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 9th Edition (2026) 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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6	Horizontal & Vertical Cross Sections (2X Buck)	12	Bill of Materials & Components

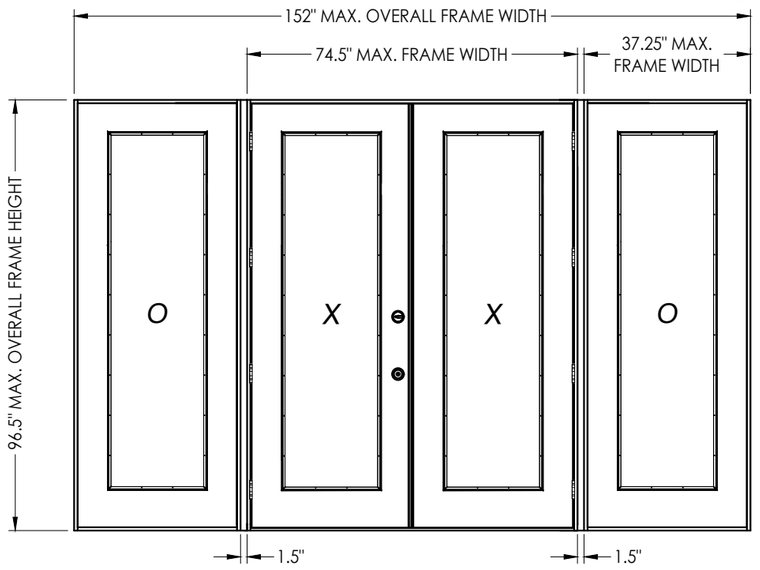
L F SCHMIDT LICENSE No. 43409 STATE OF FLORIDA PROFESSIONAL ENGINEER

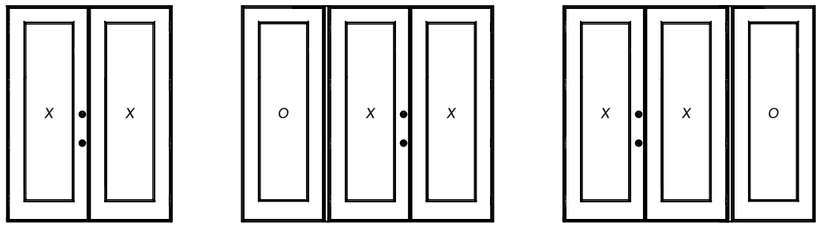
Digitally signed by Lyndon F Schmidt
Date: 2026.07.02 07:24:58 -04'00'

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





XX OXX XXO

CONFIGURATION	MAX. FRAME DIMENSION	JAMB REINFORCEMENT	DESIGN PRESSURE (PSF) OUTSWING	
			POSITIVE	NEGATIVE
XX	74.5" x 96.5"	N/A	+45.0	-45.0
OXX, XXO	113.25" x 96.5"	2X	+45.0	-45.0
OXXO	152" x 96.5"	2X	+45.0	-45.0

SEE SHEET 3 FOR GLAZING DESIGN PRESSURE LIMITATIONS

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
2	7/01/26	UPDATE TO 9TH ED. (2026) FBC	LFS
1	8/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS

DATE: 6/13/23
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DRAWING NO.: FL-37184.4
SHEET 1 OF 12

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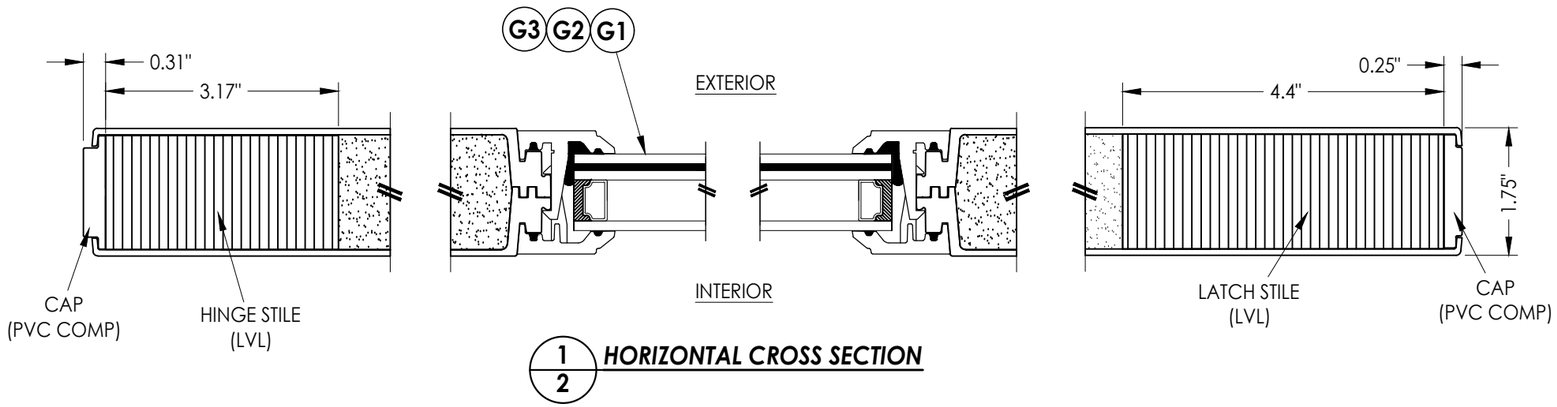
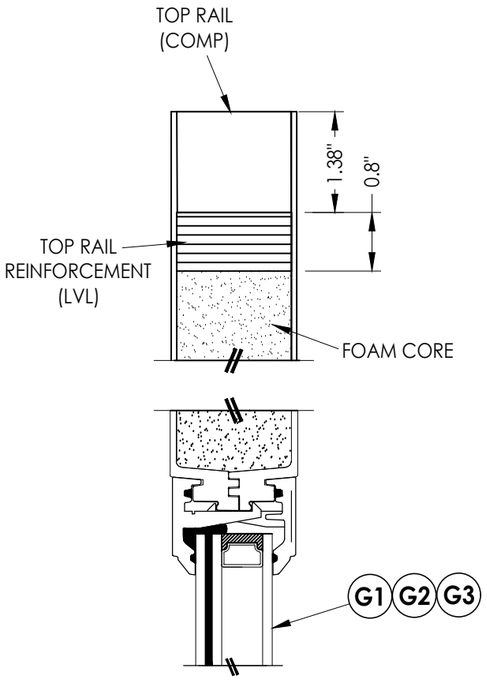
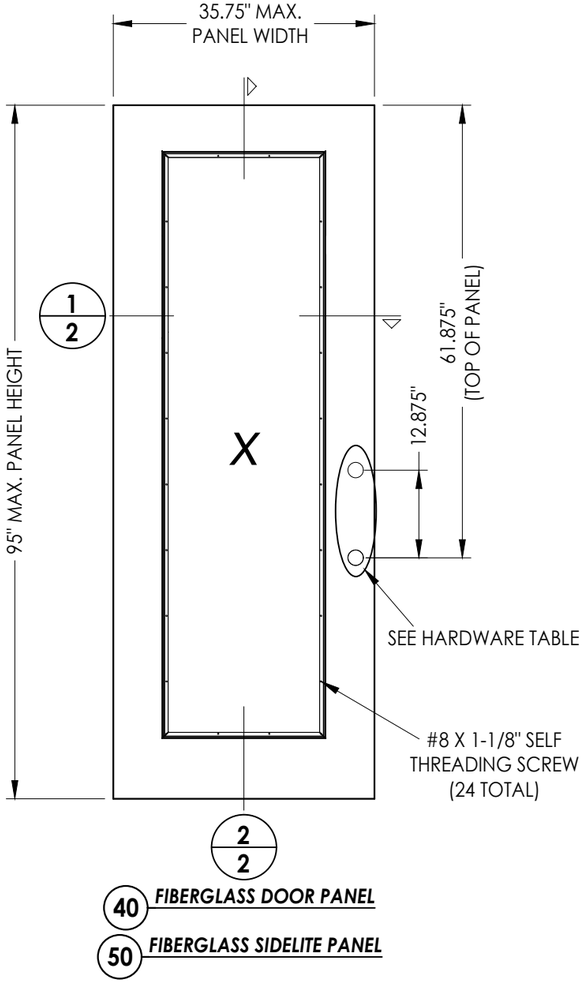


