

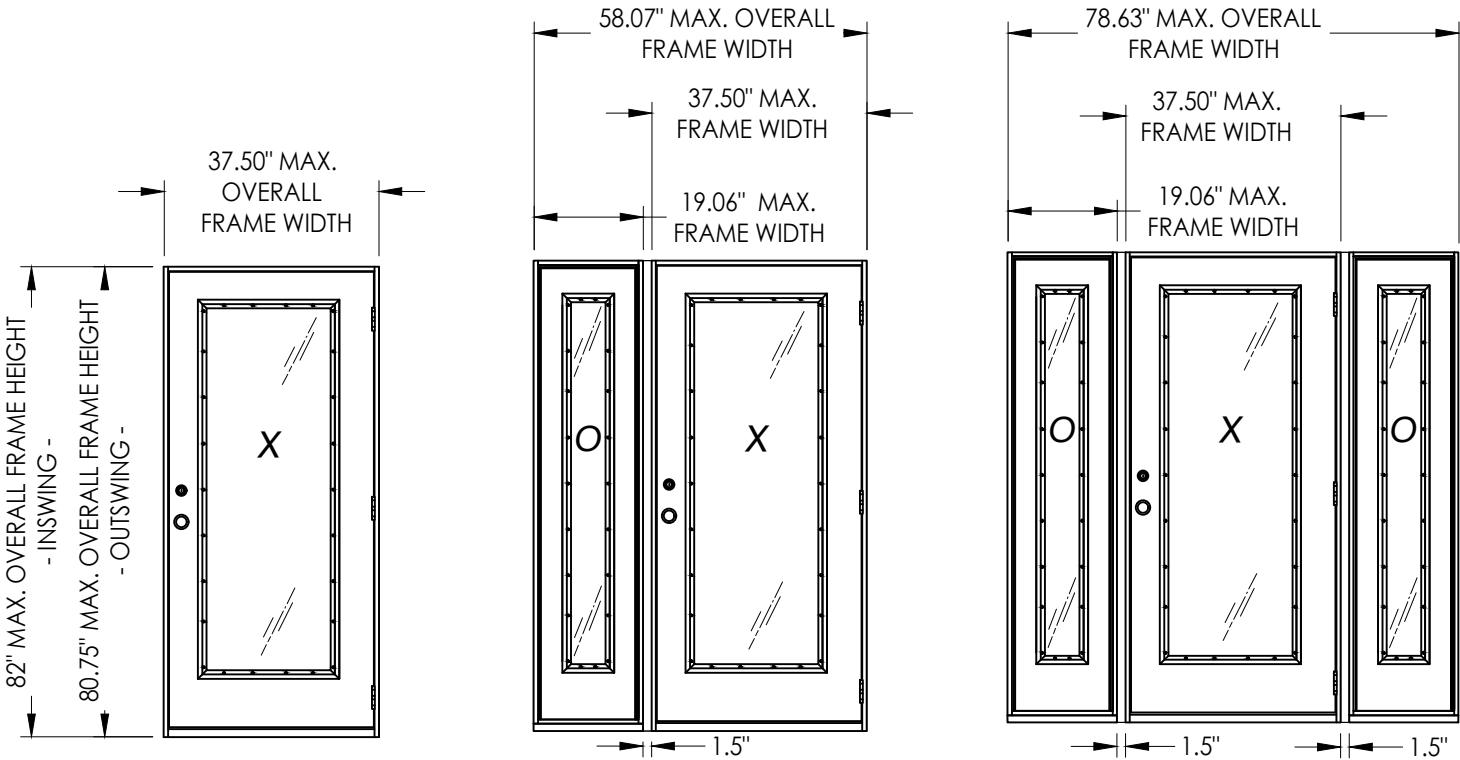
Z:\2023 FBC Drawings\MasterGrain\FL-13320 R7\FL-13320.5.dwg

GLAZED FIBERGLASS SINGLE DOOR
w/ or w/o SIDELITES
INSWING / OUTSWING
"NON-IMPACT"

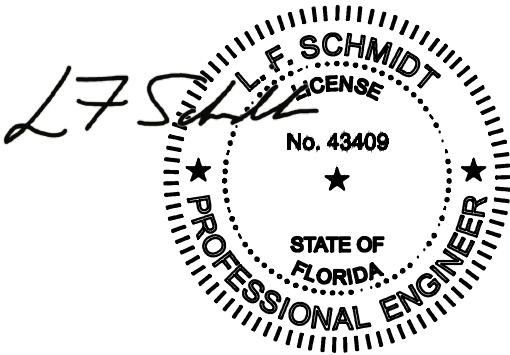
GENERAL NOTES

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	Horizontal cross section
7	Vertical cross sections
8	Vertical cross sections
9	Buck and frame anchoring - (X)
10	Buck and frame anchoring - (OX / XO)
11	Buck and frame anchoring - (OXO)
12	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
X	37.50" x 82.0"	21.12" x 63.12"	+55.0	-60.0	+55.0	-55.0
OX / XO	58.07" x 82.0"	21.12" x 63.12"	+55.0	-60.0	+55.0	-55.0
OXO	78.63" x 82.0"	21.12" x 63.12"	+55.0	-60.0	+55.0	-55.0



Digitally signed by
Lyndon F Schmidt
Date: 2026.07.01
15:34:30 -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

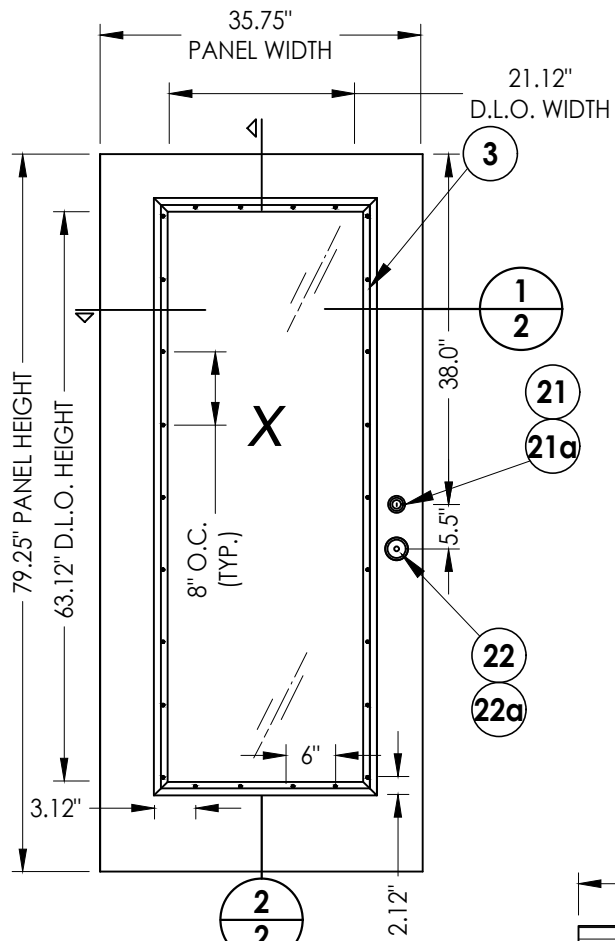
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

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

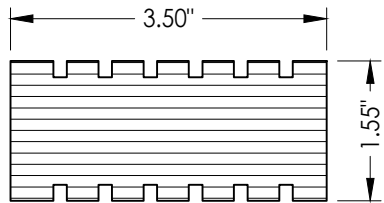
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		BY	LFS	FBC	DATE
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5	7/01/23	UPDATE TO 8TH ED.	(2023)	FBC	LFS
4	7/08/20	UPDATE TO 7TH ED.	(2020)	FBC	LFS

DATE: 11/30/09
SCALE: N.T.S.
DWG. BY: AP
CHK. BY: LFS
DRAWING NO.: FL-13320.5
SHEET 1 OF 12

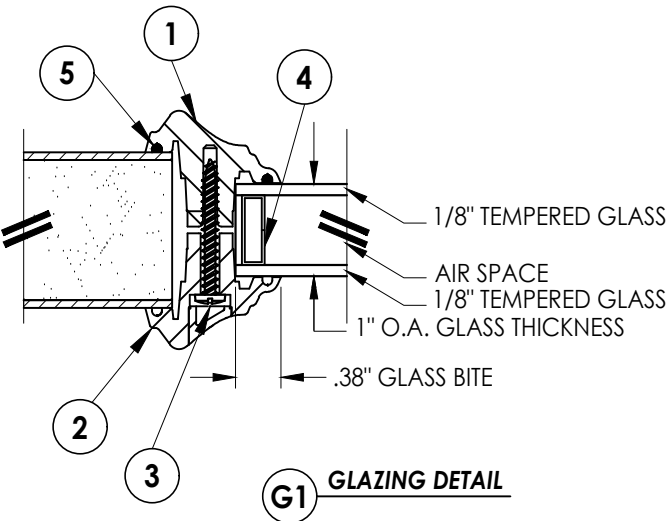
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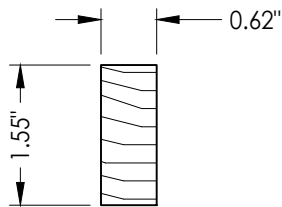
40 DOOR PANEL
Fiberglass



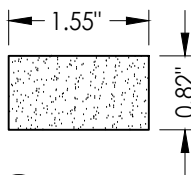
41 HINGE AND LATCH STILE
Reinforcement / LSL



