



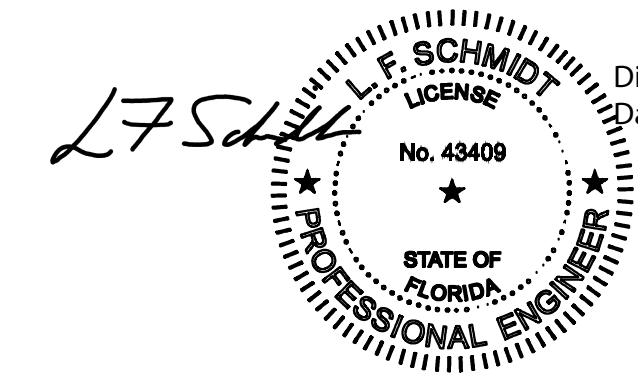
Fiber-Classic® & Smooth-Star®

WOOD EDGE
OPAQUE FIBERGLASS SINGLE DOOR
IN SWING/OUT SWING
"IMPACT"

GENERAL NOTES

1. This product evaluation drawing has been developed in compliance with the 8th Edition (2023) Florida Building Code (FBC) including 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 the "HVHZ" this product complies with Section 1626 of the FBC and does not require an impact resistant covering.
4. When used in areas outside of the "HVHZ" 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 E 1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
5. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
6. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
7. This product meets the water infiltration requirements for the "HVHZ".
8. Outswing configurations using Coastal Sill (item #19) & Composite Sill (item #16) under active doors meet water infiltration requirements for "HVHZ". All other configurations do not meet the water infiltration requirements for the "HVHZ" and shall be installed only in non-habitable areas or at habitable locations protected by an overhang or canopy such that the angle between the edge of canopy or overhang to sill is less than 45 degrees.

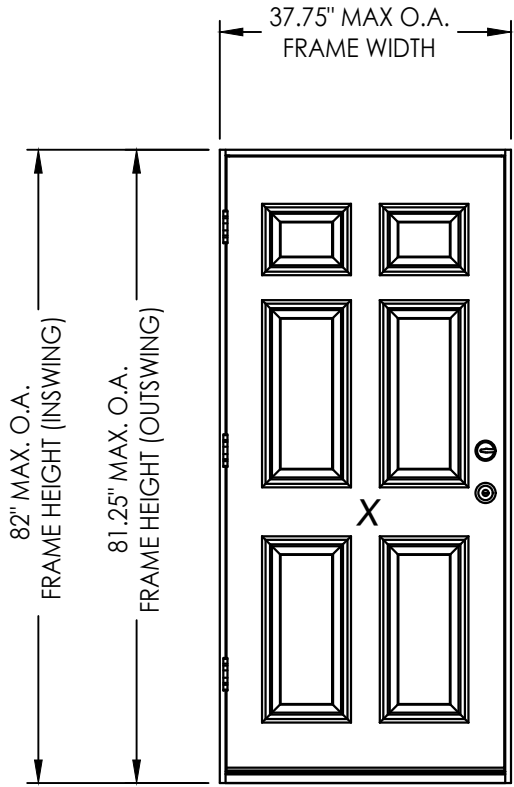
TABLE OF CONTENTS			
SHEET#	DESCRIPTION	SHEET#	
1	Typical Elevations, Design Pressures & General Notes	7	Vertical Cross Sections (Thresholds)
2	Door Panel Details	8	Buck & Frame Anchoring
3	Elevations	9	Hardware Details
4	Horizontal & Vertical Cross Sections (2X Buck)	10	Components
5	Horizontal & Vertical Cross Sections (1X Buck)	11	Components & Bill of Materials
6	Horizontal & Vertical Cross Sections (Direct to Masonry)		



Digitally signed by Lyndon F Schmidt
Date: 2023.08.18 12:13:38 -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	LOCK HARDWARE	DESIGN PRESSURE (PSF) IN SWING		DESIGN PRESSURE (PSF) OUT SWING	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
X	Kwikset	+75.0	-75.0	+80.0	-80.0
X	Schlage	+75.0	-75.0	+75.0	-75.0
X	Multipoint	+55.0	-60.0	+55.0	-55.0

See Sheet 3 for Hardware Specifications

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

PRODUCT:
THERMA-TRU
FIBERGLASS DOOR

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

DATE: 12/22/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-21142.1

SHEET 1 OF 11

28/18/23 UPDATE TO 8TH ED. (2023) FBC

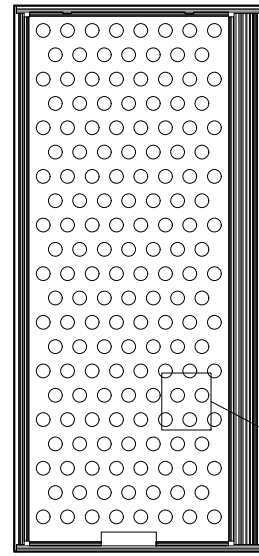
17/15/20 UPDATE TO 7th ED (2020) FBC

NO. DATE

REVISIONS

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

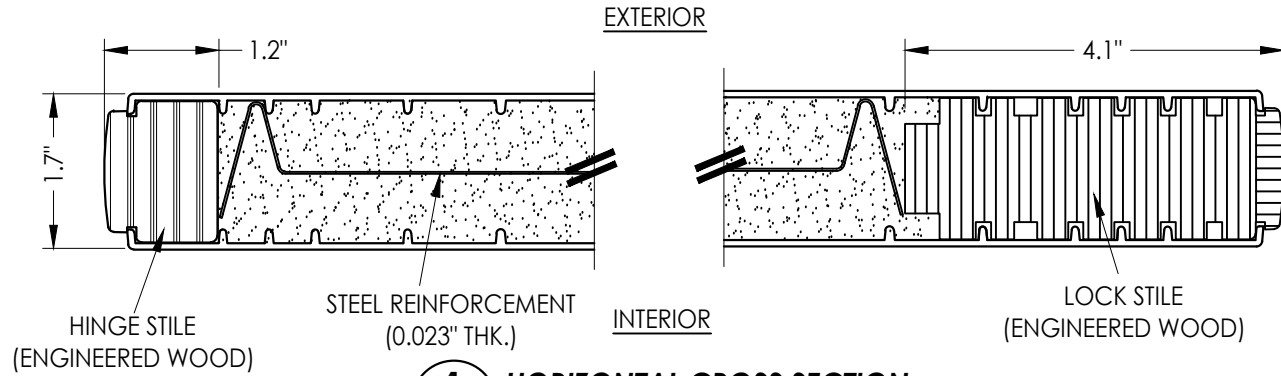
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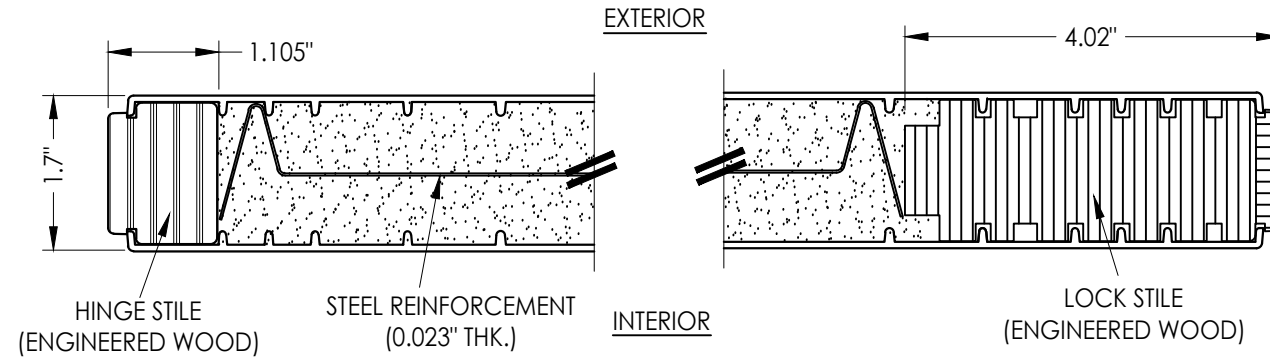
DETAIL A-A
PANEL REINFORCEMENT
(0.023\"

STEEL REINFORCEMENT
28.86% OPEN
AREA MAX.

