



DIAMOND DOOR SERIES

FLUSH GLAZED FIBERGLASS DOORS w/ SIDELITES

INSWING / OUTSWING

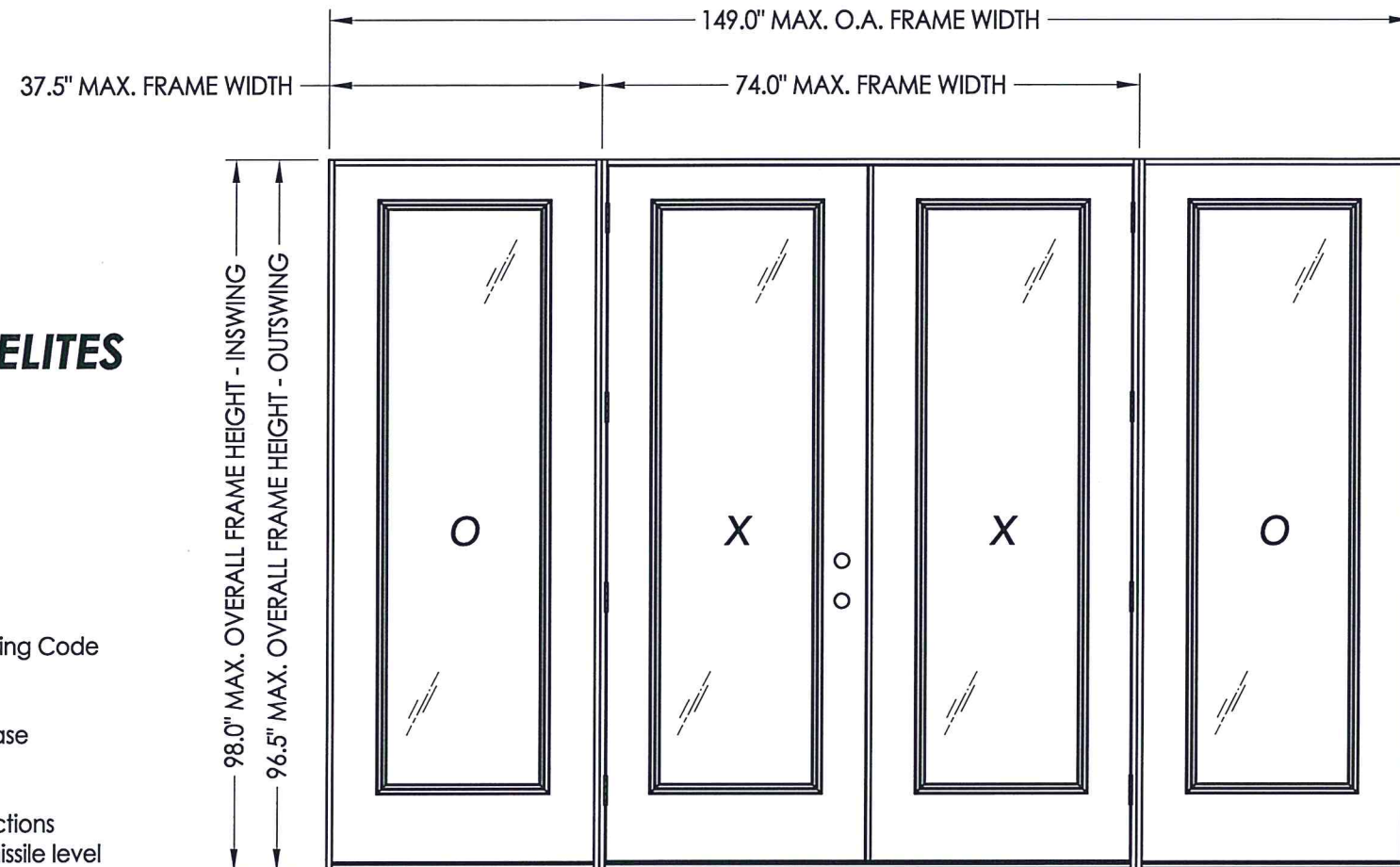
"IMPACT"

GENERAL NOTES

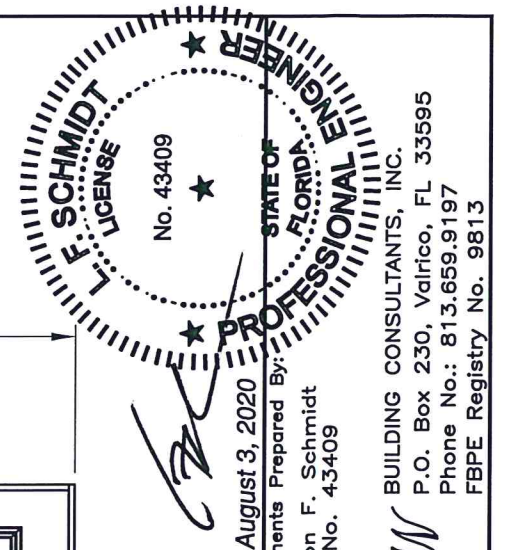
1. This product has been evaluated and is in compliance with the 7th Edition (2020) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be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



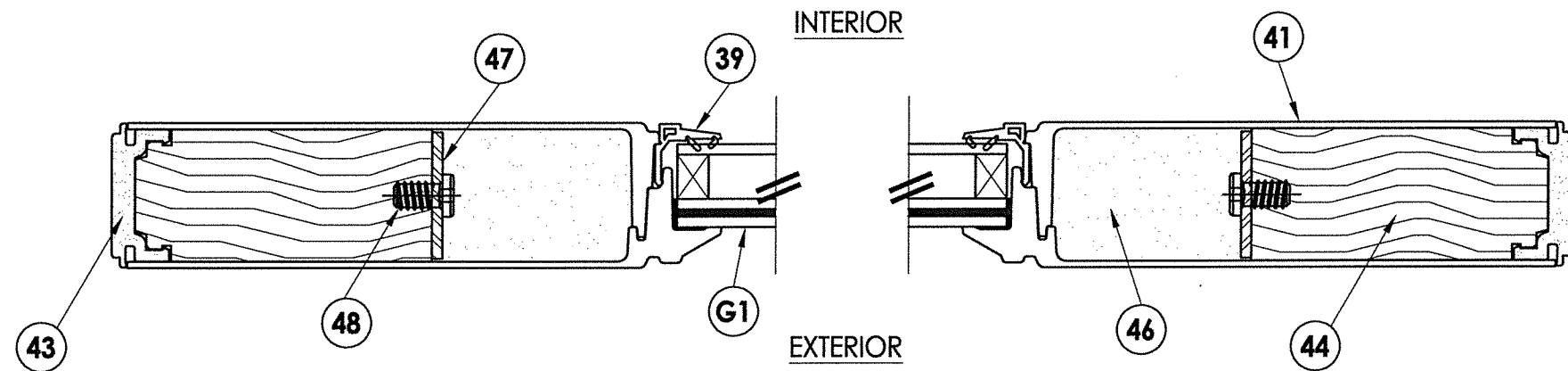
August 3, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

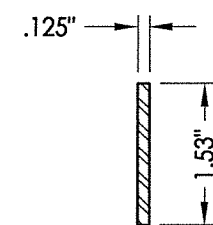
PRODUCT: DOERS FIBERGLASS DOOR
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

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

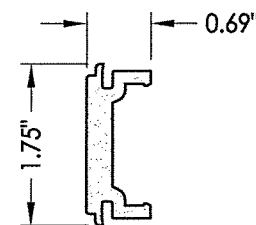
DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.20
SHEET 1 OF 11



