



DIAMOND DOOR SERIES

FLUSH GLAZED FIBERGLASS DOORS w/ SIDELIETS

INSWING / OUTSWING

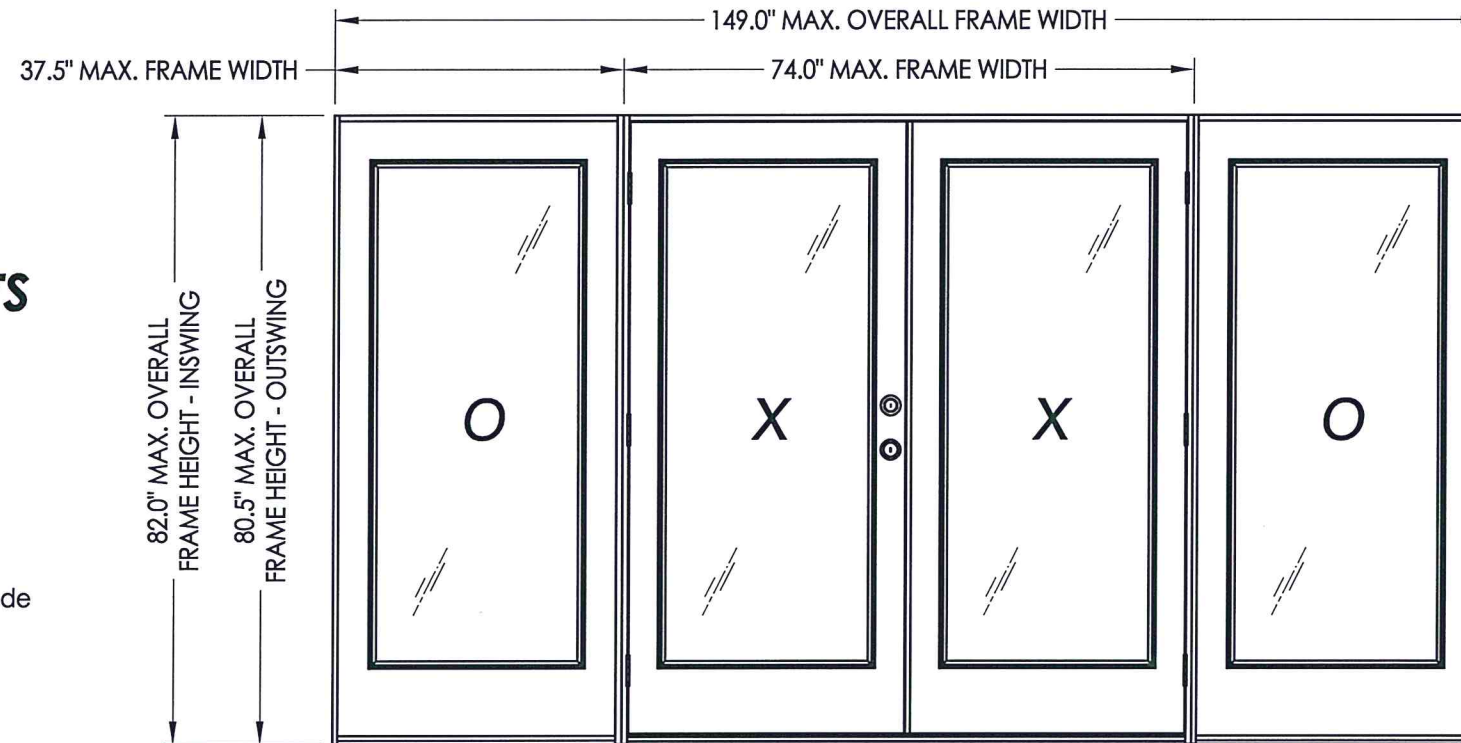
"IMPACT"

GENERAL NOTES

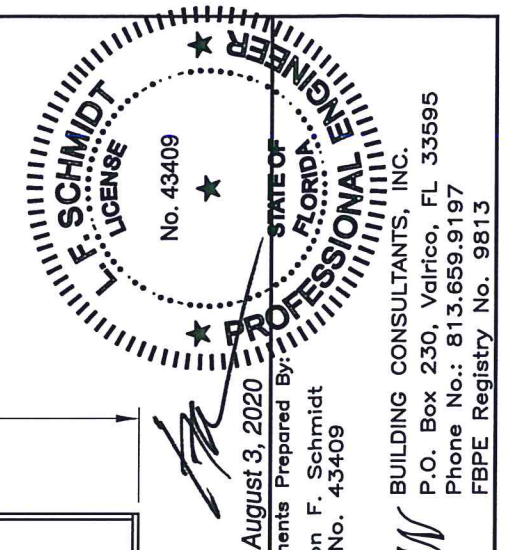
1. This product has been evaluated and is in compliance with the 7th Edition (2020) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be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

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8	Frame anchoring 2x buck masonry construction
9	Frame anchoring 1X buck masonry construction
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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 82.0"	26.25" x 65.93"	7.0" x 65.93"	G1	+50.0	-50.0
OUTSWING	149.0" x 80.5"	26.25" x 65.93"	7.0" x 65.93"		+50.0	-50.0



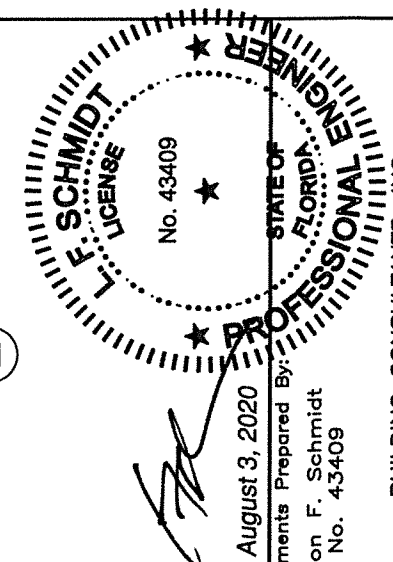
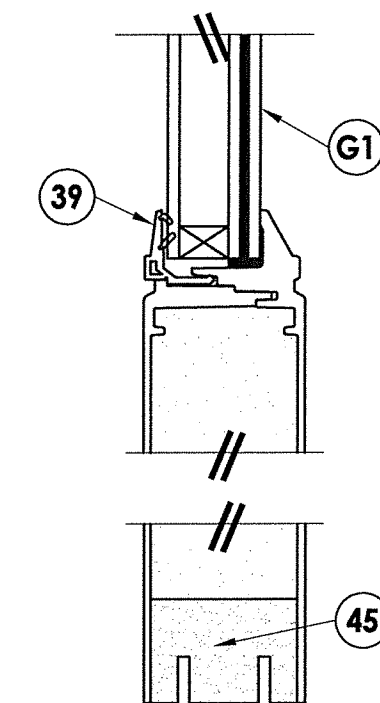
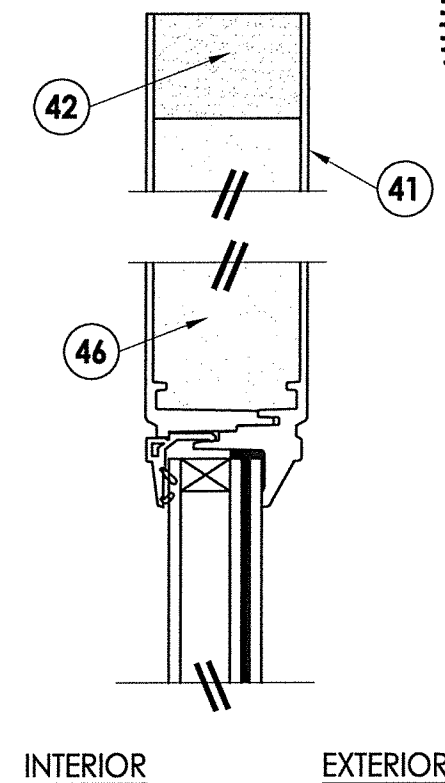
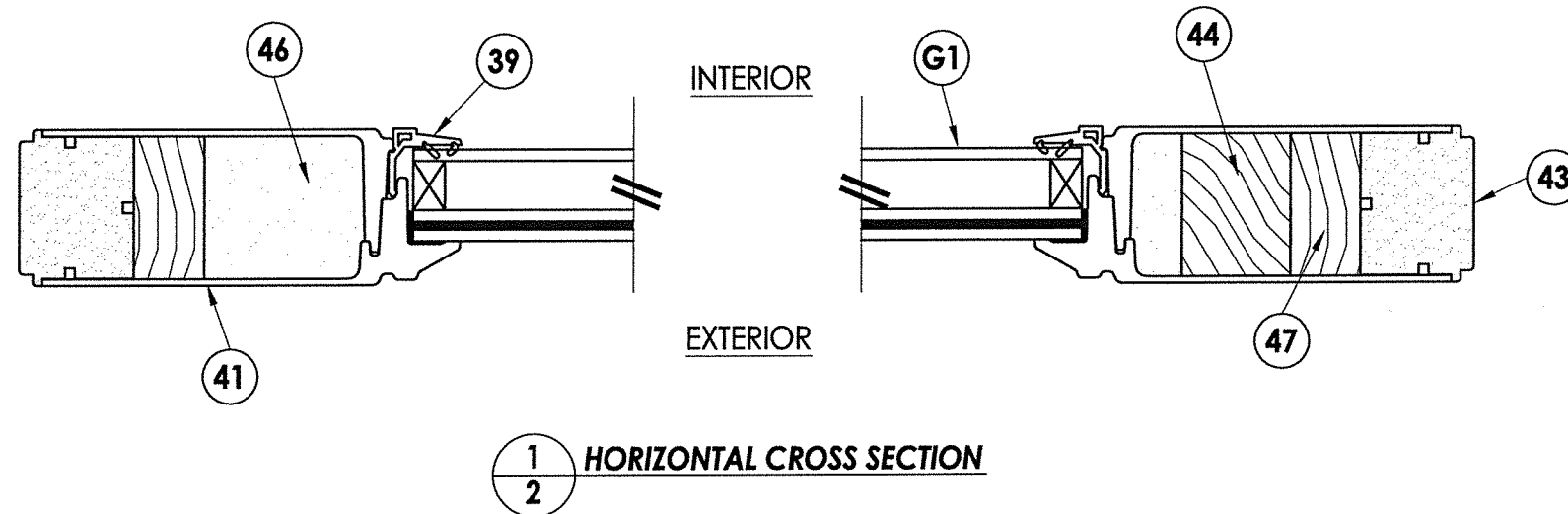
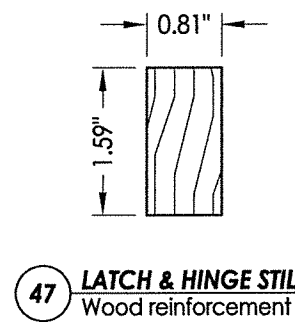
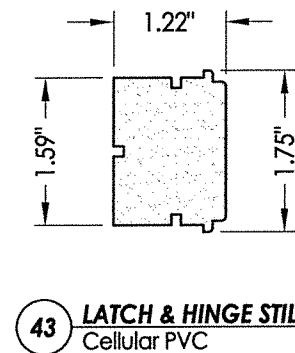
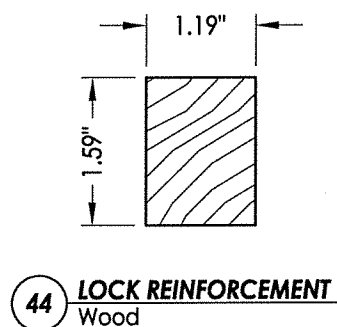
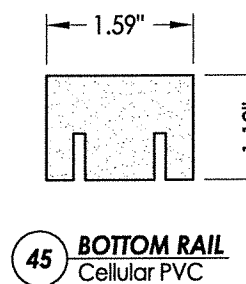
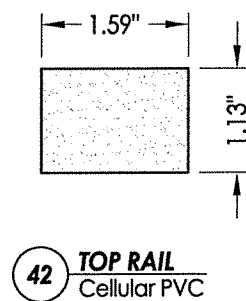
August 3, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS	
		BY	DATE
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