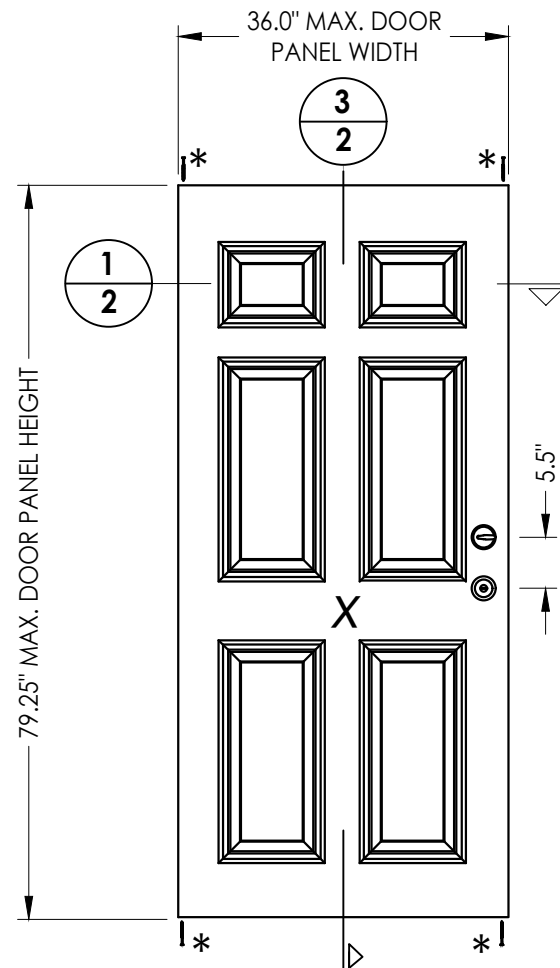
* #8 X 2.5\"



