

THERMA-TRU® DOORS

Fiber-Classic® & Smooth-Star®

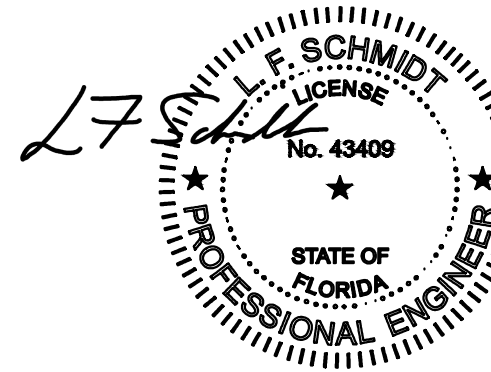
"20 Minute Fire Rated" (Foam Core) OPAQUE FIBERGLASS SINGLE DOOR INSWING/OUTSWING "IMPACT"

GENERAL NOTES

1. 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).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. 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 includes Wind Zone 4 as defined in ASTM E1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
4. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
5. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
6. Note: Fire rating of this door is not part of this approval.

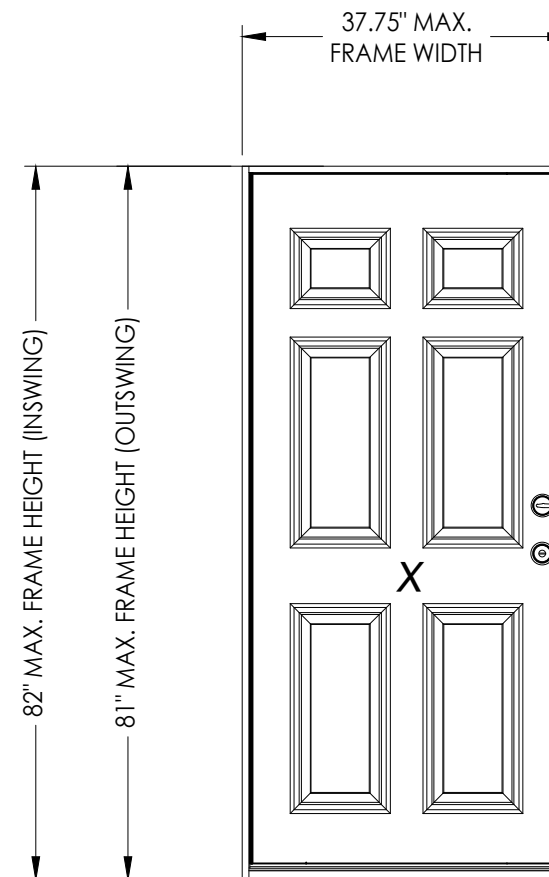
TABLE OF CONTENTS

SHEET#	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel details
3	Elevations
4	Horizontal & Vertical Cross Sections (2X Buck)
5	Horizontal & Vertical Cross Sections (1X Buck)
6	Horizontal & Vertical Cross Sections (Direct to Masonry)
7	Vertical Cross Sections (Thresholds)
8	Buck and frame anchoring
9	Components
10	Components & Bill of materials



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	MAX. FRAME DIMENSION	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
X	37.75" x 82.0"	+67.0	-67.0	+67.0	-67.0

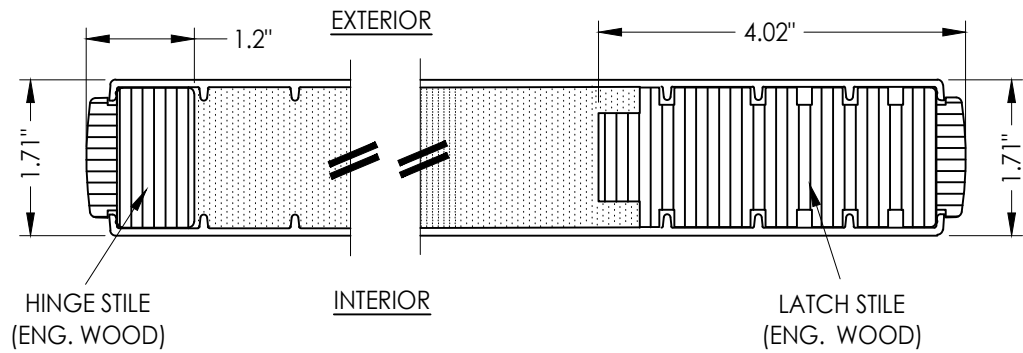
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

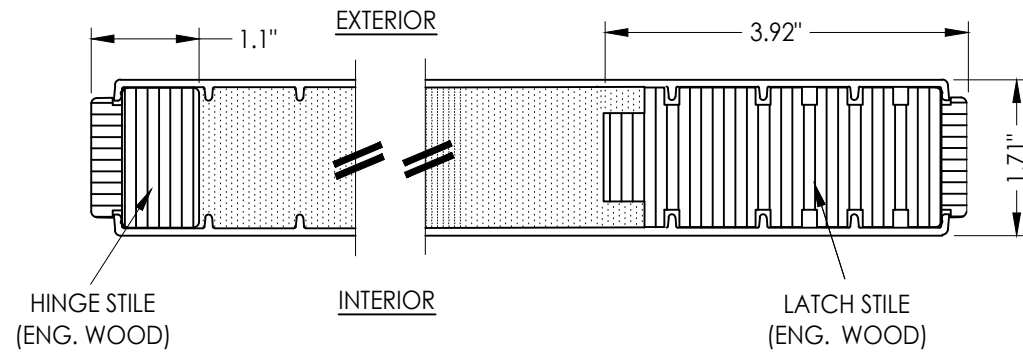
PRODUCT: THERMA-TRU FIBERGLASS DOOR
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS
2	8/22/23	UPDATE TO 8TH ED. (2023) FBC
1	7/16/20	UPDATE TO 7th ED (2020) FBC

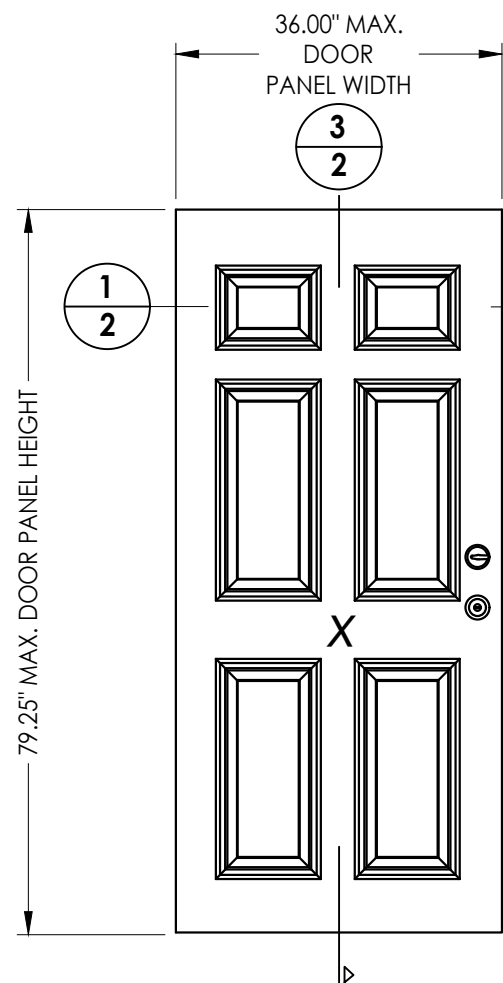
DATE: 7/25/19
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: FL-21138.17
SHEET 1 OF 10



