

G:\2023 FBC DRAWINGS\Therma-Tru\FL-30077 R2\FL-30077.1-3.dwg

THERMA-TRU[®]
DOORS

Fiber-Classic[®] & Smooth-Star[®]

CUT DOWN WOOD EDGE
OPAQUE FIBERGLASS DOUBLE DOOR
w/ or w/out SIDELITES

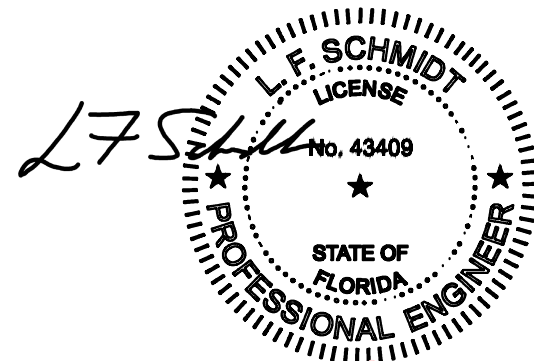
OUTSWING
"IMPACT"

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.

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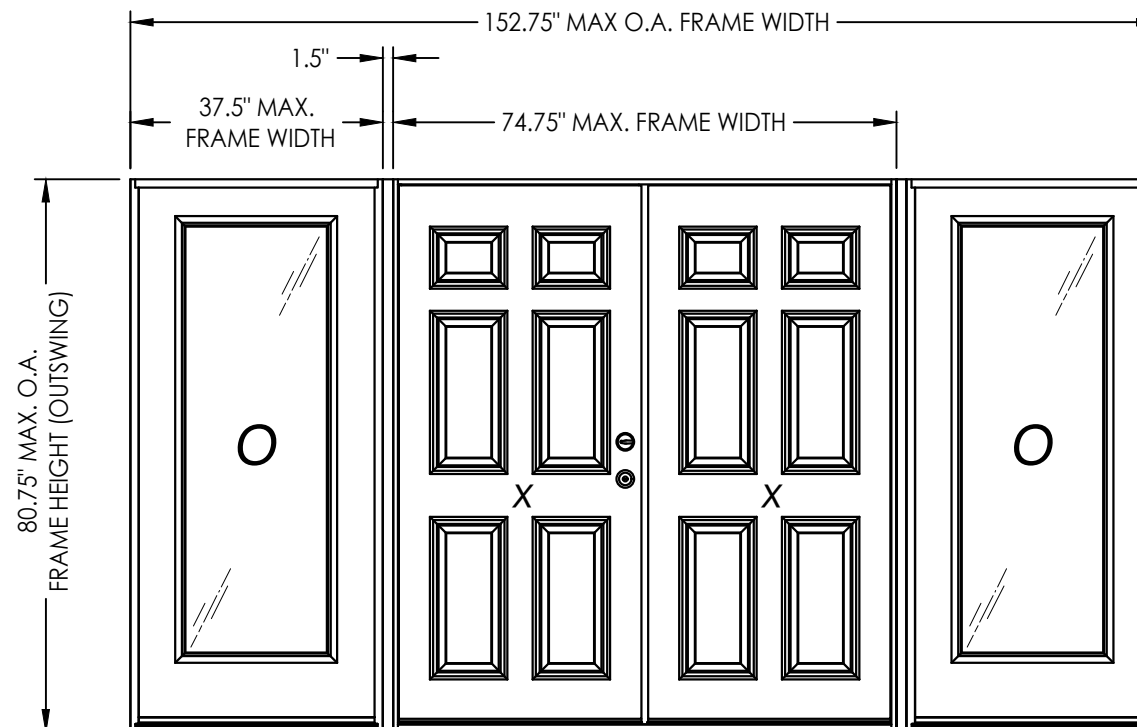
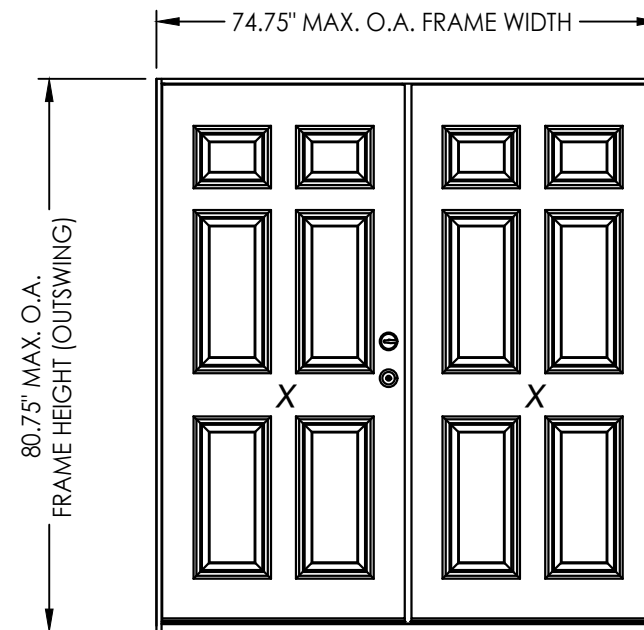
SHEET#	DESCRIPTION	SHEET#	
1	Typical Elevations, Design Pressures & General Notes	8	Vertical Cross Sections (Thresholds)
2	Door Panel Details	9	Buck Anchoring
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6	Horizontal & Vertical Cross Sections (1X Buck)	13	Components
7	Horizontal & Vertical Cross Sections (Direct to Masonry)	14	Bill of Materials



Digitally signed by Lyndon F Schmidt
Date: 2023.08.18 10:04:50 -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) OUTSWING	
		POSITIVE	NEGATIVE
XX	Latch & Deadbolt	+60.0	-60.0
OXXO	Latch & Deadbolt	+55.0	-55.0
XX, OXXO	Multipoint	+55.0	-55.0

See Sheet 4 for Hardware Specifications

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	
		PO	BY
2	8/17/23	UPDATE TO 8TH ED. (2023) FBC	LFS
1	7/15/20	UPDATE TO 7th ED (2020) FBC	PO

DATE: 08/12/19

SCALE: N.T.S.

DWG. BY: RW

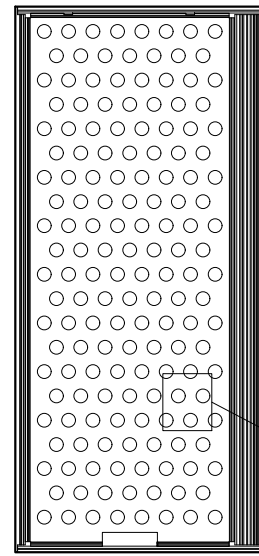
CHK. BY: LFS

DRAWING NO.:

FL-30077.3

SHEET 1 OF 14

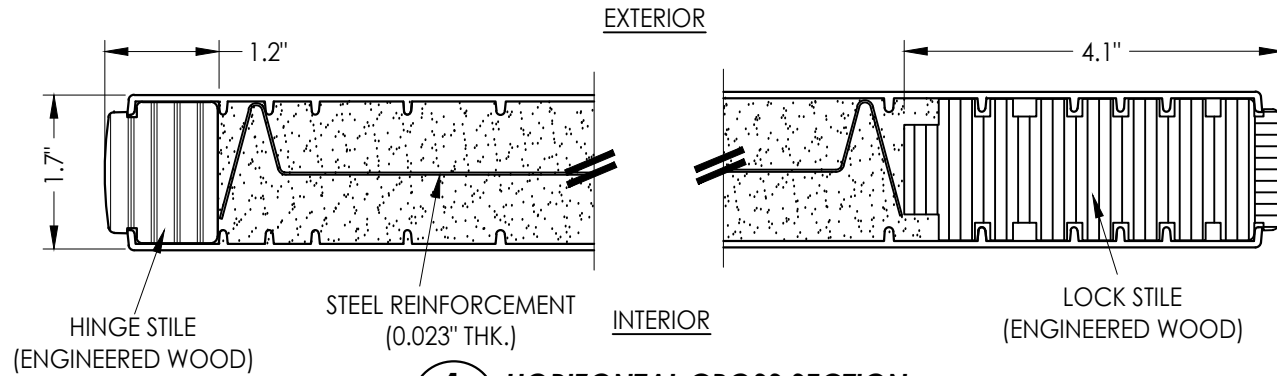
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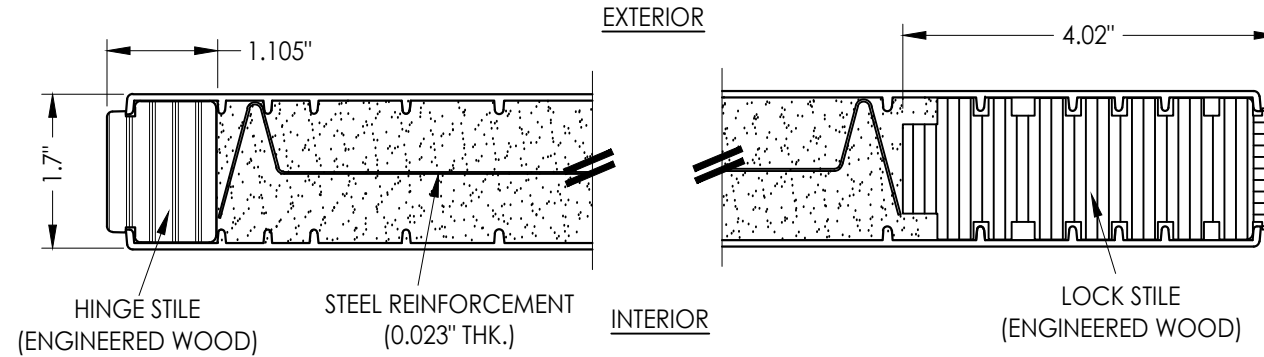
DETAIL A-A
PANEL REINFORCEMENT
(0.023\"

STEEL REINFORCEMENT
28.86% OPEN
AREA MAX.

