TRINITY GLASS INTERNATIONAL

33615 1st Way S, Federal Way, WA 98003

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

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

Digitally signed by Lyndon F Schmidt
Date: 2023.08.01 14:19:44 -04'00'

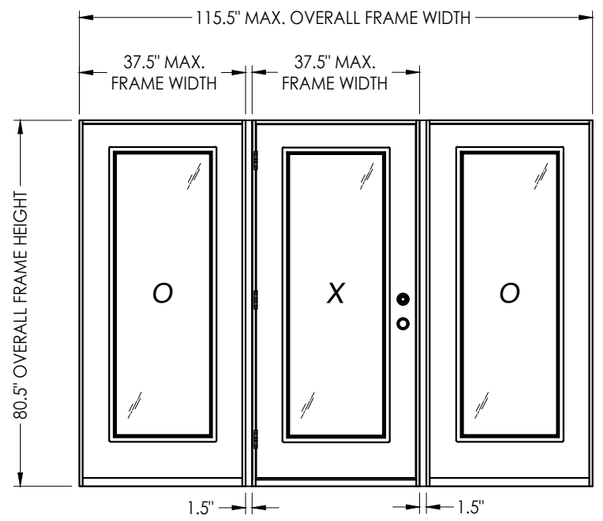
This item has been digitally signed and sealed by **L. F. Schmidt, P.E.** on the date adjacent to the seal.

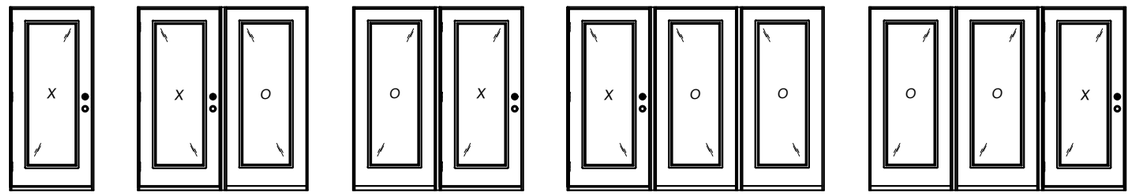
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

THIS PRODUCT APPROVAL IS VALID ONLY FOR THE STATE OF FLORIDA

GENERAL NOTES

1. This product evaluation drawing has been developed in compliance with the 8th Edition (2023) 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".





X | XO, OX | OX, XO | XOO, OOX | OOX, XOO

CONFIGURATION	MAX. FRAME DIMENSION	JAMB REINFORCEMENT	DESIGN PRESSURE (PSF) OUTSWING	
			POSITIVE	NEGATIVE
X	37.5" x 80.5"	N/A	+50.0	-50.0
OX, XO	76.5" x 80.5"	2X	+50.0	-50.0
OXO, XOO, OOX	115.5" x 80.5"	2X	+50.0	-50.0

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4	Elevations	10	Buck Anchoring
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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: TRINITY FIBERGLASS PATIO DOOR "Impact"

PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS	BY
1	8/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS

DATE: 1/28/21
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DWG. BY: RW
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DRAWING NO.: FL-37184.1
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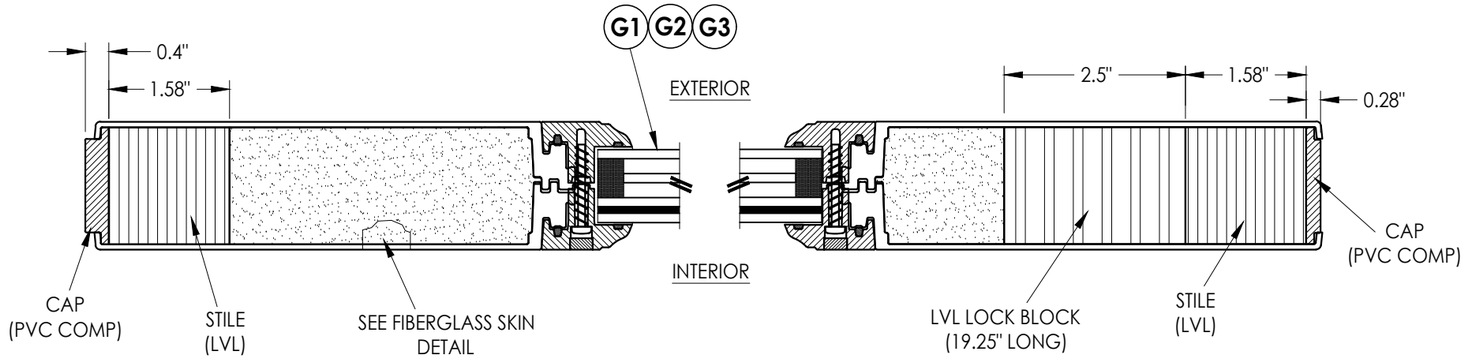
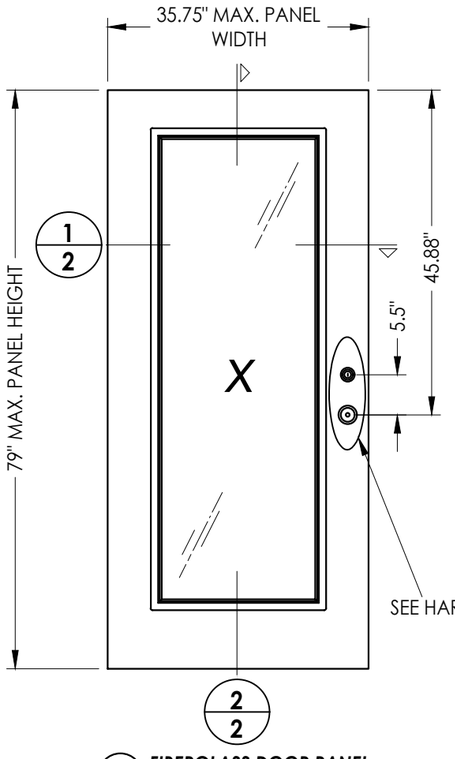
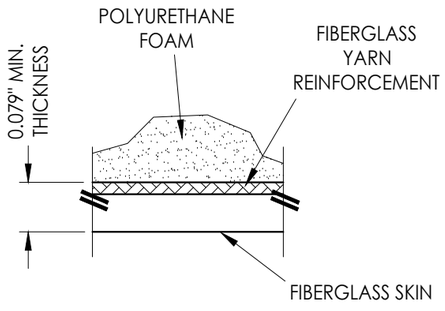


