

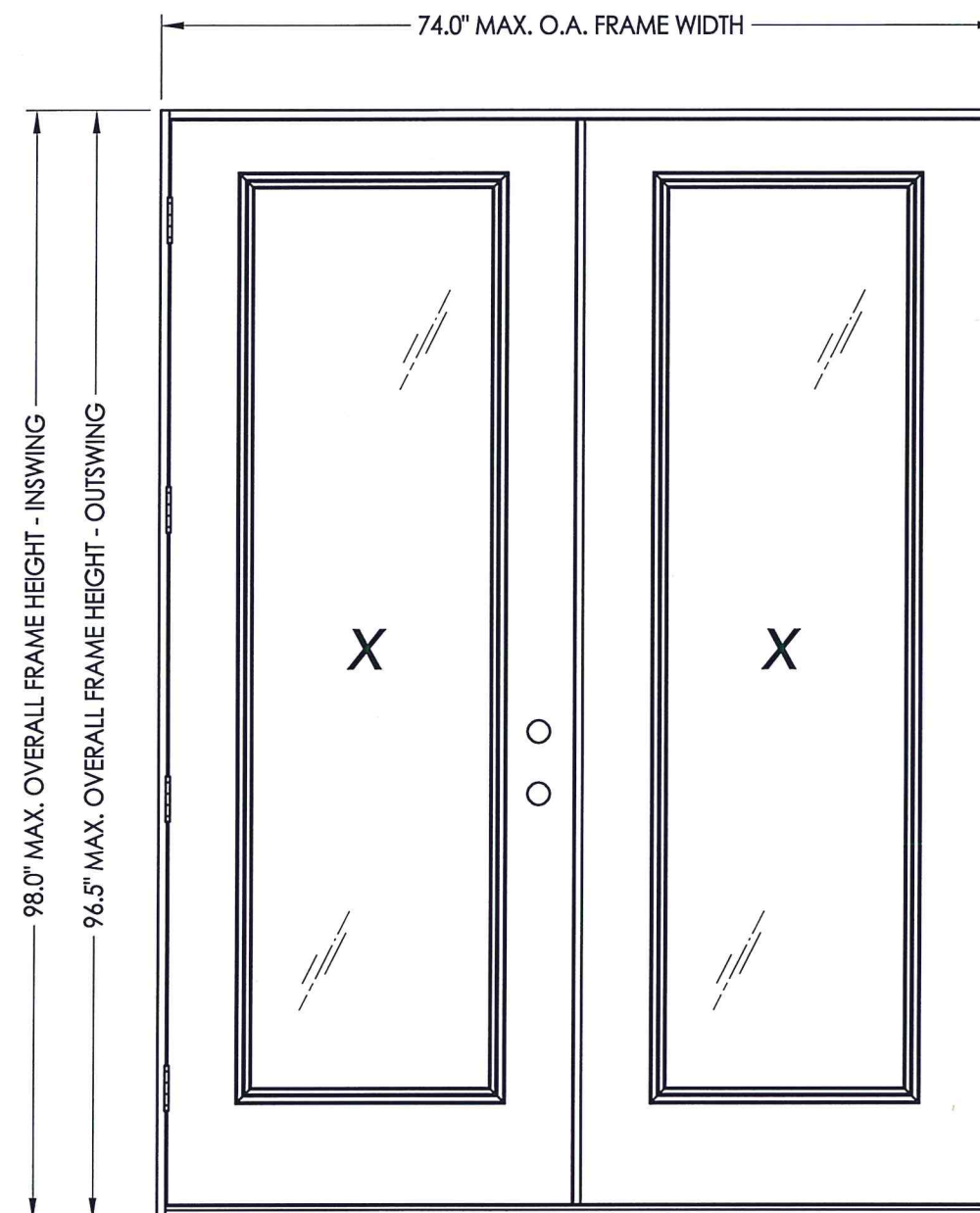


DIAMOND DOOR SERIES
FLUSH GLAZED FIBERGLASS DOORS
INSWING / OUTSWING
"IMPACT"

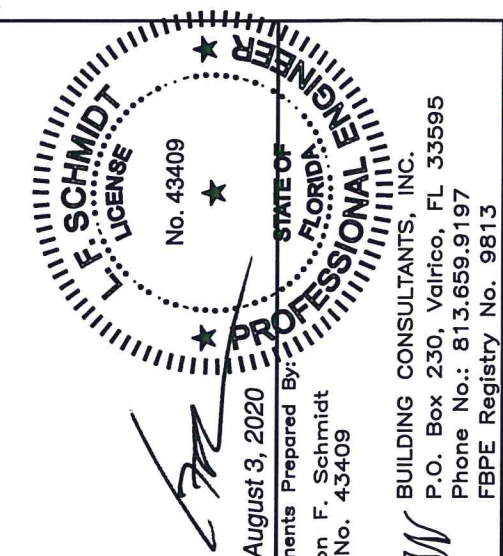
GENERAL NOTES

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.

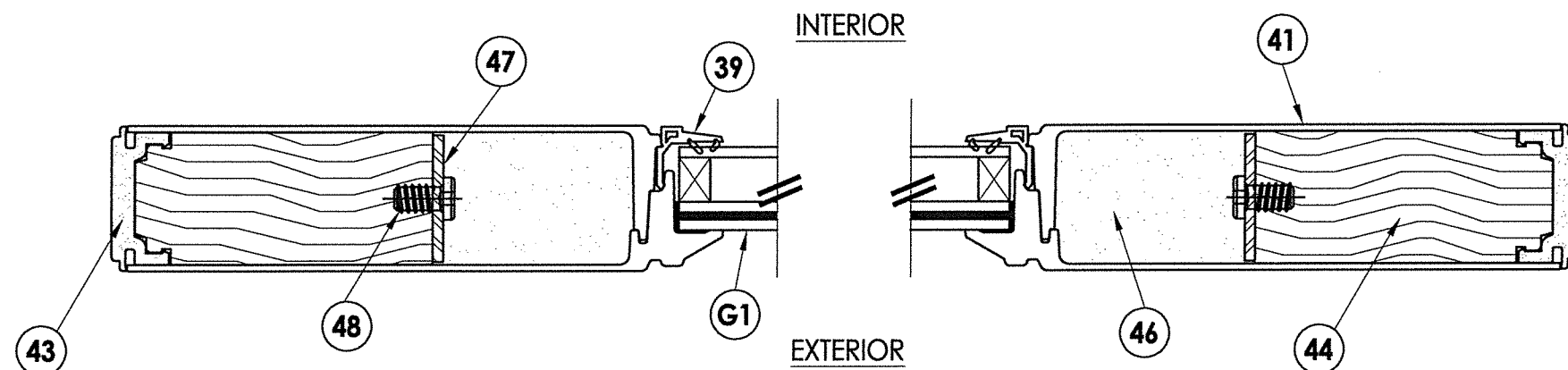
TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical elevation, design pressures, & general notes
2	Door panel details
3	Horizontal cross sections
4	Vertical cross sections
5	Buck and frame anchoring - 2X buck masonry construction
6	Frame anchoring - 1X buck masonry construction
7	Endura astragal details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



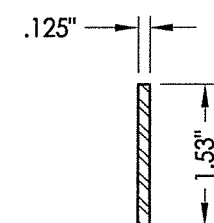
SWING	OVERALL FRAME DIMENSION	DOOR D.L.O. DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
INSWING	74.0" x 98.0"	21.0" x 79.0"	G1	+47.5	-47.5
OUTSWING	74.0" x 96.5"	21.0" x 79.0"		+50.0	-50.0



