

STEVE'S AND SONS

203 Humble Ave.
San Antonio, TX 78225



Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

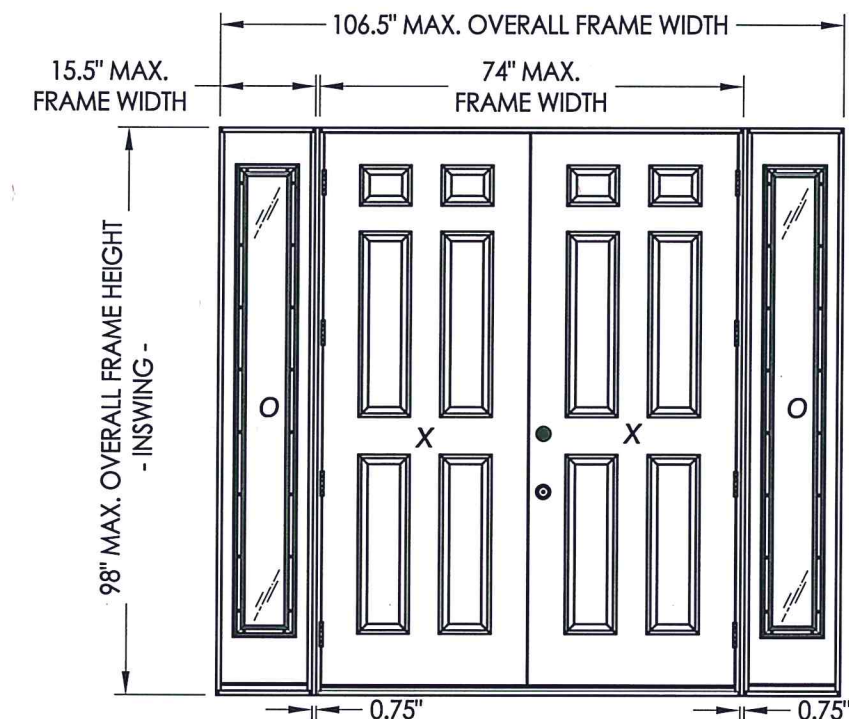
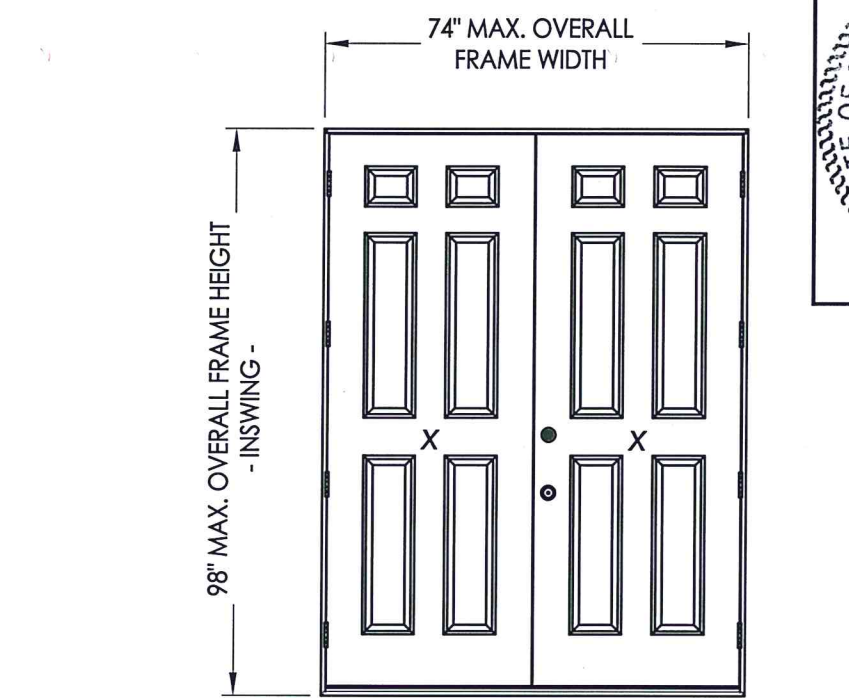
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: STEVE'S AND SONS FIBERGLASS DOOR
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS
2	5/28/20	UPDATE TO 2018 IRC/IBC CODE
1	7/16/15	REMOVE OUTSWING CONFIGURATION
		Manuf./Product Name Change
		JK
		BY

DATE: 5/19/10
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4095
SHEET 1 OF 10

Opaque Fiberglass Double Door w/ or w/out Sidelites INSWING "NON-IMPACT"



CONFIGURATION	MAX. FRAME DIMENSION	MAX. D.L.O. DIMENSION	DESIGN PRESSURE (PSF) INSWING	
			POSITIVE	NEGATIVE
XX	74.0" x 98.0"	N/A	+45.0	-45.0
OXXO	106.5" x 98.0"	7.0" x 79.87"	+45.0	-45.0

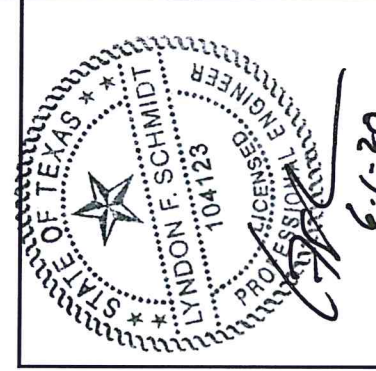
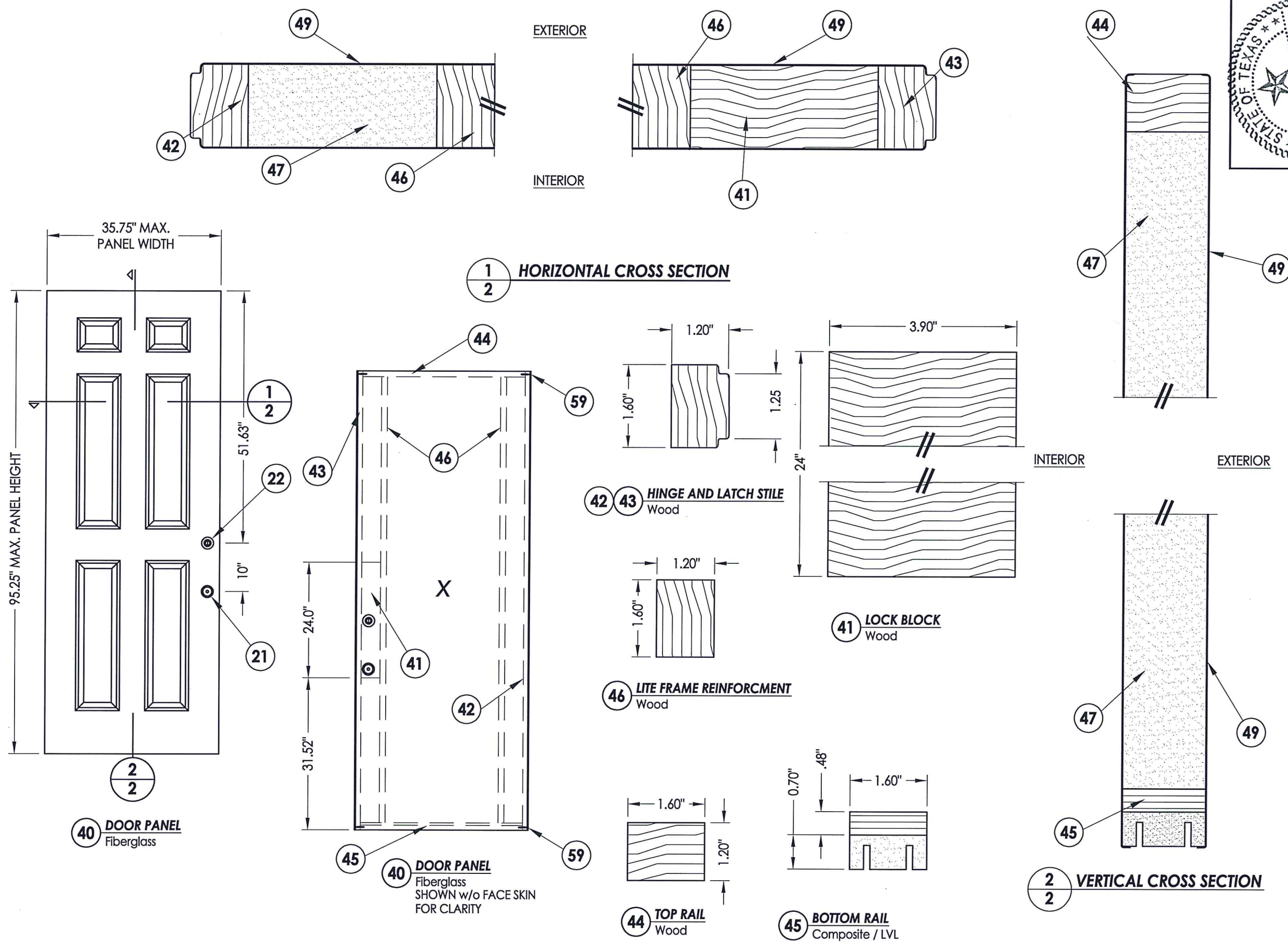
EVALUATED FOR USE IN THE STATE OF TEXAS
The Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. When used in areas requiring wind-borne debris protection this product is required to be protected with an impact resistant covering that complies with Section R301.2.1.2 of the IRC and Section 1609.1.2 of the IBC.
3. Allowable design pressure requirements must be equal to or less than the design pressure rating shown in the design pressure chart, sheet 1 of this drawing.
4. Conditions not covered by this drawing are subject to further engineering analysis.

