



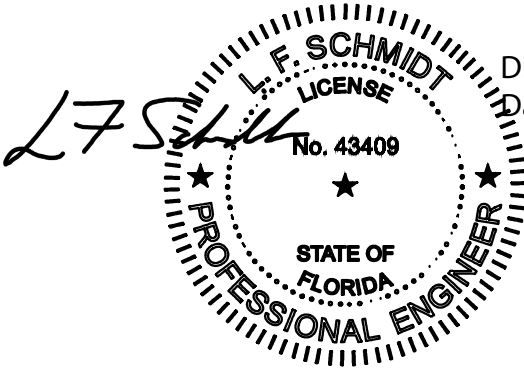
Fiber-Classic® & Smooth-Star®

WOOD EDGE
GLAZED 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.

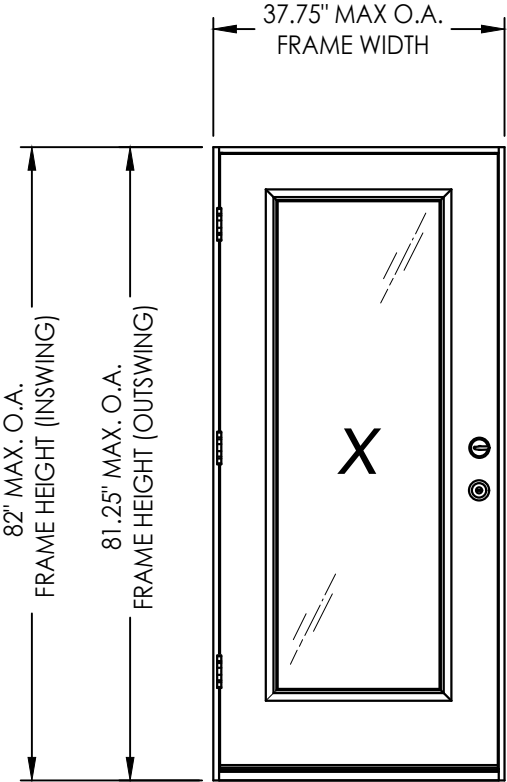
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SHEET#	DESCRIPTION	SHEET#	
1	Typical Elevations, Design Pressures & General Notes	7	Vertical Cross Sections (Thresholds)
2	Door Panel Details	8	Buck & Frame Anchoring
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4	Horizontal & Vertical Cross Sections (2X Buck)	10	Glazing Details
5	Horizontal & Vertical Cross Sections (1X Buck)	11	Components
6	Horizontal & Vertical Cross Sections (Direct to Masonry)	12	Components & Bill of Materials



Digitally signed by Lyndon F Schmidt
Date: 2023.08.18 12:59:08 -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	Latch & Deadbolt	+55.0	-55.0	+55.0	-55.0
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

THERMA-TRU
FIBERGLASS DOOR

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

2

8/18/23

UPDATE TO 8TH ED. (2023)

FBC

1

7/15/20

UPDATE TO 7th ED (2020)

FBC

NO.

DATE

REVISIONS

DATE: 12/22/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

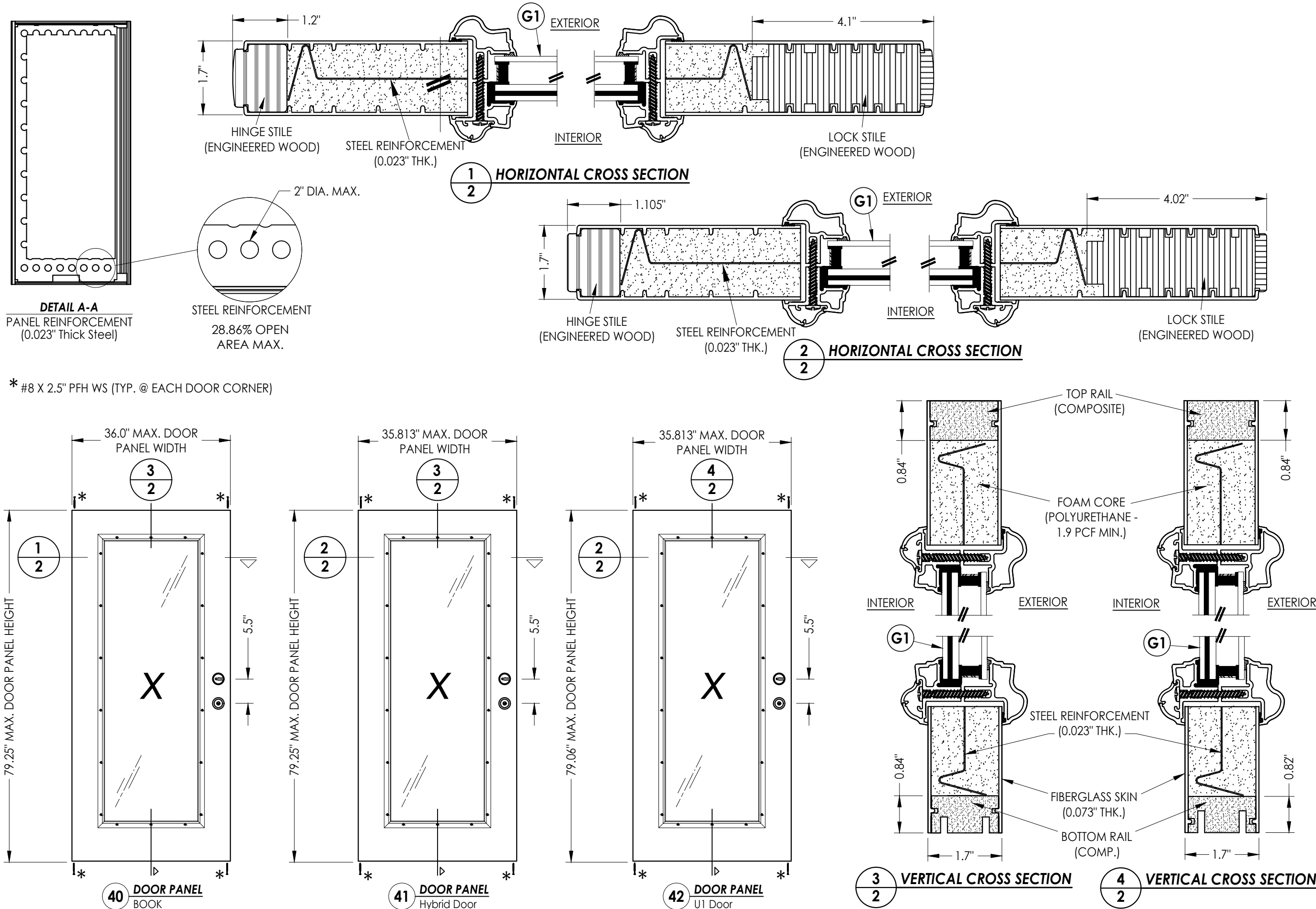
DRAWING NO.:
FL-21142.7

SHEET 1 OF 12

RW

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

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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
FIBERGLASS DOOR

