

# STEVE'S AND SONS

203 Humble Ave.  
San Antonio, TX 78225

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

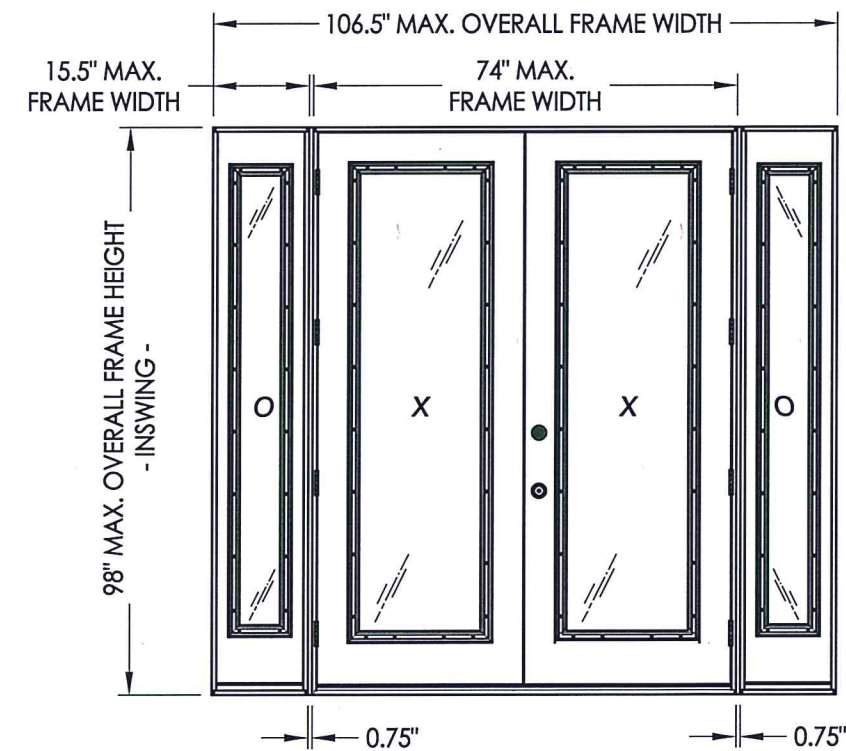
### EVALUATED FOR USE IN THE STATE OF TEXAS

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:

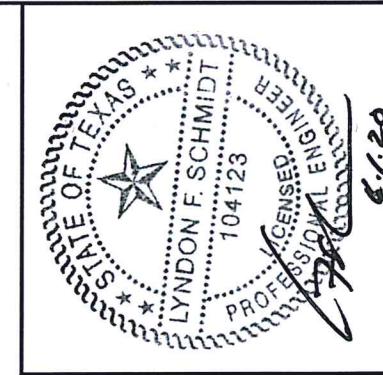
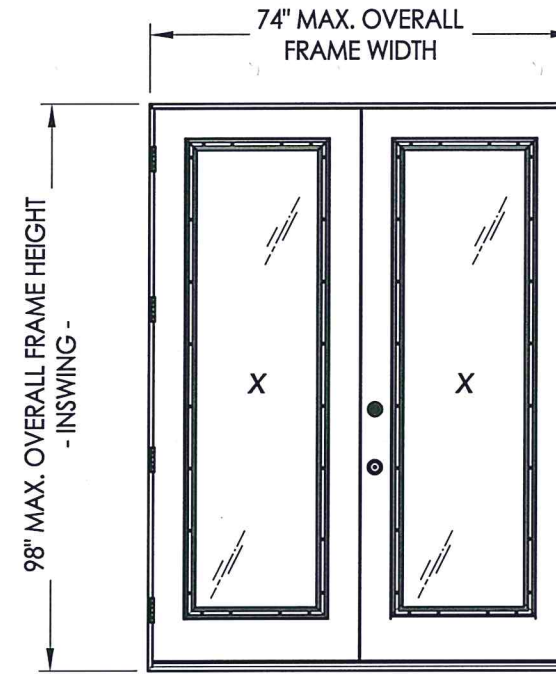
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. When used in areas requiring wind-borne debris protection this product is required to be protected with an impact resistant covering that complies with Section 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



CONFIGURATION	MAX. FRAME DIMENSION	MAX. D.L.O. DIMENSION	DESIGN PRESSURE (PSF) INSWING	
			POSITIVE	NEGATIVE
XX	74.0" x 98.0"	21.0" x 79.87"	+40.0	-45.0
OXXO	106.5" x 98.0"	21.0" x 79.87"	+40.0	-45.0