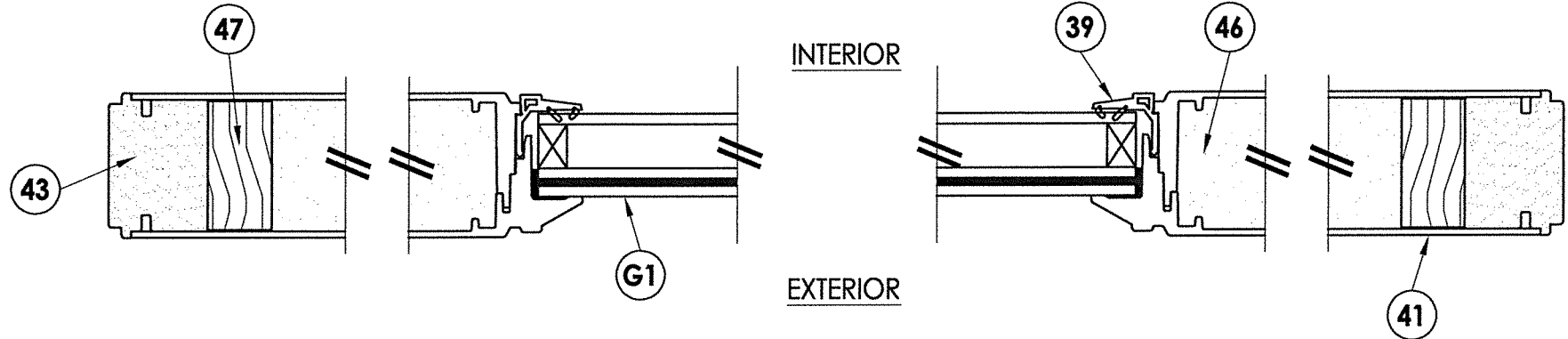
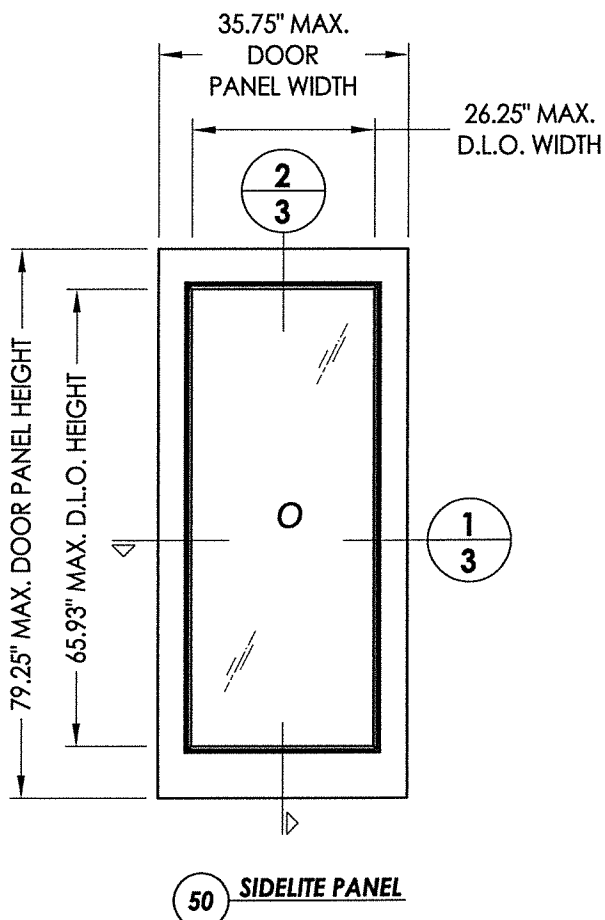
DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.15
SHEET 1 OF 11



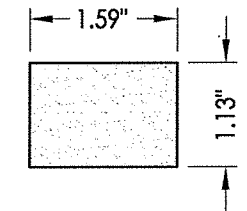
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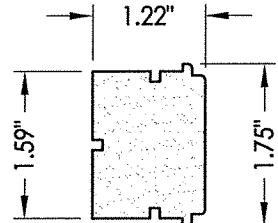
DOERS FIBERGLASS DOOR		PRODUCT:	
PART OR ASSEMBLY:		DOOR PANEL DETAILS	
REVISIONS			
NO.	DATE		
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2	5/15/19	ADD STEEL STUD ANCHORING	LFS
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC	JK
DATE: 09/28/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.15			
SHEET 2 OF 11			



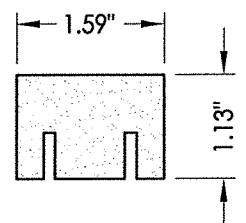
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3 HORIZONTAL CROSS SECTION



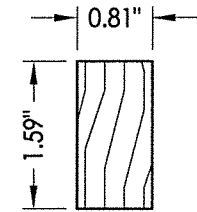
42 TOP RAIL
Cellular PVC



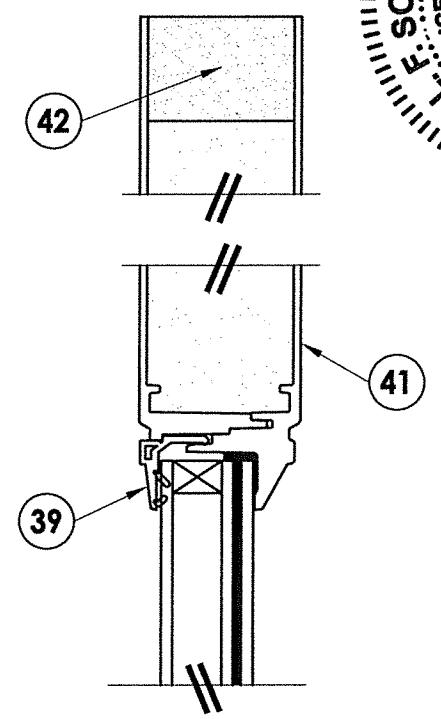
43 LATCH & HINGE STILE
Cellular PVC



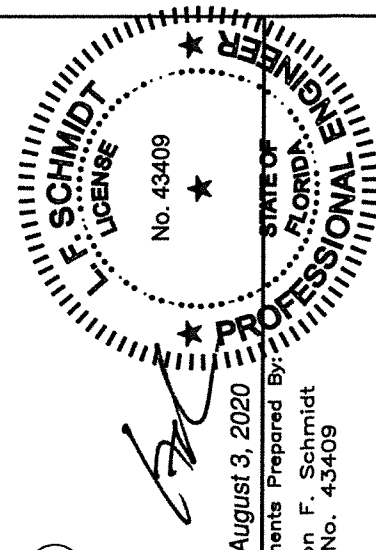
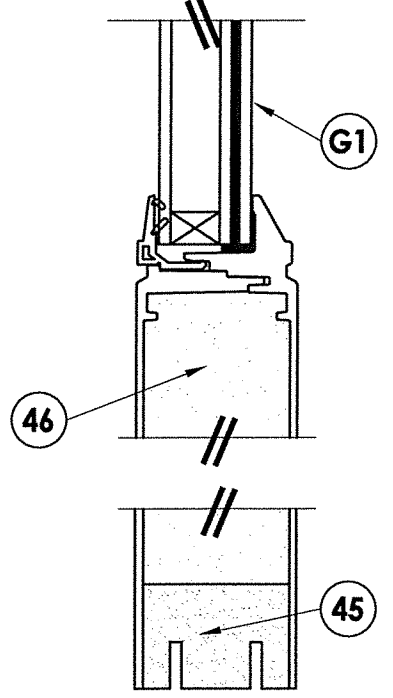
45 BOTTOM RAIL
Cellular PVC



47 LATCH & HINGE STILE
Wood reinforcement



2
3 VERTICAL CROSS SECTION

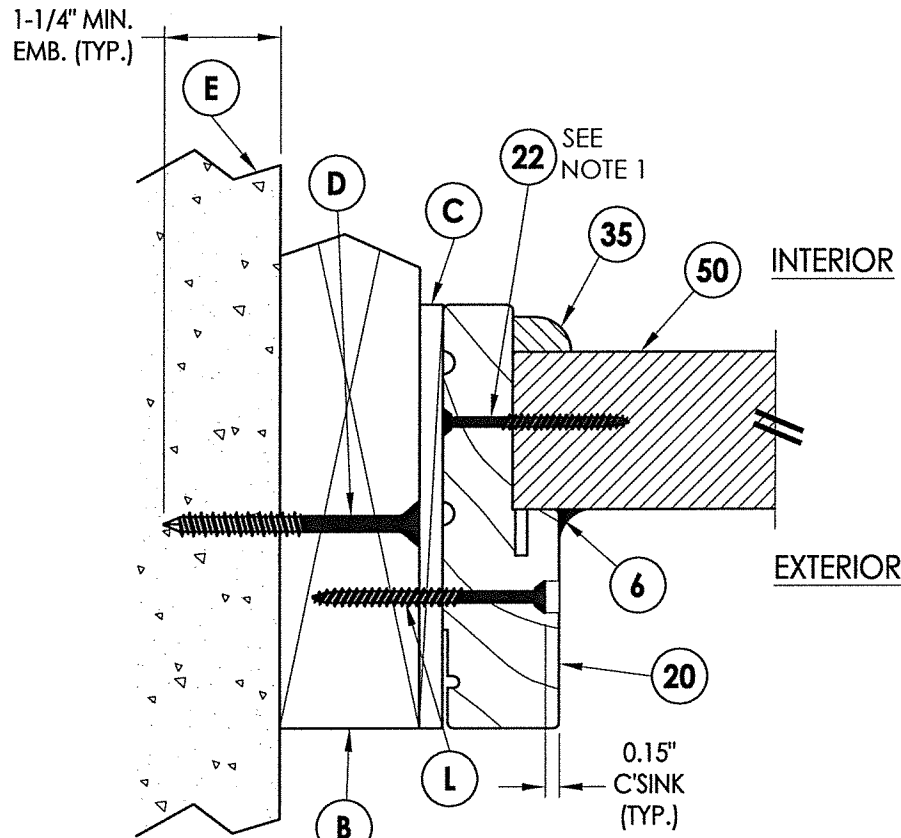


August 3, 2020

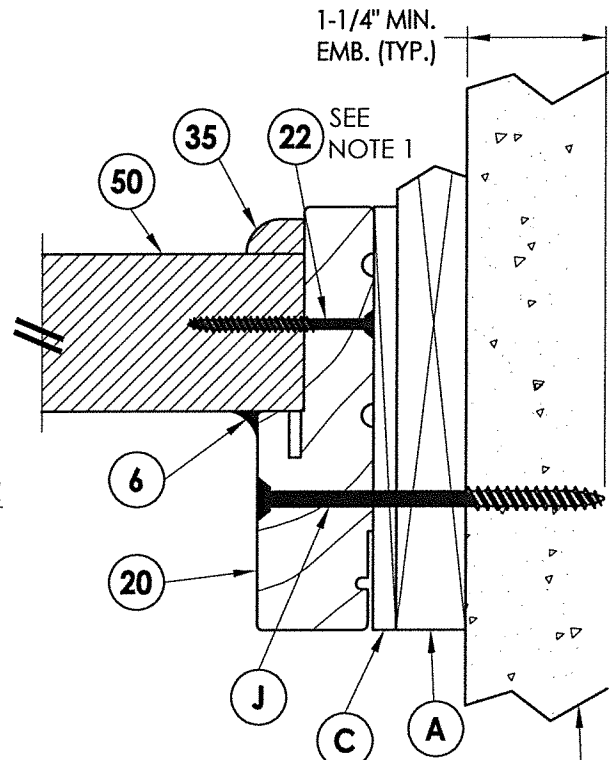
Documents Prepared By:
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RW BUILDING CONSULTANTS, INC.
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FBPE Registry No. 9813

PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		SIDELITE PANEL DETAILS	
REVISIONS		NO.	DATE
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)	JK
DATE:		09/28/15	
SCALE:		N.T.S.	
DWG. BY:		JK	
CHK. BY:		LFS	
DRAWING NO.:		FL-19007.15	
SHEET		3	OF 11



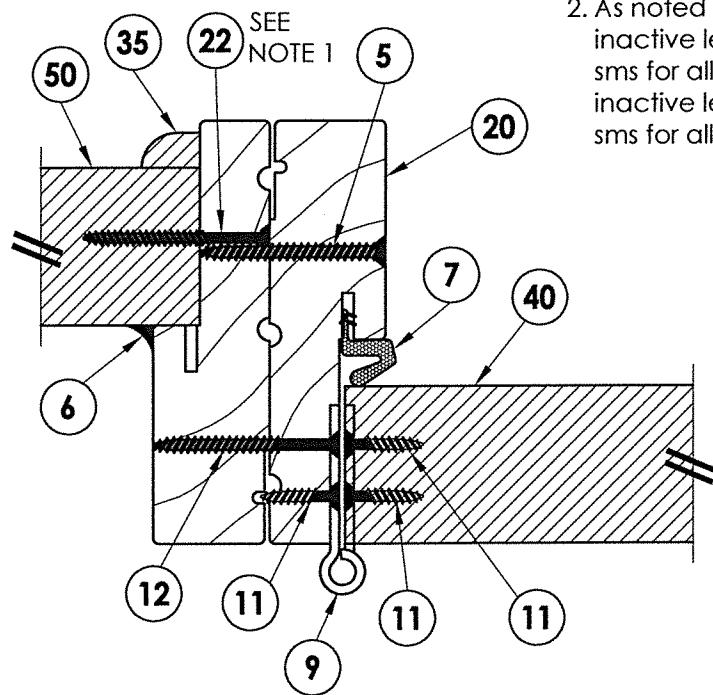
1
4 **HORIZONTAL CROSS SECTION**
Outswing shown - inswing
also approved



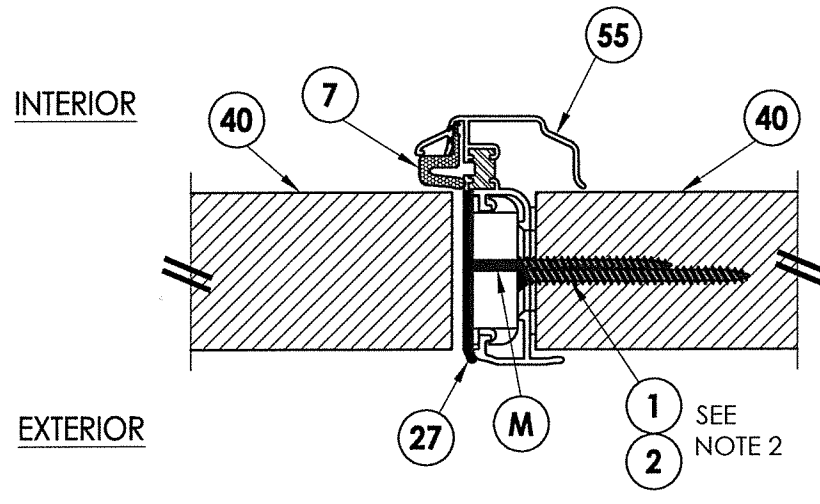
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4 **HORIZONTAL CROSS SECTION**
Shown w/1X sub-buck

NOTE:

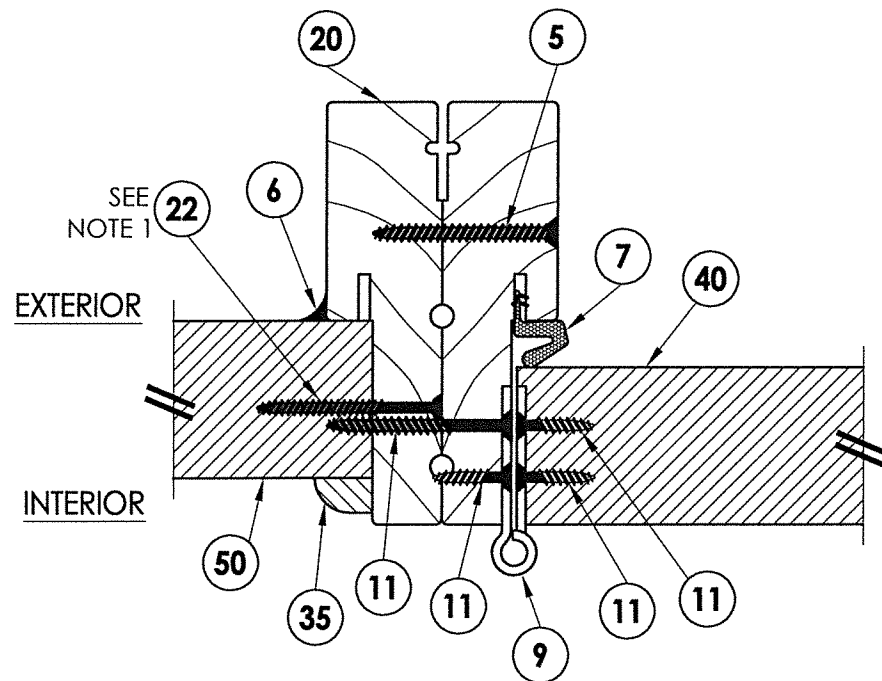
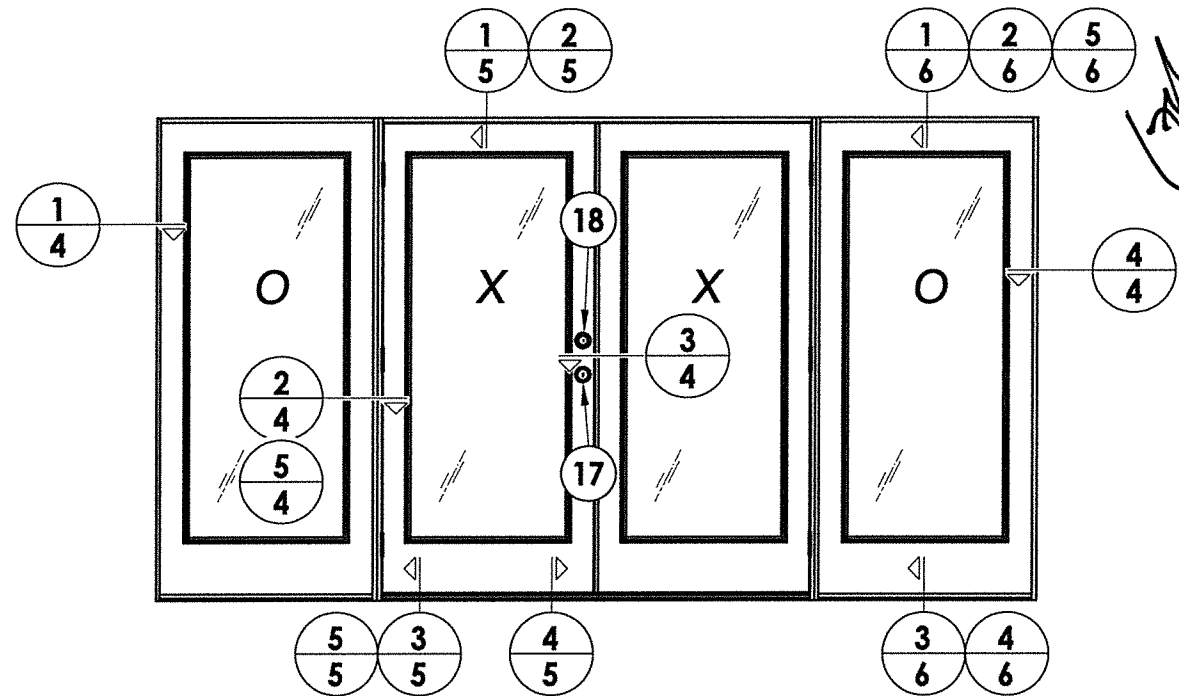
1. Sidelite panel secured to the sidelite frame with (4) of item #22 located 10", 30.5", 51" and 71.5" from top of each jamb.
2. As noted in the test report astragal was attached to the inactive leaf with (10) #8 x 3" psh sms and (4) #10 x 2-1/2 pfh sms for all 6'-8" (outswing). Astragal was attached to the inactive leaf with (9) #8 x 3" psh sms and (4) #10 x 2-1/2" pfh sms for all 6'-8" (inswing).



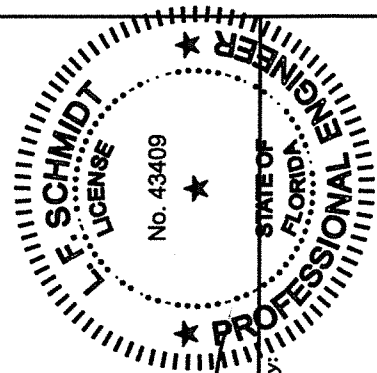
2
4 **HORIZONTAL CROSS SECTION**
Outswing configuration



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



5
4 **HORIZONTAL CROSS SECTION**
Inswing configuration



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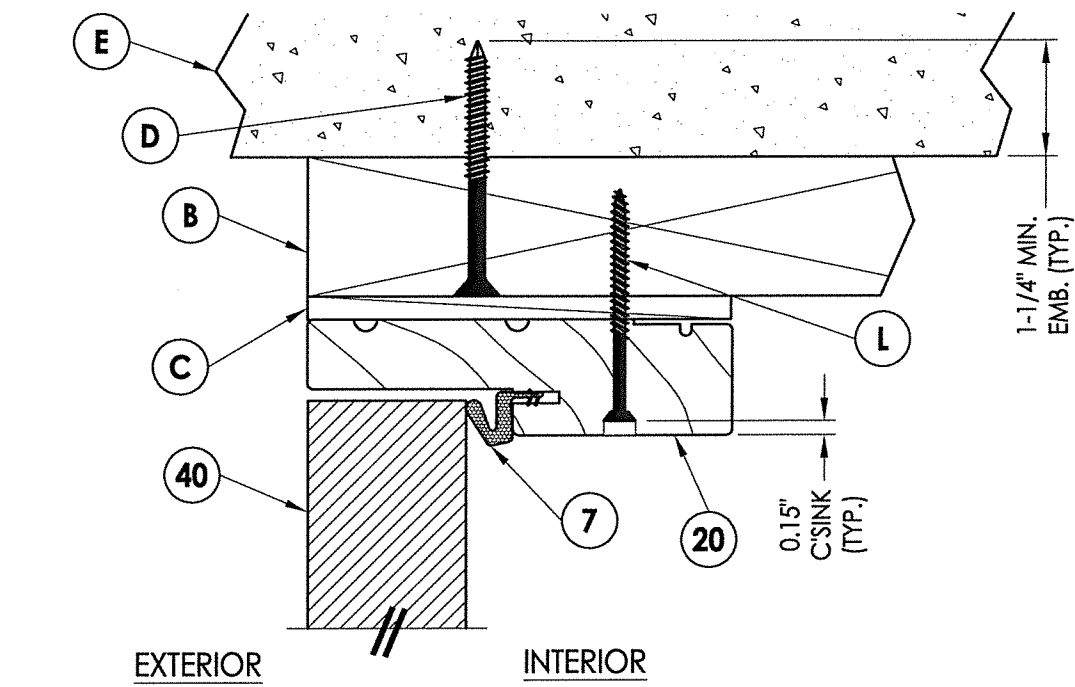
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