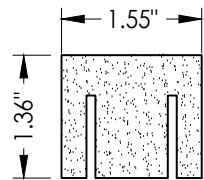
G1 GLAZING DETAIL



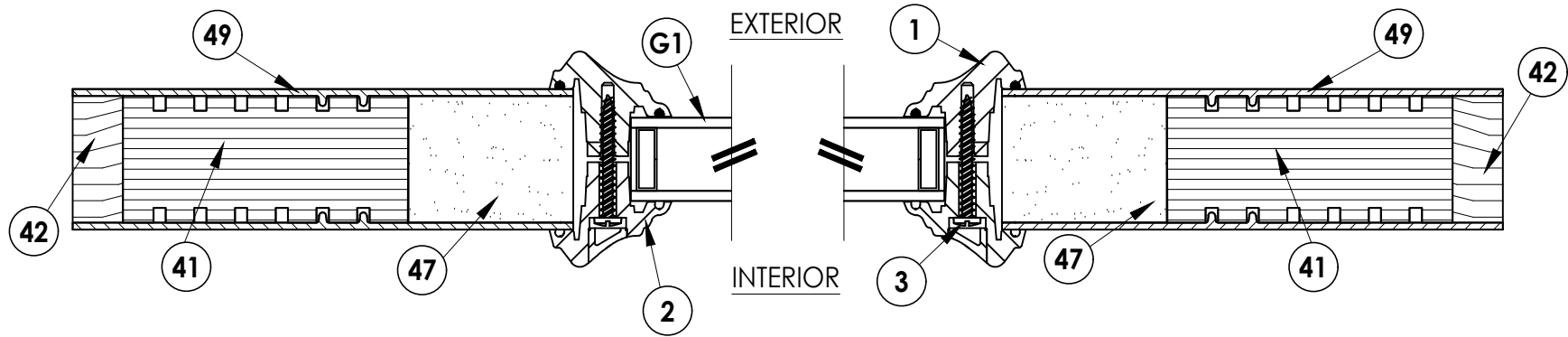
42 HINGE AND LATCH STILE
Wood



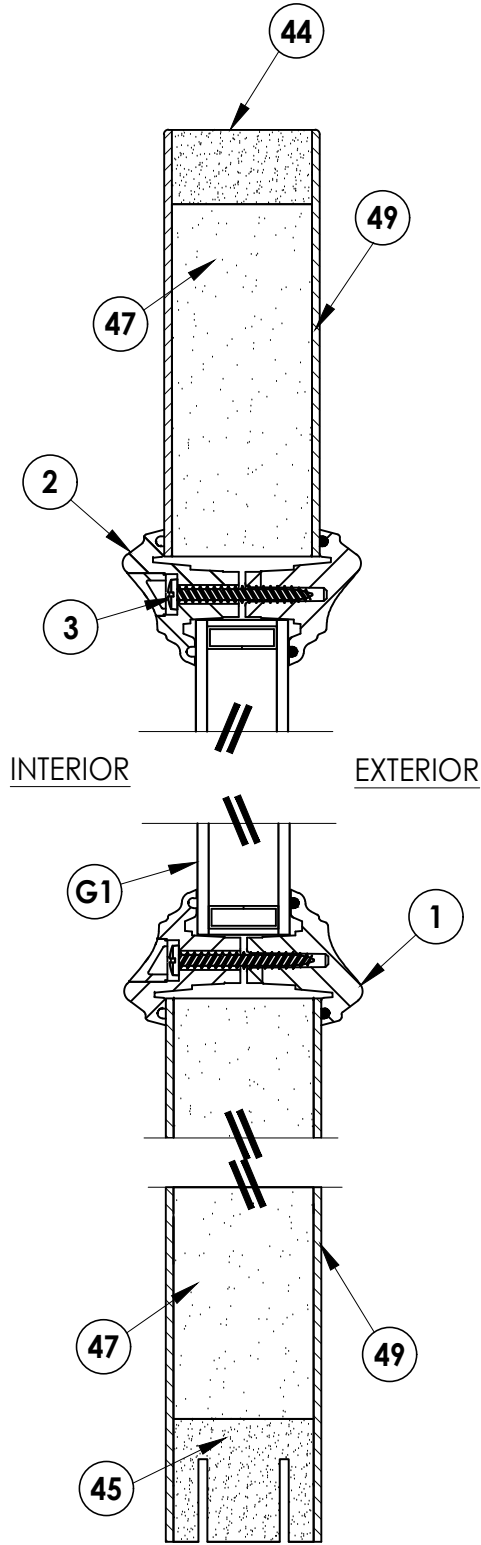
44 TOP RAIL
Composite



45 BOTTOM RAIL
Composite



**1
2 HORIZONTAL CROSS SECTION**



**2
2 VERTICAL CROSS SECTION**

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			
		BY	LFS	FBC	(2020)
6	7/01/26	UPDATE TO 9TH ED.	FBC	LFS	(2026)
5	7/01/23	UPDATE TO 8TH ED.	FBC	LFS	(2023)
4	7/08/20	UPDATE TO 7TH ED.	FBC	LFS	(2020)

DATE: 11/30/09

SCALE: N.T.S.

DWG. BY: AP

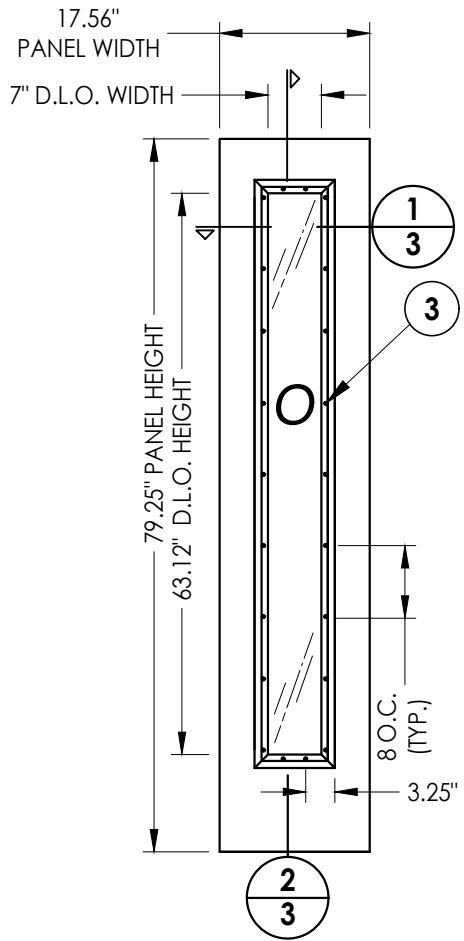
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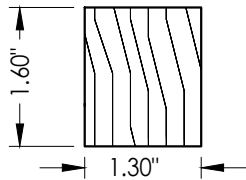
FL-13320.5

SHEET 2 OF 12

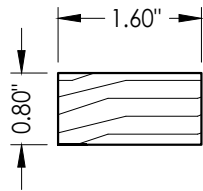
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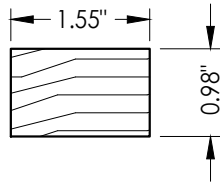
50 SIDELITE PANEL
Fiberglass