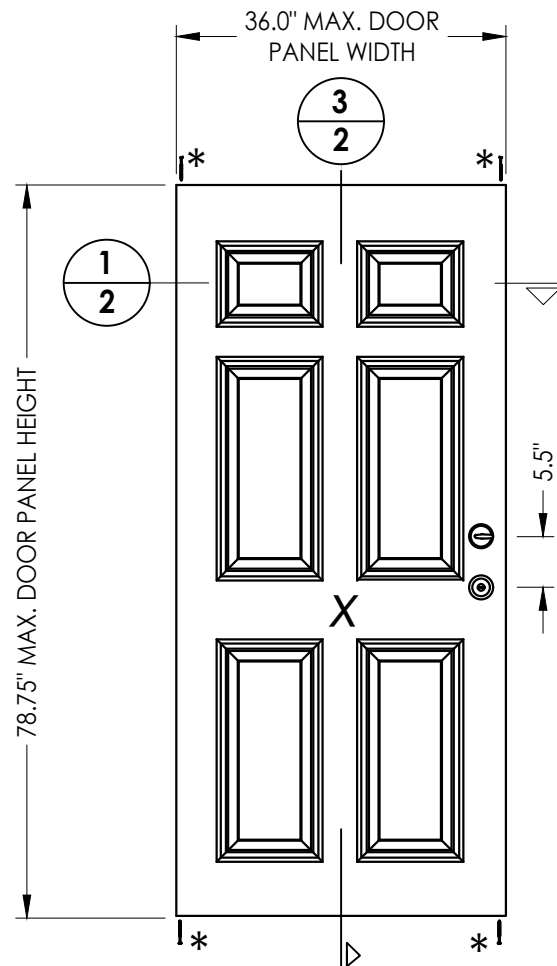
* #8 X 2.5\"



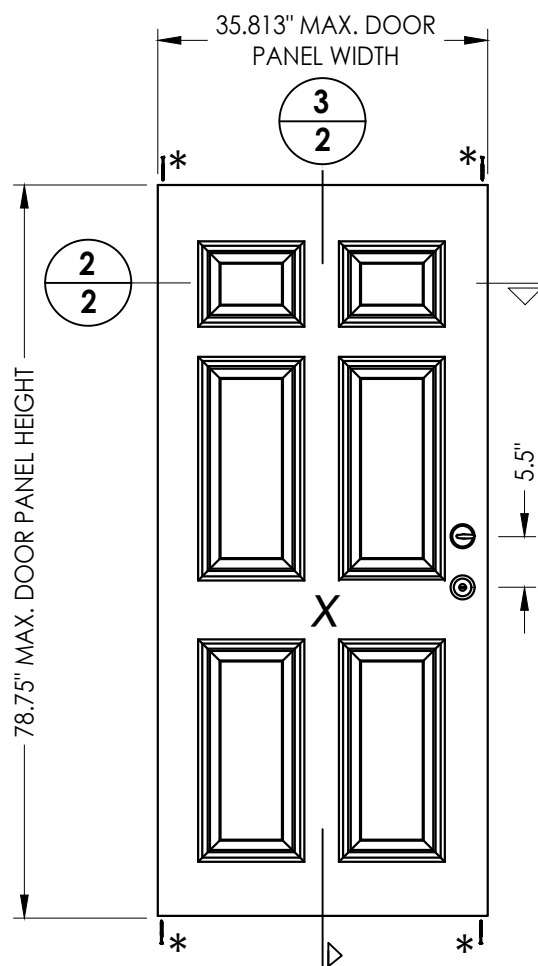
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2 **HORIZONTAL CROSS SECTION**



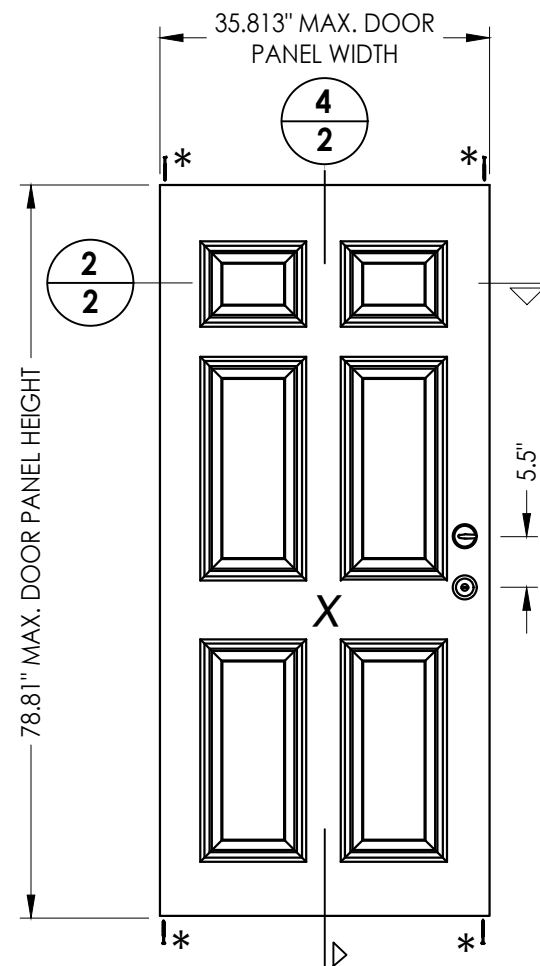
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2 **HORIZONTAL CROSS SECTION**



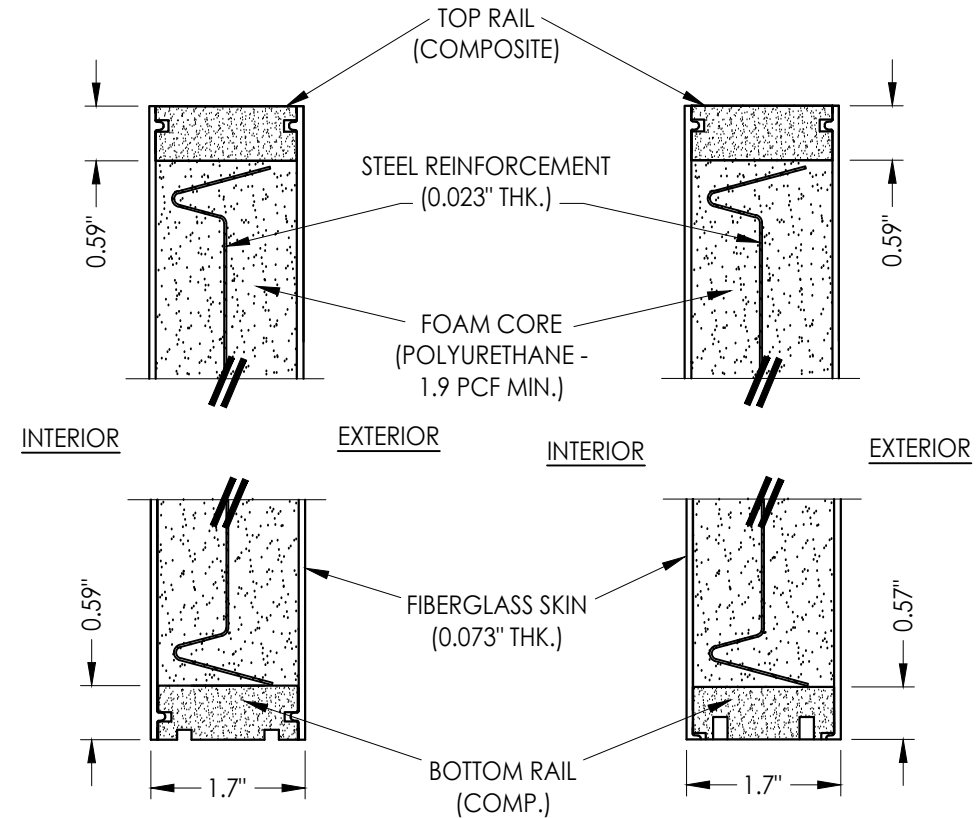
40 **DOOR PANEL**
BOOK



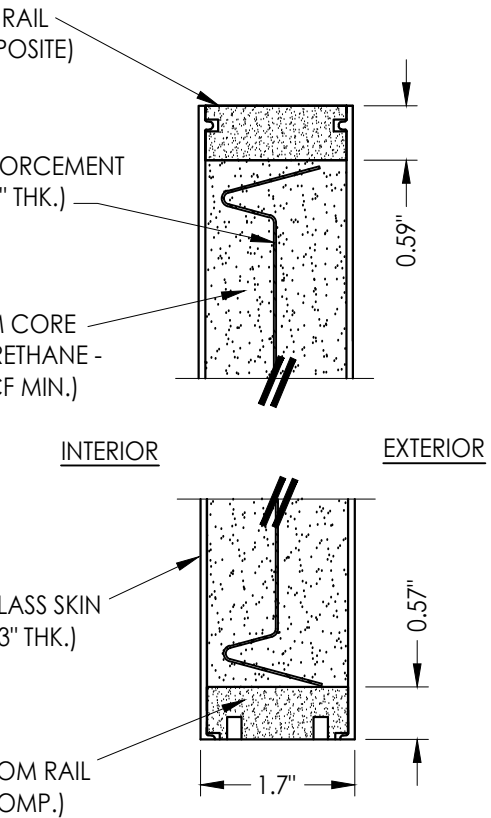
41 **DOOR PANEL**
Hybrid Door



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

PRODUCT:
THERMA-TRU
FIBERGLASS DOOR

PART OR ASSEMBLY:
DOOR PANEL DETAILS

NO.	DATE	REVISIONS	BY
2	8/17/23	UPDATE TO 8TH ED. (2023) FBC	LFS
1	7/15/20	UPDATE TO 7TH ED (2020) FBC	PO

DATE: 08/12/19

SCALE: N.T.S.

DWG. BY: RW

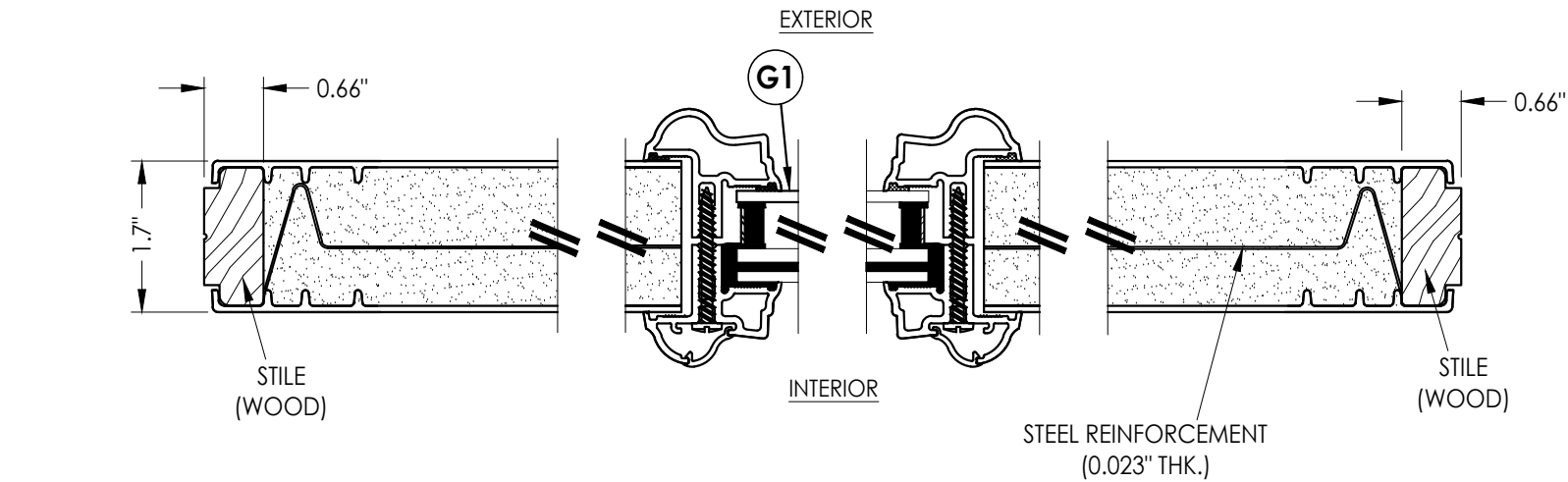
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DRAWING NO.: FL-30077.3

