

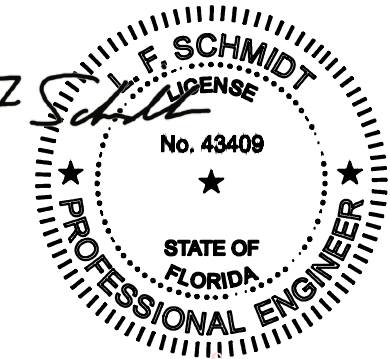
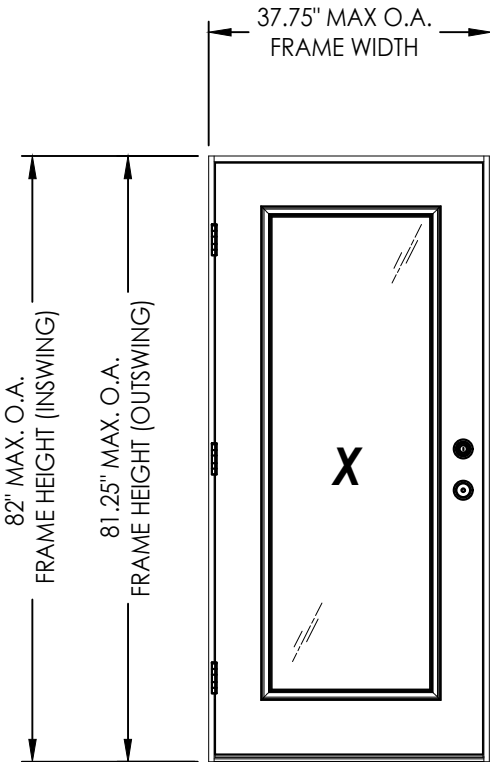
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FIBERGLASS GLAZED

SINGLE DOOR

IN SWING/OUT SWING

"IMPACT"



Digitally signed by Lyndon F Schmidt
Date: 2026.07.22 17:07:27 -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

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	Glazing Details
4	Elevation
5	Horizontal & Vertical Cross Sections (2X Buck)
6	Horizontal & Vertical Cross Sections (1X Buck)
7	Vertical Cross Sections (Thresholds)
8	Buck & Frame Anchoring
9	Hardware Details
10	Bill of Materials & Components

CONFIGURATION	DESIGN PRESSURE (PSF) IN SWING		DESIGN PRESSURE (PSF) OUT SWING	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
X	+50.0	-55.0	+50.0	-50.0

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

PRODUCT:

MASTERGRAIN
FIBERGLASS DOOR

PART OR ASSEMBLY:

TYPICAL ELEVATION, DESIGN
PRESSURES & GENERAL NOTES

REVISIONS

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

DATE:

02/09/17

SCALE:

N.T.S.

DWG. BY:

JK

CHK. BY:

LFS

DRAWING NO.:

FL-21852.14

SHEET

1

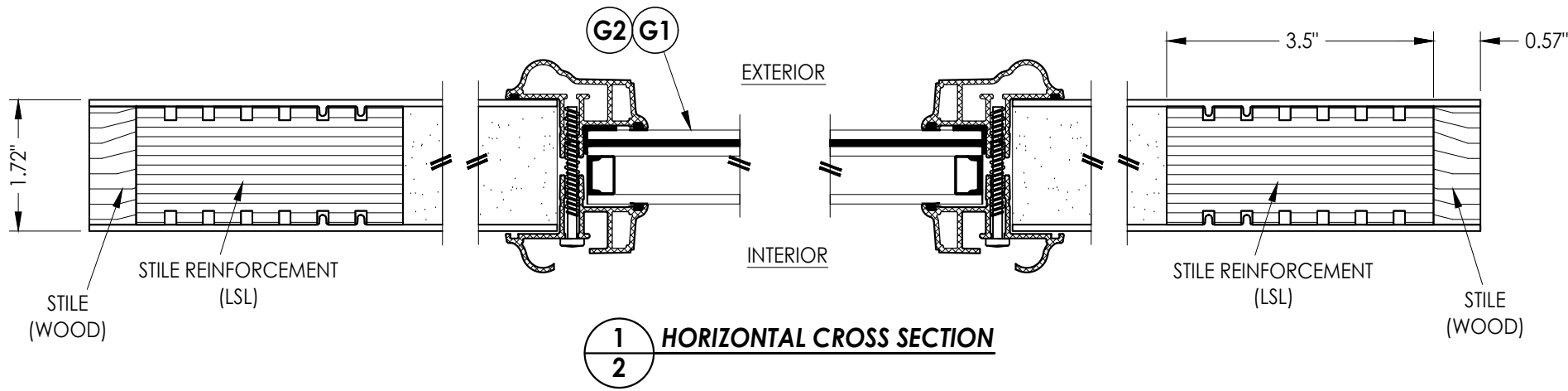
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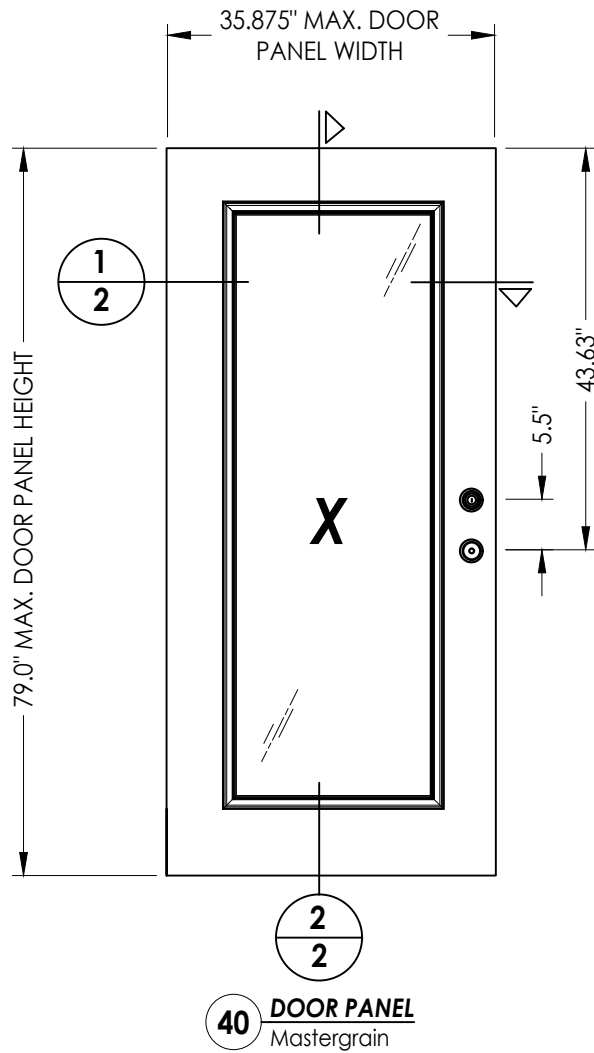
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P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

