



DIAMOND DOOR SERIES

FLUSH GLAZED FIBERGLASS DOOR w/ SIDELITES

INSWING / OUTSWING

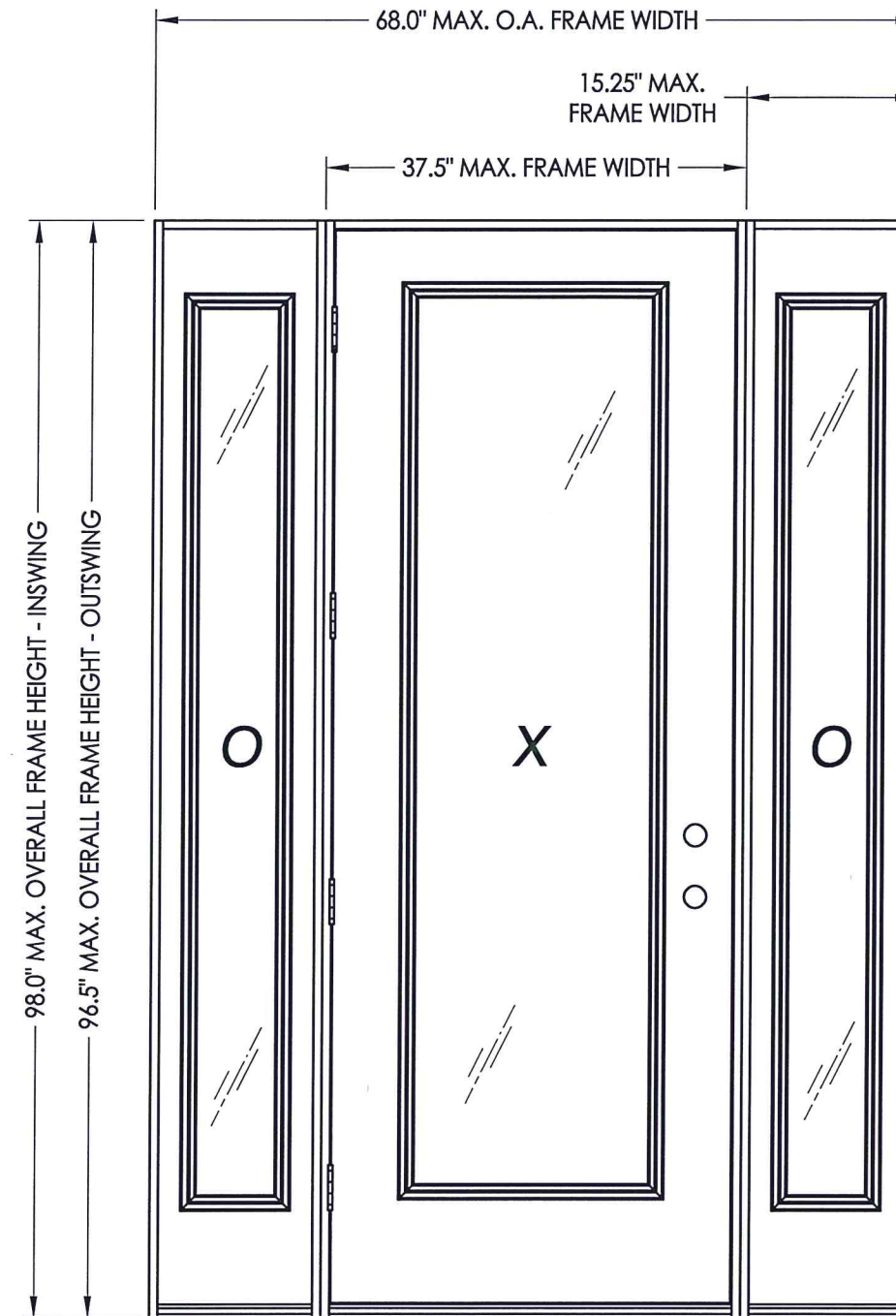
"IMPACT"

GENERAL NOTES

1. This product has been evaluated and is in compliance with the 7th Edition (2020) 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 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
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

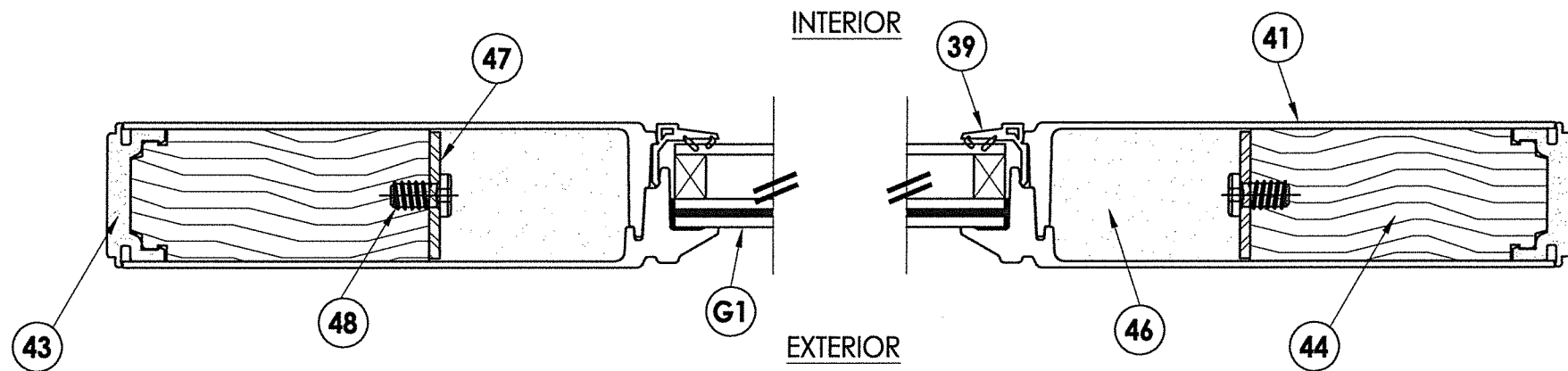
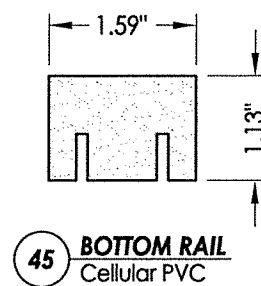
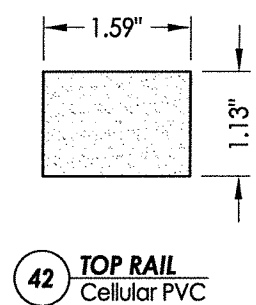
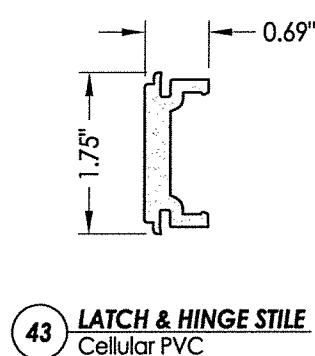
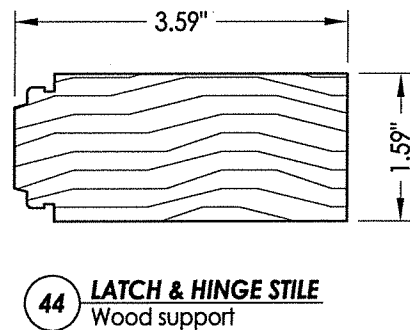
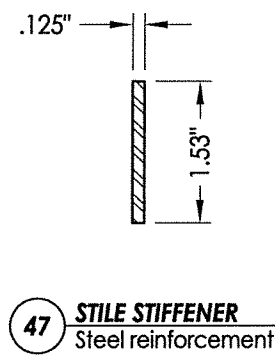
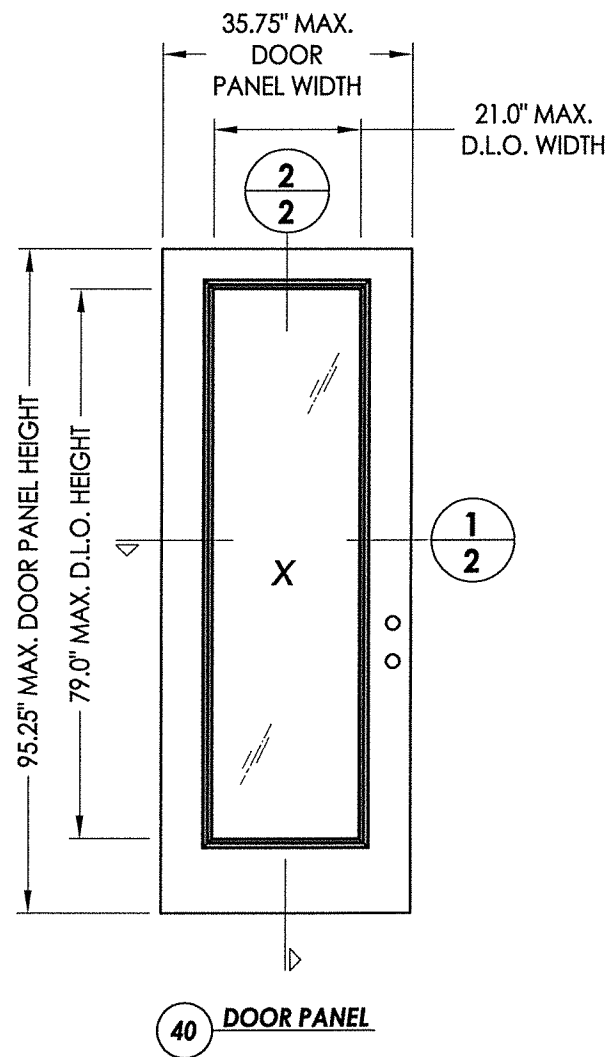
SHEET #	DESCRIPTION
1	Typical elevation, design pressures, & general notes
2	Door panel details
3	Sidelite panel details
4	Horizontal cross sections
5	Vertical cross sections
6	Vertical cross sections
7	Buck and frame anchoring - 2X buck masonry construction
8	Frame anchoring - 1X buck masonry construction
9	Bill of materials, glazing detail & components