TABLE OF CONTENTS

SHEET#	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel details
3	Sidelite panel details
4	Horizontal cross section
5	Vertical cross sections
6	Vertical cross sections
7	Frame anchoring
8	Glazing details
9	Astragal details
10	Bill of materials and components

R:\Clients\Steves and Sons - Permanent\B - Texas Dept of Ins\Hinged Doors-Fiberglass\DR 431 Opaque Fiberglass Doors\C - Drawings\TX-4094-95.dwg, 2-4



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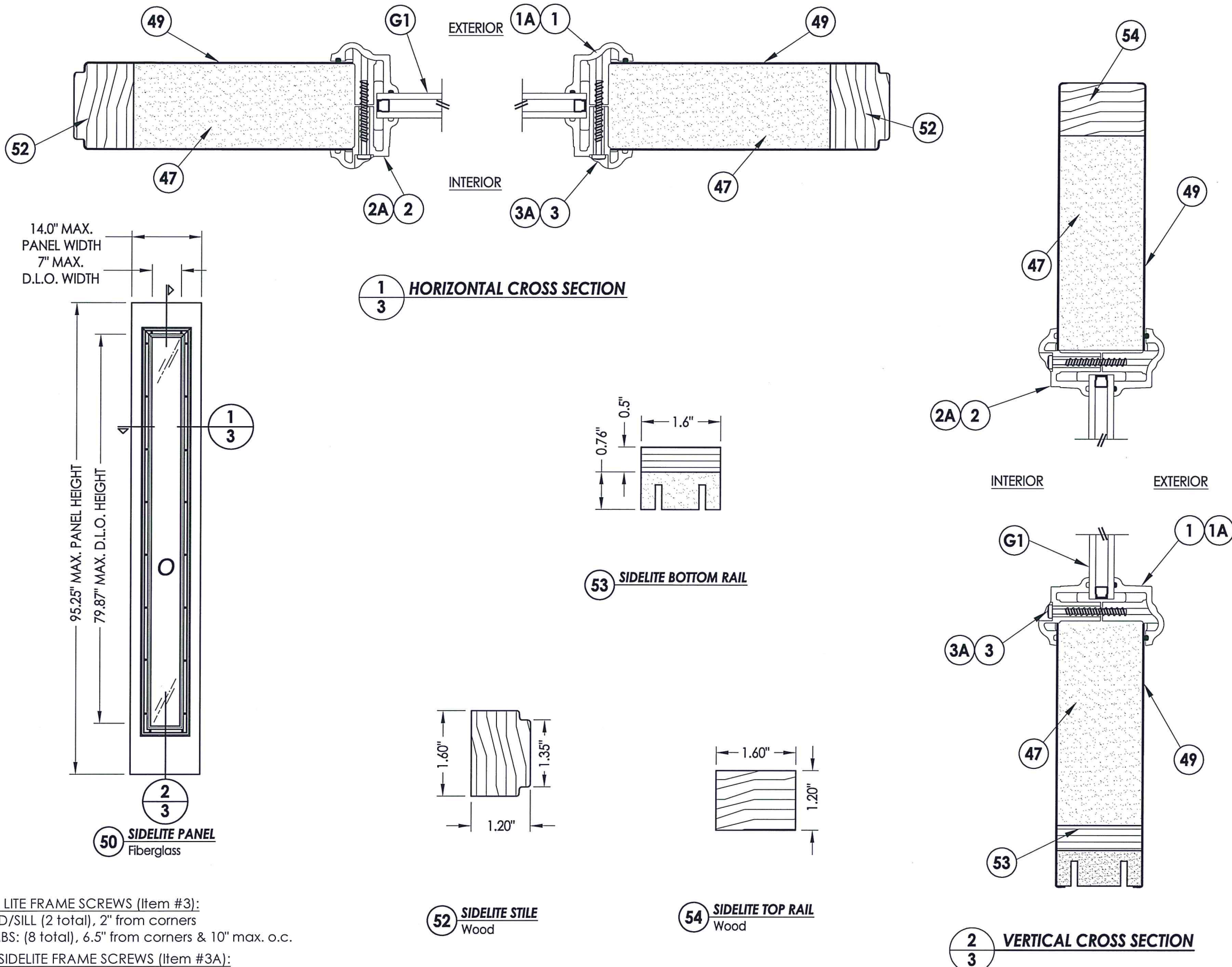
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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: STEVES AND SONS
FIBERGLASS DOOR

PART OR ASSEMBLY:
DOOR PANEL DETAILS

NO.	DATE	REVISIONS
2	5/28/20	UPDATE TO 2018 IBC/IRC CODE REMOVE OUTSWING CONFIGURATION
1	7/16/15	Manuf./Product Name Change

DATE: 5/19/10
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4095
SHEET 2 OF 10



ODL LITE FRAME SCREWS (Item #3):
 HEAD/SILL (2 total), 2" from corners
 JAMBS: (8 total), 6.5" from corners & 10" max. o.c.

RSL SIDELITE FRAME SCREWS (Item #3A):
 HEAD/SILL (2 total), 2" from corners
 JAMBS: (8 total), 3.25" from corners & 10.75" max. o.c.