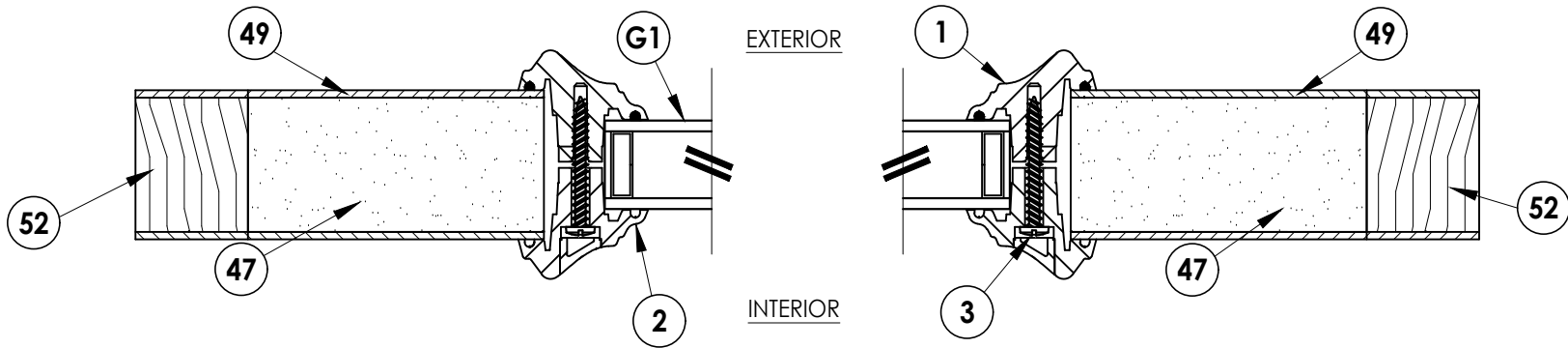
52 SIDELITE STILE
Wood



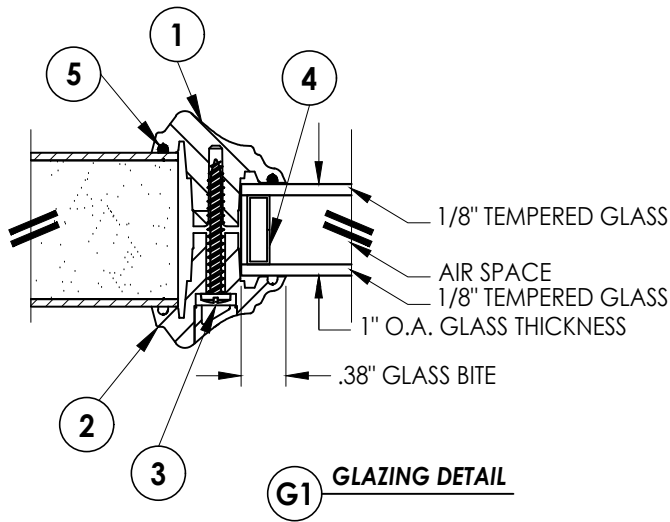
53 SIDELITE BOTTOM RAIL
Wood



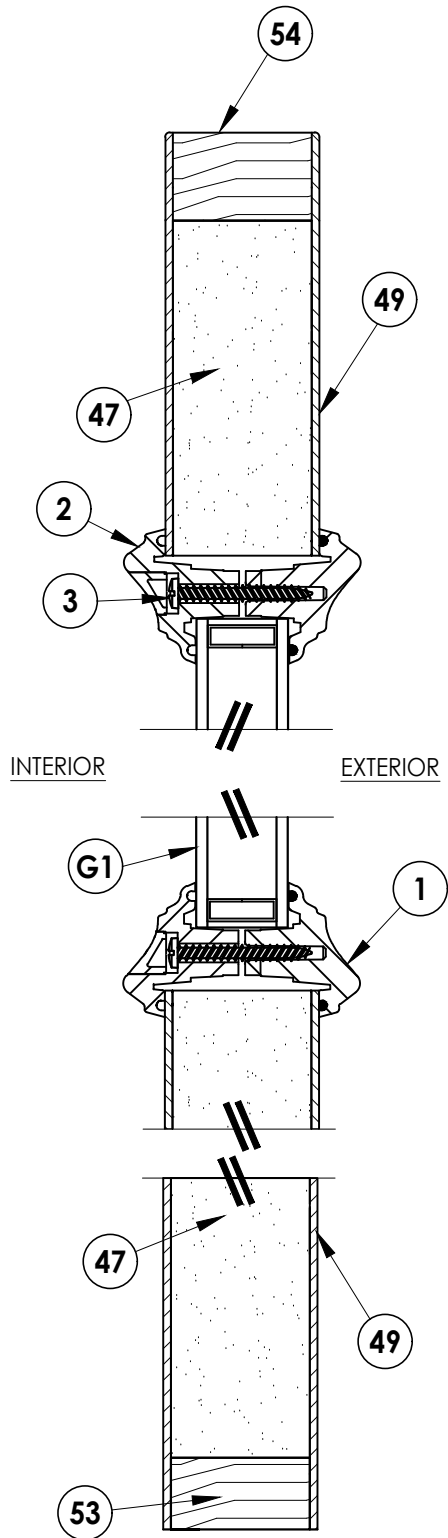
54 SIDELITE TOP RAIL
Wood



1 3 HORIZONTAL CROSS SECTION



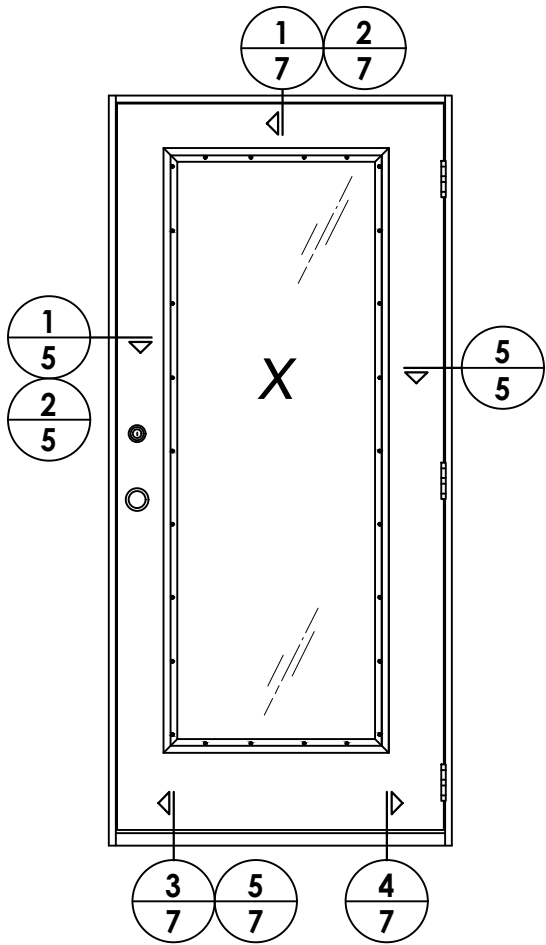
G1 GLAZING DETAIL



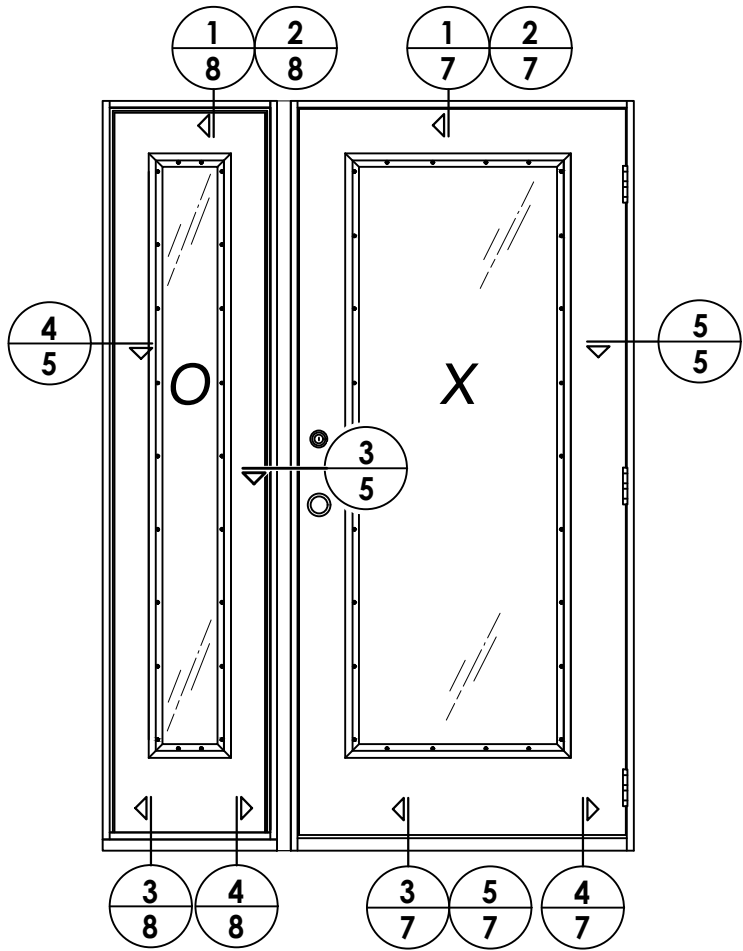
2 3 VERTICAL CROSS SECTION

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	
		LFS	BY
	6	7/01/26	UPDATE TO 9TH ED. (2026)
	5	7/01/23	UPDATE TO 8TH ED. (2023)
	4	7/08/20	UPDATE TO 7TH ED. (2020)
	NO	DATE	
REVISIONS			
DATE: 11/30/09			
SCALE: N.T.S.			
DWG. BY: AP			
CHK. BY: LFS			
DRAWING NO.: FL-13320.5			
SHEET 3 OF 12			

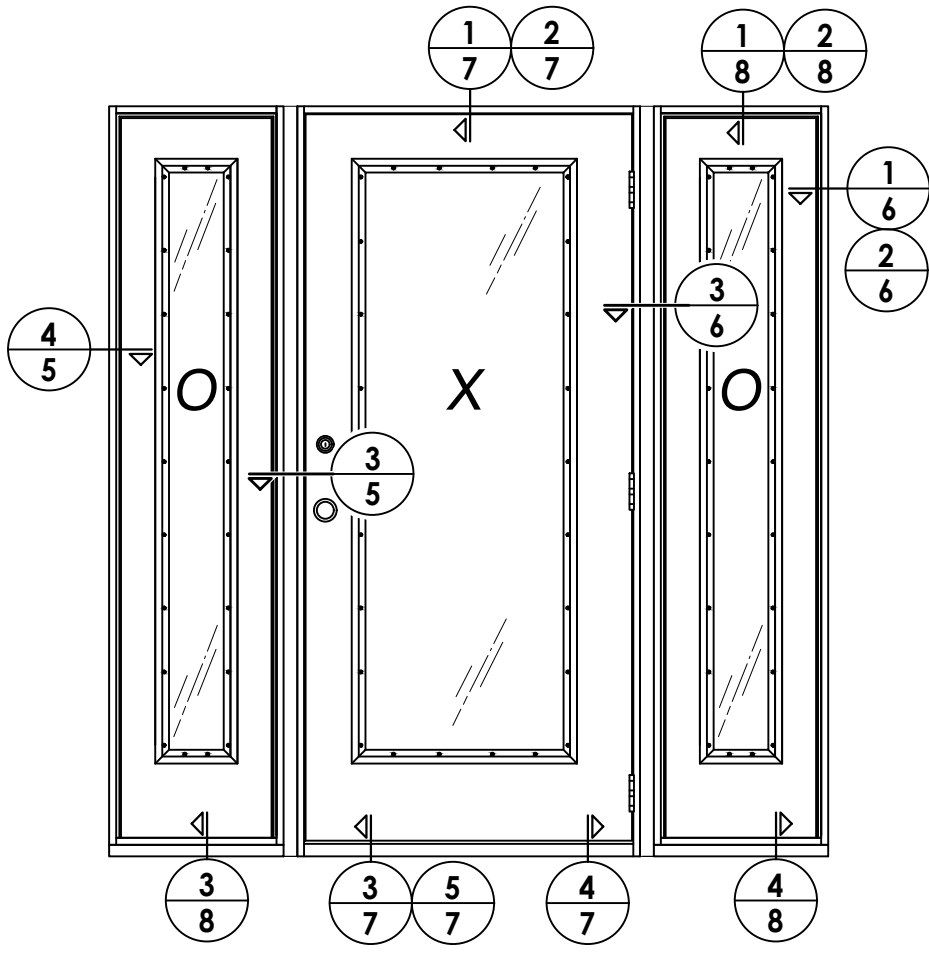
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ELEVATION (X)



ELEVATION (OX / XO)



ELEVATION (OXO)

DATE: 11/30/09

SCALE: N.T.S.