PART OR ASSEMBLY:
DOOR PANEL DETAILS

NO.	DATE	BY
2	8/18/23	LFS
1	7/15/20	PO

DATE: 12/22/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-21142.7

SHEET 2 OF 12



HARDWARE TABLE

MANUFACTURER

SCHLAGE

KWIKSET

HOPPE

DATE: 12/22/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-21142.7

SHEET 3 OF 12

PRODUCT:

THERMA-TRU
FIBERGLASS DOOR

PART OR ASSEMBLY:

ELEVATIONS

REVISIONS

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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
EBDE Register, No. 0813

FBPE Registry No. 9813

Technical drawing of a window assembly cross-section. The drawing shows the exterior (left) and interior (right) components. The exterior component is labeled 'E' and contains aggregate material. The interior component is labeled 'A' and is a solid panel. A vertical assembly is shown in the center, consisting of a threaded rod (D) passing through a gasket (B) and a sealant (C). The sealant is labeled '1-1/4" MIN. EMB. (TYP.)'. The interior component is labeled '1' and the exterior component is labeled '40', '41', and '42'. The drawing also shows a cross-section of the window frame (6) and the exterior wall (H).

0.15" C-SINK (TYP)

INTERIOR

EXTERIOR

40 41 42 27 1

C

6

E

L

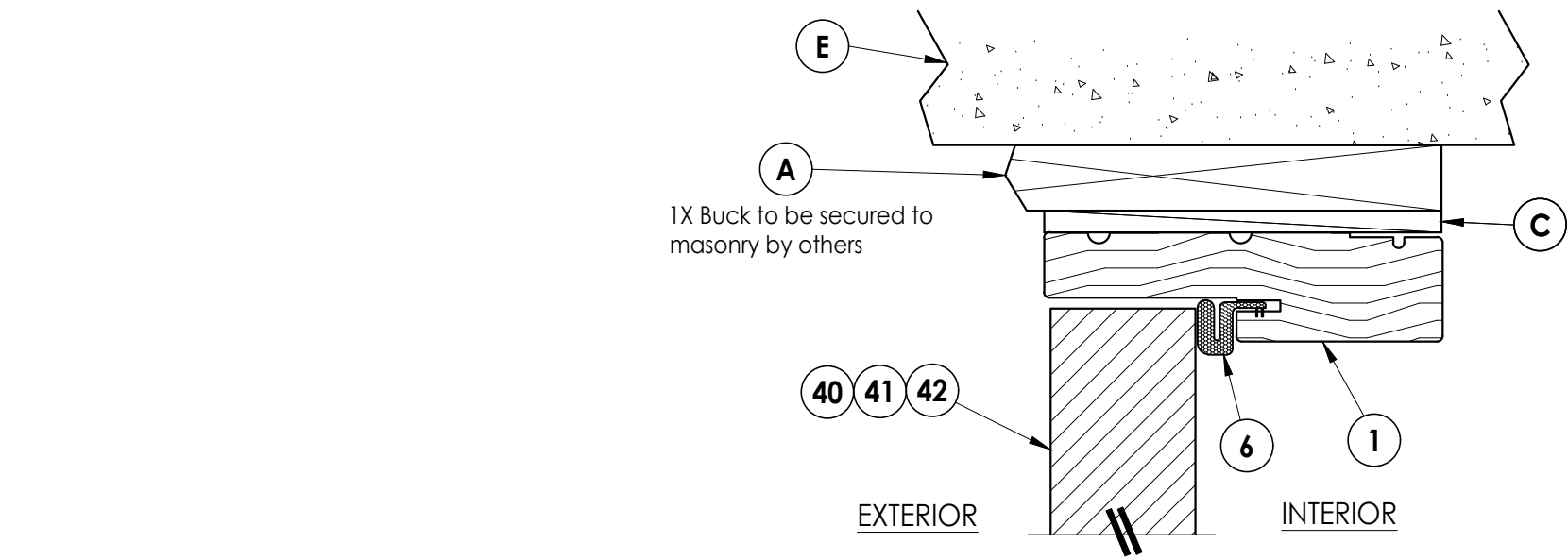
D

L

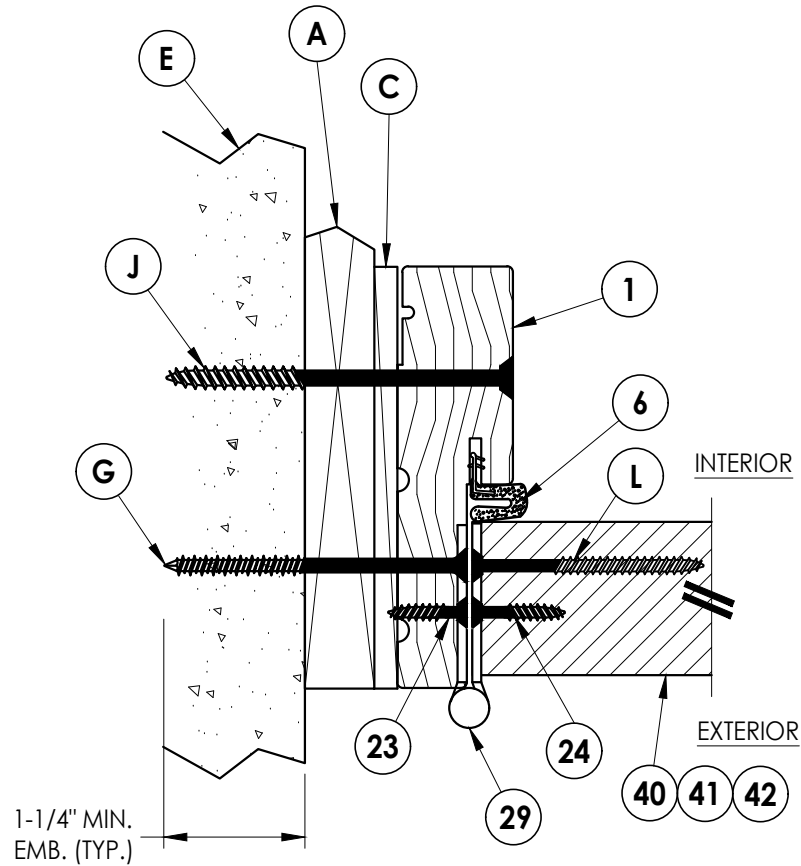
1-1/4" MIN. EMB. (TYP.)