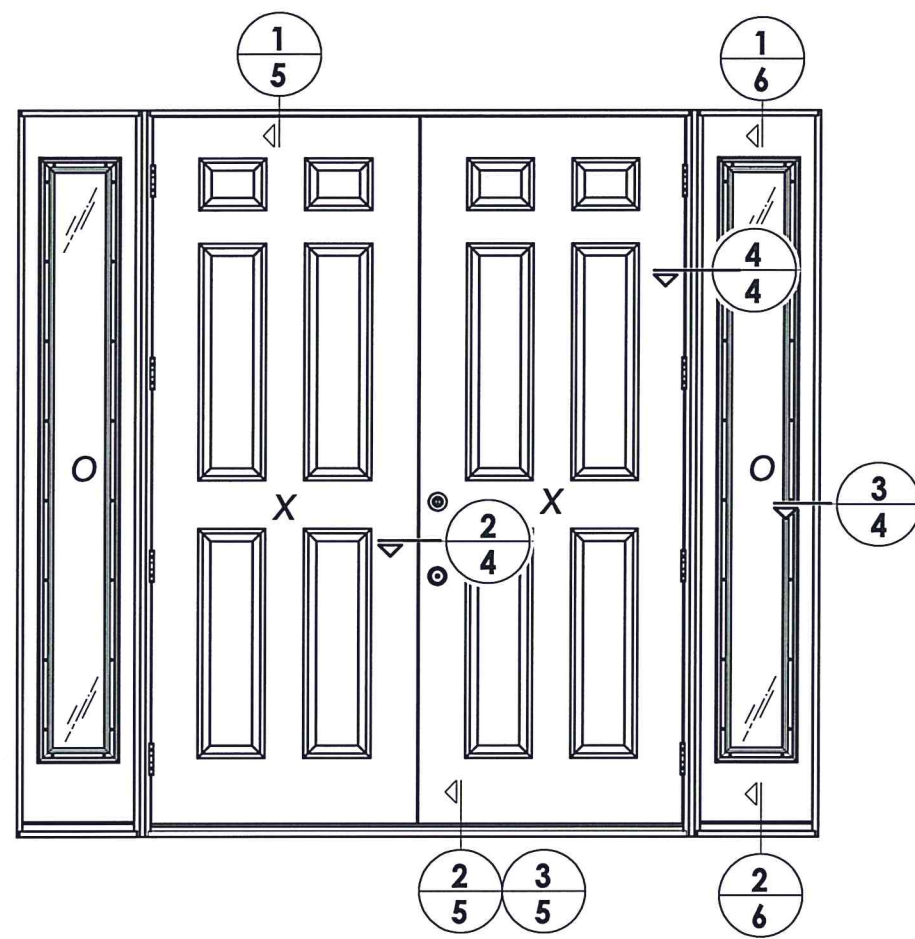
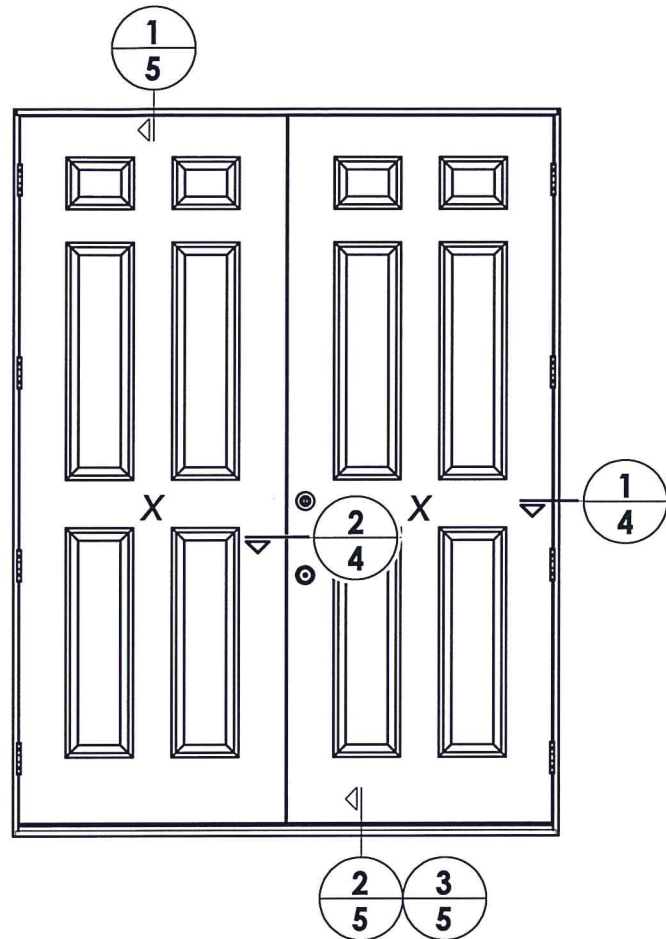


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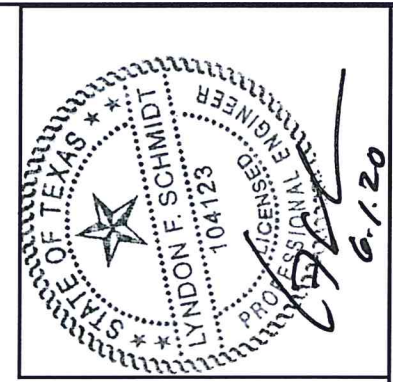
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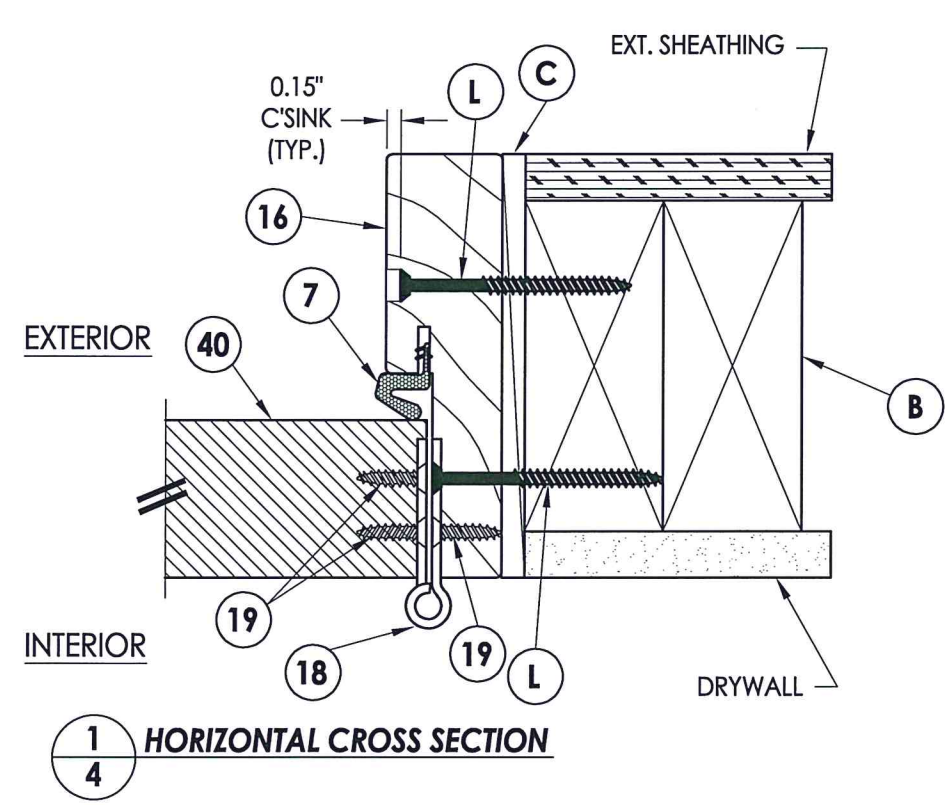
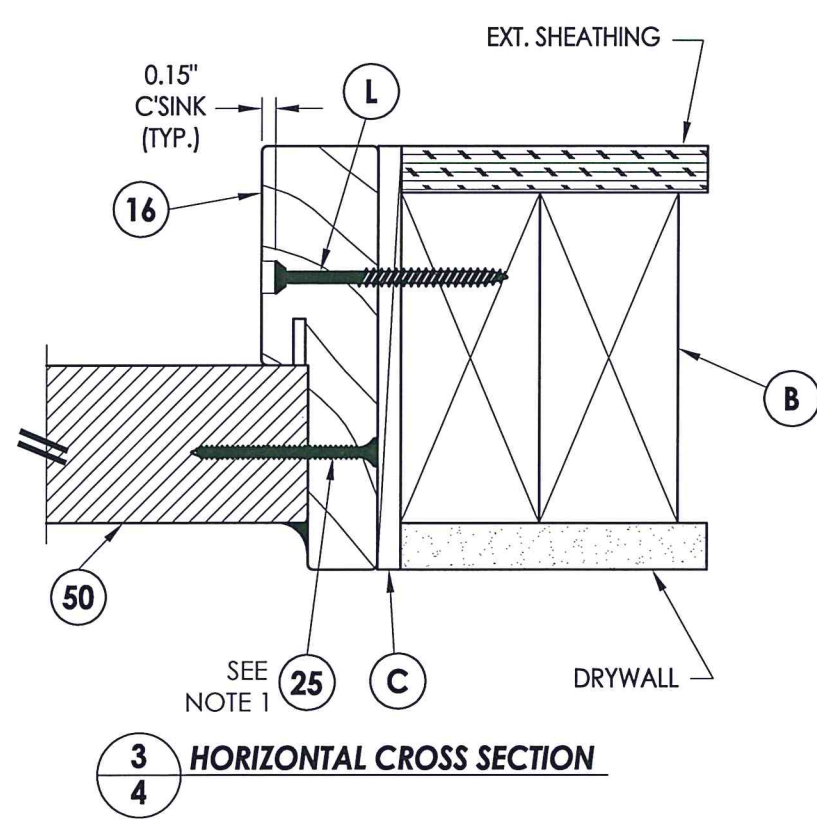
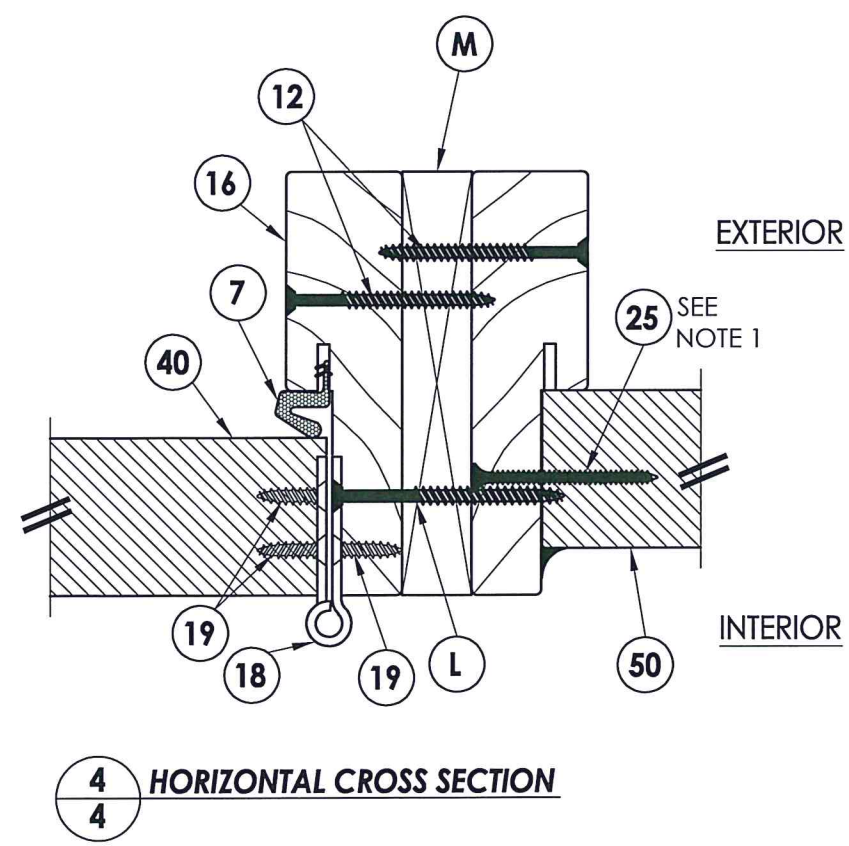
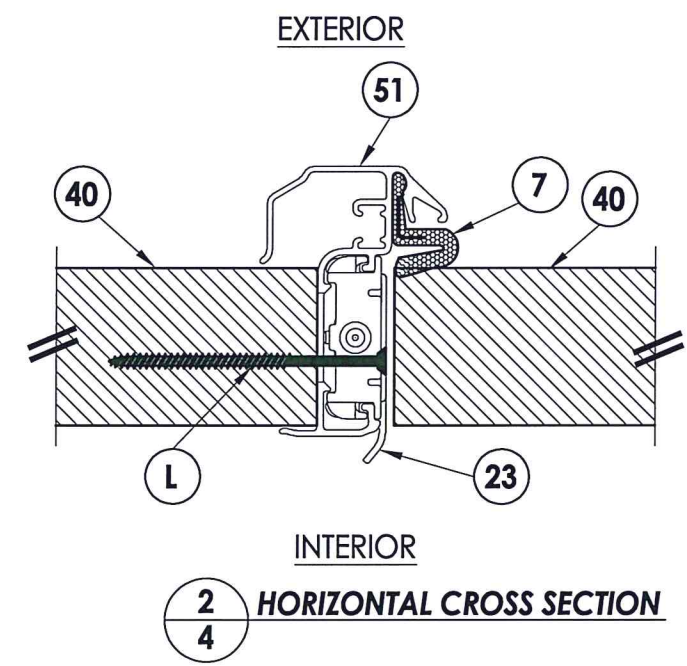
PRODUCT: STEVES AND SONS FIBERGLASS DOOR			
PART OR ASSEMBLY: SIDELITE PANEL DETAILS			
2	5/28/20	UPDATE TO 2018 IBC/IRC CODE	LFS
1	7/16/15	REMOVE OUTSWING CONFIGURATION	JK
NO.	DATE	Manuf./Product Name Change	BY
REVISIONS			
DATE: 5/19/10			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4095			
SHEET 3 of 10			