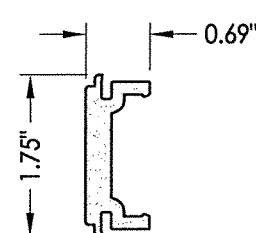
DATE: 09/28/15		PRODUCT:		DOERS FIBERGLASS DOOR	
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.: FL-19007.19					
SHEET 1 OF 8		3	7/30/20	UPDATE TO 7TH ED. (2020)	FBC LFS
		2	5/15/19	ADD STEEL STUD ANCHORING	LFS
		1	9/26/17	UPDATE TO 6TH ED. (2017)	FBC JK
		NO.	DATE		BY
		REVISIONS			
		TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES			
		PART OR ASSEMBLY:			



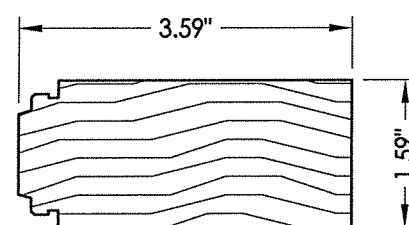
1 HORIZONTAL CROSS SECTION



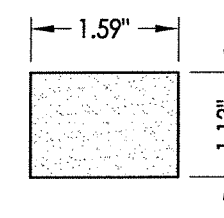
47 STILE STIFFENER
Steel reinforcement



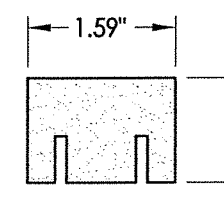
43 LATCH & HINGE STILE
Cellular PVC



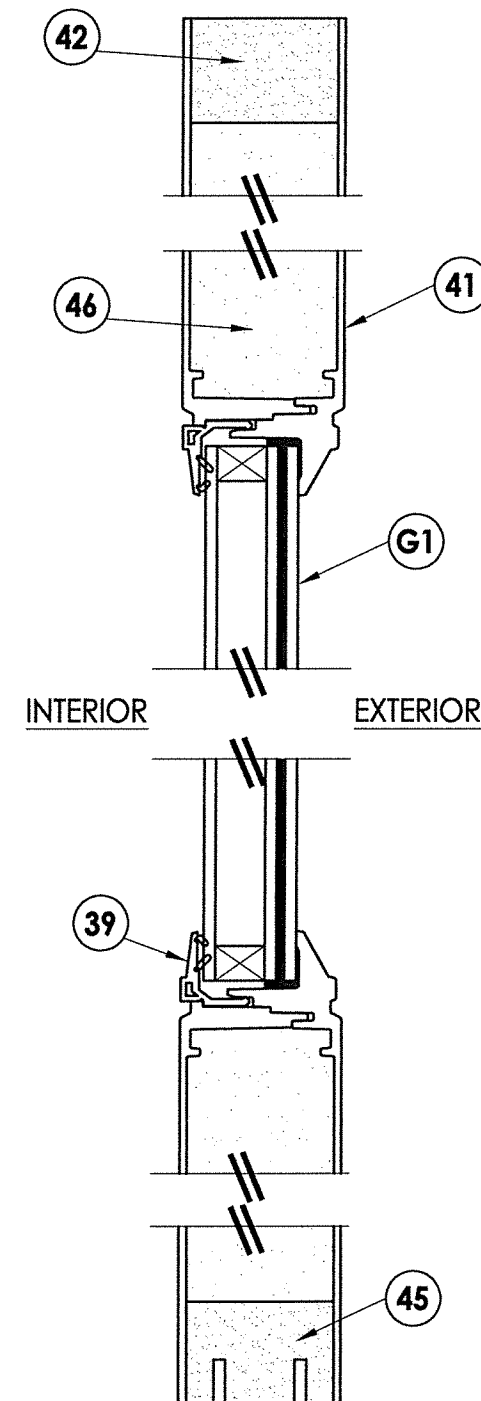
44 LATCH & HINGE STILE
Wood support



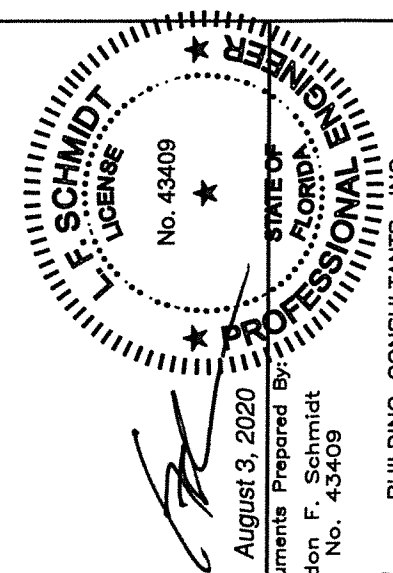
42 TOP RAIL
Cellular PVC



45 **BOTTOM RAIL**
Cellular PVC



2 VERTICAL CROSS SECTION



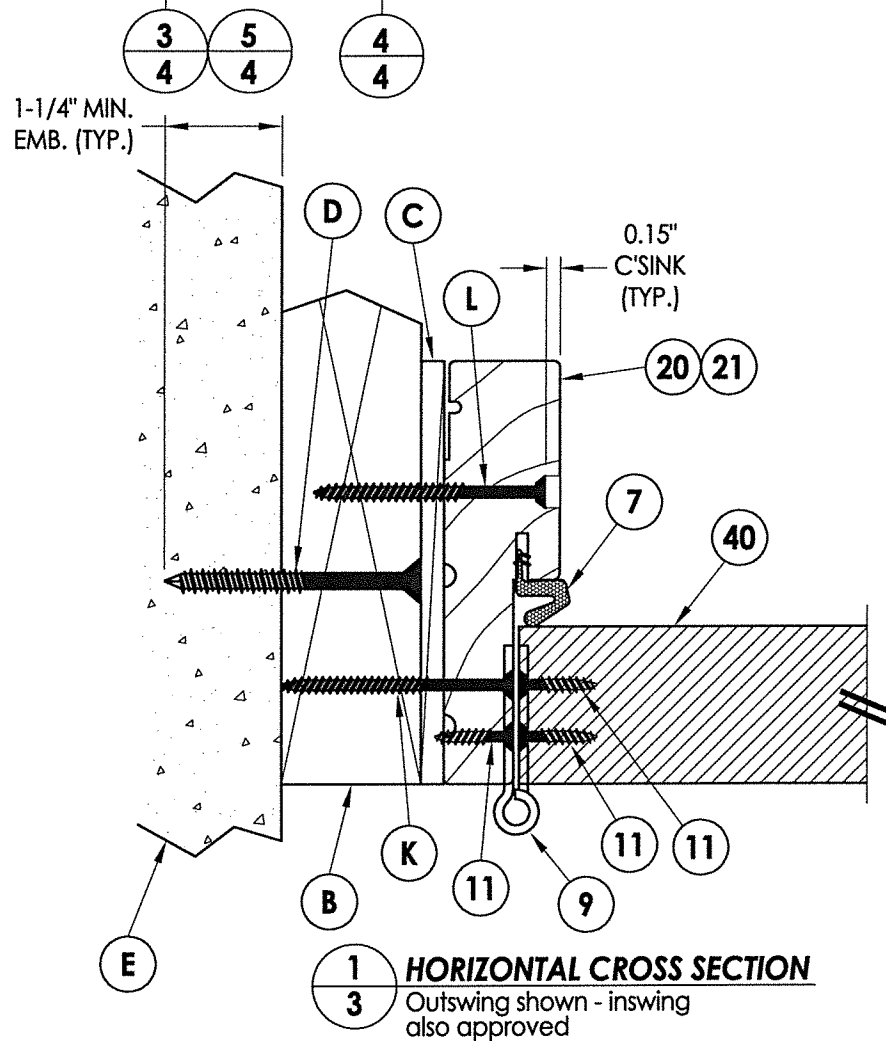
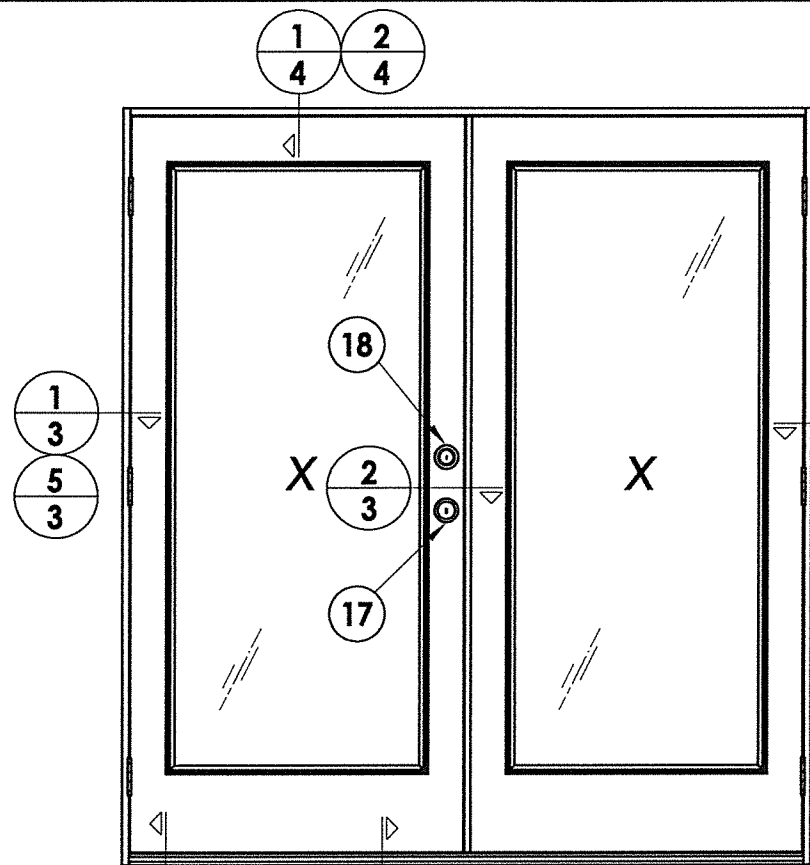
August 3, 2020