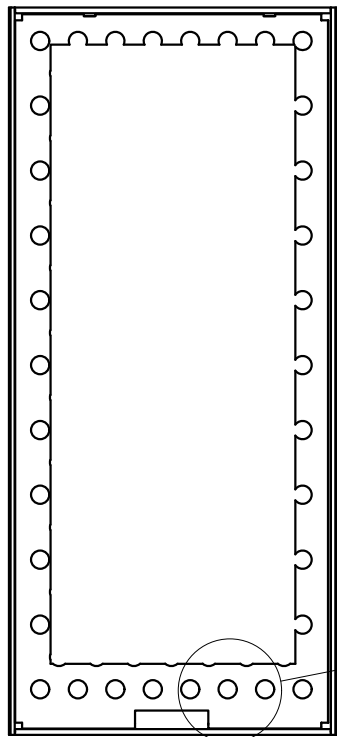
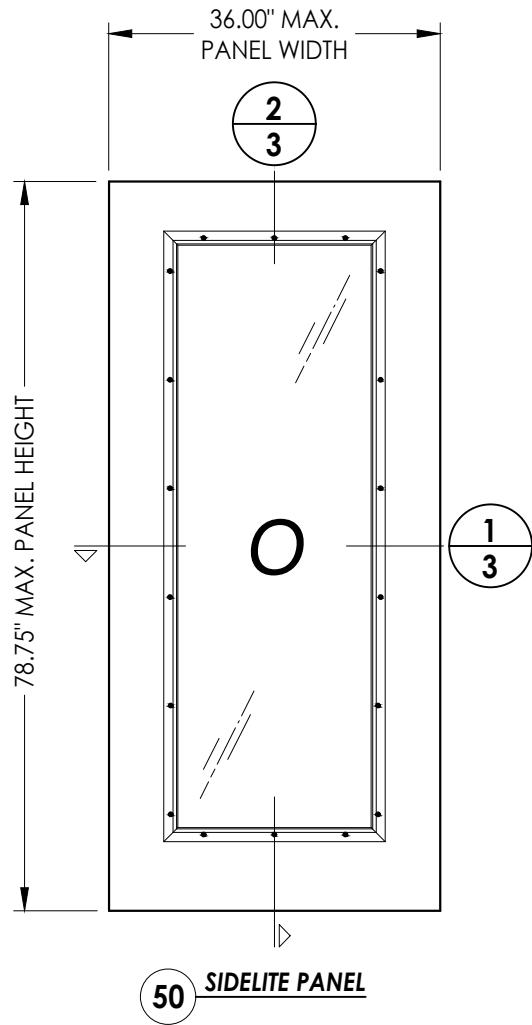
SHEET 2 OF 14

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

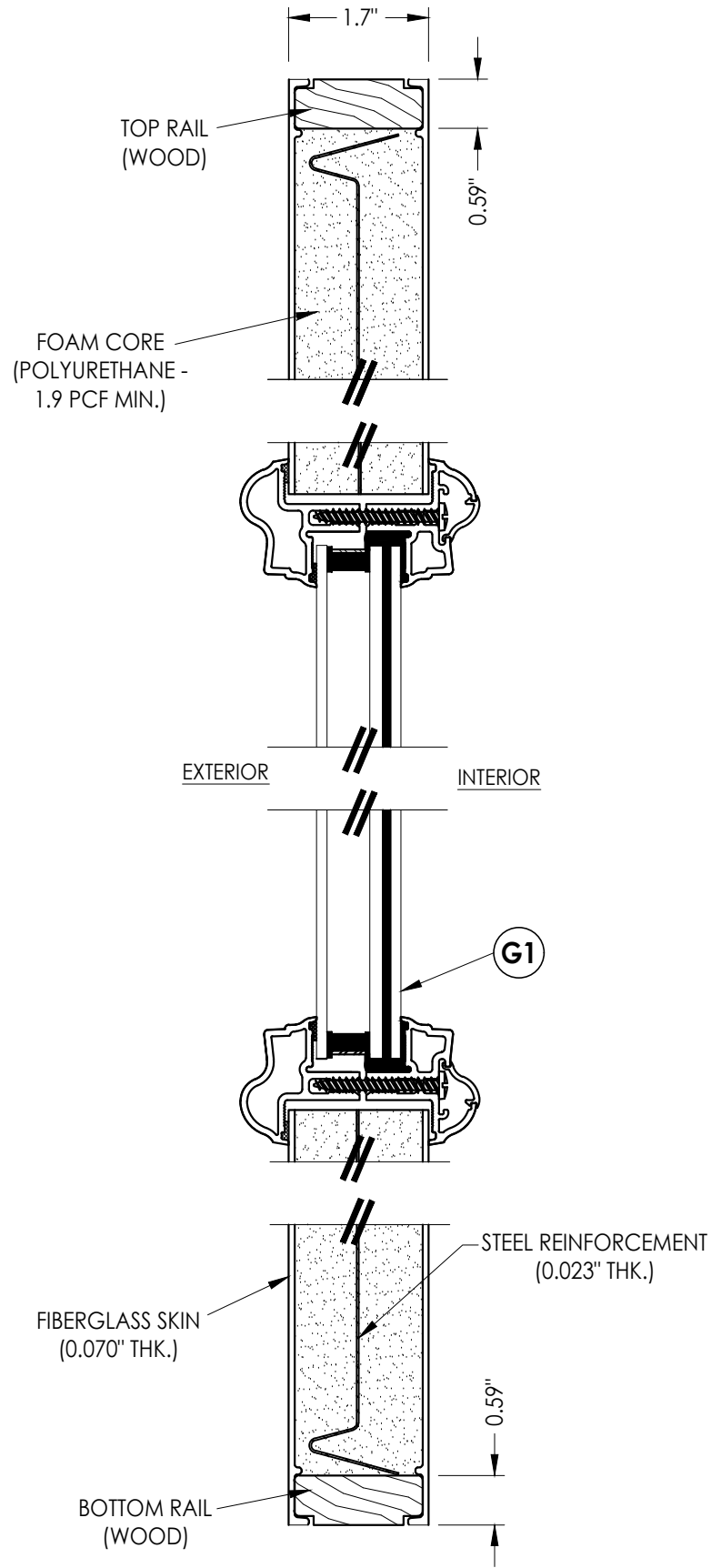
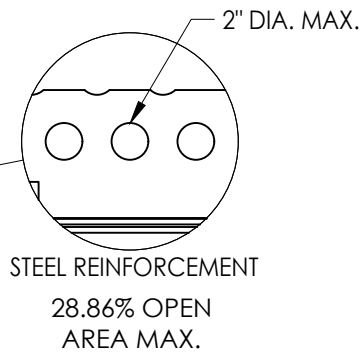
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1
3 **HORIZONTAL CROSS SECTION**



DETAIL A-A
PANEL REINFORCEMENT
(0.023\"/>



2
3 **VERTICAL CROSS SECTION**

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PRODUCT: THERMA-TRU FIBERGLASS DOOR				PART OR ASSEMBLY: SIDELITE PANEL DETAILS			
				LFS			
				FBC			
2	8/17/23	UPDATE TO 8TH ED. (2023)		FBC			
1	7/15/20	UPDATE TO 7th ED (2020)		FBC			
NO.	DATE			PO	BY		
REVISIONS							
DATE: 08/12/19							
SCALE: N.T.S.							
DWG. BY: RW							
CHK. BY: LFS							
DRAWING NO.: FL-30077.3							
SHEET 3 OF 14							



DATE:	08/12/19
SCALE:	N.T.S.
DWG. BY:	RW
CHK. BY:	LFS
DRAWING NO.:	FL-30077.3
SHEET	4 OF 14

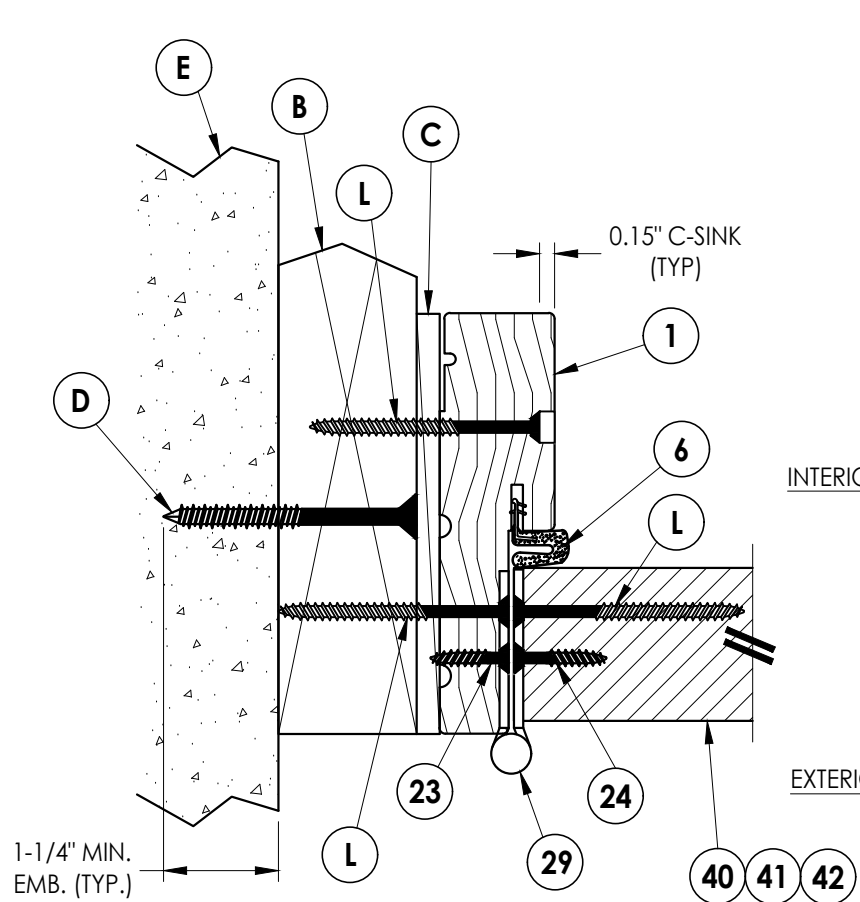
ASSEMBLY: ELEVATIONS

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P.E. No. 43409

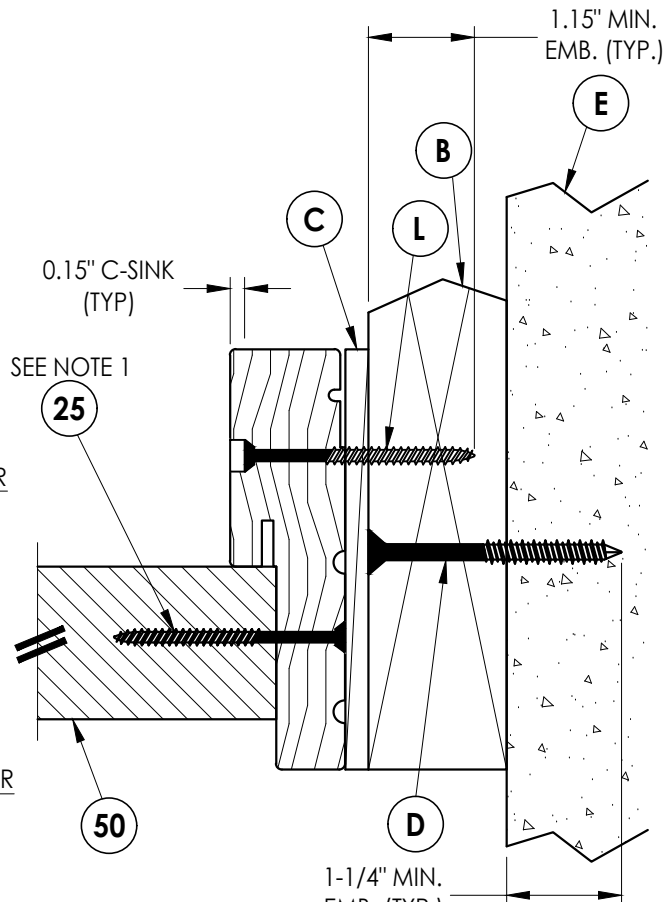
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P.O. Box 230, Valrico, FL 33415
Phone No.: 813.659.9197
FBPE Registry No. 9813

