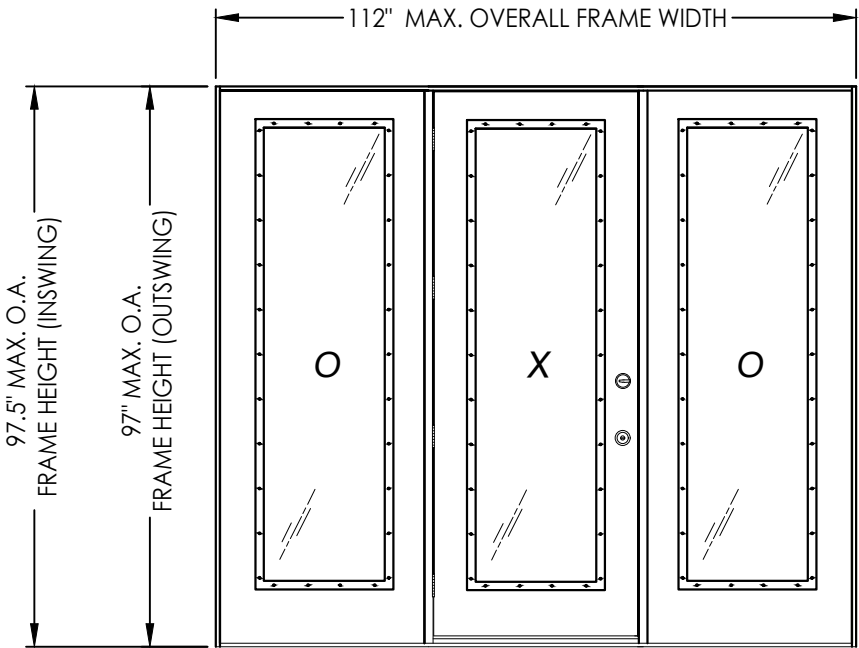
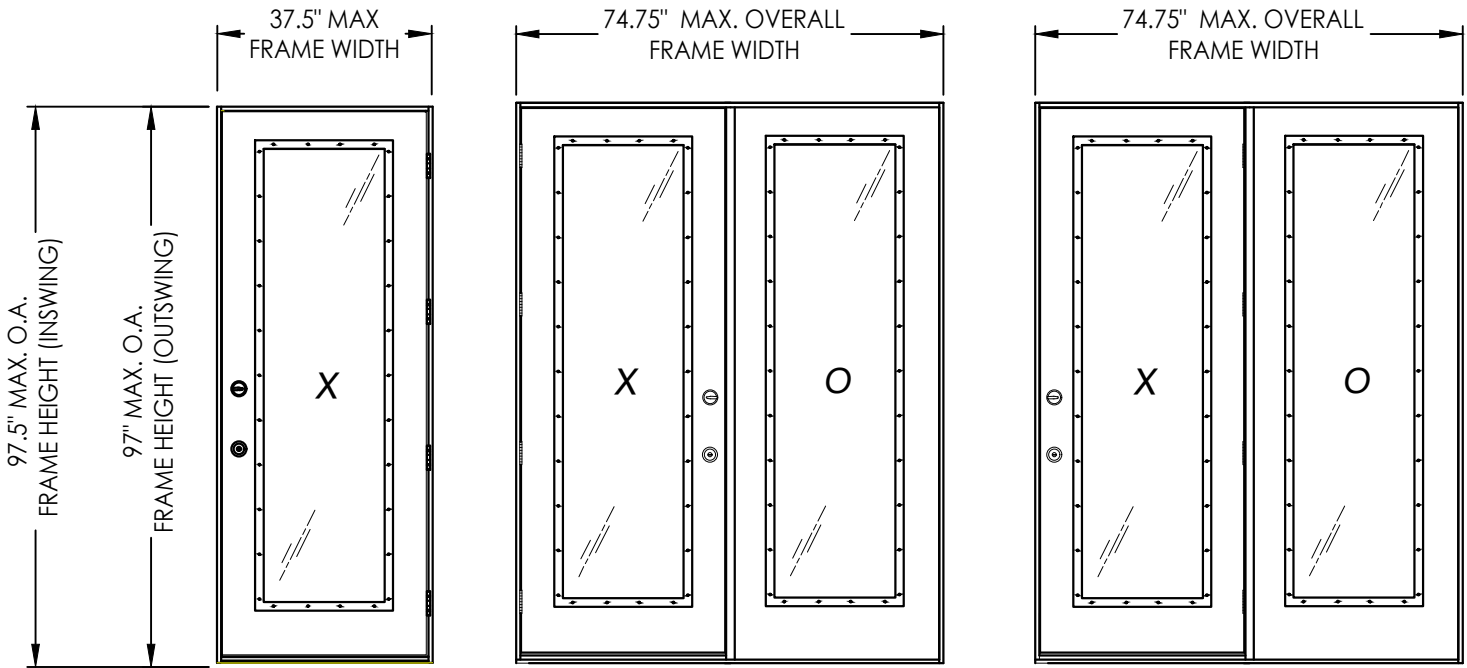
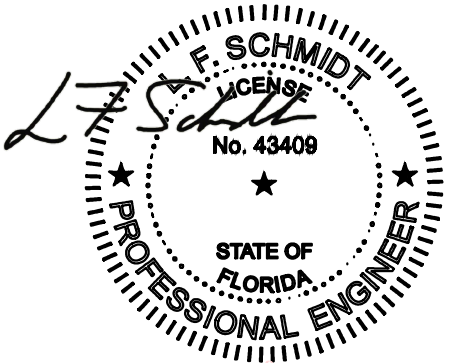


Z:\2023 FBC Drawings\MasterGrain\FL-21852 R10\FL-21852.20.dwg

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



CONTINUOUS HEAD & SILL



Digitally signed by Lyndon F Schmidt
Date: 2026.07.22 17:23:38 -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 / Sidelite Panel Details
3	Glazing Details
4	Elevations
5	Horizontal & Vertical Cross Sections (2X Buck)
6	Horizontal & Vertical Cross Sections (1X Buck)
7	Horizontal Cross Sections
8	Vertical Cross Sections (Thresholds)
9	Buck Anchoring
10	Frame Anchoring
11	Hardware Details
12	Bill of Materials & Components

CONFIGURATION	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
X	+40.0	-45.0	+40.0	-40.0
XO, OX, OXO	+40.0	-40.0	+40.0	-40.0

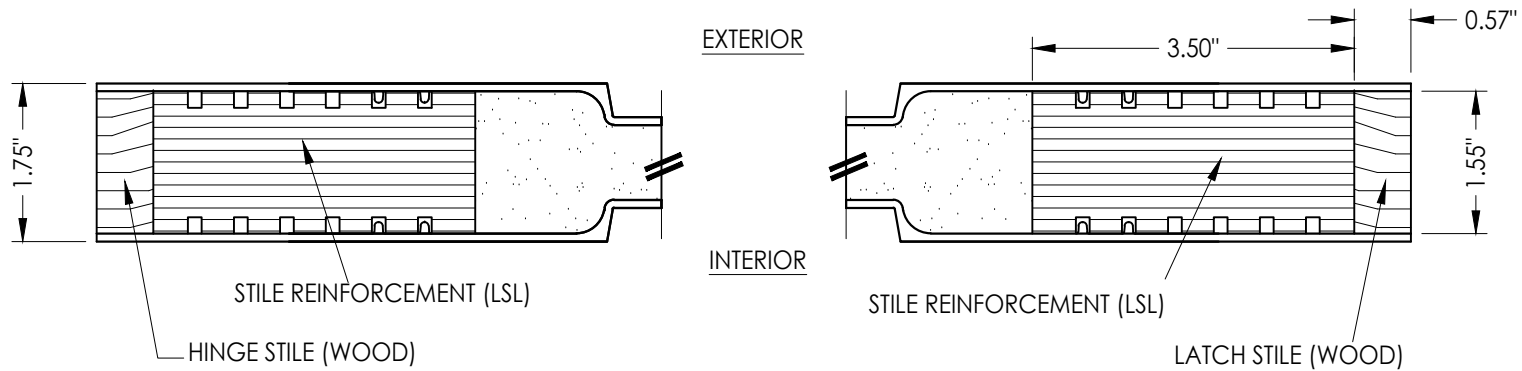
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

