



DIAMOND DOOR SERIES

FLUSH GLAZED FIBERGLASS DOORS w/ SIDELITES

INSWING / OUTSWING

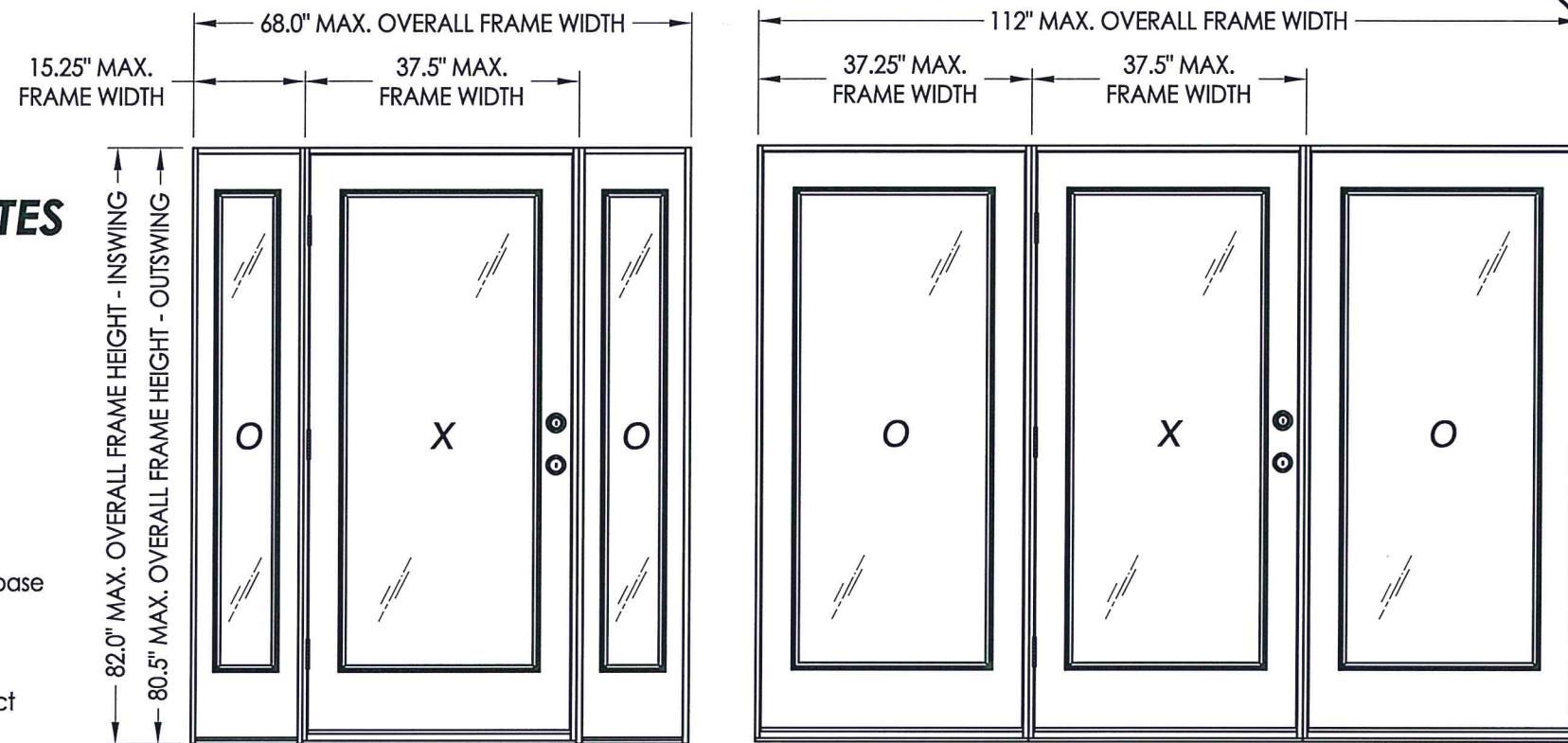
"IMPACT"

GENERAL NOTES

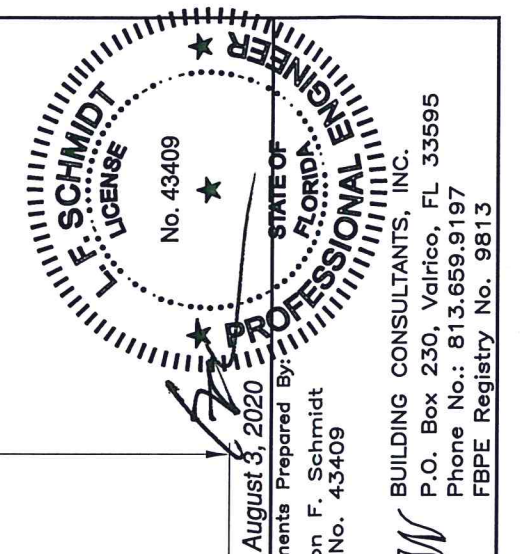
- This product has been evaluated and is in compliance with the 7th Edition (2020) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
- Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond 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 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
- 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.

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2	Door/Sidelite panel details
3	Sidelite panel details
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7	Vertical cross sections
8	Buck anchoring
9	Frame anchoring
10	Frame anchoring
11	Bill of materials and 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 82.0"	26.25" x 65.93"	7.0" x 65.93"	G1	+50.0	-50.0
OUTSWING	68.0" x 80.5"	26.25" x 65.93"	7.0" x 65.93"		+50.0	-50.0
INSWING	112.0" x 82.0"	26.25" x 65.93"	26.25" x 65.93"		+50.0	-50.0
OUTSWING	112.0" x 80.5"	26.25" x 65.93"	26.25" x 65.93"		+50.0	-50.0

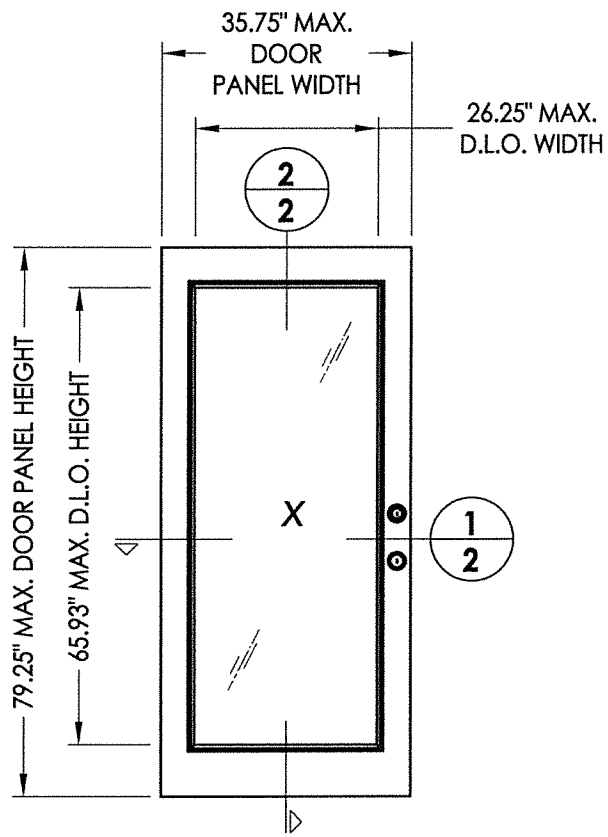


August 3, 2020
Documents Prepared By:
Lyndon F. Schmidt
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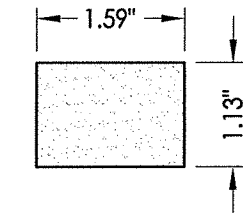
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES	
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-19007.13			
SHEET 1 OF 11			

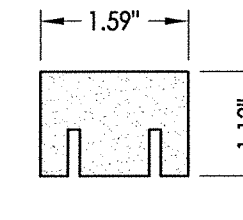
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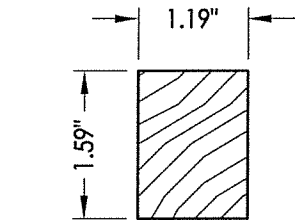
40 DOOR / SIDELITE PANEL



