



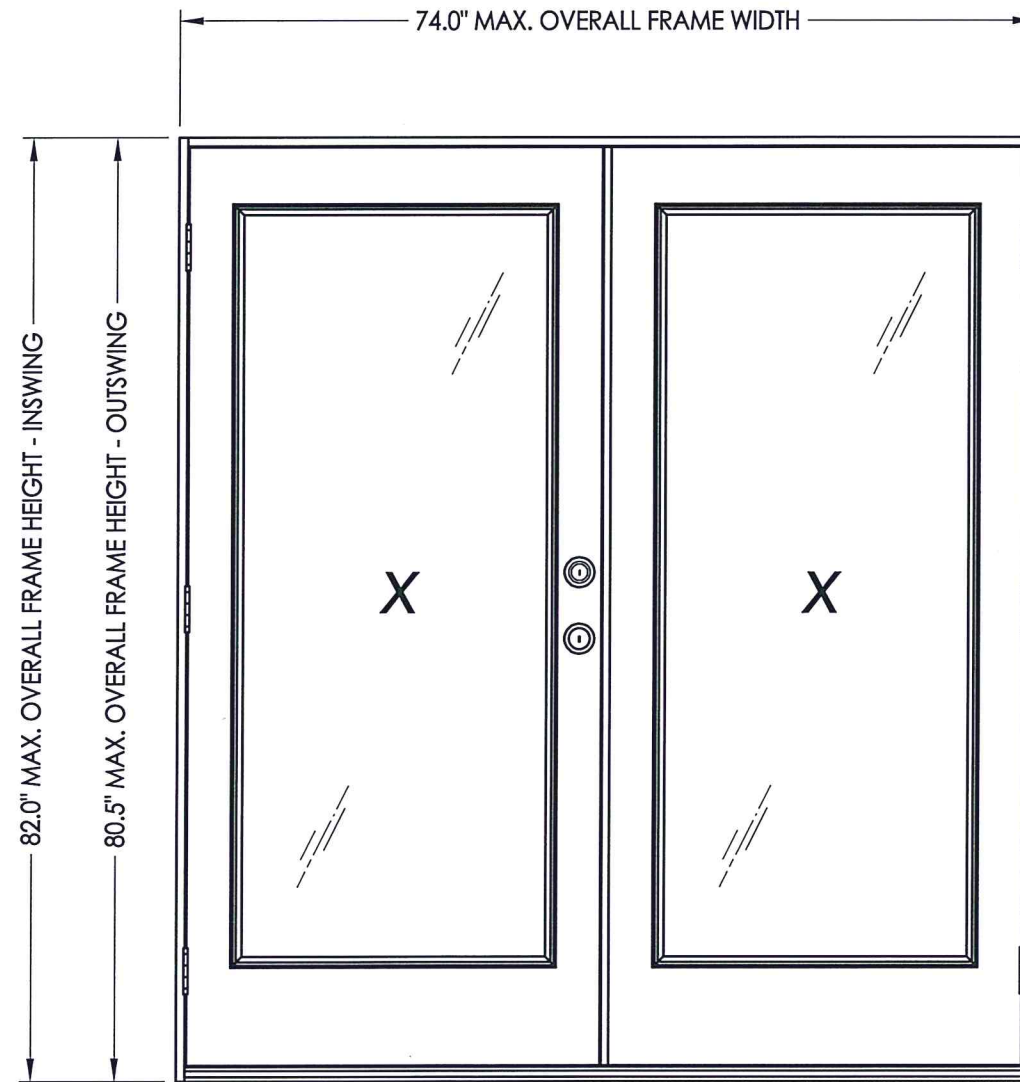
DIAMOND DOOR SERIES FLUSH GLAZED FIBERGLASS DOORS INSWING / OUTSWING "IMPACT"