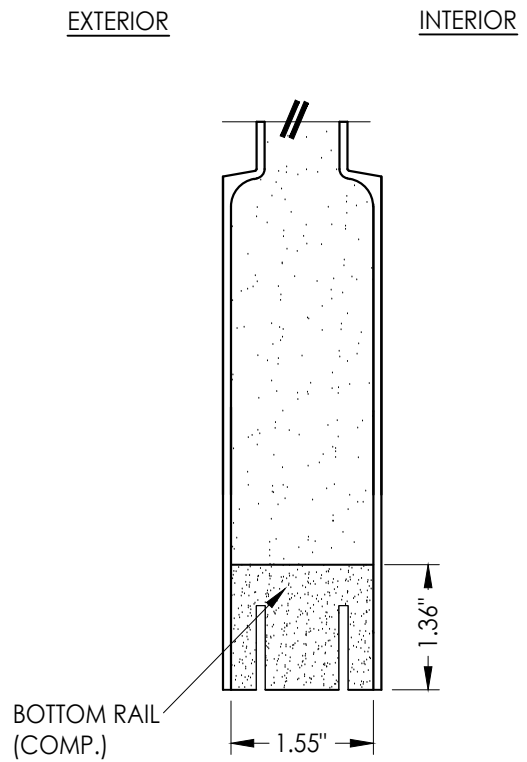
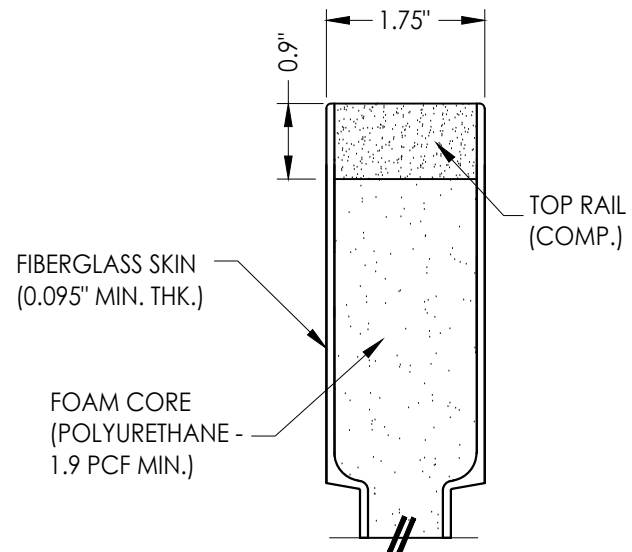
PRODUCT: MASTERGRAIN FIBERGLASS DOOR
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS
3	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
2	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
1	7/09/20	UPDATE TO 7TH ED. (2020) FBC LFS

DATE: 08/16/18
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-21852.20
SHEET 1 OF 12



1 **HORIZONTAL CROSS SECTION**
2



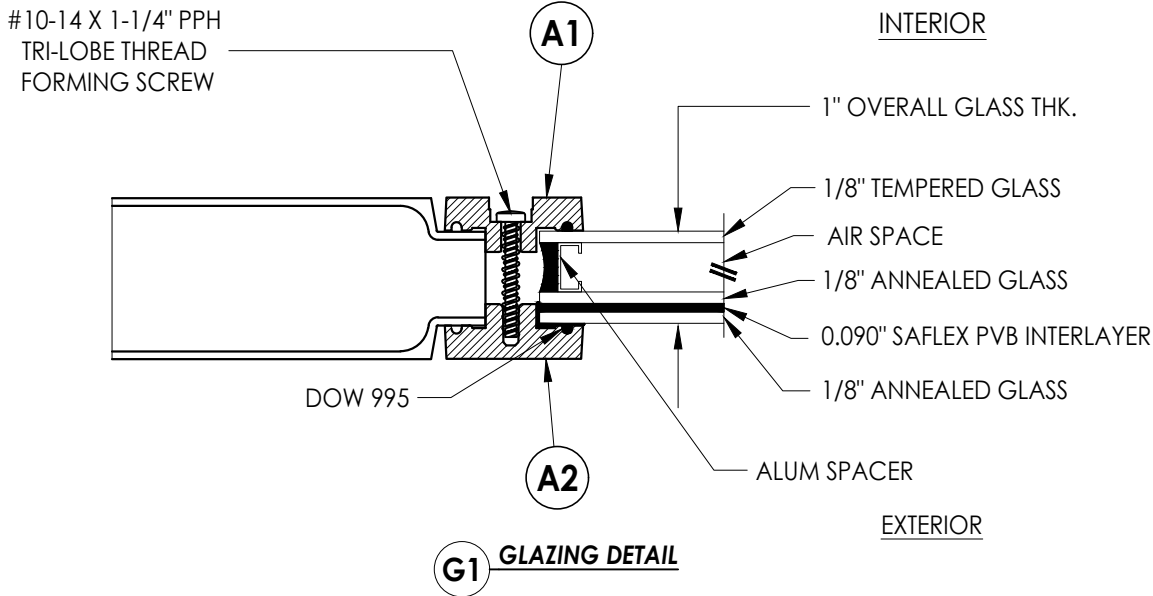
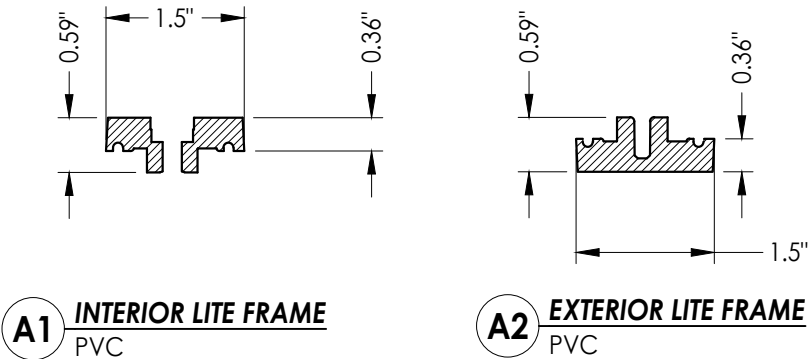
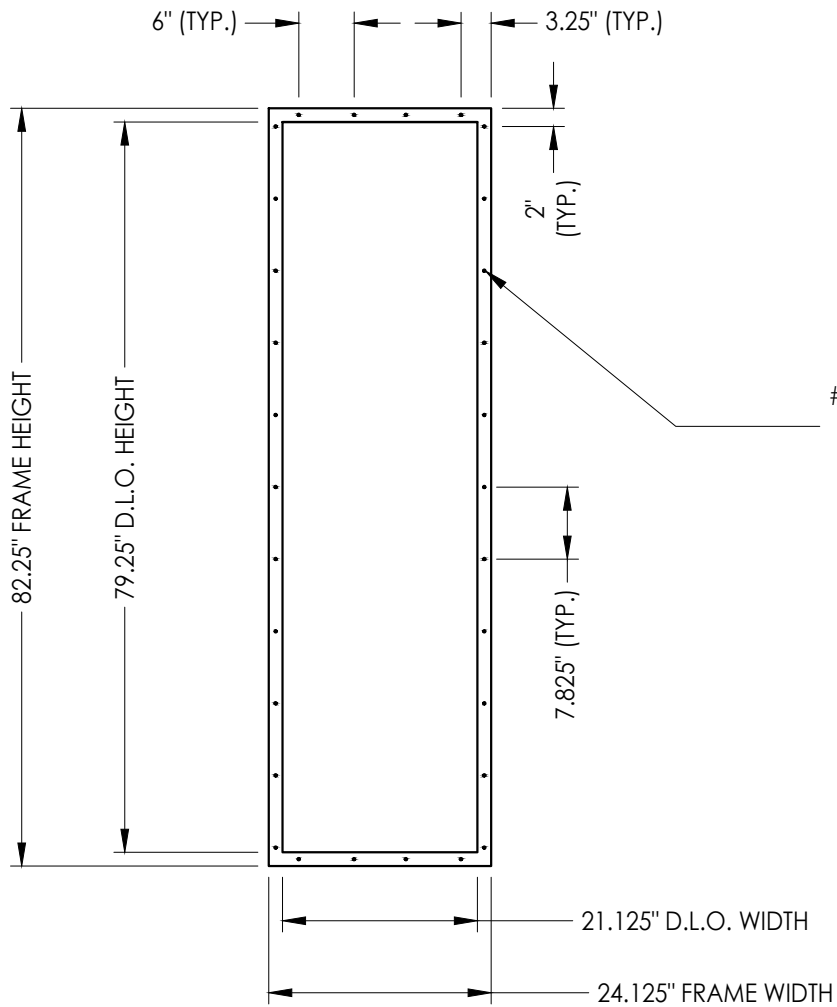
2 VERTICAL CROSS SECTION

[illegible]