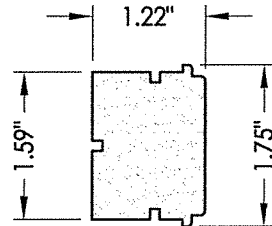
42 TOP RAIL
Cellular PVC



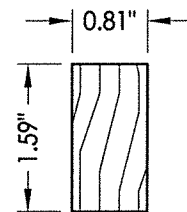
45 BOTTOM RAIL
Cellular PVC



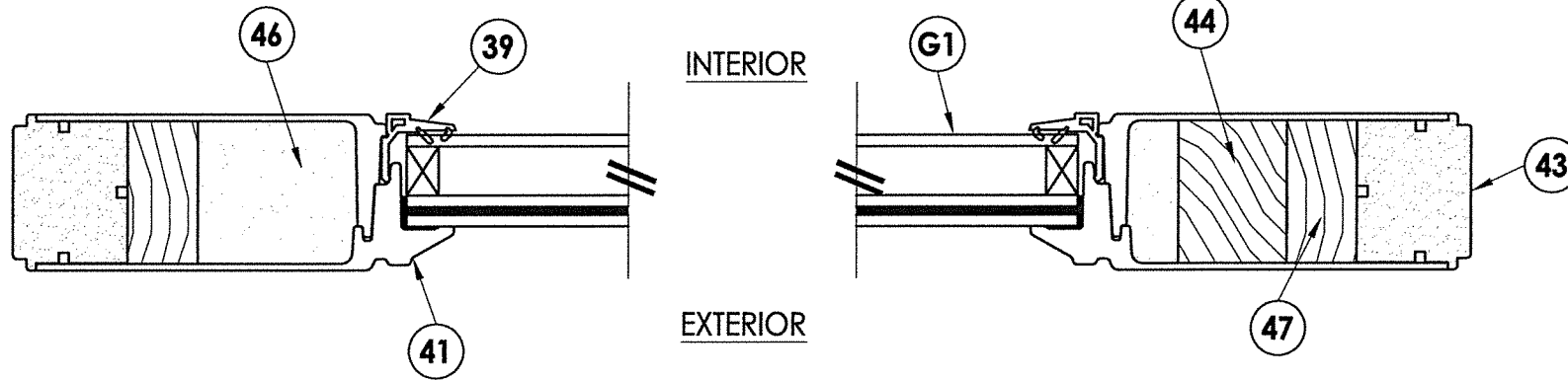
44 LOCK REINFORCEMENT
Wood



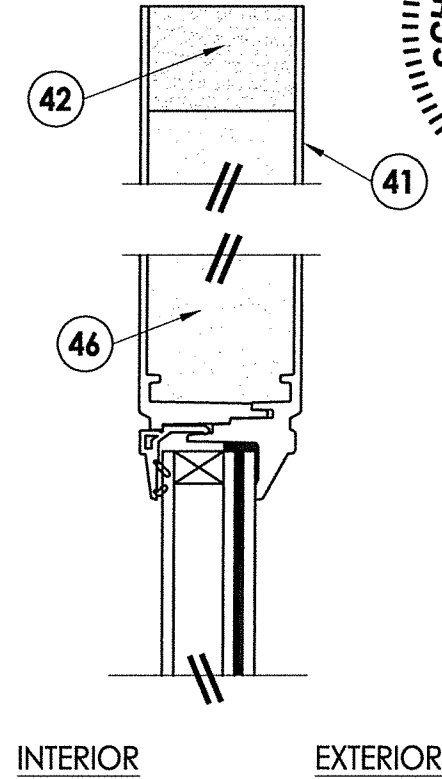
43 LATCH & HINGE STILE
Cellular PVC



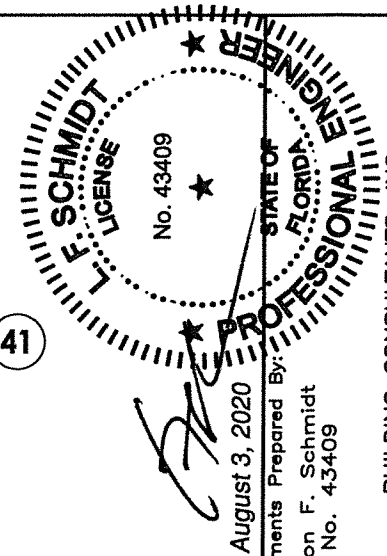
47 LATCH & HINGE STILE
Wood reinforcement



1
2 HORIZONTAL CROSS SECTION



2
2 VERTICAL CROSS SECTION



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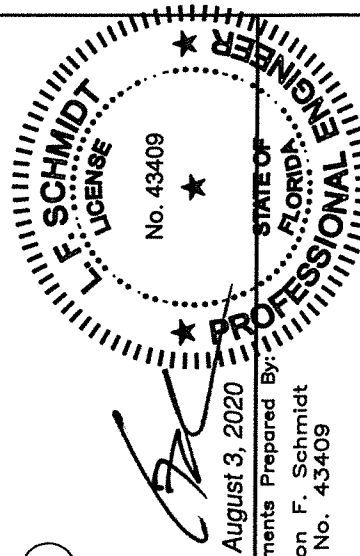
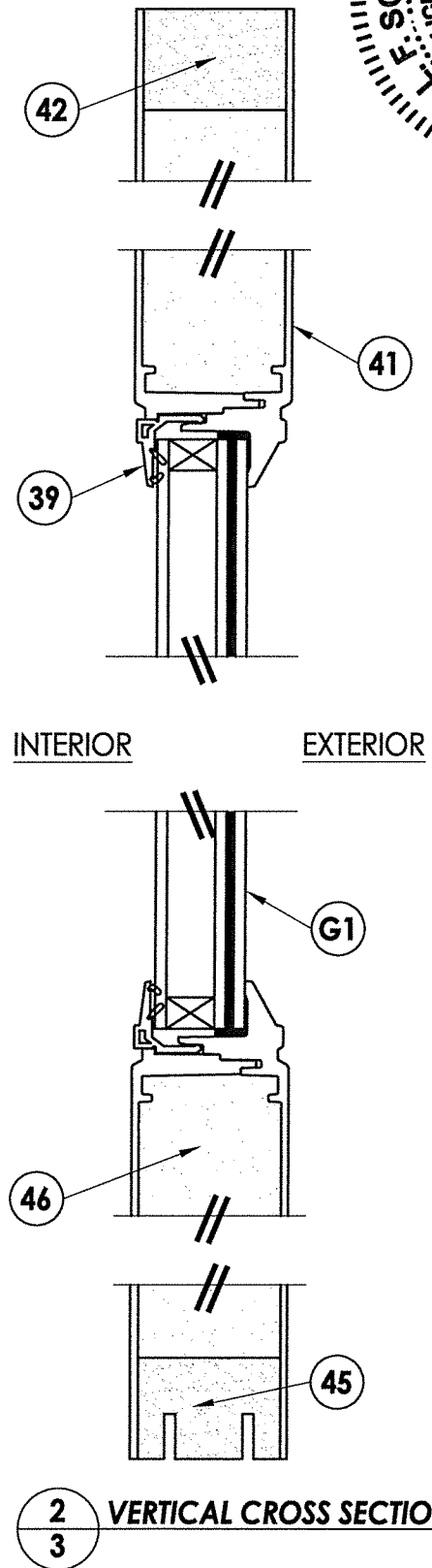
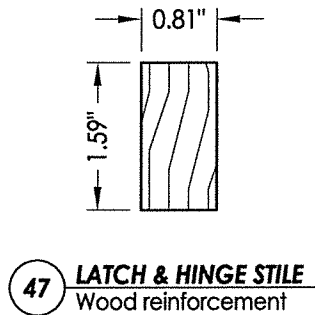
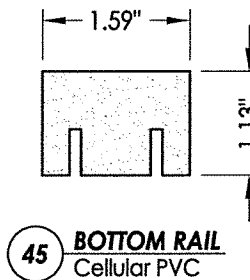
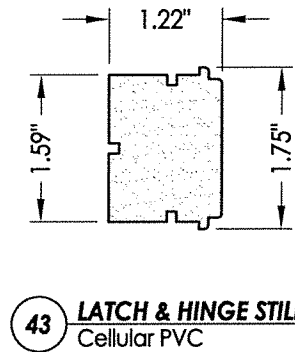
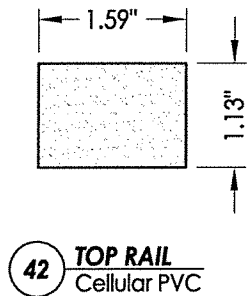
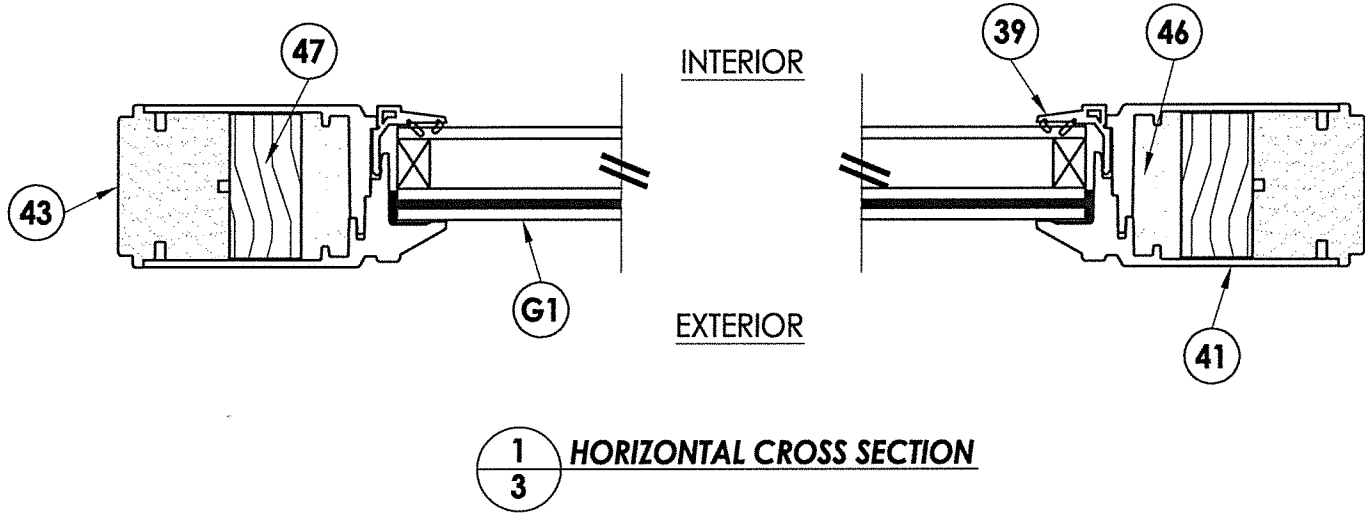
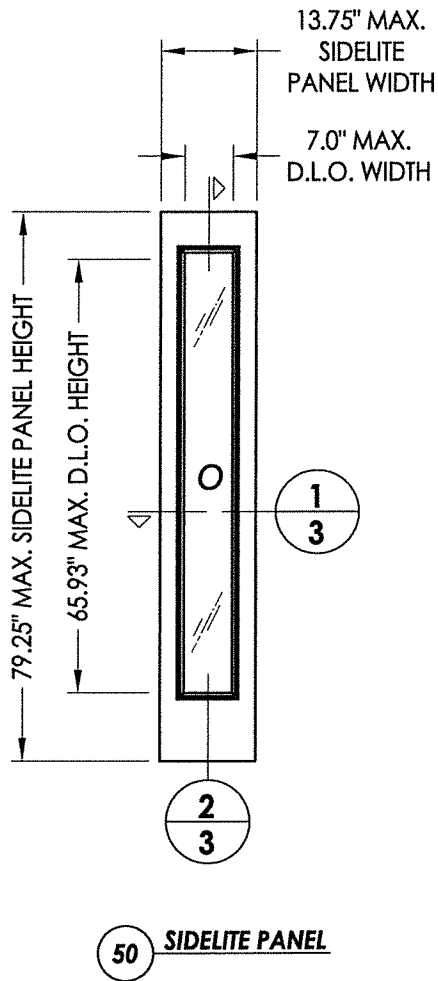
PRODUCT:
DOERS
FIBERGLASS DOOR