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

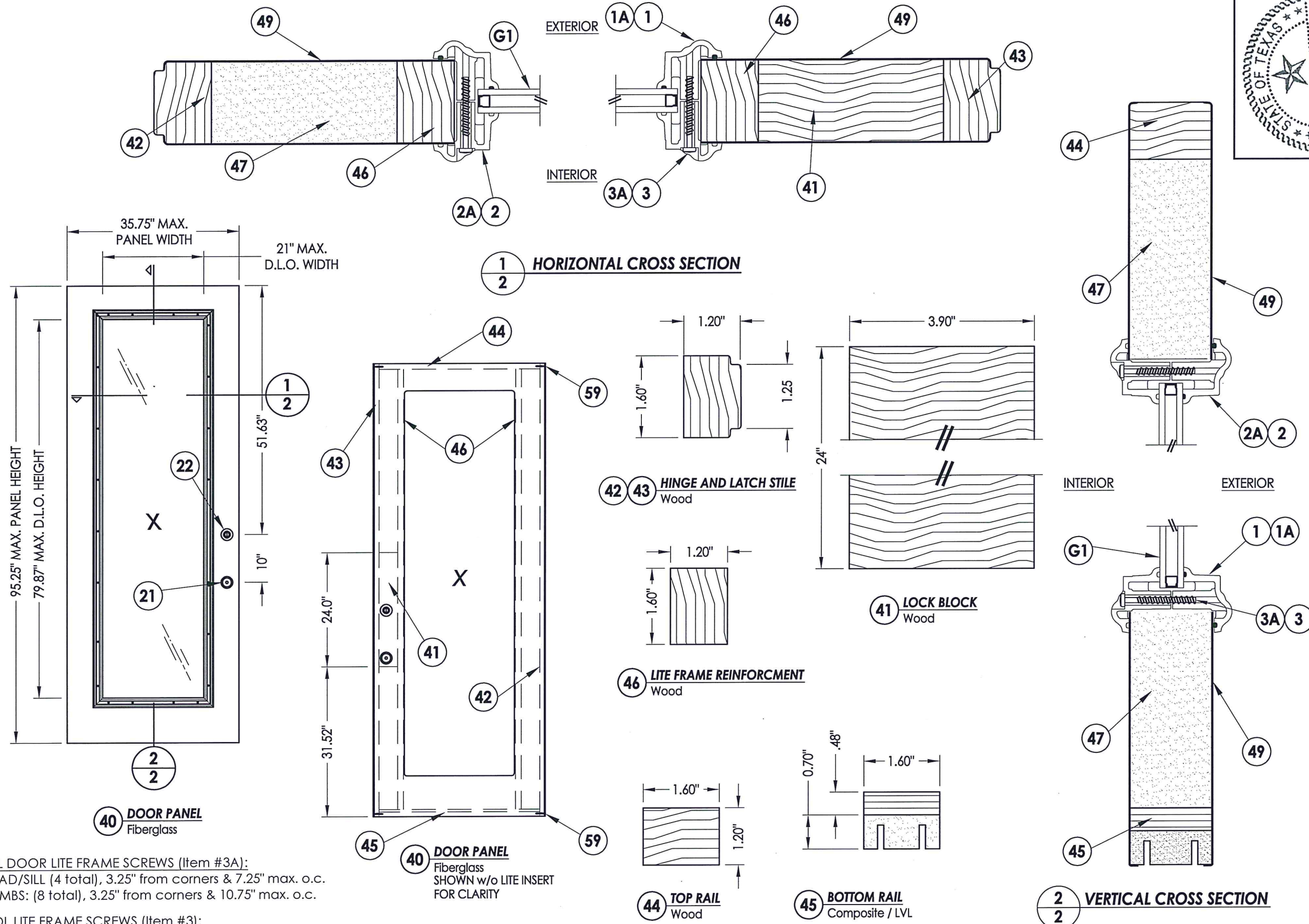
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

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 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-4093

SHEET 1 of 10



RSL DOOR LITE FRAME SCREWS (Item #3A):  
 HEAD/SILL (4 total), 3.25" from corners & 7.25" max. o.c.  
 JAMBS: (8 total), 3.25" from corners & 10.75" max. o.c.

ODL LITE FRAME SCREWS (Item #3):  
 HEAD/SILL (4 total), 3.25" from corners & 6" max. o.c.  
 JAMBS: (8 total), 6.5" from corners & 10" max. o.c.