1/2 ***HORIZONTAL CROSS SECTION***



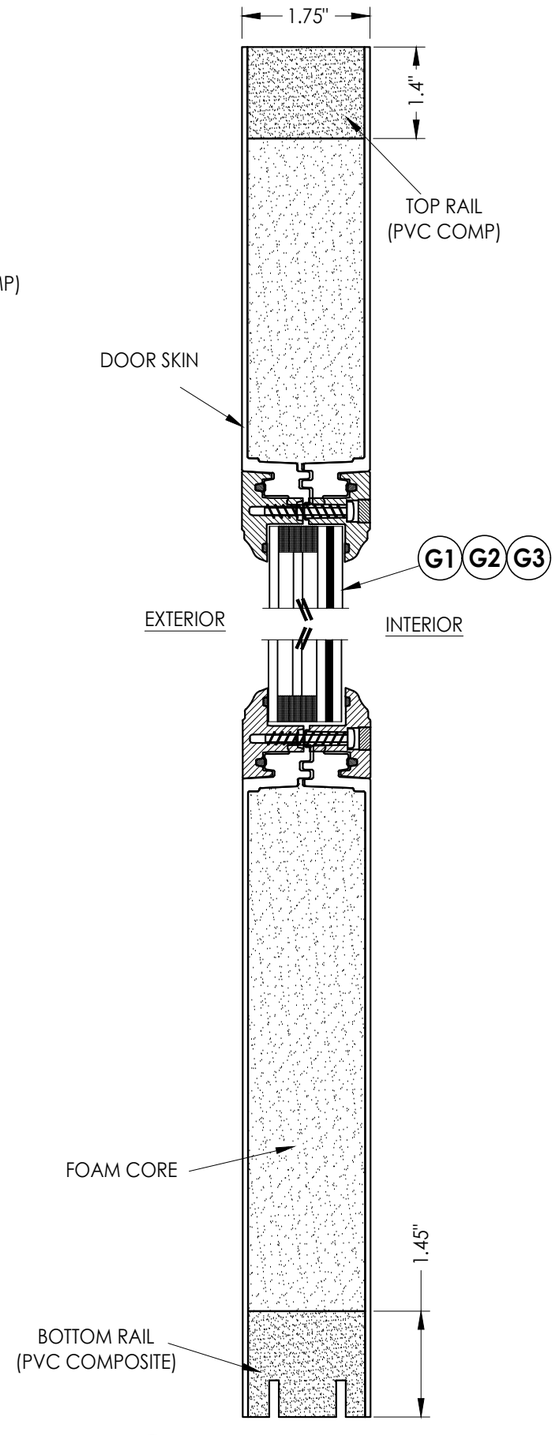
40 ***FIBERGLASS DOOR PANEL***

50 ***FIBERGLASS SIDELITE PANEL***



FIBERGLASS SKIN DETAIL

HARDWARE TABLE	
MANUFACTURER	*MODEL*
SCHLAGE	KNOB: F51 DEADBOLT: B60N



2/2 ***VERTICAL CROSS SECTION***

FIBERGLASS SKIN: 0.079" MIN. THK. (Fy = 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*

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1	8/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS

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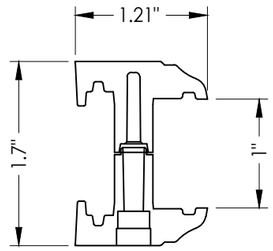
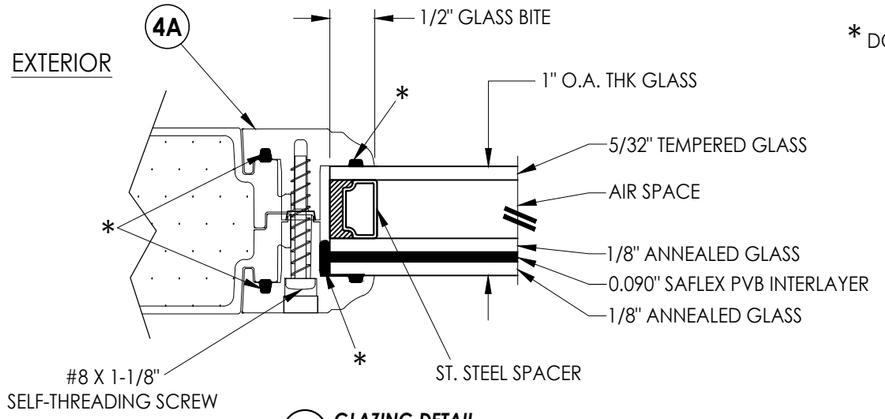
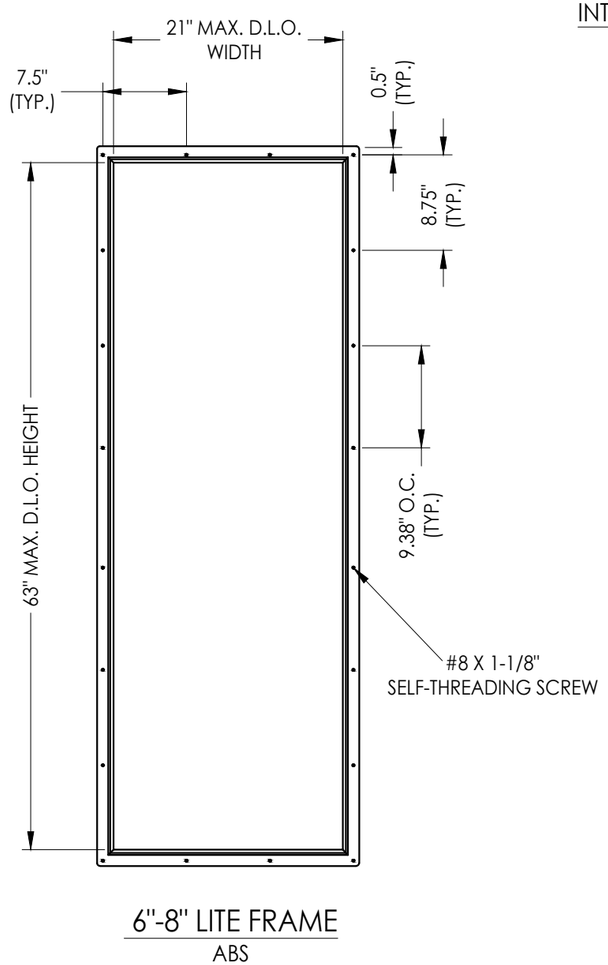


4A ***FLUSH GLAZED LITE FRAME***
ABS

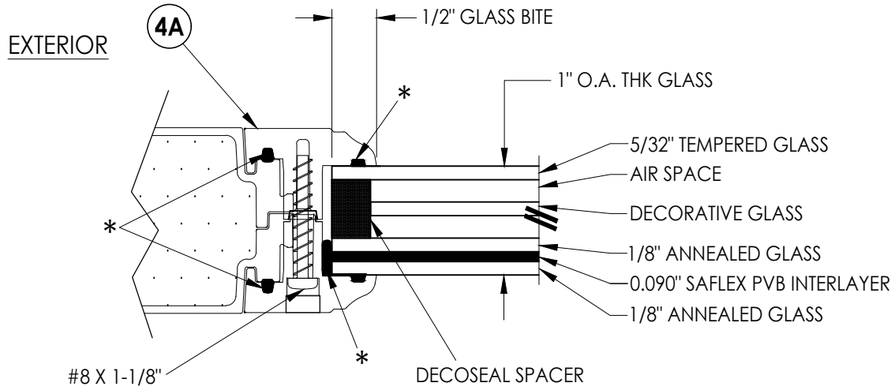


G1 ***GLAZING DETAIL***
Dual Pane

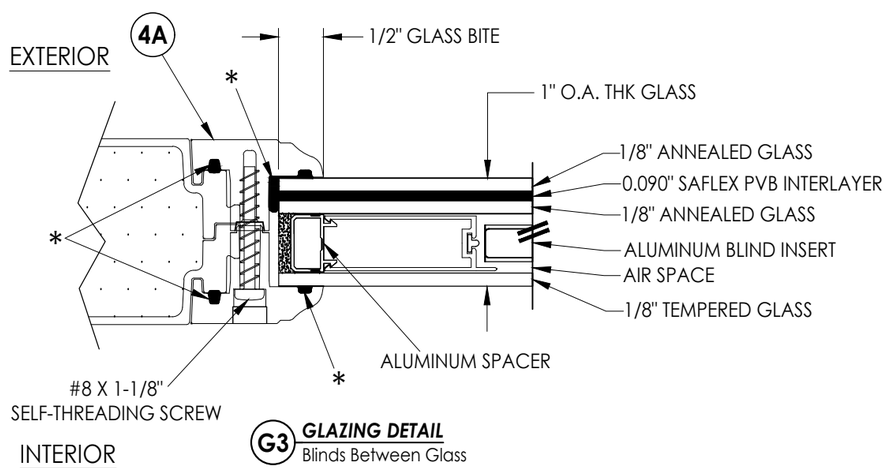
* DOW 995 STRUCTURAL SEALANT



6"-8" LITE FRAME
ABS



G2 ***GLAZING DETAIL***
Triple Pane



G3 ***GLAZING DETAIL***
Blinds Between Glass

Documents Prepared By:
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PRODUCT: *TRINITY FIBERGLASS PATIO DOOR "Impact"*

