

TRINITY GLASS
INTERNATIONAL

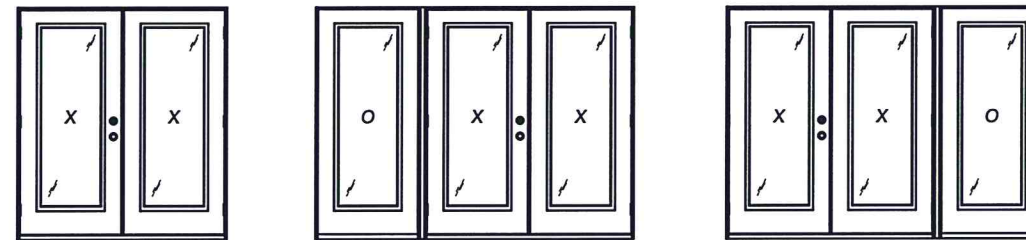
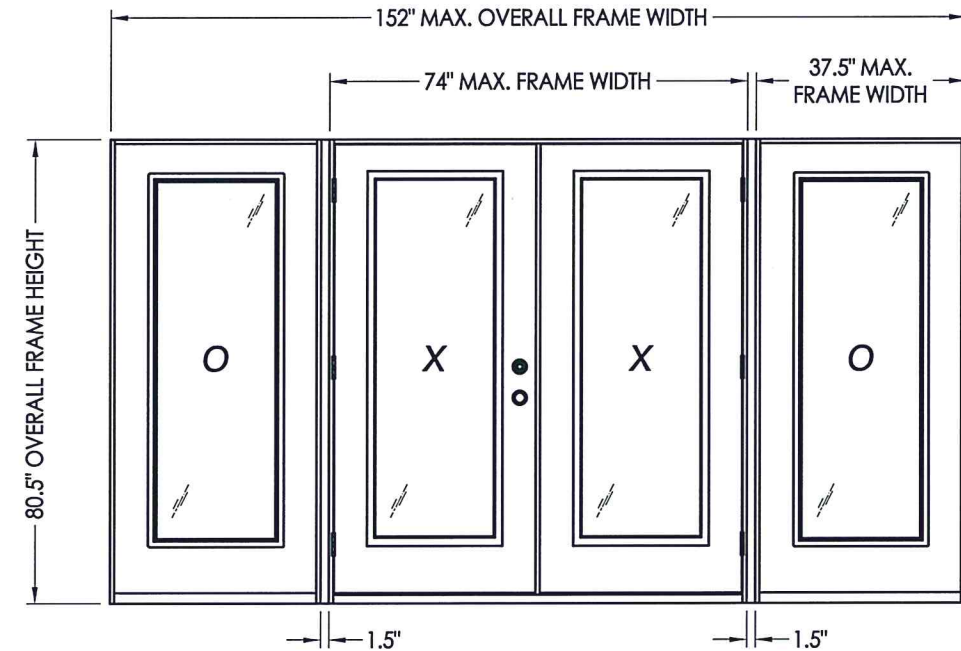
33615 1st Way S, Federal Way, WA 98003

GLAZED FIBERGLASS PATIO DOOR DOUBLE w/ or w/out SIDELITE(S) OUTSWING "IMPACT"

GENERAL NOTES

1. This product evaluation drawing has been developed in compliance with the 7th Edition (2020) Florida Building Code (FBC) including 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 the "HVHZ", this product complies with Section 1626 of the FBC and does not require an impact resistant covering.
4. When used in areas outside of the "HVHZ" 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 E 1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
5. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
6. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
7. This product meets the water infiltration requirements for the "HVHZ".

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SHEET #	DESCRIPTION	SHEET #	
1	Typical Elevations, Design Pressures & General Notes	7	Horizontal & Vertical Cross Sections (1X Buck)
2	Door & Sidelite Panel Details	8	Horizontal & Vertical Cross Sections (Direct to Masonry)
3	Lite Frame Glazing Details	9	Vertical Cross Sections (Thresholds)
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5	Horizontal & Vertical Cross Sections	11	Frame Anchoring & Hardware Details
6	Horizontal & Vertical Cross Sections (2X Buck)	12	Bill of Materials & Components

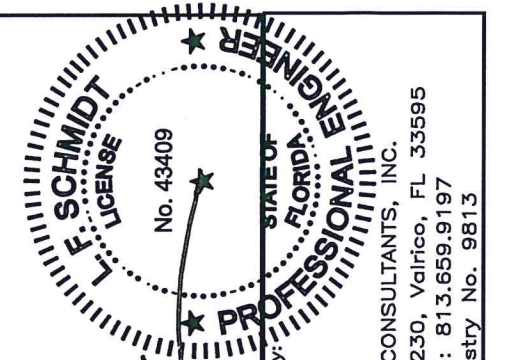


XX

OXX, XXO

OXX, XXO

CONFIGURATION	MAX. FRAME DIMENSION	JAMB REINFORCEMENT	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
			POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XX	74" x 80.5"	N/A	+50.0	-50.0	+50.0	-50.0
OXX, XXO	113" x 80.5"	2X	+50.0	-50.0	+50.0	-50.0
OXXO	152" x 80.5"	2X	+50.0	-50.0	+50.0	-50.0



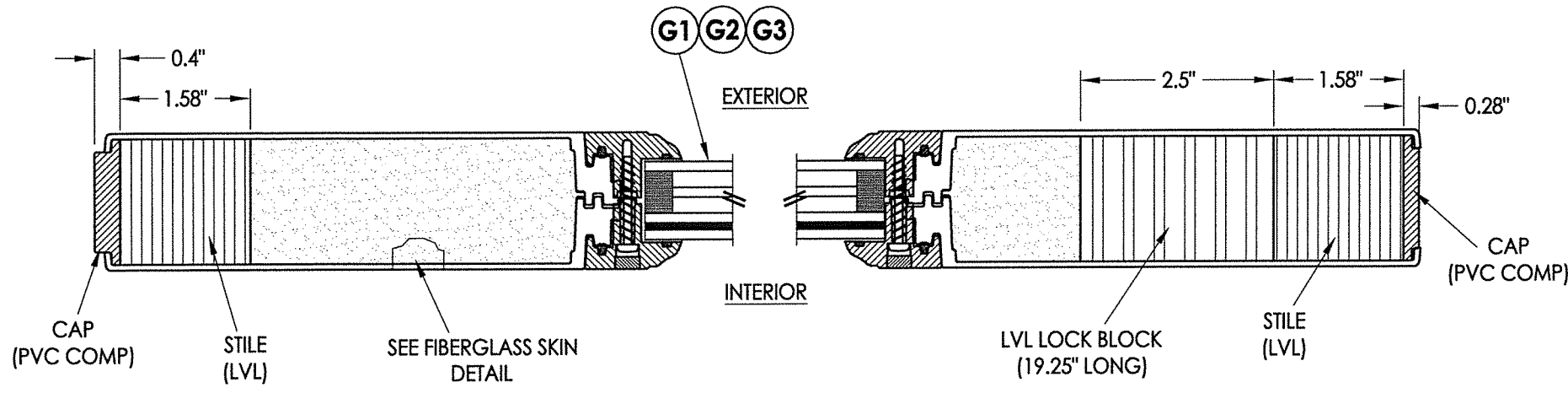
February 8, 2021
 Documents Prepared By:
 Lyndon F. Schmidt
 P.E. No. 43409

PRODUCT: TRINITY FIBERGLASS PATIO DOOR "Impact"
 PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