DWG. BY: AP

CHK. BY: LFS

DRAWING NO.:
FL-13320.5

SHEET 4 OF 12

PRODUCT:
MASTERGRAIN
FIBERGLASS DOOR

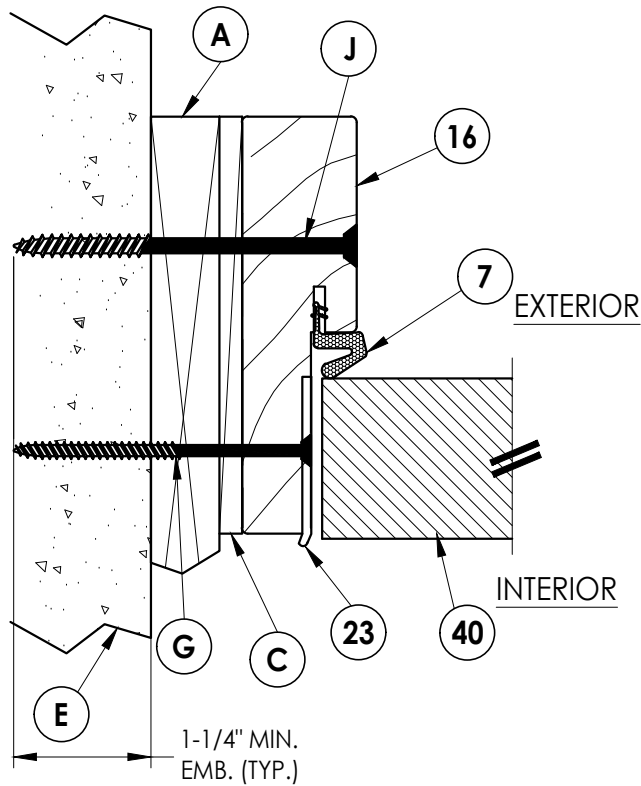
PART OR ASSEMBLY:

ELEVATIONS

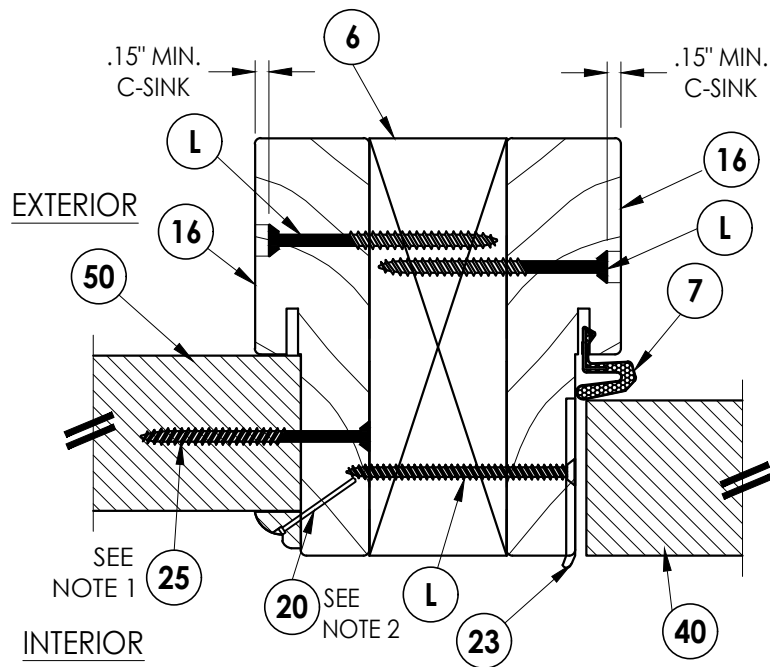
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

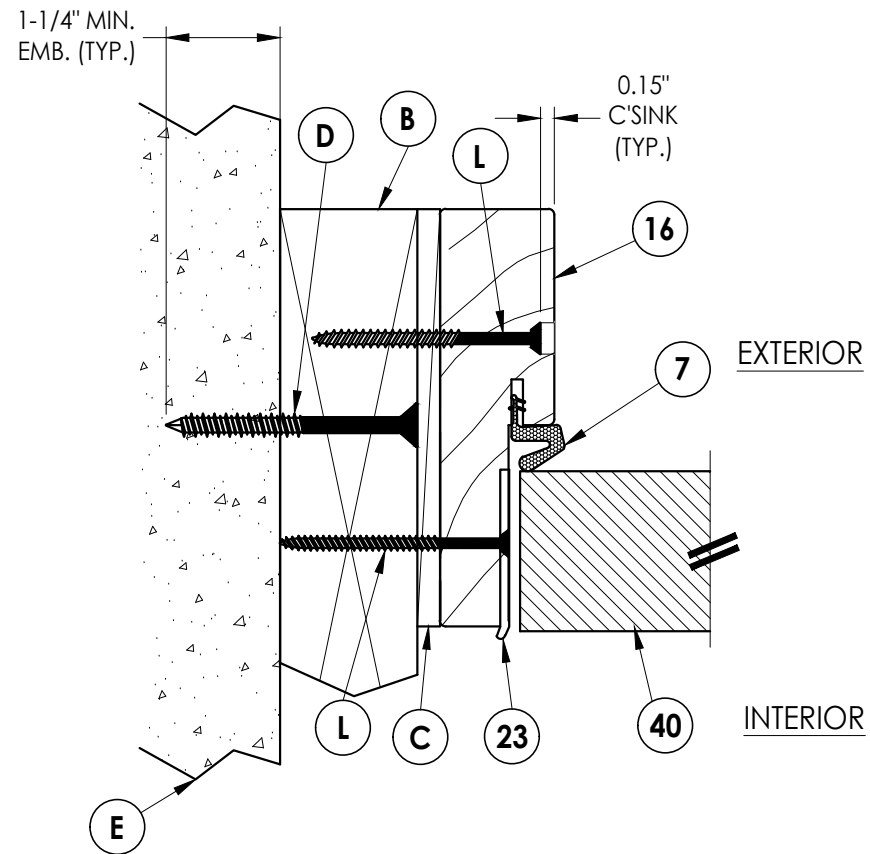
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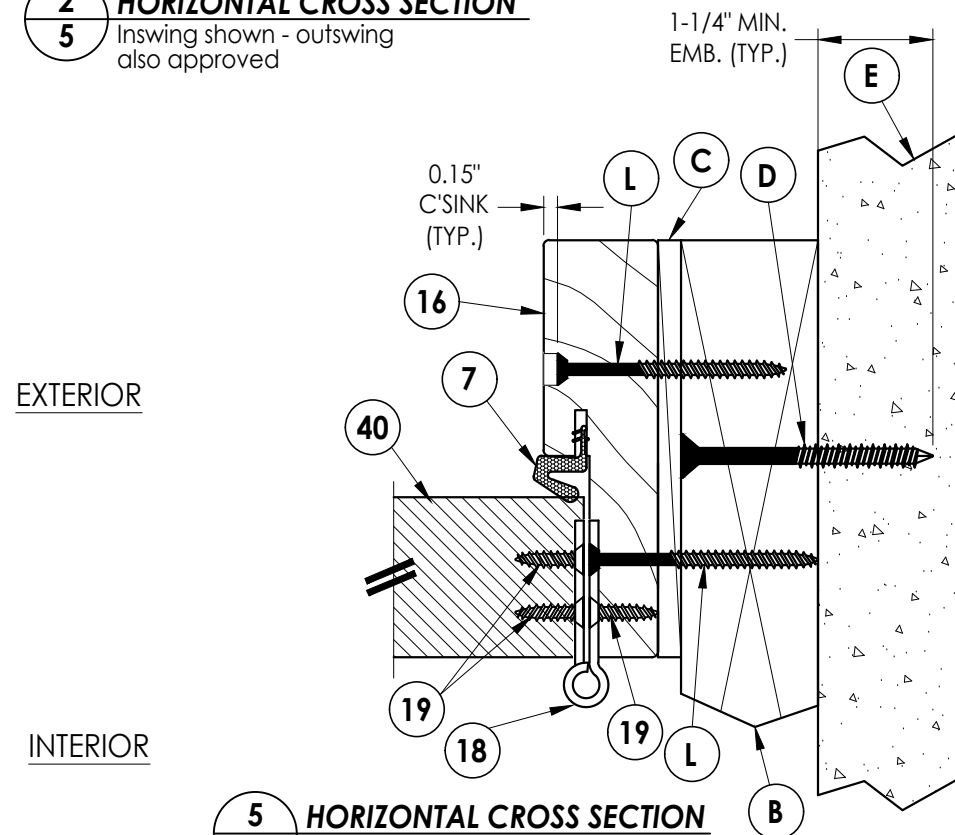
1 HORIZONTAL CROSS SECTION
5 Shown w/1X sub-buck



