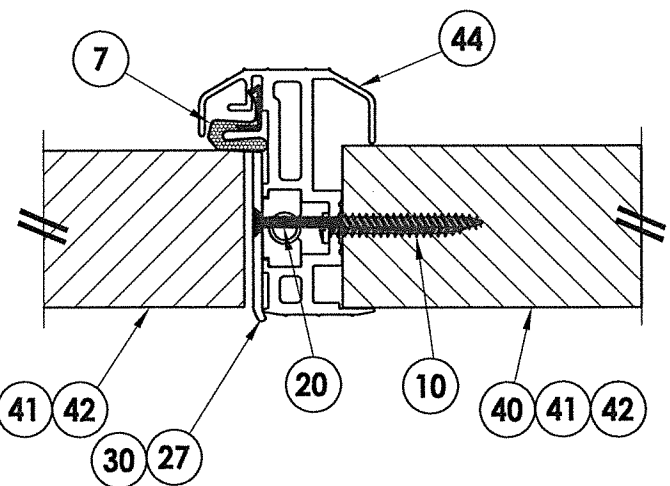
2 HORIZONTAL CROSS SECTION
5 Outswing shown (Inswing similar)



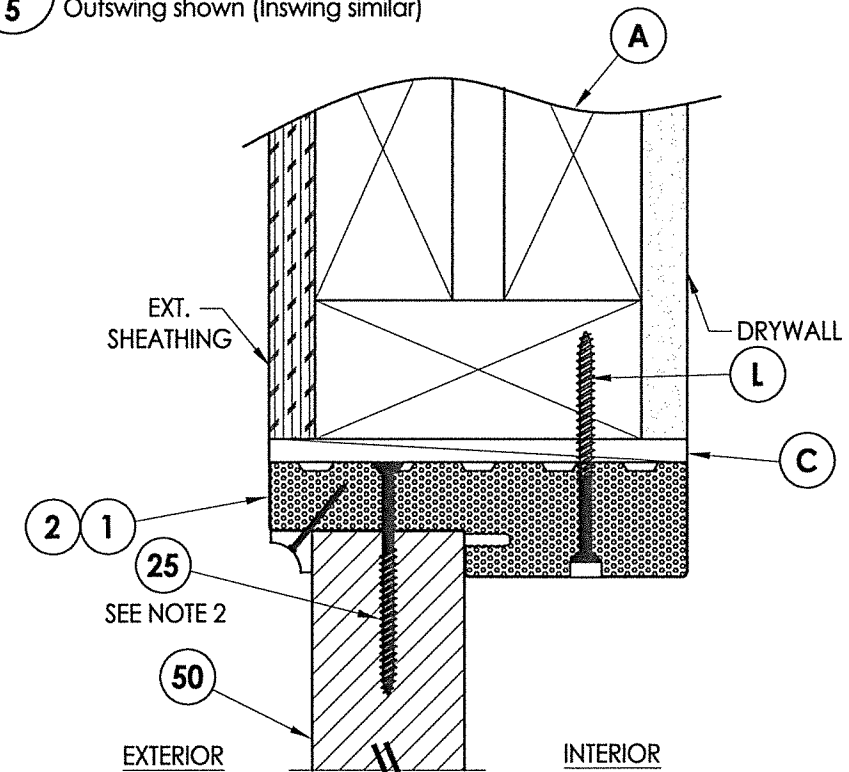
3 VERTICAL CROSS SECTION
5 Outswing shown (Inswing similar)



5 HORIZONTAL CROSS SECTION
5 Outswing shown (Inswing similar)



6 HORIZONTAL CROSS SECTION
5 Outswing shown (Inswing similar)



4 VERTICAL CROSS SECTION
5 Outswing shown (Inswing similar)

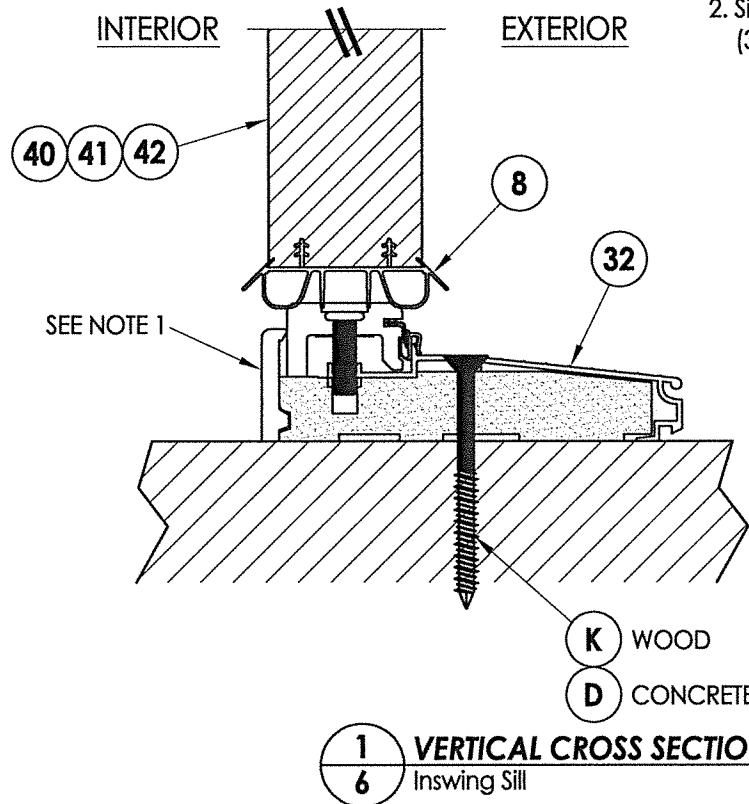
PRODUCT: THERMA-TRU FIBERGLASS DOOR

PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (2X BUCK)

