

Z:\2023 FBC Drawings\MasterGrain\FL-13320 R7\FL-13320.6.dwg

GLAZED FIBERGLASS DOUBLE DOOR

w/ or w/o SIDELITES

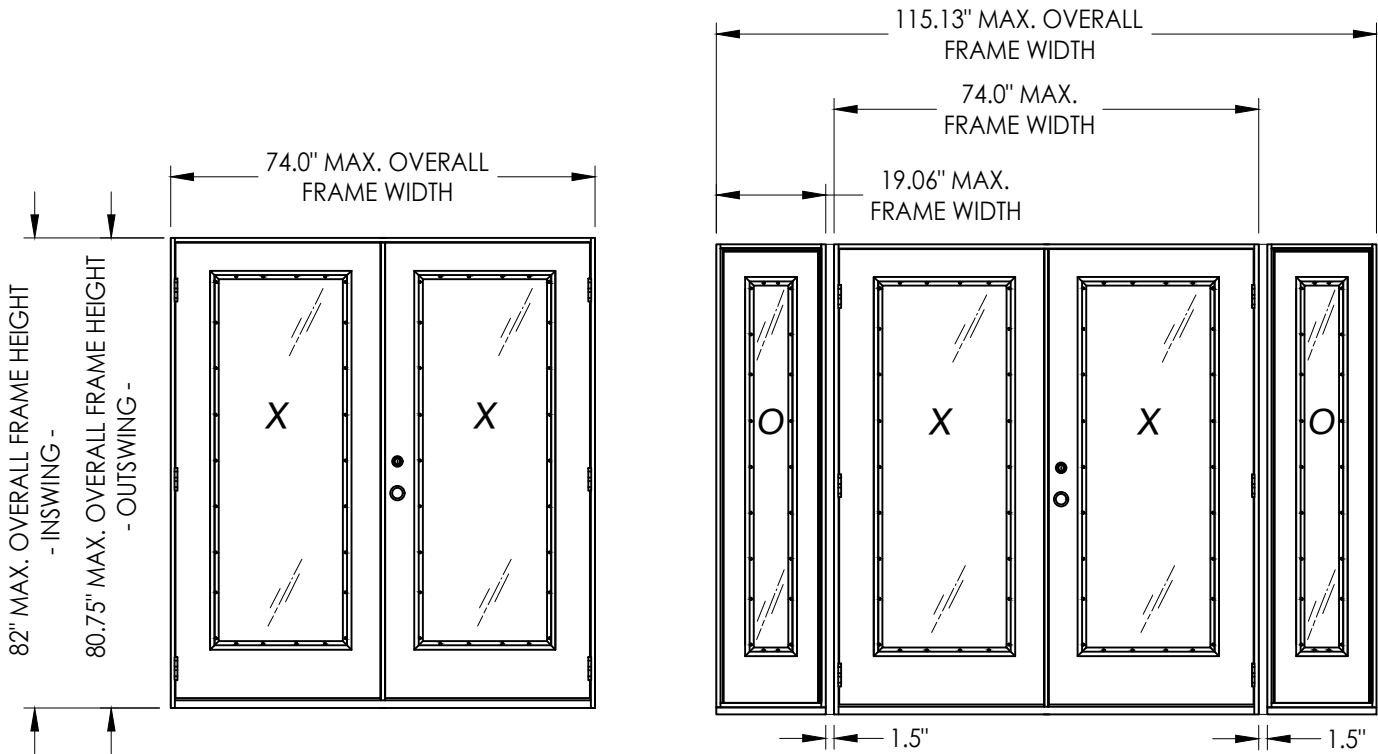
INSWING / OUTSWING

"NON-IMPACT"

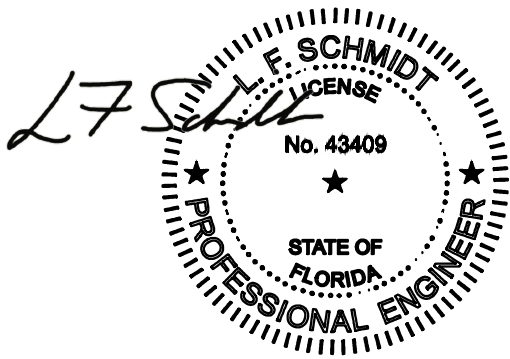
GENERAL NOTES

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 is required to be protected with an impact resistant covering that complies with FBC Sections 1609.1.2 & R301.2.1.2.
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 and glazing detail
3	Sidelite panel details and glazing detail
4	Elevations
5	Horizontal cross section
6	Vertical cross sections
7	Vertical cross sections
8	Buck and frame anchoring - (XX)
9	Buck and frame anchoring - (OXXO)
10	Bill of materials and components



CONFIGURATION	MAX. FRAME DIMENSION	MAX. D.L.O. DIMENSION	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
			POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XX	74.0" x 82.0"	21.13" x 63.13"	+55.0	-60.0	+55.0	-55.0
OXXO	95.13" x 82.0"	21.13" x 63.13"	+55.0	-60.0	+55.0	-55.0



Digitally signed
by Lyndon F
Schmidt
Date: 2026.07.01
15:34:52 -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

MASTERGRAIN
FIBERGLASS DOOR

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

6	7/01/26	UPDATE TO 9TH ED. (2026)	FBC	LFS
5	7/01/23	UPDATE TO 8TH ED. (2023)	FBC	LFS
4	7/08/20	UPDATE TO 7TH ED. (2020)	FBC	LFS
NO.	DATE	REVISIONS		

DATE: 11/30/09

SCALE: N.T.S.