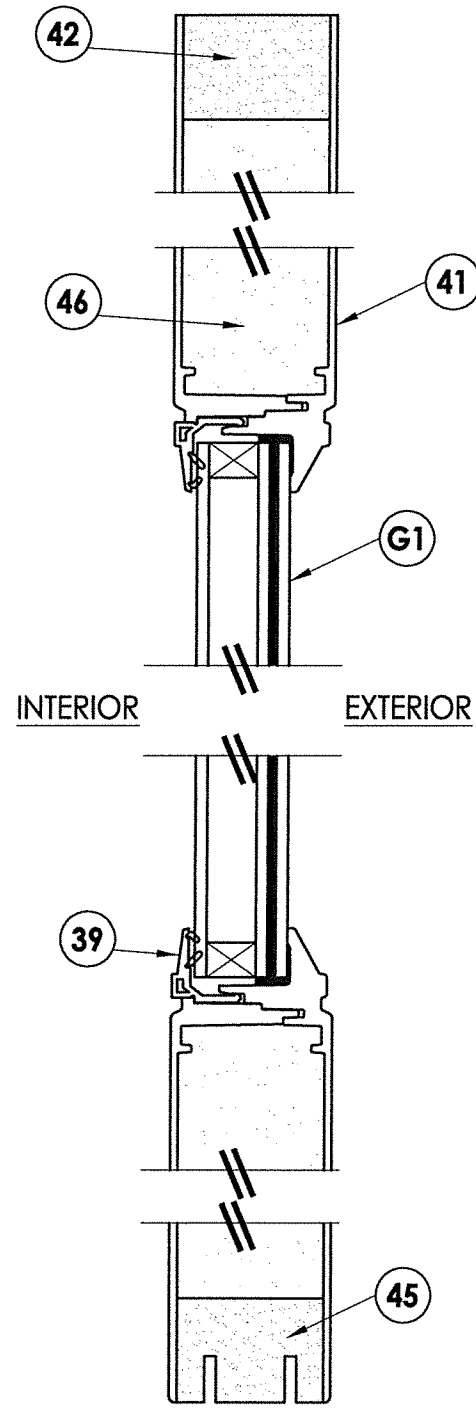
SWING	OVERALL FRAME DIMENSION	DOOR D.L.O. DIMENSION	SIDELITE D.L.O. DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
					POSITIVE	NEGATIVE
INSWING	68.0" x 98.0"	21.0" x 79.0"	7.0" x 79.0"	G1	+42.0	-47.5
OUTSWING	68.0" x 96.5"	21.0" x 79.0"	7.0" x 79.0"		+42.0	-42.0

 August 3, 2020 Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		PRODUCT: DOERS FIBERGLASS DOOR		PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES	
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC	LFS	JK	BY
2	5/15/19	ADD STEEL STUD ANCHORING	LFS	JK	BY
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC	LFS	JK	BY
NO. DATE		REVISIONS			
DATE: 09/28/15					
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.: FL-19007.18					
SHEET 1 OF 9					

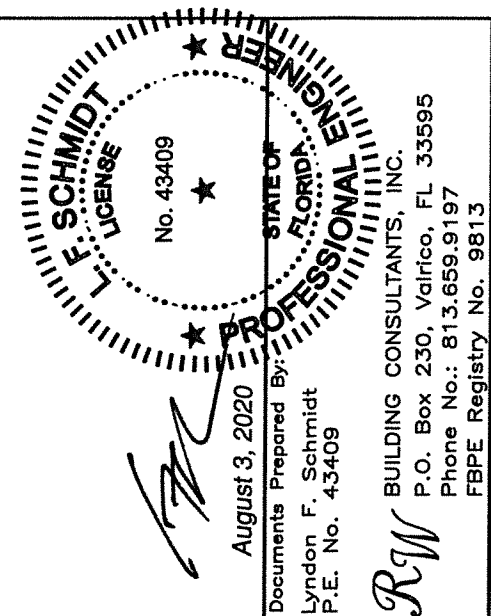
© 2015 R.W. BUILDING CONSULTANTS INC.



1
2 HORIZONTAL CROSS SECTION

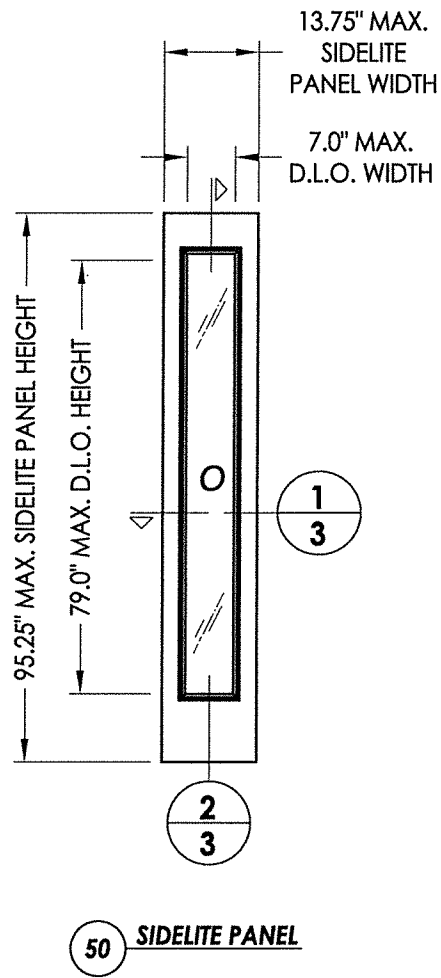


2
2 VERTICAL CROSS SECTION

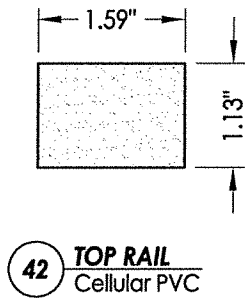


PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		DOOR PANEL DETAILS	
DATE:		09/28/15	
SCALE:		N.T.S.	
DWG. BY:		JK	
CHK. BY:		LFS	
DRAWING NO.:		FL-19007.18	
SHEET		2	OF 9
REVISIONS			
NO.	DATE	BY	
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC	LFS
2	5/15/19	ADD STEEL STUD ANCHORING	LFS
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC	JK

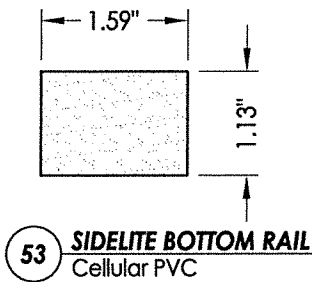
R:\Clients\Doers PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\A - Drawings\FL 19007 (2020)\FL-19007.11-20.dwg, 3.8



