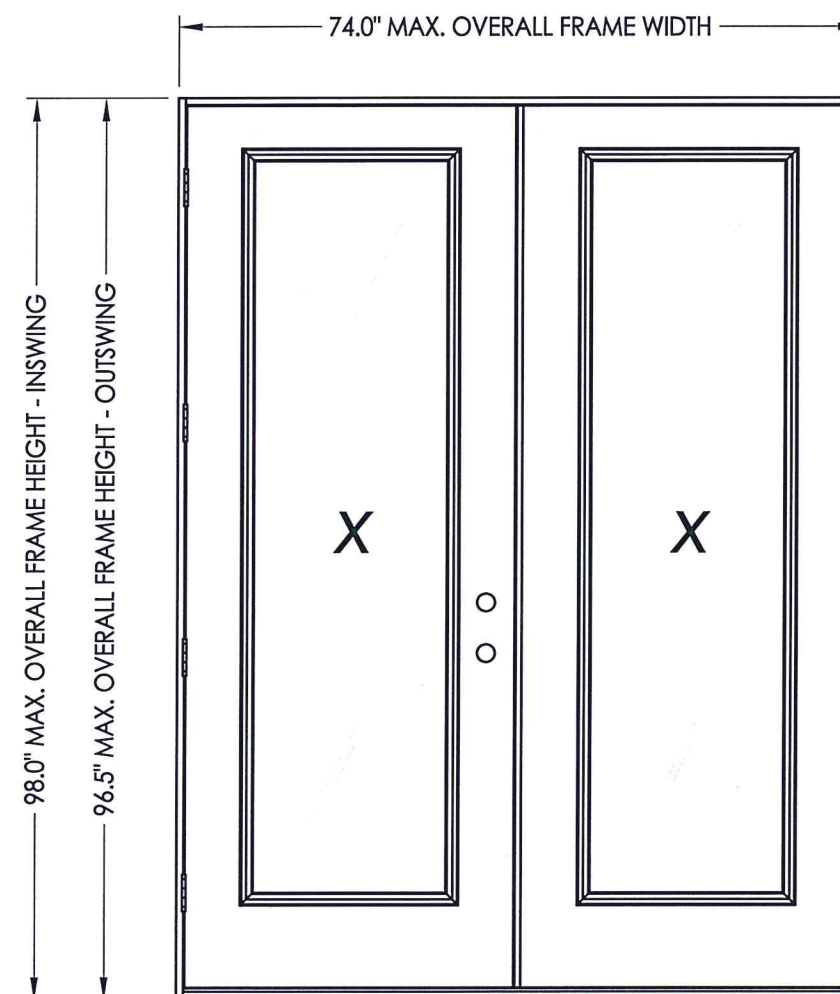




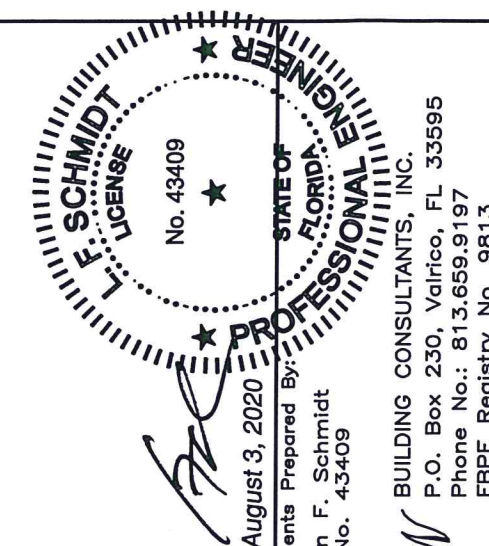
DIAMOND DOOR SERIES
FLUSH GLAZED FIBERGLASS DOORS
INSWING / OUTSWING
"NON-IMPACT"

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
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



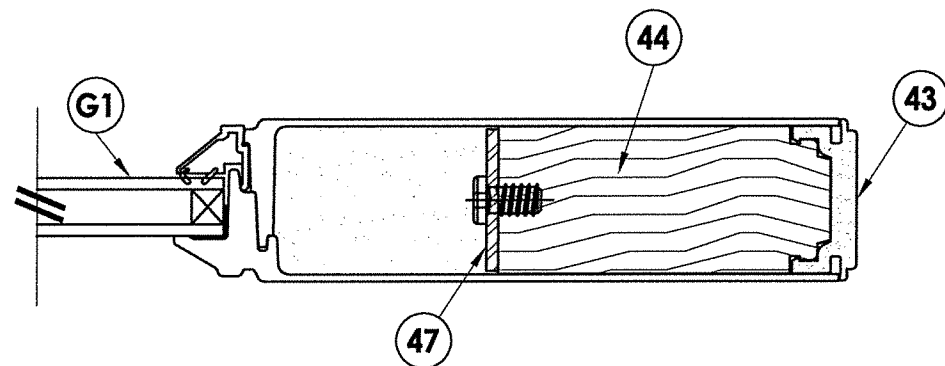
SWING	OVERALL FRAME DIMENSION	OVERALL D.L.O. DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
INSWING	74.0" x 98.0"	21.0" x 79.0"	G1	+47.5	-47.5
OUTSWING	74.0" x 96.5"	21.0" x 79.0"		+50.0	-50.0



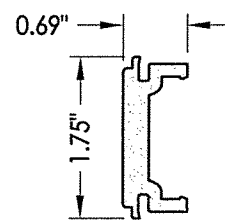
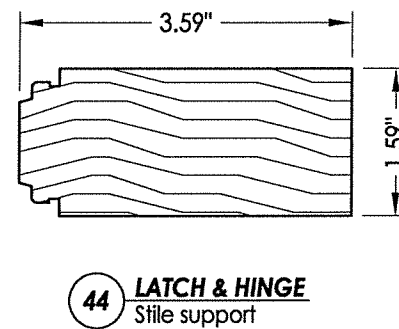
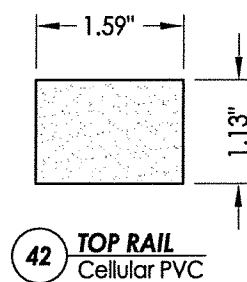
August 3, 2020
Documents Prepared By
Lyndon F. Schmidt
P.E. No. 43409

BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
ERPE Registry No. 0813

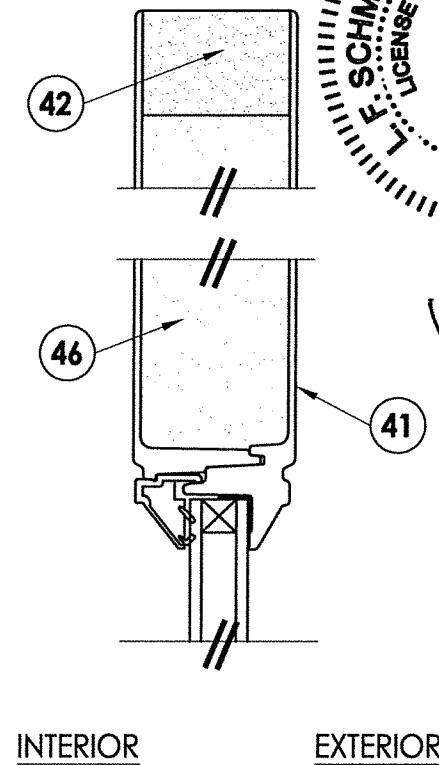
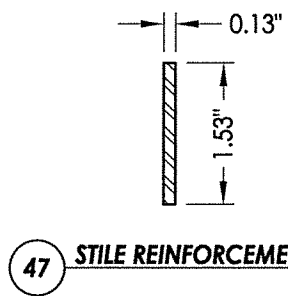
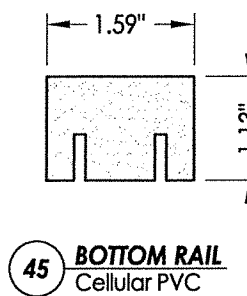
DATE: 09/22/15		PRODUCT:		DOERS FIBERGLASS DOOR
SCALE: N.T.S.				
DWG. BY: JK				
CHK. BY: LFS				
DRAWING NO.: FL-19007.9		PART OR ASSEMBLY:		
SHEET 1 OF 8		TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES		



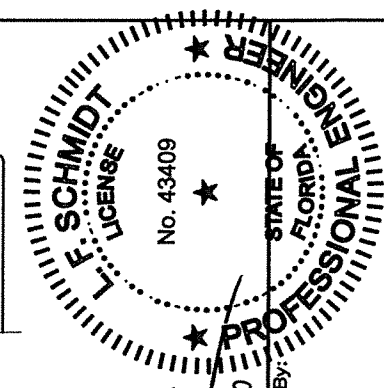
1 2 HORIZONTAL CROSS SECTION



43 LATCH & HINGE STILE
Cellular PVC



2 VERTICAL CROSS SECTION



August 3, 2020

Documents Prepared By:

Lyndon F. Schm
P.E. No. 43409

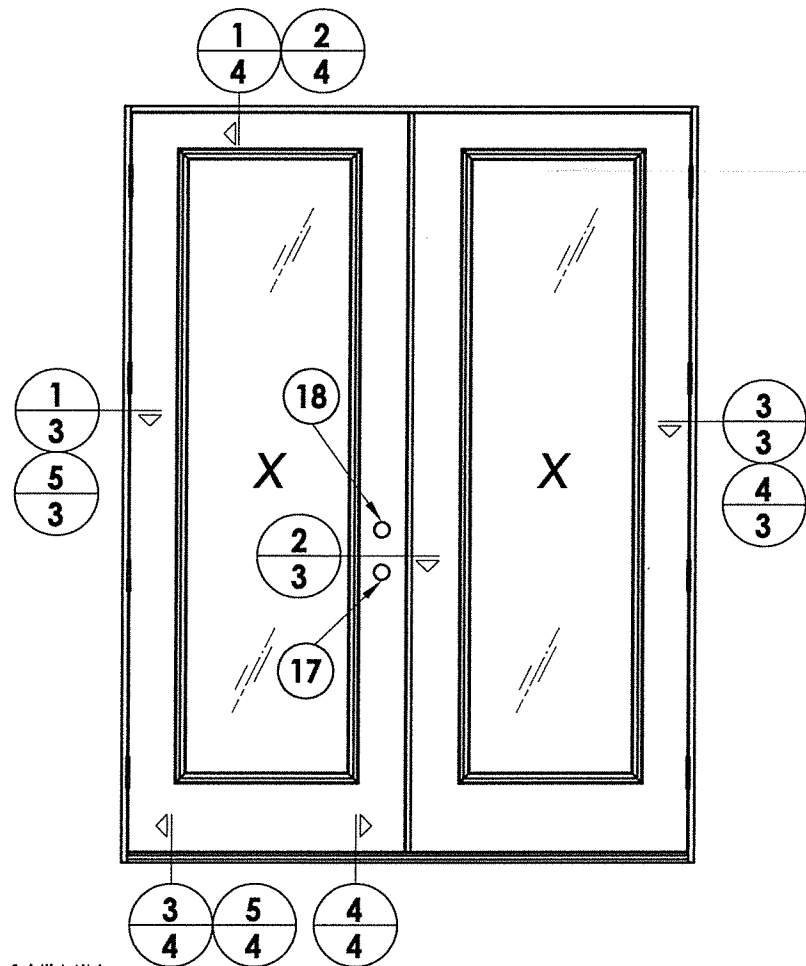
Rail BUILDING CONSULTANTS, INC.

P.O. Box 230, Valrico, FL 33595

Phone No.: 813.659.9197

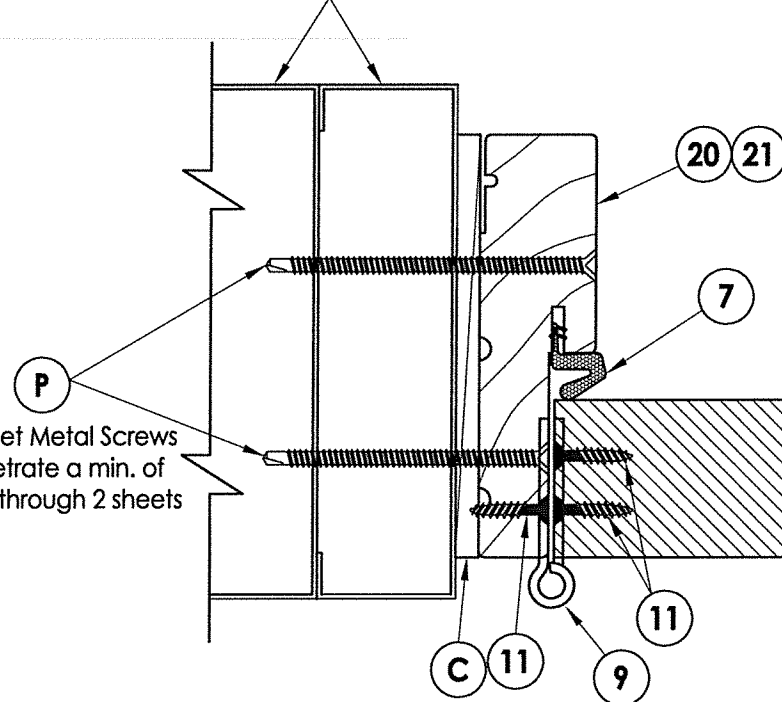
FBPE Registry No. 9813

DATE: 09/22/15		DOERS		FIBERGLASS DOOR	PRODUCT:
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.: FL-19007.9					
SHEET 2	OF 8	PART OR ASSEMBLY:		DOOR PANEL DETAILS	
		LFS			
		LFS			
		JK			
		BY			
		NO. DATE		REVISIONS	

