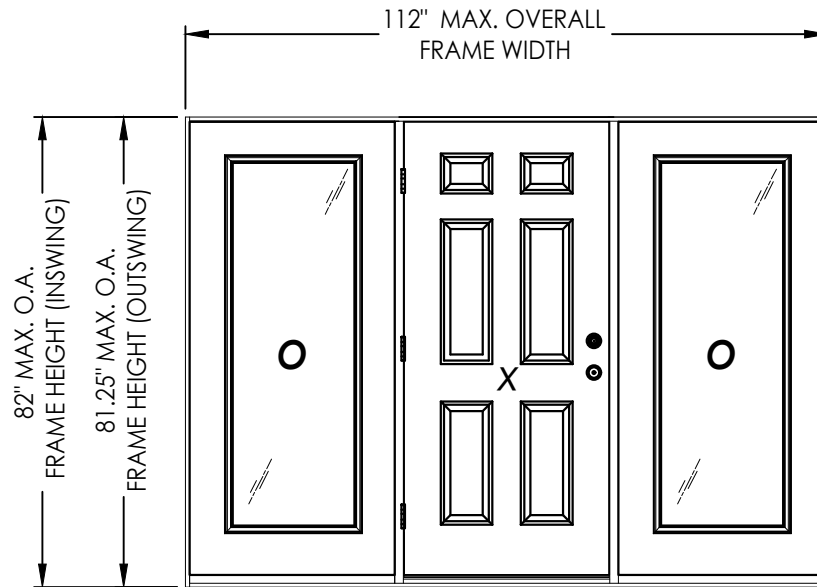
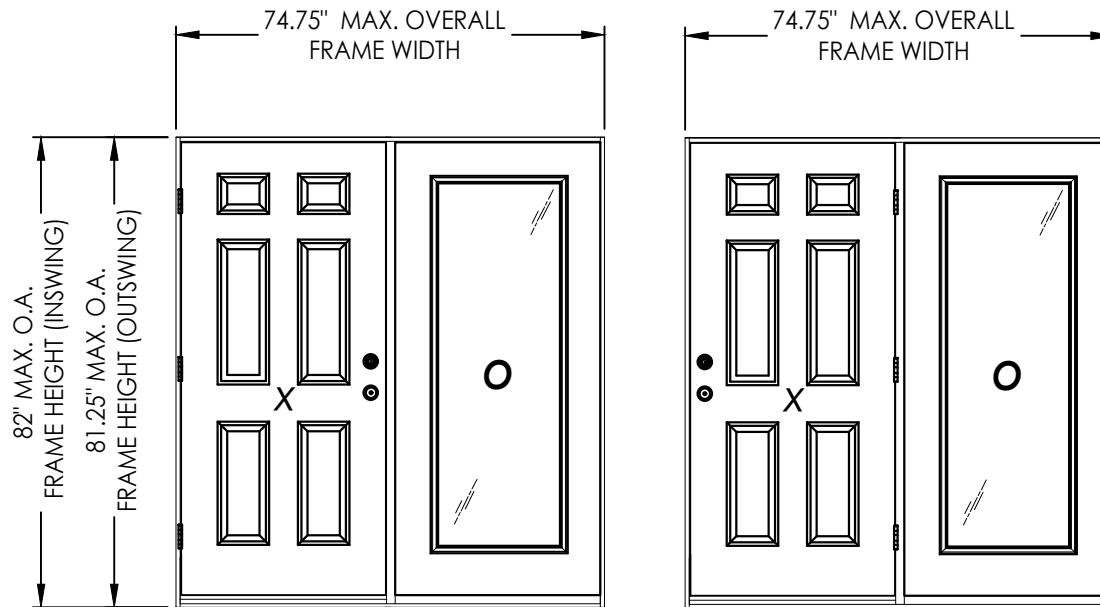
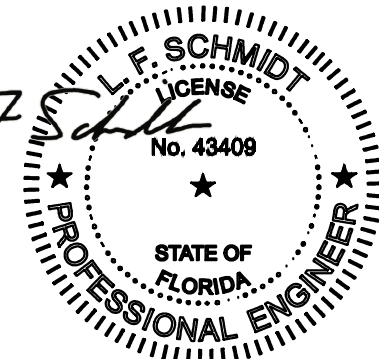


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FIBERGLASS OPAQUE
SINGLE DOOR
w/ or w/out SIDELITE(S)
INSWING/OUTSWING
"IMPACT"



CONTINUOUS HEAD & SILL



Digitally signed by Lyndon F Schmidt
Date: 2026.07.22 17:07:46 -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

- 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).
- Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
- 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.
- For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
- 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	Sidelite Panel Details
4	Glazing Details
5	Elevations
6	Horizontal & Vertical Cross Sections (2X Buck)
7	Horizontal & Vertical Cross Sections (1X Buck)
8	Horizontal Cross Sections
9	Vertical Cross Sections (Thresholds)
10	Buck Anchoring
11	Frame Anchoring
12	Hardware Details
13	Bill of Materials & Components

CONFIGURATION	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XO, OX, OXO	+50.0	-55.0	+50.0	-50.0

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

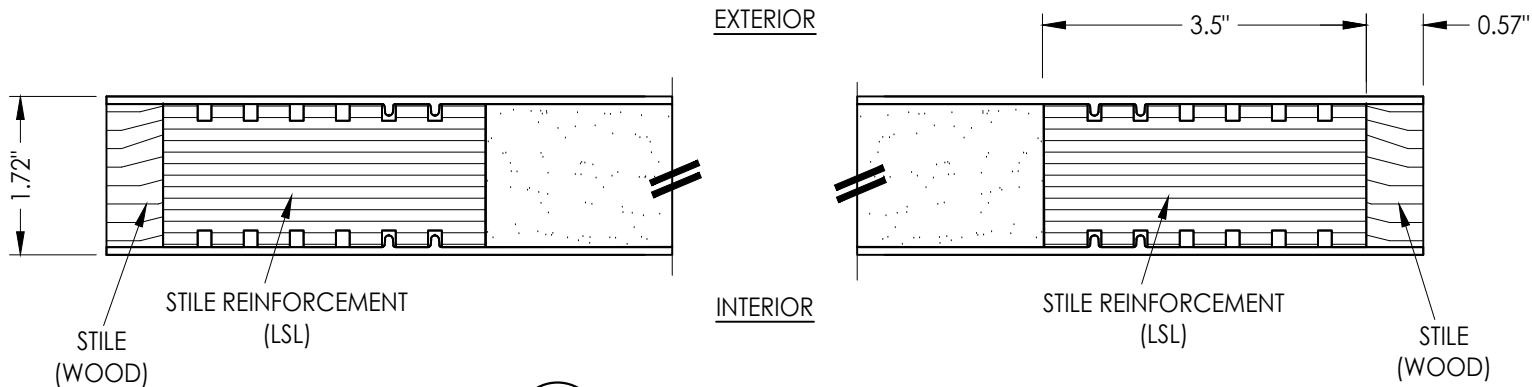
PRODUCT: MASTERGRAIN
FIBERGLASS DOOR

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

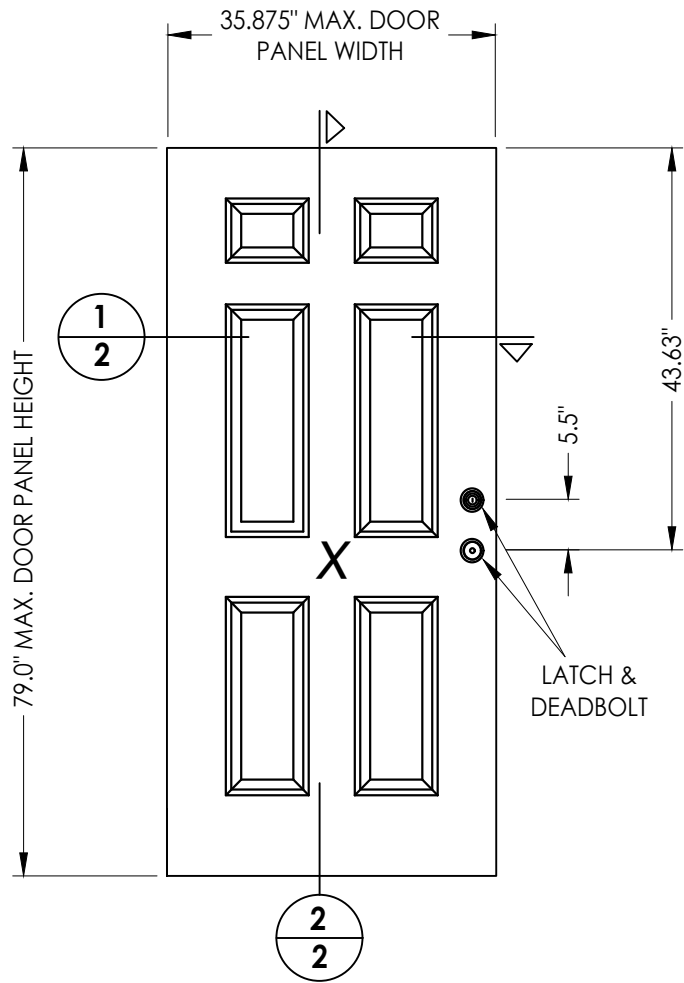
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3	7/01/23	UPDATE TO 8TH ED. (2023) FBC
2	7/08/20	UPDATE TO 7TH ED. (2020) FBC
1	10/03/17	UPDATE TO 6TH ED. (2017) FBC

DATE: 02/09/17
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-21852.12
SHEET 1 OF 13

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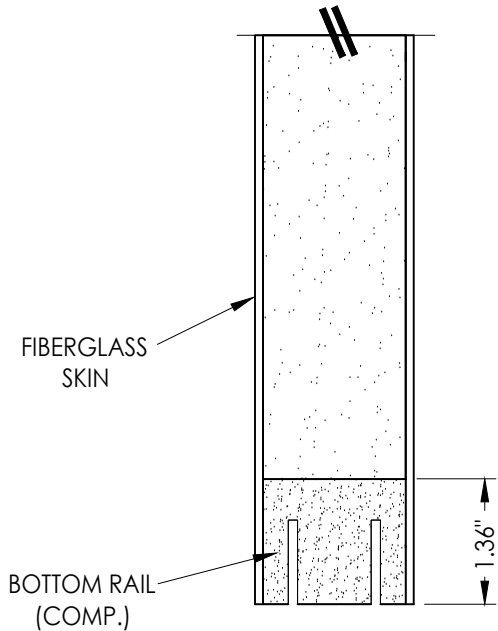
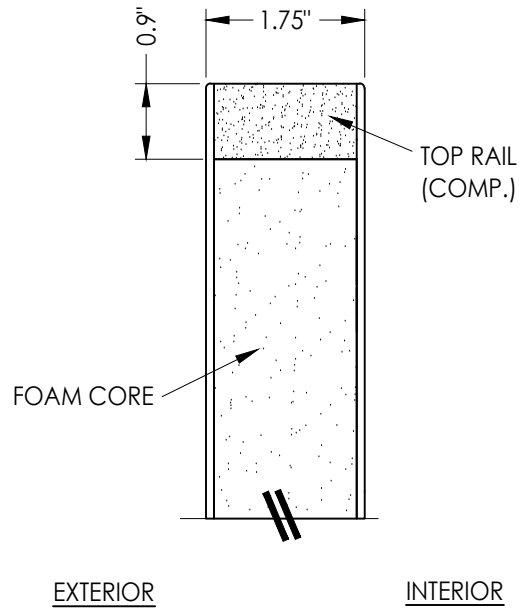


1
2 **HORIZONTAL CROSS SECTION**



40 **DOOR PANEL**
Mastergrain

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



2
2 **VERTICAL CROSS SECTION**

Documents Prepared By:
Lyndon F. Schmidt
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BUILDING CONSULTANTS, INC.
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Phone No.: 813.659.9197
FBPE Registry No. 9813

RW

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
		BY

DATE: 02/09/17

SCALE: N.T.S.