NOTE:
1. Sidelite ass'y fastener; 6" from each end and 6 more screws equally spaced between. (8 screws total per jamb.)



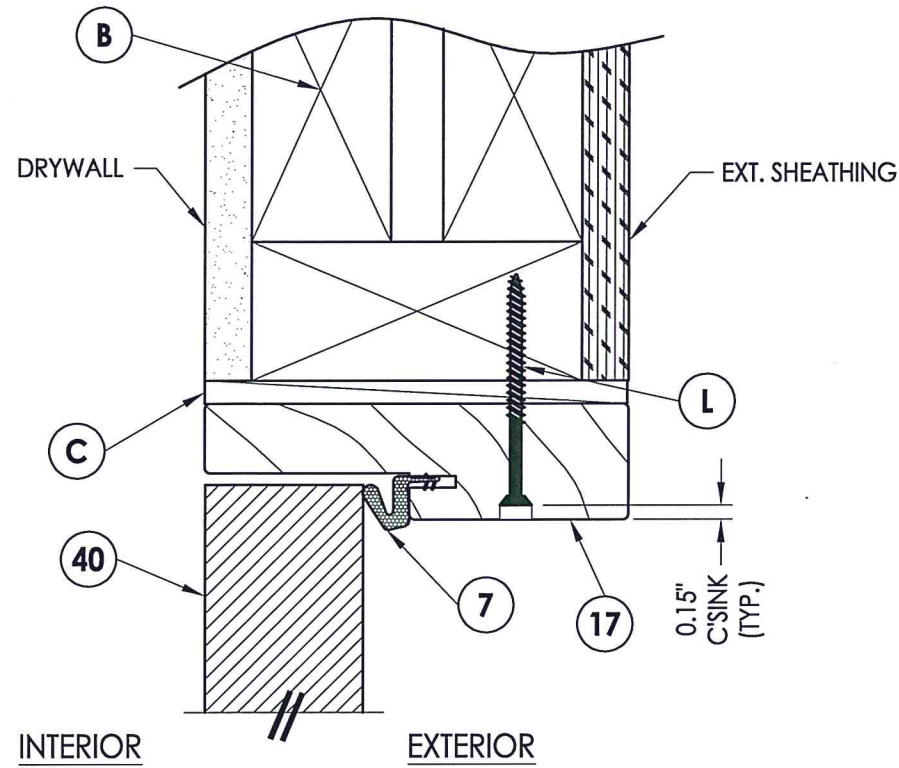
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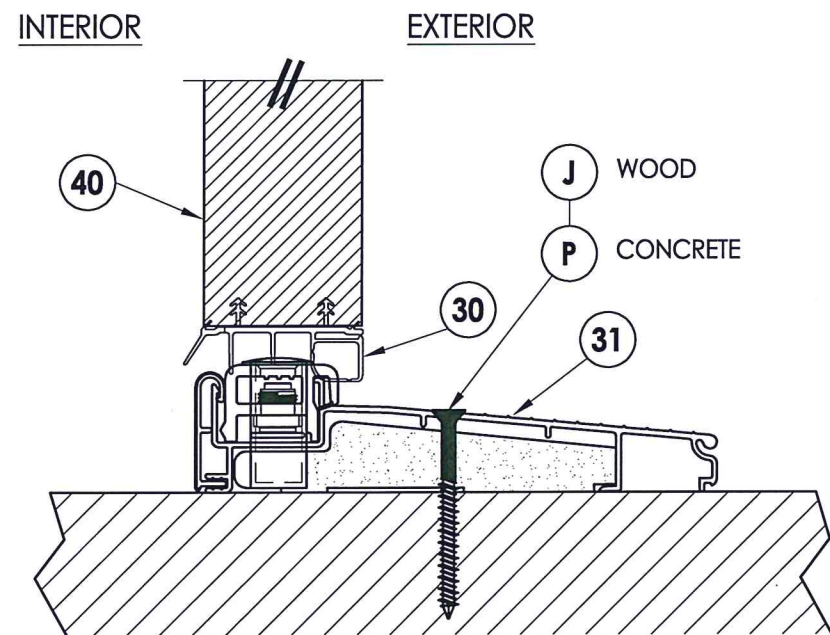
PRODUCT: STEVES AND SONS FIBERGLASS DOOR
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	REVISIONS
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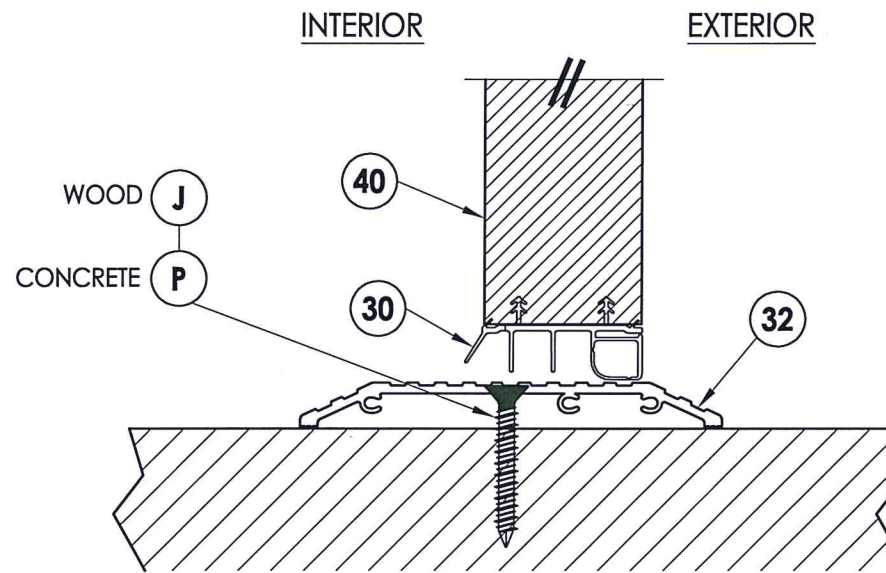
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DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4095
SHEET 4 of 10