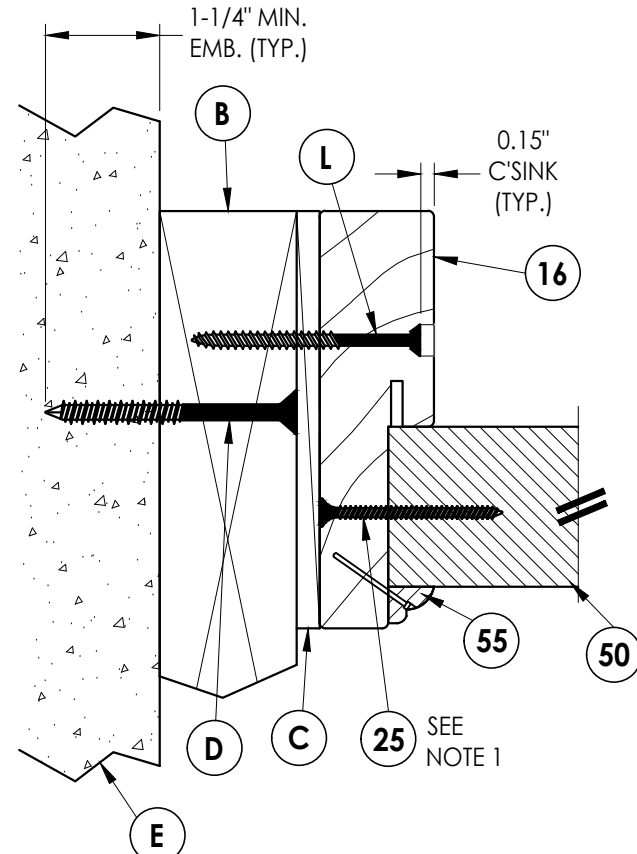
3 HORIZONTAL CROSS SECTION
5 Inswing shown - outswing also approved



2 HORIZONTAL CROSS SECTION
5 Inswing shown - outswing also approved



5 HORIZONTAL CROSS SECTION
5 Inswing shown - outswing also approved



4 HORIZONTAL CROSS SECTION
5 Inswing shown - outswing also approved

NOTE:

- Sidelite ass'y fastener; 6" from each end and 6 more screws equally spaced between. (8 screws total per jamb.)
- 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
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
3		
2		
1		

DATE: 11/30/09
SCALE: N.T.S.
DWG. BY: AP
CHK. BY: LFS
DRAWING NO.: FL-13320.5
SHEET 5 OF 12

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).

INTERIOR



INTERIOR



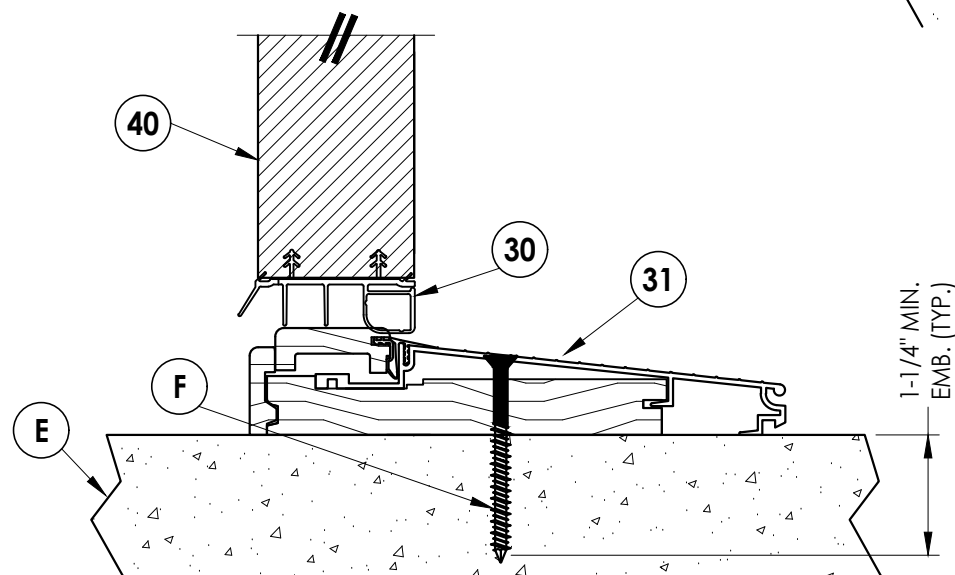
INTERIOR



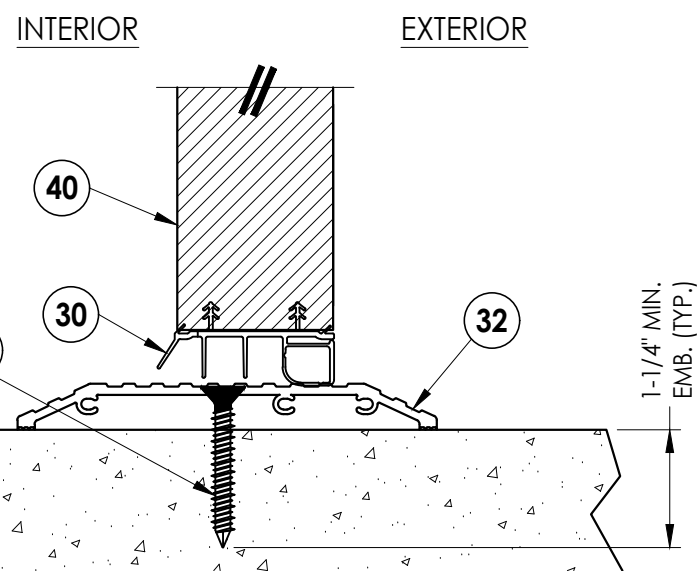
PRODUCT: MASTERGRAIN FIBERGLASS DOOR	PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS
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R^W BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

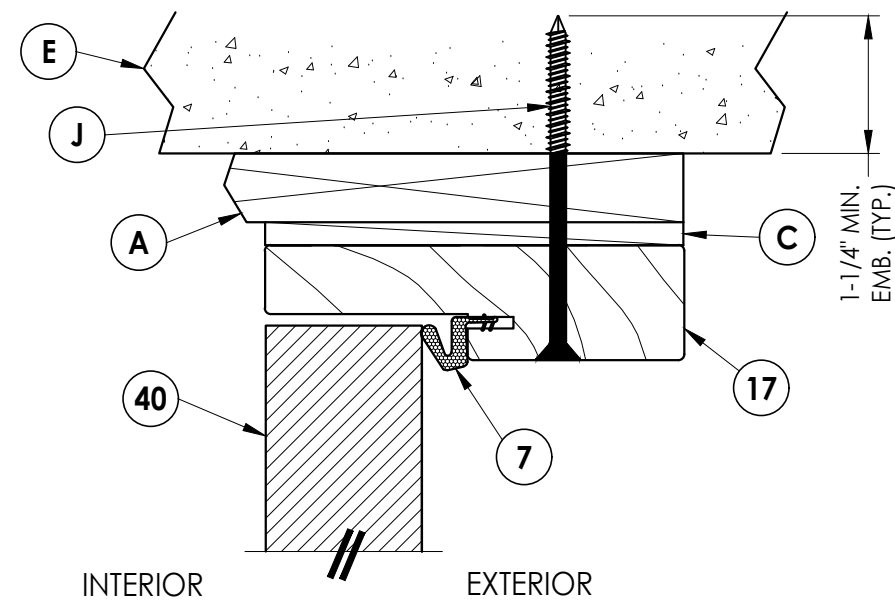
INTERIOR EXTERIOR



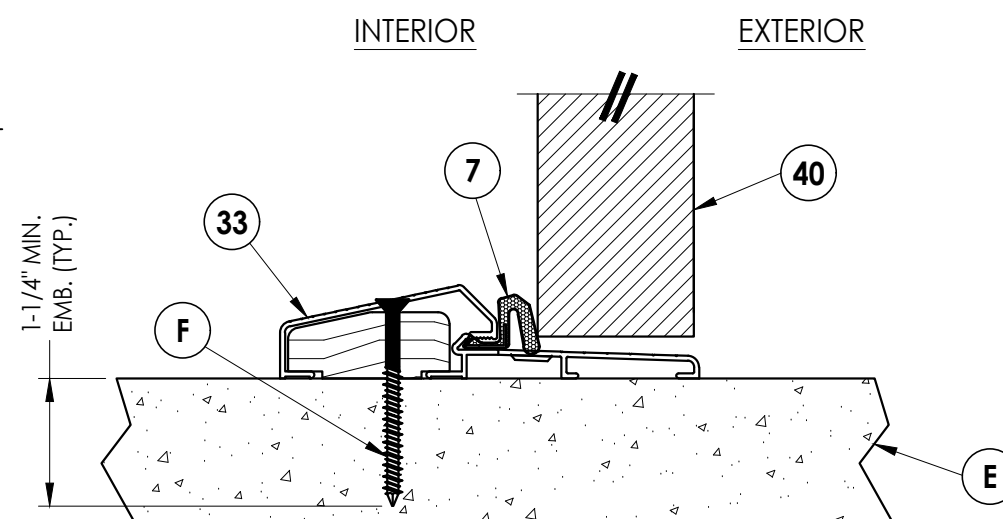
3 **VERTICAL CROSS SECTION**
7 Inswing configuration



5 VERTICAL CROSS SECTION
7 Shown w/ ADA threshold



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



4 **VERTICAL CROSS SECTION**
7 Outswing configuration

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 .