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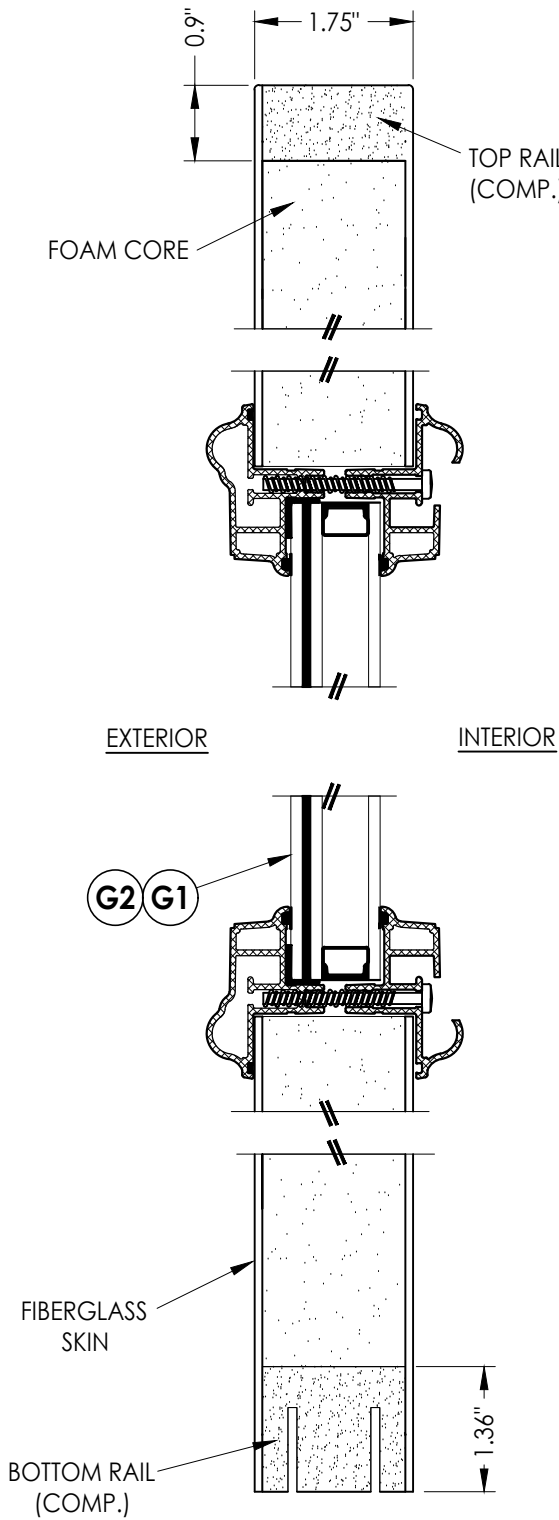


1
2 **HORIZONTAL CROSS SECTION**



40 **DOOR PANEL**
Mastergrain

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



2
2 **VERTICAL CROSS SECTION**

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PRODUCT:
MASTERGRAIN
FIBERGLASS DOOR

PART OR ASSEMBLY:
DOOR PANEL 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

DATE: 02/09/17

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-21852.14

SHEET 2 OF 10

NON-STRUCTURAL
BACK BEDDING
(READISEAL)