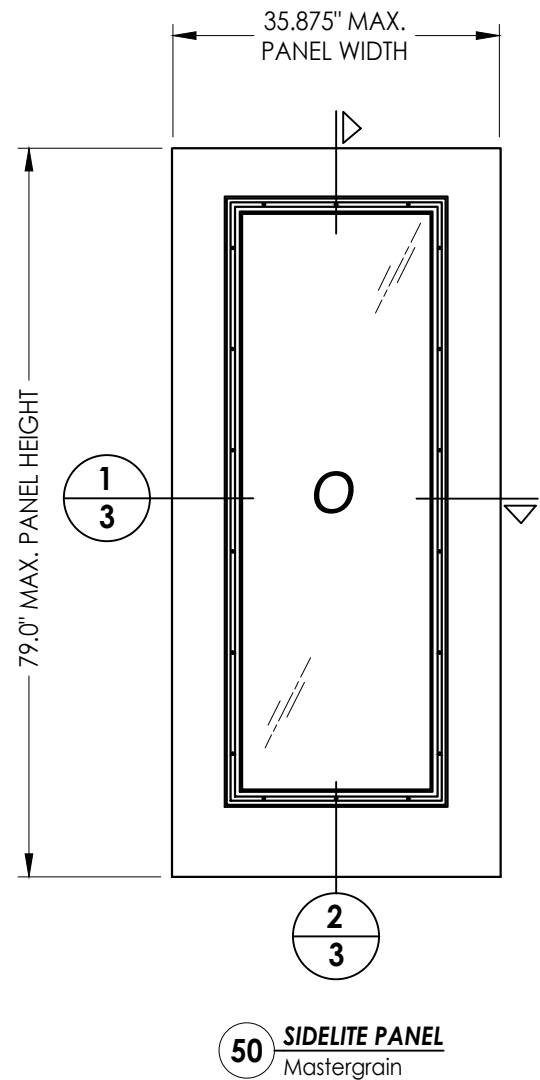
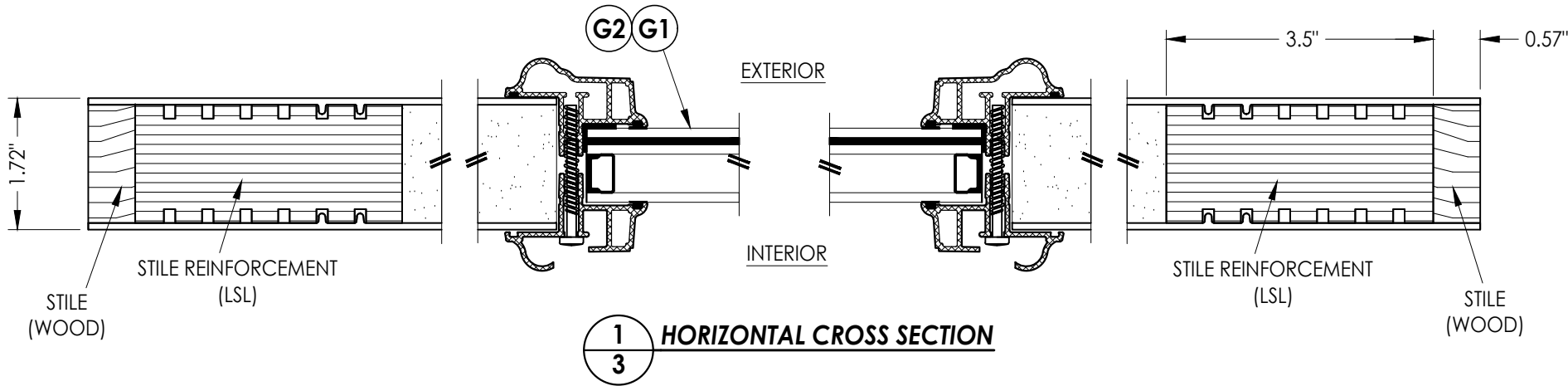
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CHK. BY: LFS

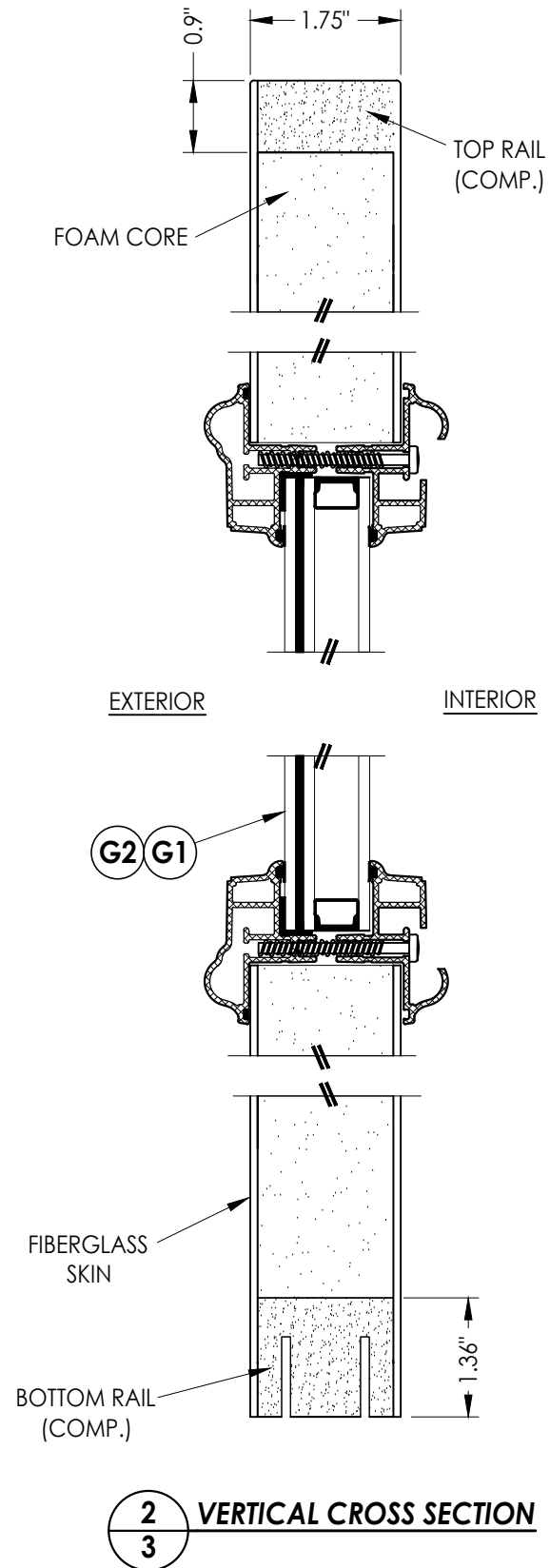
DRAWING NO.: FL-21852.12

SHEET 2 OF 13

Z:\2023 FBC Drawings\MasterGrain\FL-21852 R10\FL-21852.11-12.dwg



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

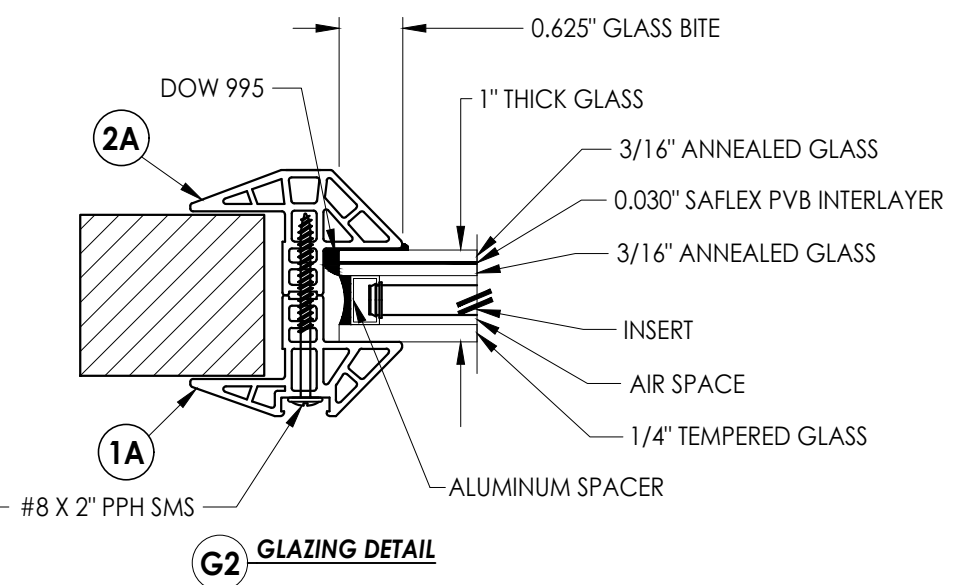
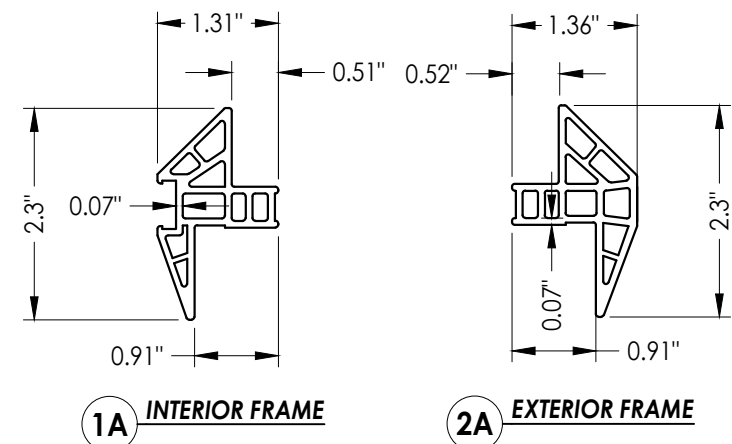
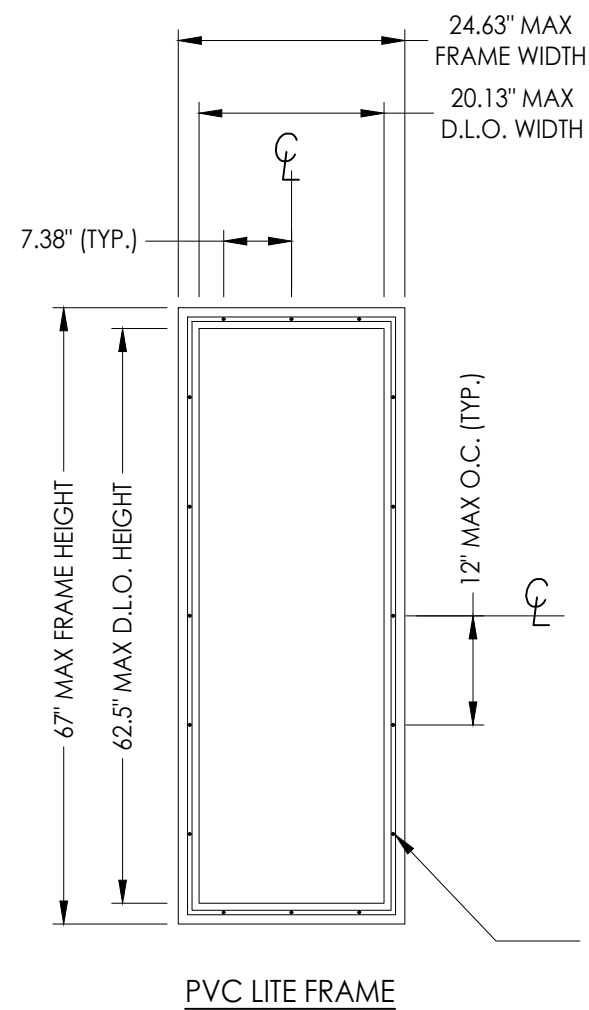
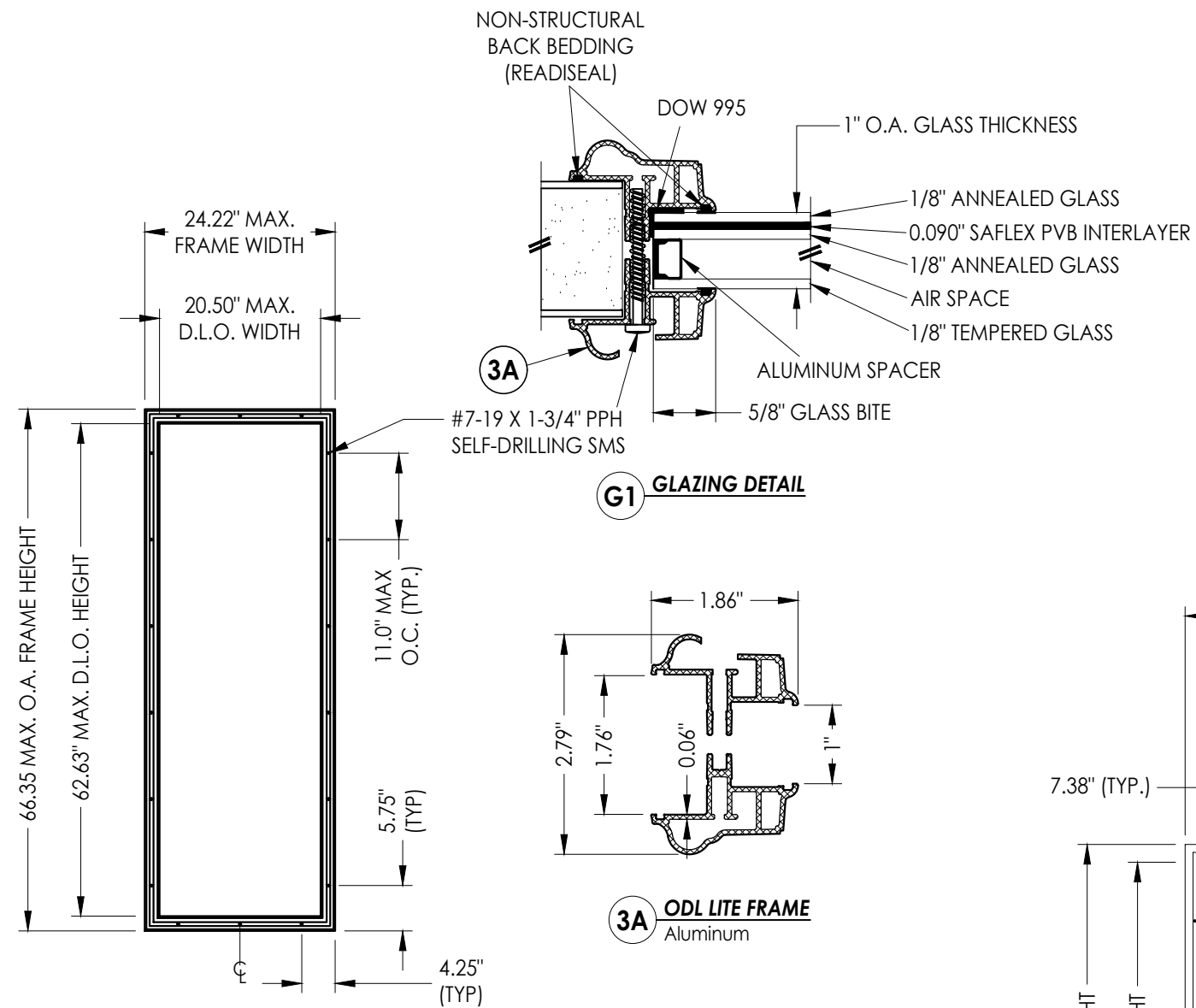