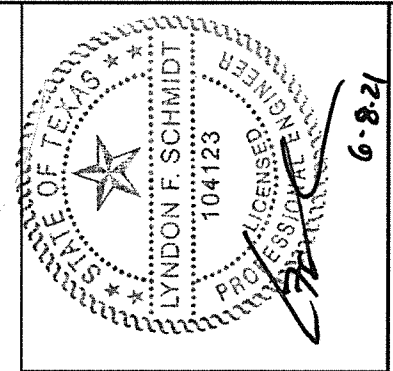
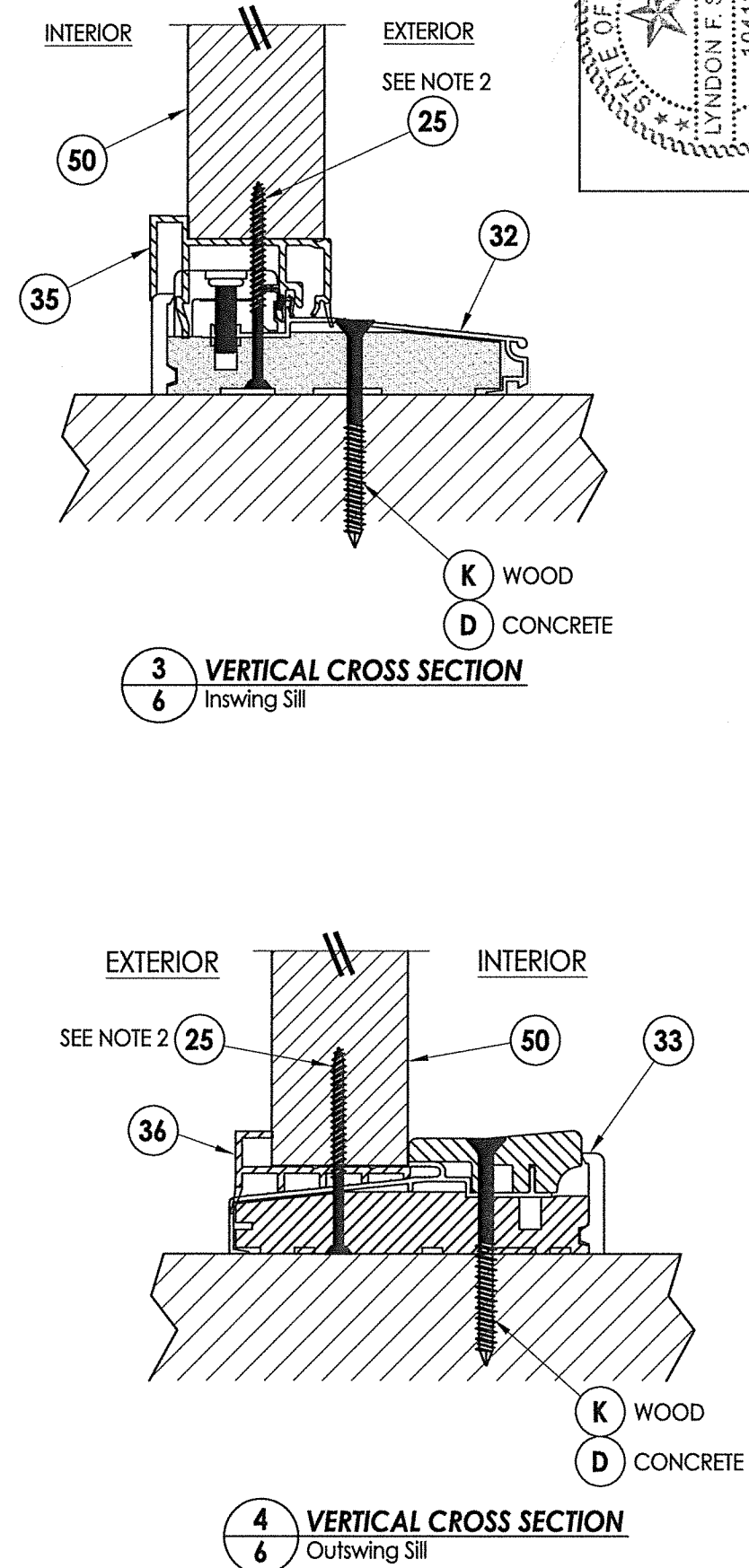
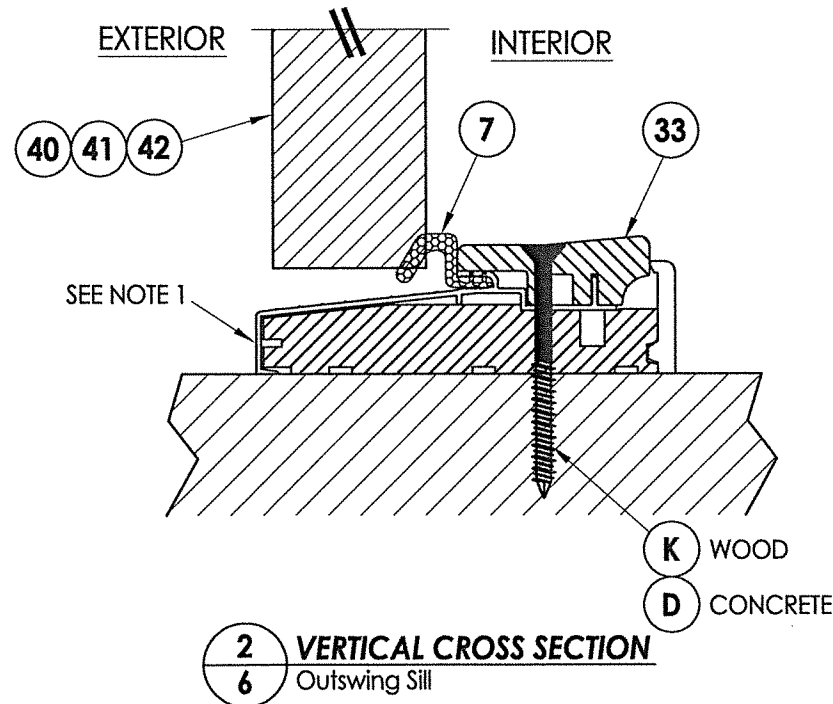
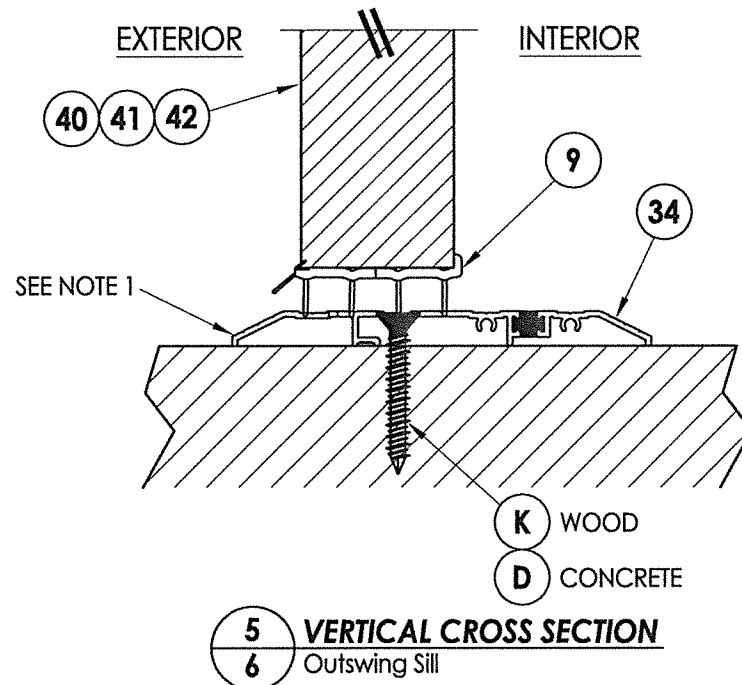
NO.	DATE	BY	REVISIONS