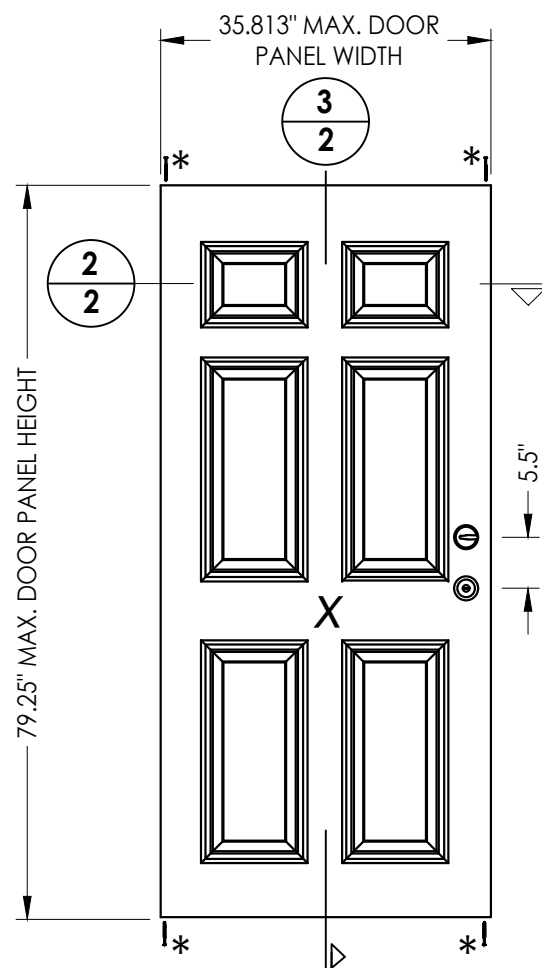
1
2 **HORIZONTAL CROSS SECTION**



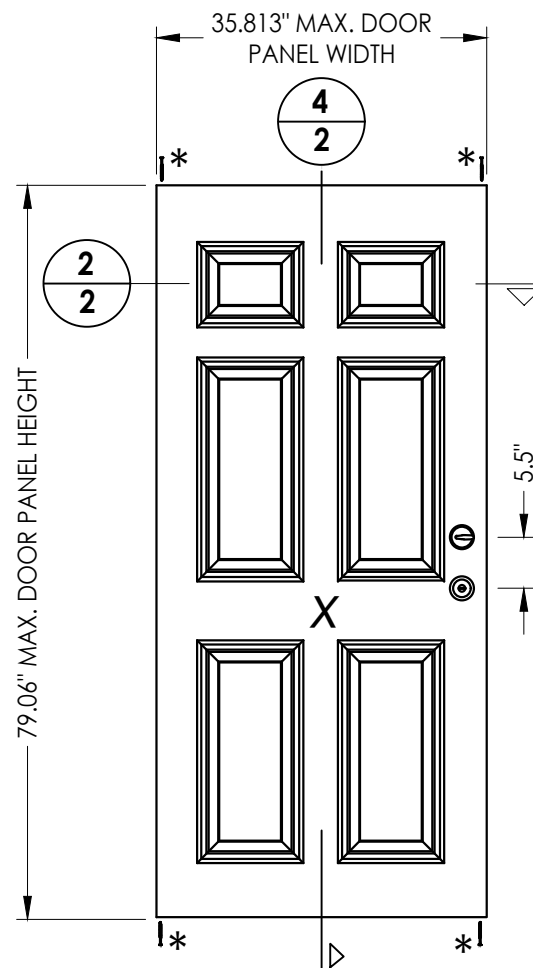
2
2 **HORIZONTAL CROSS SECTION**



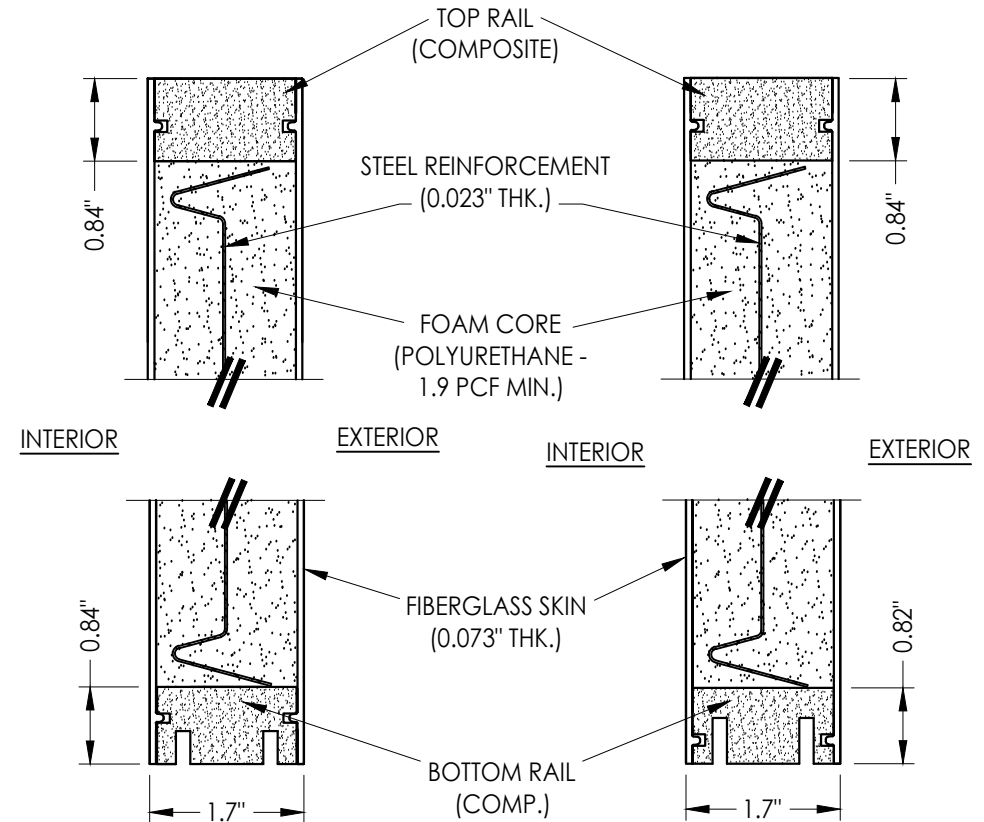
40 **DOOR PANEL**
BOOK



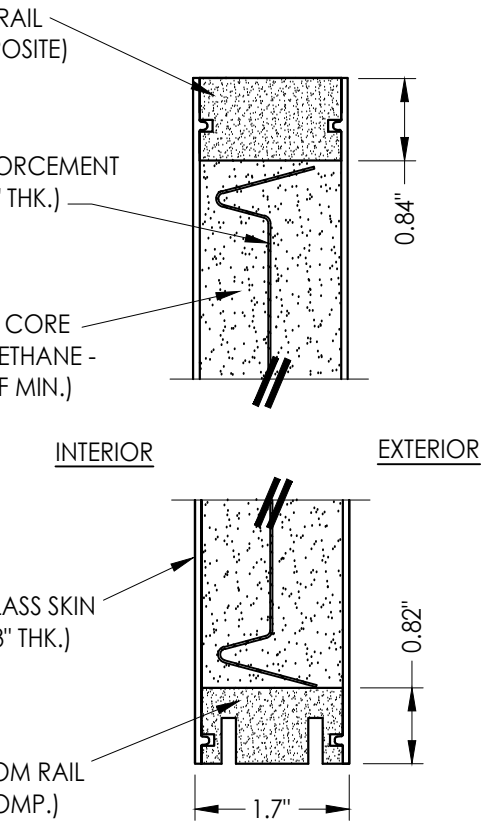
41 **DOOR PANEL**
Hybrid Door



42 **DOOR PANEL**
U1 Door



3
2 **VERTICAL CROSS SECTION**



4
2 **VERTICAL CROSS SECTION**

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Lyndon F. Schmidt
P.E. No. 43409

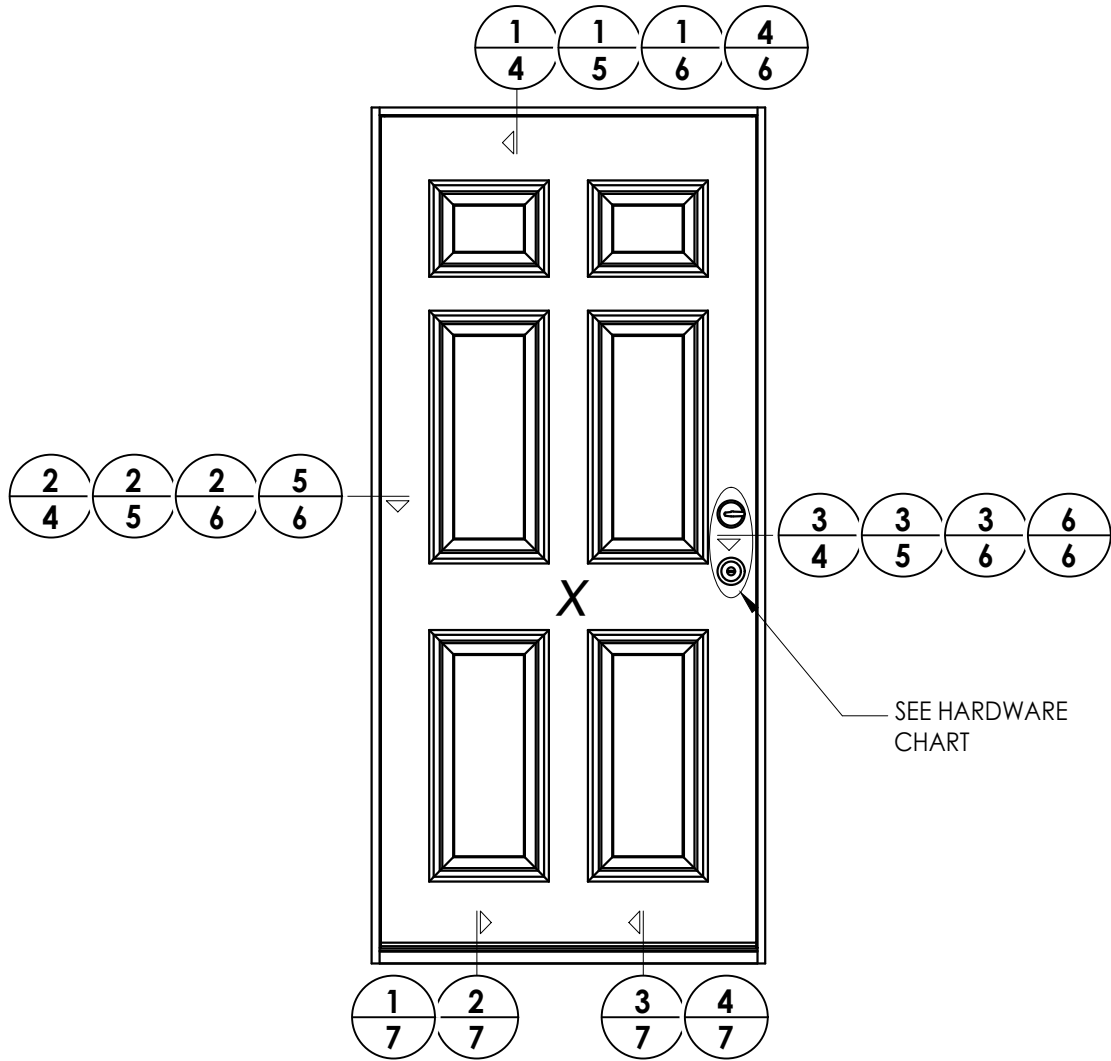
PRODUCT:
THERMA-TRU
FIBERGLASS DOOR

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

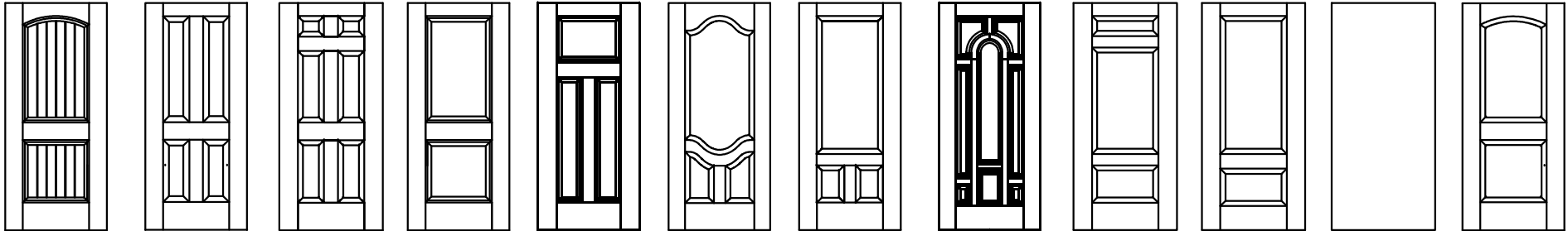
PART OR ASSEMBLY:
DOOR PANEL DETAILS

REVISIONS		NO.	DATE	BY
2	8/18/23	UPDATE TO 8TH ED. (2023)	FBC	LFS
1	7/15/20	UPDATE TO 7th ED (2020)	FBC	PO
DATE: 12/22/16		SCALE: N.T.S.		
DWG. BY: JK		CHK. BY: LFS		
DRAWING NO.: FL-21142.1		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)
HOPPE (THERMA-TRU)	MULTIPOINT : MPDGART (3 pt. Manual Tongue)	



Fiber-Classic/Smooth-Star Door Panel Options
Panel options shown are for illustration and are representative only
(similar opaque panel configurations are allowed)

Documents Prepared By:
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PRODUCT:
THERMA-TRU
FIBERGLASS DOOR