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		BY	CHK.	DATE	DESCRIPTION
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2	7/08/20	UPDATE TO 7TH ED.	(2020)	FBC	LFS
1	10/03/17	UPDATE TO 6TH ED.	(2017)	FBC	JK

DATE: 02/09/17
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-21852.12
SHEET 3 OF 13

PRODUCT: MASTERGRAIN FIBERGLASS DOOR
PART OR ASSEMBLY: DOOR PANEL DETAILS

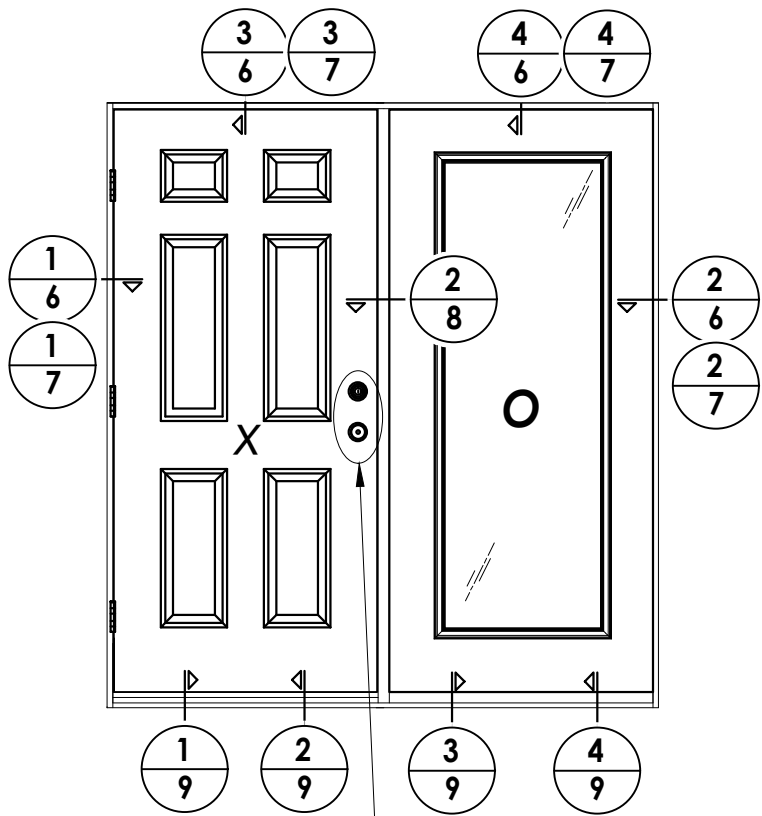
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409
BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813



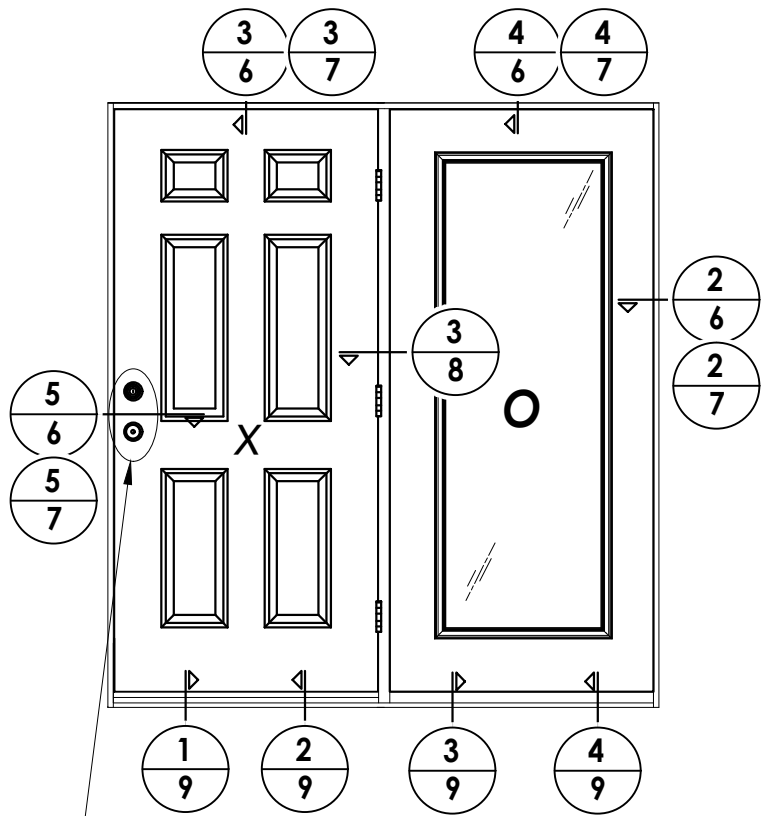
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2	7/08/20	UPDATE TO 7TH ED.	(2020)	FBC	LFS
1	10/03/17	UPDATE TO 6TH ED.	(2017)	FBC	JK
NO.	DATE				BY
					REVISIONS
DATE: 02/09/17					
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.: FL-21852.12					
SHEET 4 OF 13					

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

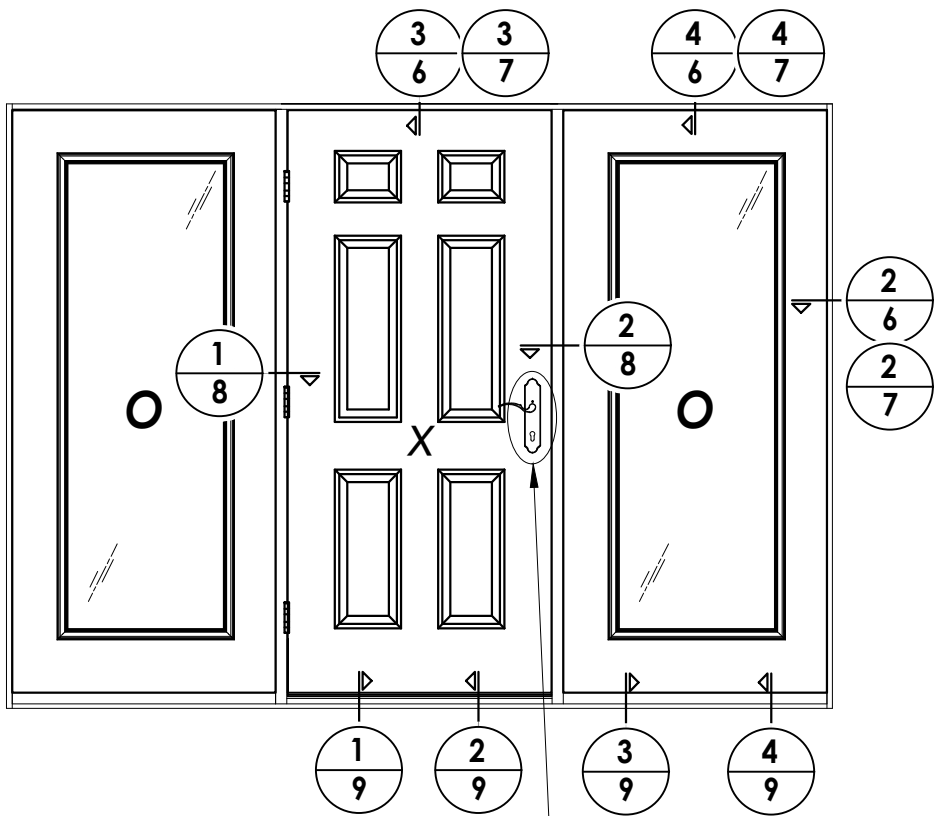
R^{qW} BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813



SEE HARDWARE
CHART



SEE HARDWARE
CHART



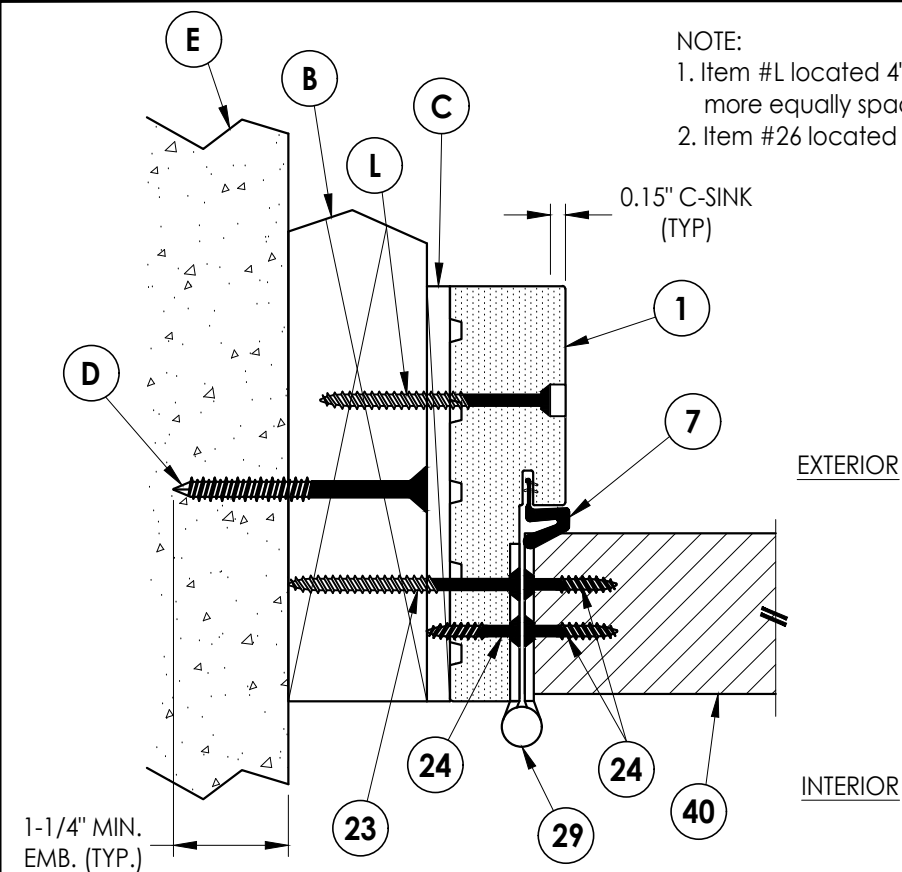
SEE HARDWARE
CHART

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)