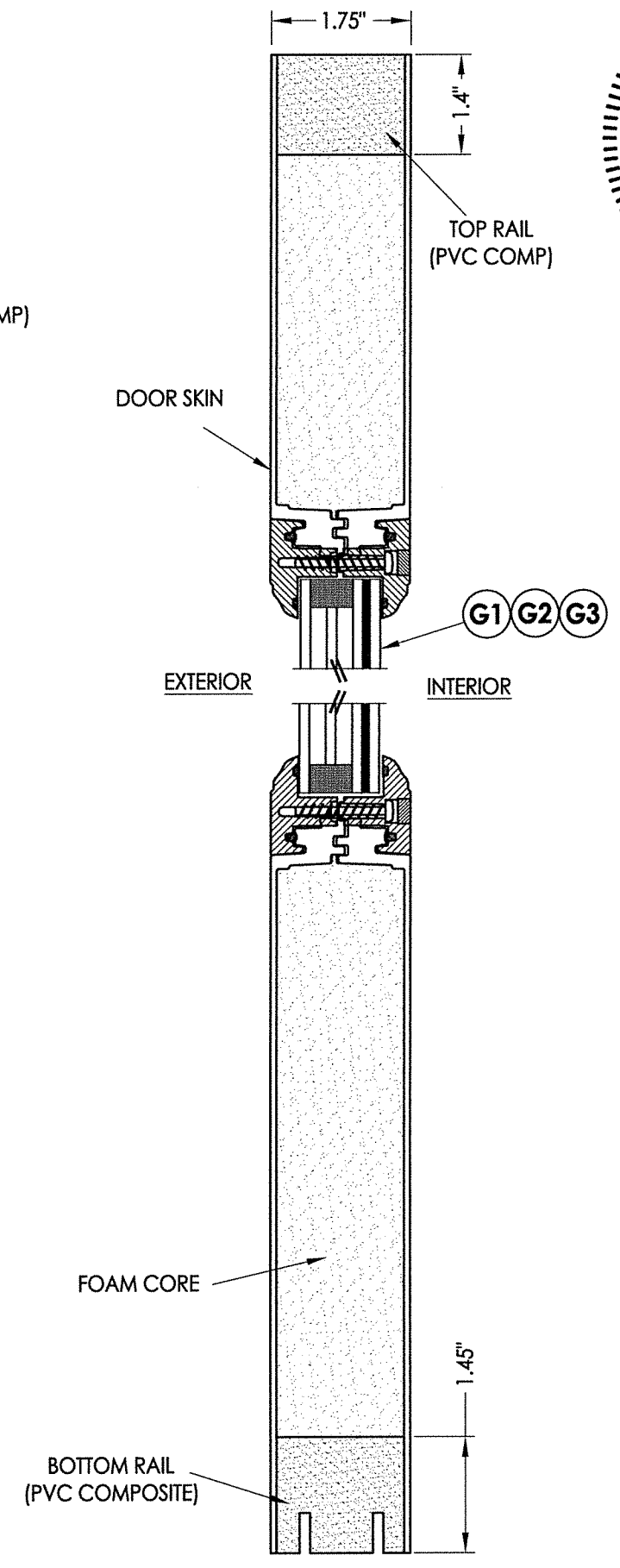
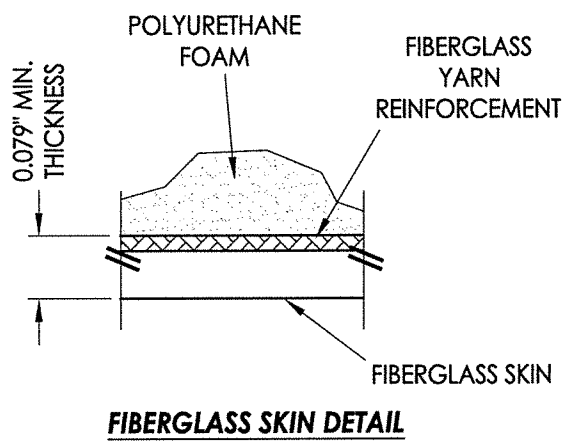
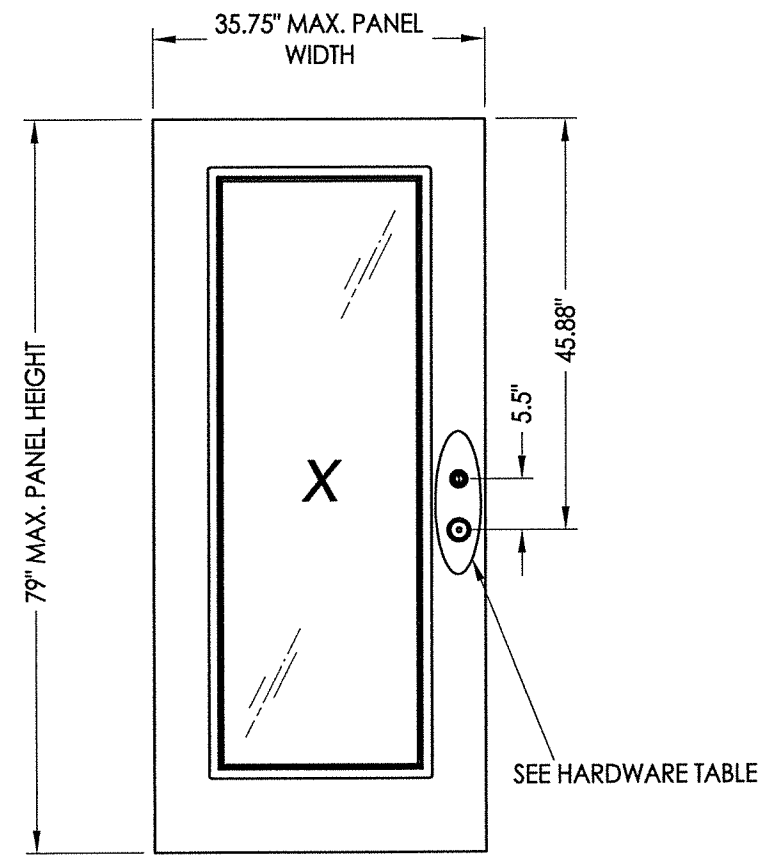
NO.	DATE	BY	REVISIONS

DATE: 1/28/21
 SCALE: N.T.S.
 DWG. BY: RW
 CHK. BY: LFS
 DRAWING NO.: FL-37184.2
 SHEET 1 of 12

Z:\Clients\Trinity Glass Permanent\TA - Florida Product Approvals\FL - 37184\C - Drawings\FL-37184(2020)\FL-37184.2.dwg



1 HORIZONTAL CROSS SECTION
2



2 VERTICAL CROSS SECTION
2

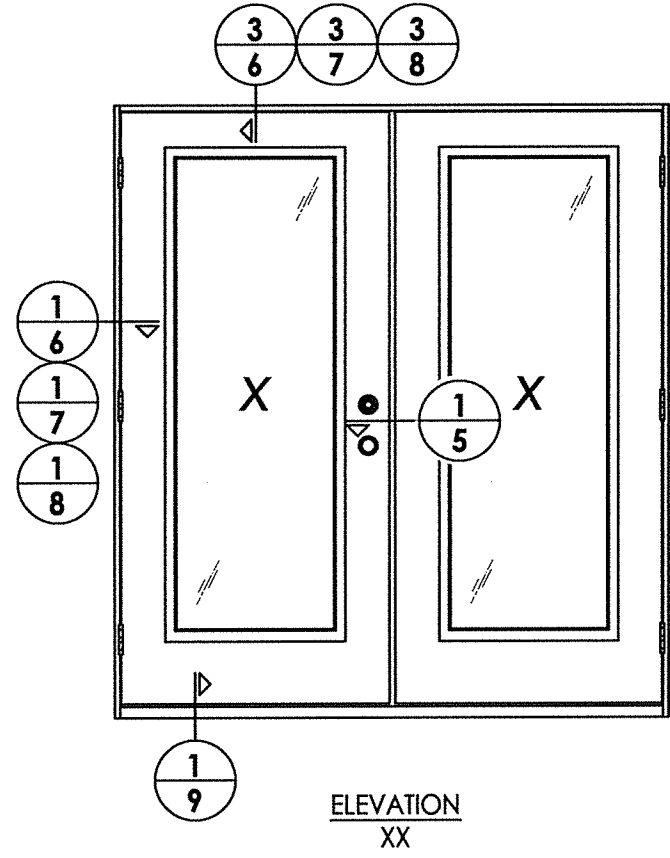
- 40** FIBERGLASS DOOR PANEL
- 50** FIBERGLASS SIDELITE PANEL

HARDWARE TABLE	
MANUFACTURER	MODEL
SCHLAGE	KNOB: F51 DEADBOLT: B60N

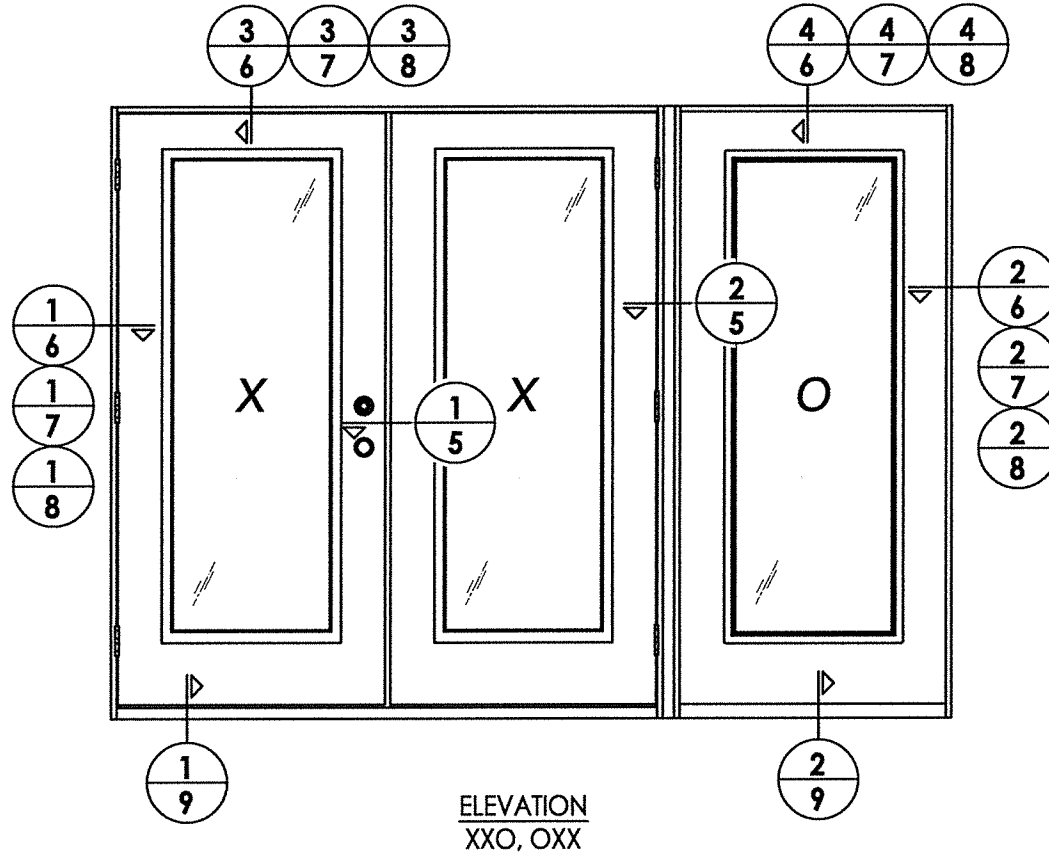
FIBERGLASS SKIN: 0.079" MIN. THK. (F_y = 10,000 PSI MIN.)
FOAM CORE: POLYURETHANE - 1.9 PCF MIN.)