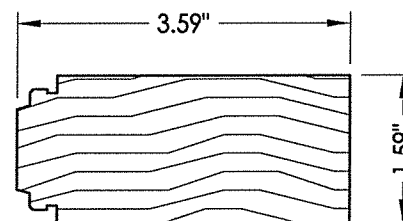
1 HORIZONTAL CROSS SECTION



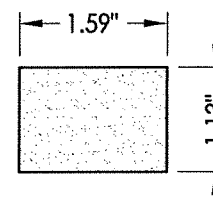
47 STILE STIFFENER
Steel reinforcement



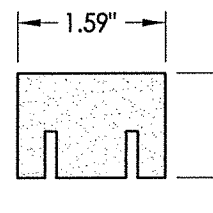
43 LATCH & HINGE STILE
Cellular PVC



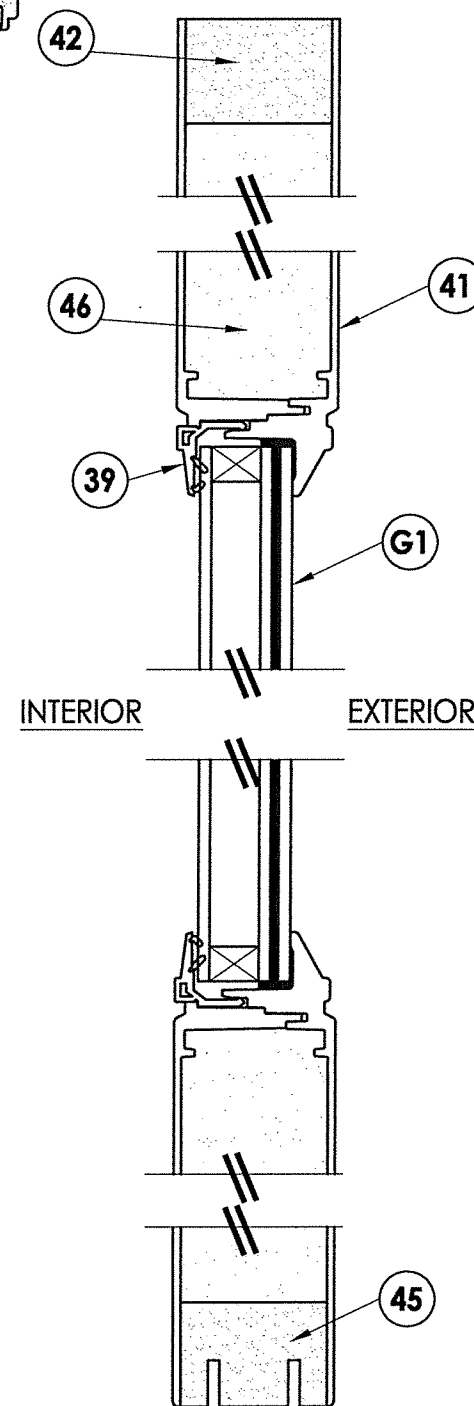
44 LATCH & HINGE STILE
Wood support



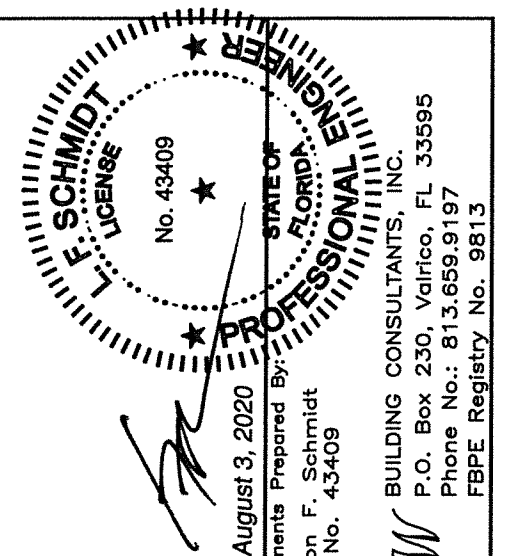
42 TOP RAIL
Cellular PVC



45 BOTTOM RAIL
Cellular PVC



2 VERTICAL CROSS SECTION



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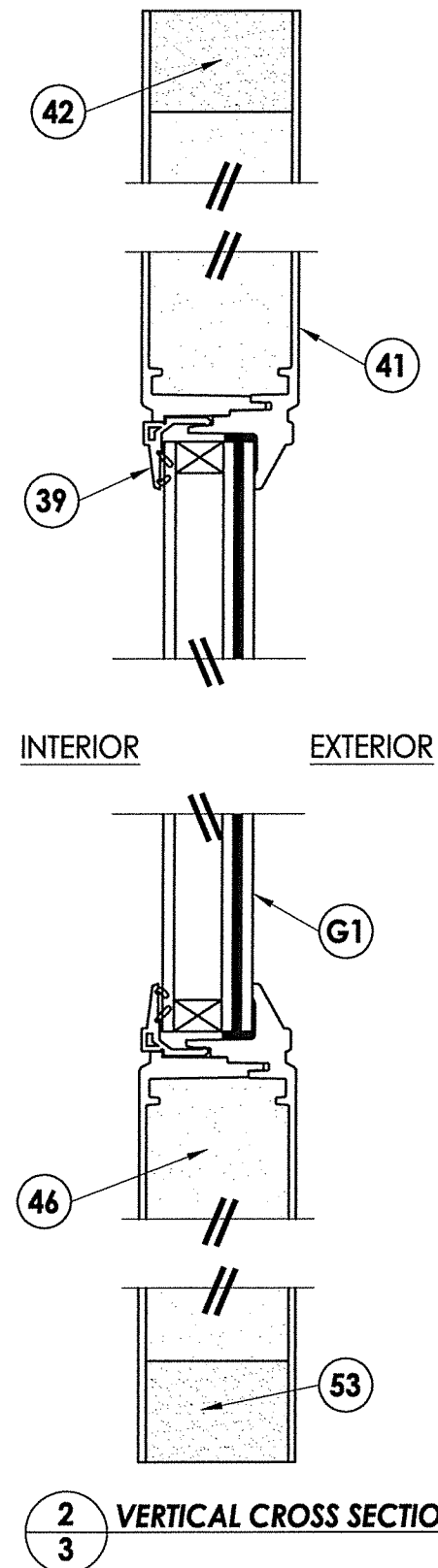
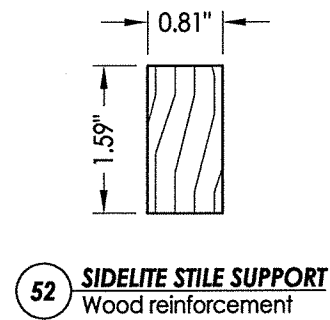
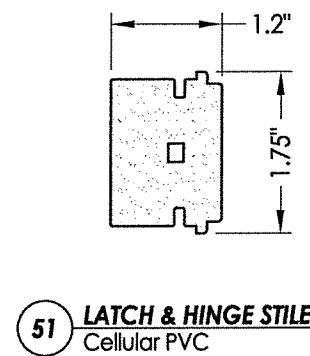
PRODUCT: DOERS FIBERGLASS DOOR

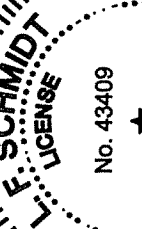
PART OR ASSEMBLY:
DOOR PANEL DETAILS

[illegible]

FL-19007.20

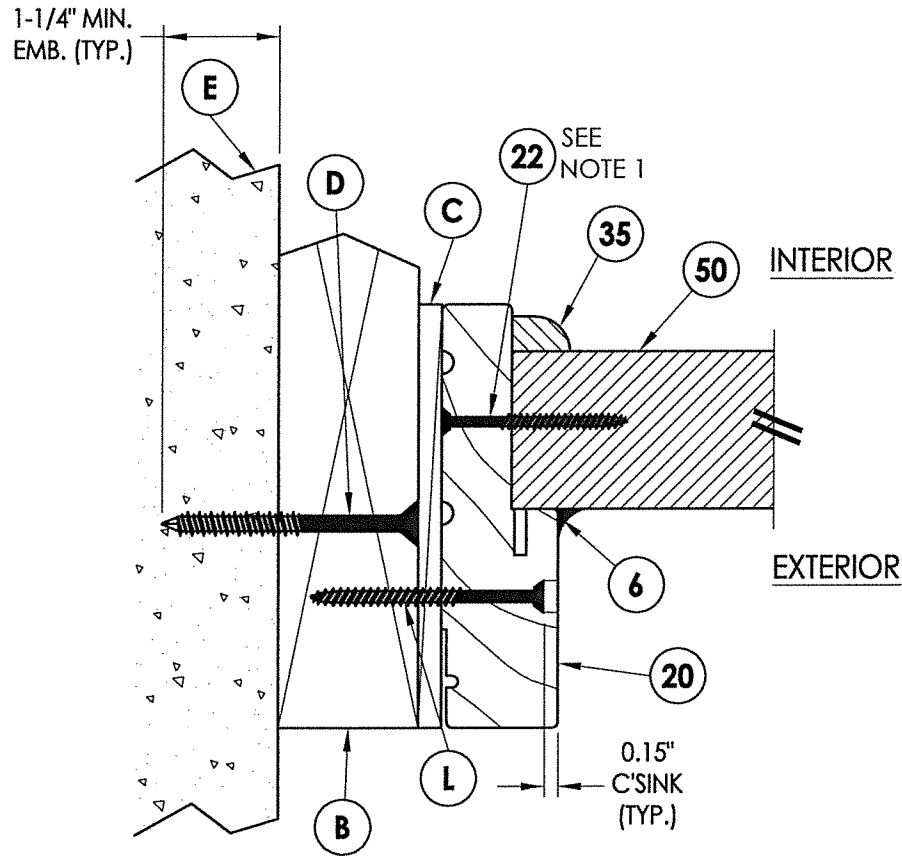
SHEET 2 OF 11

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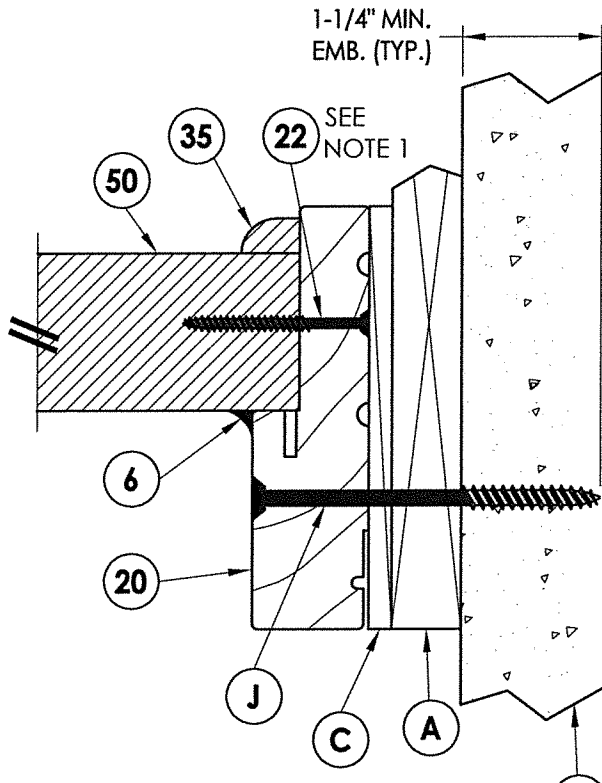

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FBPE Registry No. 9813

R:\Clients\Doers PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.11-20.dwg, 4.10



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

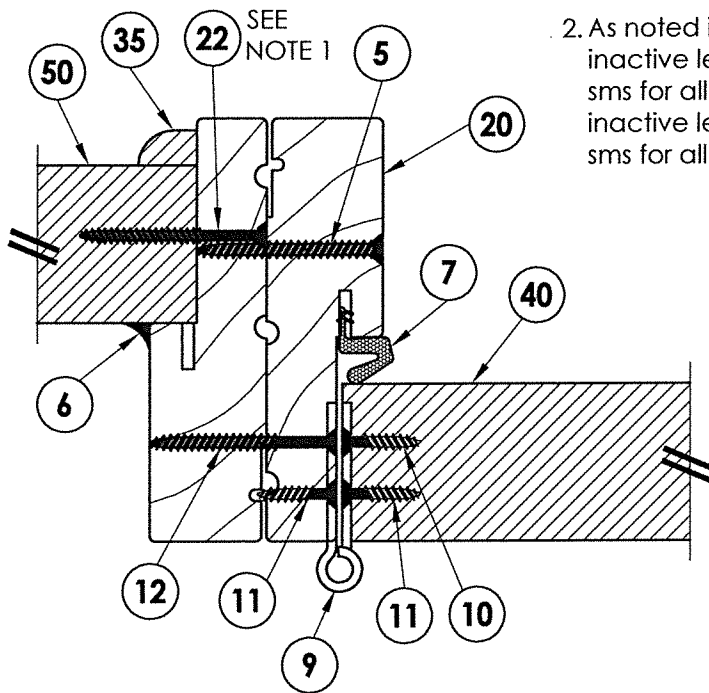


4
4 **HORIZONTAL CROSS SECTION**
Shown w/1X sub-buck

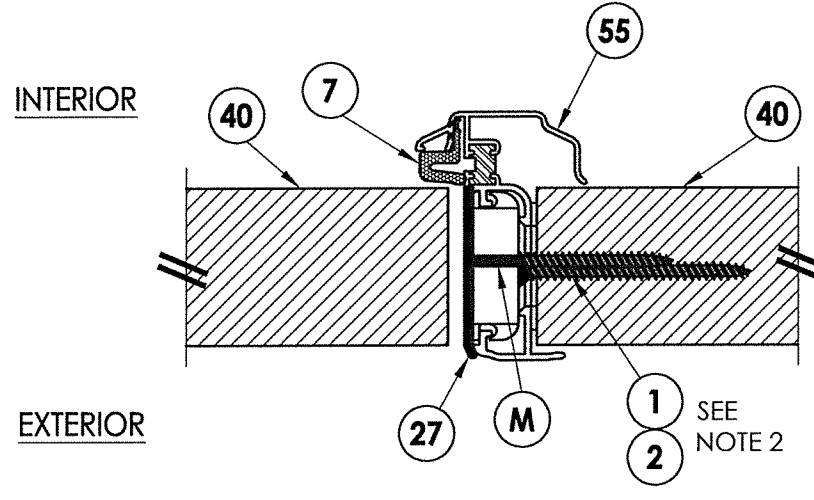
NOTE:

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.