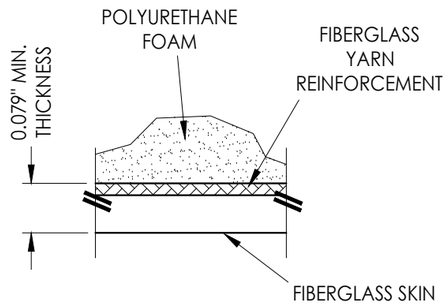
1/2 ***HORIZONTAL CROSS SECTION***





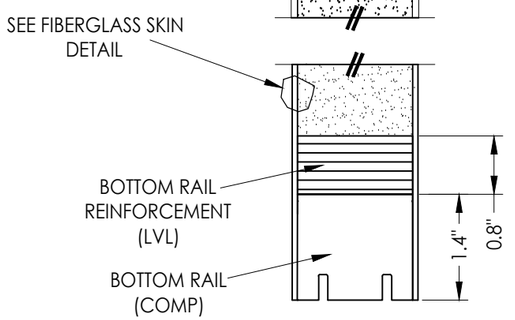
40 ***FIBERGLASS DOOR PANEL***

50 ***FIBERGLASS SIDELITE PANEL***



FIBERGLASS SKIN DETAIL

HARDWARE TABLE	
MANUFACTURER	***MODEL***
KWIKSET	**KNOB: SIGNATURE SERIES** **DEADBOLT: SIGNATURE SERIES (980)**



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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P.E. No. 43409

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PRODUCT: *TRINITY FIBERGLASS PATIO DOOR "Impact"*

PART OR ASSEMBLY: *DOOR & SIDELITE PANEL DETAILS*

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2	7/01/26	UPDATE TO 9TH ED. (2026) FBC	LFS
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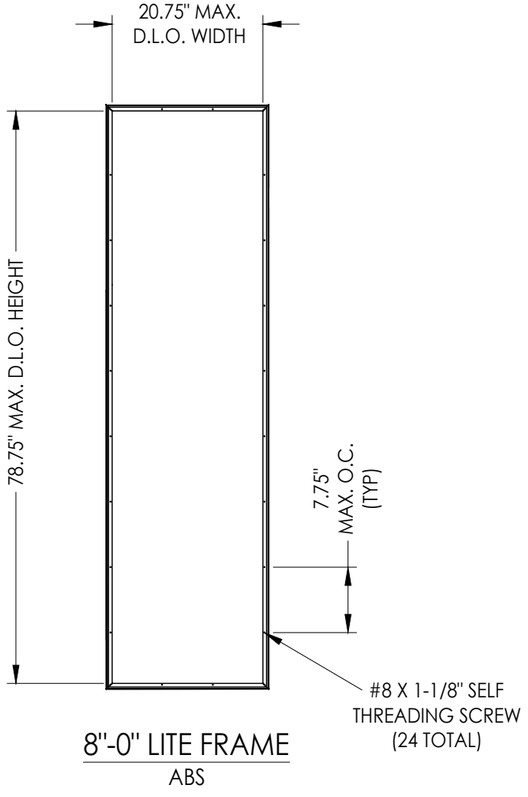
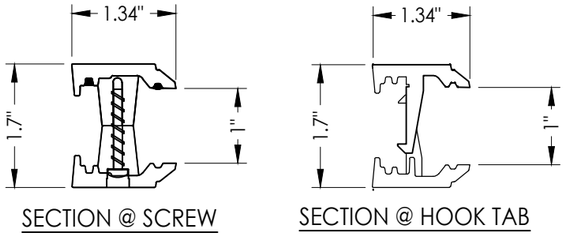
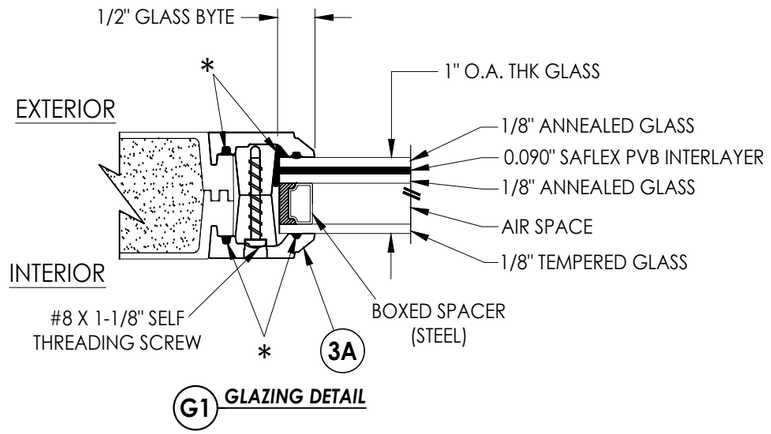


8"-0" LITE FRAME
ABS

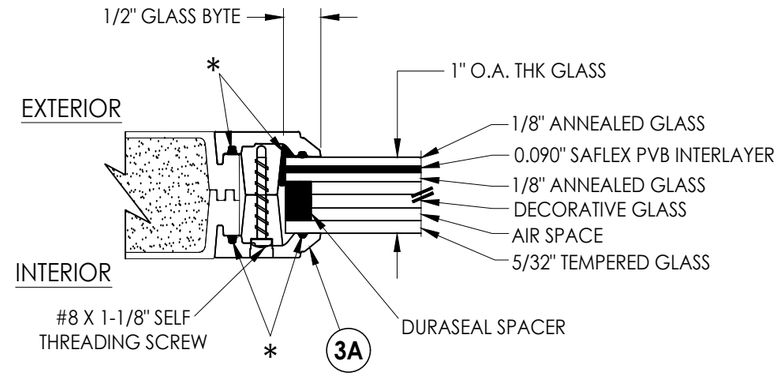


3A **FLUSH GLAZING FRAME**
ABS



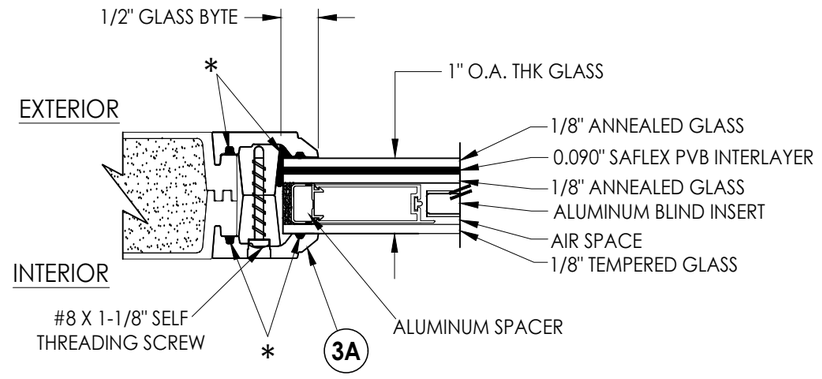
G1 **GLAZING DETAIL**

* DOW 995 STRUCTURAL SEALANT



G2 **GLAZING DETAIL**
DECORATIVE GLASS

DECORATIVE GLASS
MAX. DESIGN PRESSURE = ±40 PSF



G3 **GLAZING DETAIL**
BLINDS BETWEEN GLASS

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Lyndon F. Schmidt
P.E. No. 43409