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

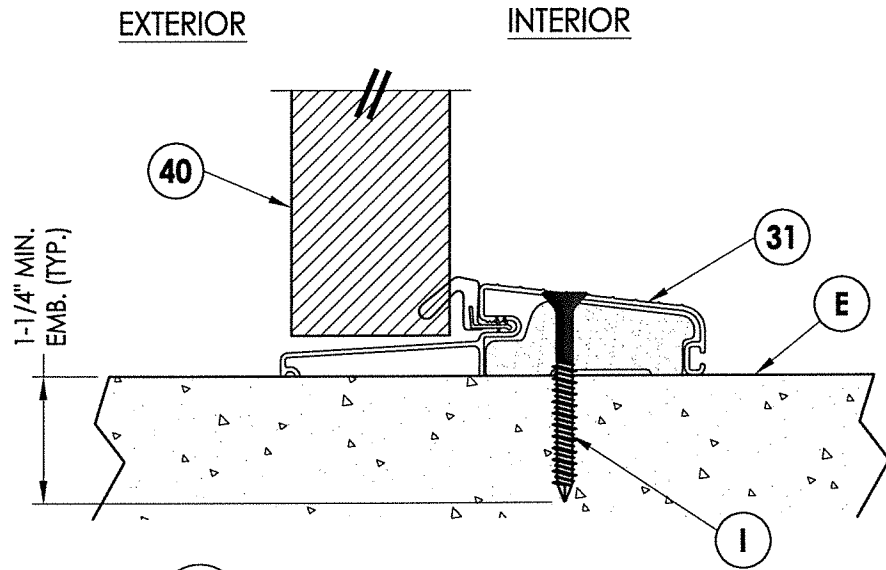
NO.	DATE	REVISIONS
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC
2	5/15/19	ADD STEEL STUD ANCHORING
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC

DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.15
SHEET 4 OF 11

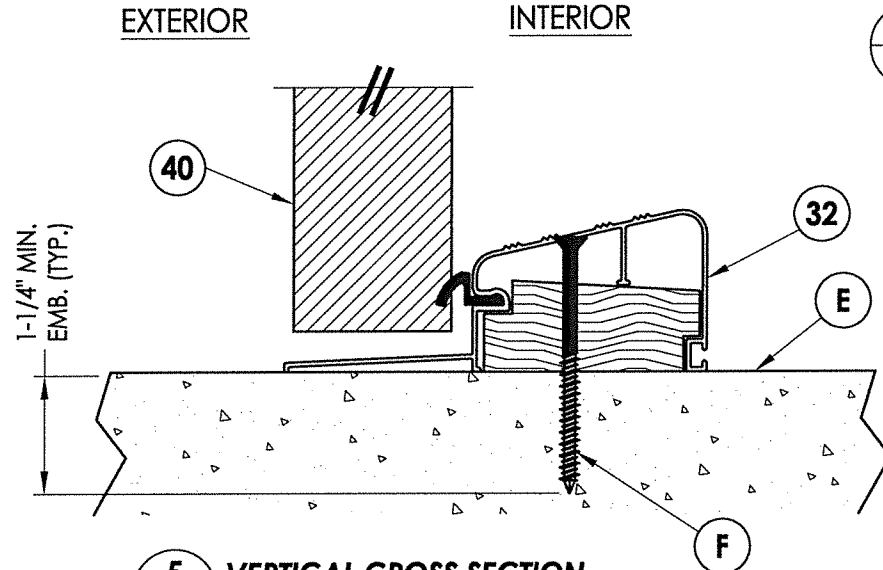
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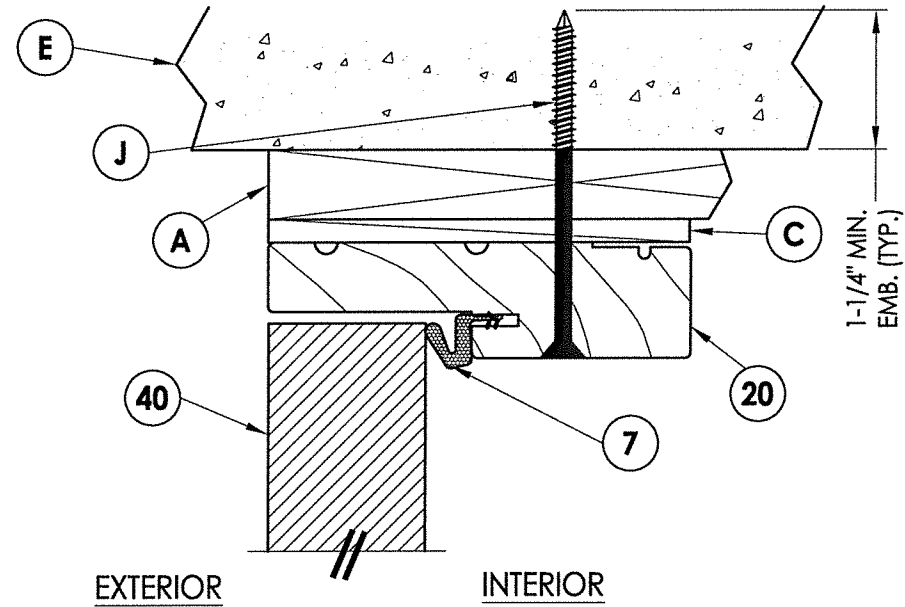
1 VERTICAL CROSS SECTION
5 Outswing shown - inswing also approved



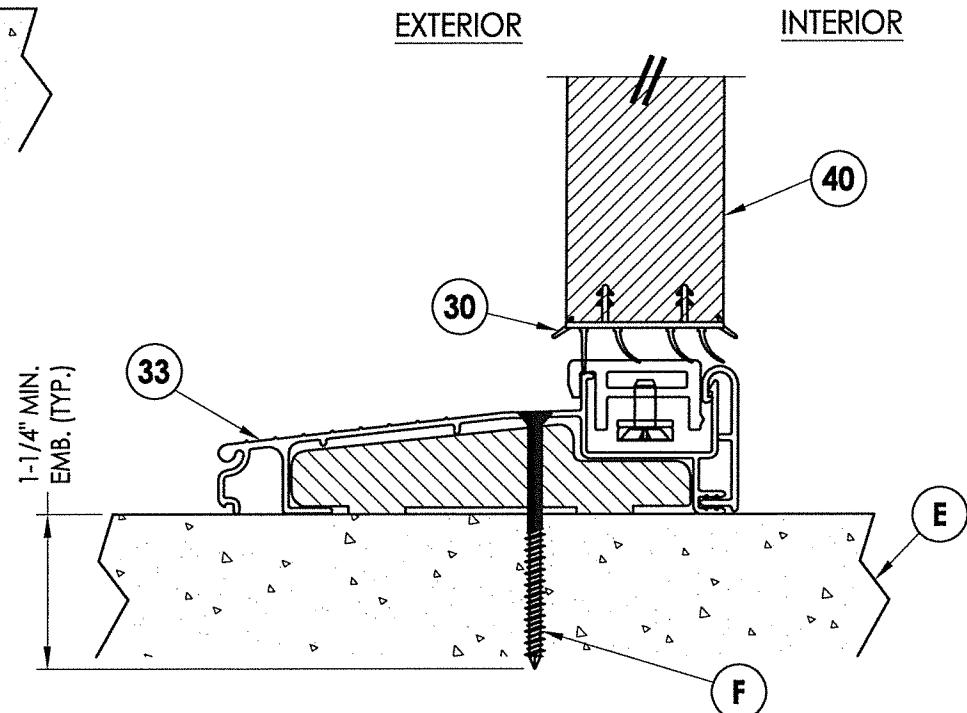
3 VERTICAL CROSS SECTION
5 Outswing configuration



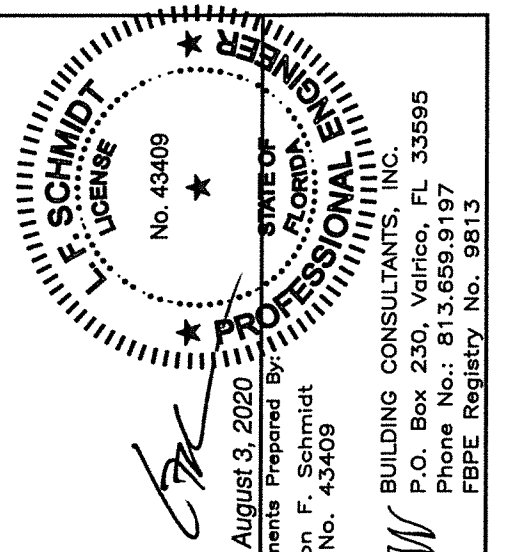
5 VERTICAL CROSS SECTION
5 Outswing configuration
(Where water infiltration requirements are specified)



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



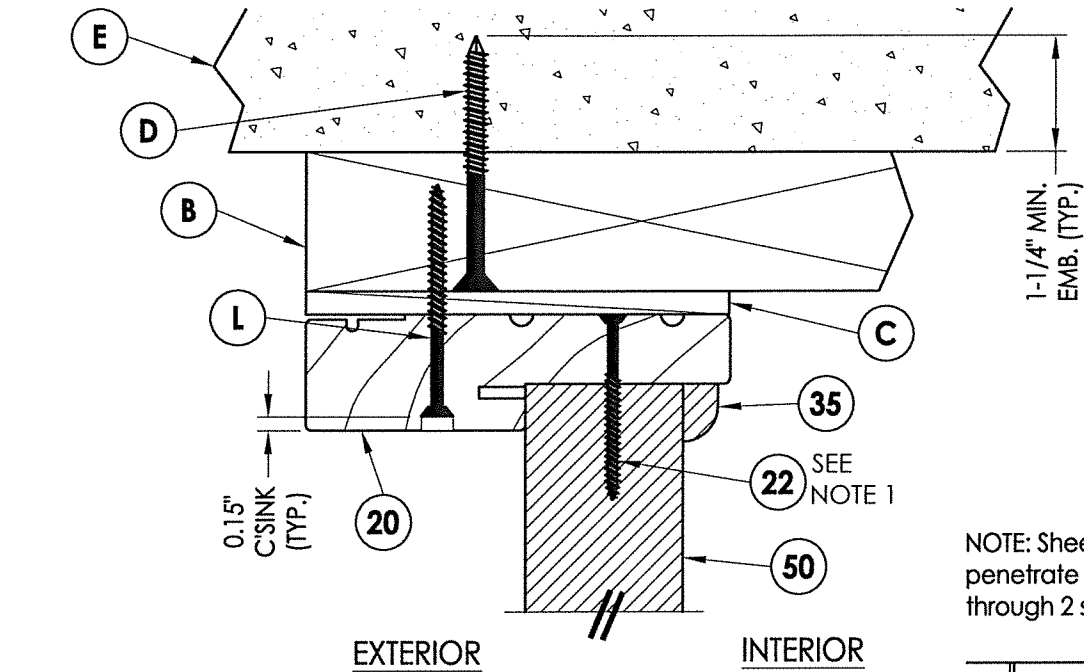
4 VERTICAL CROSS SECTION
5 Inswing configuration