DOW 995

1" O.A. GLASS THICKNESS

1/8" ANNEALED GLASS

0.090" SAFLEX PVB INTERLAYER

1/8" ANNEALED GLASS

AIR SPACE

1/8" TEMPERED GLASS

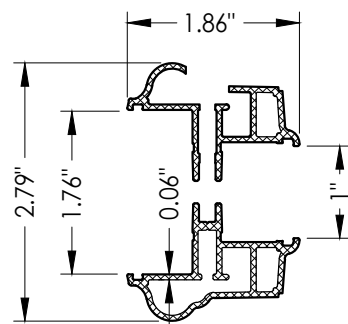
ALUMINUM SPACER

5/8" GLASS BITE

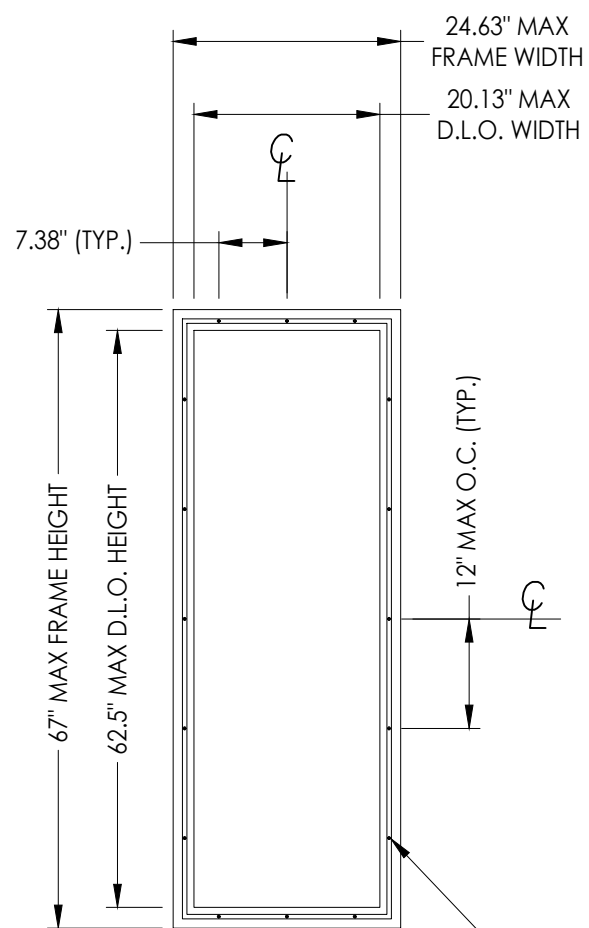
3A

7-19 X 1-3/4" PPH
ELF-DRILLING SMS

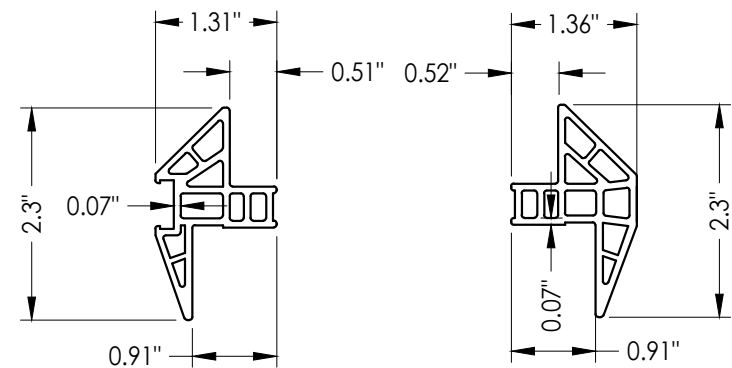
G1 GLAZING DETAIL



3A **ODL LITE FRAME**
Aluminum

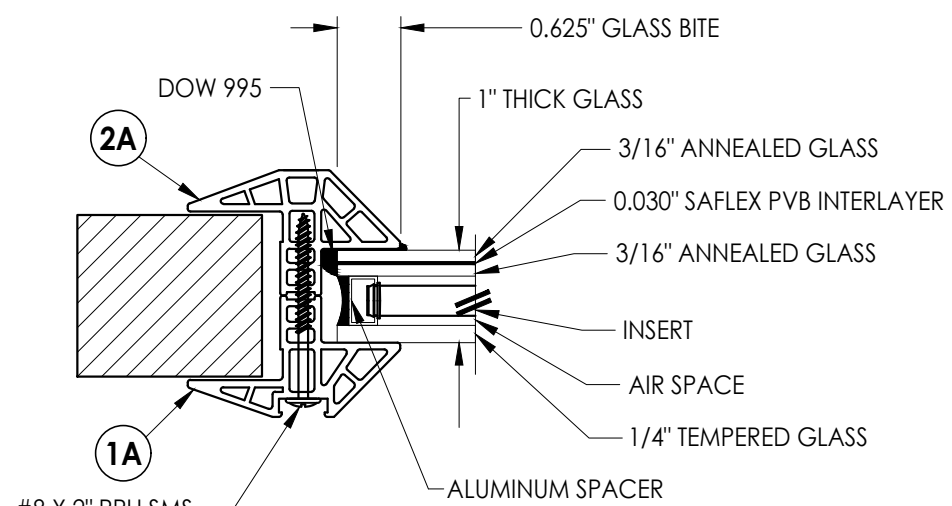


PVC LITE FRAME



1A INTERIOR FRAME

2A EXTERIOR FRAME

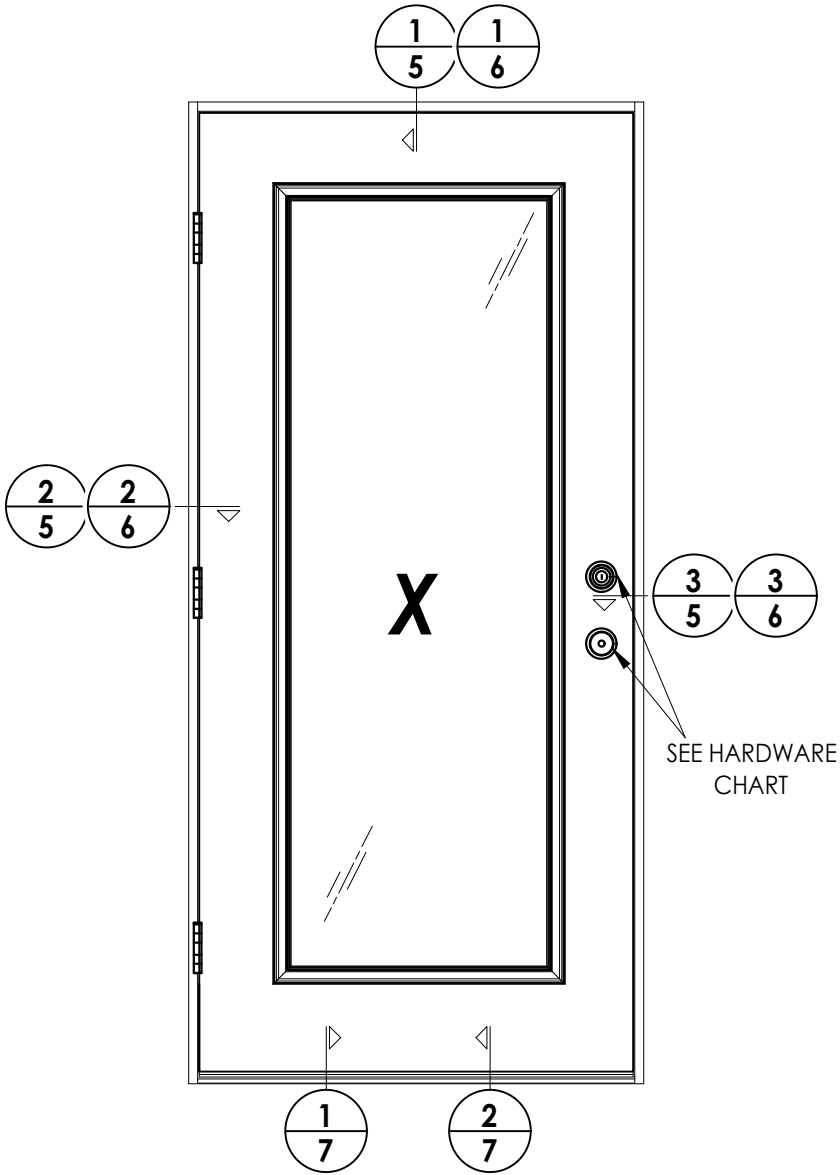


G2 GLAZING DETAIL

DATE: 02/09/17					
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.: FL-21852.14					
SHEET 3 OF 10					
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
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NO.	DATE				BY
					REVISIONS