DWG. BY: AP

CHK. BY: LFS

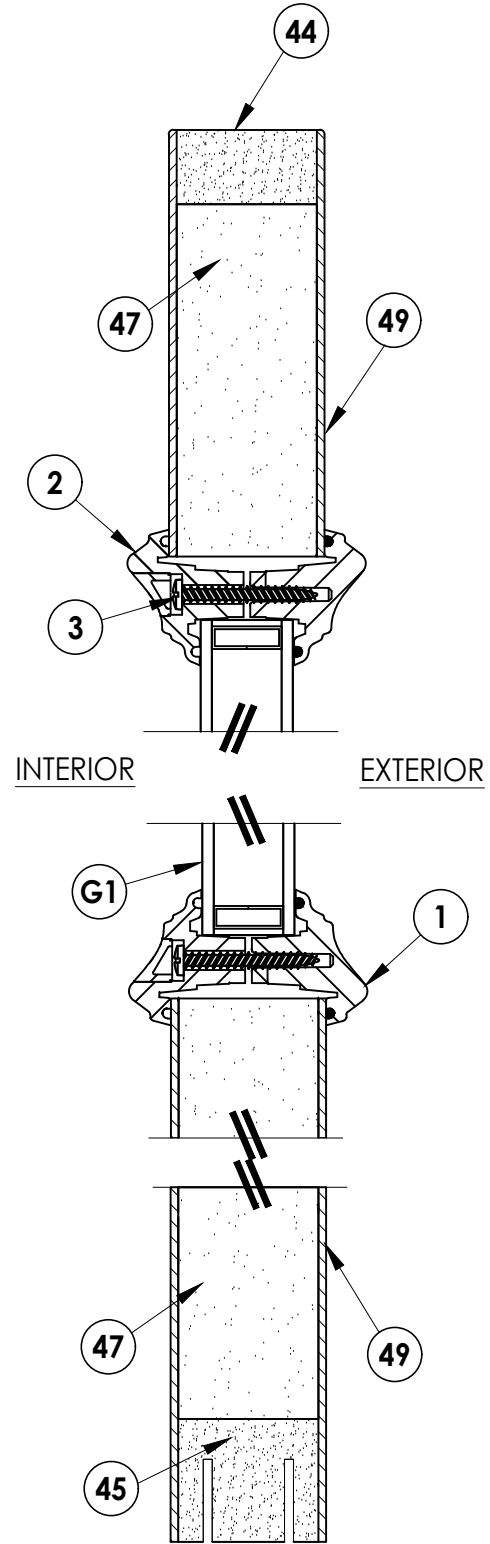
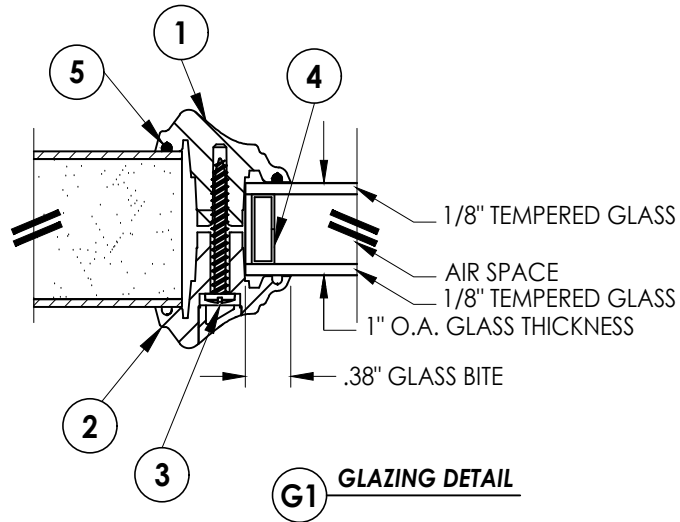
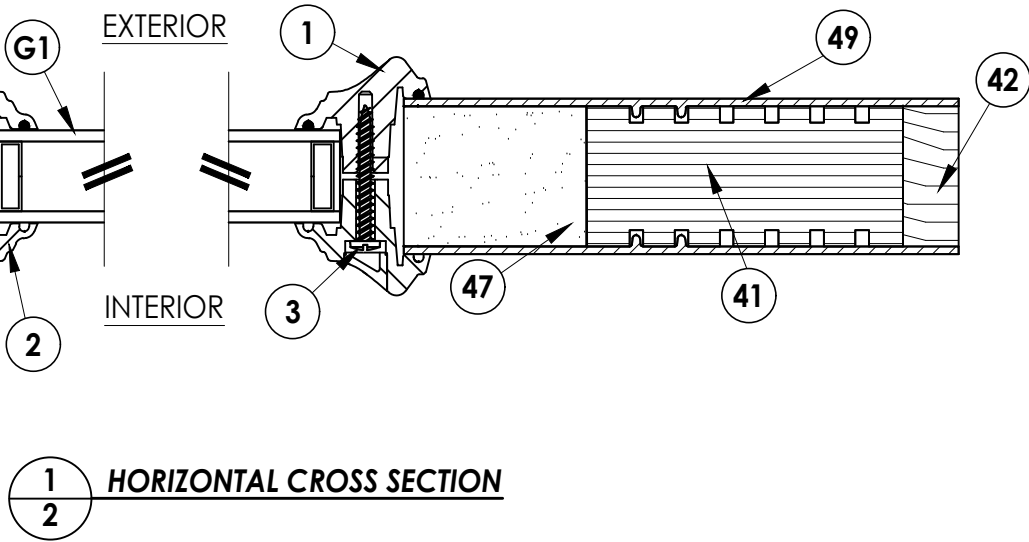
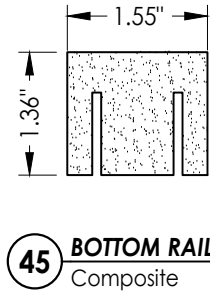
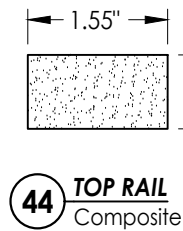
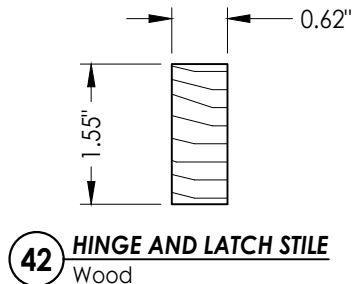
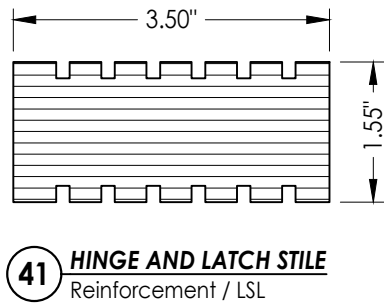
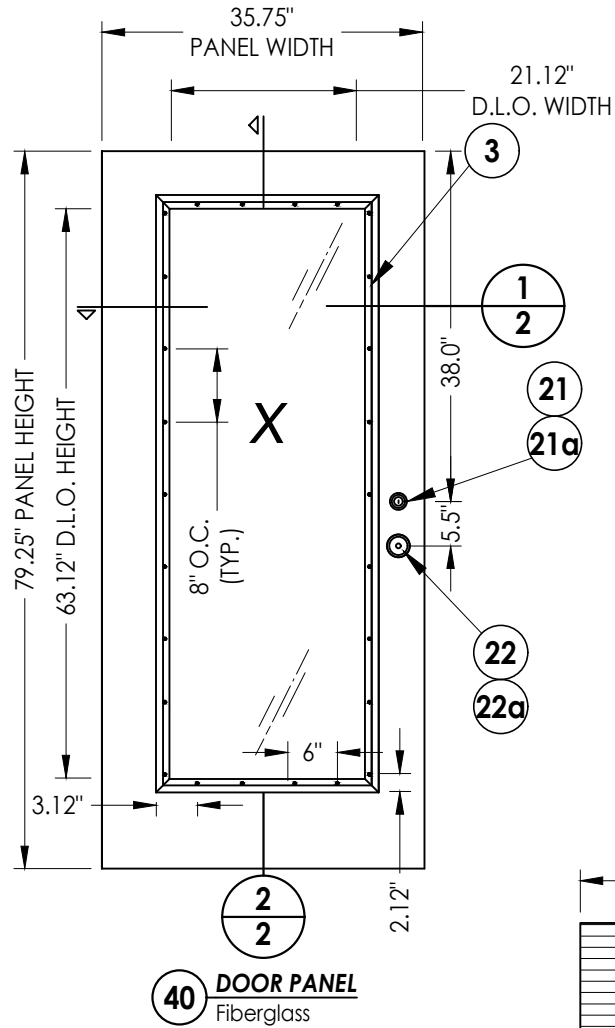
DRAWING NO.:
FL-13320.6

SHEET 1 OF 10

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

© 2008 R.W. BUILDING CONSULTANTS INC.

Z:\2023 FBC Drawings\MasterGrain\FL-13320 R7\FL-13320.6.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:
DOOR PANEL DETAILS
AND GLAZING DETAIL

NO.	DATE	REVISIONS
6	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
5	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
4	7/08/20	UPDATE TO 7TH ED. (2020) FBC LFS
NO.	DATE	BY

DATE: 11/30/09

SCALE: N.T.S.

DWG. BY: AP

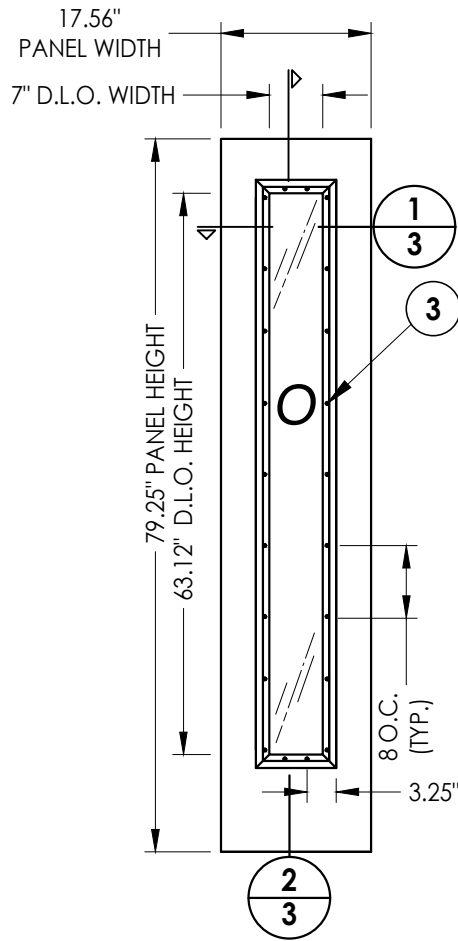
CHK. BY: LFS

DRAWING NO.:

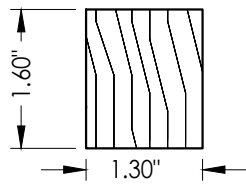
FL-13320.6

SHEET 2 OF 10

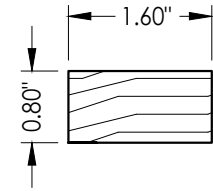
Z:\2023 FBC Drawings\MasterGrain\FL-13320 R7\FL-13320.6.dwg