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

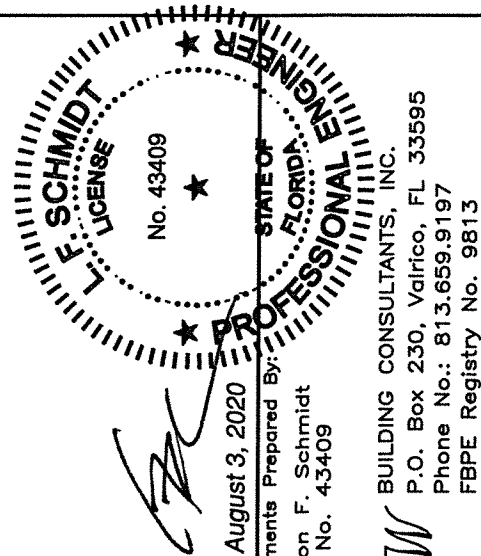
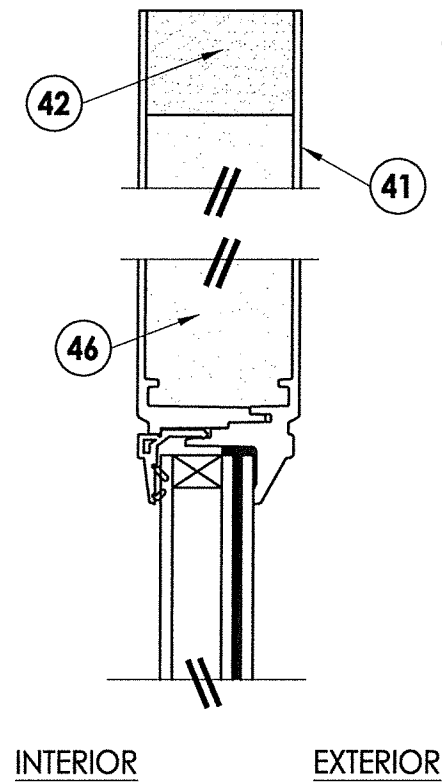
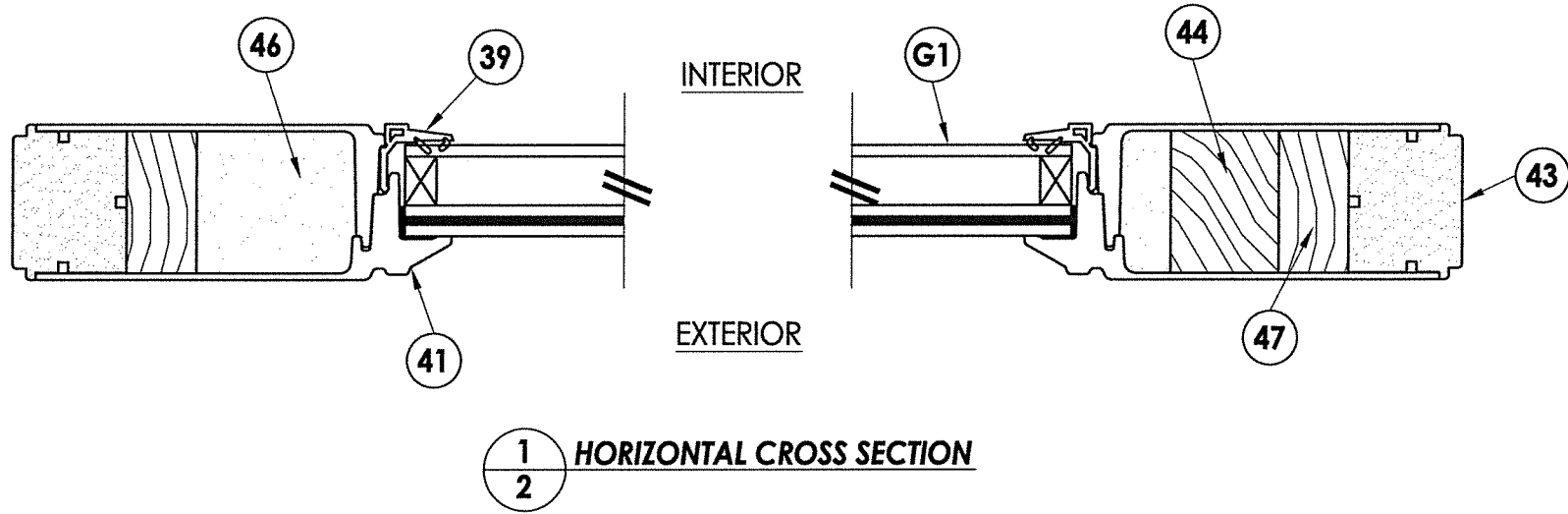
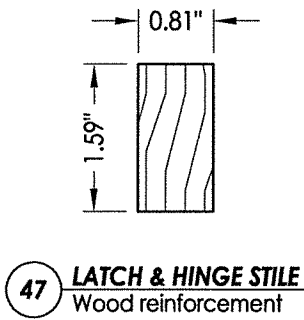
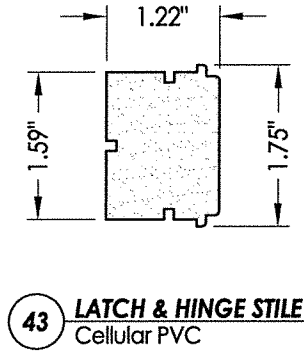
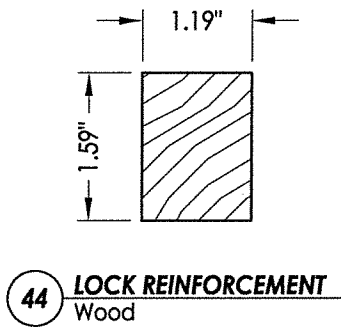
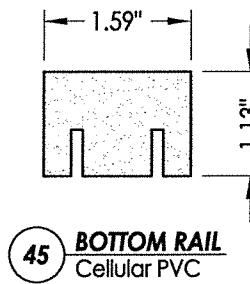
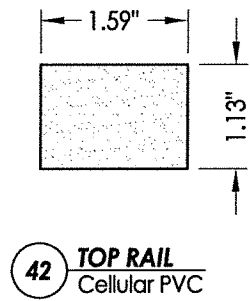
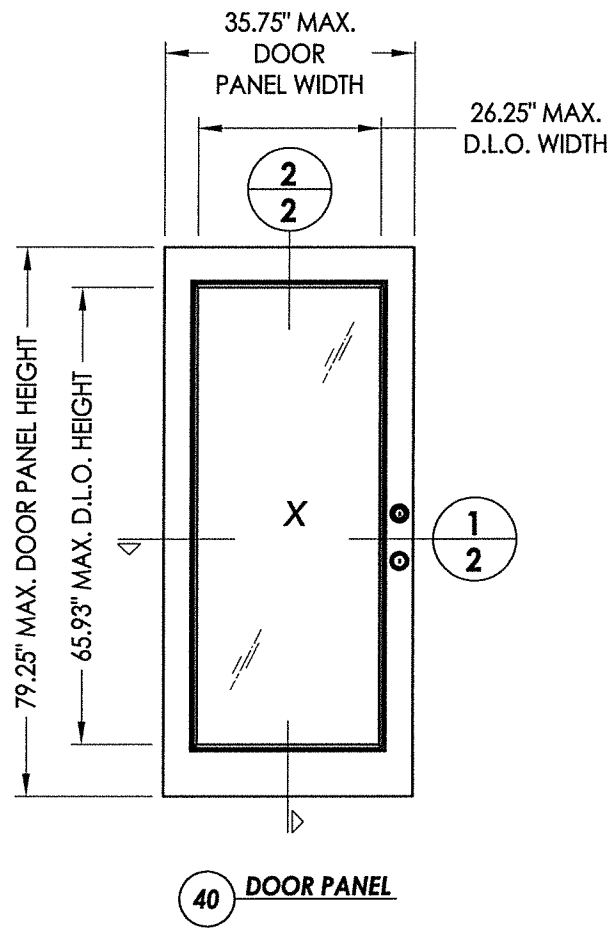
SHEET #	DESCRIPTION
1	Typical elevation, design pressures, & general notes
2	Door panel details
3	Horizontal cross sections
4	Vertical cross sections
5	Buck and frame anchoring - 2X buck masonry construction
6	Frame anchoring - 1X buck masonry construction
7	Endura astragal details
8	Bill of materials,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



SWING	OVERALL FRAME DIMENSION	DOOR D.L.O. DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
INSWING	74.0" x 82.0"	26.25" x 65.93"	G1	+50.0	-50.0
OUTSWING	74.0" x 80.5"	26.25" x 65.93"		+50.0	-50.0

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: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES
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-19007.14	
SHEET 1 OF 8	

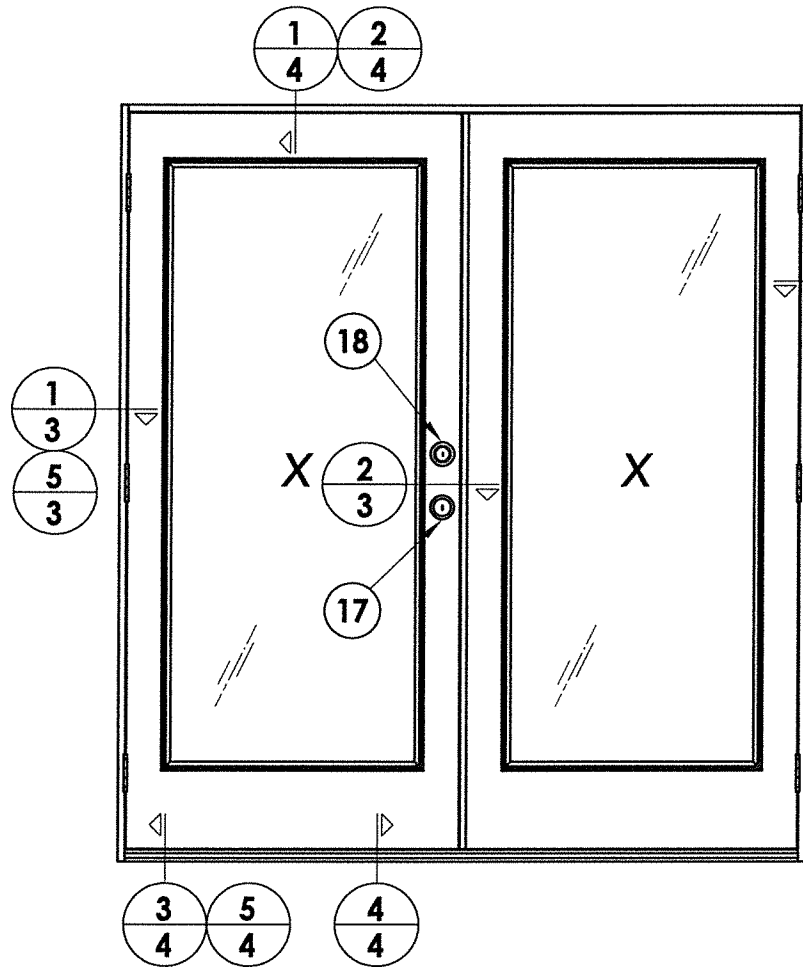
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August 3, 2020
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FBPE Registry No. 9813