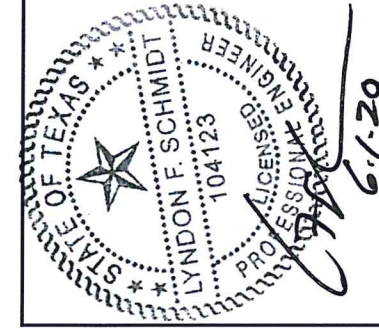
1 VERTICAL CROSS SECTION
5 Inswing shown - outswing also approved



3 VERTICAL CROSS SECTION
5 Inswing configuration



2 VERTICAL CROSS SECTION
5 Shown w/ ADA threshold



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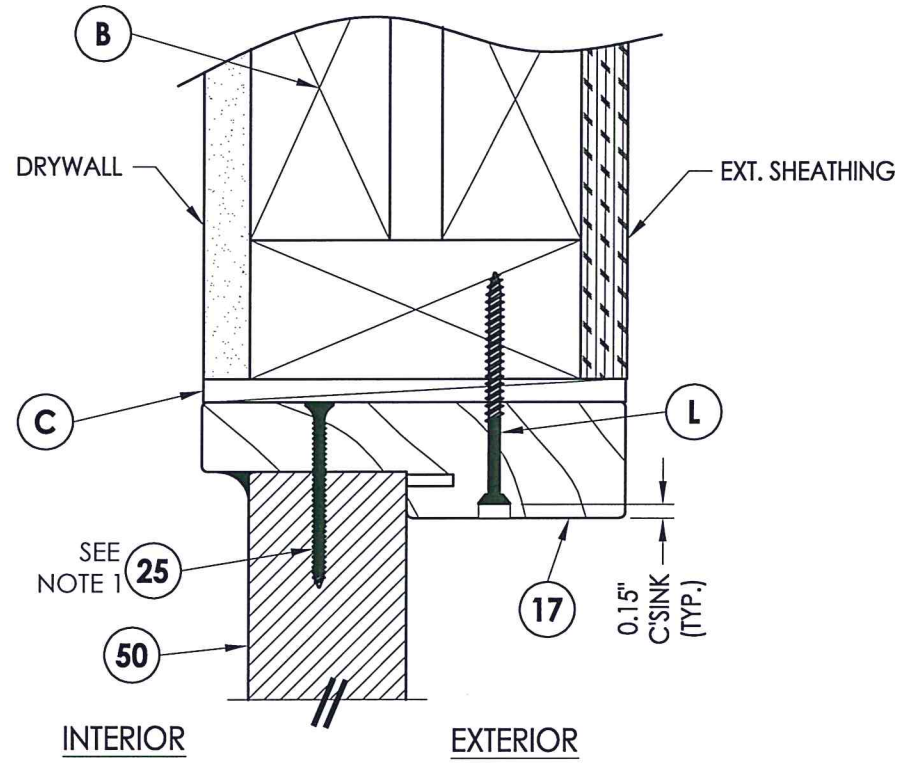
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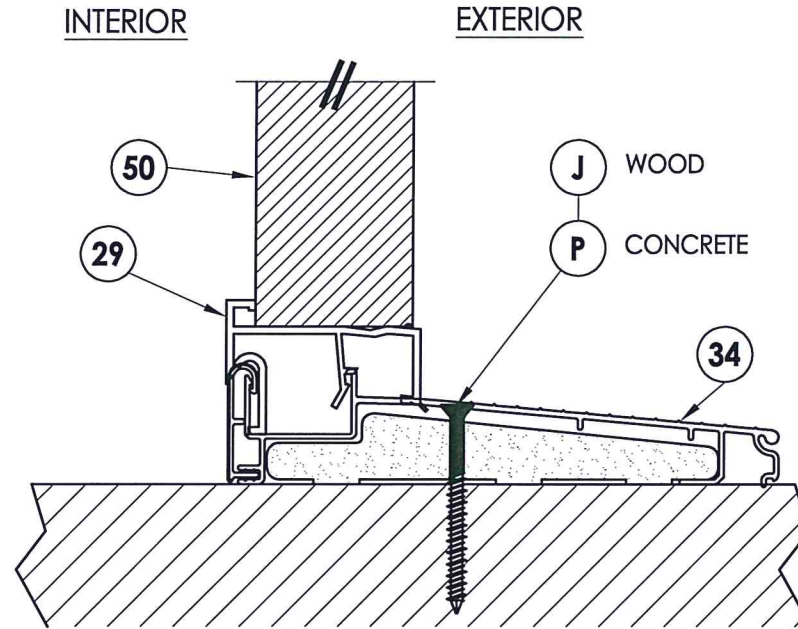
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 PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
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		JK BY

DATE: 5/19/10
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4095
 SHEET 5 OF 10



1
6 VERTICAL CROSS SECTION



2
6 VERTICAL CROSS SECTION
Inswing configuration

NOTE:

1. Screws thru head and sill jamb located 3" from each end.



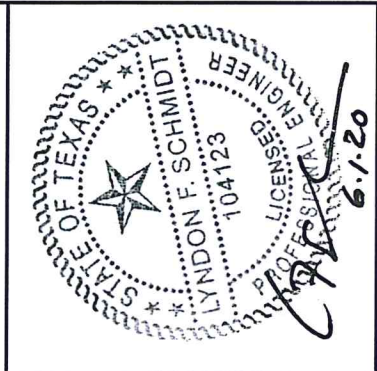
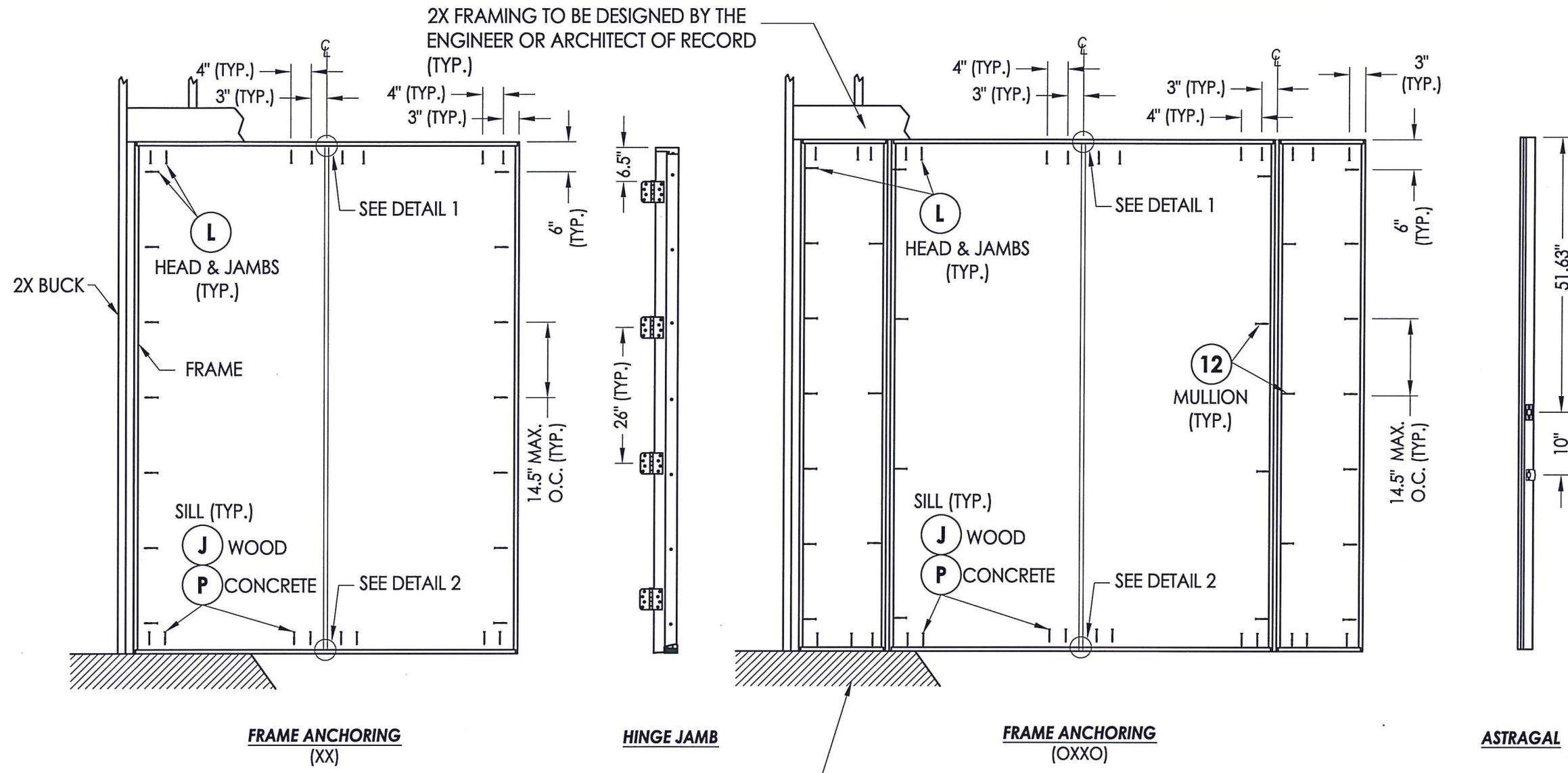
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PRODUCT: STEVES AND SONS
FIBERGLASS DOOR
PART OR ASSEMBLY:
VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
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1	7/16/15	Manuf./Product Name Change
		JK BY

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DWG. BY: JK
CHK. BY: LFS
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SHEET 6 OF 10



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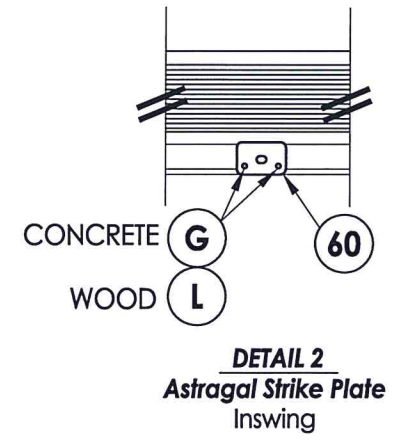
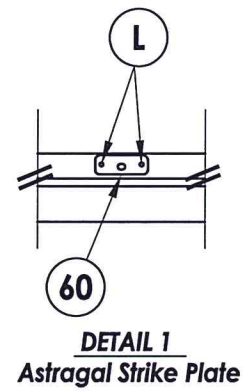
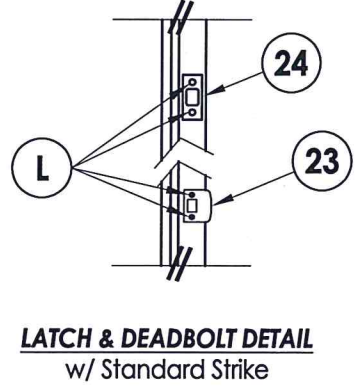
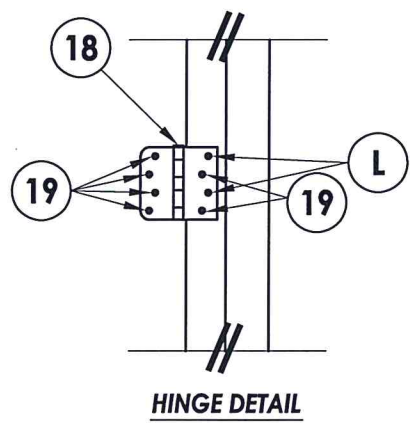
PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	REVISIONS
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		REMOVE OUTSWING CONFIGURATION
1	7/16/15	Manuf./Product Name Change
		JK
		BY

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®	3/16"	1-3/4"	3"	1-1/2"
	1/4"	1-3/4"	1-1/2"	4"
ELCO ULTRACON®	1/4"	1-3/4"	1"	4"



DATE: 5/19/10

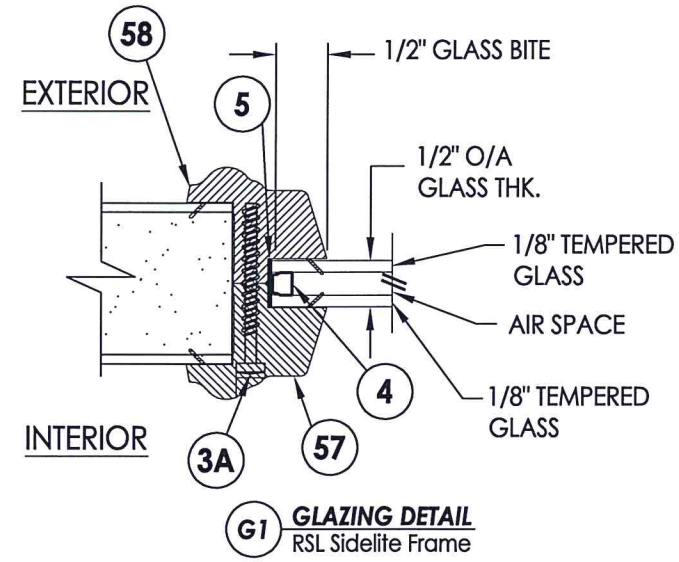
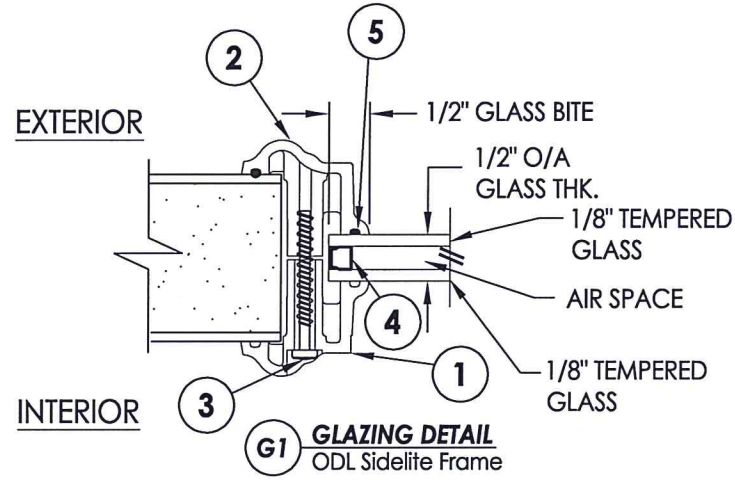
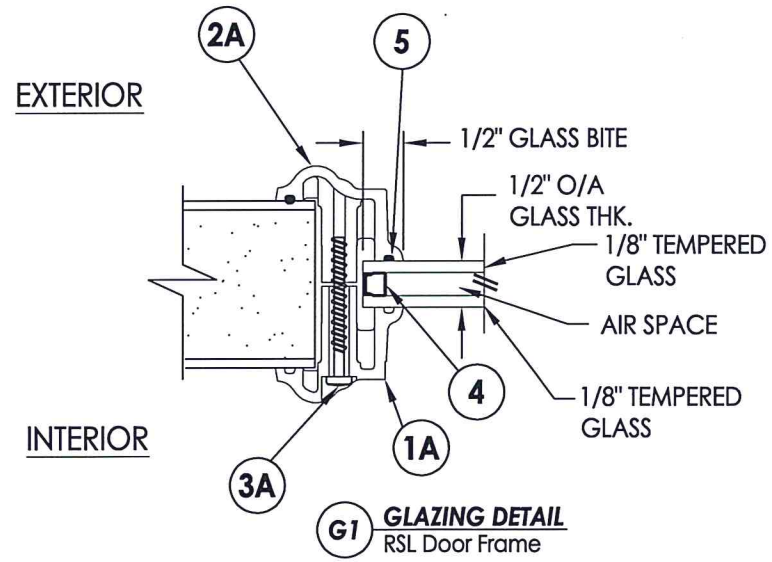
SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4095