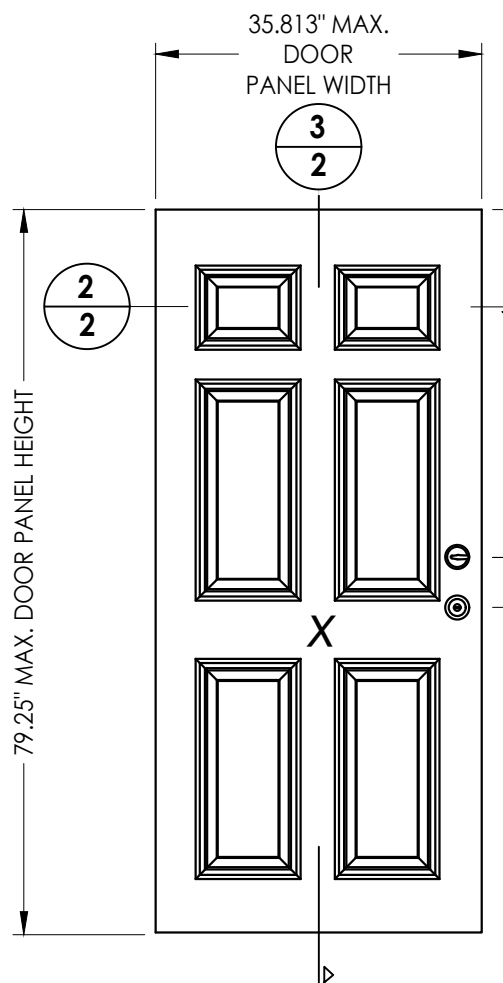
1
2 HORIZONTAL CROSS SECTION



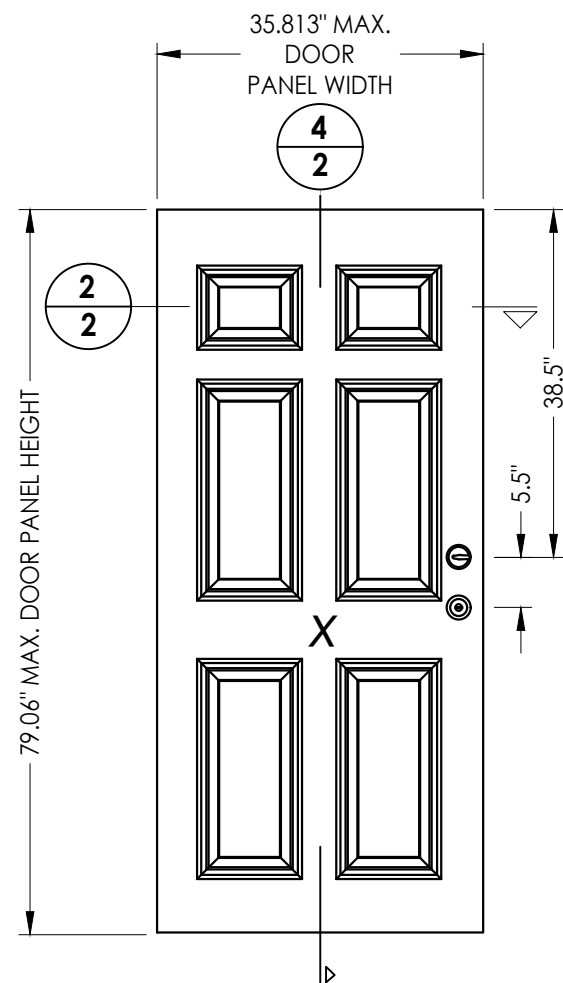
2
2 HORIZONTAL CROSS SECTION



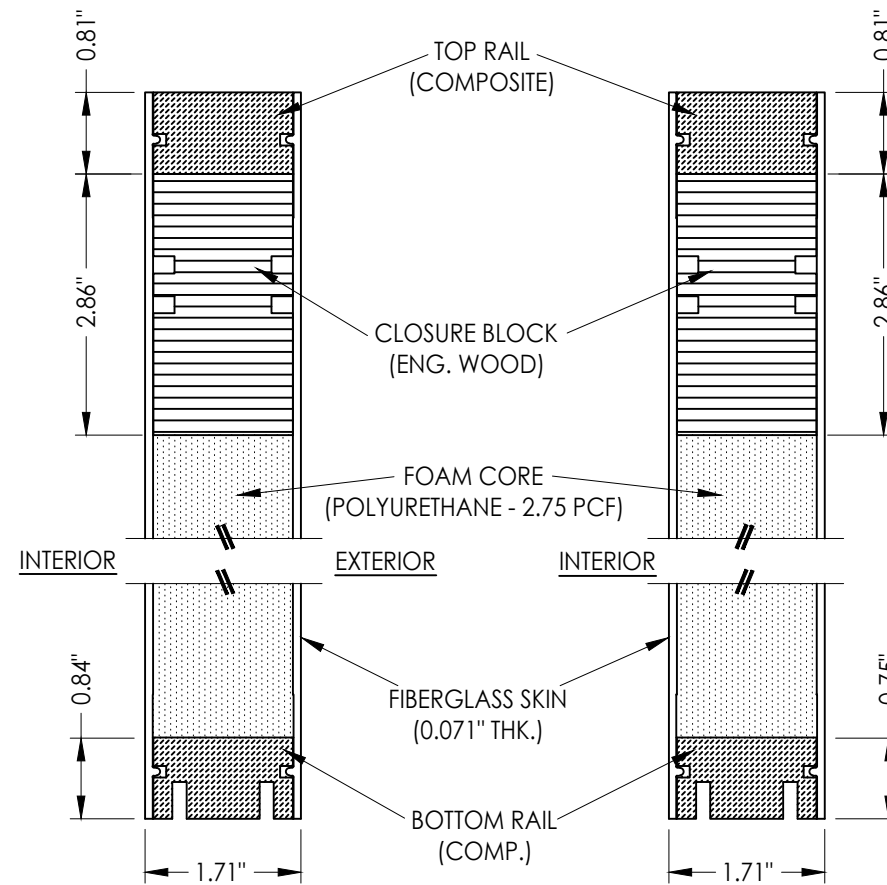
40 DOOR PANEL
BOOK



41 DOOR PANEL
Hybrid Door



42 DOOR PANEL
U1 Door



3
2 VERTICAL CROSS SECTION

4
2 VERTICAL CROSS SECTION

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

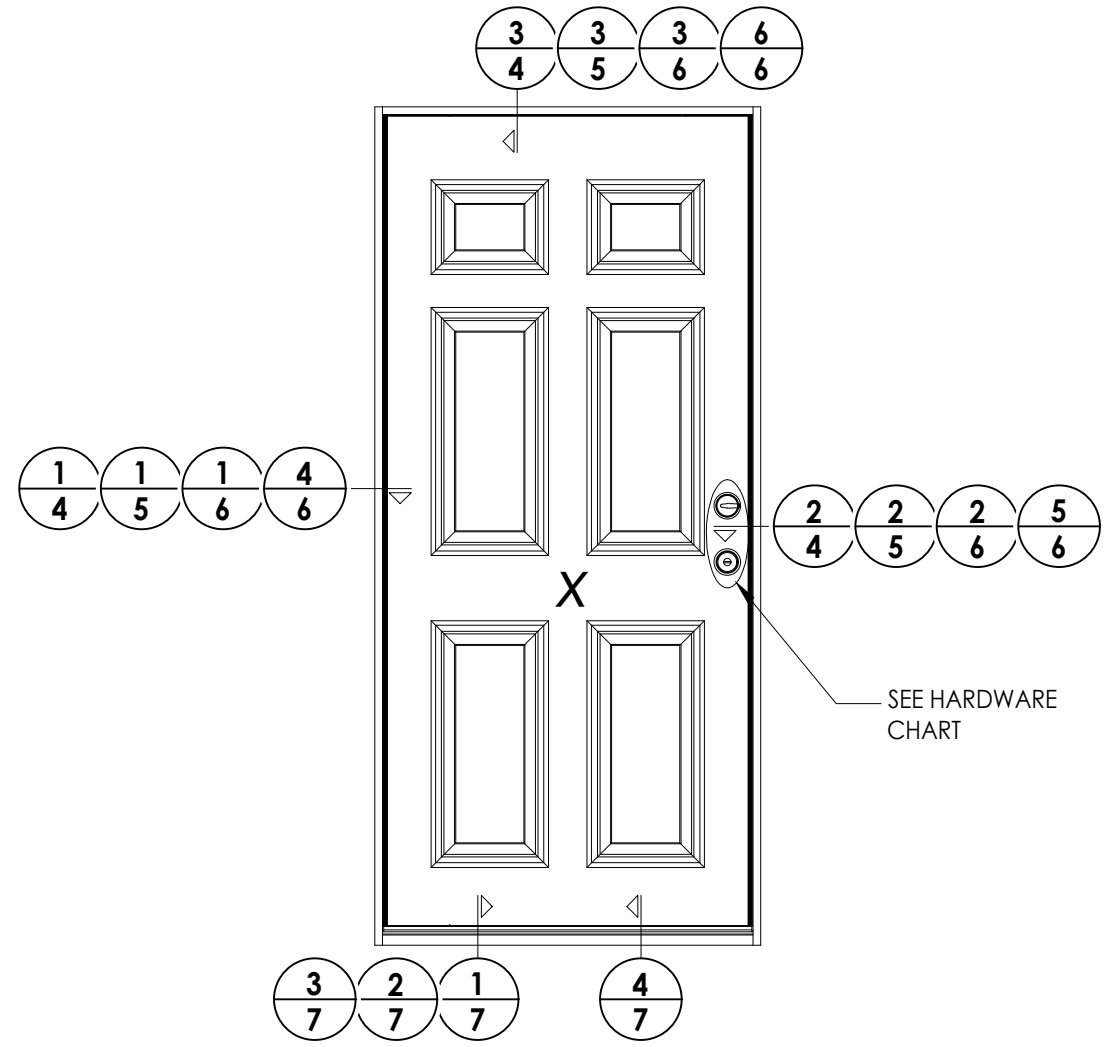
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: THERMA-TRU
FIBERGLASS DOOR

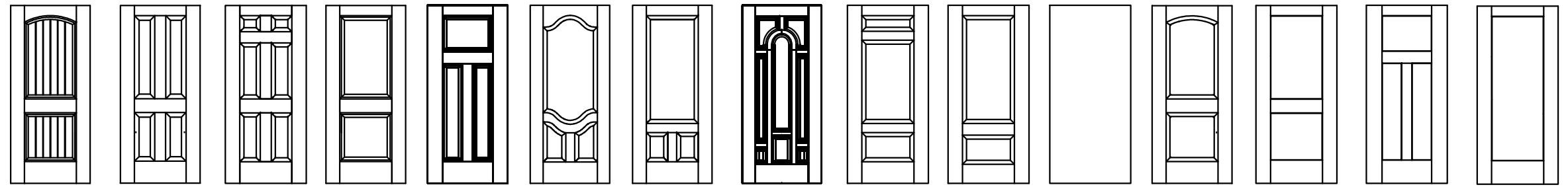
PART OR ASSEMBLY:
DOOR PANEL DETAILS

NO.	DATE	BY	REVISIONS
2	8/22/23	LFS	UPDATE TO 8TH ED. (2023) FBC
1	7/16/20	PO	UPDATE TO 7th ED (2020) FBC

DATE:	7/25/19
SCALE:	N.T.S.
DWG. BY:	RW
CHK. BY:	LFS
DRAWING NO.:	FL-21138.17
SHEET	2 of 10



HARDWARE TABLE	
MANUFACTURER	MODEL
KWIKSET	KNOB: SIGNATURE SERIES
	DEADBOLT: SIGNATURE SERIES (980)
SCHLAGE	KNOB: "F" SERIES
	DEADBOLT: "B" SERIES (B60)



Fiber-Classic/Smooth-Star Door Panel Options
 Products approved include all embossed and recessed panel doors.
 Similar opaque panel configurations are allowed.
 Panels shown are for illustration and are representative only.

