



DIAMOND DOOR SERIES

FLUSH GLAZED FIBERGLASS DOORS w/ SIDELITES

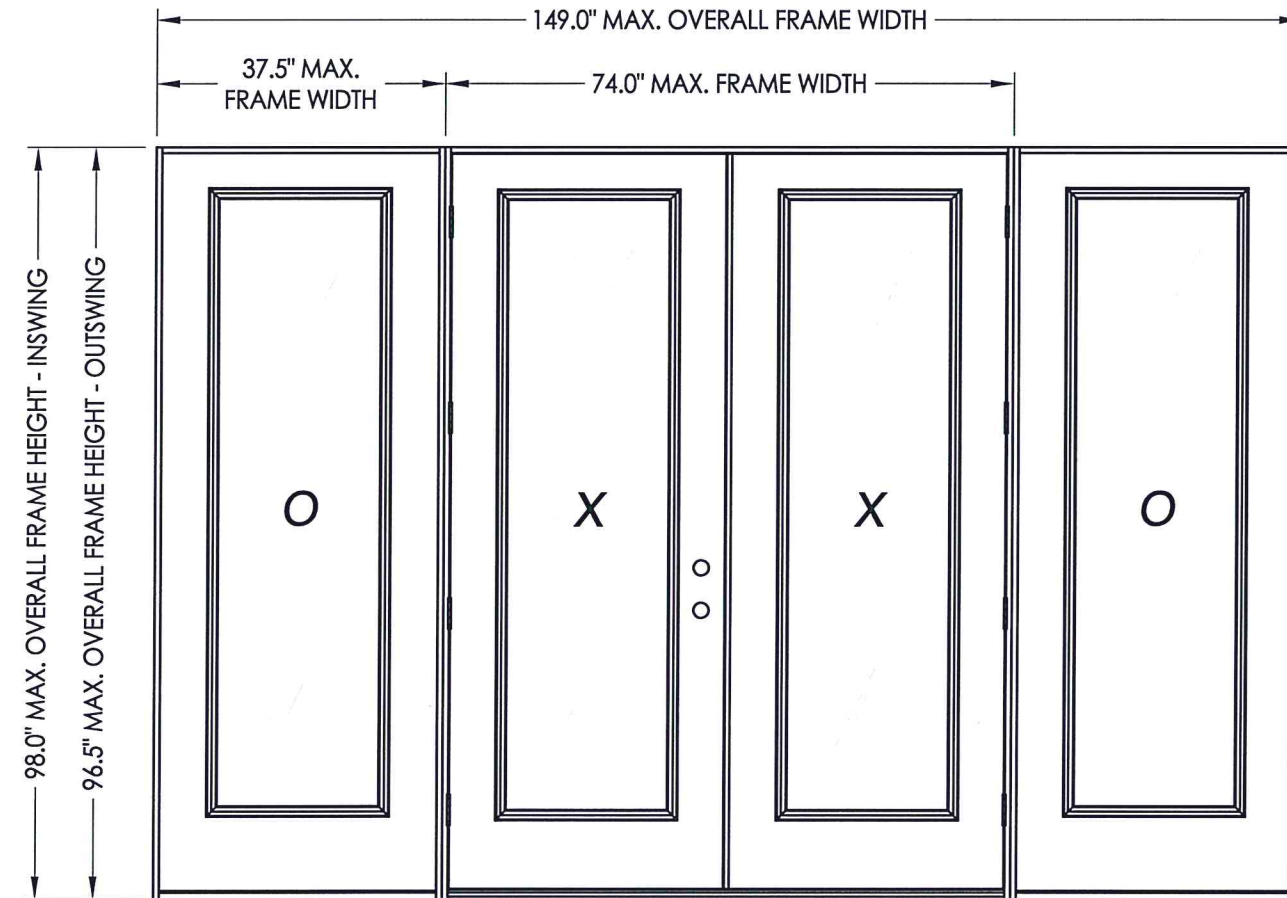
INSWING / OUTSWING

"NON-IMPACT"

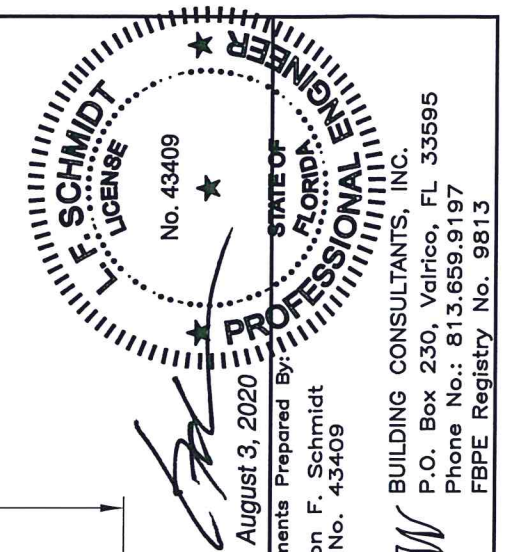
GENERAL NOTES

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 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 elevation, design pressures, & general notes
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7	Buck anchoring
8	Frame anchoring - 2X buck masonry construction
9	Frame anchoring - 1X buck masonry construction
10	Endura astragal details
11	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	149.0" x 98.0"	21.0" x 79.0"	21.0" x 79.0"	G1	+47.5	-47.5
OUTSWING	149.0" x 96.5"	21.0" x 79.0"	21.0" x 79.0"		+50.0	-50.0

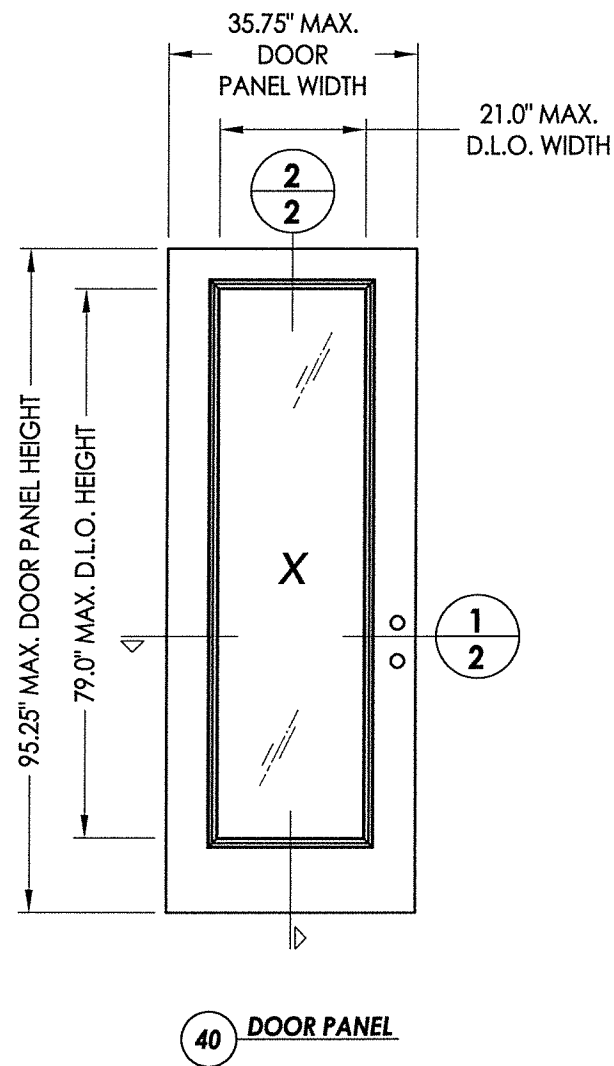


Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

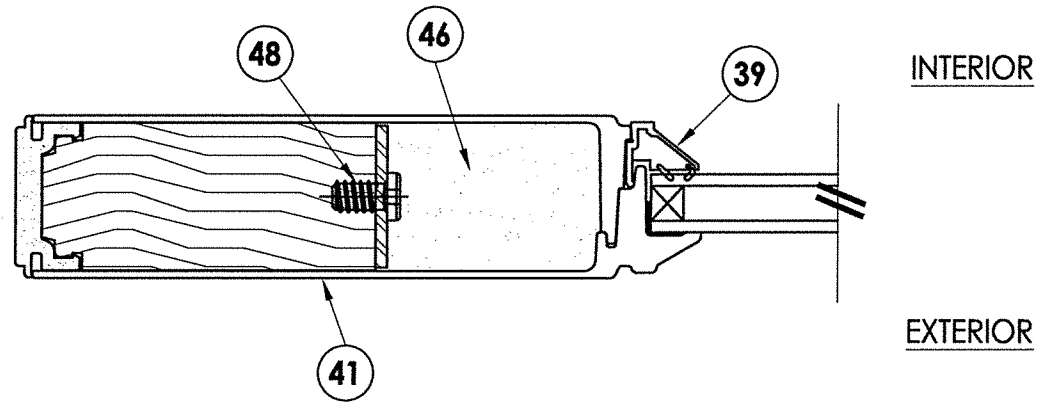
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES	
NO.	DATE	BY	REVISIONS
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: 09/22/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.10			
SHEET 1 OF 11			

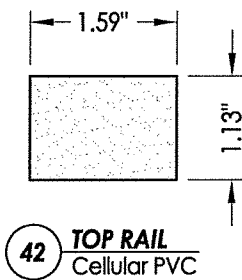
R:\Clients\Doers Permanent\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.1-10.dwg, 2:10