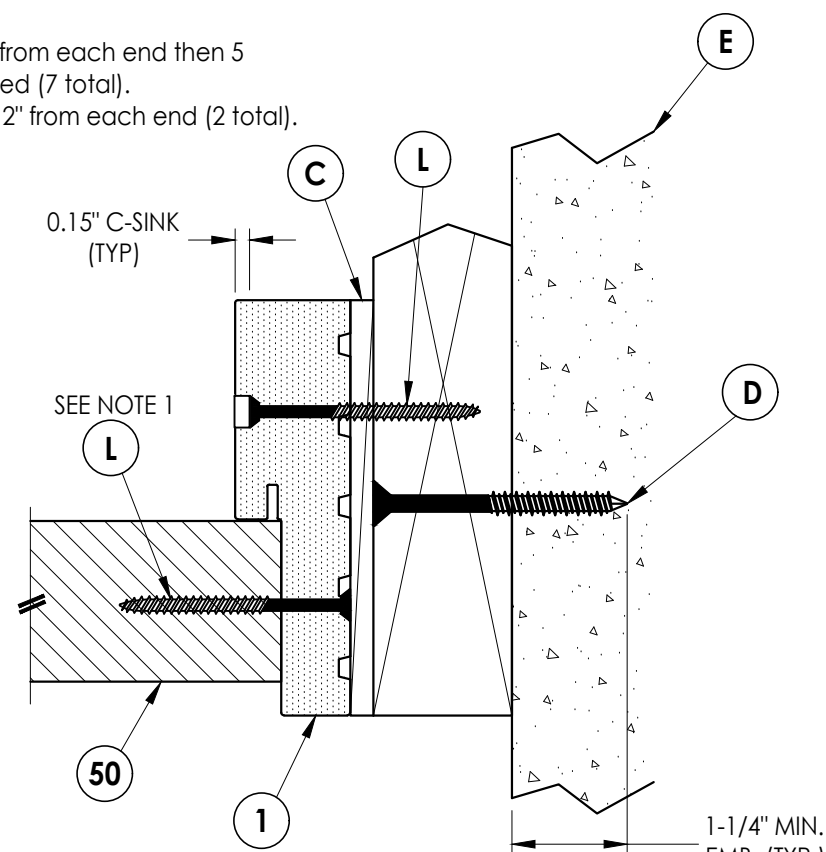
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4	7/01/26
3	7/01/23
2	7/08/20
1	10/03/17
DATE: 02/09/17	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: FL-21852.12	
SHEET 5 OF 13	

PRODUCT: MASTERGRAIN FIBERGLASS DOOR	
PART OR ASSEMBLY: ELEVATIONS	

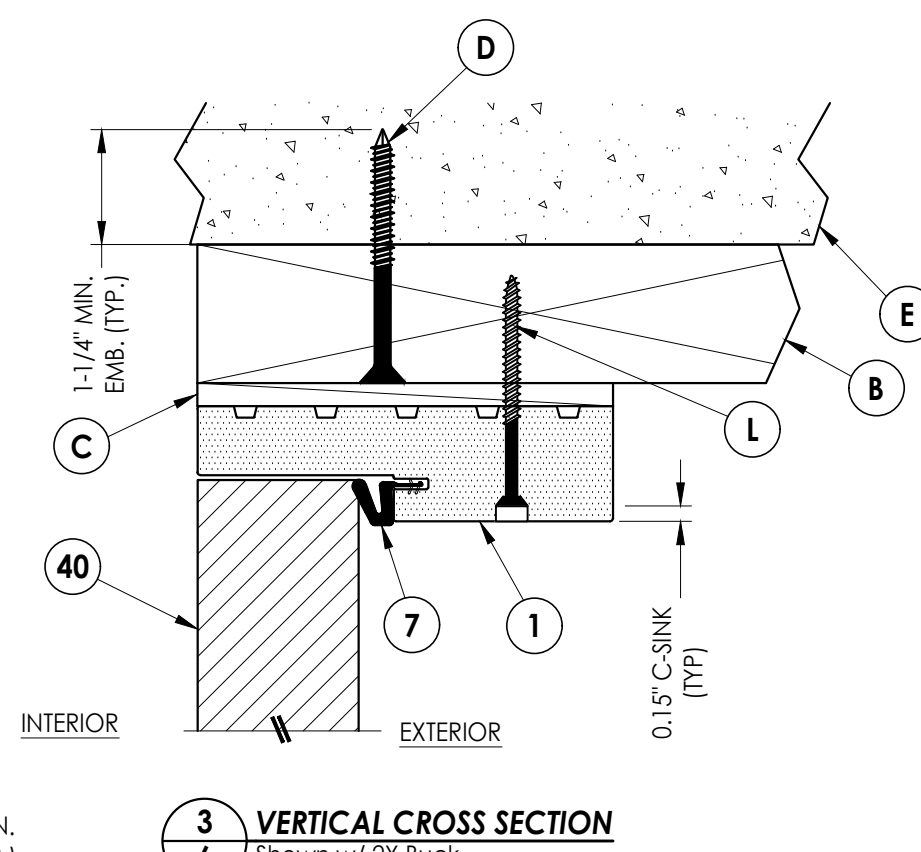
Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409	
BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	



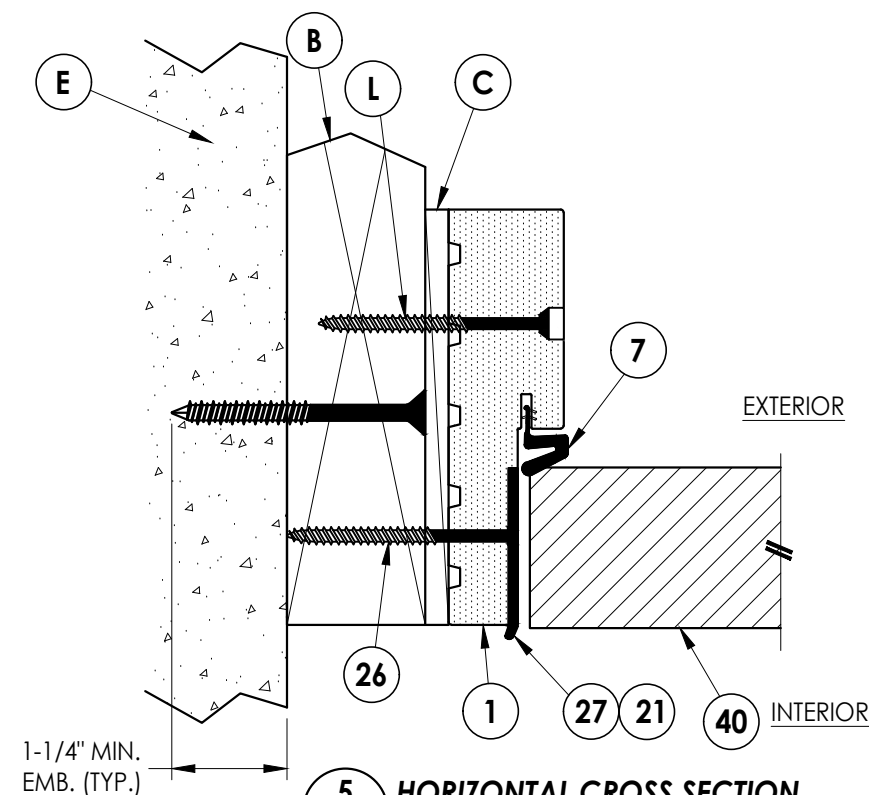
1 **HORIZONTAL CROSS SECTION**
6 Shown w/ 2X Buck
 Inswing shown (Outswing similar)



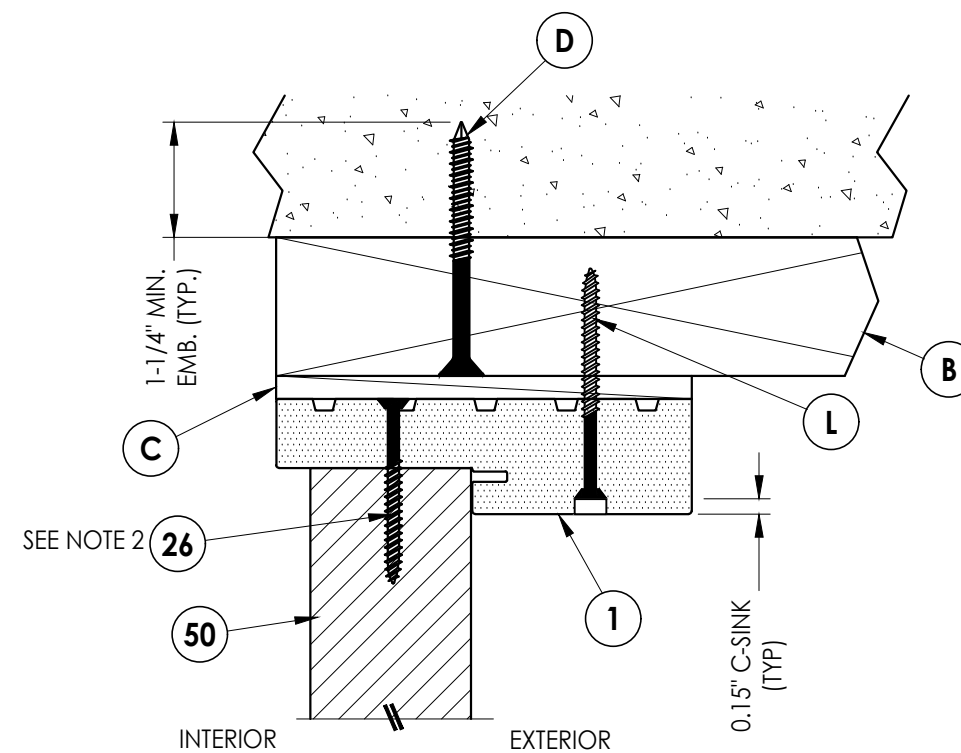
2 **HORIZONTAL CROSS SECTION**
6 Shown w/ 2X Buck
 Inswing shown (Outswing similar)



3 **VERTICAL CROSS SECTION**
6 Shown w/ 2X Buck
 Inswing shown (Outswing similar)



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



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

NOTE:

1. Item #L located 4" from each end then 5 more equally spaced (7 total).
2. Item #26 located 12" from each end (2 total).

SEE NOTE 1

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

0.15" C-SINK
(TYP)

Documents Prepared By:
Lyndon F. Schmidt
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BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33486
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: MASTERGRAIN
FIBERGLASS DOOR

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

[illegible]

DATE: 02/09/17

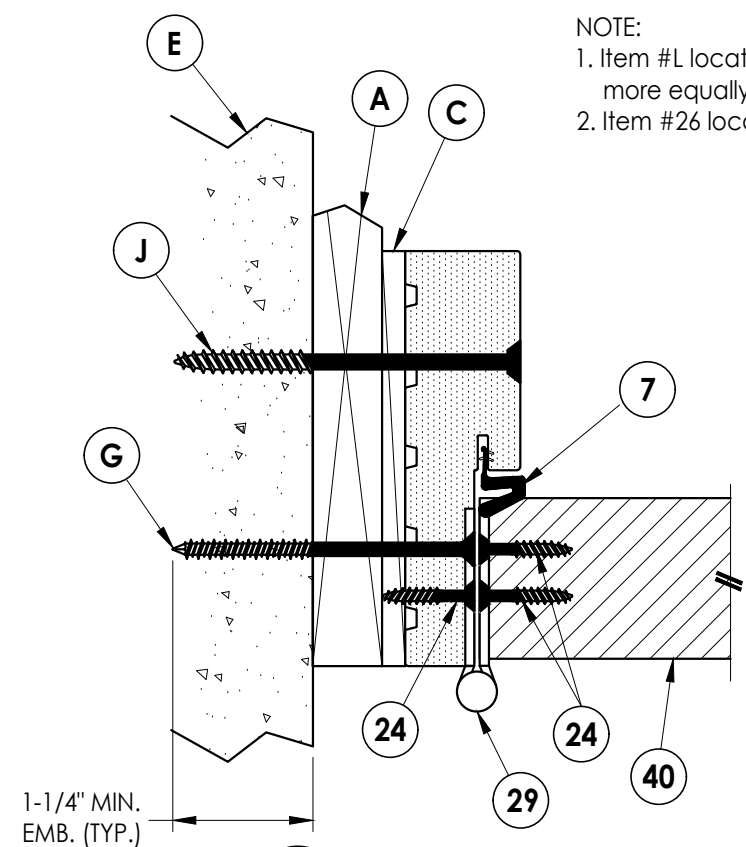
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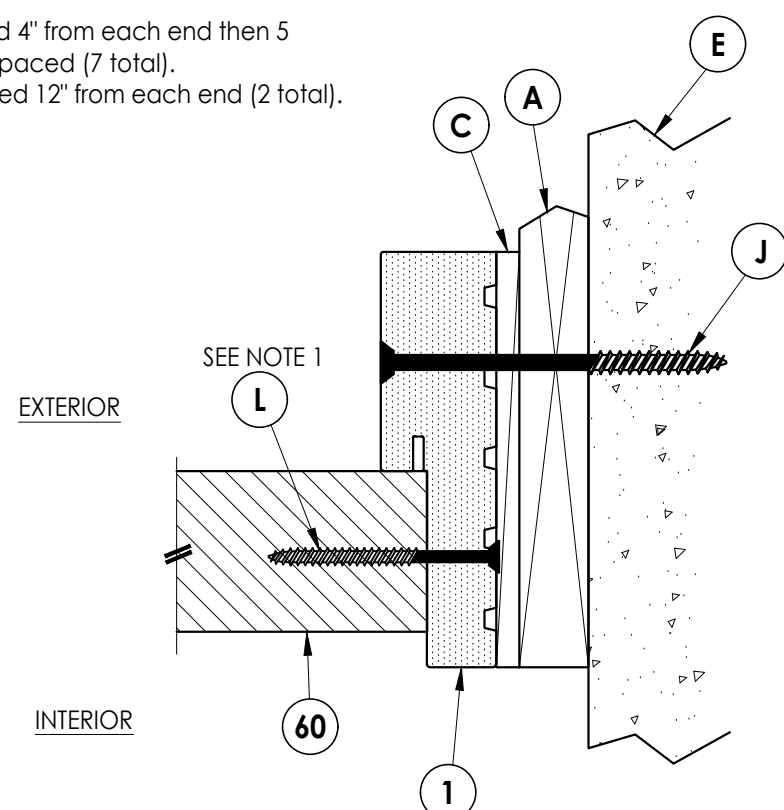
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FL-21852.12