August 3, 2020
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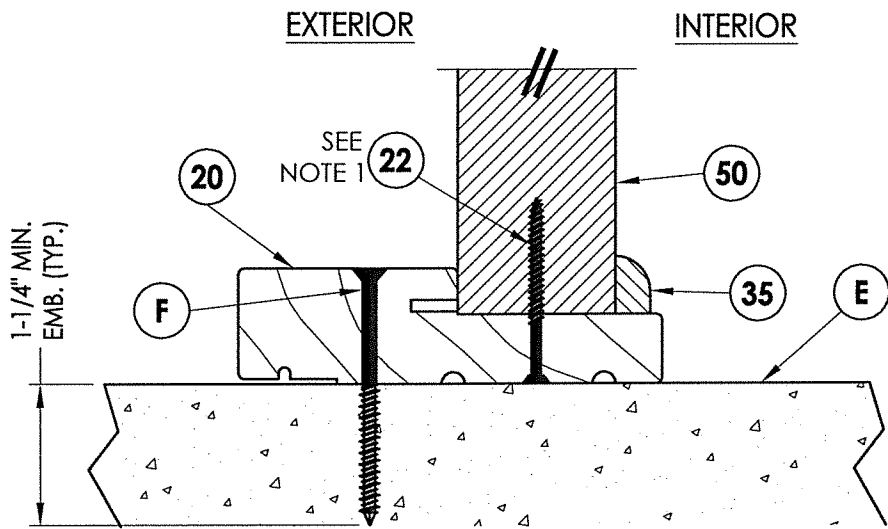
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PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
REVISIONS			
NO.	DATE	BY	
3	7/30/20	LFS	UPDATE TO 7TH ED. (2020) FBC
2	5/15/19	LFS	ADD STEEL STUD ANCHORING
1	9/26/17	JK	UPDATE TO 6TH ED. (2017) FBC
DATE: 09/28/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19007.15			
SHEET 5 OF 11			

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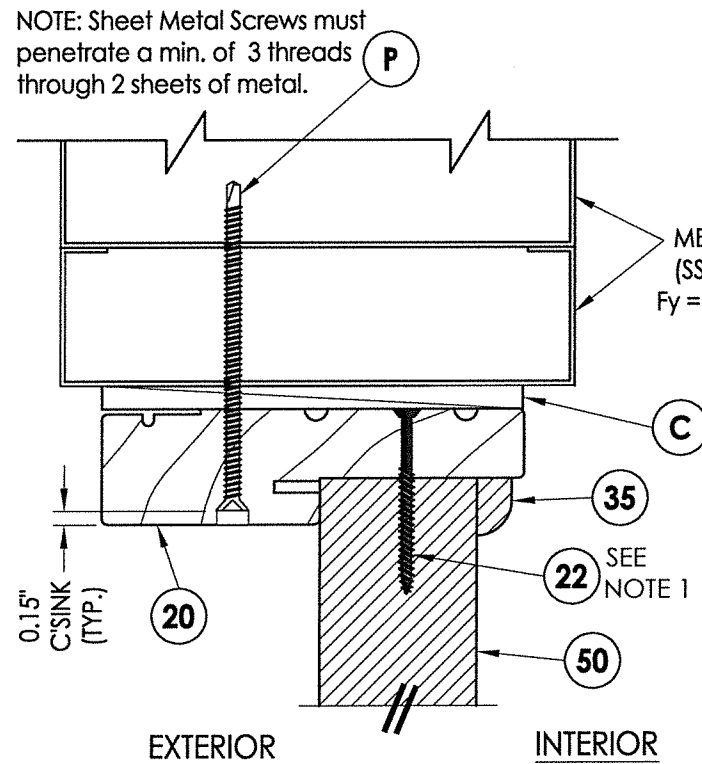


1 **VERTICAL CROSS SECTION**
6 Outswing shown - inswing also approved

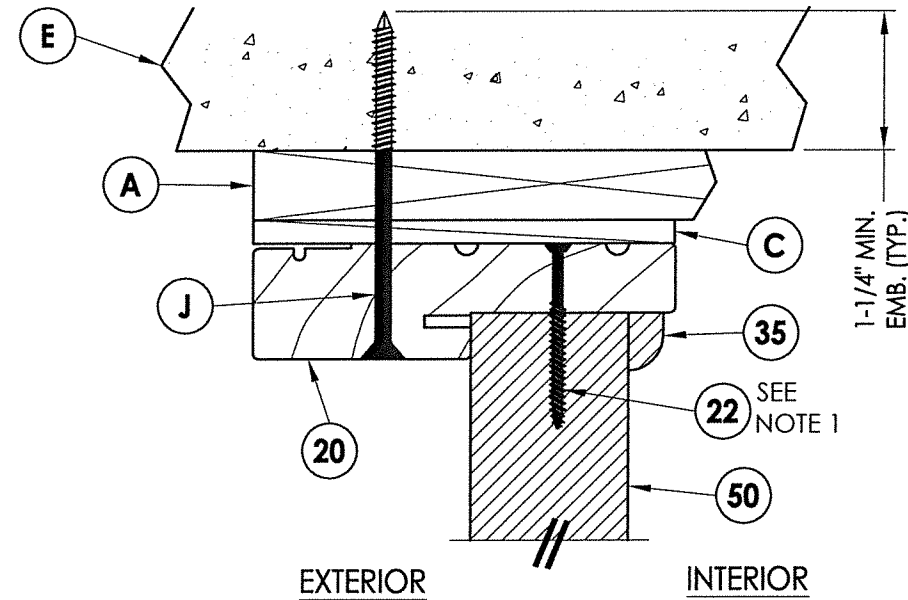
NOTE:
1. Sidelite panel secured to the sidelite frame with (2) of item #22 in the head and sill 3" from each end.



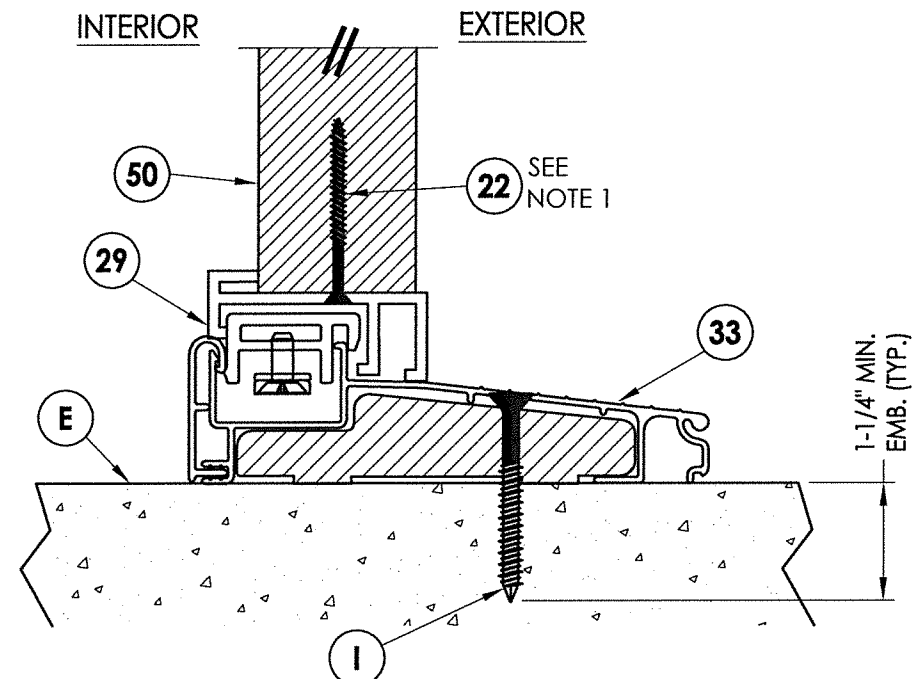
3 **VERTICAL CROSS SECTION**
6 Outswing configuration



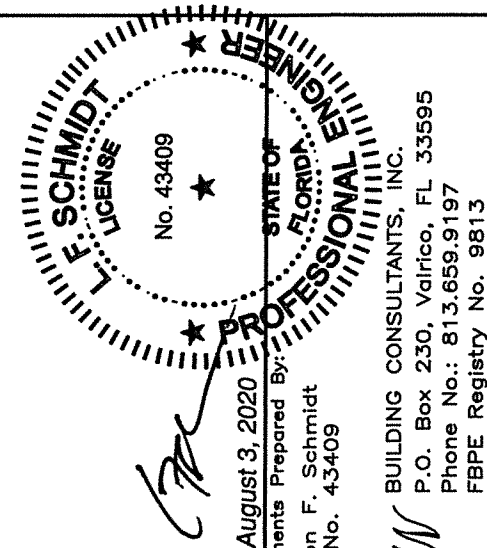
5 **VERTICAL CROSS SECTION**
6 Shown w/ Steel Stud Framing Option



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



4 **VERTICAL CROSS SECTION**
6 Inswing configuration



August 3, 2020
Documents Prepared By:
Lyndon F. Schmidt
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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: 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
NO.	DATE	BY

DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.15
SHEET 6 OF 11

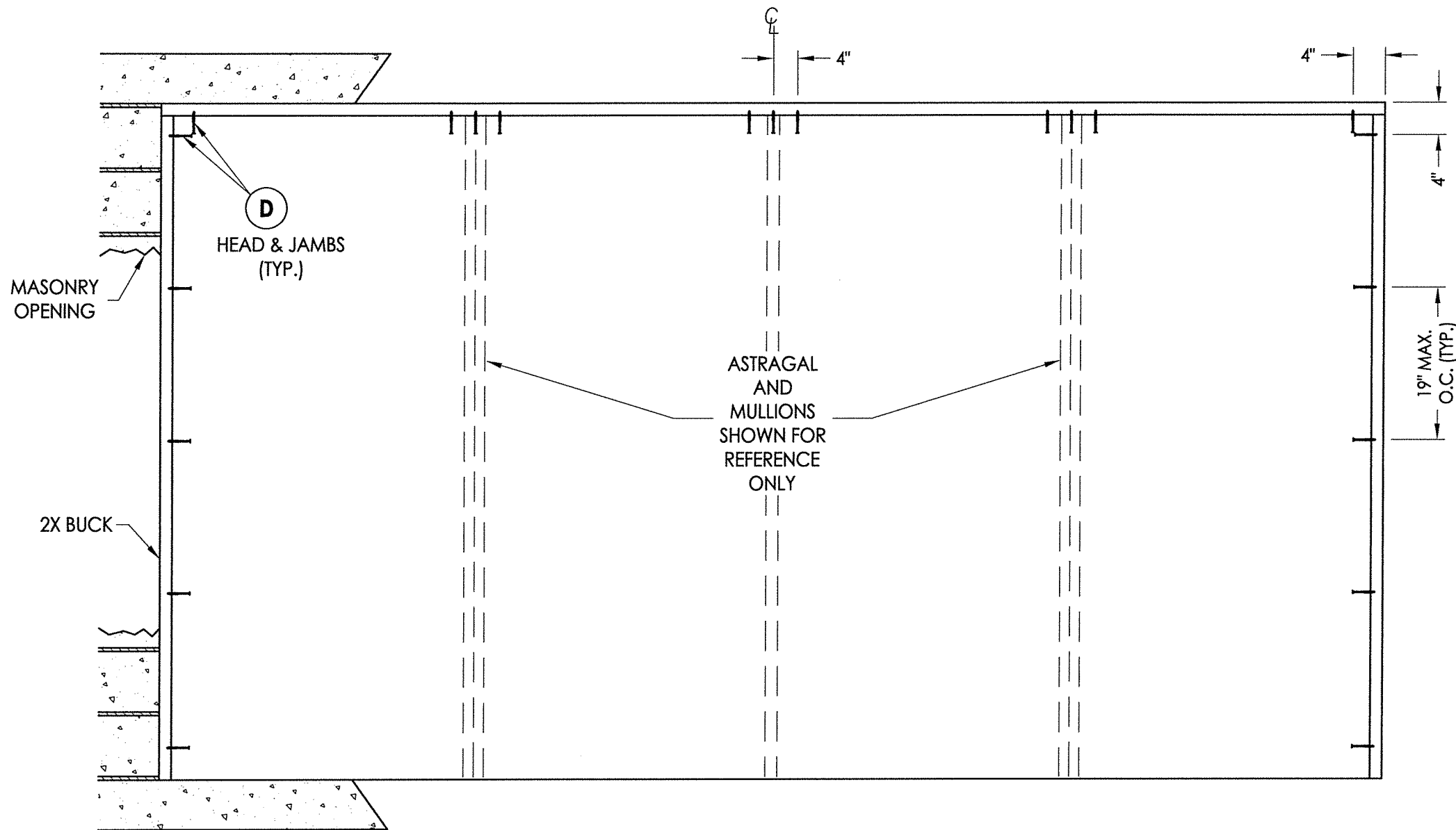
CONCRETE ANCHOR NOTES:

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"
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.