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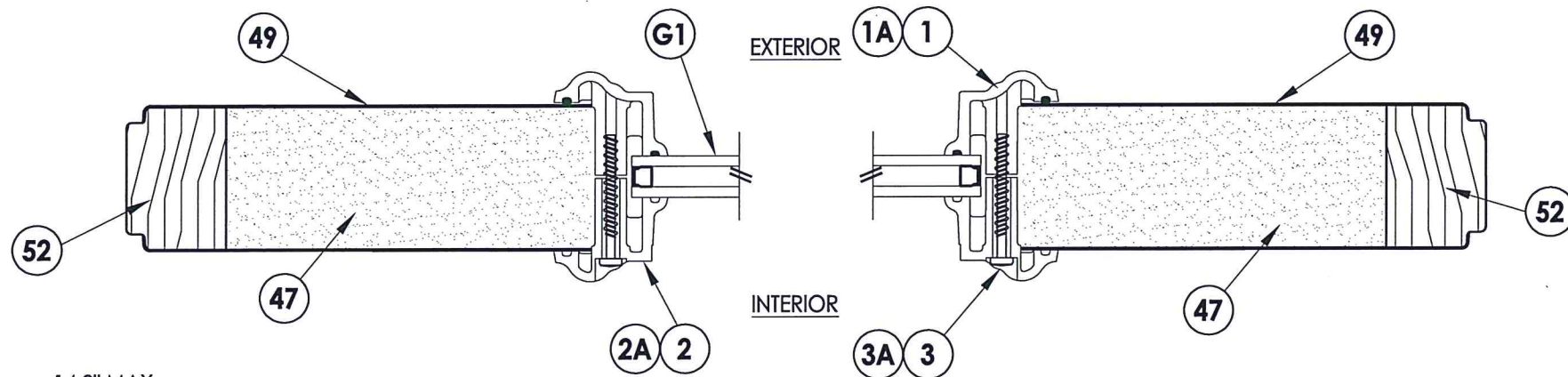
PRODUCT: STEVES AND SONS  
 FIBERGLASS DOOR

PART OR ASSEMBLY:  
 DOOR PANEL DETAILS

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

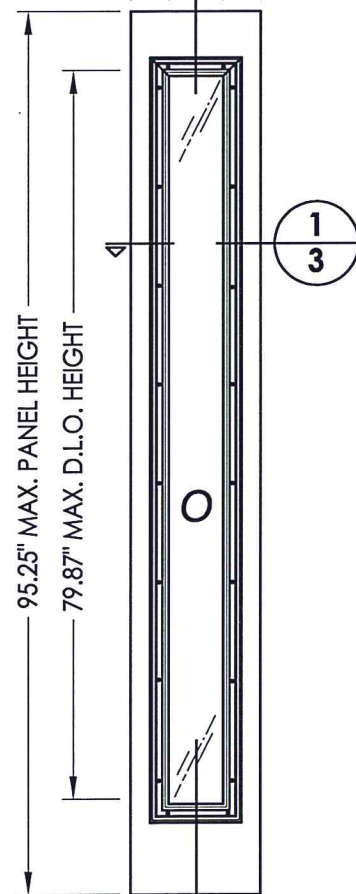
DATE: 5/19/10  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4093  
 SHEET 2 OF 10

R:\Clients\Steves and Sons - Permanent\B - Texas Dept of Ins\Hinged Doors-Fiberglass\DR 429 Glazed Fiberglass Doors\C - Drawings\TX-4092-93.dwg, 3-2

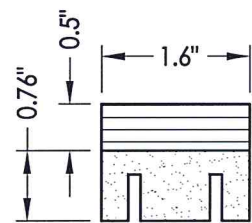


**1**  
**3** HORIZONTAL CROSS SECTION

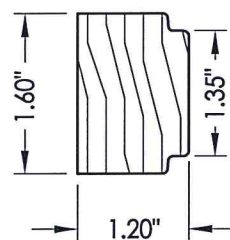
14.0" MAX.  
PANEL WIDTH  
7" MAX.  
D.L.O. WIDTH



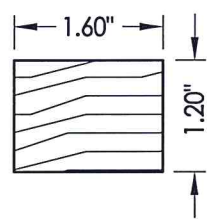
**2**  
**3** **50** SIDELITE PANEL  
Fiberglass