Documents Prepared By:
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P.E. No. 43409

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

DOERS FIBERGLASS DOOR		PRODUCT:	
PART OR ASSEMBLY:		DOOR PANEL DETAILS	
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)	JK
NO.	DATE		BY
			REVISIONS
DATE: 09/28/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.19			
SHEET 2 OF 8			

R:\Clients\Doors PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL-19007.11-20.dwg, 3.9



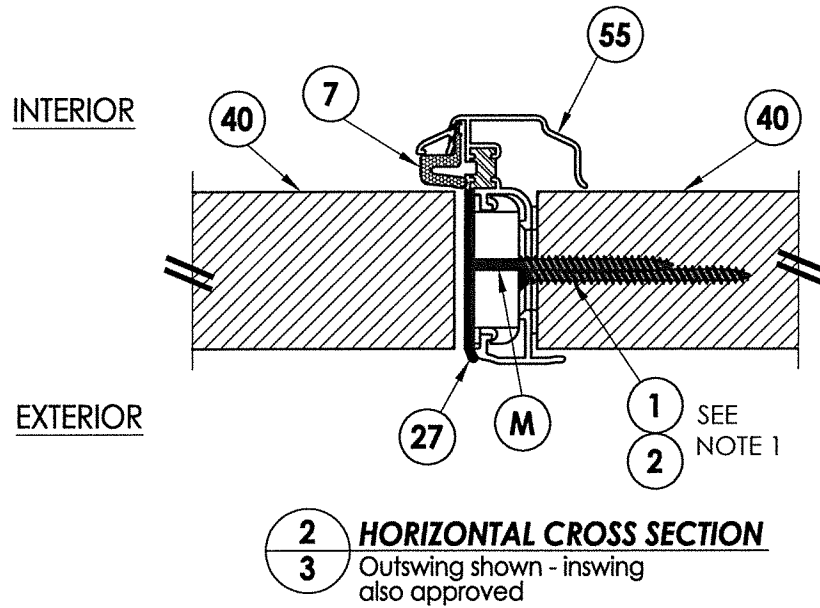
METAL STUDS BY OTHERS
(SSMA STUD 550S162-43, Fy = 33 ksi, Fu = 45 ksi, MIN.)

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

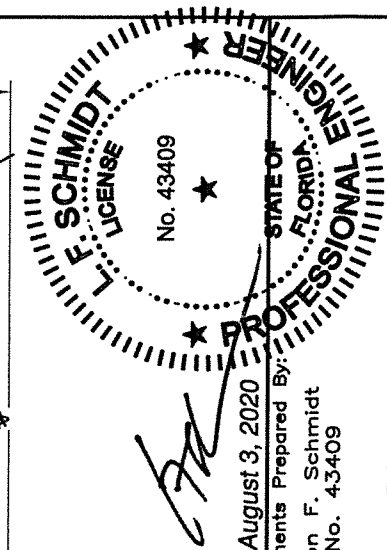
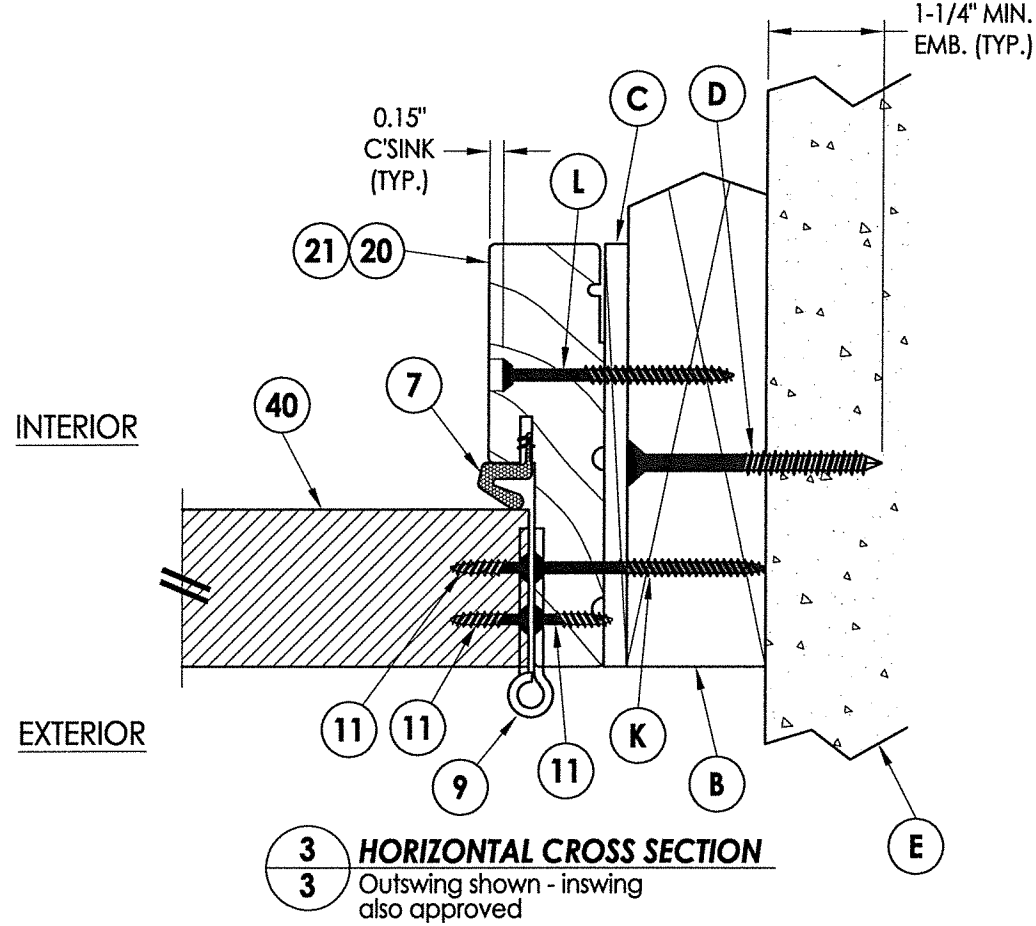
5
3 HORIZONTAL CROSS SECTION
Shown w/ Steel Stud Framing Option

NOTE:

1. 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" pph 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" pph sms for all 8'-0" (inswing).



