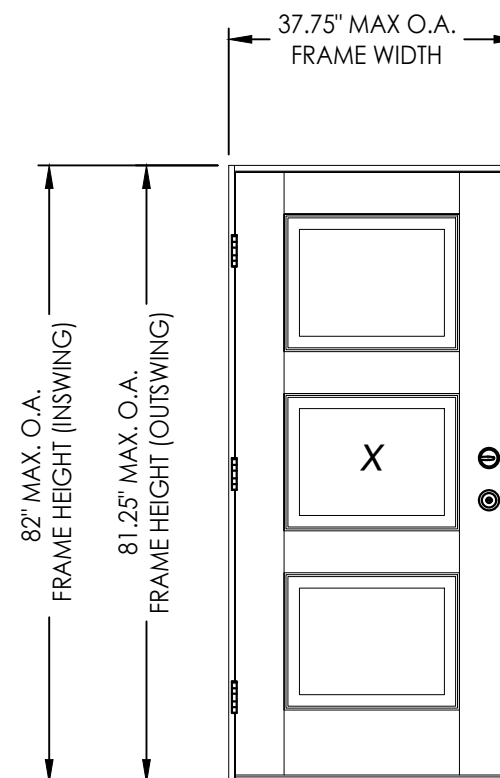


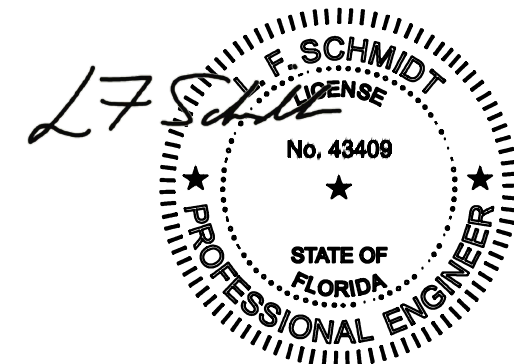
GENERAL NOTES

1. This product has been evaluated and is in compliance with the 9th Edition (2026) 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.
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.

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



CONFIGURATION	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
X	+80.0	-90.0	+80.0	-80.0



Digitally signed by Lyndon F
Schmidt
Date: 2026.07.22 17:24:39 -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