PART OR ASSEMBLY:
ELEVATIONS

DATE: 12/22/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-21142.1

SHEET 3 OF 11

2 8/18/23 UPDATE TO 8TH ED. (2023) FBC

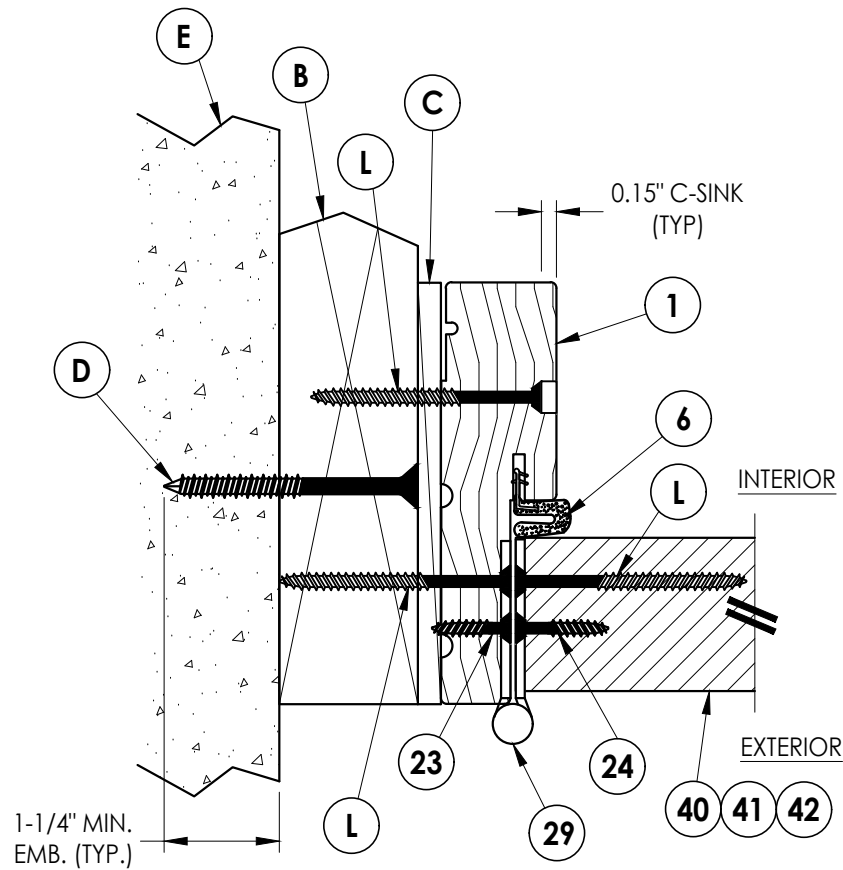
1 7/15/20 UPDATE TO 7th ED (2020) FBC

NO. DATE

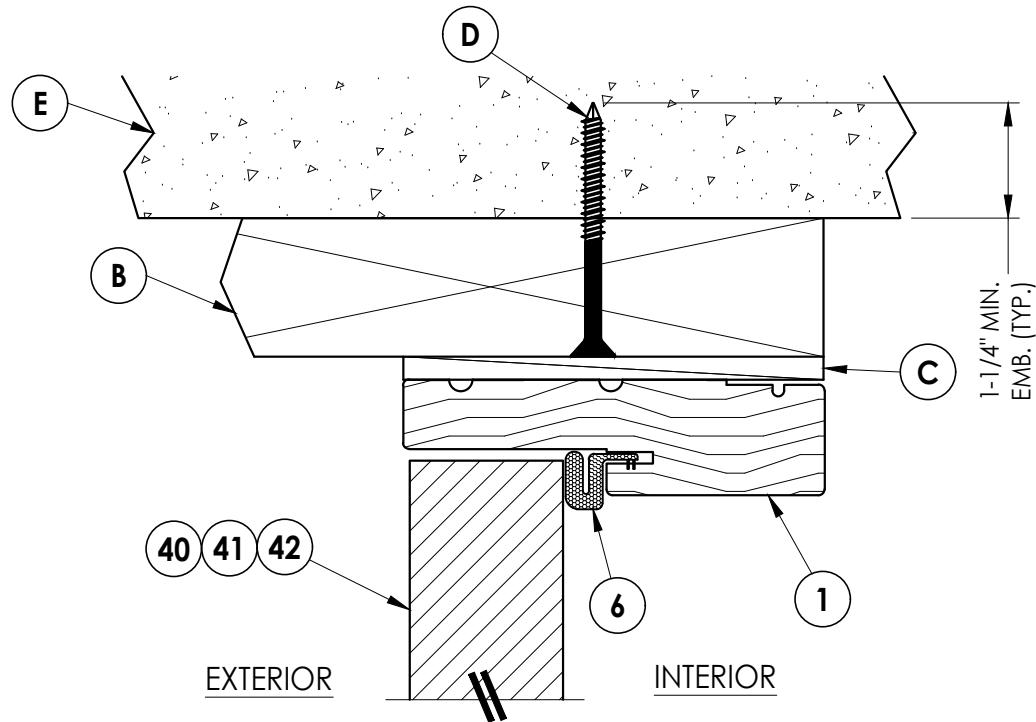
REVISIONS

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Phone No.: 813.659.9197
FBPE Registry No. 9813

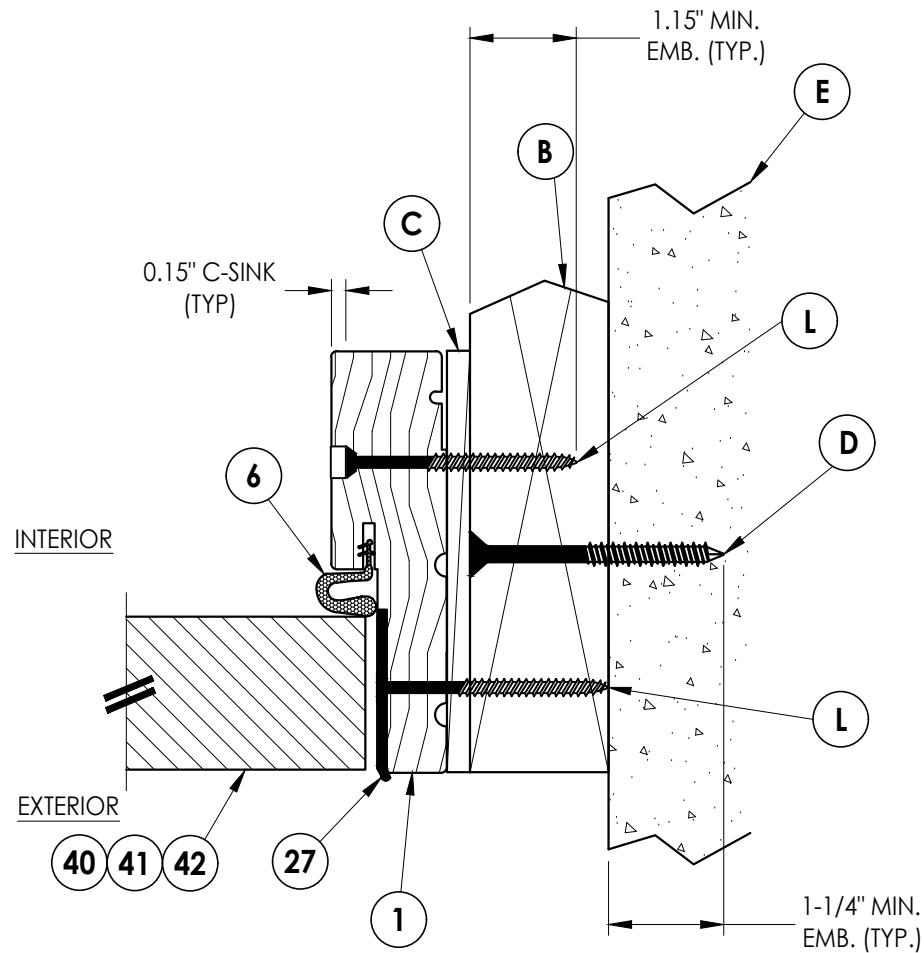
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2 HORIZONTAL CROSS SECTION
4 Shown w/ 2X Buck
Outswing shown (Inswing similar)