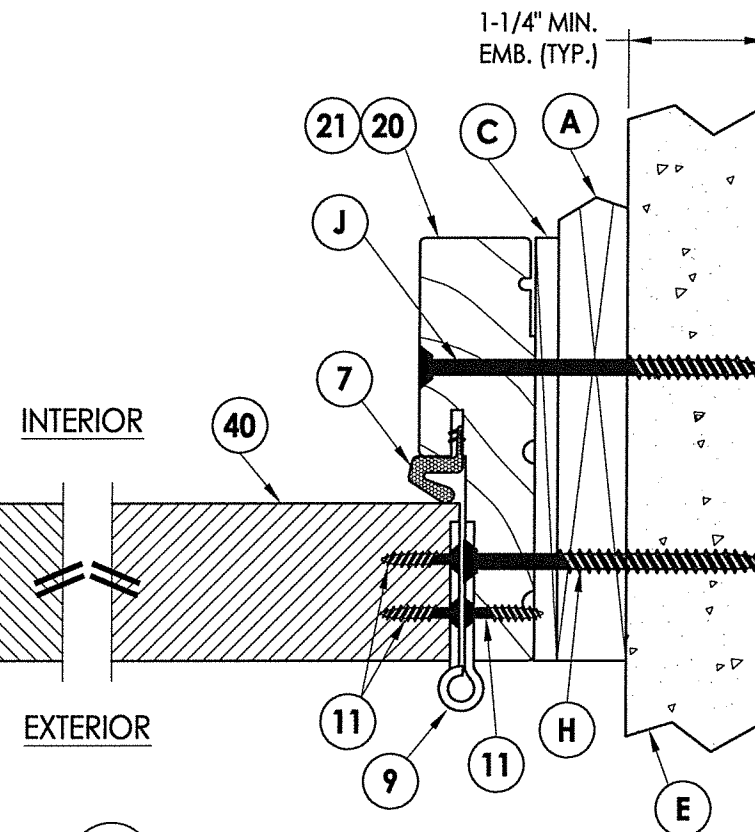


METAL STUDS BY OTHERS
(SSMA STUD 550S162-43, Fy = 33 ksi, Fu = 45 ksi, MIN.)

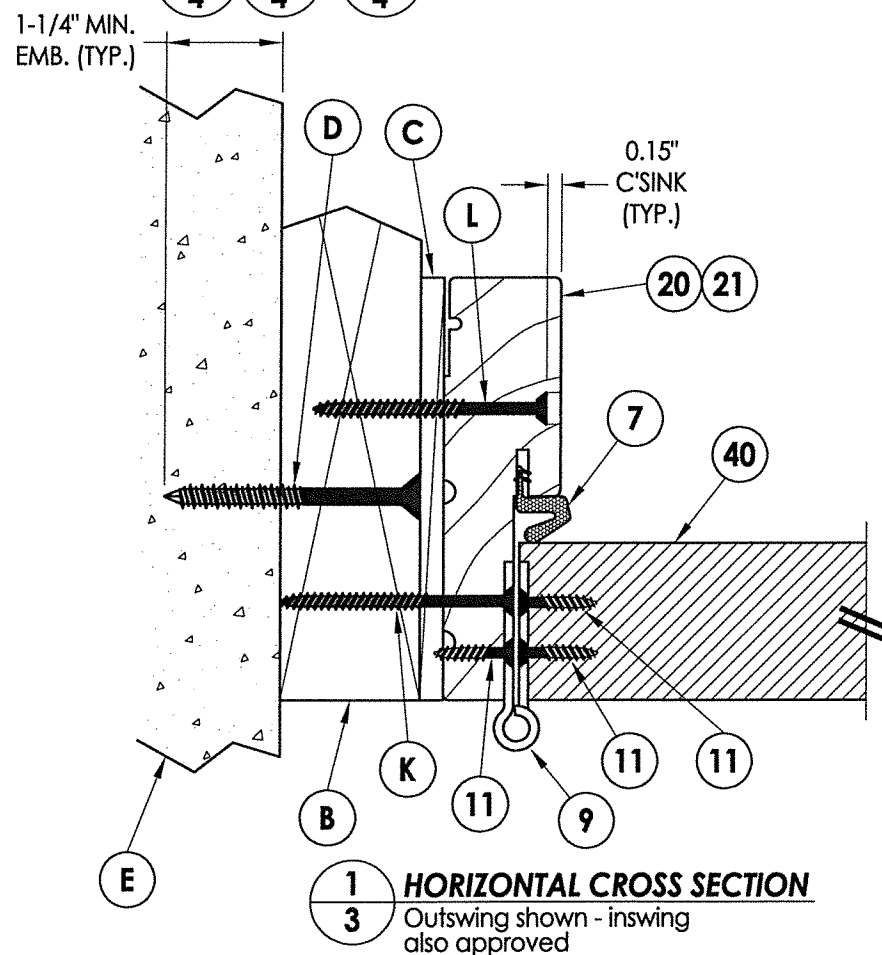
NOTE: Sheet Metal Screws
must penetrate a min. of
3 threads through 2 sheets
of metal.