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

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

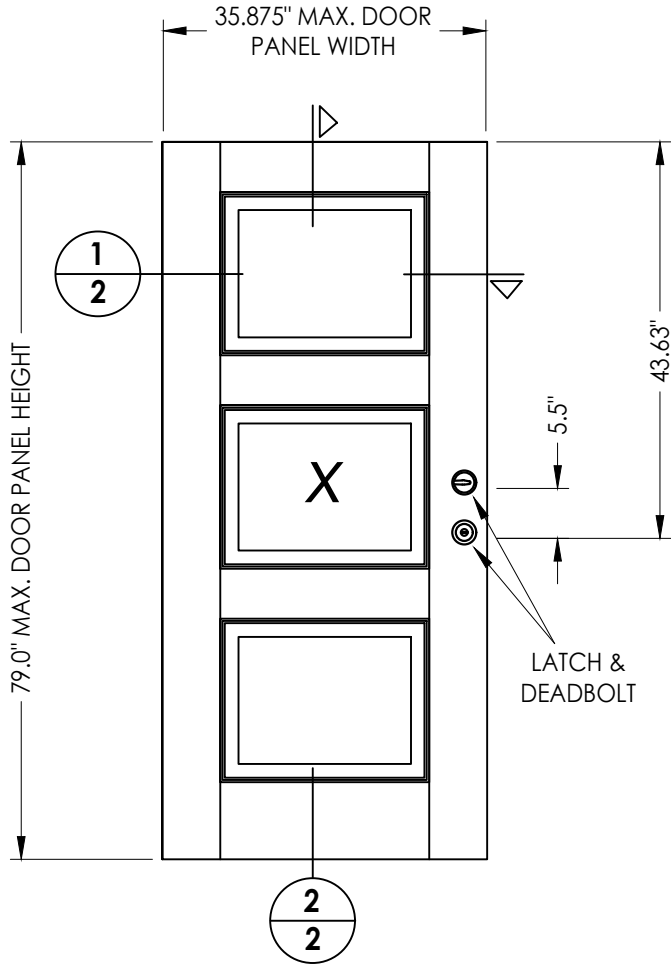
PRODUCT: MASTERGRAIN
FIBERGLASS DOOR

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

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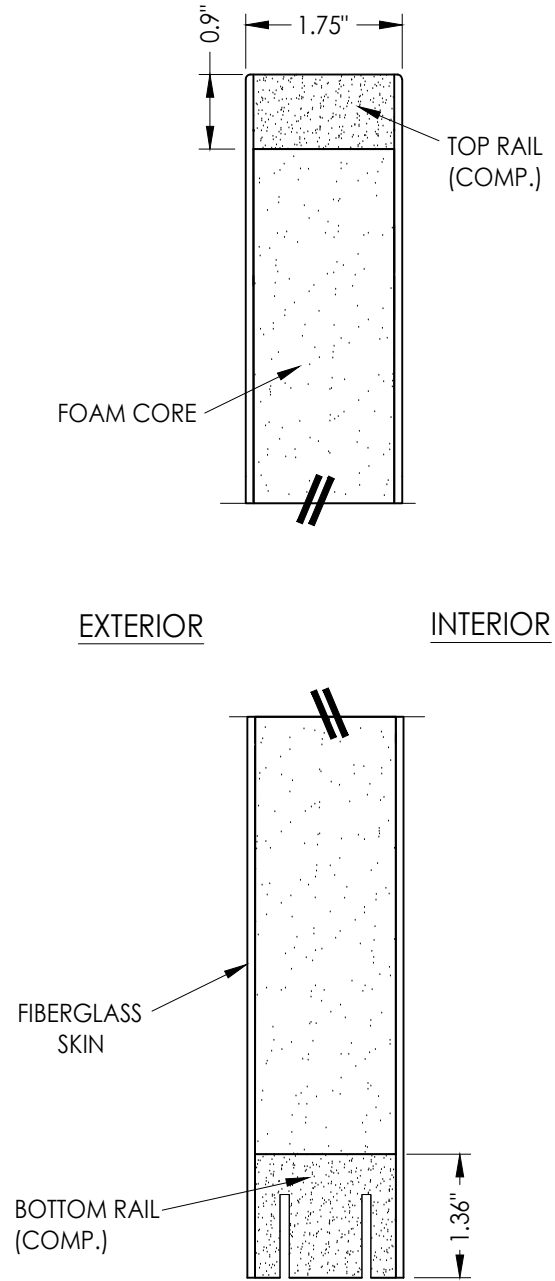
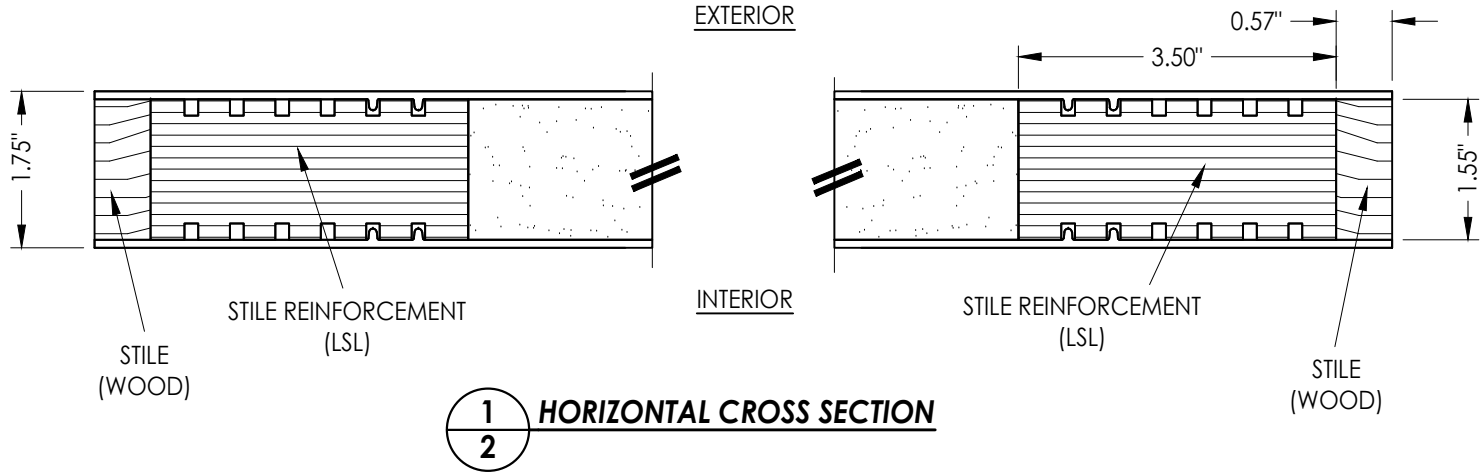
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SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-21852.17
SHEET	1 OF 9

Z:\2023 FBC Drawings\MasterGrain\FL-21852 R10\FL-21852.17-18.dwg



40 DOOR PANEL
Mastergrain

FIBERGLASS DOOR SKIN: 0.095" MIN. THK.
FOAM CORE: POLYURETHANE - 1.9 PCF MIN.



2 VERTICAL CROSS SECTION

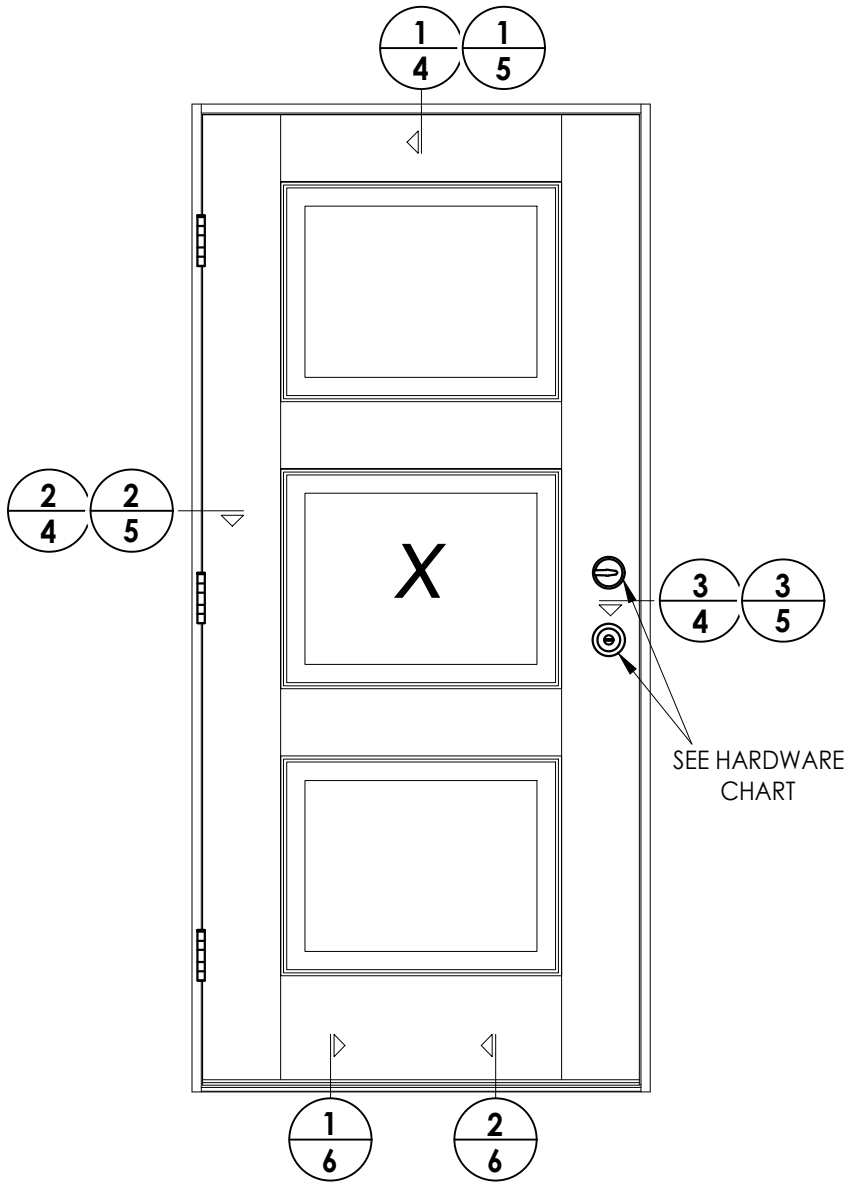
PRODUCT: MASTERGRAIN FIBERGLASS DOOR				PART OR ASSEMBLY: DOOR PANEL DETAILS			
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3	7/01/23	UPDATE TO 8TH ED. (2023)	FBC	LFS			
2	7/08/20	UPDATE TO 7TH ED. (2020)	FBC	LFS			
1	10/03/17	UPDATE TO 6TH ED. (2017)	FBC	JK			
NO.	DATE						
				REVISIONS			
DATE: 02/09/17							
SCALE: N.T.S.							
DWG. BY: JK							
CHK. BY: LFS							
DRAWING NO.: FL-21852.17							
SHEET 2 OF 9							