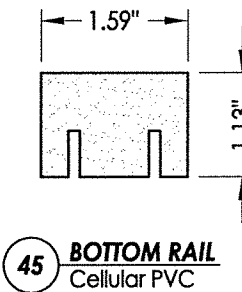
40 DOOR PANEL



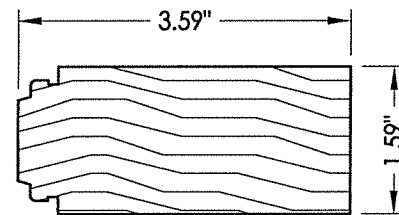
1/2 HORIZONTAL CROSS SECTION



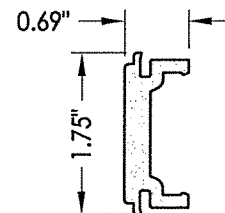
42 TOP RAIL
Cellular PVC



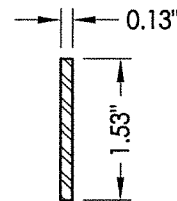
45 BOTTOM RAIL
Cellular PVC



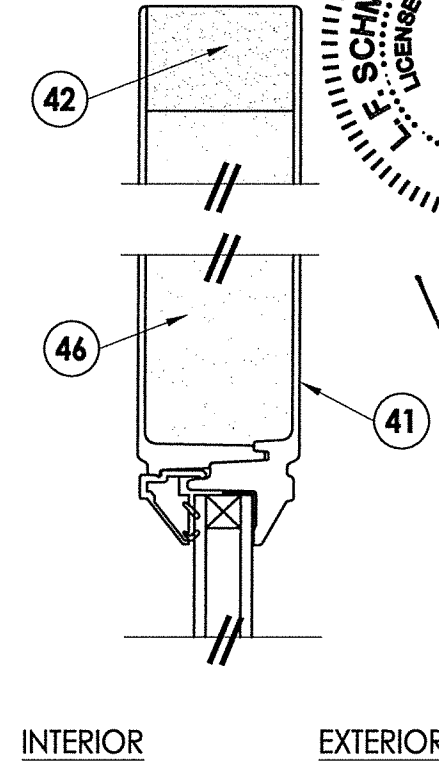
44 LATCH & HINGE
Stile support



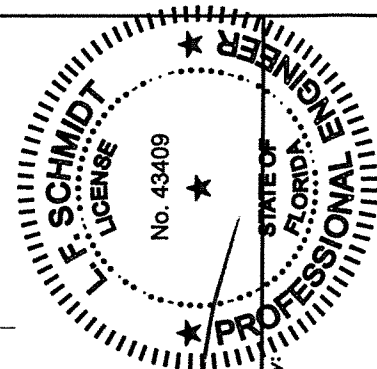
43 LATCH & HINGE STILE
Cellular PVC



47 STILE REINFORCEMENT



2/2 VERTICAL CROSS SECTION

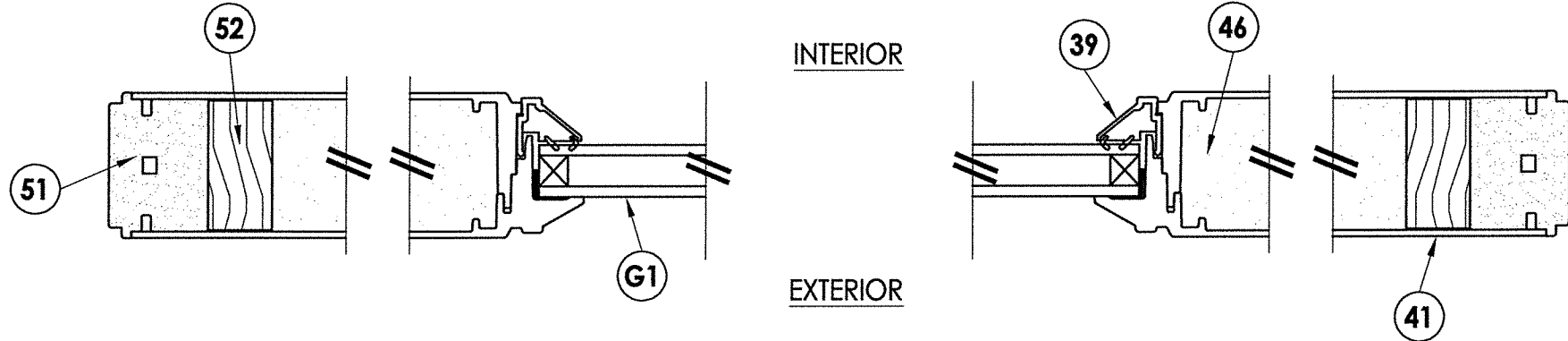
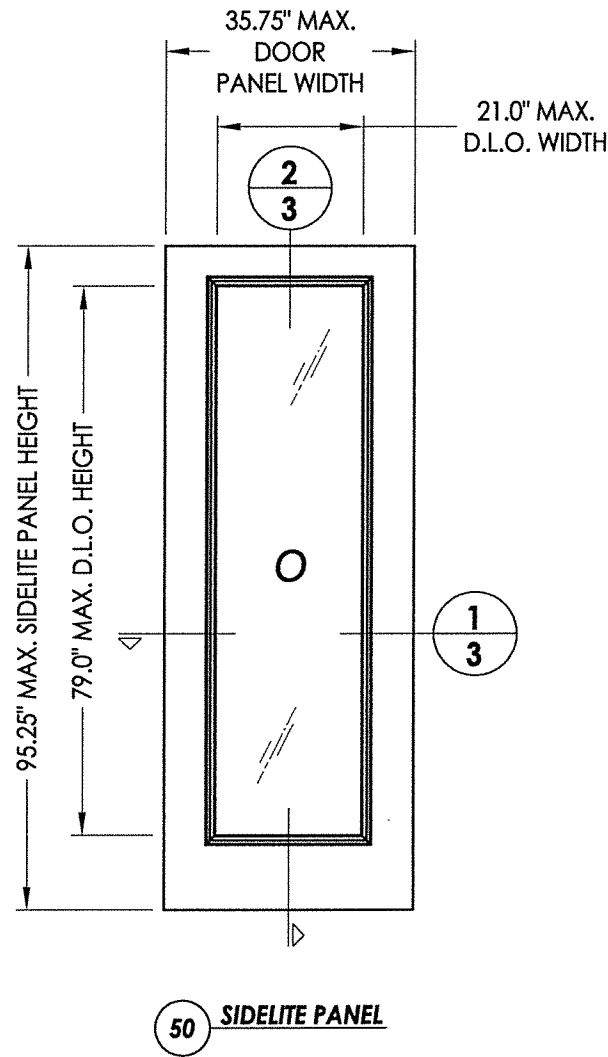


August 3, 2020
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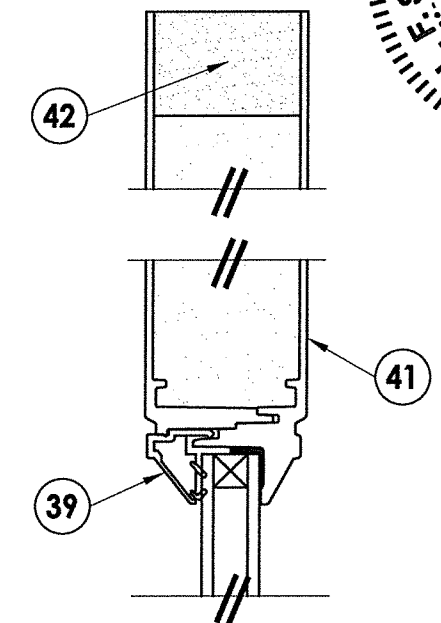
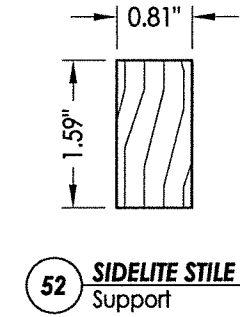
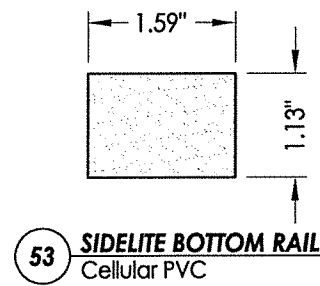
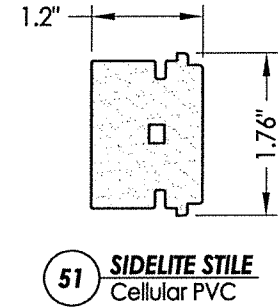
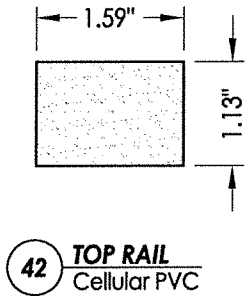
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		DOOR PANEL DETAILS	
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: 09/22/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.10			
SHEET 2 OF 11			

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1
3 HORIZONTAL CROSS SECTION