PART OR ASSEMBLY:
DOOR / SIDELITE PANEL DETAILS

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

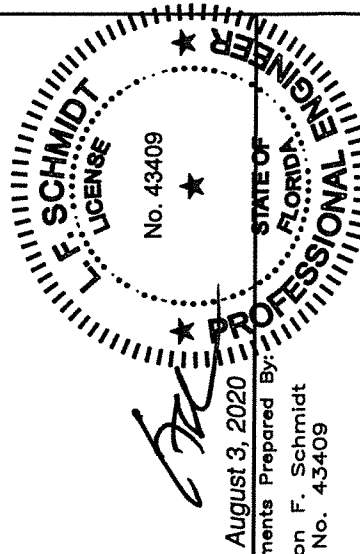
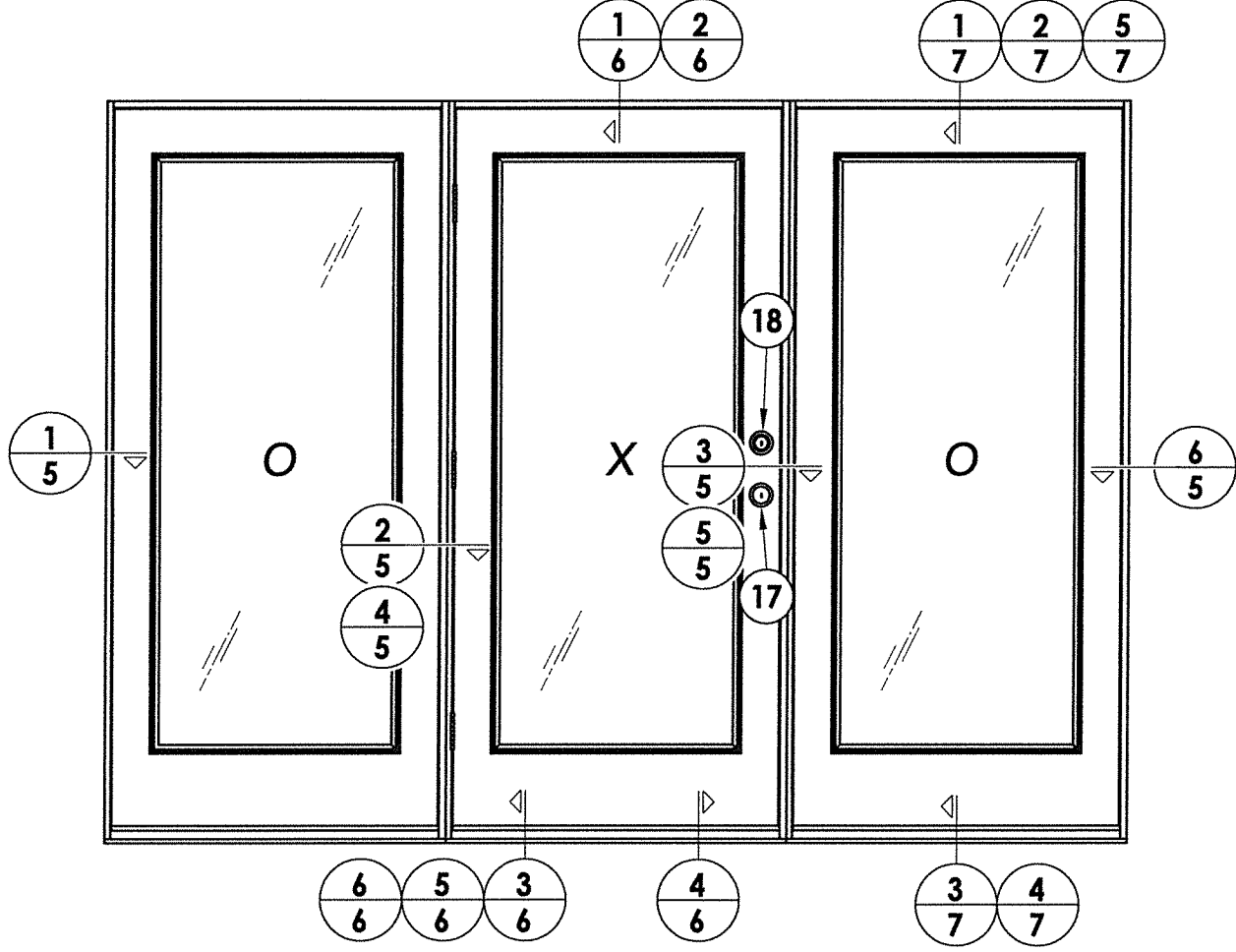
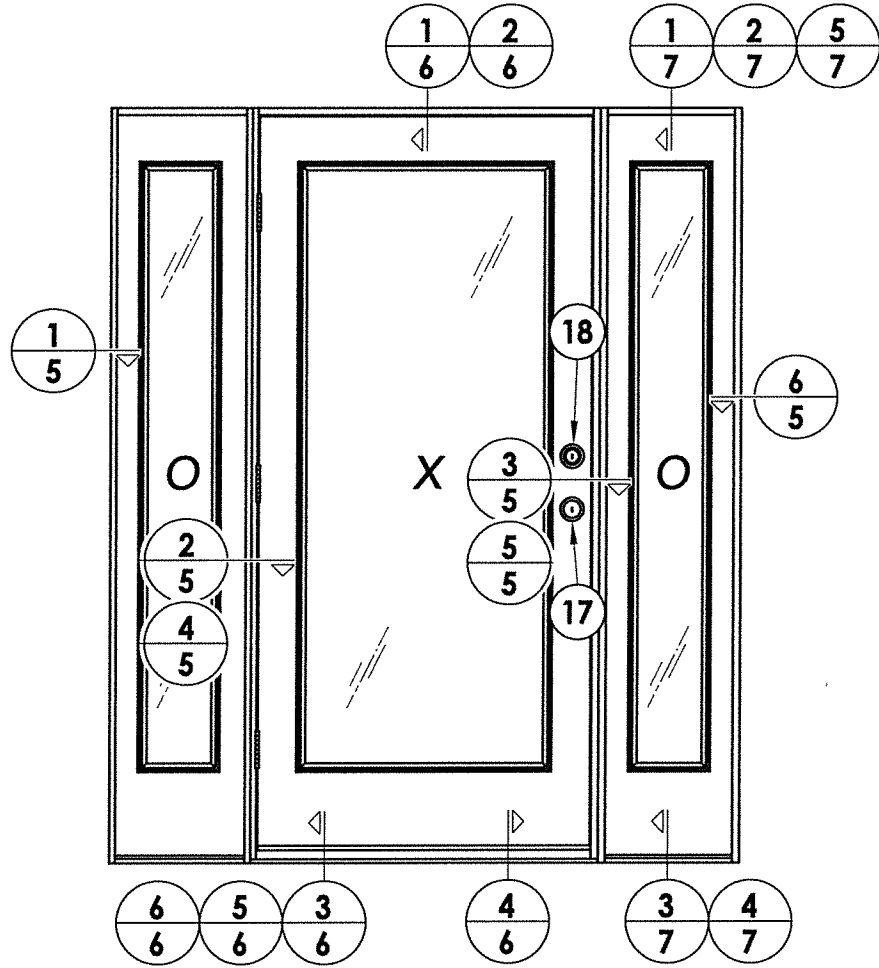
DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.13
SHEET 2 OF 11

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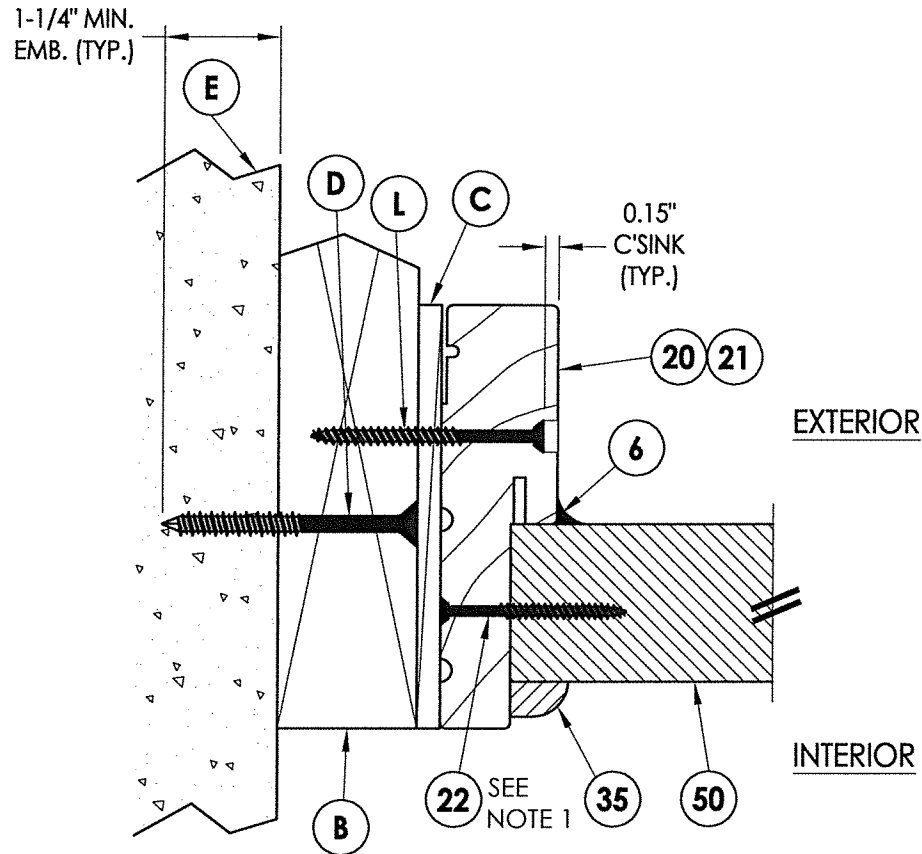
PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		SIDELITE PANEL DETAILS	
REVISIONS			
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2	5/15/19	ADD STEEL STUD ANCHORING	LFS
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC	JK
			BY
DATE: 09/28/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.13			
SHEET 3 OF 11			