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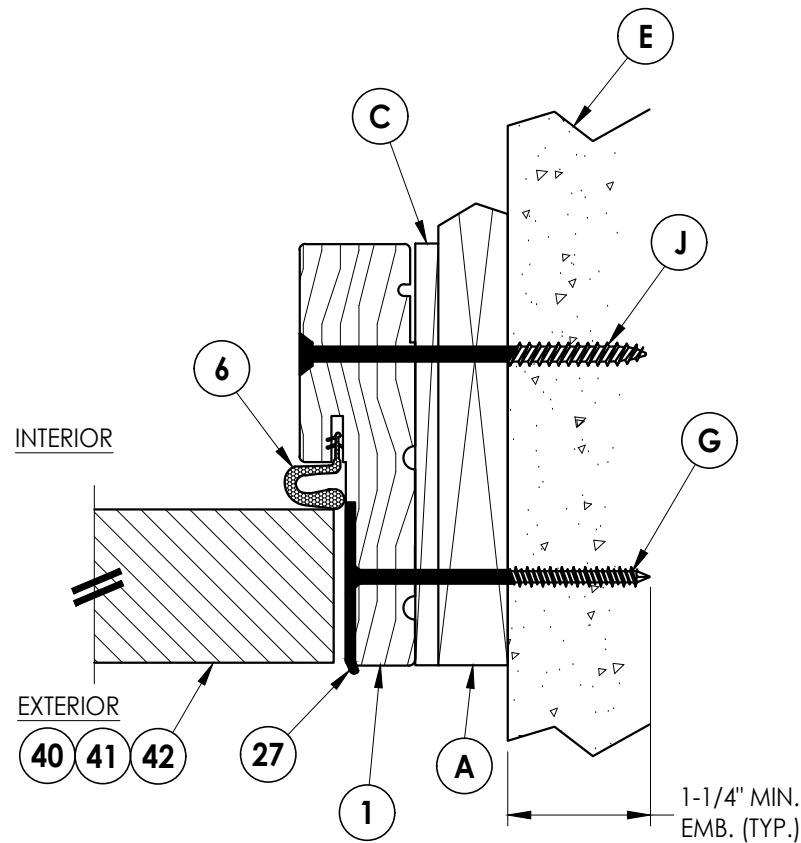
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1 VERTICAL CROSS SECTION
Shown w/ 1X sub-buck
Outswing shown (Inswing similar)



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



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

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BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
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PRODUCT:
THERMA-TRU
FIBERGLASS DOOR

PART OR ASSEMBLY:
HORIZONTAL & VERTICAL
CROSS SECTIONS (1X BUCK)

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.

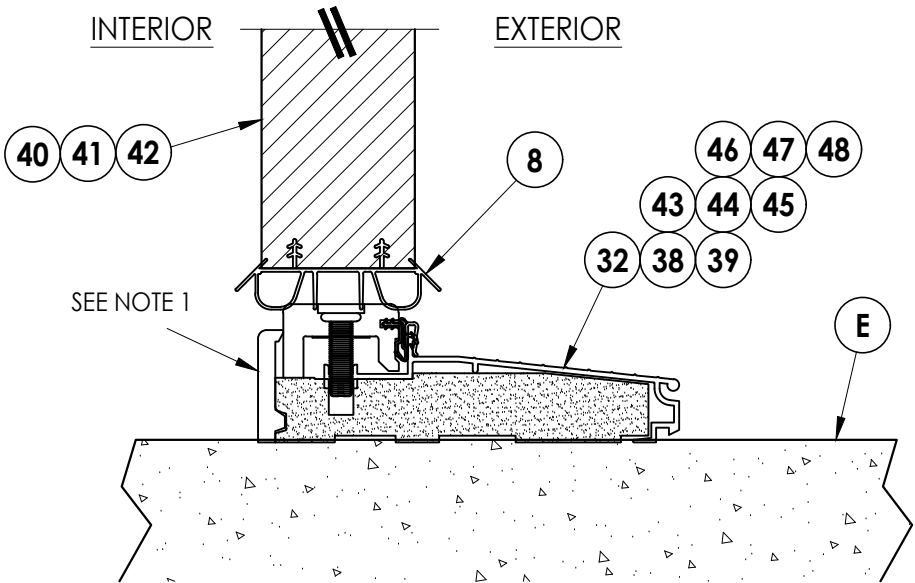
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CHK. BY: LFS