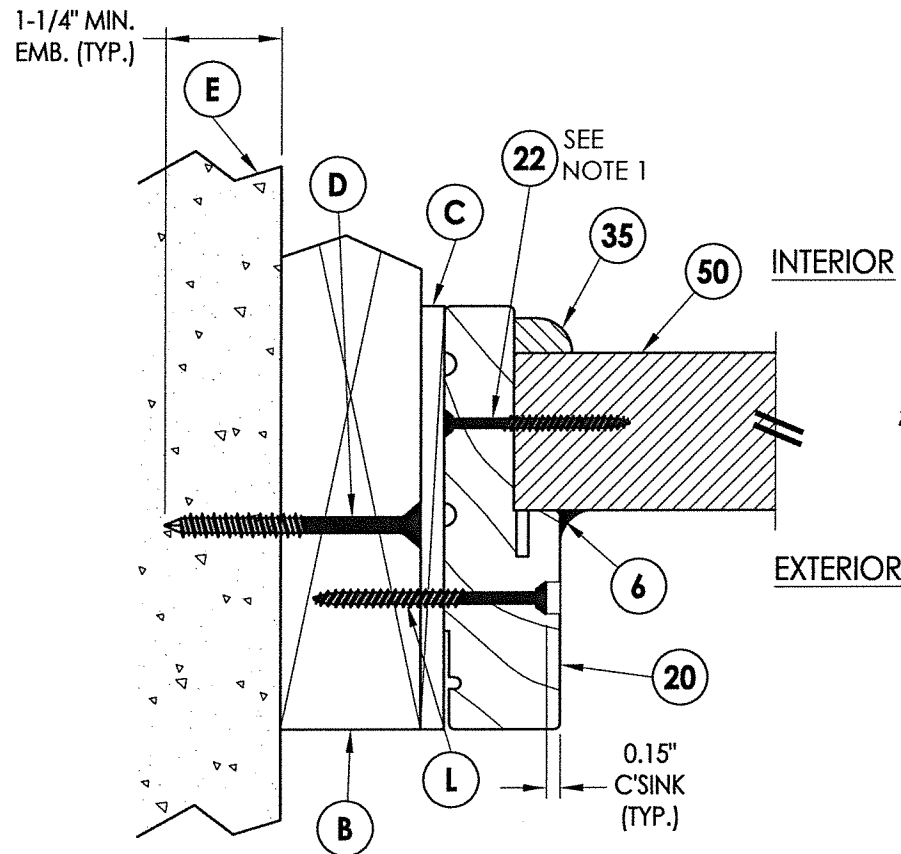


2
3 VERTICAL CROSS SECTION

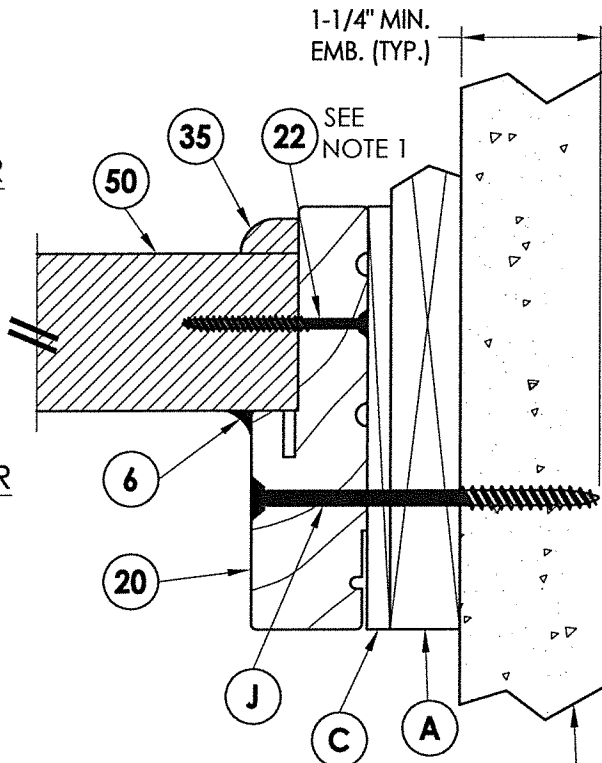
FLORIDA PROFESSIONAL ENGINEER
F. SCHMIDT
LICENSE
No. 43409
August 3, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		SIDELITE PANEL DETAILS	
NO	DATE	BY	REVISIONS
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			
DATE: 09/22/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.10			
SHEET 3 OF 11			

R:\Clients\Doors PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.1-10.dwg, 4.10



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

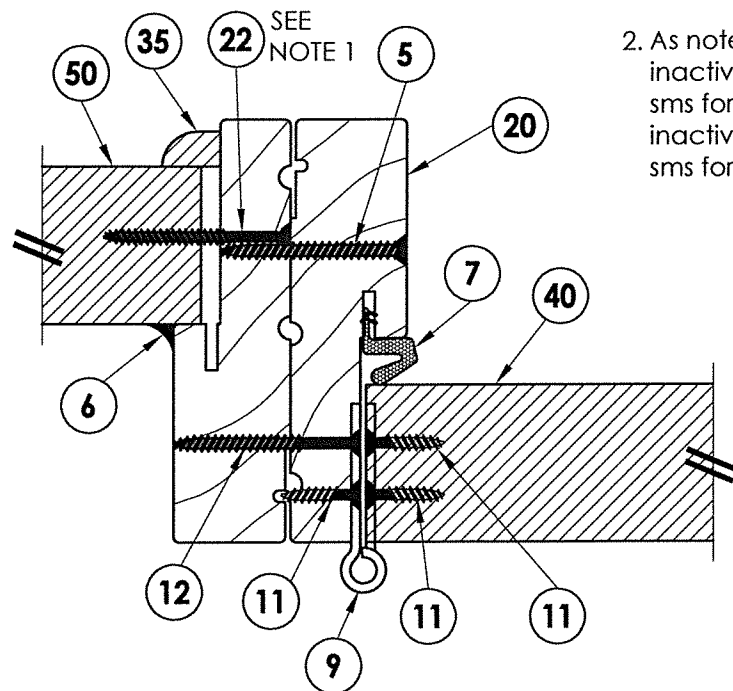


6
4 **HORIZONTAL CROSS SECTION**
Shown w/1X sub-buck

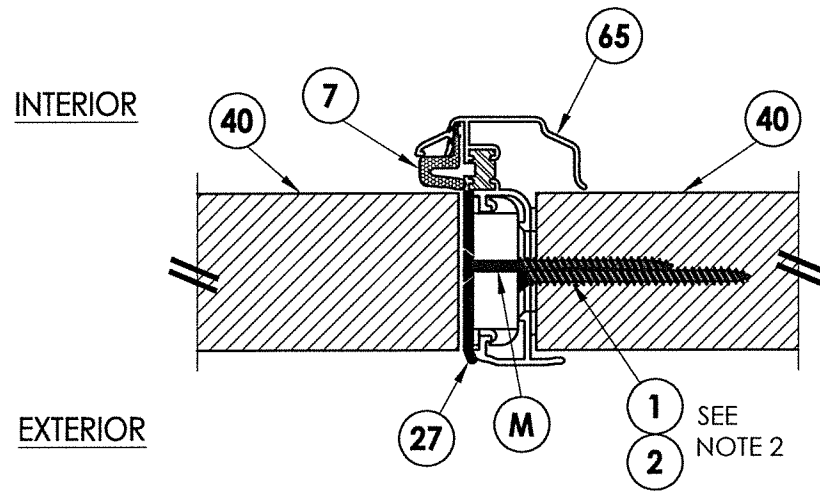
NOTE:

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.

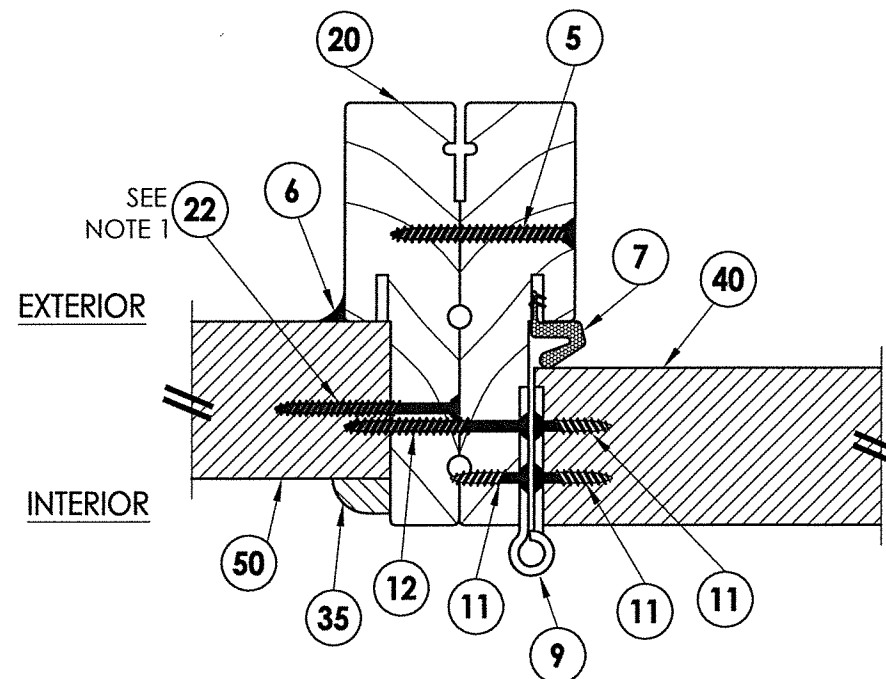
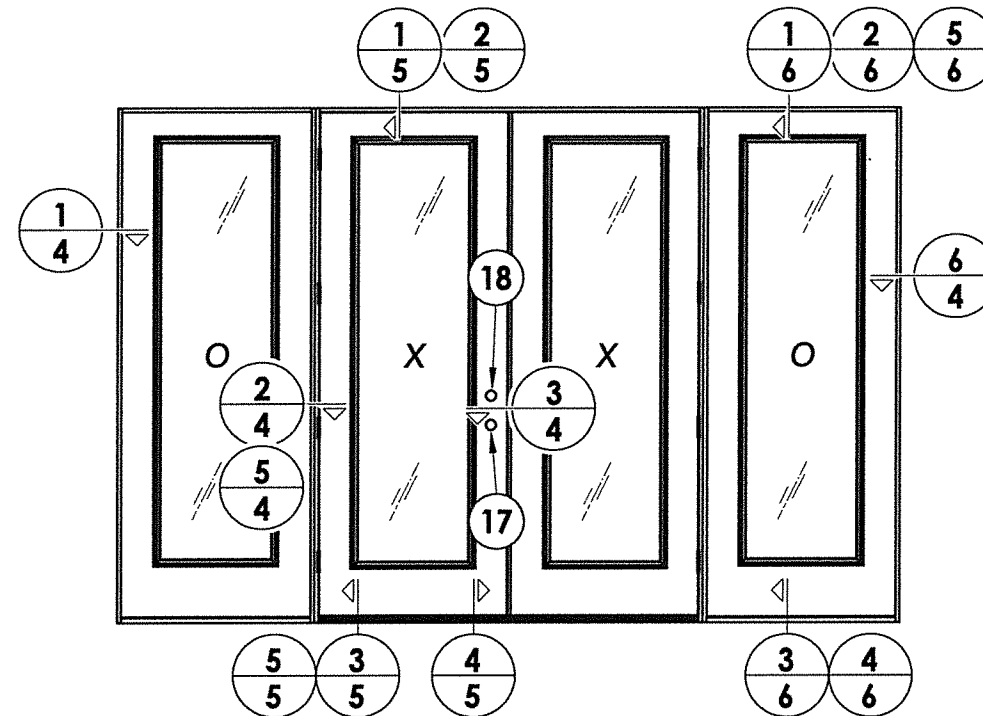
2. As noted in the test report astragal was attached to the inactive leaf with (11) #8 x 3" psh sms and (6) #10 x 2-1/2" pfh sms for all 8'-0" (outswing). Astragal was attached to the inactive leaf with (13) #8 x 3" psh sms and (6) #10 x 2-1/2" pfh sms for all 8'-0" (inswing).