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 FIBERGLASS DOOR	
PART OR ASSEMBLY:		HORIZONTAL & VERTICAL CROSS SECTIONS (2X BUCK)	
DATE		REVISIONS	
NO.		BY	
2	8/18/23	UPDATE TO 8TH ED. (2023)	LFS
1	7/15/20	UPDATE TO 7th ED (2020)	PO

DATE: 12/22/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-21142.1

SHEET 4 OF 11

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

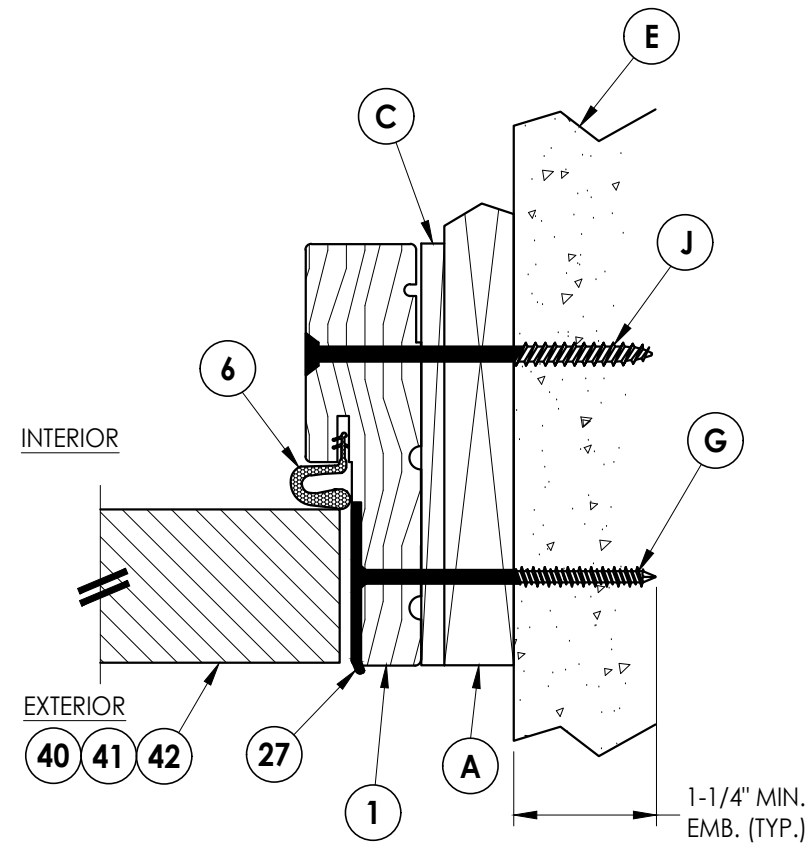
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

1X Buck to be secured to masonry by others

EXTERIOR INTERIOR

1 5 **VERTICAL CROSS SECTION**

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



3 5 **HORIZONTAL CROSS SECTION**

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

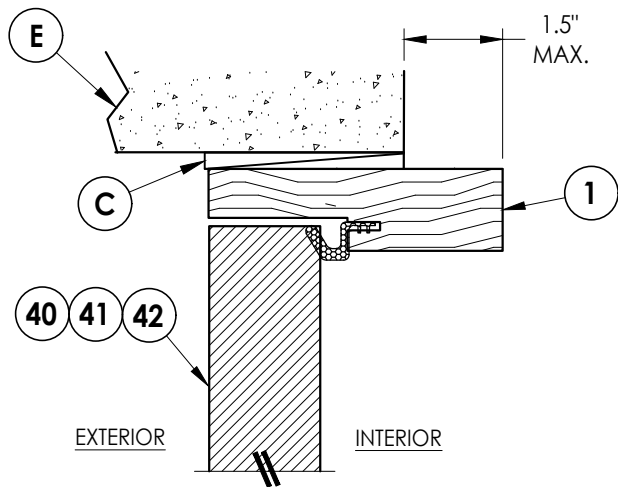
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PRODUCT: THERMA-TRU FIBERGLASS DOOR	PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (1X BUCK)
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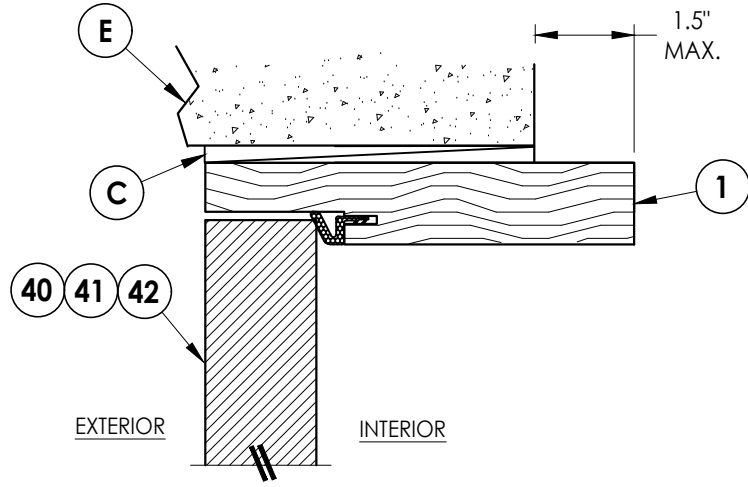
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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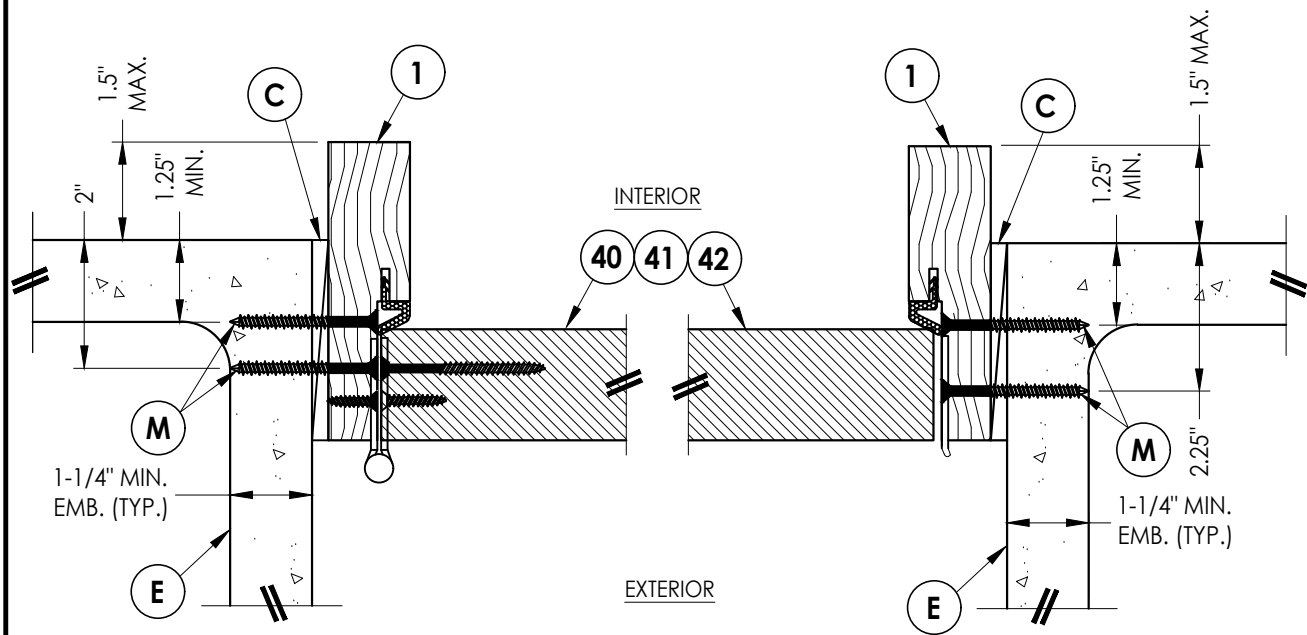


1
6 **VERTICAL CROSS SECTION**
Shown Direct to Masonry
Outswing only w/ 4-9/16" jamb