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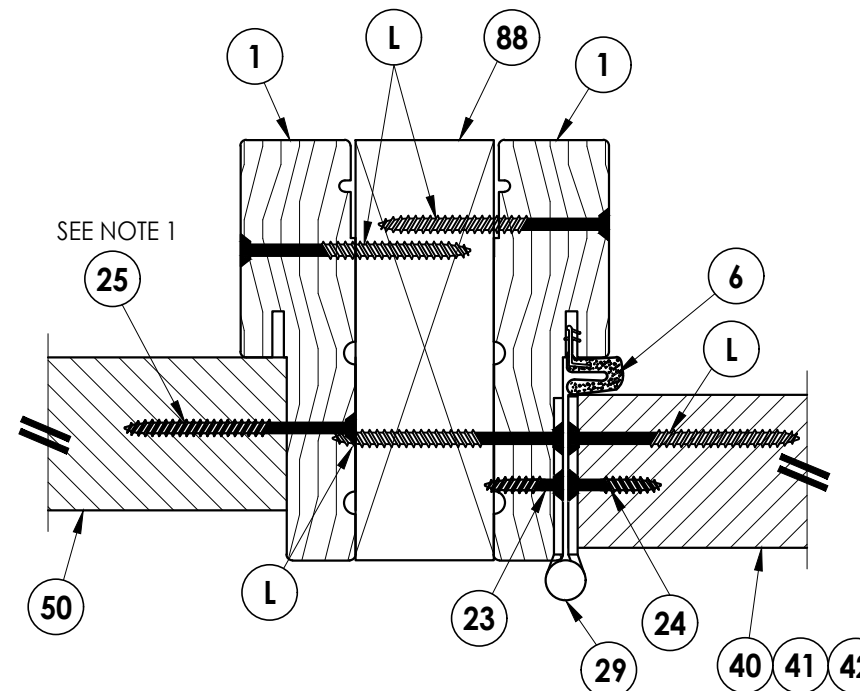
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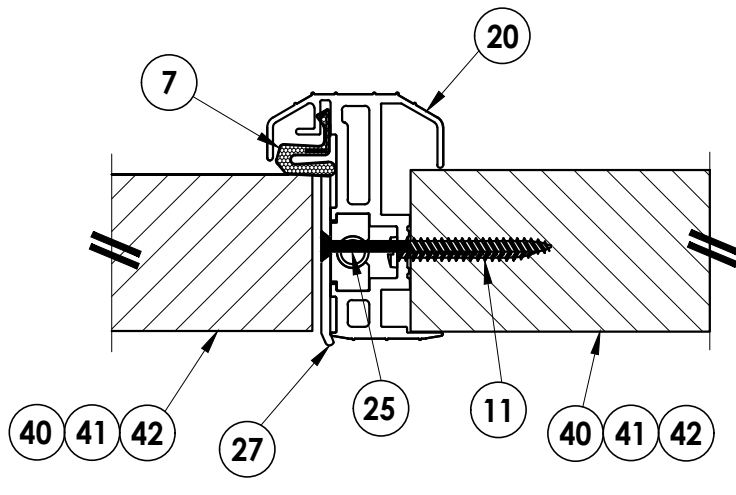
1
5 **HORIZONTAL CROSS SECTION**
Shown w/ 2X Buck



2
5 **HORIZONTAL CROSS SECTION**
Shown w/ 2X Buck



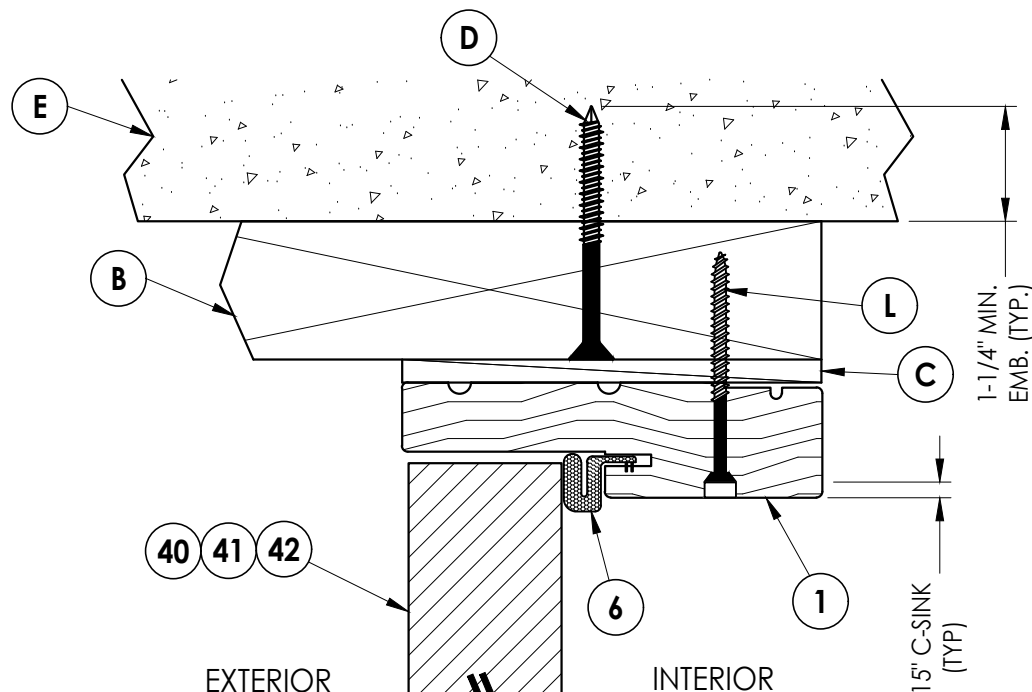
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5 **HORIZONTAL CROSS SECTION**



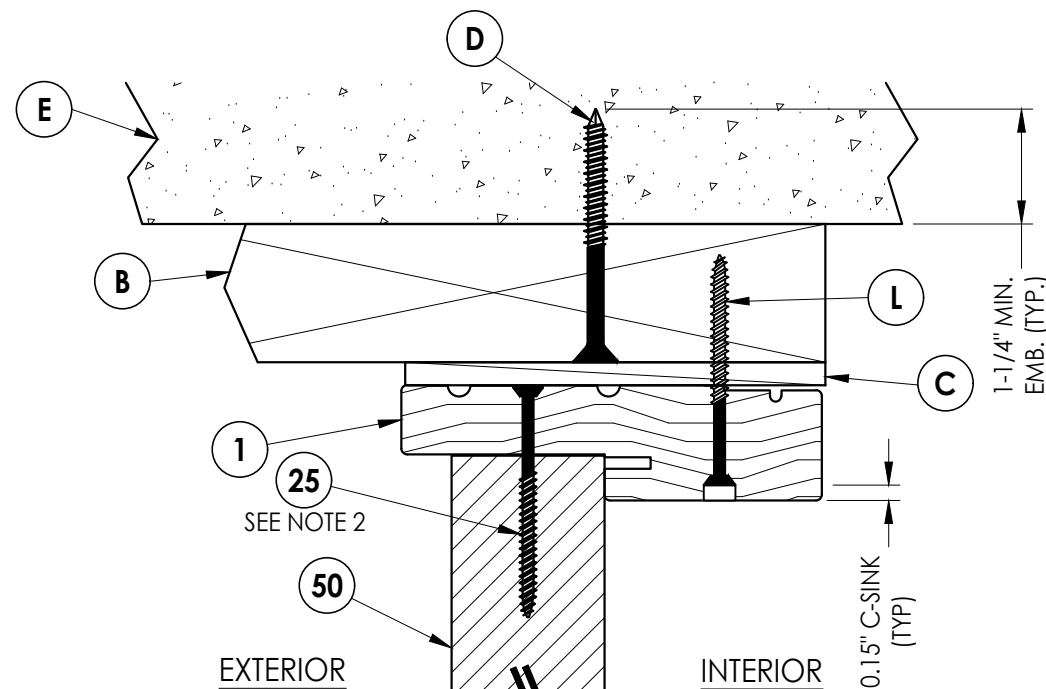
6
5 **HORIZONTAL CROSS SECTION**

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 & at centerline (3 screws along head jamb).



3
5 **VERTICAL CROSS SECTION**
Shown w/ 2X Buck



4
5 **VERTICAL CROSS SECTION**
Shown w/ 2X Buck

Documents Prepared By:
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FBPE Registry No. 9813

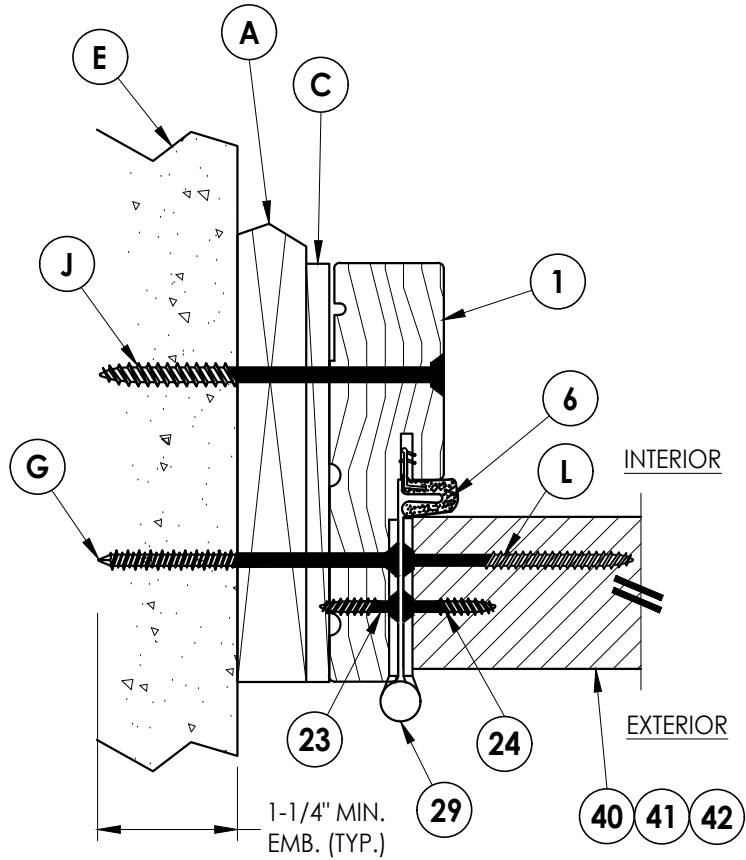
PRODUCT:
THERMA-TRU
FIBERGLASS DOOR

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

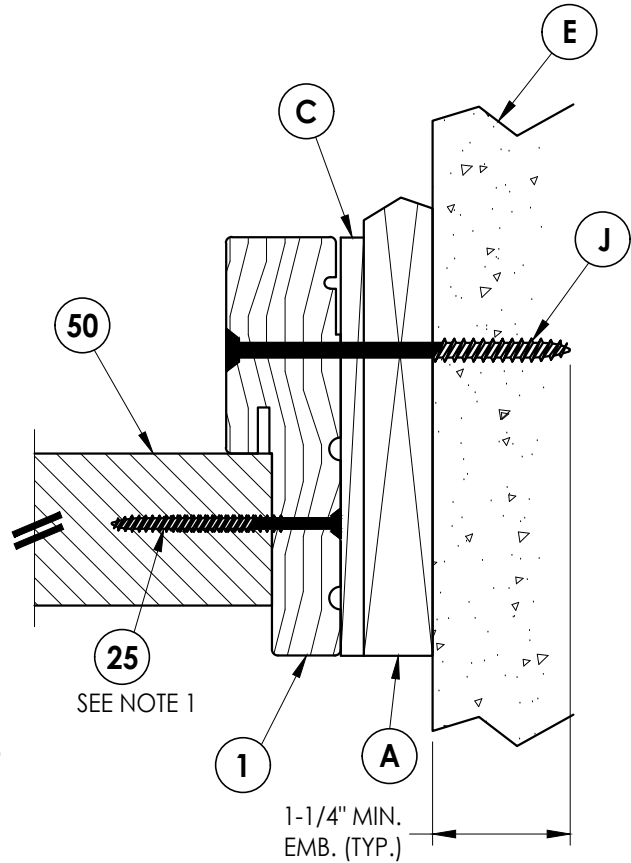
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1	7/15/20	UPDATE TO 7th ED (2020) FBC PO