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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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MASTERGRAIN
FIBERGLASS DOOR

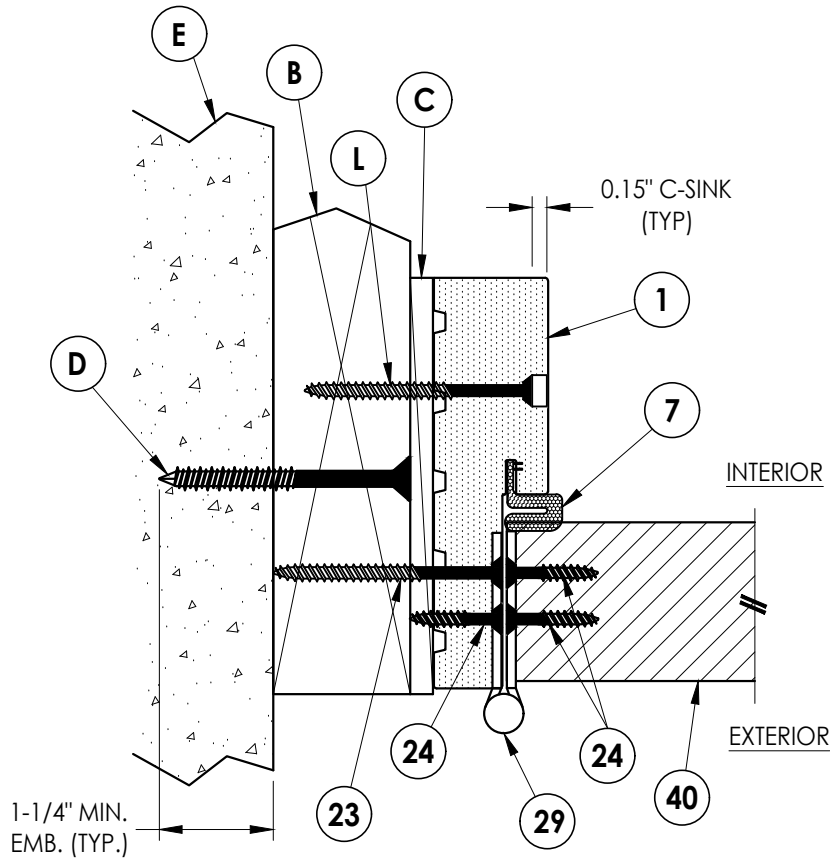
PART OR ASSEMBLY:
ELEVATION

REV

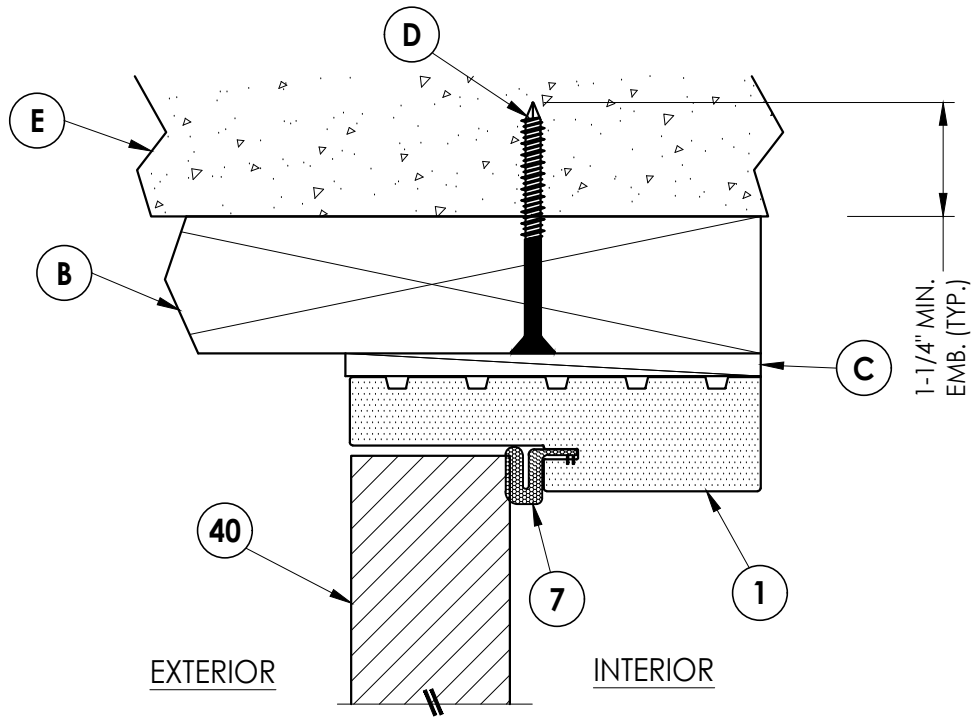
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				LFS					
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1	10/03/17	UPDATE TO 6TH ED.	(2017)	FBC	JK				
NO.	DATE								
REVISIONS									
DATE: 02/09/17									
SCALE: N.T.S.									
DWG. BY: JK									
CHK. BY: LFS									
DRAWING NO.: FL-21852.14									
SHEET 4 OF 10									