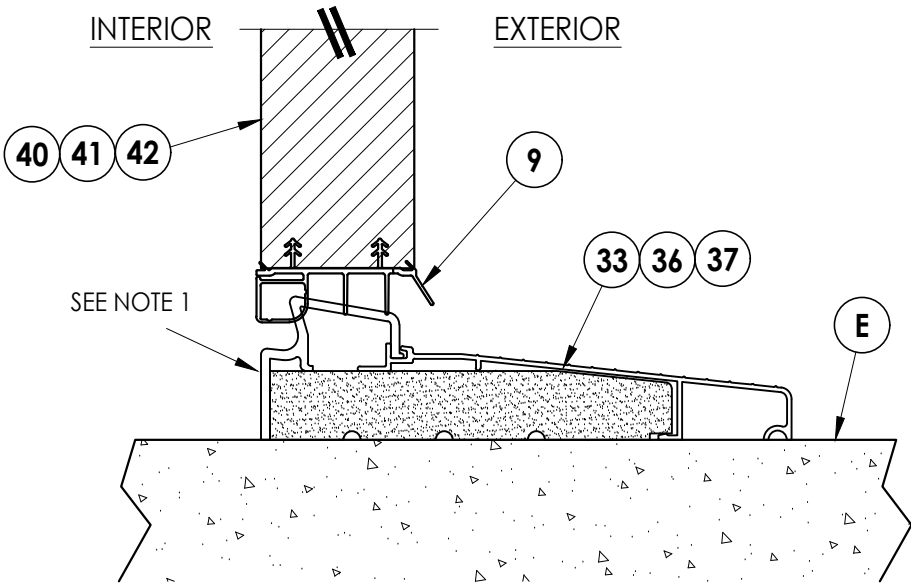
DRAWING NO.:
FL-21142.7

SHEET 5 OF 12

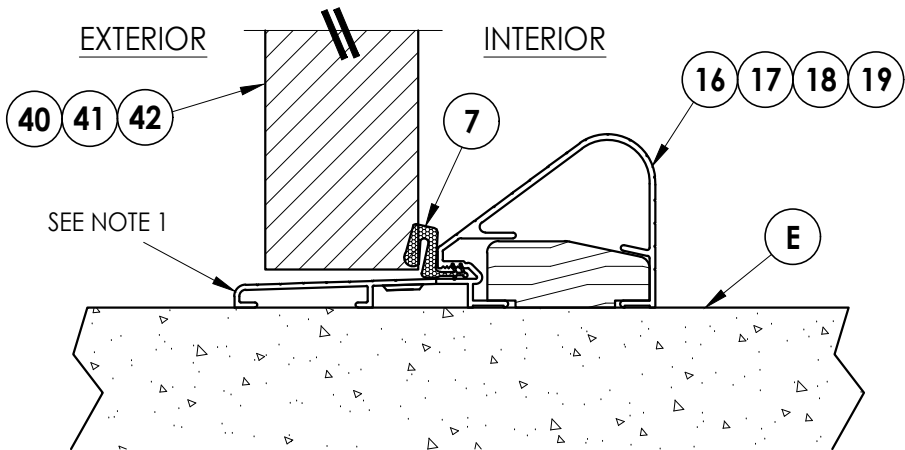
- Notes:
- 1. Sill Item #'s 16, 32, 33, 36, 37, 38, 39, 43, 44, 45, 46, 47 & 48 are attached to jambs w/ (3) #8 X 2-1/2" pfh screws or (3) 2.5" staples at each end.
 - 2. Sill Item #'s 17, 18 & 19 are attached to jambs w/ (2) #8 X 2-1/2" pfh screws at each end.
 - 3. Sill Item #15 is attached to jambs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



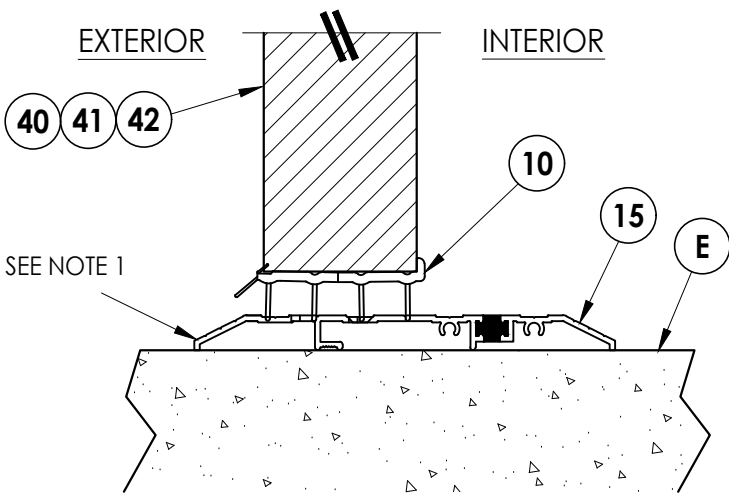
1
7 VERTICAL CROSS SECTION
Inswing Sill



2
7 VERTICAL CROSS SECTION
Inswing Sill



3
7 VERTICAL CROSS SECTION
Outswing Sill (Coastal Sill Shown)



4
7 VERTICAL CROSS SECTION
Public Access Sill

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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)

NO.	DATE	REVISIONS		
		PO	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.

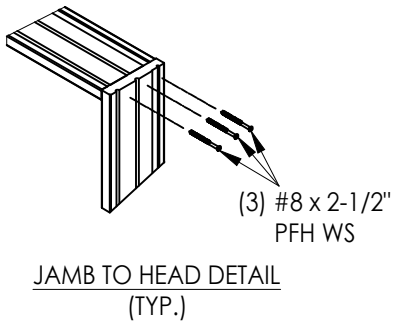
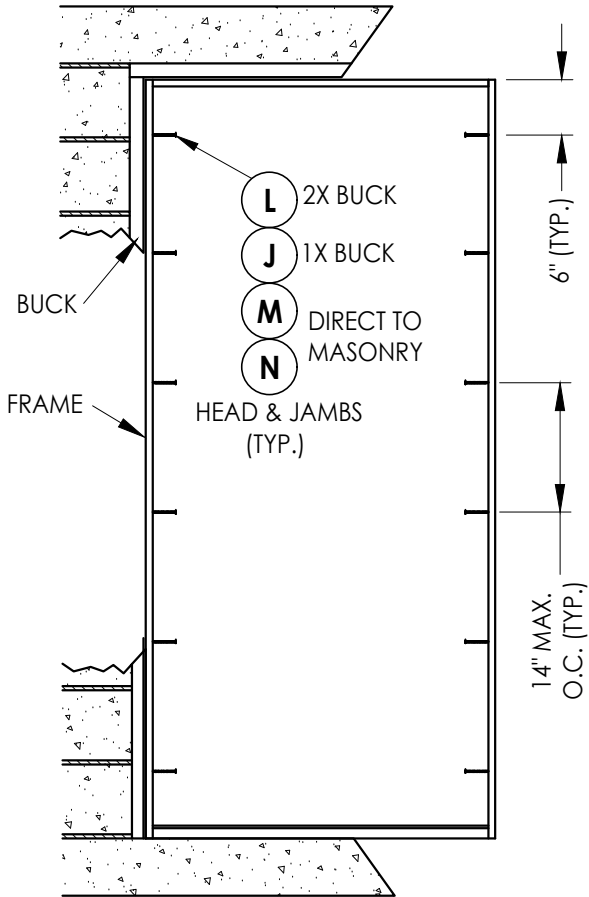
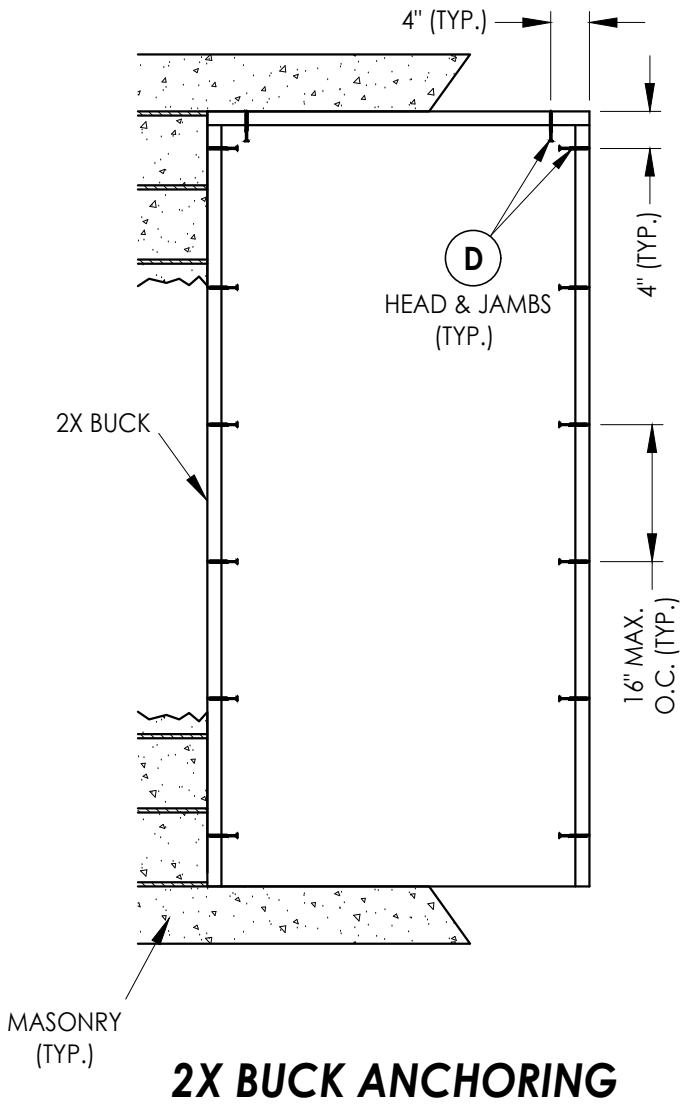
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CHK. BY: LFS