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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: *LITE FRAME GLAZING DETAILS*

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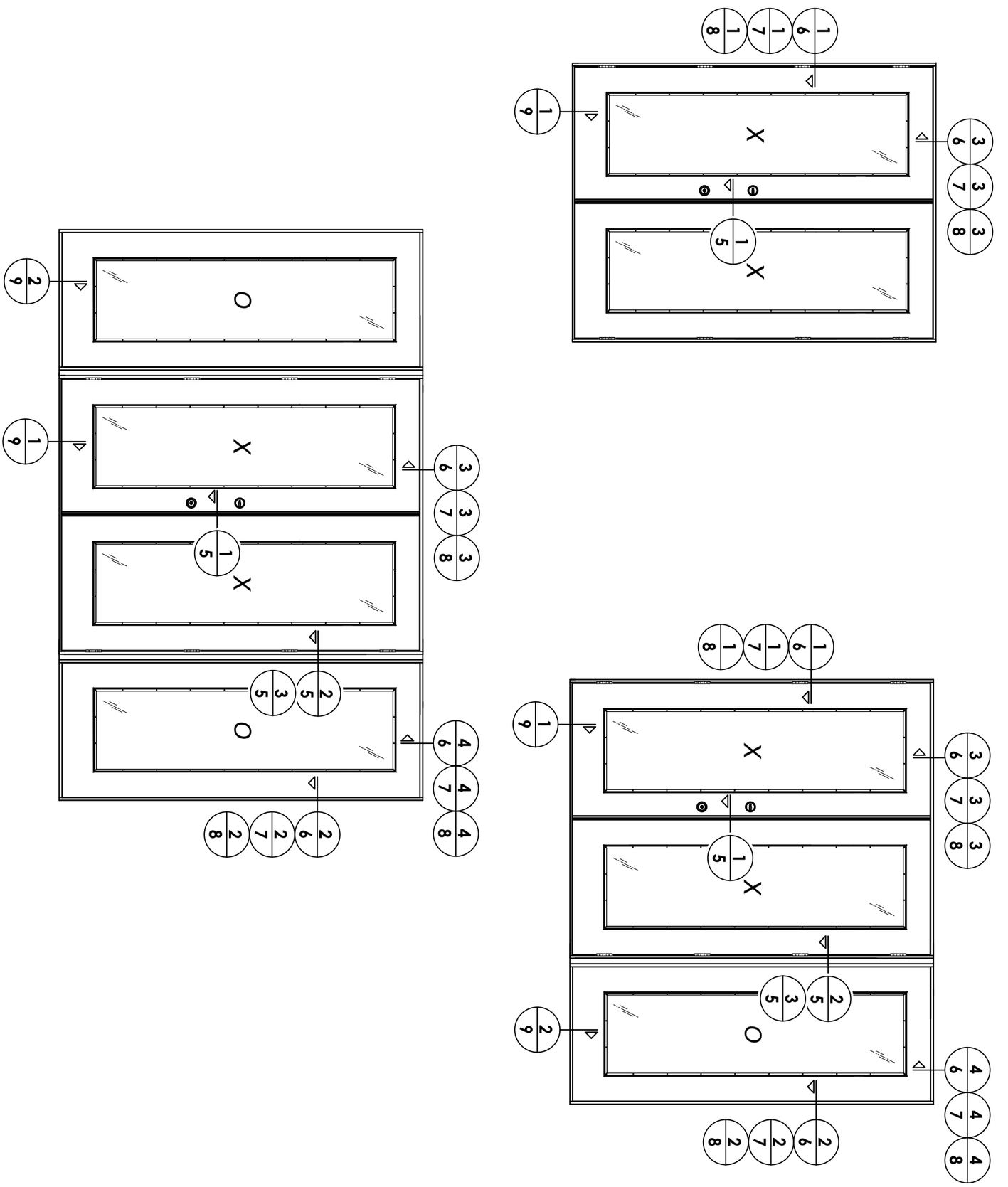

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REVISIONS

PRODUCT: TRINITY
FIBERGLASS PATIO DOOR
"Impact"

PART OR ASSEMBLY:
ELEVATIONS

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Lyndon F. Schmidt
P.E. No. 43409

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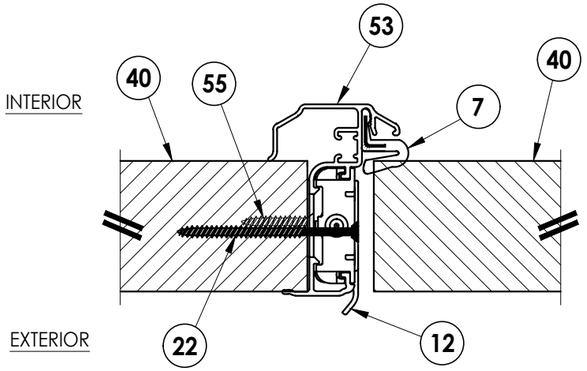
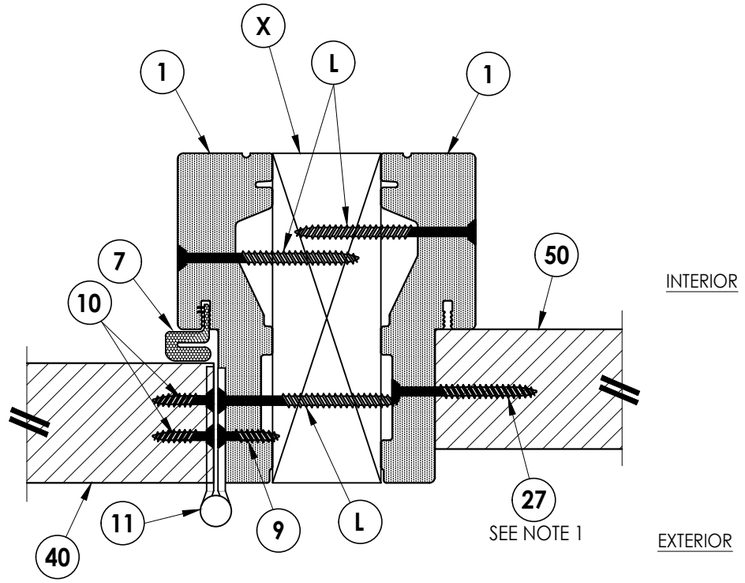
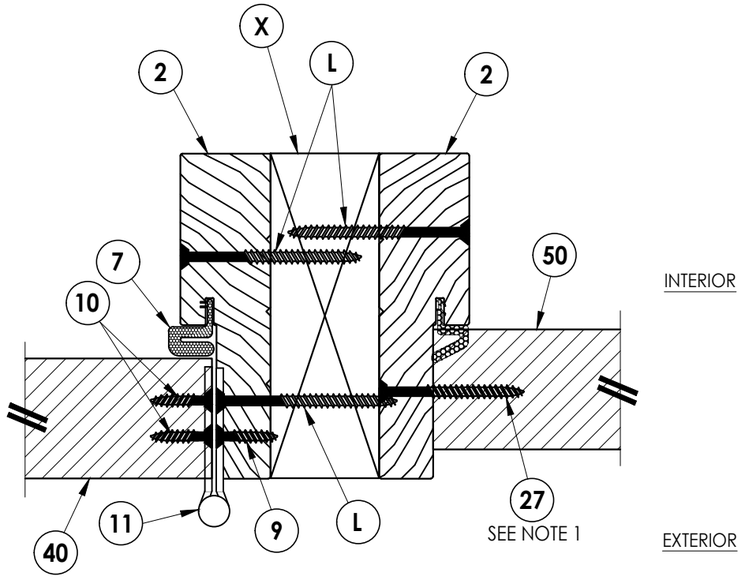


