

WOOD EDGE

OPAQUE STEEL SINGLE DOOR

INSWING/OUTSWING

"NON-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.

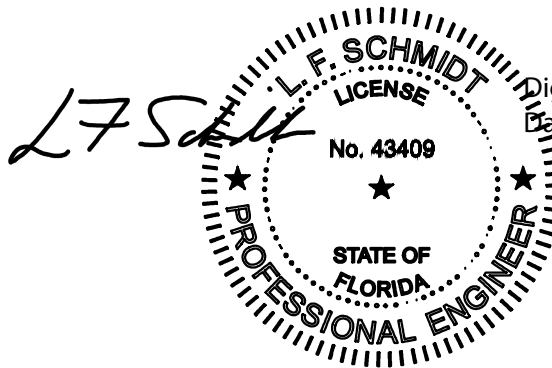
Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3.

When used in areas requiring wind borne debris protection, this product is required to be protected with an impact resistant covering that complies with FBC Sections 1609.1.2 & R301.2.1.2.
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.

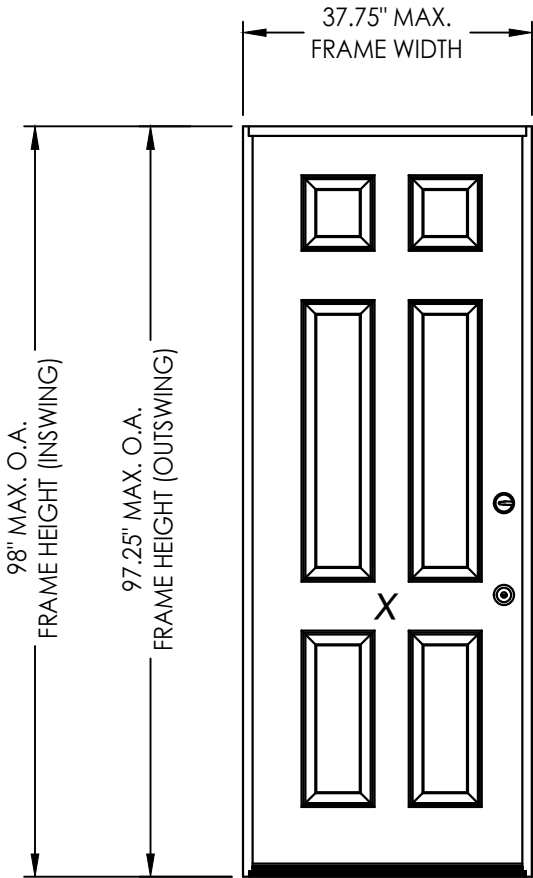
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7	Vertical Cross Sections (Thresholds)
8	Buck & Frame Anchoring
9	Hardware Details
10	Components
11	Bill of Materials



Digitally signed by Lyndon F Schmidt
Date: 2023.08.07 13:58:06 -04'00'

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	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
X	+60.0	-60.0	+60.0	-60.0

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

THERMA-TRU
STEEL DOOR

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

2

8/07/23

UPDATE TO 8TH ED. (2023)

FBC

LFS

1

7/14/20

UPDATE TO 7TH ED (2020)

FBC

LFS

NO.

DATE

BY

REVISIONS

DATE: 10/12/17

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-21131.4

SHEET 1 OF 11

RW BUILDING CONSULTANTS, INC.