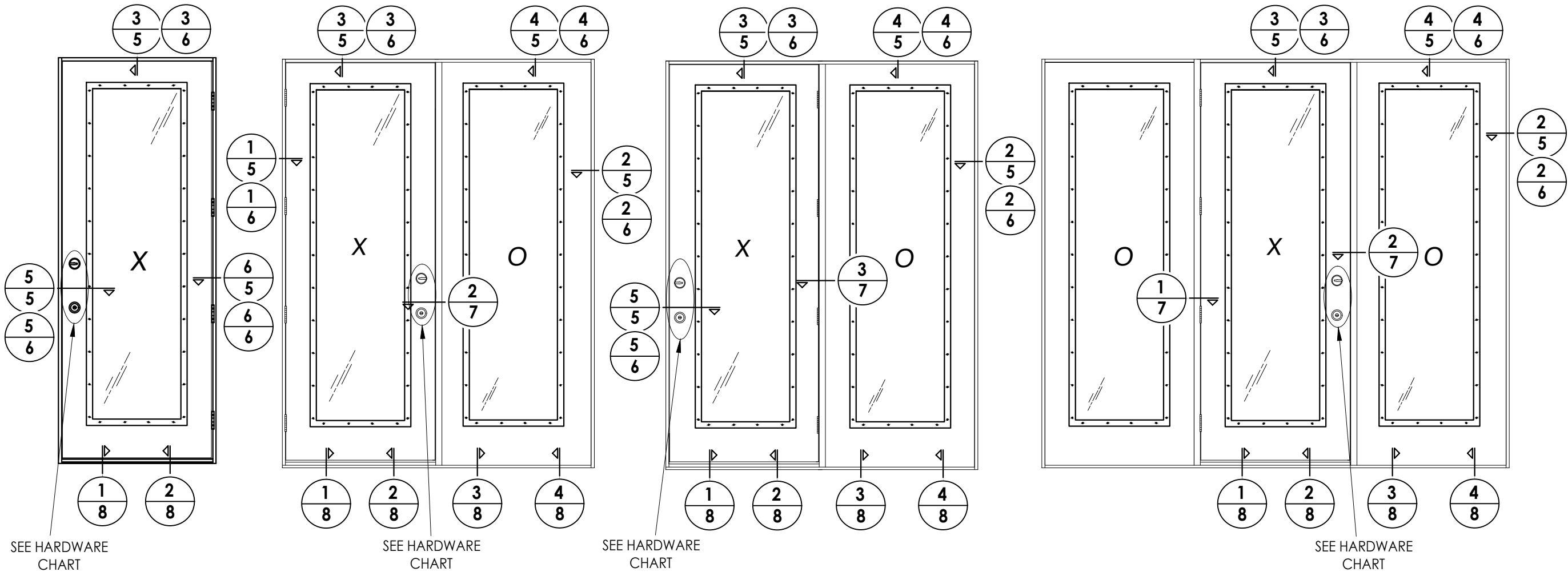
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

Z:\2023 FBC Drawings\MasterGrain\FL-21852 R10\FL-21852.20.dwg



PRODUCT:		MASTERGRAIN FIBERGLASS DOOR		PART OR ASSEMBLY: GLAZING DETAILS		BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	
3	7/01/26	UPDATE TO 9TH ED. (2026)	FBC	LFS			
2	7/01/23	UPDATE TO 8TH ED. (2023)	FBC	LFS			
1	7/09/20	UPDATE TO 7TH ED. (2020)	FBC	LFS			
NO.	DATE			BY			
				REVISIONS			
DATE: 08/16/18							
SCALE: N.T.S.							
DWG. BY: JK							
CHK. BY: LFS							
DRAWING NO.: FL-21852.20							
SHEET 3 OF 12							



HARDWARE TABLE		
MANUFACTURER	MODEL	
KWIKSET	Knob:	SIGNATURE SERIES
	DEADBOLT:	SIGNATURE SERIES (980)
SCHLAGE	Knob:	F51
	DEADBOLT:	B60N

NO.	DATE	REVISIONS	
		BY	
3	7/01/26	UPDATE TO 9TH ED.	(2026) FBC LFS
2	7/01/23	UPDATE TO 8TH ED.	(2023) FBC LFS
1	7/09/20	UPDATE TO 7TH ED.	(2020) FBC LFS

DATE: 08/16/18

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-21852.20

SHEET 4 OF 12

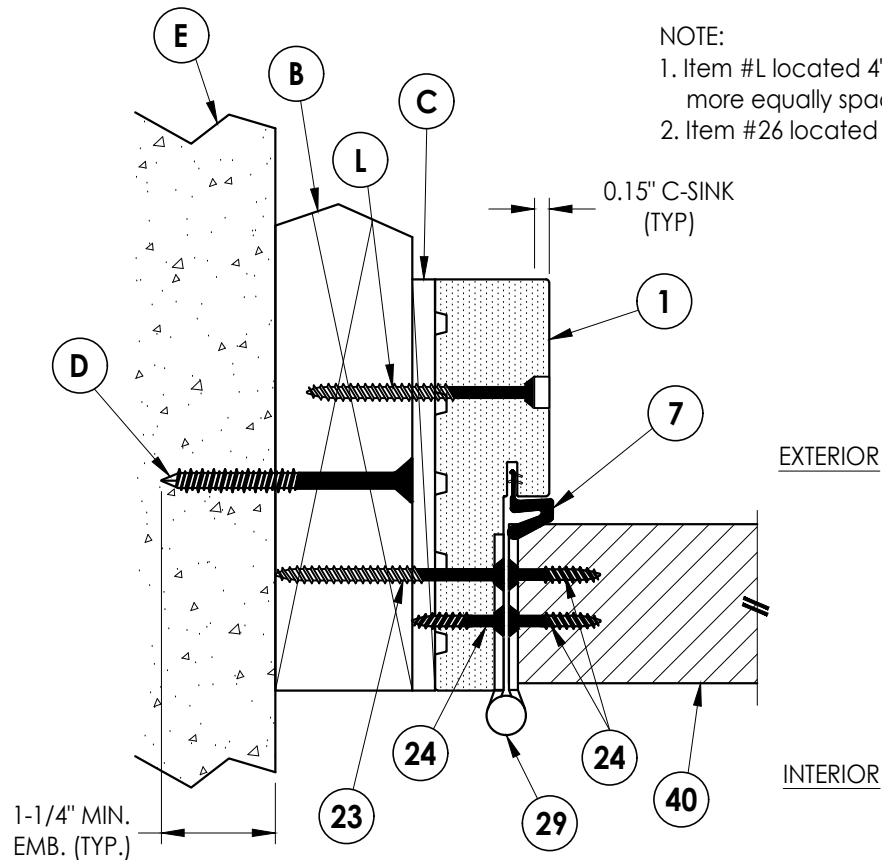
PRODUCT: MASTERGRAIN FIBERGLASS DOOR

PART OR ASSEMBLY: ELEVATIONS

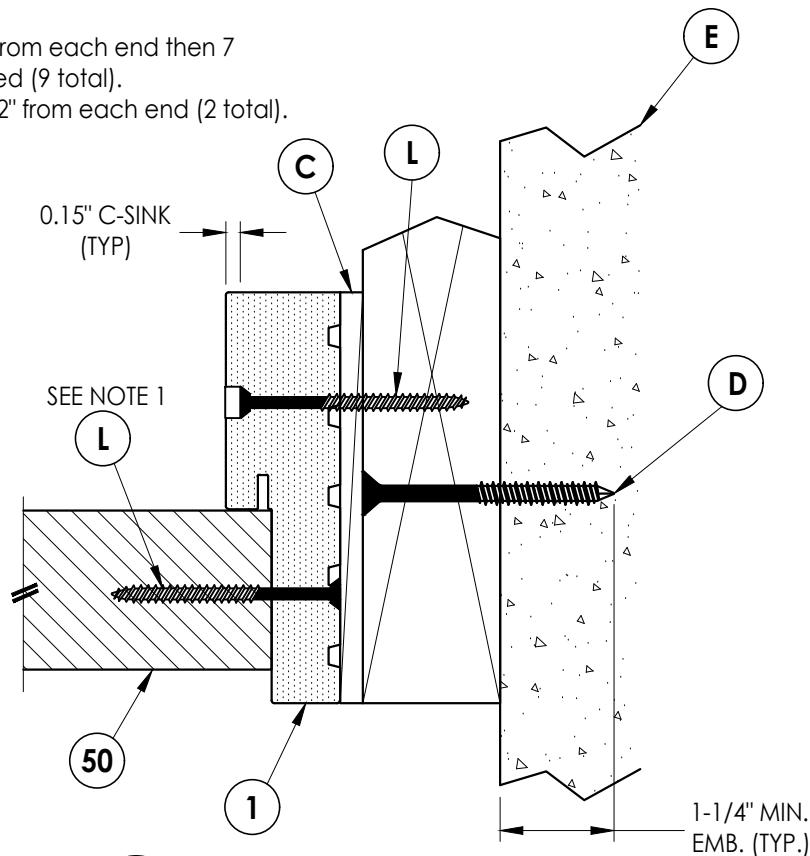
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