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

DATE: 09/28/15

SCALE: N.T.S.

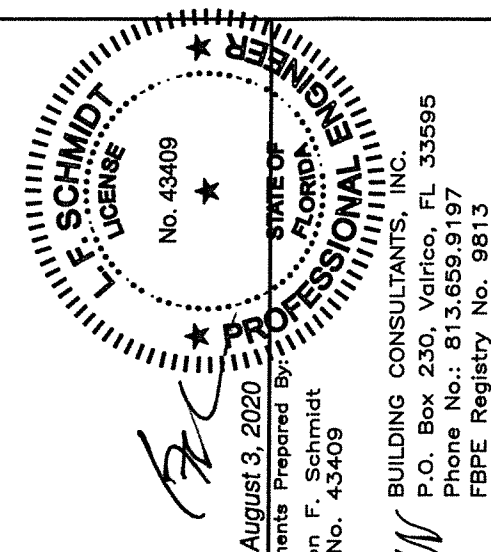
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-19007.15

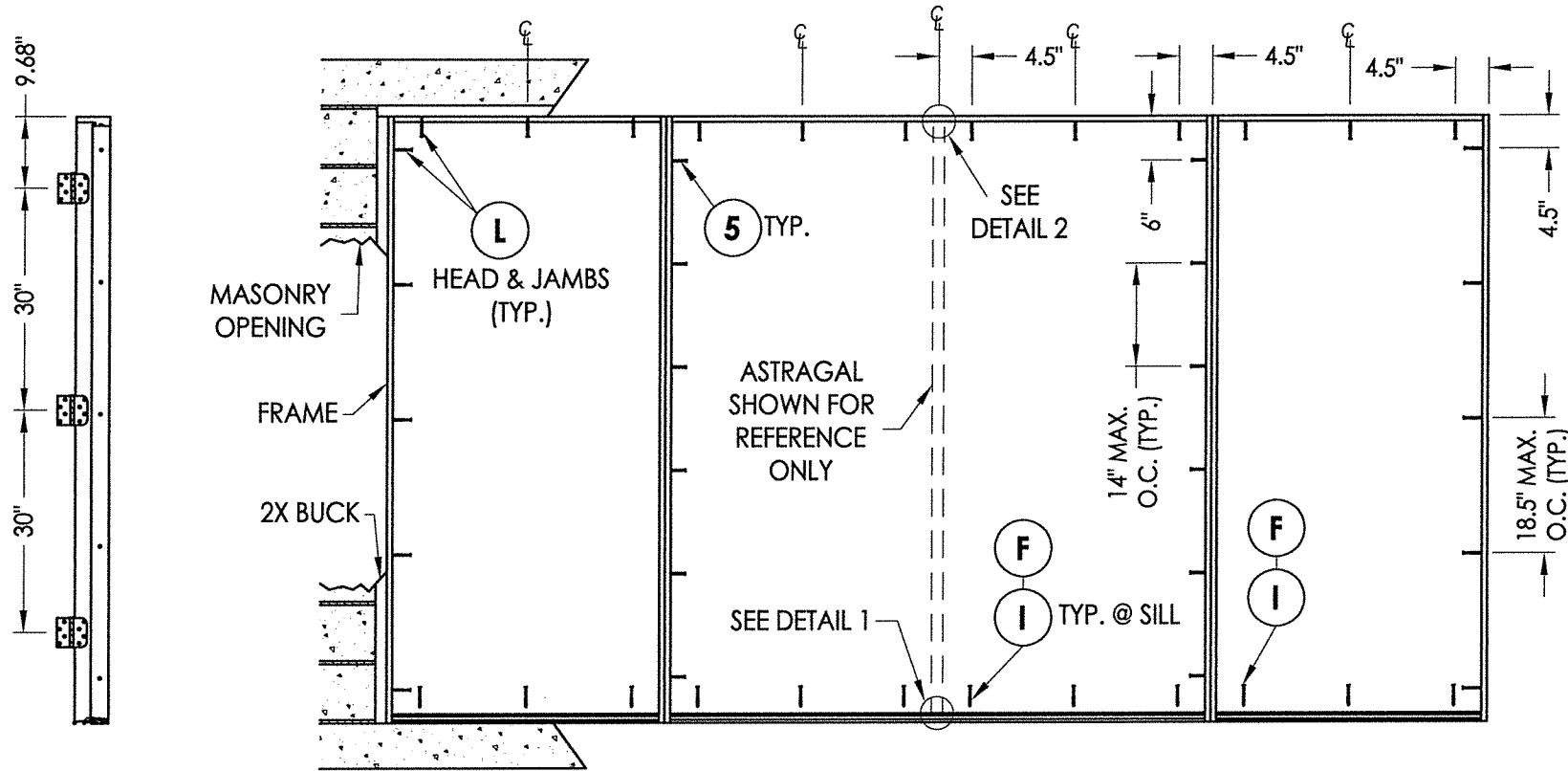
SHEET 7 OF 11



August 3, 2020

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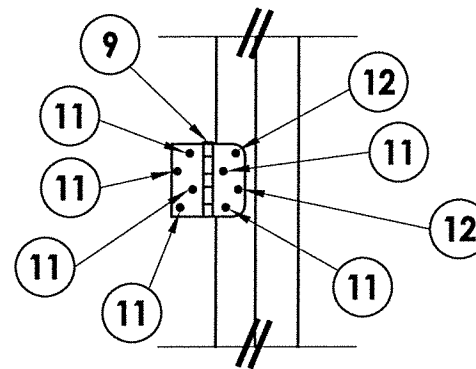
BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
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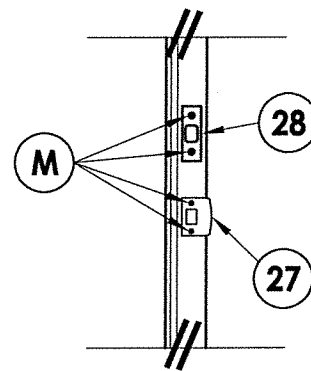
HINGE JAMB

FRAME ANCHORING
Masonry 2X buck construction

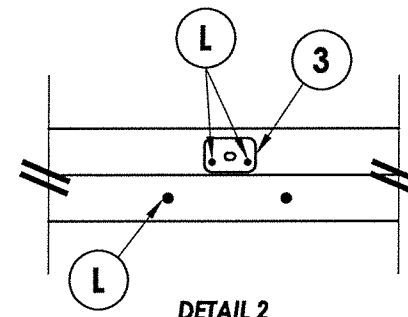
ASTRAGAL STRIKE JAMB



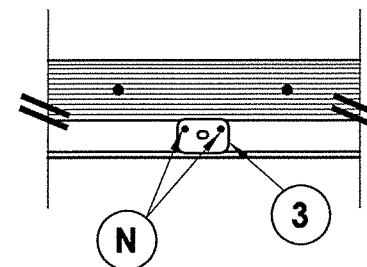
HINGE DETAIL



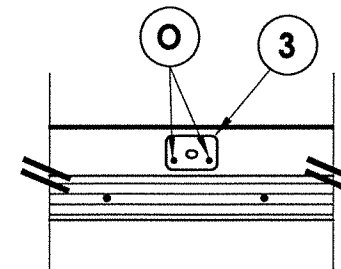
LATCH & DEADBOLT DETAIL



DETAIL 2



DETAIL 1
Inswing configuration



DETAIL 1
Outswing configuration

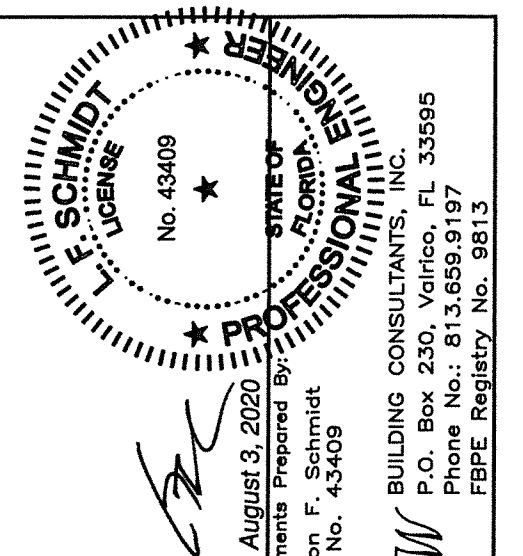
CONCRETE ANCHOR NOTES:

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"
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.