PART OR ASSEMBLY: *LITE FRAME GLAZING DETAILS*

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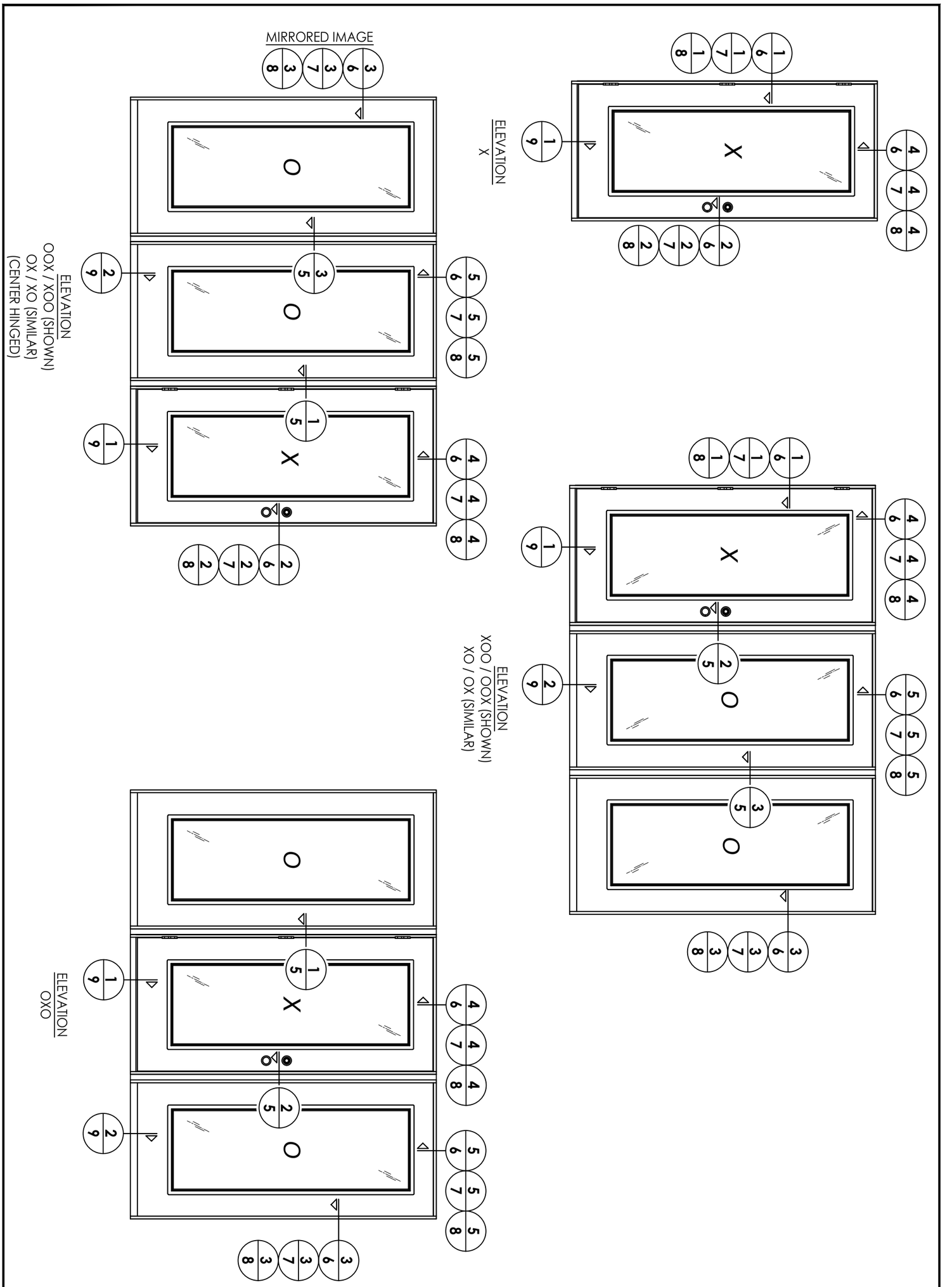

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REVISIONS

PRODUCT: *TRINITY*
FIBERGLASS PATIO DOOR
"Impact"

PART OR ASSEMBLY:
ELEVATIONS

Documents Prepared By:
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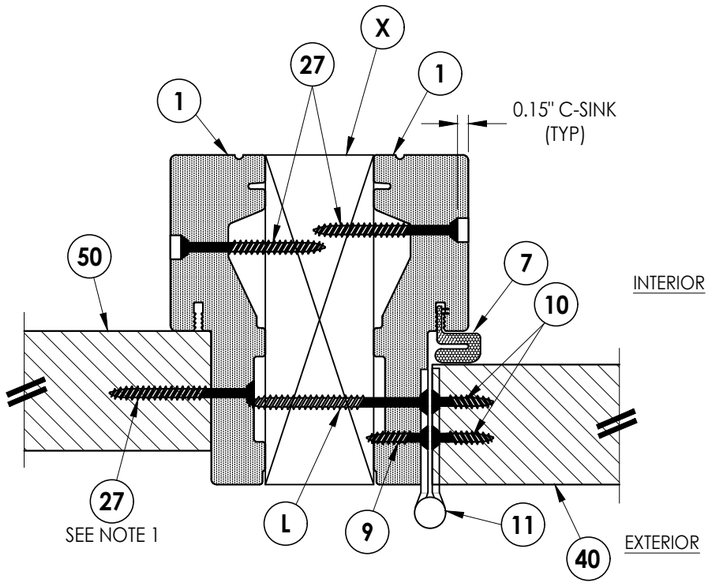
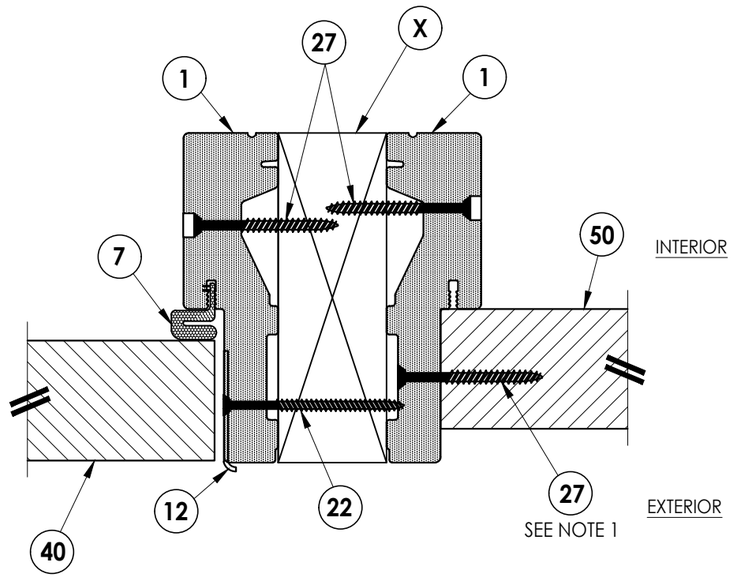
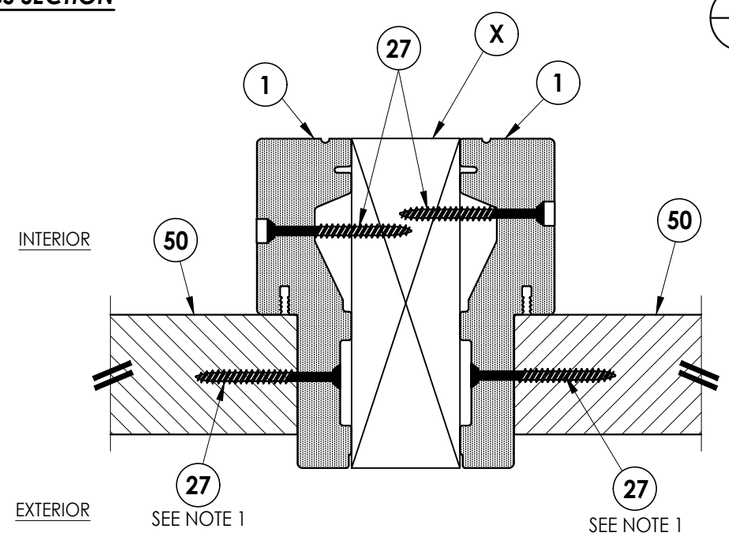