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: 09/28/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.14			
SHEET 2 OF 8			

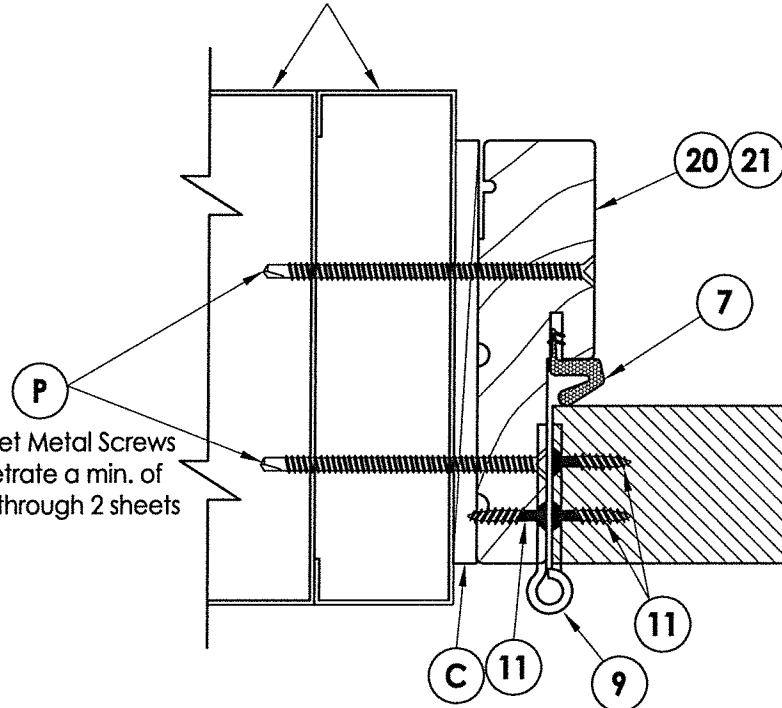
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3
3
4
3

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.)



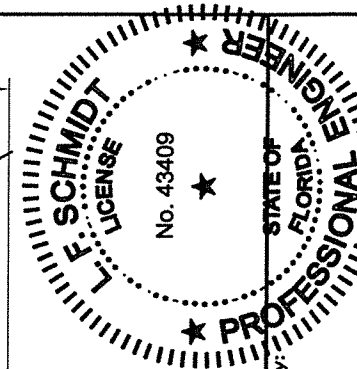
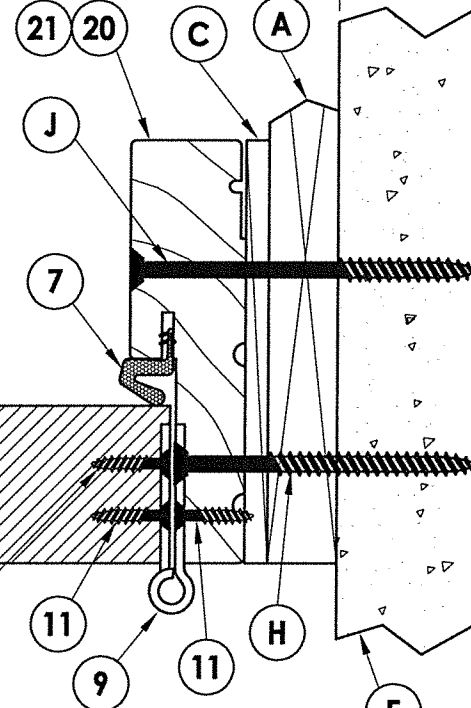
5
3 HORIZONTAL CROSS SECTION
Shown w/ Steel Stud Framing Option

INTERIOR

EXTERIOR

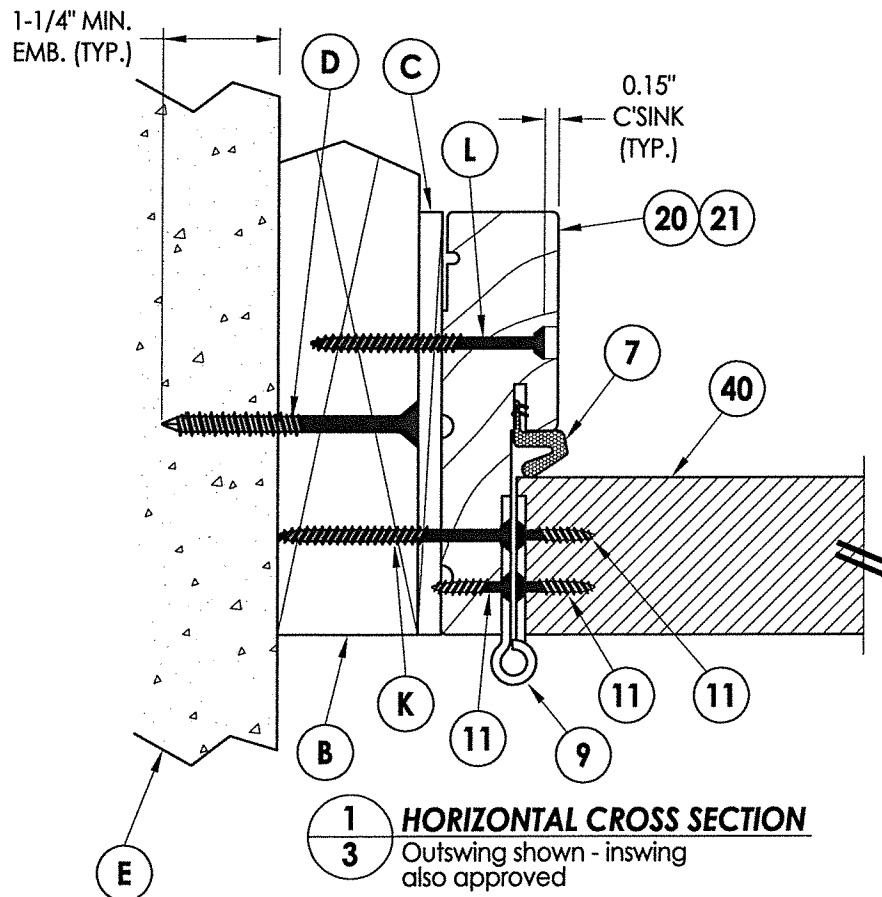
4
3 HORIZONTAL CROSS SECTION
Shown w/1X sub-buck

