

# THERMA-TRU<sup>®</sup> DOORS

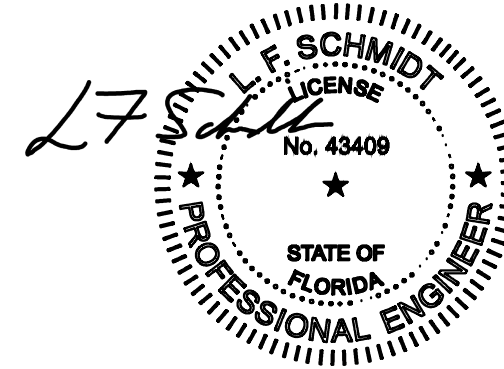
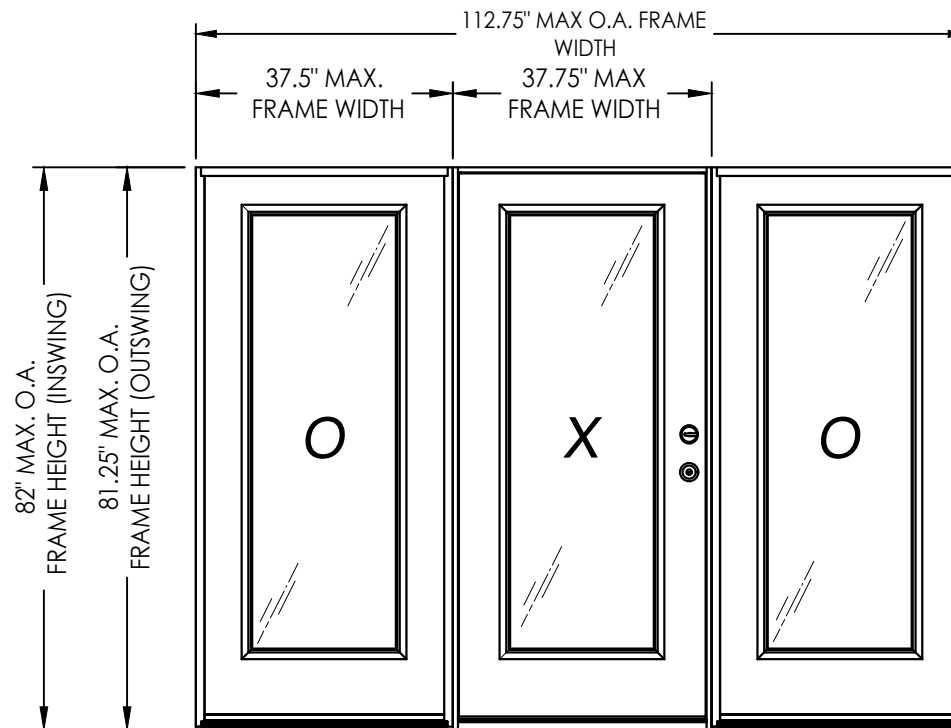
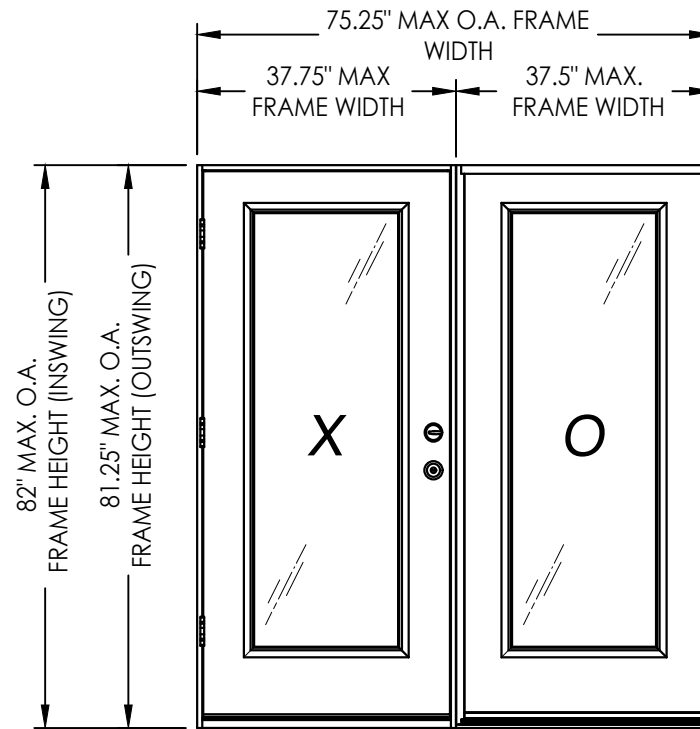
Fiber-Classic<sup>®</sup> & Smooth-Star<sup>®</sup>

## GLAZED MOLDED OPEN WOOD EDGE FIBERGLASS SINGLE DOOR w/ SIDELITE(S) IN SWING/OUT SWING "IMPACT"

### GENERAL NOTES

- This product has been evaluated and is in compliance with the 8th Edition (2023) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
- Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
- When used in areas requiring wind borne debris protection this product complies with FBC Sections 1609.1.2 & R301.2.1.2 and does not require an impact resistant covering. This product meets missile level "D" and excludes Wind Zone 4 as defined in ASTM E1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
- For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
- Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
- Fiber-Classic & Smooth-Star Door panel require the use of "J" part numbers and 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 (2X Buck)
6	Horizontal & Vertical Cross Sections (1X Buck)
7	Horizontal & Vertical Cross Sections (Direct to Masonry)
8	Vertical Cross Sections (Thresholds)
9	Buck Anchoring
10	Frame Anchoring
11	Hardware Details
12	Lite Frame & Glazing Details
13	Bill of Materials & Components



This item has been digitally signed and sealed by  
**L. F. Schmidt, P.E.** on the date adjacent to the seal.  
Printed copies of this document are not  
considered signed and sealed and the signature  
must be verified on any electronic copies.

THIS PRODUCT APPROVAL IS VALID  
ONLY FOR THE STATE OF FLORIDA

CONFIGURATION	LOCK TYPE	DESIGN PRESSURE (PSF) IN SWING		DESIGN PRESSURE (PSF) OUT SWING	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XO, OX, OXO	LATCH & DEADBOLT	+55.0	-65.0	+60.0	-60.0
	MULTIPOINT LOCK	+50.0	-50.0	+50.0	-50.0

Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

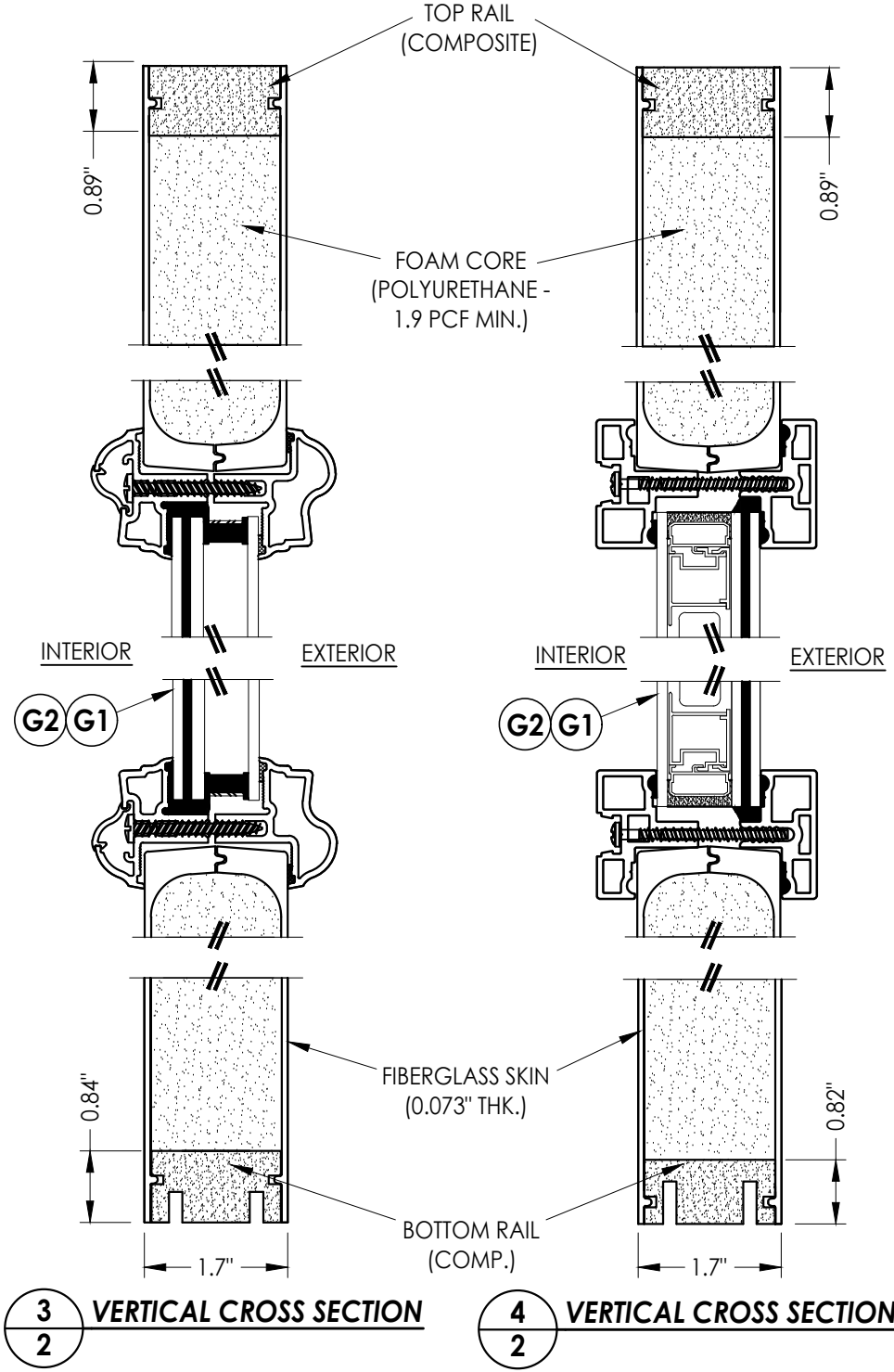
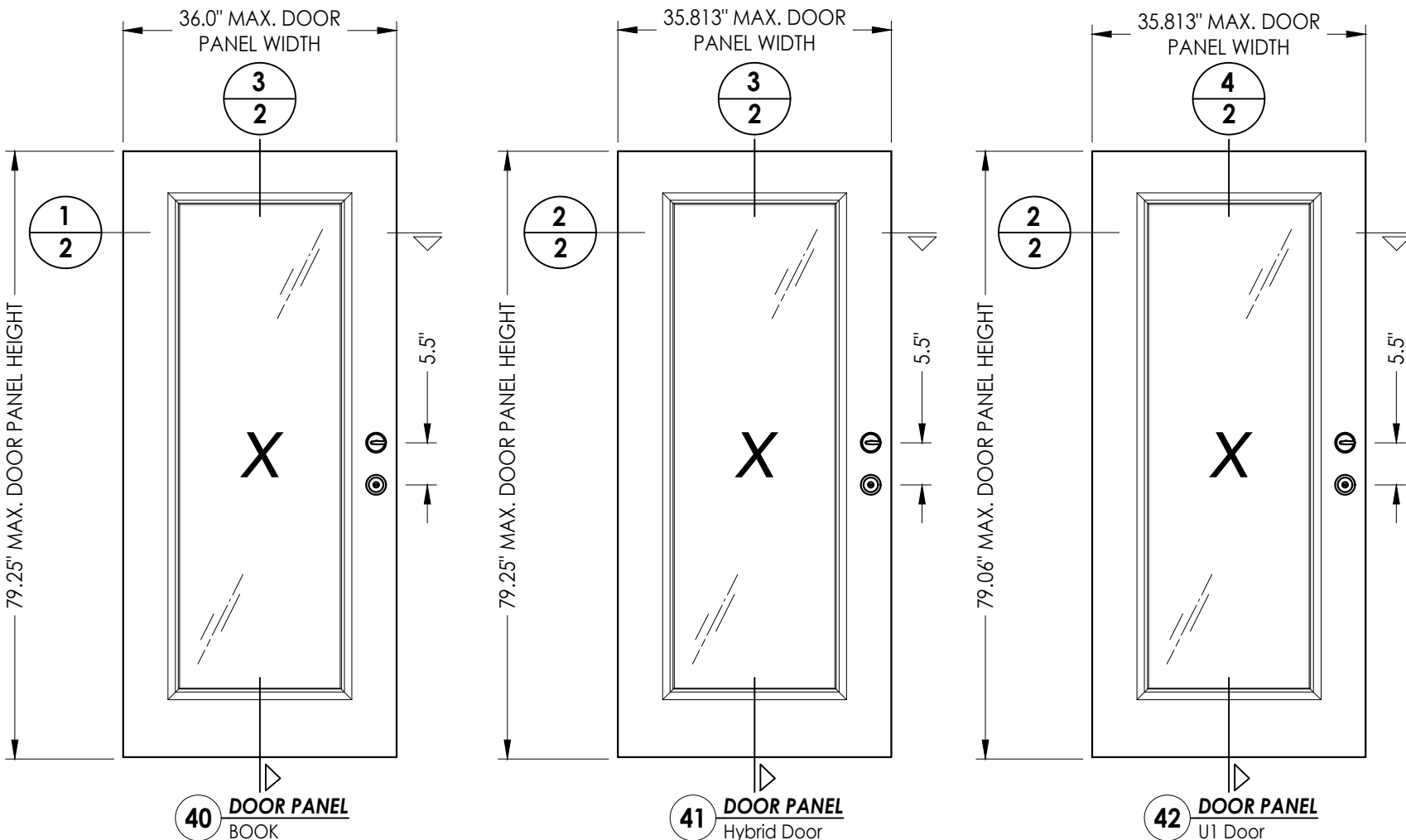
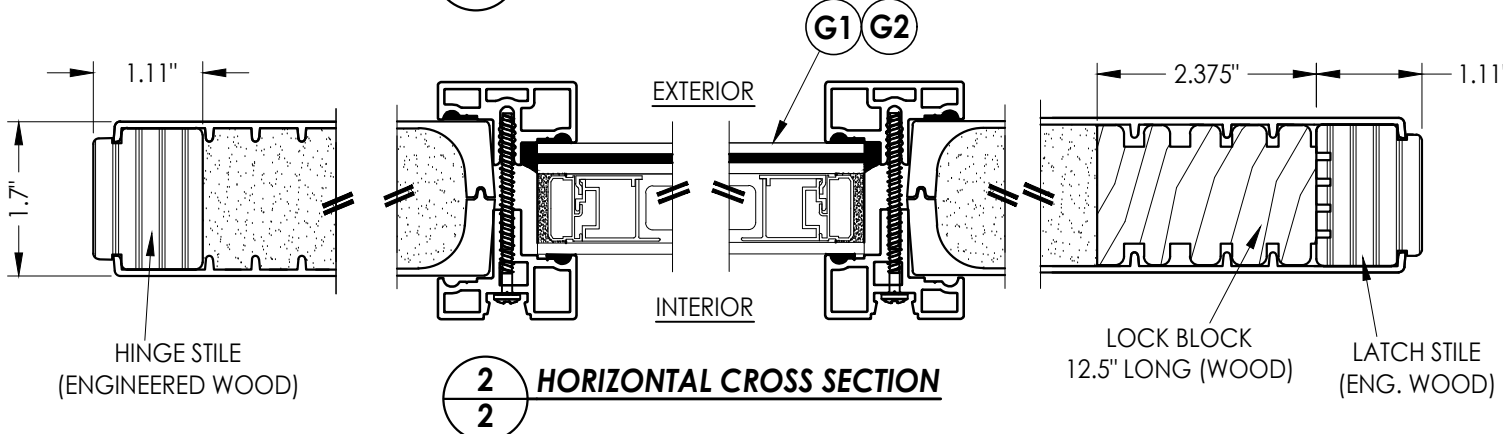
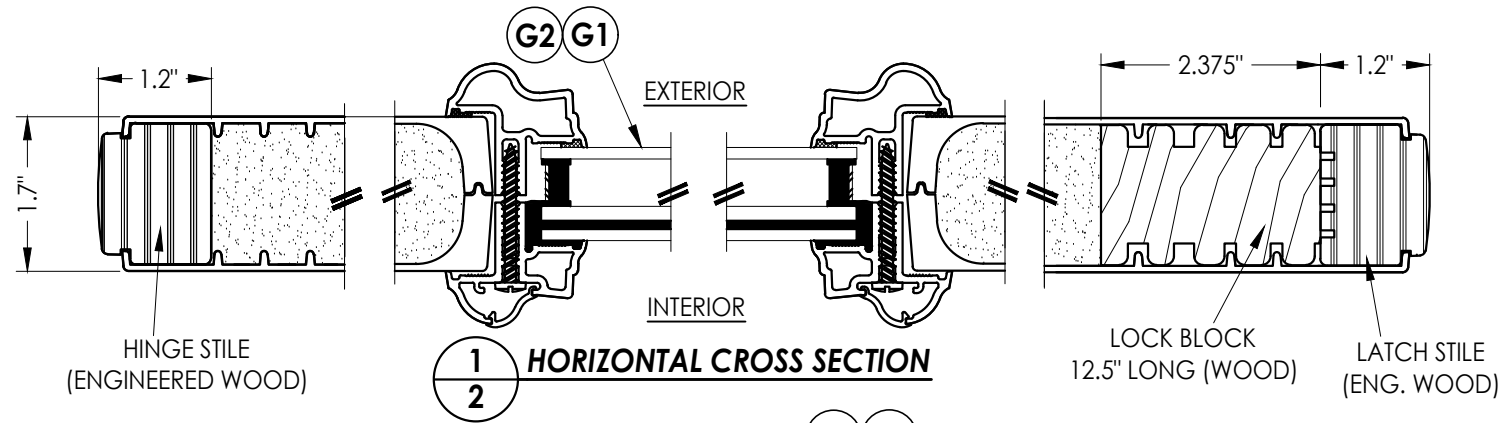
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT: THERMA-TRU  
FIBERGLASS DOOR