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

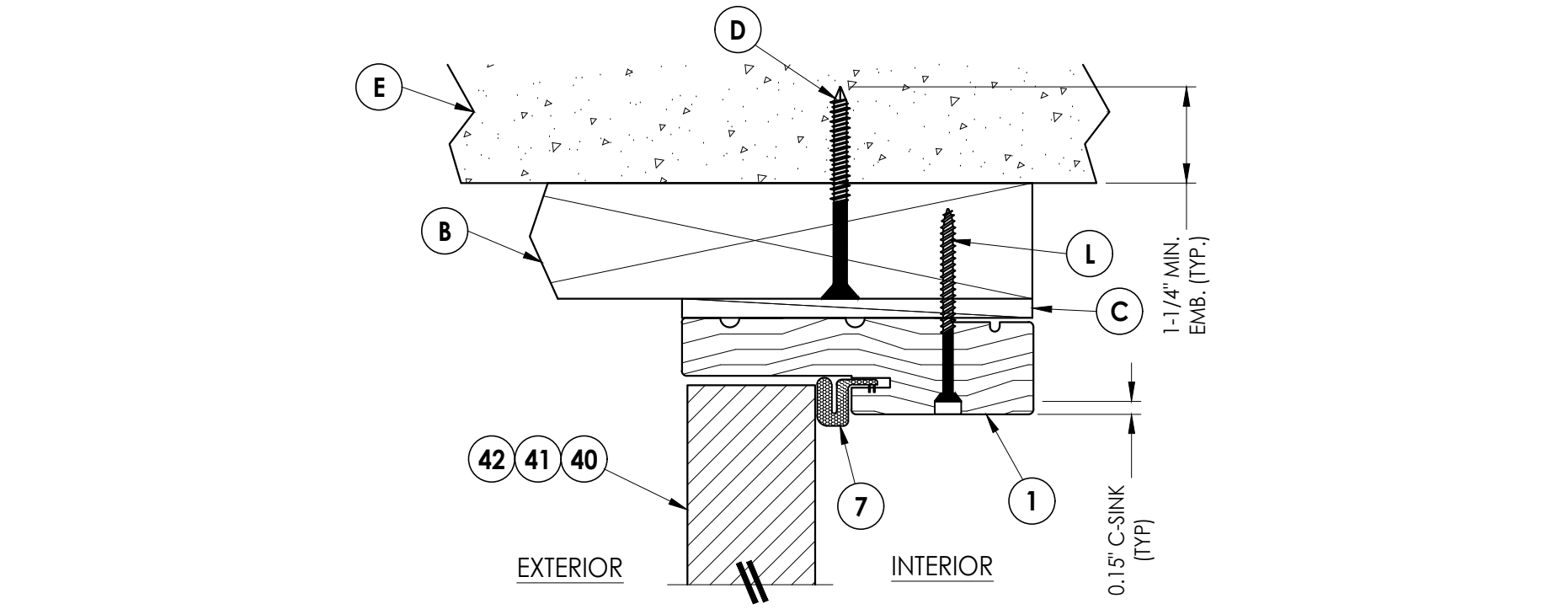
RW BUILDING CONSULTANTS, INC.
 P.O. Box 230, Valrico, FL 33595
 Phone No.: 813.659.9197
 FBPE Registry No. 9813

PRODUCT: THERMA-TRU FIBERGLASS DOOR

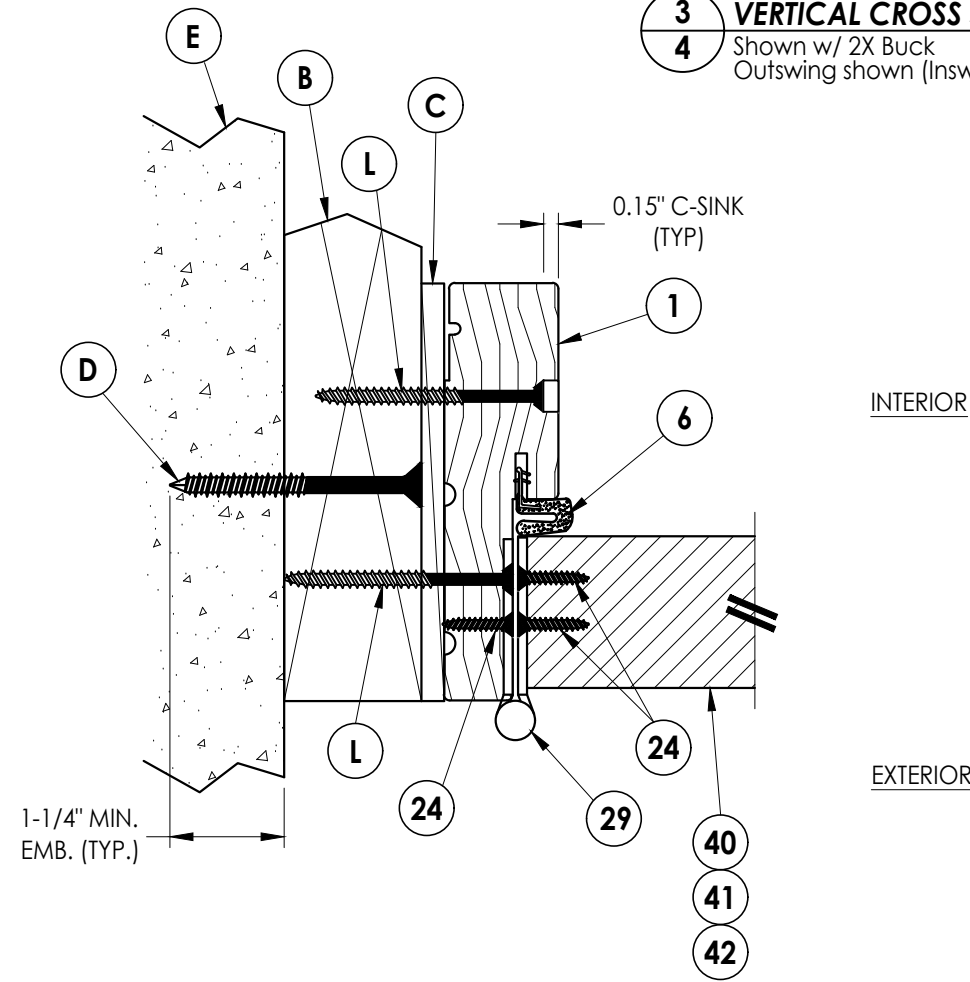
PART OR ASSEMBLY: ELEVATIONS

NO.	DATE	REVISIONS	
		BY	FO
2	8/22/23	UPDATE TO 8TH ED. (2023)	FBC LFS
1	7/16/20	UPDATE TO 7th ED (2020)	FBC PO

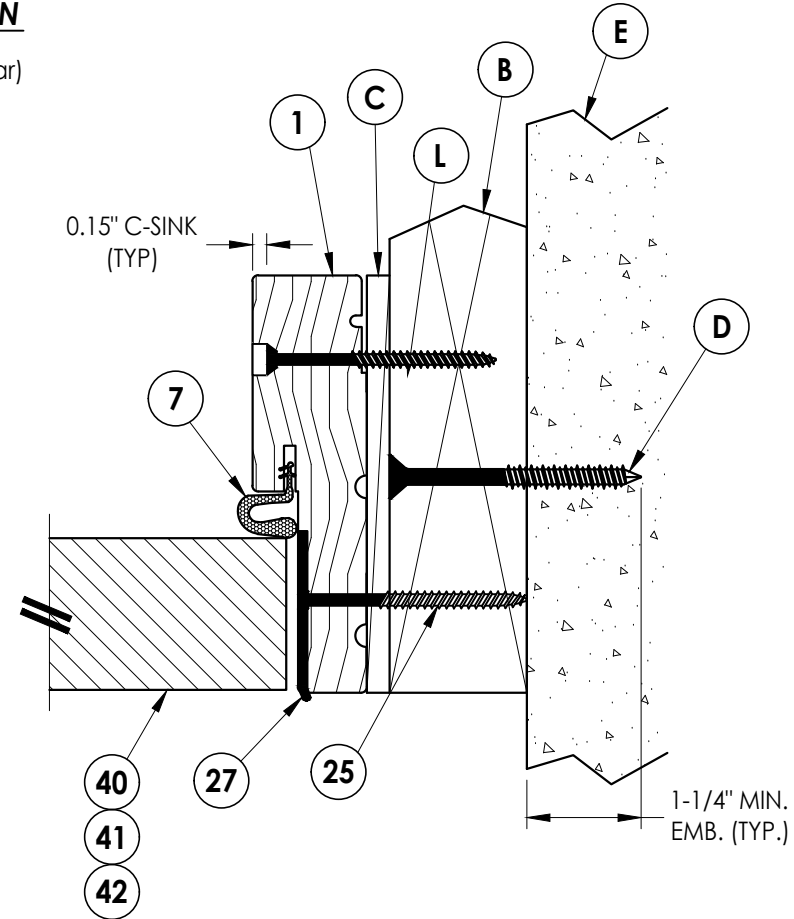
DATE: 7/25/19
 SCALE: N.T.S.
 DWG. BY: RW
 CHK. BY: LFS
 DRAWING NO.: FL-21138.17
 SHEET 3 OF 10