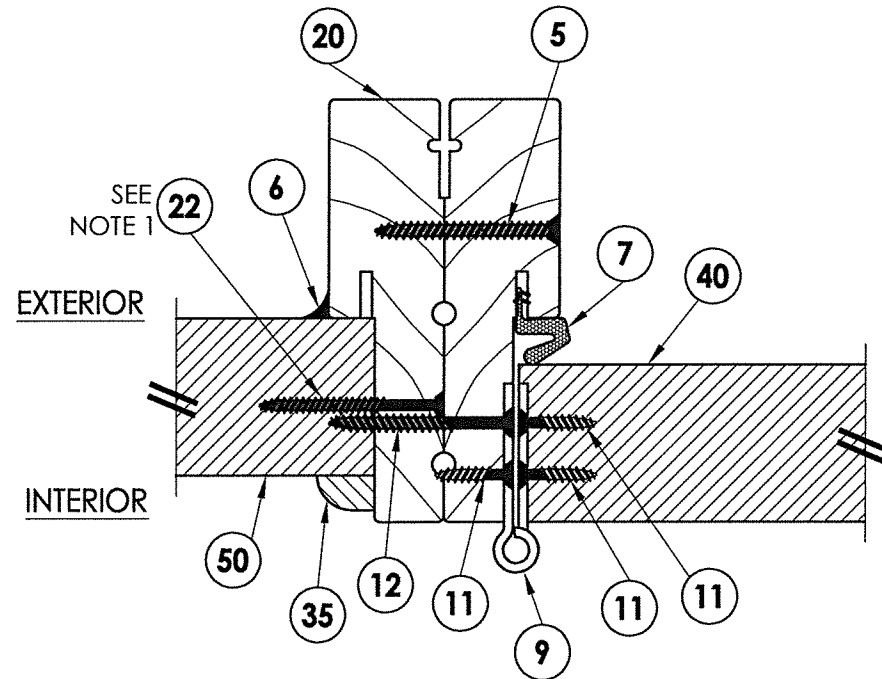
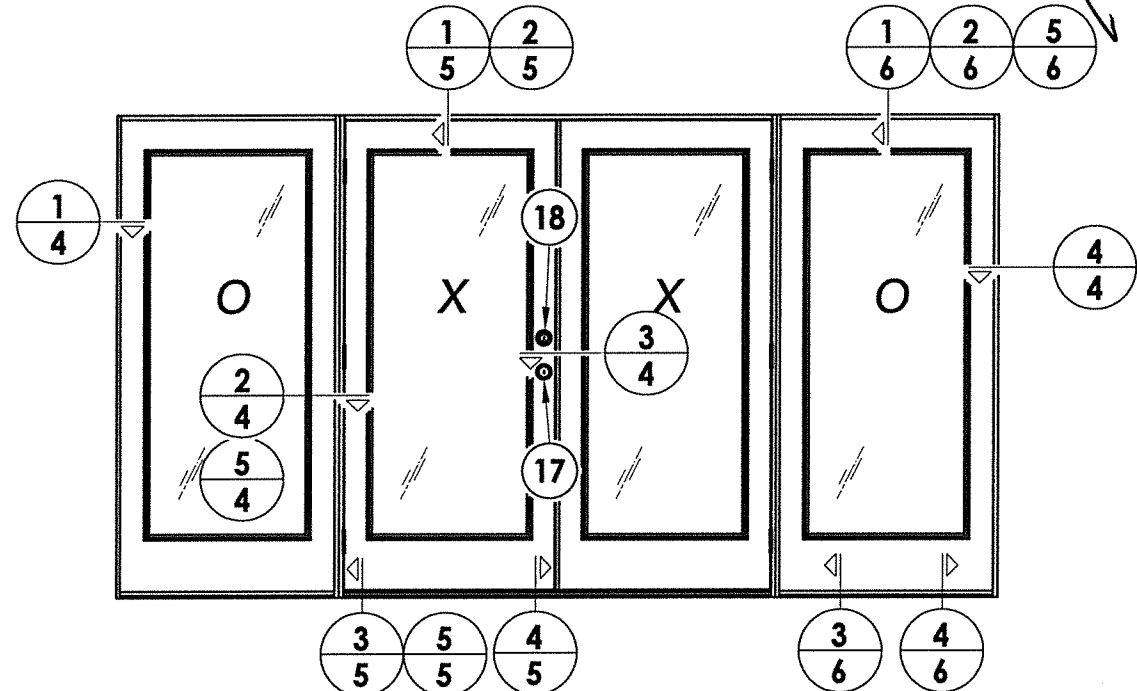
2. As noted in the test report astragal was attached to the inactive leaf with (11) #8 x 3" psh sms and (6) #10 x 2-1/2" pfh sms for all 8'-0" (outswing). Astragal was attached to the inactive leaf with (13) #8 x 3" psh sms and (6) #10 x 2-1/2" pfh sms for all 8'-0" (inswing).



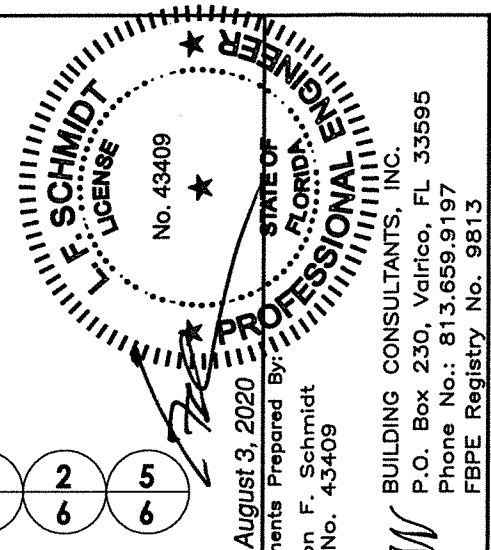
2
4 **HORIZONTAL CROSS SECTION**
Outswing configuration



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



5
4 **HORIZONTAL CROSS SECTION**
Inswing configuration



August 3, 2020

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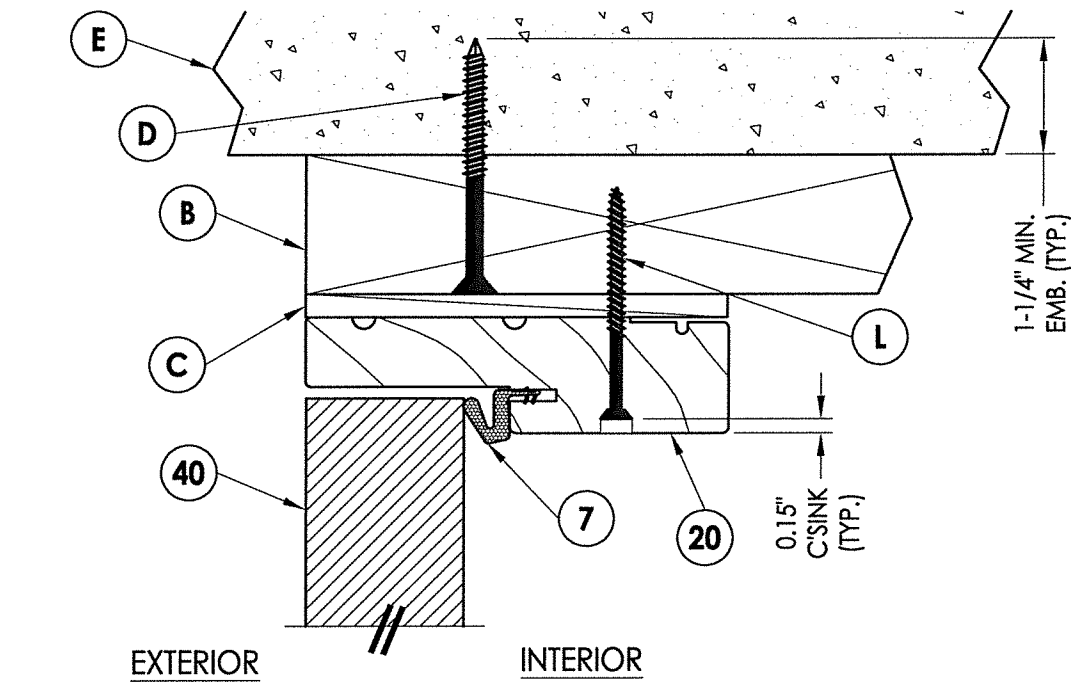
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