DATE: 5/27/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: TX-5211
SHEET 5 OF 10

Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - ID XXXX - 6'8 OP GLZ FG Imp Molded Open (TX 5209-5213)\C - Drawings\TX-5209-5211.dwg



Notes:
 1. Sill Item #32 is attached to jambs w/ (3) #8 X 2-1/2" pfh screws at each end.
 Sill Item #33 is attached to jambs w/ (2) #8 X 2-1/2" pfh screws at each end.
 Sill Item #34 is attached to jambs utilizing (2) #10 X 2" pph SMS at each end.
 2. Sidelite assembly screws located 3" from each end and @ centerline (3 screws along sill).



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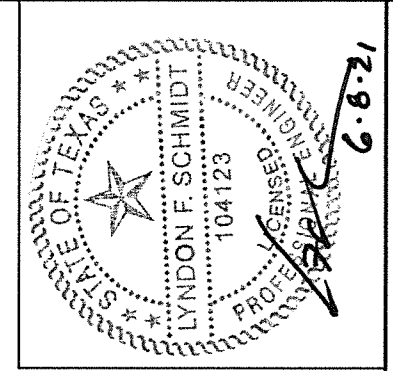
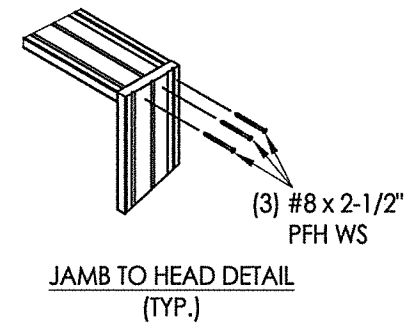
RW BUILDING CONSULTANTS, INC.
 P.O. Box 230 Valrico FL 33595
 Phone No.: 813.659.9197

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

PRODUCT: THERMA-TRU
 FIBERGLASS DOOR
 PART OR ASSEMBLY:
 VERTICAL CROSS
 SECTIONS (THRESHOLDS)