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

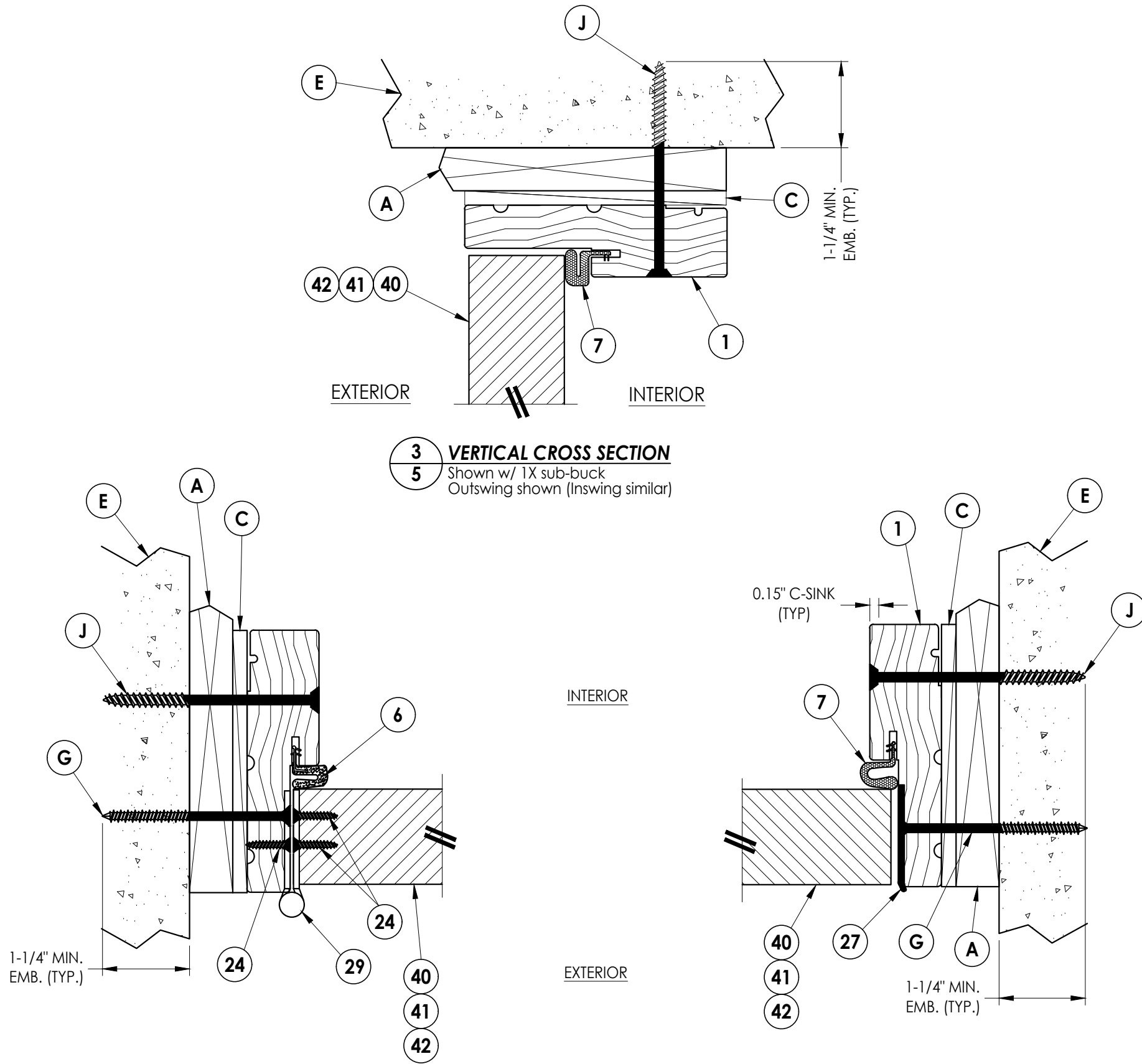


1 HORIZONTAL CROSS SECTION
 4 Shown w/ 2X Buck
 Outswing shown (Inswing similar)



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

Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		 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)	
		LFS	BY
		FBC	PO
2	8/22/23	UPDATE TO 8TH ED. (2023)	
1	7/16/20	UPDATE TO 7th ED (2020)	
NO.	DATE	REVISIONS	
DATE: 7/25/19			
SCALE: N.T.S.			
DWG. BY: RW			
CHK. BY: LFS			
DRAWING NO.: FL-21138.17			
SHEET 4 OF 10			



3 **VERTICAL CROSS SECTION**
5 Shown w/ 1X sub-buck
 Outswing shown (Inswing similar)

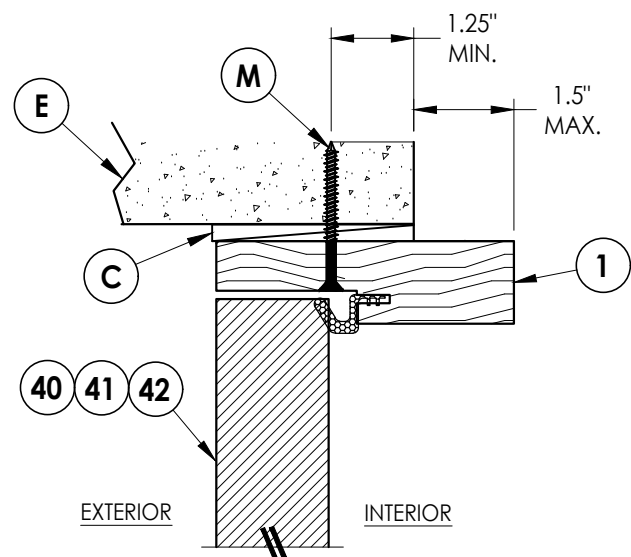
1 **HORIZONTAL CROSS SECTION**
5 Shown w/ 1X sub-buck
 Outswing shown (Inswing similar)

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

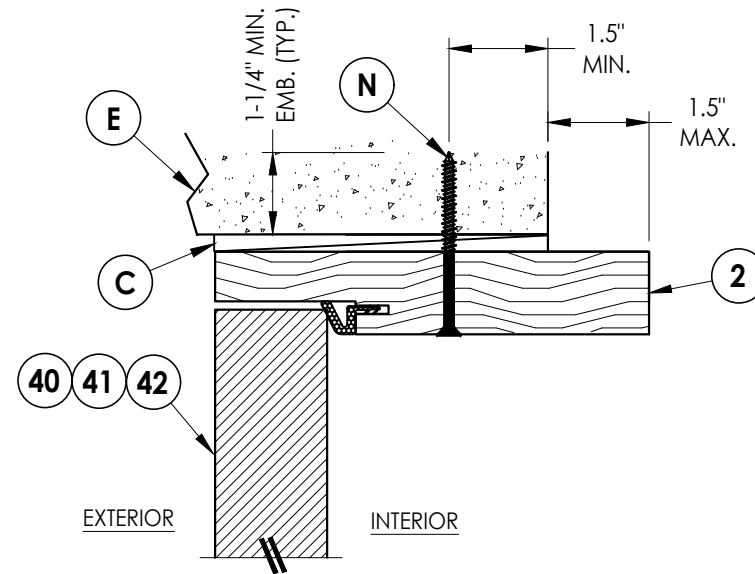
Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	
PRODUCT:	THERMA-TRU FIBERGLASS DOOR	PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (1X BUCK)	
NO.	DATE	BY	REVISIONS
2	8/22/23	LFS	UPDATE TO 8TH ED. (2023)
1	7/16/20	FBC	UPDATE TO 7th ED (2020)
		PO	
		BY	
DATE: 7/25/19			
SCALE: N.T.S.			
DWG. BY: RW			
CHK. BY: LFS			
DRAWING NO.: FL-21138.17			
SHEET 5 OF 10			

© 2019 R.W. BUILDING CONSULTANTS INC.