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

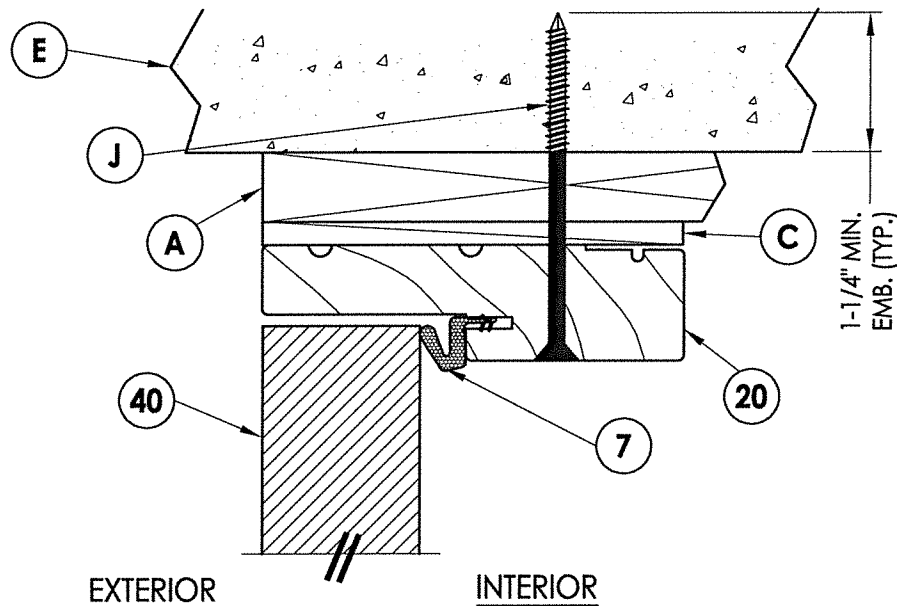
NO.	DATE	REVISIONS
3	7/30/20	UPDATE TO 7TH ED. (2020) FBC
2	5/15/19	ADD STEEL STUD ANCHORING
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC

DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.20
SHEET 4 OF 11

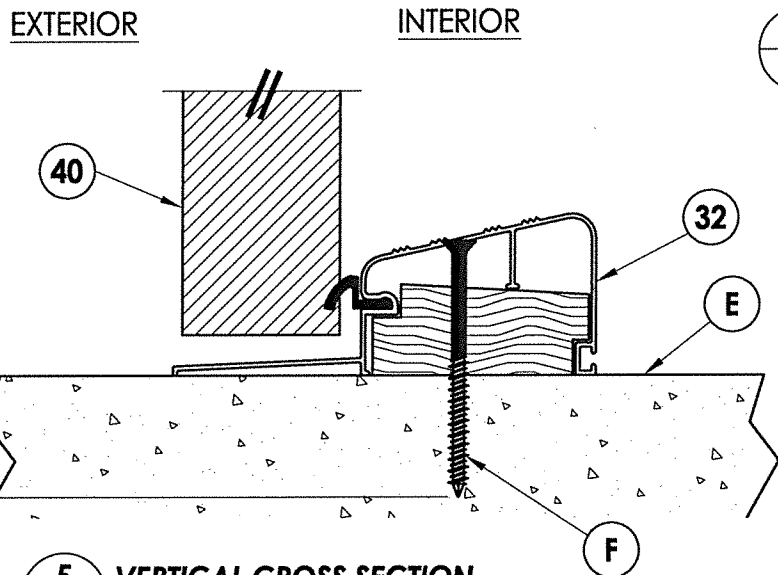
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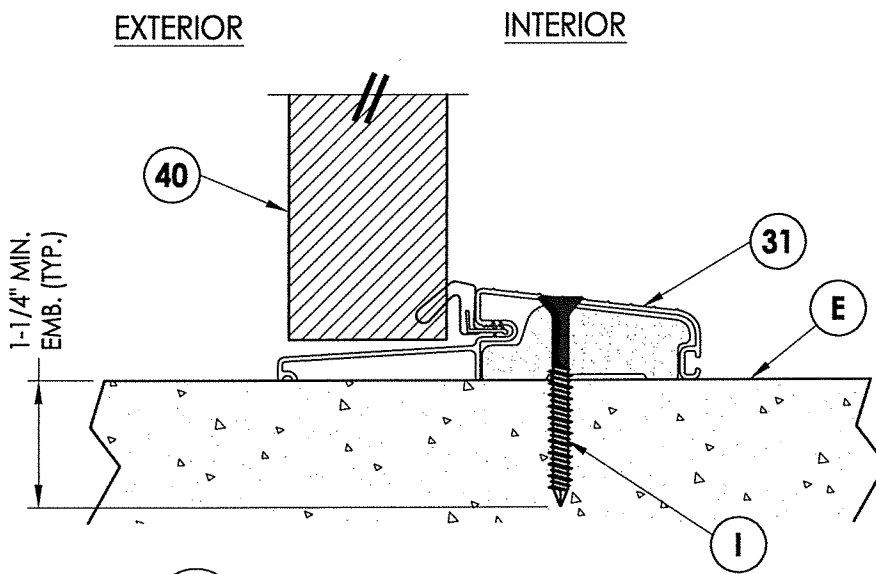
1 **VERTICAL CROSS SECTION**
5 Outswing shown - inswing also approved



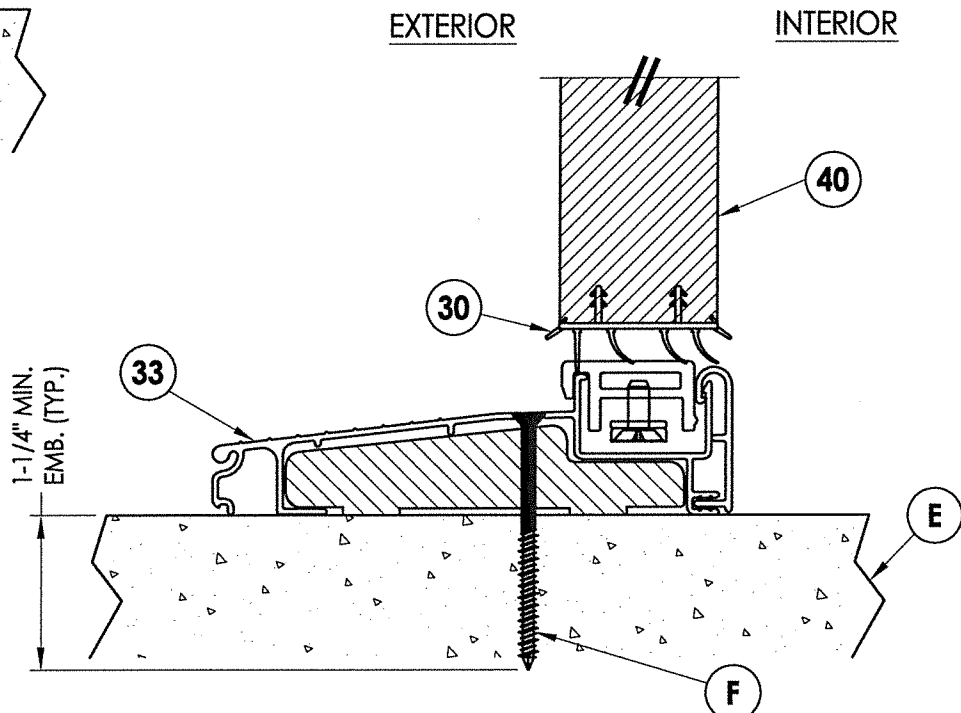
2 **VERTICAL CROSS SECTION**
5 Shown w/1X sub-buck



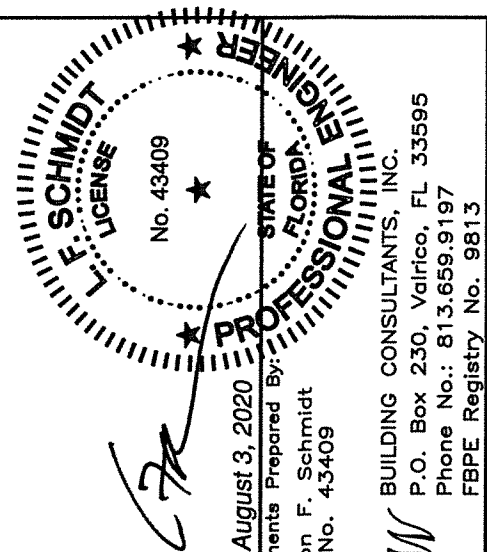
5 **VERTICAL CROSS SECTION**
5 Outswing configuration
(Where water infiltration requirements are specified)



3 **VERTICAL CROSS SECTION**
5 Outswing configuration



4 **VERTICAL CROSS SECTION**
5 Inswing configuration

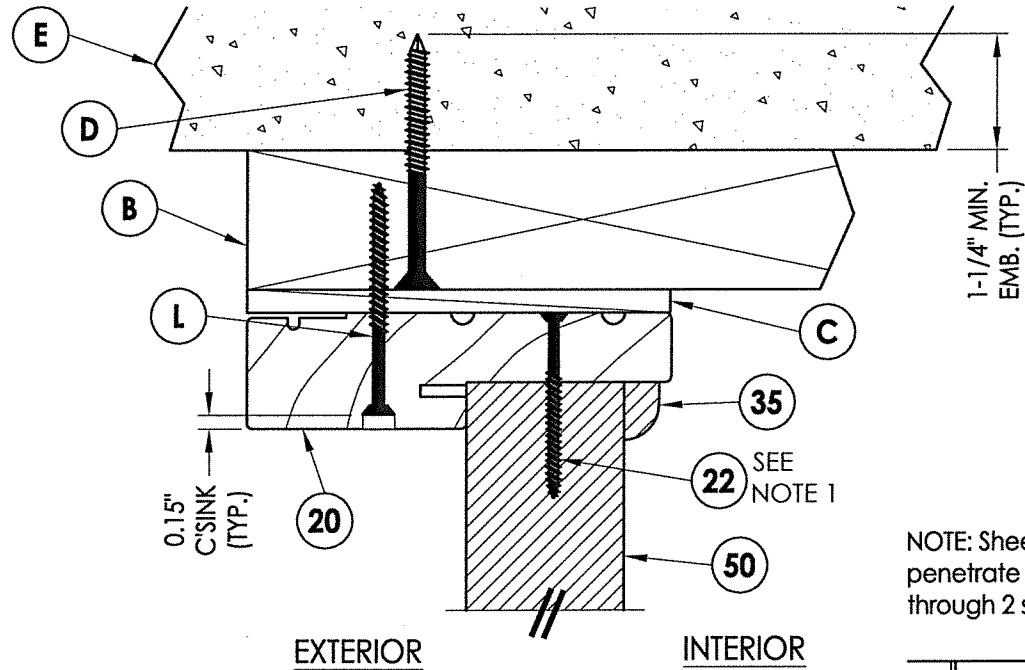


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PRODUCT: DOERS FIBERGLASS DOOR
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