1/5 **HORIZONTAL CROSS SECTION**



2/5 **HORIZONTAL CROSS SECTION**
SHOWN w/ PVC JAMBS



3/5 **HORIZONTAL CROSS SECTION**
SHOWN w/ WOOD JAMBS

Notes:
1. Sidelite assembly screws located 6" from each end and 5 more screws equally spaced between (7 screws total per side jamb).

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PART OR ASSEMBLY: *HORIZONTAL CROSS SECTIONS*

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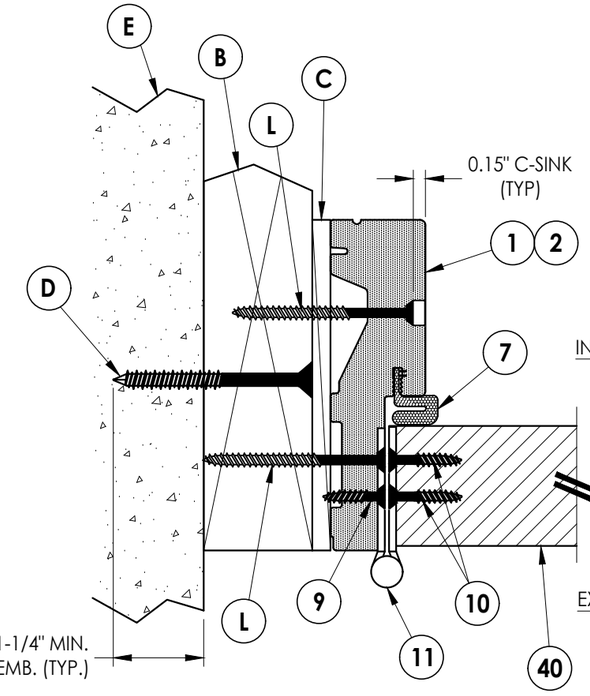
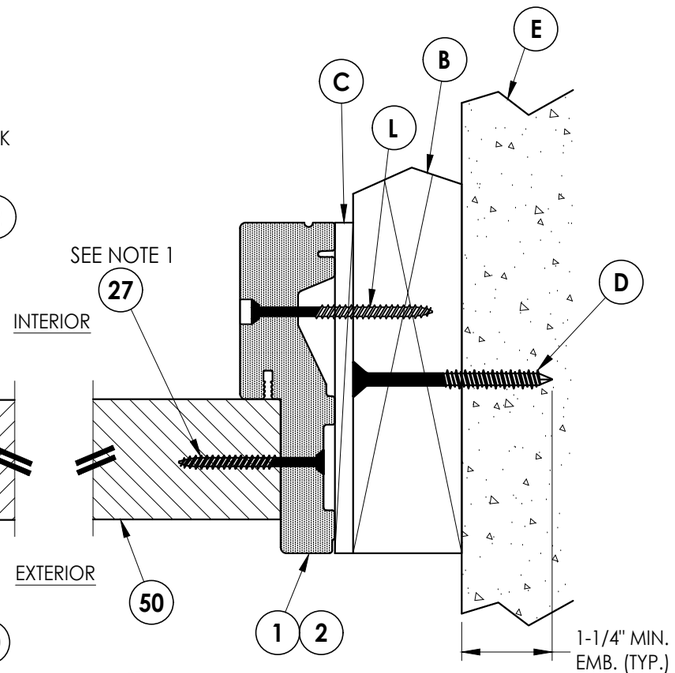
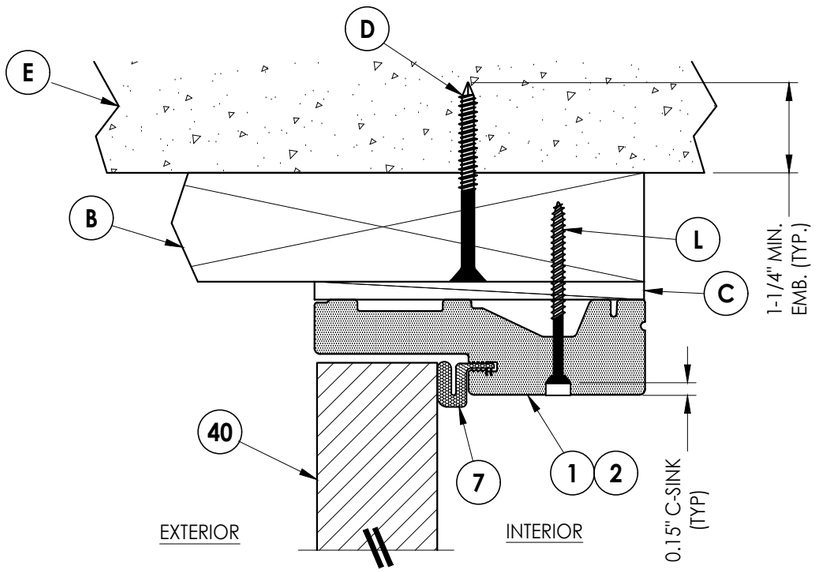


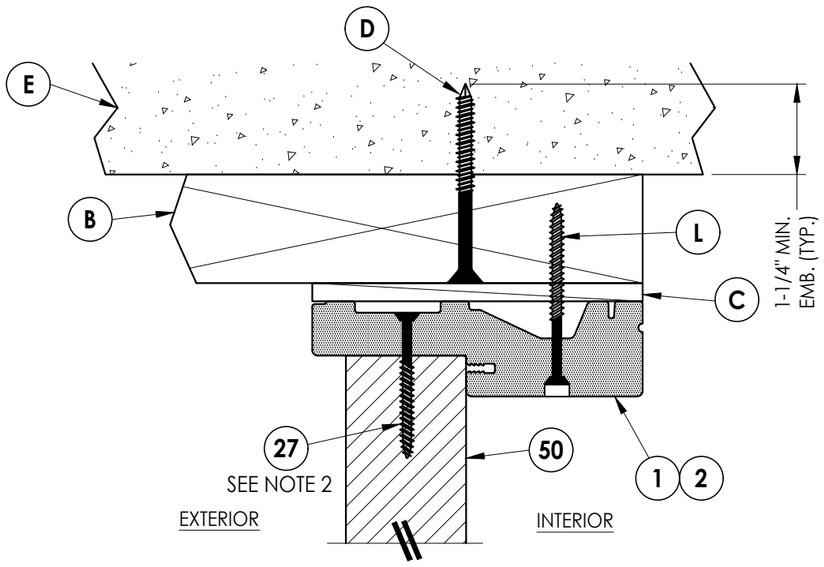
1/6 **HORIZONTAL CROSS SECTION**



2/6 **HORIZONTAL CROSS SECTION**



3/6 **VERTICAL CROSS SECTION**



4/6 **VERTICAL CROSS SECTION**

Notes:
1. Sidelite assembly screws located 6" from each end and 5 more screws equally spaced between (7 screws total per side jamb).
2. Sidelite assembly screws located 10" from each end (2 screws total along head & sill).