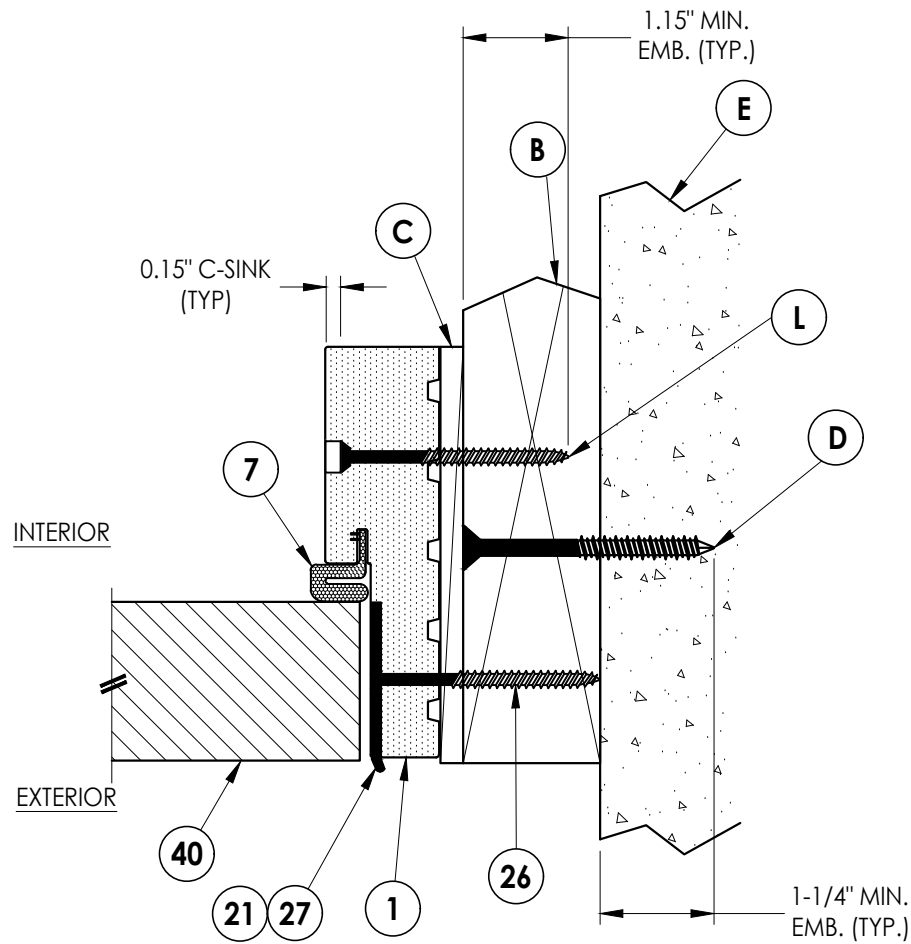
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2 HORIZONTAL CROSS SECTION
Shown w/ 2X Buck
Outswing shown (Inswing similar)



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



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

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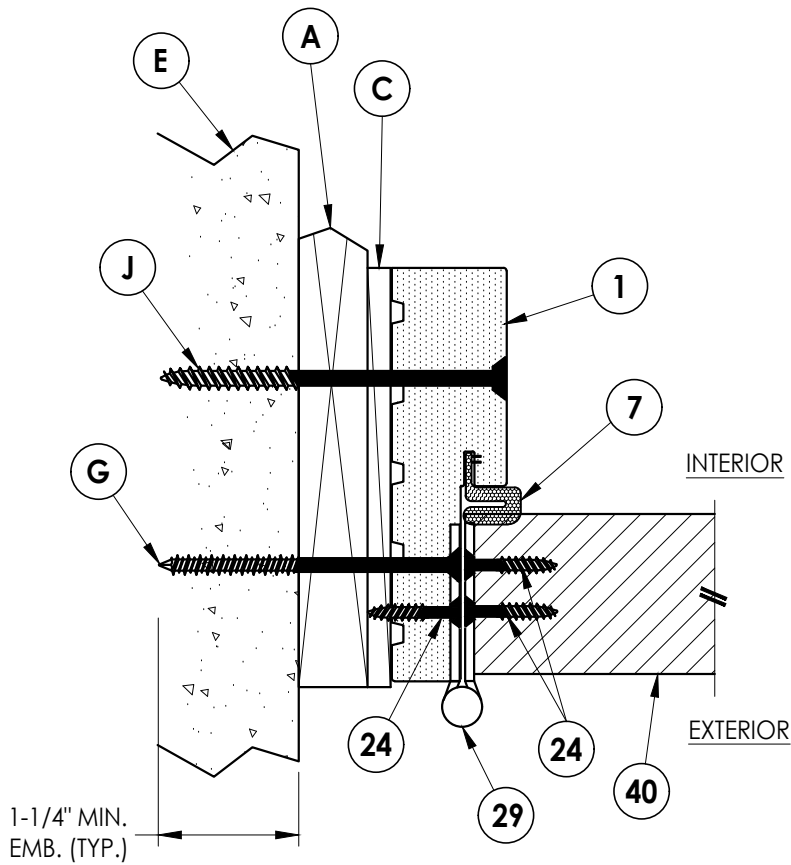
PRODUCT:
MASTERGRAIN
FIBERGLASS DOOR

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

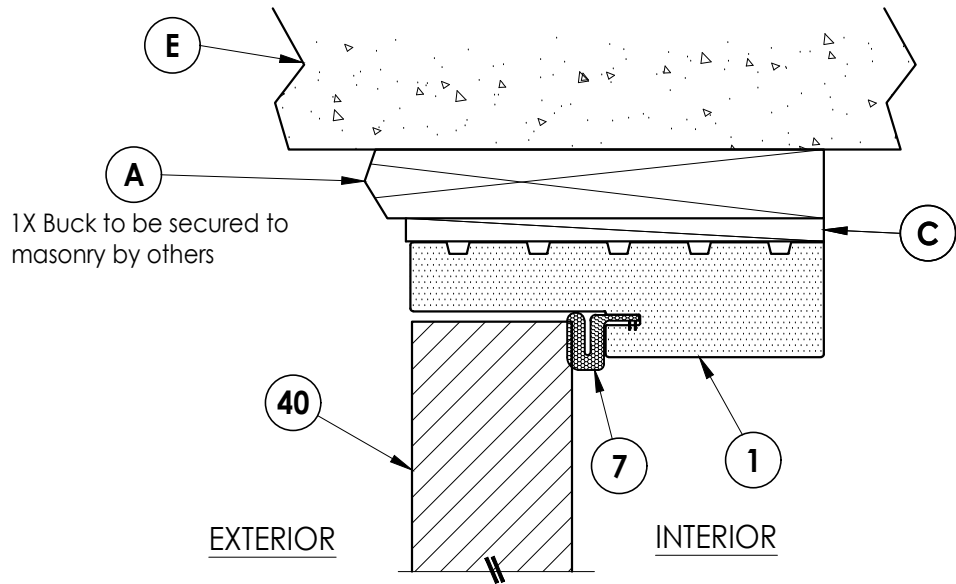
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1	10/03/17	UPDATE TO 6TH ED. (2017) FBC	JK

DATE: 02/09/17
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-21852.14
SHEET 5 OF 10