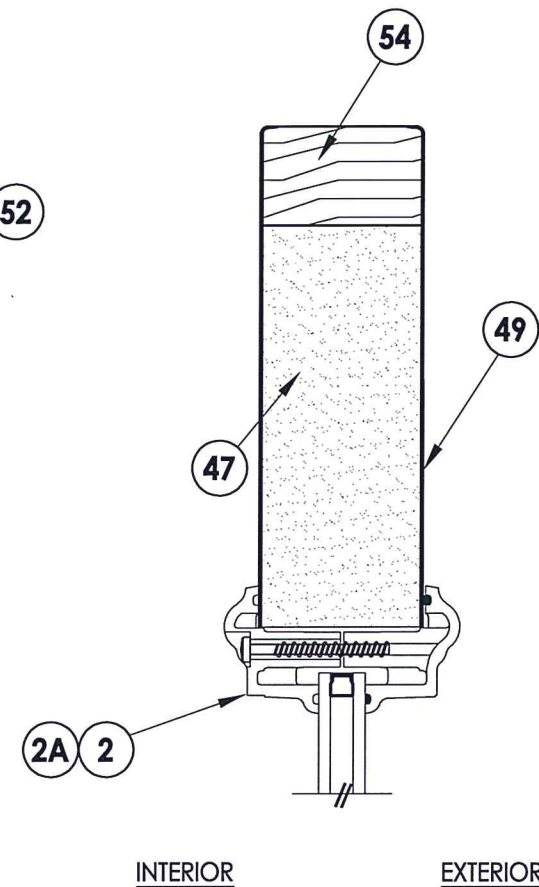
**53** SIDELITE BOTTOM RAIL



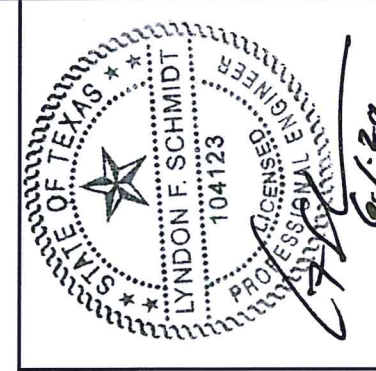
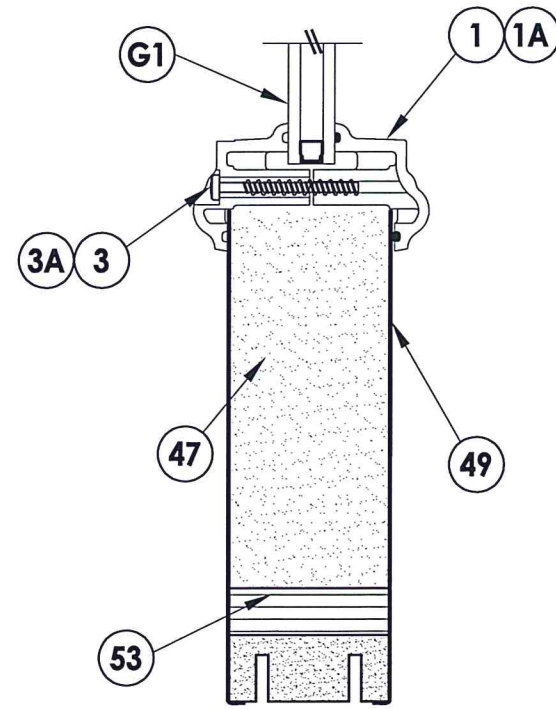
**52** SIDELITE STILE  
Wood



**54** SIDELITE TOP RAIL  
Wood



**2**  
**3** VERTICAL CROSS SECTION



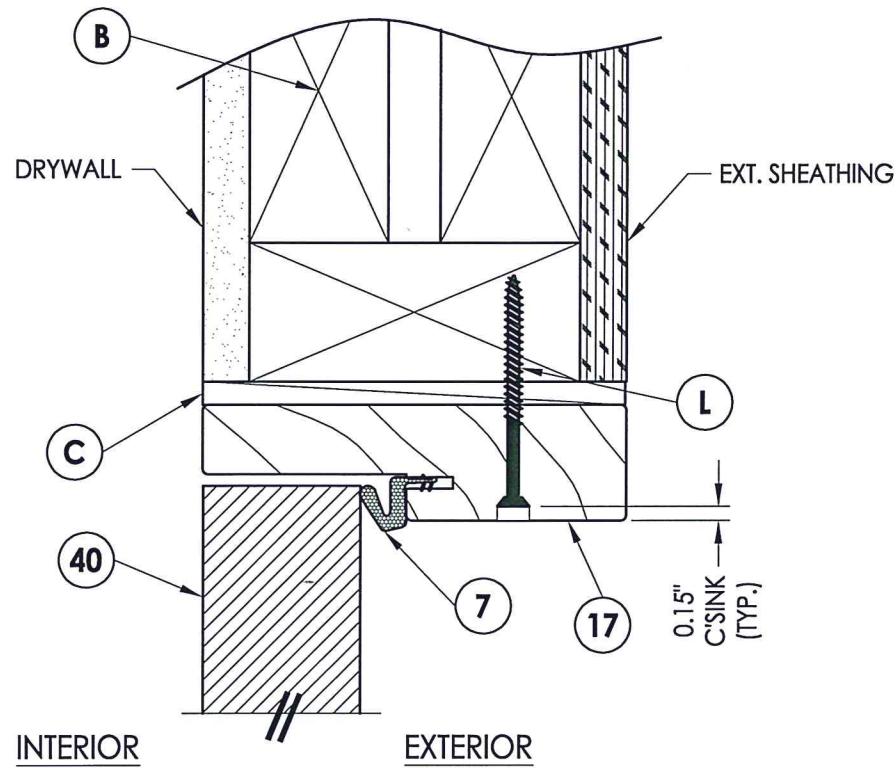
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PRODUCT: STEVES AND SONS  
FIBERGLASS DOOR  
PART OR ASSEMBLY: SIDELITE PANEL DETAILS