DATE: 5/27/21
 SCALE: N.T.S.
 DWG. BY: RW
 CHK. BY: LFS
 DRAWING NO.: TX-5211
 SHEET 6 of 10

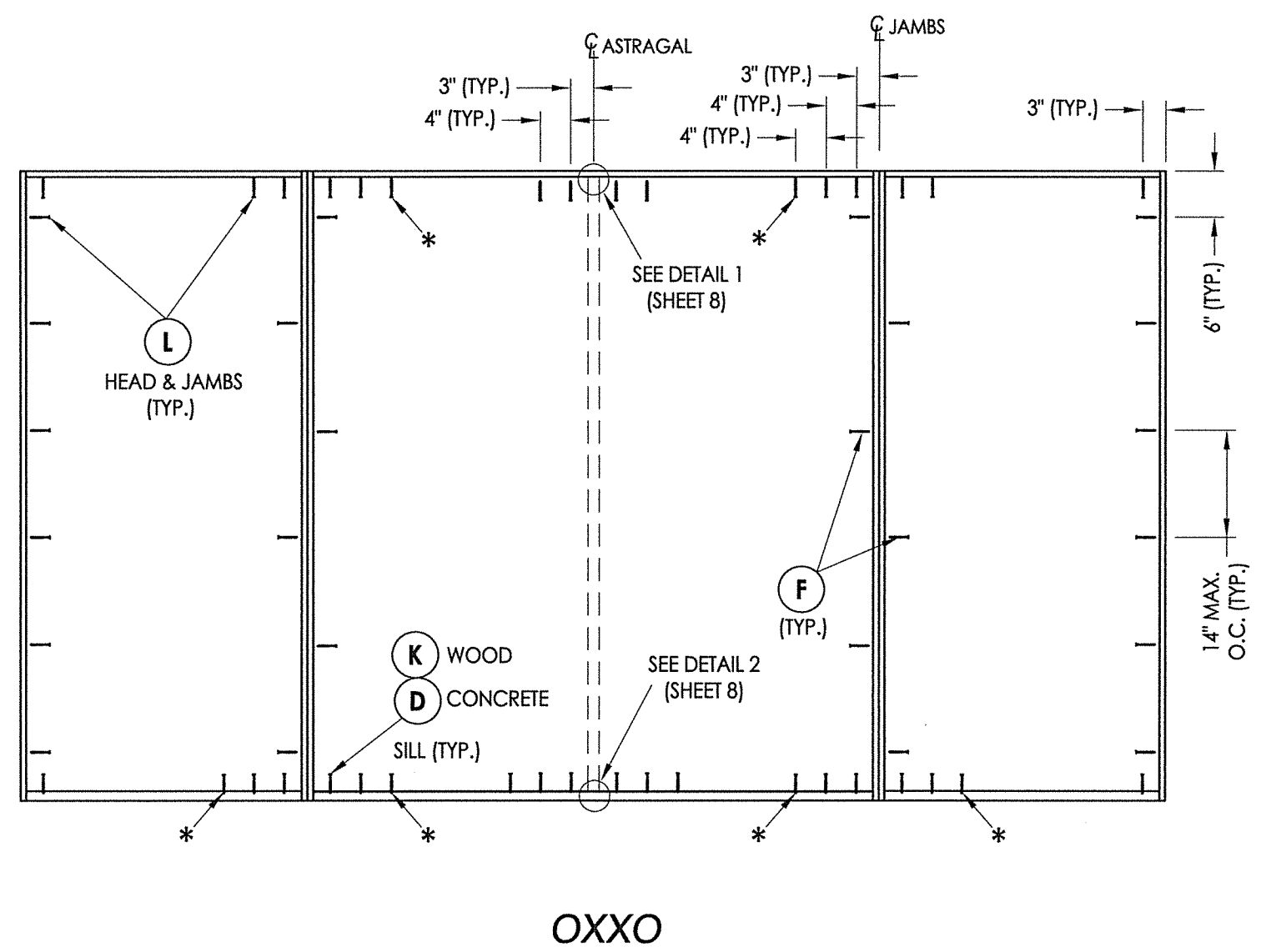
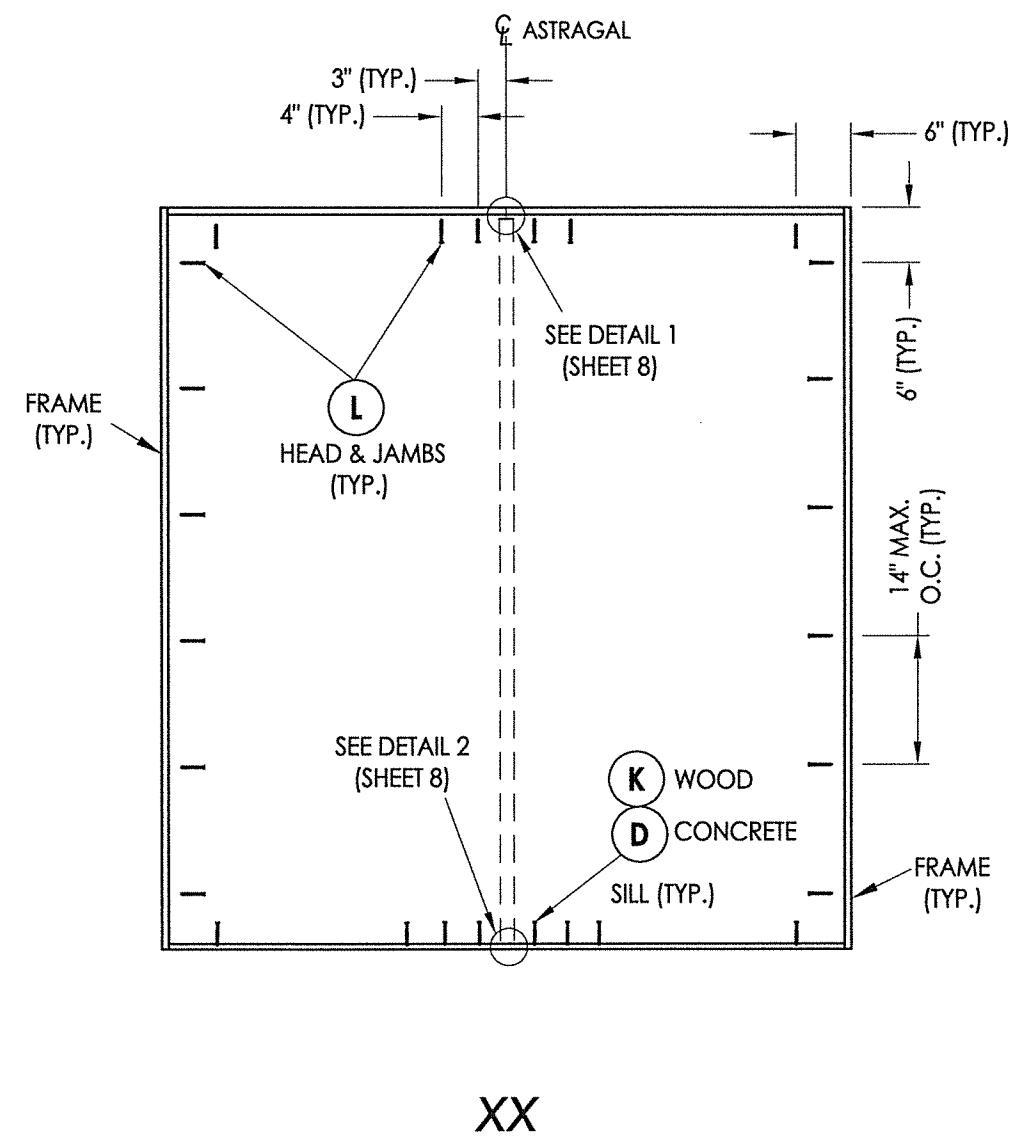
Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDL - ID XXXX - 6'8 OP GLZ FG Imp Molded Open (TX-5209-5213)\C - Drawings\TX-5209-5211.dwg



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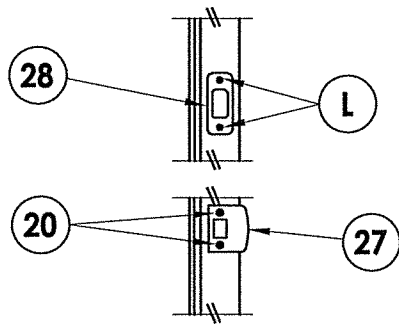


FRAME ANCHORING

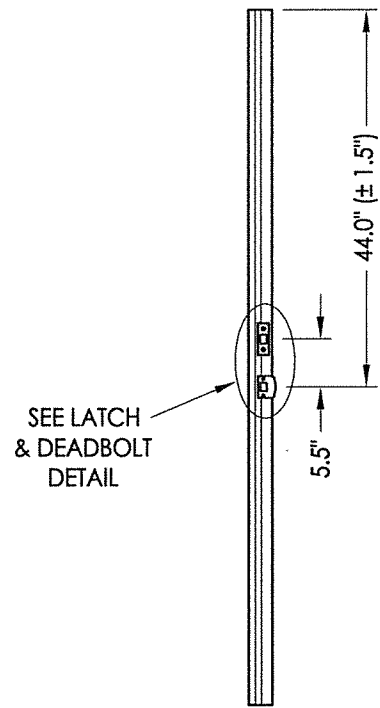
14" SIDELITE NOTES:
* ANCHOR NOT REQUIRED FOR DOORS WITH 14" SIDELITES

PRODUCT:	Therma-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	BY
REVISIONS		
DATE: 5/27/21		
SCALE: N.T.S.		
DWG. BY: RW		
CHK. BY: LFS		
DRAWING NO.: TX-5211		
SHEET 7 OF 10		