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

NO.	DATE	REVISIONS
1	8/22/23	UPDATE TO 8TH ED. (2023) FBC

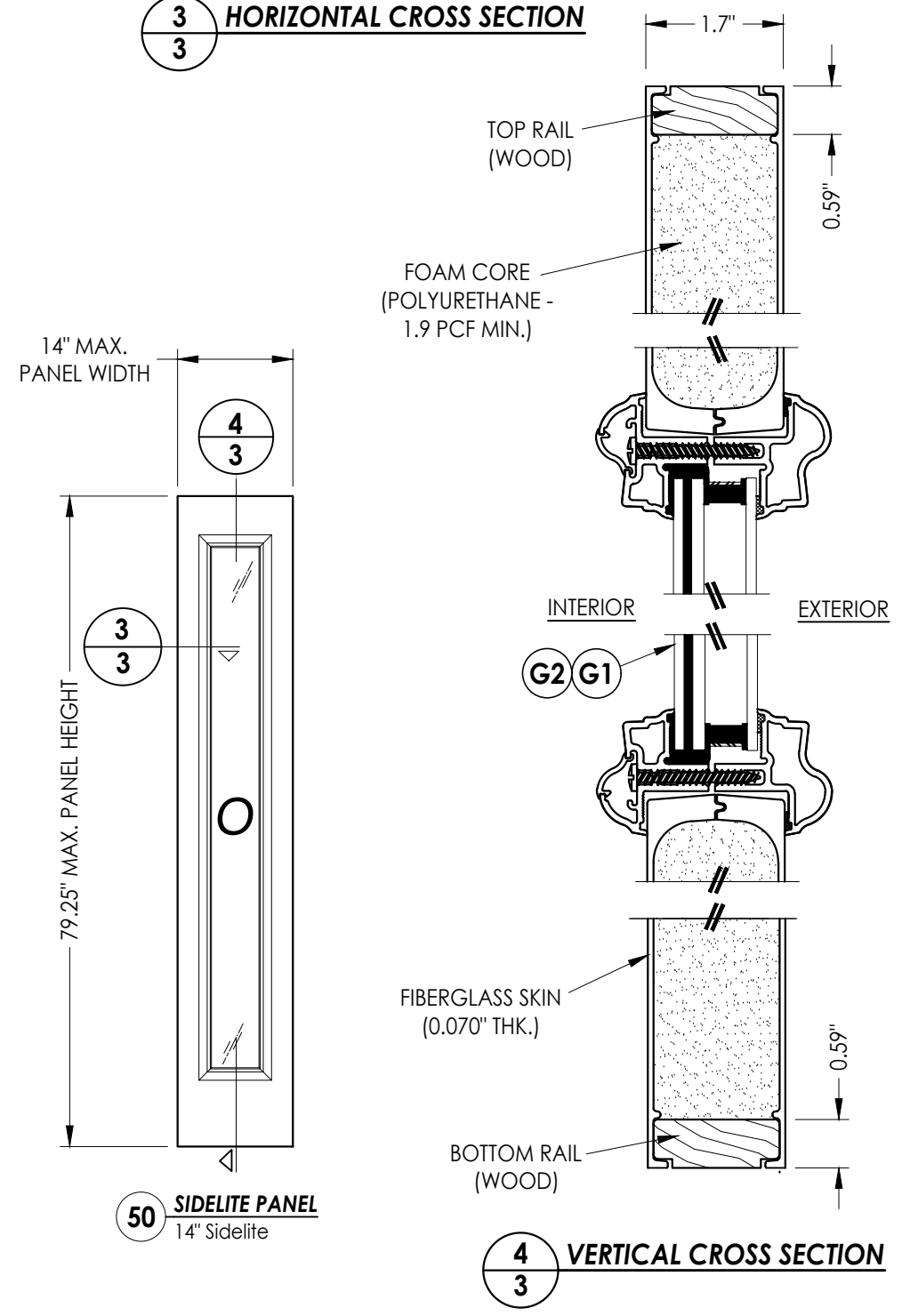
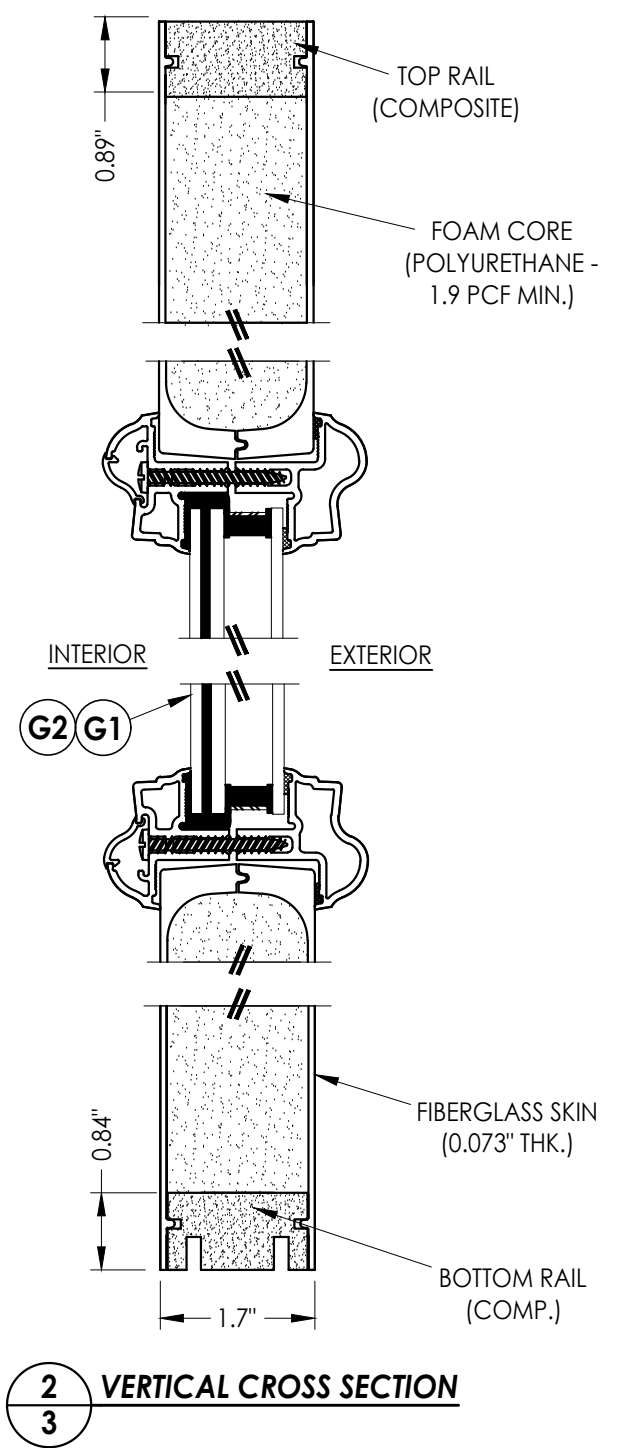
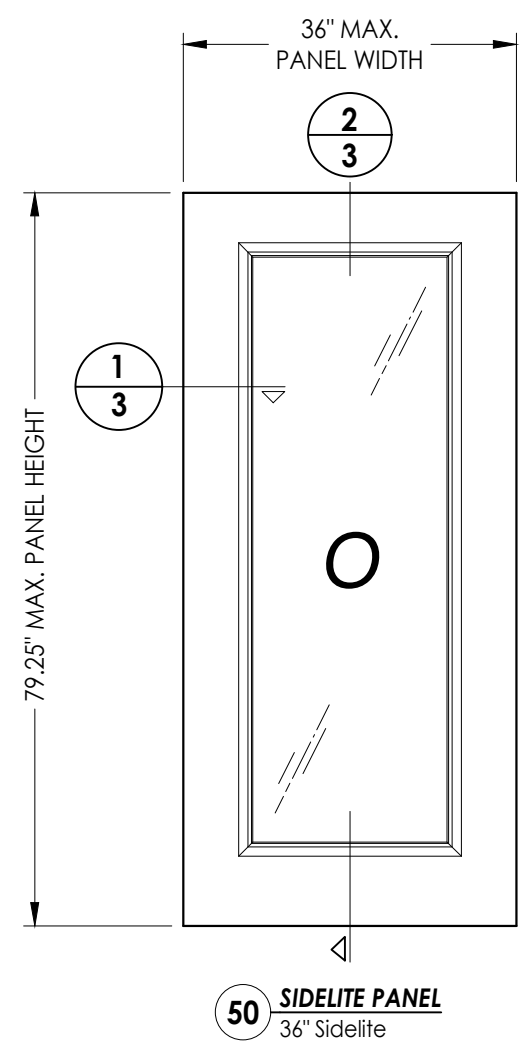
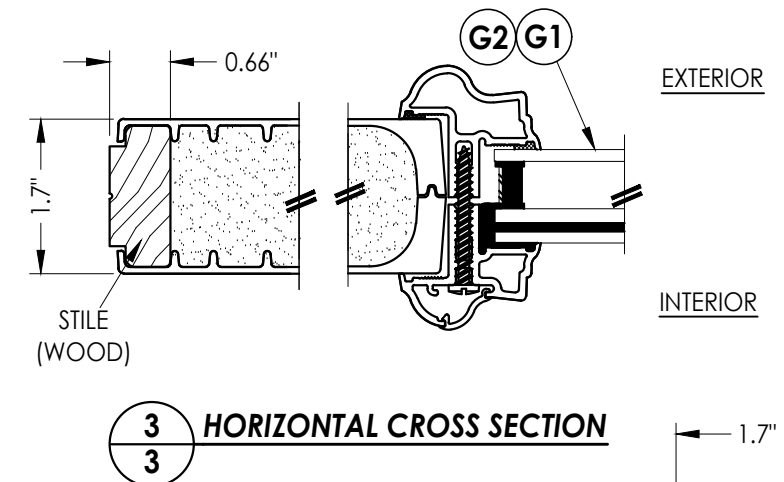
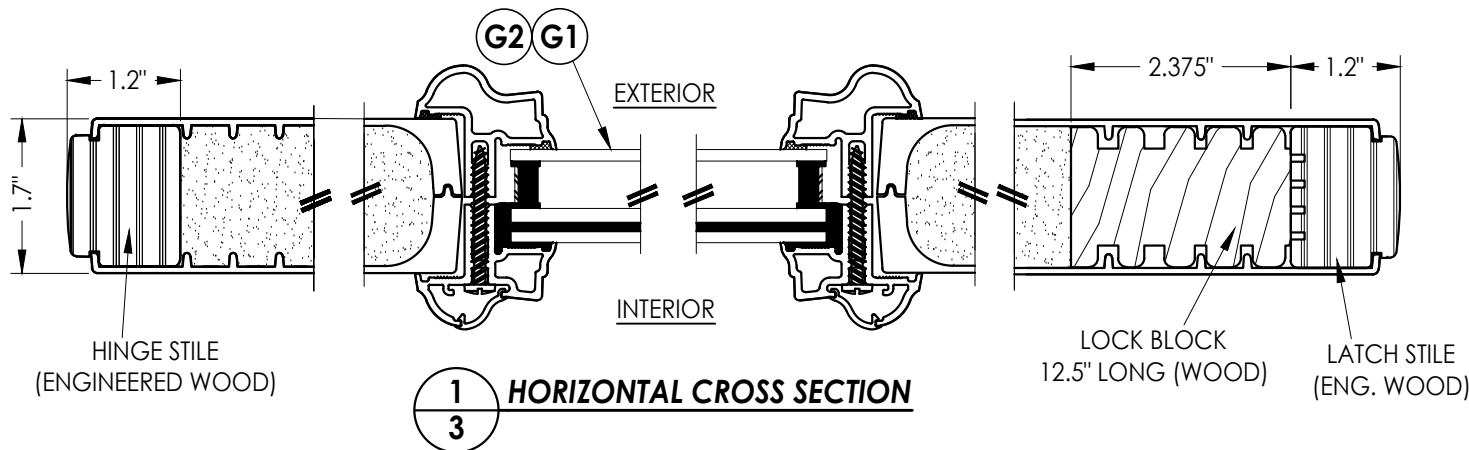
DATE: 4/13/21  
SCALE: N.T.S.  
DWG. BY: RW  
CHK. BY: LFS  
DRAWING NO.:  
FL-21138.20  
SHEET 1 OF 13



Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT:		THERMA-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY:		DOOR PANEL DETAILS	
NO.	DATE	BY	REVISIONS
1	8/22/23	LFS	UPDATE TO 8TH ED. (2023) FBC
DATE:		4/13/21	
SCALE:		N.T.S.	
DWG. BY:		RW	
CHK. BY:		LFS	
DRAWING NO.:		FL-21138.20	
SHEET		2 OF 13	



Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

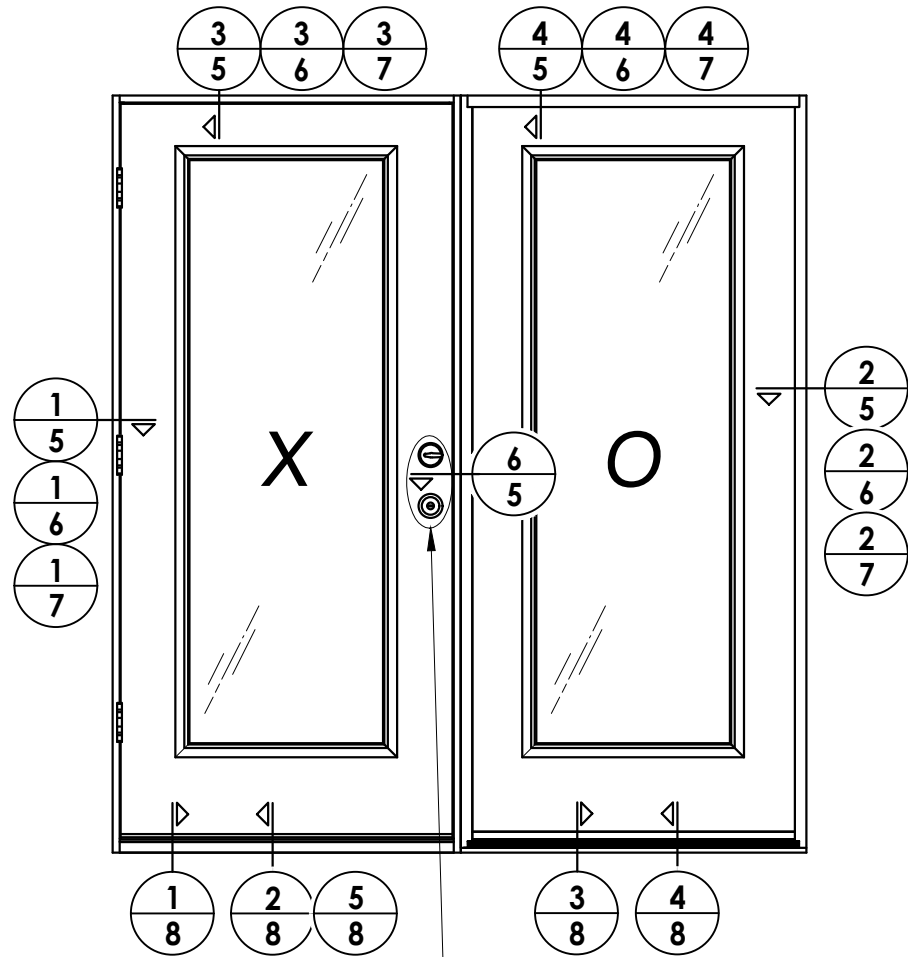
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

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

NO.	DATE	DESCRIPTION	BY
1	8/22/23	UPDATE TO 8TH ED. (2023)	LFS

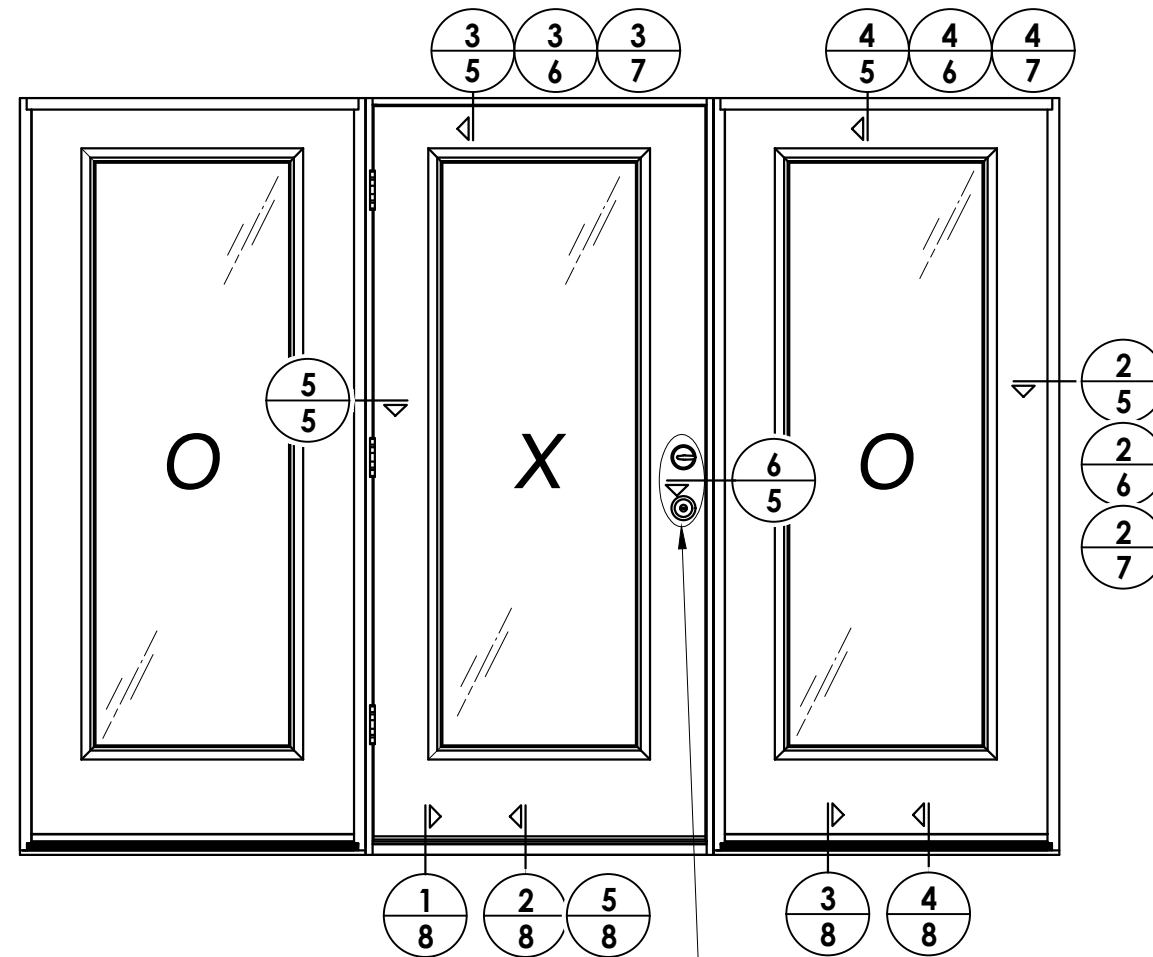
REVISIONS

DATE: 4/13/21  
SCALE: N.T.S.  
DWG. BY: RW  
CHK. BY: LFS  
DRAWING NO.: FL-21138.20  
SHEET 3 OF 13



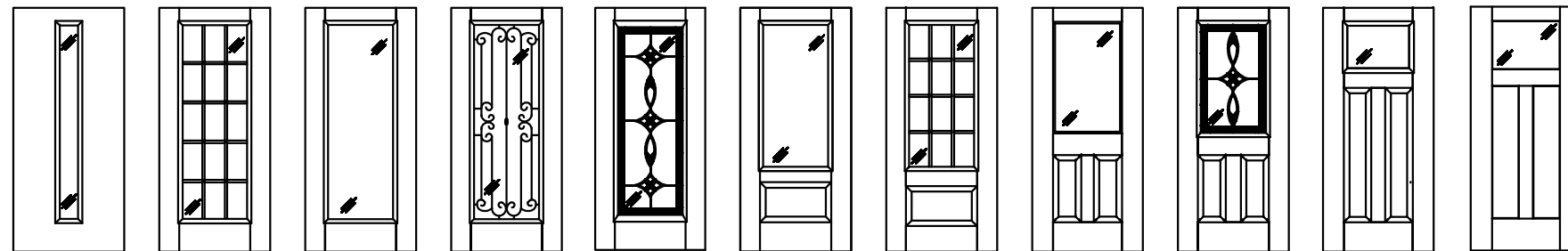
SEE HARDWARE CHART

ELEVATION  
XO



SEE HARDWARE CHART

ELEVATION  
OXO



**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 : MPDGART (3 pt. Manual Tongue)

Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT: THERMA-TRU  
FIBERGLASS DOOR

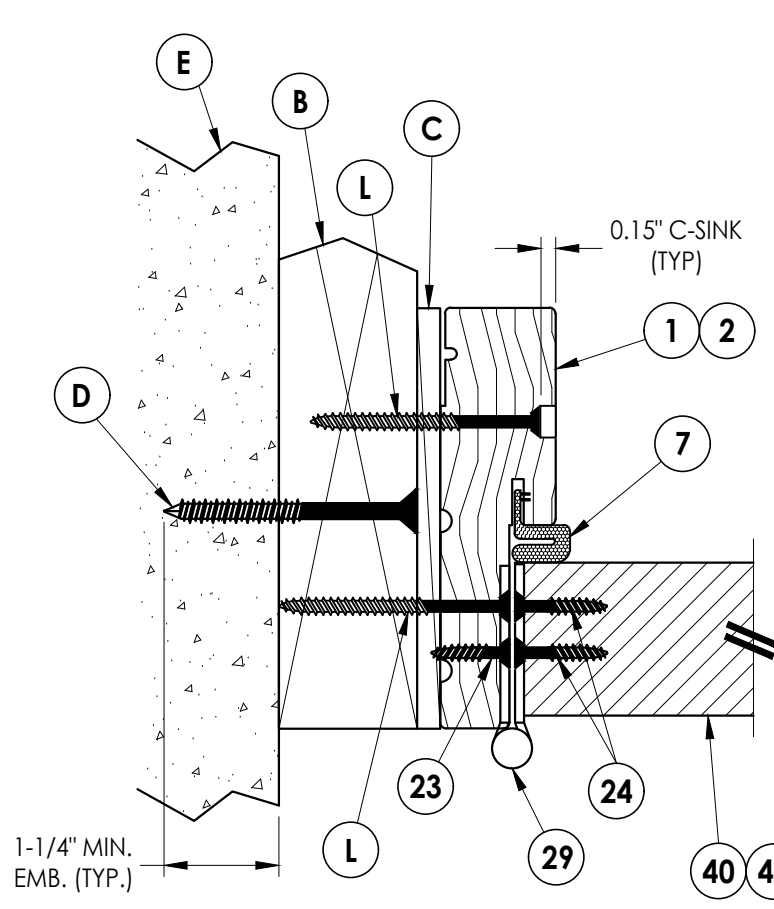
PART OR ASSEMBLY:  
ELEVATIONS

NO.	DATE	BY
1	8/22/23	LFS

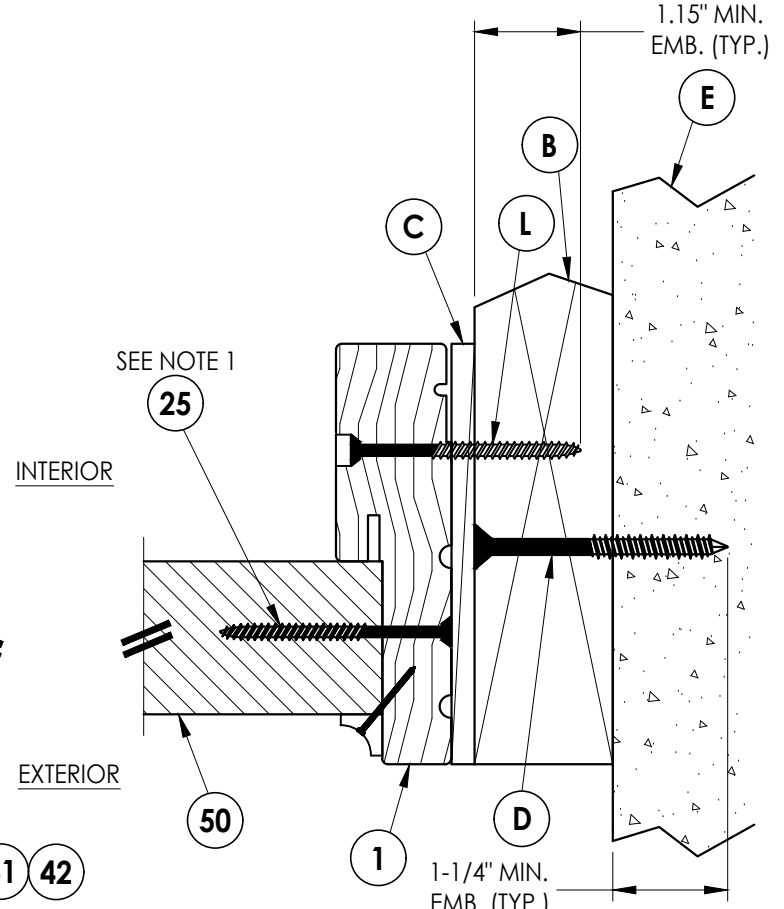
UPDATE TO 8TH ED. (2023) FBC

REVISIONS

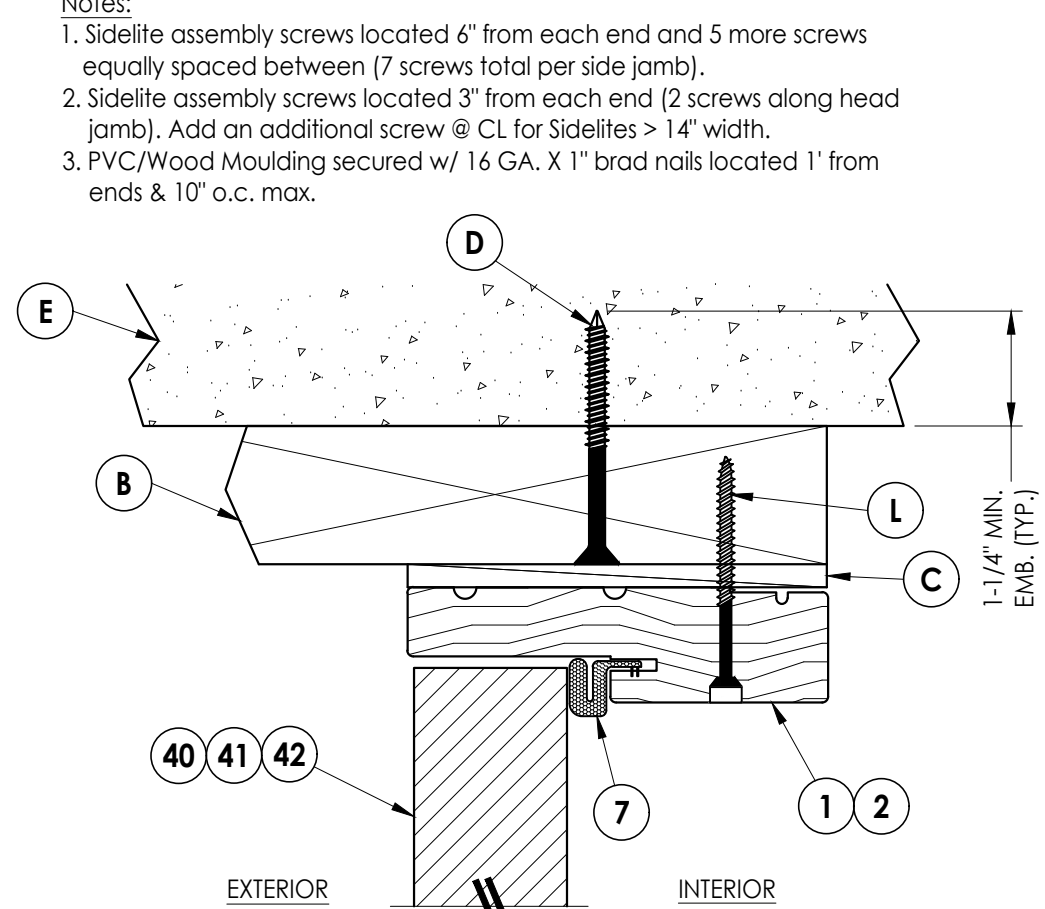
DATE: 4/13/21  
SCALE: N.T.S.  
DWG. BY: RW  
CHK. BY: LFS  
DRAWING NO.: FL-21138.20  
SHEET 4 OF 13