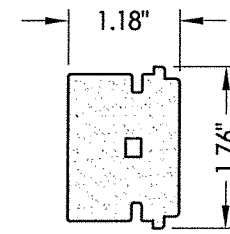
50 SIDELITE PANEL



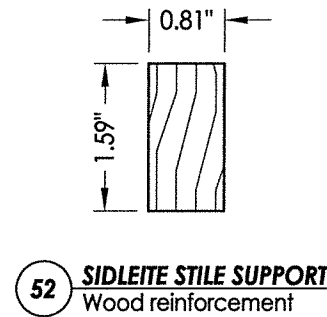
42 TOP RAIL
Cellular PVC



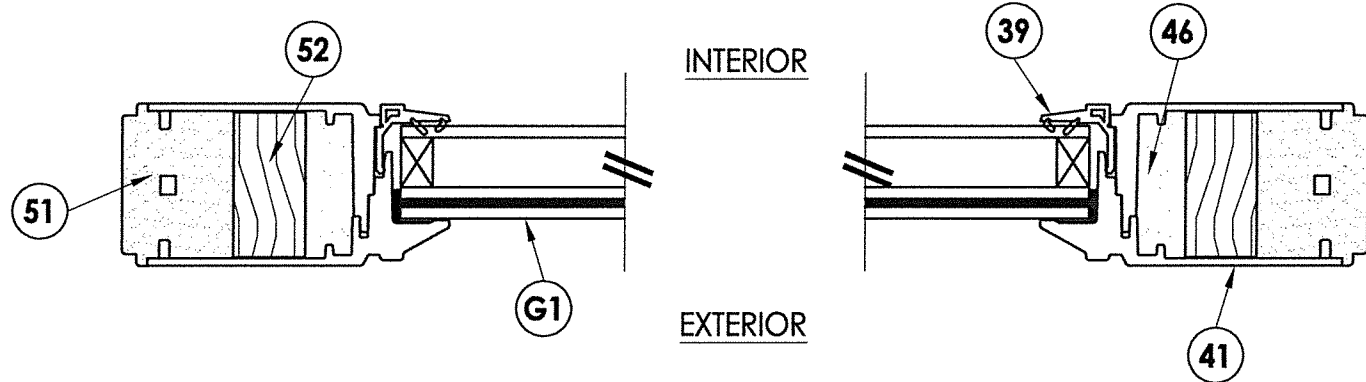
53 SIDELITE BOTTOM RAIL
Cellular PVC



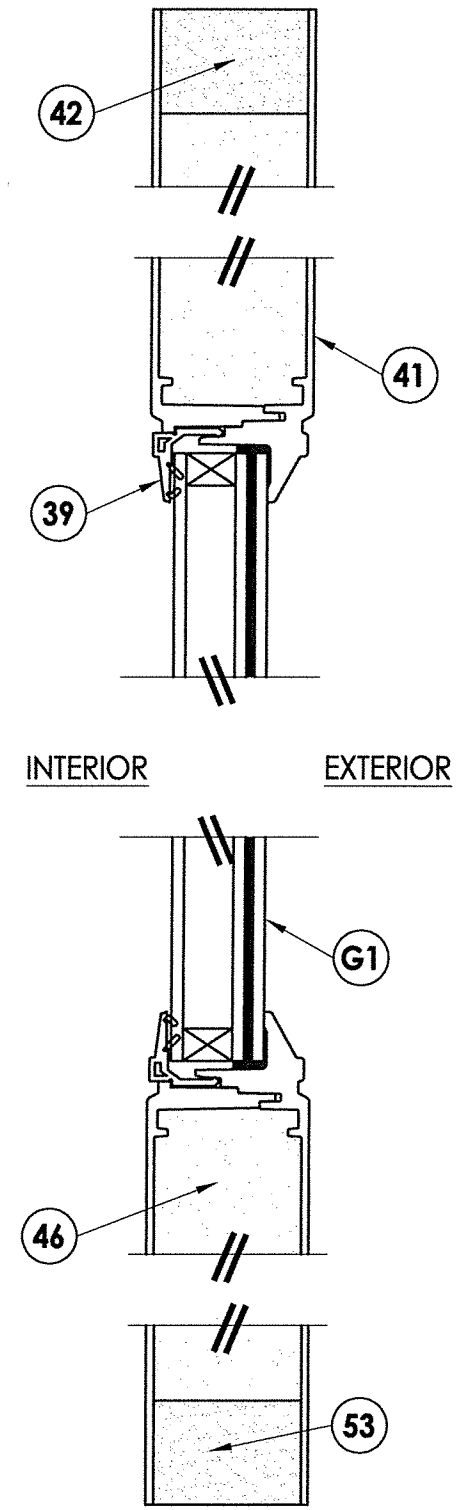
51 SIDELITE STILE
Cellular PVC



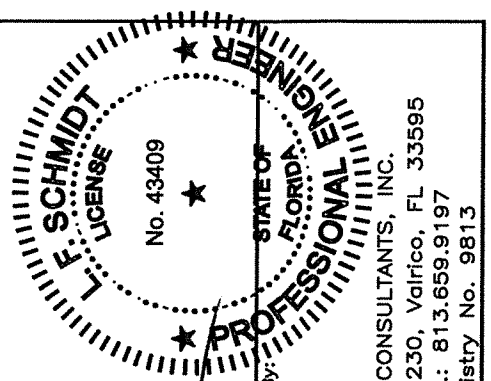
52 SIDELITE STILE SUPPORT
Wood reinforcement



1 3 HORIZONTAL CROSS SECTION



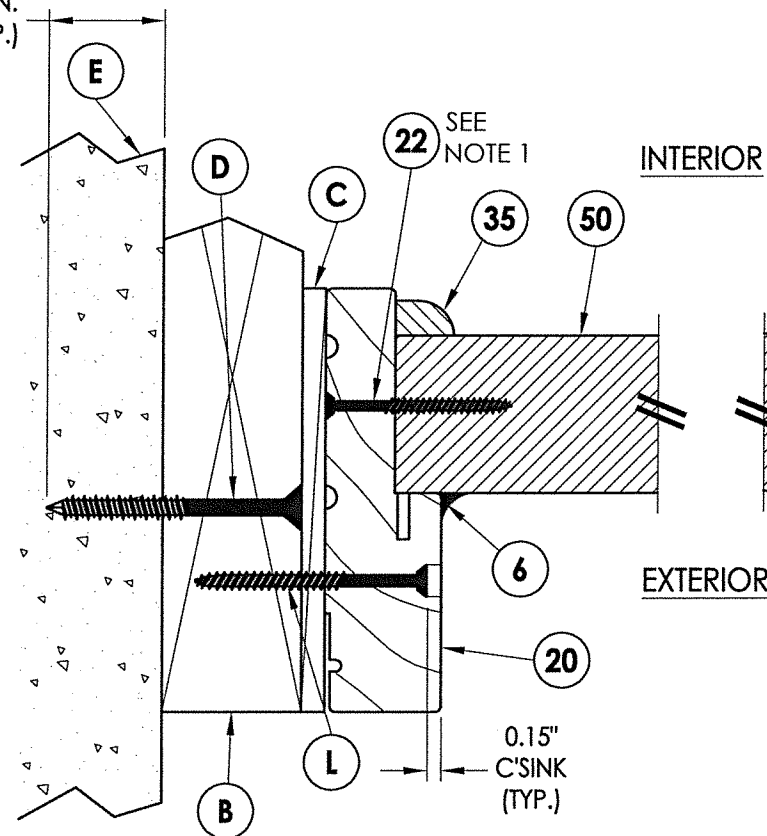
2 3 VERTICAL CROSS SECTION



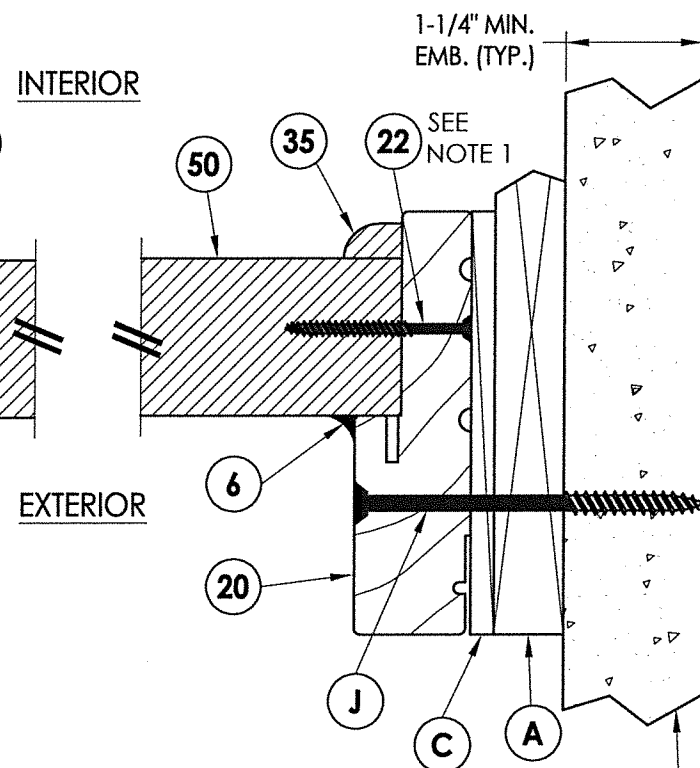
August 3, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		SIDELITE PANEL DETAILS	
NO.	DATE	REVISIONS	
		BY	
3	7/30/20	LFS	UPDATE TO 7TH ED. (2020) FBC
2	5/15/19	LFS	ADD STEEL STUD ANCHORING
1	9/26/17	JK	UPDATE TO 6TH ED. (2017) FBC
DATE:	09/28/15		
SCALE:	N.T.S.		
DWG. BY:	JK		
CHK. BY:	LFS		
DRAWING NO.:	FL-19007.18		
SHEET	3	OF	9

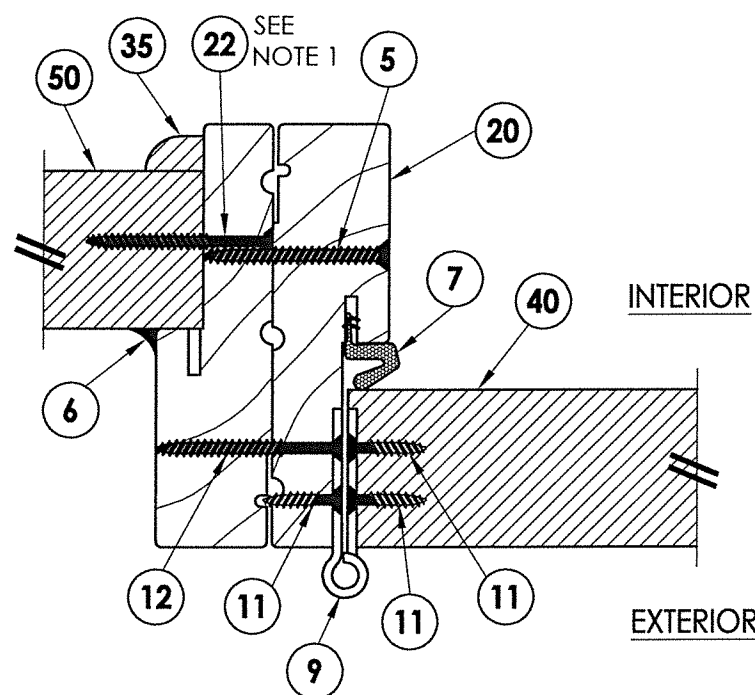
1-1/4" MIN.
EMB. (TYP.)