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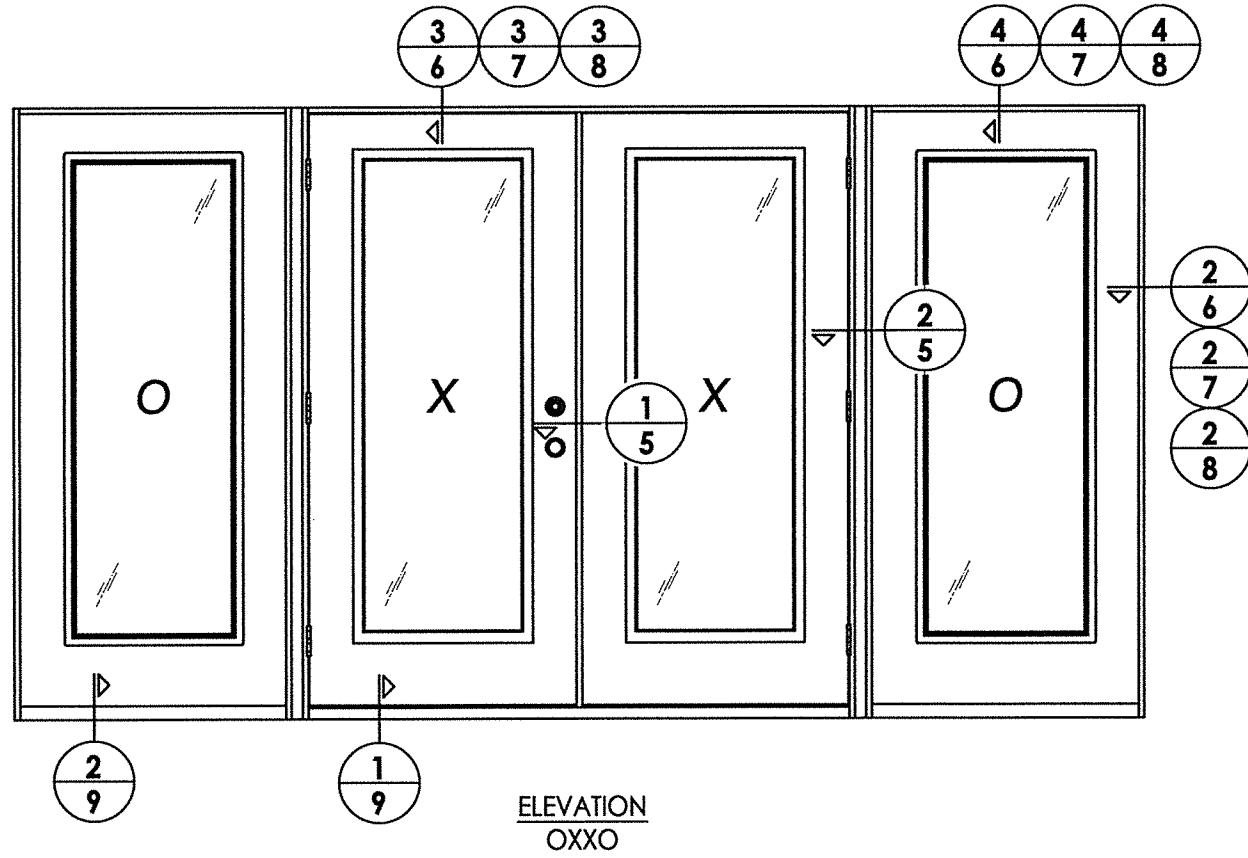
PRODUCT:	TRINITY FIBERGLASS PATIO DOOR "Impact"	
PART OR ASSEMBLY:	DOOR & SIDELITE PANEL DETAILS	
NO.	DATE	BY
REVISIONS		
DATE: 1/28/21		
SCALE: N.T.S.		
DWG. BY: RW		
CHK. BY: LFS		
DRAWING NO.: FL-37184.2		
SHEET 2 OF 12		



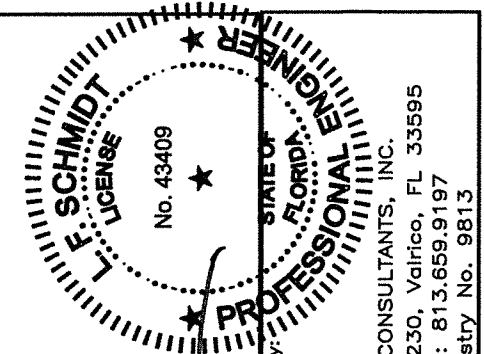
ELEVATION
XX



ELEVATION
XXO, OXX



ELEVATION
OXXO



LFS

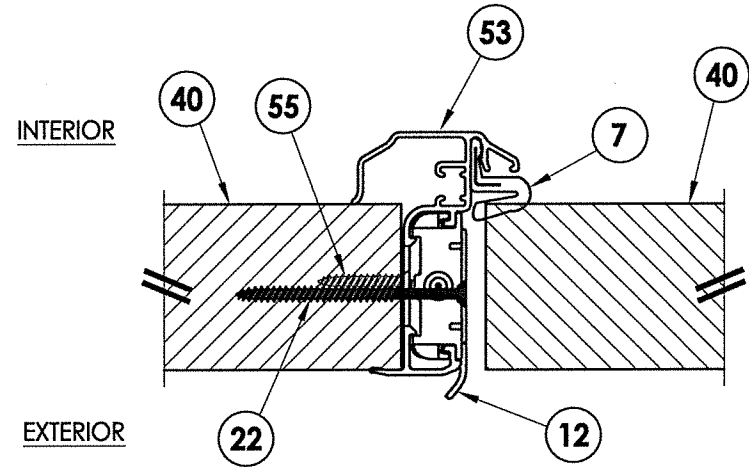
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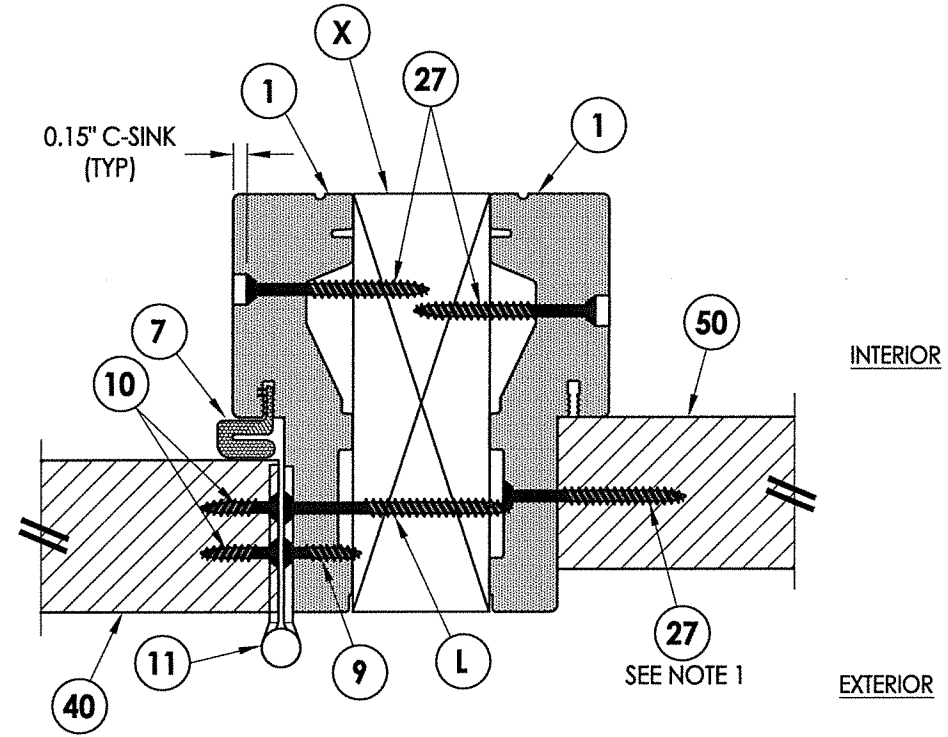
RW
BUILDING CONSULTANTS, INC.
P.O. Box 230, Vairico, FL 33595
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FBPE Registry No. 9813

PRODUCT:	TRINITY FIBERGLASS PATIO DOOR "Impact"
PART OR ASSEMBLY:	ELEVATIONS
DATE:	1/28/21
SCALE:	N.T.S.
DWG. BY:	RW
CHK. BY:	LFS
DRAWING NO.:	FL-37184.2
SHEET	4 OF 12

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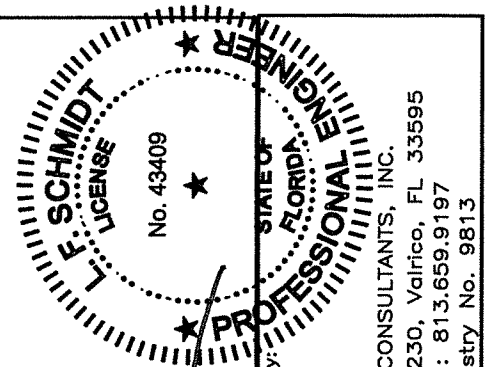
1
5 HORIZONTAL CROSS SECTION



2
5 HORIZONTAL CROSS SECTION

Notes:

- Sidelite assembly screws located 6" from each end and 4 more screws equally spaced between (6 screws total per side jamb).