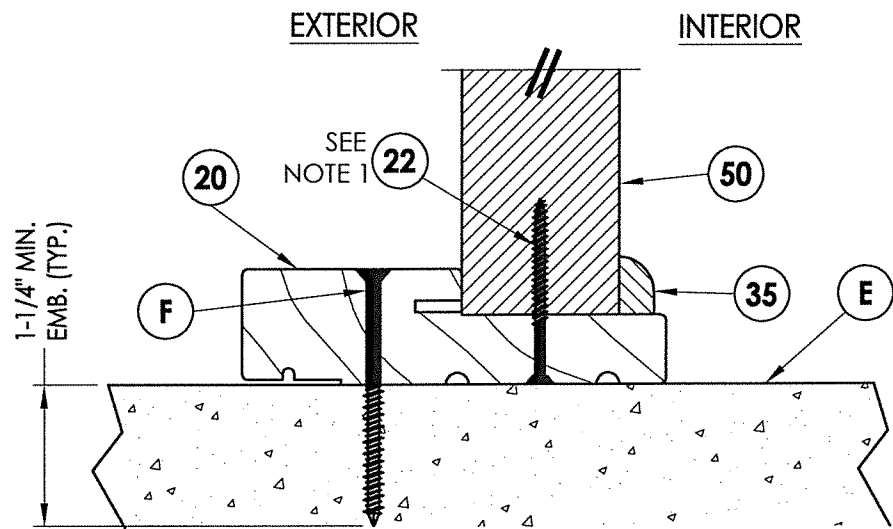
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1	9/26/17	UPDATE TO 6TH ED. (2017) FBC

DATE: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.20
SHEET 5 OF 11

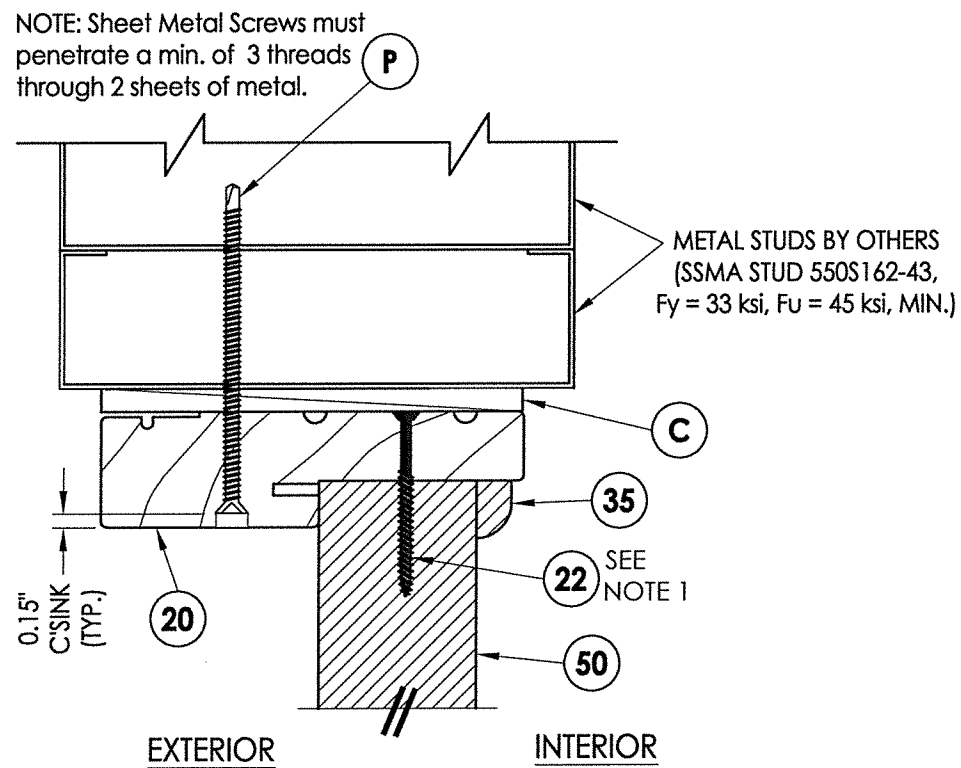


1
6 **VERTICAL CROSS SECTION**
Outswing shown - inswing
also approved

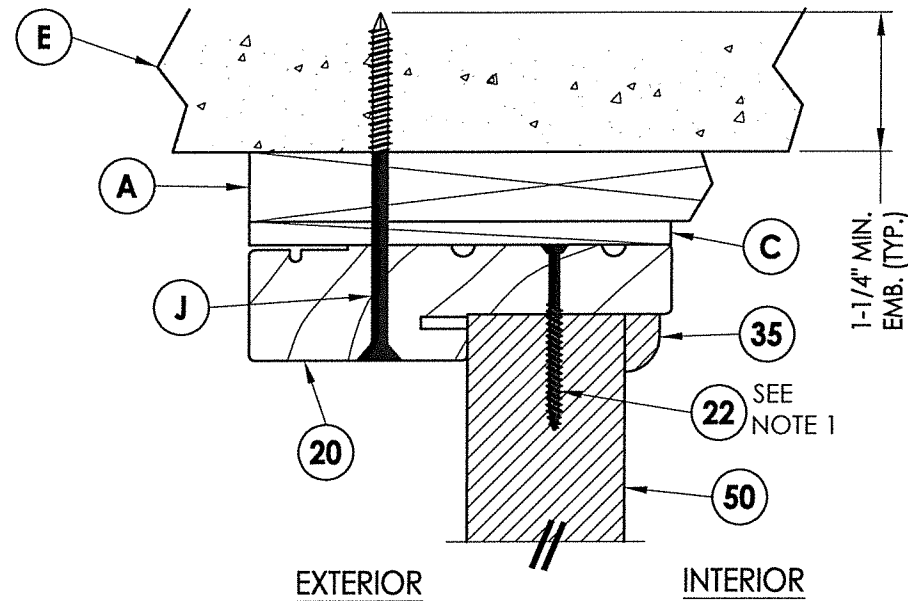
NOTE:
1. Sidelite panel secured to the sidelite
frame with (2) of item #22 in the
head and sill 3" from each end.



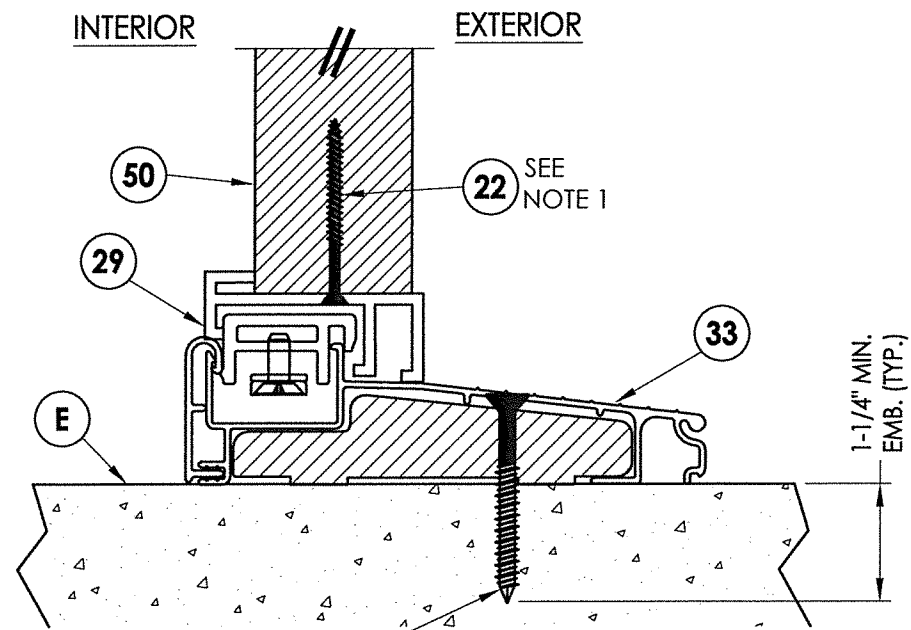
3
6 **VERTICAL CROSS SECTION**
Outswing configuration



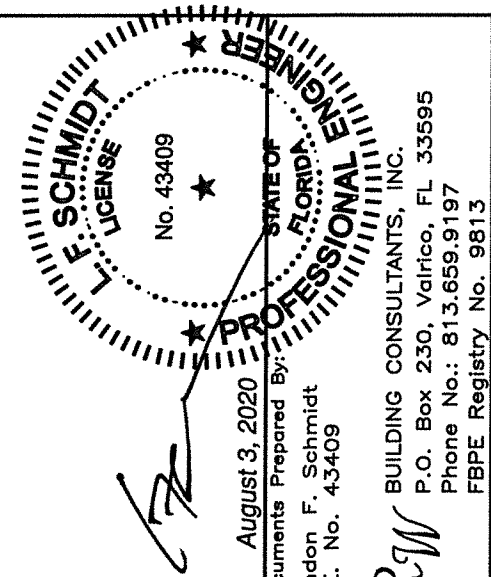
5
6 **VERTICAL CROSS SECTION**
Shown w/ Steel Stud Framing Option