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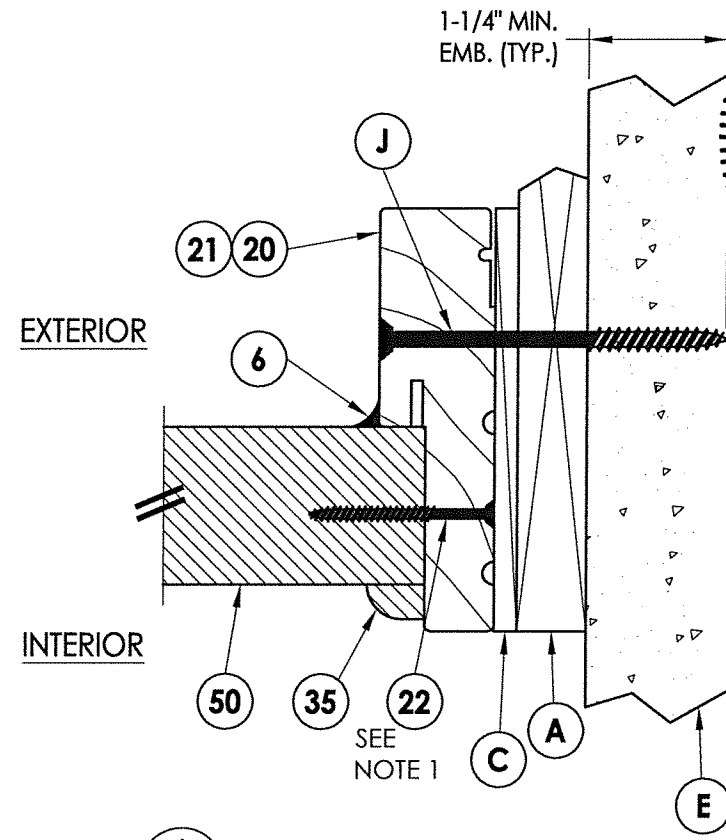
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		PART OR ASSEMBLY: ELEVATIONS	
		REVISIONS	
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2	5/15/19	ADD STEEL STUD ANCHORING	LFS
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC	JK
NO.	DATE		BY
DATE: 09/28/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.13			
SHEET 4 OF 11			

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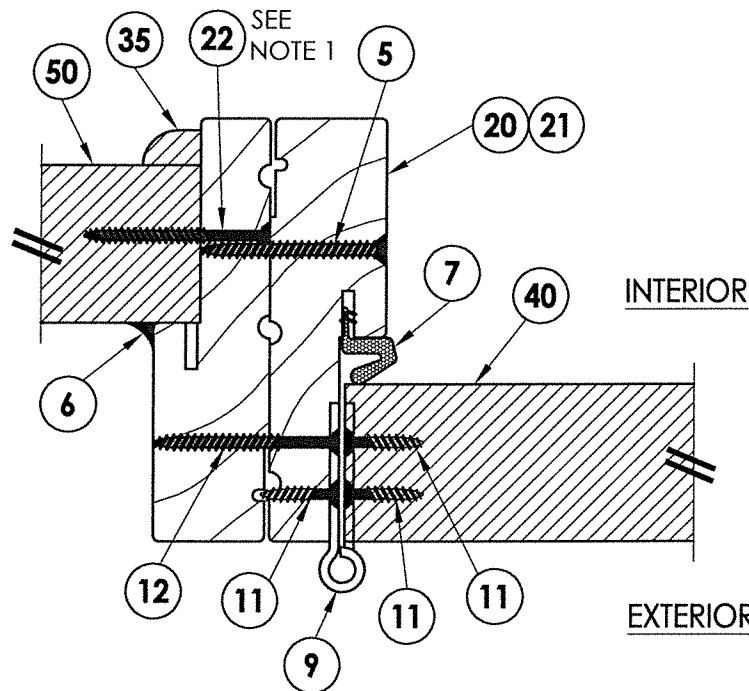


1 HORIZONTAL CROSS SECTION
5 Inswing shown - outswing also approved

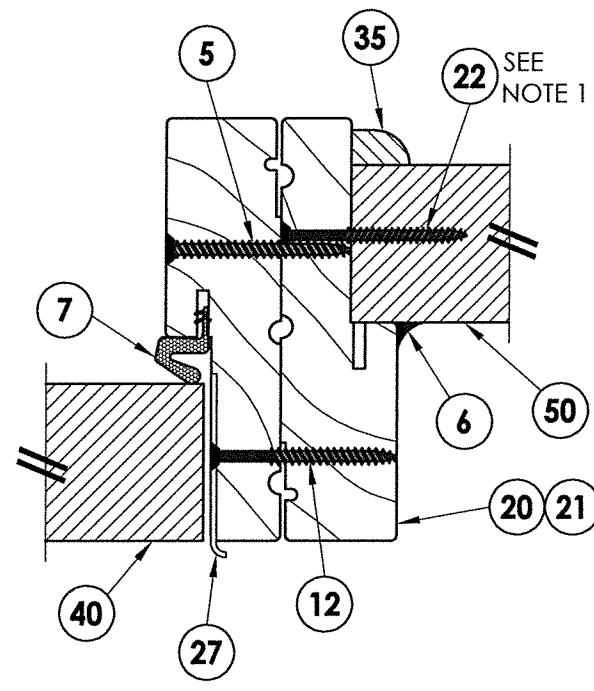
NOTE:
1. Sidelite panel secured to the sidelite frame as follows:
14" nom. panel: (4) of item #22 located 10" from each end and 2 more equally spaced.
36" nom. panel: (6) of item #22 located 6" from each end and 4 more equally spaced.



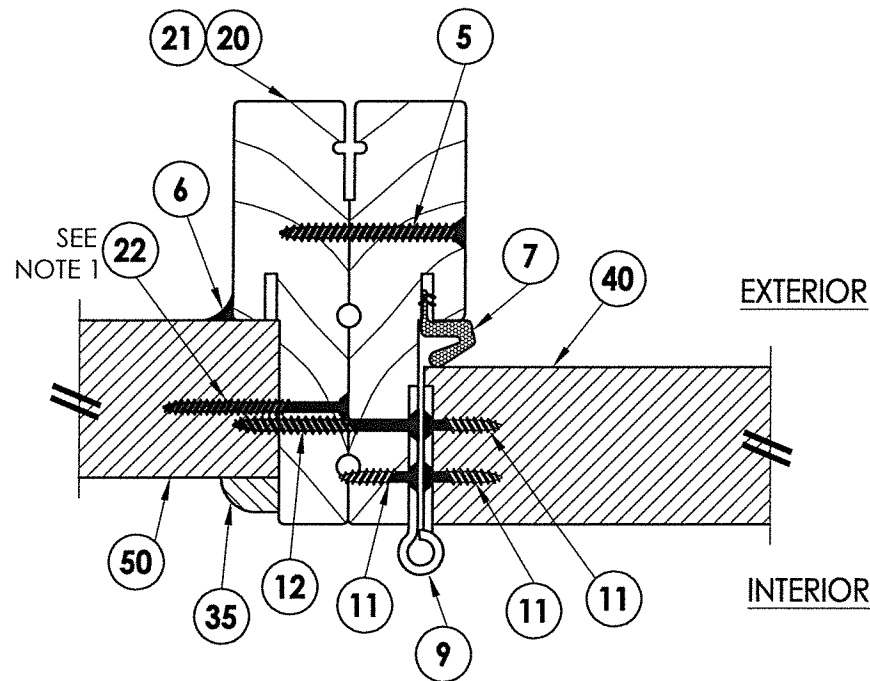
6 HORIZONTAL CROSS SECTION
5 Shown w/ 1X sub-buck
Inswing shown - outswing also approved



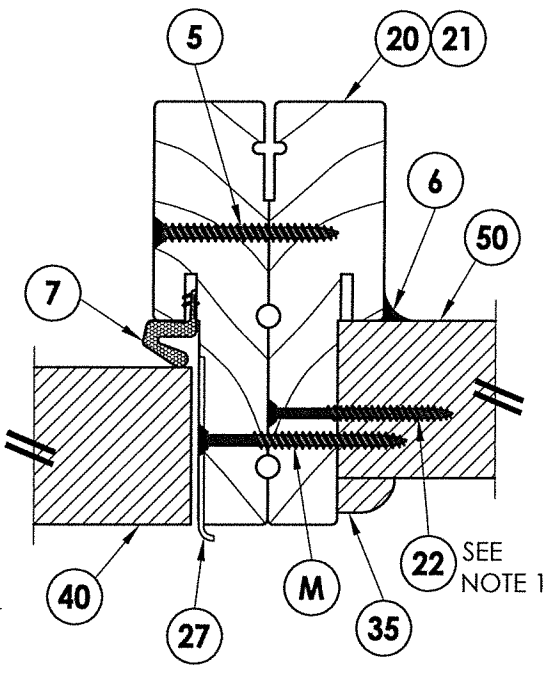
2 HORIZONTAL CROSS SECTION
5 Alternate outswing configuration shown



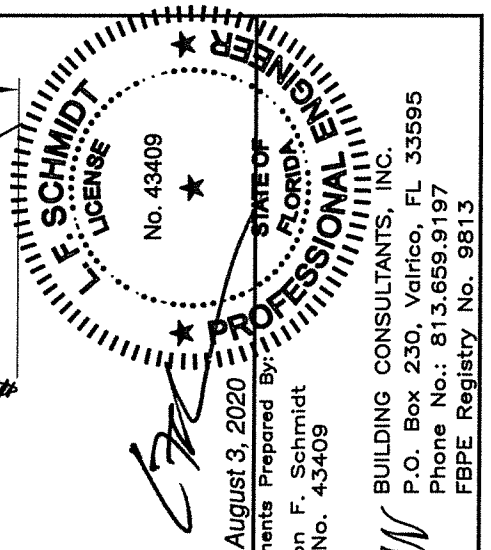
3 HORIZONTAL CROSS SECTION
5 Alternate outswing configuration shown