DATE: 08/12/19
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: FL-30077.3
SHEET 5 OF 14

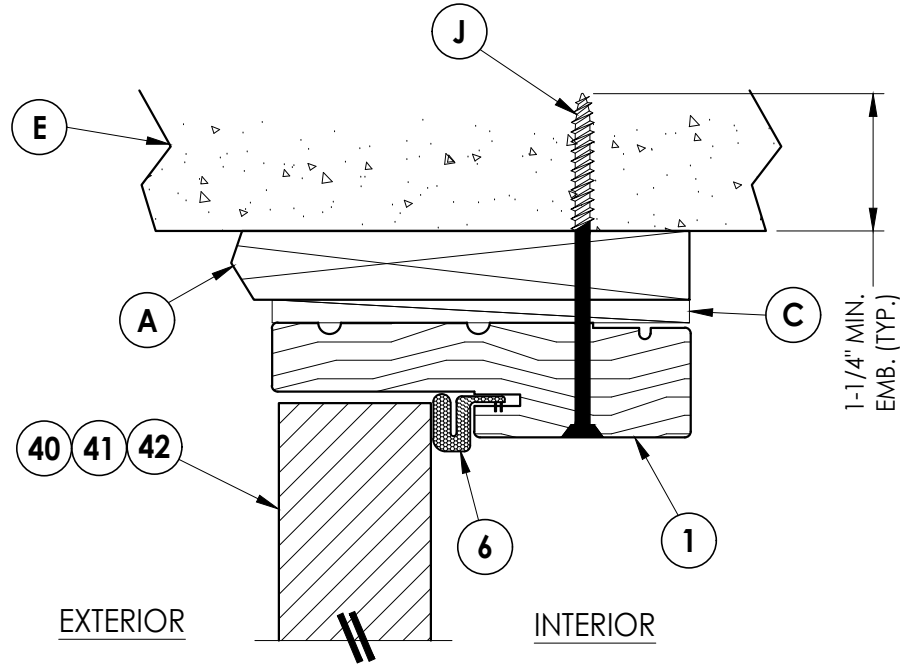
- Notes:
1. Sidelite assembly screws located 6" from each end and 5 more screws equally spaced between (7 screws total per side jamb).
 2. Sidelite assembly screws located 3" from each end & at centerline (3 screws along head jamb).



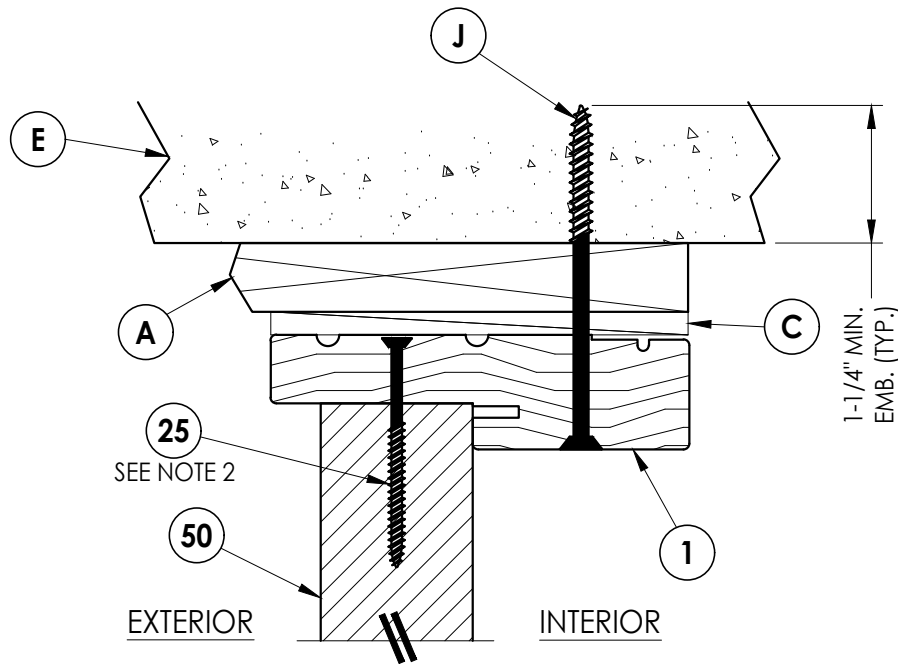
1
6 **HORIZONTAL CROSS SECTION**
Shown w/ 1X sub-buck
Outswing shown (Inswing similar)



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



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



4
6 **VERTICAL CROSS SECTION**
Shown w/ 1X sub-buck
Outswing shown (Inswing similar)

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

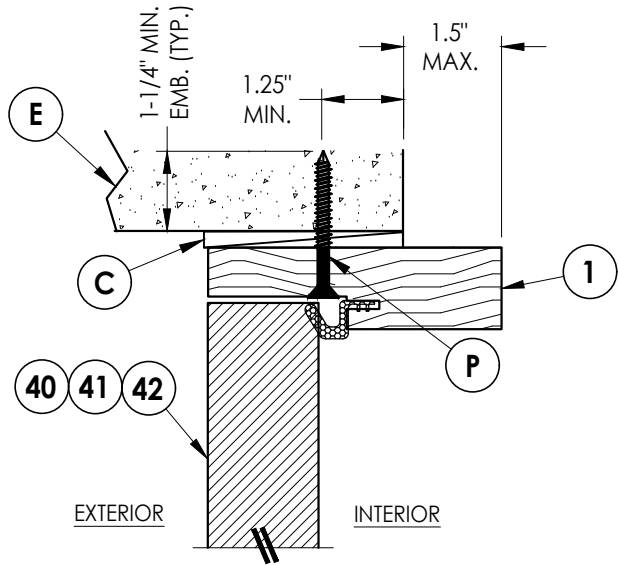
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

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

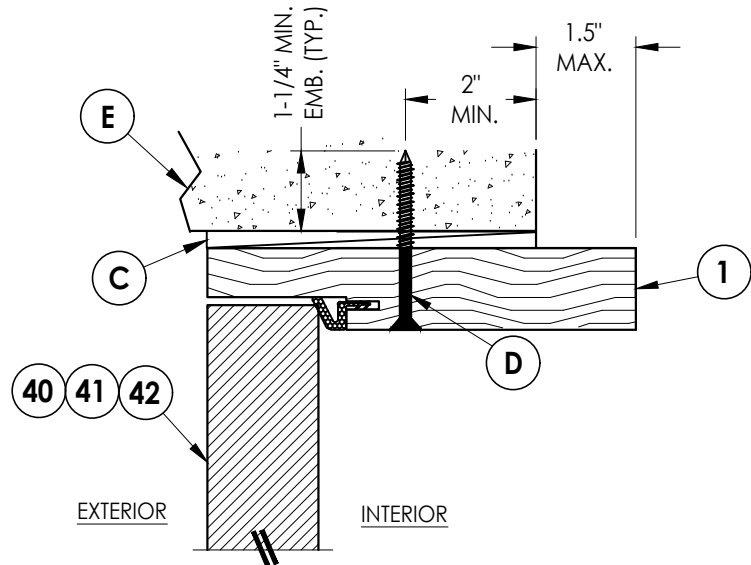
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NO.	DATE	BY	
2	8/17/23	UPDATE TO 8TH ED. (2023)	FBC
1	7/15/20	UPDATE TO 7th ED (2020)	FBC

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FL-30077.3
SHEET 6 OF 14

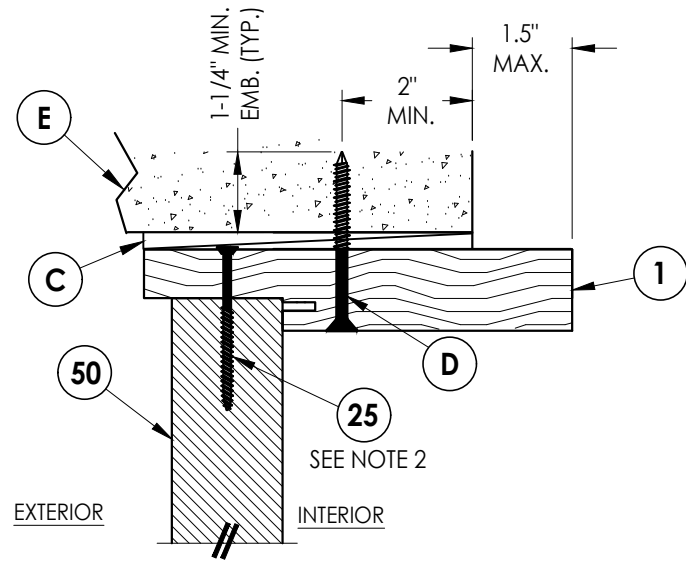
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3
7 **VERTICAL CROSS SECTION**
Shown Direct to Masonry
4-9/16" jamb
Double Door Only (N/A w/ Sidelites)

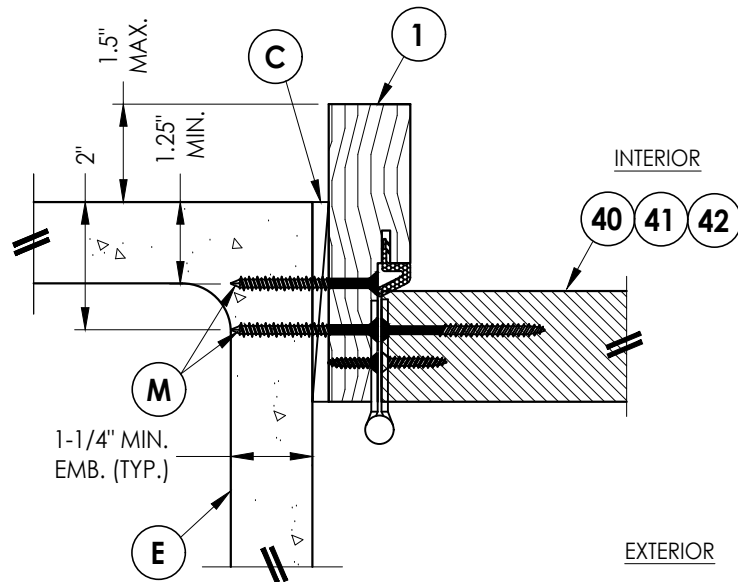


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7 **VERTICAL CROSS SECTION**
Shown Direct to Masonry
6-9/16" jamb