FW
February 8, 2021

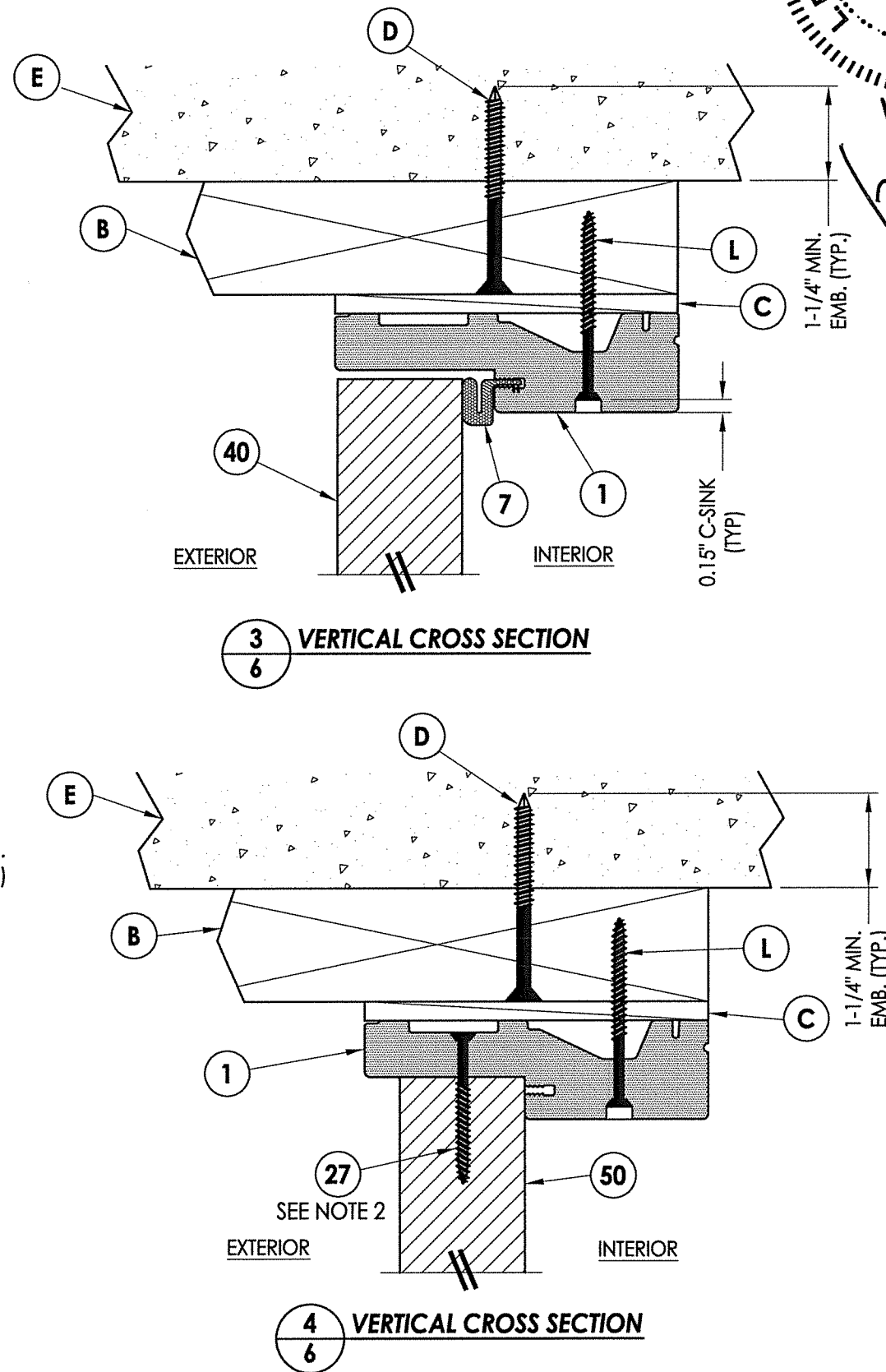
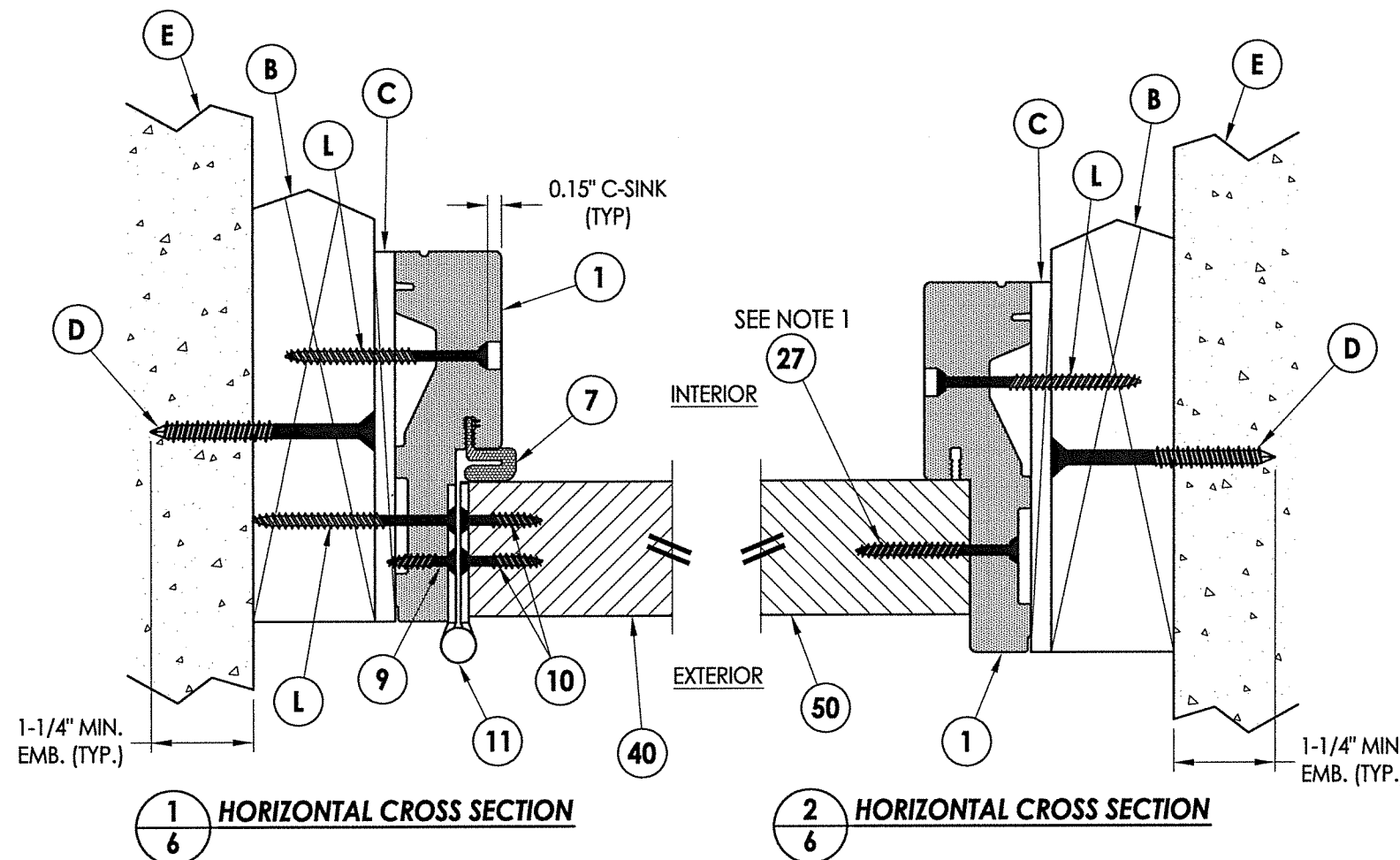
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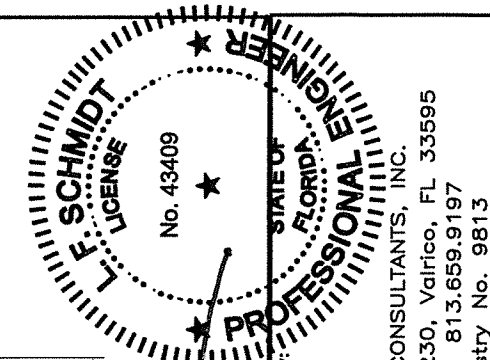
PRODUCT: TRINITY FIBERGLASS PATIO DOOR "Impact"
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	BY

DATE: 1/28/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: FL-37184.2
SHEET 5 OF 12



- Notes:
1. Sidelite assembly screws located 6" from each end and 4 more screws equally spaced between (6 screws total per side jamb).
 2. Sidelite assembly screws located 10" from each end (2 screws total along head & sill).

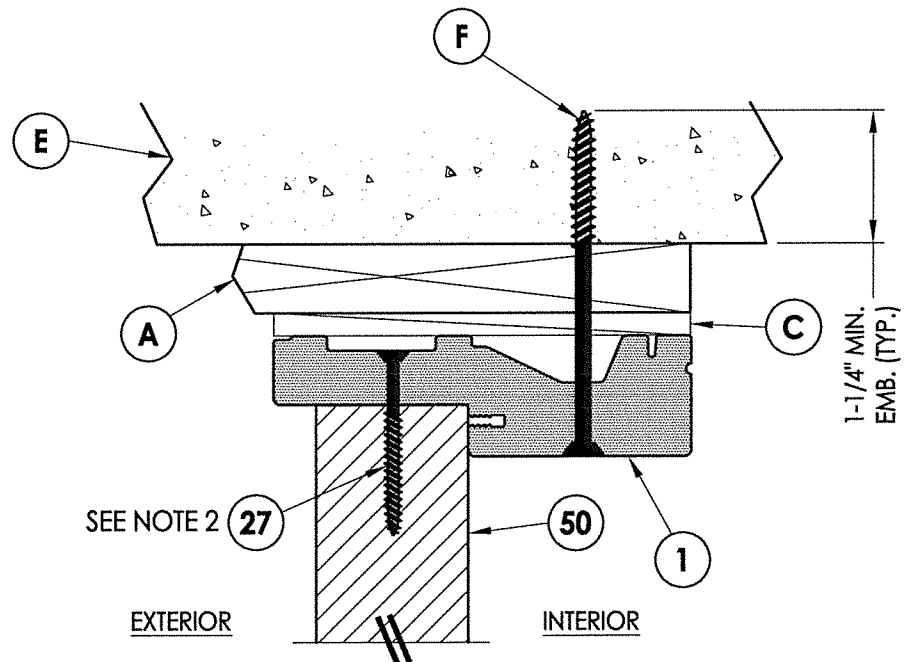
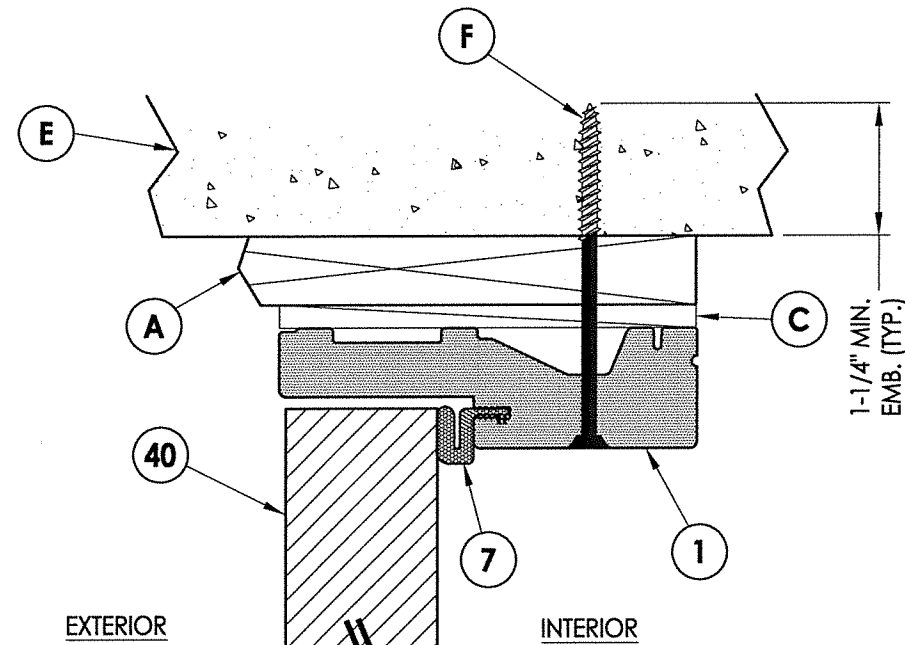
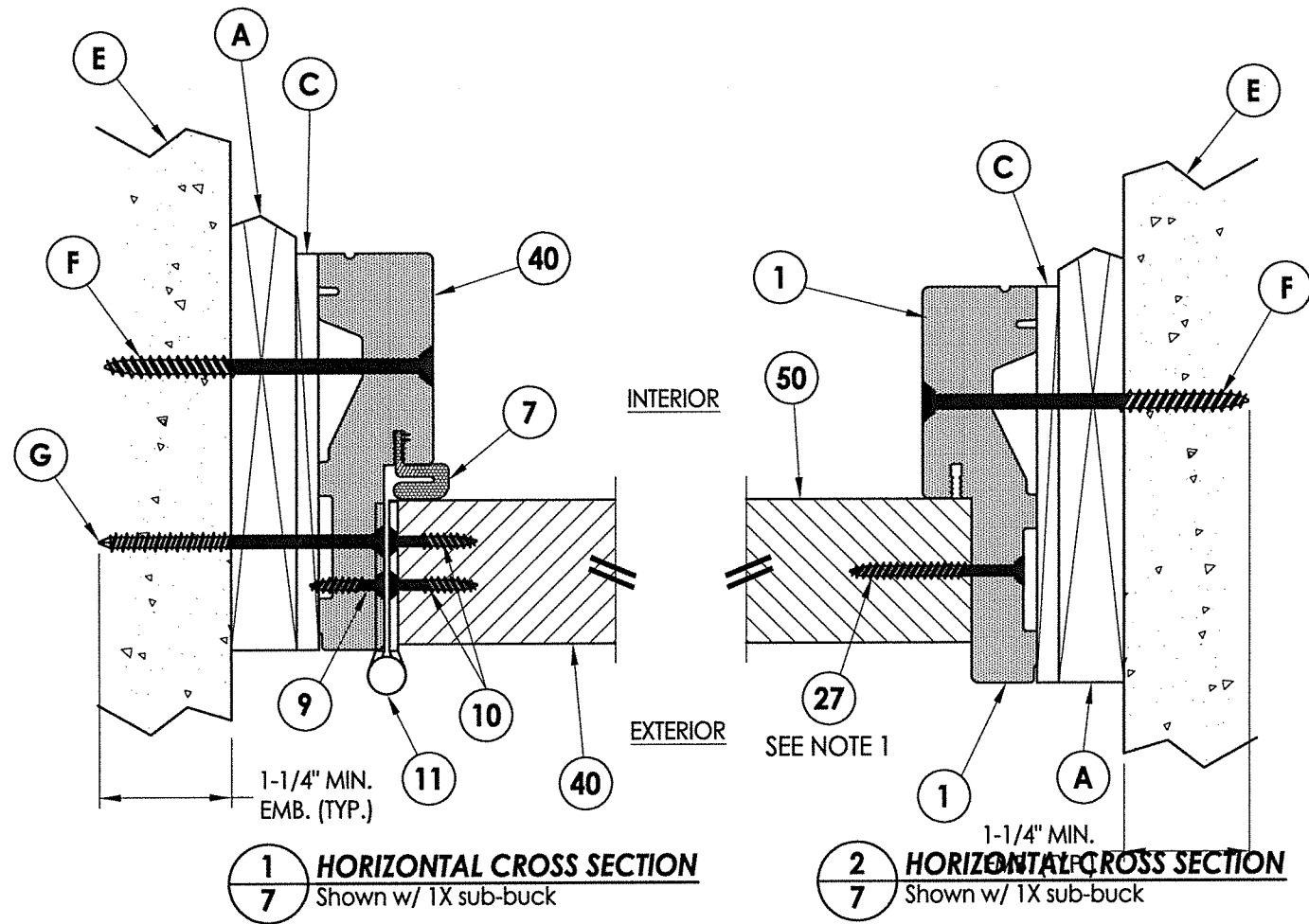