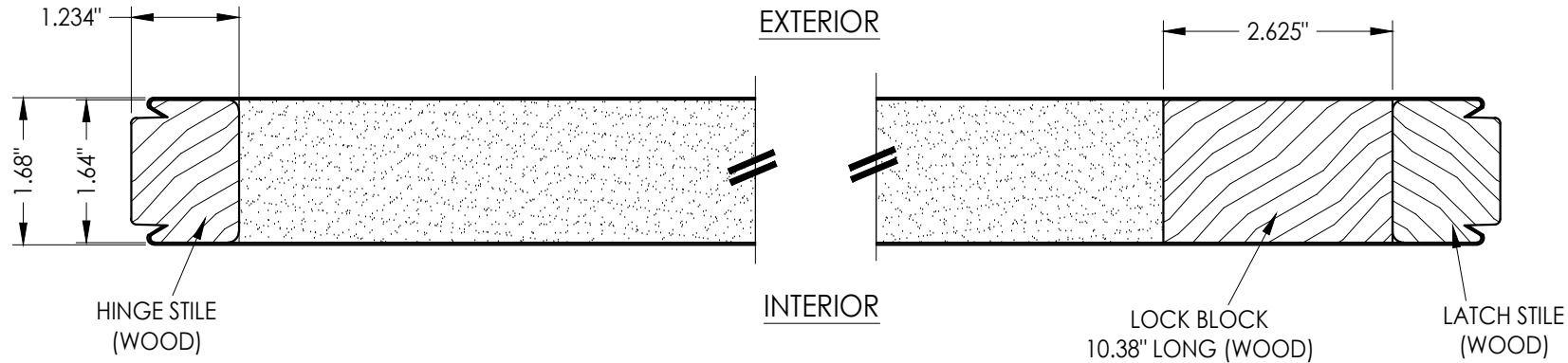
P.O. Box 230, Valrico, FL 33595

Phone No.: 813.659.9197

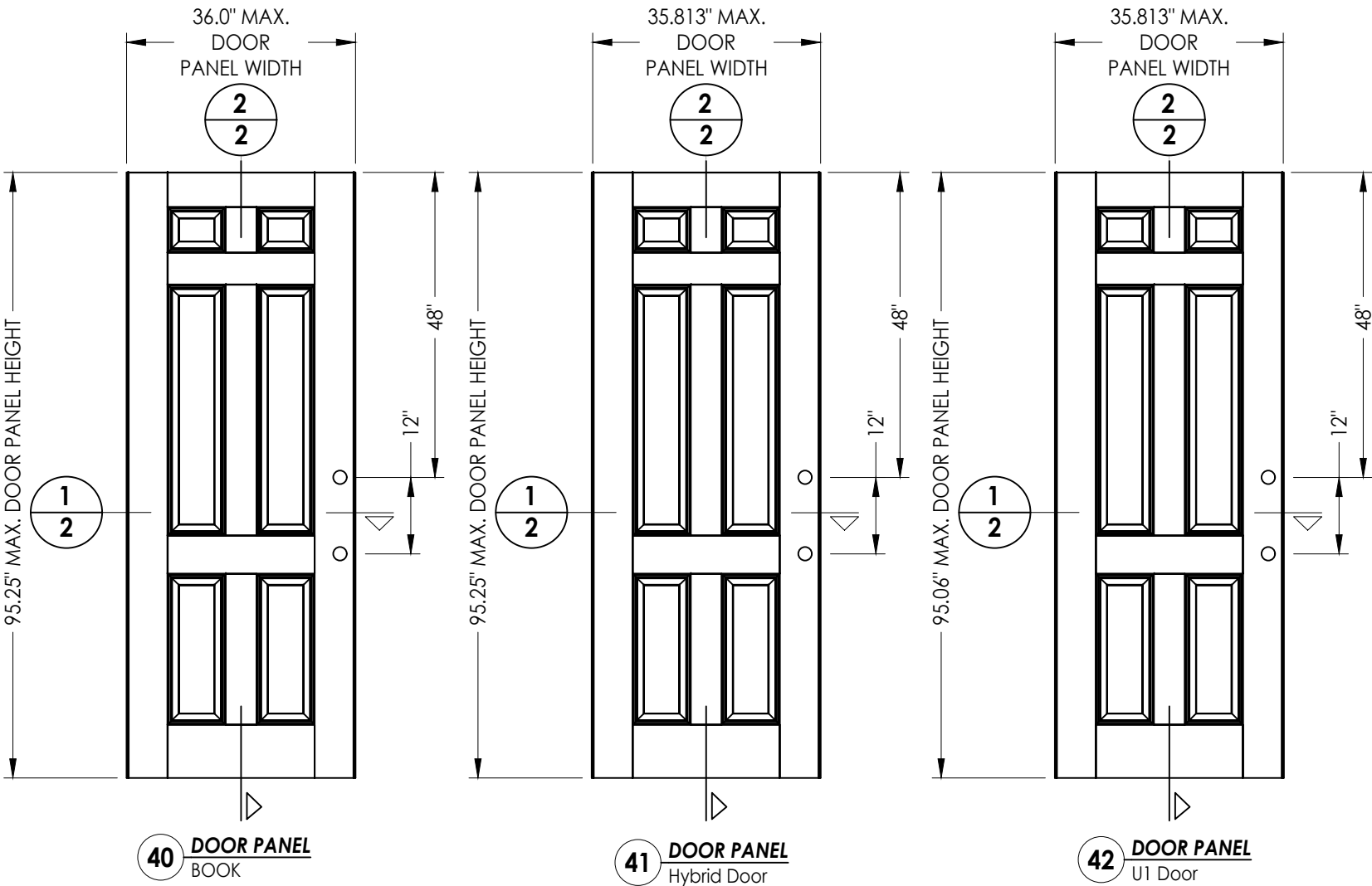
FBPE Registry No. 9813

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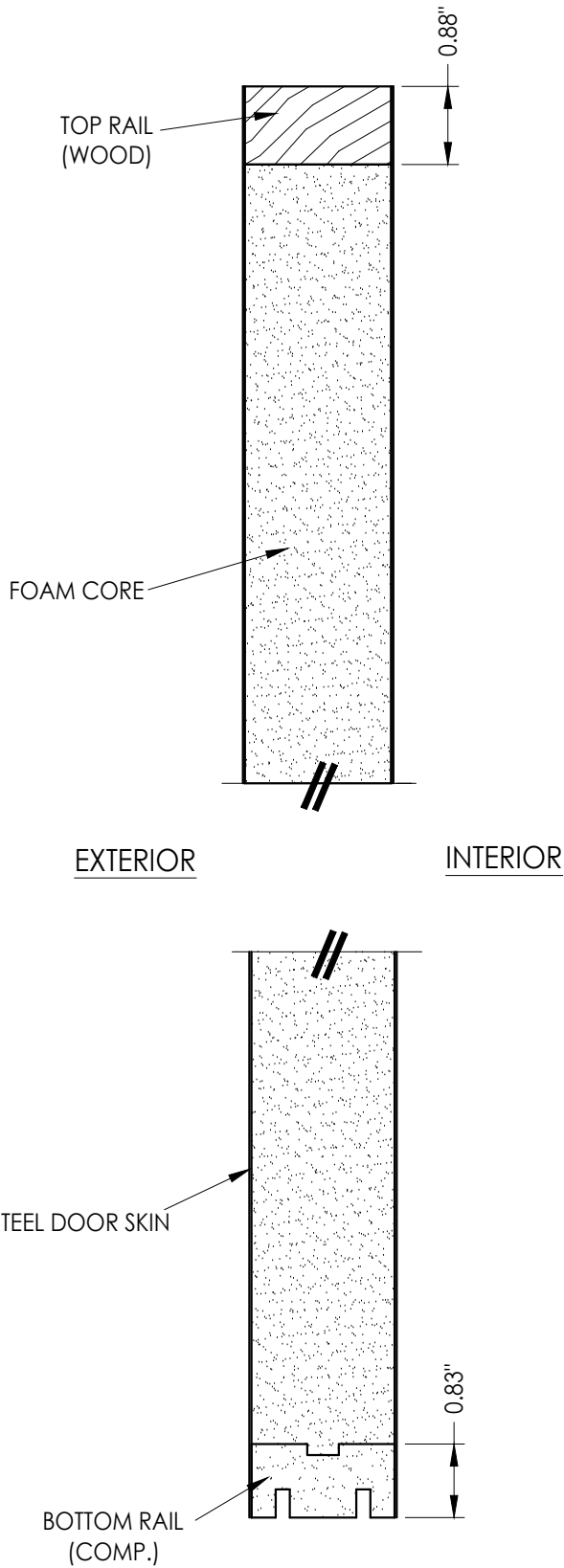


1
2 HORIZONTAL CROSS SECTION



"TRADITIONS" SERIES DOOR PANEL

STEEL DOOR SKIN: 24 GA. (0.022" MIN. THICKNESS, F_y = 48,470 PSI MIN.)
FOAM CORE: POLYURETHANE FOAM (1.9 PCF MIN.)



2
2 VERTICAL CROSS SECTION

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Lyndon F. Schmidt
P.E. No. 43409

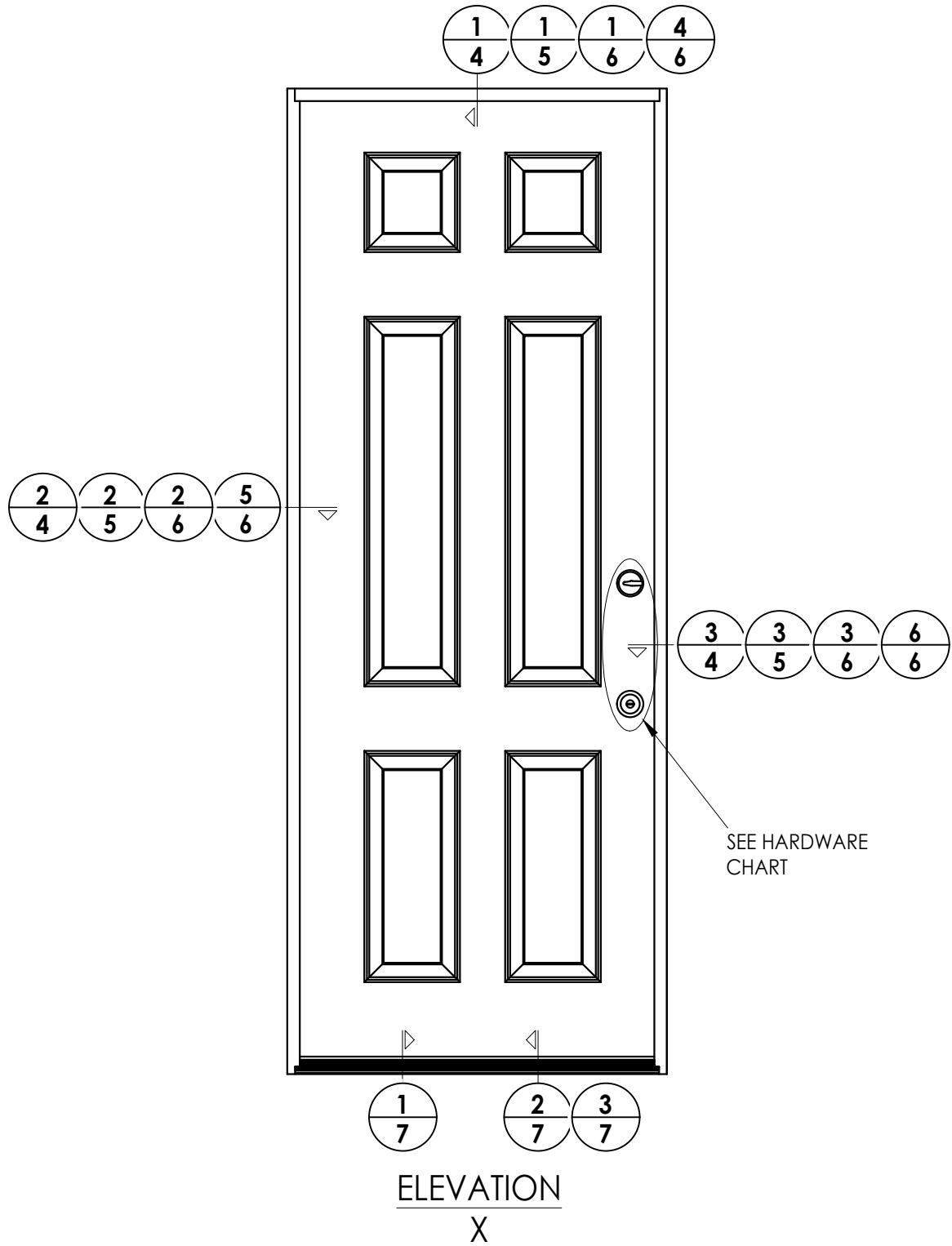
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:	THERMA-TRU STEEL DOOR
PART OR ASSEMBLY:	DOOR PANEL DETAILS

NO.	DATE	REVISIONS
2	8/07/23	UPDATE TO 8TH ED. (2023) FBC LFS
1	7/14/20	UPDATE TO 7TH ED (2020) FBC LFS

DATE:	10/12/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-21131.4
SHEET	2 OF 11

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HARDWARE TABLE		
MANUFACTURER	MODEL	
SCHLAGE	KNOB:	F51
	DEADBOLT:	B60
KWIKSET	KNOB:	SIGNATURE SERIES
	DEADBOLT:	SIGNATURE SERIES (980)

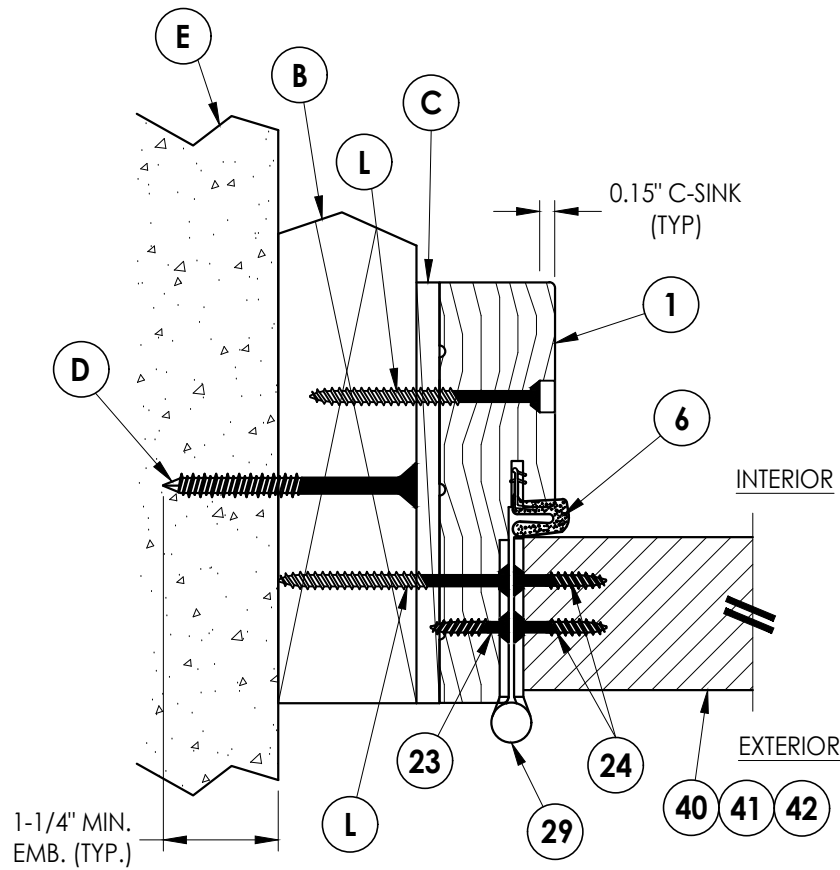
"TRADITIONS" Door Panel Options
Panel options shown are for illustration and are representative only
(similar opaque panel configurations are allowed)