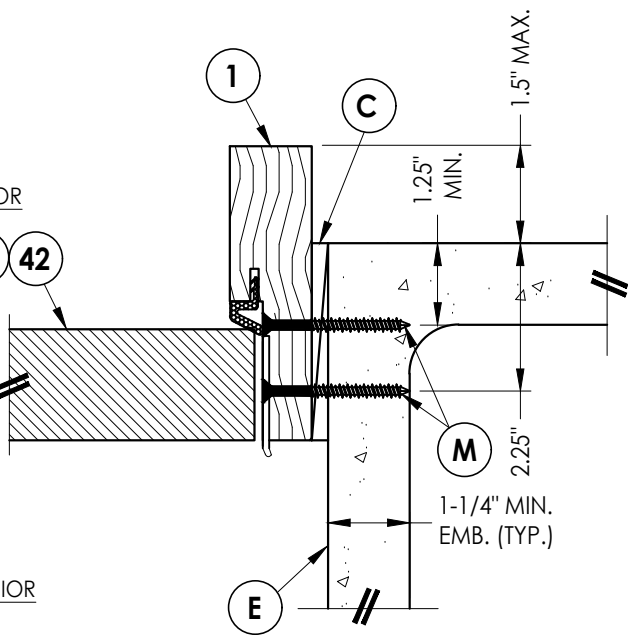


4
6 **VERTICAL CROSS SECTION**
Shown Direct to Masonry
Outswing only w/ 6-9/16" jamb

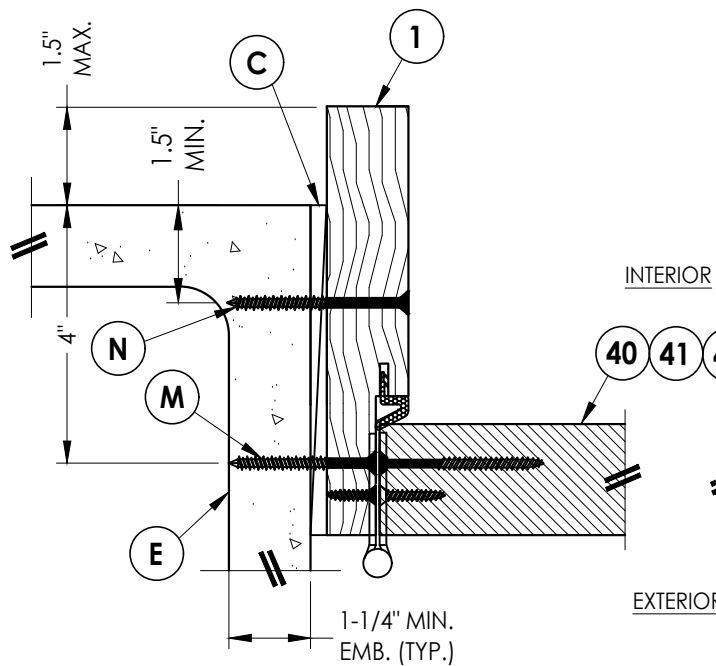
DIRECT TO MASONRY MAX. DESIGN PRESSURE:
w/ STANDARD STRIKE = ± 55 PSF
w/ SECURITY STRIKE = ± 65 PSF



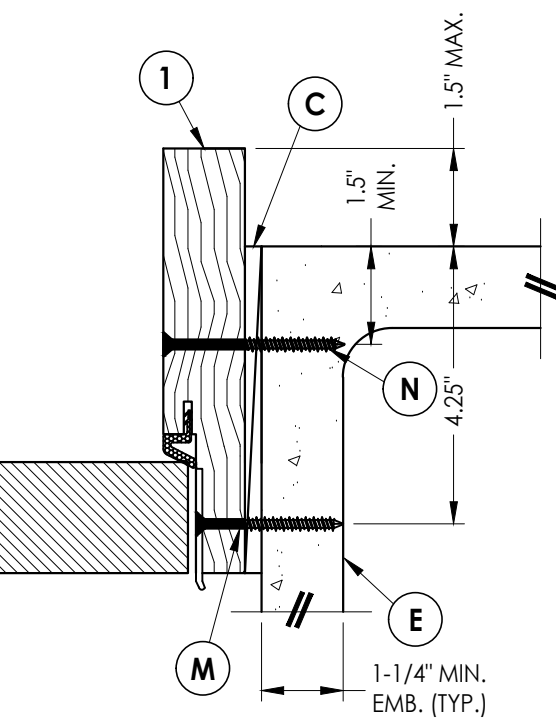
2
6 **HORIZONTAL CROSS SECTION**
Shown Direct to Masonry
Outswing only w/ 4-9/16" jamb



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
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	REVISIONS
2	8/18/23	UPDATE TO 8TH ED. (2023) FBC
1	7/15/20	UPDATE TO 7th ED (2020) FBC

DATE: 12/22/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

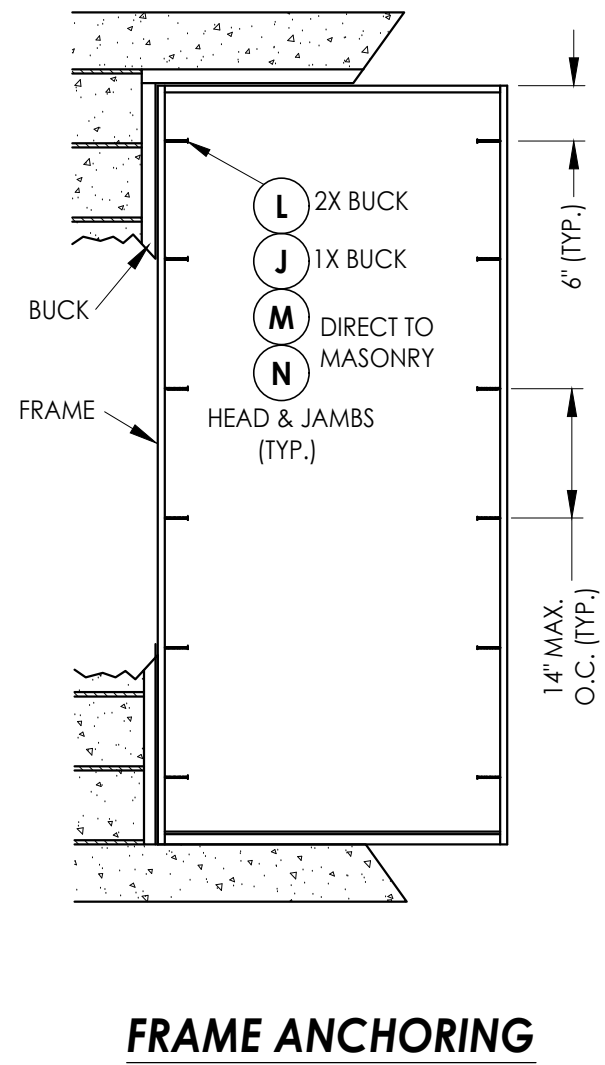
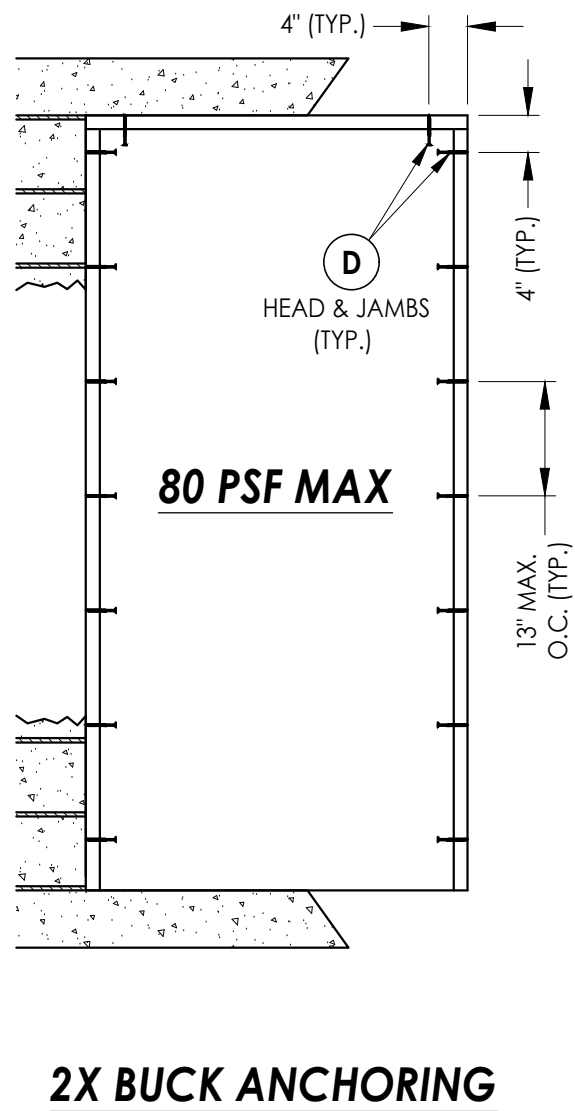
DRAWING NO.:

FL-21142.1

SHEET 6 OF 11

1. Sill Item #'s 16, 32, 33, 36, 37, 38, 39, 43, 44, 45, 46, 47 & 48 are attached to jambs w/ (3) #8 X 2-1/2" pph screws or (3) 2.5" staples at each end.
2. Sill Item #'s 17, 18 & 19 are attached to jambs w/ (2) #8 X 2-1/2" pph screws at each end.
3. Sill Item #15 is attached to jambs utilizing (2) #10 X 2" pph SMS screws at each end.

[illegible]



DATE: 12/22/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-21142.1

SHEET 8 OF 11

Documents Prepared By:
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P.E. No. 43409

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FBPE Registry No. 9813



LATCH & DEADBOLT STRIKE DETAILS

(Standard Deadbolt Strike Plate)



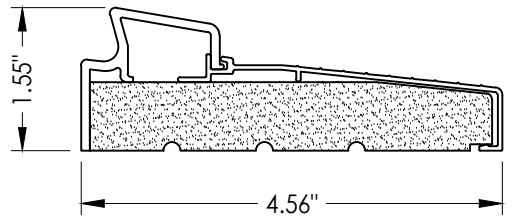
MULTIPOINT LOCK STRIKE DETAILS

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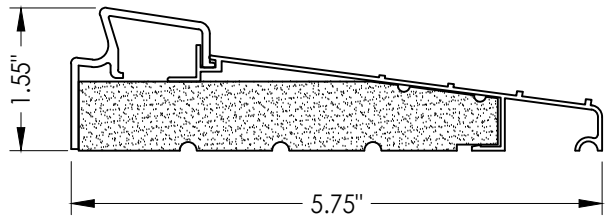
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

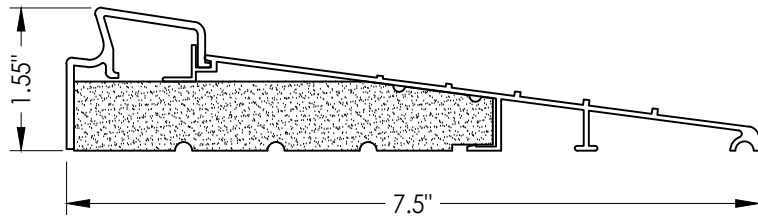
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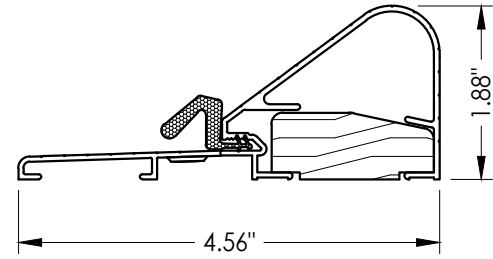
33 INSWING THRESHOLD
Inswing Basic Fixed Sill



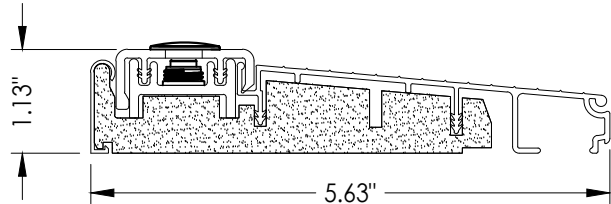
36 INSWING THRESHOLD
Inswing Basic Fixed 5-3/4" Sill



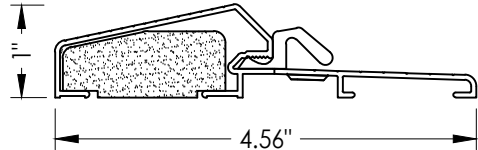
37 INSWING THRESHOLD
Inswing Basic Fixed 7-1/2" Sill



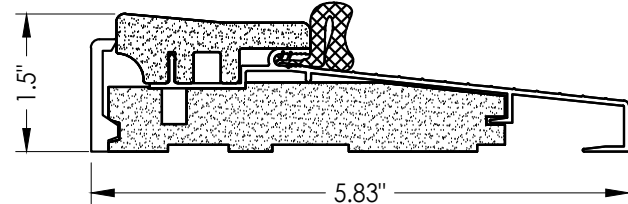
19 OUTSWING
Threshold coastal



39 INSWING THRESHOLD
Inswing Composite Adjustable Sill

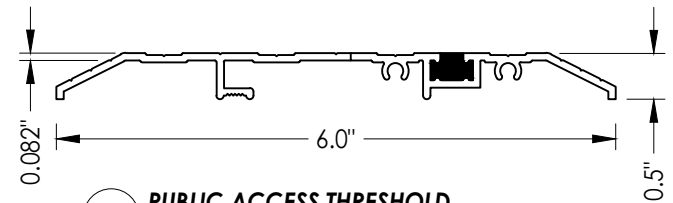


17 OUTSWING THRESHOLD
Composite / Aluminum Sill

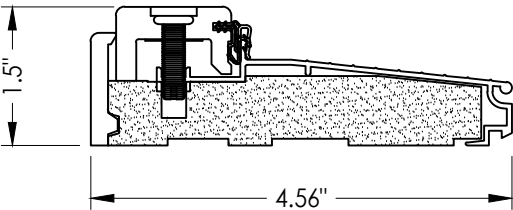


16 OUTSWING THRESHOLD *
Composite / Aluminum Sill

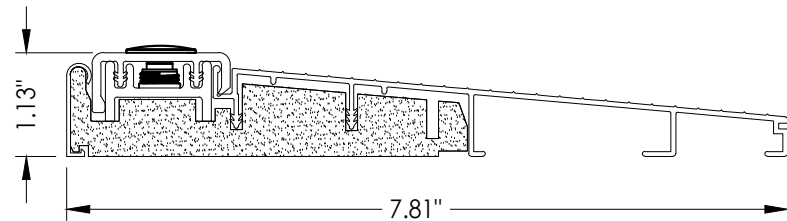
* **MAX. +55 PSF**
(where water infiltration is required)