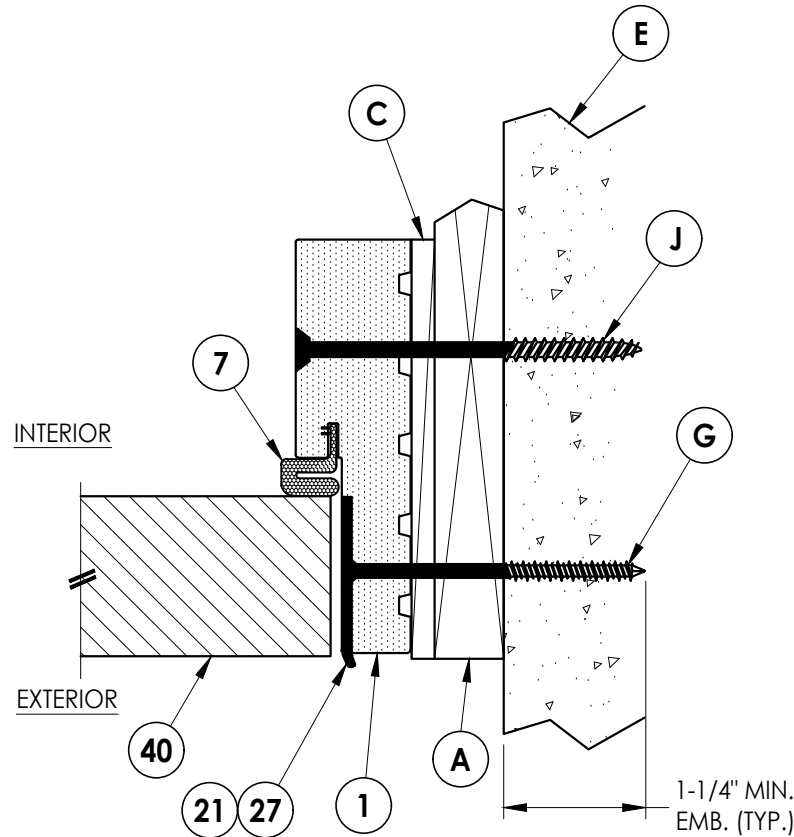
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2 HORIZONTAL CROSS SECTION
Shown w/ 1X sub-buck
Outswing shown (Inswing similar)



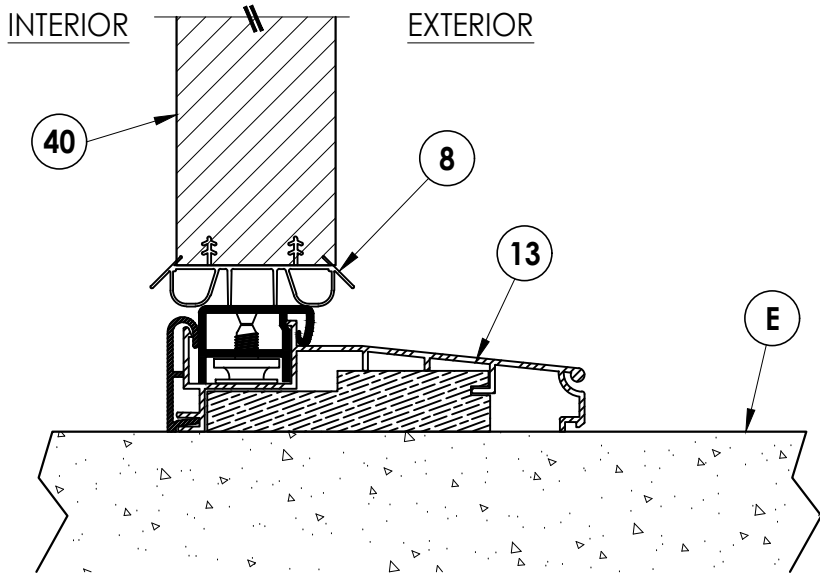
1 VERTICAL CROSS SECTION
Shown w/ 1X sub-buck
Outswing shown (Inswing similar)



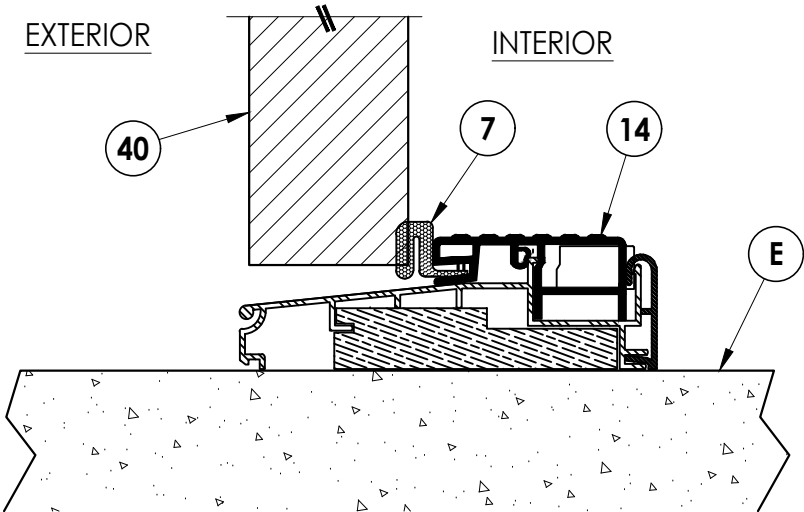
3 HORIZONTAL CROSS SECTION
Shown w/ 1X sub-buck
Outswing shown (Inswing similar)

PRODUCT:										MASTERGRAIN FIBERGLASS DOOR										PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (1X BUCK)										BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813																																																																																																			
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1
7 **VERTICAL CROSS SECTION**
Inswing Sill