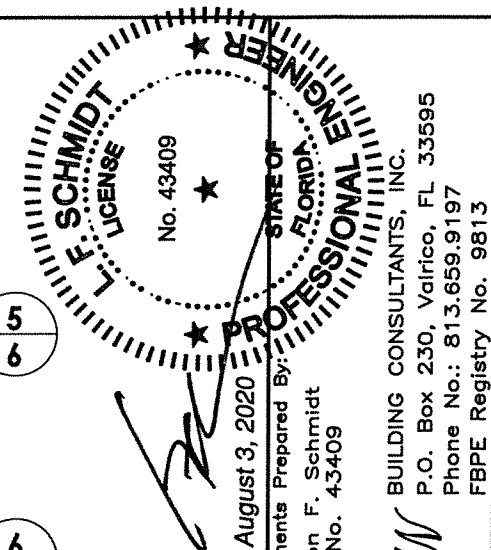
2
4 **HORIZONTAL CROSS SECTION**
Outswing configuration



3
4 **HORIZONTAL CROSS SECTION**
Outswing shown - inswing
also approved



5
4 **HORIZONTAL CROSS SECTION**
Inswing configuration



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FBPE Registry No. 9813

PRODUCT: DOERS
FIBERGLASS DOOR
PART OR ASSEMBLY:
HORIZONTAL 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: 09/22/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.10
SHEET 4 of 11

[illegible]

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

40

32

E

F

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

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

33

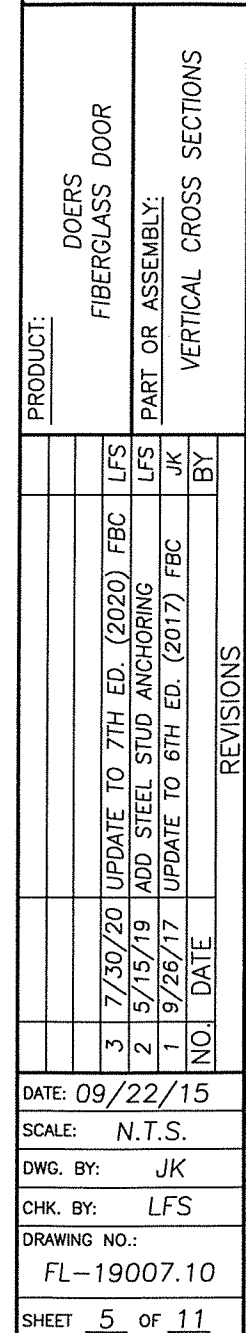
30

40

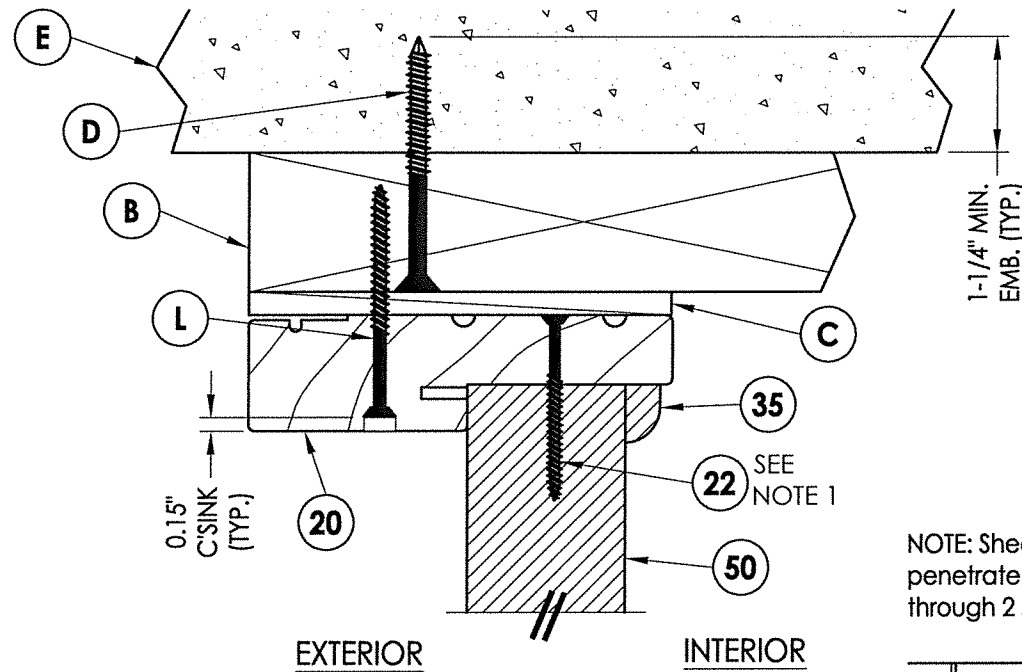
E

F

4 **VERTICAL CROSS SECTION**
5 inswing configuration

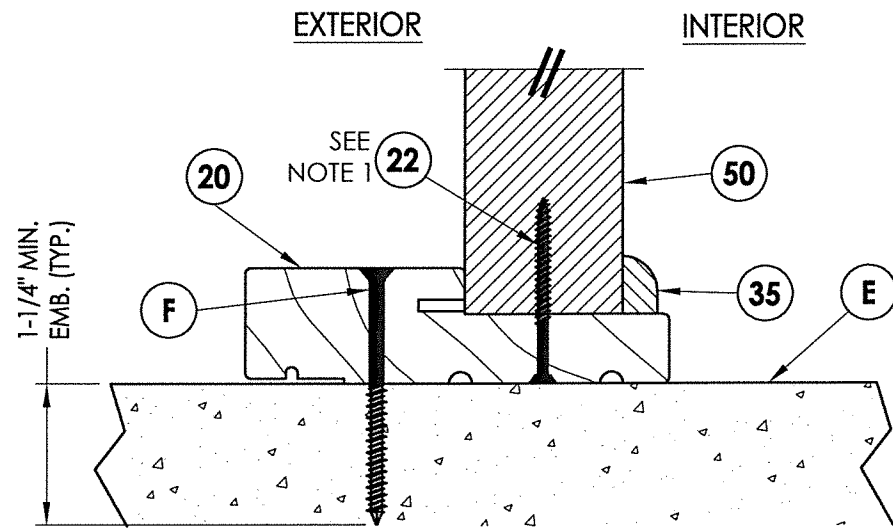


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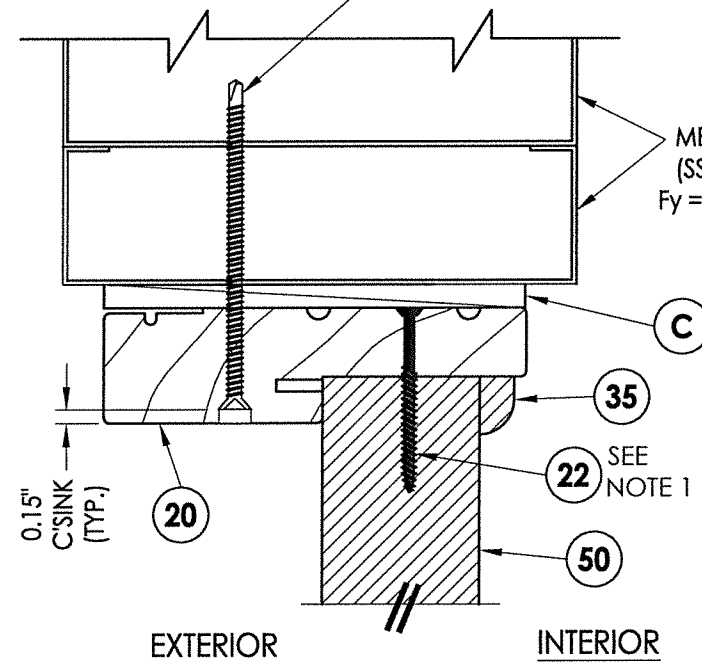
1 VERTICAL CROSS SECTION
6 Outswing shown - inswing also approved