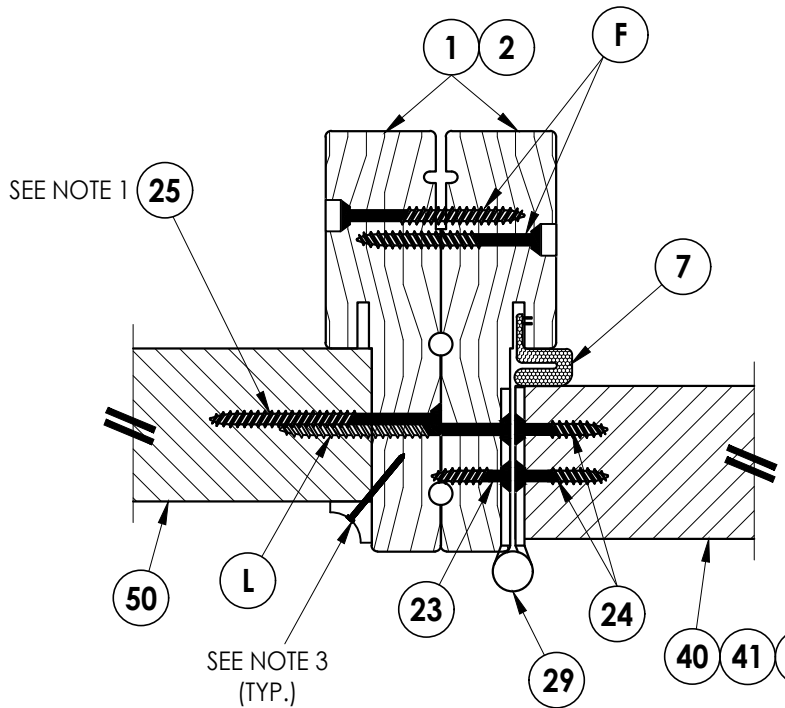
**1 HORIZONTAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)



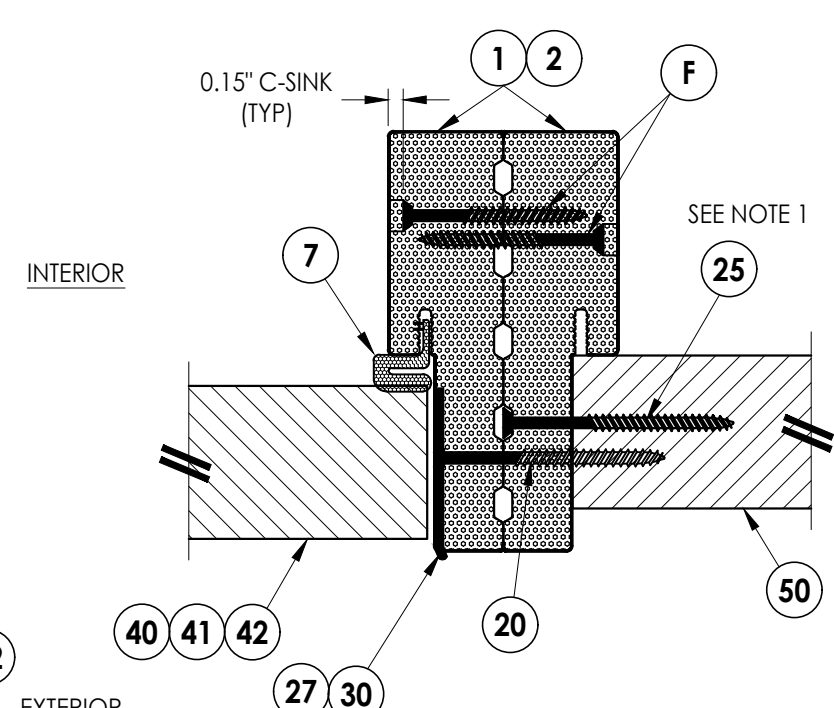
**2 HORIZONTAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)



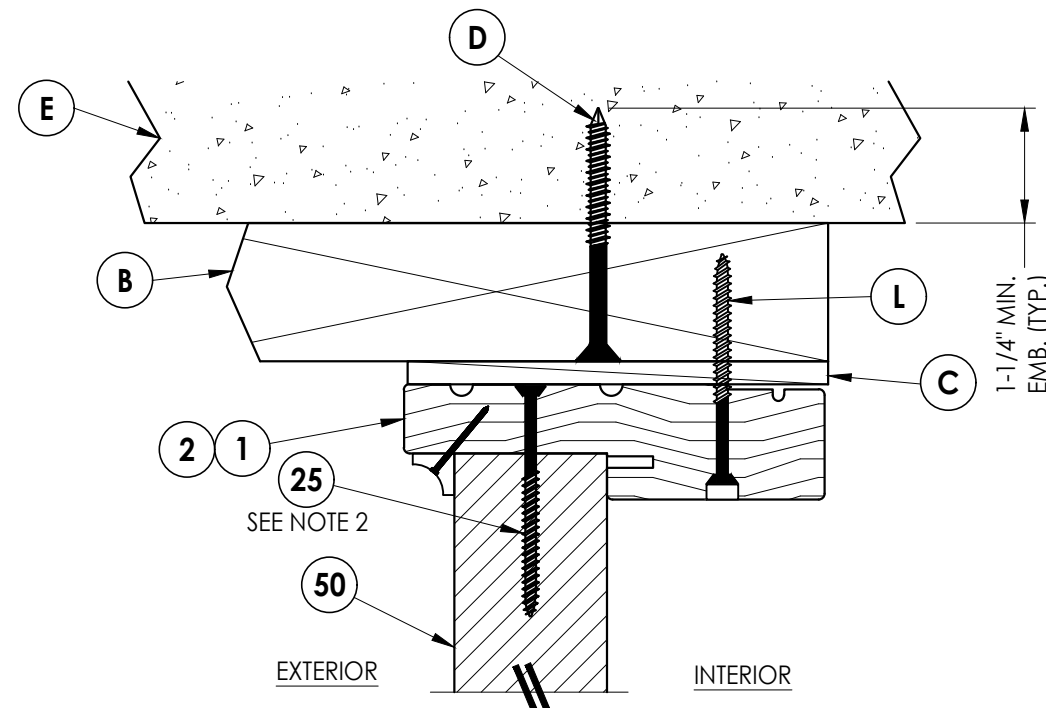
**3 VERTICAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)



**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)

- Notes:
- Sidelite assembly screws located 6" from each end and 5 more screws equally spaced between (7 screws total per side jamb).
  - Sidelite assembly screws located 3" from each end (2 screws along head jamb). Add an additional screw @ CL for Sidelites > 14" width.
  - PVC/Wood Moulding secured w/ 16 GA. X 1" brad nails located 1' from ends & 10" o.c. max.

Z:\2023 FBC Drawings\Therma-Tru\FL-21138 R7\FL-21138.19-21.dwg

Documents Prepared By:  
 Lyndon F. Schmidt  
 P.E. No. 43409

**RW** BUILDING CONSULTANTS, INC.  
 P.O. Box 230, Valrico, FL 33595  
 Phone No.: 813.659.9197  
 FBPE Registry No. 9813

PRODUCT: THERMA-TRU FIBERGLASS DOOR  
 PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (2X BUCK)

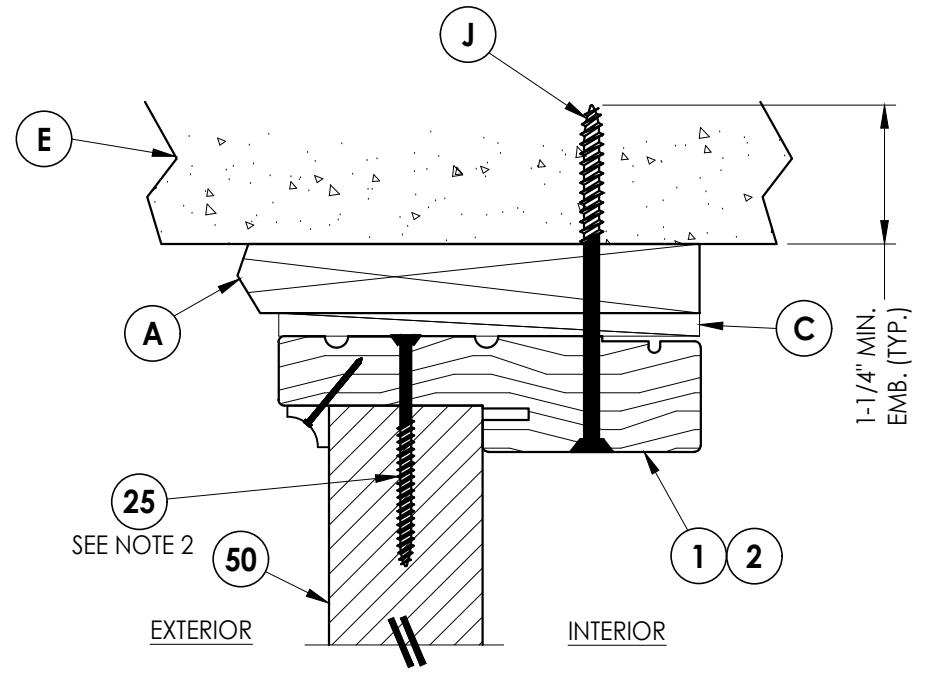
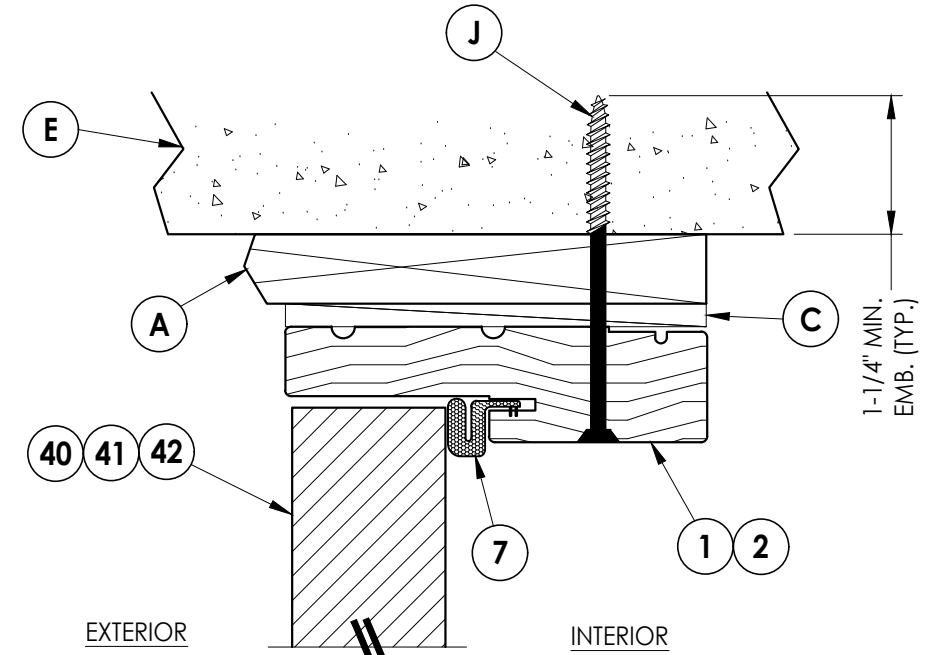
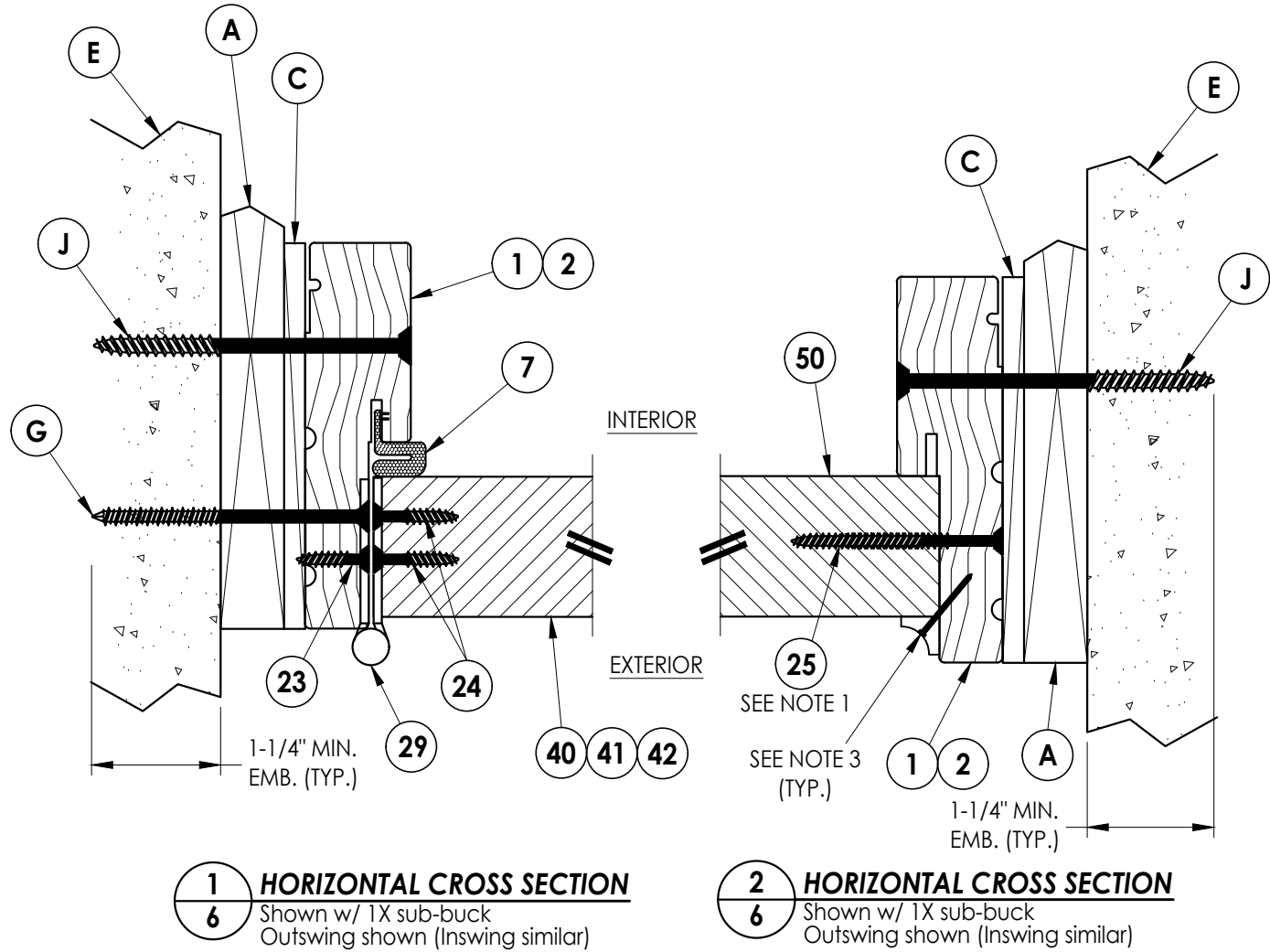
NO.	DATE	REVISIONS	LFS	BY
1	8/22/23	UPDATE TO 8TH ED. (2023)	FBC	

DATE: 4/13/21  
 SCALE: N.T.S.  
 DWG. BY: RW  
 CHK. BY: LFS  
 DRAWING NO.: FL-21138.20  
 SHEET 5 OF 13

© 2021 R.W. BUILDING CONSULTANTS INC.