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



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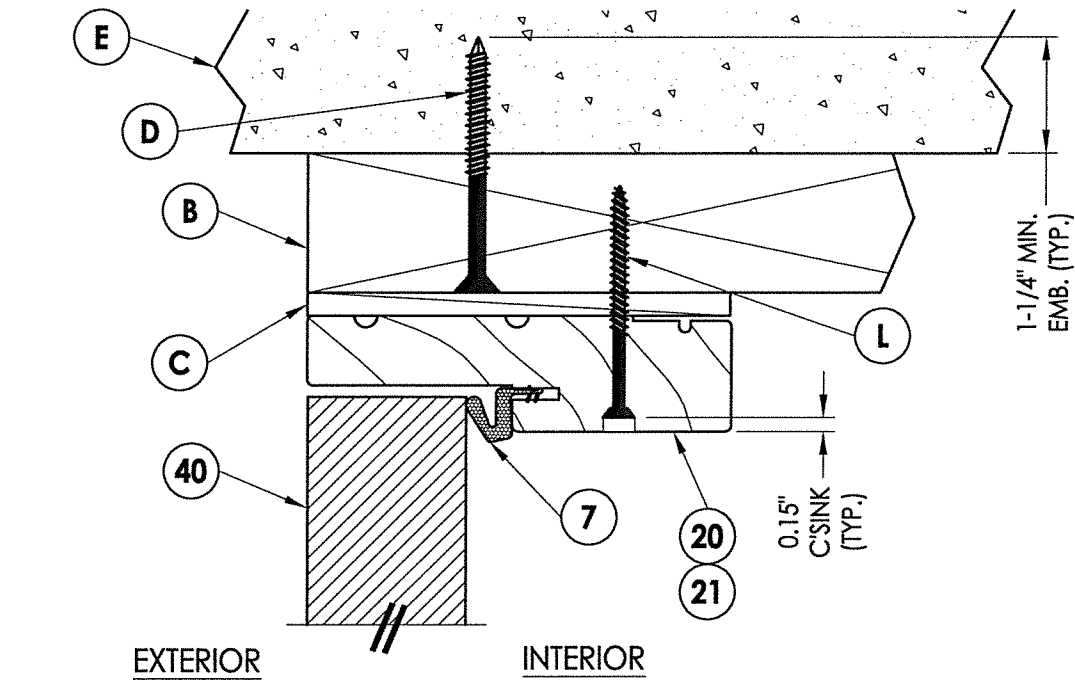
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: DOORS DOOR
FIBERGLASS DOOR
PART OR ASSEMBLY:
HORIZONTAL CROSS SECTIONS

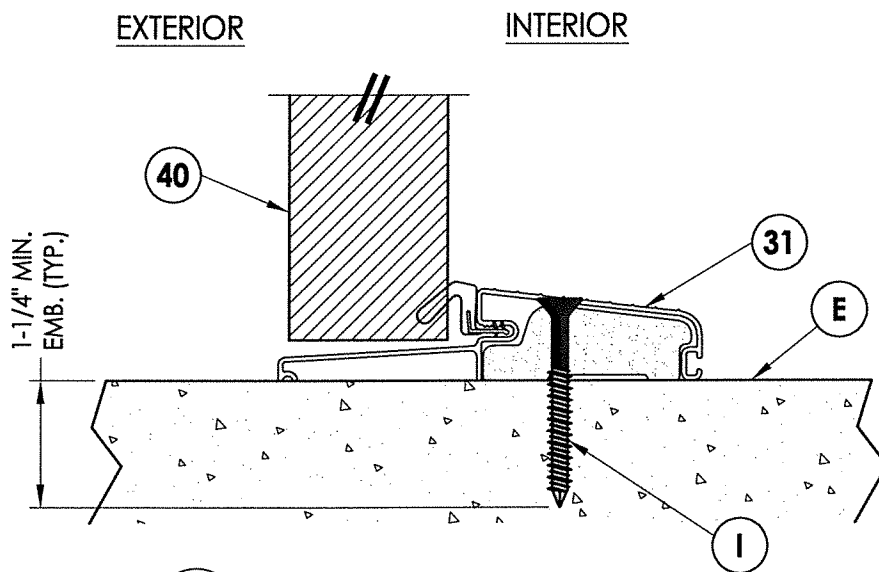
NO.	DATE	REVISIONS
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC
2	5/15/19	ADD STEEL STUD ANCHORING
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC

DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.19
SHEET 3 OF 8

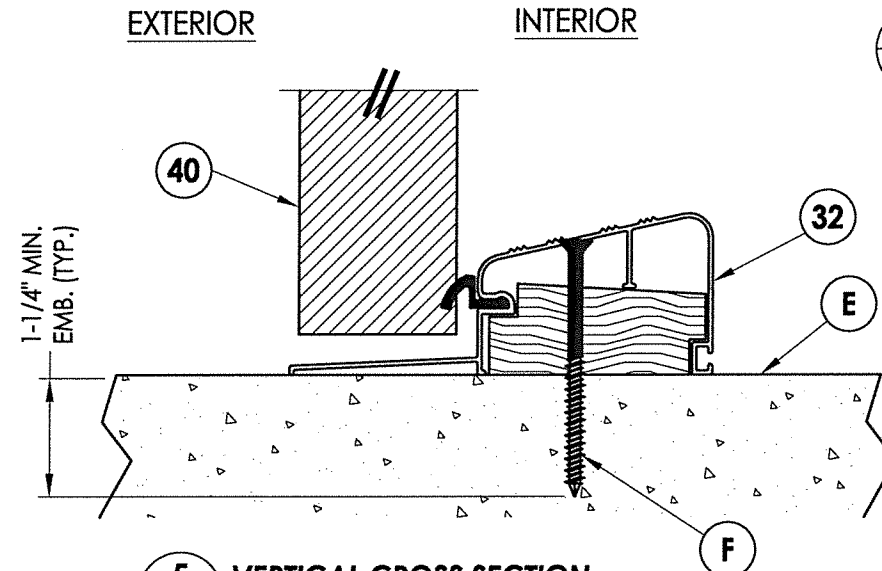
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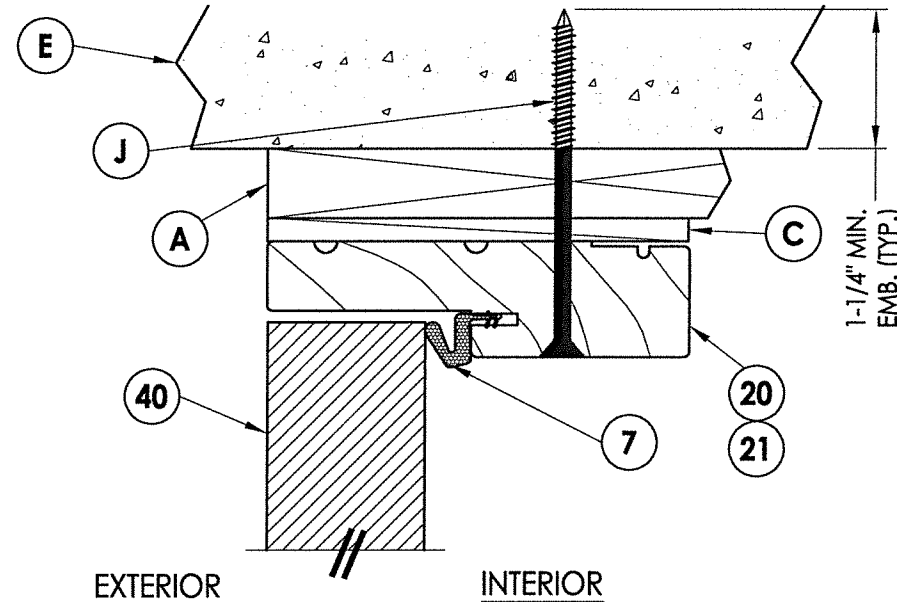
1 **VERTICAL CROSS SECTION**
4 Outswing shown - inswing also approved