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



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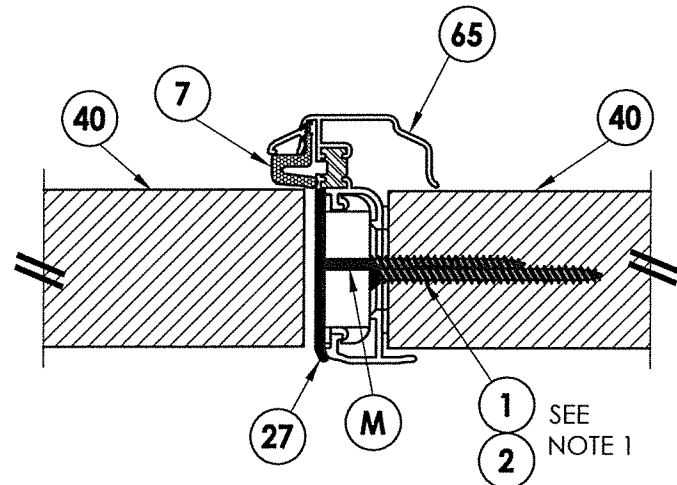
1
3 HORIZONTAL CROSS SECTION
Outswing shown - inswing also approved

NOTE:

1. As noted in the test report astragal was attached to the inactive leaf with (10) #8 x 3" psh sms and (4) #10 x 2-1/2" psh sms for all 6'-8" (outswing). Astragal was attached to the inactive leaf with (9) #8 x 3" psh sms and (4) #10 x 2-1/2" psh sms for all 6'-8" (inswing).

INTERIOR

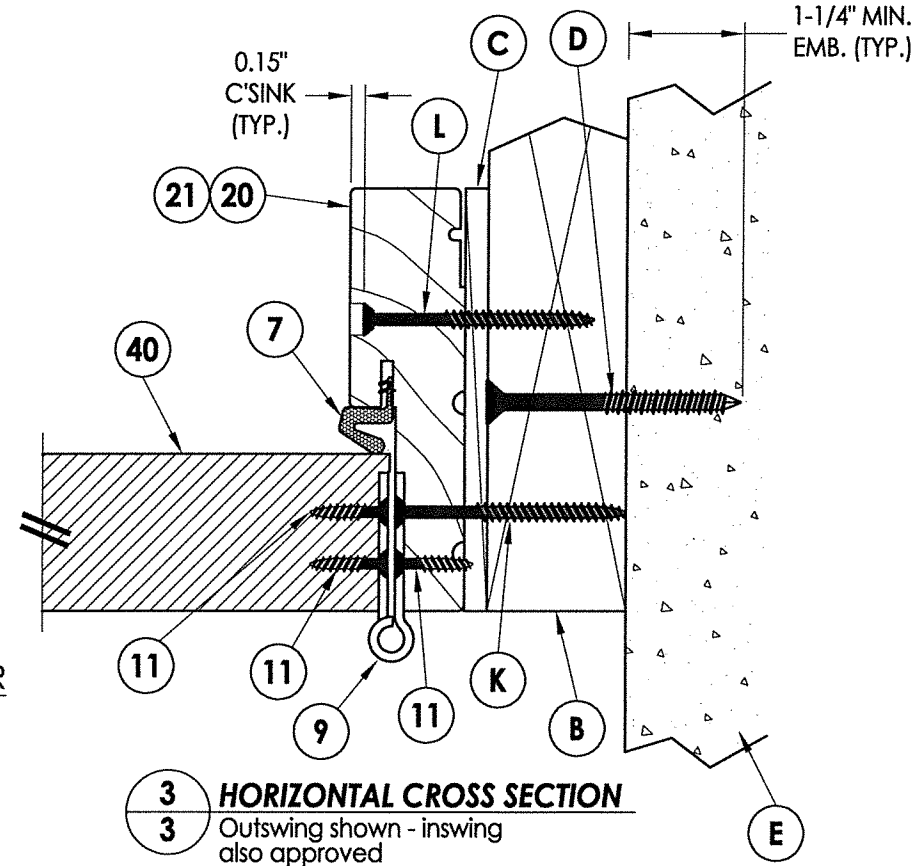
EXTERIOR



2
3 HORIZONTAL CROSS SECTION
Outswing shown - inswing also approved

INTERIOR

EXTERIOR



3
3 HORIZONTAL CROSS SECTION
Outswing shown - inswing also approved

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

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: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.14
SHEET 3 OF 8

The diagram is a vertical cross-section of a door threshold assembly. It is divided into two main sections: 'EXTERIOR' on the left and 'INTERIOR' on the right. A vertical dimension line on the far left indicates a minimum embedment depth of '1-1/4" MIN. EMB. (TYP.)' into the exterior concrete. The exterior concrete is shown with a stippled texture and contains small triangular aggregate. A vertical structural member, labeled '40', is shown in cross-section with diagonal hatching. The interior side shows a door frame assembly, labeled '31', which is seated in a concrete base, labeled 'E'. A screw, labeled 'I', is shown driving through the interior concrete base into the exterior concrete. Below the diagram, a legend box contains the following information:

3	VERTICAL CROSS SECTION
4	Outswing configuration

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

Technical cross-section diagram of a window assembly. The diagram shows the exterior (left) and interior (right) views, separated by a break symbol (//). The exterior side features a frame (A) and a sash (40). The interior side features a frame (C) and a sash (20, 21). A fastener (J) is shown passing through the frame and sash. A detail (E) shows a cross-section of the fastener. A dimension line indicates a minimum thickness of 1-1/4" MIN. EMB. (TYP.).