PRODUCT:		THERMA-TRU STEEL DOOR	
PART OR ASSEMBLY:		ELEVATIONS	
DATE: 10/12/17		REVISIONS	
SCALE: N.T.S.		LFS	
DWG. BY: JK		FBC	
CHK. BY: LFS		FBC	
DRAWING NO.: FL-21131.4		FBC	
SHEET 3 OF 11		BY	
		NO. DATE	
		1 7/14/20	
		2 8/07/23	
		UPDATE TO 8TH ED. (2023)	
		UPDATE TO 7TH ED (2020)	

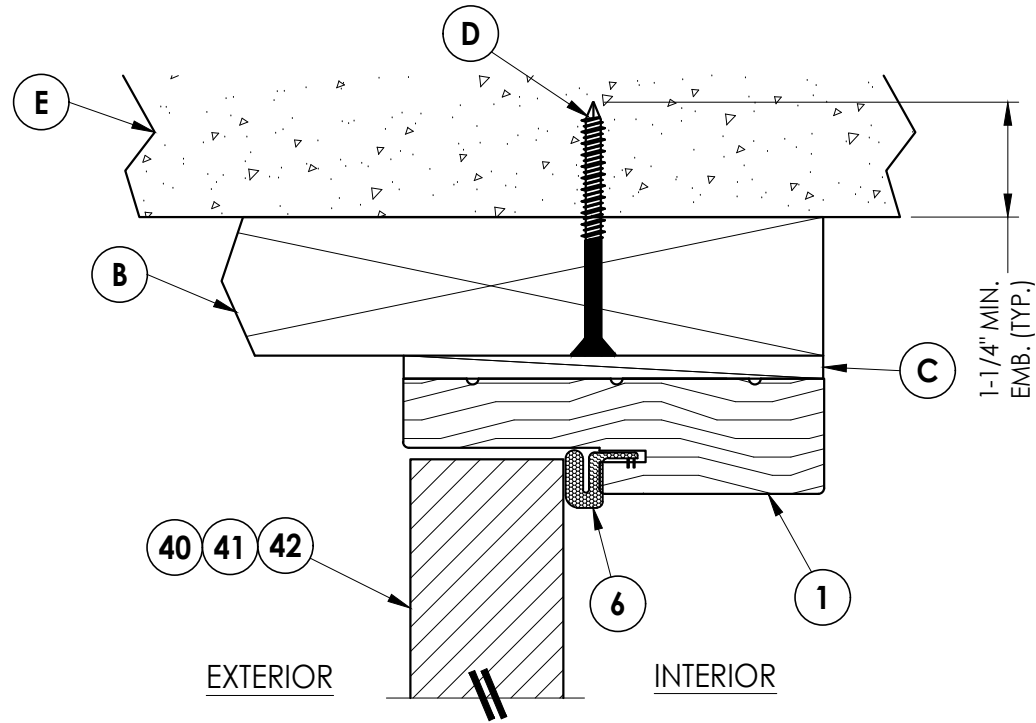
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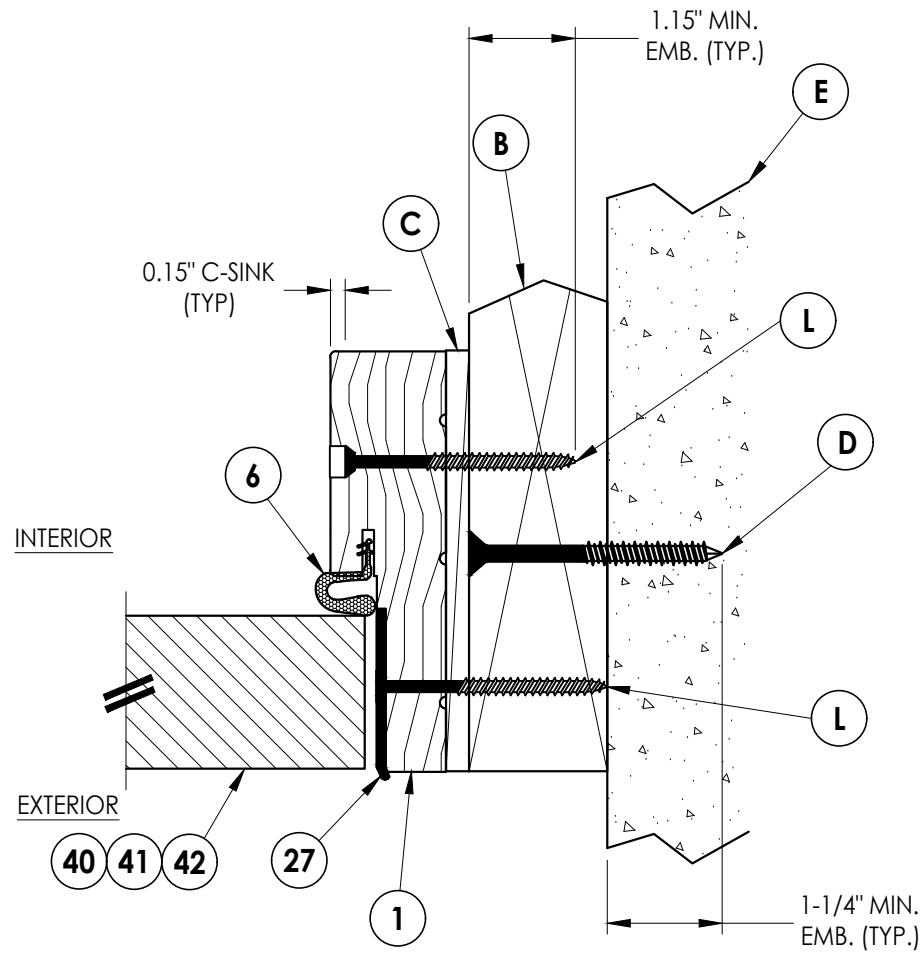
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2 HORIZONTAL CROSS SECTION
4 Shown w/ 2X Buck
Outswing shown (Inswing similar)



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

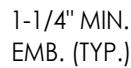


3 HORIZONTAL CROSS SECTION
4 Shown w/ 2X Buck
Outswing shown (Inswing similar)

PRODUCT:		THERMA-TRU STEEL DOOR		PART OR ASSEMBLY:		HORIZONTAL & VERTICAL CROSS SECTIONS (2X BUCK)	
DATE		NO.		DATE		REVISIONS	
10/12/17		2		8/07/23		UPDATE TO 8TH ED. (2023)	
N.T.S.		1		7/14/20		UPDATE TO 7TH ED (2020)	
JK		LFS		FBC		BY	
FL-21131.4		4		OF		11	

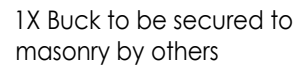
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Phone No.: 813.659.9197
FBPE Registry No. 9813



2 HORIZONTAL CROSS SECTION

5 Shown w/ 1X sub-buck
Outswing shown (Inswing similar)



1 5 **VERTICAL CROSS SECTION**

Shown w/ 1X sub-buck
Outswing shown (Inswing similar)