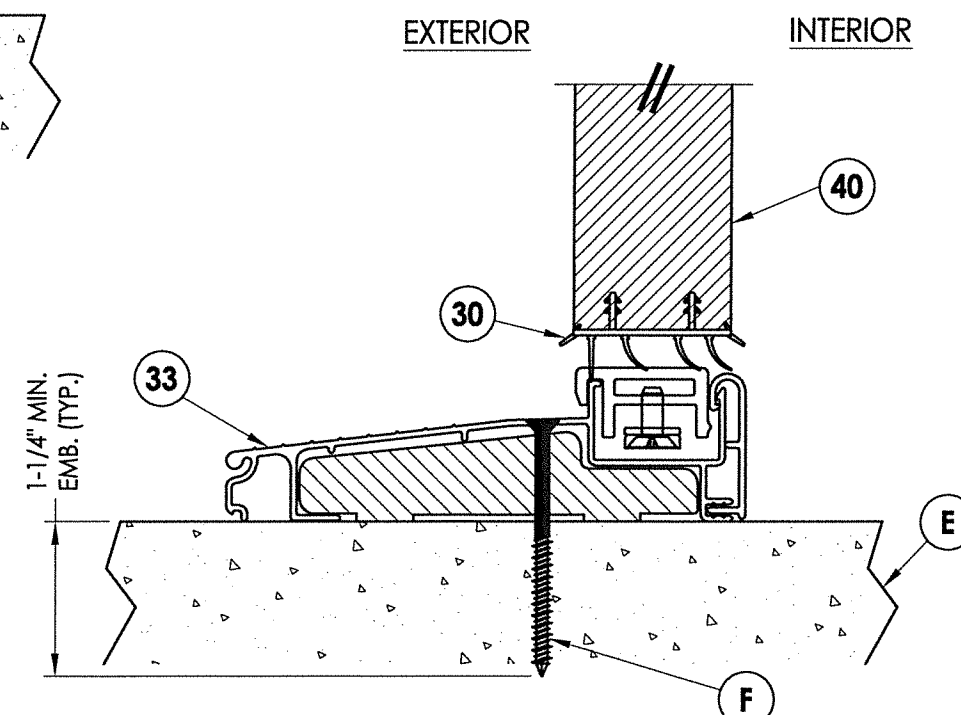
3 **VERTICAL CROSS SECTION**
4 Outswing configuration



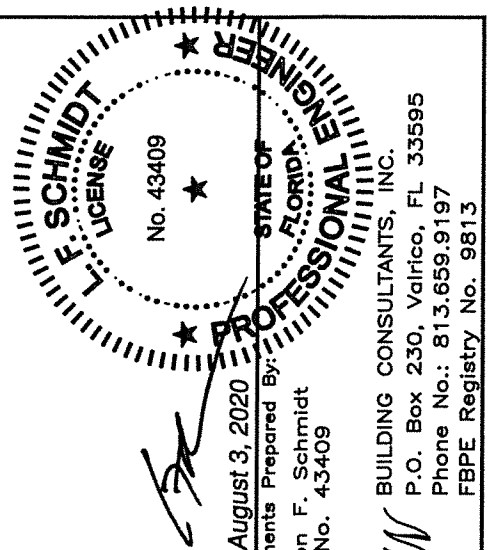
5 **VERTICAL CROSS SECTION**
4 Outswing configuration (Where water infiltration requirements are specified)



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



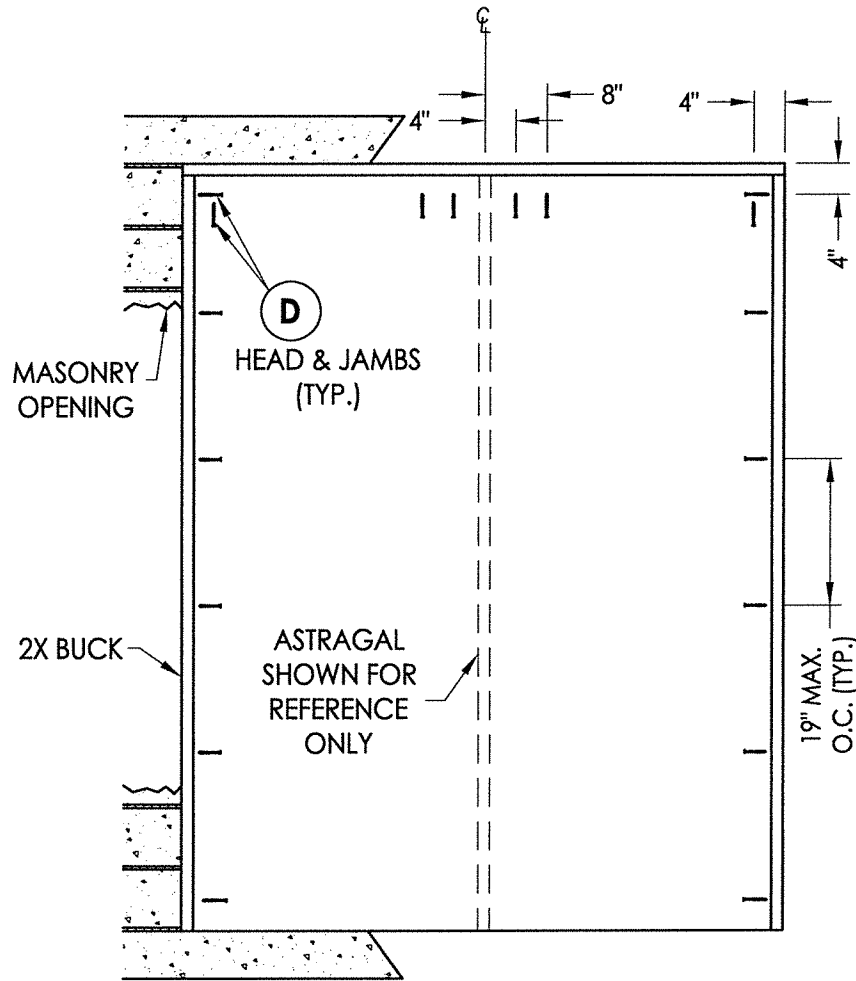
4 **VERTICAL CROSS SECTION**
4 Inswing configuration



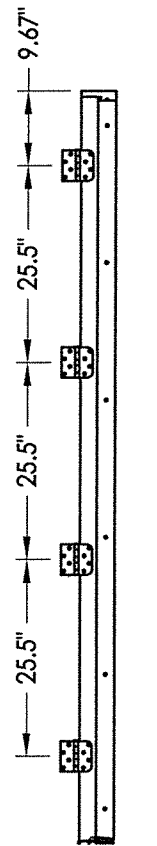
August 3, 2020
Documents Prepared By:
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RW BUILDING CONSULTANTS, INC.
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FBPE Registry No. 9813

PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
		LFS	JK
		BY	BY
		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-19007.19	
SHEET		4 OF 8	

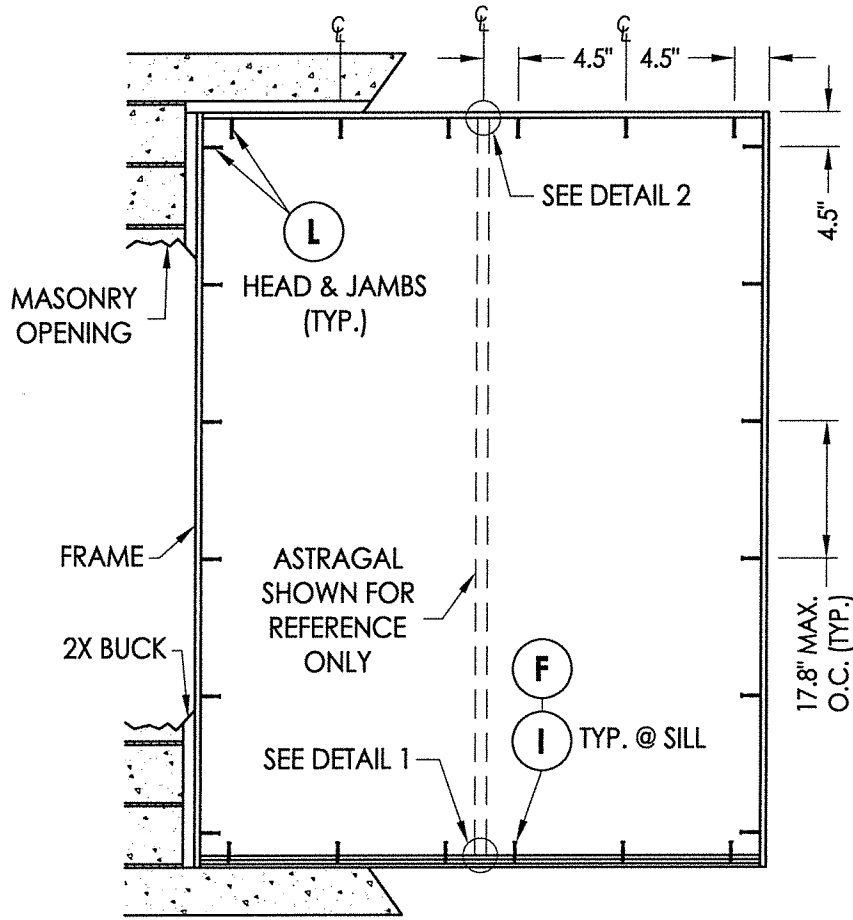
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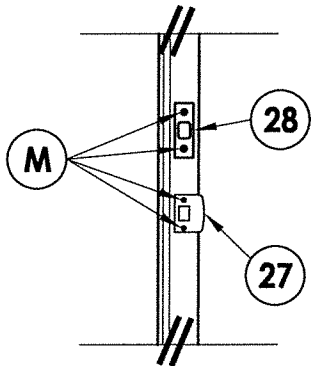
BUCK ANCHORING



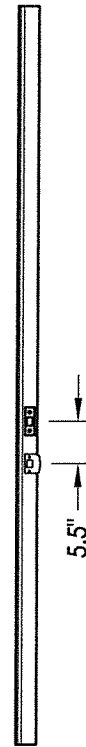
HINGE JAMB



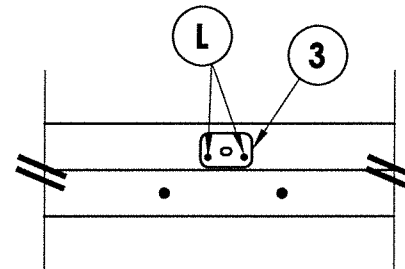
FRAME ANCHORING
Masonry 2X buck construction



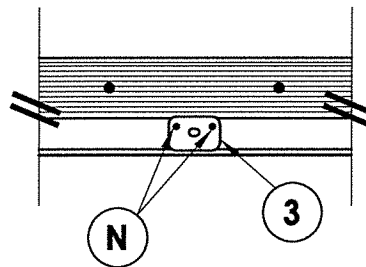
LATCH & DEADBOLT DETAIL



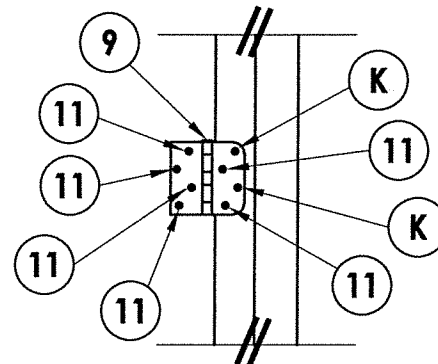
ASTRAGAL STRIKE JAMB



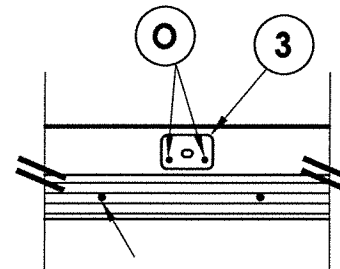
DETAIL 2



DETAIL 1
Inswing configuration



HINGE DETAIL



DETAIL 1
Outswing configuration

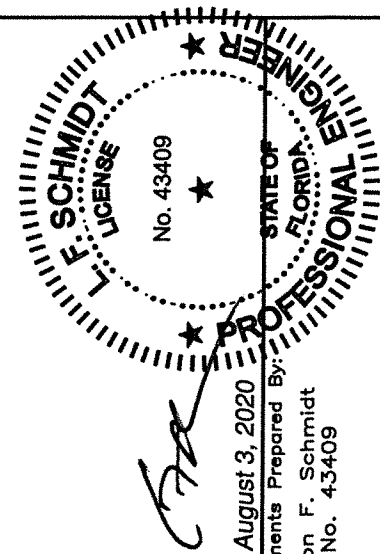
CONCRETE ANCHOR NOTES:

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"

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.



August 3, 2020
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FBPE Registry No. 9813

PRODUCT: DOERS FIBERGLASS DOOR
PART OR ASSEMBLY: BUCK & FRAME ANCHORING 2X 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

DATE: 09/28/15

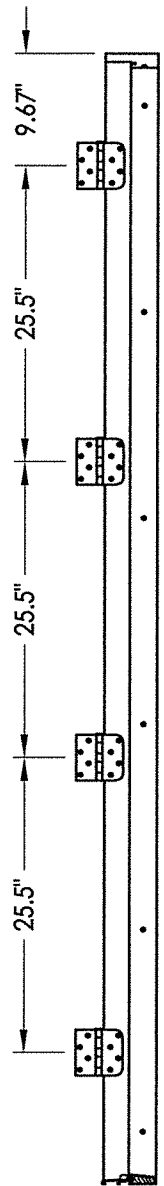
SCALE: N.T.S.