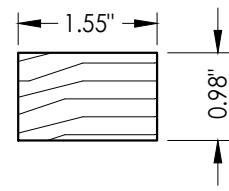
50 SIDELITE PANEL
Fiberglass



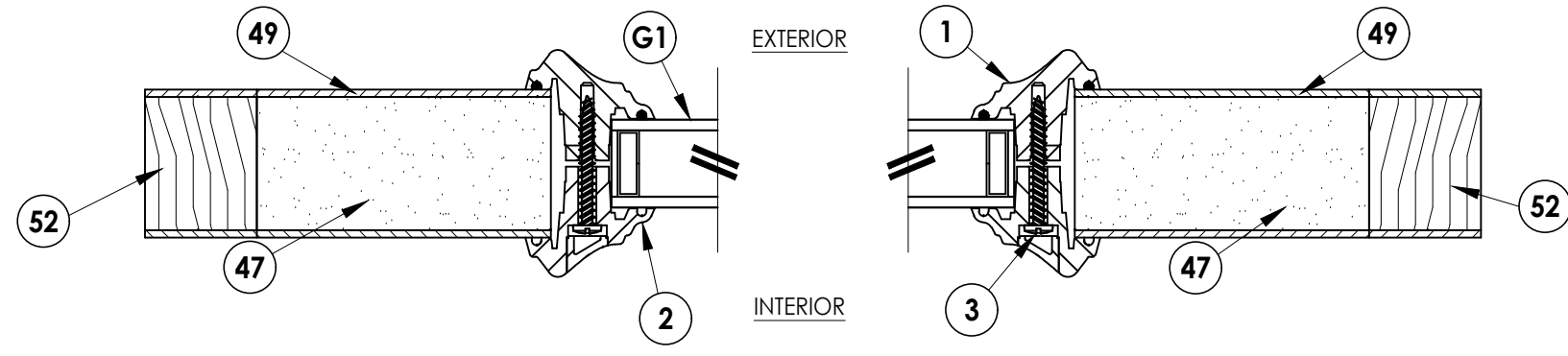
52 SIDELITE STILE
Wood



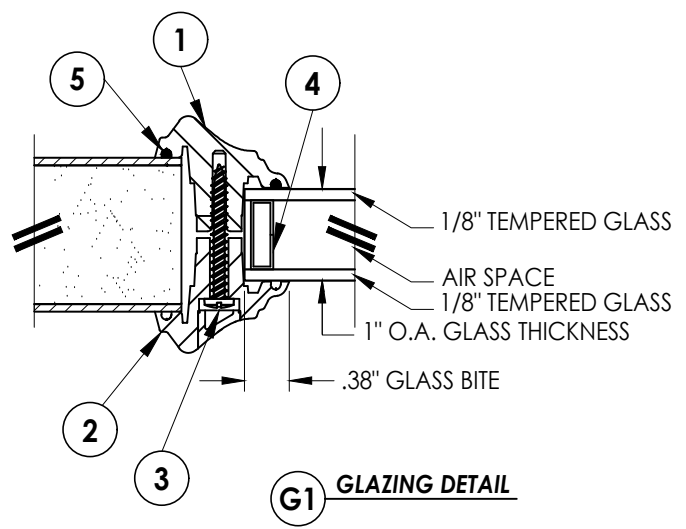
53 SIDELITE BOTTOM RAIL
Wood



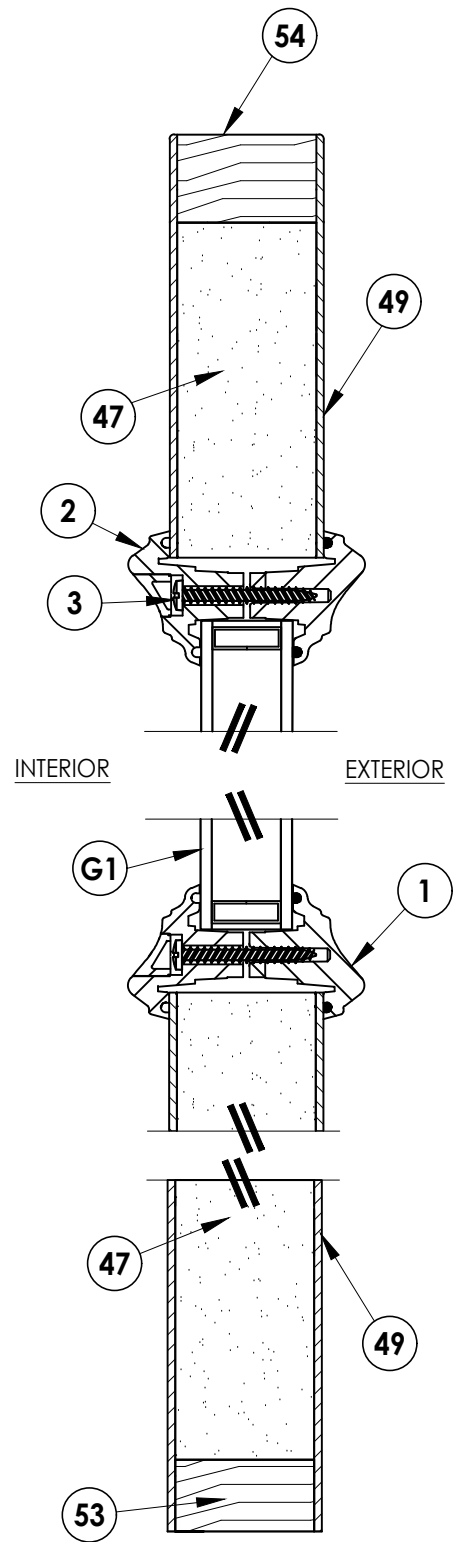
54 SIDELITE TOP RAIL
Wood



1/3 HORIZONTAL CROSS SECTION



G1 GLAZING DETAIL



2/3 VERTICAL CROSS SECTION

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: SIDELITE PANEL DETAILS AND GLAZING DETAIL			
6	7/01/26	UPDATE TO 9TH ED.	(2026)	FBC	LFS		
5	7/01/23	UPDATE TO 8TH ED.	(2023)	FBC	LFS		
4	7/08/20	UPDATE TO 7TH ED.	(2020)	FBC	LFS		
NO.	DATE					BY	
							REVISIONS
DATE: 11/30/09							
SCALE: N.T.S.							
DWG. BY: AP							
CHK. BY: LFS							
DRAWING NO.: FL-13320.6							
SHEET 3 OF 10							

A diagram of a four-door puzzle. The doors are arranged in a row. The first and fourth doors are narrow and contain the letter 'O'. The second and third doors are wider and contain the letter 'X'. Each door has a handle on its right side. Above the first door is a circle with '1' over '7'. Above the second door is a circle with '1' over '6'. Above the third door is a circle with '2' over '6'. Above the fourth door is a circle with '5' over '5', a circle with '4' over '5', and a circle with '3' over '5'. Below the first door is a circle with '3' over '7'. Below the second door is a circle with '5' over '6' and a circle with '3' over '6'. Below the third door is a circle with '4' over '6'. Below the fourth door is a circle with '4' over '7'. Arrows point from the circles to the handles: from the top-left circle to the first handle, from the top-middle circle to the second handle, from the top-right circle to the third handle, and from the bottom-right circle to the fourth handle.

6	7/01/26	UPDATE TO 9TH ED.	(2026)	FBC	LFS
5	7/01/23	UPDATE TO 8TH ED.	(2023)	FBC	LFS
4	7/08/20	UPDATE TO 7TH ED.	(2020)	FBC	LFS
NO.	DATE				BY
REVISIONS					

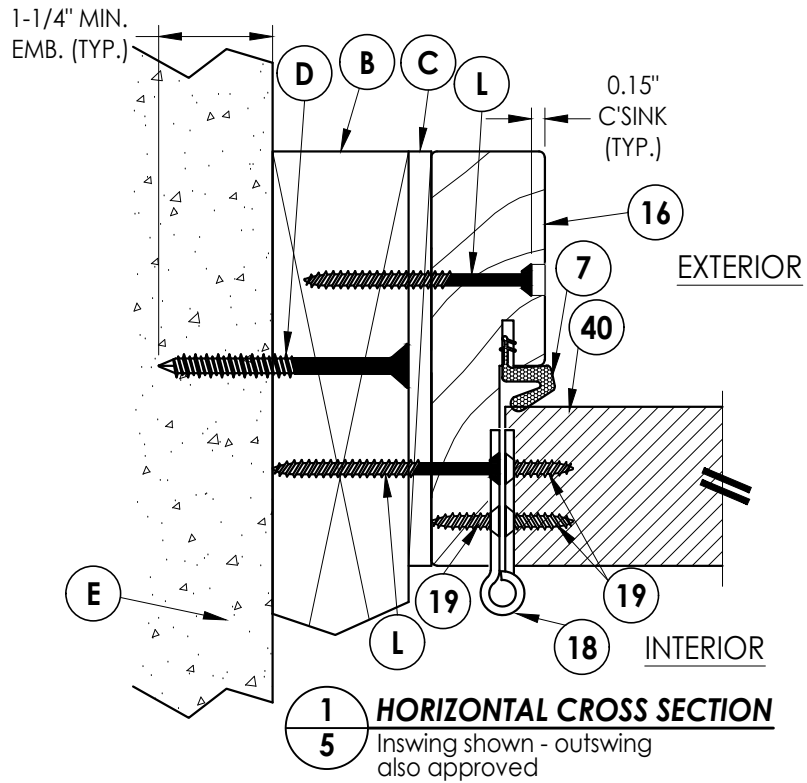
DATE:	11/30/09
SCALE:	N.T.S.
DWG. BY:	AP
CHK. BY:	LFS
DRAWING NO.:	FL-13320.6
SHEET	4 OF 10

PART OR ASSEMBLY:

ELEVATIONS

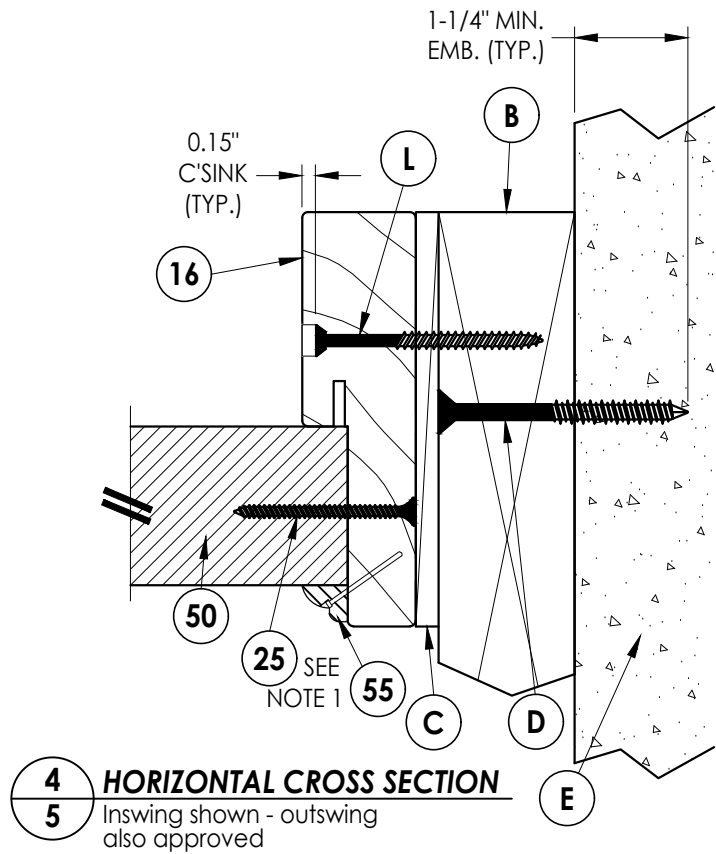
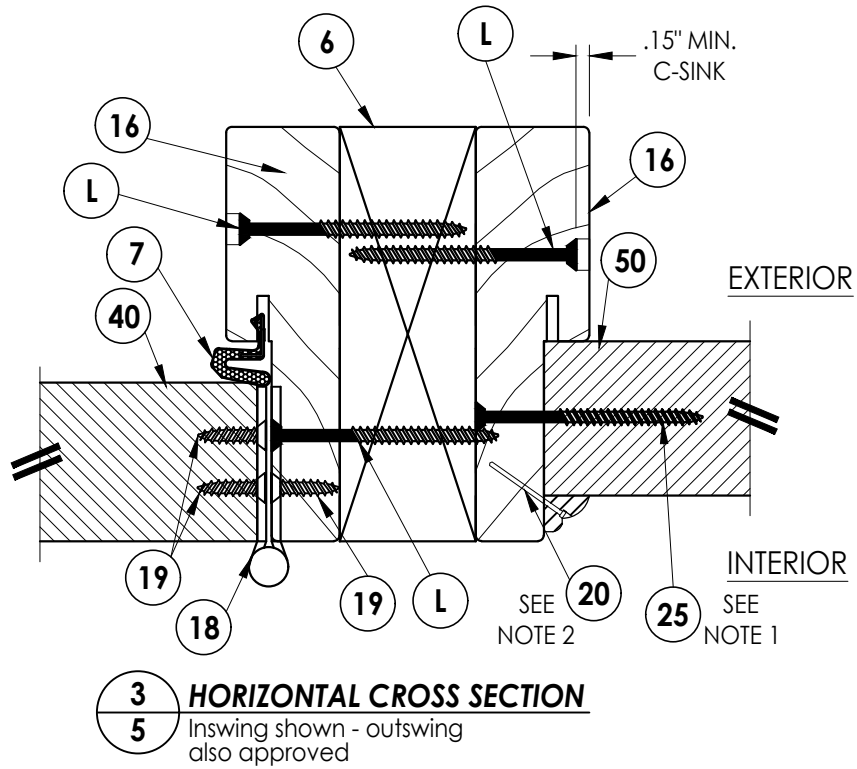
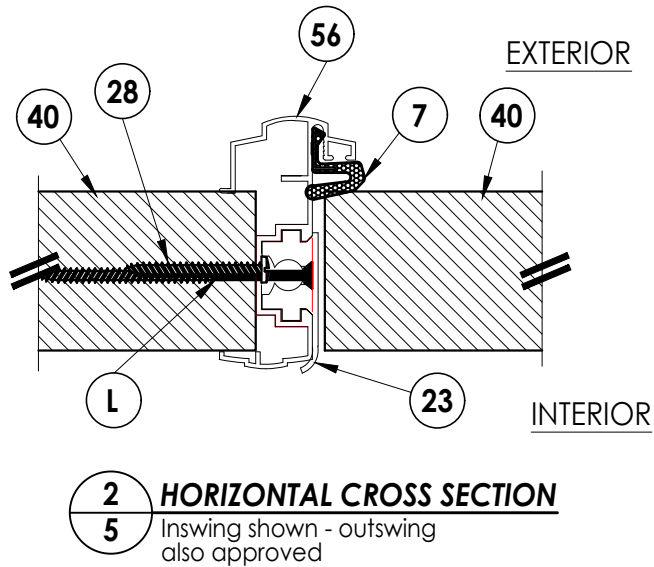
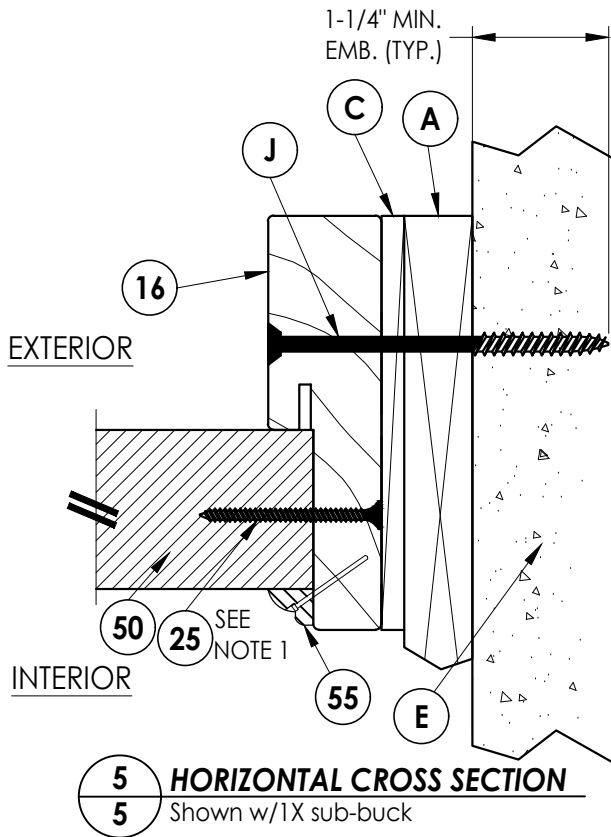
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

Z:\2023 FBC Drawings\MasterGrain\FL-13320 R7\FL-13320.6.dwg



NOTE:

1. Sidelite ass'y fastener; 6" from each end and 6 more screws equally spaced between. (8 screws total per jamb.)
2. Trim secured with 1" Brad Nail @ 6" O.C. (TYP.).



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 CROSS SECTIONS

NO.	DATE	REVISIONS			
		BY	DATE	DESCRIPTION	DATE
6	7/01/26	UPDATE TO 9TH ED. (2026)	FBC	LFS	
5	7/01/23	UPDATE TO 8TH ED. (2023)	FBC	LFS	
4	7/08/20	UPDATE TO 7TH ED. (2020)	FBC	LFS	

DATE: 11/30/09

SCALE: N.T.S.