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PRODUCT: TRINITY FIBERGLASS PATIO DOOR "Impact"
 PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (2X BUCK)

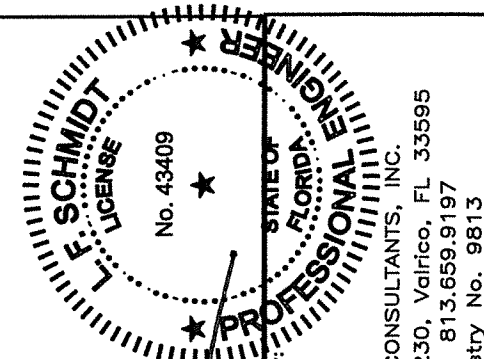
NO.	DATE	BY

DATE: 1/28/21
 SCALE: N.T.S.
 DWG. BY: RW
 CHK. BY: LFS
 DRAWING NO.: FL-37184.2
 SHEET 6 of 12



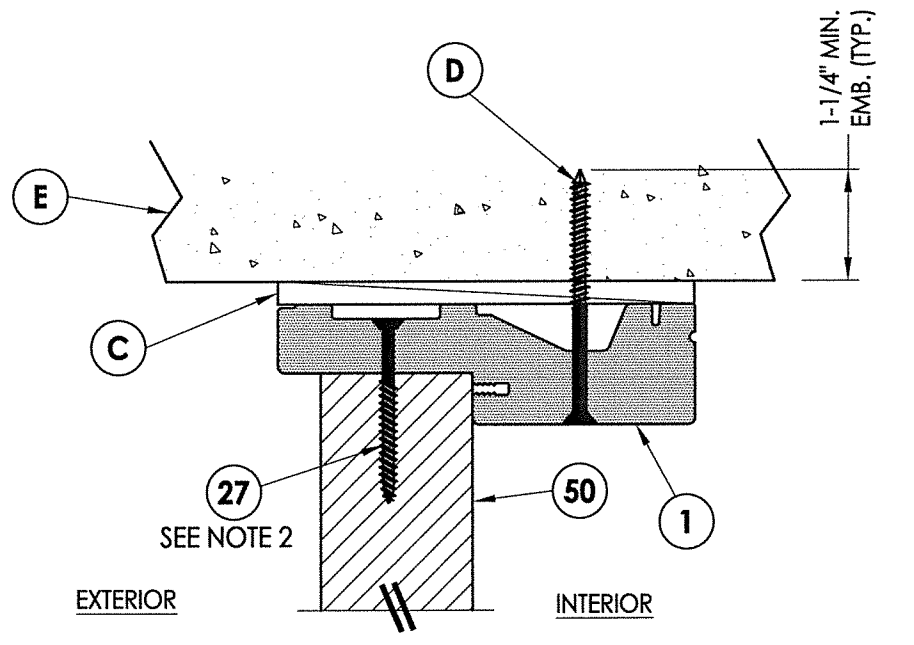
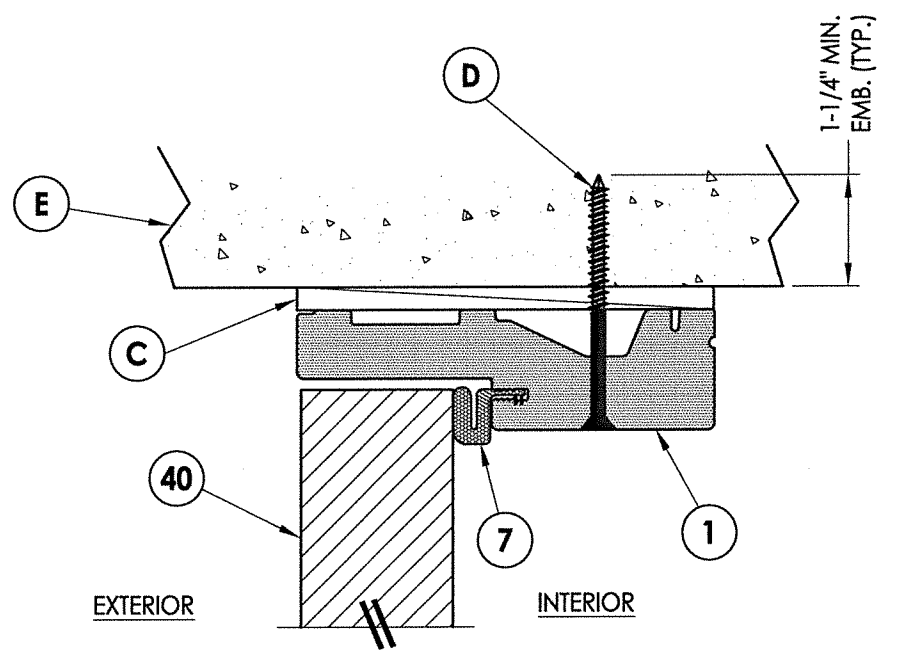
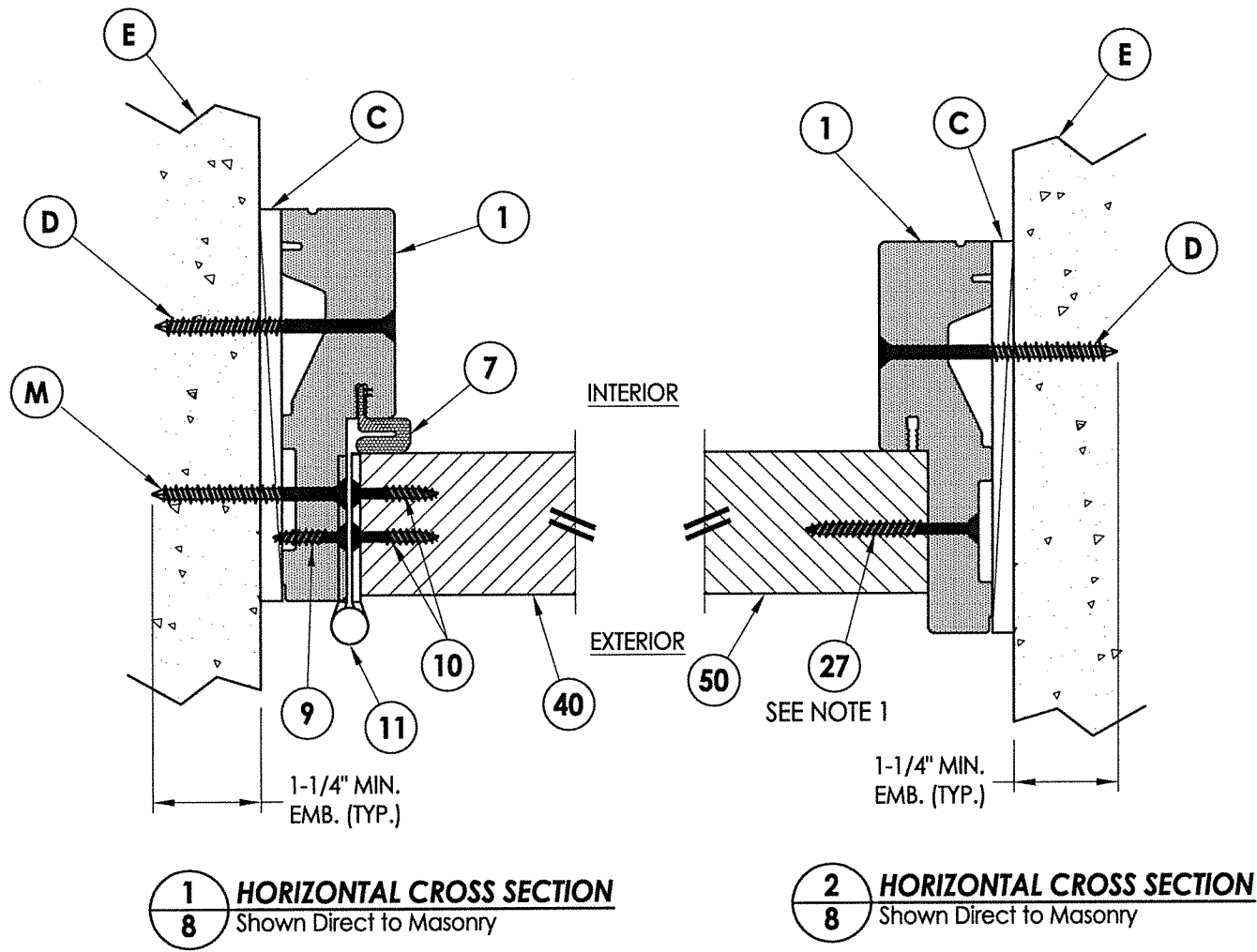
Notes:

1. Sidelite assembly screws located 6" from each end and 4 more screws equally spaced between (6 screws total per side jamb).
2. Sidelite assembly screws located 10" from each end (2 screws total along head & sill).



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PRODUCT:	TRINITY FIBERGLASS PATIO DOOR "Impact"	
PART OR ASSEMBLY:	HORIZONTAL & VERTICAL CROSS SECTIONS (1X BUCK)	
NO.	DATE	BY
REVISIONS		
DATE:	1/28/21	
SCALE:	N.T.S.	
DWG. BY:	RW	
CHK. BY:	LFS	
DRAWING NO.:	FL-37184.2	
SHEET	7	OF 12



- Notes:
1. Sidelite assembly screws located 6" from each end and 4 more screws equally spaced between (6 screws total per side jamb).
 2. Sidelite assembly screws located 10" from each end (2 screws total along head & sill).

F. SCHMIDT
 LICENSE No. 43409
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

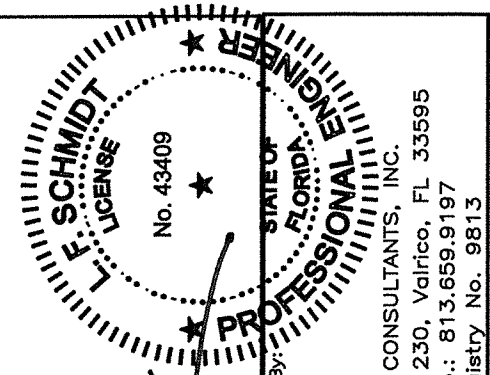
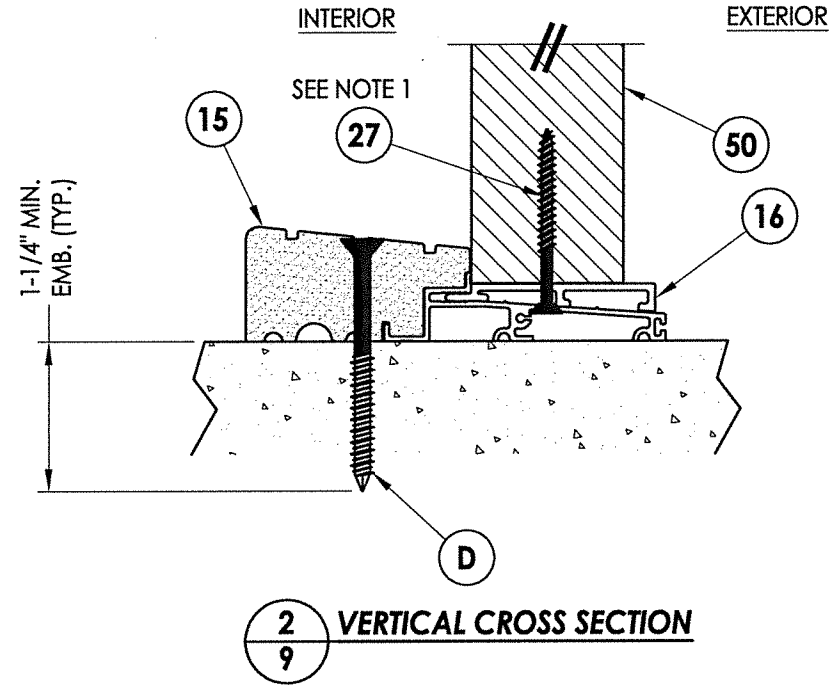
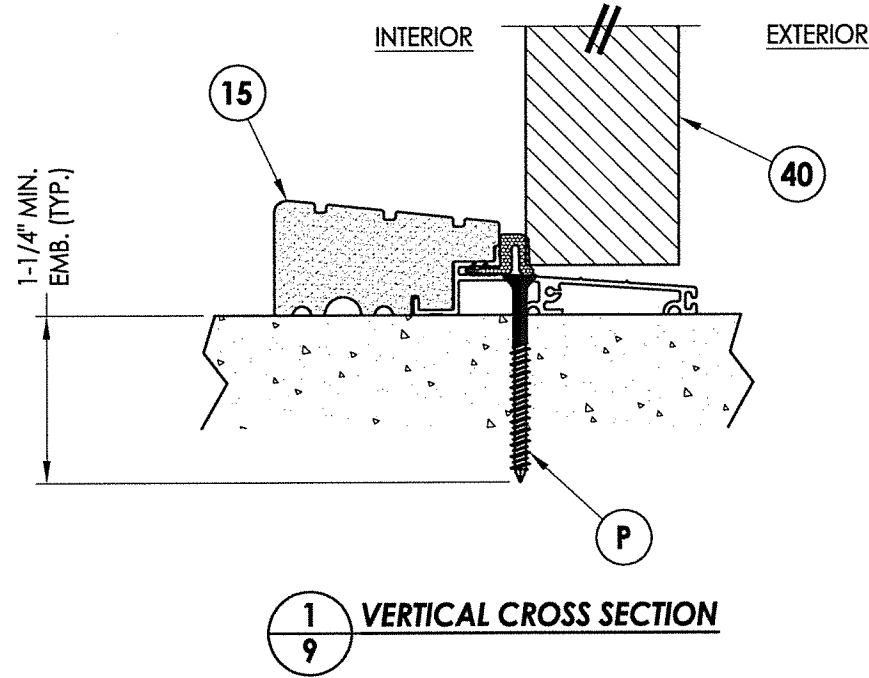
[Signature]
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 FBPE Registry No. 9813

PRODUCT:	TRINITY FIBERGLASS PATIO DOOR "Impact"	
PART OR ASSEMBLY:	HORIZONTAL & VERTICAL CROSS SECTIONS (DIRECT TO MASONRY)	
DATE:	1/28/21	BY
SCALE:	N.T.S.	
DWG. BY:	RW	
CHK. BY:	LFS	
DRAWING NO.:	FL-37184.2	
SHEET	8	OF 12
REVISIONS		
NO.	DATE	BY

Notes:
 1. Sidelite assembly screws located 10" from each end (2 screws total along head & sill).