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 (2 screws along head jamb). Add an additional screw @ CL for Sidelites > 14" width.
3. PVC/Wood Moulding secured w/ 16 GA. X 1" brad nails located 1' from ends & 10" o.c. max.



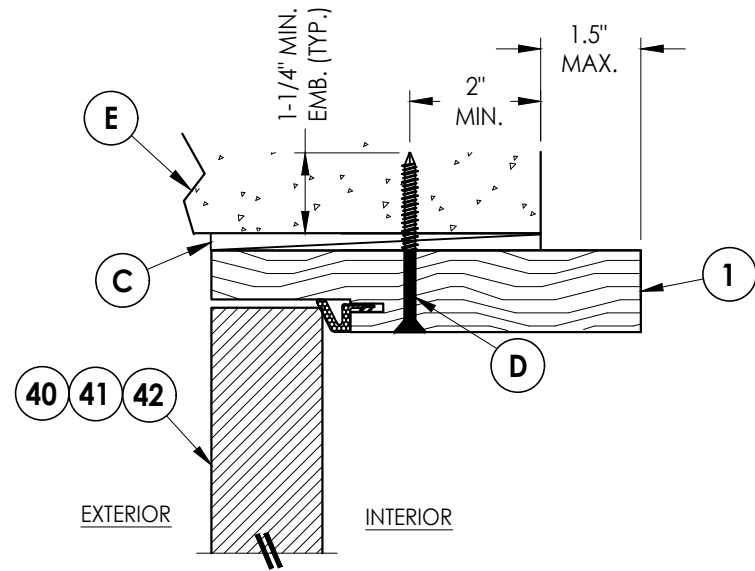
Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Vairico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

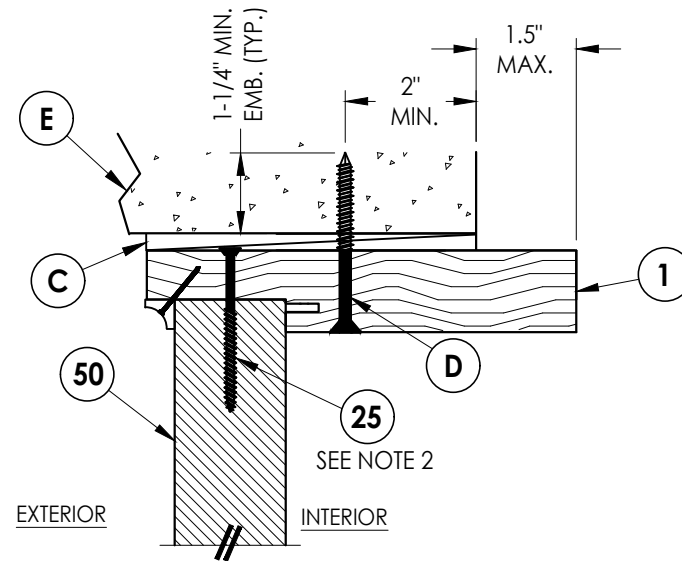
PRODUCT: THERMA-TRU FIBERGLASS DOOR  
PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (1X BUCK)

NO.	DATE	REVISIONS
1	8/22/23	UPDATE TO 8TH ED. (2023) FBC
		LFS
		BY

DATE:	4/13/21
SCALE:	N.T.S.
DWG. BY:	RW
CHK. BY:	LFS
DRAWING NO.:	FL-21138.20
SHEET	6 OF 13



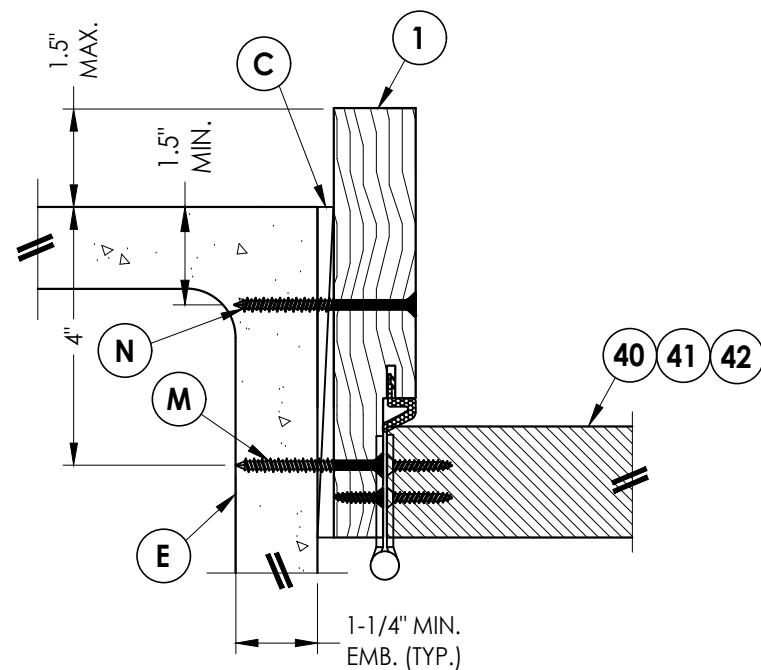
**3** **HORIZONTAL CROSS SECTION**  
**7** Shown Direct to Masonry  
 Outswing only w/ 6-9/16" jamb



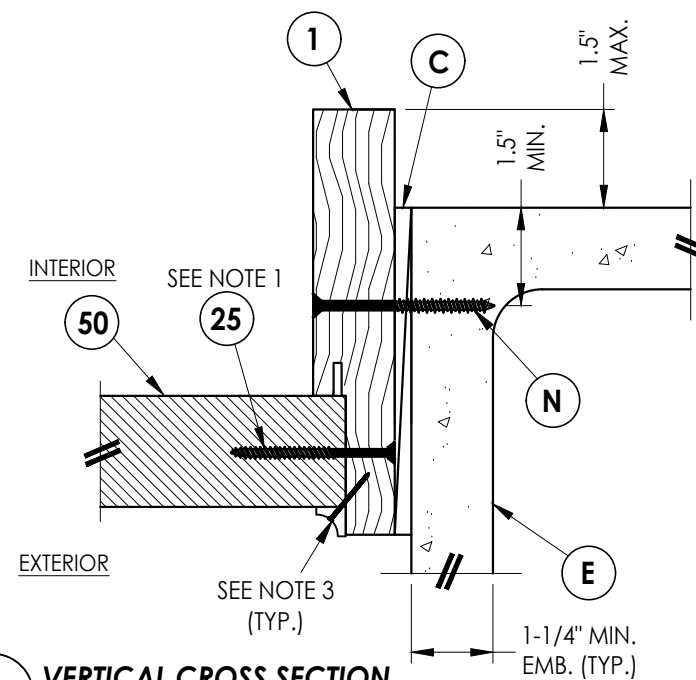
**4** **VERTICAL CROSS SECTION**  
**7** Shown Direct to Masonry  
 Outswing only w/ 6-9/16" jamb

**Notes:**

- Sidelite assembly screws located 6" from each end plus 5 more equally spaced between (7 screws total per side jamb).
- Sidelite assembly screws located 3" from each end (2 screws along head jamb). Add an additional screw @ CL for Sidelites > 14" width
- PVC/Wood Moulding secured w/ 16 GA. X 1" brad nails located 1" from ends & 10" o.c. max.



**1** **HORIZONTAL CROSS SECTION**  
**7** Shown Direct to Masonry  
 Outswing only w/ 6-9/16" jamb



**2** **VERTICAL CROSS SECTION**  
**7** Shown Direct to Masonry  
 Outswing only w/ 6-9/16" jamb

Documents Prepared By:  
 Lyndon F. Schmidt  
 P.E. No. 43409

**RW** BUILDING CONSULTANTS, INC.  
 P.O. Box 230, Vairico, FL 33595  
 Phone No.: 813.659.9197  
 FBPE Registry No. 9813

PRODUCT: THERMA-TRU  
 FIBERGLASS DOOR

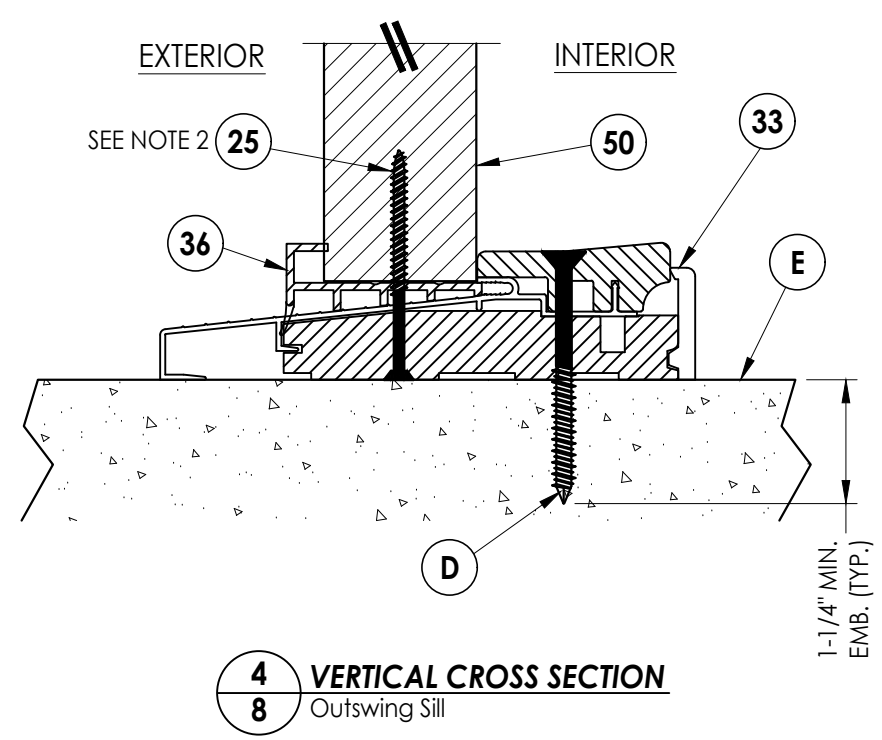
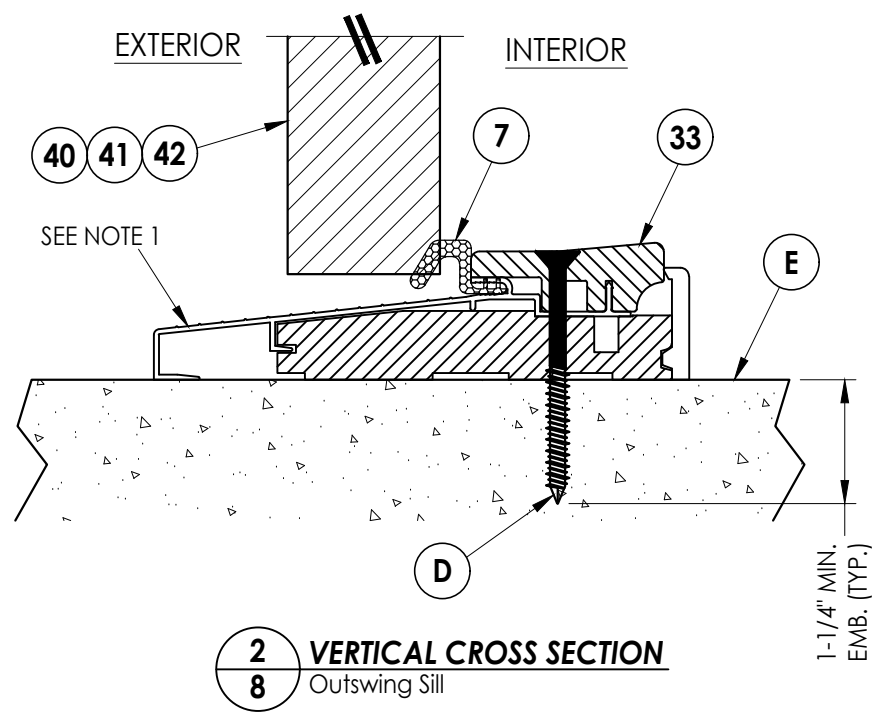
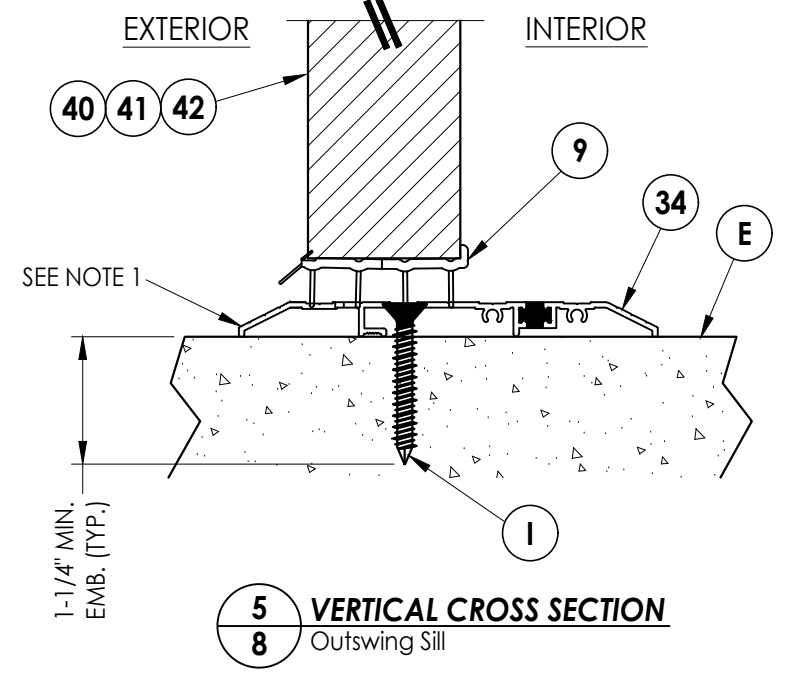
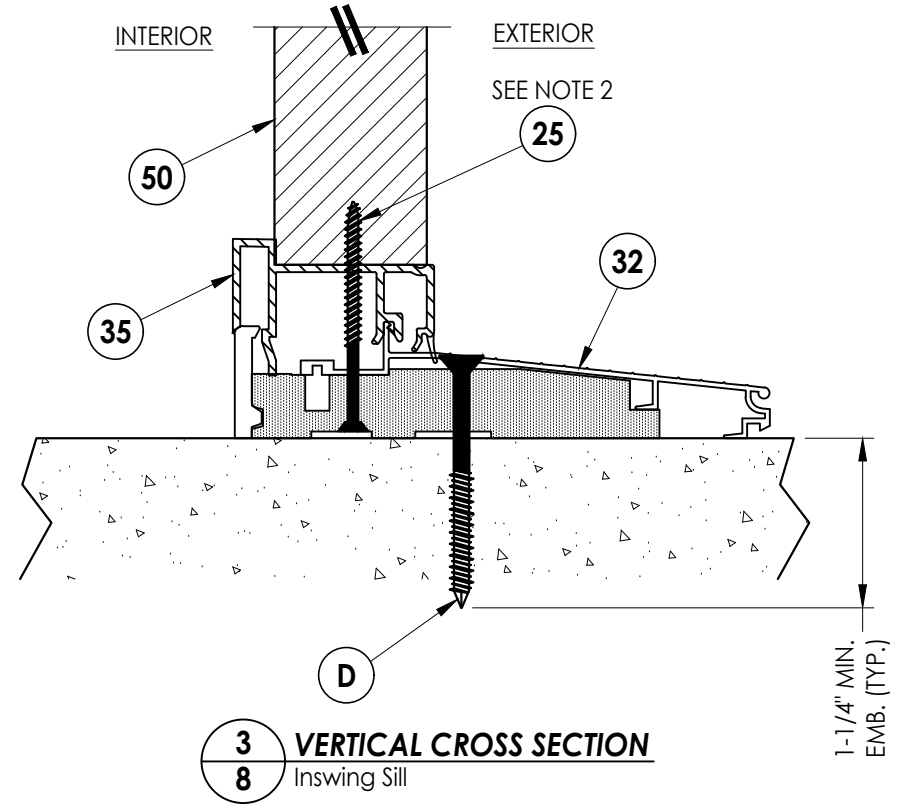
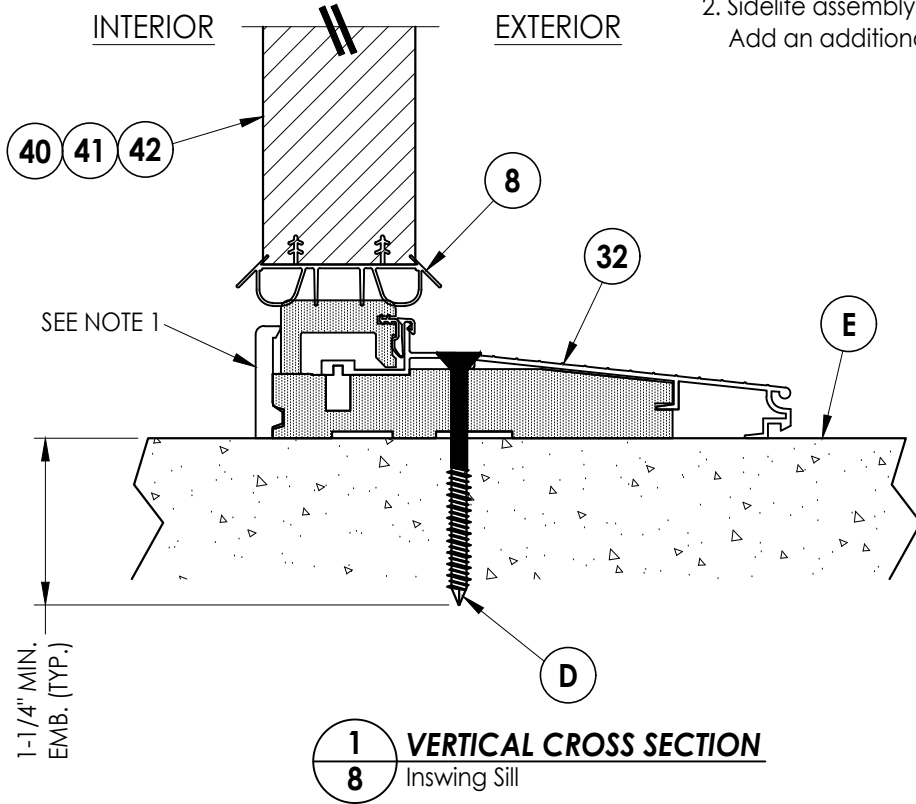
PART OR ASSEMBLY:  
 HORIZONTAL & VERTICAL  
 SECTIONS (DIRECT TO MASONRY)