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

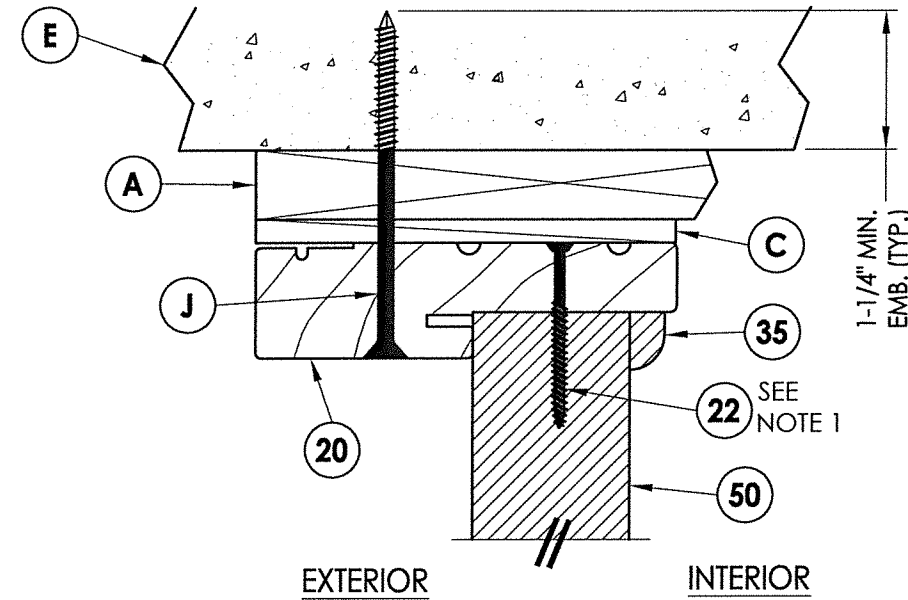


3 VERTICAL CROSS SECTION
6 Outswing configuration

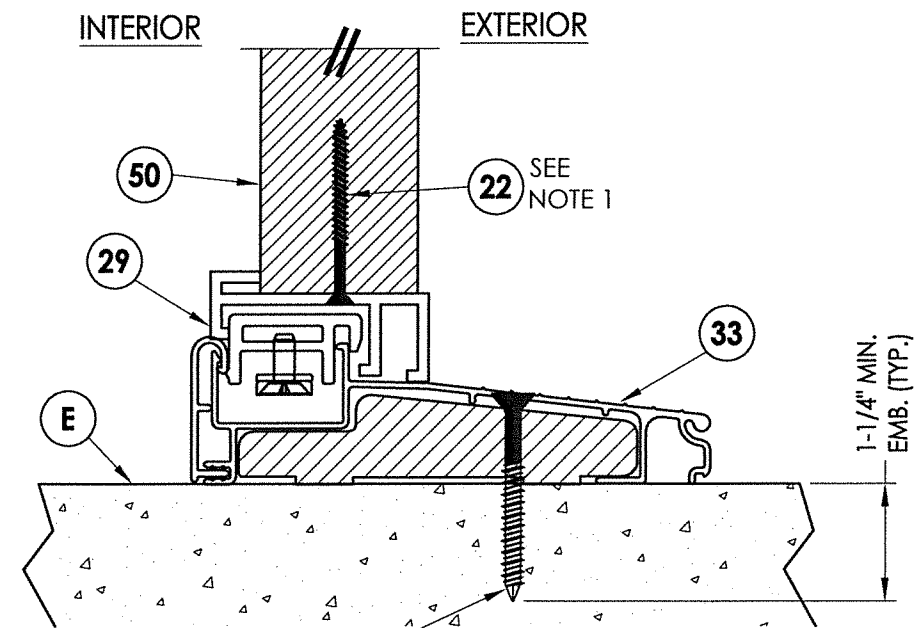
NOTE: Sheet Metal Screws must penetrate a min. of 3 threads through 2 sheets of metal.



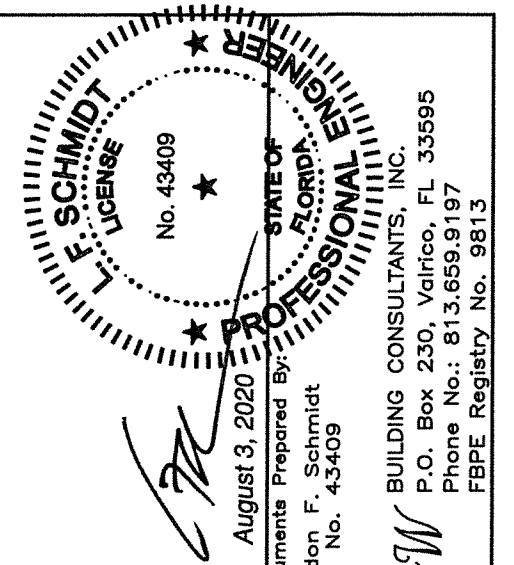
5 VERTICAL CROSS SECTION
6 Shown w/ Steel Stud Framing Option



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



4 VERTICAL CROSS SECTION
6 Inswing configuration



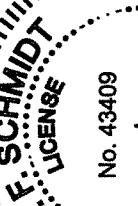
August 3, 2020
Documents Prepared By:
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Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		DOORS		FIBERGLASS DOOR	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS		REVISIONS	
NO.	DATE	BY	DATE	NO.	DATE
3	7/30/20	LFS	UPDATE TO 7TH ED. (2020) FBC	3	7/30/20
2	5/15/19	LFS	ADD STEEL STUD ANCHORING	2	5/15/19
1	9/26/17	JK	UPDATE TO 6TH ED. (2017) FBC	1	9/26/17
DATE: 09/22/15					
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.: FL-19007.10					
SHEET 6 of 11					

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"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"


August 3, 2020
Documents Prepared By:
Don F. Schmidt
No. 43409

W BUILDING CONSULTANTS, INC.
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Phone No.: 813.659.9197
FBPE Registry No. 9813

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: DOERS
FIBERGLASS DOOR

PART OR ASSEMBLY:
BUCK ANCHORING

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: 09/22/15

SCALE: N.T.S.

DWG. BY: JK

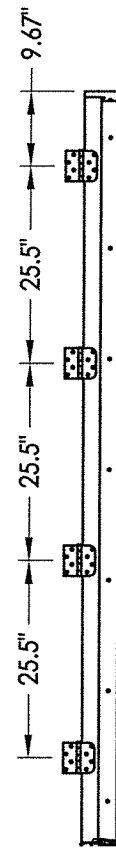
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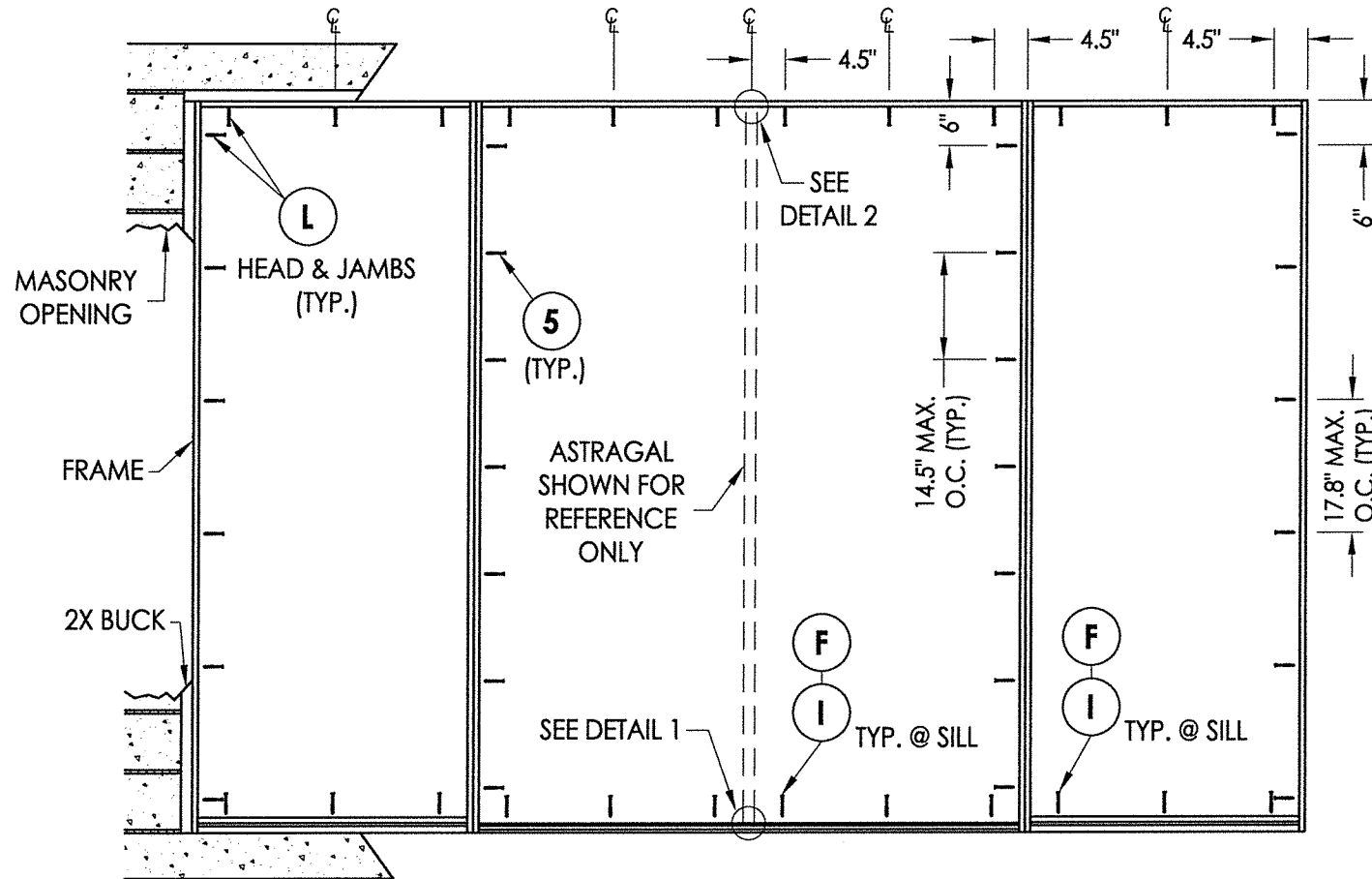
FL-19007.10