2
7 **VERTICAL CROSS SECTION**
Outswing Sill

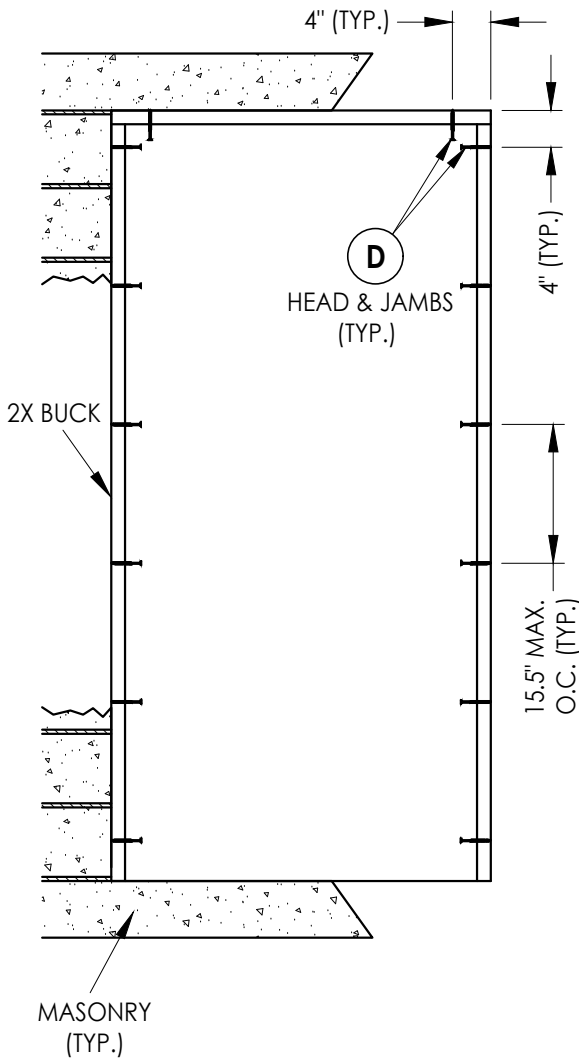
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SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.:
FL-21852.14
SHEET 7 OF 10

NO.	DATE	REVISIONS
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1	10/03/17	UPDATE TO 6TH ED. (2017) FBC JK
		BY

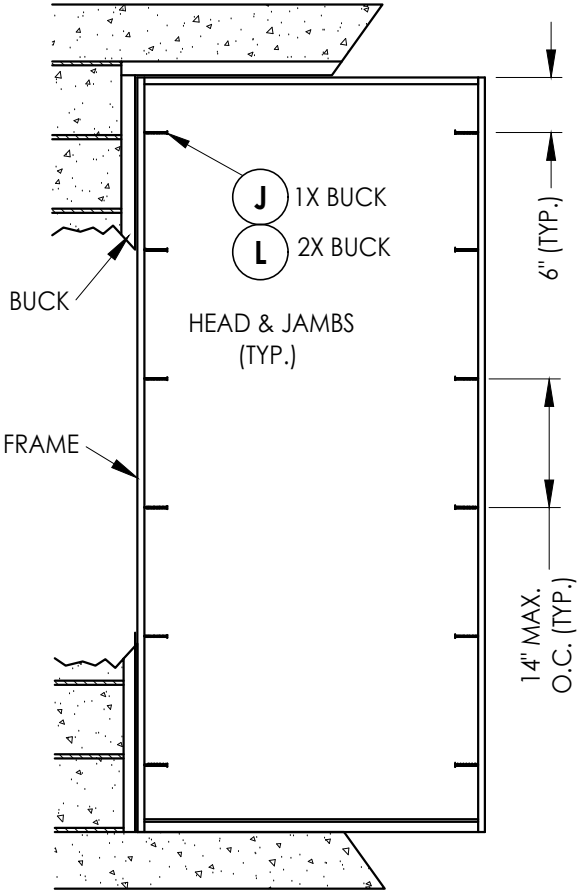
PRODUCT: MASTERGRAIN
FIBERGLASS DOOR
PART OR ASSEMBLY:
VERTICAL CROSS
SECTIONS (THRESHOLDS)

Documents Prepared By:
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2X BUCK ANCHORING



FRAME ANCHORING

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

DATE: 02/09/17		NO.		DATE		REVISIONS	
SCALE: N.T.S.		4	7/01/26	UPDATE TO 9TH ED. (2026)	FBC	LFS	
DWG. BY: JK		3	7/01/23	UPDATE TO 8TH ED. (2023)	FBC	LFS	
CHK. BY: LFS		2	7/08/20	UPDATE TO 7TH ED. (2020)	FBC	LFS	
DRAWING NO.: FL-21852.14		1	10/03/17	UPDATE TO 6TH ED. (2017)	FBC	JK	
SHEET 8 OF 10						BY	