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HARDWARE TABLE	
MANUFACTURER	MODEL
PAMEX	Knob: FLU600 Deadbolt: FD261
KWIKSET	Knob: SIGNATURE SERIES Deadbolt: SIGNATURE SERIES (980)
SCHLAGE	Knob: F51 Deadbolt: B60N
HOPPE	MULTIPOINT: HLS™ ONE (3 pt. Manual Tongue)

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P.E. No. 43409

PRODUCT:
MASTERGRAIN
FIBERGLASS DOOR

PART OR ASSEMBLY:

ELEVATION

DATE: 02/09/17

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-21852.17

SHEET 3 OF 9

REVISIONS

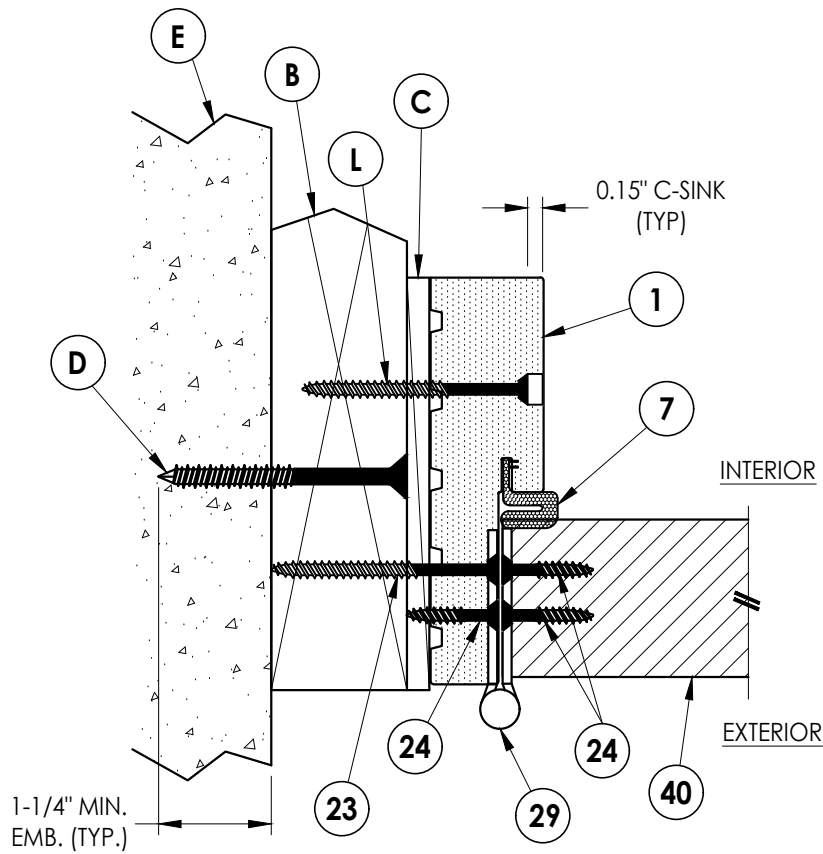
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2	7/08/20	UPDATE TO 7TH ED. (2020)
1	10/03/17	UPDATE TO 6TH ED. (2017)

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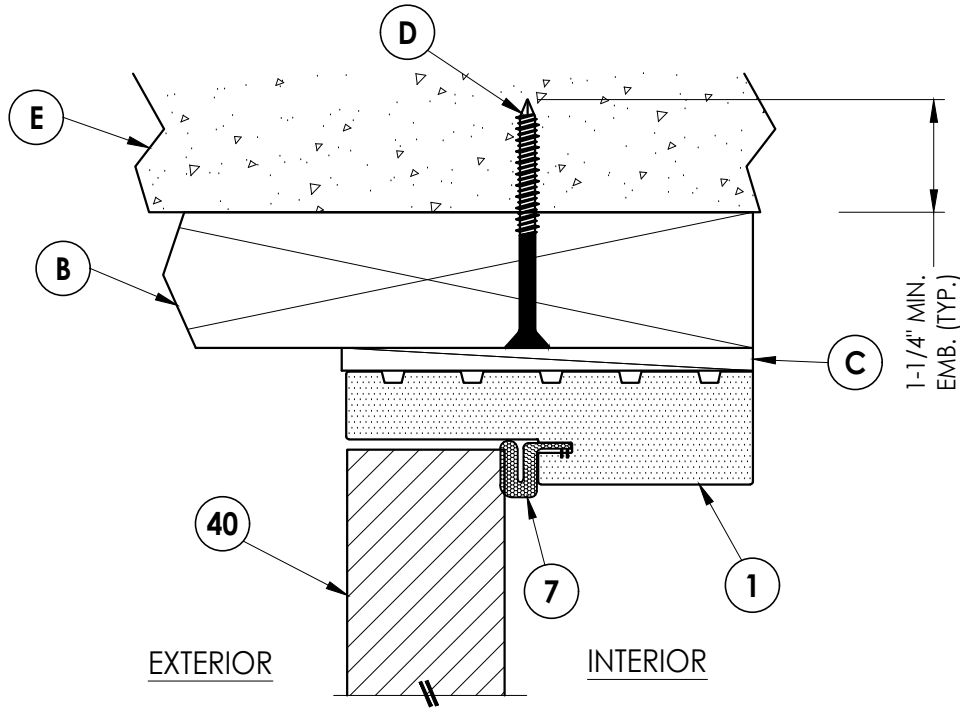
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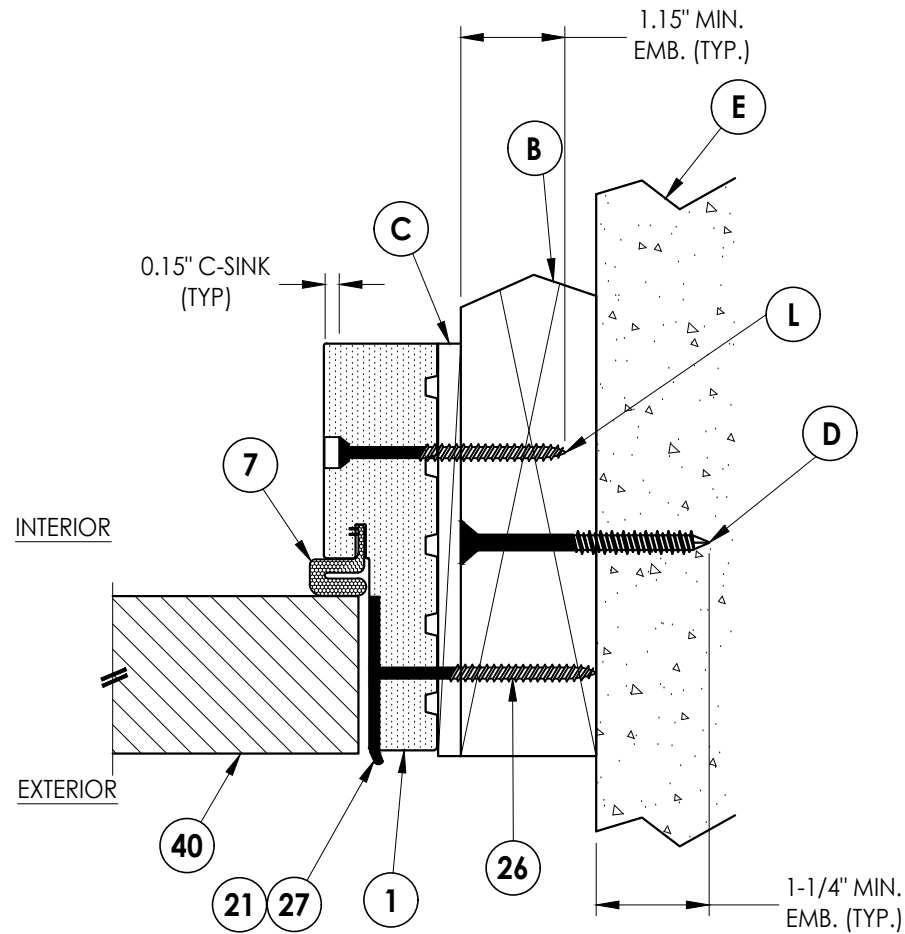
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2 HORIZONTAL CROSS SECTION
4 Shown w/ 2X Buck
Outswing shown (Inswing similar)