1/5 **HORIZONTAL CROSS SECTION**



2/5 **HORIZONTAL CROSS SECTION**



3/5 **HORIZONTAL CROSS SECTION**

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

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PART OR ASSEMBLY: *HORIZONTAL CROSS SECTIONS*

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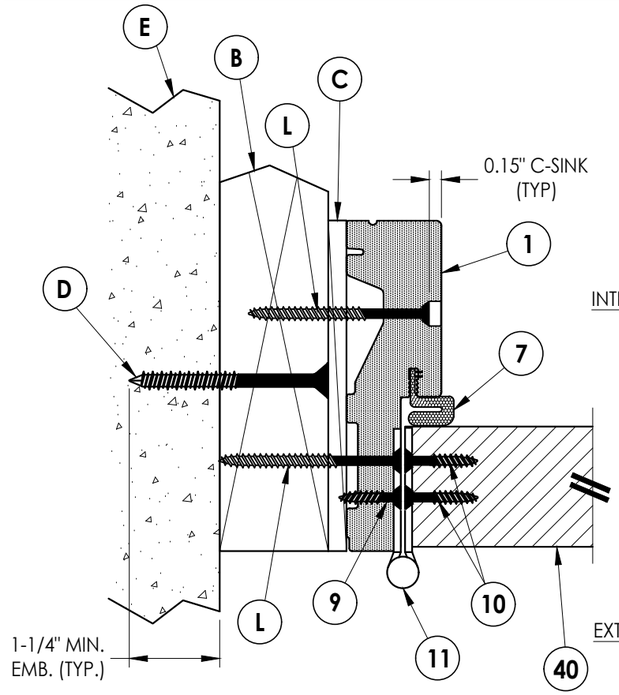
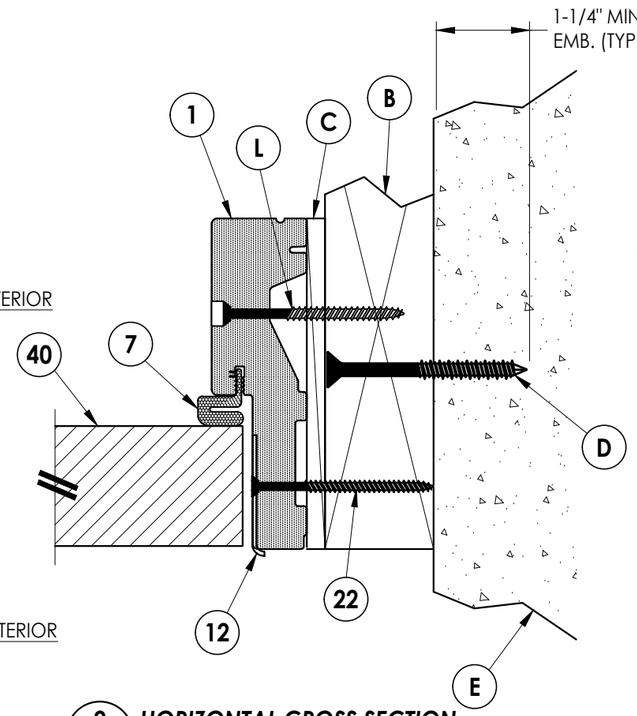
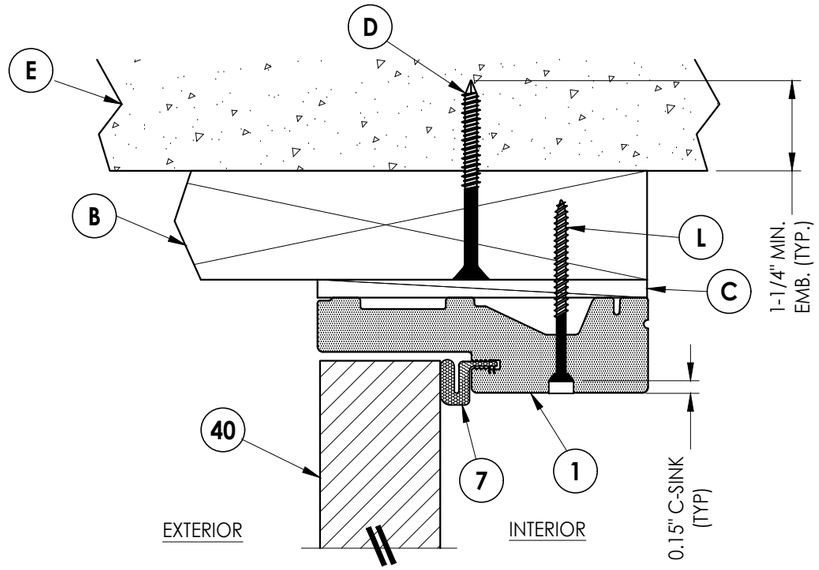