DRAWING NO.:
FL-21142.7

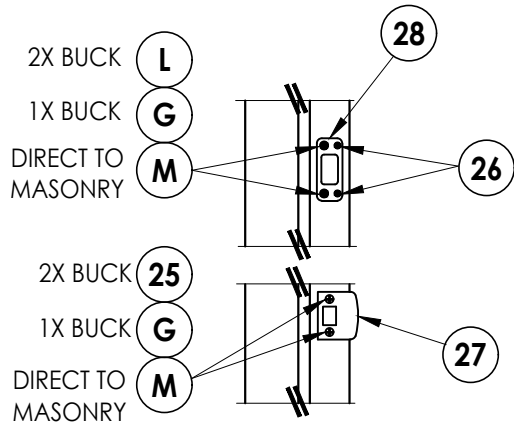
SHEET 7 OF 12

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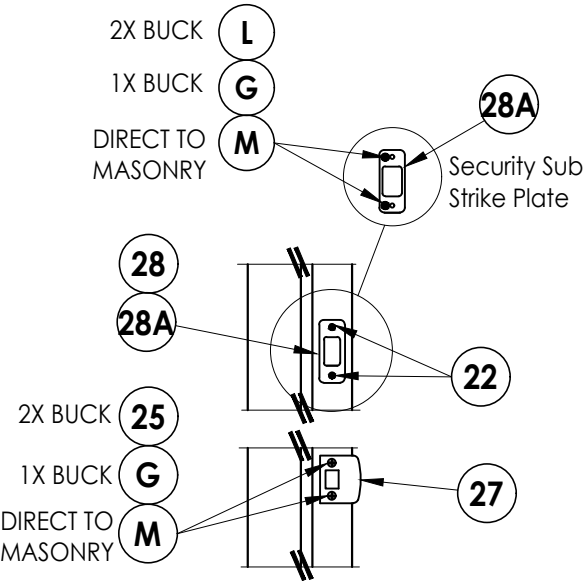
DATE: 12/22/16				DOCUMENTS PREPARED BY: Lyndon F. Schmidt P.E. No. 43409			
SCALE: N.T.S.				BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813			
DWG. BY: JK							
CHK. BY: LFS				PART OR ASSEMBLY: BUCK & FRAME ANCHORING			
DRAWING NO.: FL-21142.7							
SHEET 8 OF 12				PRODUCT: THERMA-TRU FIBERGLASS DOOR			

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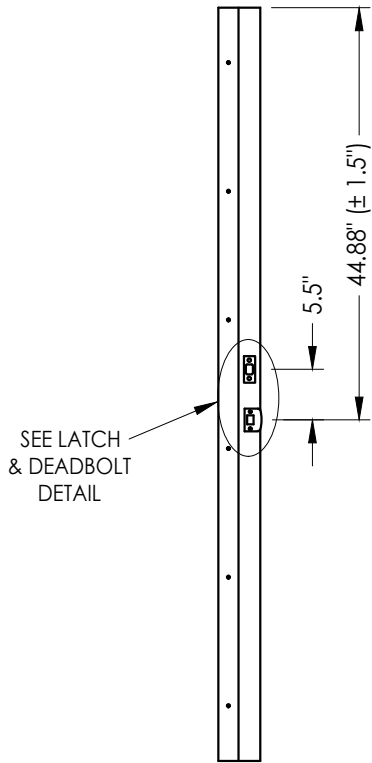
LATCH & DEADBOLT DETAIL