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



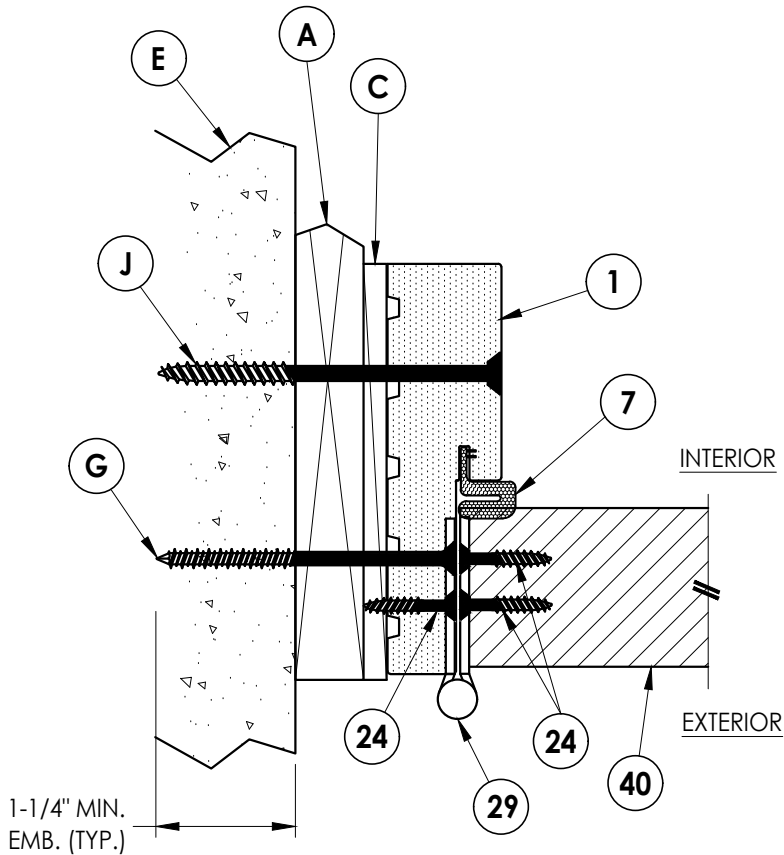
3 HORIZONTAL CROSS SECTION
4 Shown w/ 2X Buck
Outswing shown (Inswing similar)

PRODUCT:		MASTERGRAIN FIBERGLASS DOOR	
PART OR ASSEMBLY:		HORIZONTAL & VERTICAL CROSS SECTIONS (2X BUCK)	
NO	DATE	REVISIONS	
		BY	DATE
4	7/01/26	UPDATE TO 9TH ED. (2026)	FBC
3	7/01/23	UPDATE TO 8TH ED. (2023)	FBC
2	7/08/20	UPDATE TO 7TH ED. (2020)	FBC
1	10/03/17	UPDATE TO 6TH ED. (2017)	JK
DATE: 02/09/17			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-21852.17			
SHEET 4 of 9			

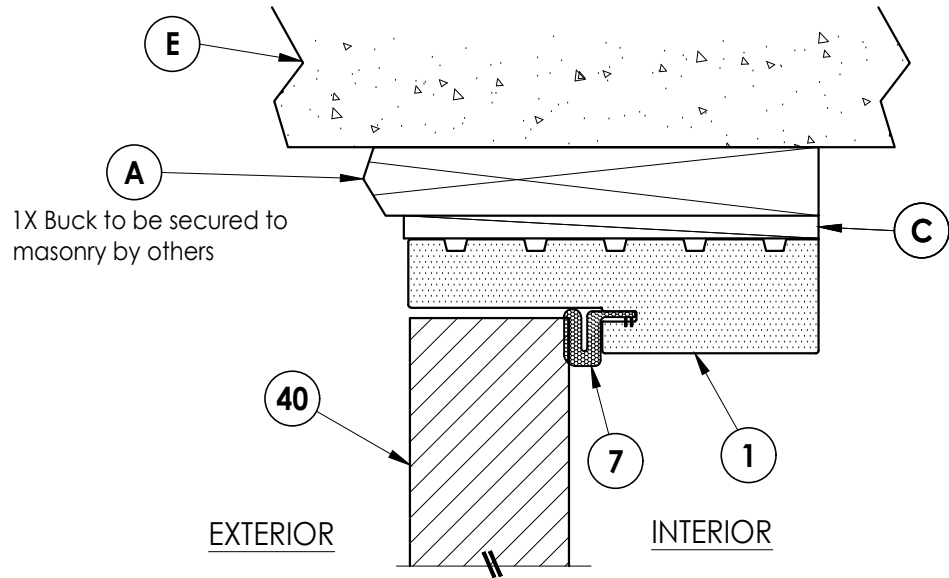
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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Phone No.: 813.659.9197
FBPE Registry No. 9813