PRODUCT: MASTERGRAIN
FIBERGLASS DOOR

FOR OR ASSEMBLY:
VERTICAL CROSS SECTIONS

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*

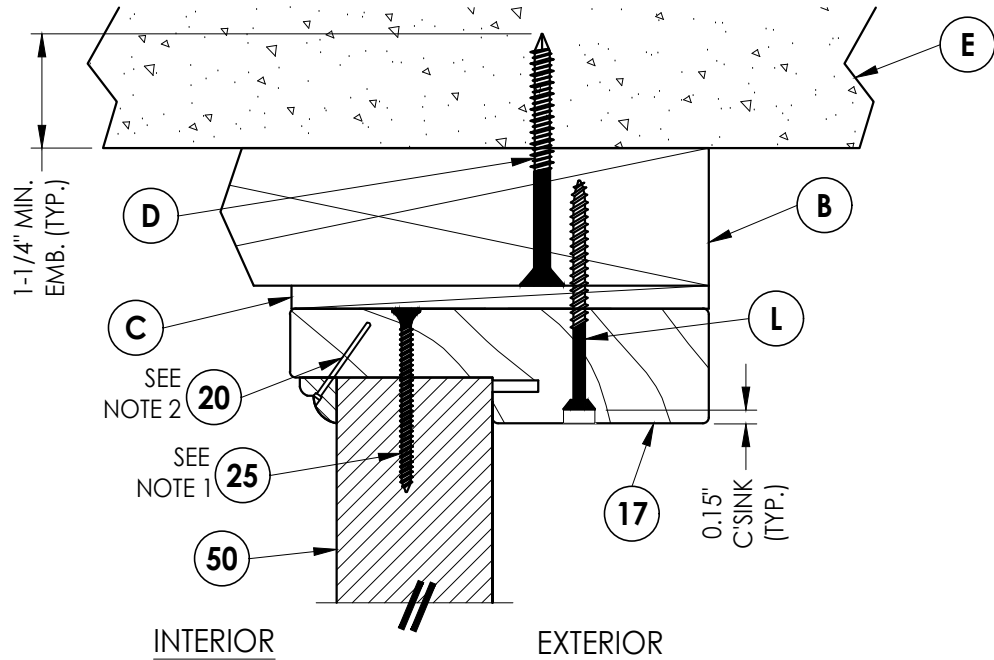
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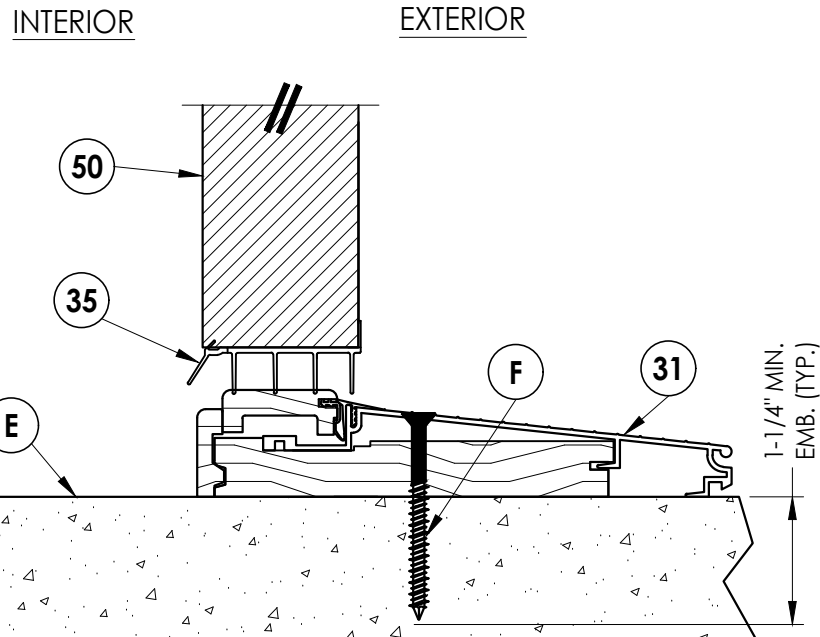
FL-13320.5

SHEET 7 OF 12

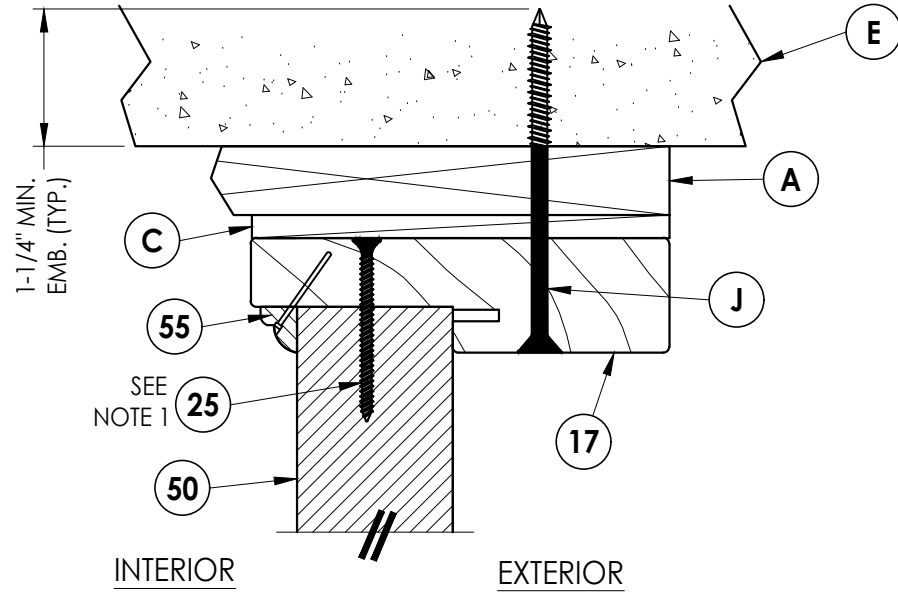
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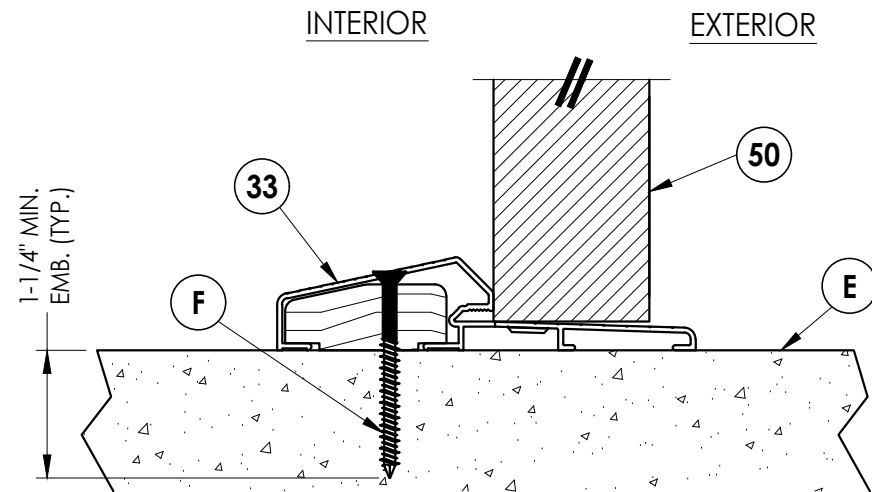
1
8 **VERTICAL CROSS SECTION**
Inswing shown - outswing
also approved



3
8 **VERTICAL CROSS SECTION**
Inswing configuration



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



4
8 **VERTICAL CROSS SECTION**
Outswing configuration

NOTE:

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

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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:
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.

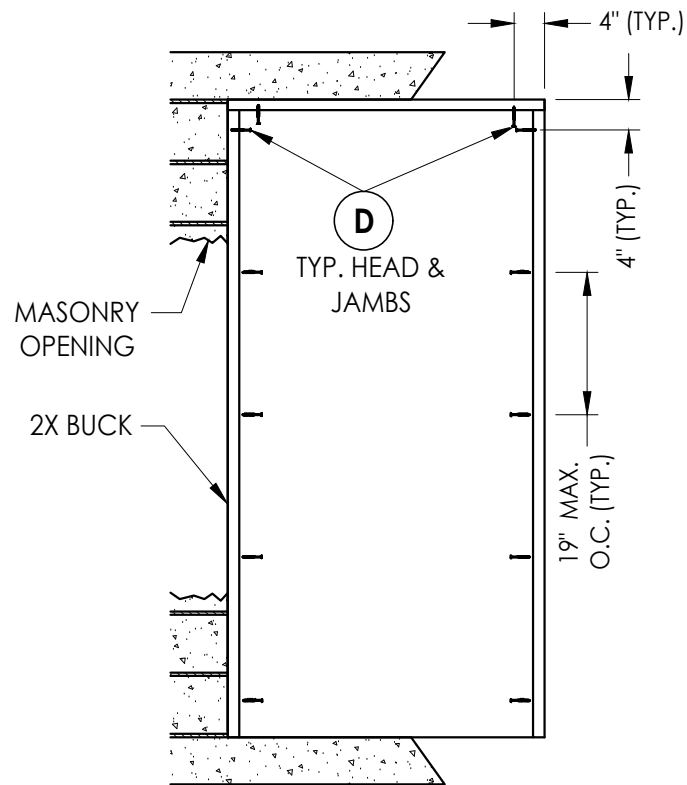
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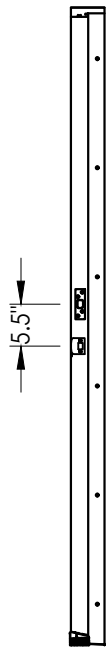
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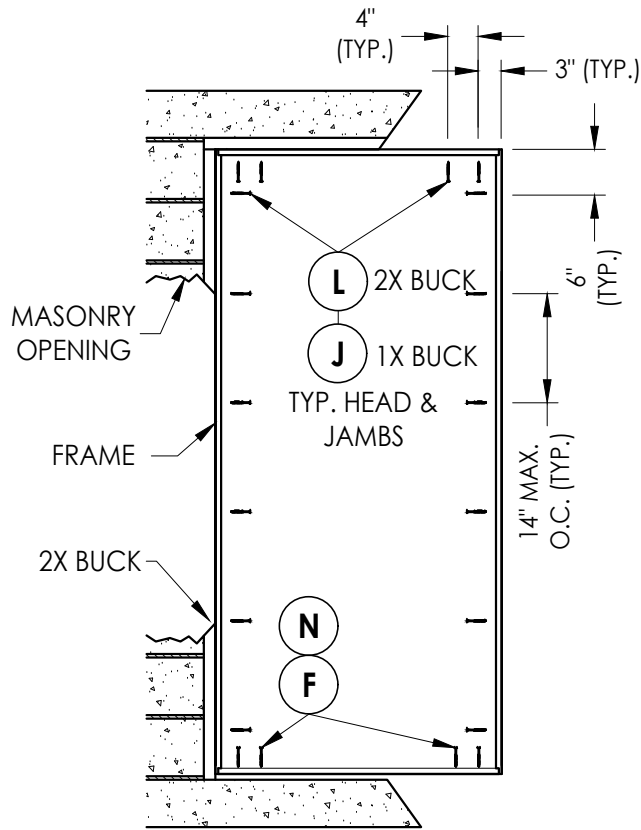
SHEET 8 OF 12