4 HORIZONTAL CROSS SECTION
5 Inswing shown - outswing also approved

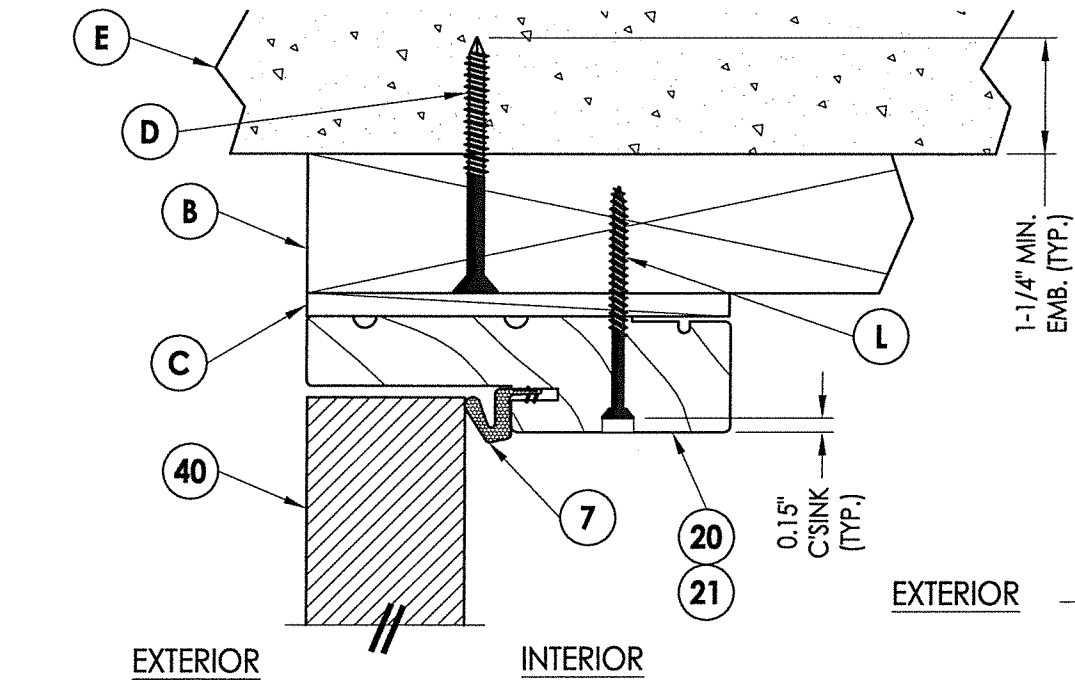


5 HORIZONTAL CROSS SECTION
5 Inswing shown - outswing also approved

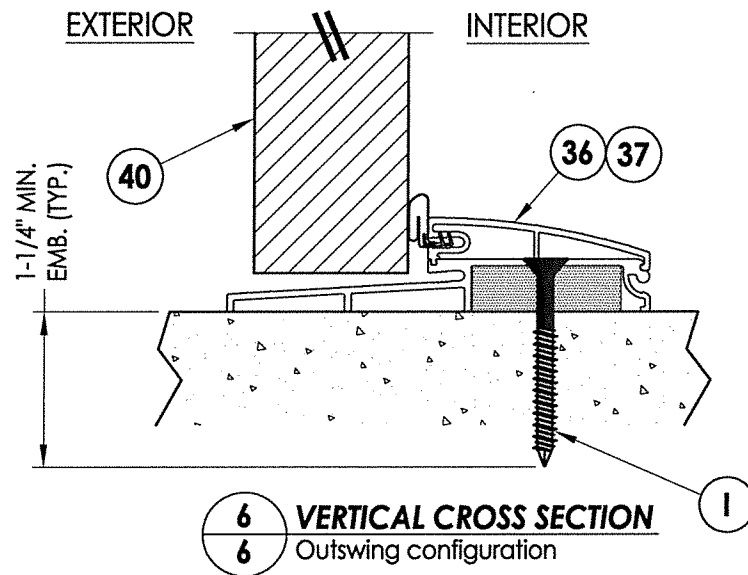


PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		HORIZONTAL CROSS SECTIONS	
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC	LFS
2	5/15/19	ADD STEEL STUD ANCHORING	LFS
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC	JK
NO.	DATE		BY
REVISIONS			
DATE: 09/28/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.13			
SHEET 5 OF 11			

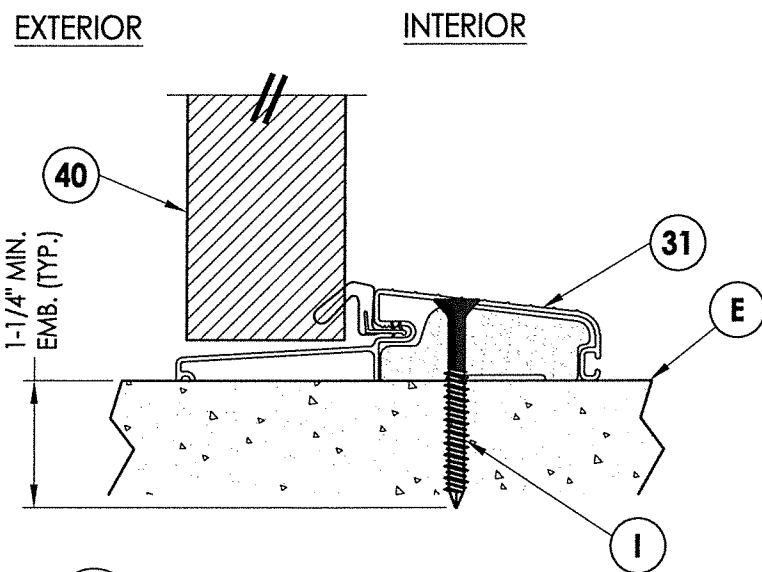
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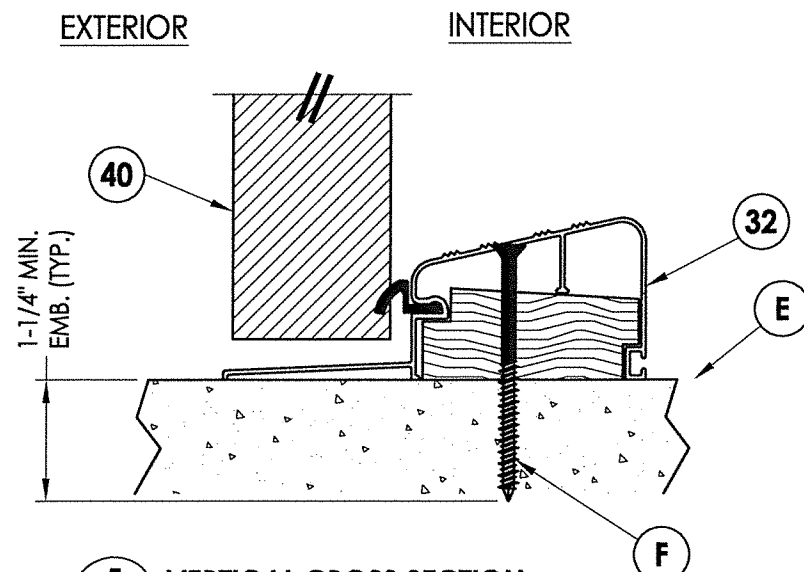
1
6 **VERTICAL CROSS SECTION**
Outswing shown - inswing
also approved



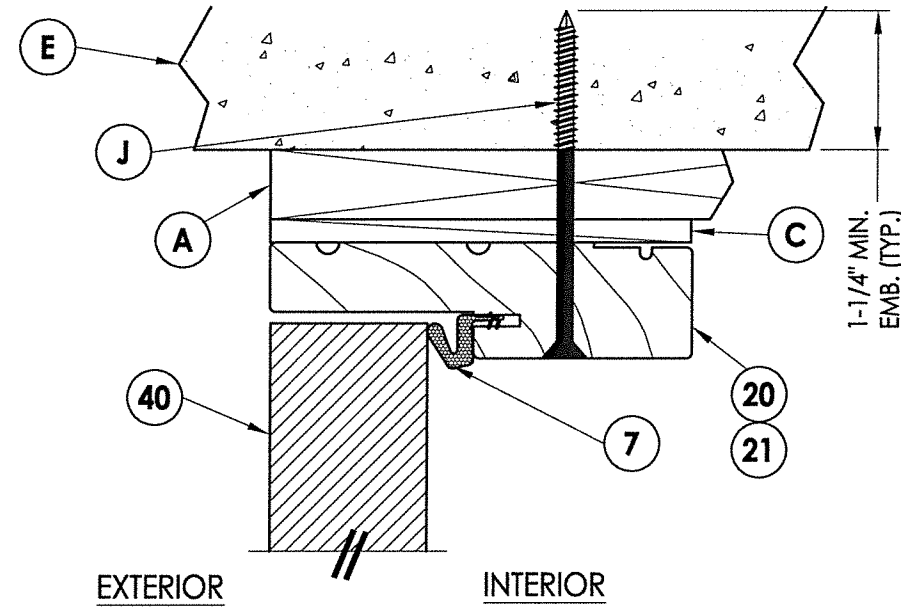
6
6 **VERTICAL CROSS SECTION**
Outswing configuration



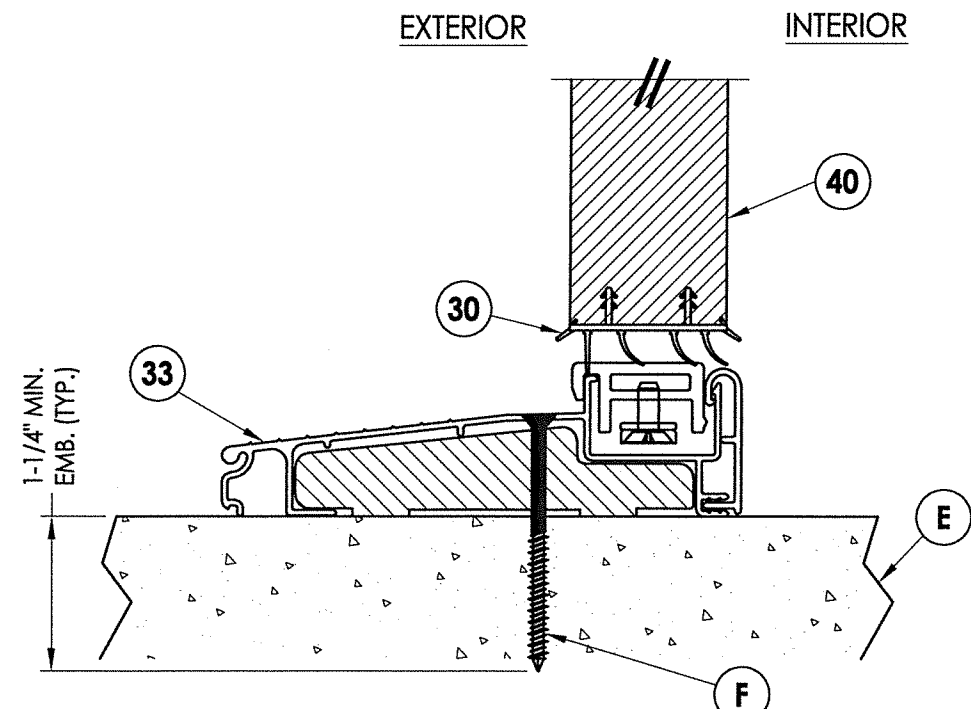
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6 **VERTICAL CROSS SECTION**
Outswing configuration