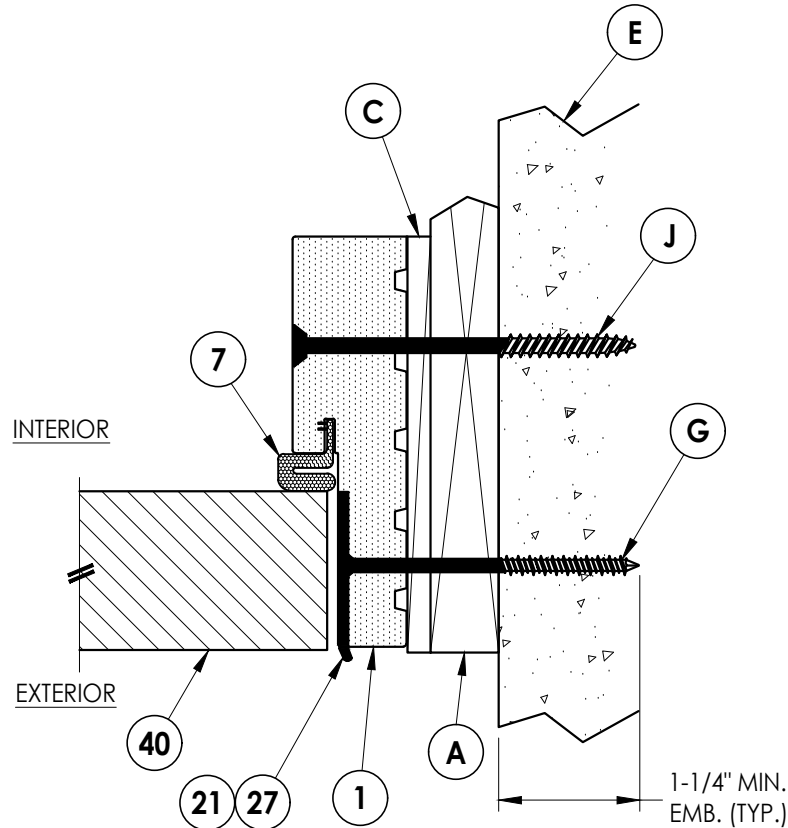
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2 HORIZONTAL CROSS SECTION
Shown w/ 1X sub-buck
Outswing shown (Inswing similar)



1 VERTICAL 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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P.E. No. 43409

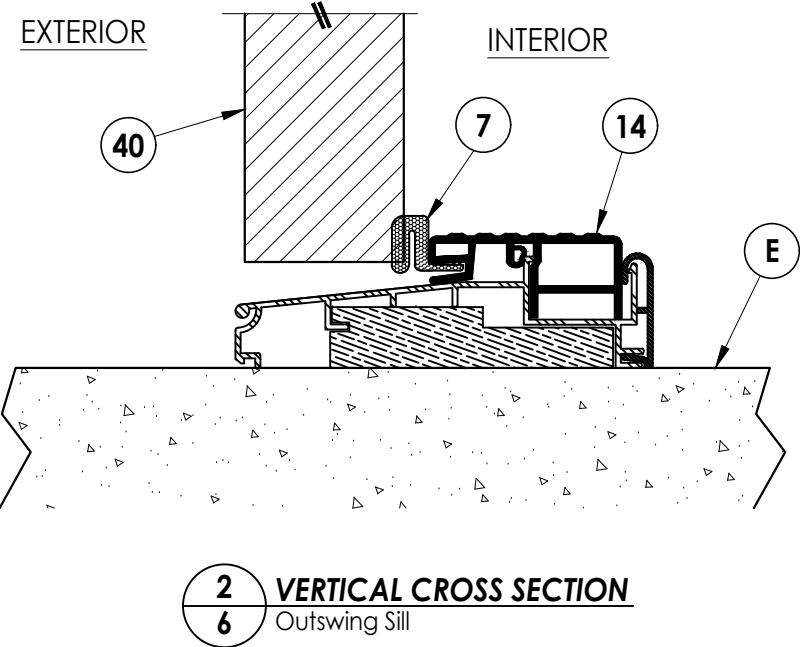
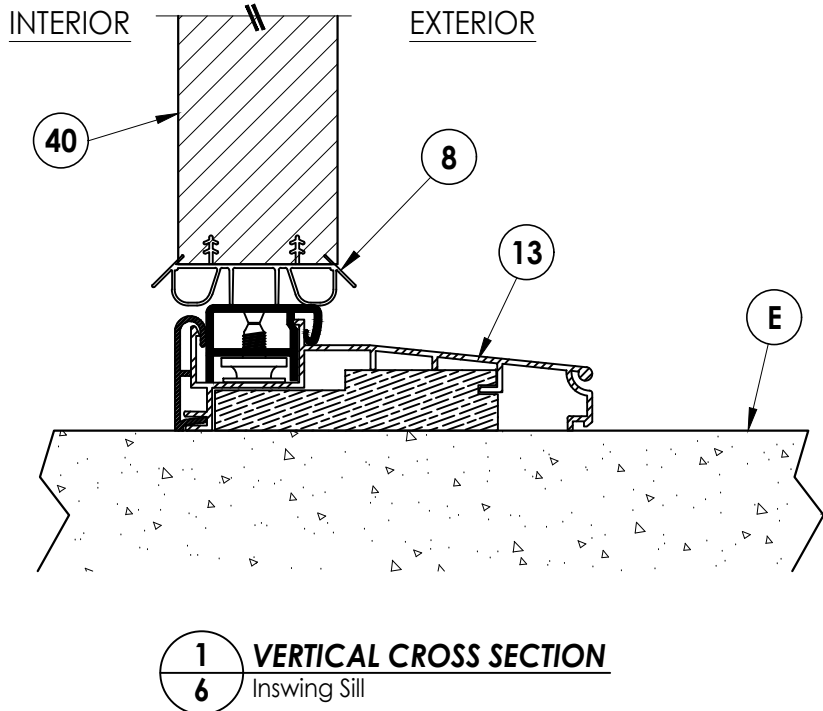
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P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:
MASTERGRAIN
FIBERGLASS DOOR