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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: *TRINITY FIBERGLASS PATIO DOOR "Impact"*

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

NO.	DATE	REVISIONS	BY
2	7/01/26	UPDATE TO 9TH ED. (2026) FBC	LFS
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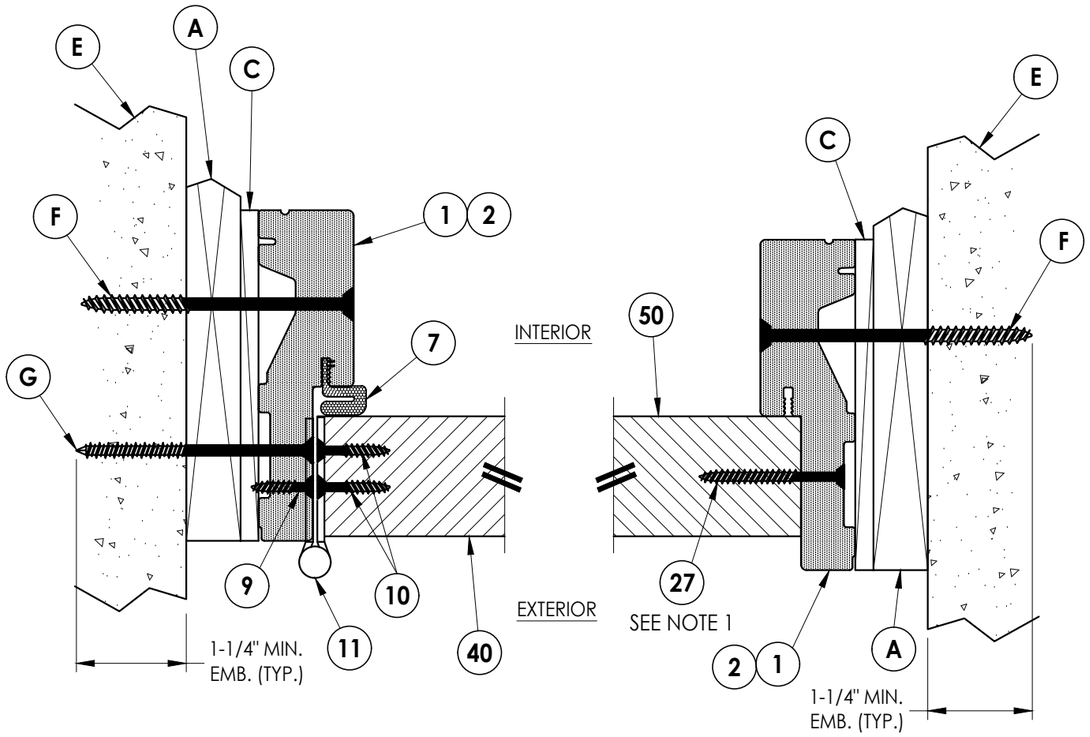
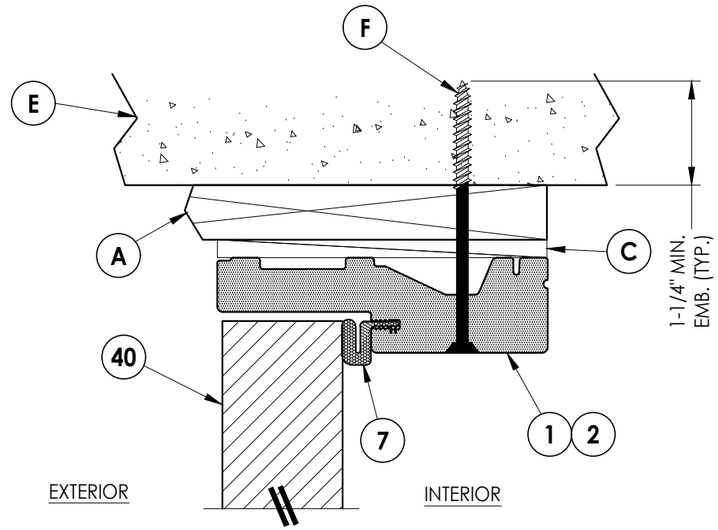
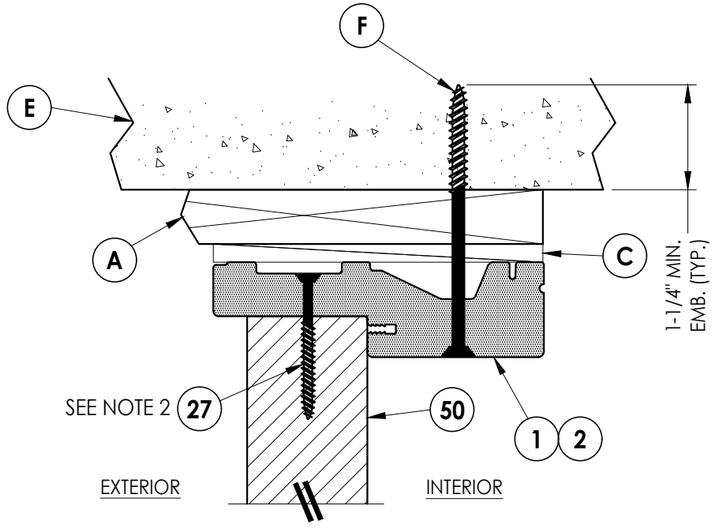


1/7 HORIZONTAL CROSS SECTION
Shown w/ 1X sub-buck

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



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



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

Notes:
1. Sidelite assembly screws located 6" from each end and 5 more screws equally spaced between (7 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)*