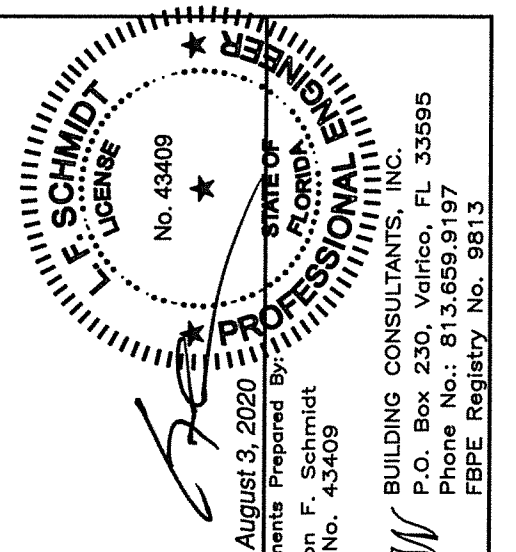
5
6 **VERTICAL CROSS SECTION**
Outswing configuration
(Where water infiltration requirements are specified)



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



4
6 **VERTICAL CROSS SECTION**
Inswing configuration



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FBPE Registry No. 9813

PRODUCT:
DOERS
FIBERGLASS DOOR

PART OR ASSEMBLY:
VERTICAL CROSS SECTIONS

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

DATE: 09/28/15

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-19007.13

SHEET 6 OF 11

NOTE:

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

NOTE: Sheet Metal Screws must penetrate a min. of 3 threads through 2 sheets of metal.

➤ METAL STUDS BY OTHERS
(SSMA STUD 550S162-43,
Fy = 33 ksi, Fu = 45 ksi, MIN.)

5 VERTICAL CROSS SECTION
7 Shown w/ Steel Stud Framing Option

EXTERIOR " INTERIOR

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

INTERIOR

EXTERIOR

50

22 SEE NOTE 1

29

33

E

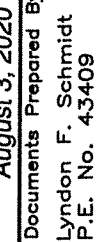
1

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

4
7

VERTICAL CROSS SECTION

Inswing configuration



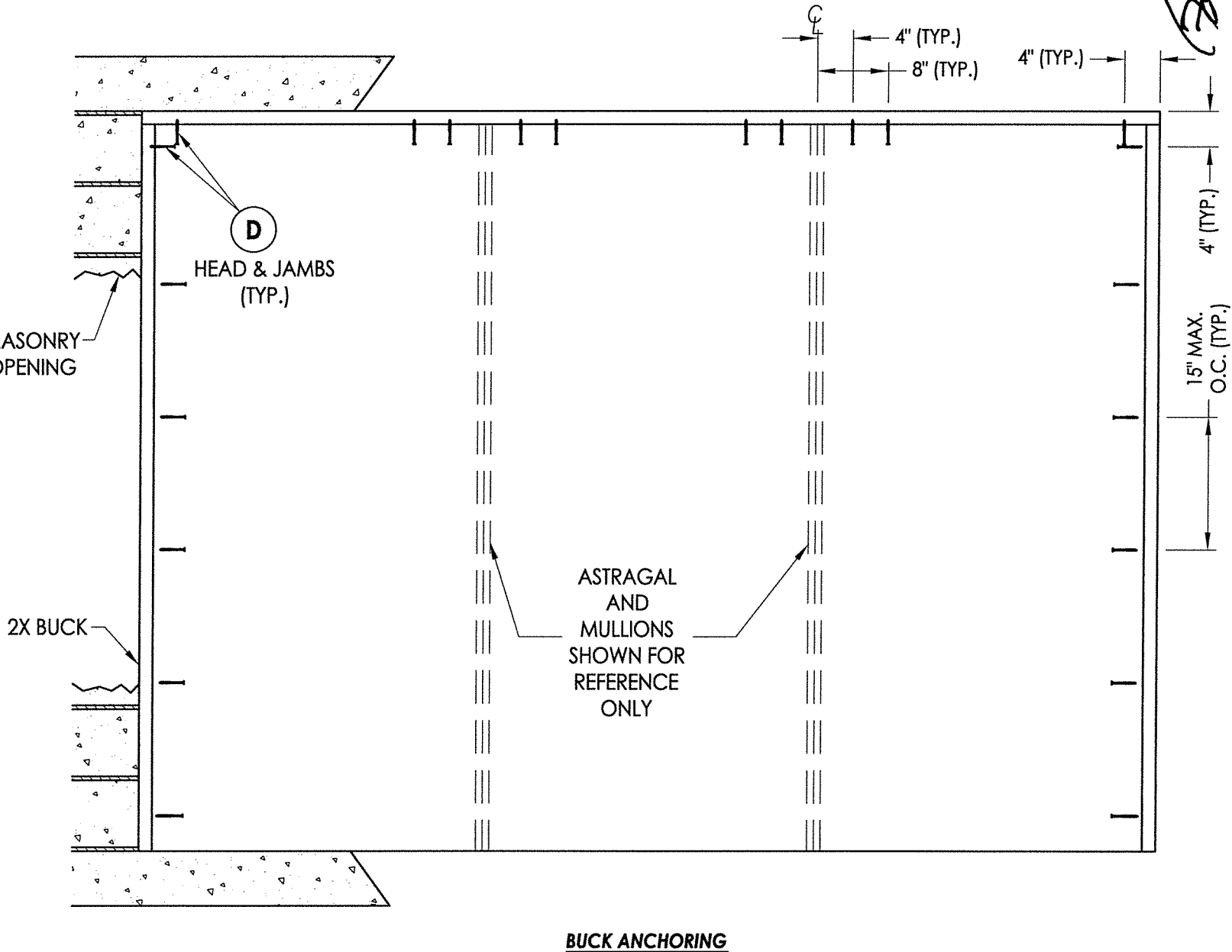
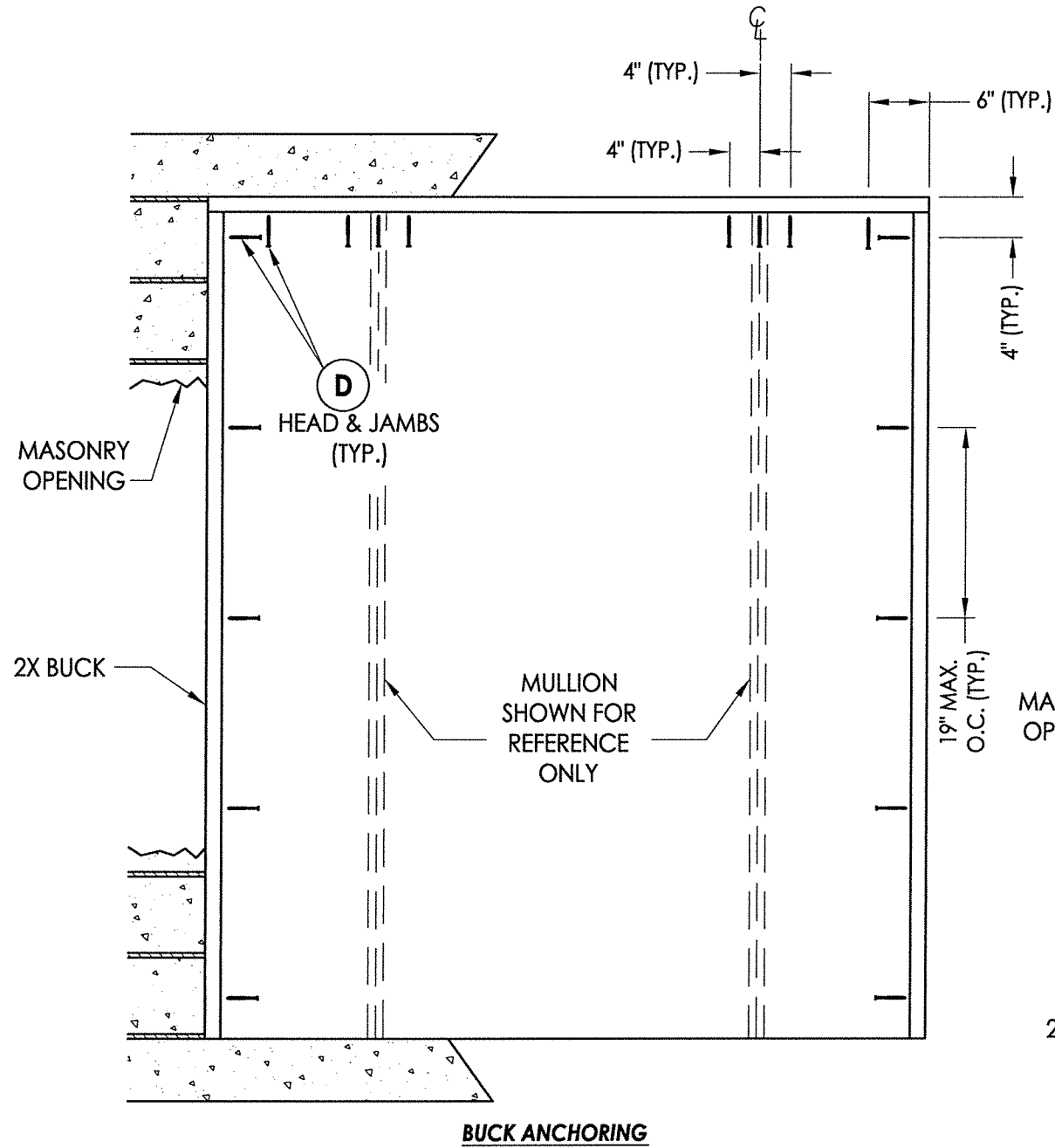
PRODUCT: DOERS
FIBERGLASS DOOR

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

[illegible]

DATE:	09/28/15
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-19007.13
SHEET	7 OF 11

R:\Clients\Doers PERMANENTVA - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.11-20.dwg, 8.3



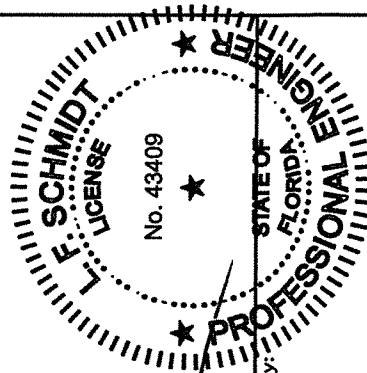
CONCRETE ANCHOR NOTES:

- 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.