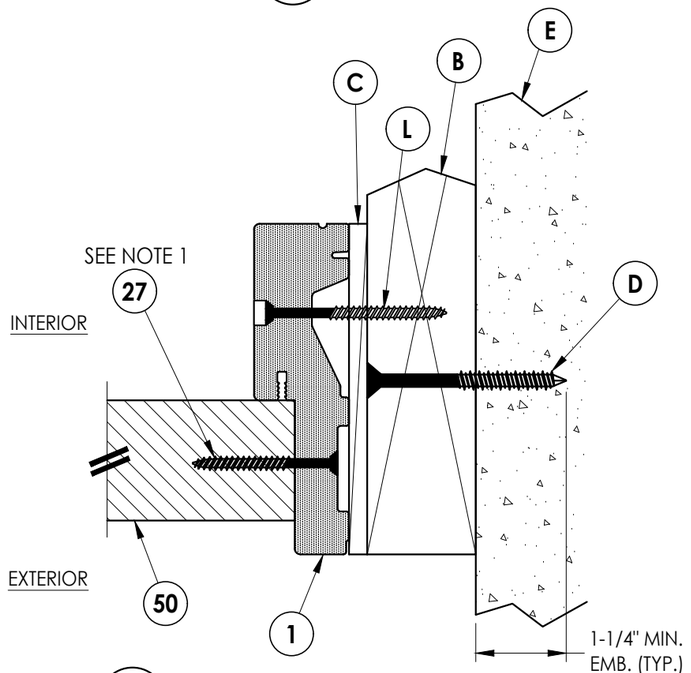
1/6 **HORIZONTAL CROSS SECTION**



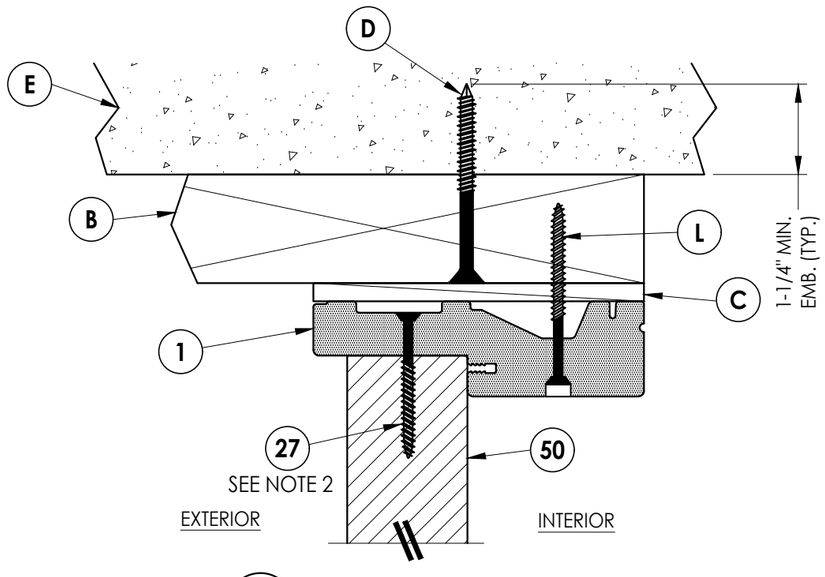
2/6 **HORIZONTAL CROSS SECTION**



4/6 **VERTICAL CROSS SECTION**



3/6 **HORIZONTAL CROSS SECTION**



5/6 **VERTICAL CROSS SECTION**

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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RW BUILDING CONSULTANTS, INC.
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PRODUCT: *TRINITY FIBERGLASS PATIO DOOR "Impact"*

PART OR ASSEMBLY: *HORIZONTAL & VERTICAL CROSS SECTIONS (2X BUCK)*

NO.	DATE	REVISIONS	BY
1	8/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS

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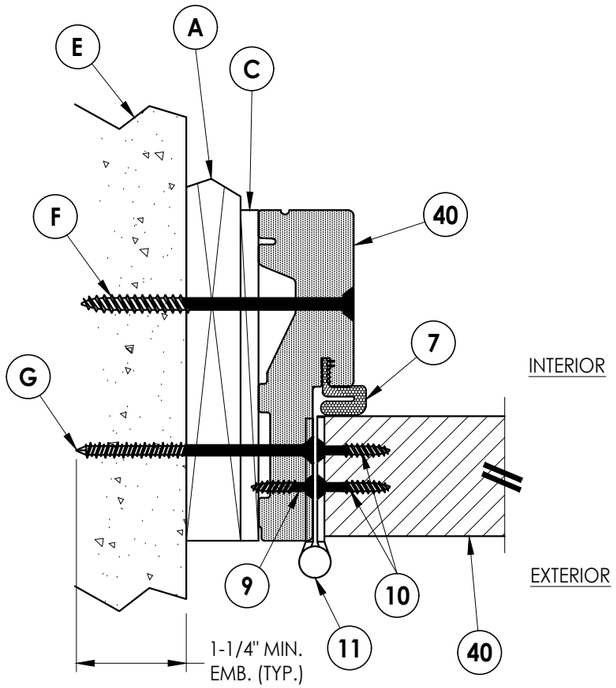
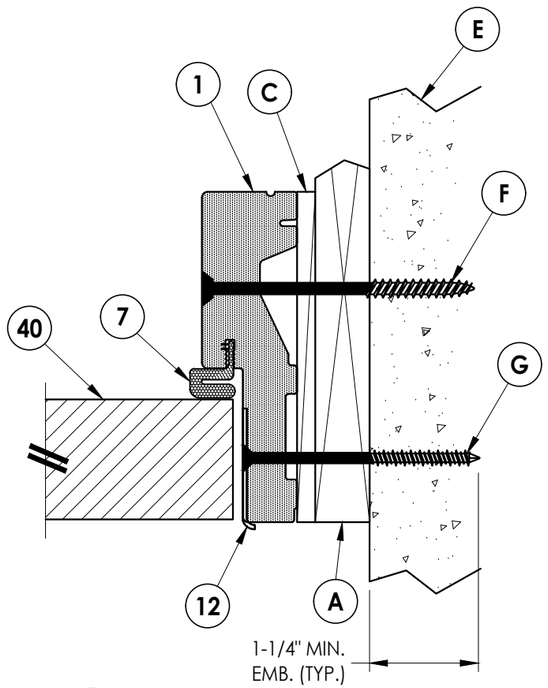
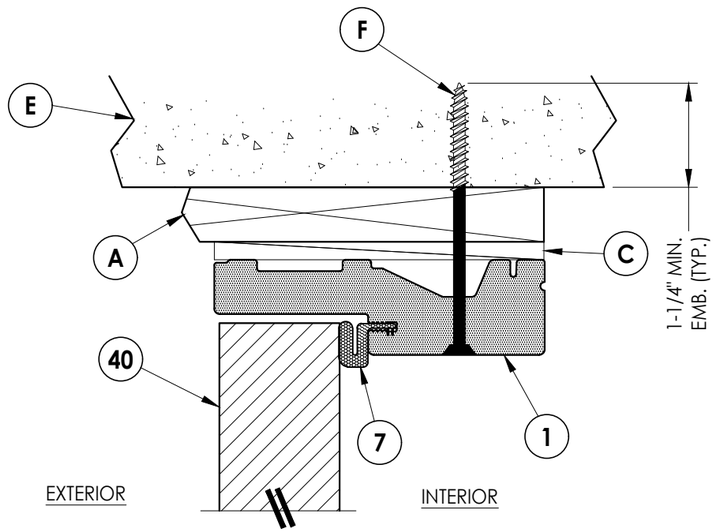


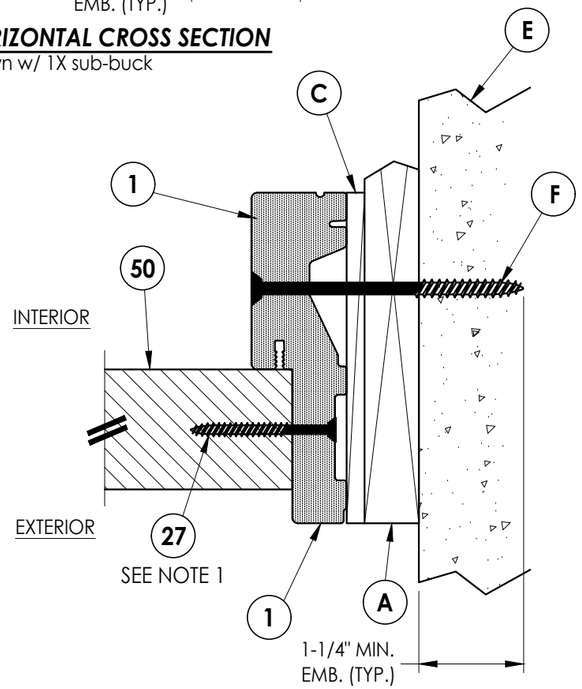
1/7 HORIZONTAL CROSS SECTION
Shown w/ 1X sub-buck



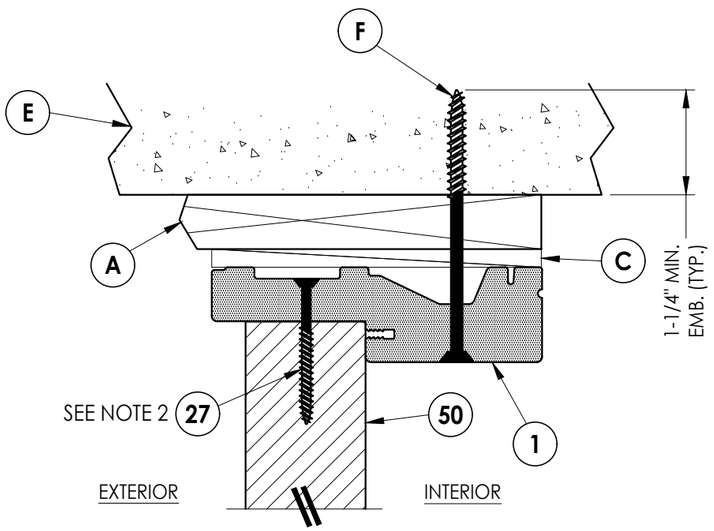
2/7 HORIZONTAL CROSS SECTION
Shown w/ 1X sub-buck