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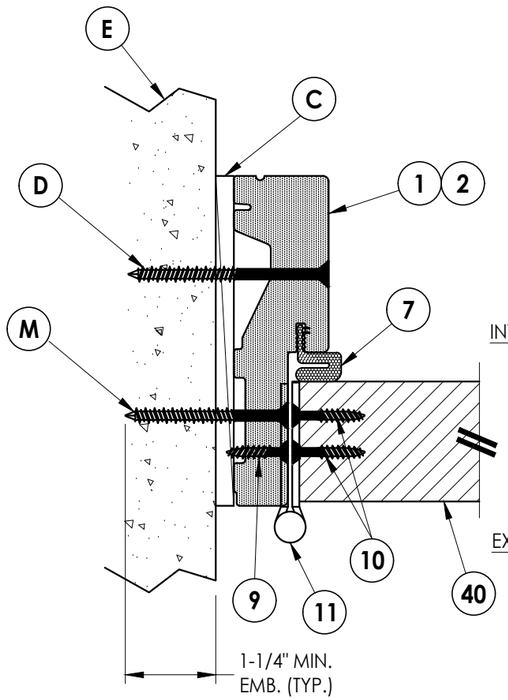
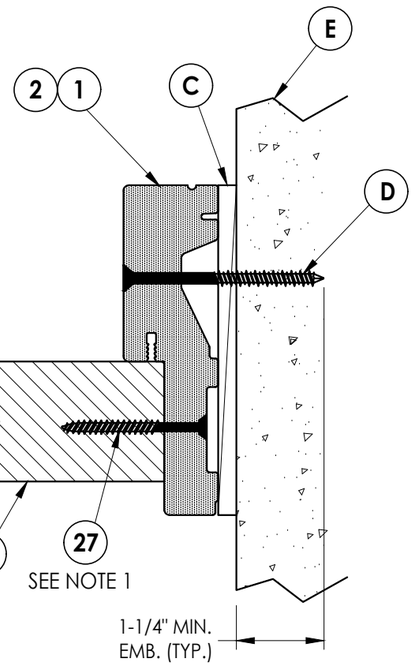
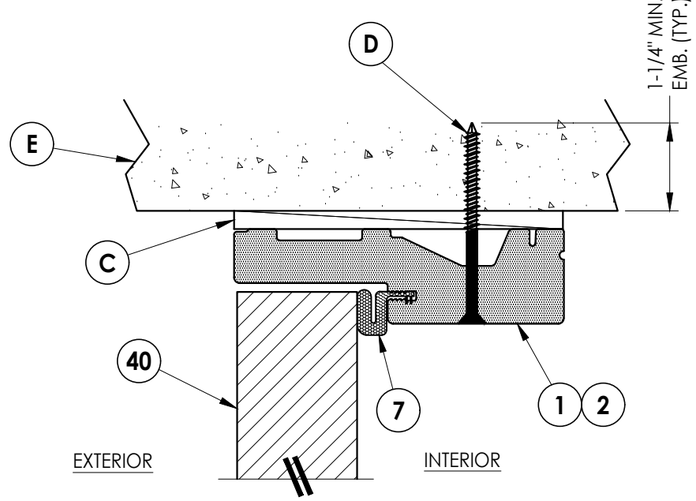


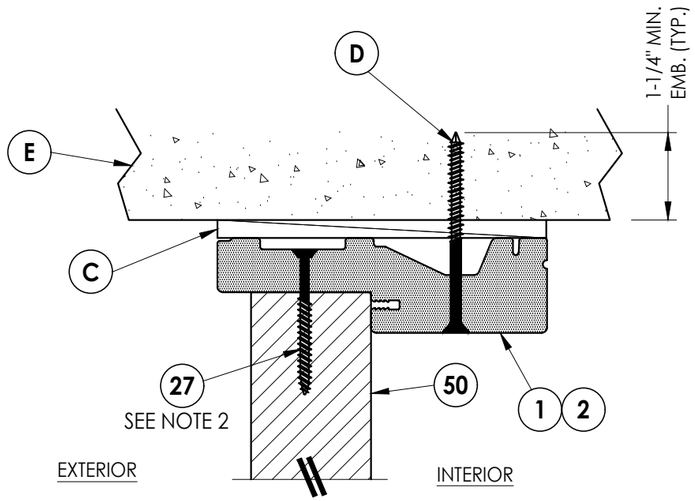
1/8 HORIZONTAL CROSS SECTION
Shown Direct to Masonry



2/8 HORIZONTAL CROSS SECTION
Shown Direct to Masonry



3/8 VERTICAL CROSS SECTION
Shown Direct to Masonry



4/8 VERTICAL CROSS SECTION
Shown Direct to Masonry

Notes:
1. Sidelite assembly screws located 6" from each end and 5 more screws equally spaced between (7 screws total per side jamb).
2. Sidelite assembly screws located 10" from each end (2 screws total along head & sill).

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: *FIBERGLASS PATIO DOOR TRINITY "Impact"*

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

NO.	DATE	REVISIONS	BY
2	7/01/26	UPDATE TO 9TH ED. (2026) FBC	LFS
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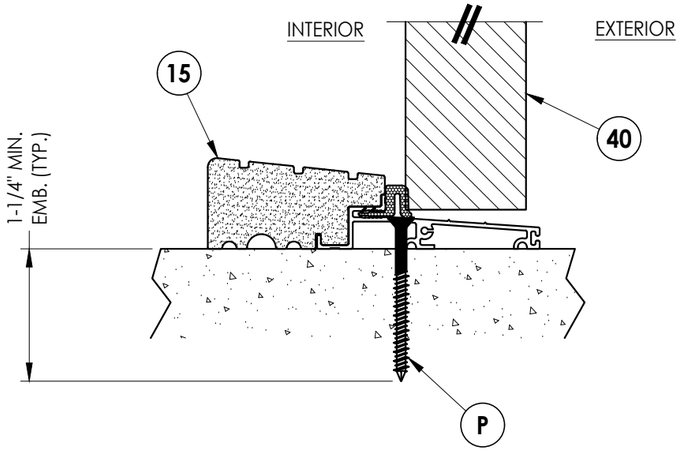
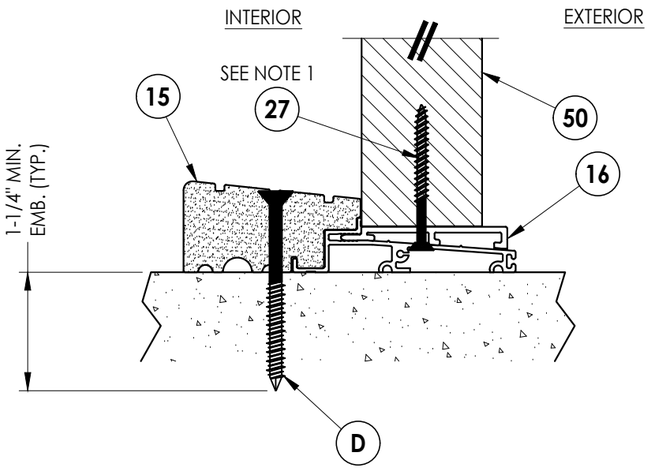
Notes:
1. Sidelite assembly screws located 10" from each end (2 screws total along head & sill).



1/9 VERTICAL CROSS SECTION



2/9 VERTICAL CROSS SECTION

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Lyndon F. Schmidt
P.E. No. 43409

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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
2	7/01/26	UPDATE TO 9TH ED. (2026) FBC	LFS
1	8/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS

DATE: 6/13/23
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: FL-37184.4
SHEET 9 OF 12

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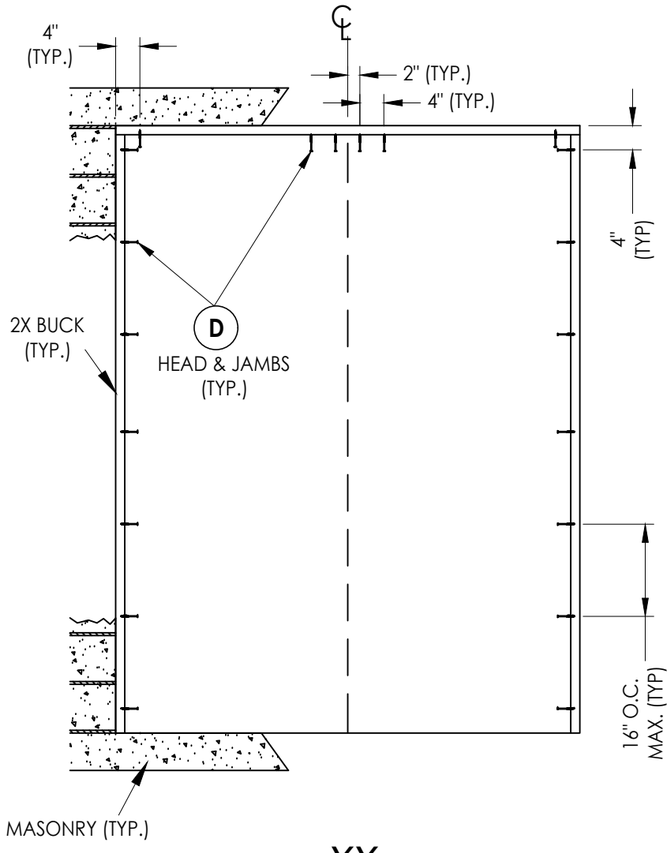