Kwikset



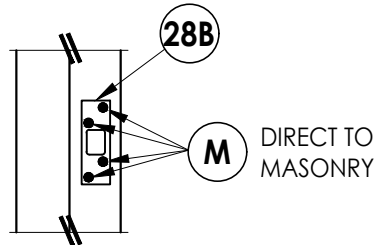
LATCH & DEADBOLT DETAIL

Schlage



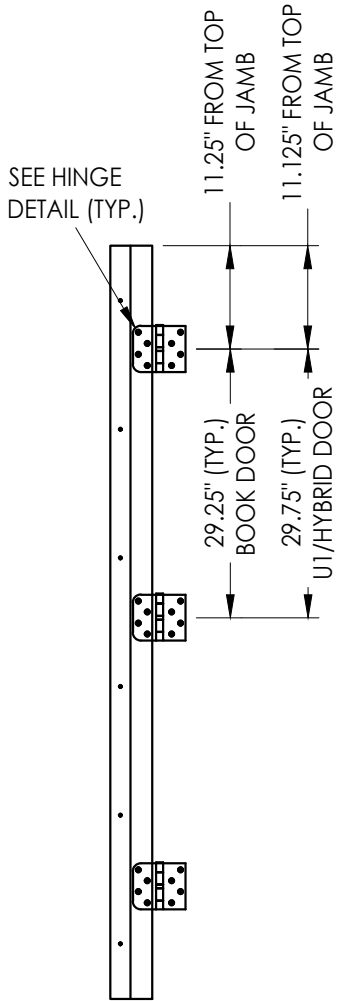
STRIKE JAMB

Latch and Deadbolt

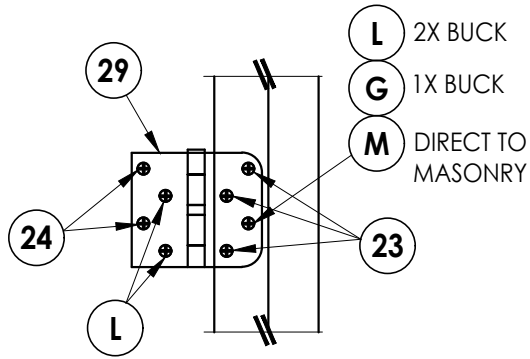


DEADBOLT STRIKE DETAILS

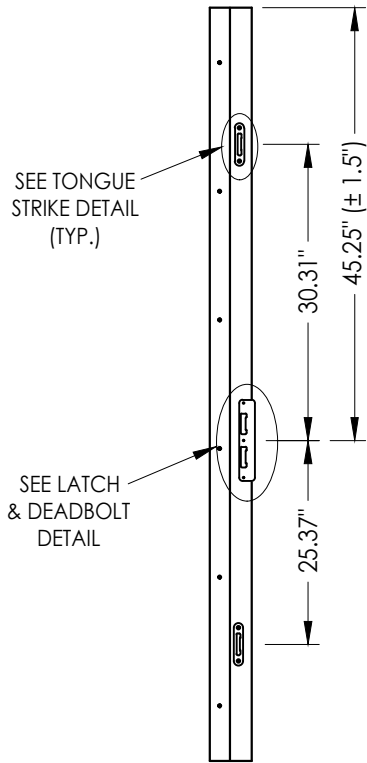
(Security Deadbolt Strike Plate)



HINGE JAMB

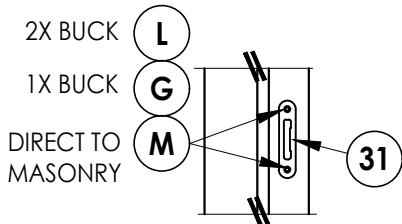


HINGE DETAIL



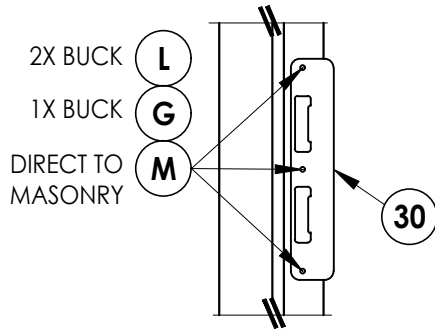
STRIKE JAMB

Multipoint Lock



TONGUE STRIKE DETAIL

Multipoint Lock



LATCH & DEADBOLT DETAIL

Multipoint Lock

MULTIPOINT LOCK STRIKE DETAILS

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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
FIBERGLASS DOOR

PART OR ASSEMBLY:
HARDWARE DETAILS

NO.	DATE	REVISIONS		
		BY	PO	LFS
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

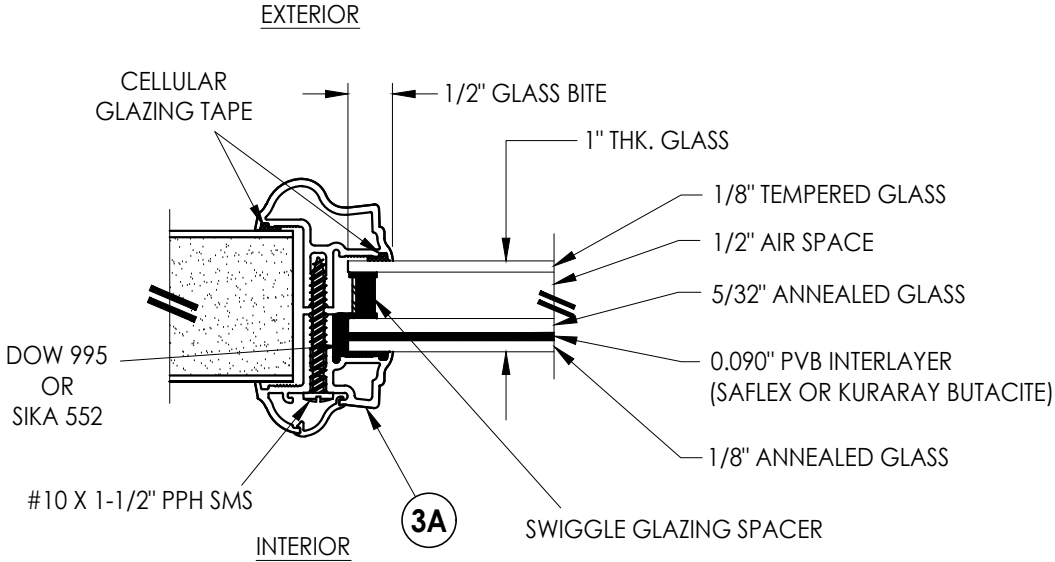
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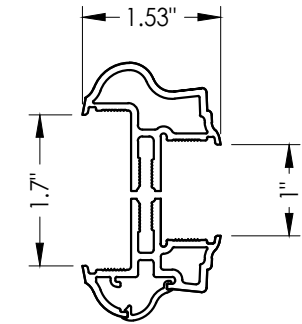
FL-21142.7

SHEET 9 OF 12

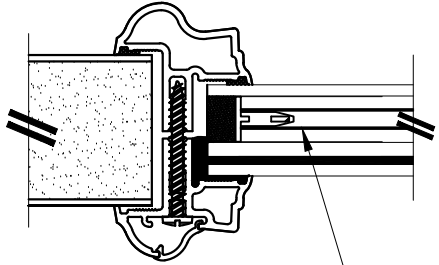
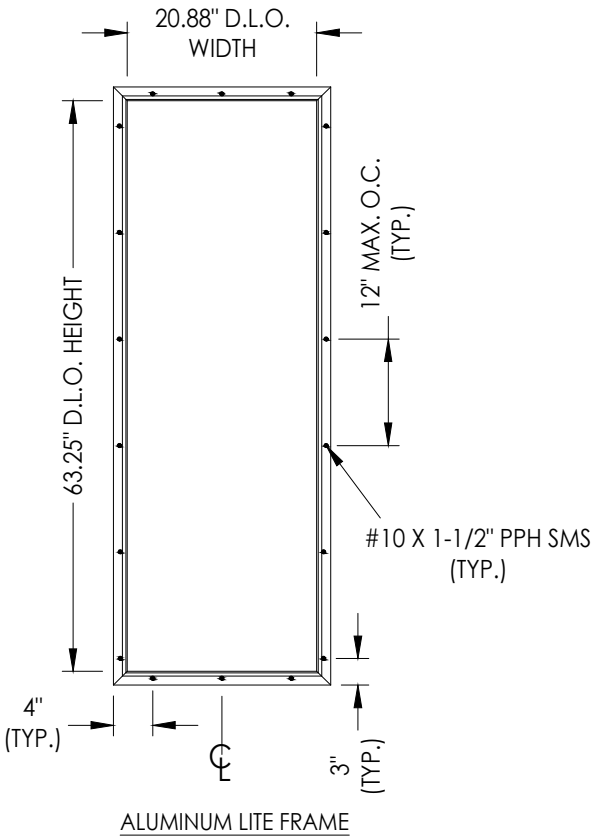
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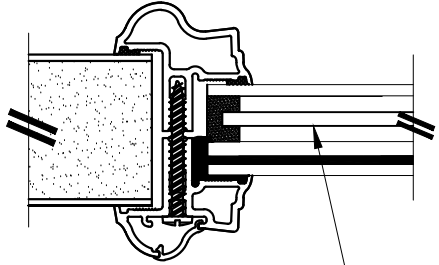
G1 GLAZING DETAIL
Aluminum Impact Lite Frame
Door Panels & Sidelites