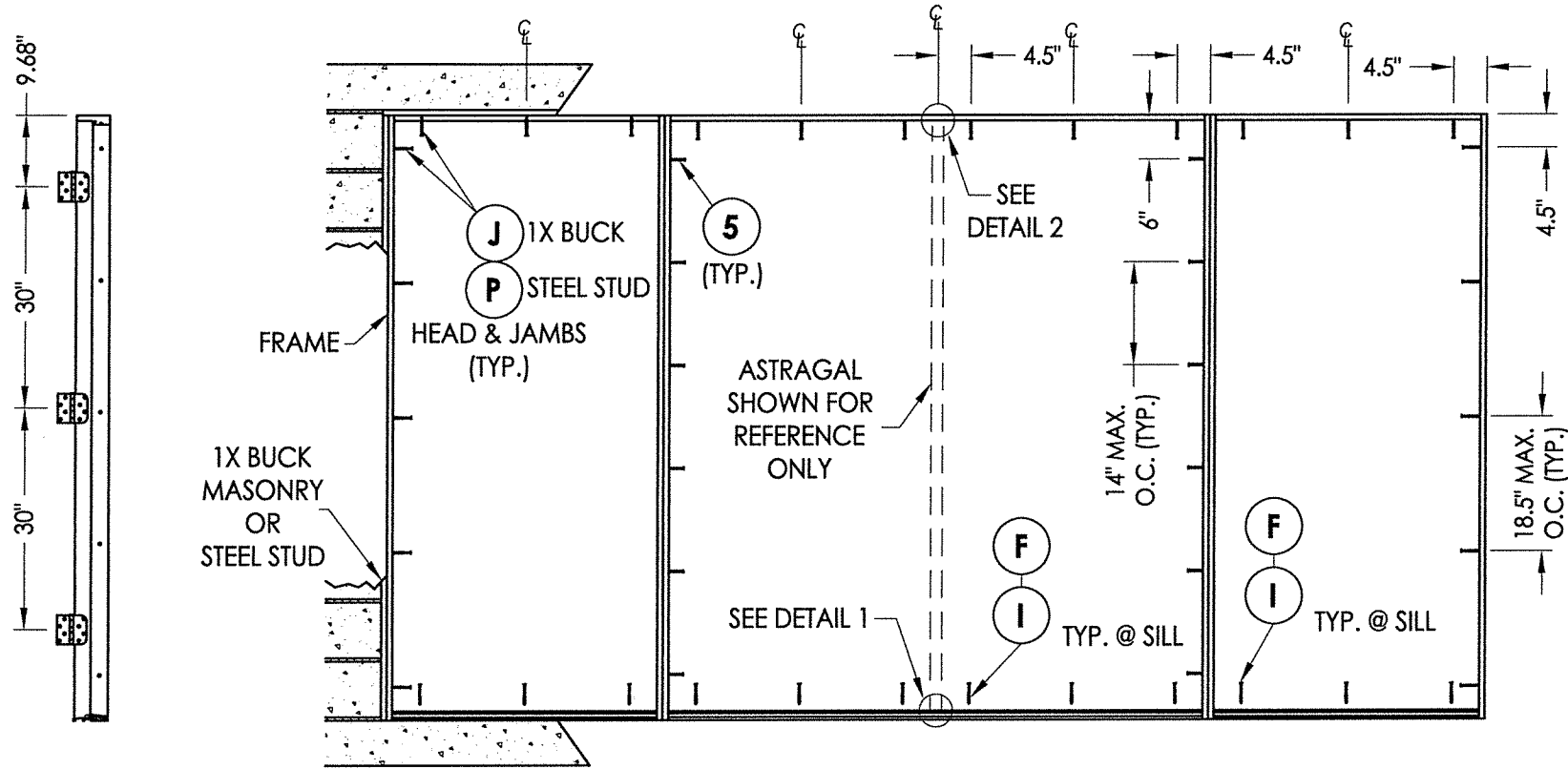


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FBPE Registry No. 9813

PRODUCT: DOERS FIBERGLASS DOOR
PART OR ASSEMBLY: 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

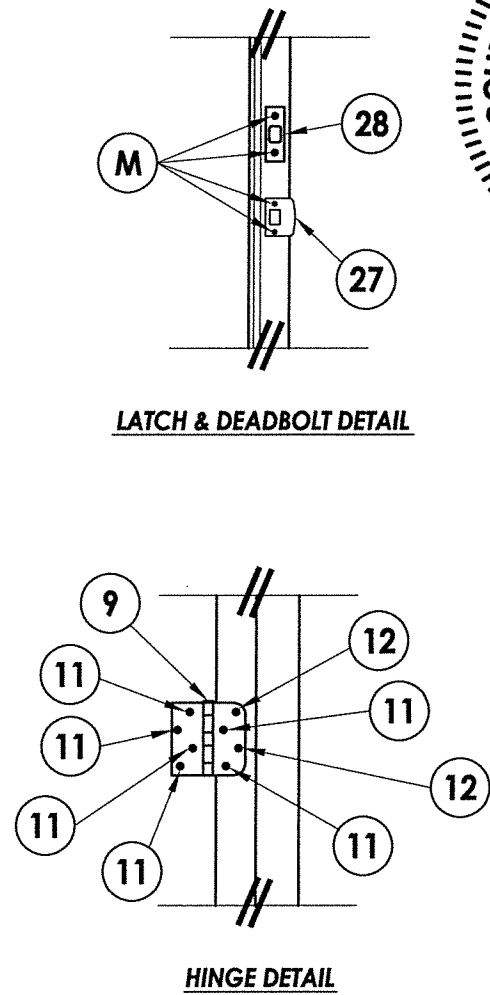
DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.15
SHEET 8 OF 11



HINGE JAMB

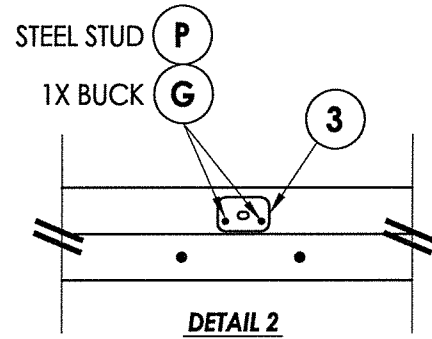
FRAME ANCHORING
Masonry 1X buck Construction
Steel Stud Construction

ASTRAGAL STRIKE JAMB

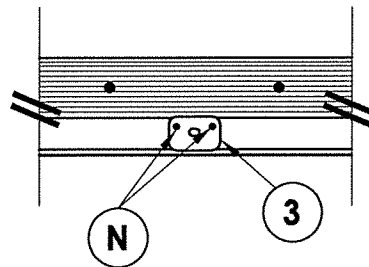


LATCH & DEADBOLT DETAIL

HINGE DETAIL

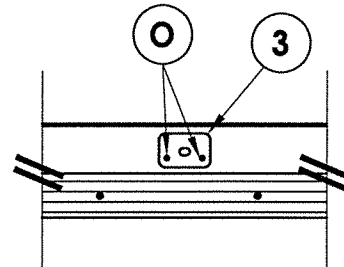


DETAIL 2



DETAIL 1

Inswing configuration



DETAIL 1

Outswing configuration

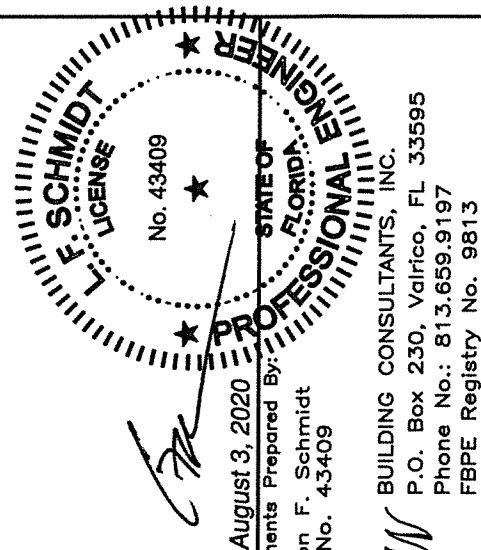
CONCRETE ANCHOR NOTES:

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"
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.



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:
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

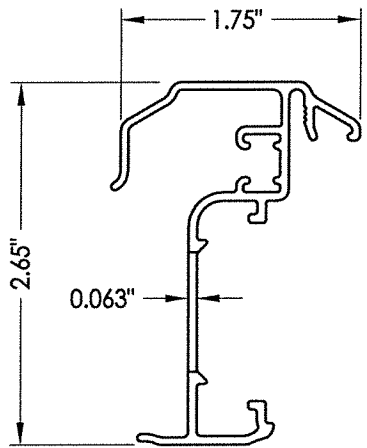
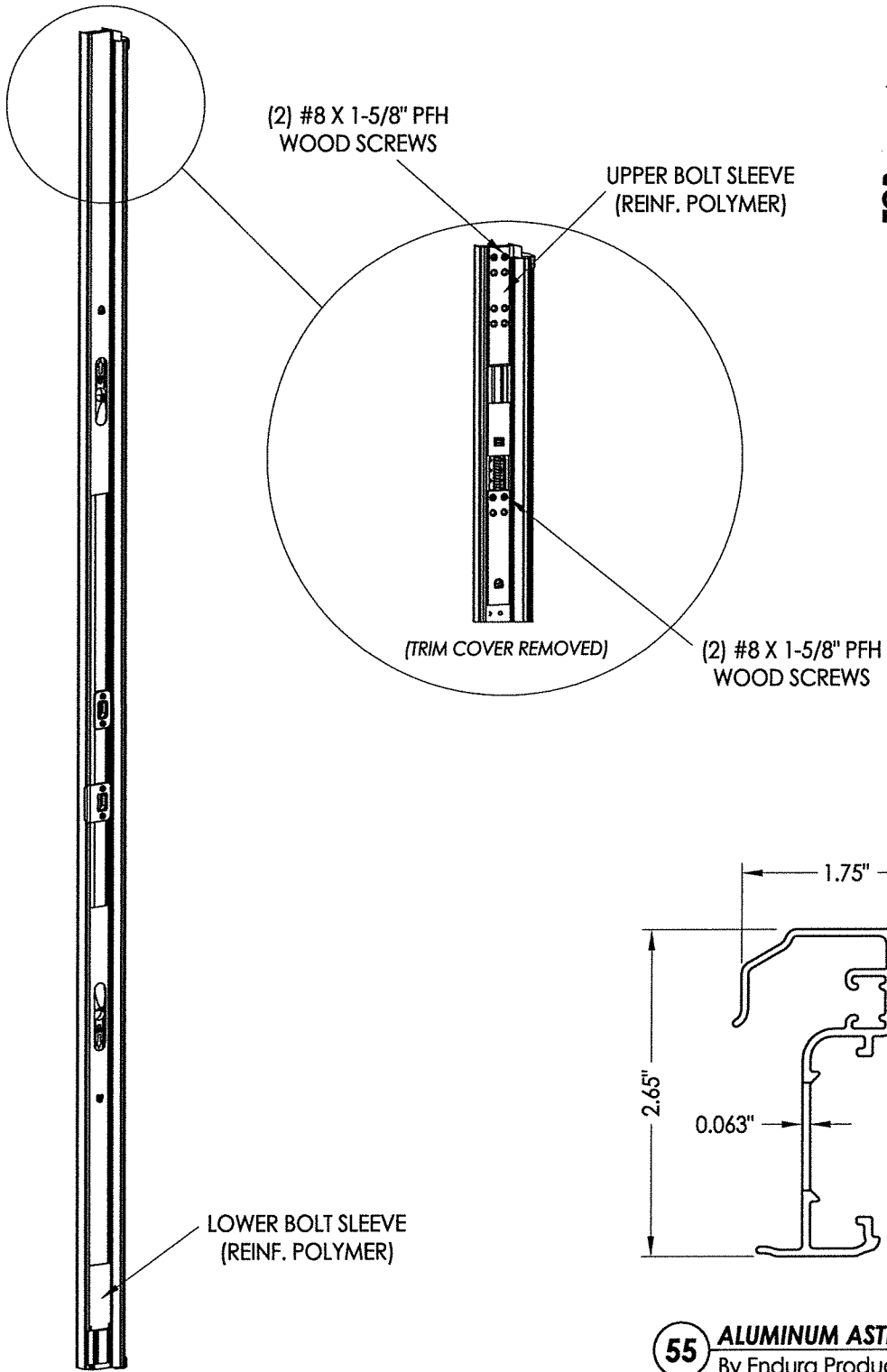
SCALE: N.T.S.