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

NO.	DATE	REVISIONS
4	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
3	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
2	7/08/20	UPDATE TO 7TH ED. (2020) FBC LFS
1	10/03/17	UPDATE TO 6TH ED. (2017) FBC JK

DATE: 02/09/17
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-21852.17
SHEET 5 OF 9

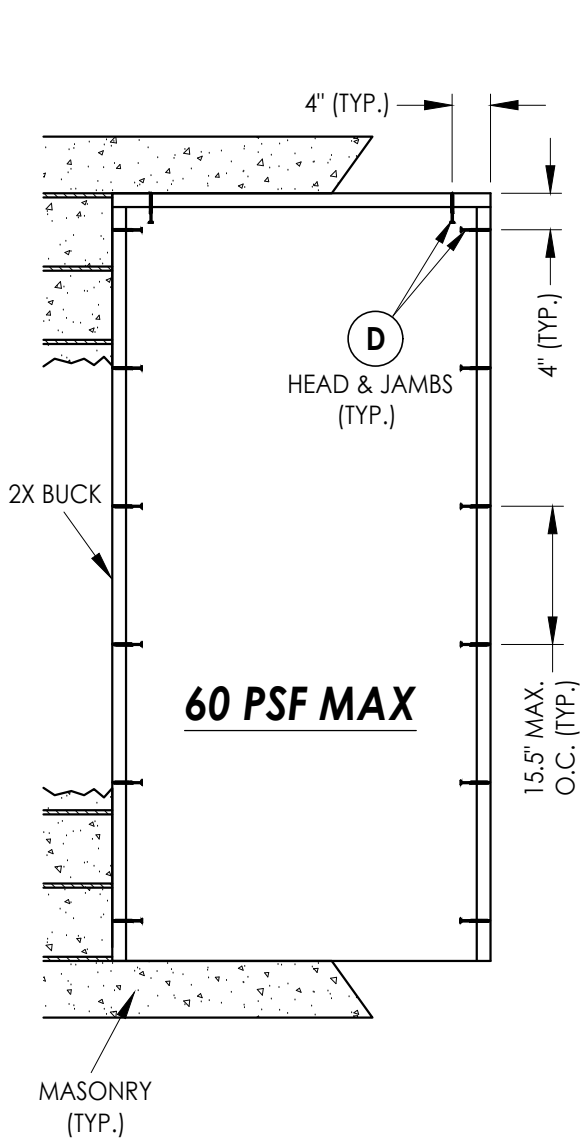
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PRODUCT:	MASTERGRAIN FIBERGLASS DOOR
PART OR ASSEMBLY:	VERTICAL CROSS SECTIONS (THRESHOLDS)

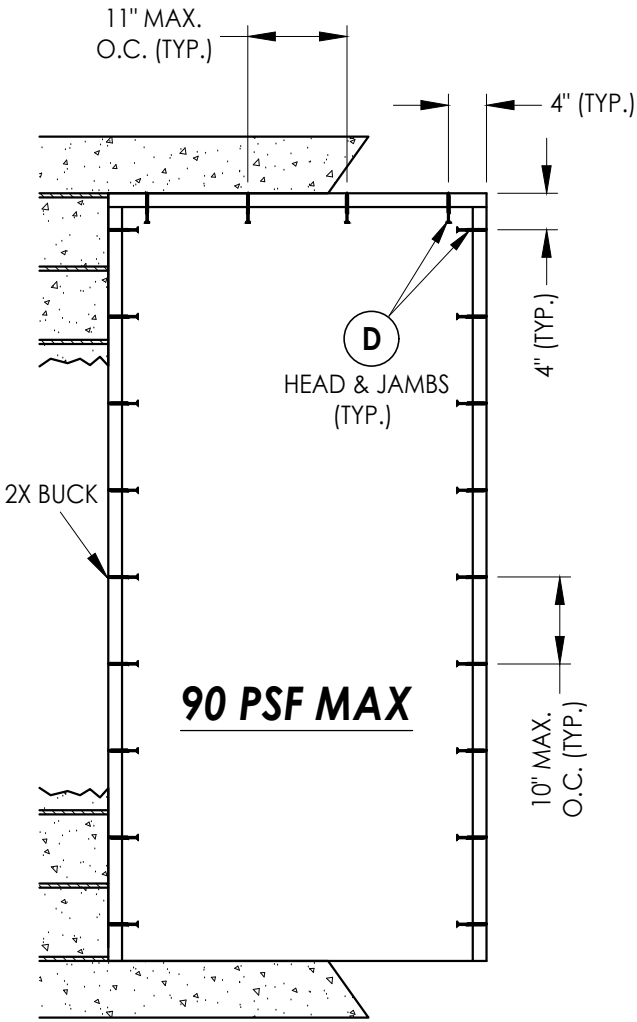
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P.E. No. 43409