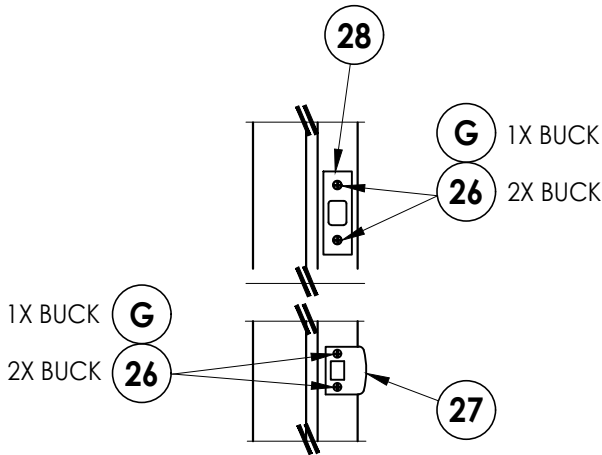
PRODUCT: MASTERGRAIN FIBERGLASS DOOR	
PART OR ASSEMBLY: BUCK & FRAME ANCHORING	

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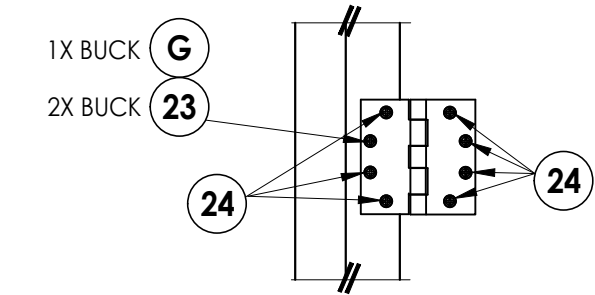
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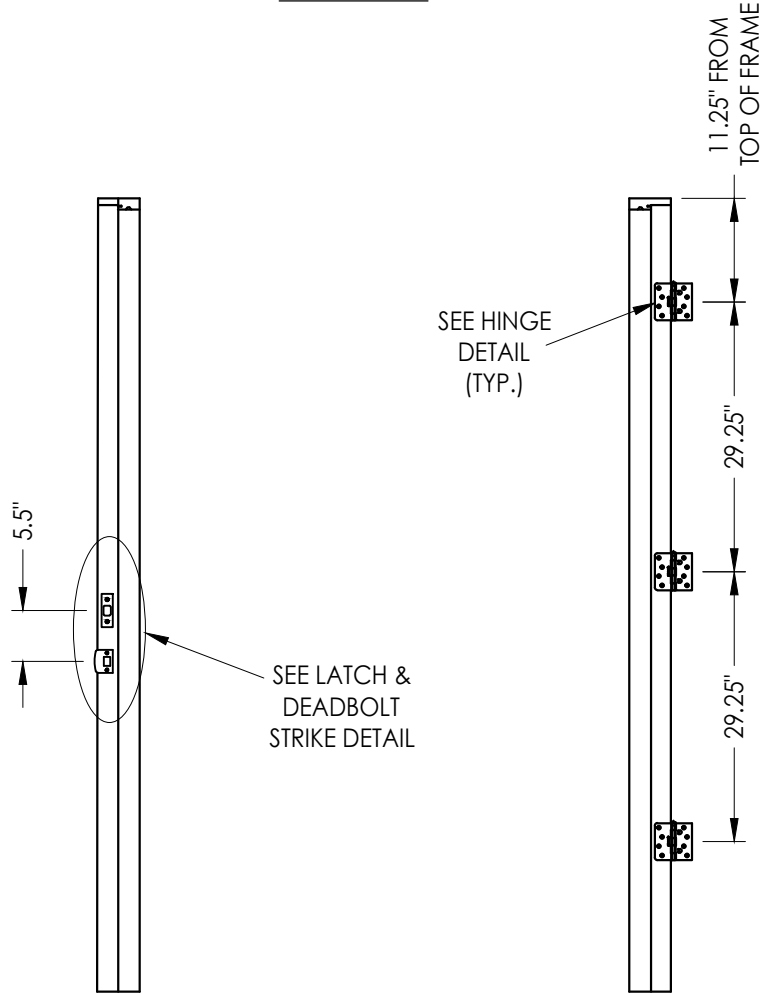


LATCH & DEADBOLT DETAIL

LATCH & DEADBOLT HARDWARE DETAILS

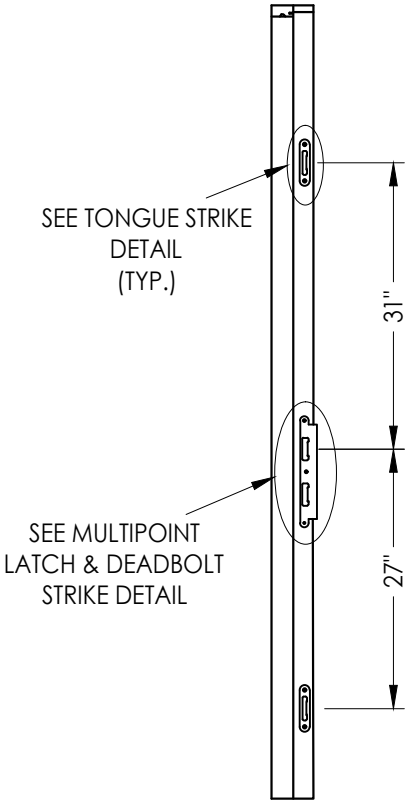


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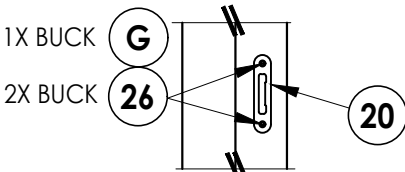


STRIKE JAMB
Latch and Deadbolt

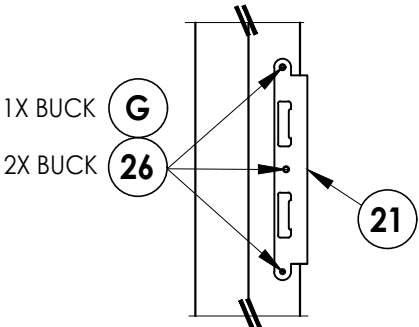
HINGE JAMB



STRIKE JAMB
Multipoint Lock



TONGUE STRIKE DETAIL



MULTIPOINT LATCH & DEADBOLT STRIKE DETAIL

MULTIPOINT LOCK HARDWARE DETAILS

REVISONS		NO		DATE	
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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
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SCALE: N.T.S.

DWG. BY: JK

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DRAWING NO.:

FL-21852.14

SHEET 9 OF 10

PRODUCT:		PART OR ASSEMBLY:	
MASTERGRAIN FIBERGLASS DOOR		HARDWARE DETAILS	

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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	-

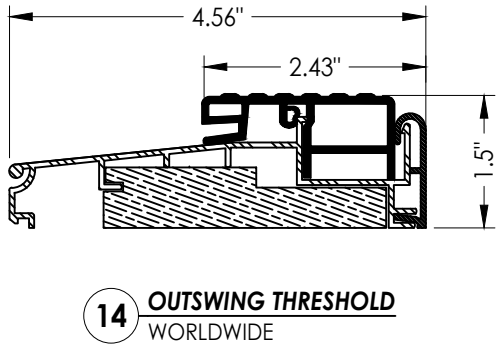
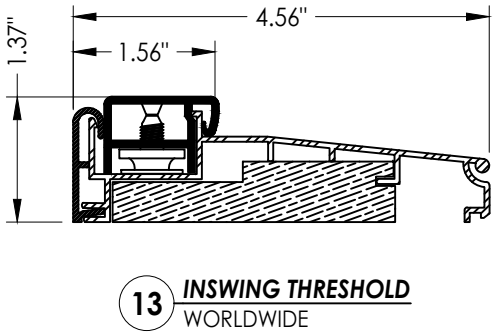
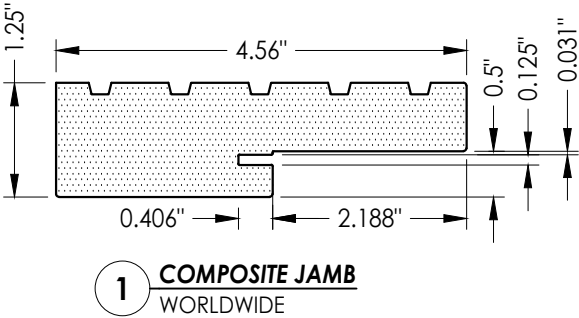
CONCRETE ANCHOR NOTES:

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.

[illegible]