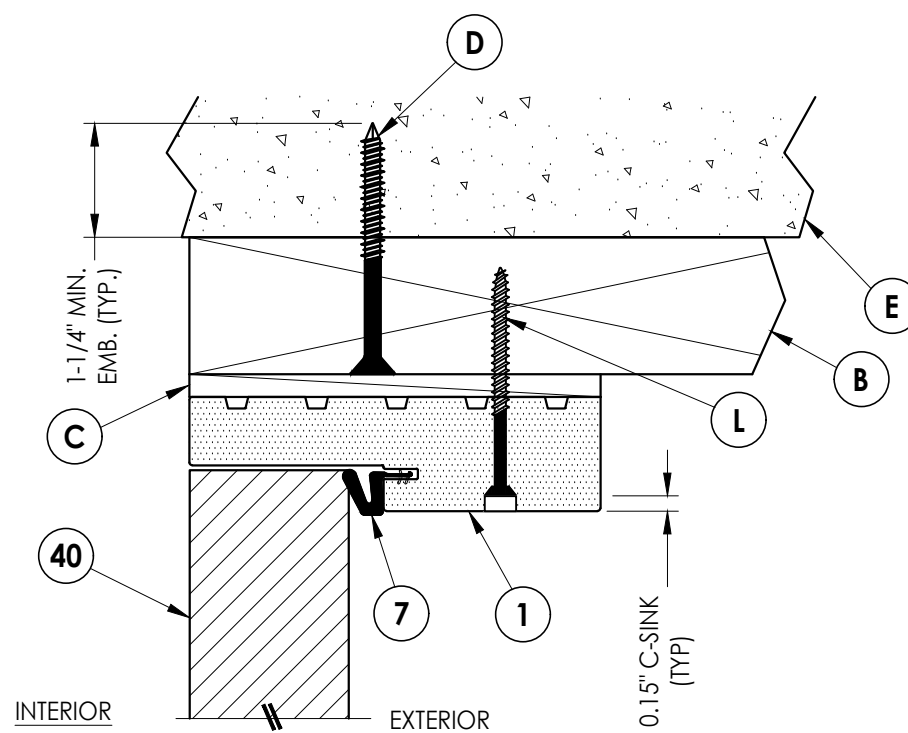
Z:\2023 FBC Drawings\MasterGrain\FL-21852 R10\FL-21852.20.dwg



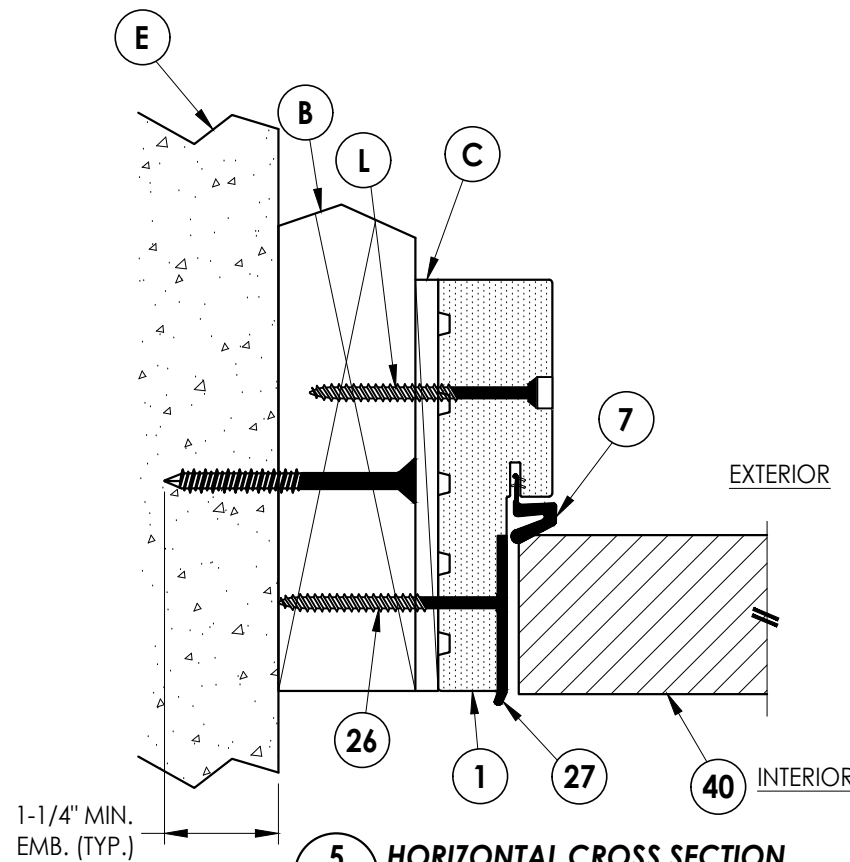
1
5 **HORIZONTAL CROSS SECTION**
Shown w/ 2X Buck
Inswing shown (Outswing similar)



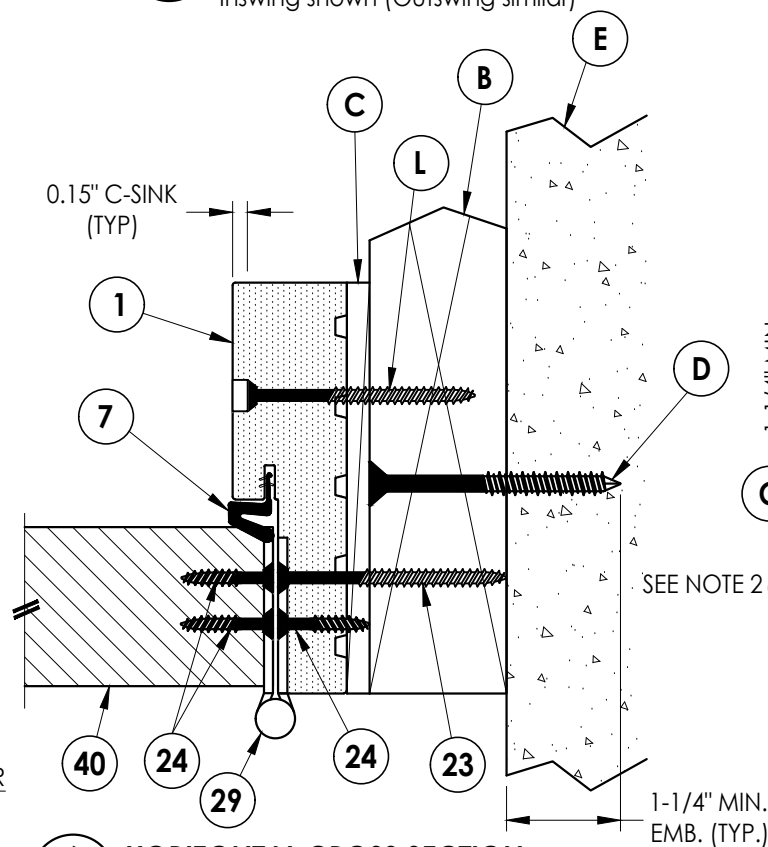
2
5 **HORIZONTAL CROSS SECTION**
Shown w/ 2X Buck
Inswing shown (Outswing similar)



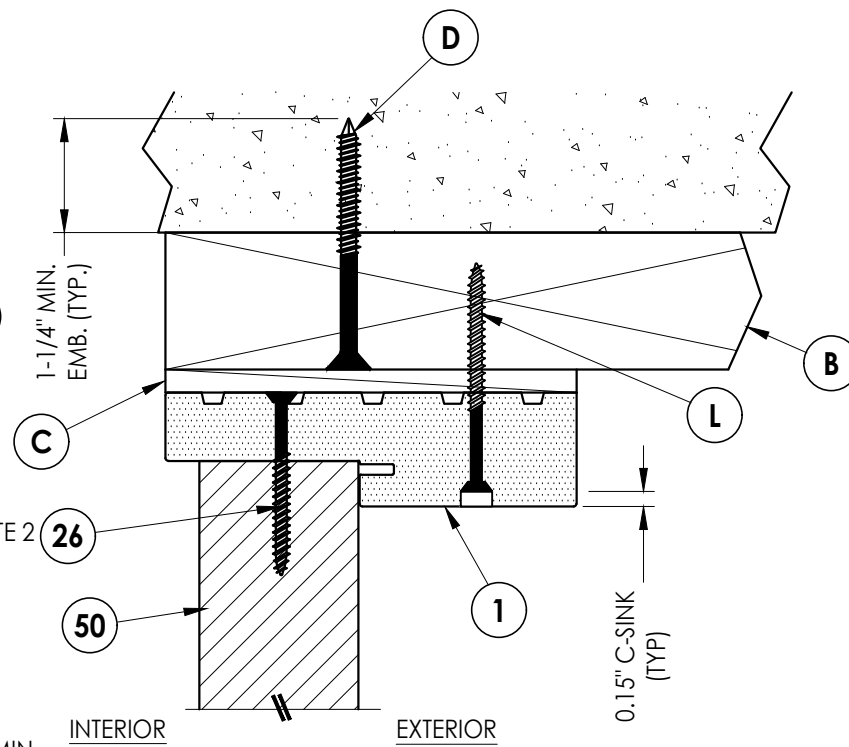
3
5 **VERTICAL CROSS SECTION**
Shown w/ 2X Buck
Inswing shown (Outswing similar)



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



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



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

NOTE:
1. Item #L located 4" from each end then 7 more equally spaced (9 total).
2. Item #26 located 12" from each end (2 total).