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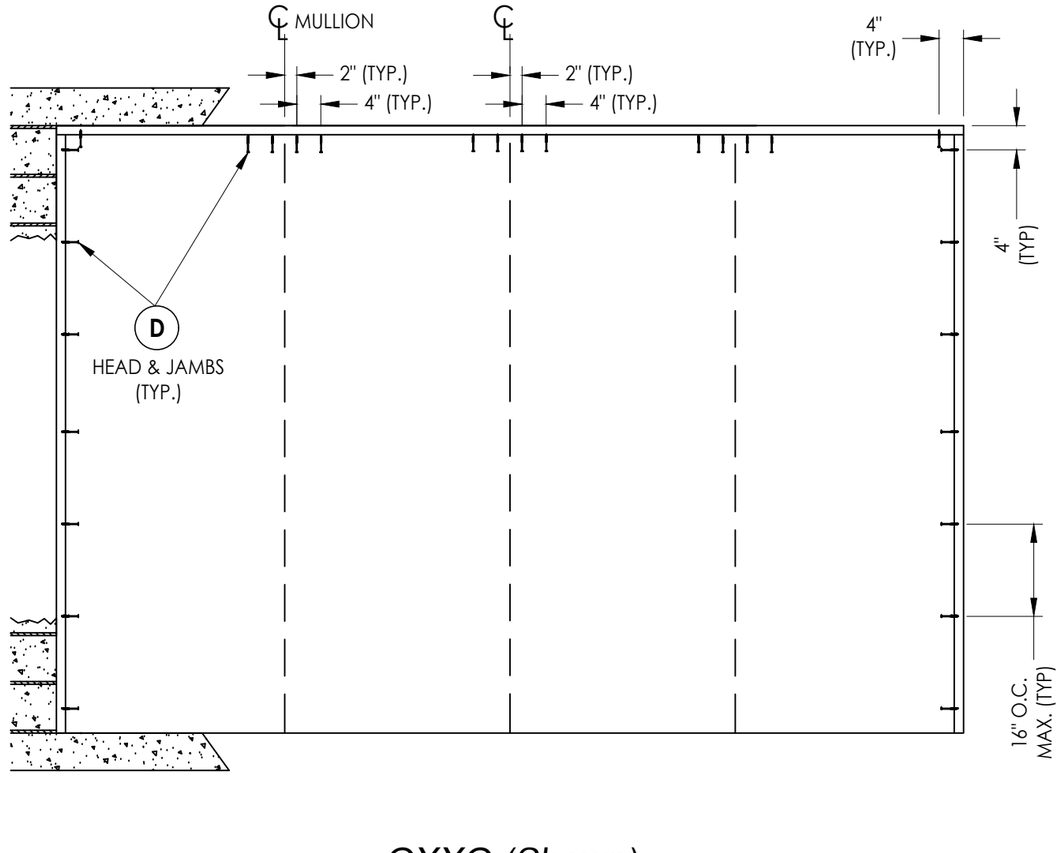

OXXO (Shown)
XXO, OXX (Similar)

2X BUCK ANCHORING

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: *BUCK ANCHORING*

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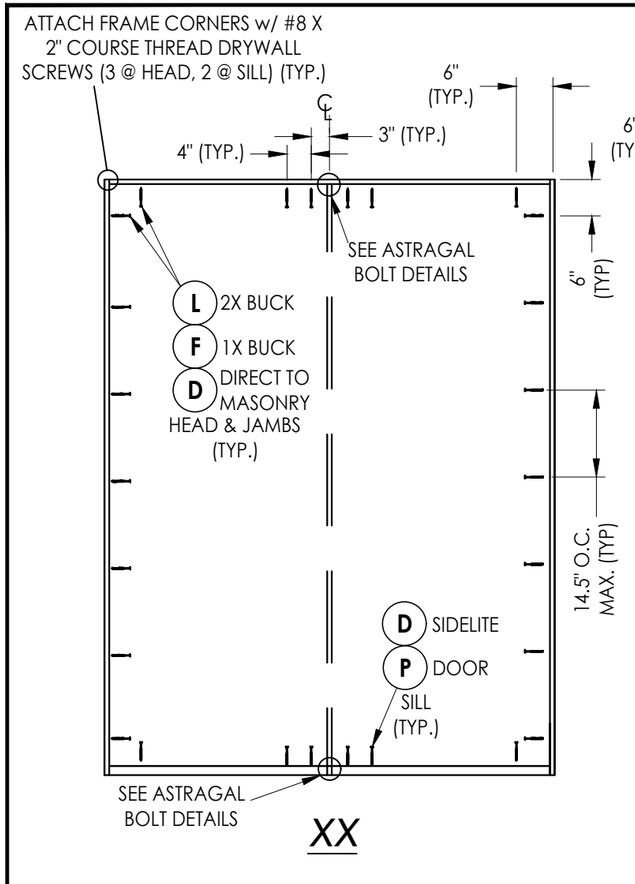