3 **HORIZONTAL CROSS SECTION**

5 Shown w/ 1X sub-buck
Outswing shown (Inswing similar)

2	8/07/23	UPDATE TO 8TH ED.	(2023)	FBC	LFS
1	7/14/20	UPDATE TO 7TH ED	(2020)	FBC	LFS
NO.	DATE				
REVISIONS					

DATE: 10/12/17

SCALE: *N.T.S.*

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-21131.4

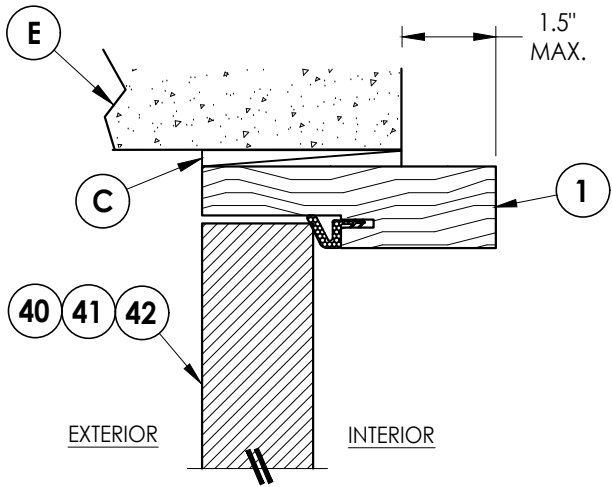
SHEET 5 OF 11

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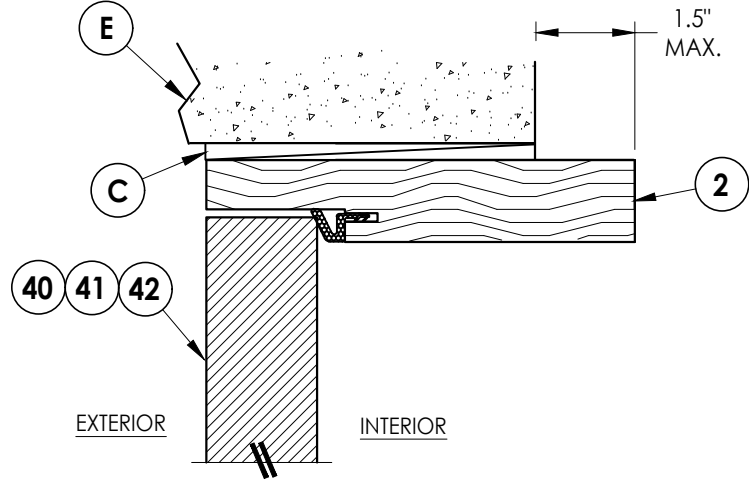
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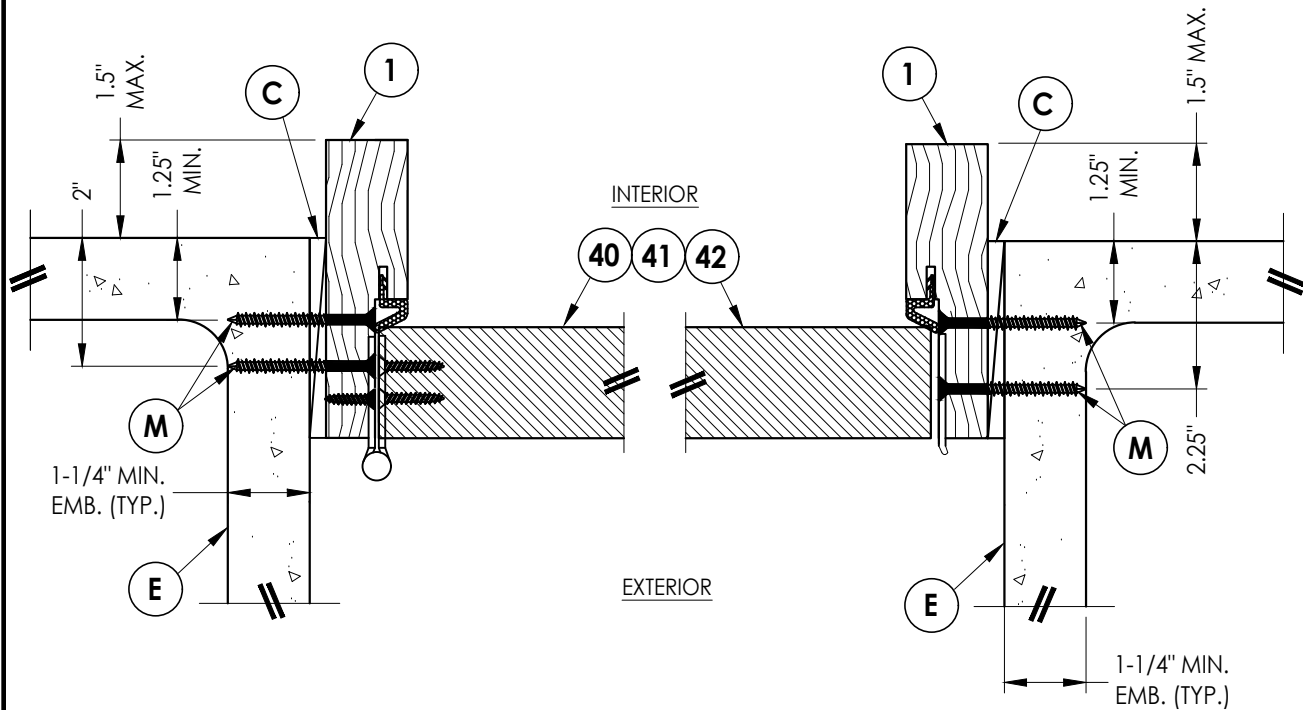


1
6 **VERTICAL CROSS SECTION**
Shown Direct to Masonry
Outswing only w/ 4-9/16" jamb

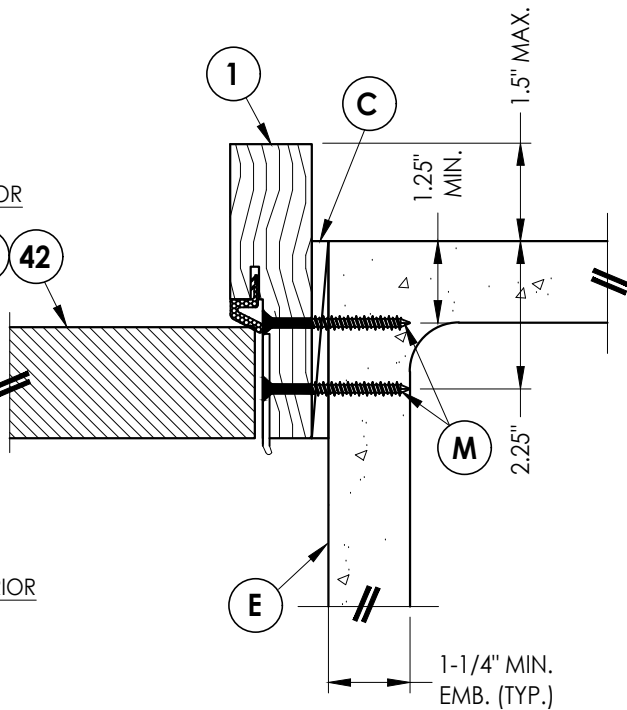


4
6 **VERTICAL CROSS SECTION**
Shown Direct to Masonry
Outswing only w/ 6-9/16" jamb

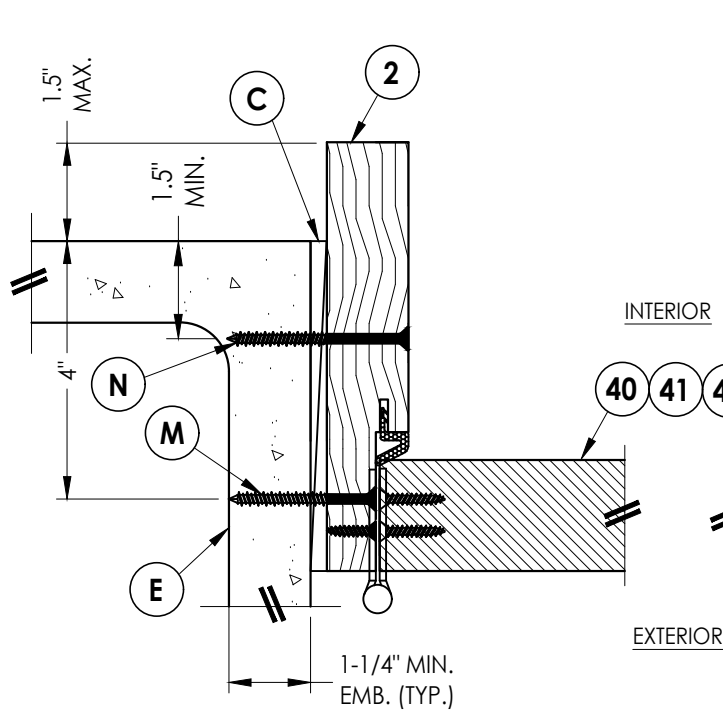
DIRECT TO MASONRY MAX. DESIGN PRESSURE:
w/ STANDARD STRIKE = ± 47 PSF
w/ SECURITY STRIKE = ± 55 PSF



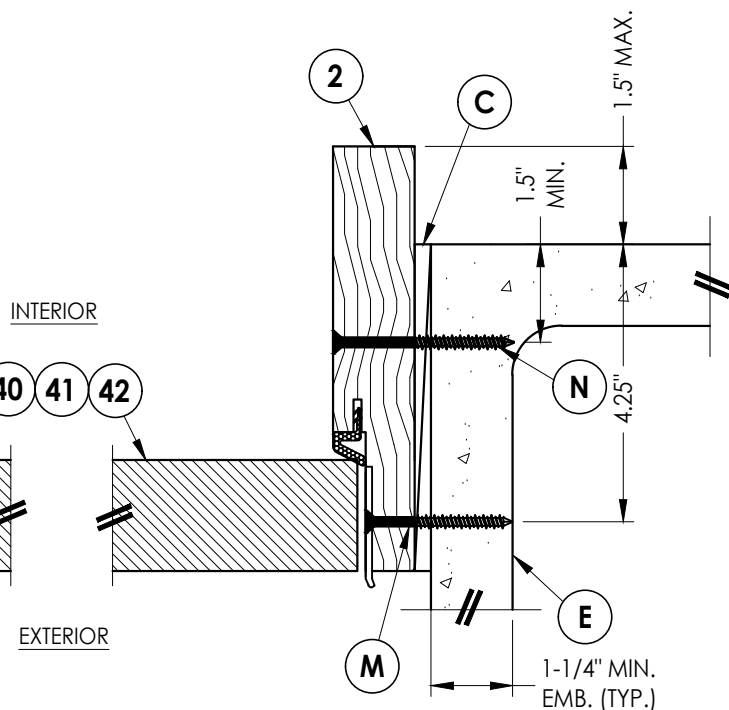
2
6 **HORIZONTAL CROSS SECTION**
Shown Direct to Masonry
Outswing only w/ 4-9/16" jamb