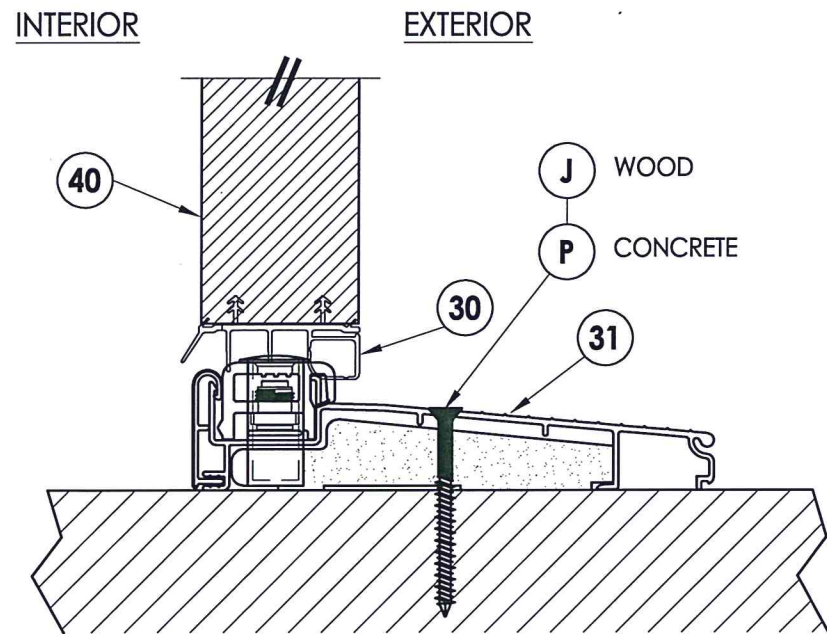
NO.	DATE	REVISIONS
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1		Manuf./Product Name Change
		JK
		BY

DATE: 5/19/10  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4093  
SHEET 3 OF 10

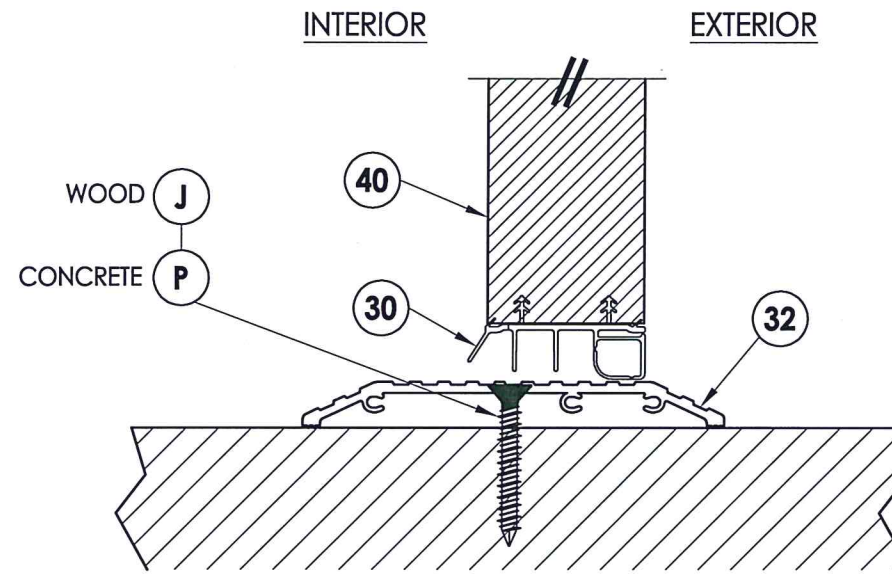




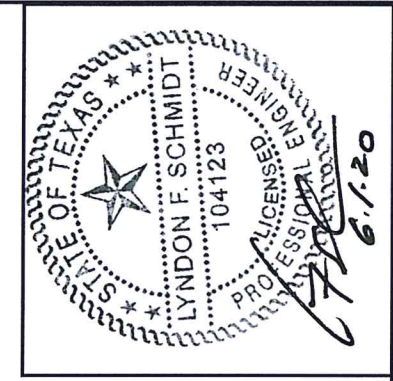
**1 VERTICAL CROSS SECTION**  
**5** Inswing shown - outswing also approved