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

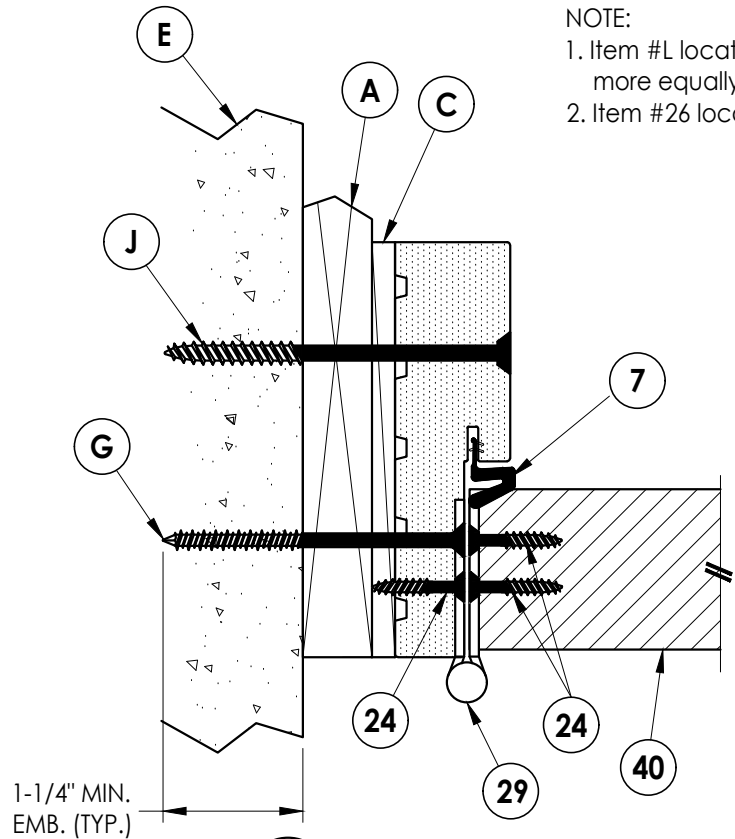
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: MASTERGRAIN FIBERGLASS DOOR
PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (2X BUCK)

NO.	DATE	REVISIONS
3	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
2	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
1	7/09/20	UPDATE TO 7TH ED. (2020) FBC LFS

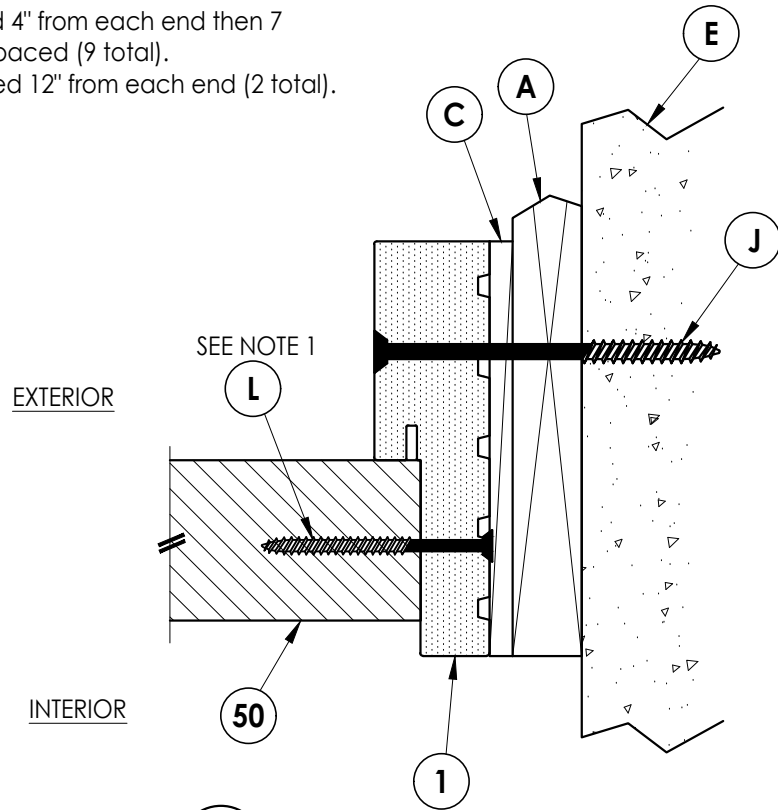
DATE: 08/16/18
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-21852.20
SHEET 5 OF 12

Z:\2023 FBC Drawings\MasterGrain\FL-21852 R10\FL-21852.20.dwg

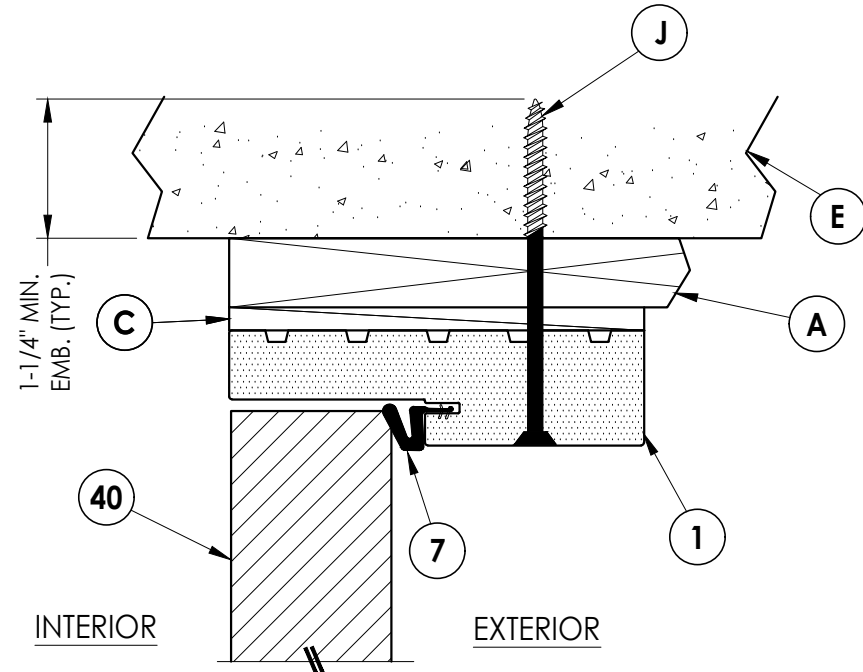


1
6 **HORIZONTAL CROSS SECTION**
Shown w/ 1X sub-buck
Inswing shown (Outswing similar)

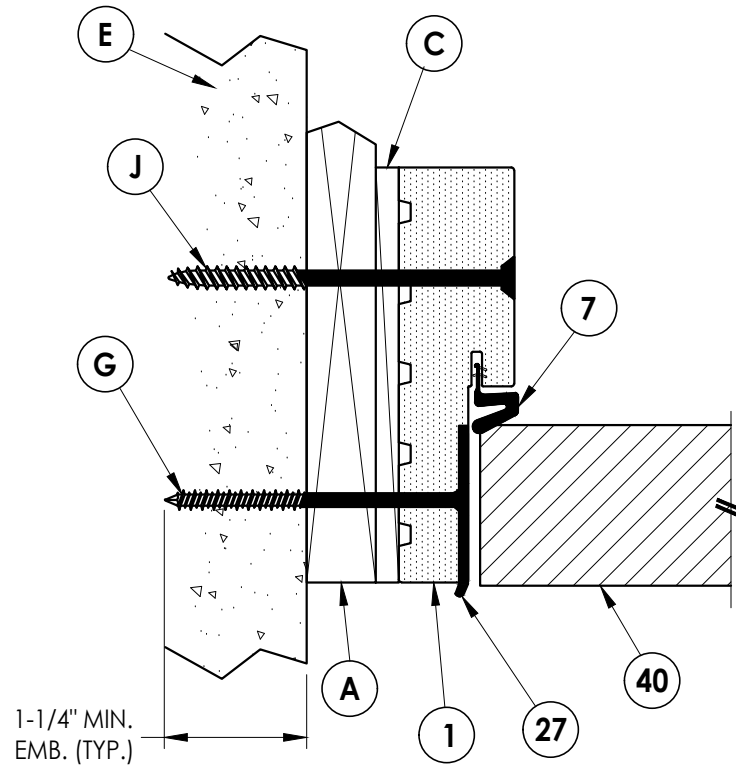
- NOTE:
1. Item #L located 4" from each end then 7 more equally spaced (9 total).
2. Item #26 located 12" from each end (2 total).