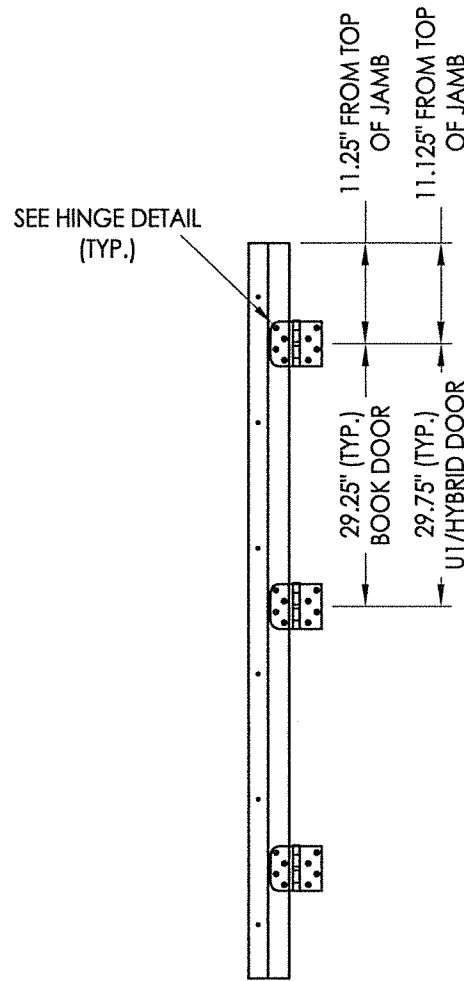
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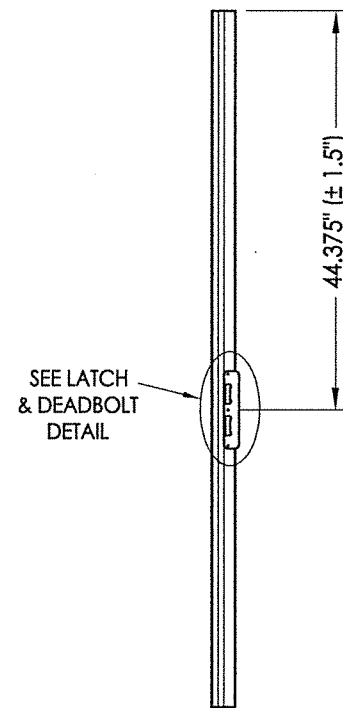
LATCH & DEADBOLT DETAIL
Schlage / Kwikset