NO.	DATE	BY
1	8/22/23	LFS
	UPDATE TO 8TH ED. (2023)	FBC

REVISIONS

DATE: 8/02/16  
 SCALE: N.T.S.  
 DWG. BY: RW  
 CHK. BY: LFS  
 DRAWING NO.: FL-21138.20  
 SHEET 7 OF 13

- Notes:
- 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.
  - Sidelite assembly screws located 3" from each end (2 screws along sill jamb).  
Add an additional screw @ CL for Sidelites > 14" width.



Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT:  
THERMA-TRU  
FIBERGLASS DOOR

PART OR ASSEMBLY:  
VERTICAL CROSS  
SECTIONS (THRESHOLDS)

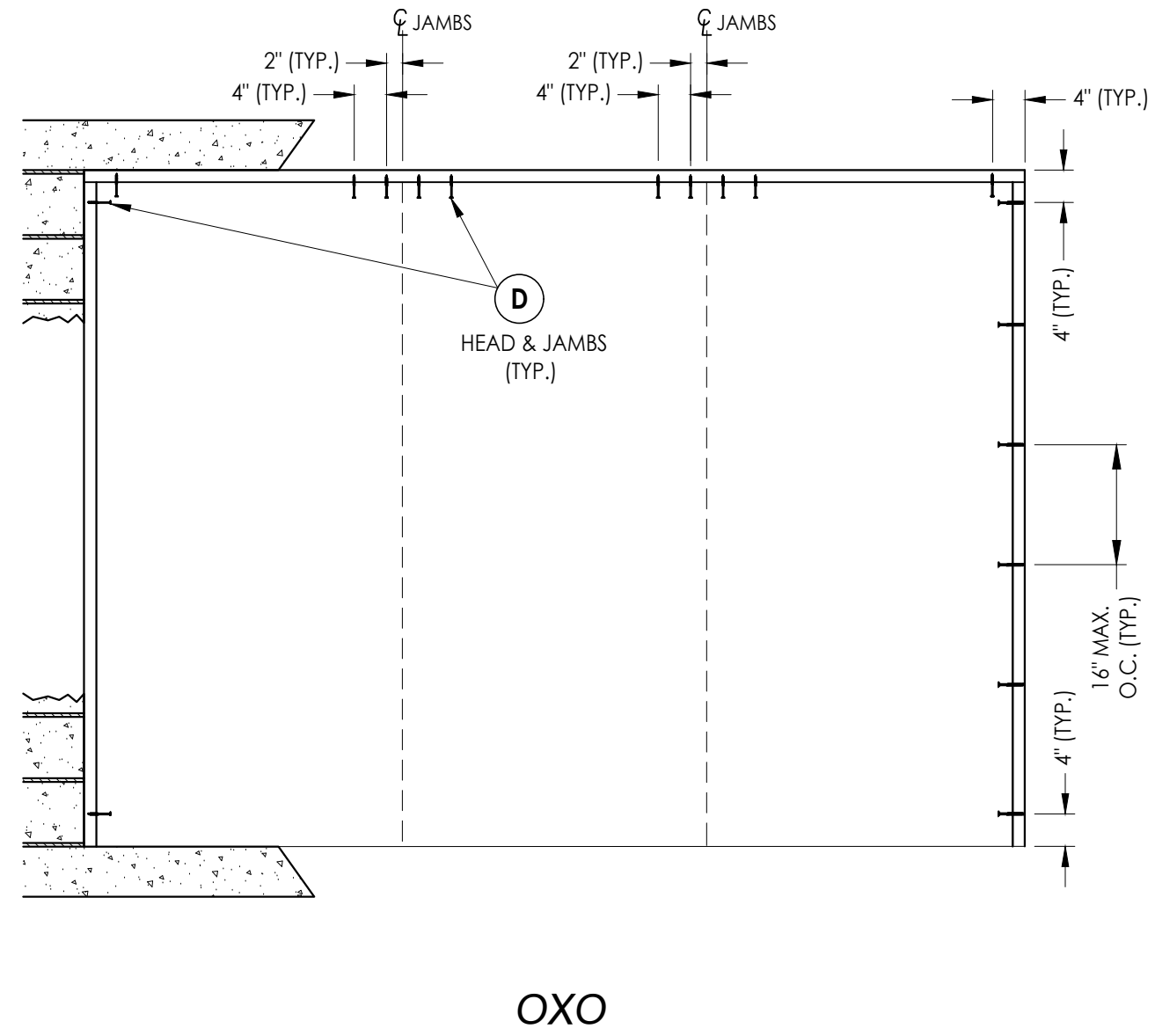
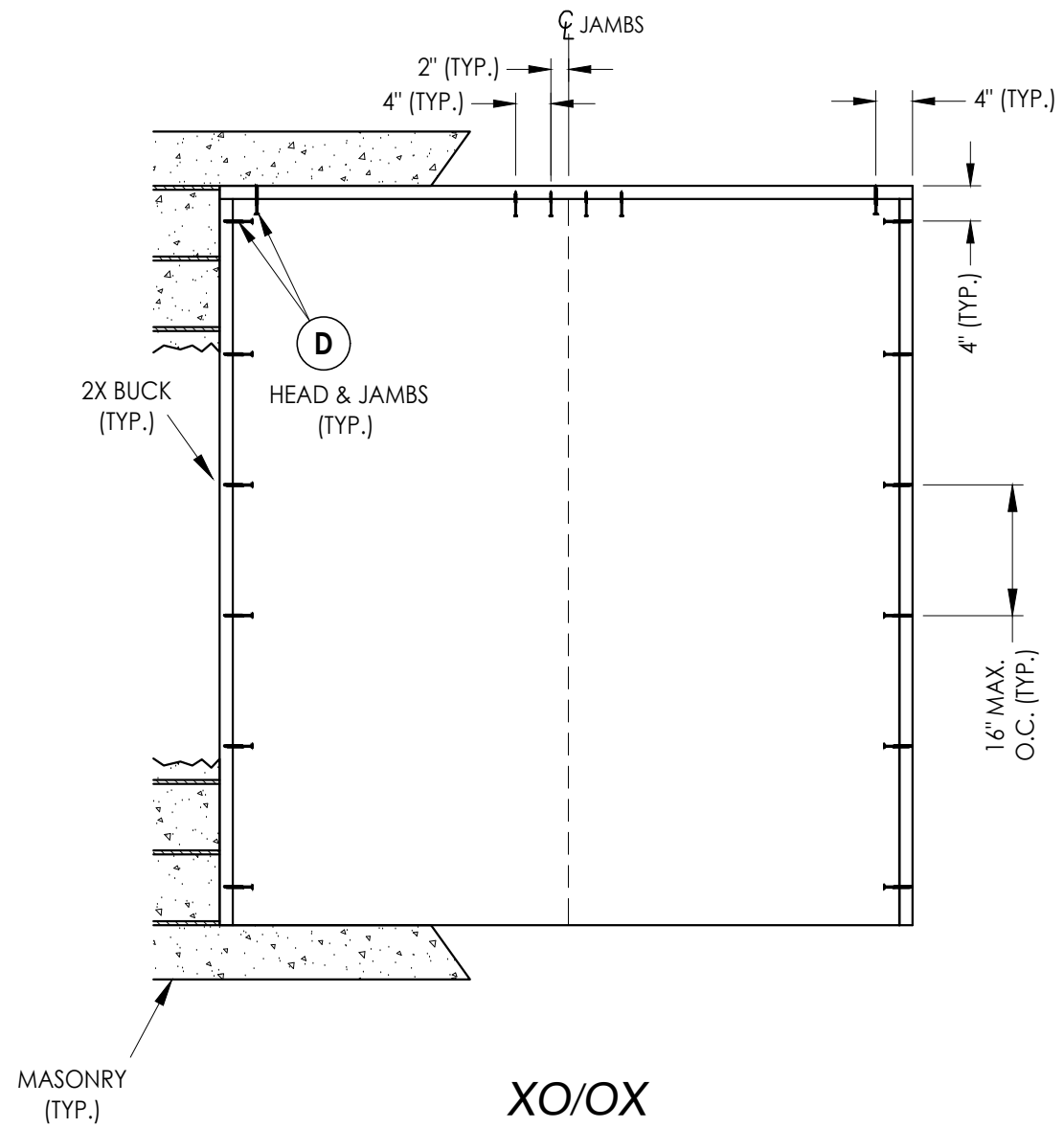
NO.	DATE	BY
1	8/22/23	LFS
UPDATE TO 8TH ED. (2023) FBC		

REVISIONS

DATE:	4/13/21
SCALE:	N.T.S.
DWG. BY:	RW
CHK. BY:	LFS
DRAWING NO.:	FL-21138.20
SHEET	8 of 13



Z:\2023 FBC Drawings\Therma-Tru\FL-21138 R7\FL-21138.19-21.dwg



**2X BUCK ANCHORING**

Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT:  
THERMA-TRU  
FIBERGLASS DOOR