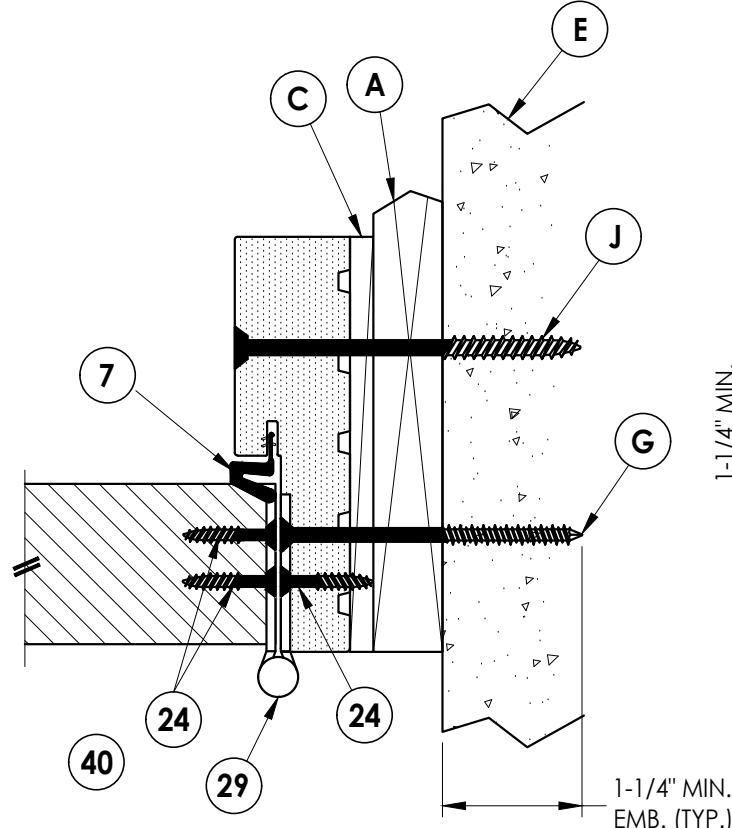
2
6 **HORIZONTAL CROSS SECTION**
Shown w/ 1X sub-buck
Inswing shown (Outswing similar)



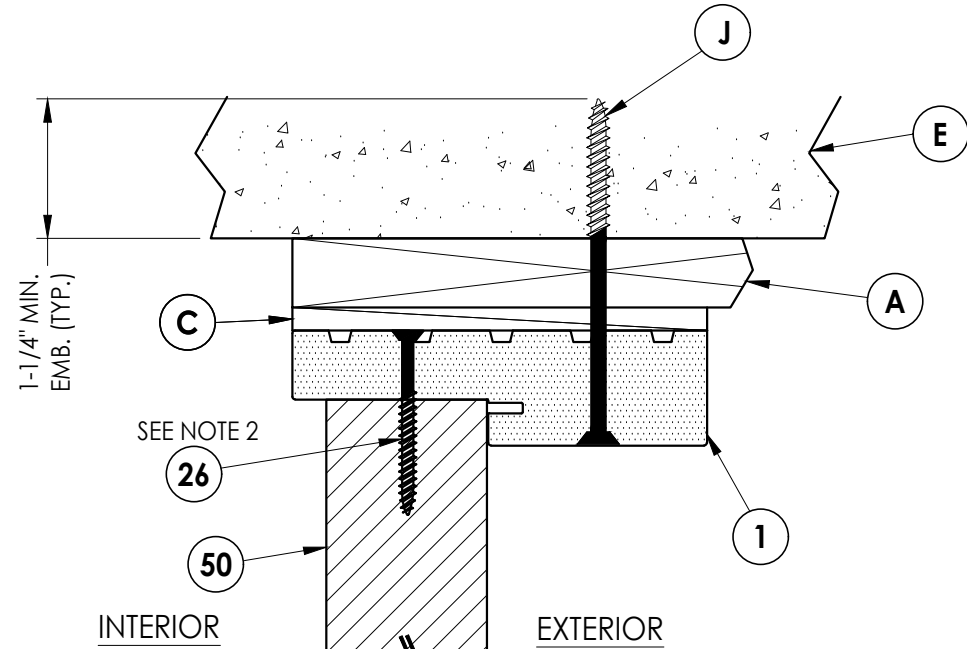
3
6 **VERTICAL CROSS SECTION**
Shown w/ 1X sub-buck
Inswing shown (Outswing similar)



5
6 **HORIZONTAL CROSS SECTION**
Shown w/ 1X sub-buck
Inswing shown (Outswing similar)



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



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

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:
HORIZONTAL & VERTICAL
CROSS SECTIONS (1X BUCK)

NO.	DATE	REVISIONS
3	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
2	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
1	7/09/20	UPDATE TO 7TH ED. (2020) FBC LFS