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PRODUCT:	DOERS FIBERGLASS DOOR
PART OR ASSEMBLY:	BUCK ANCHORING

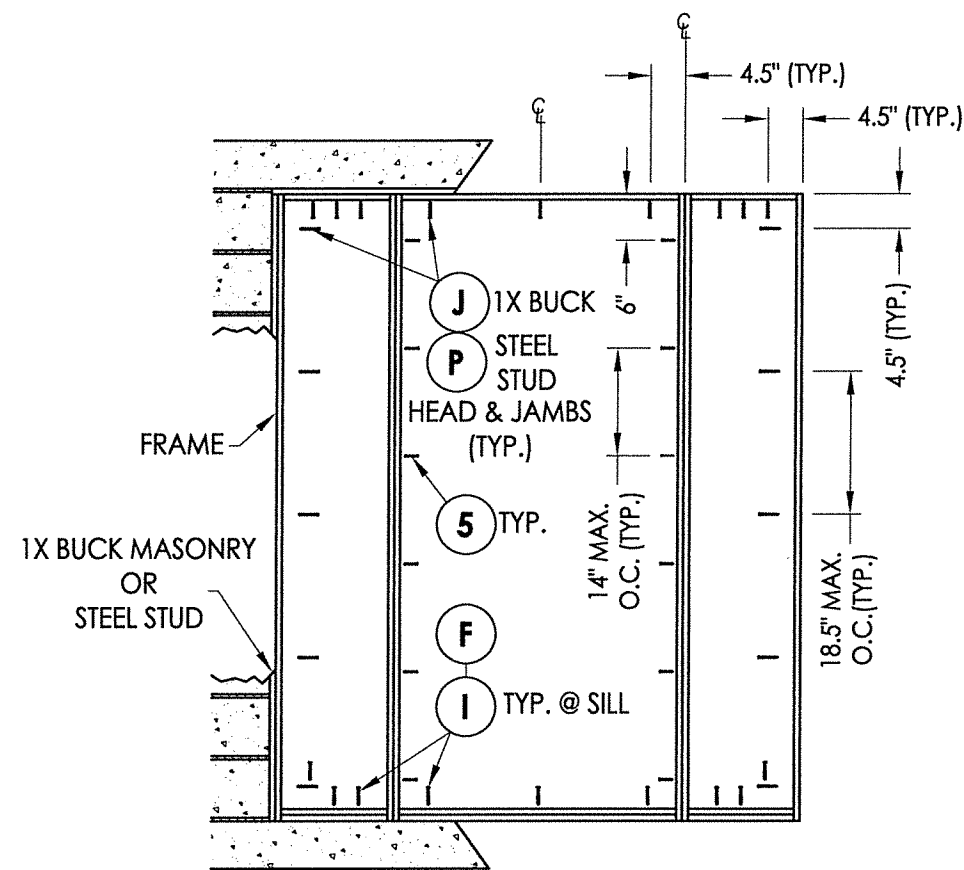
NO.	DATE	REVISIONS
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC
2	5/15/19	ADD STEEL STUD ANCHORING
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC

DATE:	09/28/15
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-19007.13
SHEET	8 OF 11

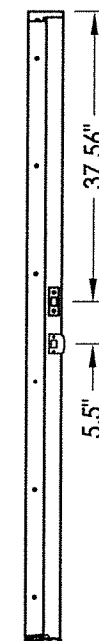
FRAME ANCHORING
Masonry 2X buck construction

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"

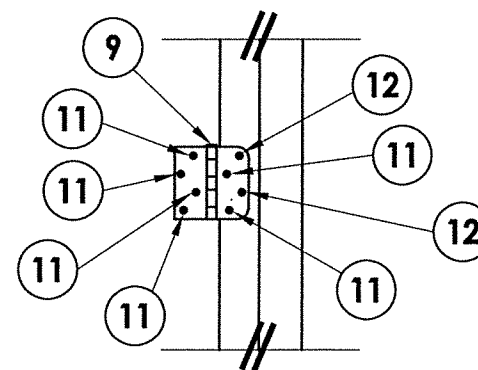
1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



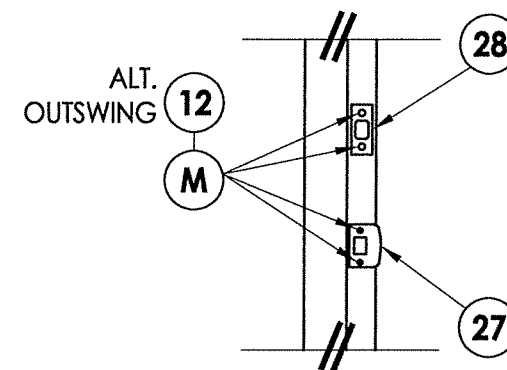
FRAME ANCHORING
Masonry 1X buck Construction
Steel Stud Construction



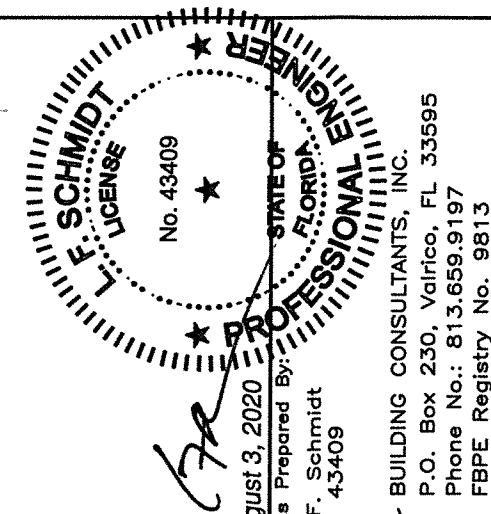
STRIKE JAMB



HINGE DETAIL



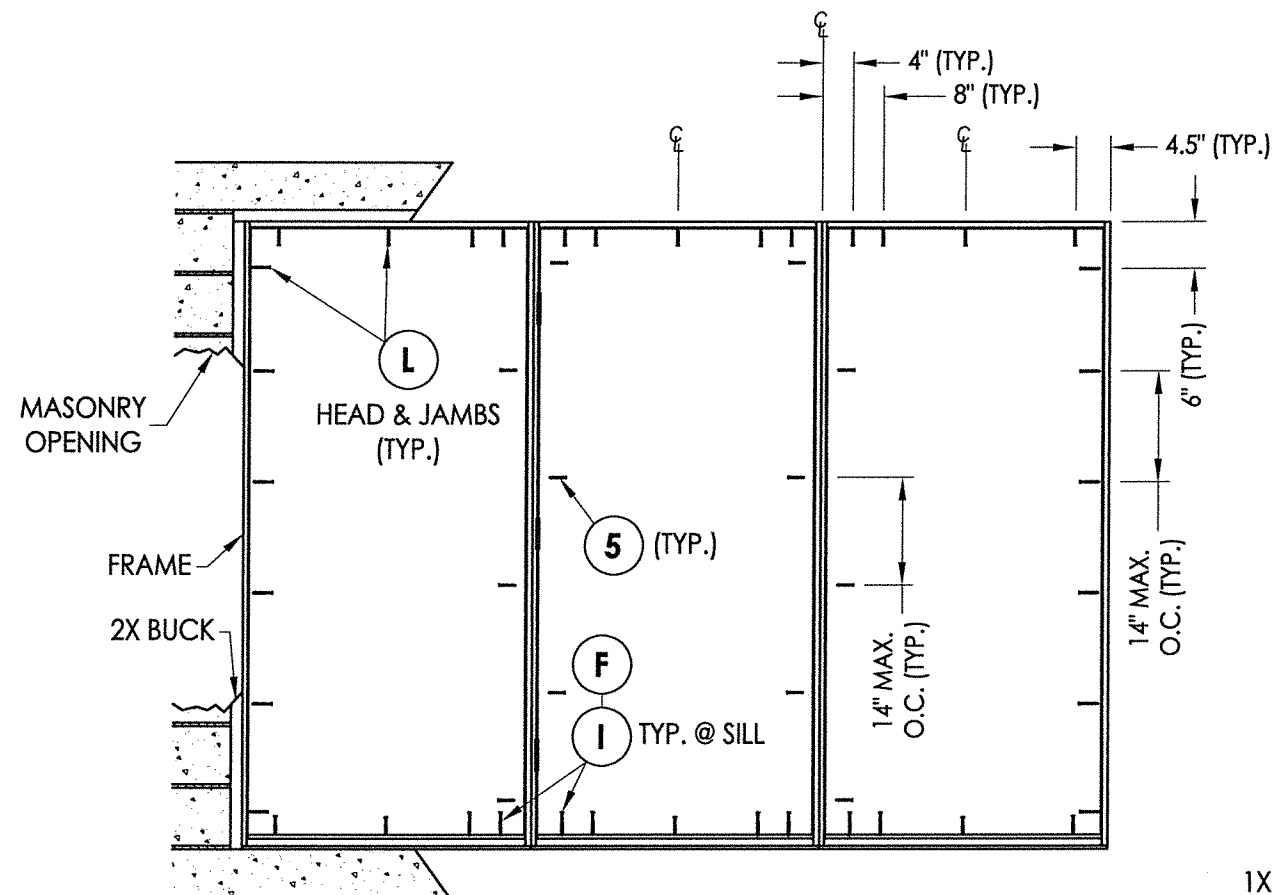
LATCH & DEADBOLT DETAIL



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DATE: 09/28/15		PRODUCT: DOERS FIBERGLASS DOOR	
SCALE: N.T.S.		PART OR ASSEMBLY: FRAME ANCHORING	
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.13			
SHEET 9 OF 11			