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



5
6 **HORIZONTAL CROSS SECTION**
Shown Direct to Masonry
Outswing only w/ 6-9/16" jamb



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

Documents Prepared By:
Lyndon F. Schmidt
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RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: **THERMA-TRU
STEEL DOOR**

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

NO.	DATE	REVISIONS
2	8/07/23	UPDATE TO 8TH ED. (2023) FBC
1	7/14/20	UPDATE TO 7TH ED (2020) FBC
1		

DATE: 10/12/17

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

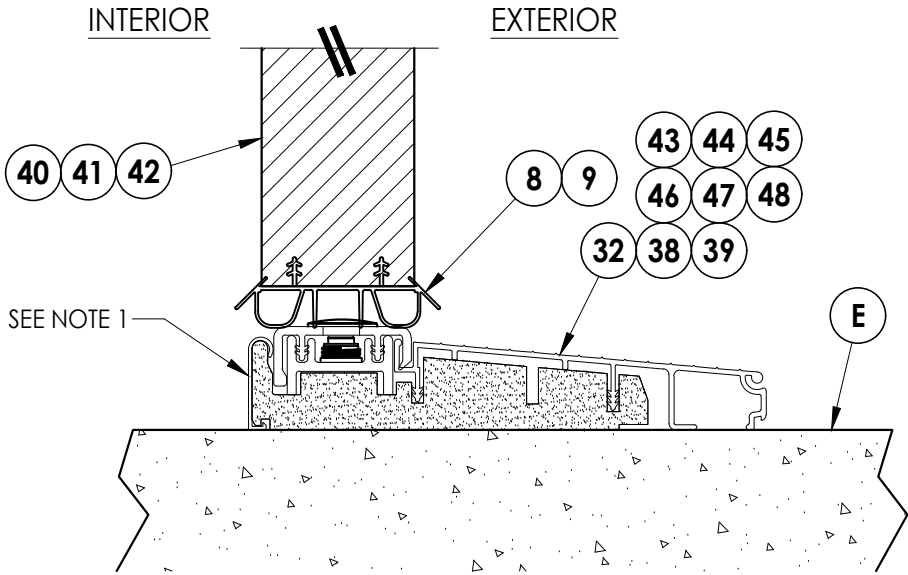
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FL-21131.4

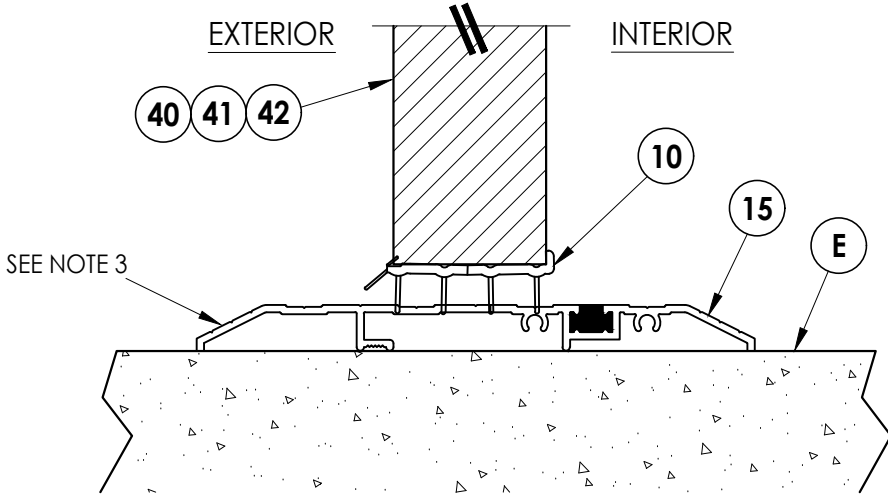
SHEET 6 OF 11

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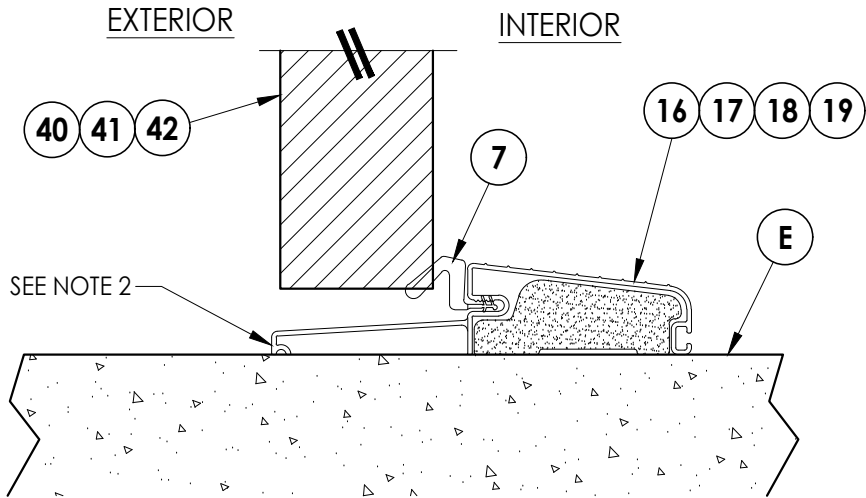
- Notes:
- Sill Item #'s 16, 32, 38, 39, 43, 44, 45, 46, 47 & 48 are attached to jambs w/ (3) #8 X 2-1/2" pfh screws or (3) 2.5" staples at each end.
 - Sill Item #'s 17, 18 & 19 are attached to jambs w/ (2) #8 X 2-1/2" pfh screws at each end.
 - Sill Item #15 is attached to jambs utilizing (2) #10 X 2" pph SMS screws at each end.



1
7 **VERTICAL CROSS SECTION**
Inswing Sill



3
7 **VERTICAL CROSS SECTION**
Public Access Sill



2
7 **VERTICAL CROSS SECTION**
Outswing Sill

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

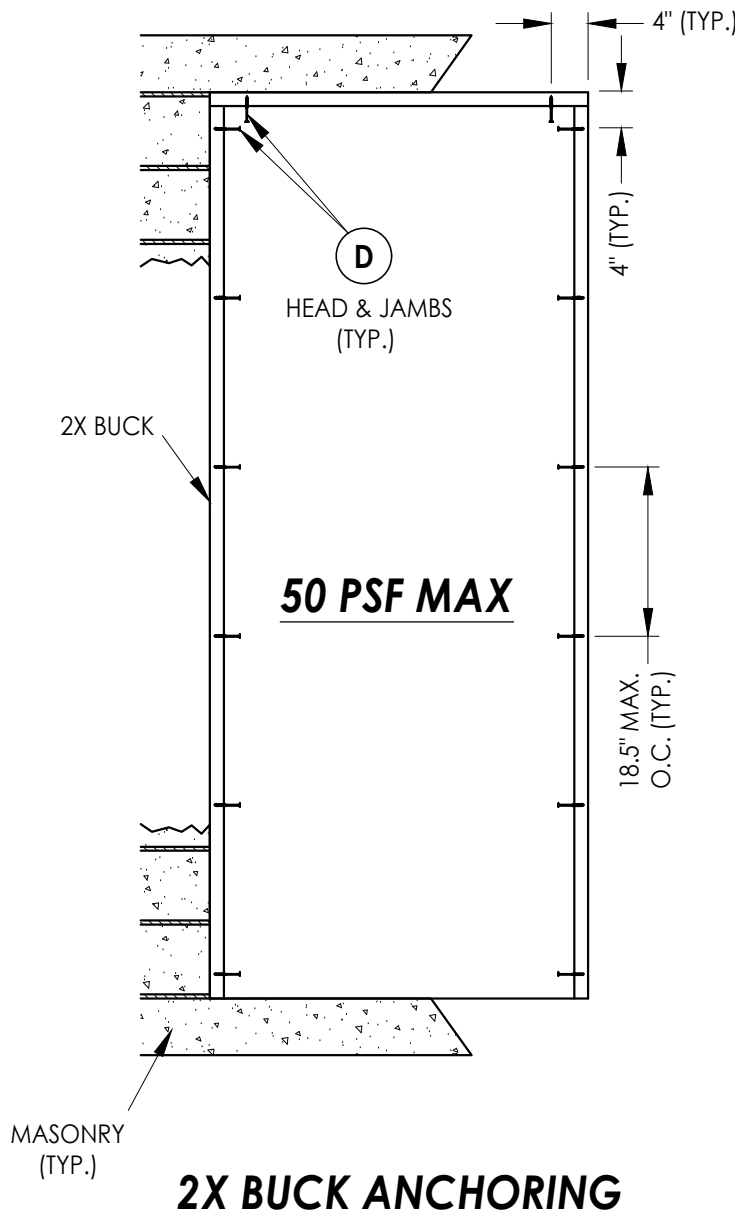
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P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