EXTERIOR **INTERIOR**

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

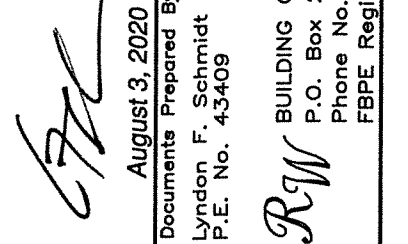
30

33

40

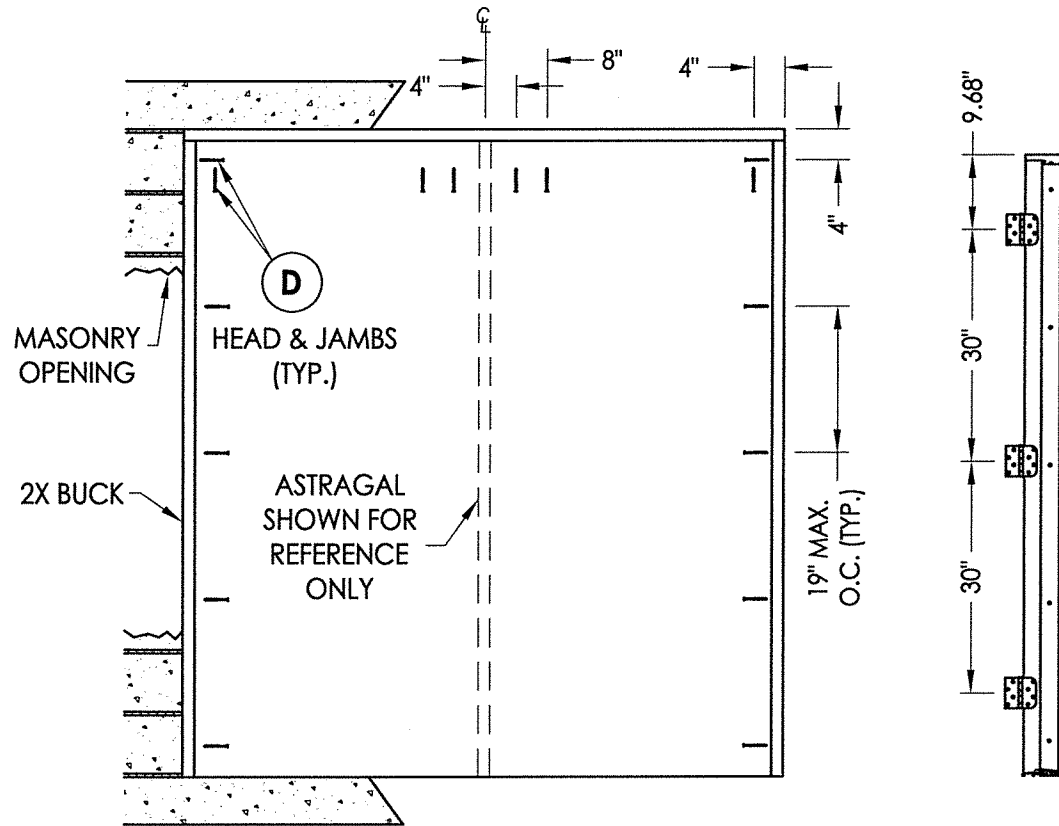
E

F

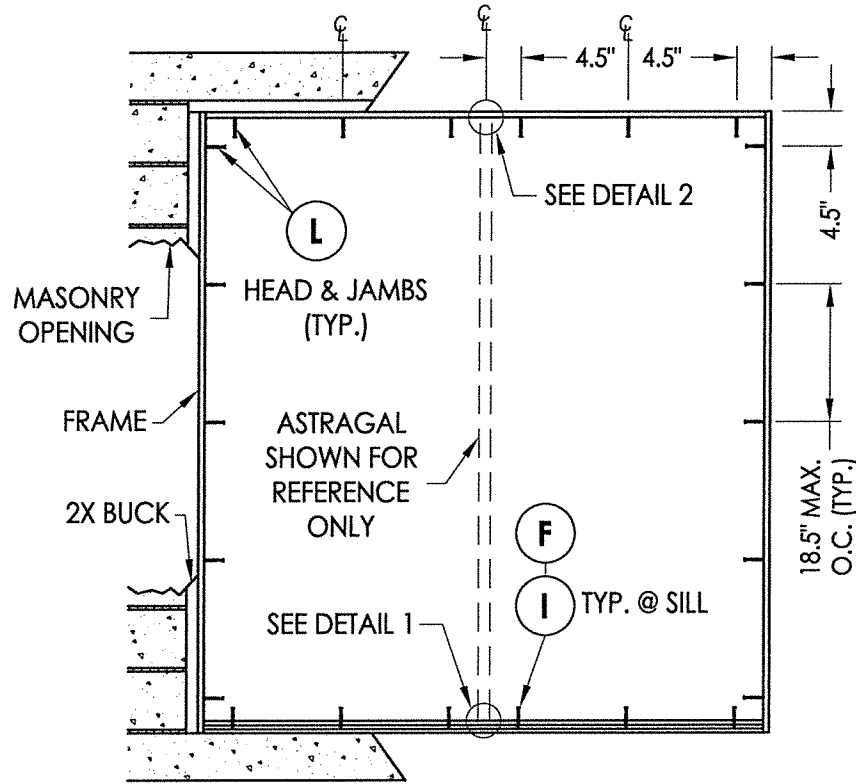


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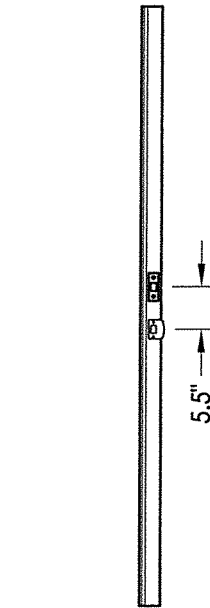
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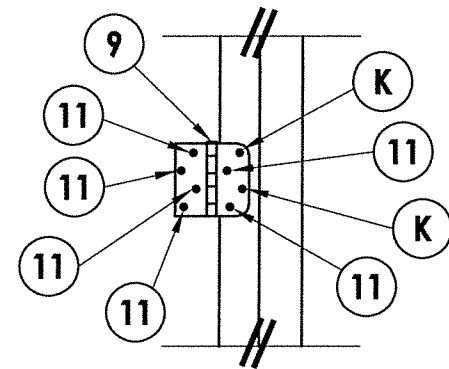
BUCK ANCHORING



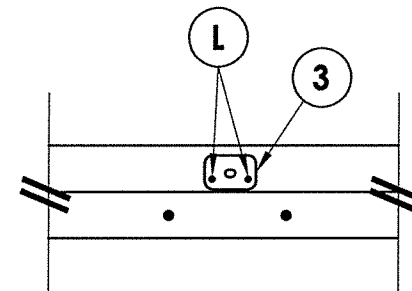
FRAME ANCHORING
Masonry 2X buck construction



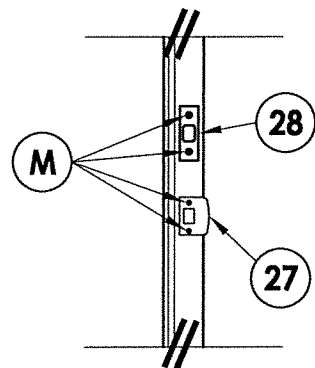
ASTRAGAL STRIKE JAMB



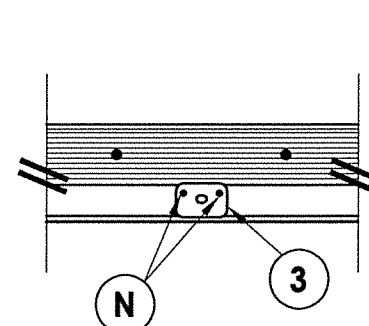
HINGE DETAIL



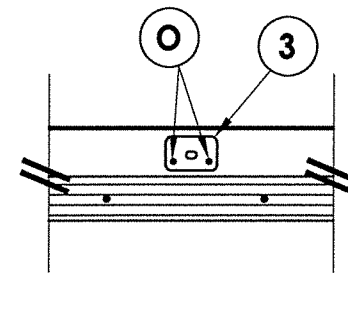
DETAIL 2



LATCH & DEADBOLT DETAIL



DETAIL 1
Inswing configuration



DETAIL 1
Outswing configuration

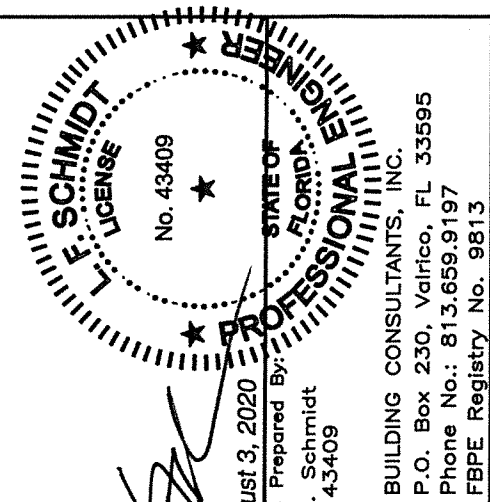
CONCRETE ANCHOR NOTES:

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.