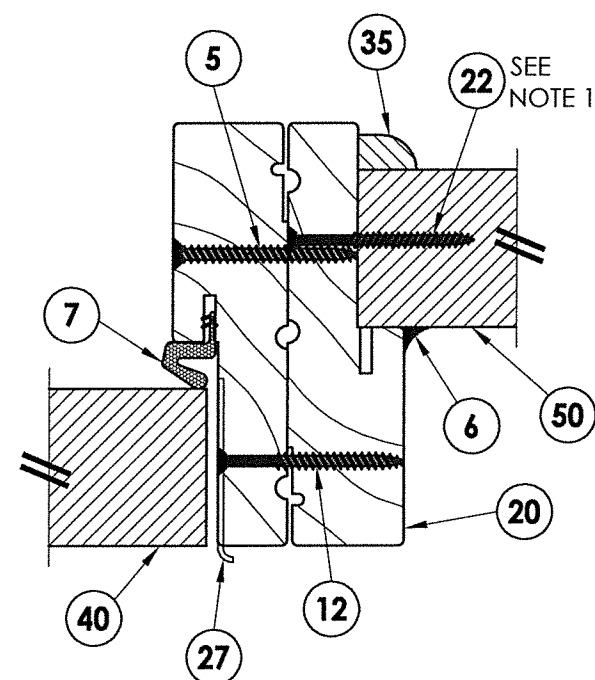
1 **HORIZONTAL CROSS SECTION**
4 Outswing shown - inswing also approved



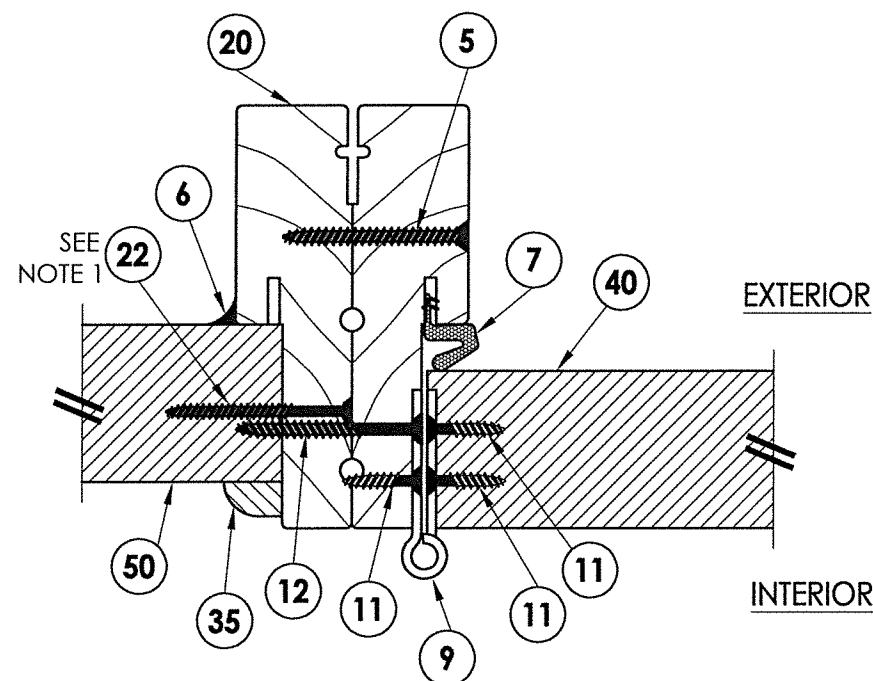
6 HORIZONTAL CROSS SECTION
4 Shown w/1X sub-buck



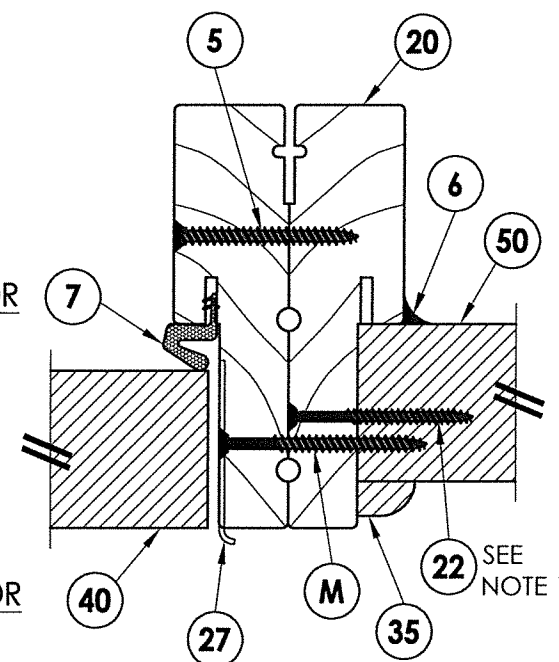
2 HORIZONTAL CROSS SECTION



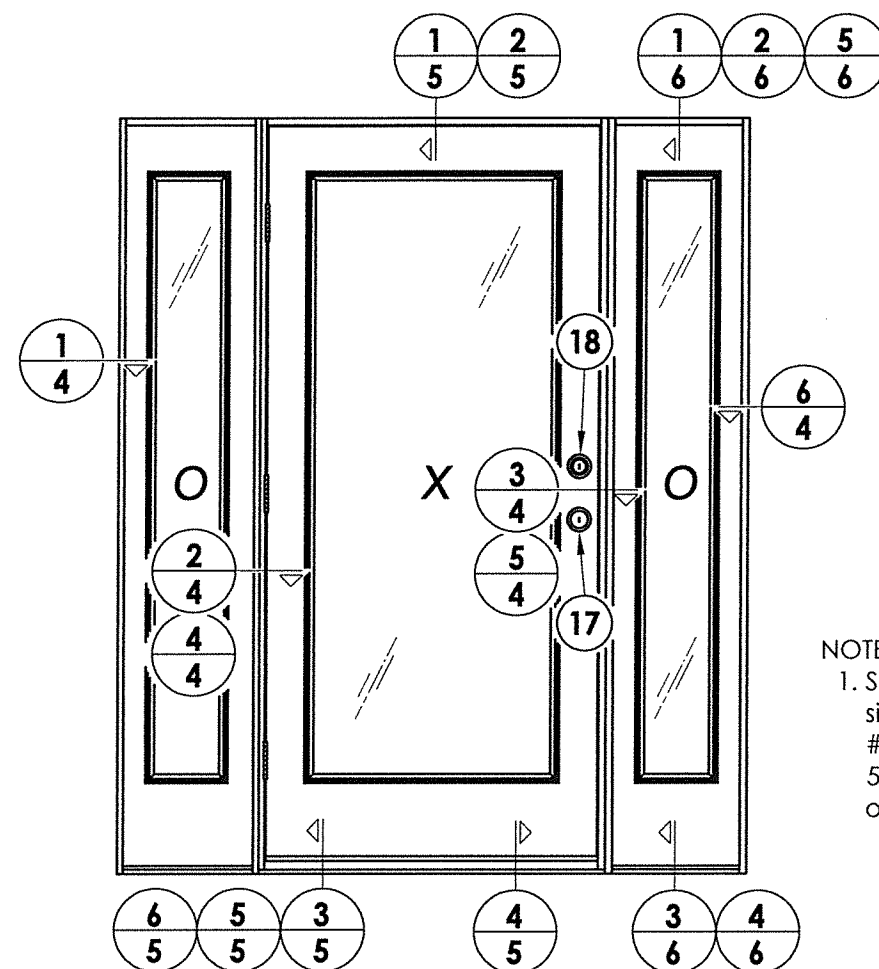
3 HORIZONTAL CROSS SECTION



4 HORIZONTAL CROSS SECTION
4 Inswing configuration

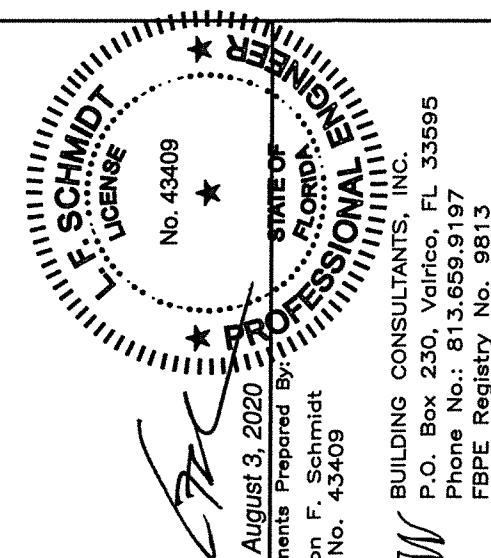


5 HORIZONTAL CROSS SECTION
4 Inswing configuration



NOTE:

1. Sidelite panel secured to the sidelite frame with (6) of item #22 located 5", 22.05", 39.10", 56.15", 73.2" & 90.25" from top of each jamb.