**3 VERTICAL CROSS SECTION**  
**5** Inswing configuration



**2 VERTICAL CROSS SECTION**  
**5** Shown w/ ADA threshold



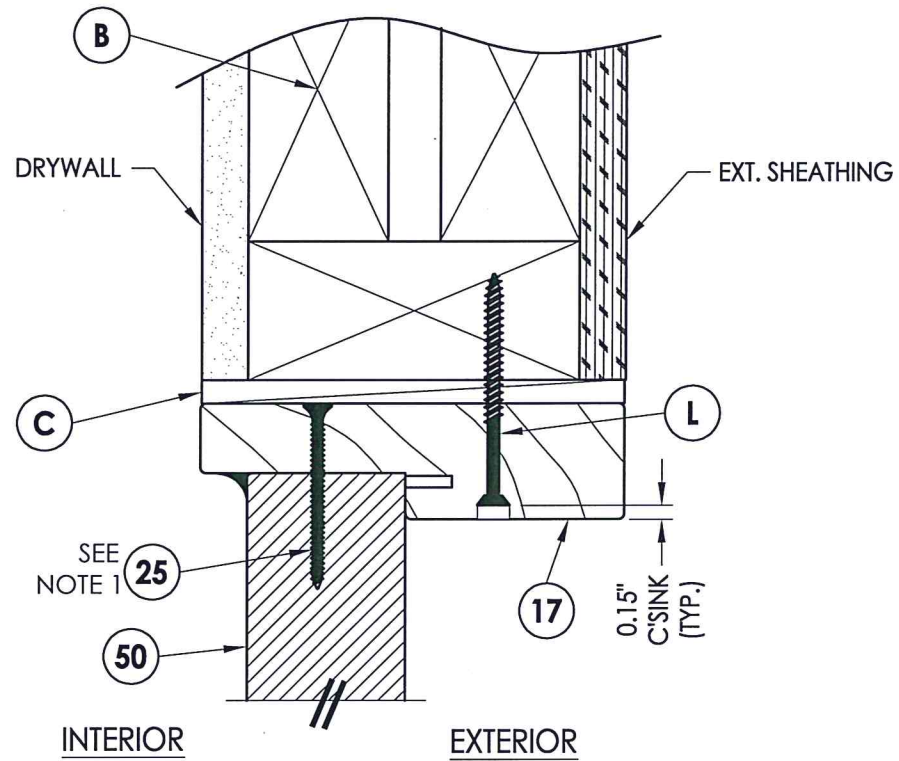
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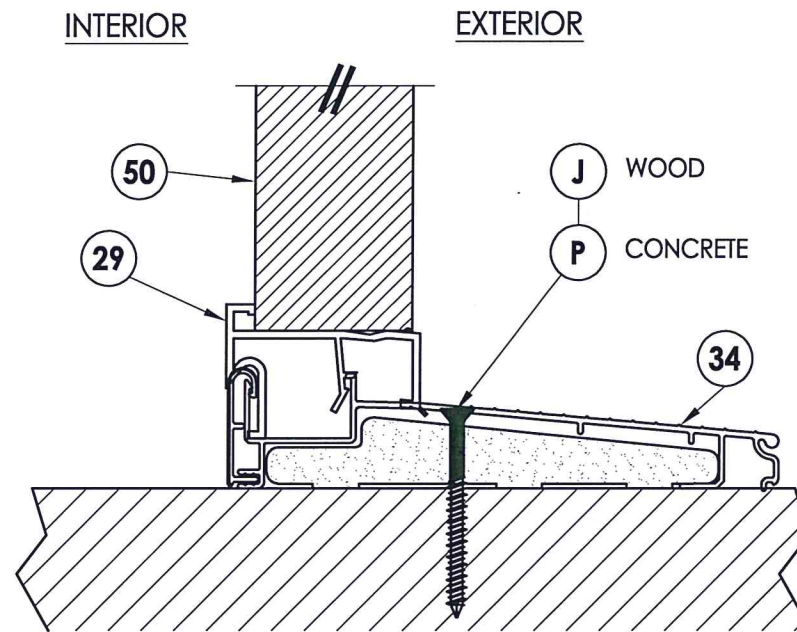
PRODUCT: STEVES AND SONS FIBERGLASS DOOR  
 PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

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

DATE: 5/19/10  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4093  
 SHEET 5 OF 10