SHEET 6 OF 13

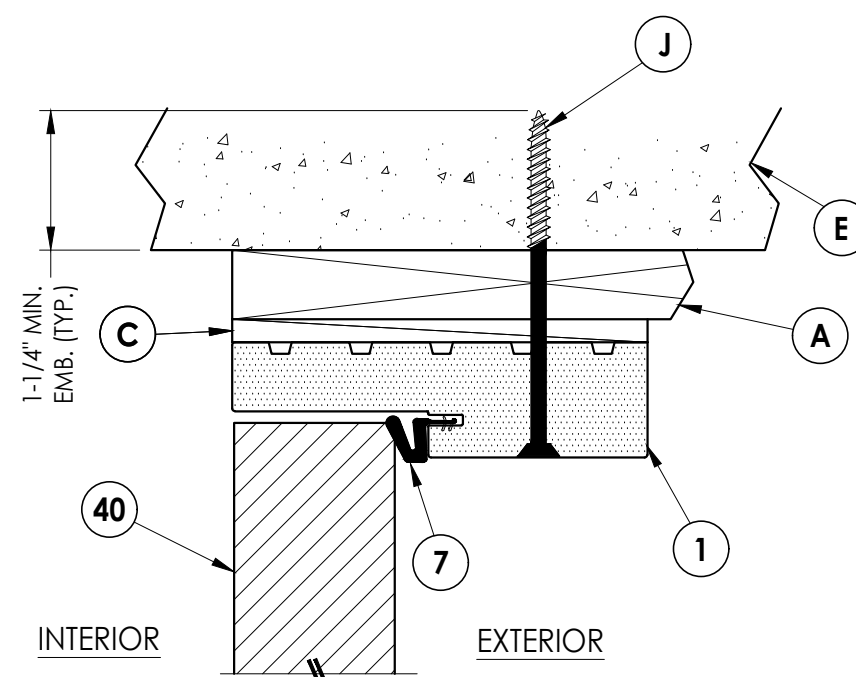


1 7 **HORIZONTAL CROSS SECTION**

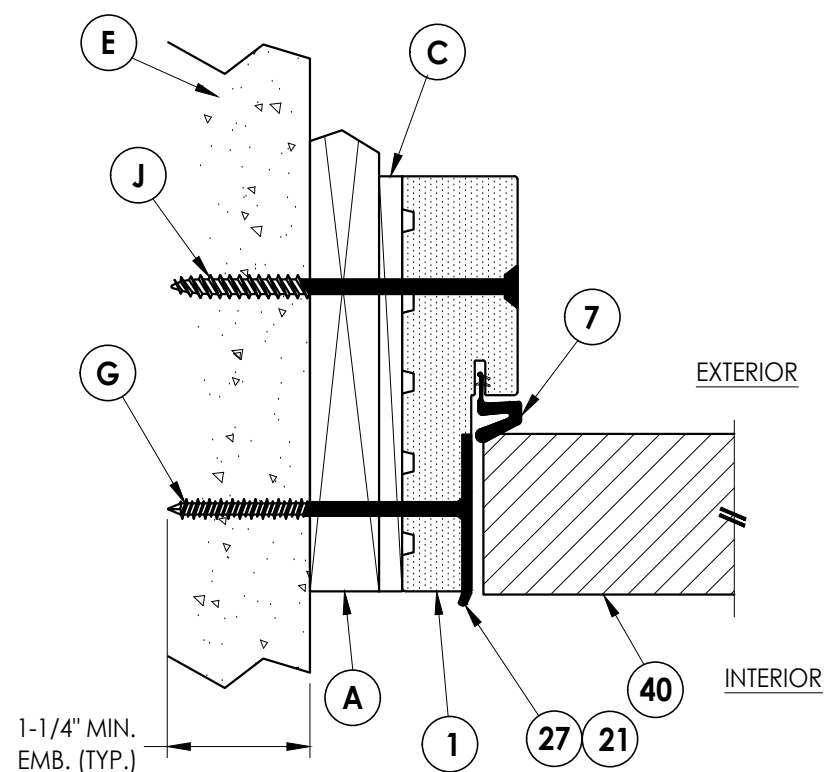
Shown w/ 1X sub-buck
Inswing shown (Outswing similar)



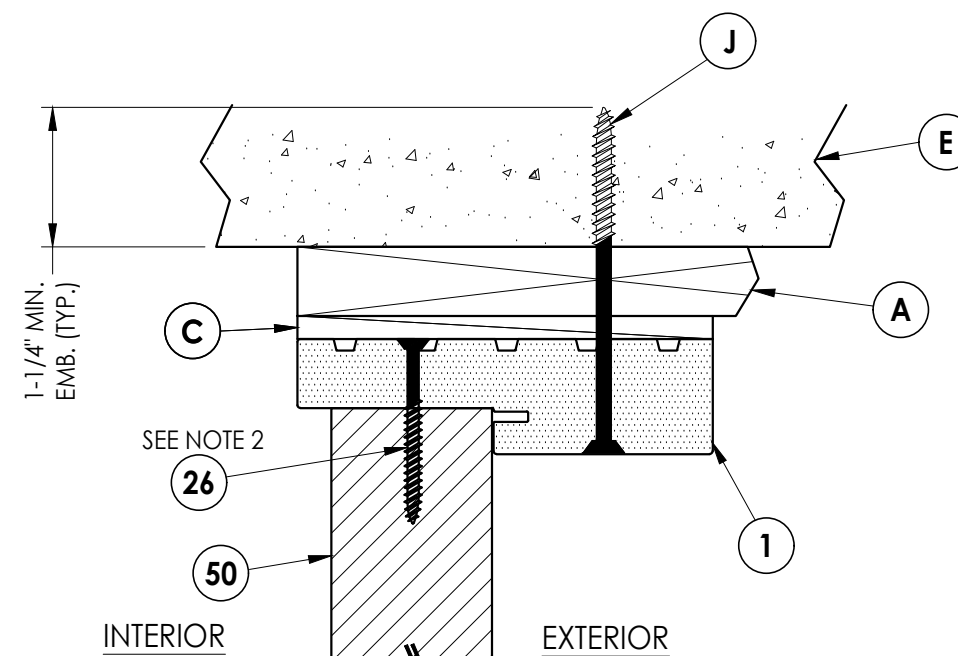
2 **HORIZONTAL CROSS SECTION**
7 Shown w/ 1X sub-buck
 Inswing shown (Outswing similar)



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



5 **HORIZONTAL CROSS SECTION**



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

[illegible]

DATE: 02/09/17

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-21852.12

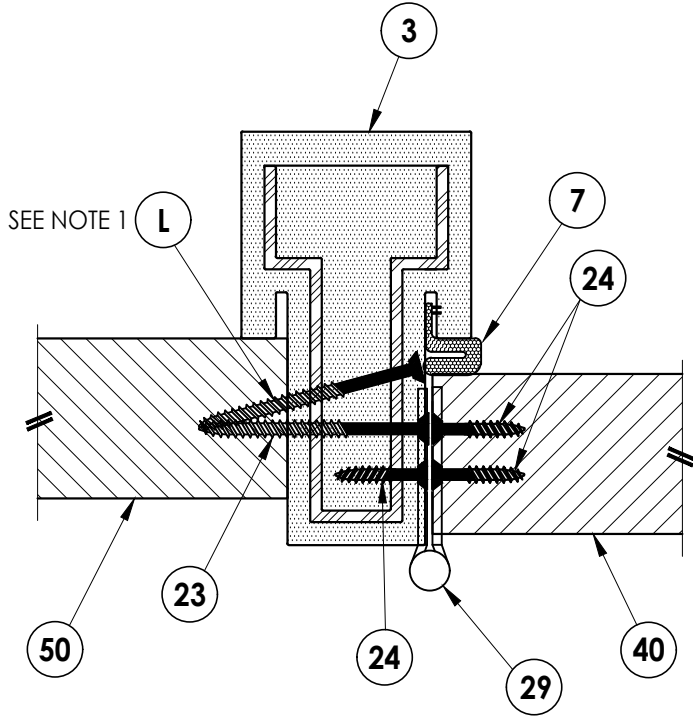
SHEET 7 OF 13

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

PAR BUILDING CONSULTANTS, INC.

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

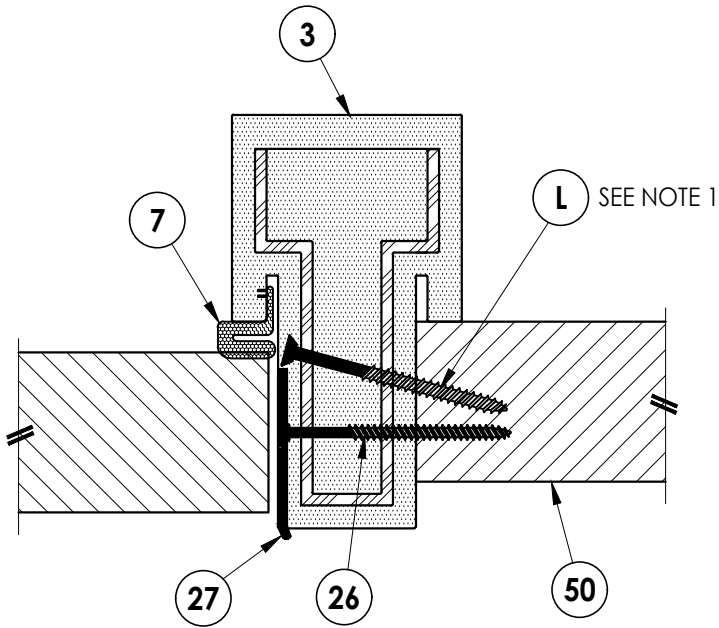
NOTE:
1. Item #L located 4" from each end then 5 more equally spaced (7 total).



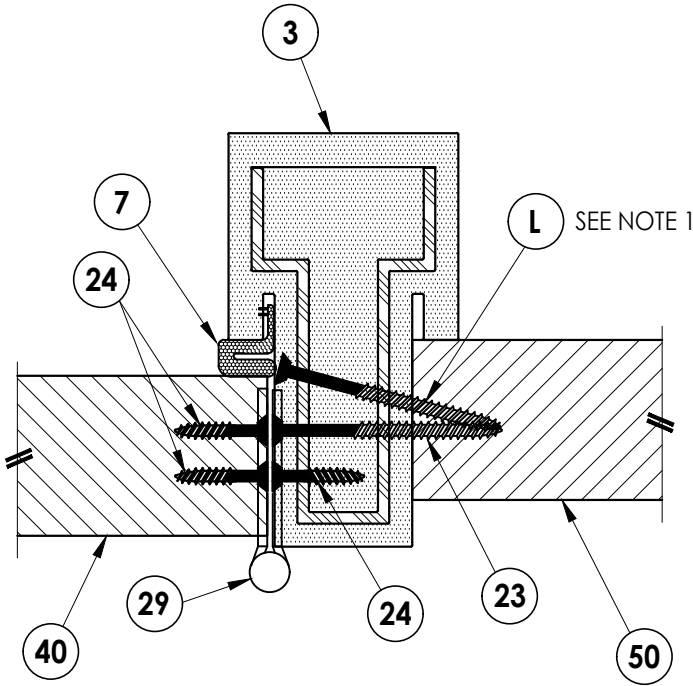
1
8 **HORIZONTAL CROSS SECTION**
Inswing shown (Outswing similar)

EXTERIOR

INTERIOR



2
8 **HORIZONTAL CROSS SECTION**
Inswing shown (Outswing similar)



3
8 **HORIZONTAL CROSS SECTION**
Inswing shown (Outswing similar)

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

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

PRODUCT:
MASTERGRAIN
FIBERGLASS DOOR

PART OR ASSEMBLY:
HORIZONTAL
CROSS SECTIONS

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.