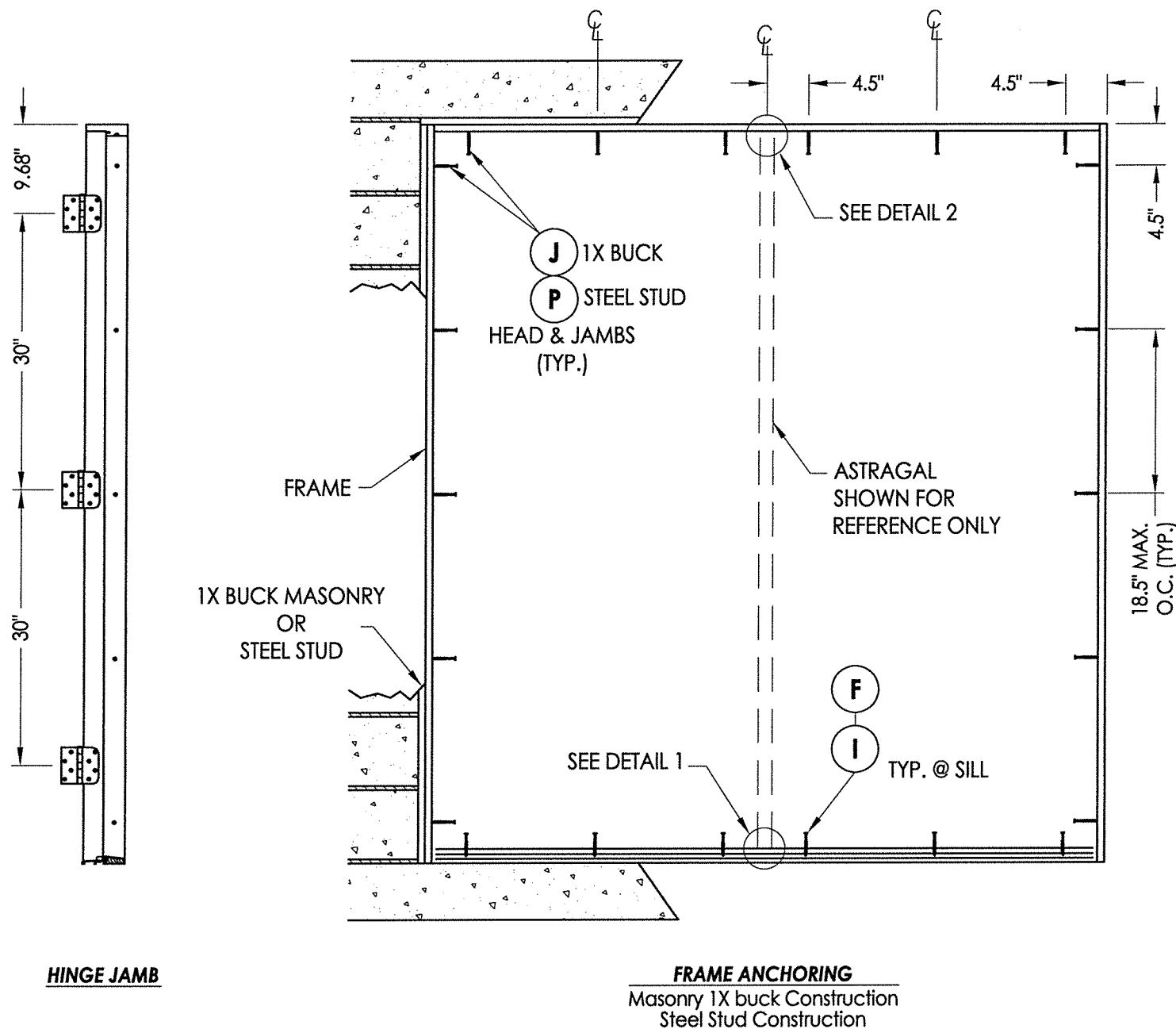
August 3, 2020
Documents Prepared By:
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P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

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

NO.	DATE	REVISIONS
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-19007.14
SHEET 5 OF 8

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HINGE JAMB

FRAME ANCHORING
Masonry 1X buck Construction
Steel Stud Construction

CONCRETE ANCHOR NOTES:

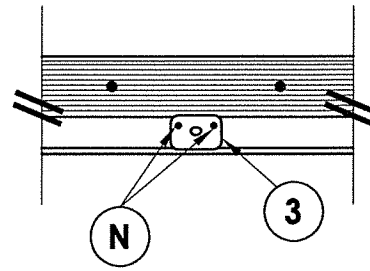
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2. Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimension are not exceeded.
3. Concrete anchor table:

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"

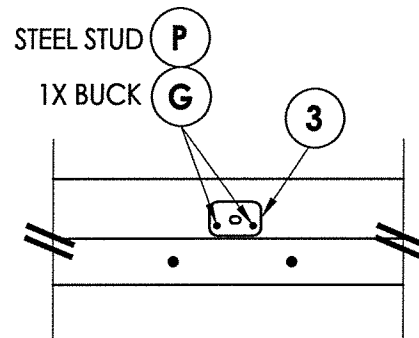
WOOD SCREW INSTALLATION NOTES:

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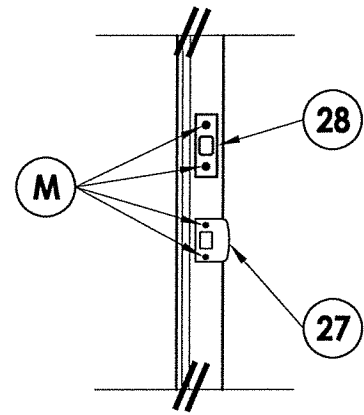
ASTRAGAL STRIKE JAMB