SHEET 7 OF 10



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FIBERGLASS DOOR

PART OR ASSEMBLY:
GLAZING DETAILS

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		BY

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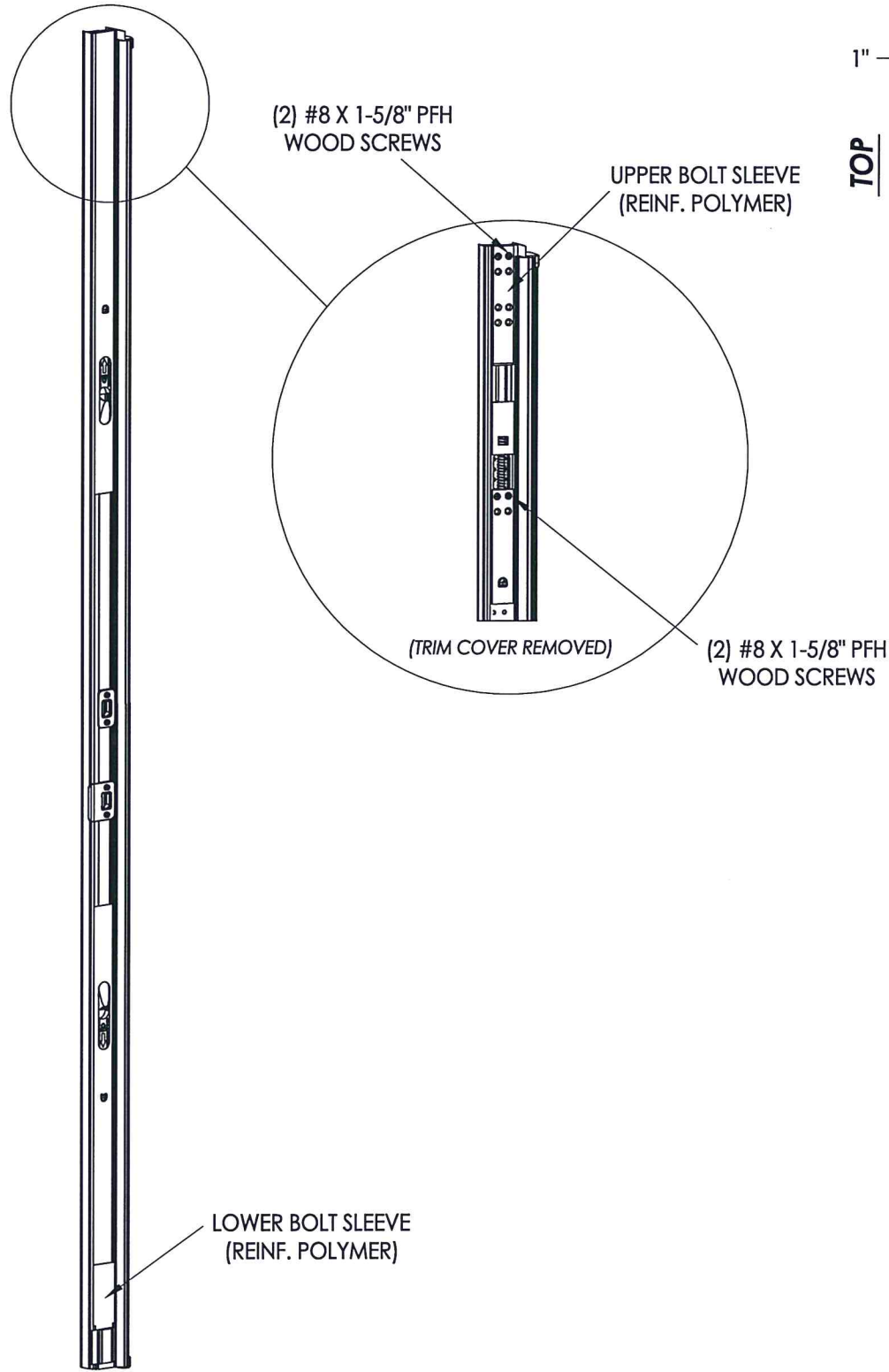
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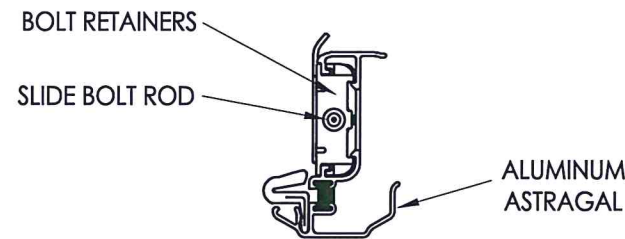
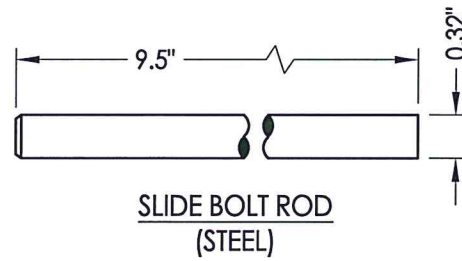
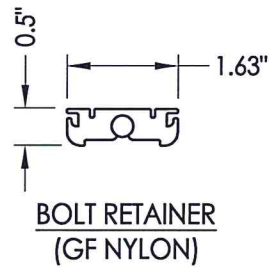
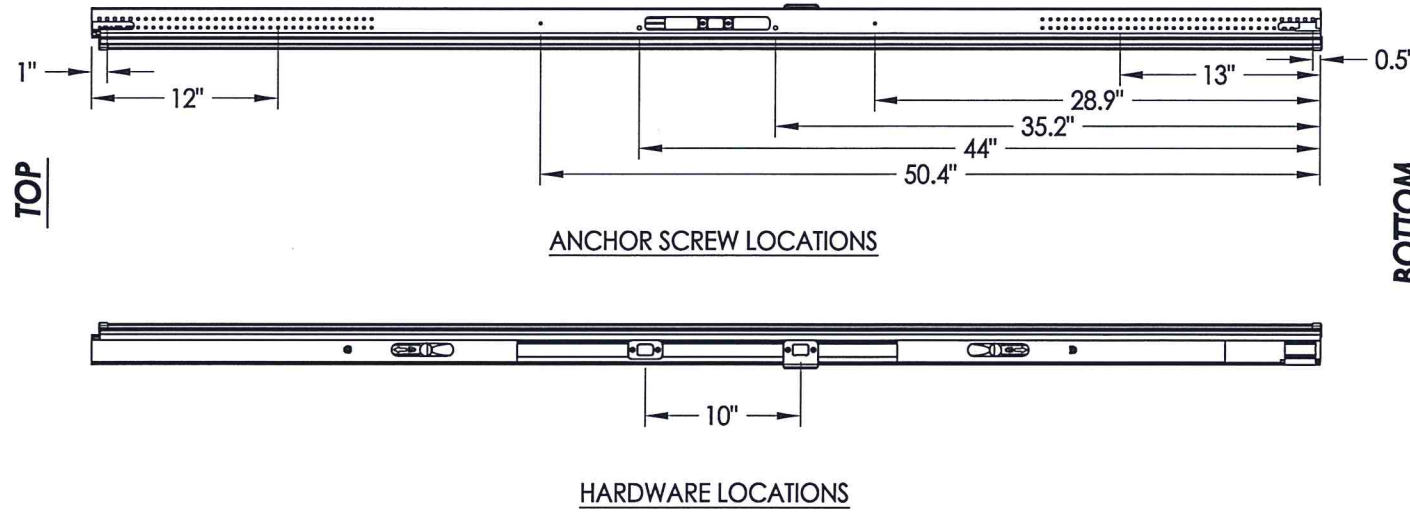
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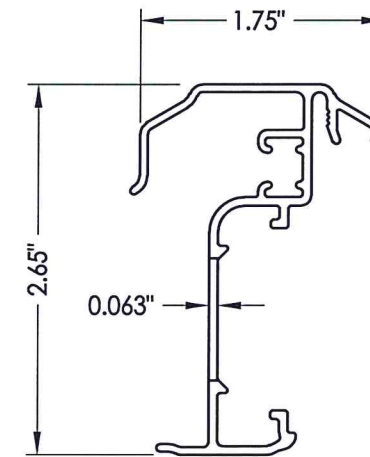
SHEET 8 OF 10