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

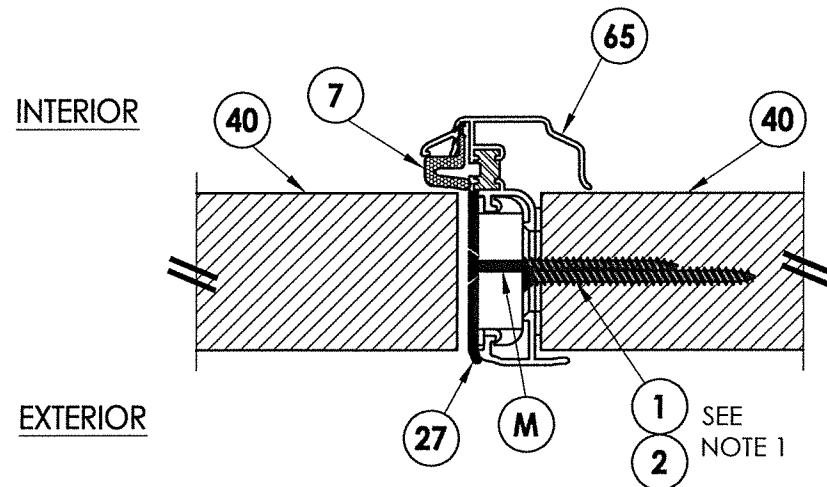


4
3 **HORIZONTAL CROSS SECTION**
Shown w/1X sub-buck

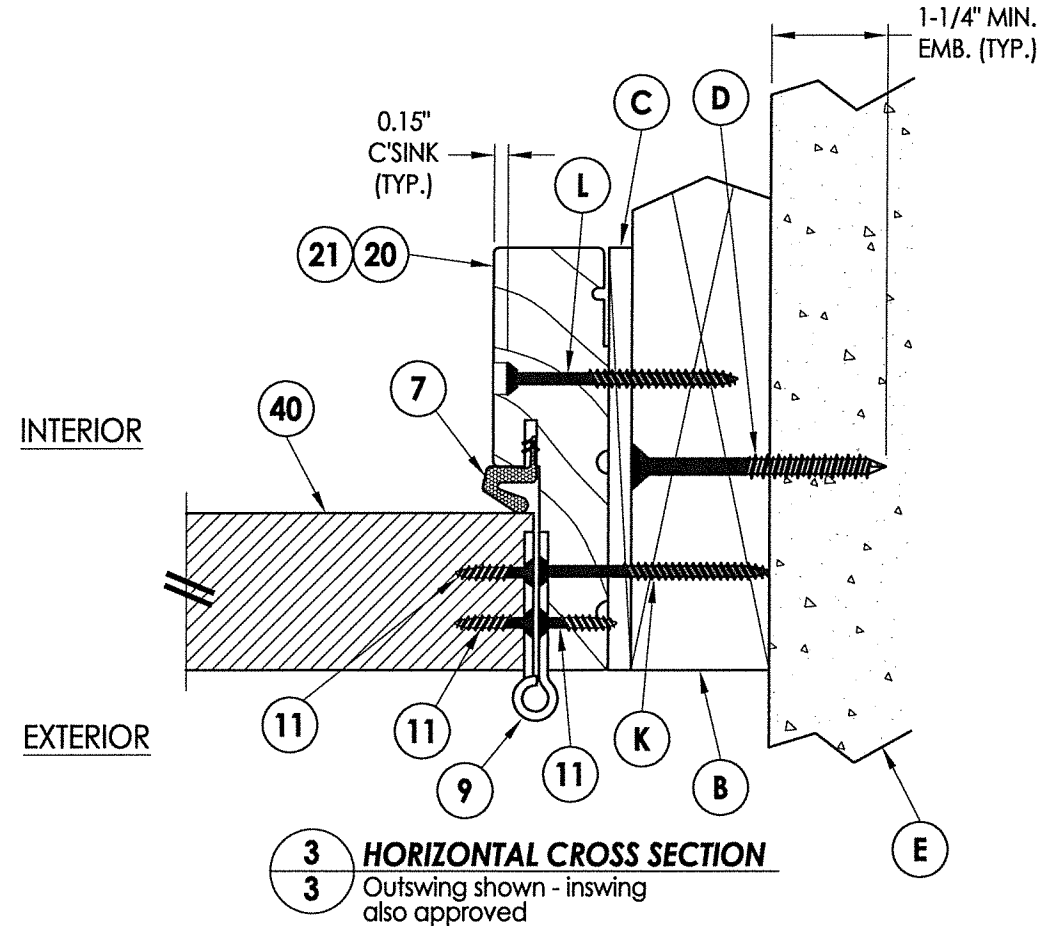


1
3 **HORIZONTAL CROSS SECTION**
Outswing shown - inswing
also approved

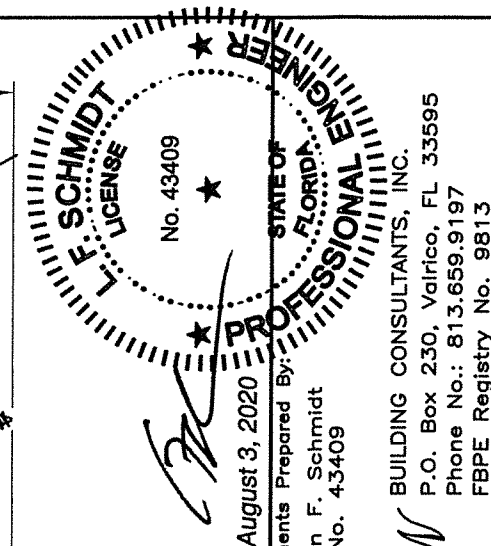
NOTE:
1. As noted in the test report astragal was attached
to the inactive leaf with (11) #8 x 3" psh sms and
(6) #10 x 2-1/2" pph sms for all 8'-0" (outswing).
Astragal was attached to the inactive leaf with
(13) #8 x 3" psh sms and (6) #10 x 2-1/2" pph sms
for all 8'-0" (inswing).



2
3 **HORIZONTAL CROSS SECTION**
Outswing shown - inswing
also approved



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



August 3, 2020

Documents Prepared By:

Lyndon F. Schmidt

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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:

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

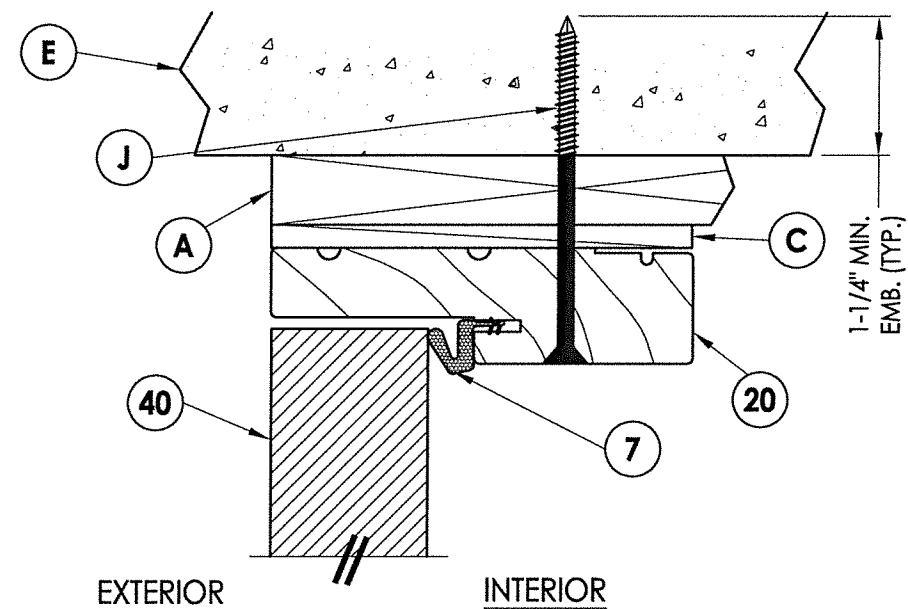
DRAWING NO.:

FL-19007.9

SHEET 3 OF 8

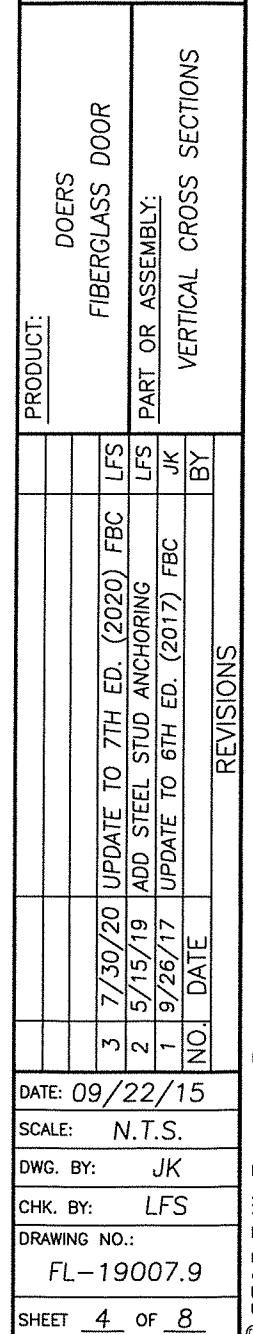
A detailed vertical cross-section diagram of a door threshold assembly in an outswing configuration. The diagram is divided into two main sections: **EXTERIOR** on the left and **INTERIOR** on the right. A vertical structural element, labeled **40**, is shown on the exterior side. The threshold assembly, labeled **31**, is mounted on a concrete base, labeled **I**, which is shown with aggregate and a rebar. The threshold has a central opening for the door. A dimension line on the left indicates a minimum embedment depth of **1-1/4" MIN. EMB. (TYP.)**. The interior side of the threshold is labeled **E**.

3 **VERTICAL CROSS SECTION**
4 Outswing configuration



The diagram is a vertical cross-section of a door assembly in its inswing configuration. 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 embedding depth of '1-1/4" MIN. EMB. (TYP.)' for the threshold assembly. The threshold assembly, labeled '33', is shown as a wedge-shaped component with a hatched pattern, embedded into a concrete floor, labeled 'E'. A vertical bolt, labeled 'F', passes through the threshold and the door frame into the floor. The door frame, labeled '30', is shown as a U-shaped component with a hatched pattern, mounted on the floor. The door, labeled '40', is shown as a rectangular component with a hatched pattern, positioned above the frame. The interior side of the door is labeled 'INTERIOR'.

4 **VERTICAL CROSS SECTION**
4 Inswing configuration



HINGE JAMB

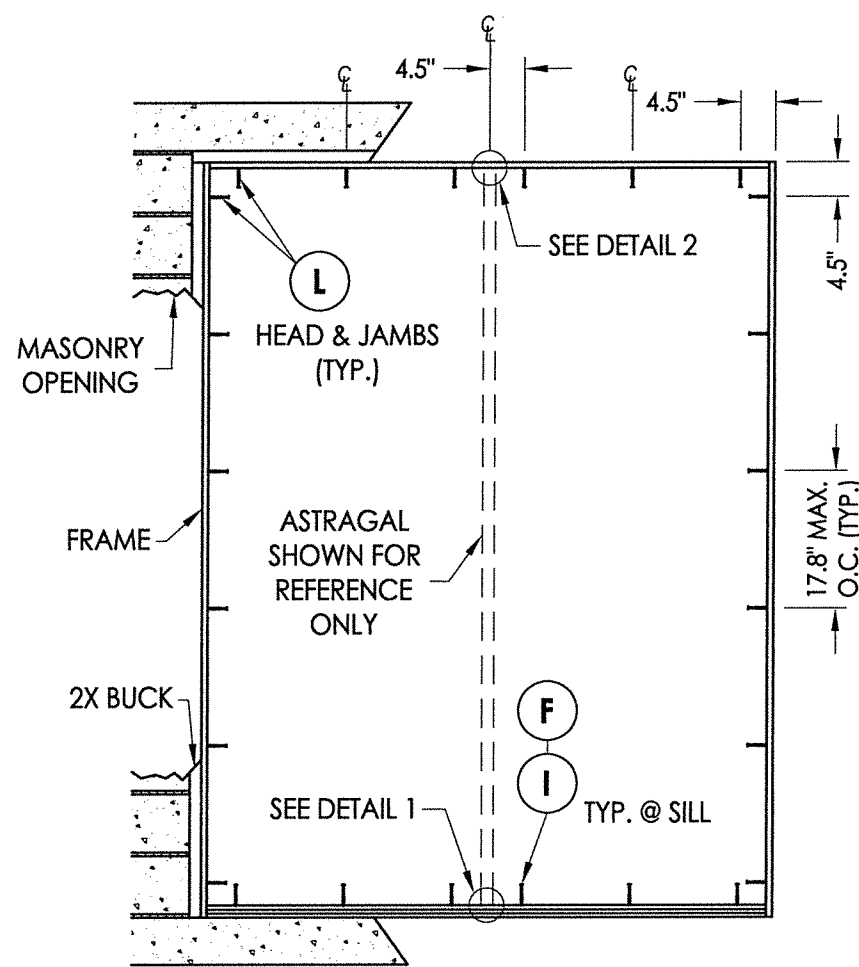
Masonry 2X buck construction

HINGE DETAIL

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"

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

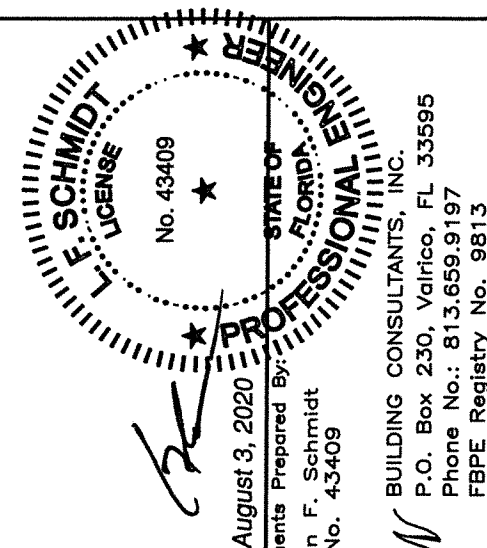
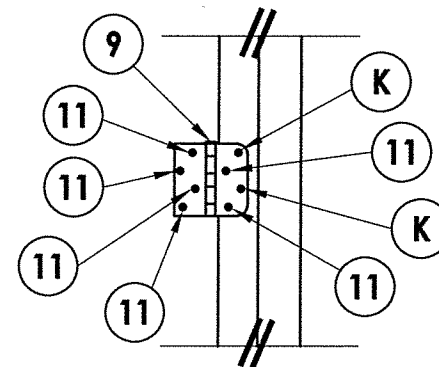


LATCH & DEADBOLT DETAIL

DETAIL 2

DETAIL 1
Inswing configuration

DETAIL 1
Outswing configuration



August 3, 2020

Documents Prepared By
Lyndon F. Schmidt
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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

REVISIONS

© 2015 R.W. BUILDING CONSULTANTS INC.

DATE: 09/22/15

SCALE: N.T.S.