DWG. BY: JK

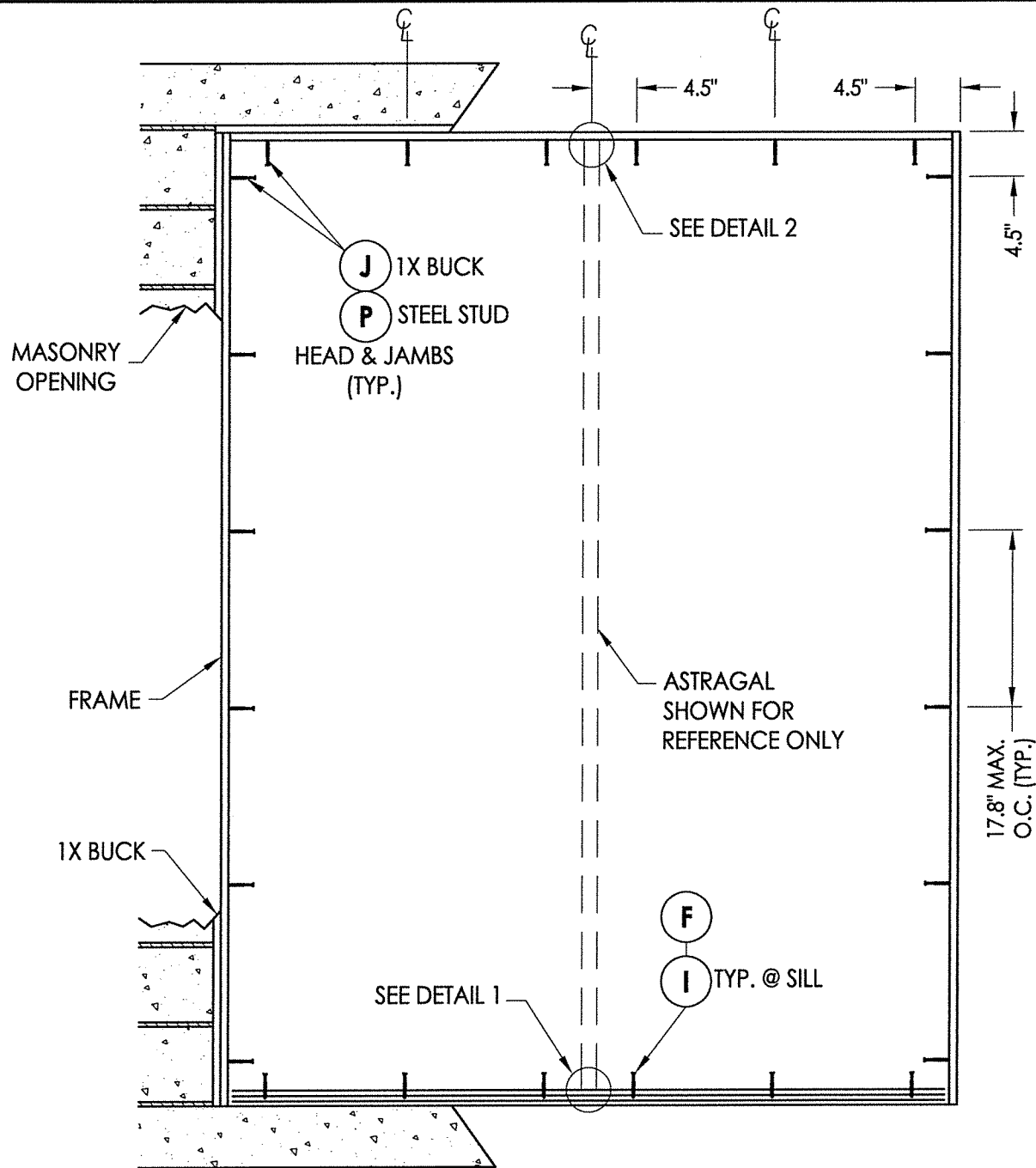
CHK. BY: LFS

DRAWING NO.: FL-19007.19

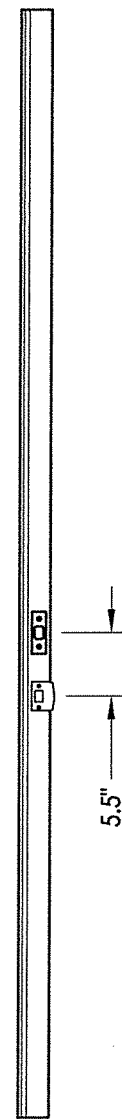
SHEET 5 OF 8



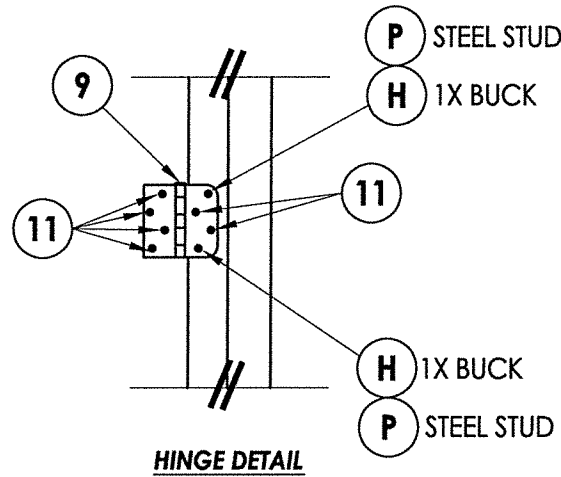
HINGE JAMB



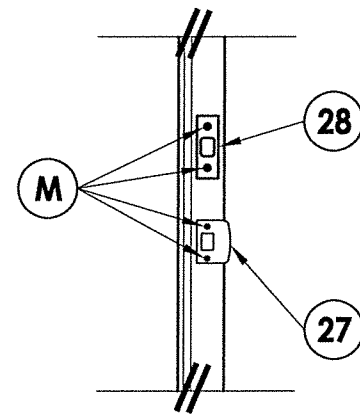
FRAME ANCHORING
Masonry 1X buck Construction



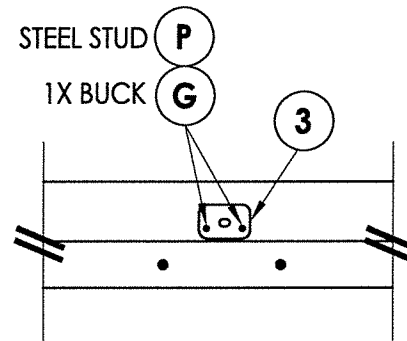
ASTRAGAL STRIKE JAMB



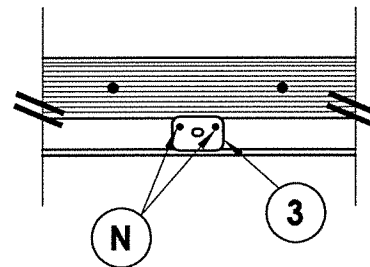
HINGE DETAIL



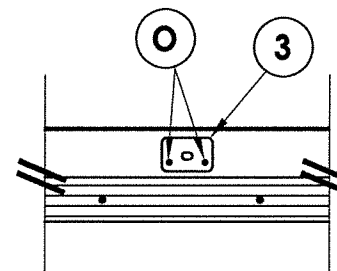
LATCH & DEADBOLT DETAIL



DETAIL 2



DETAIL 1
Inswing configuration



DETAIL 1
Outswing configuration

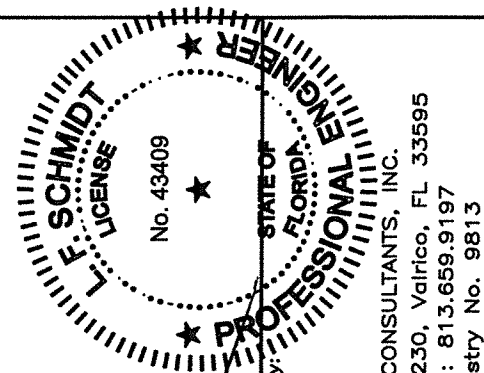
CONCRETE ANCHOR NOTES:

- 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"
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.



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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

DATE: 09/28/15

SCALE: N.T.S.