SHEET 7 OF 11

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HINGE JAMB



FRAME ANCHORING
Masonry 2X buck construction

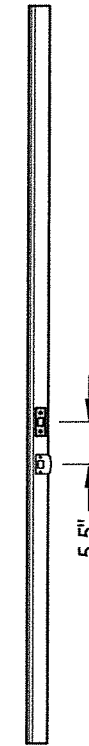
CONCRETE ANCHOR NOTES:

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:

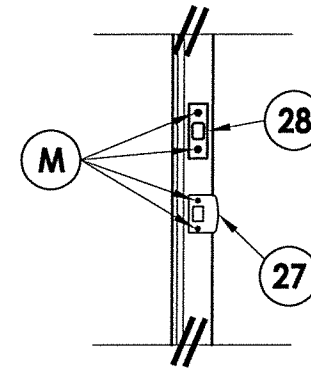
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
ELCO ULTRACON®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

WOOD SCREW INSTALLATION NOTES:

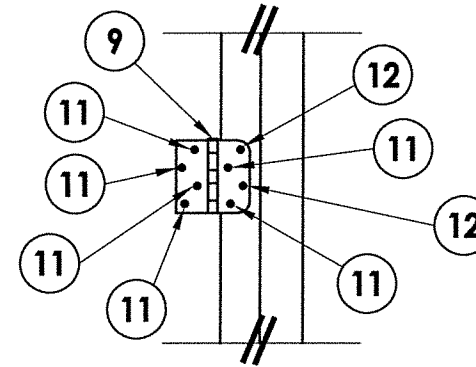
1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



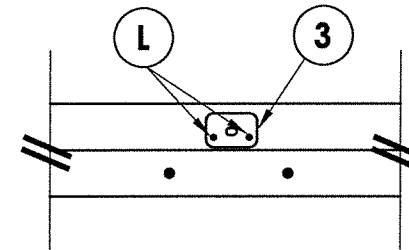
ASTRAGAL STRIKE JAMB



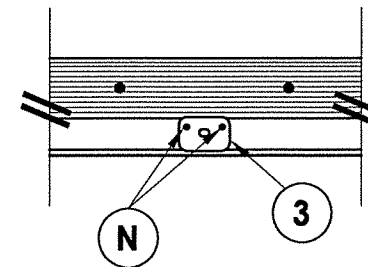
LATCH & DEADBOLT DETAIL



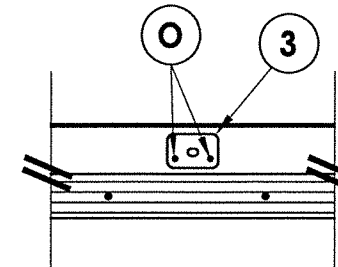
HINGE DETAIL



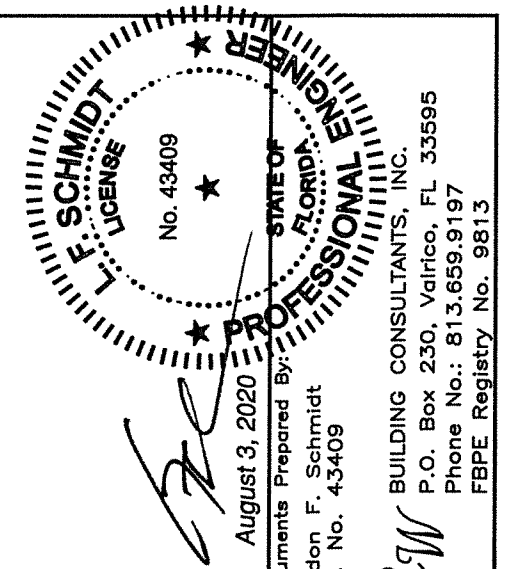
DETAIL 2



DETAIL 1
Inswing configuration



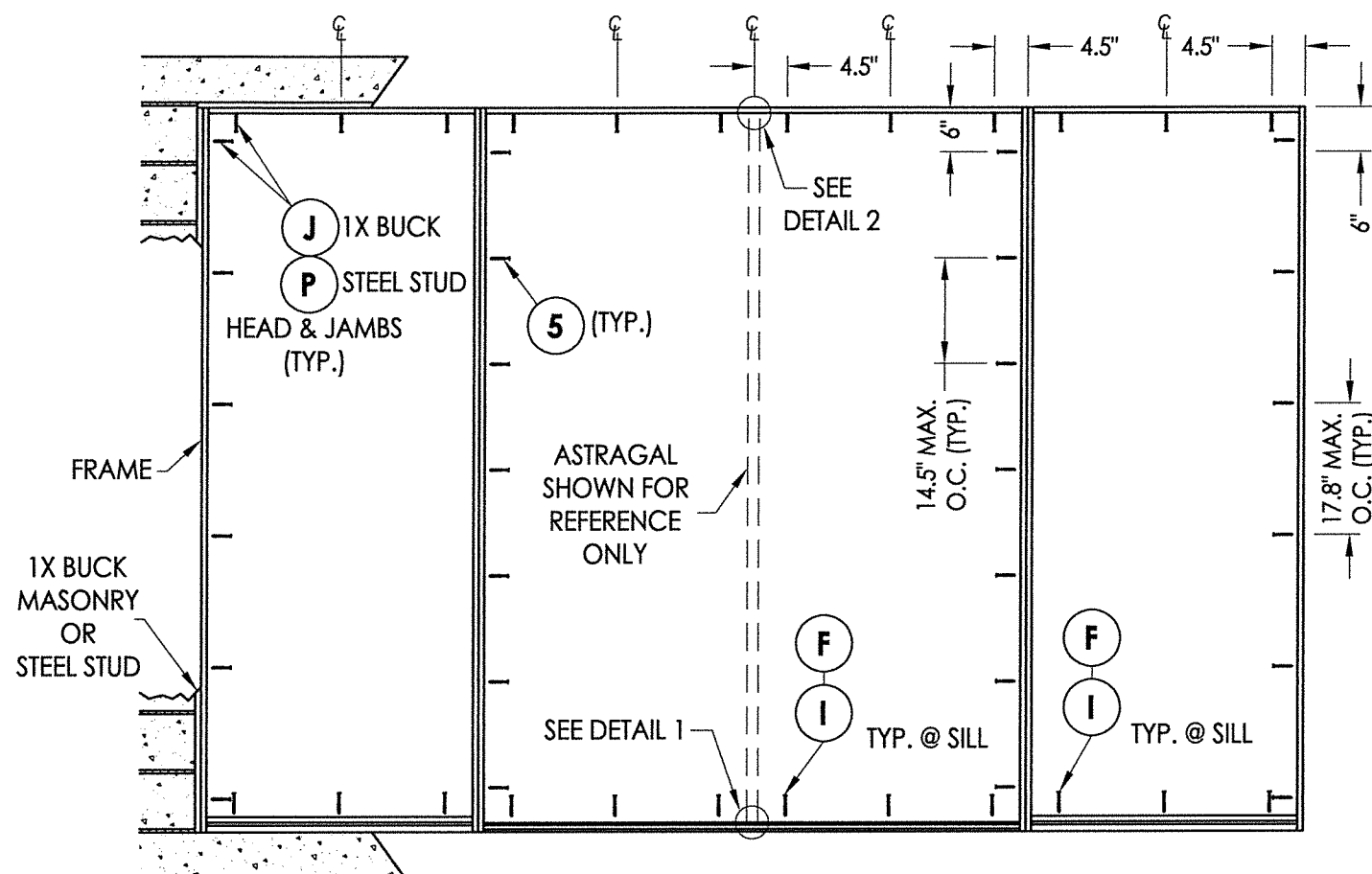
DETAIL 1
Outswing configuration



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FBPE Registry No. 9813

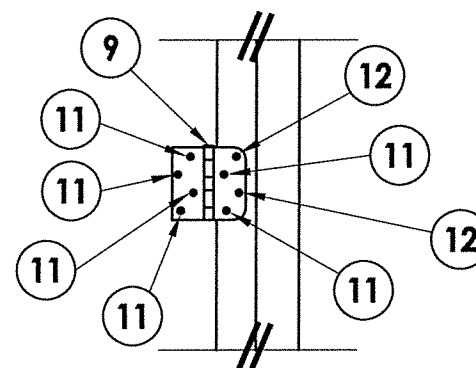
PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		FRAME ANCHORING 2X BUCK MASONRY CONSTRUCTION	
		LFS	BY
		LFS	JK
		FBC	BY
		FBC	BY
		DATE	REVISIONS
3	7/30/20	UPDATE TO 7TH ED. (2020)	FBC
2	5/15/19	ADD STEEL STUD ANCHORING	LFS
1	9/26/17	UPDATE TO 6TH ED. (2017)	FBC
	NO.	DATE	
DATE: 09/22/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.10			
SHEET 8 OF 11			



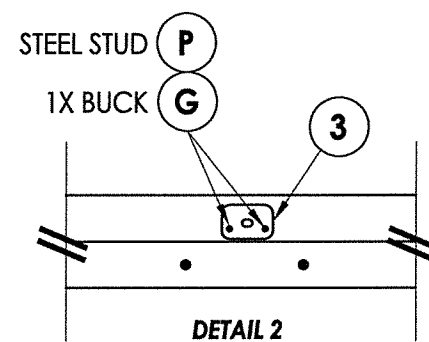
FRAME ANCHORING
Masonry 1X buck Construction
Steel Stud Construction