DWG. BY: JK

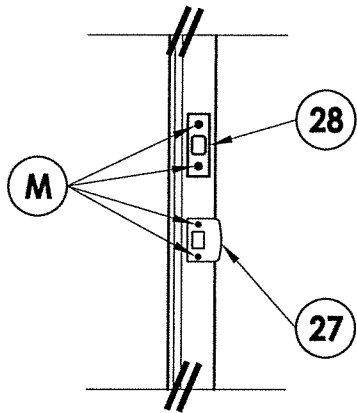
CHK. BY: LFS

DRAWING NO.:

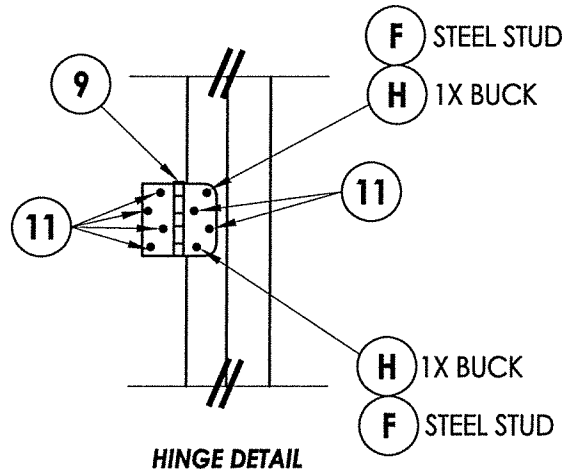
FL-19007.

SHEET 5 OF 8

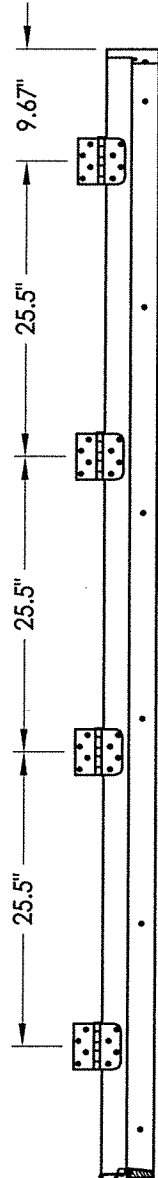
R:\Clients\Doors PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.1-10.dwg, 6.9



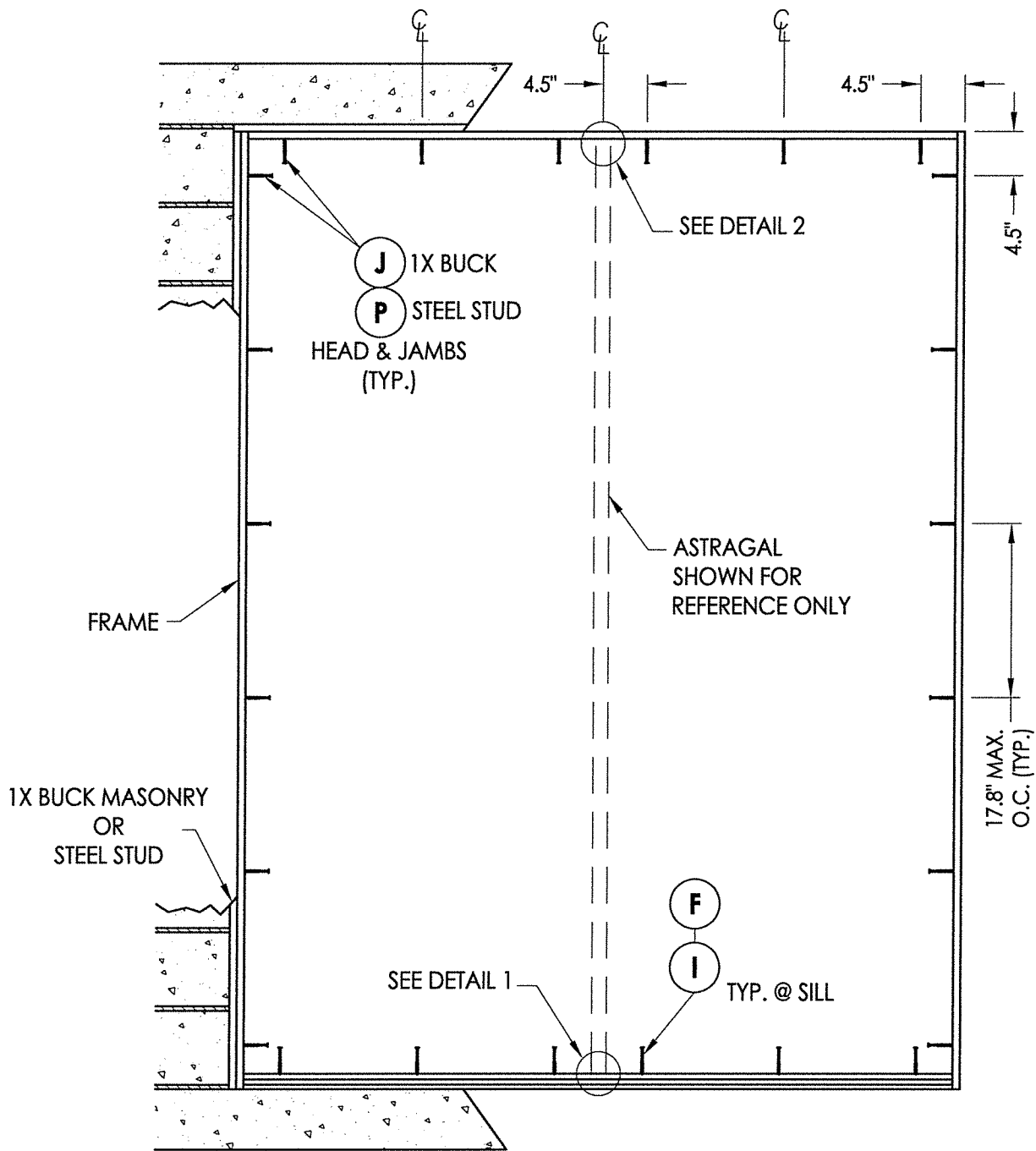
LATCH & DEADBOLT DETAIL



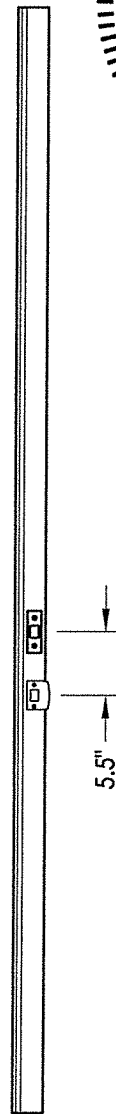
HINGE DETAIL



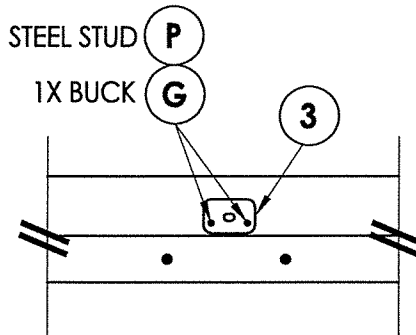
HINGE JAMB



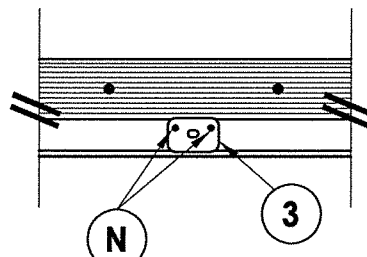
FRAME ANCHORING
Masonry 1X buck Construction
Steel Stud Construction