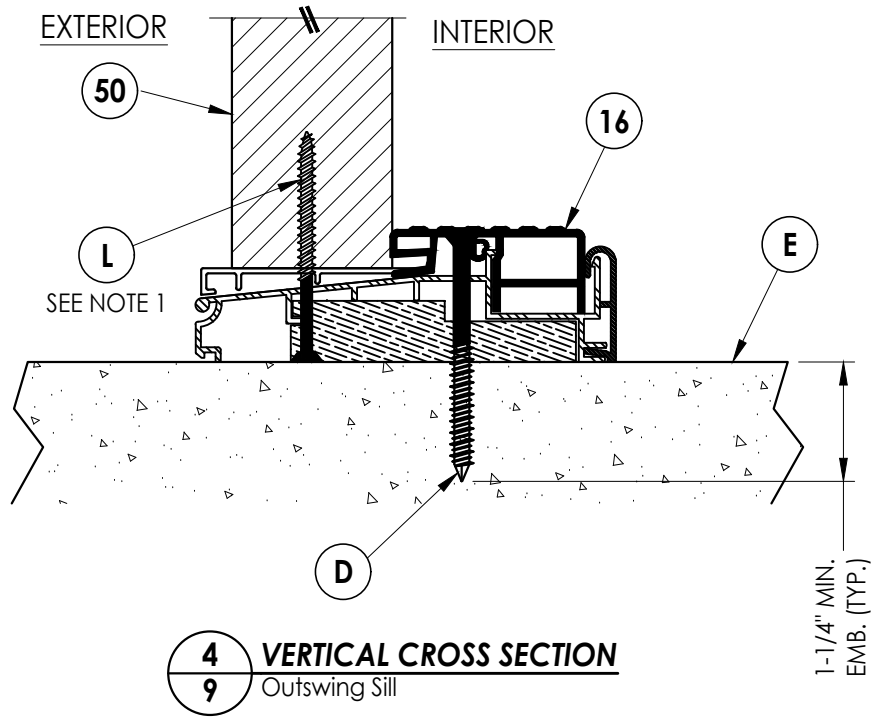
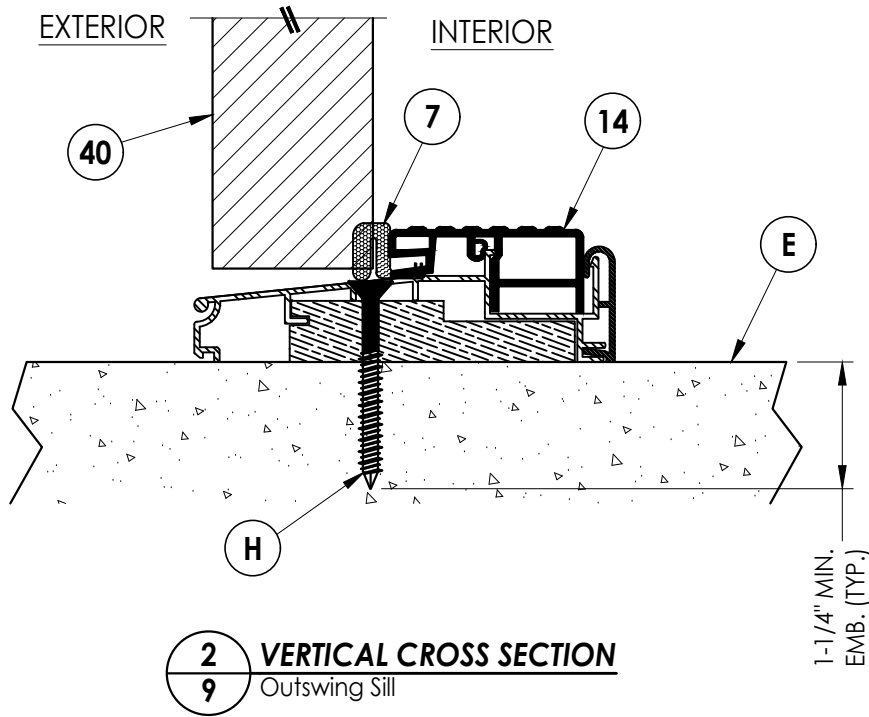
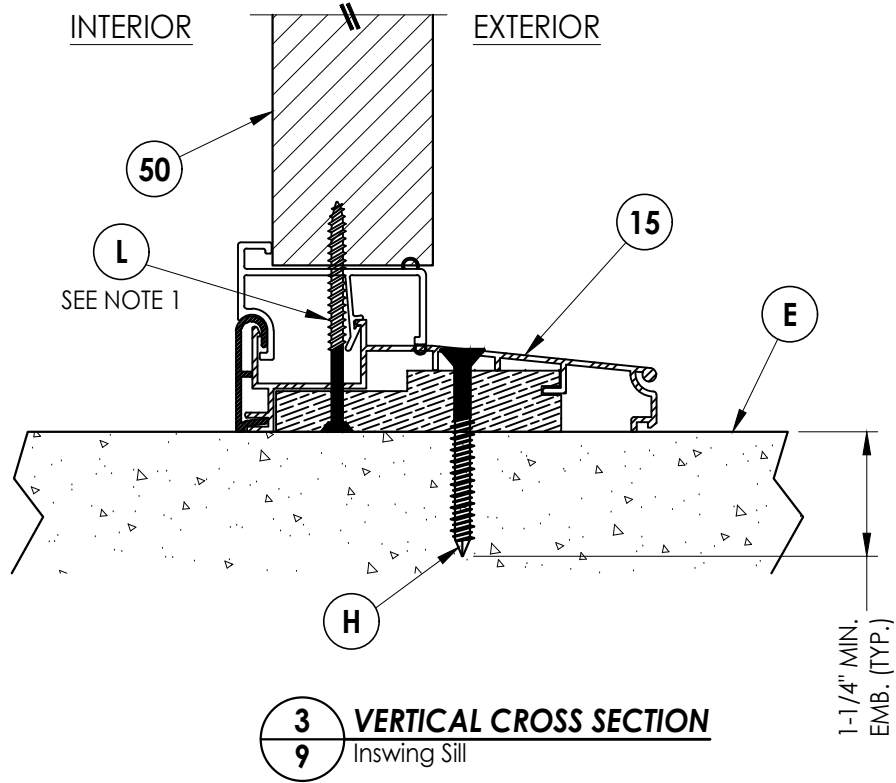
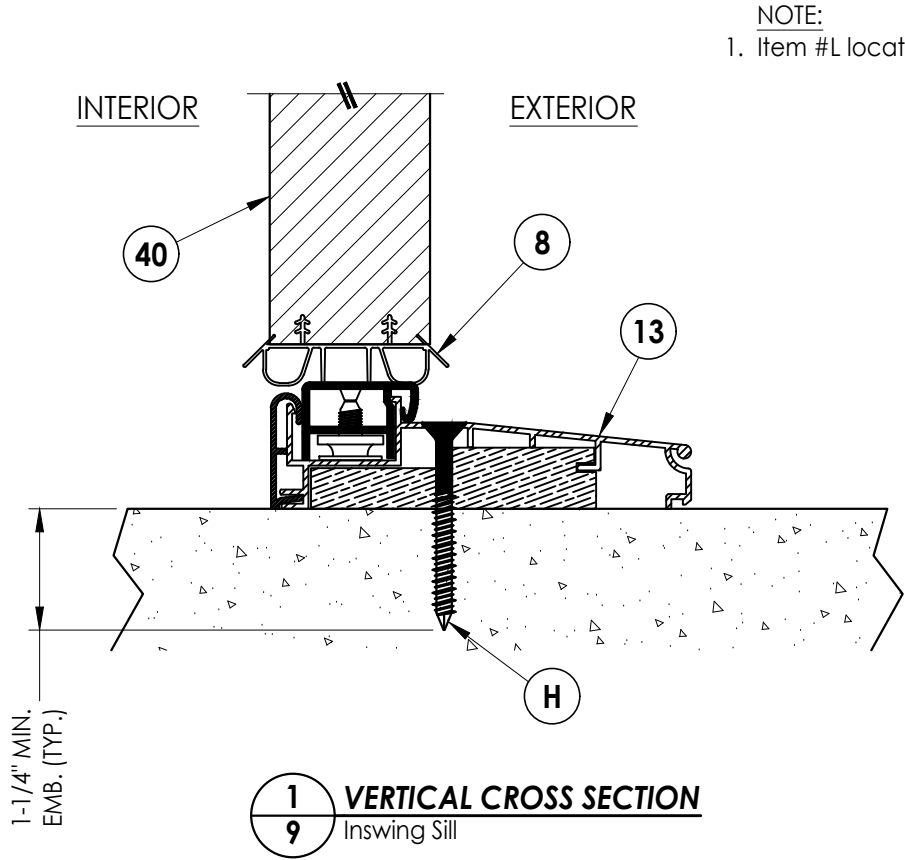
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:
FL-21852.12

SHEET 8 OF 13

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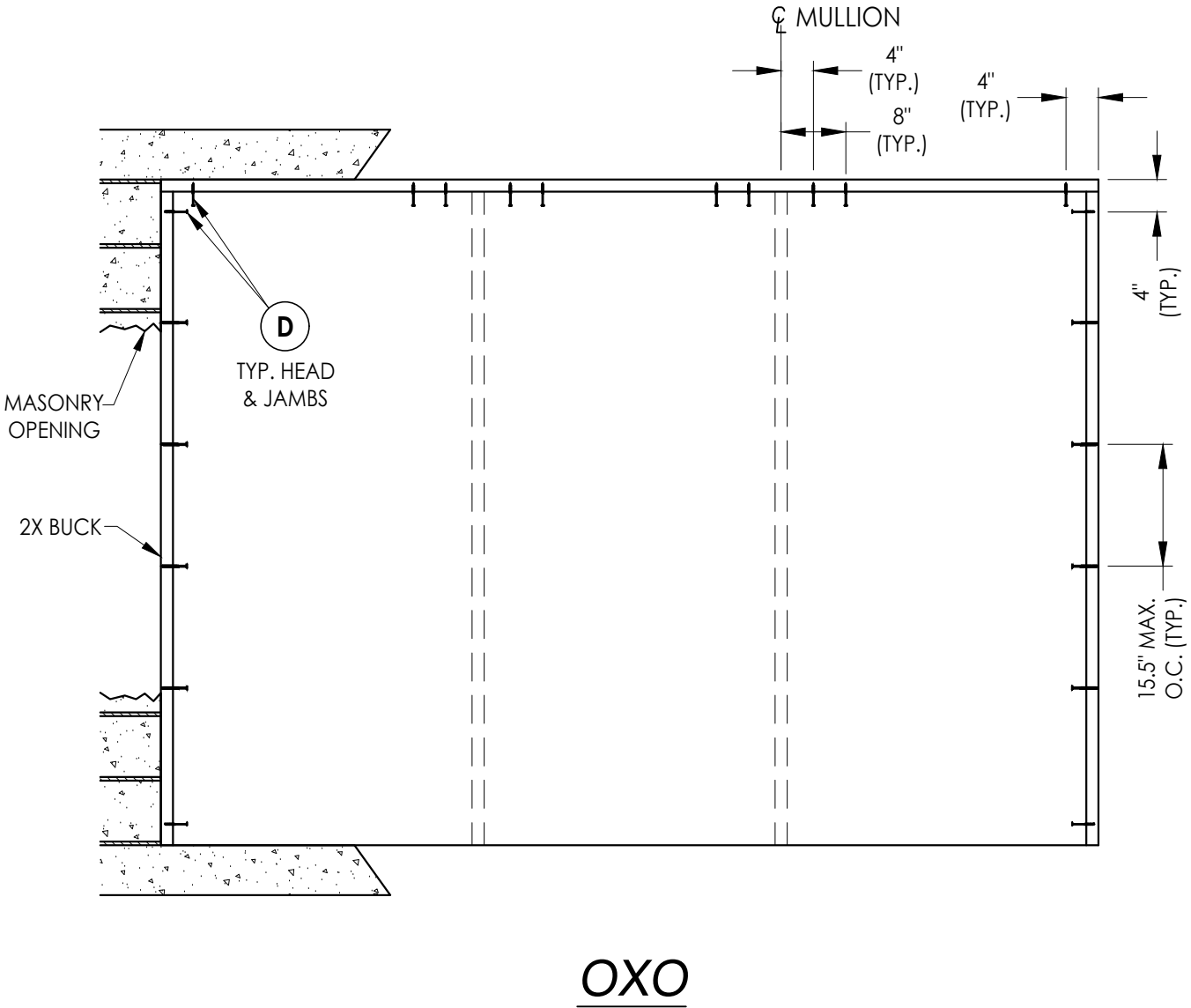
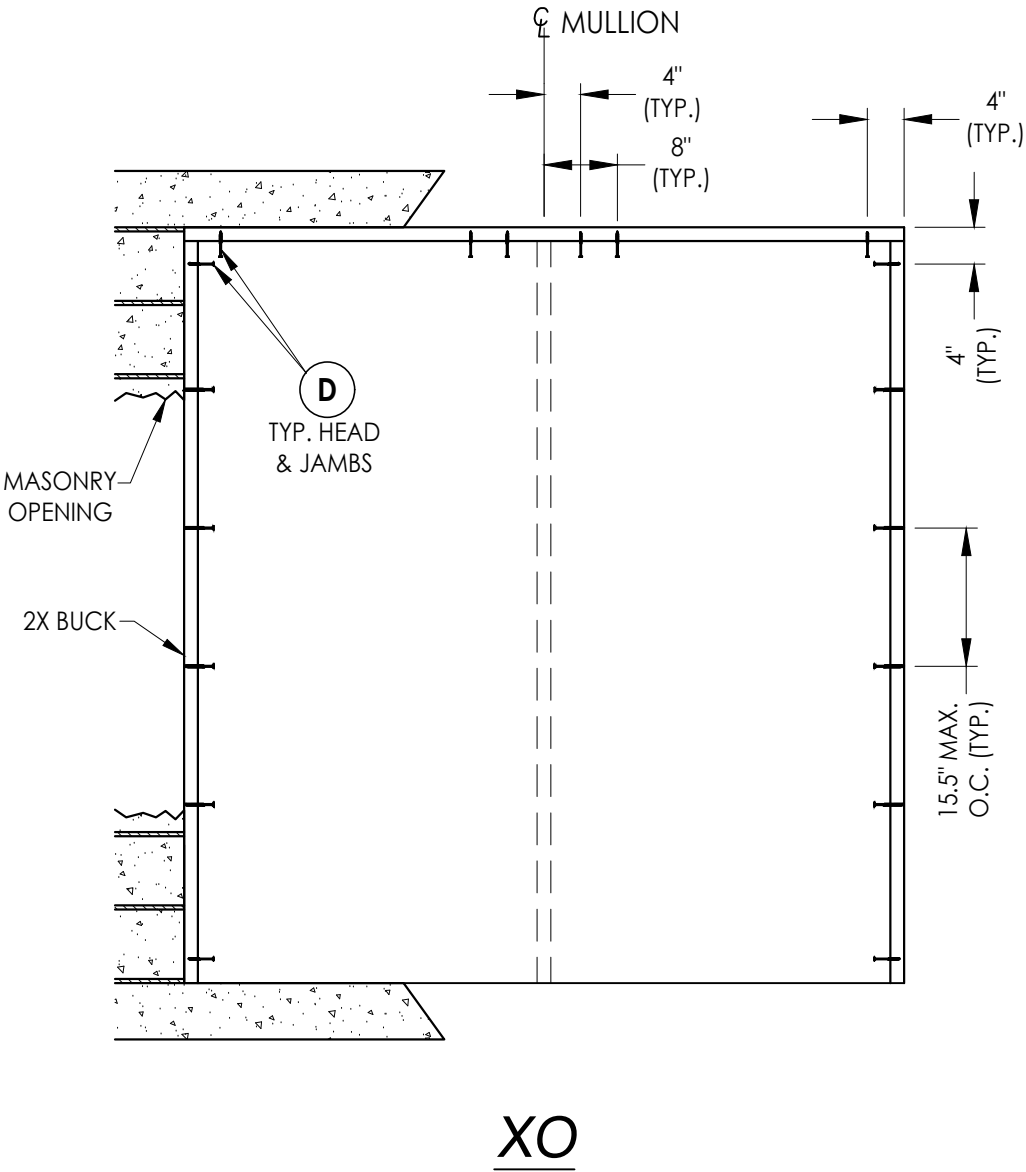