DATE: 08/16/18

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-21852.20

SHEET 6 OF 12

1. Item #L located 4" from each end then 7 more equally spaced (9 total).



INTERIOR

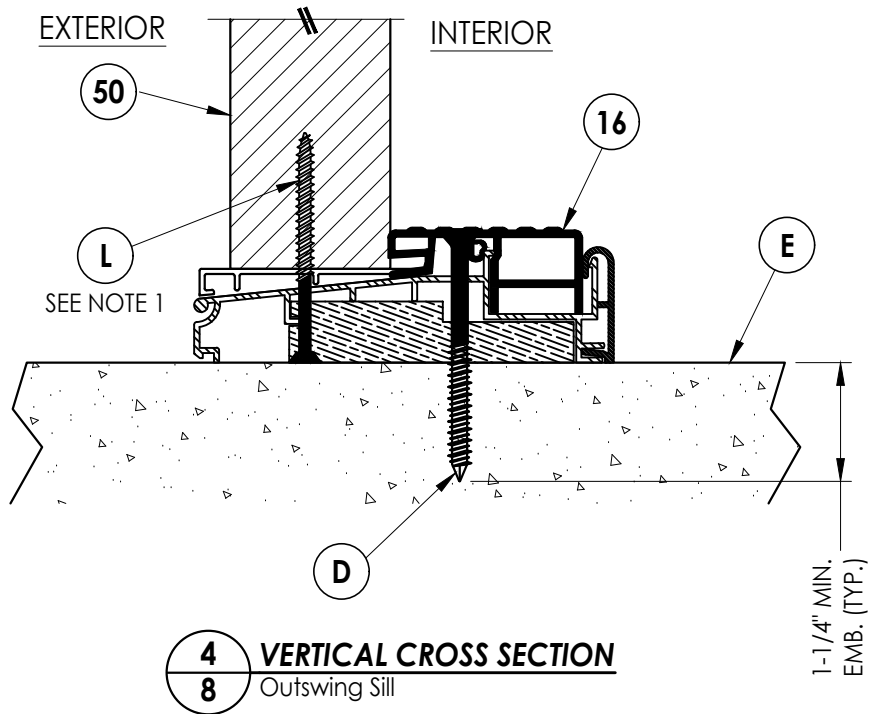
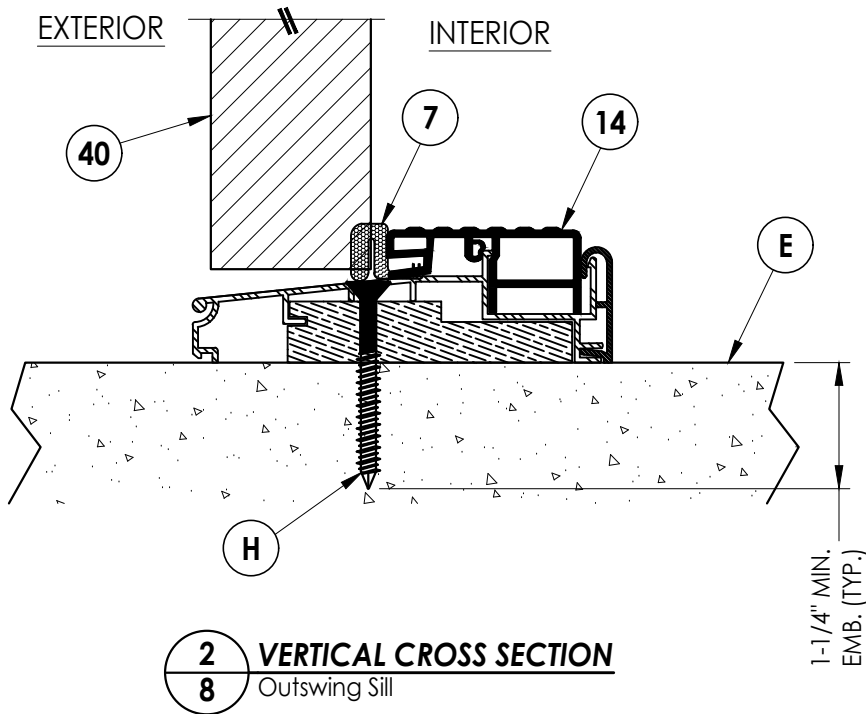
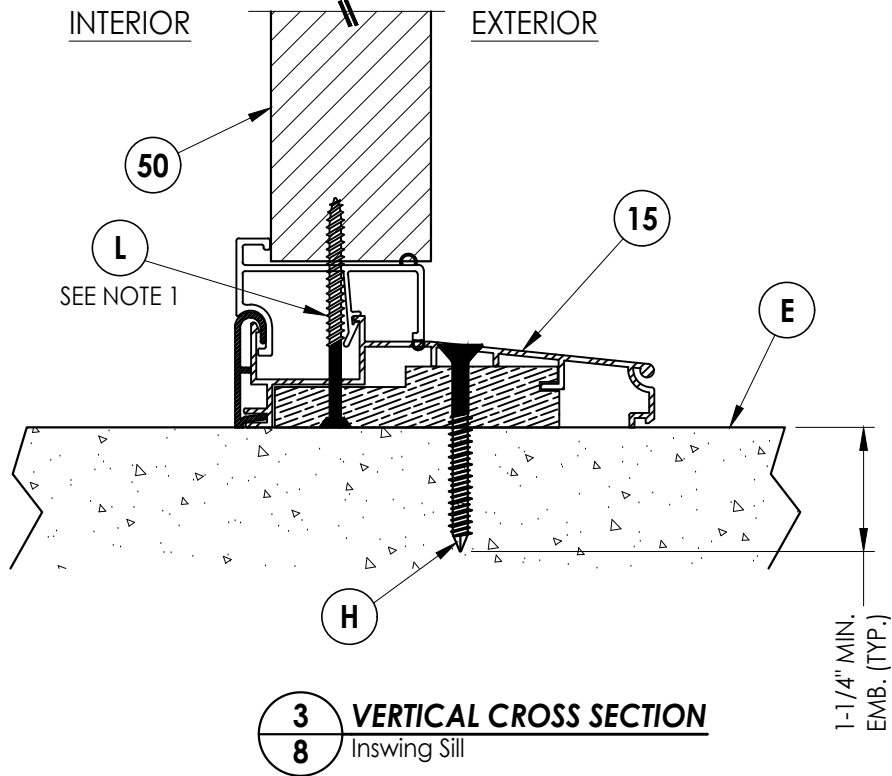
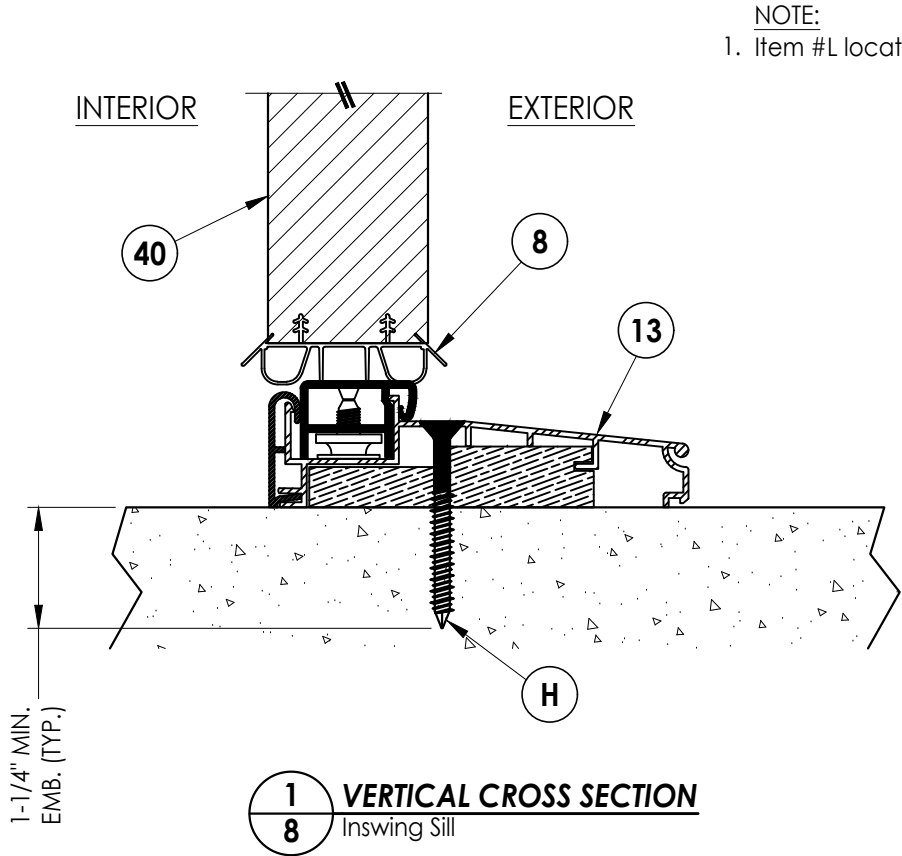
[illegible]

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

© 2018 R.W. BUILDING CONSULTANTS INC.

Z:\2023 FBC Drawings\MasterGrain\FL-21852 R10\FL-21852.20.dwg



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:
VERTICAL CROSS
SECTIONS (THRESHOLDS)

NO.	DATE	REVISIONS
3	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
2	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
1	7/09/20	UPDATE TO 7TH ED. (2020) FBC LFS

DATE: 08/16/18

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-21852.20

SHEET 8 OF 12

4" (TYP.)

MULLION

2" (TYP.)

6" (TYP.)

4" (TYP.)

4" (TYP.)

16" O.C. MAX. (TYP.)

D

HEAD & JAMBS (TYP.)

2X BUCK

MASONRY (TYP.)

Diagram illustrating the elevation view of a window frame assembly, showing structural details and dimensions:

- MULLION:** Indicated by a vertical line and label at the top center.
- Dimensions:**
 - 4" (TYP.) (Typical) dimension shown at the top right.
 - 2" (TYP.) (Typical) dimension shown below the mullion.
 - 4" (TYP.) (Typical) dimension shown below the 2" dimension.
 - 4" (TYP.) (Typical) dimension shown on the right side.
 - 16" O.C. MAX. (TYP) (Typical) dimension shown on the right side, indicating the maximum spacing between vertical members.
- HEAD & JAMBS (TYP.):** Labeled with a circled 'D' and arrows pointing to the top and side frame members.