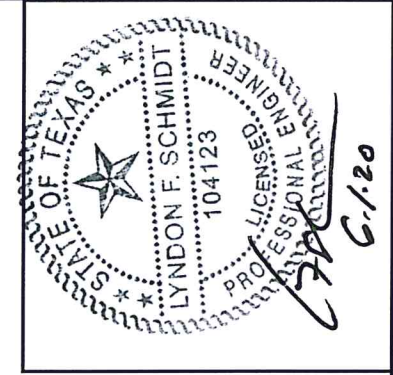
**1** VERTICAL CROSS SECTION  
**6**



**2** VERTICAL CROSS SECTION  
**6** Inswing configuration

NOTE:

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



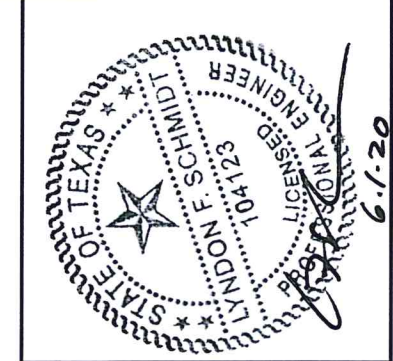
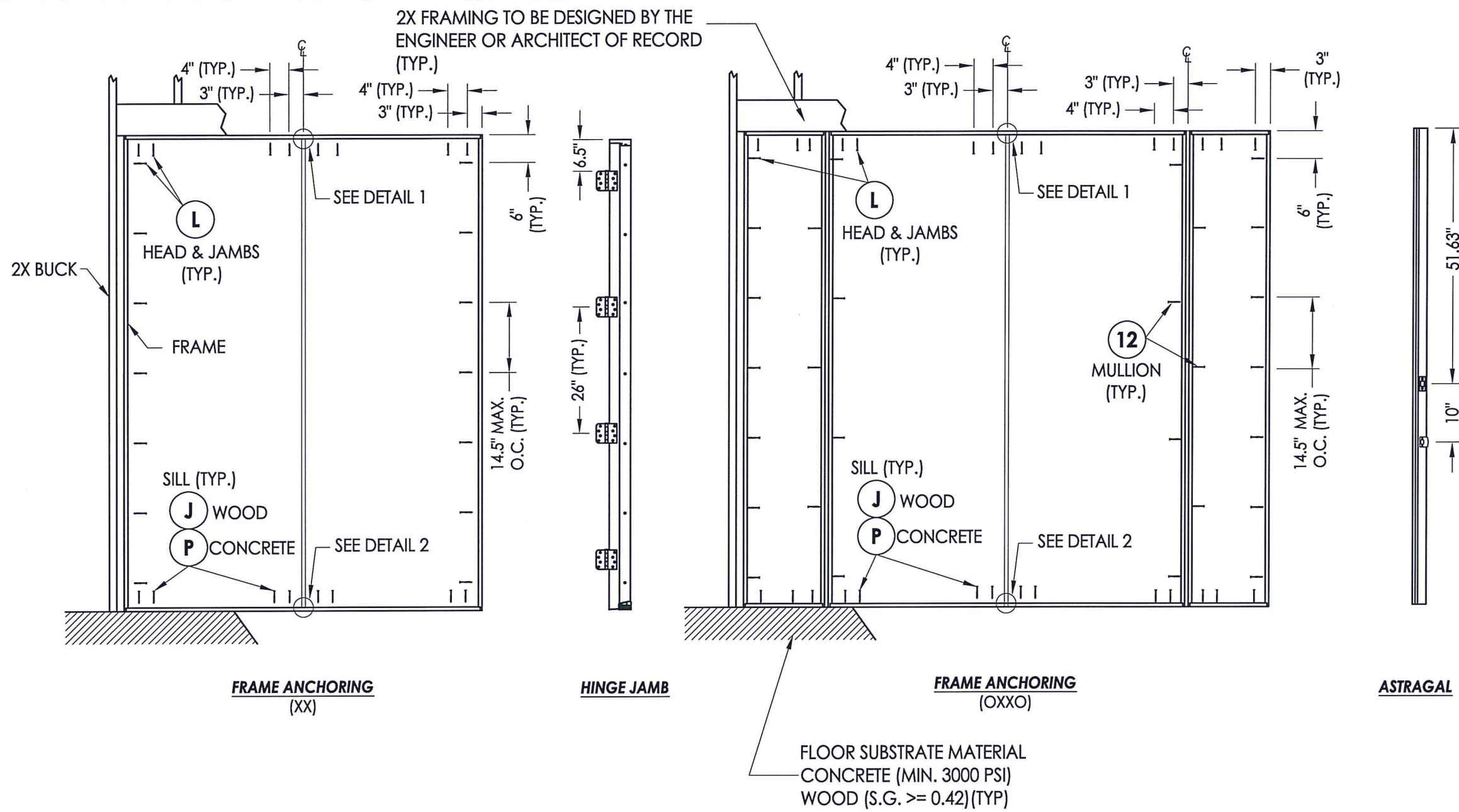
Documents Prepared By: Lyndon F. Schmidt, P.E.  
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PRODUCT:		STEVES AND SONS FIBERGLASS DOOR	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
2	5/28/20	LFS	UPDATE TO 2018 IBC/IRC CODE
1	7/16/15	JK	REMOVE OUTSWING CONFIGURATION Manuf./Product Name Change