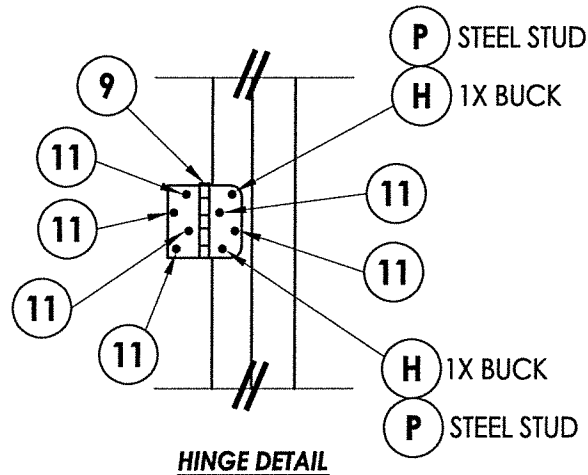
DETAIL 1
Inswing configuration



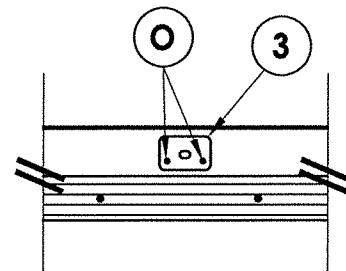
DETAIL 2



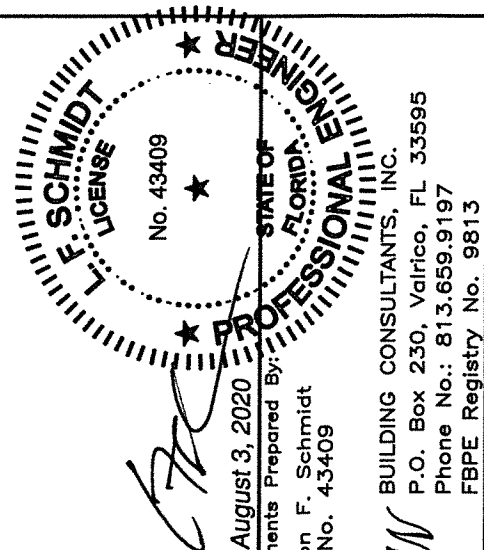
LATCH & DEADBOLT DETAIL



HINGE DETAIL



DETAIL 1
Outswing configuration



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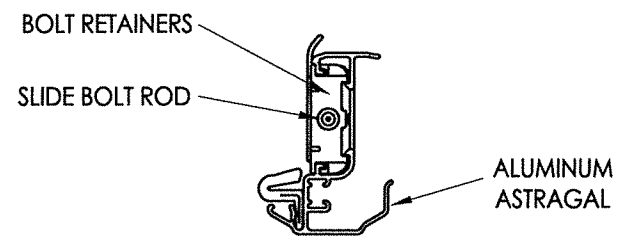
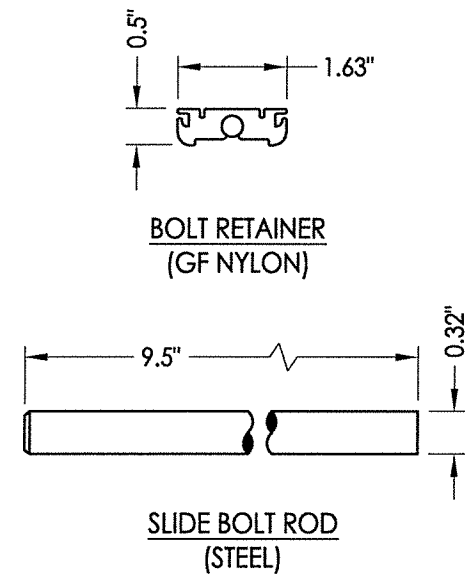
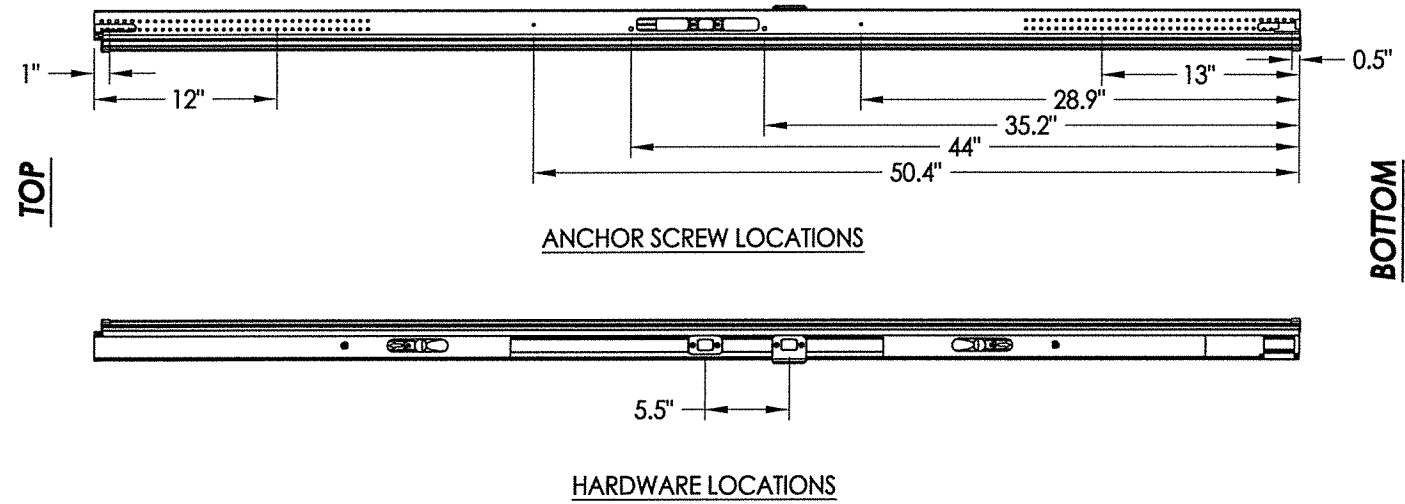
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: DOERS FIBERGLASS DOOR
PART OR ASSEMBLY: FRAME ANCHORING 1X BUCK MASONRY CONSTRUCTION

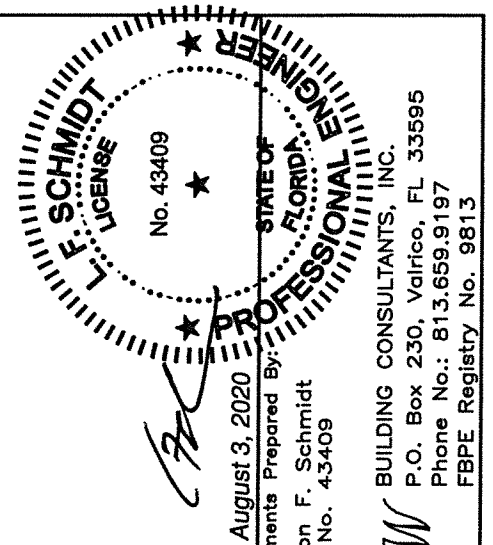
NO.	DATE	REVISIONS
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC
2	5/15/19	ADD STEEL STUD ANCHORING
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC

DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.14
SHEET 6 OF 8

65 ALUMINUM ASTRAGAL



ALUMINUM ASTRAGAL ASSEMBLY



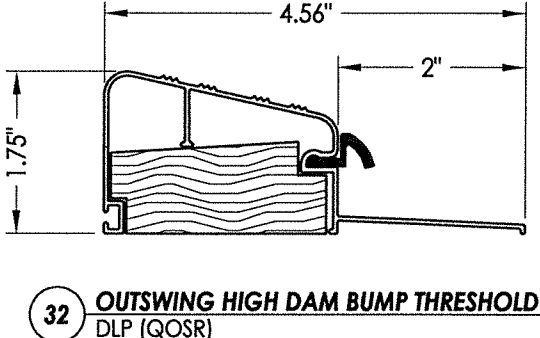
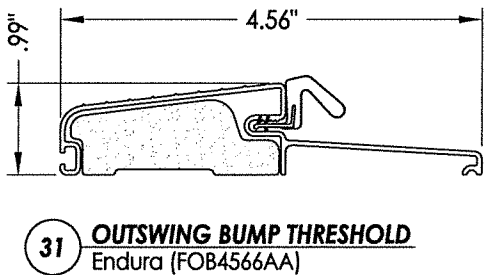
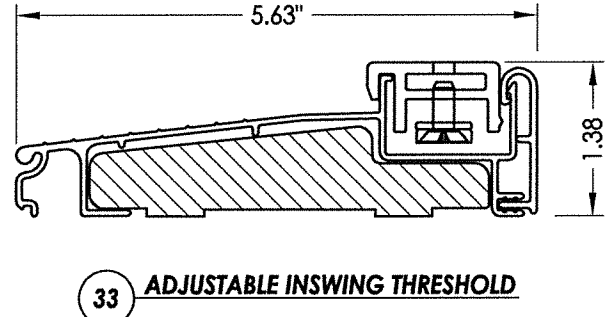
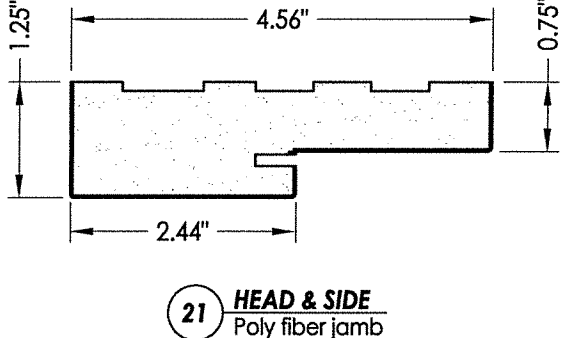
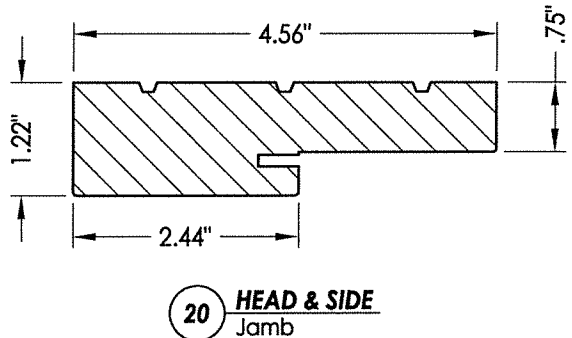
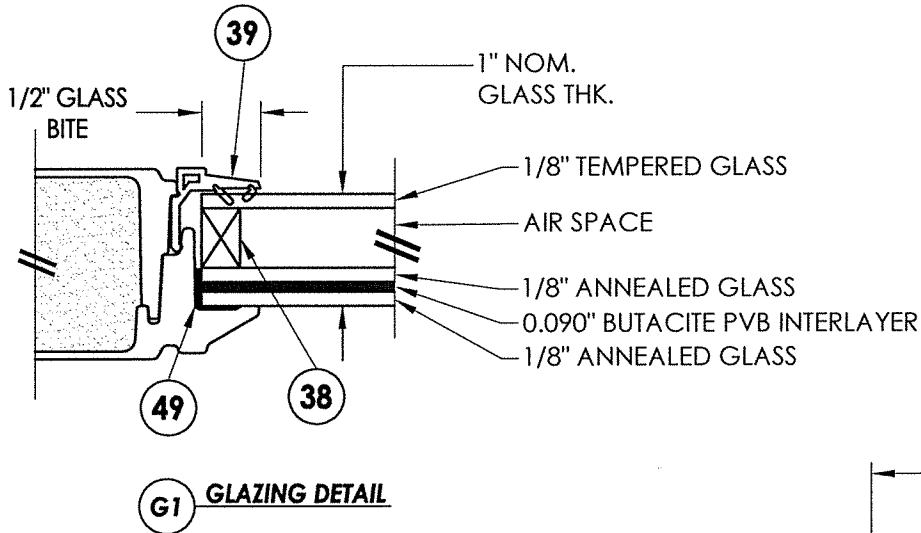
August 3, 2020
Documents Prepared By
Lyndon F. Schmidt
P.E. No. 43409

PRODUCT: DOERS
FIBERGLASS DOOR

PART OR ASSEMBLY: ENDURA ASTRAGAL DETAILS

DATE:	09/28/15	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	FL-19007.14	
SHEET	7	OF 8

BILL OF MATERIALS					
ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD	18	KWIKSET DEADBOLT - SIGNATURE SERIES (780)	STEEL
B	2X BUCK SG >= 0.55	WOOD	20	FINGER JOINTED PINE FRAME, HEAD & HINGE JAMBS	WOOD
C	1/4" MAX. SHIM SPACE	-	21	POLY FIBER JAMB	COMP. / VINYL
D	1/4" X 2-3/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL	27	LATCH STRIKE PLATE	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE	28	DEADBOLT STRIKE PLATE	STEEL
F	1/4" X 2-3/4" PFH ITW CONCRETE SCREW	STEEL	30	WEATHER-STOP 3647 HOLM INDUSTRIES	VINYL
G	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL	31	OUTSWING BUMP THRESHOLD	ALUM. / PVC
H	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL	32	OUTSWING HIGH DAM BUMP THRESHOLD	ALUM. / WOOD
I	1/4" X 2-1/4" PFH ITW CONCRETE SCREW	STEEL	33	INSWING ADJUSTABLE THRESHOLD	ALUM. / WOOD
J	1/4" X 3-3/4" PFH ITW CONCRETE SCREW	STEEL	38	GLAZING SPACER	ALUM.
K	#9 X 2-1/2" PFH WOOD 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. 0.075" 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" PFH SMS	STEEL	46	POLYURETHANE FOAM	POLYURETHANE
3	FLUSH BOLT STRIKE PLATE	STEEL	47	CONTINUOUS LATCH & HINGE STILE REINFORCEMENT	WOOD
7	Q-LON 650 WEATHER STRIP SCHLEGEL	FOAM	49	GLAZING COMPOUND DOW 995	SILICONE
9	4" X 4" BUTT HINGE	STEEL	65	ASTRAGAL (ENDURA)	ALUMINUM
11	#9 X 3/4" PFH WOOD SCREW	STEEL			
17	KWIKSET KEYED ENTRY - SIGNATURE SERIES	STEEL			



FLORIDA
STATE OF
ENGINEER
F. SCHMIDT
LICENSE
No. 43409

August 3, 2020

Documents Prepared By:
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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:
DOORS
FIBERGLASS DOOR

PART OR ASSEMBLY:
BILL OF MATERIALS, GLAZING
DETAIL & COMPONENTS

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-19007.14

SHEET 8 OF 8

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