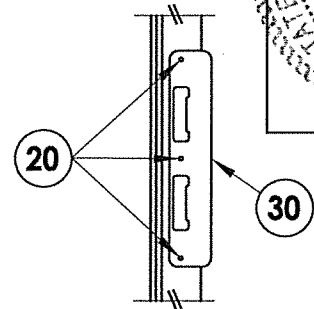
ASTRAGAL
Latch and Deadbolt



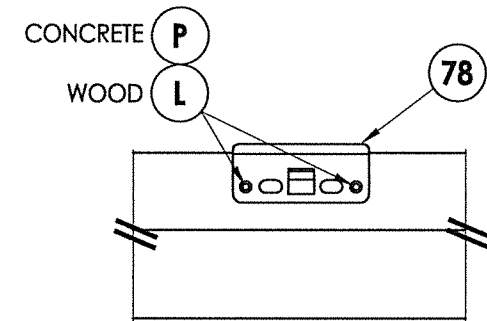
HINGE JAMB



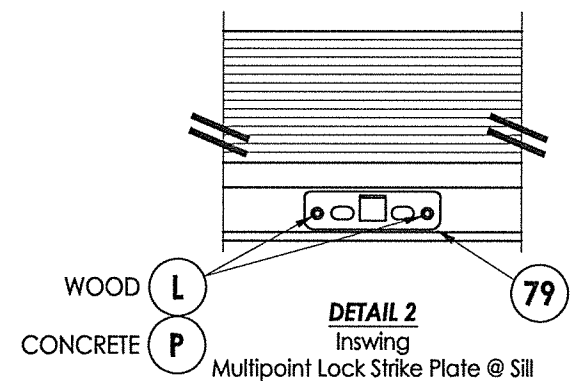
ASTRAGAL
Multipoint Lock



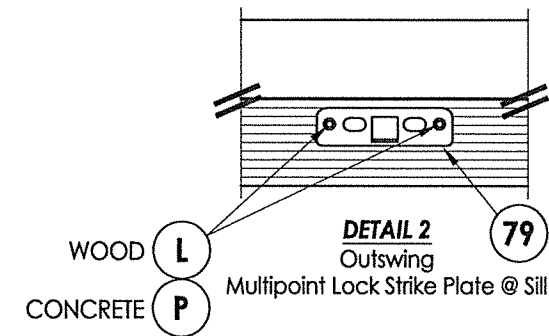
LATCH & DEADBOLT DETAIL
Multipoint Lock



DETAIL 1
Multipoint Lock Strike Plate @ Head

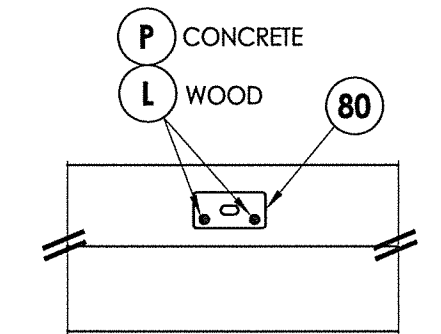


DETAIL 2
Inswing
Multipoint Lock Strike Plate @ Sill

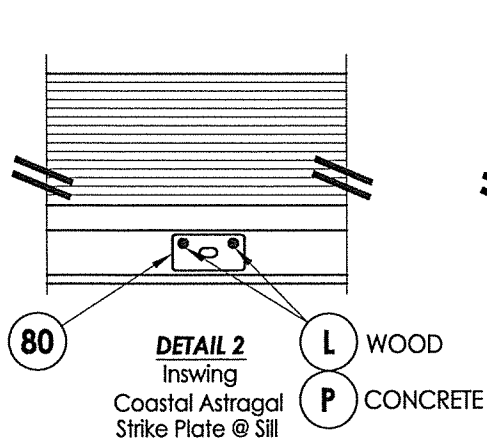


DETAIL 2
Outswing
Multipoint Lock Strike Plate @ Sill

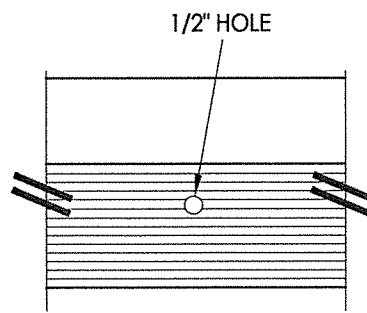
MULTIPOINT LOCK STRIKE DETAILS



DETAIL 1
Coastal Astragal Strike Plate @ Head

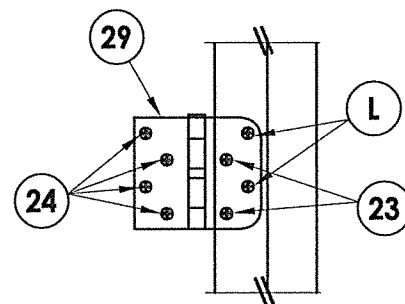


DETAIL 2
Inswing
Coastal Astragal Strike Plate @ Sill

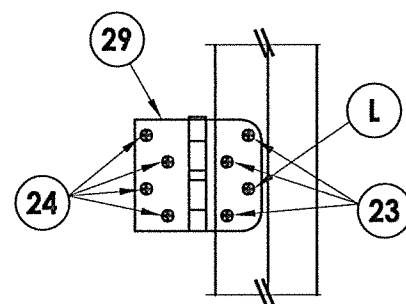


DETAIL 2
Outswing
Astragal Bolt Hole @ Sill

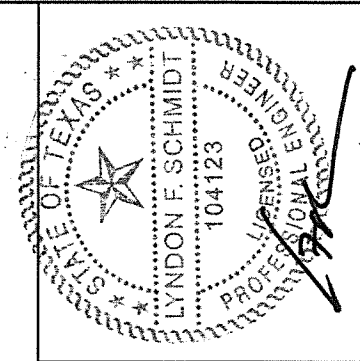
LATCH & DEADBOLT STRIKE DETAILS



HINGE DETAIL
Inswing



HINGE DETAIL
Outswing

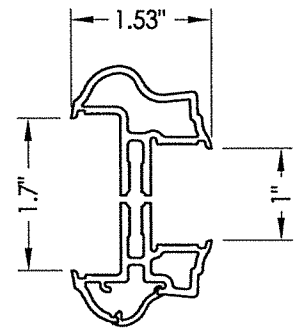


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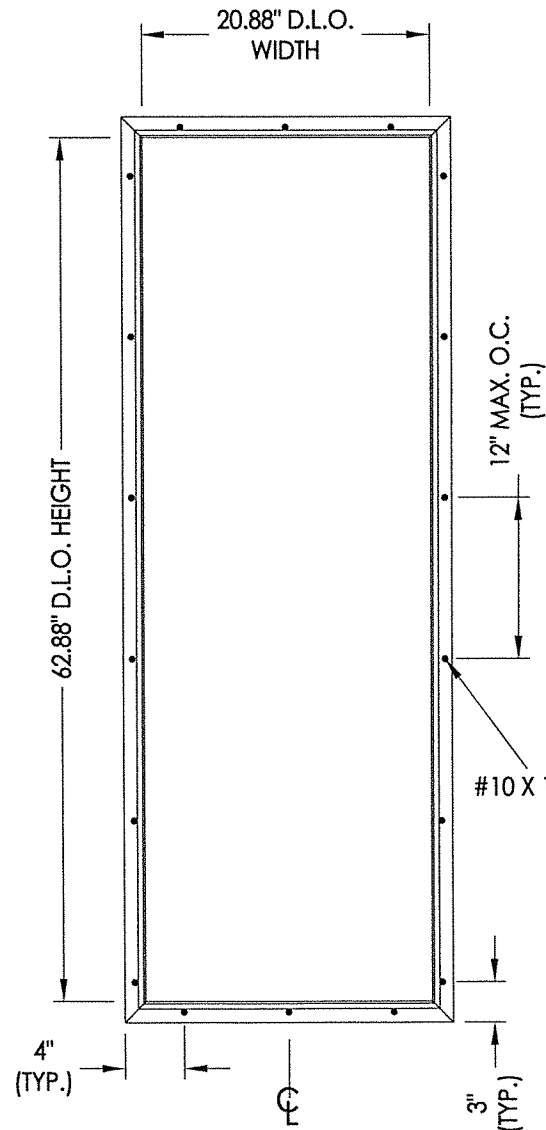
PRODUCT: THERMA-TRU FIBERGLASS DOOR
PART OR ASSEMBLY: HARDWARE DETAILS

NO.	DATE	BY	REVISIONS

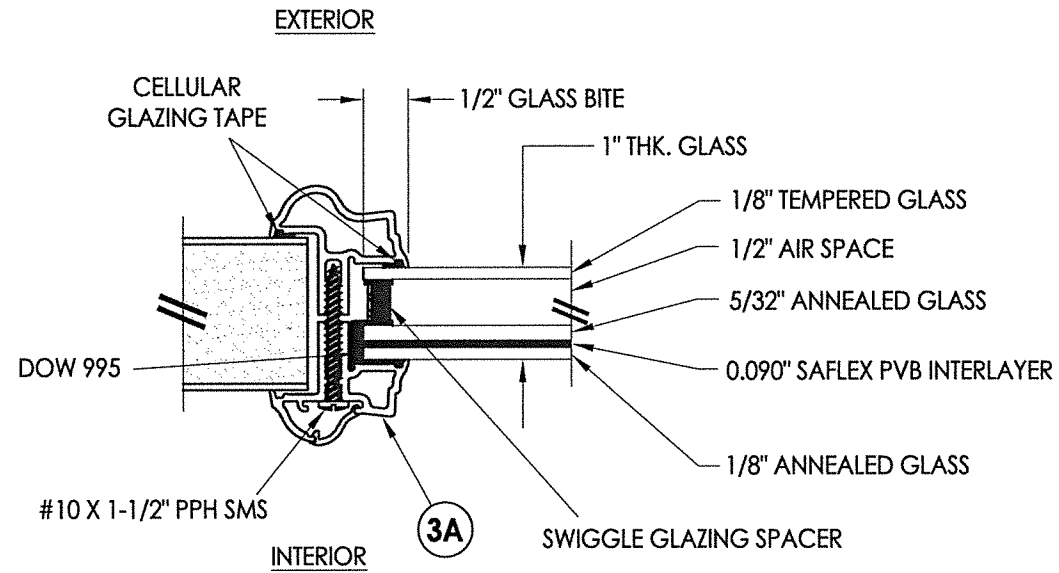
DATE: 5/27/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: TX-5211
SHEET 8 of 10