August 3, 2020

August 3, 2020

Lyndon F. Schme

RW

BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595

Phone No.: 813.659.9197

FBPE Registry No. 9813

FBPE Registry No. 9813

PRODUCT:

DOERS
FIBERGLASS DOOR

PART OR ASSEMBLY:

HORIZONTAL CROSS SECTIONS

[illegible]

[illegible]

A cross-sectional view of a window assembly. The diagram is divided into two main regions: **EXTERIOR** on the left and **INTERIOR** on the right. The window frame is labeled **30**. The interior pane is labeled **40**. The exterior pane is labeled **33**. The assembly is mounted on a substrate labeled **E**, which is shown with a cross-hatched pattern. The window frame **30** is shown in a cross-section with internal components like a hinge or latch mechanism. The exterior pane **33** is shown with a curved, flange-like edge. The interior pane **40** is shown with a straight edge. The substrate **E** is shown with a cross-hatched pattern and a jagged bottom edge.

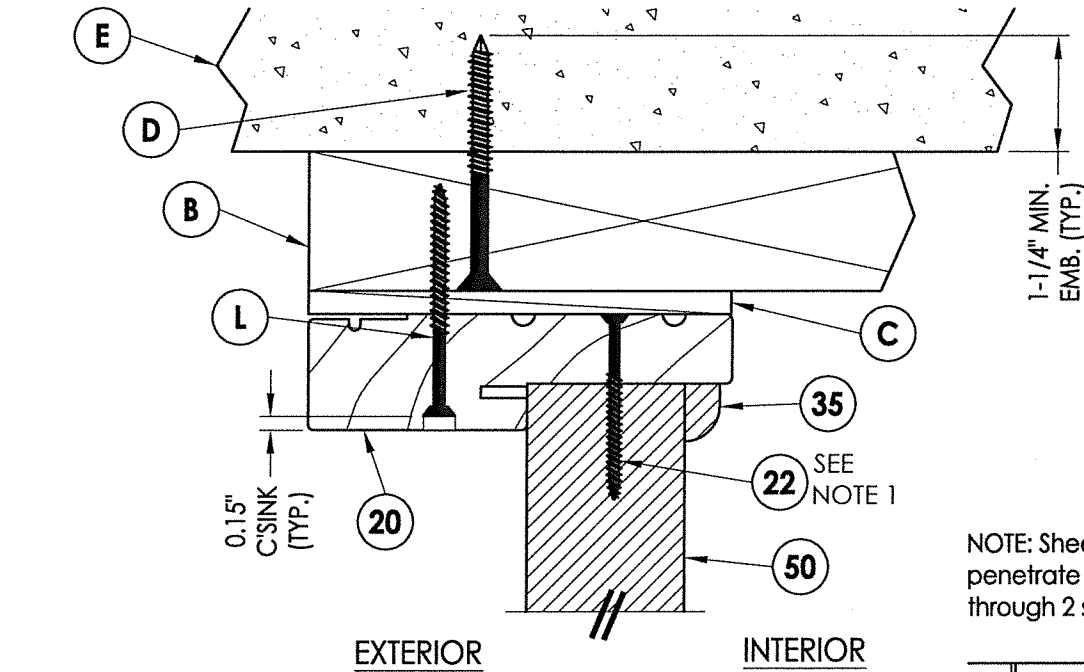


August 3, 2020
Documents Prepared By
Lyndon F. Schmidt
P.E. No. 43409

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

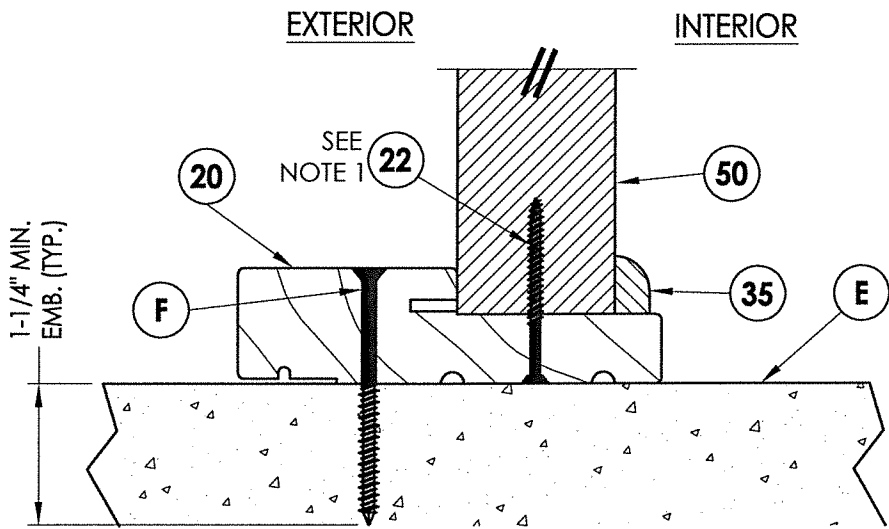
DATE: 09/28/15		PRODUCT: DOERS FIBERGLASS DOOR	
SCALE: N.T.S.		PART OR ASSEMBLY: VERTICAL CROSS SECTIONS	
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.18			
SHEET 5 OF 9			

R:\Clients\Doers PERMANENTVA - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.11-20.dwg, 6.8

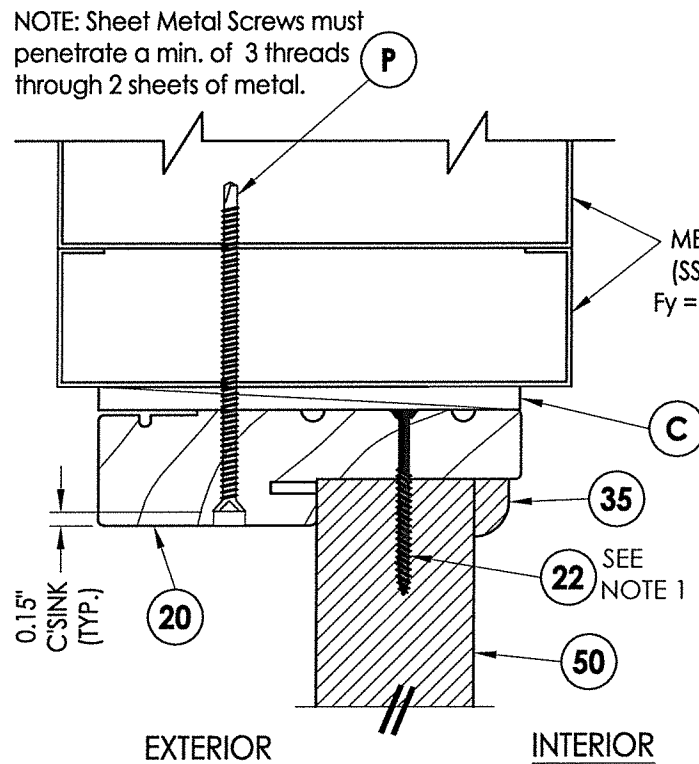


1
6 **VERTICAL CROSS SECTION**
Outswing shown - inswing
also approved

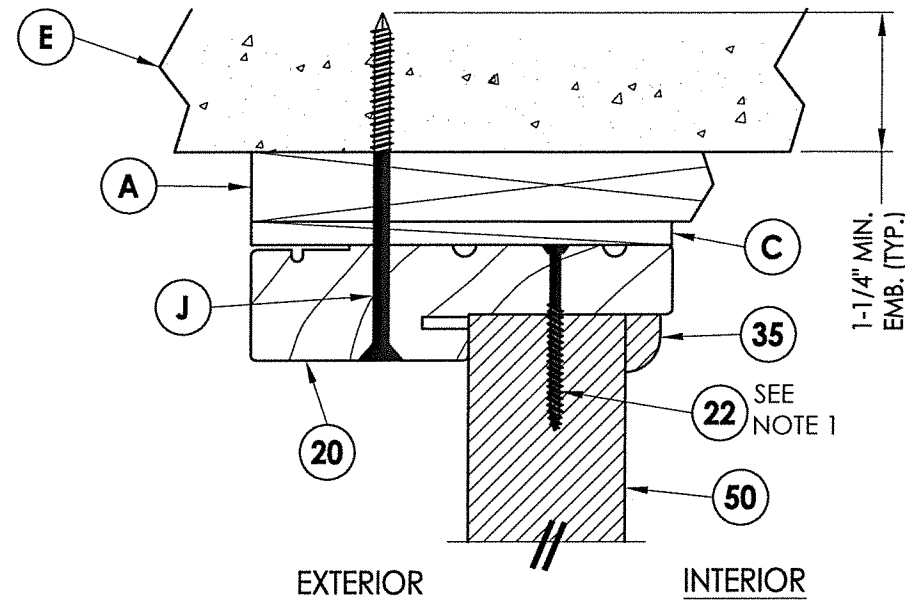
NOTE:
1. Sidelite panel secured to the sidelite
frame with (2) of item #22 in the
head and sill 3" from each end.