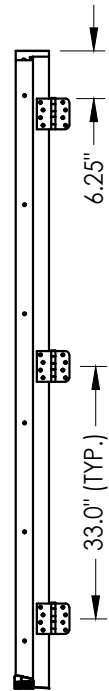
BUCK ANCHORING



STRIKE JAMB



FRAME ANCHORING
Masonry construction



HINGE JAMB

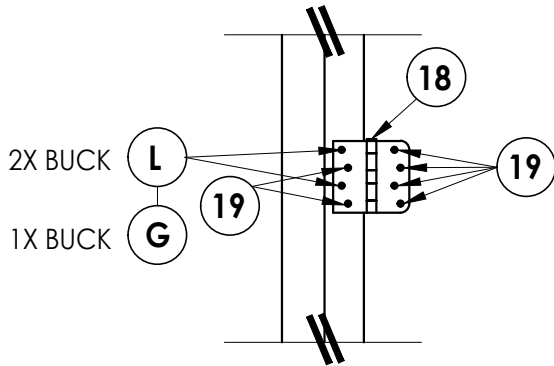
CONCRETE ANCHOR NOTES:

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:

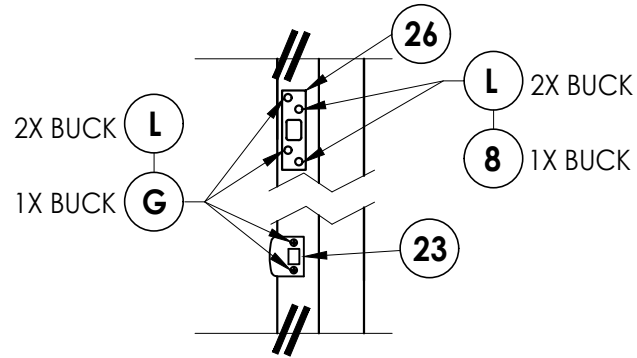
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

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.



HINGE DETAIL



LATCH & DEADBOLT DETAIL
SECURITY STRIKE

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:
BUCK & FRAME ANCHORING
(X)

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

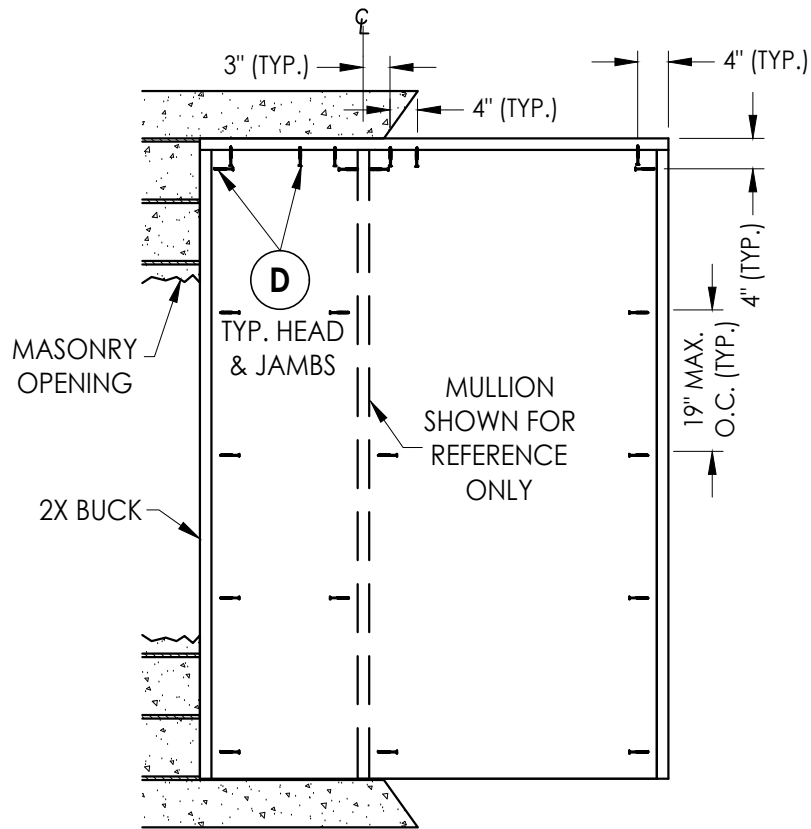
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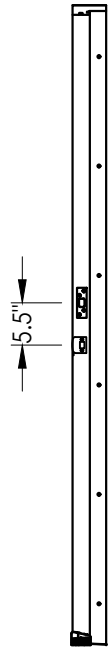
FL-13320.5

SHEET 9 OF 12

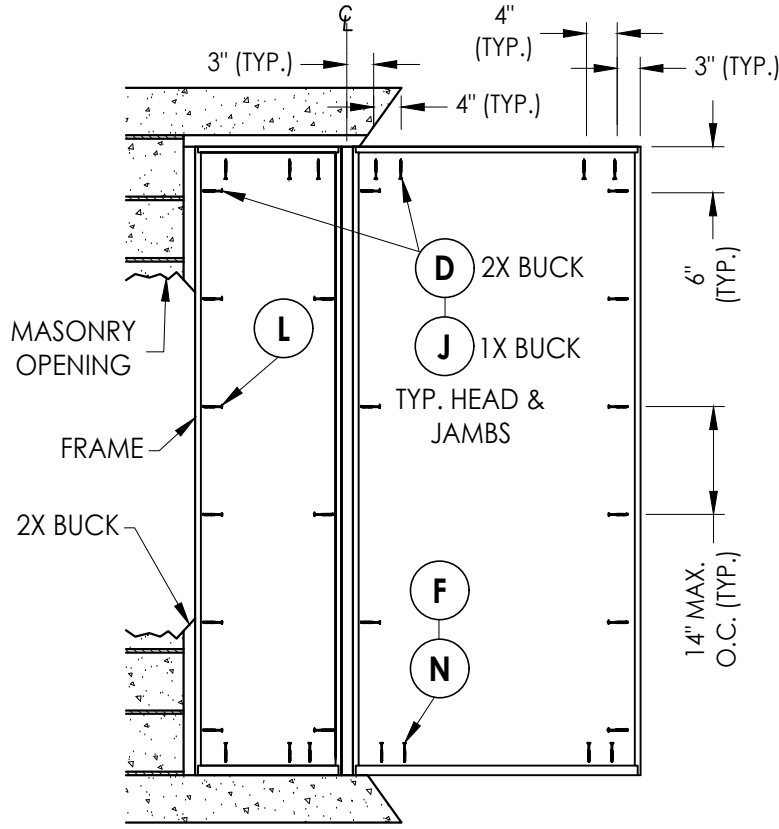
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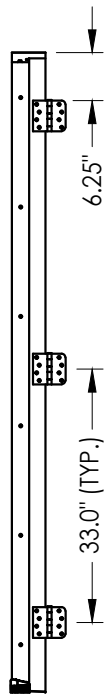
BUCK ANCHORING



STRIKE JAMB



FRAME ANCHORING
Masonry construction



HINGE JAMB

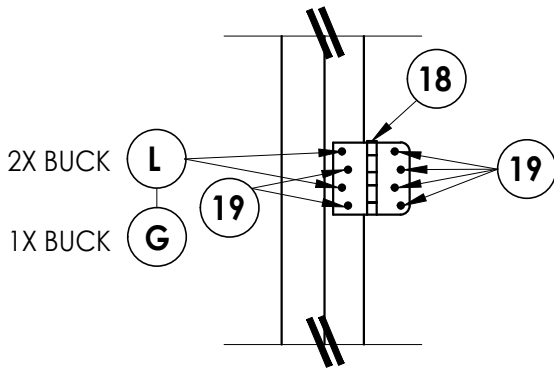
CONCRETE ANCHOR NOTES:

- 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:

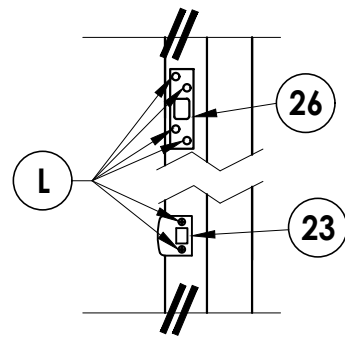
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

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.



HINGE DETAIL



LATCH & DEADBOLT DETAIL
SECURITY STRIKE

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:
BUCK & FRAME ANCHORING
(OX/XO)

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
		BY

DATE: 11/30/09

SCALE: N.T.S.