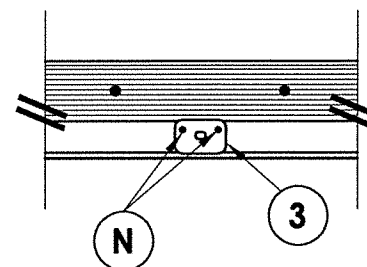
ASTRAGAL STRIKE JAMB



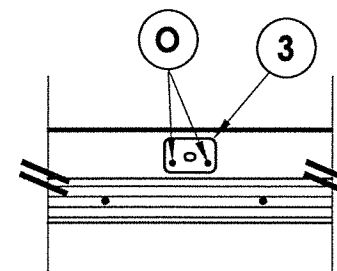
HINGE DETAIL



DETAIL 2



DETAIL 1
Inswing configuration

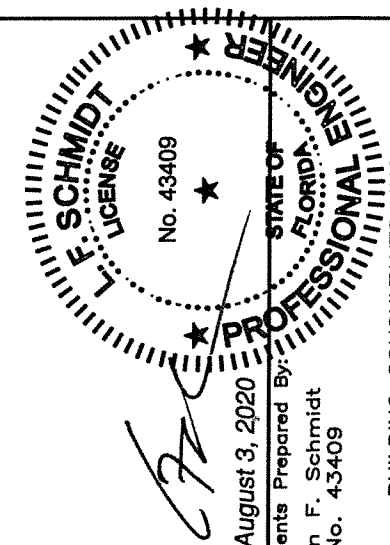


DETAIL 1
Outswing configuration

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. O.C. (TYP.)" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. O.C. (TYP.)" 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"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

1. 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:
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D.E. No. 43409

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

[illegible]

DATE: 09/22/15

SCALE: N.T.S.

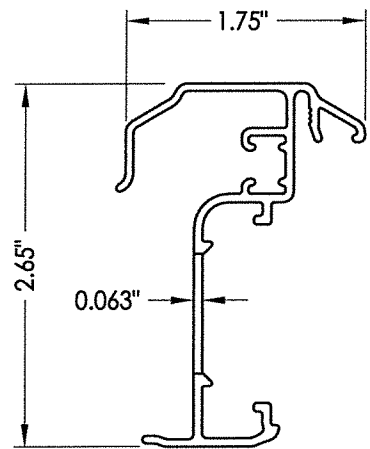
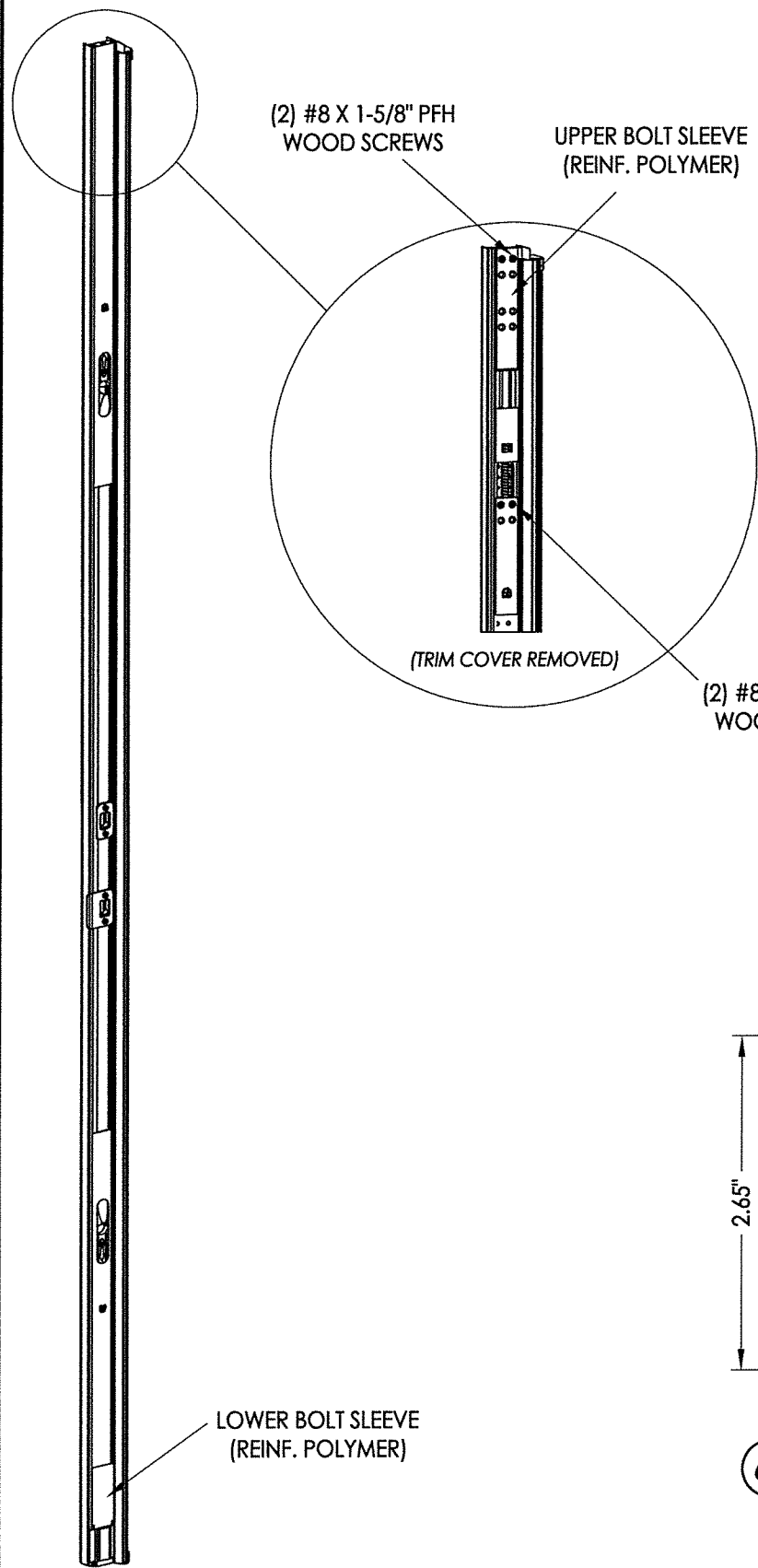
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CHK. BY: LFS

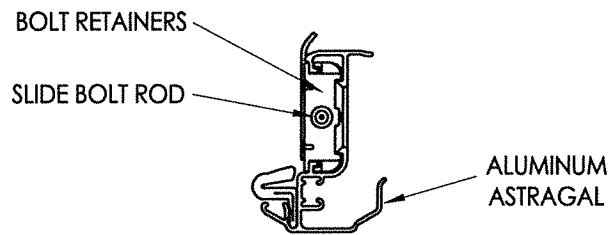
DRAWING NO.:
FL-19007.10

SHEET 9 OF 11

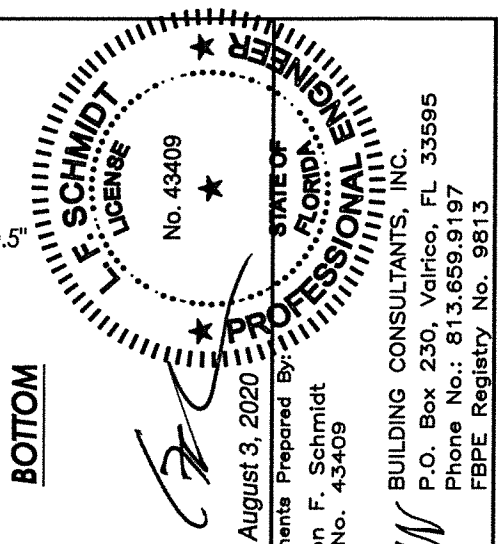
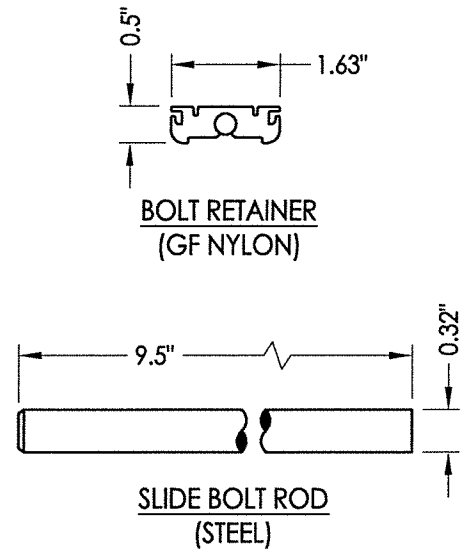
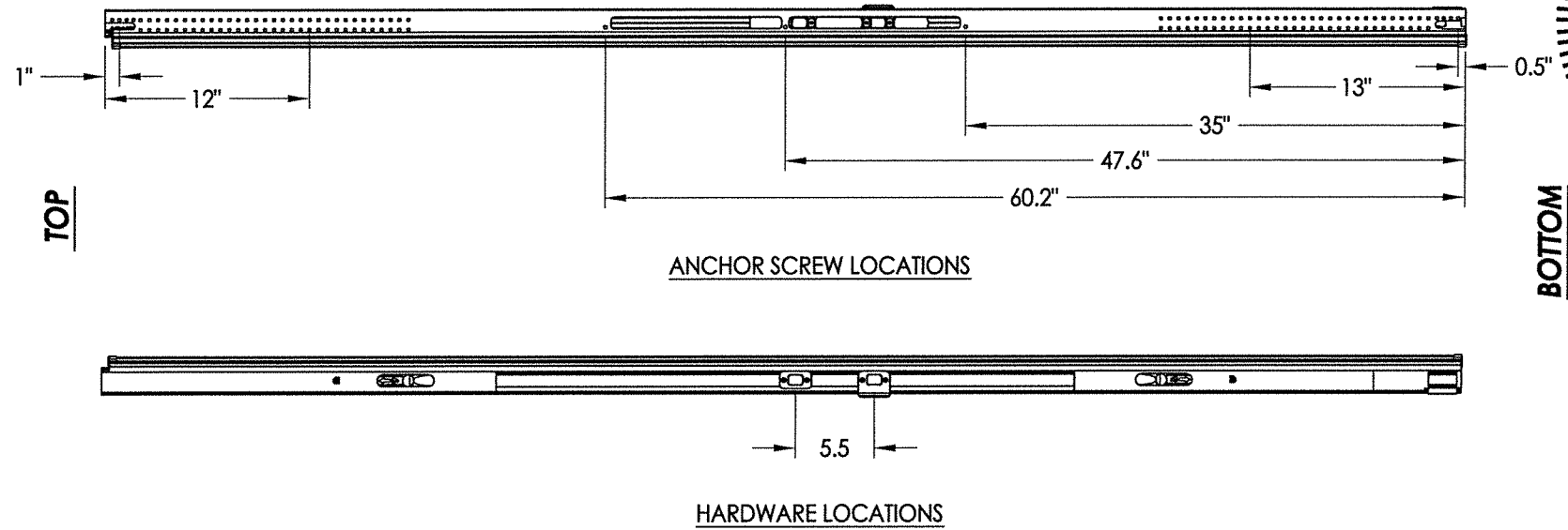
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65 ALUMINUM ASTRAGAL
By Endura Products