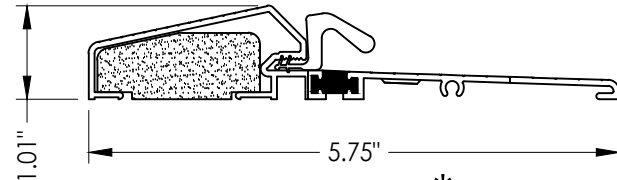
15 PUBLIC ACCESS THRESHOLD



38 INSWING THRESHOLD
Inswing Composite Adjustable Sill

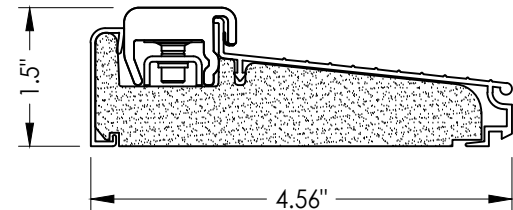


32 INSWING THRESHOLD
Inswing Composite Adjustable 7-3/4" Sill

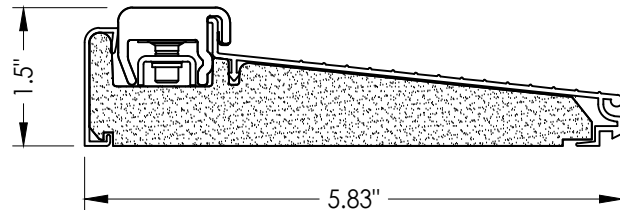


18 OUTSWING THRESHOLD *
Composite / Aluminum Sill
(Thermal Break)

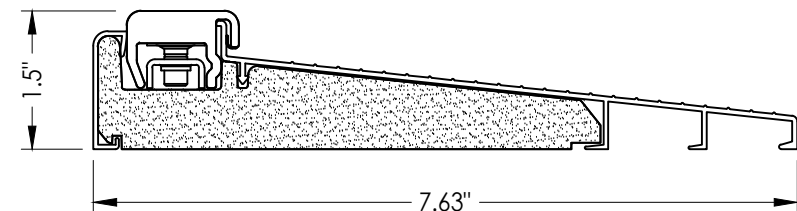
* Max. Positive Design Pressure = +55 PSF
(Where water infiltration is required)



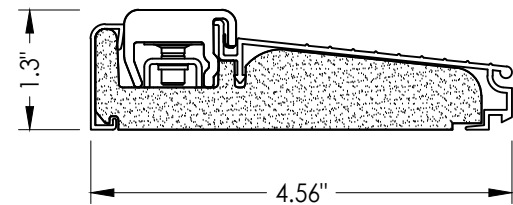
43 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



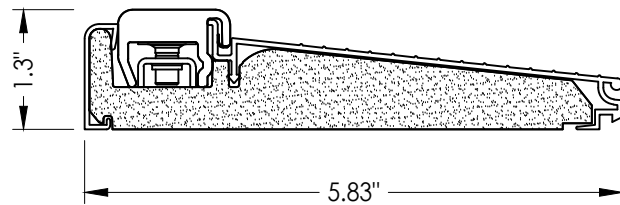
44 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



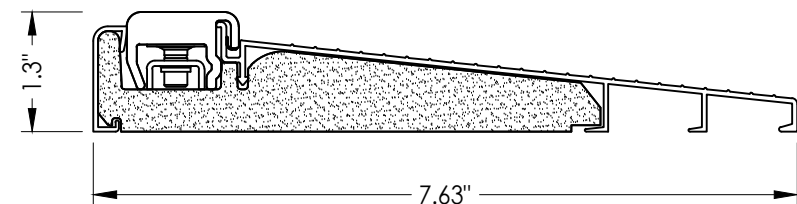
45 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



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
FIBERGLASS DOOR**

PART OR ASSEMBLY:

COMPONENTS

NO.	DATE	REVISIONS		
		DATE	BY	REVISIONS
2	8/18/23	UPDATE TO 8TH ED. (2023)	LFS	
1	7/15/20	UPDATE TO 7th ED. (2020)	PO	

DATE: 12/22/16

SCALE: N.T.S.

DWG. BY: JK

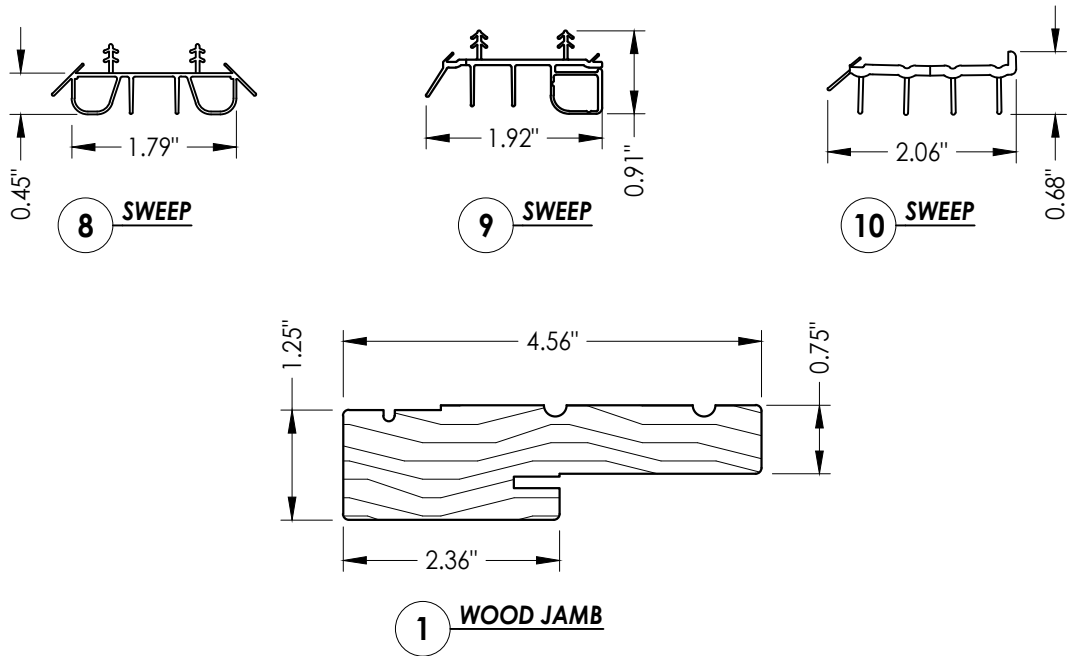
CHK. BY: LFS

DRAWING NO.:

FL-21142.1

SHEET 10 OF 11

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 SECURITY 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	30	LATCH & DEADBOLT STRIKE PLATE (TONGUE SYSTEM)	ALUM/COMP
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL	31	MULTIPOINT STRIKE PLATE (TONGUE SYSTEM)	ALUM/COMP
M	3/16" X 2-1/4" ITW CONCRETE SCREW	STEEL	32	INSWING THRESHOLD	ALUM/COMP
N	3/16" X 2-3/4" ITW CONCRETE SCREW	STEEL	33	INSWING THRESHOLD	ALUM/COMP
1	JAMB (FINGER JOINT PINE)	WOOD	36	INSWING THRESHOLD	ALUM/COMP
6	WEATHERSTRIP (MEDIUM REACH)	FOAM	37	INSWING THRESHOLD	ALUM/COMP
7	WEATHERSTRIP (LONG REACH)	FOAM	38	INSWING THRESHOLD	ALUM/COMP
8	SWEEP	VINYL	39	INSWING THRESHOLD	ALUM/COMP
9	SWEEP	VINYL	40	DOOR PANEL (BOOK)	-
10	SWEEP (USE W/ PUBLIC ACCESS THRESHOLD)	VINYL	41	DOOR PANEL (HYBRID)	-
15	PUBLIC ACCESS THRESHOLD	ALUM	42	DOOR PANEL (U1)	-
16	OUTSWING THRESHOLD	ALUM/COMP	43	INSWING THRESHOLD	ALUM/COMP
17	OUTSWING THRESHOLD	ALUM/COMP	44	INSWING THRESHOLD	ALUM/COMP
18	OUTSWING THRESHOLD	ALUM/COMP	45	INSWING THRESHOLD	ALUM/COMP
19	COASTAL OUTSWING THRESHOLD	ALUM/WOOD	46	INSWING THRESHOLD	ALUM/COMP
22	#8 x 3/4" PFH WOOD SCREW	STEEL	47	INSWING THRESHOLD	ALUM/COMP
23	#10 x 3/4" PFH WOOD SCREW	STEEL	48	INSWING THRESHOLD	ALUM/COMP
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.

Documents Prepared By:
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RW
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P.O. Box 230, Valrico, FL 33595
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FBPE Registry No. 9813

PRODUCT: THERMA-TRU
FIBERGLASS DOOR

PART OR ASSEMBLY:

2	8/18/23	UPDATE TO 8TH ED.	(2023)	FBC	LFS	
1	7/15/20	UPDATE TO 7th ED	(2020)	FBC	P0	
NO.	DATE				BY	
REVISIONS						

DATE:	12/22/16
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-21142.1
SHEET	11 OF 11