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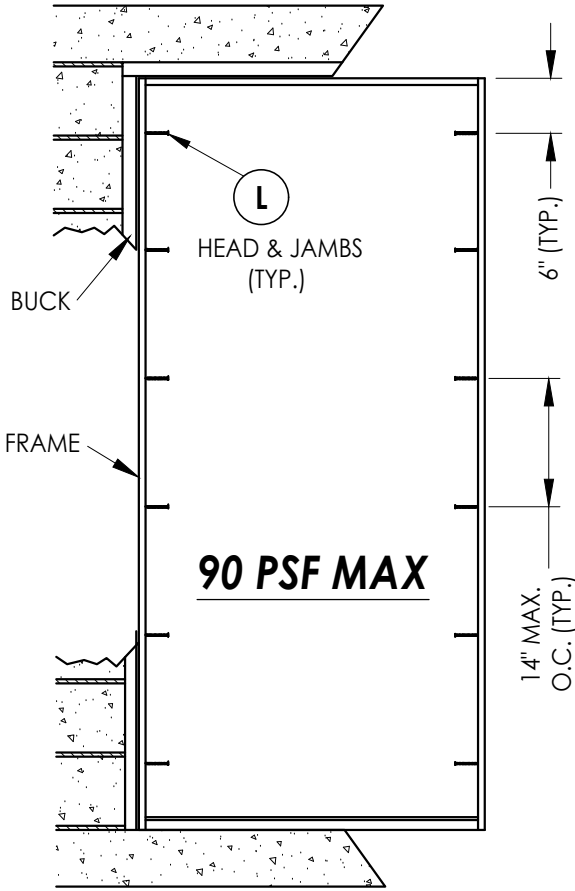
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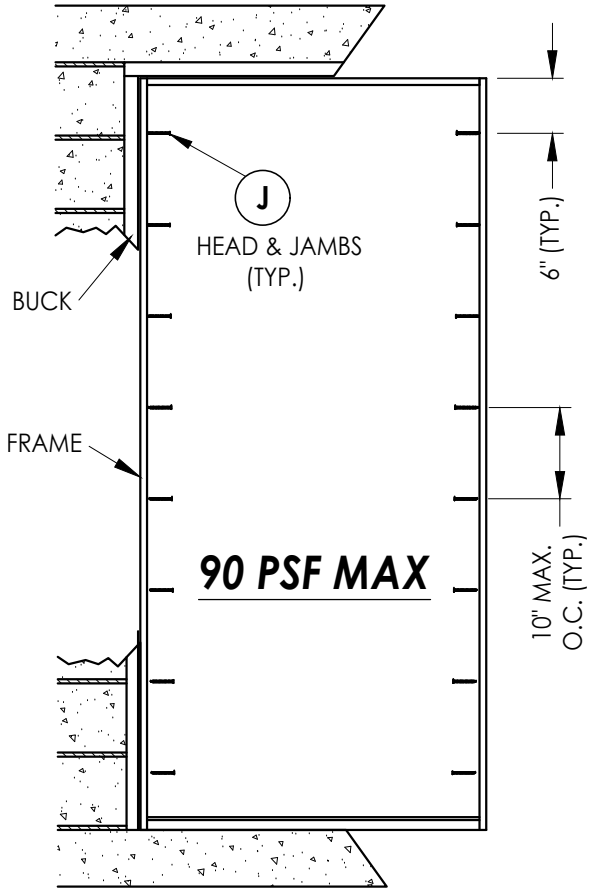
2X BUCK ANCHORING



2X BUCK ANCHORING



FRAME ANCHORING
2X BUCK CONSTRUCTION

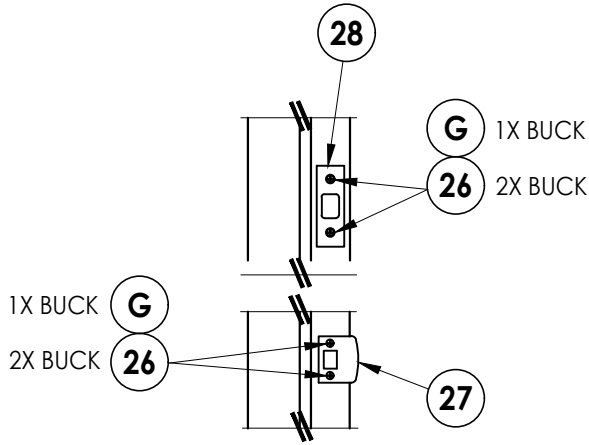


FRAME ANCHORING
1X BUCK CONSTRUCTION

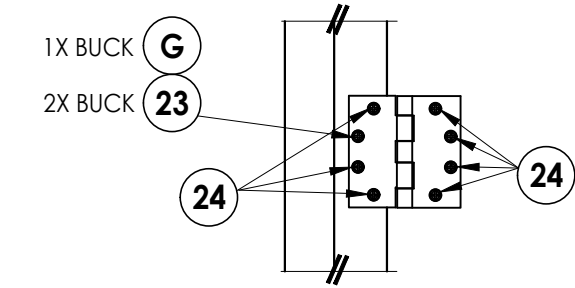
NOTE:
1. ALL FRAME CORNERS SECURED WITH (3) #8 X 2-1/2" FH DEEP THREAD WOOD SCREWS @ HEAD & SILL.

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PRODUCT: MASTERGRAIN FIBERGLASS DOOR		PART OR ASSEMBLY: BUCK & FRAME ANCHORING	
4	7/01/26	UPDATE TO 9TH ED. (2026)	FBC LFS
3	7/01/23	UPDATE TO 8TH ED. (2023)	FBC LFS
2	7/08/20	UPDATE TO 7TH ED. (2020)	FBC LFS
1	10/03/17	UPDATE TO 6TH ED. (2017)	FBC JK
NO.	DATE		BY
REVISIONS			
DATE: 02/09/17			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-21852.17			
SHEET 7 OF 9			

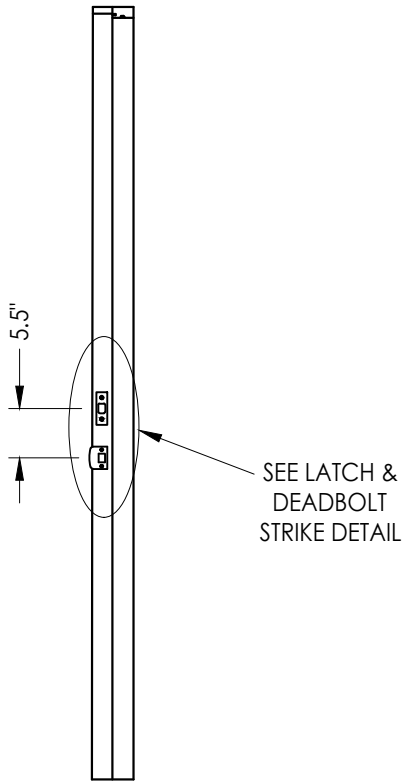
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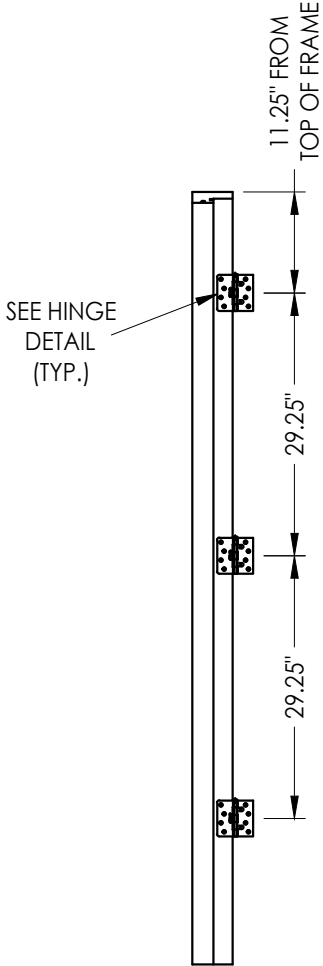
LATCH & DEADBOLT DETAIL