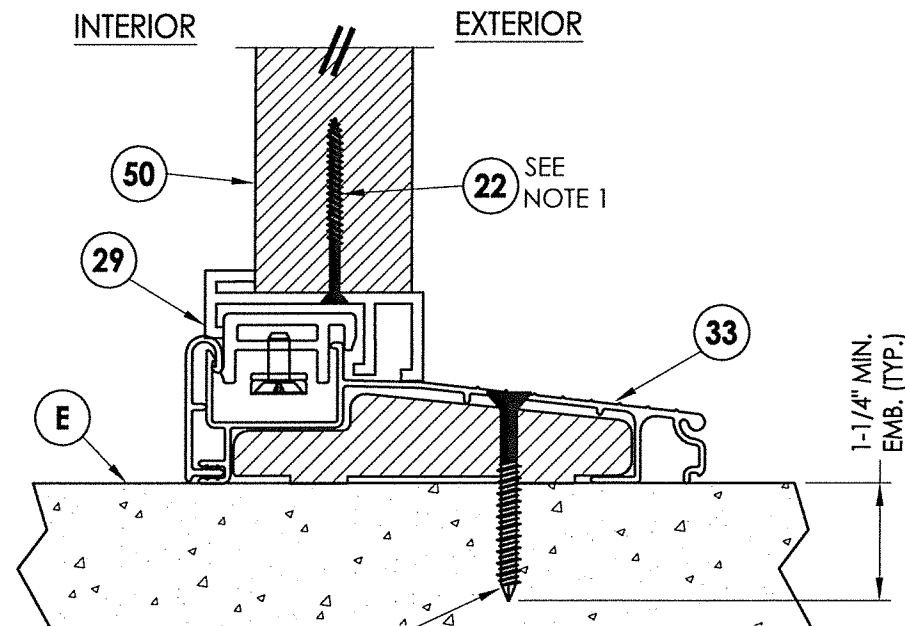
3
6 **VERTICAL CROSS SECTION**
Outswing configuration



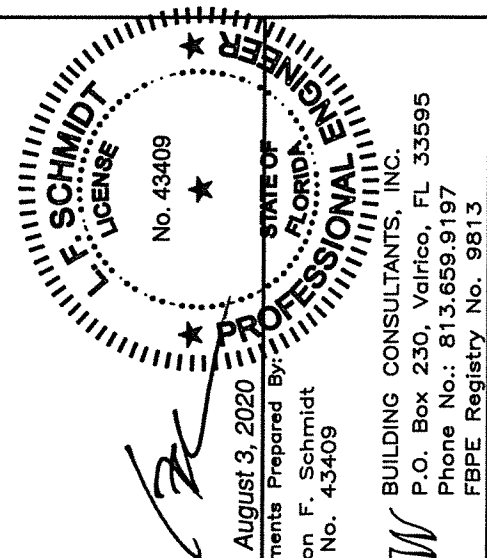
5
6 **VERTICAL CROSS SECTION**
Shown w/ Steel Stud Framing Option



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

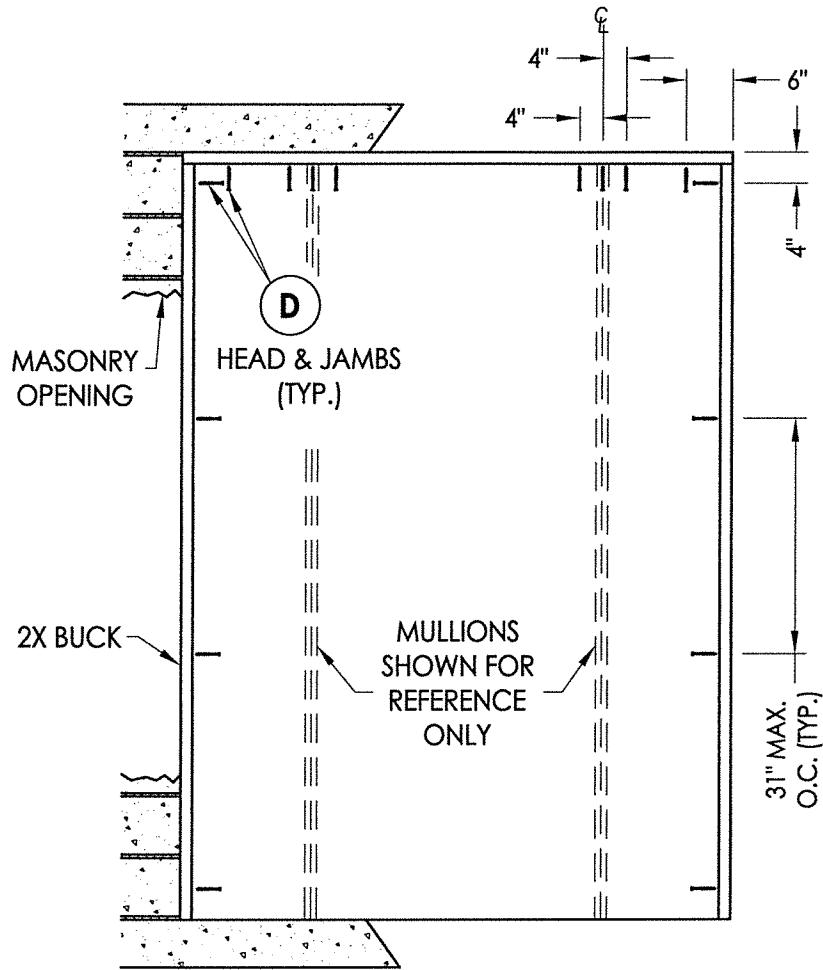


4
6 **VERTICAL CROSS SECTION**
Inswing configuration

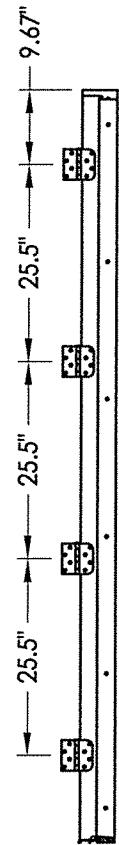


August 3, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

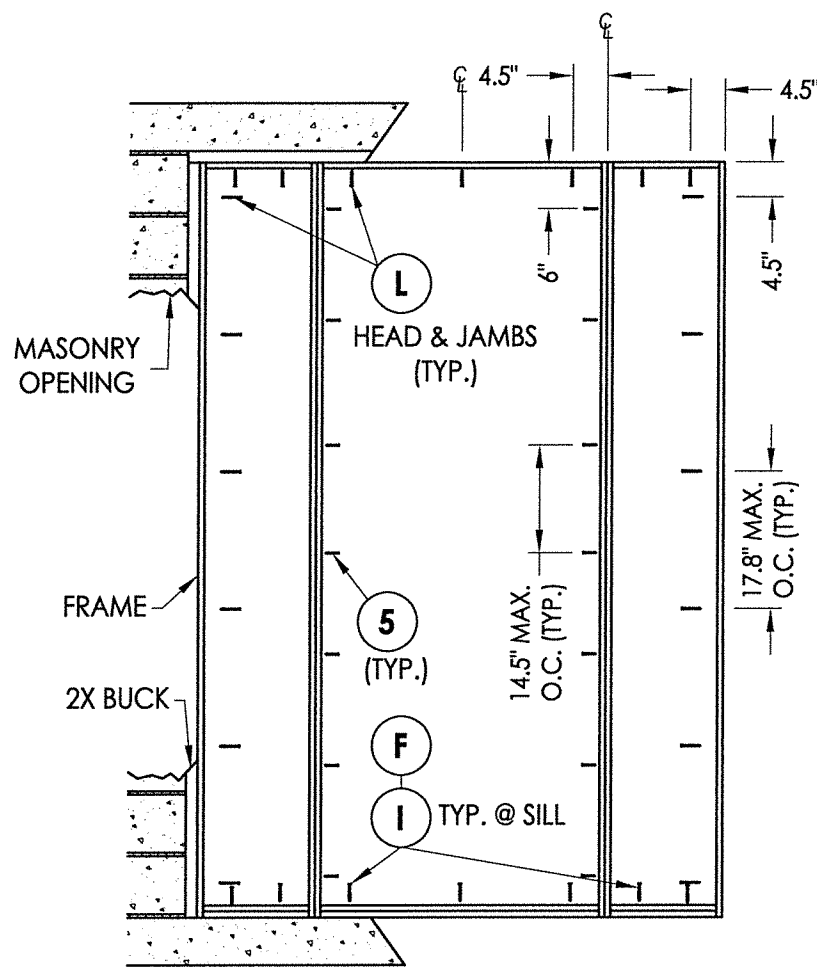
PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
REVISIONS			
NO.	DATE	DESCRIPTION	BY
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC	LFS
2	5/15/19	ADD STEEL STUD ANCHORING	LFS
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC	JK
DATE: 09/28/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.18			
SHEET 6 OF 9			



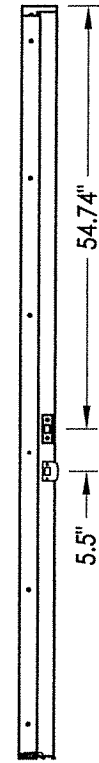
BUCK ANCHORING



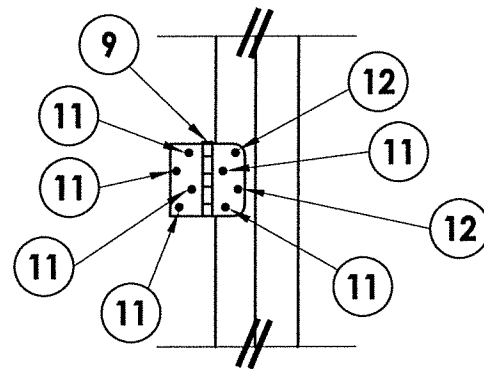
HINGE JAMB



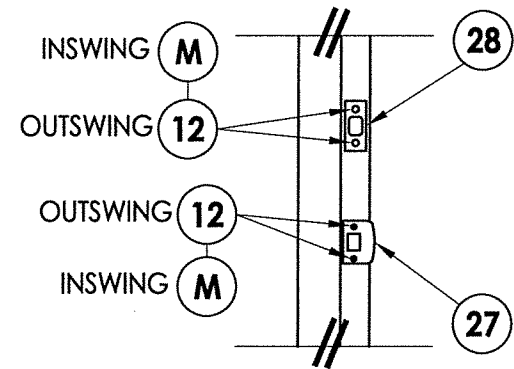
FRAME ANCHORING
Masonry 2X buck construction



STRIKE JAMB



HINGE DETAIL



LATCH & DEADBOLT DETAIL

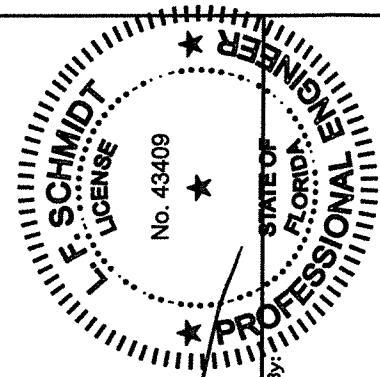
CONCRETE ANCHOR NOTES:

- 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"
ELCO ULTRACON®	1/4"	1-1/4"	1"	4"

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.