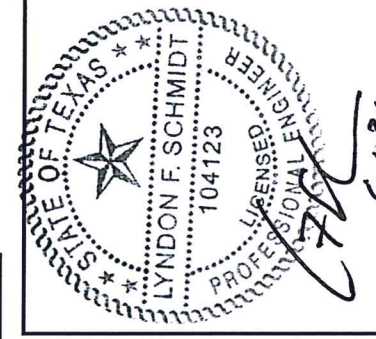
ULTIMATE HURRICANE ASTRAGAL



ALUMINUM ASTRAGAL ASSEMBLY



ASTRAGAL SECTION



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1	7/16/15	REMOVE OUTSWING CONFIGURATION JK
		Manuf./Product Name Change BY

DATE: 05/19/10

SCALE: N.T.S.

DWG. BY: JK

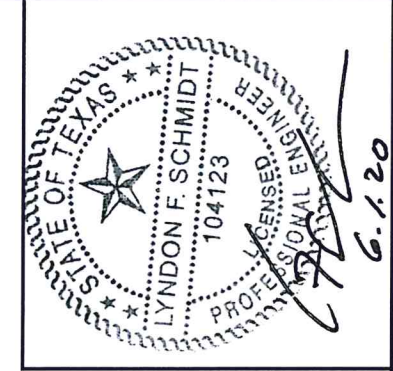
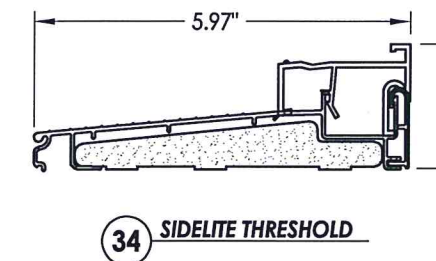
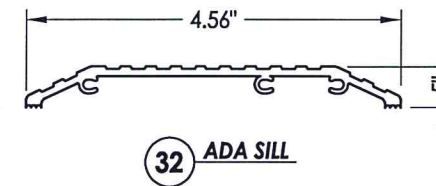
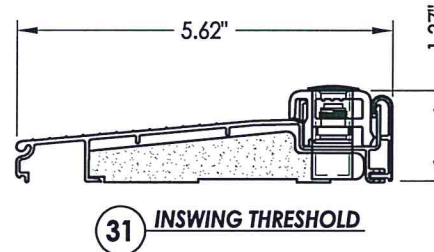
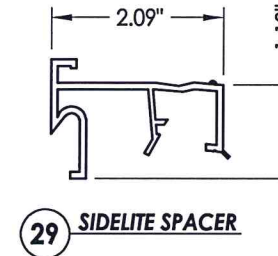
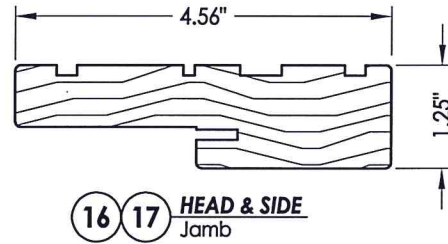
CHK. BY: LFS

DRAWING NO.: TX-4095

SHEET 9 OF 10

BILL OF MATERIALS

ITEM #	DESCRIPTION	MATERIAL
B	2X FRAMING SG >= 0.42	WOOD
C	1/4" MAX. SHIM SPACE	-
G	3/16" PFH ITW CONCRETE SCREW (1-3/4" MIN. EMB.)	STEEL
J	#10 X 3" PFH WOOD SCREW	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMB.)	STEEL
M	1X OR 2X REINFORCEMENT SG >= 0.55	STEEL
P	1/4" PFH ELCO OR ITW CONCRETE SCREW (1-3/4" MIN. EMB.)	STEEL
1	FEMALE LITE FRAME - ODL	POLYPROPYLENE
1A	FEMALE LITE FRAME - RSL	POLYPROPYLENE
2	MALE LITE FRAME - ODL	POLYPROPYLENE
2A	MALE LITE FRAME - RSL	POLYPROPYLENE
3	#8 X 1-3/4" PANHEAD SMS (LIGHT FRAME SCREW)	STEEL
3A	#8 X 1-1/2" PANHEAD SMS (LIGHT FRAME SCREW)	STEEL
4	ALUMINUM SPACER SYSTEM	ALUMINUM
5	HOT MELT SEALANT / SILICONE	SILICONE
7	WEATHER STRIP	FOAM
12	#10 X 2-1/4" PFH SCREW	STEEL
16	SIDE JAMB SG >= 0.42	WOOD
17	HEAD JAMB SG >= 0.42	WOOD
18	4" X 4" HINGE MIN 0.1" THICK	STEEL
19	#10 X 3/4" PFH WS	STEEL
20	#10 X 2-1/2" PFH SCREW	STEEL
21	KWIKSET LOCK -SERIES 690 CP PASSAGE	STEEL
22	KWIKSET DEADBOLT -SERIES 690 CP	STEEL
23	LATCH STRIKEPLATE	STEEL
24	DEADBOLT STRIKE PLATE	STEEL
25	#8 X 2-1/2" PFH WOOD SCREW	STEEL
29	SIDELITE SPACER	VINYL
30	DOOR BOTTOM SWEEP	PVC
31	INSWING THRESHOLD	ALUM/COMP.
32	ADA THRESHOLD	ALUM.
34	SIDELITE THRESHOLD	ALUM./COMP.
40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
41	WOOD LOCK BLOCK	WOOD
42	HINGE STILE - SG >= 0.42	WOOD
43	LATCH STILE - SG >= 0.42	WOOD
44	TOP RAIL SG >= 0.42	WOOD
45	BOTTOM RAIL	COMP./LVL
46	FRAME REINFORCEMENT SG >= 0.42	WOOD
47	POLYSTYRENE FOAM	POLYSTYRENE
49	FIBERGLASS SKIN 0.08" MIN. THICKNESS	FIBERGLASS
50	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
51	ALUMINUM ASTRAGAL	ALUM
52	SIDELITE STILE - SG >= 0.42	WOOD
53	SIDELITE BOTTOM RAIL	COMP./LVL
54	SIDELITE TOP RAIL	WOOD
57	SIDELITE FEMALE LITE FRAME - RSL	PVC
58	SIDELITE MALE LITE FRAME - RSL	PVC
59	#8 X 2" PFH WOOD SCREW	STEEL
60	ASTRAGAL STRIKE PLATE	STEEL



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FIBERGLASS DOOR

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BILL OF MATERIALS
& COMPONENTS

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1	7/16/15	REMOVE OUTSWING CONFIGURATION
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SHEET 10 OF 10