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SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: FL-21852.12	
SHEET 9 OF 13	

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

Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409	
R.W. BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	

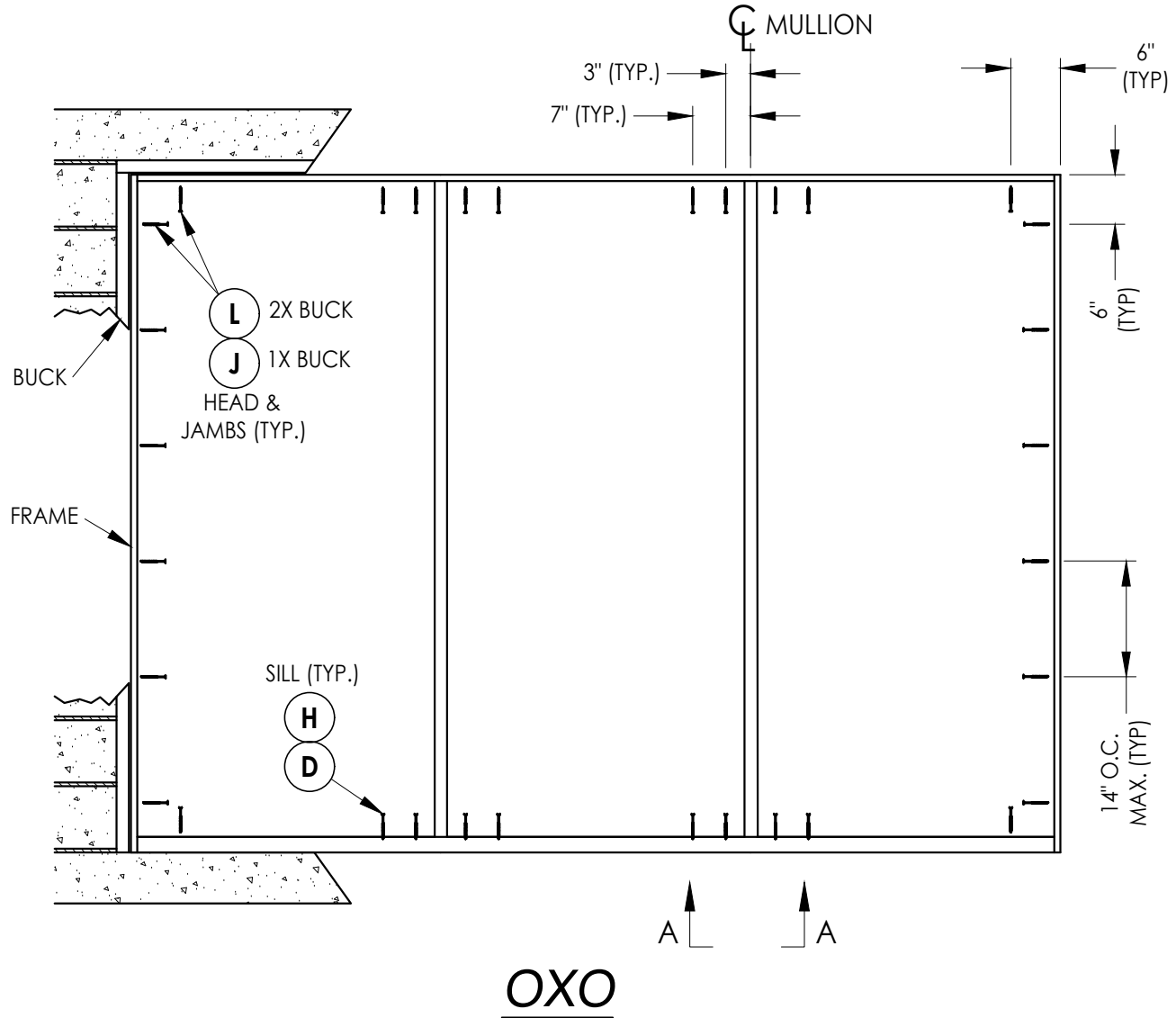
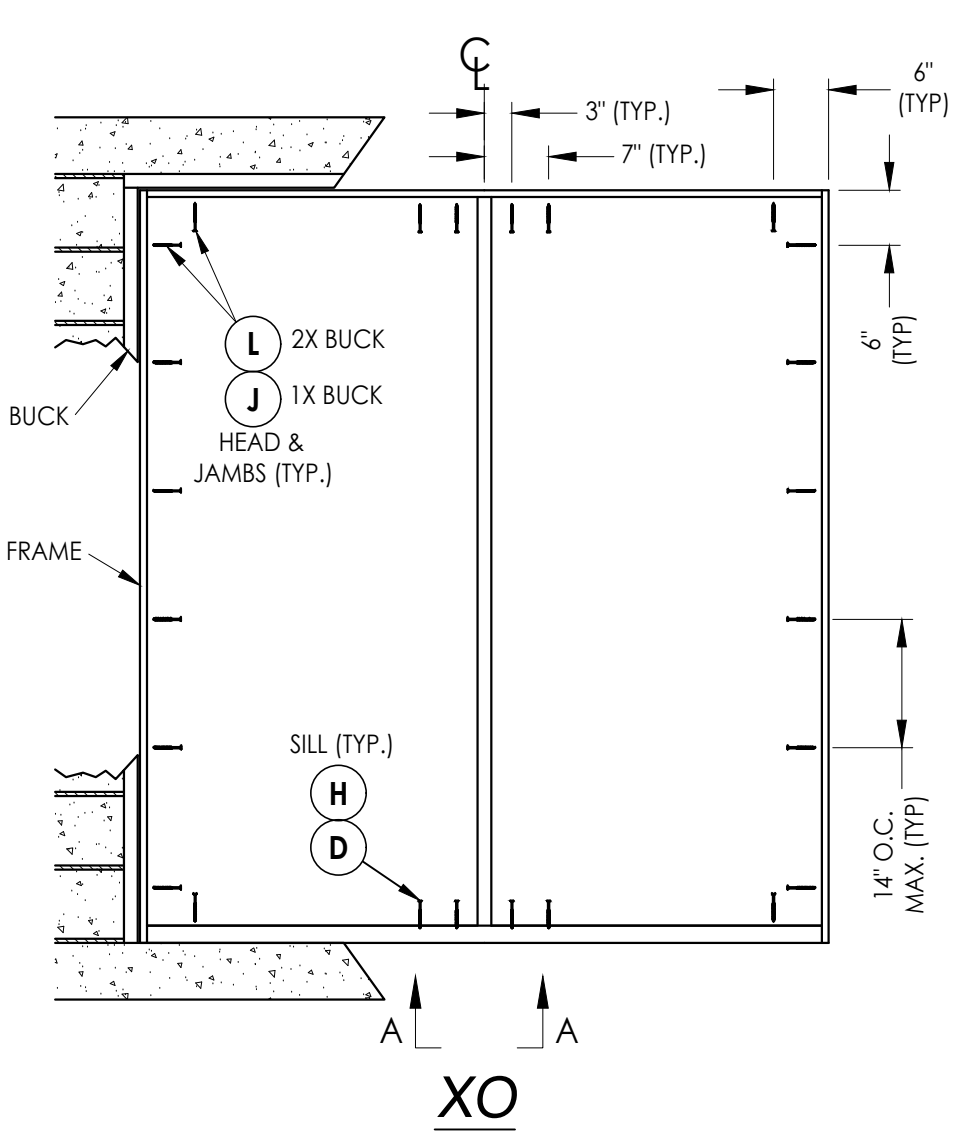
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2X BUCK ANCHORING