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

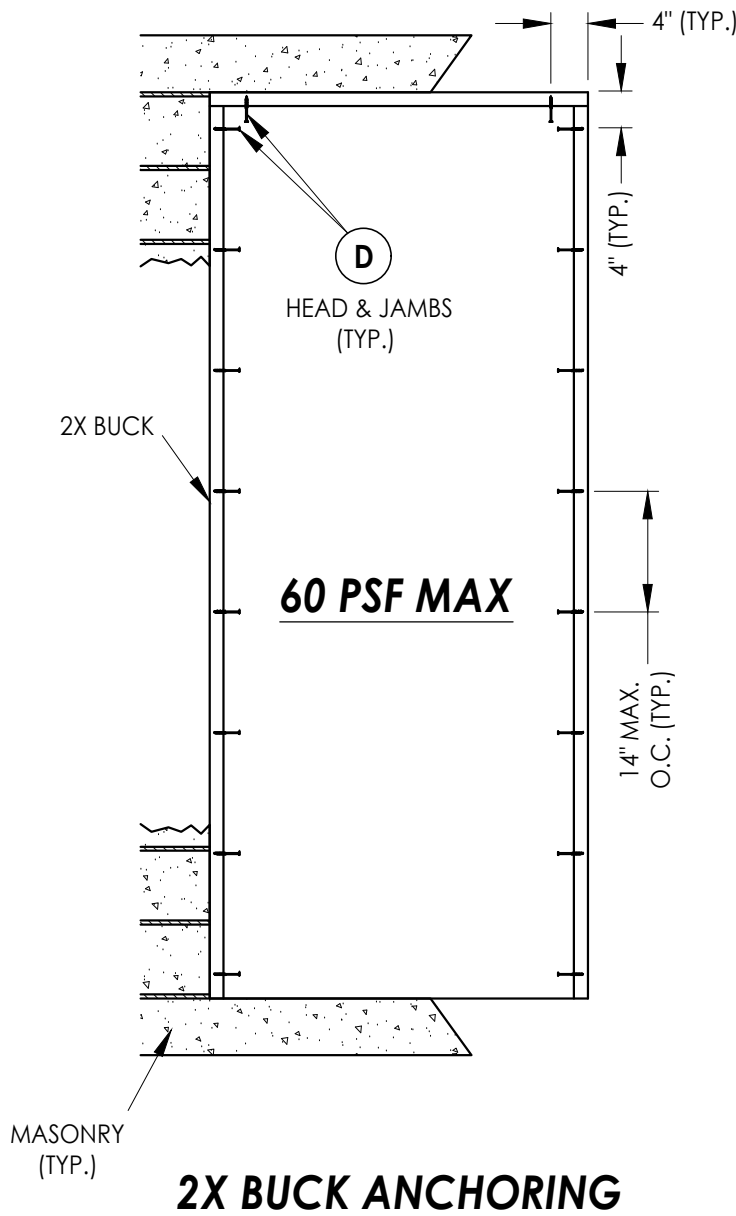
NO.	DATE	REVISIONS			
		DATE	BY	DESCRIPTION	DATE
2	8/07/23	UPDATE TO 8TH ED. (2023)	FBC	LFS	
1	7/14/20	UPDATE TO 7TH ED (2020)	FBC	LFS	

DATE:	10/12/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-21131.4
SHEET	7 OF 11

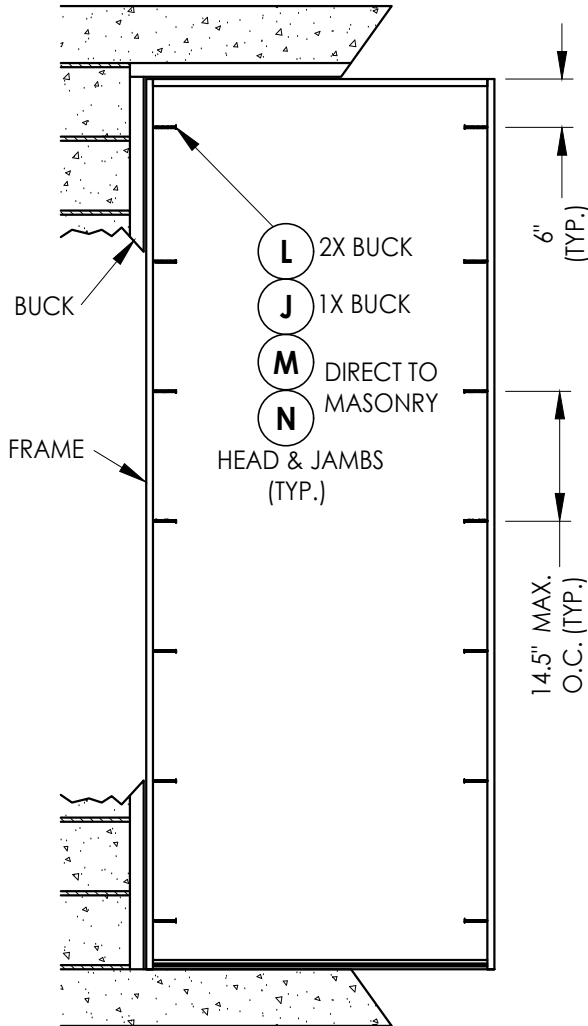
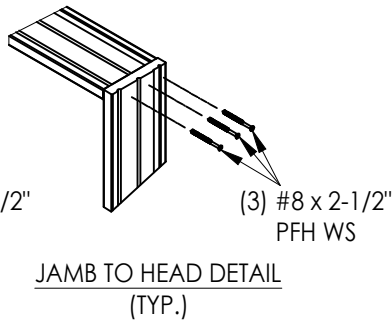
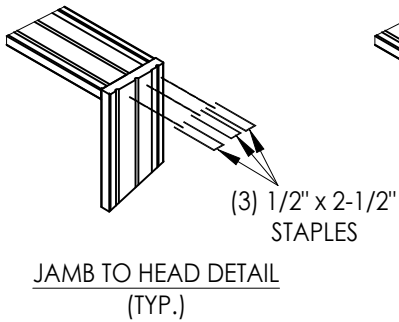
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2X BUCK ANCHORING



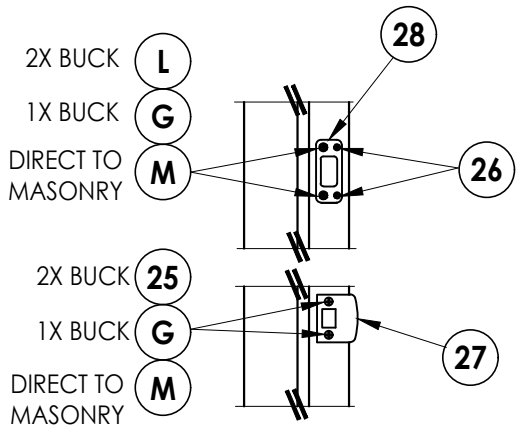
2X BUCK ANCHORING



FRAME ANCHORING

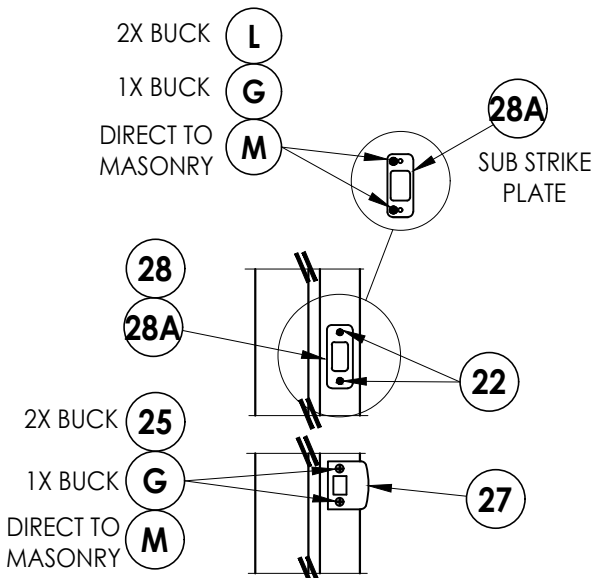
Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409				BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813			
PRODUCT: THERMA-TRU STEEL DOOR				PART OR ASSEMBLY: BUCK AND FRAME ANCHORING			
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LATCH & DEADBOLT DETAIL