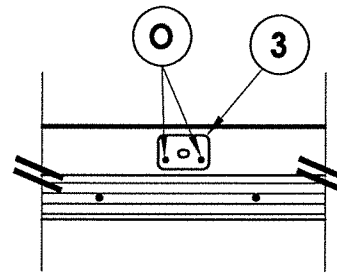
ASTRAGAL STRIKE JAMB



DETAIL 2



DETAIL 1
Inswing configuration



DETAIL 1
Outswing configuration

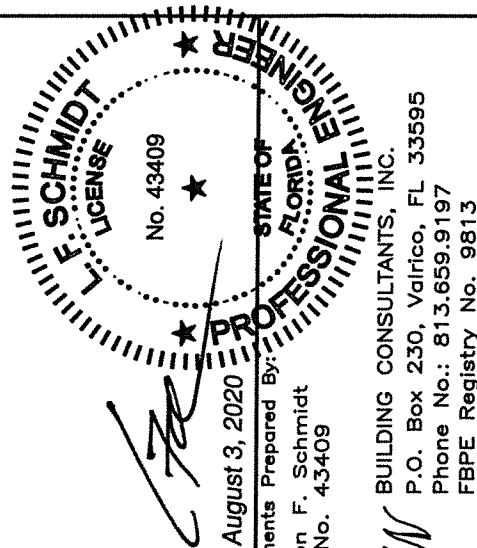
CONCRETE ANCHOR NOTES:

- 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.



August 3, 2020

Documents Prepared By:

Lyndon F. Schmidt

P.E. No. 43409

RW

BUILDING CONSULTANTS, INC.

P.O. Box 230, Valrico, FL 33595

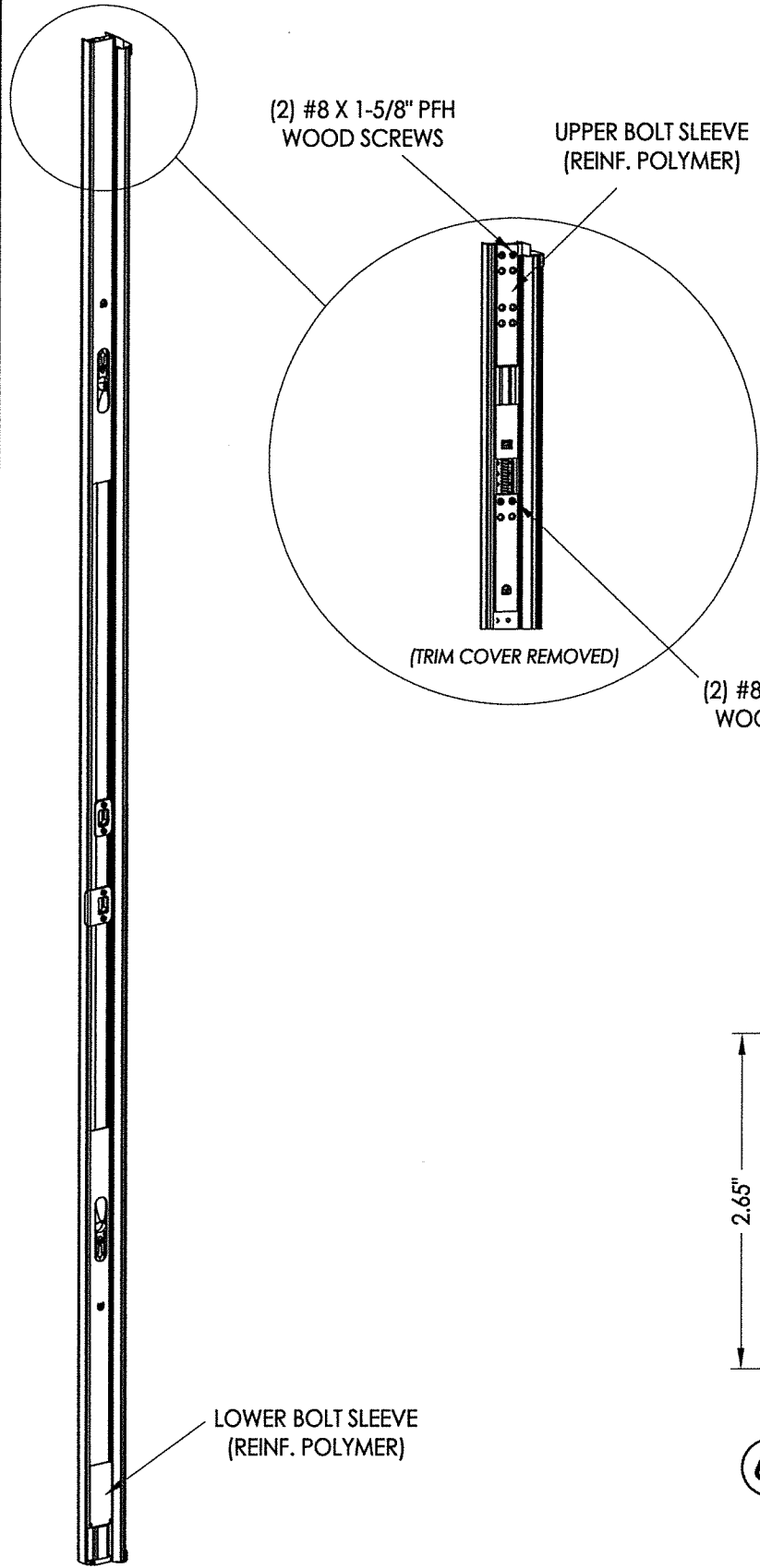
Phone No.: 813.659.9197

FBPE Registry No. 9813

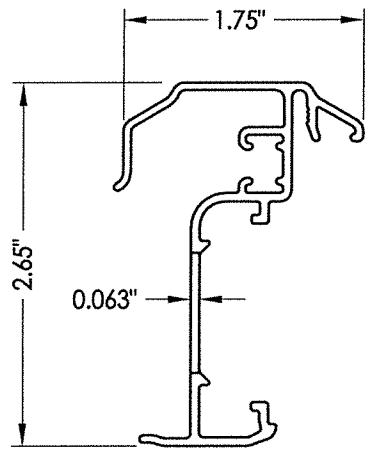
PRODUCT:	DOORS
	FIBERGLASS DOOR
PART OR ASSEMBLY:	FRAME ANCHORING 1X BUCK MASONRY CONSTRUCTION