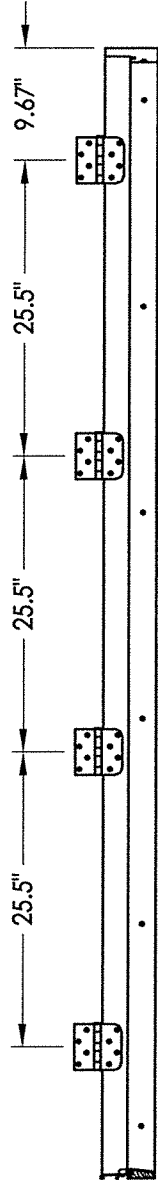


August 3, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		BUCK & FRAME ANCHORING 2X BUCK MASONRY CONSTRUCTION	
NO.	DATE	REVISIONS	BY
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC	LFS
2	5/15/19	ADD STEEL STUD ANCHORING	LFS
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC	JK
DATE			
DATE: 09/28/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.18			
SHEET 7 OF 9			

R:\Clients\Doers PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.11-20.dwg, 8.8



HINGE JAMB

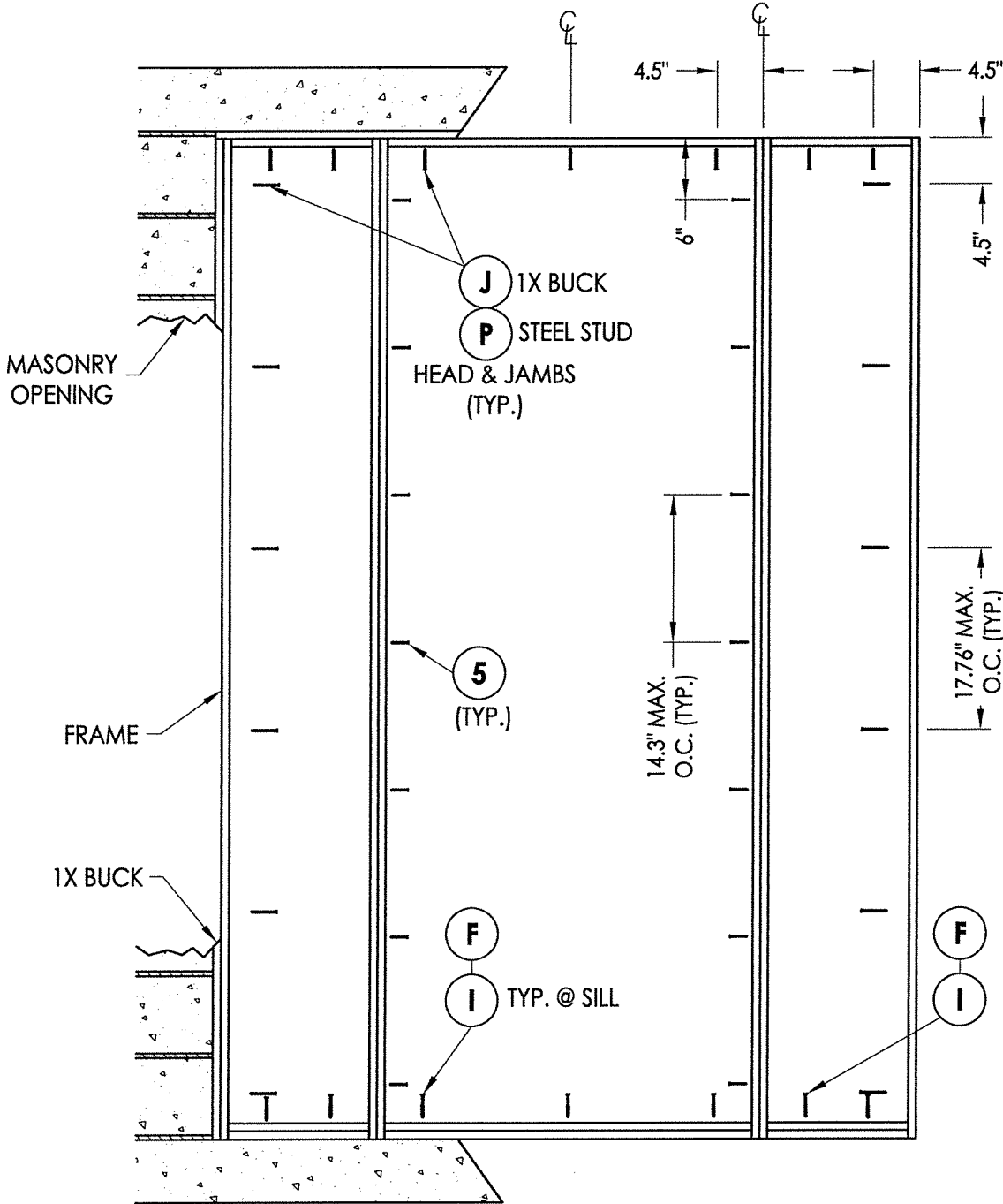
CONCRETE ANCHOR NOTES:

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:

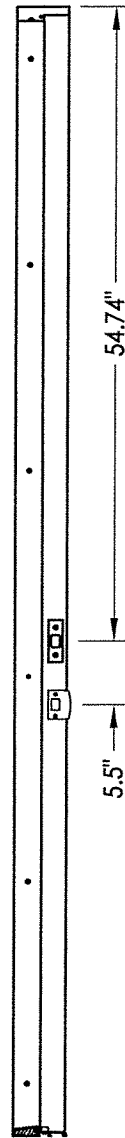
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"

WOOD SCREW INSTALLATION NOTES:

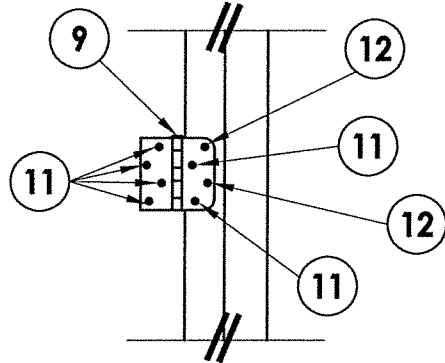
1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



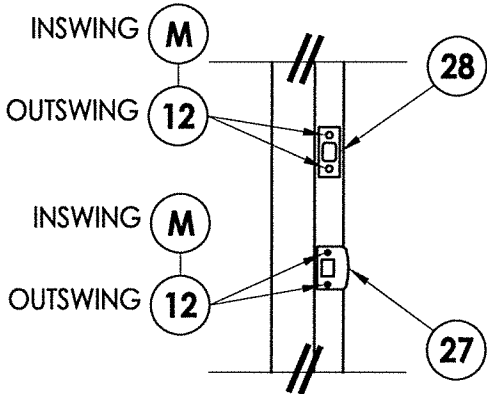
FRAME ANCHORING
Masonry 1X buck Construction



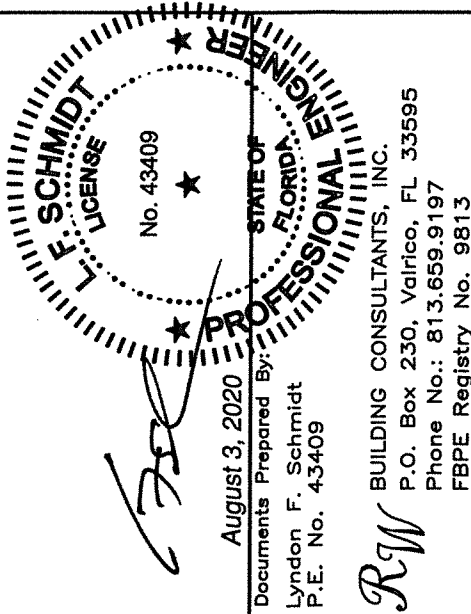
STRIKE JAMB



HINGE DETAIL



LATCH & DEADBOLT DETAIL



August 3, 2020
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:
DOERS FIBERGLASS DOOR

PART OR ASSEMBLY:
FRAME ANCHORING 1X BUCK
MASONRY CONSTRUCTION

NO	DATE	REVISIONS
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC
2	5/15/19	ADD STEEL STUD ANCHORING
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC
NO	DATE	BY

DATE: 09/28/15

SCALE: N.T.S.