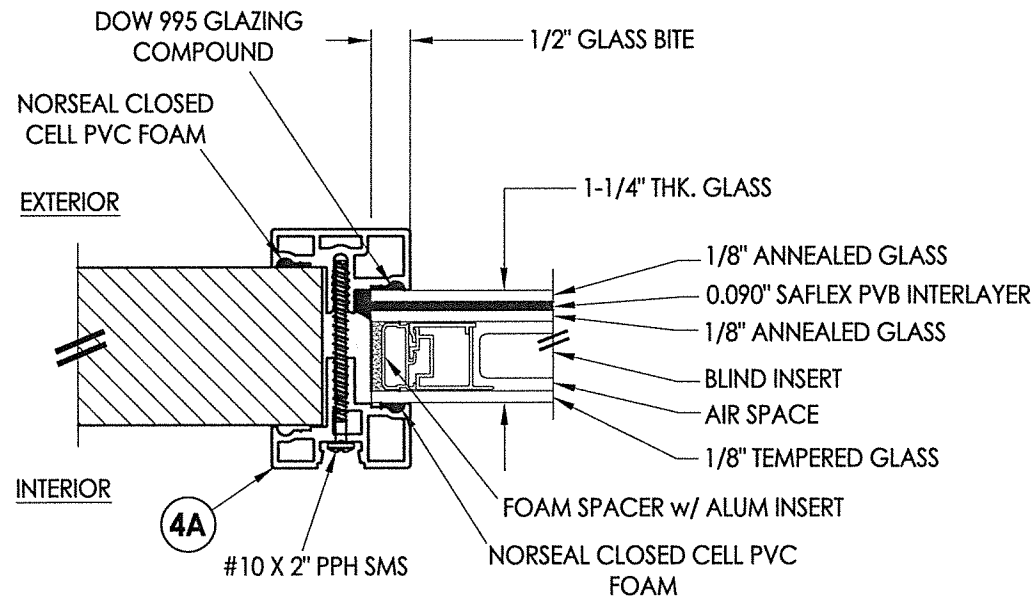
3A ALUMINUM FRAME
Aluminum Impact Lite Frame



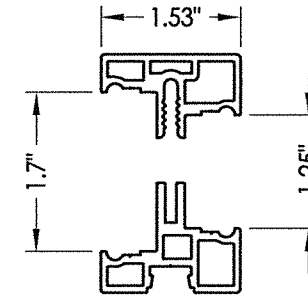
3A ALUMINUM LITE FRAME*
(w/ 1\"/>



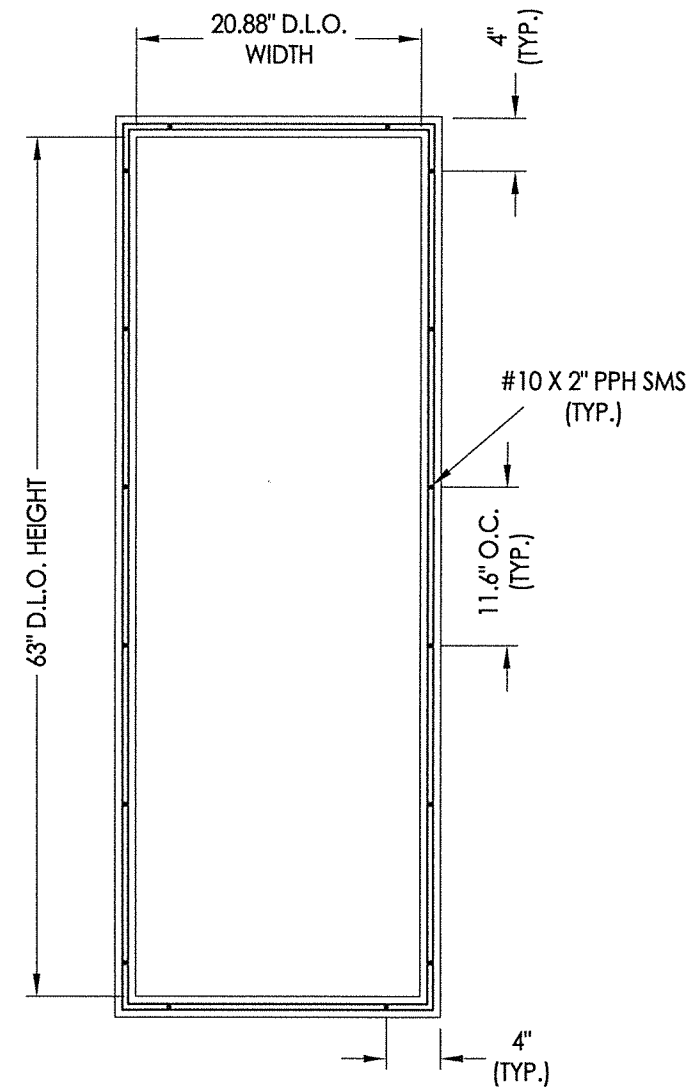
G1 GLAZING DETAIL
Aluminum Impact Lite Frame



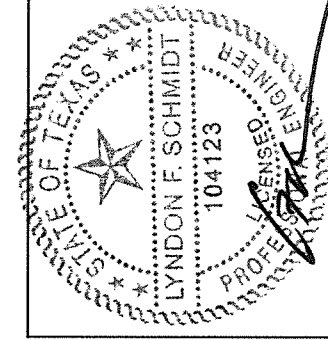
G2 GLAZING DETAIL
1-1/4\"/>



4A ALUMINUM FRAME
Aluminum Impact Lite Frame



4A ALUMINUM LITE FRAME**
(w/ 1-1/4\"/>



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

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

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

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

NO.	DATE	BY	REVISIONS

DATE:	5/27/21
SCALE:	N.T.S.
DWG. BY:	RW
CHK. BY:	LFS
DRAWING NO.:	TX-5211
SHEET	9 OF 10

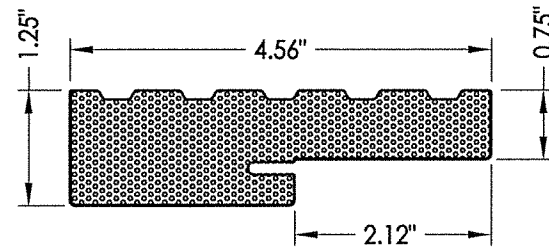
14" SIDELITE NOTES:

- * 14" SIDELITE HAS ONLY 2 END SCREWS @ TOP & BOTTOM
- ** 14" SIDELITE HAS ONLY 1 SCREW @ CL @ TOP & BOTTOM

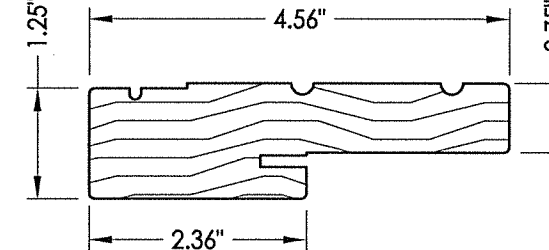
Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - ID XXXX - 68 OP GLZ EG Imp Molded Open (TX 5209-5213)\C - Drawings\TX-5209-5211.dwg