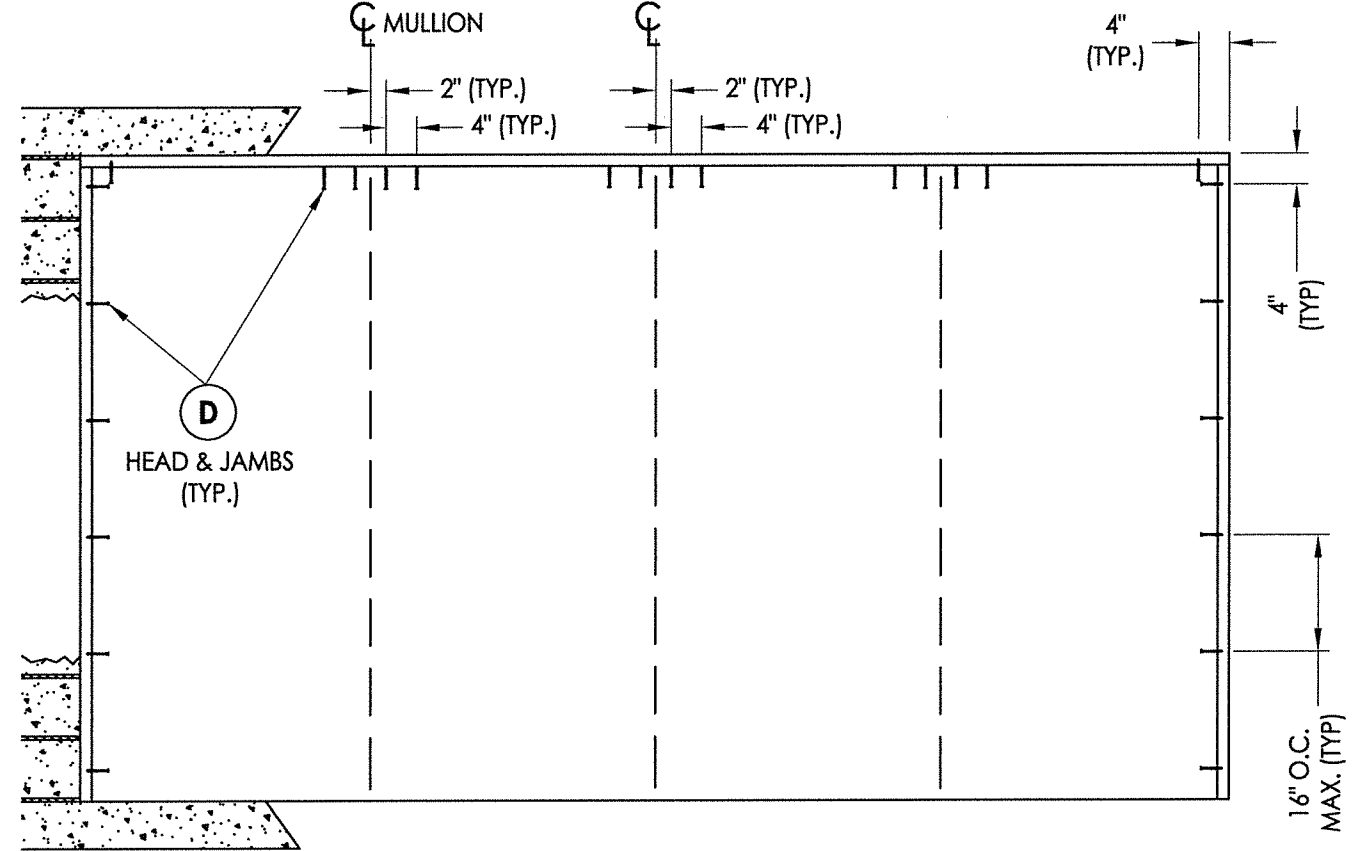
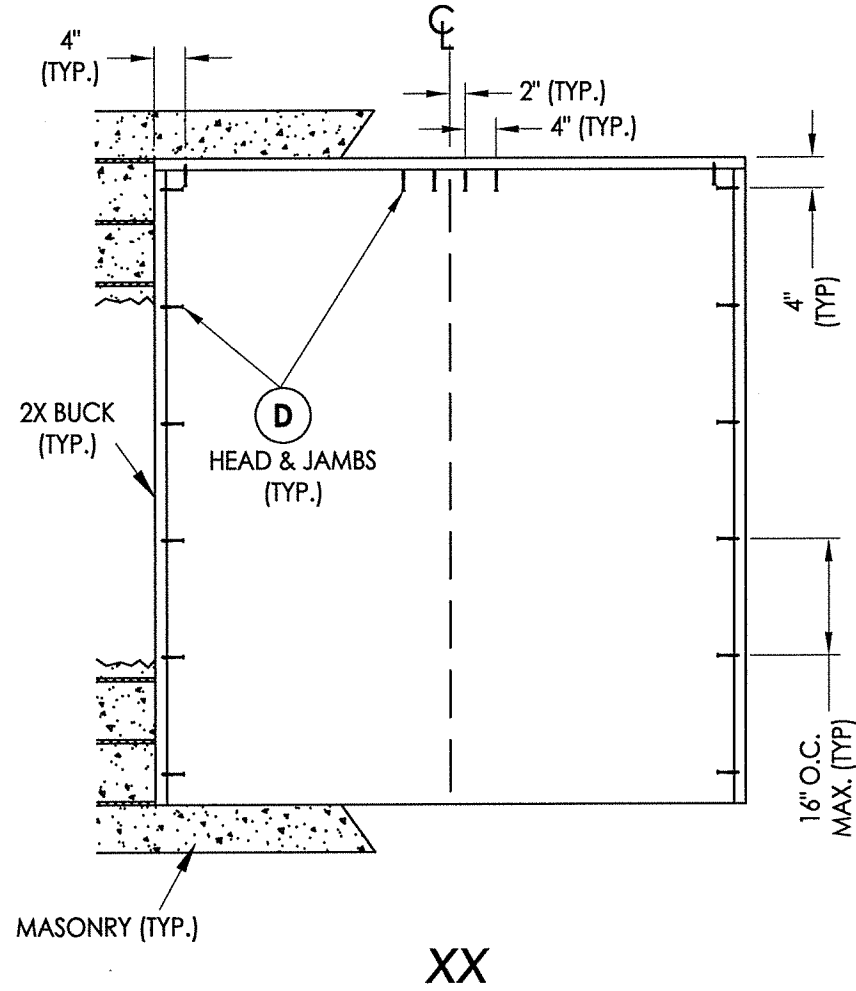


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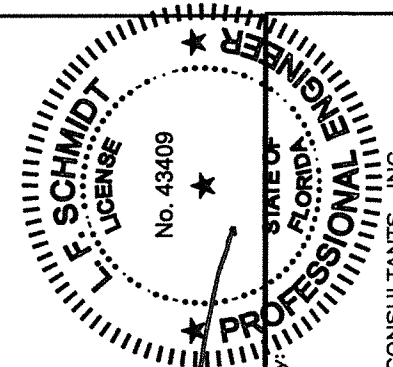
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PRODUCT:		TRINITY	
		FIBERGLASS PATIO DOOR	
		"Impact"	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS (THRESHOLDS)	
NO.	DATE	BY	REVISIONS
DATE:		1/28/21	
SCALE:		N.T.S.	
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CHK. BY:		LFS	
DRAWING NO.:		FL-37184.2	
SHEET		9 OF 12	



2X BUCK ANCHORING



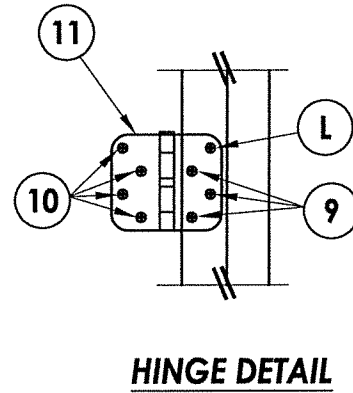
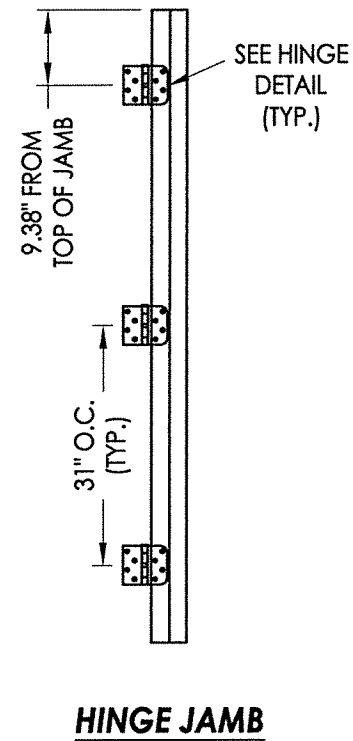
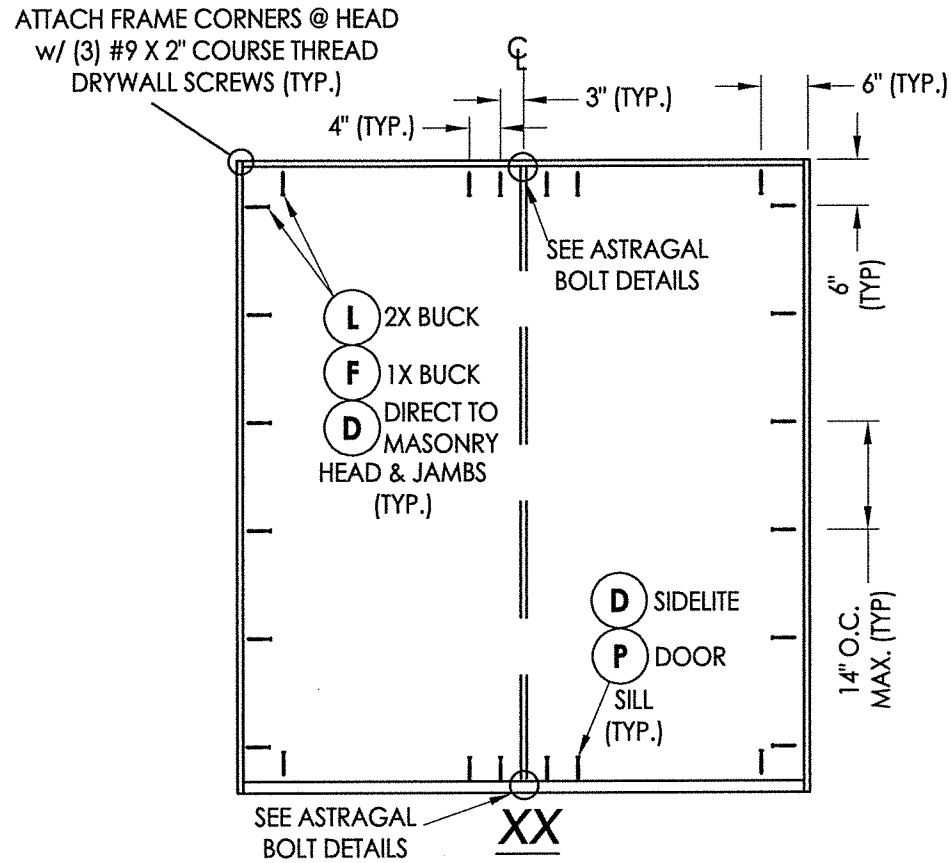
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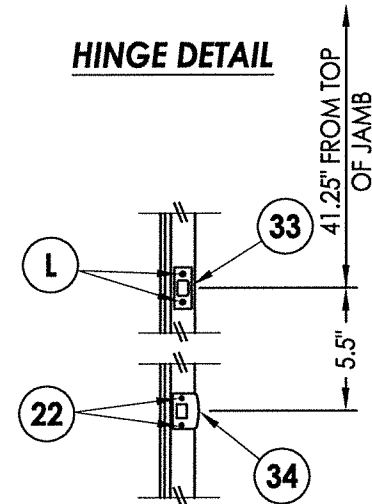
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 FBPE Registry No. 9813

PRODUCT: TRINITY FIBERGLASS PATIO DOOR "Impact"	
PART OR ASSEMBLY: BUCK ANCHORING	
NO.	DATE
REVISIONS	
BY	
DATE: 1/28/21	
SCALE: N.T.S.	
DWG. BY: RW	
CHK. BY: LFS	
DRAWING NO.: FL-37184.2	
SHEET 10 OF 12	

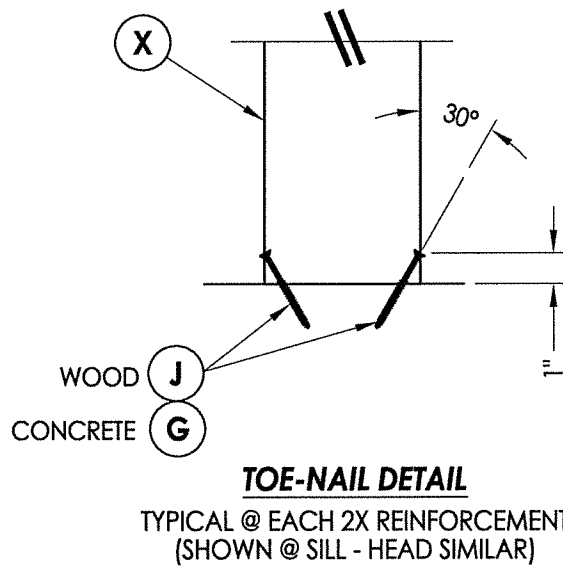
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HINGE DETAIL