FRAME ANCHORING
Masonry 2X buck construction

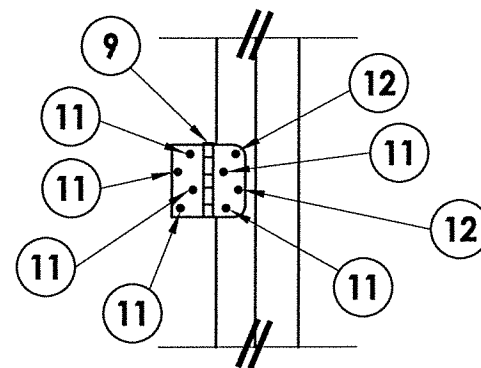
FRAME ANCHORING
Masonry 1X buck Construction
Steel Stud Construction

STRIKE JAMB

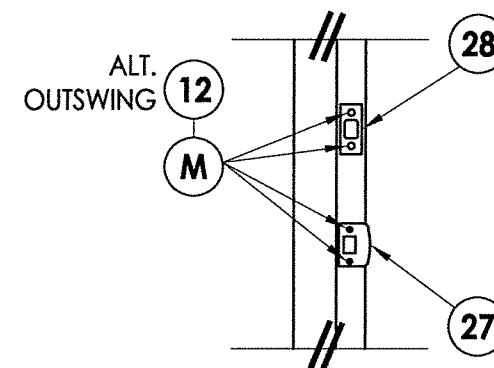
1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. 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"
ELCO ULTRA CON®	1/4"	1-1/4"	1"	4"

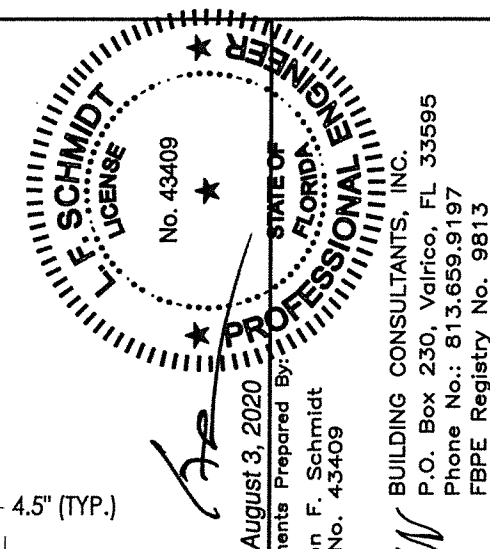
1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



HINGE DETAIL



LATCH & DEADBOLT DETAIL



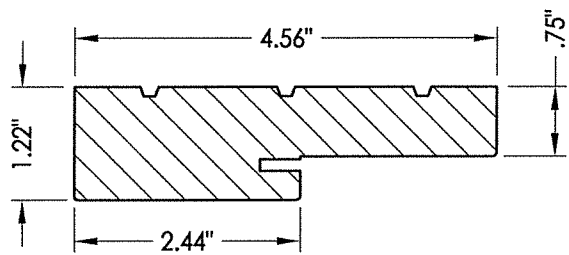
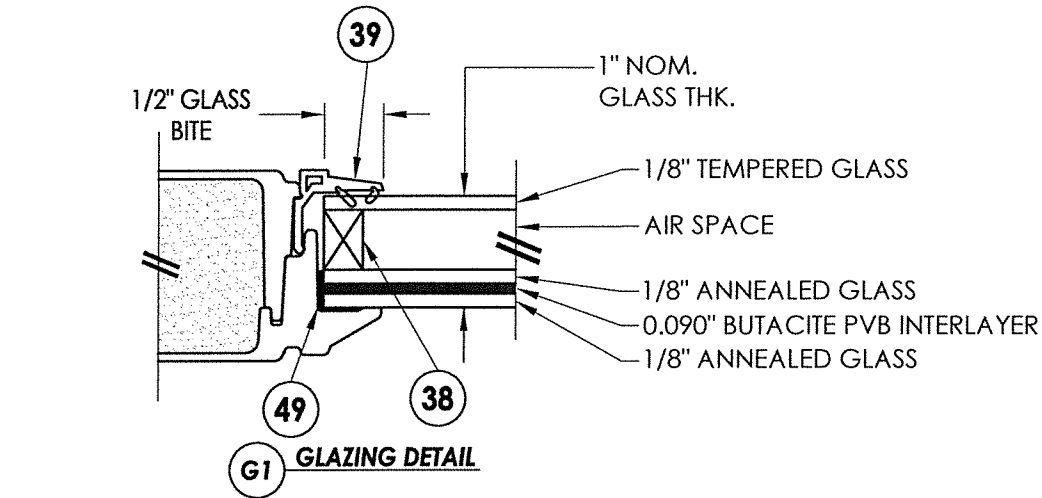
August 3, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

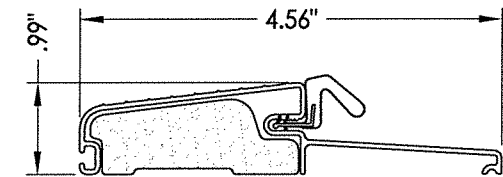
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R:\Clients\Doers PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL-19007.11-20.dwg, 11.3

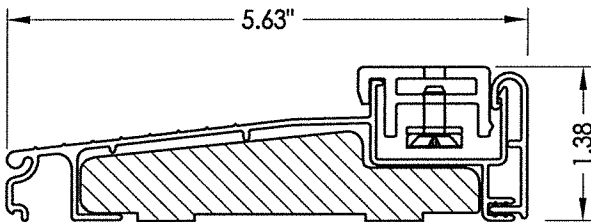
BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD
B	2X BUCK SG >= 0.55	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	1/4" X 2-3/4" PFH ITW CONCRETE SCREW	STEEL
H	3/16" x 3-1/4" 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
K	#9 X 2-1/2" PFH WOOD 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 JAMB	WOOD
21	POLY FIBER JAMB	COMP.
22	#10 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. 0.075" THICK)	FIBERGLASS
42	TOP RAIL	CELLULAR PVC
43	LATCH & HINGE STILE	CELLULAR PVC
44	LOCK REINFORCEMENT	WOOD
45	BOTTOM RAIL	CELLULAR PVC
46	POLYURETHANE FOAM	POLYURETHANE
47	CONTINUOUS LATCH & HINGE STILE REINFORCEMENT	WOOD
49	GLAZING COMPOUND DOW 995	SILICONE
50	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-



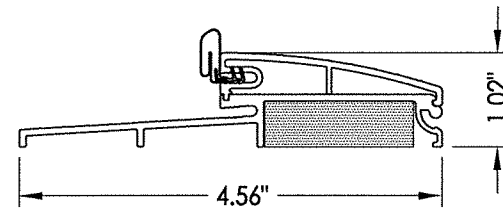
20 HEAD & SIDE
Wood Jamb



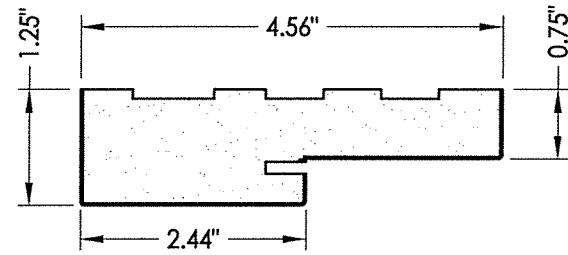
31 OUTSWING BUMP THRESHOLD
Endura (FOB4566AA)



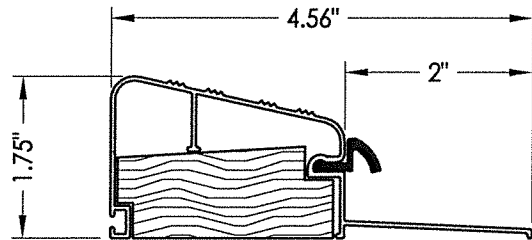
33 ADJUSTABLE INSWING THRESHOLD
Endura



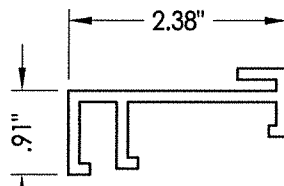
36 OUTSWING BASE SILL w/ BUMPER THRESHOLD CAP



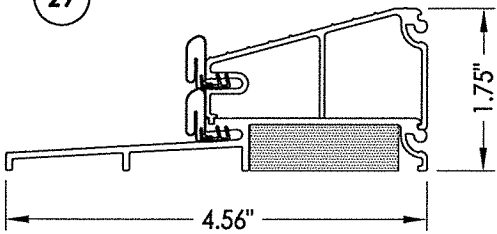
21 HEAD & SIDE
Poly fiber jamb



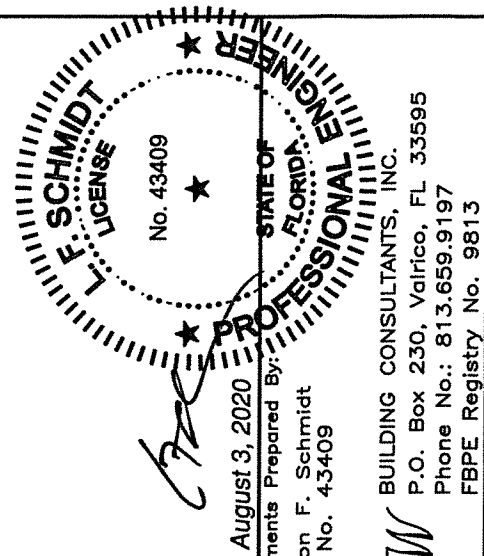
32 OUTSWING HIGH DAM BUMP THRESHOLD
DLP (QOSR)



29 SIDELITE SPACER



37 OUTSWING BASE SILL w/ BUMPER THRESHOLD
HIGH DAM CAP



August 3, 2020

Documents Prepared By:

Lyndon F. Schmidt

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RW

BUILDING CONSULTANTS, INC.

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FBPE Registry No. 9813

PRODUCT:		DOERS DOOR	
PART OR ASSEMBLY:		BILL OF MATERIALS, GLAZING DETAIL & COMPONENTS	
REVISIONS			
NO.	DATE	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-19007.13			
SHEET 11 OF 11			

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