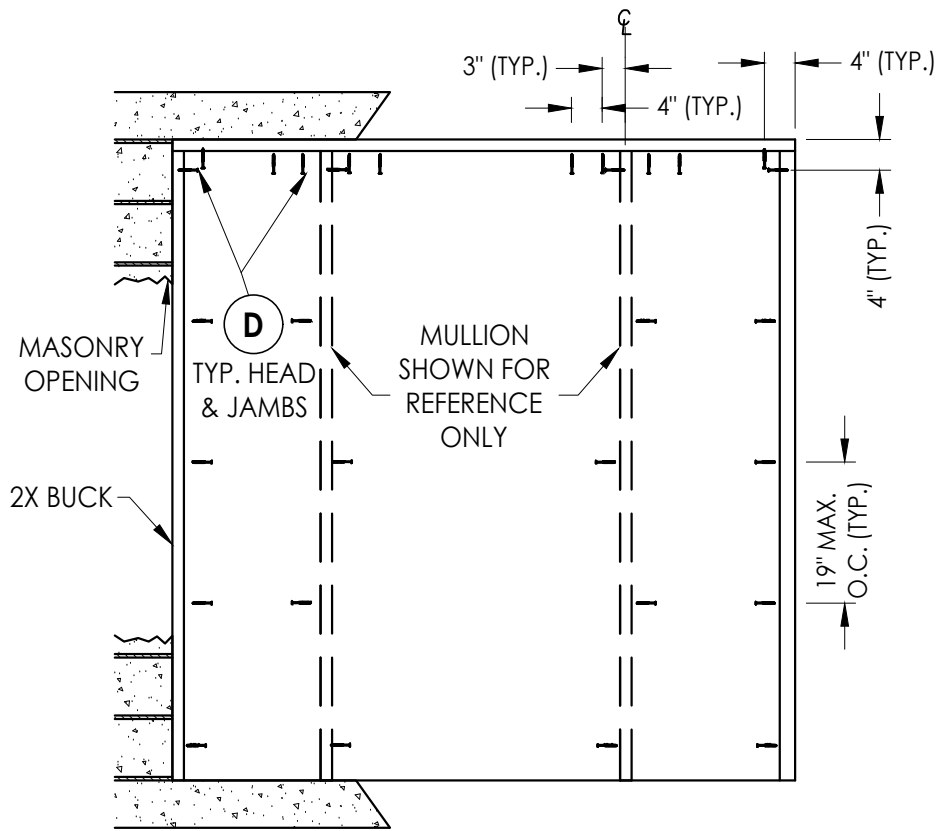
DWG. BY: AP

CHK. BY: LFS

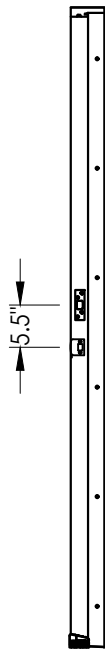
DRAWING NO.: FL-13320.5

SHEET 10 OF 12

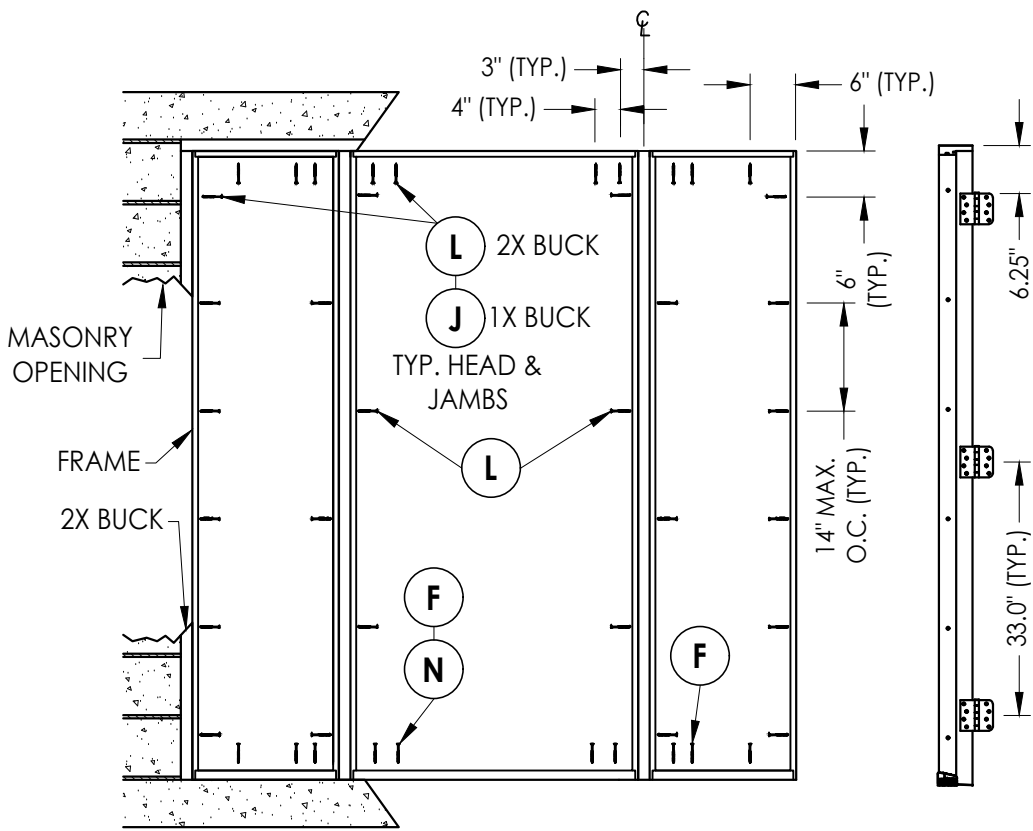
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BUCK ANCHORING



STRIKE JAMB



FRAME ANCHORING
Masonry construction

HINGE JAMB

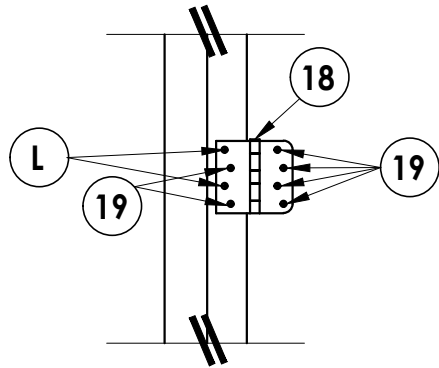
CONCRETE ANCHOR NOTES:

- 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:

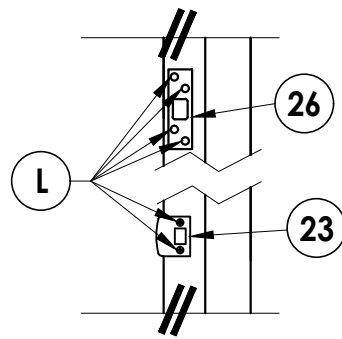
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

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.



HINGE DETAIL



LATCH & DEADBOLT DETAIL
SECURITY STRIKE

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:
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FIBERGLASS DOOR

PART OR ASSEMBLY:
BUCK & FRAME ANCHORING
(OXO)

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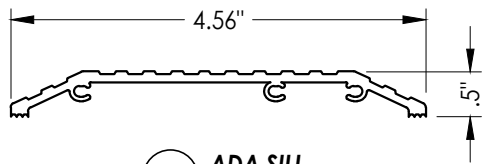
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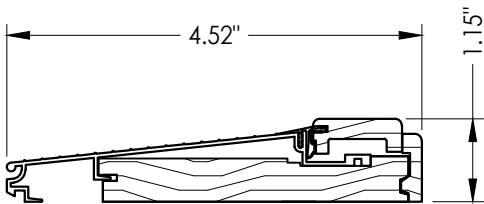
SHEET 11 OF 12

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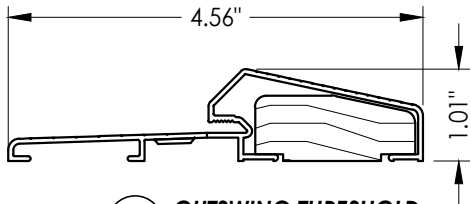
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD
B	2X BUCK SG >= 0.55	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	1/4" X 2-1/4" PFH 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	SILICONE WEATHER SEAL MG #2500	SILICONE
6	2X MULLION SG > = 0.55	WOOD
7	WEATHER STRIP	FOAM
8	#10 X 1-1/2" PFH	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



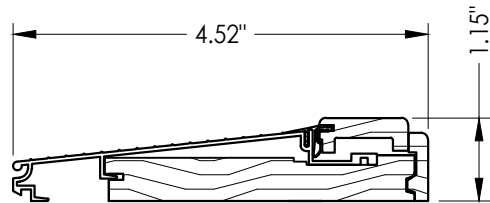
32 ADA SILL



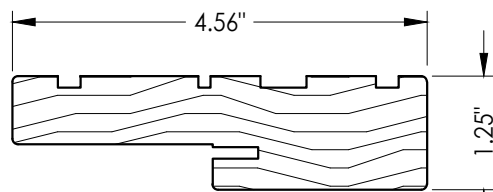
31 INSWING THRESHOLD



33 OUTSWING THRESHOLD



34 SIDELITE THRESHOLD



16 17 HEAD & SIDE Jamb

21	DEADBOLT - KWIKSET SERIES 660	STEEL
21A	DEADBOLT - COPPER CREEK E-SERIES	STEEL
22	KNOB - KWIKSET SERIES	STEEL
22A	KNOB - COPPER CREEK E-SERIES	STEEL
23	LATCH STRIKE PLATE	STEEL
25	#8 X 2-1/2" PFH WOOD SCREW	STEEL
26	SECURITY STRIKE PLATE	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	POLYEURETHANE FOAM	POLYEURETHANE
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

Documents Prepared By:
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PART OR ASSEMBLY:
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AND COMPONENTS

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SHEET 12 OF 12