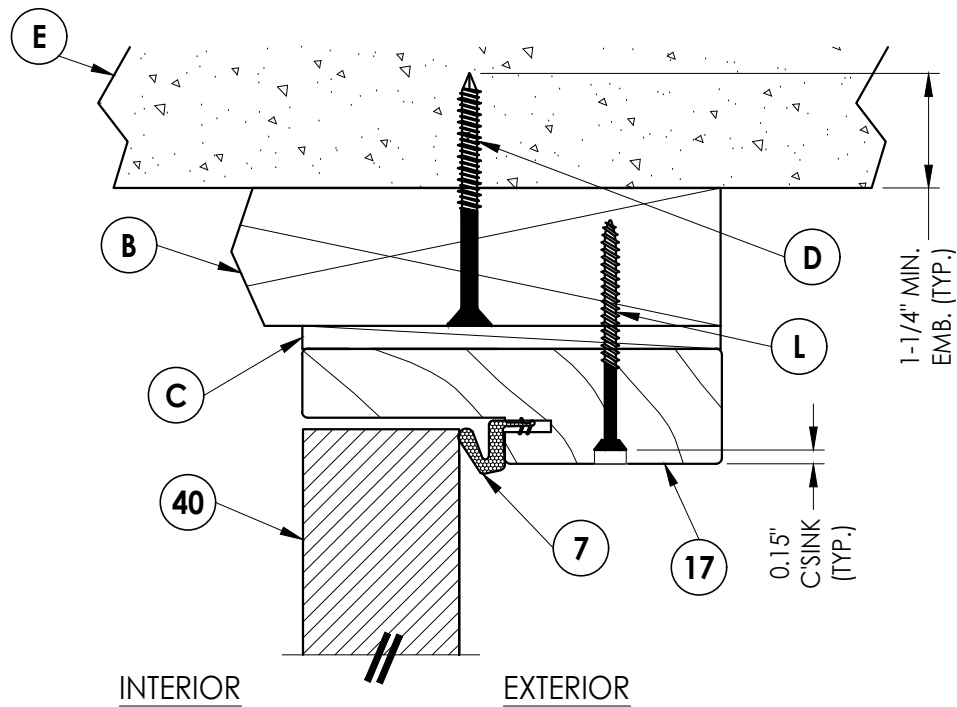
DWG. BY: AP

CHK. BY: LFS

DRAWING NO.: FL-13320.6

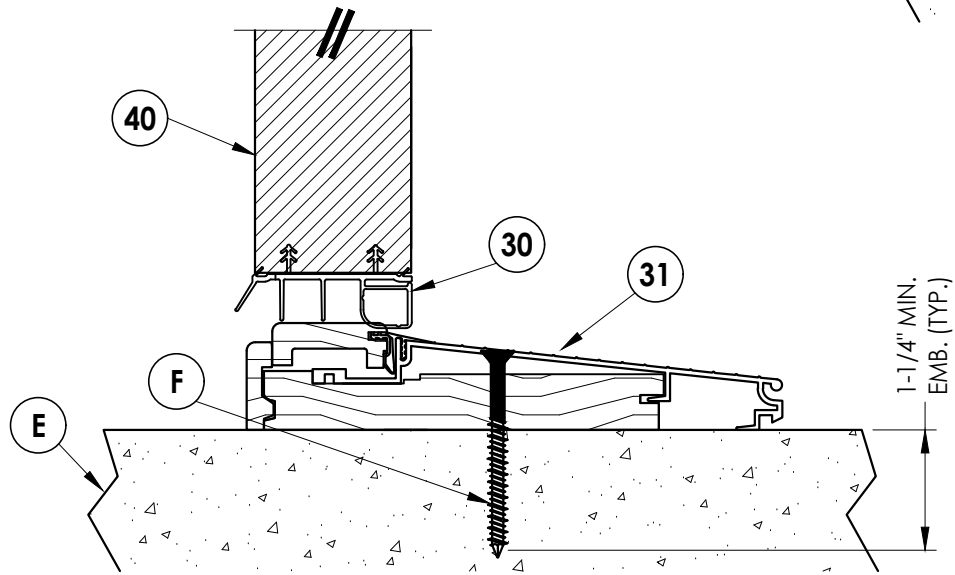
SHEET 5 OF 10

Z:\2023 FBC Drawings\MasterGrain\FL-13320 R7\FL-13320.6.dwg

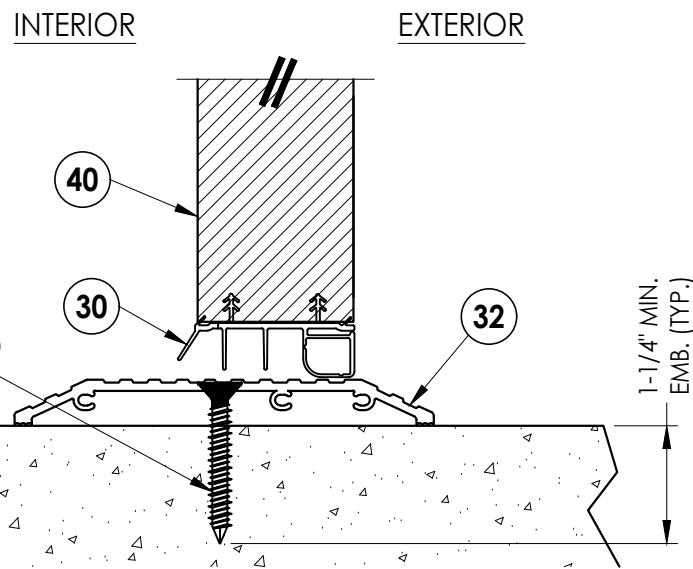


1
6 **VERTICAL CROSS SECTION**
Inswing shown - outswing
also approved

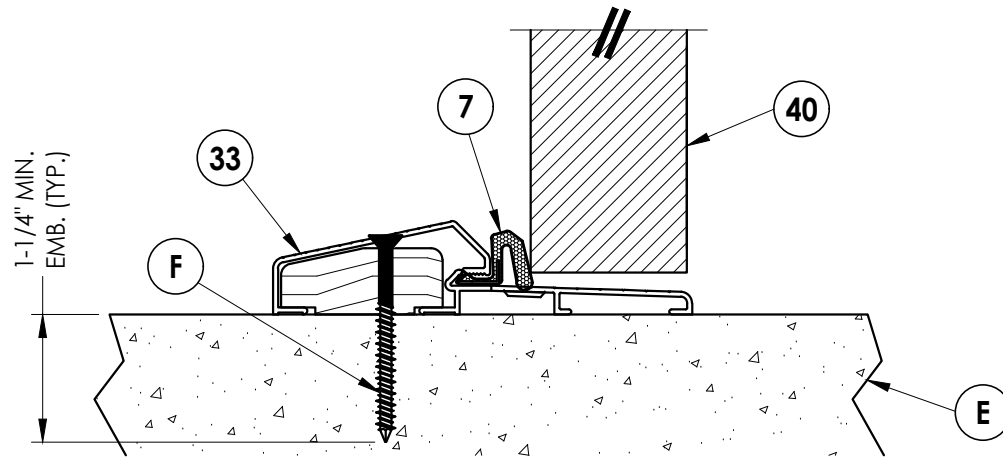
INTERIOR EXTERIOR



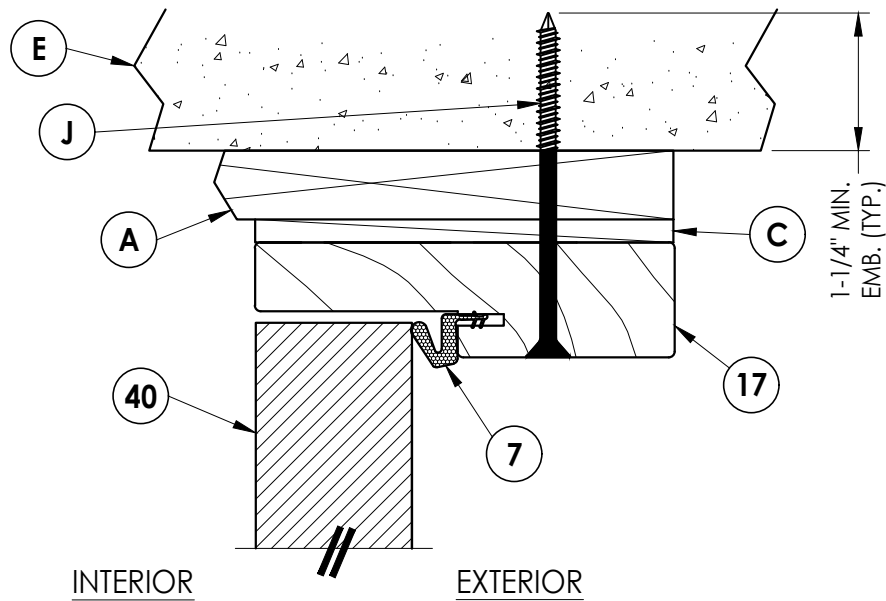
3
6 **VERTICAL CROSS SECTION**
Inswing configuration



5
6 **VERTICAL CROSS SECTION**
Shown w/ ADA threshold



4
6 **VERTICAL CROSS SECTION**
Outswing configuration



2
6 **VERTICAL CROSS SECTION**
Shown w/ 1X sub-buck

INTERIOR EXTERIOR

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

NO.	DATE	REVISIONS
6	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
5	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
4	7/08/20	UPDATE TO 7TH ED. (2020) FBC LFS
3		
2		
1		

DATE: 11/30/09

SCALE: N.T.S.

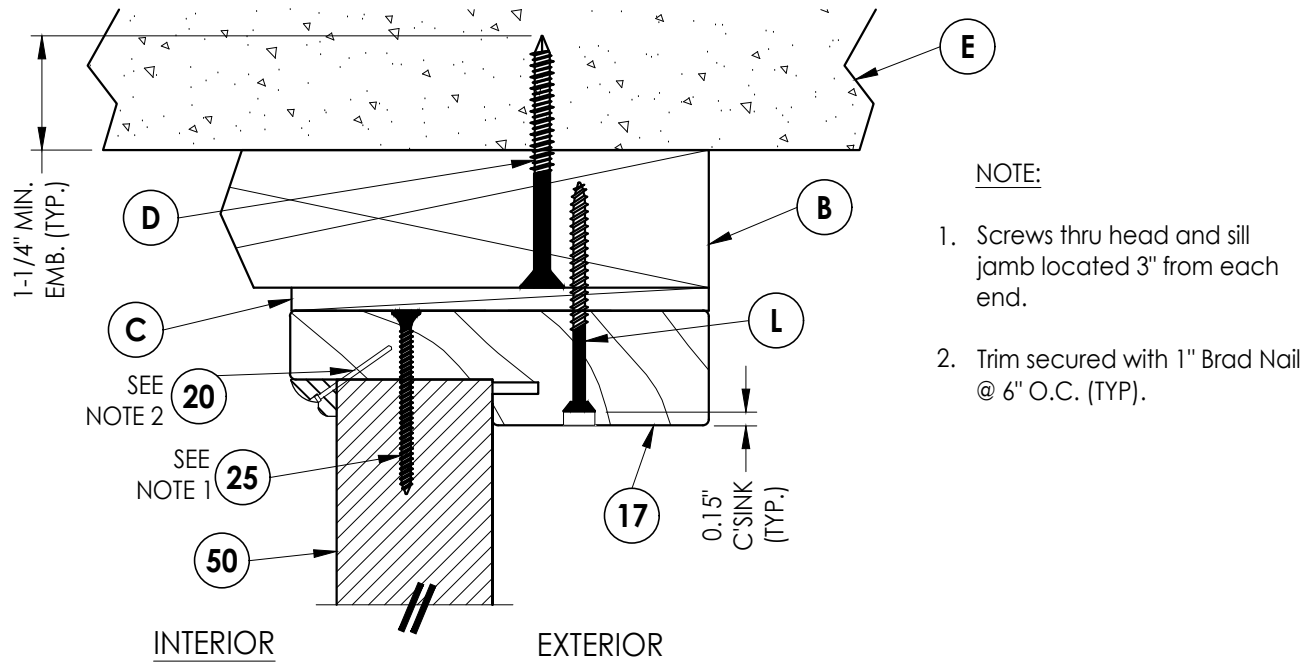
DWG. BY: AP

CHK. BY: LFS

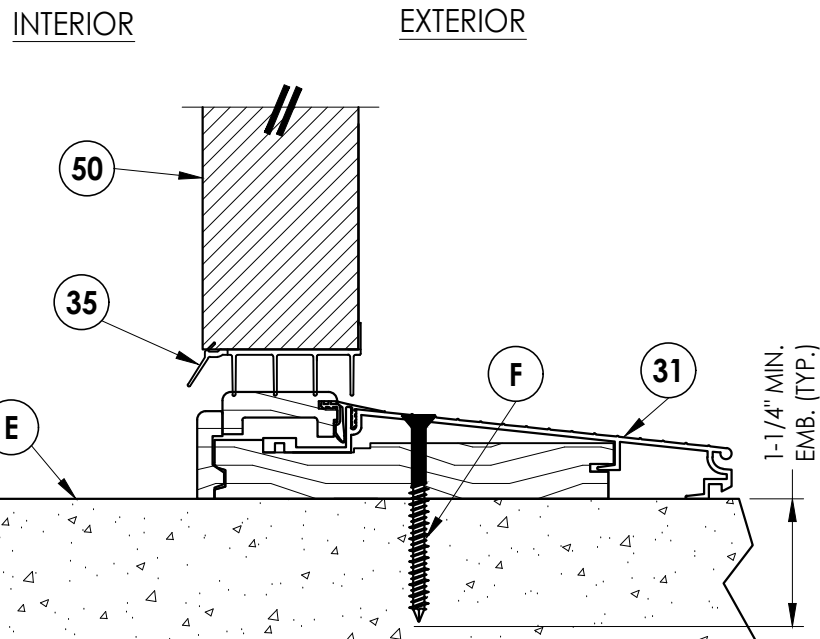
DRAWING NO.: FL-13320.6

SHEET 6 OF 10

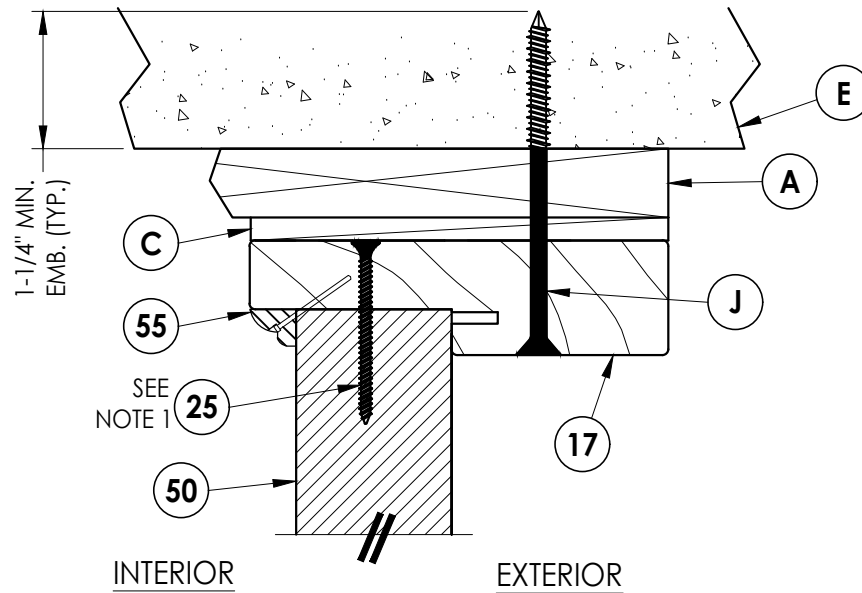
Z:\2023 FBC Drawings\MasterGrain\FL-13320 R7\FL-13320.6.dwg