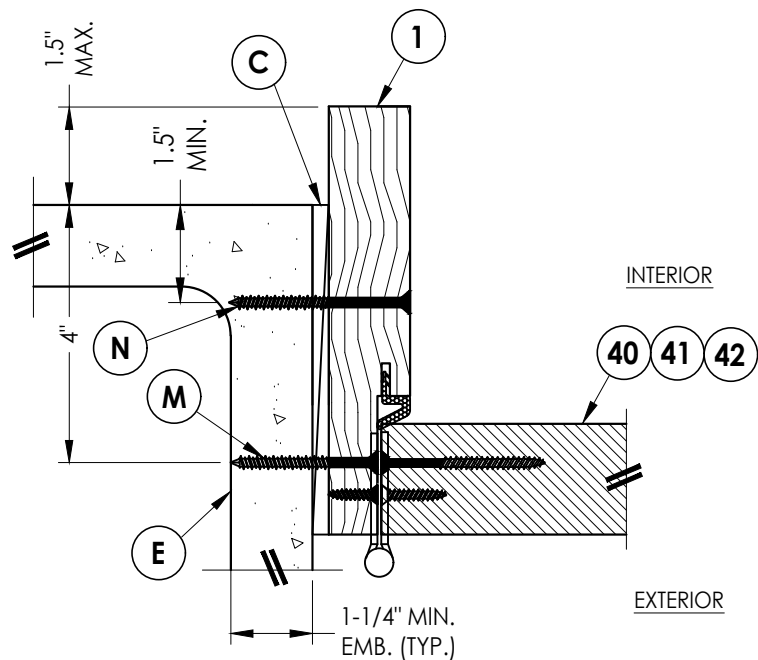


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7 **VERTICAL CROSS SECTION**
Shown Direct to Masonry
6-9/16" jamb

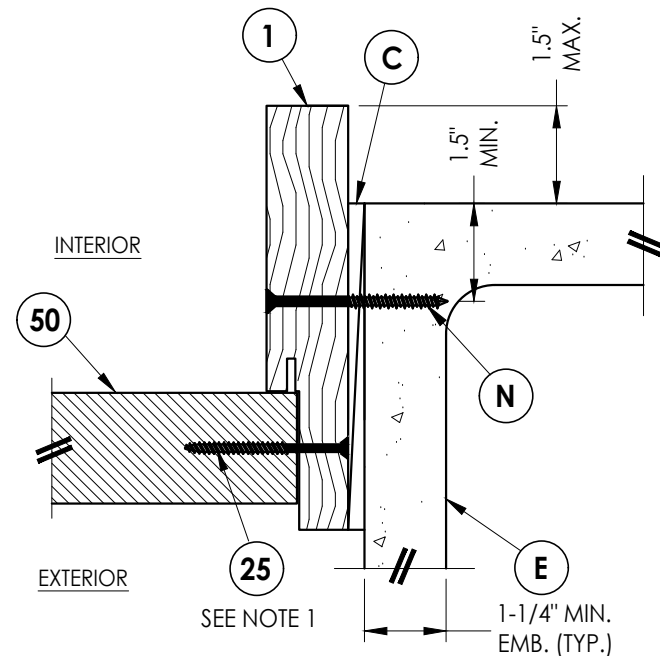
- Notes:
1. Sidelite assembly screws located 6" from each end plus 5 more equally spaced between (7 screws total per side jamb).
 2. Sidelite assembly screws located 3" from each end & at centerline (3 screws along head jamb).



1
7 **HORIZONTAL CROSS SECTION**
Shown Direct to Masonry
6-9/16" jamb
Double Door Only (N/A w/ Sidelites)



4
7 **HORIZONTAL CROSS SECTION**
Shown Direct to Masonry
6-9/16" jamb



2
7 **HORIZONTAL CROSS SECTION**
Shown Direct to Masonry
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	PO	FBC	REVISIONS
2	8/17/23	UPDATE TO 8TH ED. (2023)	FBC	LFS	
1	7/15/20	UPDATE TO 7th ED (2020)	FBC	PO	

DATE: 08/12/19

SCALE: N.T.S.

DWG. BY: RW

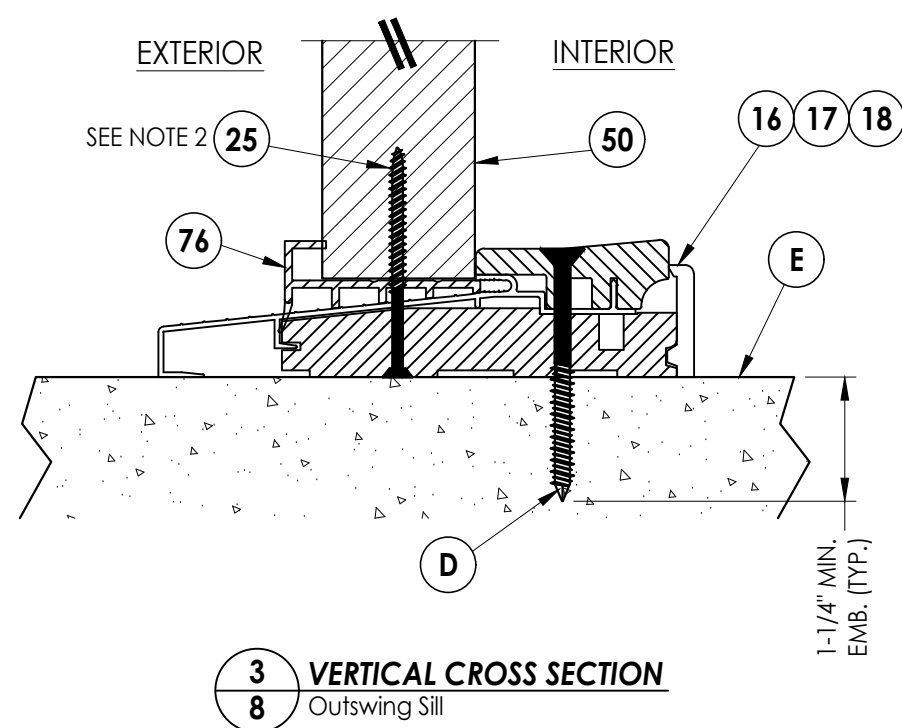
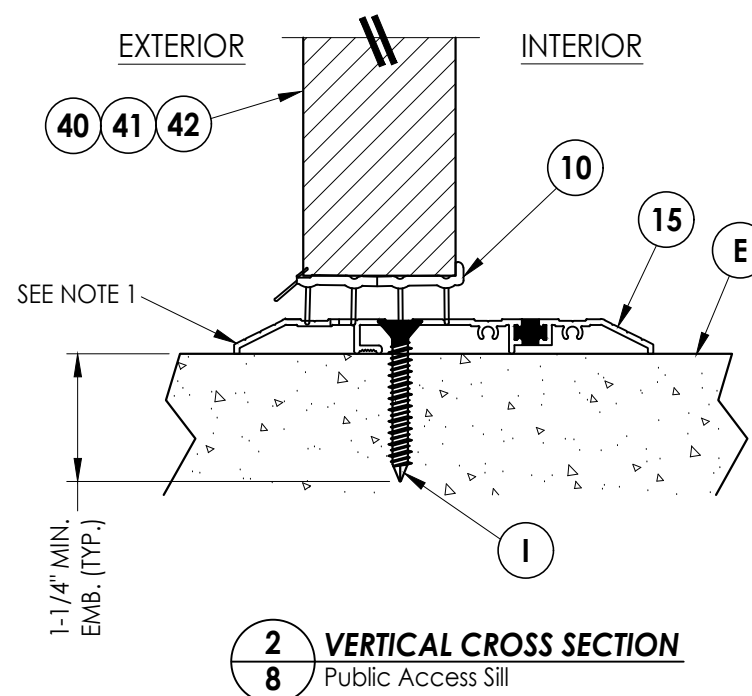
CHK. BY: LFS

DRAWING NO.:

FL-30077.3

SHEET 7 OF 14

1. Sill Item #'s 17, 18, & 19 are attached to jambs w/ (3) #8 X 2-1/2" pph screws at each end.
Sill Item # 16 is 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 screws at each end.
2. Sidelite assembly screws located 3" from each end & at centerline (3 screws along sill).



Documents Prepared By:
Lyndon F. Schmidt
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Phone No.: 813.659.9197
FBPE Registry No. 9813

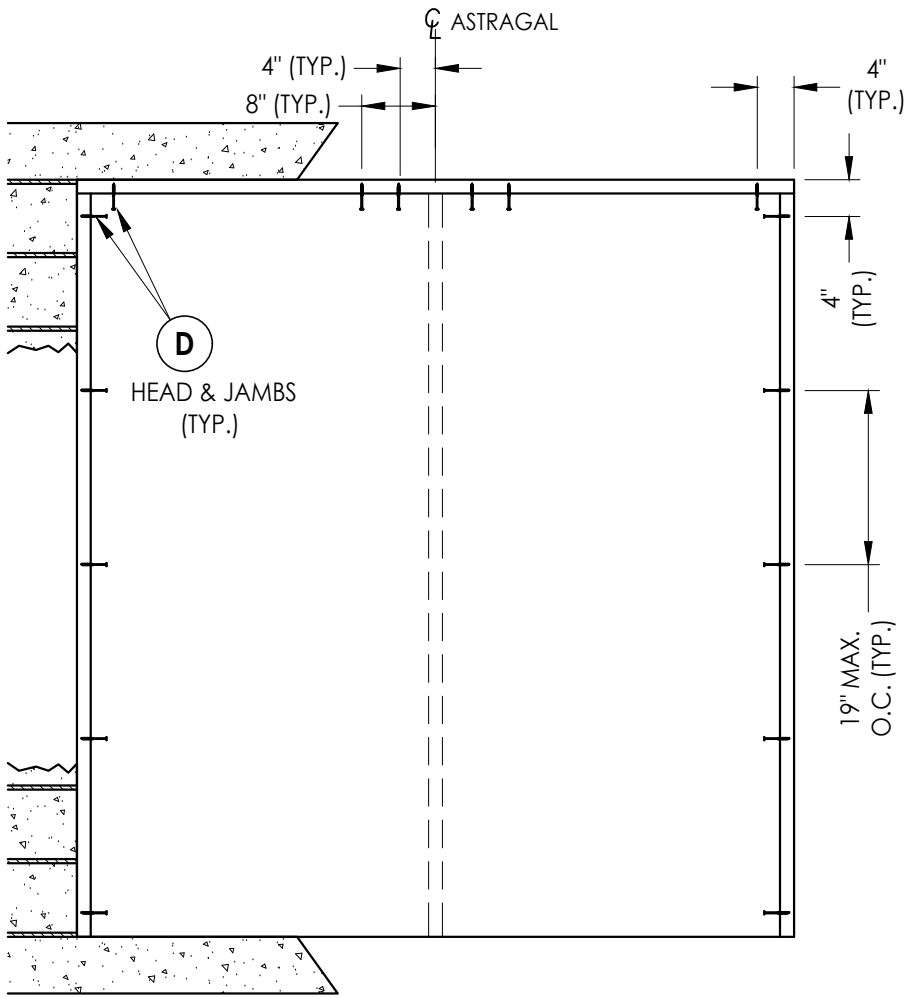
PRODUCT: THERMA-TRU
FIBERGLASS DOOR

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS (THRESHOLDS)