OXO

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

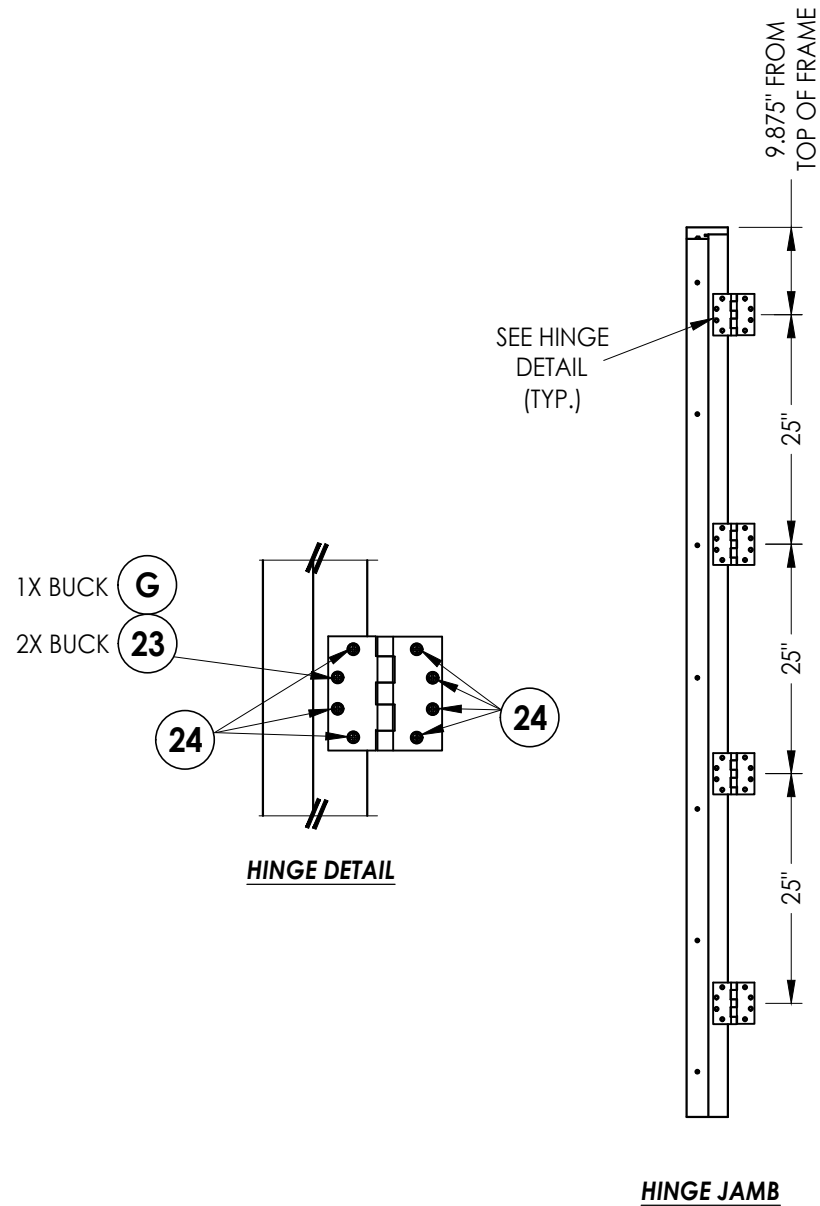
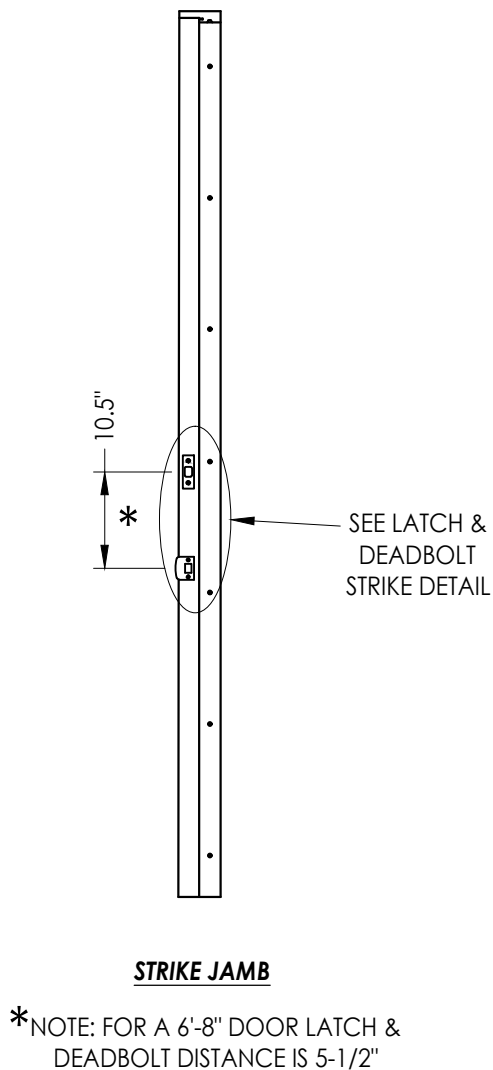
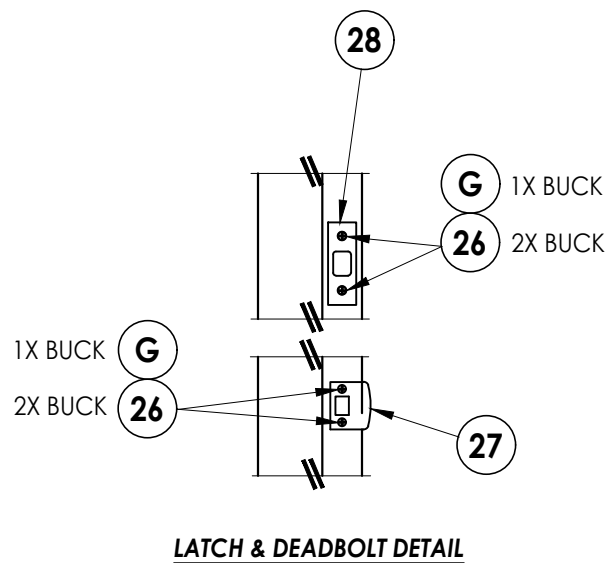
RW

PART OR ASSEMBLY:

NO.		DATE	REVISIONS	
3	7/01/26	UPDATE TO 9TH ED. (2026)	FBC	LFS
2	7/01/23	UPDATE TO 8TH ED. (2023)	FBC	LFS
1	7/09/20	UPDATE TO 7TH ED. (2020)	FBC	LFS
				BY

© 2018 R.W. BUILDING CONSULTANTS INC.

© 2018 R.W. BUILDING CONSULTANTS INC.



LATCH & DEADBOLT HARDWARE DETAILS

[illegible]

PRODUCT: MASTERGRAIN
FIBERGLASS DOOR

PART OR ASSEMBLY: HARDWARE 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

Z:\2023 FBC Drawings\MasterGrain\FL-21852 R10\FL-21852.20.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
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	-

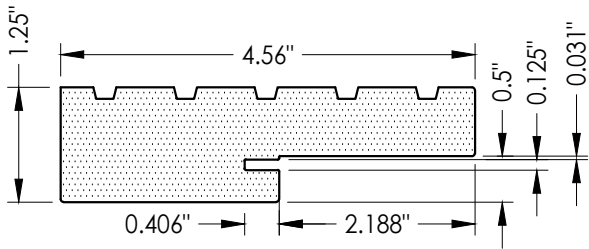
CONCRETE ANCHOR NOTES:

- 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:

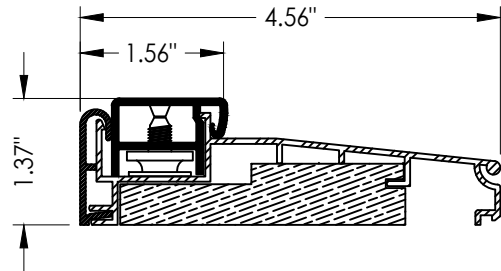
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
DeWALT ULTRAICON®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

WOOD SCREW INSTALLATION NOTES:

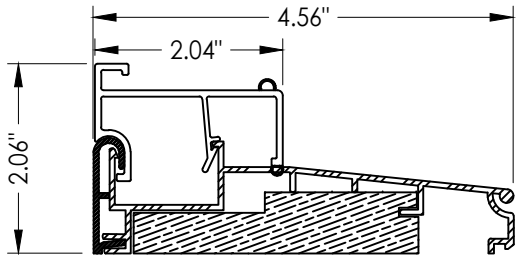
- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



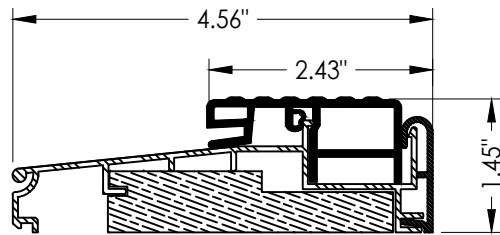
1 COMPOSITE JAMB
WORLDWIDE



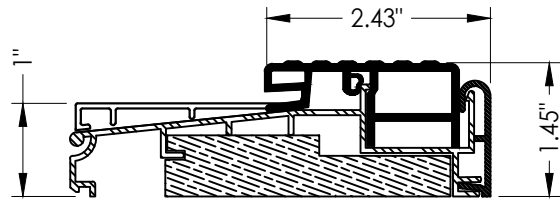
13 INSWING THRESHOLD
WORLDWIDE



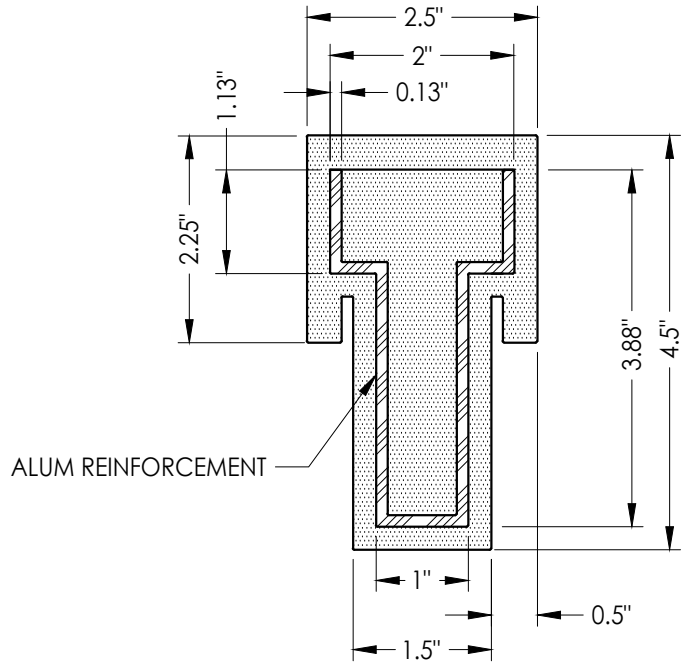
15 INSWING THRESHOLD w/ SIDELITE ADAPTER
WORLDWIDE



14 OUTSWING THRESHOLD
WORLDWIDE



16 OUTSWING THRESHOLD w/ SIDELITE ADAPTER
WORLDWIDE



3 COMPOSITE MULLION
WORLDWIDE

Documents Prepared By:
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:
BILL OF MATERIALS
& COMPONENTS

NO.	DATE	REVISIONS
3	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
2	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
1	7/09/20	UPDATE TO 7TH ED. (2020) FBC LFS

DATE: 08/16/18

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-21852.20

SHEET 12 OF 12