Z:\2023 FBC Drawings\Therma-Tru\FL-21138 R7\FL-21138.17.dwg

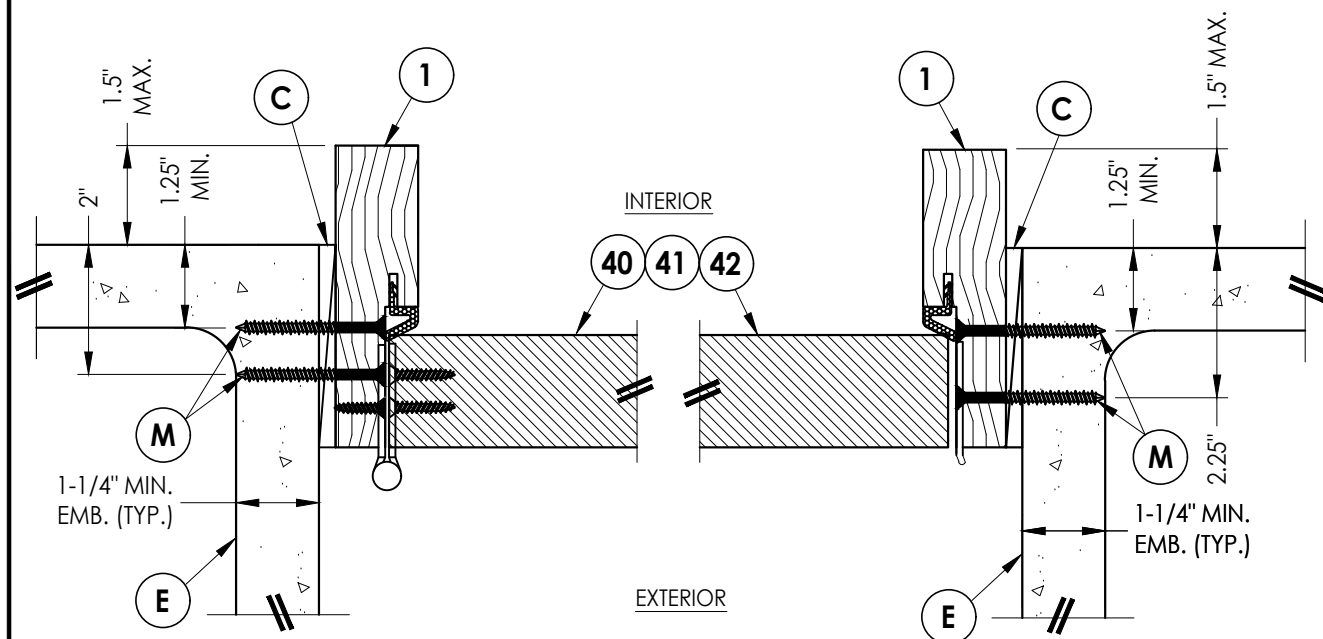


3 VERTICAL CROSS SECTION
6 Shown Direct to Masonry
 Outswing only w/ 4-9/16" jamb



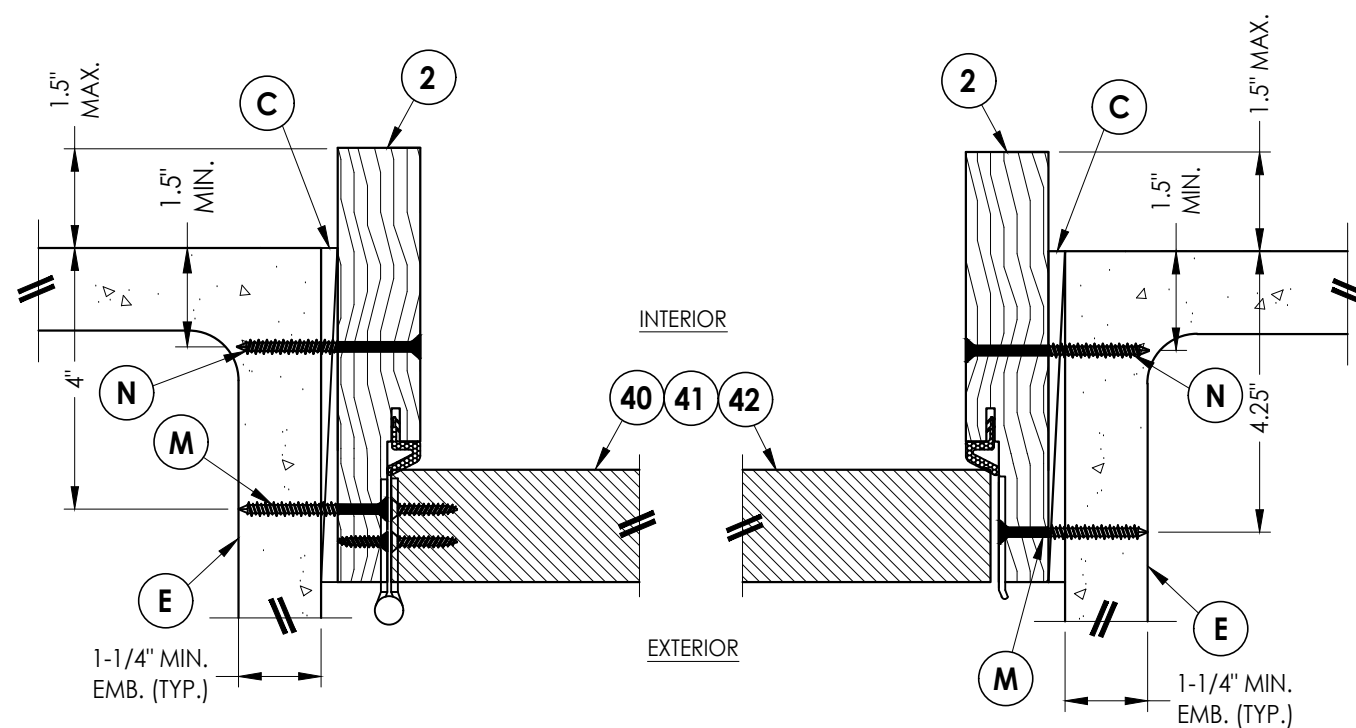
6 VERTICAL CROSS SECTION
6 Shown Direct to Masonry
 Outswing only w/ 6-9/16" jamb

DIRECT TO MASONRY MAX. DESIGN PRESSURE:
 ± 55 PSF



1 HORIZONTAL CROSS SECTION
6 Shown Direct to Masonry
 Outswing only w/ 4-9/16" jamb

2 HORIZONTAL CROSS SECTION
6 Shown Direct to Masonry
 Outswing only w/ 4-9/16" jamb



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

5 HORIZONTAL CROSS SECTION
6 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, Valrico, FL 33595
 Phone No.: 813.659.9197
 FBPE Registry No. 9813

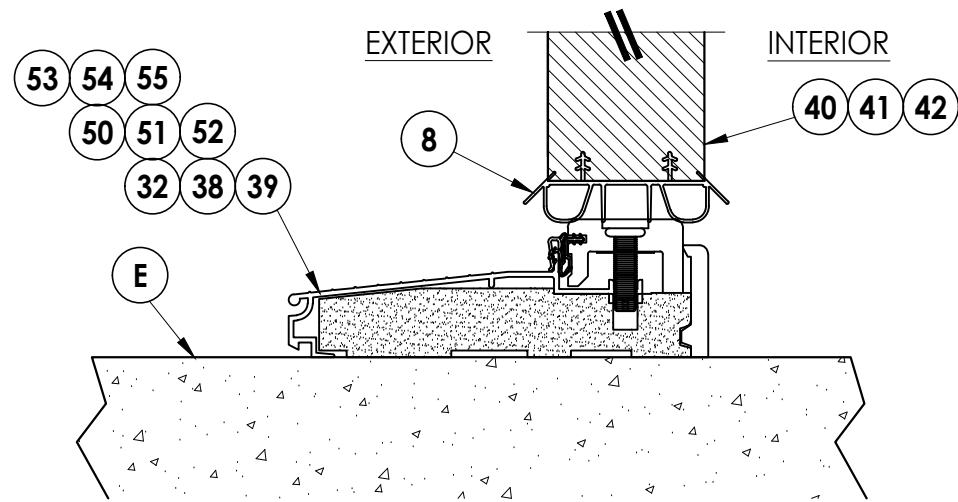
PRODUCT: THERMA-TRU
 FIBERGLASS DOOR
 PART OR ASSEMBLY:
 HORIZONTAL & VERTICAL
 SECTIONS (DIRECT TO MASONRY)

NO.	DATE	BY	REVISIONS
2	8/22/23	LFS	UPDATE TO 8TH ED. (2023) FBC
1	7/16/20	PO	UPDATE TO 7th ED (2020) FBC

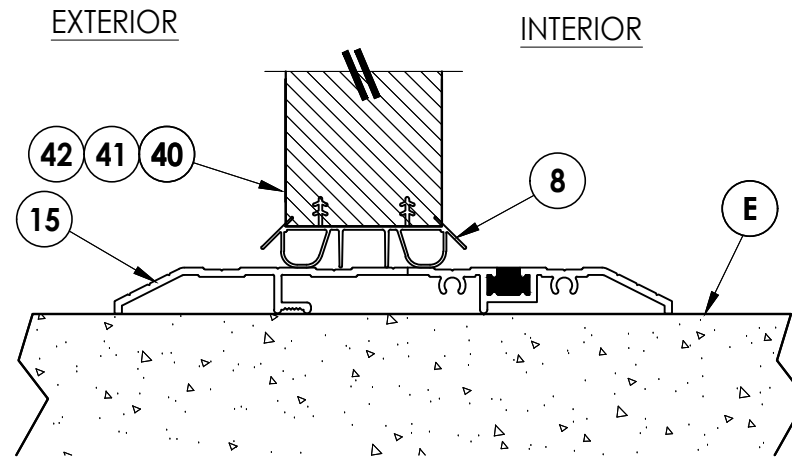
DATE: 7/25/19
 SCALE: N.T.S.
 DWG. BY: RW
 CHK. BY: LFS
 DRAWING NO.: FL-21138.17
 SHEET 6 OF 10