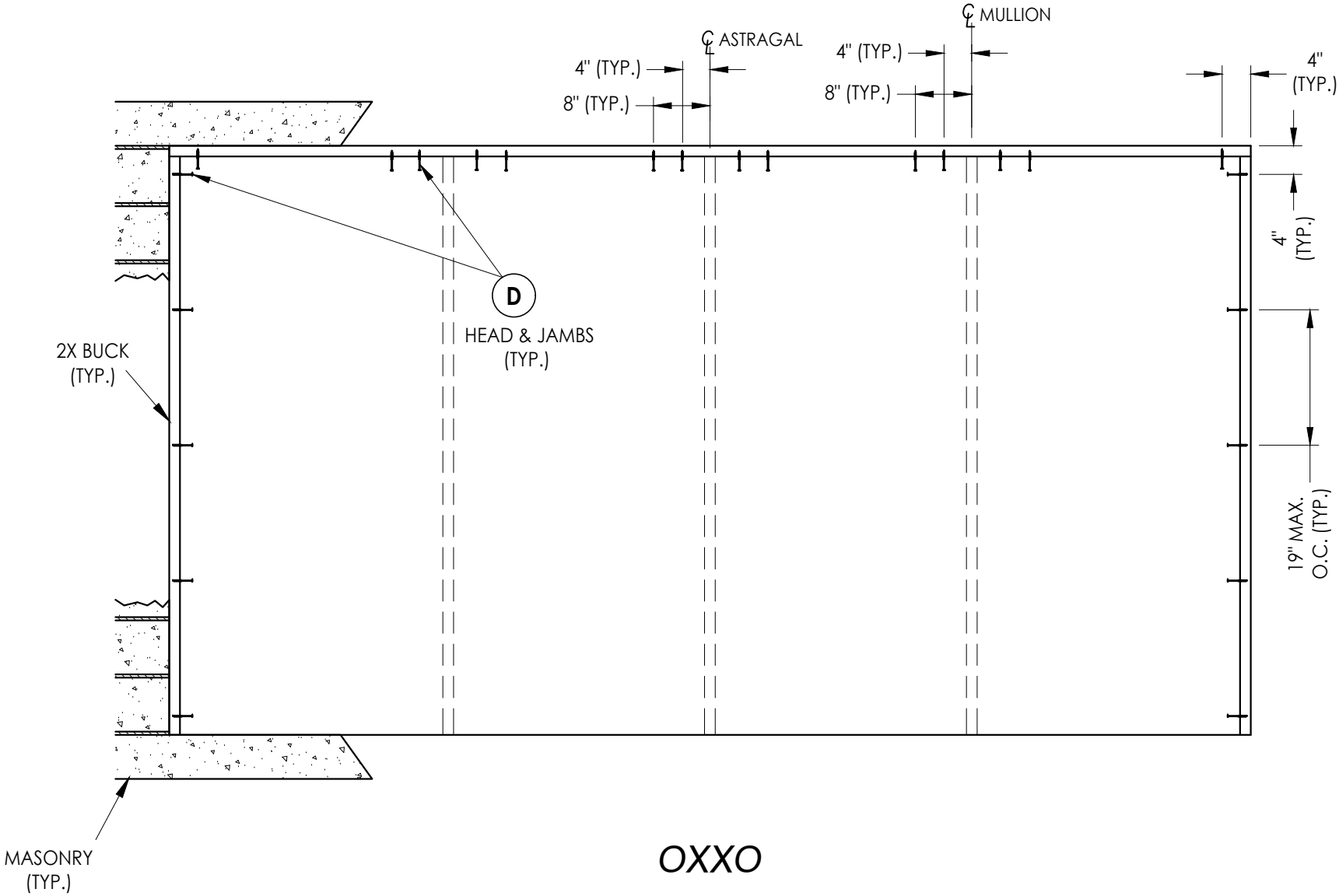
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1	7/15/20	UPDATE TO 7th ED (2020)	FBC	PO
NO.	DATE	BY		
REVISIONS				

SHEET 8 OF 14

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XX

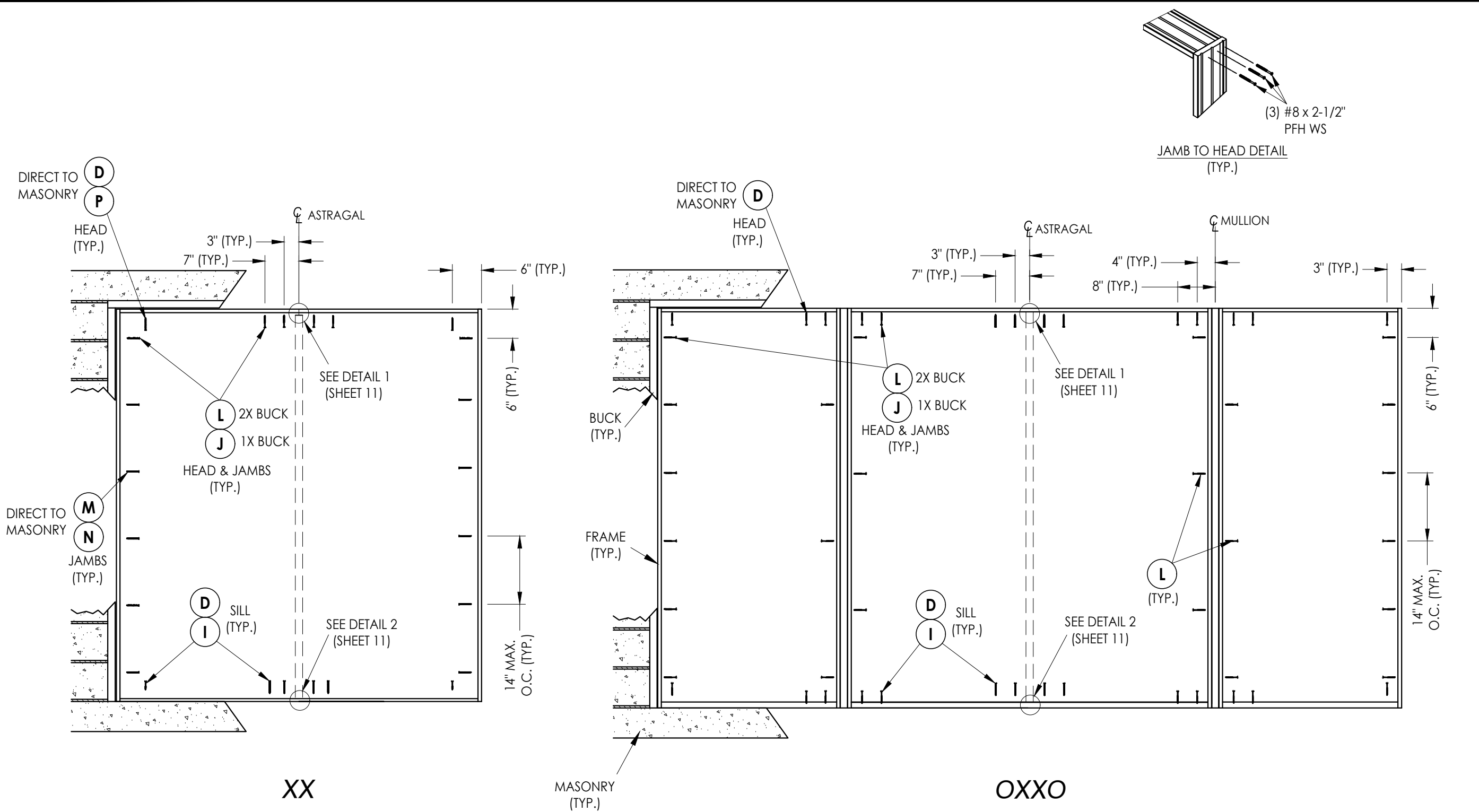


OXXO

2X BUCK ANCHORING

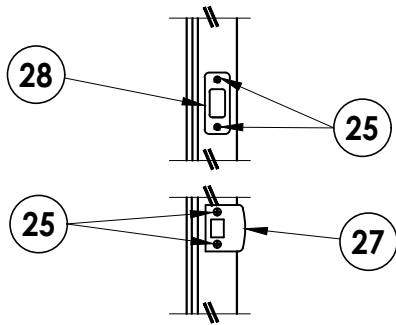
Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409				R.W. BUILDING CONSULTANTS, INC. P.O. Box 230, Vairico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813			
PRODUCT: THERMA-TRU FIBERGLASS DOOR				PART OR ASSEMBLY: BUCK ANCHORING			
				2	8/17/23	UPDATE TO 8TH ED. (2023)	FBC LFS
				1	7/15/20	UPDATE TO 7th ED (2020)	FBC PO
				NO	DATE		BY
				REVISIONS			
DATE: 08/12/19							
SCALE: N.T.S.							
DWG. BY: RW							
CHK. BY: LFS							
DRAWING NO.: FL-30077.3							
SHEET 9 OF 14							

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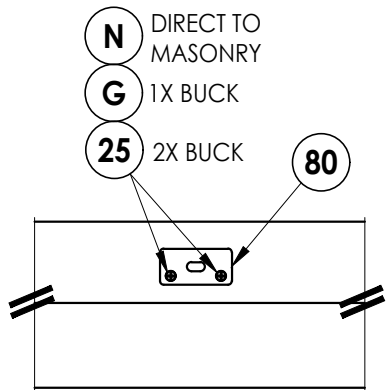


FRAME ANCHORING

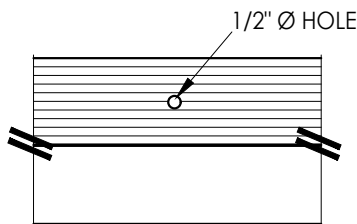
Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	
PRODUCT: THERMA-TRU FIBERGLASS DOOR		PART OR ASSEMBLY: FRAME ANCHORING	
		LFS	BY
		FBC	PO
2	8/17/23	UPDATE TO 8TH ED. (2023)	FBC
1	7/15/20	UPDATE TO 7th ED (2020)	FBC
NO.	DATE	REVISIONS	
DATE: 08/12/19			
SCALE: N.T.S.			
DWG. BY: RW			
CHK. BY: LFS			
DRAWING NO.: FL-30077.3			
SHEET 10 OF 14			