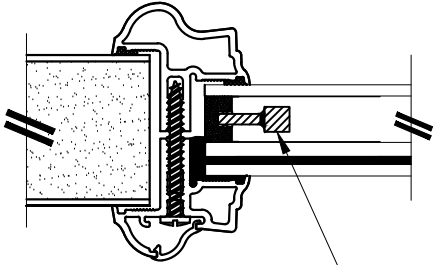
3A ALUMINUM FRAME
Aluminum Impact Lite Frame
Door Panels & Sidelites



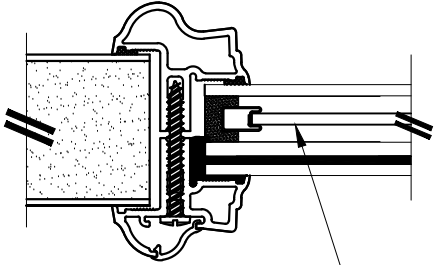
INTERNAL GRID (GBG)



PRIVACY INSERT



WROUGHT IRON INSERT



DECORATIVE INSERT

1" LAMINATED INSULATED IMPACT GLASS INSERT OPTIONS

Documents Prepared By:
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P.E. No. 43409

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

PRODUCT: THERMA-TRU
FIBERGLASS DOOR

PART OR ASSEMBLY:
GLAZING DETAILS

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.

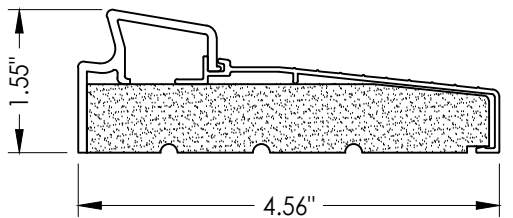
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CHK. BY: LFS

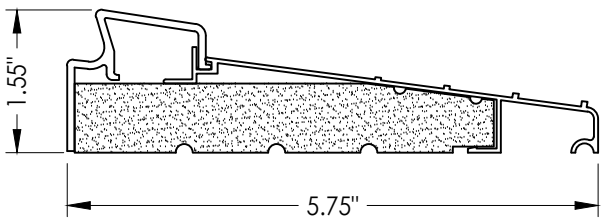
DRAWING NO.:
FL-21142.7

SHEET 10 OF 12

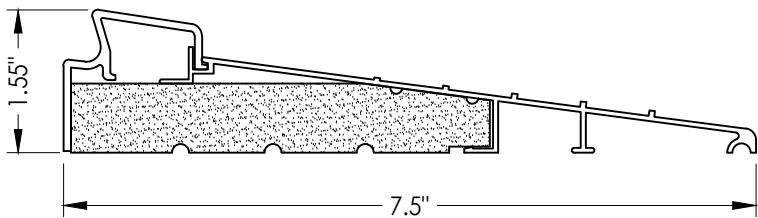
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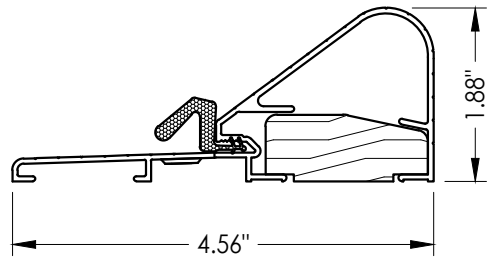
33 INSWING THRESHOLD
Inswing Basic Fixed Sill



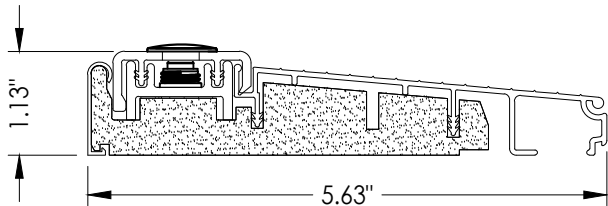
36 INSWING THRESHOLD
Inswing Basic Fixed 5-3/4" Sill



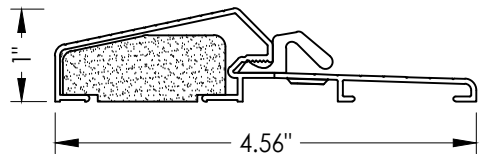
37 INSWING THRESHOLD
Inswing Basic Fixed 7-1/2" Sill



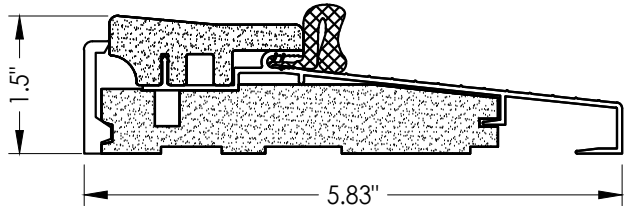
19 OUTSWING
Threshold coastal



39 INSWING THRESHOLD
Inswing Composite Adjustable Sill



17 OUTSWING THRESHOLD
Composite / Aluminum Sill

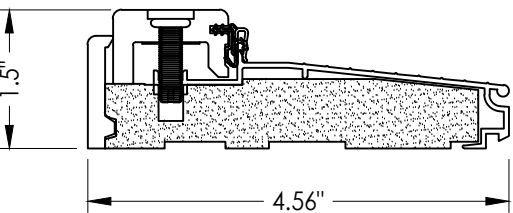


16 OUTSWING THRESHOLD *
Composite / Aluminum Sill

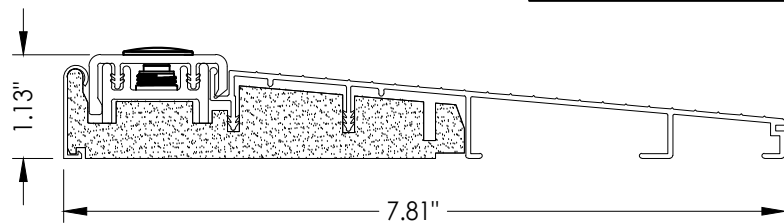
* **MAX. +55 PSF**
(where water infiltration is required)