Notes:

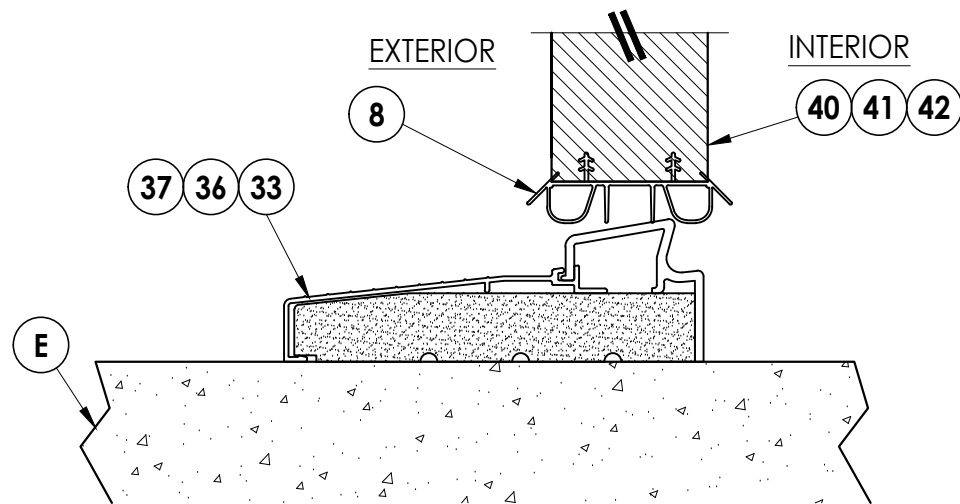
- Sill Item #'s 16, 32, 33, 36, 37, 38, 39, 50, 51, 52, 53, 54 & 55 are attached to jambs w/ (3) #8 X 2-1/2" pph screws or (3) 2.5" staples at each end.
- Sill Item #'s 17 & 18 are attached to jambs w/ (2) #8 X 2-1/2" pph screws at each end.
- Sill Item #15 is attached to jambs utilizing (2) #10 X 2" pph SMS screws at each end.



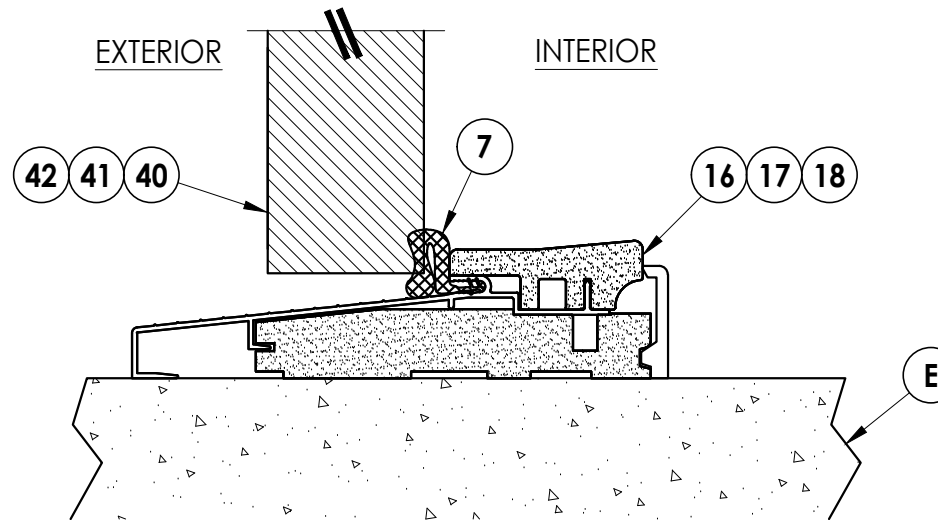
1 VERTICAL CROSS SECTION
7 Inswing configuration



2 VERTICAL CROSS SECTION
7 Outswing configuration



3 VERTICAL CROSS SECTION
7 Inswing configuration



4 VERTICAL CROSS SECTION
7 Outswing configuration

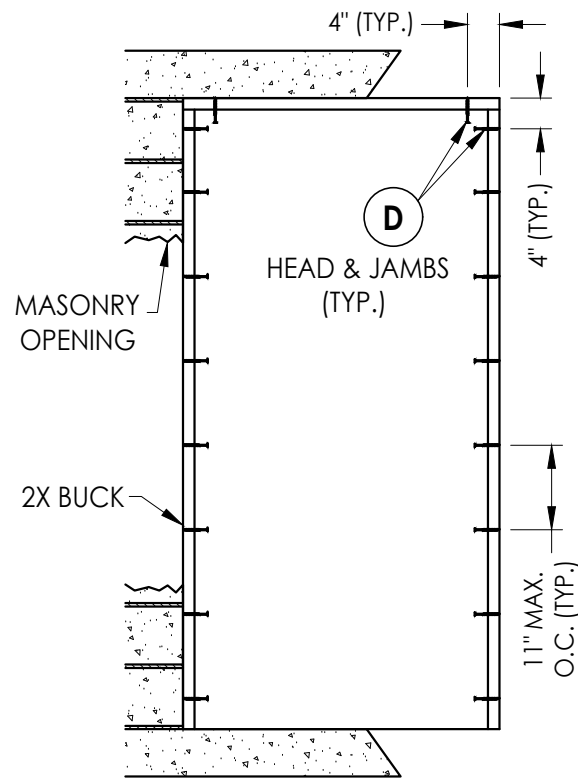
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

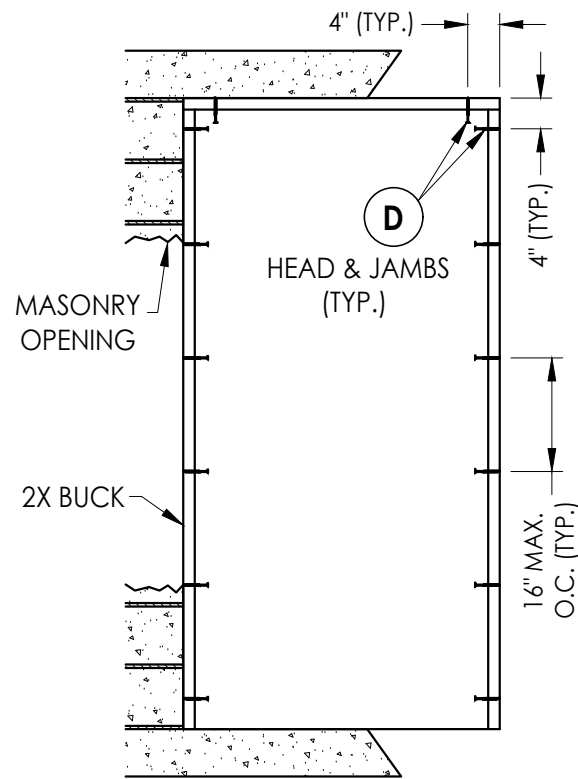
PRODUCT: THERMA-TRU
FIBERGLASS DOOR
PART OR ASSEMBLY:
VERTICAL CROSS
SECTIONS (THRESHOLDS)

NO.	DATE	REVISIONS
2	8/22/23	UPDATE TO 8TH ED. (2023) FBC
1	7/16/20	UPDATE TO 7th ED (2020) FBC

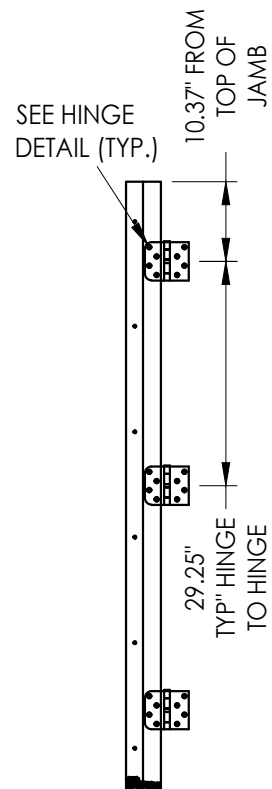
DATE: 7/25/19
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: FL-21138.17
SHEET 7 of 10