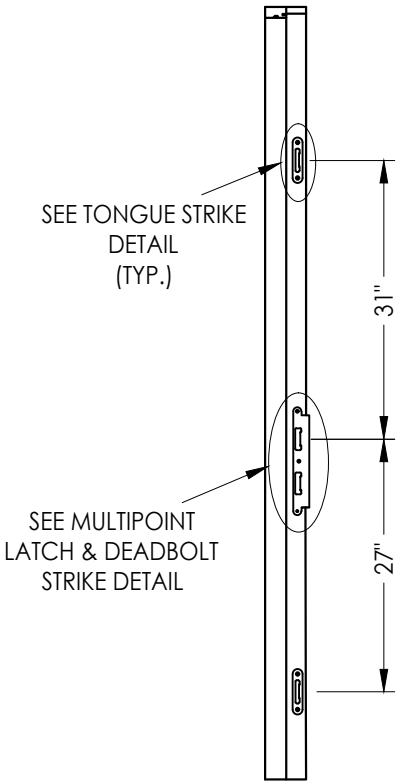
HINGE DETAIL



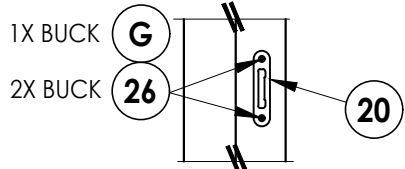
STRIKE JAMB
Latch and Deadbolt



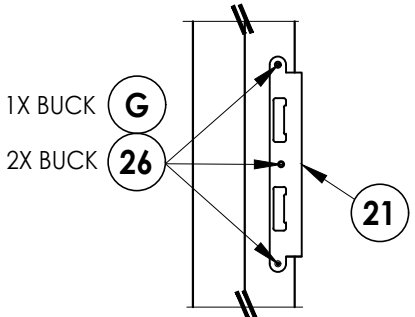
HINGE JAMB



STRIKE JAMB
Multipoint Lock



TONGUE STRIKE DETAIL



MULTIPOINT LATCH & DEADBOLT STRIKE DETAIL

LATCH & DEADBOLT HARDWARE DETAILS

MULTIPOINT LOCK HARDWARE DETAILS

NO.	DATE	REVISIONS
4	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
3	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
2	7/08/20	UPDATE TO 7TH ED. (2020) FBC LFS
1	10/03/17	UPDATE TO 6TH ED. (2017) FBC JK
		BY

DATE: 02/09/17

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-21852.17

SHEET 8 OF 9

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:
MASTERGRAIN
FIBERGLASS DOOR

PART OR ASSEMBLY:
HARDWARE DETAILS

BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK (SG >= 0.42)	WOOD
B	2X BUCK (SG >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
G	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL
J	1/4" X 3-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL
1	COMPOSITE JAMB	COMP
7	WEATHERSTRIP	FOAM
8	SWEEP	VINYL
13	INSWING ADJUSTABLE THRESHOLD	ALUM/COMP
14	OUTSWING BUMP THRESHOLD	ALUM/COMP
20	MULTIPOINT TONGUE STRIKE PLATE	STEEL
21	MULTIPOINT LATCH & DEADBOLT STRIKE PLATE	STEEL
23	#12 X 2-1/2" PFH WOOD SCREW	STEEL
24	#12 x 1" PFH WOOD SCREW	STEEL
26	#8 X 2-1/2" PFH WOOD SCREW	STEEL
27	LATCH STRIKE PLATE	STEEL
28	DEADBOLT STRIKE PLATE	STEEL
29	4.5" X 4.5" HINGE	STEEL
40	DOOR PANEL	-

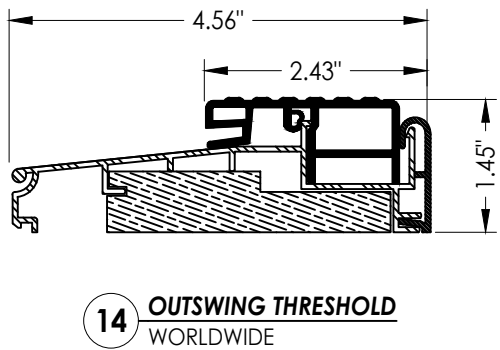
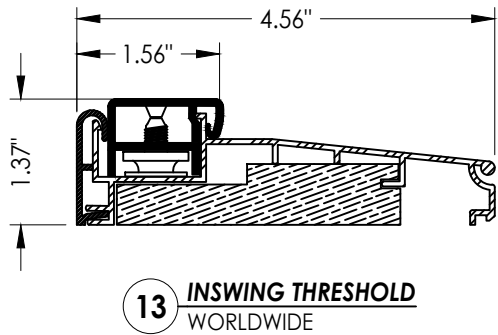
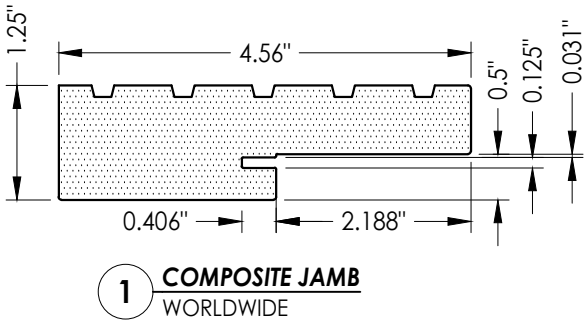
CONCRETE ANCHOR NOTES:

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"	3"	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.



DATE: 02/09/17		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			
DRAWING NO.: FL-21852.17			
SHEET 9 OF 9			
PRODUCT: MASTERGRAIN FIBERGLASS DOOR			
PART OR ASSEMBLY: BILL OF MATERIALS AND COMPONENTS			
4	7/01/26	UPDATE TO 9TH ED. (2026)	FBC LFS
3	7/01/23	UPDATE TO 8TH ED. (2023)	FBC LFS
2	7/08/20	UPDATE TO 7TH ED. (2020)	FBC LFS
1	10/03/17	UPDATE TO 6TH ED. (2017)	FBC JK
NO.	DATE		BY
REVISIONS			