BILL OF MATERIALS

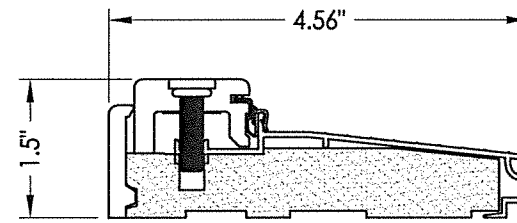
ITEM #	DESCRIPTION	MATERIAL
A	2X FRAMING (SG >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" PFH DeWALT OR ITW CONCRETE SCREW (1-3/4" MIN. EMBEDMENT)	STEEL
F	#10 X 2" PFH WOOD SCREW	STEEL
K	#10 PFH WOOD SCREW (1-3/4" MIN. EMBEDMENT)	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL
P	3/16" PFH ITW CONCRETE SCREW (1-3/4" MIN. EMBEDMENT)	STEEL
1	COMPOSITE JAMB	COMP
2	WOOD JAMB (FINGER JOINT PINE)	WOOD
7	WEATHERSTRIP	FOAM
8	DOOR SWEEP	VINYL
9	SWEEP (USE w/ PUBLIC ACCESS THRESHOLD)	VINYL
10	#10 X 1-1/2" PPH SMS	STEEL
20	#8 X 2-1/2" PFH WOOD SCREW	STEEL
21	#12 X 1-1/2" PFH WOOD SCREW	STEEL
22	#8 X 3/4" PFH WOOD SCREW	STEEL
23	#9 X 3/4" PFH WOOD SCREW	STEEL
24	#9 X 1" PFH WOOD SCREW	STEEL
25	#9 X 2-1/2" PFH WOOD SCREW	STEEL
26	#8 X 5/8" PFH WOOD SCREW	STEEL
27	LATCH STRIKE PLATE	STEEL
28	DEADBOLT STRIKE PLATE	STEEL
28A	DEADBOLT SUB-STRIKE PLATE	STEEL
29	4" X 4" HINGE	STEEL
30	LATCH & DEADBOLT STRIKE PLATE	STEEL
32	INSWING THRESHOLD	ALUM/COMP
33	OUTSWING THRESHOLD	ALUM/COMP
34	PUBLIC ACCESS THRESHOLD	ALUM
35	SIDELITE SPACER (INSWING)	VINYL
36	SIDELITE SPACER (OUTSWING)	VINYL
40	DOOR PANEL (BOOK)	-
41	DOOR PANEL (HYBRID)	-
42	DOOR PANEL (U1)	-
44	COASTAL ASTRAGAL (THERMA-TRU)	ALUM
50	SIDELITE PANEL	-
78	MULTIPOINT LOCK STRIKE PLATE @ HEAD	STEEL
79	MULTIPOINT LOCK STRIKE PLATE @ SILL	STEEL
80	COASTAL ASTRAGAL STRIKE PLATE	STEEL



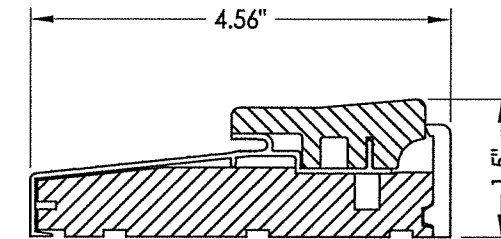
1 COMPOSITE JAMB



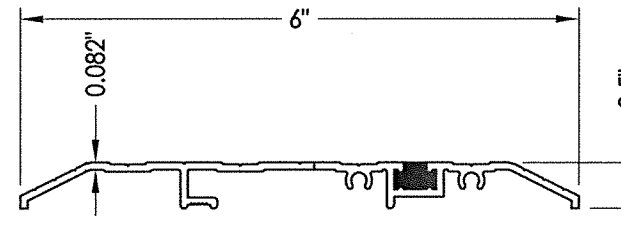
2 WOOD JAMB



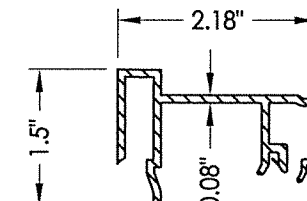
32 INSWING THRESHOLD
Adjustable Composite Sill



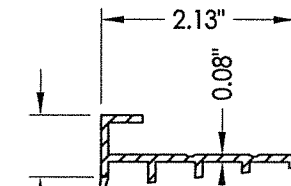
33 OUTSWING THRESHOLD
Composite Sill



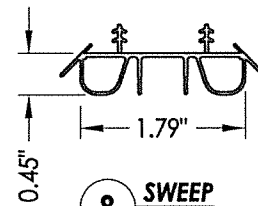
34 PUBLIC ACCESS THRESHOLD



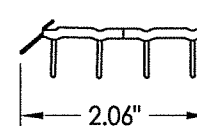
35 SIDELITE SPACER
Inswing



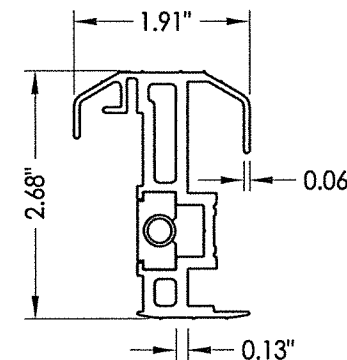
36 SIDELITE SPACER
Outswing



8 SWEEP



9 SWEEP



44 COASTAL ASTRAGAL

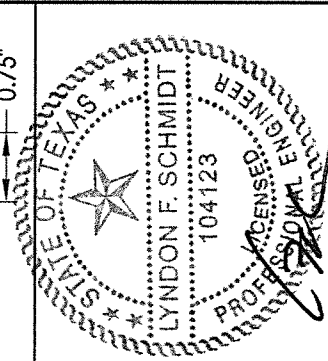
CONCRETE ANCHOR NOTES:

- 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"	1-1/4"	2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	AS SHOWN	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.



6-8-21

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CERTIFICATE OF REGISTRATION # F-11852

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

NO.	DATE	BY	REVISIONS

DATE: 5/27/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: TX-5211
SHEET 10 of 10