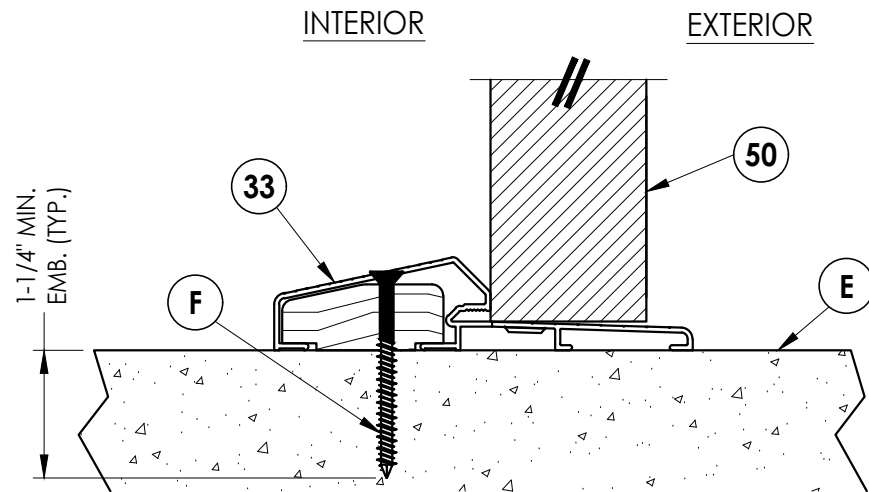
1
7 **VERTICAL CROSS SECTION**
Inswing shown - outswing
also approved



3
7 **VERTICAL CROSS SECTION**
Inswing configuration



2
7 **VERTICAL CROSS SECTION**
Shown w/1X sub-buck



4
7 **VERTICAL CROSS SECTION**
Outswing configuration

NOTE:

1. Screws thru head and sill jamb located 3" from each end.
2. Trim secured with 1" Brad Nail @ 6" O.C. (TYP).

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

NO.	DATE	REVISIONS
6	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
5	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
4	7/08/20	UPDATE TO 7TH ED. (2020) FBC LFS

DATE: 11/30/09

SCALE: N.T.S.

DWG. BY: AP

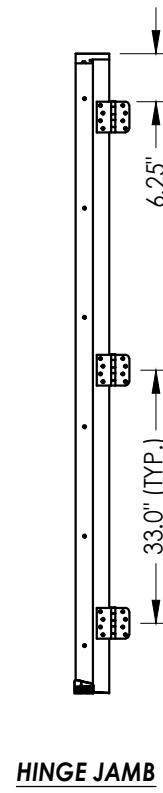
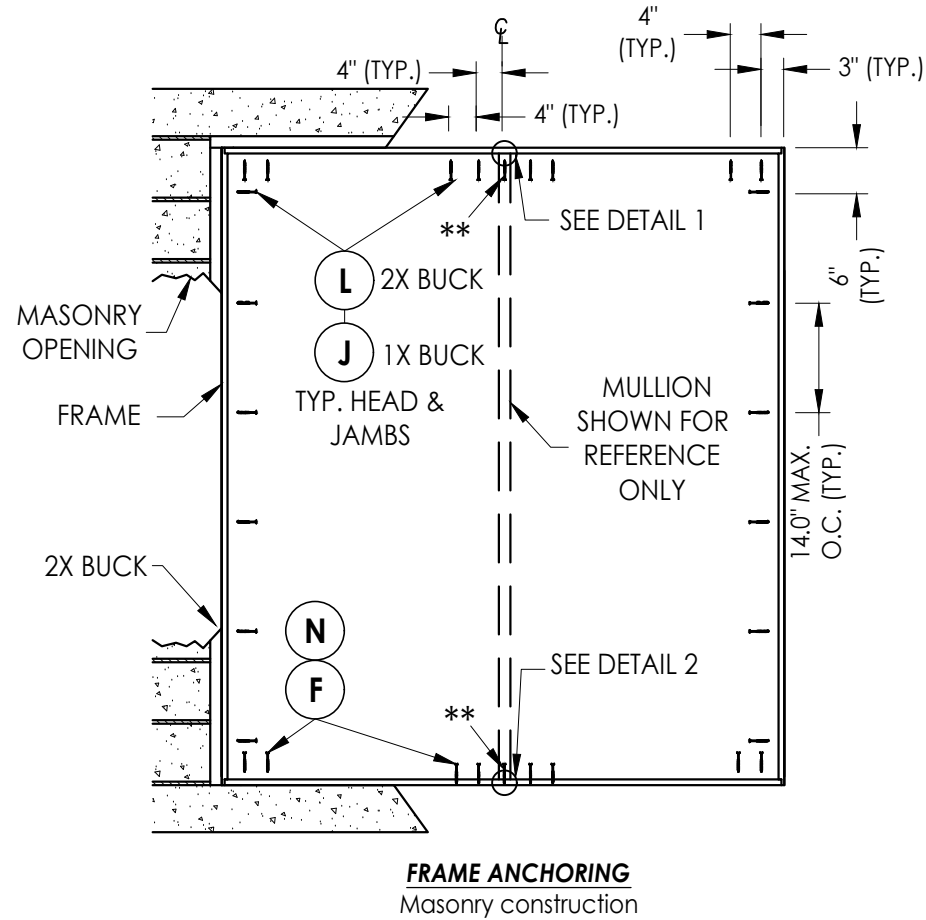
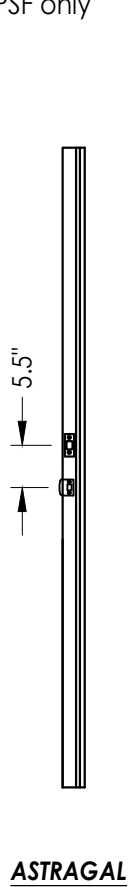
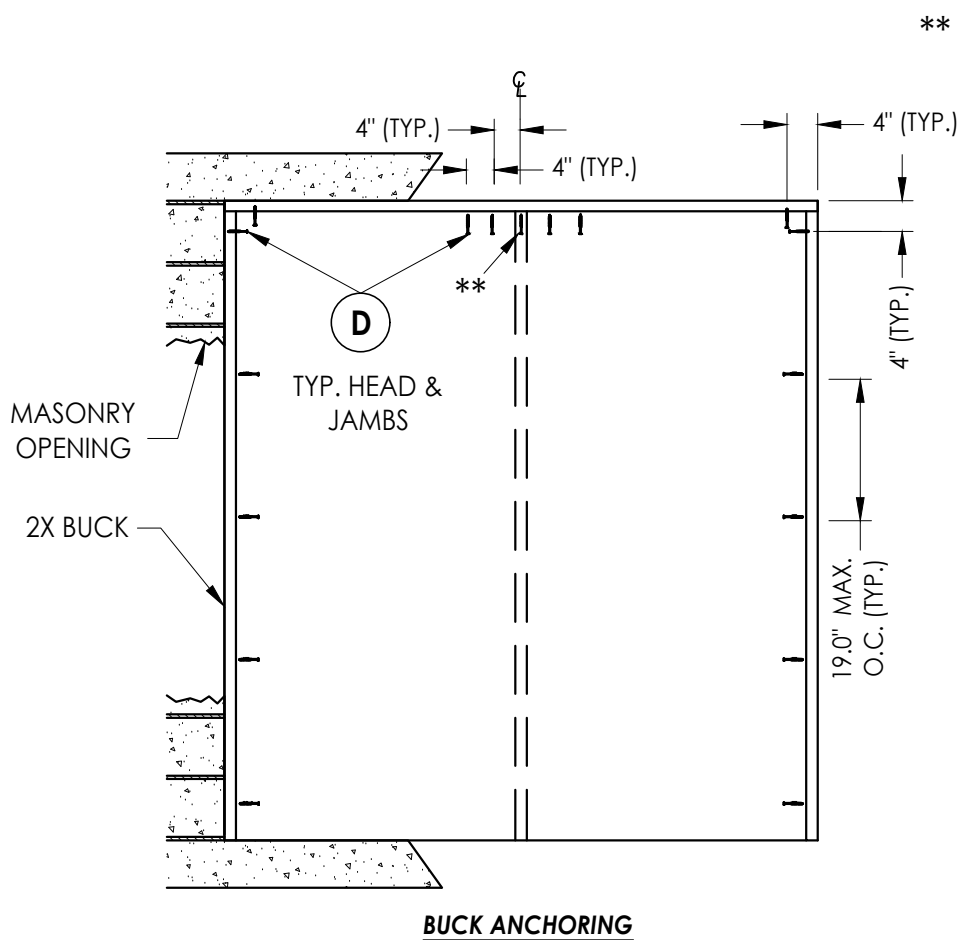
CHK. BY: LFS

DRAWING NO.:

FL-13320.6

SHEET 7 OF 10

Z:\2023 FBC Drawings\MasterGrain\FL-13320 R7\FL-13320.6.dwg



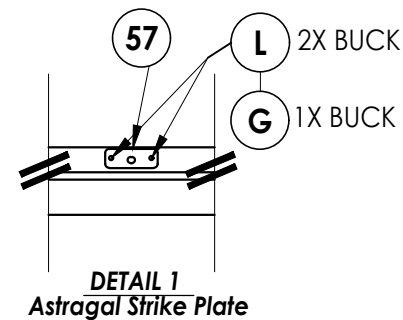
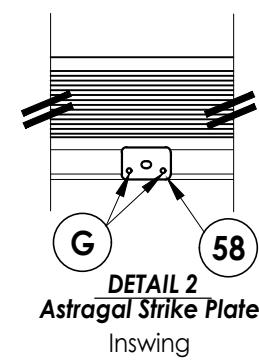
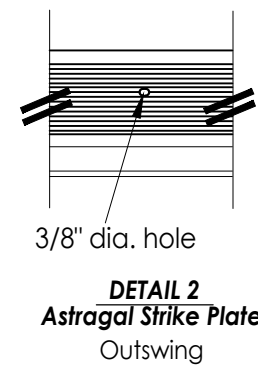
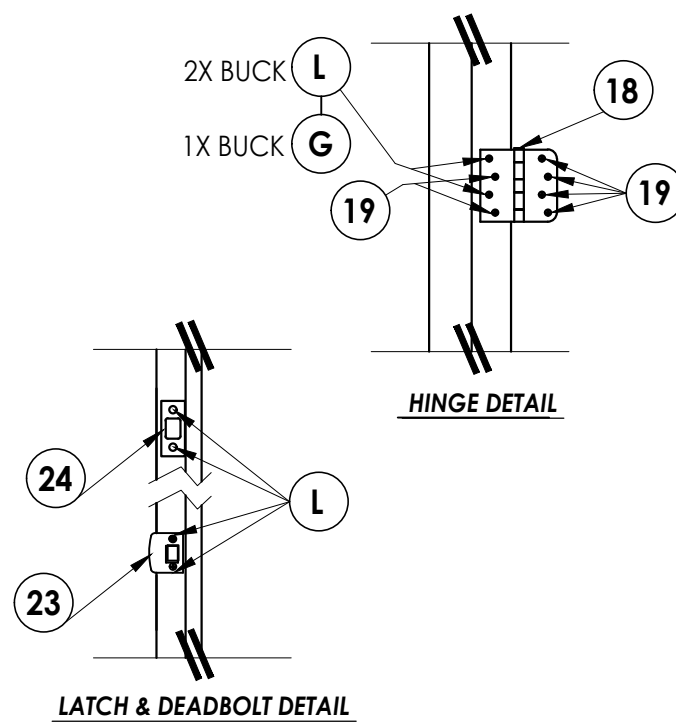
CONCRETE ANCHOR NOTES:

- 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 ULTRACON®	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.



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

PRODUCT:
MASTERGRAIN
FIBERGLASS DOOR

PART OR ASSEMBLY:
BUCK & FRAME ANCHORING
(XX)

NO.	DATE	REVISIONS	BY
6	7/01/26	UPDATE TO 9TH ED. (2026) FBC	LFS
5	7/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS
4	7/08/20	UPDATE TO 7TH ED. (2020) FBC	LFS

DATE: 11/30/09

SCALE: N.T.S.

DWG. BY: AP

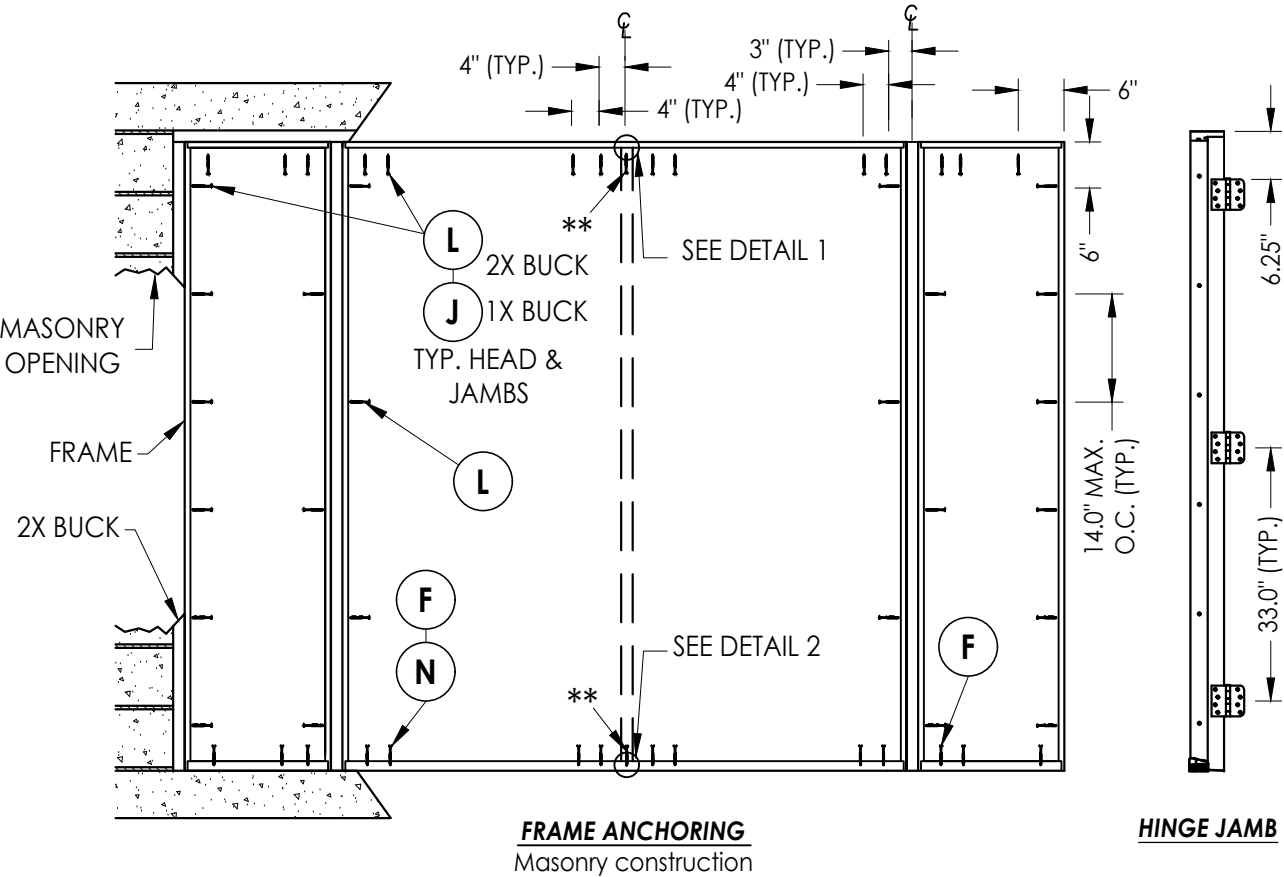
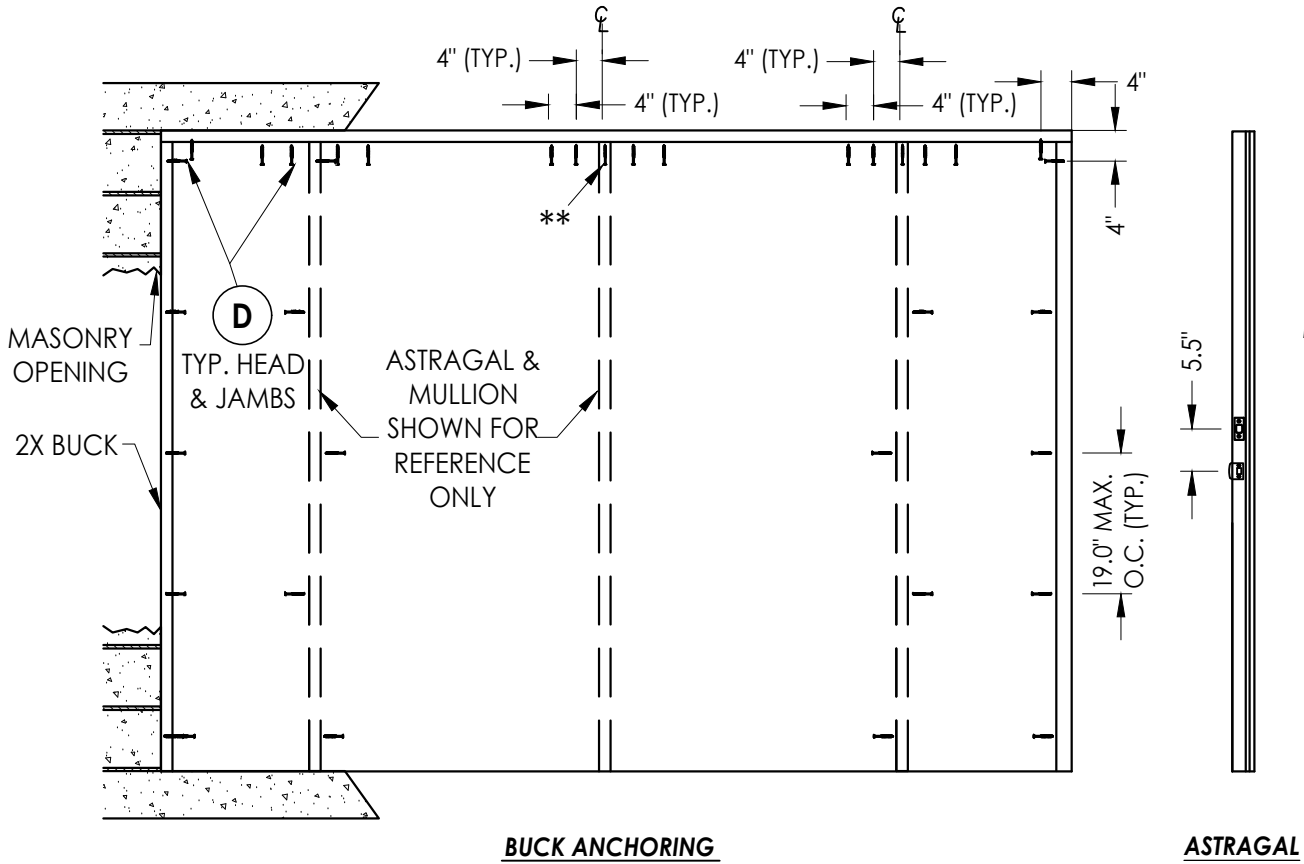
CHK. BY: LFS