LATCH & DEADBOLT DETAIL
Schlage / Kwikset

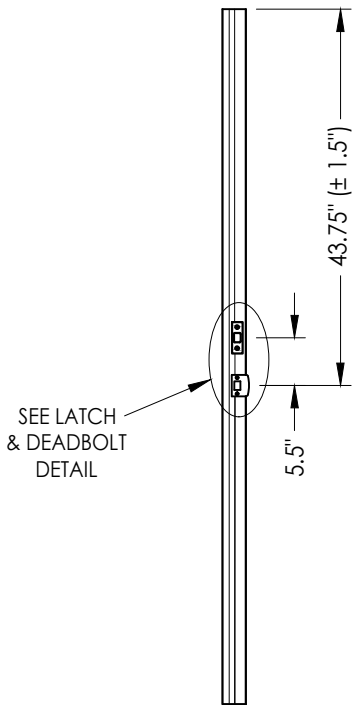


DETAIL 1
Coastal Astragal Strike Plate @ Head

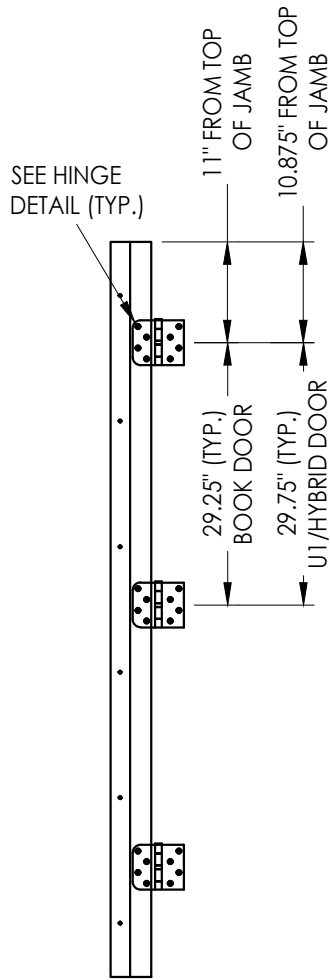


DETAIL 2
Outswing
Astragal Bolt Hole @ Sill

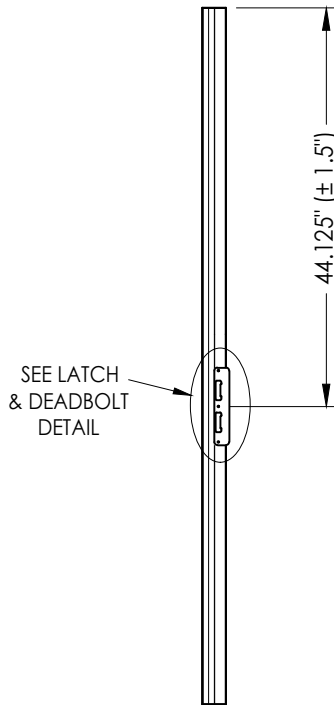
LATCH & DEADBOLT STRIKE DETAILS



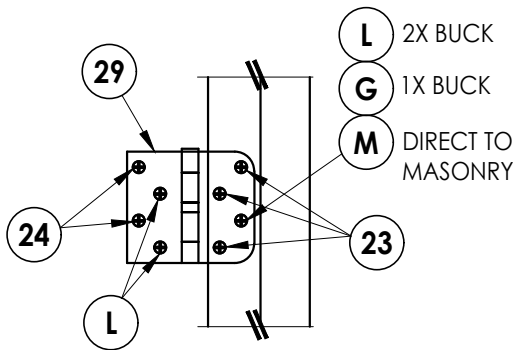
ASTRAGAL
Latch and Deadbolt



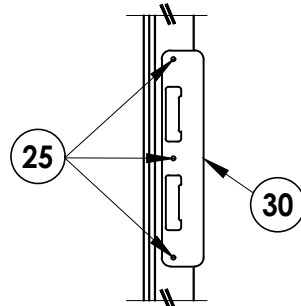
HINGE JAMB



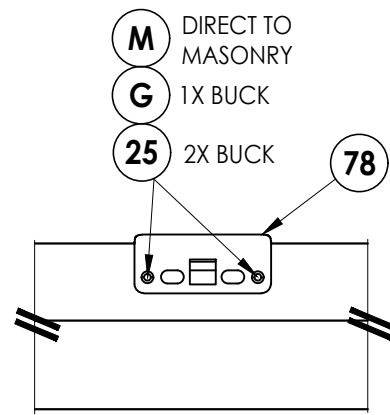
ASTRAGAL
Multipoint Lock



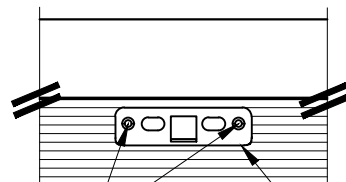
HINGE DETAIL



LATCH & DEADBOLT DETAIL
Multipoint Lock



DETAIL 1
Multipoint Lock Strike Plate @ Head



DETAIL 2
Outswing
Multipoint Lock Strike Plate @ Sill

MULTIPOINT LOCK STRIKE DETAILS

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

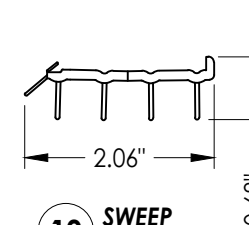
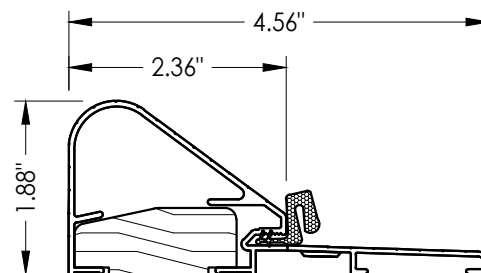
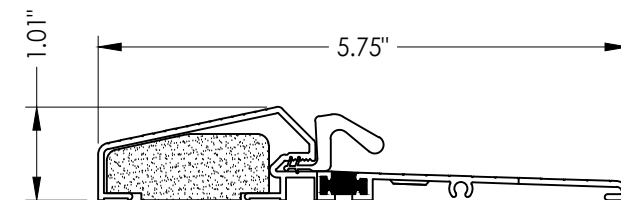
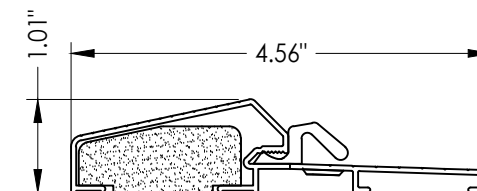
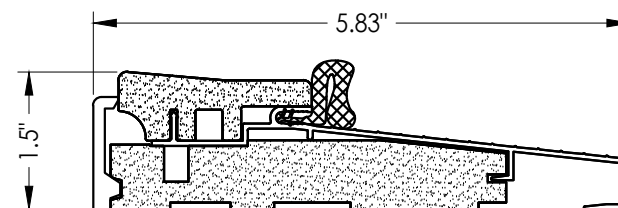
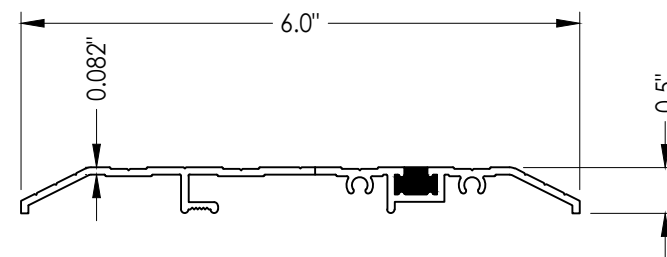
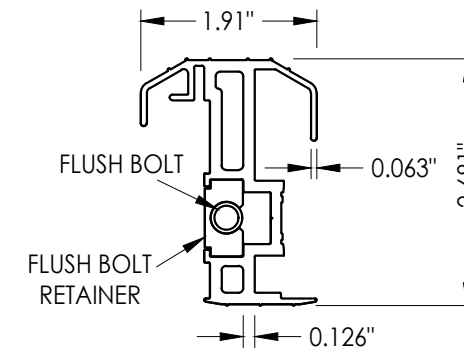
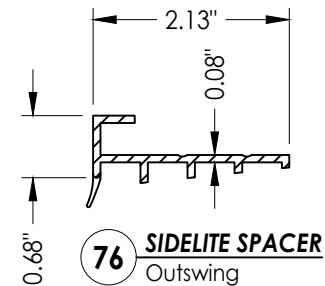
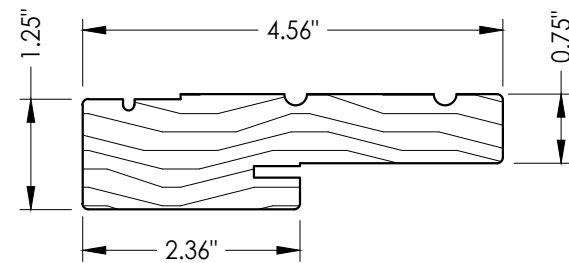
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:
THERMA-TRU
FIBERGLASS DOOR

PART OR ASSEMBLY:
HARDWARE DETAILS

NO.	DATE	REVISIONS
2	8/17/23	UPDATE TO 8TH ED. (2023) FBC
1	7/15/20	UPDATE TO 7th ED (2020) FBC

DATE:	08/12/19
SCALE:	N.T.S.
DWG. BY:	RW
CHK. BY:	LFS
DRAWING NO.:	FL-30077.3
SHEET	11 OF 14



2	8/17/23	UPDATE TO 8TH ED. (2023)	FBC	LFS	
1	7/15/20	UPDATE TO 7th ED (2020)	FBC	PO	
NO.	DATE	REVISIONS			

DATE:	08/12/19
SCALE:	N.T.S.
DWG. BY:	RW
CHK. BY:	LFS
DRAWING NO.:	FL-30077.3
SHEET	13 OF 14

Documents Prepared By:
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RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33486
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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	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE	29	4" X 4" HINGE	STEEL
			30	LATCH & DEADBOLT STRIKE PLATE	STEEL
G	3/16" X 3-1/4" ITW CONCRETE SCREW	STEEL	40	DOOR PANEL (BOOK)	-
I	1/4" X 1-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL	41	DOOR PANEL (HYBRID)	-
J	1/4" X 3-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL	42	DOOR PANEL (U1)	-
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL	50	SIDELITE	-
M	3/16" X 2-1/4" ITW CONCRETE SCREW	STEEL	76	SIDELITE SPACER (OUTSWING)	PVC
N	3/16" X 2-3/4" ITW CONCRETE SCREW	STEEL	78	MULTIPOINT LOCK STRIKE PLATE @ HEAD	STEEL
P	1/4" X 2-3/4" PFH DeWALT CONCRETE SCREW	STEEL	79	MULTIPOINT LOCK STRIKE PLATE @ SILL	STEEL
1	JAMB (FINGER JOINT PINE)	WOOD	80	ASTRAGAL STRIKE PLATE	STEEL
6	WEATHERSTRIP (MEDIUM REACH)	FOAM	88	2X MULLION (SG >= 0.55)	WOOD
7	WEATHERSTRIP (LONG REACH)	FOAM			
10	SWEEP (USE W/ PUBLIC ACCESS THRESHOLD)	VINYL			
11	#10 X 1-3/4" PFH WOOD SCREW	STEEL			
15	PUBLIC ACCESS THRESHOLD	ALUM			
16	OUTSWING THRESHOLD	ALUM/COMP			
17	OUTSWING THRESHOLD	ALUM/COMP			
18	OUTSWING THRESHOLD	ALUM/COMP			
19	COASTAL OUTSWING THRESHOLD	ALUM/WOOD			
20	COASTAL ALUMINUM ASTRAGAL	ALUM			
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 ULTRA CON+®	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.

[illegible]

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