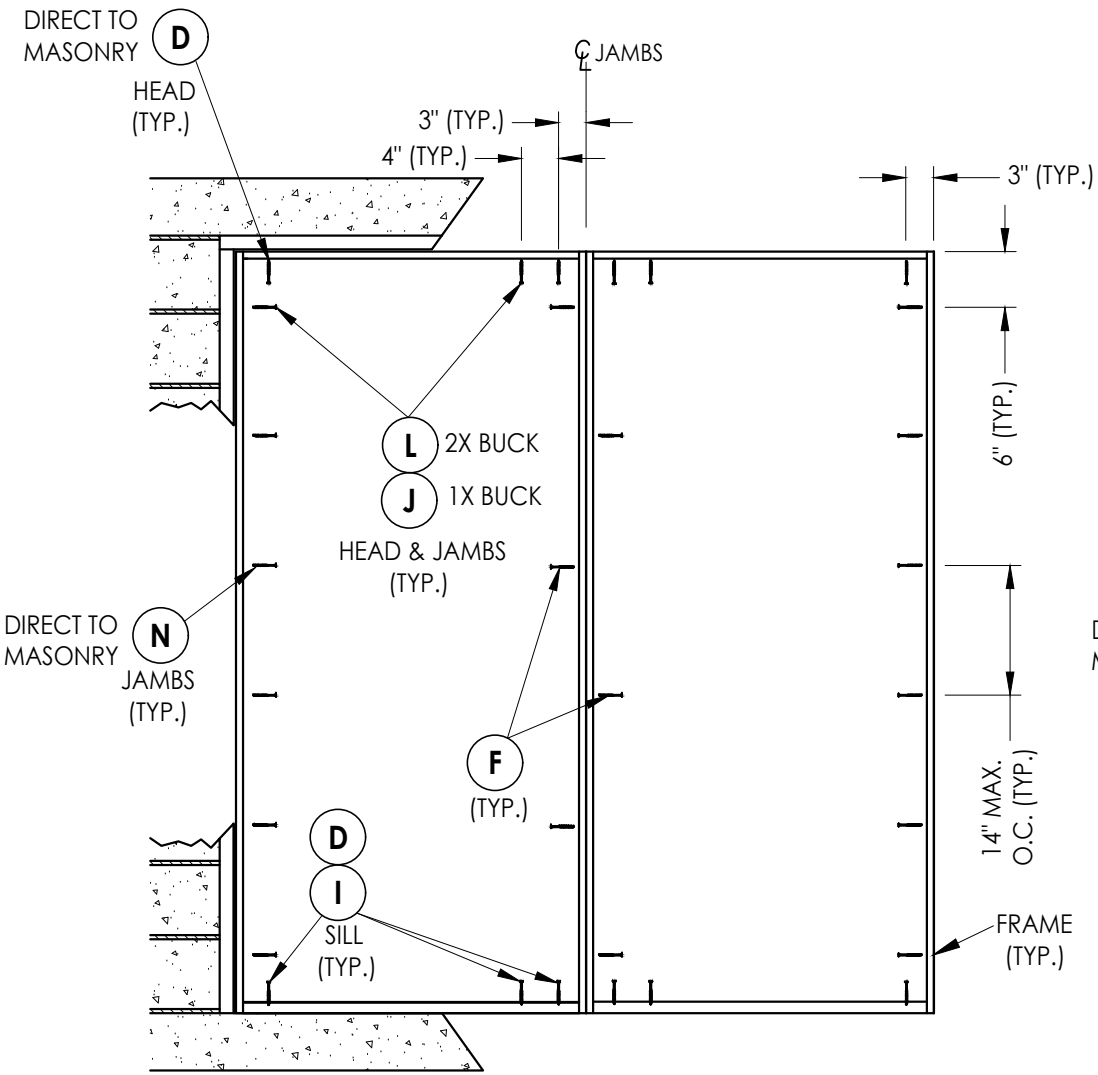
PART OR ASSEMBLY:  
BUCK ANCHORING

NO.	DATE	DESCRIPTION	BY
1	8/22/23	UPDATE TO 8TH ED. (2023) FBC	LFS

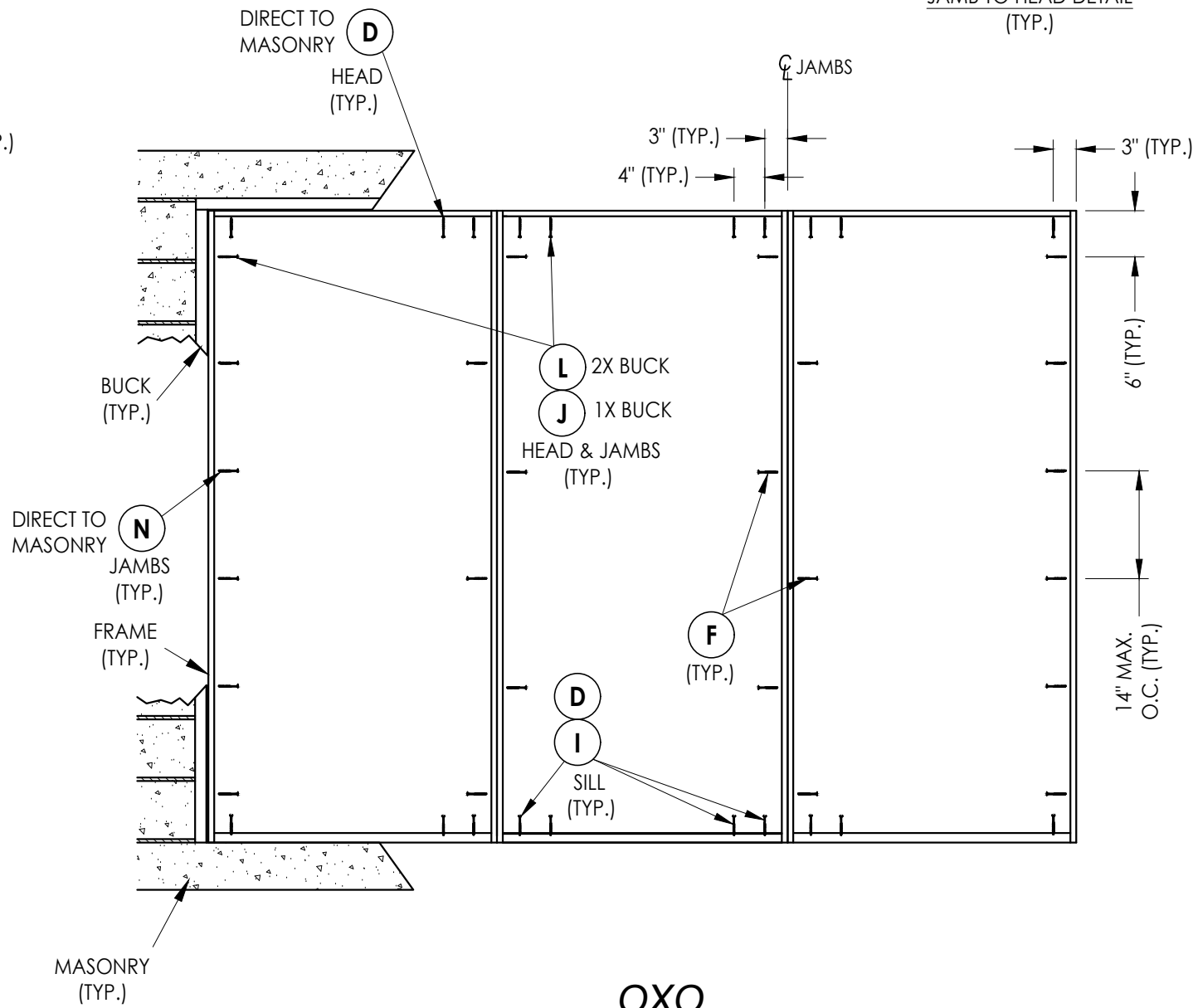
REVISIONS

DATE: 4/13/21  
SCALE: N.T.S.  
DWG. BY: RW  
CHK. BY: LFS  
DRAWING NO.: FL-21138.20  
SHEET 9 OF 13

Z:\2023 FBC Drawings\Therma-Tru\FL-21138 R7\FL-21138.19-21.dwg

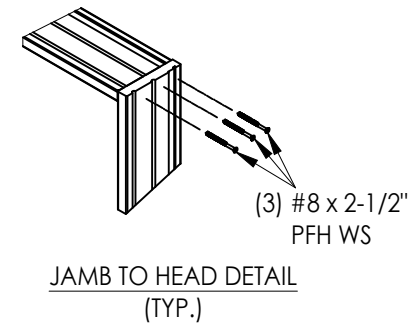


XO/OX



OXO

**FRAME ANCHORING**



Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT:  
THERMA-TRU  
FIBERGLASS DOOR

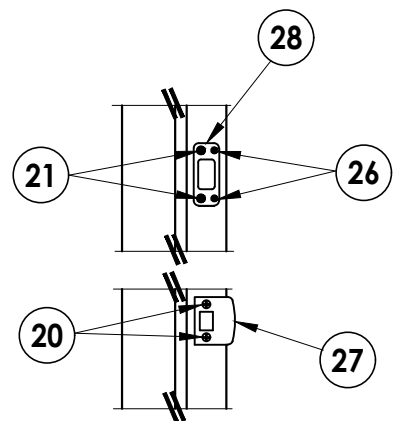
PART OR ASSEMBLY:  
FRAME ANCHORING

NO.	DATE	DESCRIPTION	BY
1	8/22/23	UPDATE TO 8TH ED. (2023)	LFS

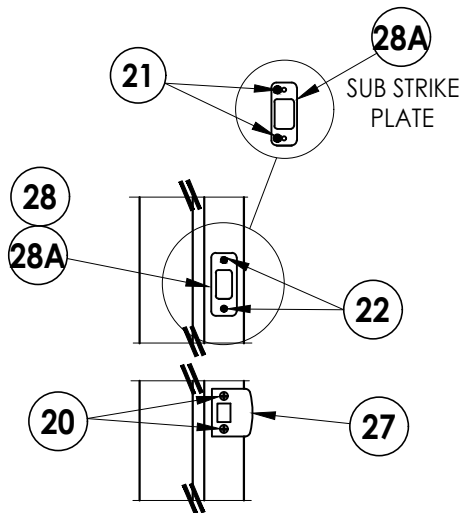
REVISIONS

DATE: 4/13/21  
SCALE: N.T.S.  
DWG. BY: RW  
CHK. BY: LFS  
DRAWING NO.: FL-21138.20  
SHEET 10 OF 13

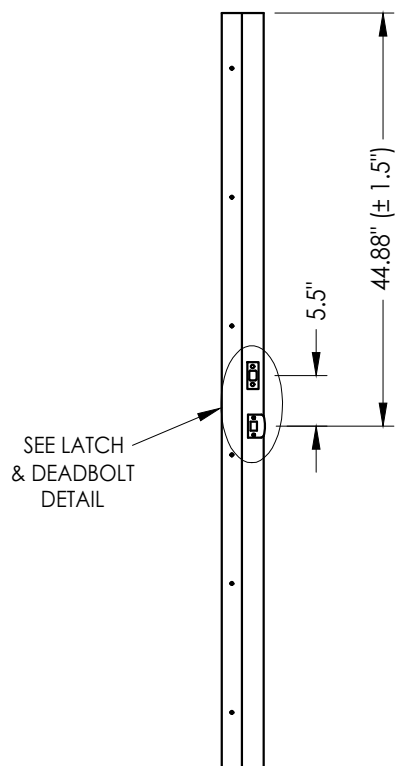
© 2021 R.W. BUILDING CONSULTANTS INC.



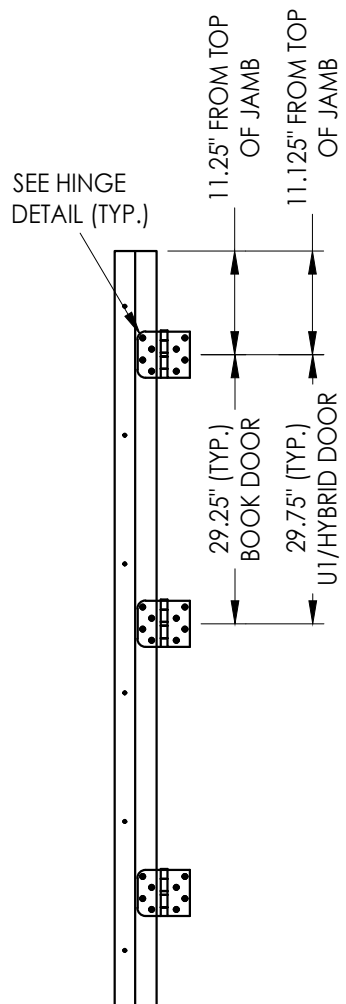
**LATCH & DEADBOLT DETAIL**  
Kwikset



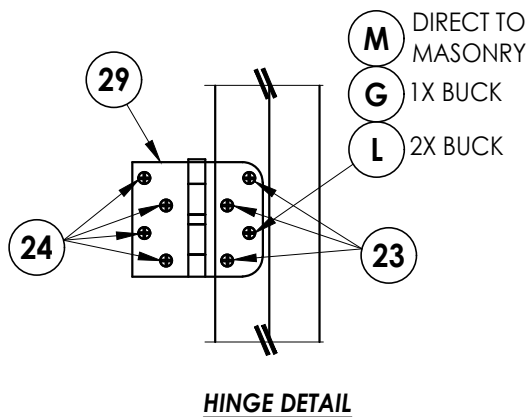
**LATCH & DEADBOLT DETAIL**  
Schlage



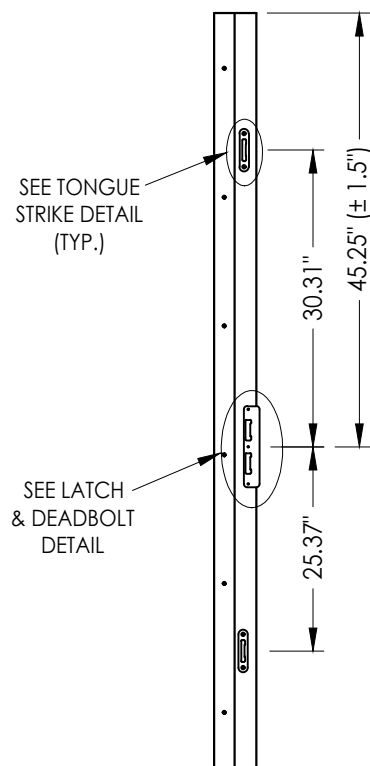
**STRIKE JAMB**  
Latch and Deadbolt



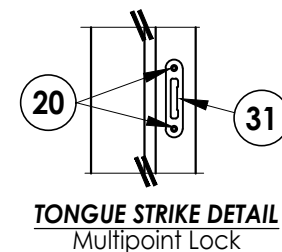
**HINGE JAMB**



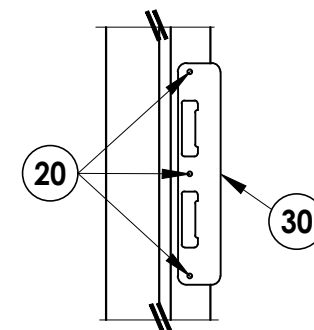
**HINGE DETAIL**



**STRIKE JAMB**  
Multipoint Lock



**TONGUE STRIKE DETAIL**  
Multipoint Lock



**LATCH & DEADBOLT DETAIL**  
Multipoint Lock

**LATCH & DEADBOLT STRIKE DETAILS**

**MULTIPOINT LOCK STRIKE DETAILS**

Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

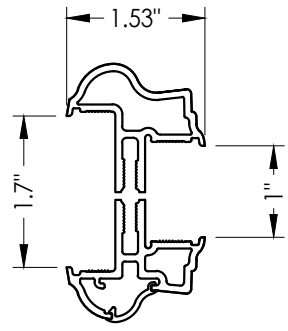
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Vairico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT:  
THERMA-TRU  
FIBERGLASS DOOR