DWG. BY: JK

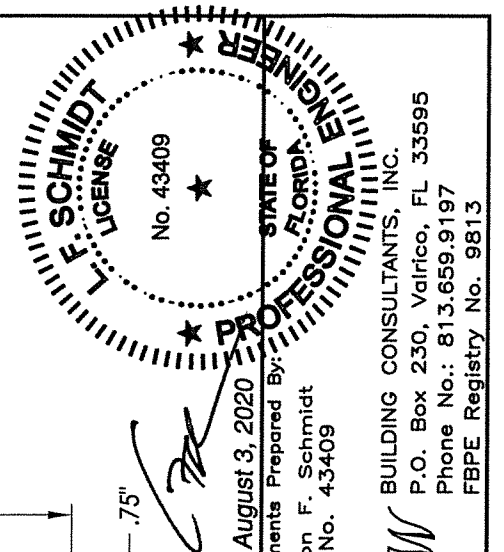
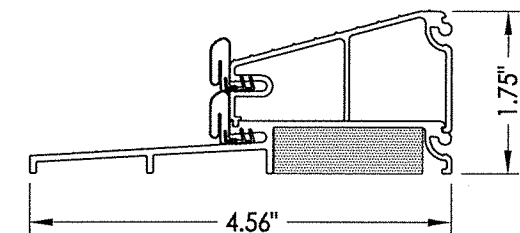
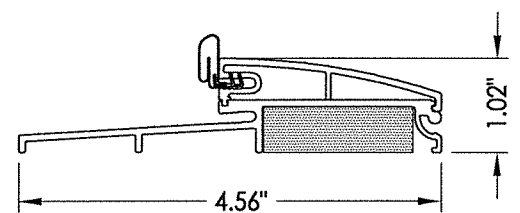
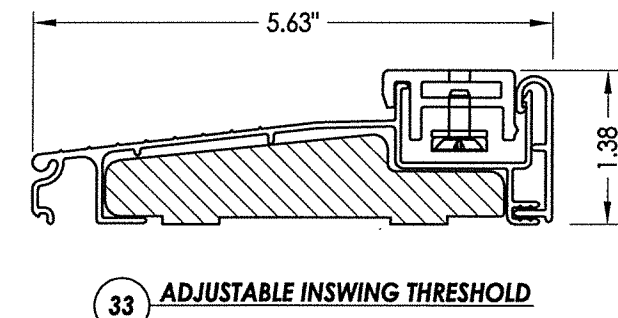
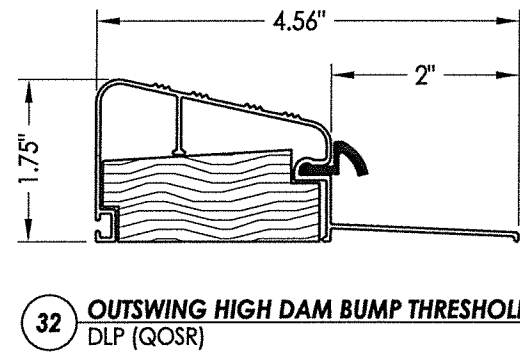
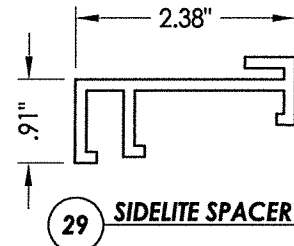
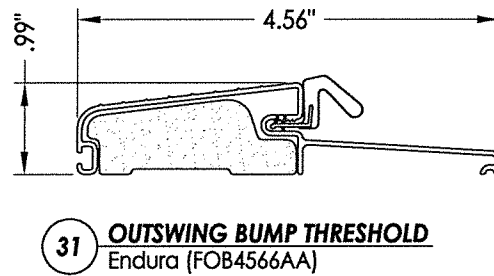
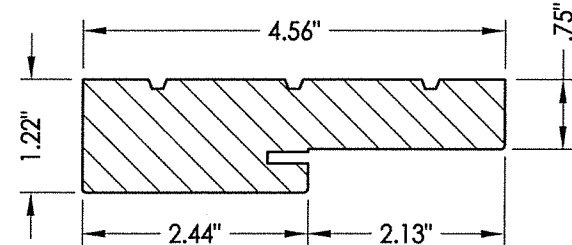
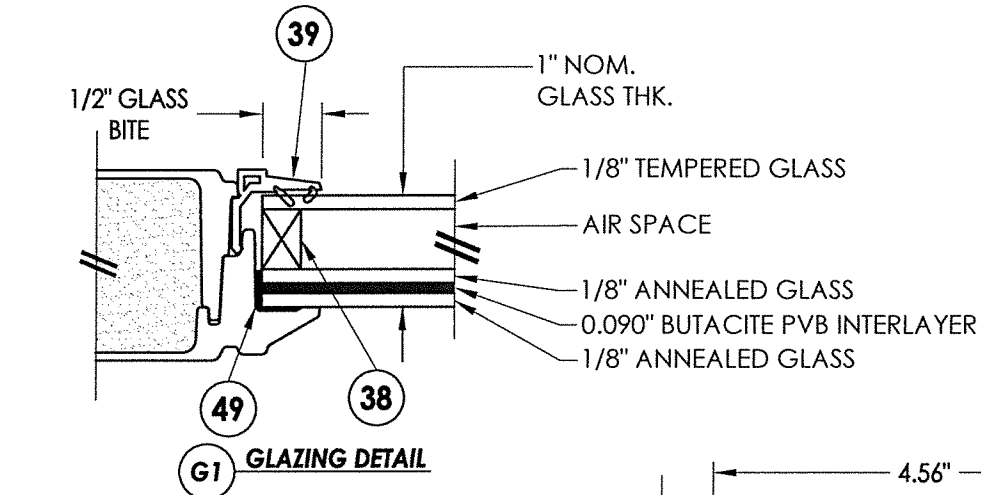
CHK. BY: LFS

DRAWING NO.: FL-19007.18

SHEET 8 OF 9

R:\Clients\Doors PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.11-20.dwg, 9.8

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" PFH ELCO 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 2-3/4" PFH ITW CONCRETE SCREW	STEEL
I	1/4" X 2-1/4" PFH ITW CONCRETE SCREW	STEEL
J	1/4" X 3-3/4" PFH ITW CONCRETE SCREW	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1-3/8" MIN. EMBEDMENT)	STEEL
M	#9 X 2-1/4" PFH WOOD SCREW	STEEL
P	#10-16 PFH SELF-DRILLING SMS	STEEL
5	#10 X 2" PFH SCREW	STEEL
6	SEALANT	SILICONE
7	Q-LON 650 WEATHER STRIP SCHLEGEL	FOAM
9	4" X 4" BUTT HINGE	STEEL
11	#9 X 3/4" PFH WOOD SCREW	STEEL
12	#9 X 2" PFH WOOD SCREW	STEEL
17	KWIKSET KEYED ENTRY - SIGNATURE SERIES	STEEL
18	KWIKSET DEADBOLT - SIGNATURE SERIES (780)	STEEL
20	FINGER JOINTED PINE FRAME, HEAD & HINGE JAMBS	WOOD
22	#8 X 2" PFH WOOD SCREW	STEEL
27	LATCH STRIKE PLATE	STEEL
28	DEADBOLT STRIKE PLATE	STEEL
29	SIDELITE SPACER	PVC
30	WEATHER-STOP 3647 HOLM INDUSTRIES	VINYL
31	OUTSWING BUMP THRESHOLD	ALUM. / PVC
32	OUTSWING HIGH DAM BUMP THRESHOLD	ALUM. / WOOD
33	INSWING ADJUSTABLE THRESHOLD	ALUM. / WOOD
35	SHOE MOULD 5/8" X 3/8"	WOOD
36	OUTSWING BASE SILL w/ BUMPER THRESHOLD CAP	ALUM. / COMP.
37	OUTSWING BASE SILL w/ BUMPER THRESHOLD HIGH DAM CAP	ALUM. / COMP.
38	GLAZING SPACER	ALUM.
39	GLAZING BEAD	PVC
40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
41	DOOR SKIN (MIN. 0.095" THICK)	FIBERGLASS
42	TOP RAIL	CELLULAR PVC
43	LATCH & HINGE STILE	CELLULAR PVC
44	LATCH & HINGE STILE SUPPORT	WOOD
45	BOTTOM RAIL	CELLULAR PVC
46	POLYURETHANE FOAM	POLYURETHANE
47	STILE STIFFENER REINFORCEMENT	STEEL
48	REINFORCEMENT RETAINING SCREW	NYLON
49	GLAZING COMPOUND DOW 995	SILICONE
50	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
51	SIDELITE STILE	CELLULAR PVC
52	SIDELITE STILE SUPPORT	WOOD
53	SIDELITE BOTTOM RAIL	CELLULAR PVC



August 3, 2020
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:		DOORS	
		FIBERGLASS DOOR	
PART OR ASSEMBLY:		BILL OF MATERIALS, GLAZING DETAIL & COMPONENTS	
		LFS	BY
		LFS	JK
		FBC	DATE
		NO.	DATE
		3	7/30/20
		2	5/15/19
		1	9/26/17
DATE: 09/28/15		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: FL-19007.18		SHEET 9 OF 9	