DRAWING NO.:

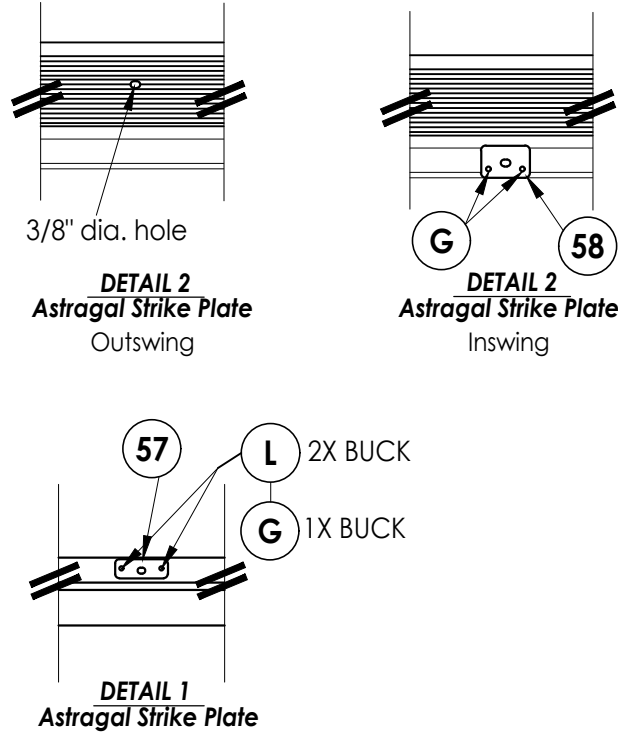
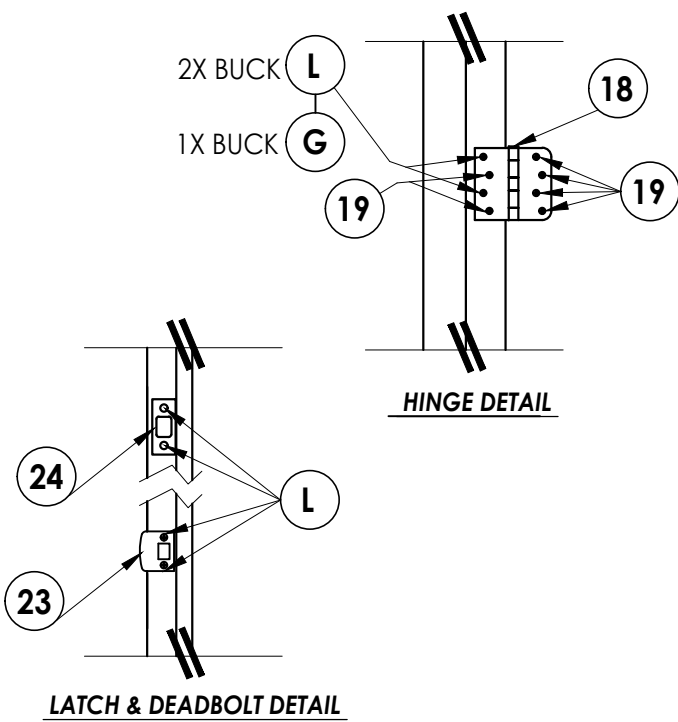
FL-13320.6

SHEET 8 OF 10

Z:\2023 FBC Drawings\MasterGrain\FL-13320 R7\FL-13320.6.dwg



** Additional anchor required
for DP > 50 PSF only



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 ULTRACON®	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.

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

PRODUCT:
MASTERGRAIN
FIBERGLASS DOOR

PART OR ASSEMBLY:
BUCK & FRAME ANCHORING
(OXXO)

NO.	DATE	REVISIONS
6	7/01/26	UPDATE TO 9TH ED. (2026) FBC LFS
5	7/01/23	UPDATE TO 8TH ED. (2023) FBC LFS
4	7/08/20	UPDATE TO 7TH ED. (2020) FBC LFS
3		BY

DATE: 11/30/09

SCALE: N.T.S.

DWG. BY: AP

CHK. BY: LFS

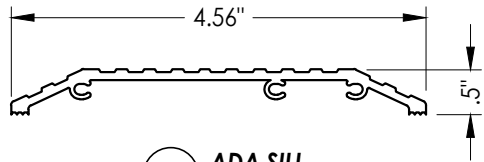
DRAWING NO.:

FL-13320.6

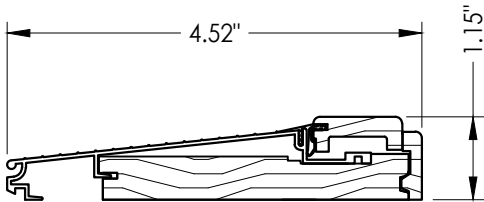
SHEET 9 OF 10

Z:\2023 FBC Drawings\MasterGrain\FL-13320 R7\FL-13320.6.dwg

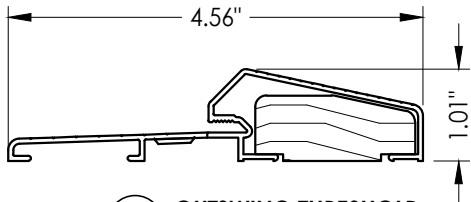
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD
B	2X BUCK SG >= 0.55	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	1/4" X 2-1/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
G	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL
H	1/4" X 3-1/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
J	1/4" X 3-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
K	#9 X 2-1/2" PFH WS	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL
N	1/4" X 1-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
1	FEMALE LITE FRAME - MASTERGRAIN	POLYPROPYLENE
2	MALE LITE FRAME - MASTERGRAIN	POLYPROPYLENE
3	#8 X 1-3/4" PANHEAD SMS (LIGHT FRAME SCREW)	STEEL
4	ALUMINUM SPACER SYSTEM	ALUMINUM
5	WEATHER SEAL / SILICONE MG #2500	SILICONE
6	2X MULLION SG > = 0.55	WOOD
7	WEATHER STRIP	FOAM
12	#10 X 2-1/4" PFH SCREW	STEEL
16	SIDE JAMB SG > = 0.42	WOOD
17	HEAD JAMB SG > = 0.42	WOOD
18	4" X 4" HINGE MIN 0.1" THICK	STEEL
19	#10 X 3/4" PFH WS	STEEL
20	1" BRAD NAIL	STEEL
21	DEADBOLT - KWIKSET SERIES 660	STEEL



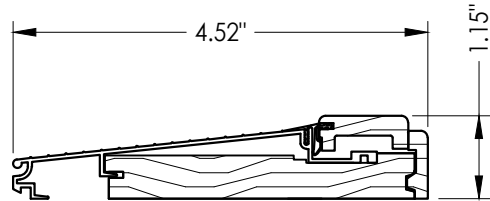
32 ADA SILL



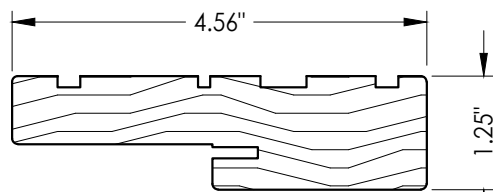
31 INSWING THRESHOLD



33 OUTSWING THRESHOLD



34 SIDELITE THRESHOLD



16 17 HEAD & SIDE Jamb

21A	DEADBOLT - COPPER CREEK E-SERIES	STEEL
22	KNOB - KWIKSET SERIES	STEEL
22A	KNOB - COPPER CREEK E-SERIES	STEEL
23	LATCH STRIKEPLATE	STEEL
24	DEADBOLT STRIKE PLATE	STEEL
25	#8 X 2-1/2" PFH WOOD SCREW	STEEL
28	#8 X 1-1/2" PPH SMS	STEEL
30	DOOR BOTTOM SWEEP	VINYL
31	INSWING THRESHOLD	ALUM/COMP.
32	ADA THRESHOLD	ALUM.
33	OUTSWING THRESHOLD	ALUM./WOOD
34	SIDELITE THRESHOLD	ALUM./COMP.
35	SIDELITE SWEEP	VINYL
40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
41	HINGE AND LATCH REINFORCMENT	WOOD
42	HINGE AND LATCH STILE SG > = 0.42	WOOD
44	TOP RAIL	COMP.
45	BOTTOM RAIL	COMP.
47	POLYSTYRENE FOAM	POLYSTYRENE
49	FIBERGLASS SKIN 0.08" MIN. THICKNESS	FIBERGLASS
50	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
52	SIDELITE STILE SG > = 0.42	WOOD
53	SIDELITE BOTTOM RAIL SG > = 0.42	WOOD
54	SIDELITE TOP RAIL SG > = 0.42	WOOD
55	SIDELITE TRIM	WOOD
56	ASTRAGAL (IMPERIAL)	ALUMINUM
57	ASTRAGAL TOP STRIKE PLATE	STEEL
58	ASTRAGAL BOTTOM STRIKE PLATE	STEEL

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:
BILL OF MATERIALS

NO.	DATE	REVISIONS
6	7/01/26	UPDATE TO 9TH ED. (2026) FBC
5	7/01/23	UPDATE TO 8TH ED. (2023) FBC
4	7/08/20	UPDATE TO 7TH ED. (2020) FBC

DATE: 11/30/09

SCALE: N.T.S.

DWG. BY: AP

CHK. BY: LFS

DRAWING NO.:
FL-13320.6

SHEET 10 OF 10