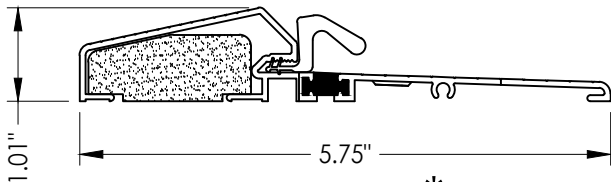
15 PUBLIC ACCESS THRESHOLD



38 INSWING THRESHOLD
Inswing Composite Adjustable Sill

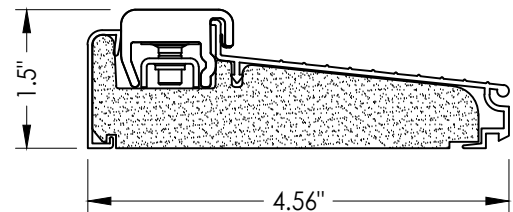


32 INSWING THRESHOLD
Inswing Composite Adjustable 7-3/4" Sill

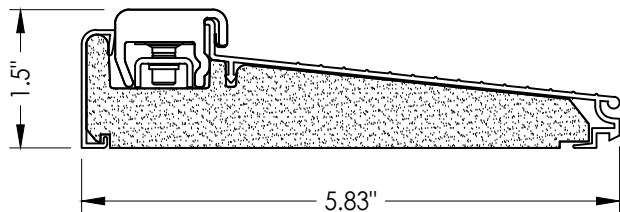


18 OUTSWING THRESHOLD *
Composite / Aluminum Sill
(Thermal Break)

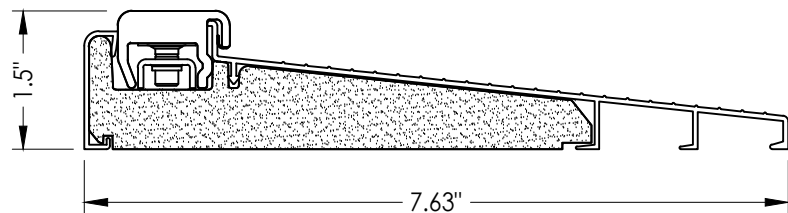
* Max. Positive Design Pressure = +55 PSF
(Where water infiltration is required)



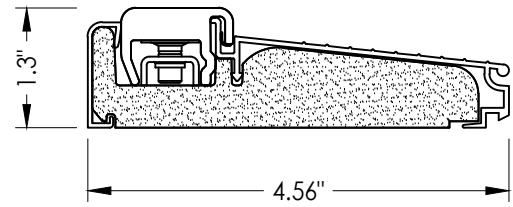
43 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



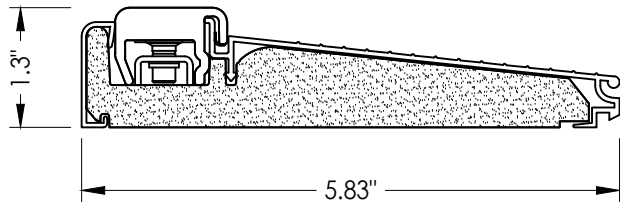
44 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



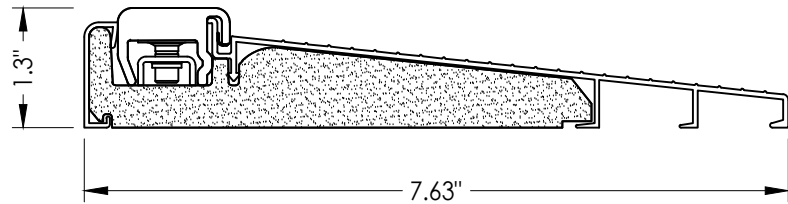
45 INSWING THRESHOLD
Inswing Composite Adjustable Sill
Book, Hybrid



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

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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

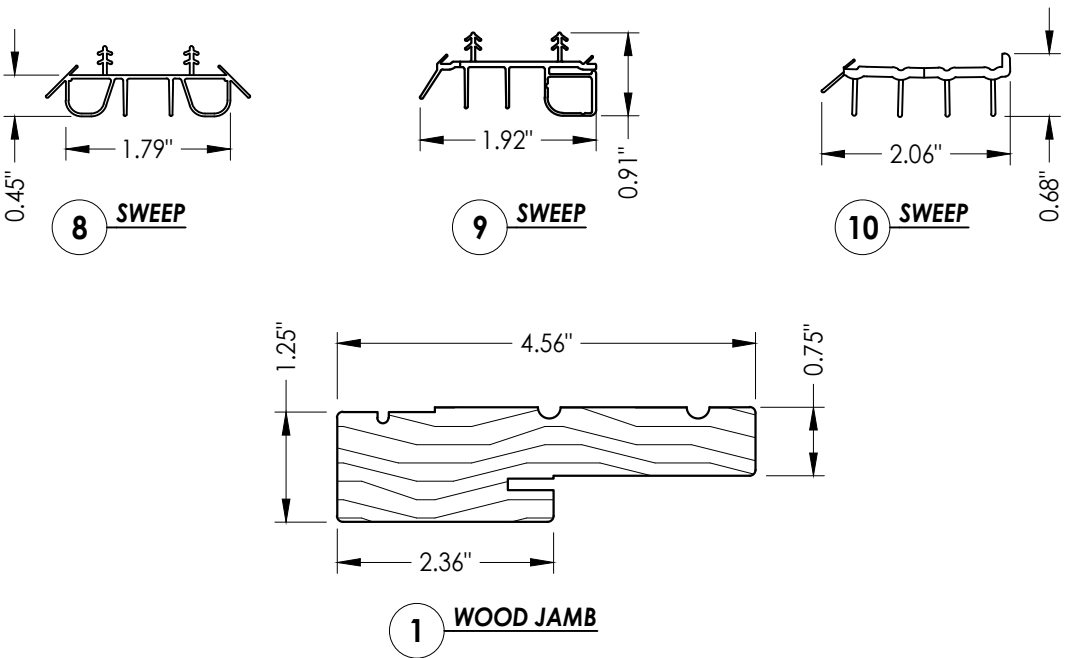
CHK. BY: LFS

DRAWING NO.:

FL-21142.7

SHEET 11 OF 12

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	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.

[illegible]