4/7 VERTICAL CROSS SECTION
Shown w/ 1X sub-buck



3/7 HORIZONTAL CROSS SECTION
Shown w/ 1X sub-buck



5/7 VERTICAL CROSS SECTION
Shown w/ 1X sub-buck

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: FIBERGLASS PATIO DOOR "Impact" TRINITY

PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (1X BUCK)

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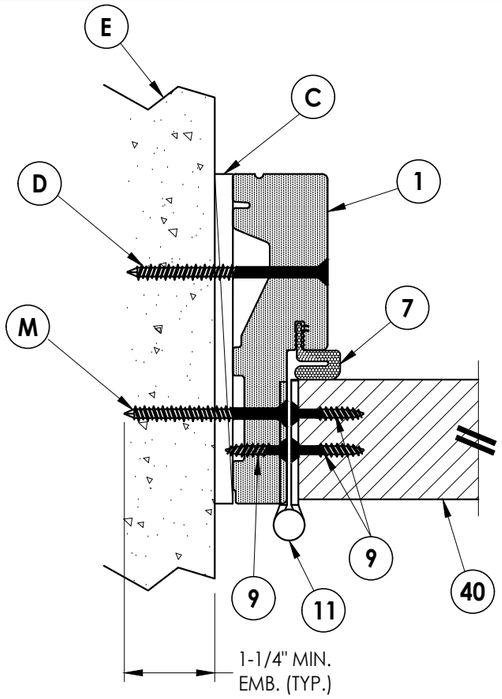
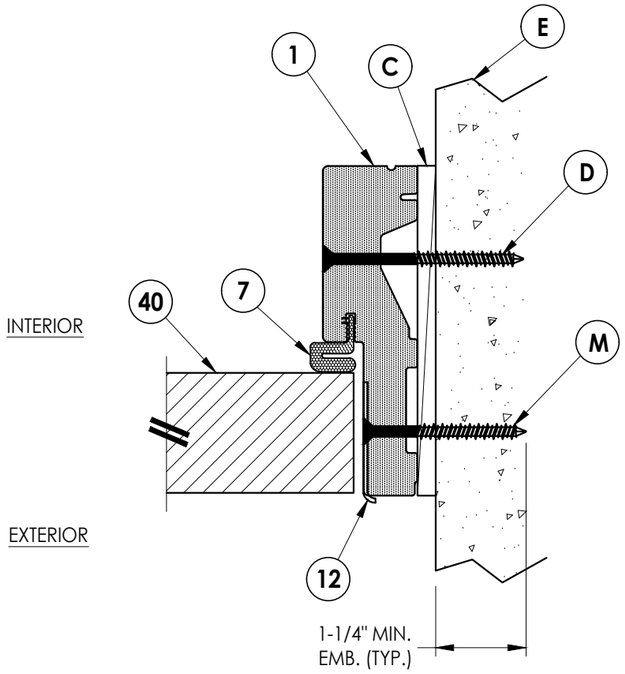
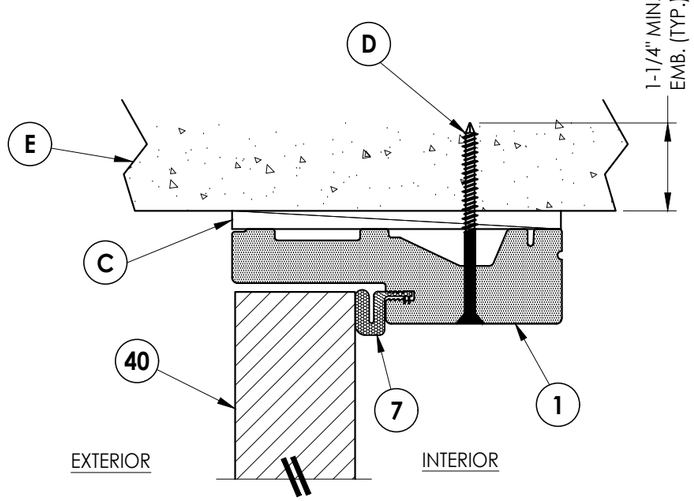


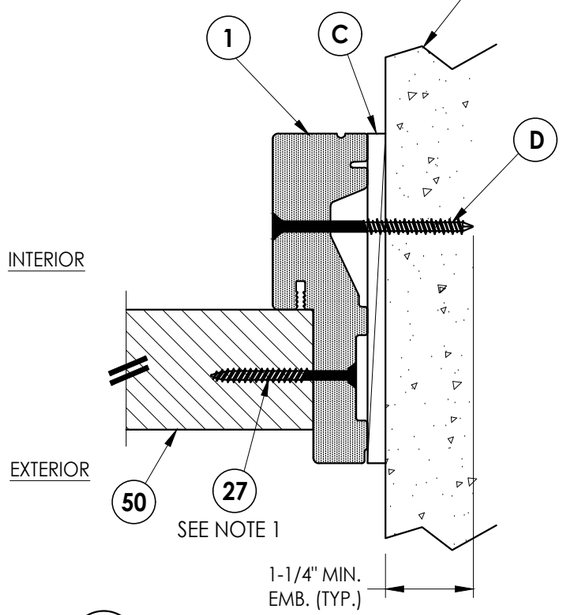
1/8 HORIZONTAL CROSS SECTION
Shown Direct to Masonry



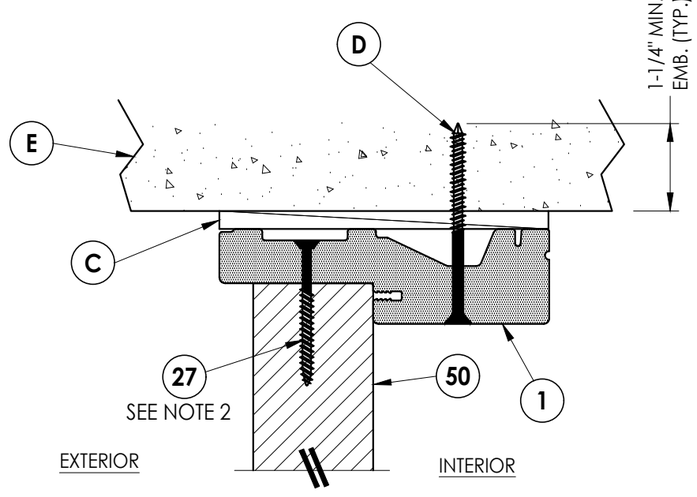
2/8 HORIZONTAL CROSS SECTION
Shown Direct to Masonry



4/8 VERTICAL CROSS SECTION
Shown Direct to Masonry



3/8 HORIZONTAL CROSS SECTION
Shown Direct to Masonry



5/8 VERTICAL CROSS SECTION
Shown Direct to Masonry

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).