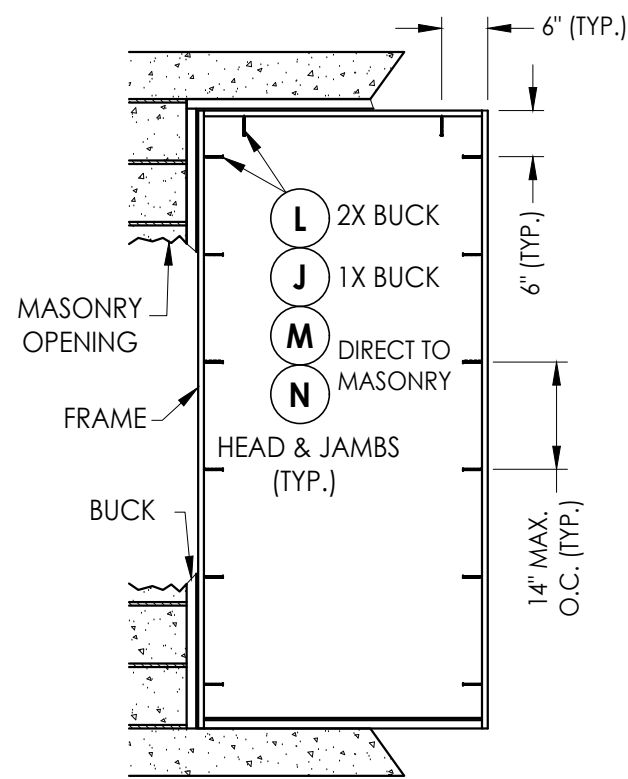
BUCK ANCHORING
Max. Design Pressure = 100 PSF



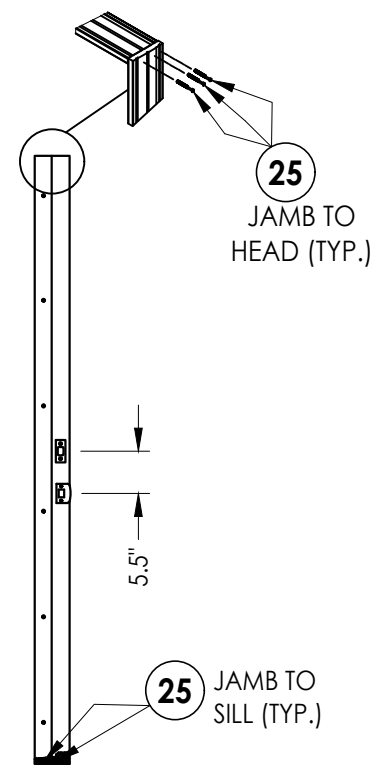
BUCK ANCHORING
Max. Design Pressure = 60 PSF



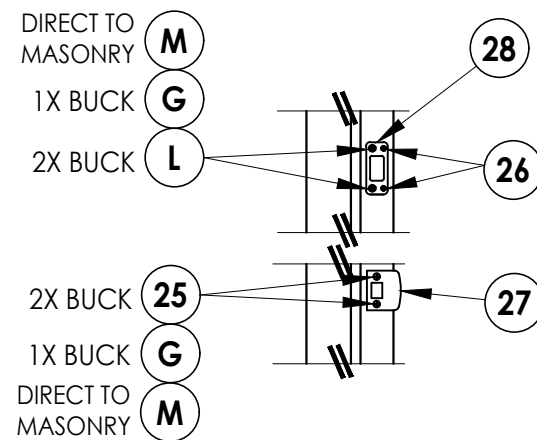
HINGE JAMB



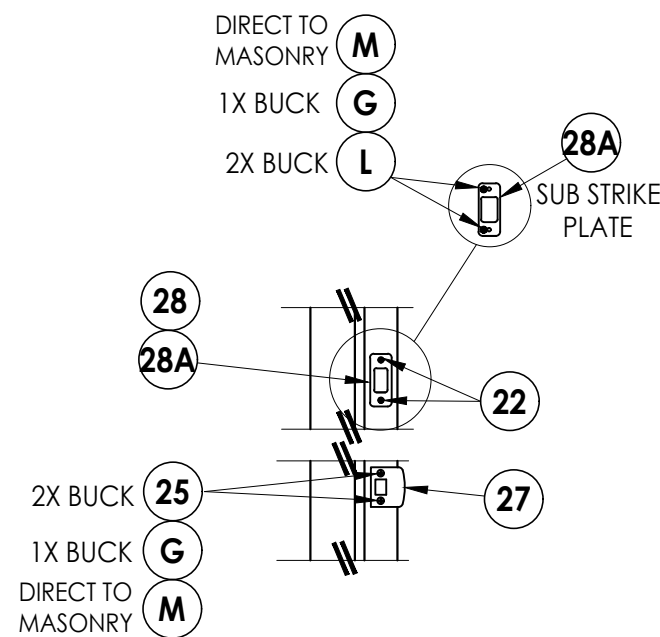
FRAME ANCHORING
Masonry Construction



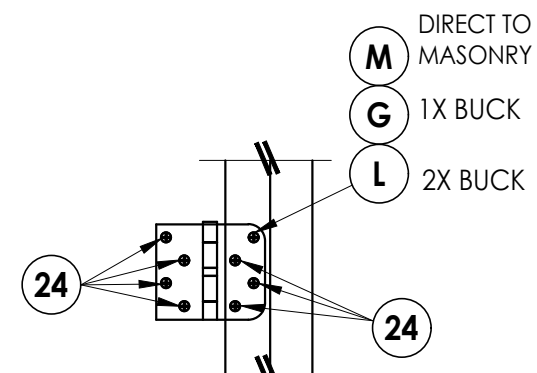
STRIKE JAMB



LATCH & DEADBOLT DETAIL
Kwikset



LATCH & DEADBOLT DETAIL
Schlage



HINGE DETAIL

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 & FRAME ANCHORING

NO.	DATE	BY	REVISIONS
2	8/22/23	LFS	UPDATE TO 8TH ED. (2023) FBC
1	7/16/20	PO	UPDATE TO 7th ED (2020) FBC

DATE: 7/25/19

SCALE: N.T.S.

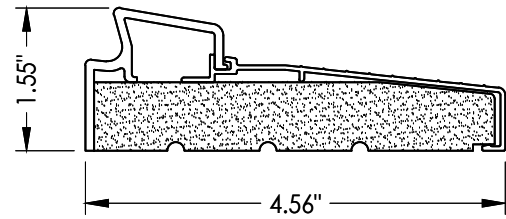
DWG. BY: RW

CHK. BY: LFS

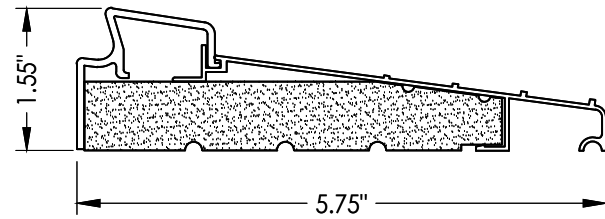
DRAWING NO.:

FL-21138.17

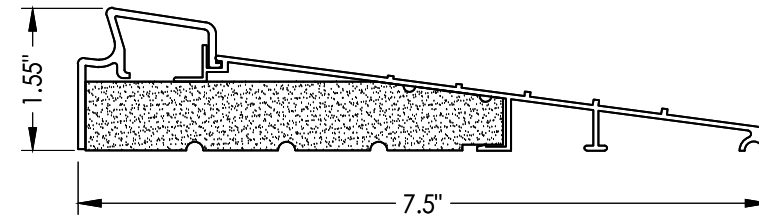
SHEET 8 OF 10



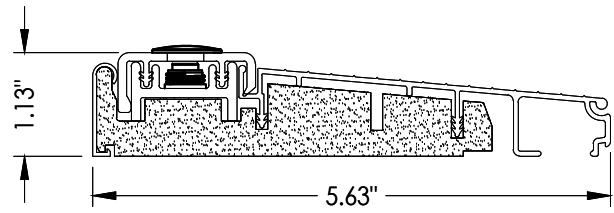
33 INSWING THRESHOLD
Inswing Basic Fixed Sill



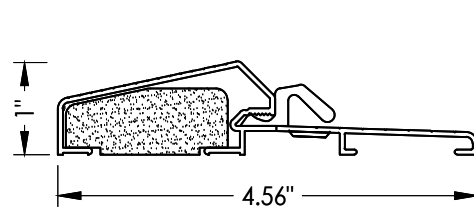
36 INSWING THRESHOLD
Inswing Basic Fixed 5-3/4" Sill



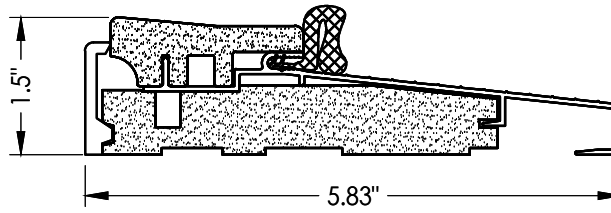
37 INSWING THRESHOLD
Inswing Basic Fixed 7-1/2" Sill



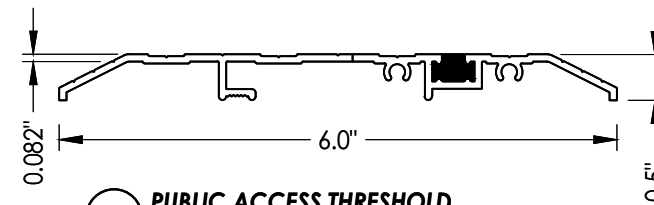
39 INSWING THRESHOLD
Inswing Composite Adjustable Sill