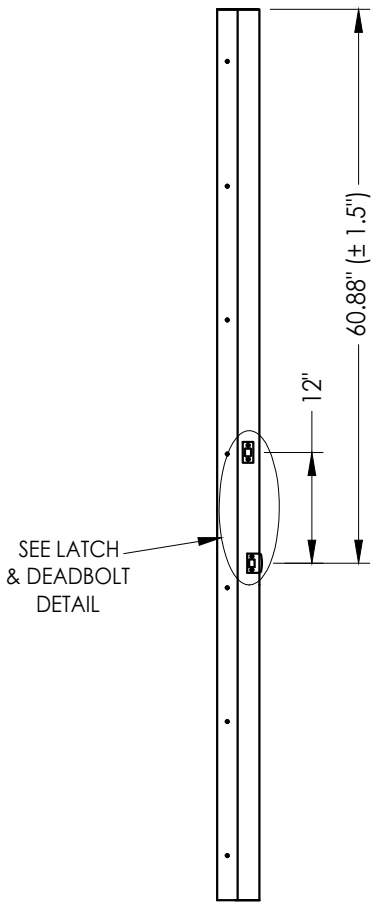
Kwikset



LATCH & DEADBOLT DETAIL

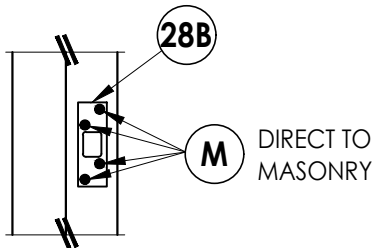
Schlage

LATCH & DEADBOLT STRIKE DETAILS



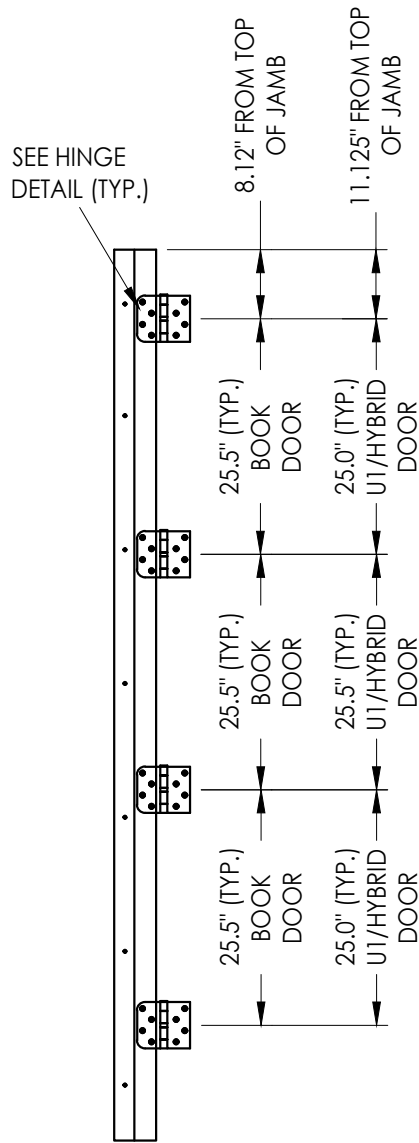
STRIKE JAMB

Latch and Deadbolt

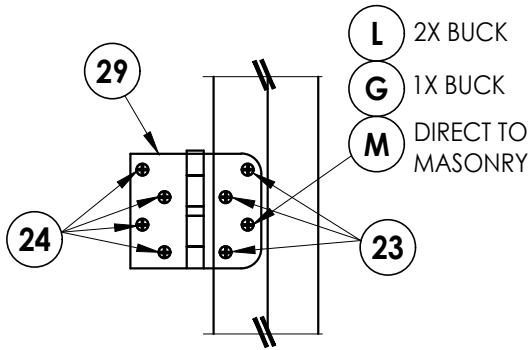


DEADBOLT STRIKE DETAILS

(Security Deadbolt Strike Plate)



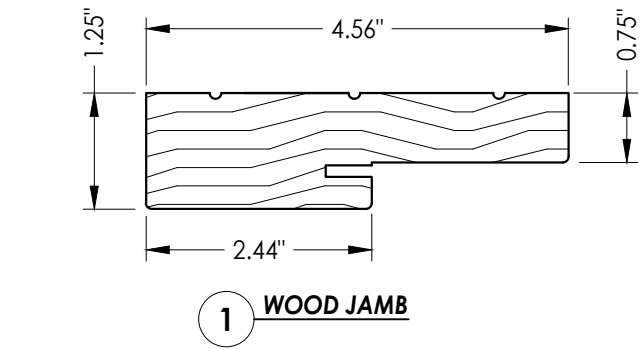
HINGE JAMB



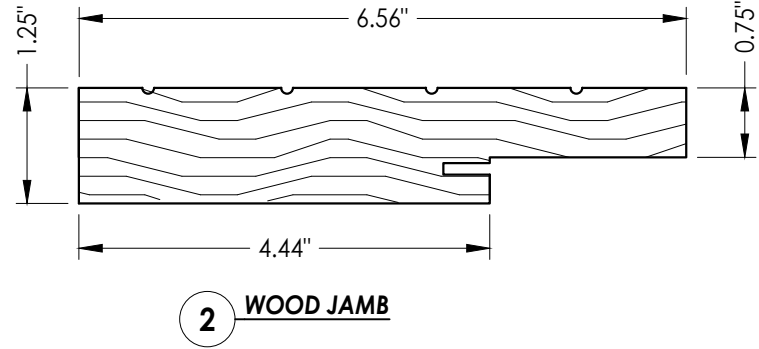
HINGE DETAIL

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 STEEL DOOR				PART OR ASSEMBLY: HARDWARE DETAILS			
				LFS	FBC	8/07/23	2
				LFS	FBC	7/14/20	1
				BY	DATE		
				REVISIONS			
DATE: 10/12/17							
SCALE: N.T.S.							
DWG. BY: JK							
CHK. BY: LFS							
DRAWING NO.: FL-21131.4							
SHEET 9 OF 11							

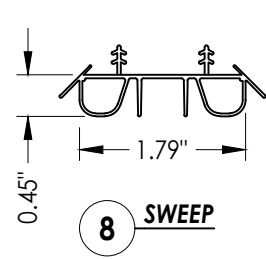
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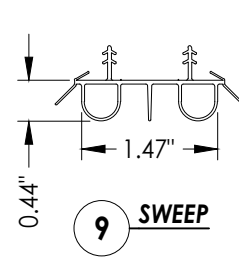
1 WOOD JAMB



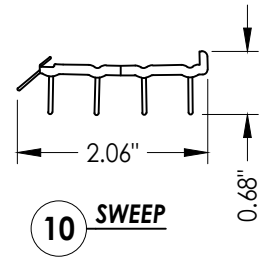
2 WOOD JAMB



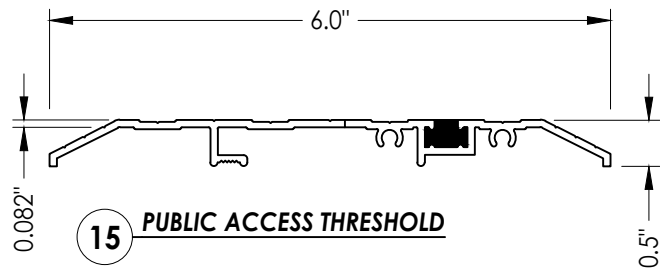
8 SWEEP



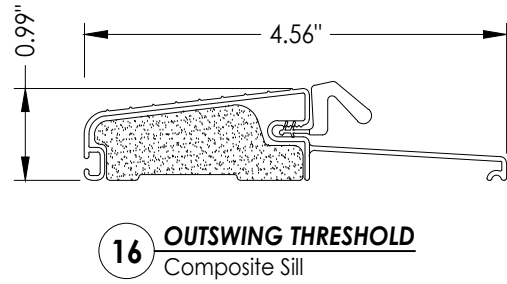
9 SWEEP



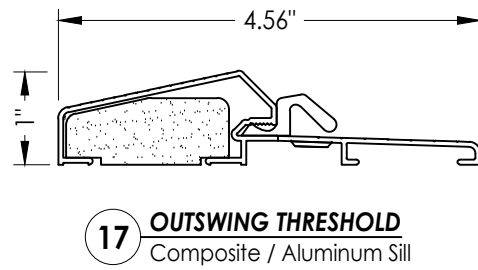
10 SWEEP



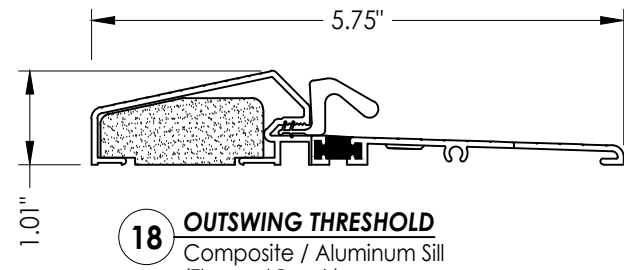
15 PUBLIC ACCESS THRESHOLD



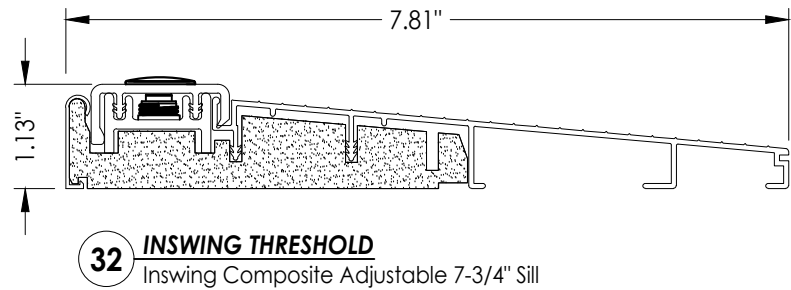
16 OUTSWING THRESHOLD
Composite Sill



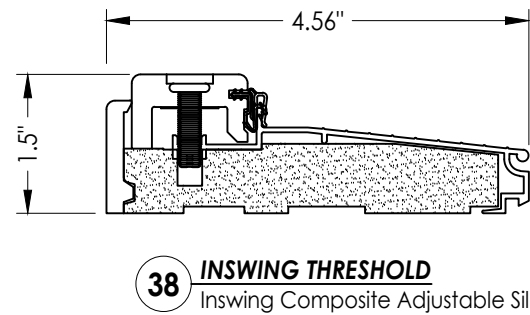
17 OUTSWING THRESHOLD
Composite / Aluminum Sill