Documents Prepared By:
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P.E. No. 43409

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PRODUCT: *TRINITY FIBERGLASS PATIO DOOR "Impact"*

PART OR ASSEMBLY: *HORIZONTAL & VERTICAL CROSS SECTIONS (DIRECT TO MASONRY)*

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1	8/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS

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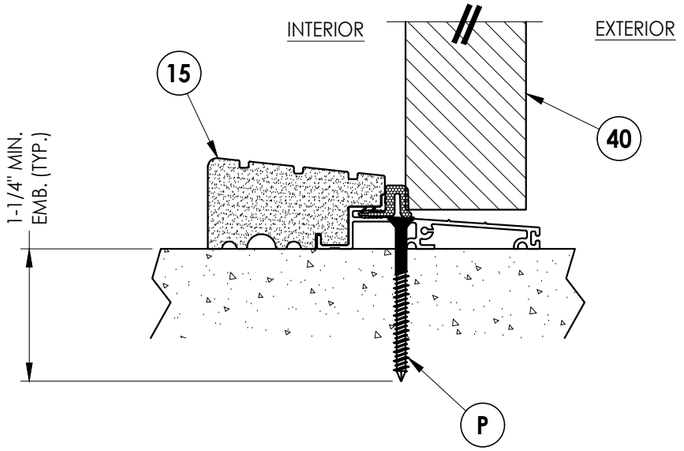
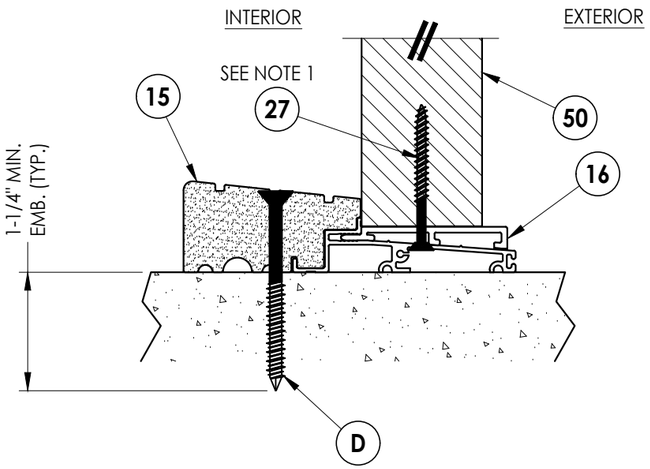
Notes:
1. Sidelite assembly screws located 10" from each end (2 screws total along head & sill).



1/9 VERTICAL CROSS SECTION



2/9 VERTICAL CROSS SECTION

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FBPE Registry No. 9813

PRODUCT: *TRINITY FIBERGLASS PATIO DOOR "Impact"*

PART OR ASSEMBLY: *VERTICAL CROSS SECTIONS (THRESHOLDS)*

NO.	DATE	REVISIONS	BY
1	8/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS

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CHK. BY: LFS
DRAWING NO.: FL-37184.1
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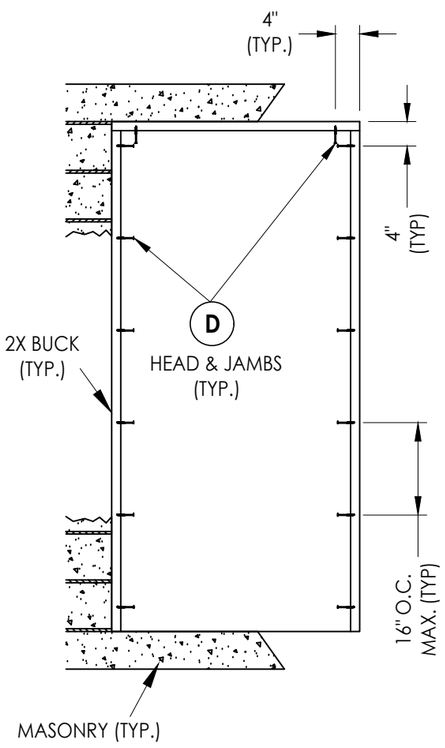

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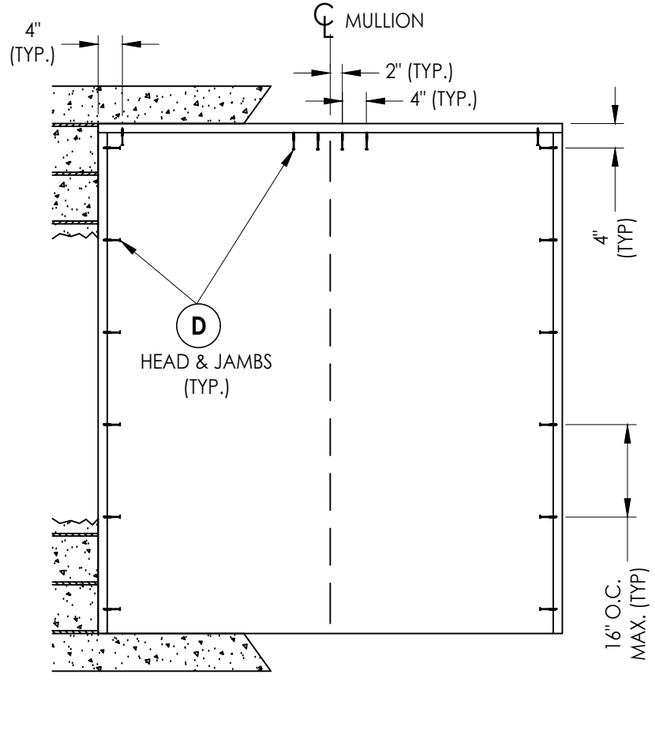

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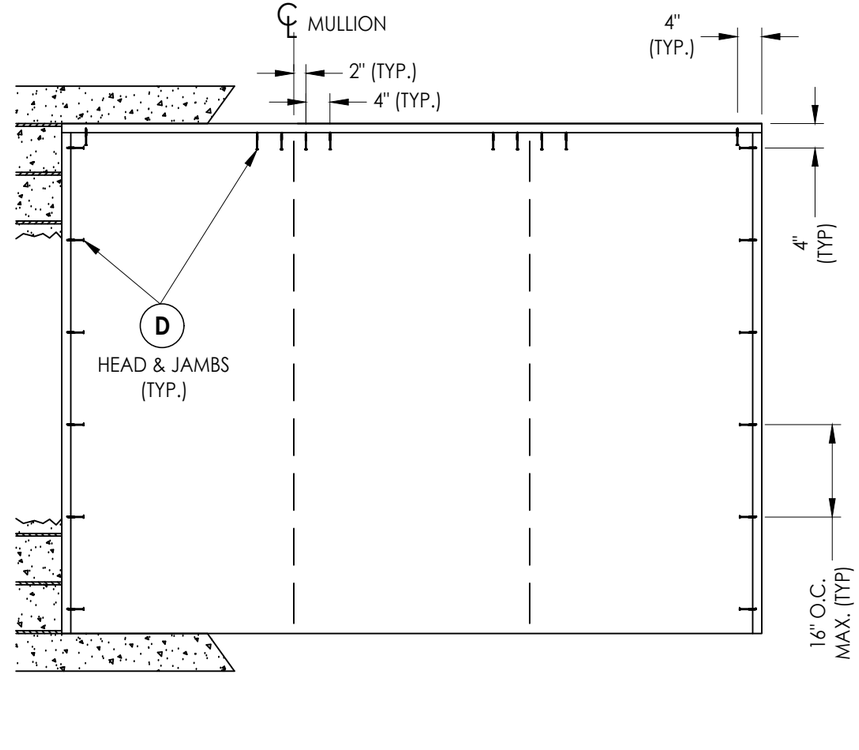

OXO, OOX, XOO

2X BUCK ANCHORING

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PART OR ASSEMBLY: *BUCK ANCHORING*

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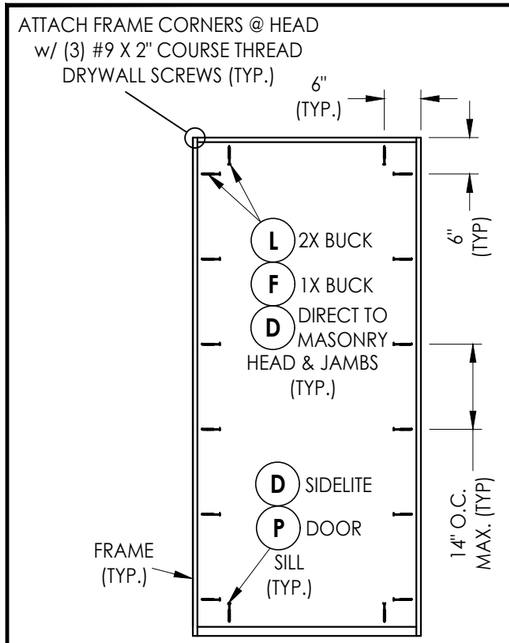