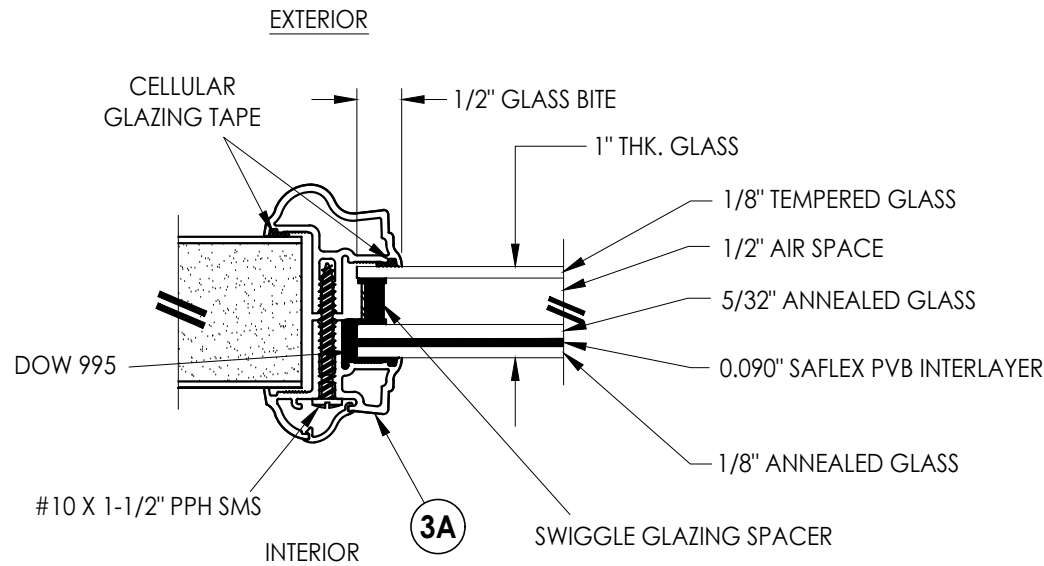
PART OR ASSEMBLY:  
HARDWARE DETAILS

NO.	DATE	DESCRIPTION	BY
1	8/22/23	UPDATE TO 8TH ED. (2023)	FBC
			LFS

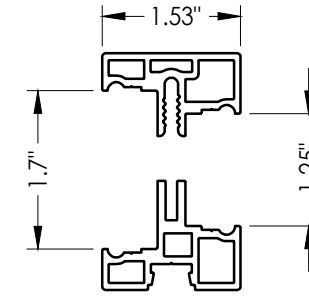
DATE: 4/13/21  
SCALE: N.T.S.  
DWG. BY: RW  
CHK. BY: LFS  
DRAWING NO.: FL-21138.20  
SHEET 11 OF 13



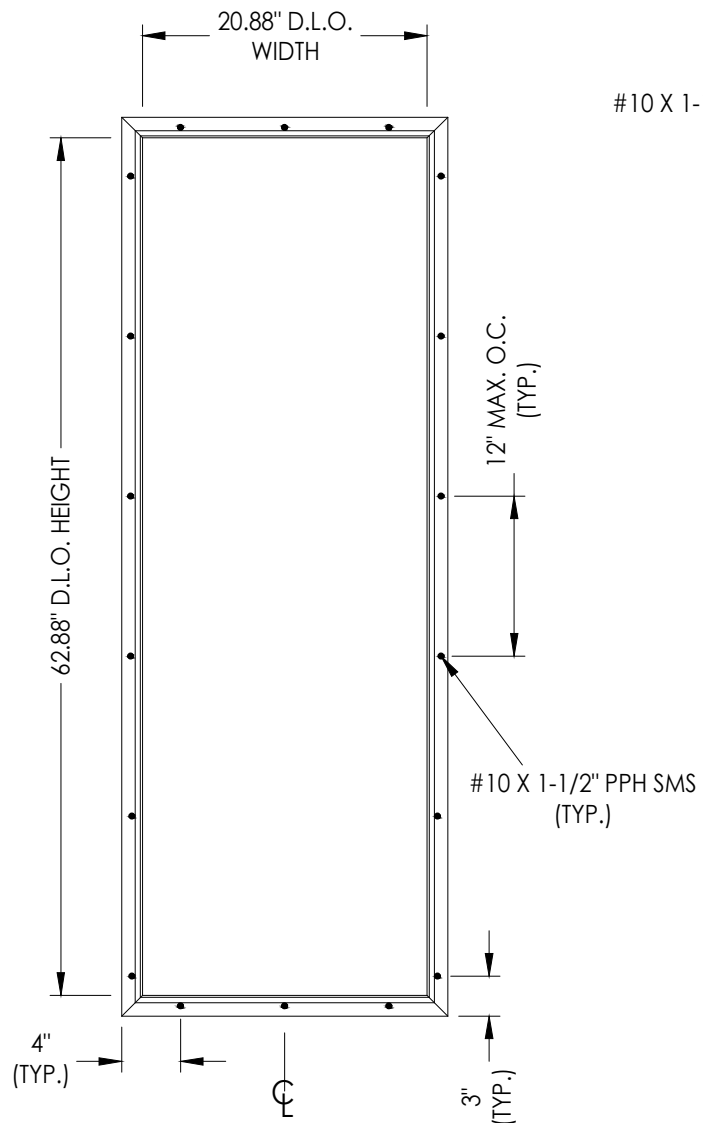
**3A ALUMINUM FRAME**  
Aluminum Impact Lite Frame



**G1 GLAZING DETAIL**  
Aluminum Impact Lite Frame

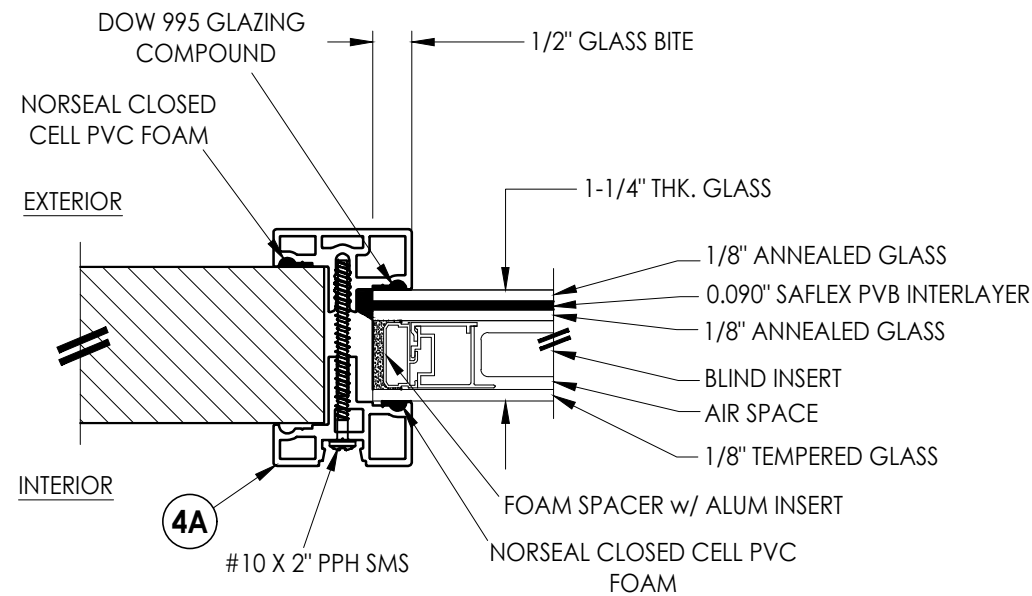


**4A ALUMINUM FRAME**  
Aluminum Impact Lite Frame

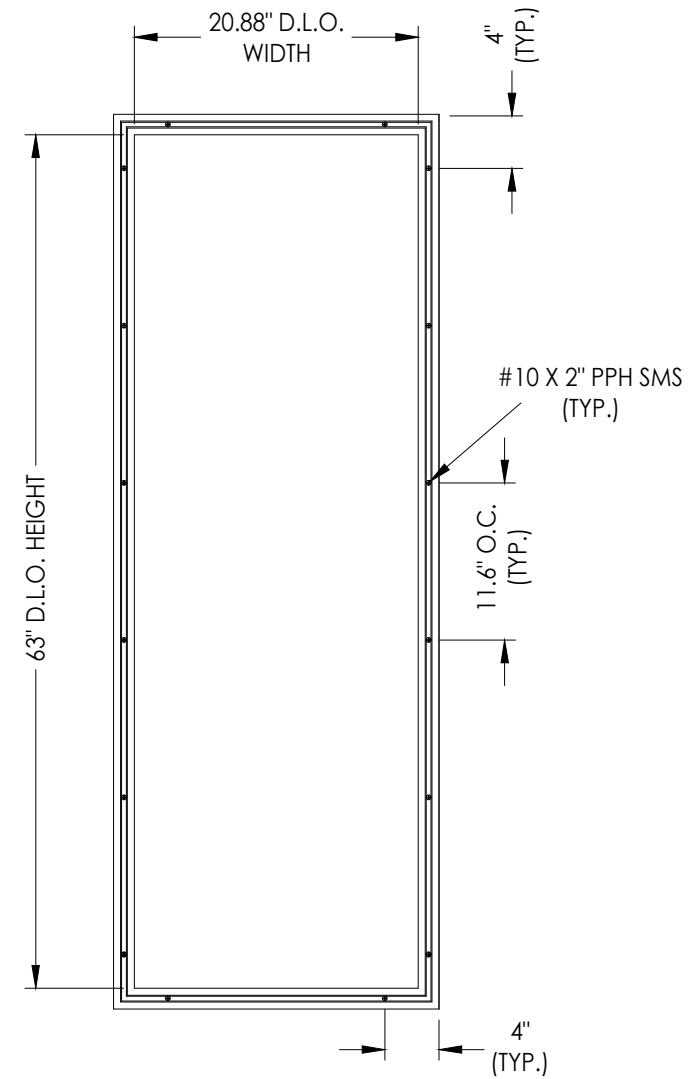


**3A ALUMINUM LITE FRAME\***  
(w/ 1\"/>

**14\"/>**



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



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

Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

**RW BUILDING CONSULTANTS, INC.**  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

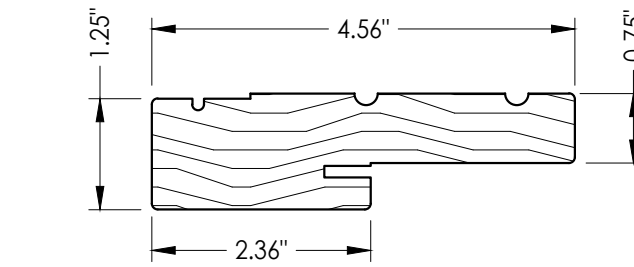
PRODUCT: THERMA-TRU  
FIBERGLASS DOOR  
PART OR ASSEMBLY:  
LITE FRAME  
& GLAZING DETAILS

NO.	DATE	DESCRIPTION	BY
1	8/22/23	UPDATE TO 8TH ED. (2023) FBC	LFS

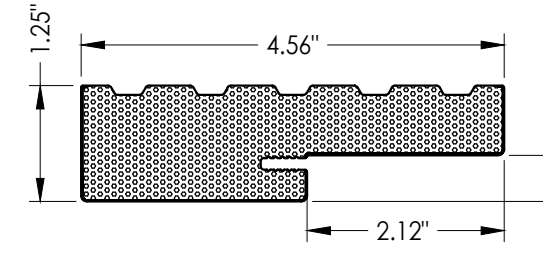
DATE: 4/13/21  
SCALE: N.T.S.  
DWG. BY: RW  
CHK. BY: LFS  
DRAWING NO.: FL-21138.20  
SHEET 12 OF 13

**BILL OF MATERIALS**

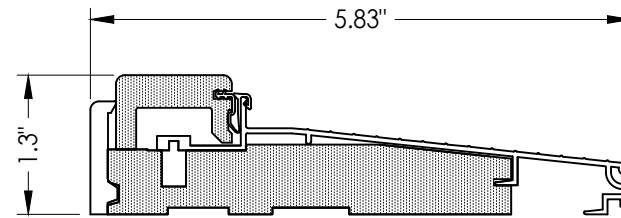
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK (G >= 0.42)	WOOD
B	2X BUCK (G >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	#10 X 2" PFH WOOD SCREW	STEEL
G	3/16" x 3-1/4" PFH ITW CONCRETE SCREW	STEEL
I	1/4" X 2-1/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
J	1/4" X 3-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL
M	3/16" X 2-1/4" ITW CONCRETE SCREW	STEEL
N	3/16" X 2-3/4" ITW CONCRETE SCREW	STEEL
1	WOOD JAMB (FINGER JOINT PINE)	WOOD
2	COMPOSITE JAMB	COMP
7	WEATHERSTRIP	FOAM
8	DOOR SWEEP	VINYL
9	SWEEP (USE w/ PUBLIC ACCESS THRESHOLD)	VINYL
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
31	MULTIPOINT STRIKE PLATE (TONGUE SYSTEM)	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)	-
50	SIDELITE PANEL	-



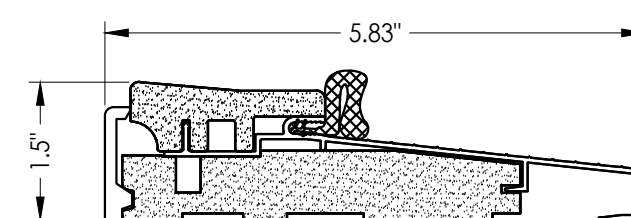
**1 WOOD JAMB**



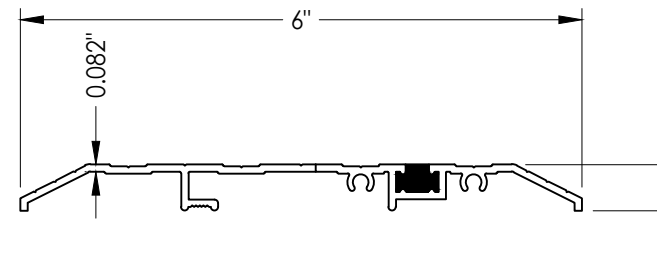
**2 COMPOSITE JAMB**



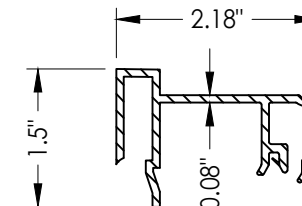
**32 INSWING THRESHOLD**  
Adjustable Composite Sill



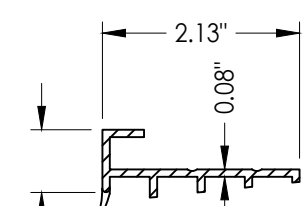
**33 OUTSWING THRESHOLD**  
Composite Sill



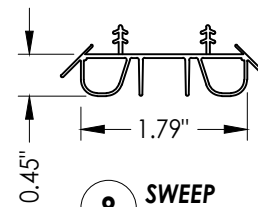
**34 PUBLIC ACCESS THRESHOLD**



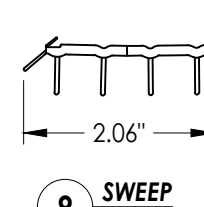
**35 SIDELITE SPACER**  
Inswing



**36 SIDELITE SPACER**  
Outswing



**8 SWEEP**



**9 SWEEP**

**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.

Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT: THERMA-TRU  
FIBERGLASS DOOR

PART OR ASSEMBLY:  
BILL OF MATERIALS  
& COMPONENTS

NO.	DATE	DESCRIPTION	BY
1	8/22/23	UPDATE TO 8TH ED. (2023) FBC	LFS

DATE: 4/13/21  
SCALE: N.T.S.  
DWG. BY: RW  
CHK. BY: LFS  
DRAWING NO.: FL-21138.20  
SHEET 13 OF 13