DWG. BY: JK

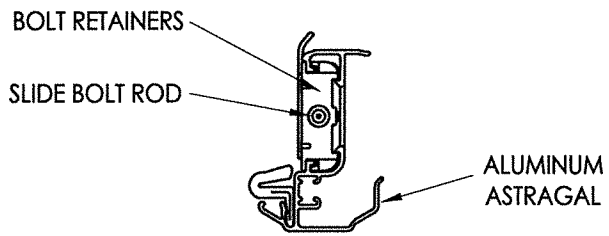
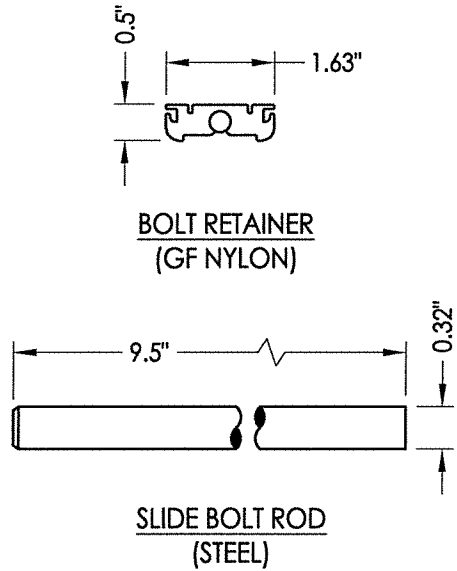
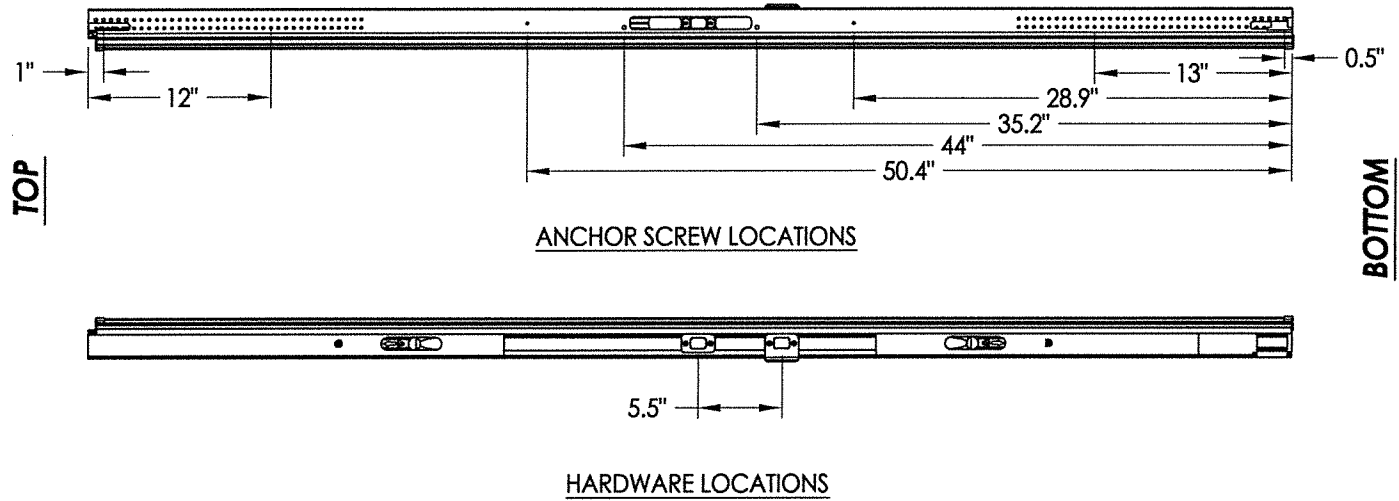
CHK. BY: LFS

DRAWING NO.: FL-19007.15

SHEET 9 OF 11

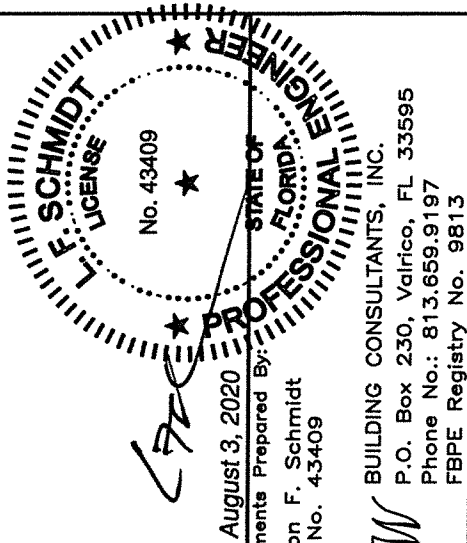


55 **ALUMINUM ASTRAGAL**
By Endura Products



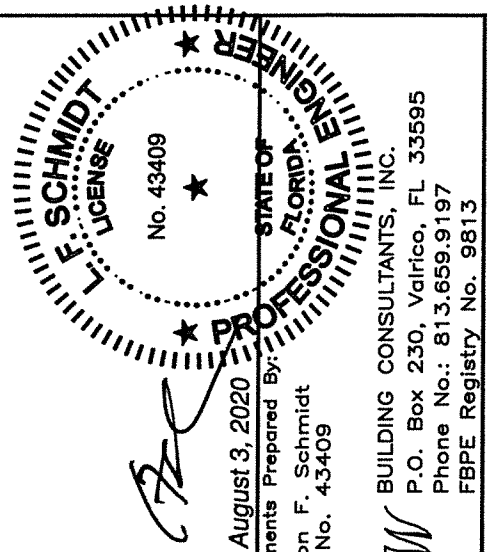
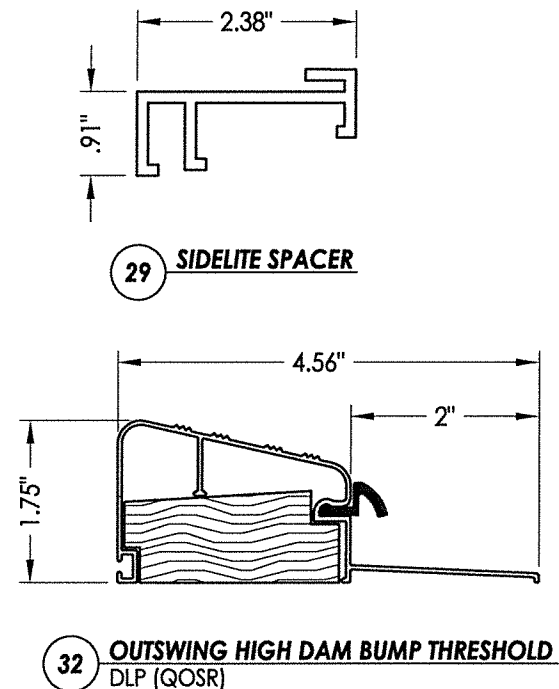
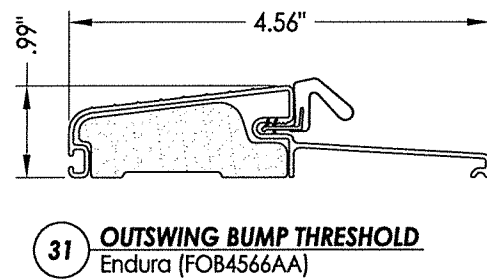
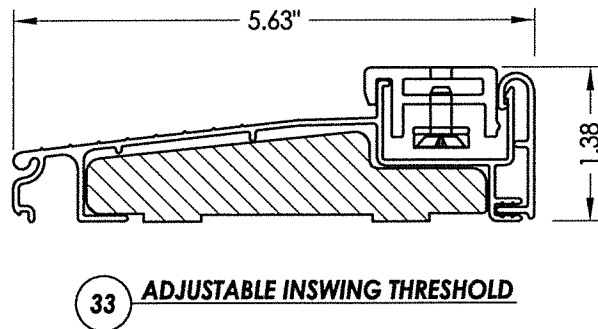
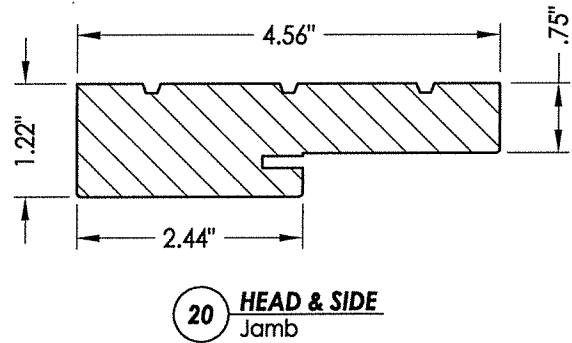
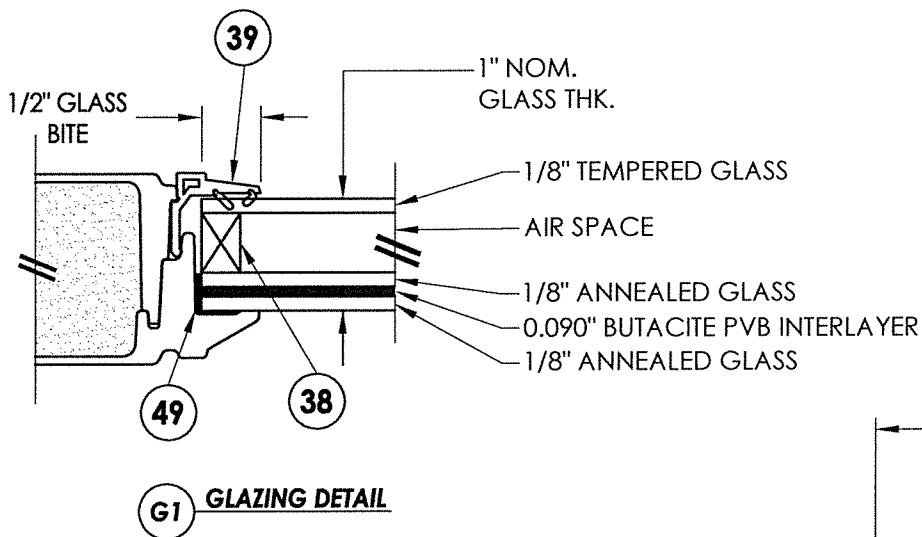
ALUMINUM ASTRAGAL ASSEMBLY

ULTIMATE HURRICANE ASTRAGAL



PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		ENDURA ASTRAGAL DETAILS	
NO.	DATE	REVISIONS	
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-19007.15			
SHEET 10 OF 11			

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	22	#8 X 2" PFH WOOD SCREW	STEEL
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	29	SIDELITE SPACER	PVC
			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
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	35	SHOE MOULD 5/8" X 3/8"	WOOD
L	#10 X 2-1/2" PFH WOOD SCREW (1-3/8" MIN. EMBEDMENT)	STEEL	38	GLAZING SPACER	ALUM.
M	#9 X 2-1/4" PFH WOOD SCREW	STEEL	39	GLAZING BEAD	PVC
N	3/16" X 3-1/2" PFH ITW CONCRETE SCREW	STEEL	40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
O	3/16" X 1-1/2" PFH ITW CONCRETE SCREW	STEEL	41	DOOR SKIN (MIN. 0.095" THICK)	FIBERGLASS
P	#10-16 PFH SELF-DRILLING SMS	STEEL	42	TOP RAIL	CELLULAR PVC
1	#10 X 2-1/2" PFH SMS	STEEL	43	LATCH & HINGE STILE	CELLULAR PVC
2	#8 X 3" PSH SMS	STEEL	44	LATCH & HINGE STILE SUPPORT	WOOD
3	FLUSH BOLT STRIKE PLATE	STEEL	45	BOTTOM RAIL	CELLULAR PVC
5	#10 X 2" PFH SCREW	STEEL	46	POLYURETHANE FOAM	POLYURETHANE
6	SEALANT	SILICONE	47	LATCH & HINGE STILE	WOOD
7	Q-LON 650 WEATHER STRIP SCHLEGEL	FOAM	49	GLAZING COMPOUND DOW 995	SILICONE
9	4" X 4" BUTT HINGE	STEEL	50	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
11	#9 X 3/4" PFH WOOD SCREW	STEEL	55	ASTRAGAL (ENDURA)	ALUMINUM
12	#9 X 2" PFH WOOD SCREW	STEEL			
17	KWIKSET KEYED ENTRY - SIGNATURE SERIES	STEEL			
18	KWIKSET DEADBOLT - SIGNATURE SERIES (780)	STEEL			



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PRODUCT: _____

DOERS
FIBERGLASS DOOR

RT OR ASSEMBLY:
**BILL OF MATERIALS, GLAZING
DETAIL & COMPONENTS**

[illegible]

DATE: 09/28/15

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