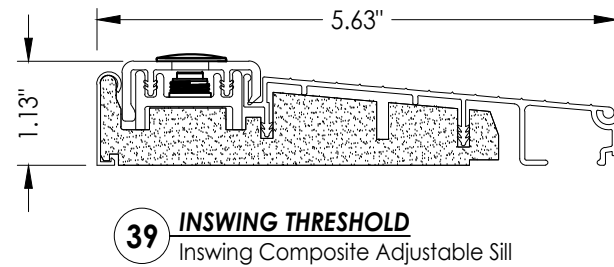
18 OUTSWING THRESHOLD
Composite / Aluminum Sill
(Thermal Break)



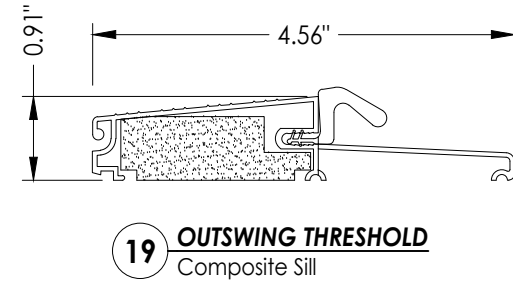
32 INSWING THRESHOLD
Inswing Composite Adjustable 7-3/4" Sill



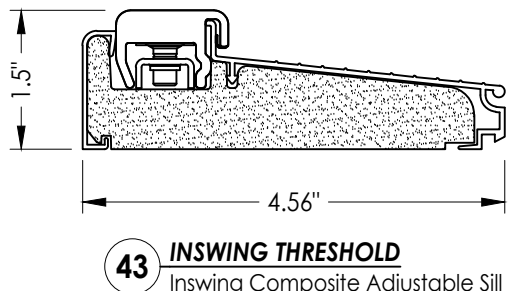
38 INSWING THRESHOLD
Inswing Composite Adjustable Sill



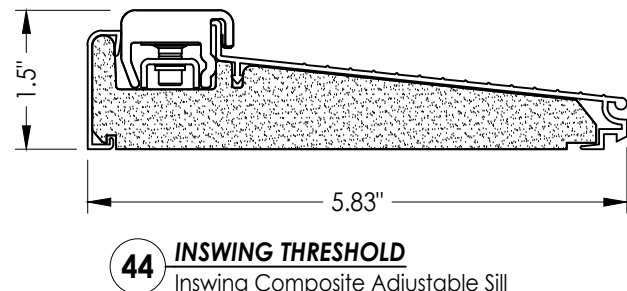
39 INSWING THRESHOLD
Inswing Composite Adjustable Sill



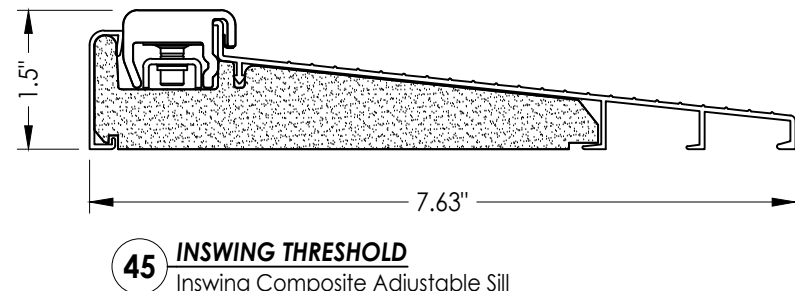
19 OUTSWING THRESHOLD
Composite Sill



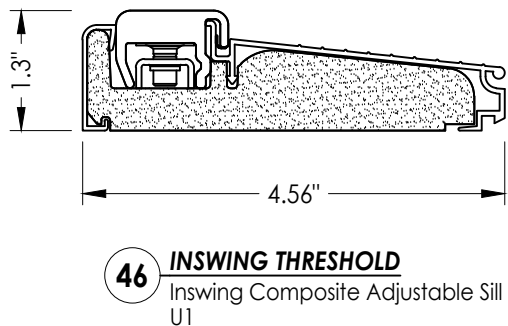
43 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



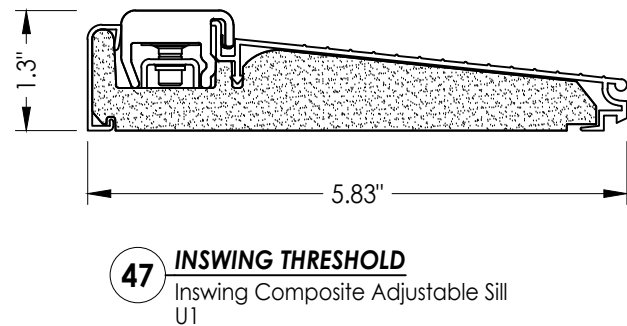
44 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



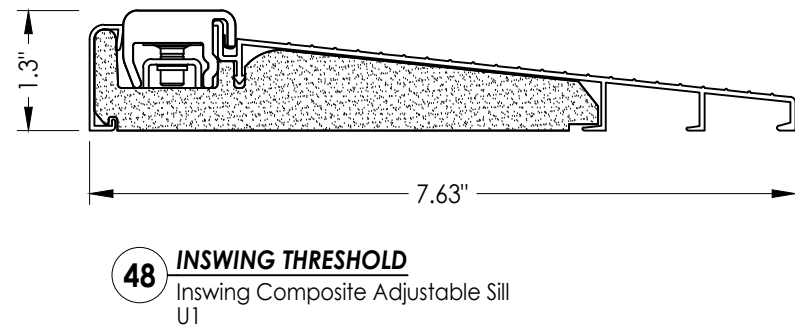
45 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



46 INSWING THRESHOLD
Inswing Composite Adjustable Sill
U1



47 INSWING THRESHOLD
Inswing Composite Adjustable Sill
U1



48 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
STEEL DOOR

PART OR ASSEMBLY:

COMPONENTS

NO.	DATE	REVISIONS
2	8/07/23	UPDATE TO 8TH ED. (2023) FBC
1	7/14/20	UPDATE TO 7TH ED (2020) FBC

DATE:	10/12/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-21131.4
SHEET	10 OF 11

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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 (STANDARD)	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
			28B	DEADBOLT STRIKE PLATE (SECURITY)	STEEL
G	3/16" X 3-1/4" ITW CONCRETE SCREW	STEEL	29	4" X 4" HINGE	STEEL
J	1/4" X 3-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL	32	INSWING THRESHOLD	ALUM/COMP
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL	38	INSWING THRESHOLD	ALUM/COMP
M	3/16" X 2-1/4" ITW CONCRETE SCREW	STEEL	39	INSWING THRESHOLD	ALUM/COMP
N	3/16" X 2-3/4" ITW CONCRETE SCREW	STEEL	40	DOOR PANEL (BOOK)	-
1	JAMB (FINGER JOINT PINE)	WOOD	41	DOOR PANEL (HYBRID)	-
2	JAMB (FINGER JOINT PINE)	WOOD	42	DOOR PANEL (U1)	-
6	WEATHERSTRIP (MEDIUM REACH)	FOAM	43	INSWING THRESHOLD	ALUM/COMP
7	WEATHERSTRIP (LONG REACH)	FOAM	44	INSWING THRESHOLD	ALUM/COMP
8	SWEEP	VINYL	45	INSWING THRESHOLD	ALUM/COMP
9	SWEEP (USE w/ MODERATE CLIMATE THRESHOLD)	VINYL	46	INSWING THRESHOLD	ALUM/COMP
10	SWEEP (USE w/ PUBLIC ACCESS THRESHOLD)	VINYL	47	INSWING THRESHOLD	ALUM/COMP
15	PUBLIC ACCESS THRESHOLD	ALUM	48	INSWING THRESHOLD	ALUM/COMP
16	OUTSWING THRESHOLD	ALUM/COMP			
17	OUTSWING THRESHOLD	ALUM/COMP			
18	OUTSWING THRESHOLD	ALUM/COMP			
19	OUTSWING THRESHOLD	ALUM/COMP			
22	#8 x 3/4" PFH WOOD SCREW	STEEL			
23	#10 x 3/4" PFH WOOD SCREW	STEEL			
24	#10 x 1" PFH WOOD SCREW	STEEL			

CONCRETE ANCHOR NOTES:

1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. 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.
3. 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:

1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.

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