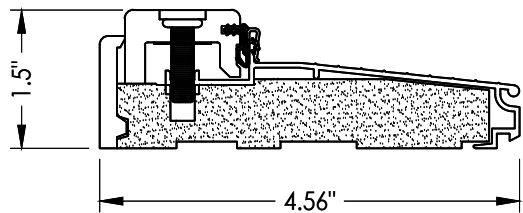
17 OUTSWING THRESHOLD
Composite / Aluminum Sill



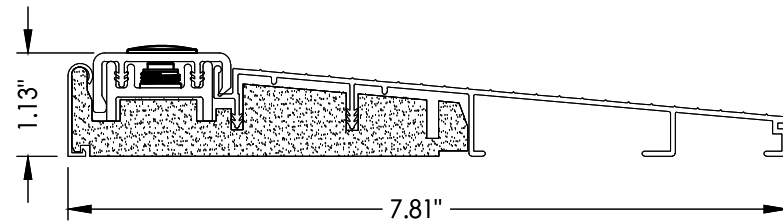
16 OUTSWING THRESHOLD*
Composite / Aluminum Sill



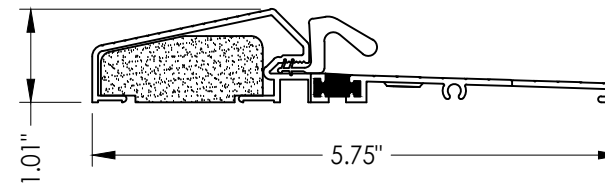
15 PUBLIC ACCESS THRESHOLD



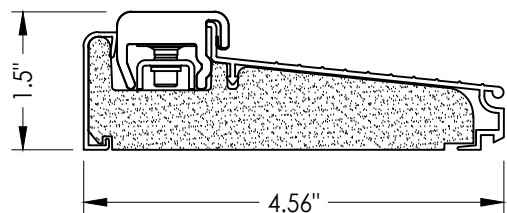
38 INSWING THRESHOLD
Inswing Composite Adjustable Sill



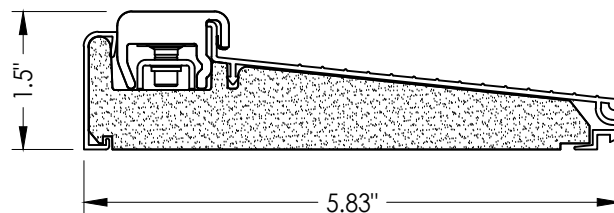
32 INSWING THRESHOLD
Inswing Composite Adjustable 7-3/4" Sill



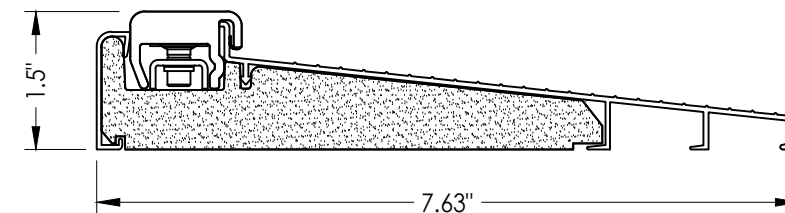
18 OUTSWING THRESHOLD
Composite / Aluminum Sill
(Thermal Break)



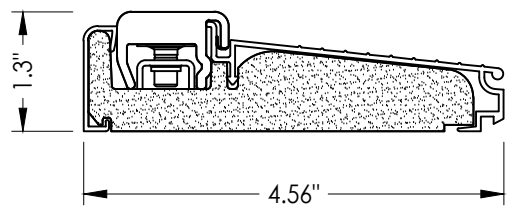
50 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



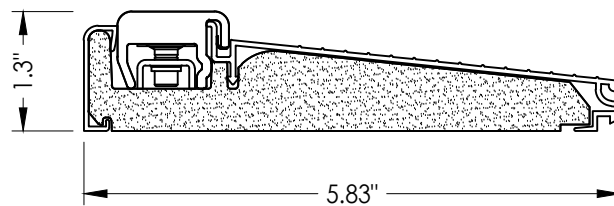
51 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



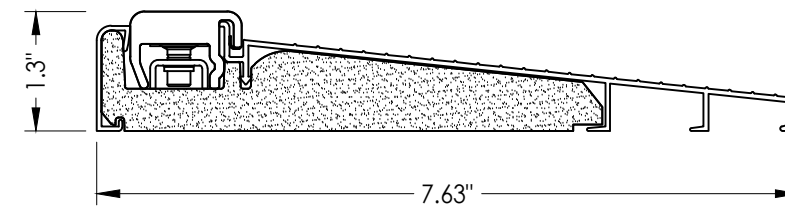
52 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



53 INSWING THRESHOLD
Inswing Composite Adjustable Sill
U1



54 INSWING THRESHOLD
Inswing Composite Adjustable Sill
U1



55 INSWING THRESHOLD
Inswing Composite Adjustable Sill
U1

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

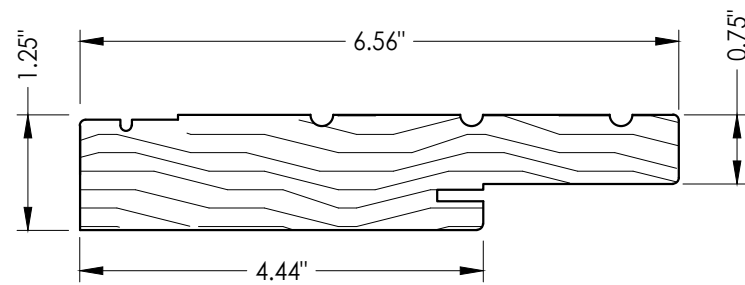
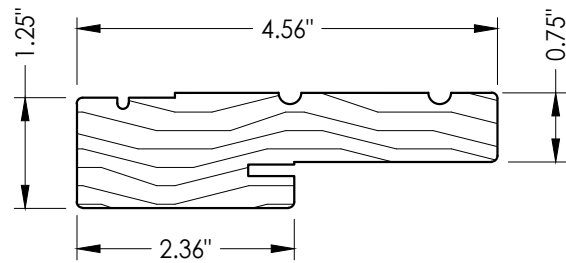
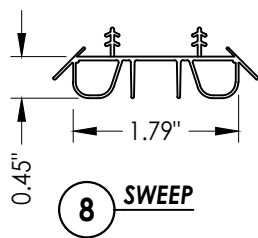
PRODUCT:
THERMA-TRU
FIBERGLASS DOOR

PART OR ASSEMBLY:
COMPONENTS

NO.	DATE	BY	REVISIONS
2	8/22/23	LFS	UPDATE TO 8TH ED. (2023)
1	7/16/20	PO	UPDATE TO 7th ED (2020)

DATE: 7/25/19
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: FL-21138.17
SHEET 9 OF 10

BILL OF MATERIALS			BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL	ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK (SG >= 0.42)	WOOD	25	#8 x 2-1/2" PFH WOOD SCREW	STEEL
B	2X BUCK (SG >= 0.42)	WOOD	26	#8 x 5/8" PFH WOOD SCREW	STEEL
C	1/4" MAX. SHIM SPACE	-	27	LATCH STRIKE PLATE	STEEL
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL	28	DEADBOLT STRIKE PLATE	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE	28A	DEADBOLT SUB STRIKE PLATE	STEEL
			29	4" X 4" HINGE	STEEL
G	3/16" X 3-1/4" ITW CONCRETE SCREW	STEEL	32	INSWING THRESHOLD	ALUM/COMP
I	1/4" X 1-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL	33	INSWING THRESHOLD	ALUM/COMP
J	1/4" X 3-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL	36	INSWING THRESHOLD	ALUM/COMP
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL	37	INSWING THRESHOLD	ALUM/COMP
M	3/16" X 2-1/4" ITW CONCRETE SCREW	STEEL	38	INSWING THRESHOLD	ALUM/COMP
N	3/16" X 2-3/4" ITW CONCRETE SCREW	STEEL	39	INSWING THRESHOLD	ALUM/COMP
1	JAMB (FINGER JOINT PINE)	WOOD	40	DOOR PANEL (BOOK)	-
2	JAMB (FINGER JOINT PINE)	WOOD	41	DOOR PANEL (HYBRID)	-
6	WEATHERSTRIP (MEDIUM REACH)	FOAM	42	DOOR PANEL (U1)	-
7	WEATHERSTRIP (LONG REACH)	FOAM	50	INSWING THRESHOLD	ALUM/COMP
8	SWEEP	VINYL	51	INSWING THRESHOLD	ALUM/COMP
15	PUBLIC ACCESS THRESHOLD	ALUM	52	INSWING THRESHOLD	ALUM/COMP
16	OUTSWING THRESHOLD	ALUM/COMP	53	INSWING THRESHOLD	ALUM/COMP
17	OUTSWING THRESHOLD	ALUM/COMP	54	INSWING THRESHOLD	ALUM/COMP
18	OUTSWING THRESHOLD	ALUM/COMP	55	INSWING 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			



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: COMPONENTS & BILL OF MATERIALS

NO.	DATE	REVISIONS
2	8/22/23	UPDATE TO 8TH ED. (2023) FBC
1	7/16/20	UPDATE TO 7th ED (2020) FBC

DATE: 7/25/19
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: FL-21138.17
SHEET 10 OF 10