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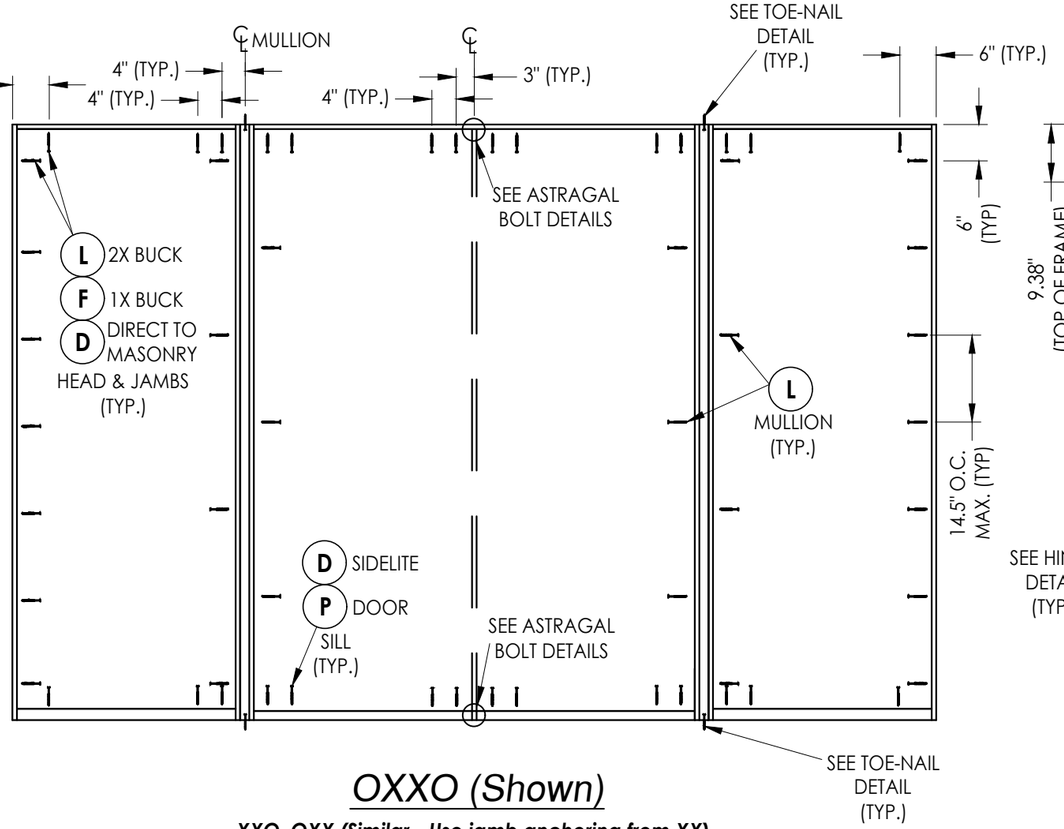
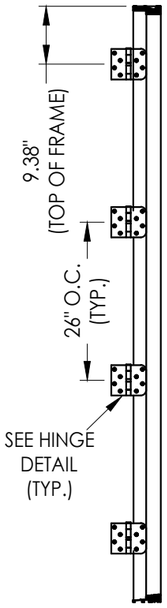
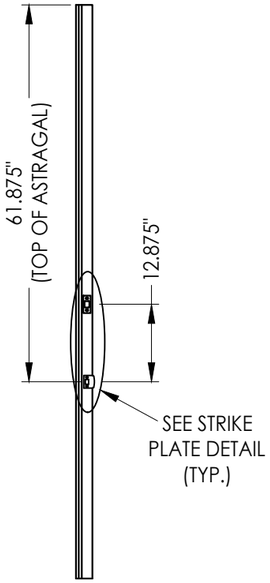


OXXO (Shown)

XXO, OXX (Similar - Use jamb anchoring from XX)

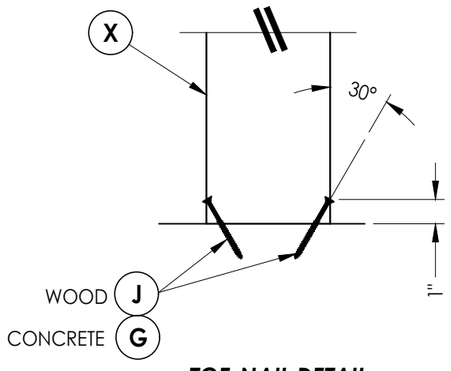


HINGE JAMB



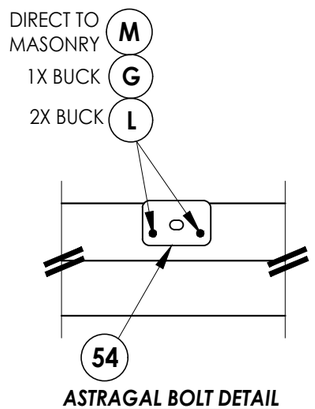
ASTRAGAL STRIKE

FRAME ANCHORING

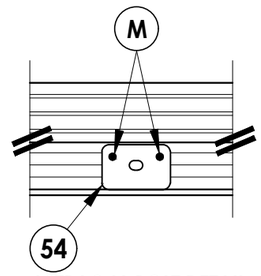


TOE-NAIL DETAIL

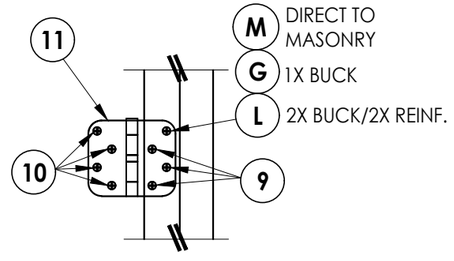
TYPICAL @ EACH 2X REINFORCEMENT
(SHOWN @ SILL - HEAD SIMILAR)



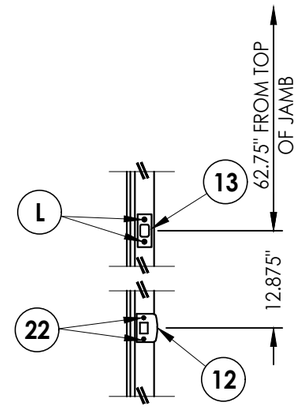
ASTRAGAL BOLT DETAIL
Strike Plate @ Head



ASTRAGAL BOLT DETAIL
Outswing Threshold



HINGE DETAIL



LATCH & DEADBOLT DETAILS

HARDWARE DETAILS

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: *FRAME ANCHORING & HARDWARE DETAILS*

NO.	DATE	REVISIONS	BY
2	7/01/26	UPDATE TO 9TH ED. (2026) FBC	LFS
1	8/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS

DATE: 6/13/23
SCALE: N.T.S.
DWG. BY: RW
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DRAWING NO.: FL-37184.4
SHEET 11 OF 12

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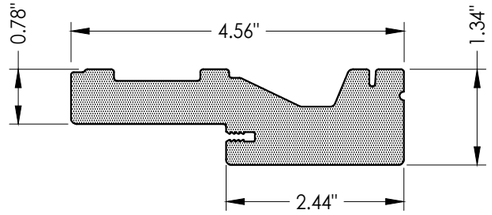
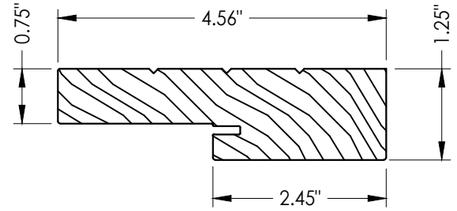
BILL OF MATERIALS

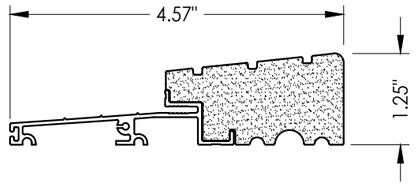
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK (G >= 0.42)	WOOD
B	2X BUCK (G >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	1/4" X 3-3/4" PFH DeWALT OR ITW 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
2	WOOD JAMB	WOOD
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



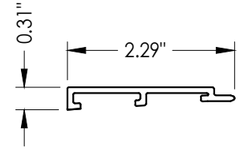
1 PVC JAMB



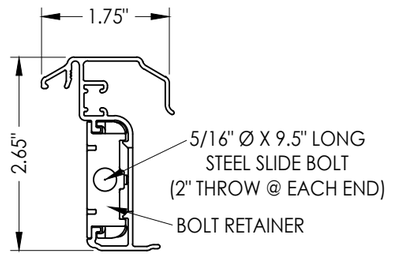
2 WOOD JAMB
FINGER JOINTED PINE



15 OUTSWING THRESHOLD
High-dam



16 OUTSWING SIDELITE ADAPTER



53 ENDURA ASTRAGAL
Ultimate Hurricane

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.*

Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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FBPE Registry No. 9813

PRODUCT: TRINITY FIBERGLASS PATIO DOOR "Impact"

PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS

NO.	DATE	BY	REVISIONS
2	7/01/26	LFS	UPDATE TO 9TH ED. (2026) FBC
1	8/01/23	LFS	UPDATE TO 8TH ED. (2023) FBC

DATE: 6/13/23
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DRAWING NO.: FL-37184.4
SHEET 12 OF 12

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