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



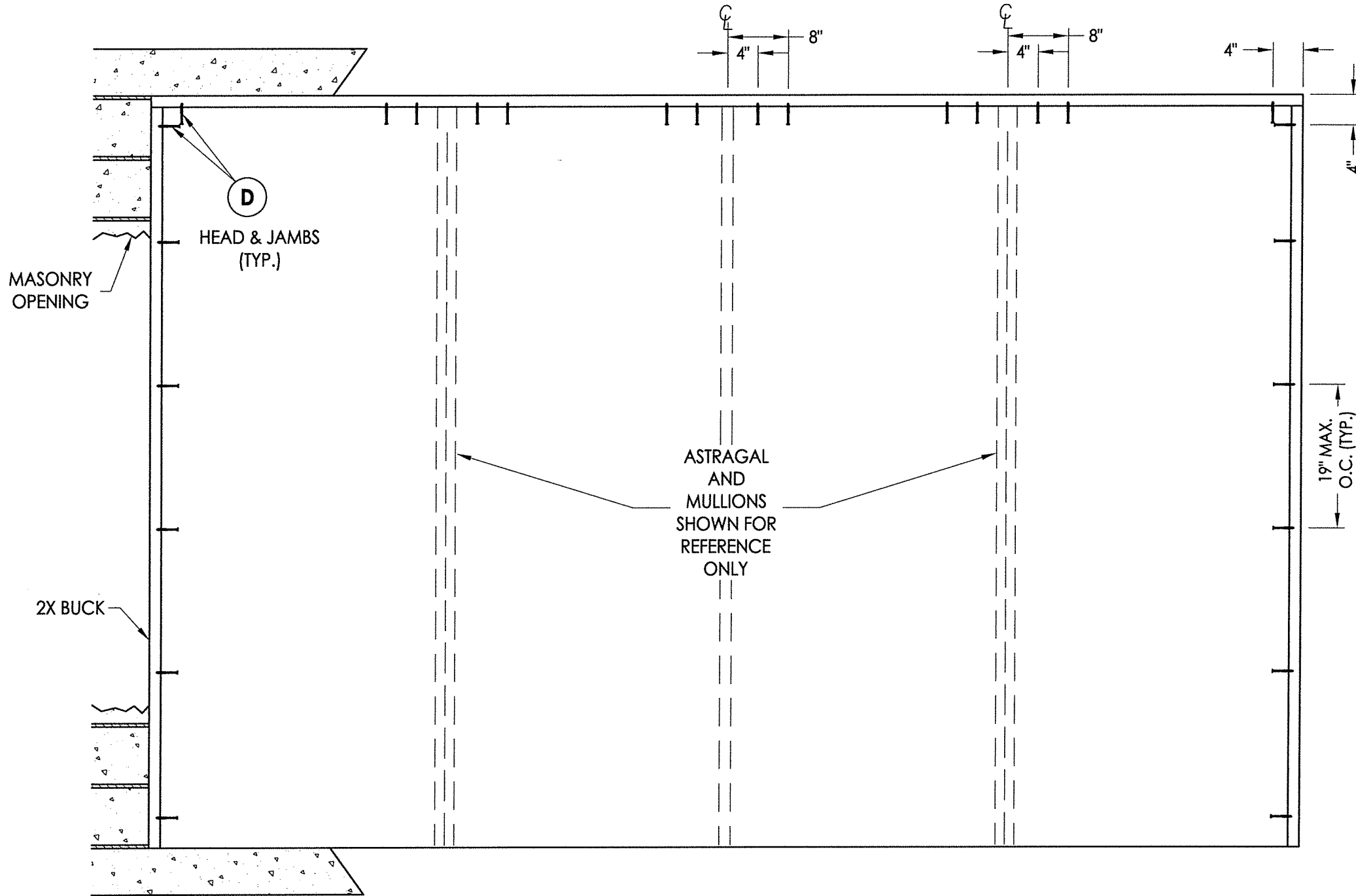
4
6 **VERTICAL CROSS SECTION**
Inswing configuration



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FBPE Registry No. 9813

PRODUCT:		DOERS		FIBERGLASS DOOR	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS		REVISIONS	
NO.		DATE		BY	
3		7/30/20		LFS	
2		5/15/19		LFS	
1		9/26/17		JK	
DATE:		09/28/15		SCALE:	
DWG. BY:		JK		CHK. BY:	
DRAWING NO.:		FL-19007.20		SHEET	
6		OF		11	

R:\Clients\Doers PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.11-20.dwg, 7.10



BUCK ANCHORING

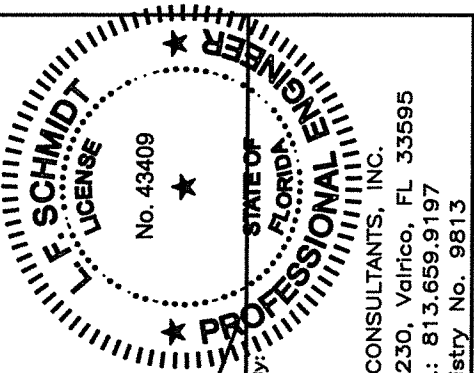
CONCRETE ANCHOR NOTES:

- 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"
ELCO ULTRACON®	1/4"	1-1/4"	1"	4"

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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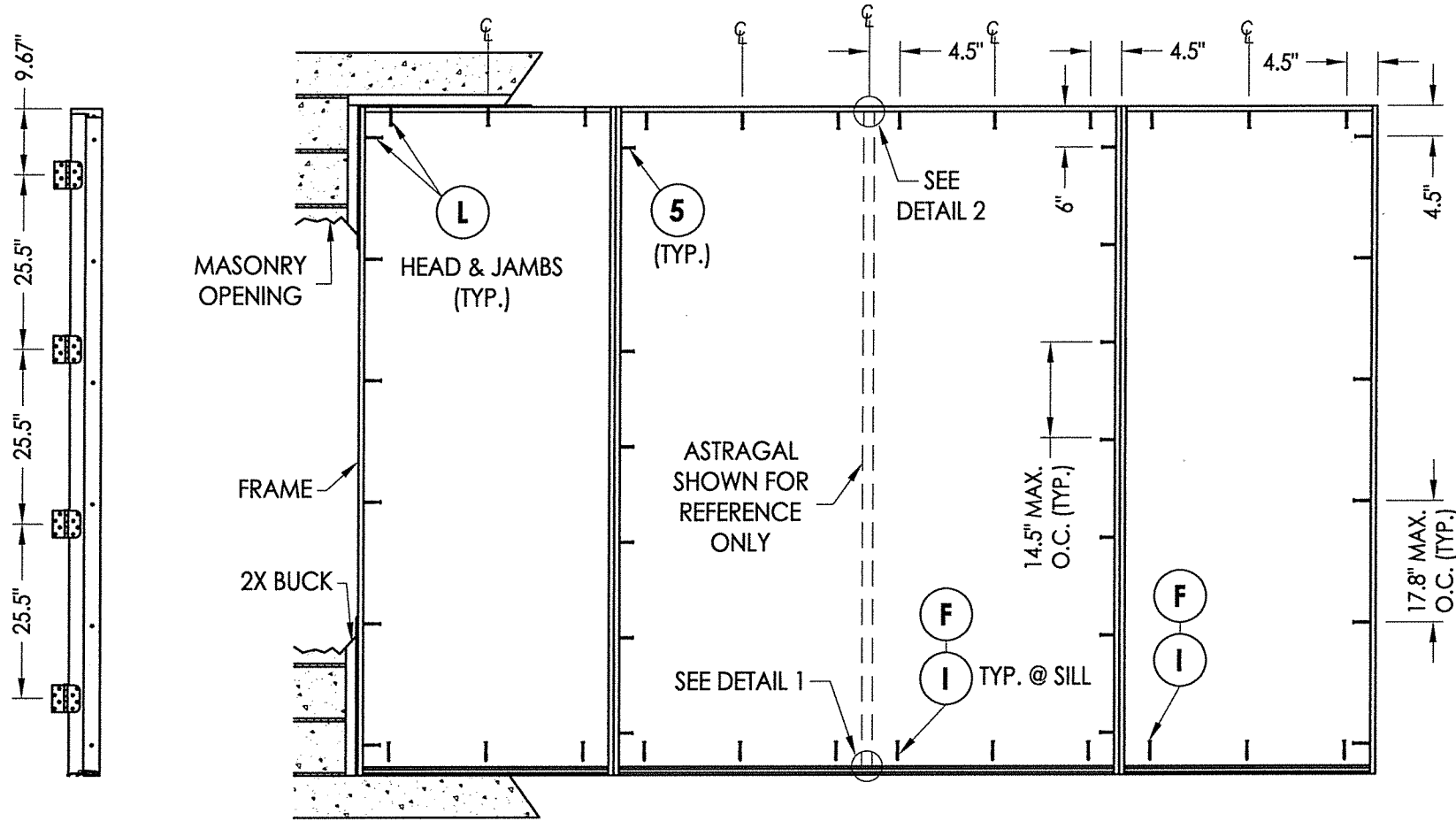
PRODUCT: DOERS FIBERGLASS DOOR

PART OR ASSEMBLY: BUCK ANCHORING

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-19007.20
SHEET 7 OF 11

R:\Clients\Doors PERMANENTVA - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.11-20.dwg, 8.10



HINGE JAMB

FRAME ANCHORING
Masonry 2X buck construction

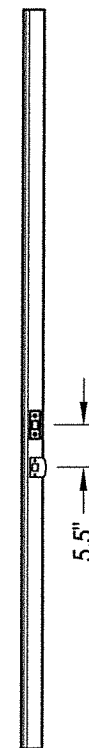
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2. Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimension are not exceeded.
3. Concrete anchor table:

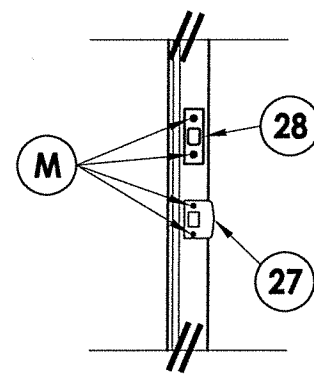
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
ELCO ULTRA CON®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

WOOD SCREW INSTALLATION NOTES:

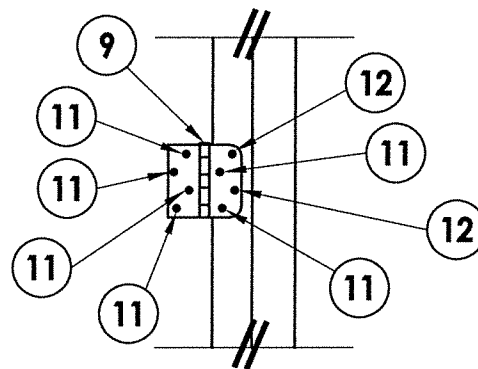
1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