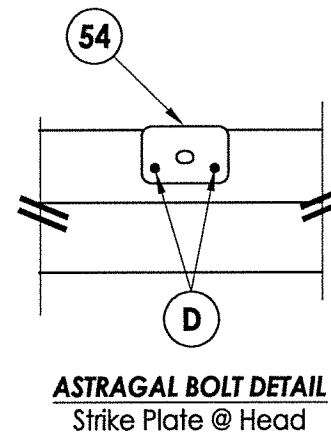


LATCH & DEADBOLT DETAILS

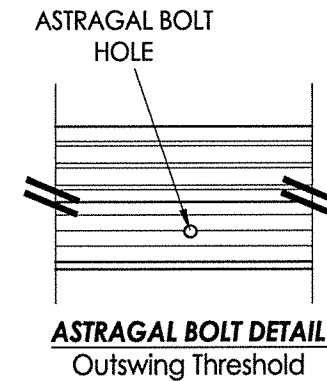


TOE-NAIL DETAIL

TYPICAL @ EACH 2X REINFORCEMENT (SHOWN @ SILL - HEAD SIMILAR)

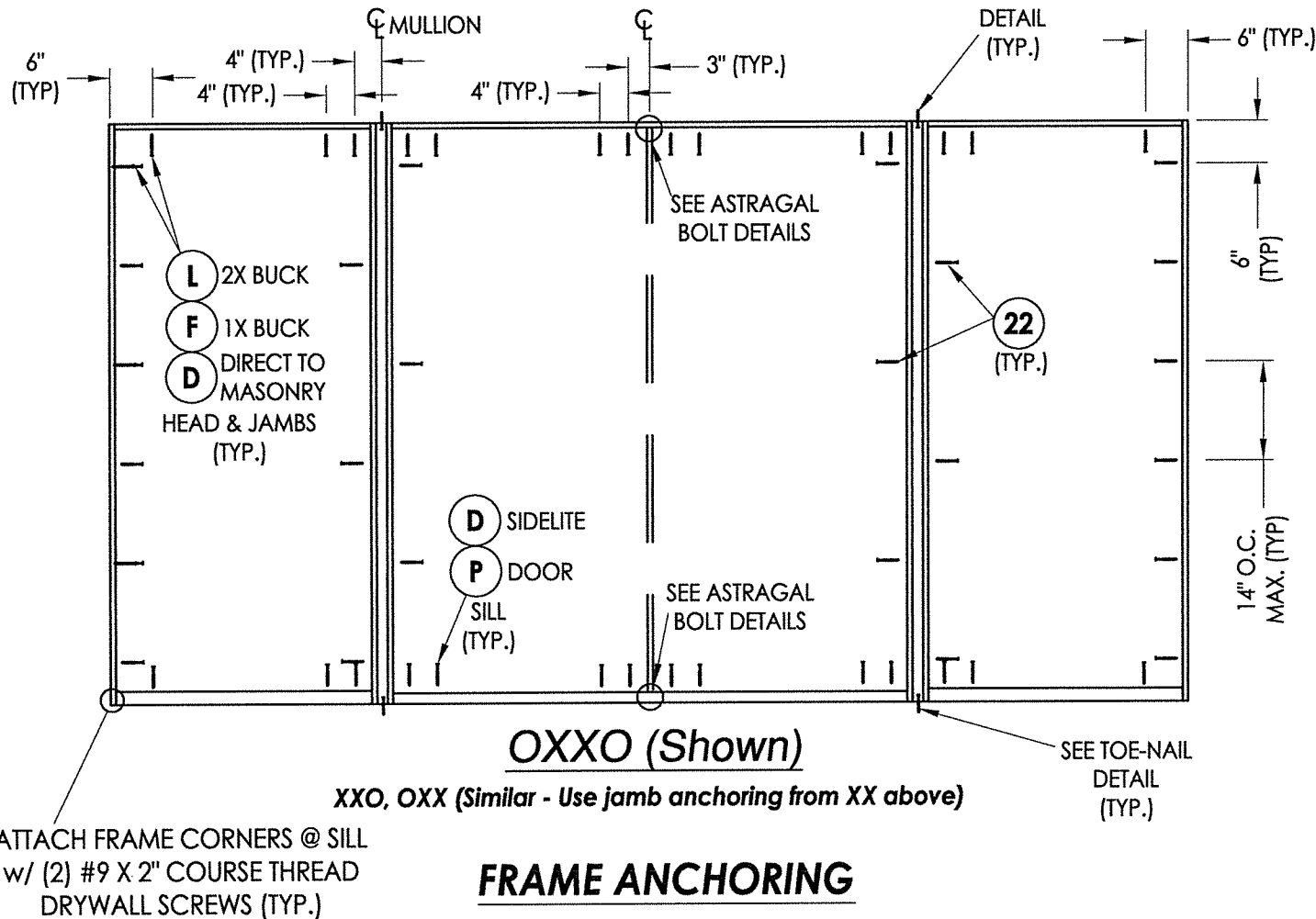


ASTRAGAL BOLT DETAIL
Strike Plate @ Head

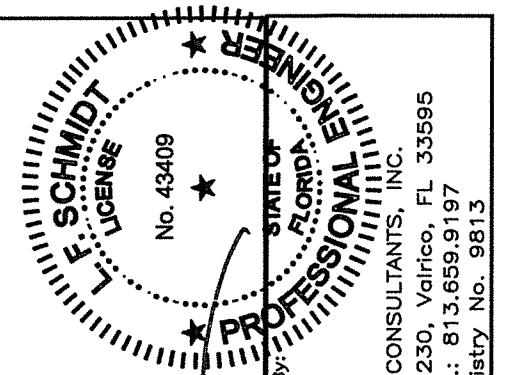


ASTRAGAL BOLT DETAIL
Outswing Threshold

HARDWARE DETAILS



FRAME ANCHORING



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FBPE Registry No. 9813

PRODUCT: TRINITY
FIBERGLASS PATIO DOOR
"Impact"
PART OR ASSEMBLY:
FRAME ANCHORING
& HARDWARE DETAILS

NO.	DATE	BY	REVISIONS

DATE: 1/28/21

SCALE: N.T.S.

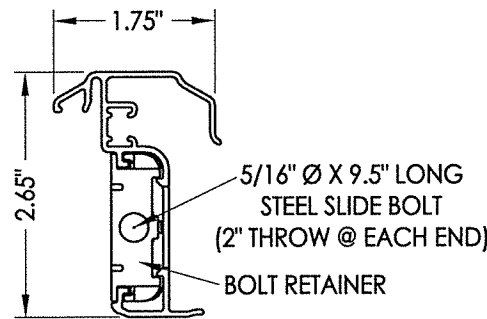
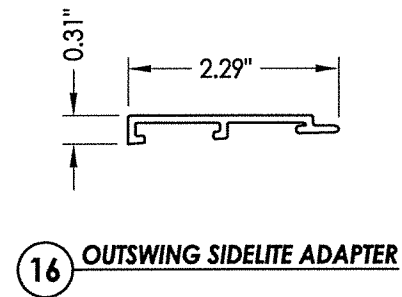
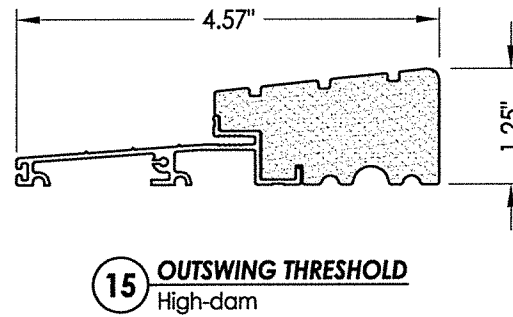
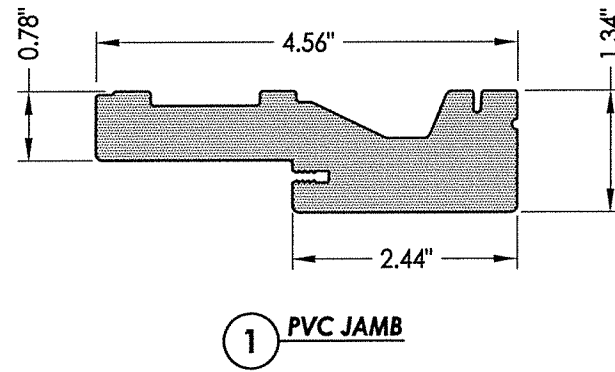
DWG. BY: RW

CHK. BY: LFS

DRAWING NO.: FL-37184.2

SHEET 11 OF 12

BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK (G >= 0.42)	WOOD
B	2X BUCK (G >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	1/4" X 3-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
G	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL
J	#10 X 3" PFH WOOD SCREW	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMB.)	STEEL
M	3/16" X 2-1/4" PFH ITW CONCRETE SCREW	STEEL
P	1/4" X 2-1/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
X	2X REINFORCEMENT (SG = 0.55)	WOOD
1	PVC JAMB	COMP.
7	WEATHERSTRIP	FOAM
9	#9 X 3/4" PFH WOOD SCREW	STEEL
10	#9 X 1" PFH WOOD SCREW	STEEL
11	4" X 4" HINGE	STEEL
12	LATCH STRIKE PLATE	STEEL
13	DEADBOLT STRIKE PLATE	STEEL
15	OUTSWING THRESHOLD	ALUM/COMP
16	OUTSWING SIDELITE ADAPTER	PVC
22	#8 X 2-1/2" PFH WOOD SCREW	STEEL
27	#10 X 2" PFH SMS	STEEL
40	DOOR PANEL	-
50	SIDELITE PANEL	-
53	ALUMINUM ASTRAGAL	ALUM
54	ASTRAGAL STRIKE PLATE	STEEL
55	#8 X 1" PFH WS	STEEL



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 BUILDEX TAPCON®	3/16"	1-1/4"	3"	1-1/2"
	1/4"	1-1/4"	2"	4"
DeWALT 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:	TRINITY FIBERGLASS PATIO DOOR "Impact"
PART OR ASSEMBLY:	BILL OF MATERIALS & COMPONENTS
NO.	DATE
BY	REVISIONS
DATE:	1/28/21
SCALE:	N.T.S.
DWG. BY:	RW
CHK. BY:	LFS
DRAWING NO.:	FL-37184.2
SHEET	12 OF 12