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

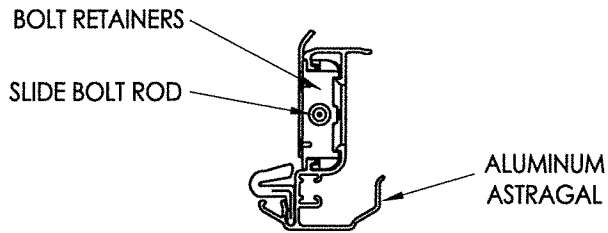
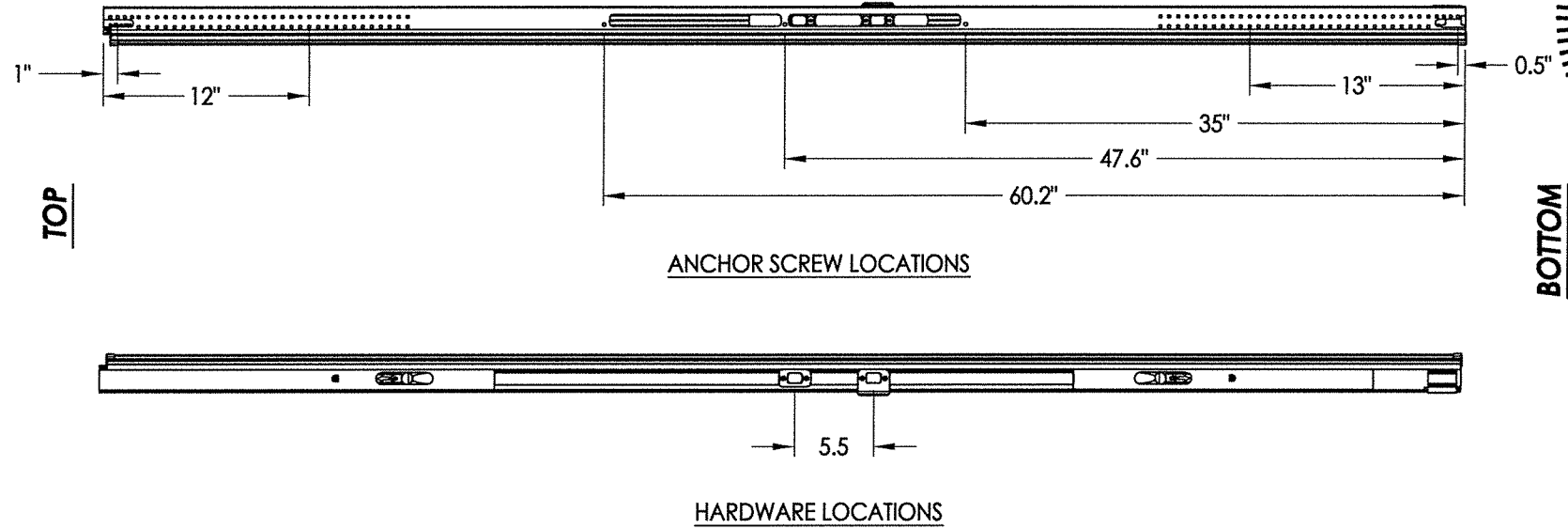
DATE:	09/22/15
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-19007.9
SHEET	6 OF 8



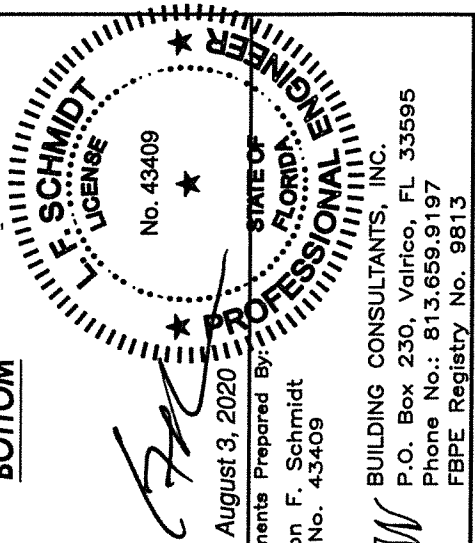
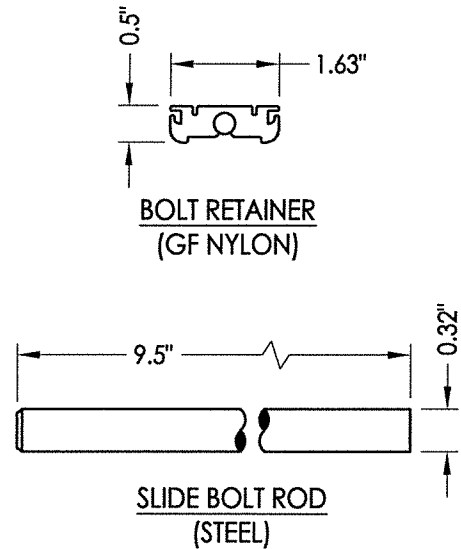
ULTIMATE HURRICANE ASTRAGAL



65 ALUMINUM ASTRAGAL
By Endura Products



ALUMINUM ASTRAGAL ASSEMBLY



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: ENDURA ASTRAGAL 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: 09/22/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.9
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	POLYFIBER 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
			30	WEATHER-STOP 3647 HOLM INDUSTRIES	VINYL
F	1/4" X 2-3/4" PFH ITW CONCRETE SCREW	STEEL	31	OUTSWING BUMP THRESHOLD	ALUM. / PVC
G	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL	32	OUTSWING HIGH DAM BUMP THRESHOLD	ALUM. / WOOD
H	3/16" x 3-1/4" PFH ITW CONCRETE SCREW	STEEL	33	INSWING ADJUSTABLE THRESHOLD	ALUM. / 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
K	#9 X 2-1/2" PFH WOOD SCREW	STEEL	40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
L	#10 X 2-1/2" PFH WOOD SCREW (1-3/8" MIN. EMBEDMENT)	STEEL	41	DOOR SKIN (MIN. 0.095" THICK)	FIBERGLASS
M	#9 X 2-1/4" PFH WOOD SCREW	STEEL	42	TOP RAIL	CELLULAR PVC
N	3/16" X 3-1/2" PFH ITW CONCRETE SCREW	STEEL	43	LATCH & HINGE STILE	CELLULAR PVC
O	3/16" X 1-1/2" PFH ITW CONCRETE SCREW	STEEL	44	LATCH & HINGE STILE SUPPORT	WOOD
P	#10-16 PFH SELF-DRILLING SMS	STEEL	45	BOTTOM RAIL	CELLULAR PVC
1	#10 X 2-1/2" PFH SMS	STEEL	46	POLYURETHANE FOAM	POLYURETHANE
2	#8 X 3" PSH SMS	STEEL	47	STILE REINFORCEMENT	STEEL
3	FLUSH BOLT STRIKE PLATE	STEEL	48	REINFORCEMENT RETAINING SCREW	NYLON
7	Q-LON 650 WEATHERSTRIP 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			