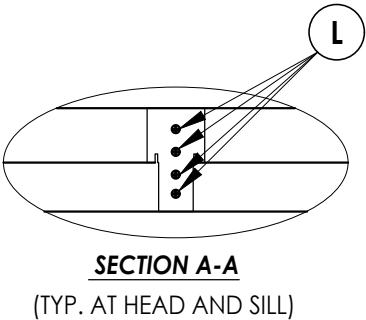
Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409				PRODUCT: MASTERGRAIN FIBERGLASS DOOR				PART OR ASSEMBLY: BUCK ANCHORING				</			
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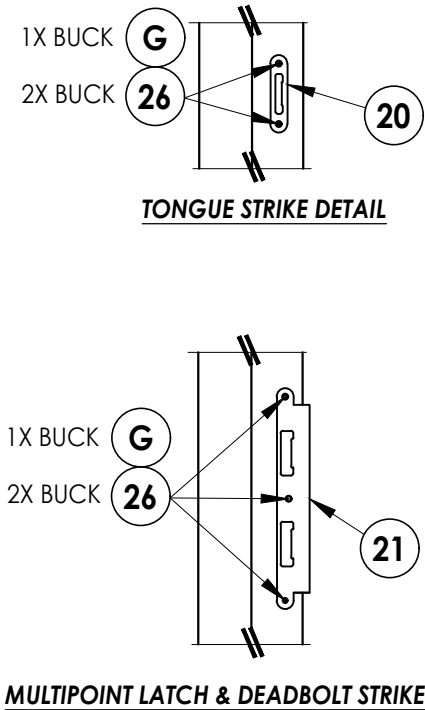
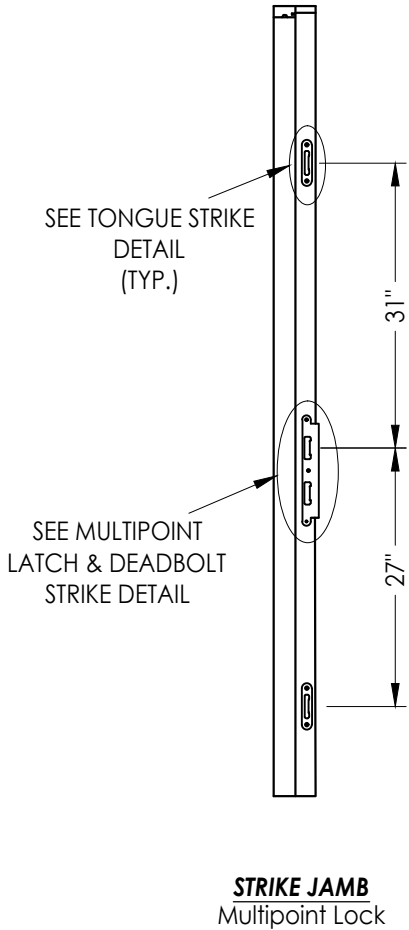
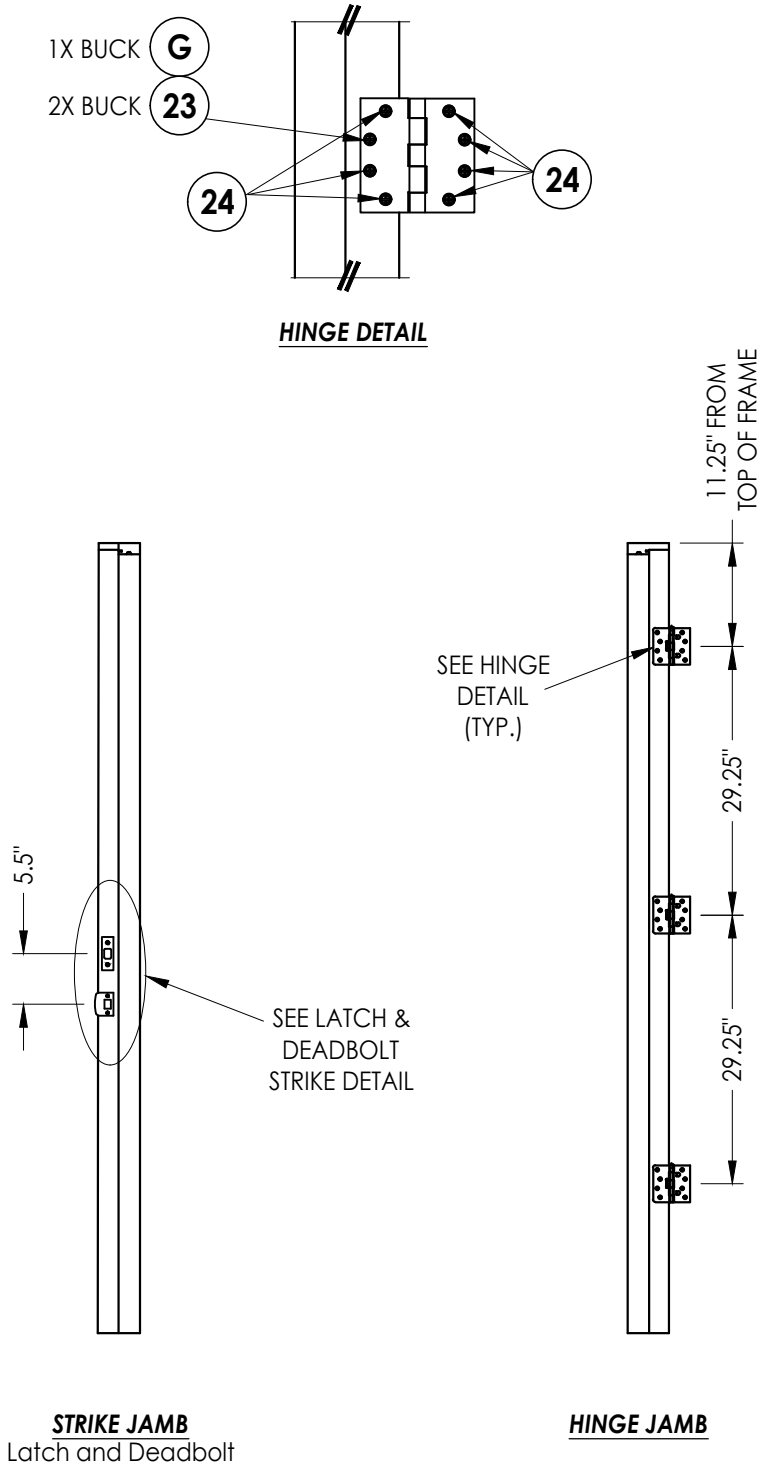
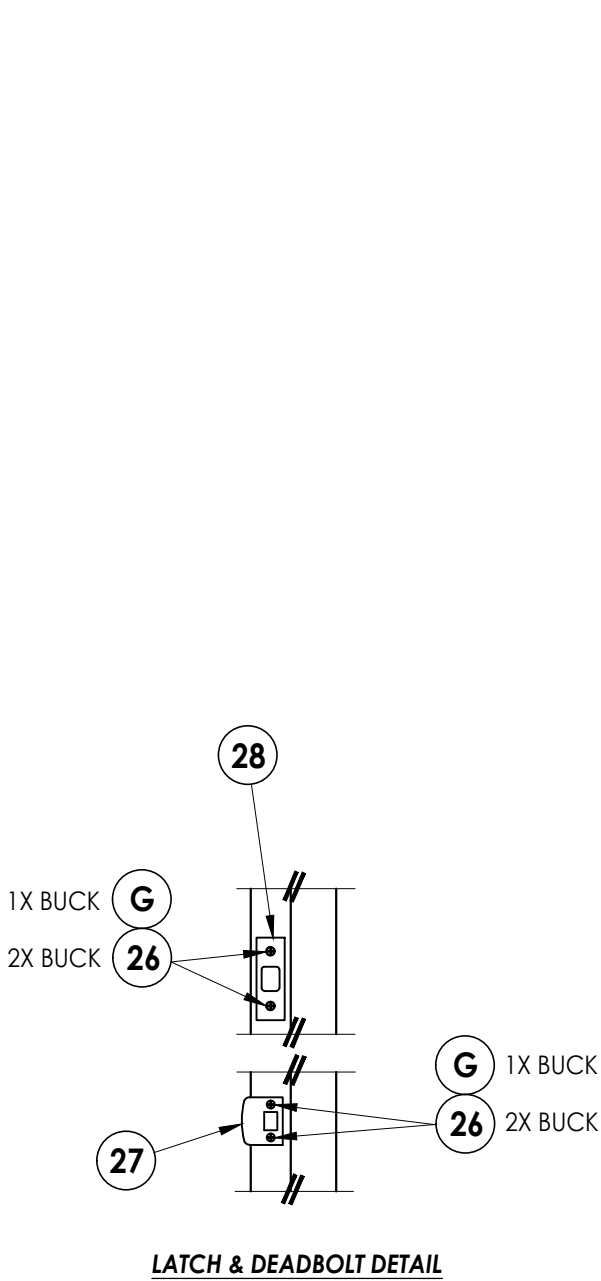
FRAME ANCHORING

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



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: MASTERGRAIN FIBERGLASS DOOR		PART OR ASSEMBLY: BUCK 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	REVISIONS	
DATE: 02/09/17		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: FL-21852.12		SHEET 11 OF 13	

Z:\2023 FBC Drawings\MasterGrain\FL-21852 R10\FL-21852.11-12.dwg



LATCH & DEADBOLT HARDWARE DETAILS

MULTIPOINT LOCK HARDWARE DETAILS

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: MASTERGRAIN FIBERGLASS DOOR		PART OR ASSEMBLY: HARDWARE DETAILS	
		LFS	BY
4	7/01/26	UPDATE TO 9TH ED. (2026) FBC	JK
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-21852.12			
SHEET 12 OF 13			

Z:\2023 FBC Drawings\MasterGrain\FL-21852 R10\FL-21852.11-12.dwg

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
H	1/4" X 2-1/4" PFH DeWALT OR 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
3	MULLION	ALUM/COMP
7	WEATHERSTRIP	FOAM
8	SWEEP	VINYL
13	INSWING ADJUSTABLE THRESHOLD	ALUM/COMP
14	OUTSWING BUMP THRESHOLD	ALUM/COMP
15	INSWING THRESHOLD (w/ SIDELITE ADAPTER)	ALUM/COMP
16	OUTSWING THRESHOLD (w/ SIDELITE ADAPTER)	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	#10 X 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	-
50	SIDELITE PANEL	-

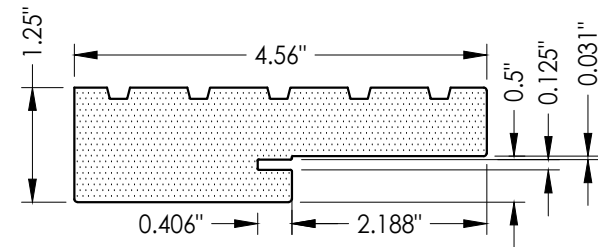
CONCRETE ANCHOR NOTES:

- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- 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.
- Concrete anchor table:

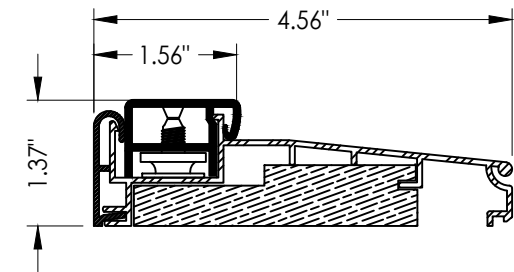
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
DeWALT ULTRA-CON®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

WOOD SCREW INSTALLATION NOTES:

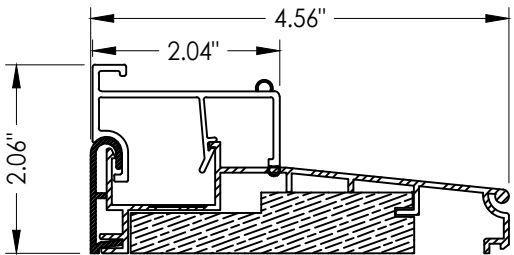
- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



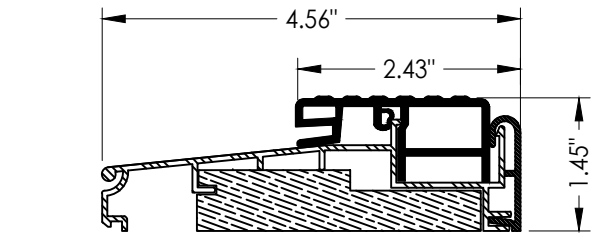
1 COMPOSITE JAMB
WORLDWIDE



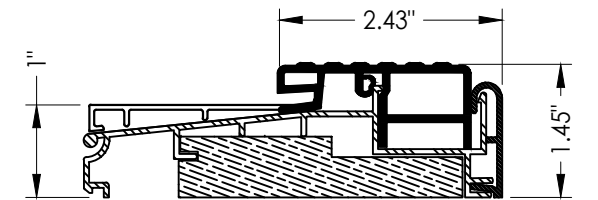
13 INSWING THRESHOLD
WORLDWIDE



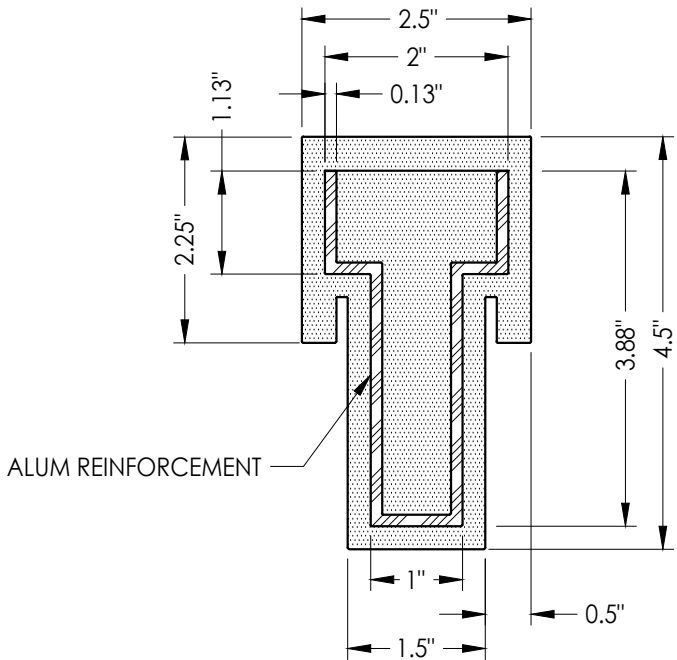
15 INSWING THRESHOLD w/ SIDELITE ADAPTER
WORLDWIDE



14 OUTSWING THRESHOLD
WORLDWIDE



16 OUTSWING THRESHOLD w/ SIDELITE ADAPTER
WORLDWIDE



3 COMPOSITE MULLION
WORLDWIDE

Documents Prepared By:
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BUILDING CONSULTANTS, INC.
P.O. Box 230, Vairico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:
MASTERGRAIN
FIBERGLASS DOOR

PART OR ASSEMBLY:
BILL OF MATERIALS
& COMPONENTS

NO.	DATE	REVISIONS
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) FBC

DATE: 02/09/17
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-21852.12
SHEET 13 OF 13