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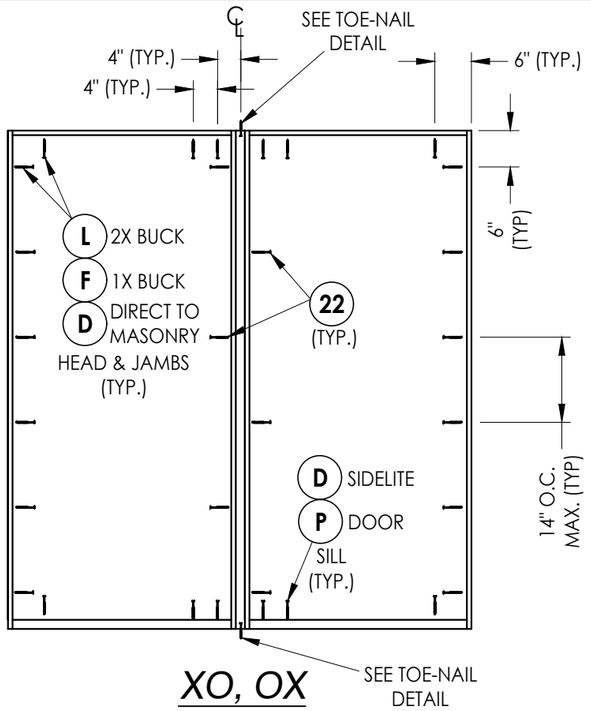

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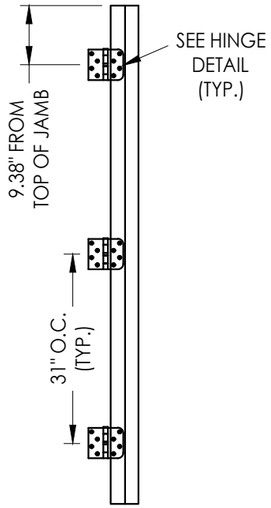
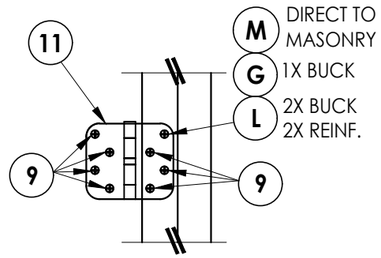
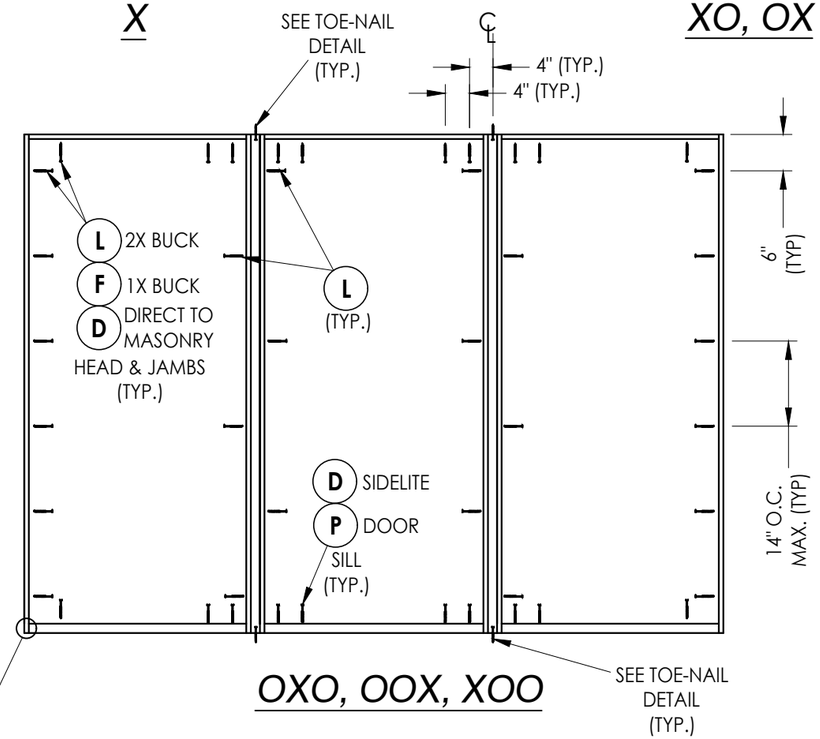


HINGE JAMB

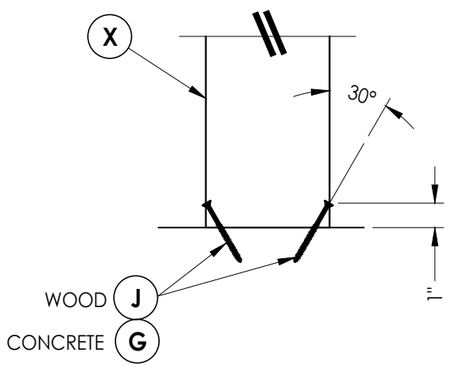


HINGE DETAIL



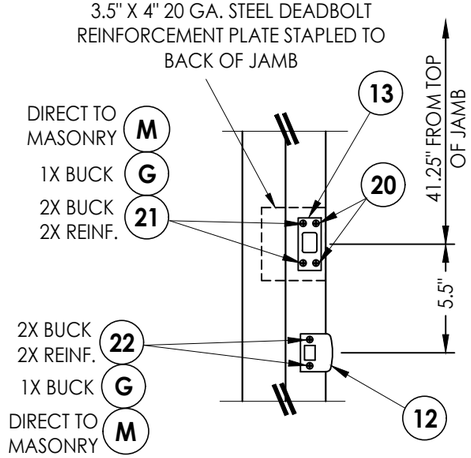
OXO, OOX, XOO

FRAME ANCHORING



TOE-NAIL DETAIL

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



LATCH & DEADBOLT DETAILS

HARDWARE DETAILS

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PRODUCT: *TRINITY FIBERGLASS PATIO DOOR "Impact"*

PART OR ASSEMBLY: *FRAME ANCHORING & HARDWARE DETAILS*

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1	8/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS

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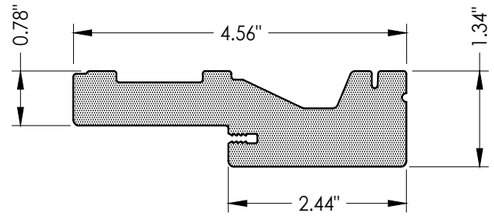
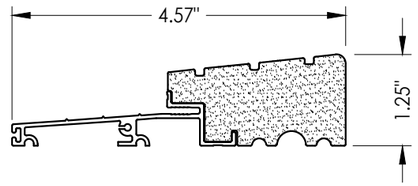
BILL OF MATERIALS

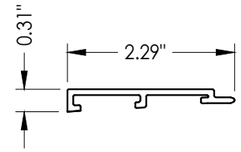
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK (G >= 0.42)	WOOD
B	2X BUCK (G >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	1/4" X 3-3/4" PFH DeWALT OR ITW 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
20	#9 X 1/2" PFH WOOD SCREW	STEEL
21	#12 X 2-1/2" PFH WOOD SCREW	STEEL
22	#8 X 2-1/2" PFH WOOD SCREW	STEEL
27	#10 X 2" PFH SMS	STEEL
40	DOOR PANEL	-
50	SIDELITE PANEL	-



1 PVC JAMB



15 OUTSWING THRESHOLD
High-dam



16 OUTSWING SIDELITE ADAPTER

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 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:

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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PART OR ASSEMBLY: *BILL OF MATERIALS & COMPONENTS*

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