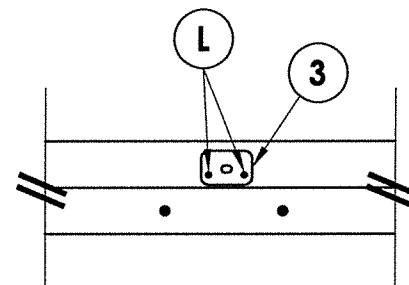
ASTRAGAL STRIKE JAMB



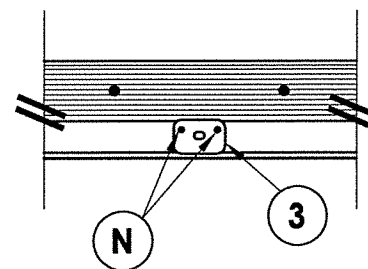
LATCH & DEADBOLT DETAIL



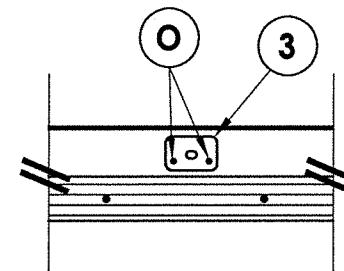
HINGE DETAIL



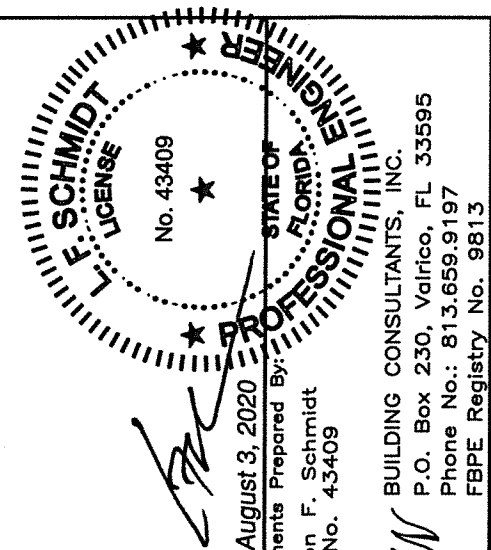
DETAIL 2



DETAIL 1
Inswing configuration



DETAIL 1
Outswing configuration



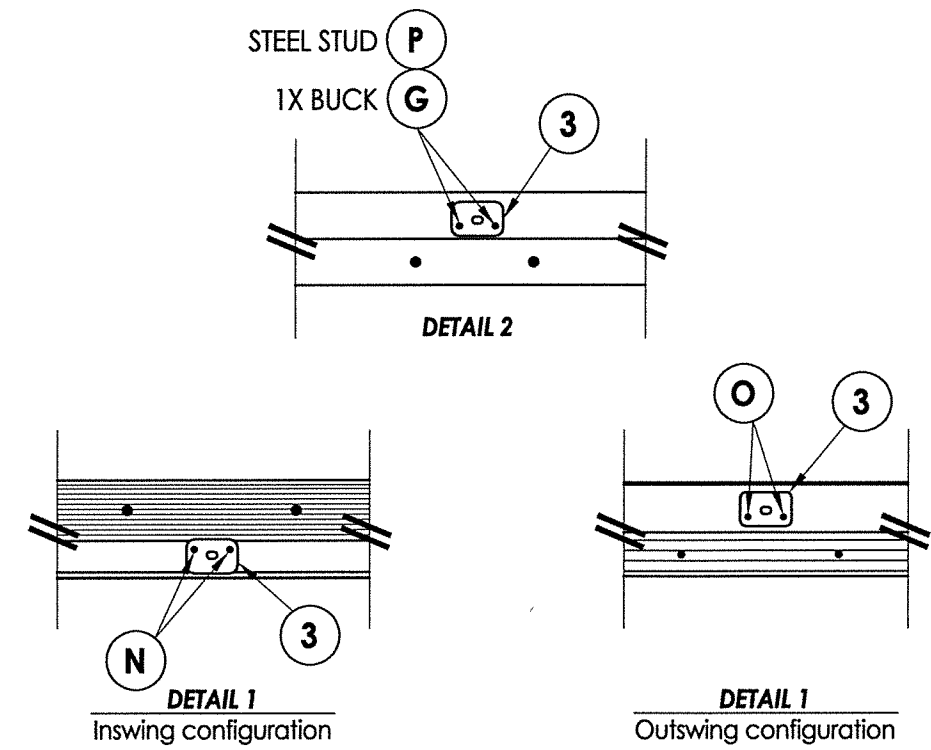
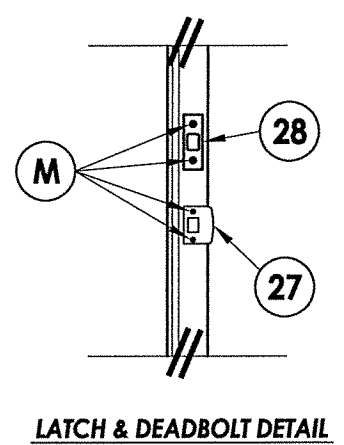
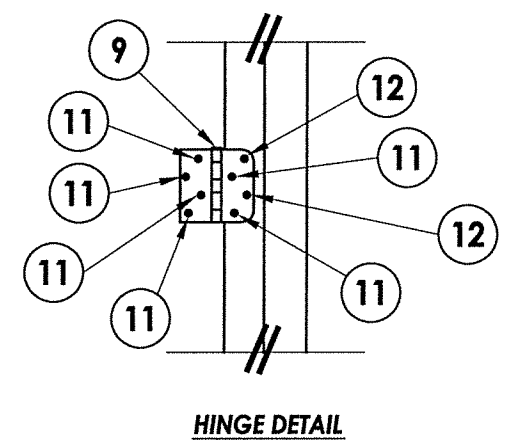
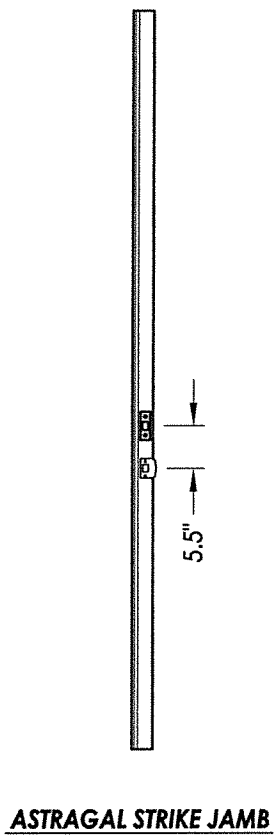
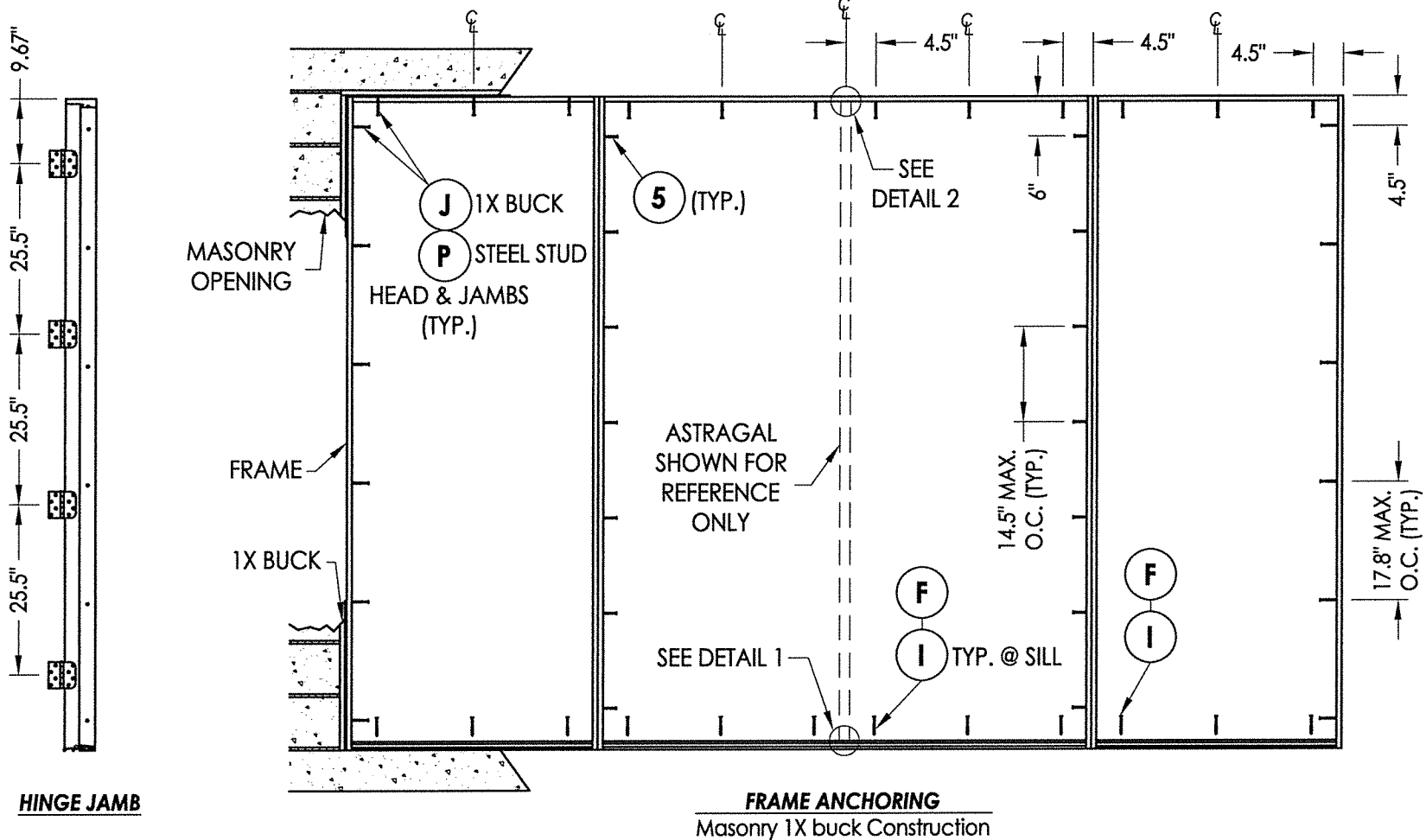
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P.O. Box 230, Valrico, FL 33595
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PRODUCT: DOERS FIBERGLASS DOOR
PART OR ASSEMBLY: FRAME ANCHORING 2X BUCK MASONRY CONSTRUCTION

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-19007.20
SHEET 8 OF 11



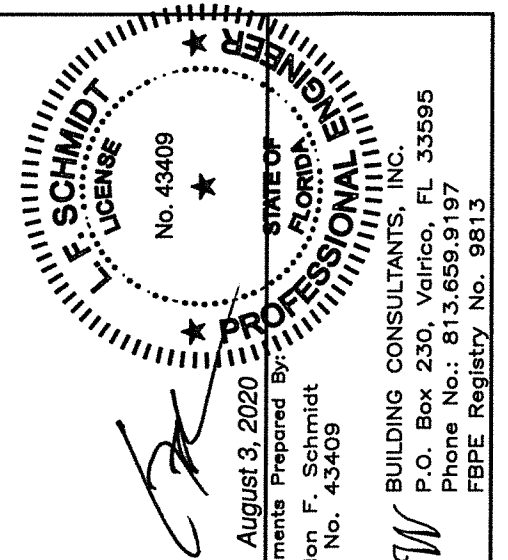
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2. Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimension are not exceeded.
3. Concrete anchor table:

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:

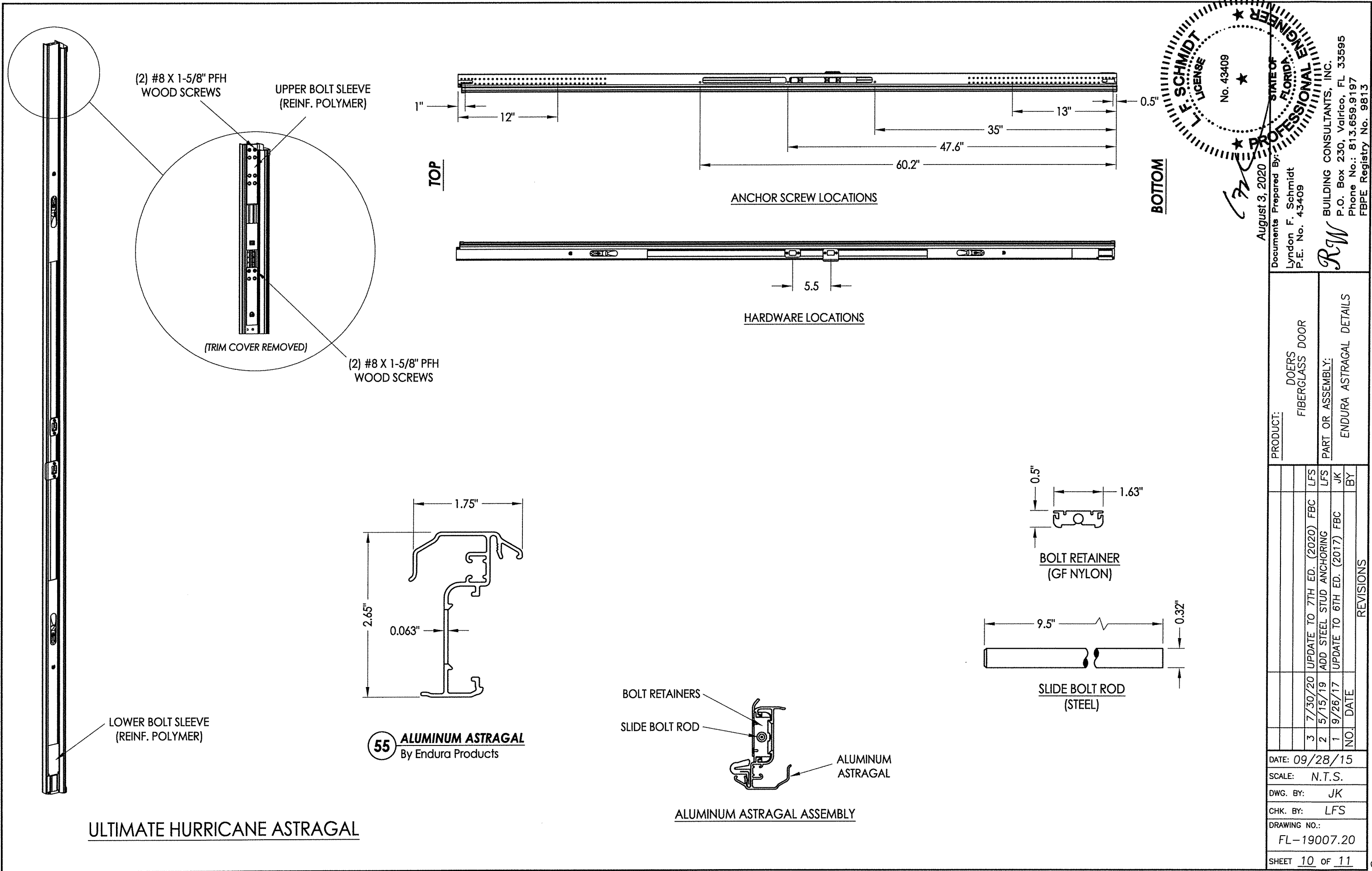
1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



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P.E. No. 43409

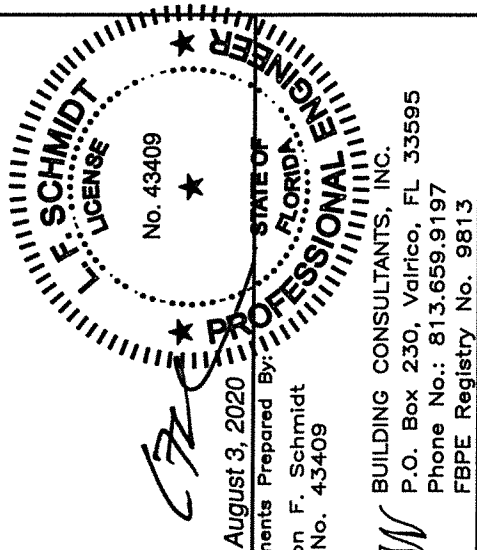
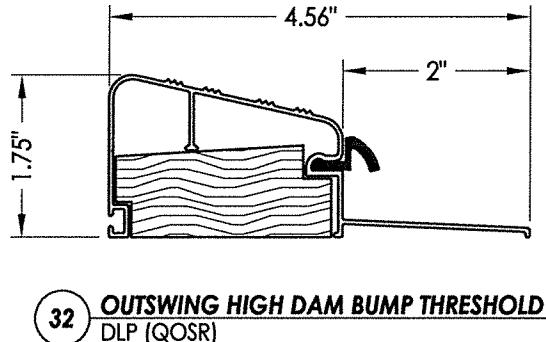
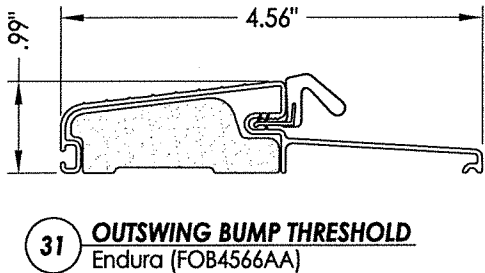
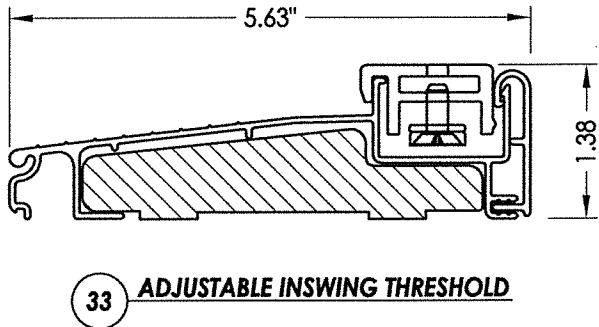
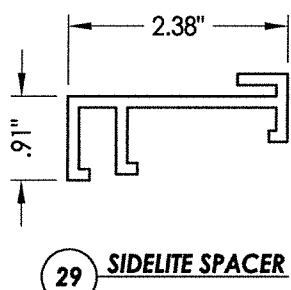
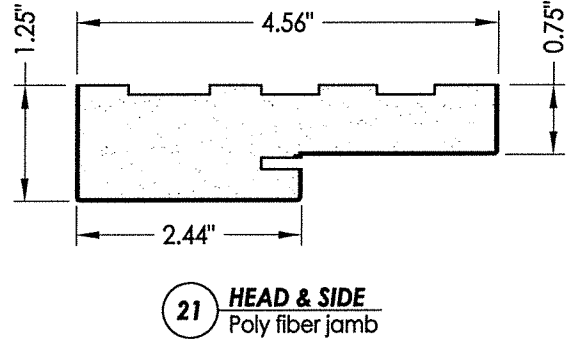
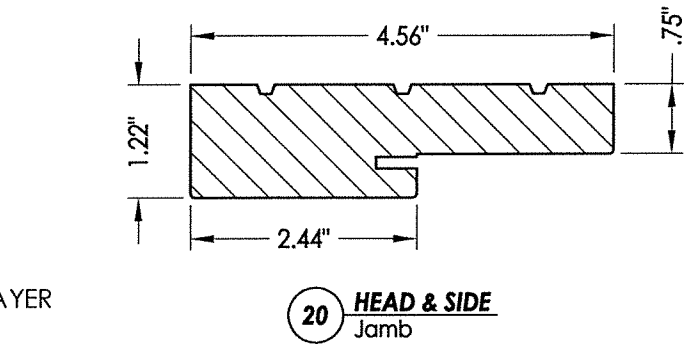
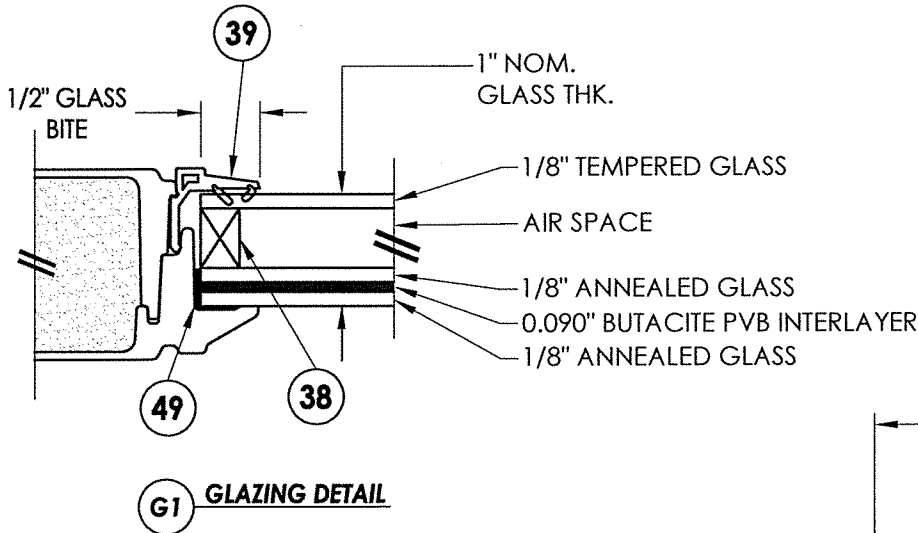
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		DOERS FIBERGLASS DOOR	
PART OR ASSEMBLY:		FRAME ANCHORING 1X BUCK MASONRY CONSTRUCTION	
			LFS
			LFS
			JK
			BY
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R:\Clients\Doors PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\A - Drawings\FL 19007 (2020)\FL-19007.11-20.dwg, 11.10

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	LATCH & HINGE STILE SUPPORT	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	STILE STIFFENER 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 WEATHER STRIP 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	55	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
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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PRODUCT: DOERS DOOR

FIBERGLASS

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: 09/28/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19007.20
SHEET 11 OF 11