ALUMINUM ASTRAGAL ASSEMBLY



Documents Prepared By:
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RW BUILDING CONSULTANTS, INC.
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Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: **DOERS FIBERGLASS DOOR**

PART OR ASSEMBLY: **ENDURA ASTRAGAL DETAILS**

REVISIONS			
NO.	DATE	BY	JK
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: **09/22/15**

SCALE: **N.T.S.**

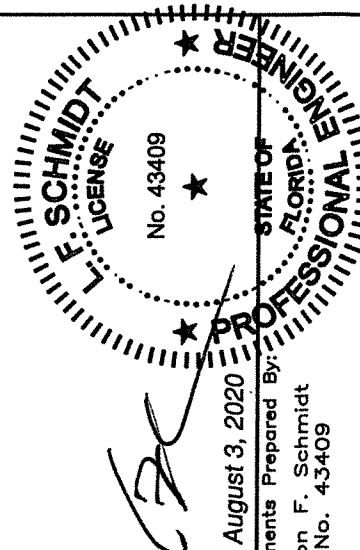
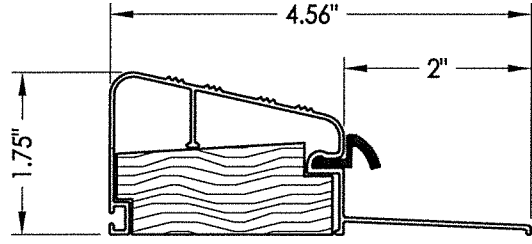
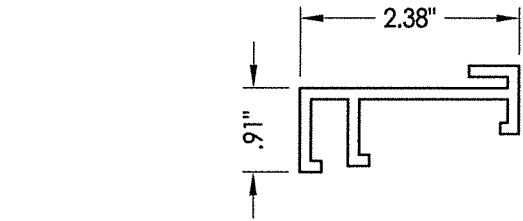
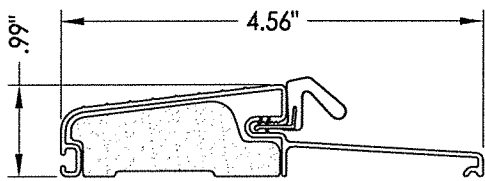
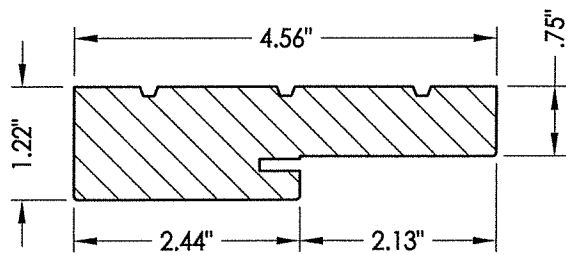
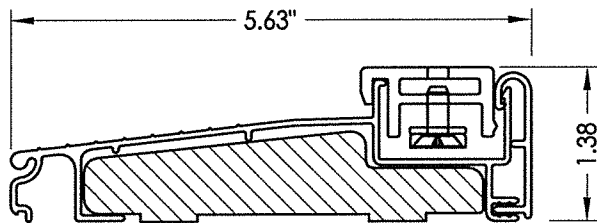
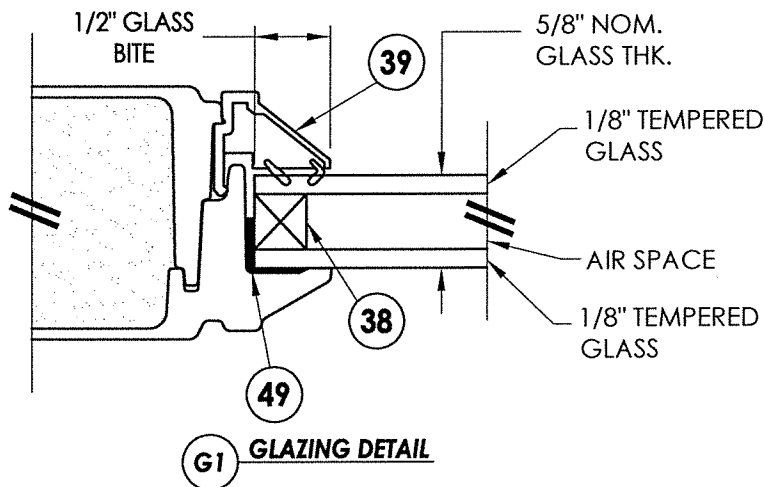
DWG. BY: **JK**

CHK. BY: **LFS**

DRAWING NO.: **FL-19007.10**

SHEET **10** OF **11**

BILL OF MATERIALS					
ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD	27	LATCH STRIKE PLATE	STEEL
B	2X BUCK SG >= 0.55	WOOD	28	DEADBOLT STRIKE PLATE	STEEL
C	1/4" MAX. SHIM SPACE	-	29	SIDELITE SPACER	PVC
D	1/4" X 2-3/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL	30	WEATHER-STOP 3647 HOLM INDUSTRIES	VINYL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE	31	OUTSWING BUMP THRESHOLD	ALUM. / PVC
			32	OUTSWING HIGH DAM BUMP THRESHOLD	ALUM. / WOOD
F	1/4" X 2-3/4" PFH ITW CONCRETE SCREW	STEEL	33	INSWING ADJUSTABLE THRESHOLD	ALUM. / WOOD
G	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL	35	SHOE MOULD 5/8" X 3/8"	WOOD
I	1/4" X 2-1/4" PFH ITW CONCRETE SCREW	STEEL	38	GLAZING SPACER	ALUM.
J	1/4" X 3-3/4" PFH ITW CONCRETE SCREW	STEEL	39	GLAZING BEAD	PVC
L	#10 X 2-1/2" PFH WOOD SCREW (1-3/8" MIN. EMBEDMENT)	STEEL	40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
M	#9 X 2-1/4" PFH WOOD SCREW	STEEL	41	DOOR SKIN (MIN. 0.095" THICK)	FIBERGLASS
N	3/16" X 3-1/2" PFH ITW CONCRETE SCREW	STEEL	42	TOP RAIL	CELLULAR PVC
O	3/16" X 1-1/2" PFH ITW CONCRETE SCREW	STEEL	43	LATCH & HINGE STILE	CELLULAR PVC
P	#10-16 PFH SELF-DRILLING SMS	STEEL	44	LOCK REINFORCEMENT	WOOD
1	#10 X 2-1/2" PFH SMS	STEEL	45	BOTTOM RAIL	CELLULAR PVC
2	#8 X 3" PSH SMS	STEEL	46	POLYURETHANE FOAM	POLYURETHANE
3	FLUSH BOLT STRIKE PLATE	STEEL	47	CONTINUOUS LATCH & HINGE STILE REINFORCEMENT	WOOD
5	#10 X 2" PFH SCREW	STEEL	48	REINFORCEMENT RETAINING SCREW	NYLON
6	SEALANT	SILICONE	49	GLAZING COMPOUND DOW 995	SILICONE
7	Q-LON 650 WEATHERSTRIP SCHLEGEL	FOAM	50	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
9	4" X 4" BUTT HINGE	STEEL	51	SIDELITE STILE	CELLULAR PVC
11	#9 X 3/4" PFH WOOD SCREW	STEEL	52	SIDELITE STILE SUPPORT	WOOD
12	#9 X 2" PFH WOOD SCREW	STEEL	53	SIDELITE BOTTOM RAIL	CELLULAR PVC
17	KWIKSET KEYED ENTRY - SIGNATURE SERIES	STEEL	65	ASTRAGAL (ENDURA)	ALUMINUM
18	KWIKSET DEADBOLT - SIGNATURE SERIES (780)	STEEL			
20	FINGER JOINTED PINE FRAME, HEAD & HINGE JAMBS	WOOD			
22	#8 X 2" PFH WOOD SCREW	STEEL			



August 3, 2020
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Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: DOERS FIBERGLASS DOOR
PART OR ASSEMBLY: BILL OF MATERIALS, GLAZING DETAIL & COMPONENTS

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: 09/22/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.10
SHEET 11 OF 11