DWG. BY: JK

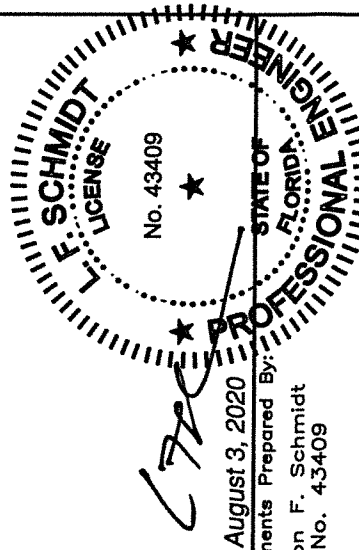
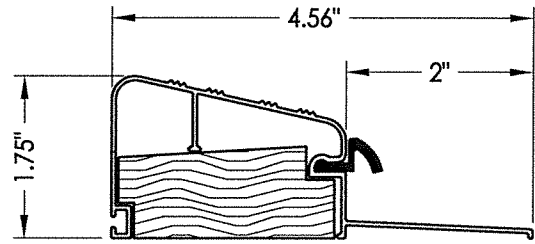
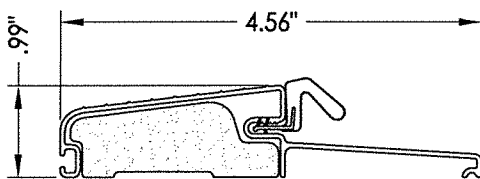
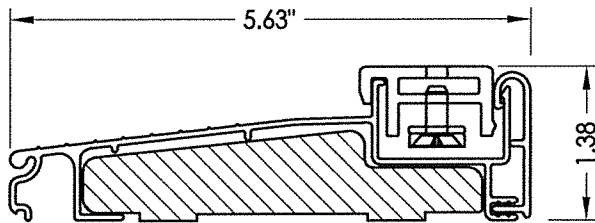
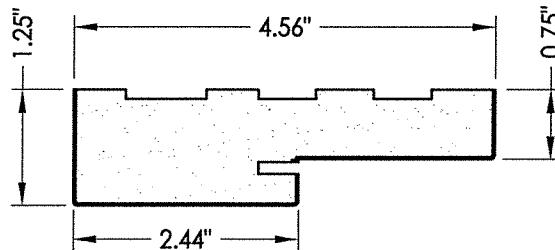
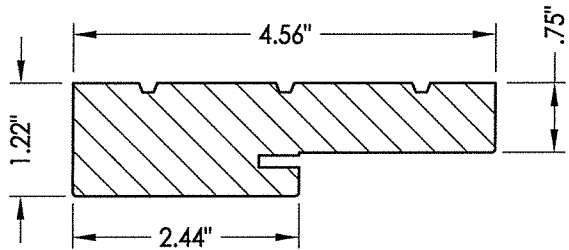
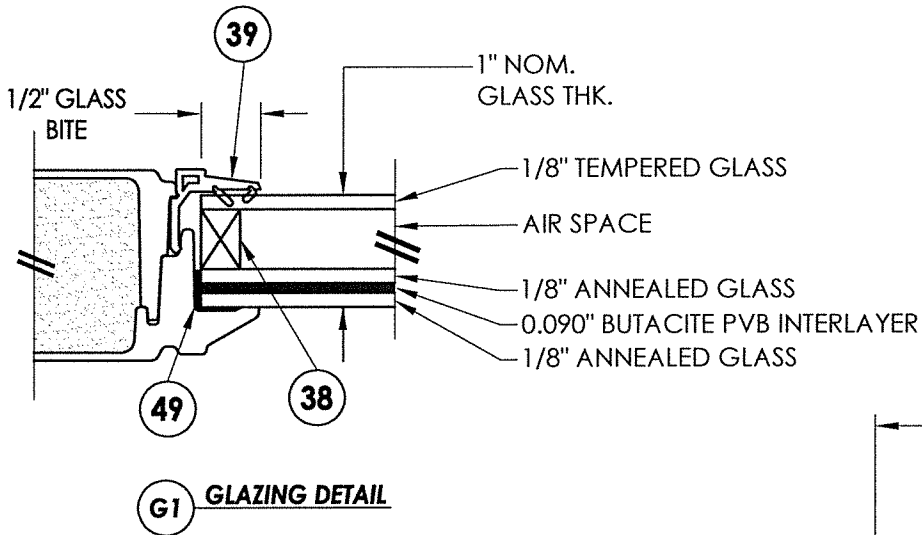
CHK. BY: LFS

DRAWING NO.: FL-19007.19

SHEET 6 OF 8

R:\Clients\Doers PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 11 - 20.dwg, 8.9

BILL OF MATERIALS					
ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD	20	FINGER JOINTED PINE FRAME, HEAD & HINGE JAMBS	WOOD
B	2X BUCK SG >= 0.55	WOOD	21	POLY FIBER JAMB	COMP. / VINYL
C	1/4" MAX. SHIM SPACE	-	27	LATCH STRIKE PLATE	STEEL
D	1/4" X 2-3/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL	28	DEADBOLT STRIKE PLATE	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE	30	WEATHER-STOP 3647 HOLM INDUSTRIES	VINYL
			31	OUTSWING BUMP THRESHOLD	ALUM. / PVC
F	1/4" X 2-3/4" PFH ITW CONCRETE SCREW	STEEL	32	OUTSWING HIGH DAM BUMP THRESHOLD	ALUM. / WOOD
G	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL	33	INSWING ADJUSTABLE THRESHOLD	ALUM. / WOOD
H	3/16" x 3-1/4" PFH ITW CONCRETE SCREW	STEEL	38	GLAZING SPACER	ALUM.
I	1/4" X 2-1/4" PFH ITW CONCRETE SCREW	STEEL	39	GLAZING BEAD	PVC
J	1/4" X 3-3/4" PFH ITW CONCRETE SCREW	STEEL	40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
K	#9 X 2-1/2" PFH WOOD SCREW	STEEL	41	DOOR SKIN (MIN. 0.095" THICK)	FIBERGLASS
L	#10 X 2-1/2" PFH WOOD SCREW (1-3/8" MIN. EMBEDMENT)	STEEL	42	TOP RAIL	CELLULAR PVC
M	#9 X 2-1/4" PFH WOOD SCREW	STEEL	43	LATCH & HINGE STILE	CELLULAR PVC
N	3/16" X 3-1/2" PFH ITW CONCRETE SCREW	STEEL	44	LATCH & HINGE STILE SUPPORT	WOOD
O	3/16" X 1-1/2" PFH ITW CONCRETE SCREW	STEEL	45	BOTTOM RAIL	CELLULAR PVC
P	#10-16 PFH SELF-DRILLING SMS	STEEL	46	POLYURETHANE FOAM	POLYURETHANE
1	#10 X 2-1/2" PFH SMS	STEEL	47	STILE STIFFENER REINFORCEMENT	STEEL
2	#8 X 3" PSH SMS	STEEL	48	REINFORCEMENT RETAINING SCREW	NYLON
3	FLUSH BOLT STRIKE PLATE	STEEL	49	GLAZING COMPOUND DOW 995	SILICONE
7	Q-LON 650 WEATHER STRIP SCHLEGEL	FOAM	55	ASTRAGAL (ENDURA)	ALUMINUM
9	4" X 4" BUTT HINGE	STEEL			
11	#9 X 3/4" PFH WOOD SCREW	STEEL			
17	KWIKSET KEYED ENTRY - SIGNATURE SERIES	STEEL			
18	KWIKSET DEADBOLT - SIGNATURE SERIES (780)	STEEL			



August 3, 2020
Documents Prepared By:
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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: 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
		BY JK

DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.19
SHEET 8 OF 8