DATE: 5/19/10  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4093  
SHEET 6 of 10



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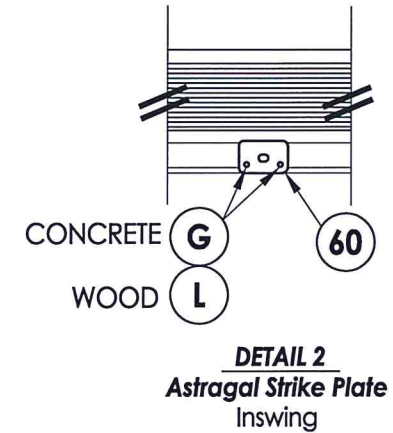
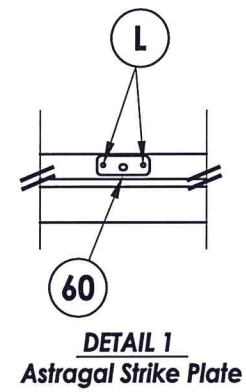
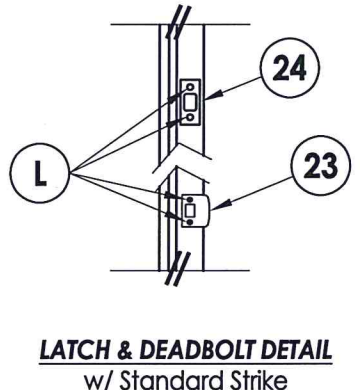
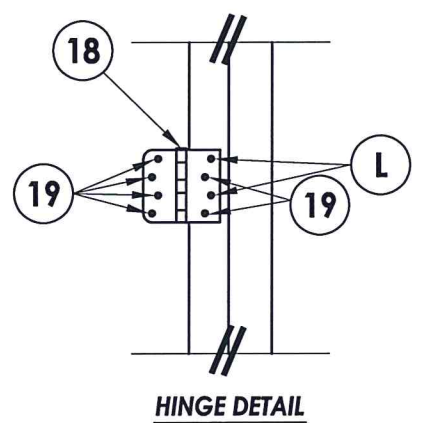
PART OR ASSEMBLY: FRAME ANCHORING

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

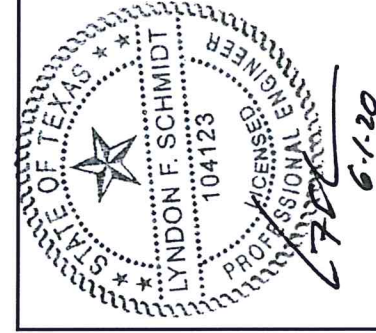
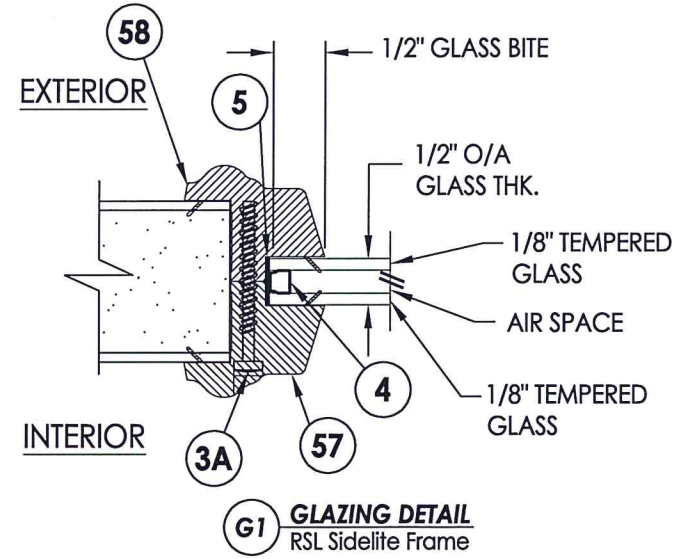
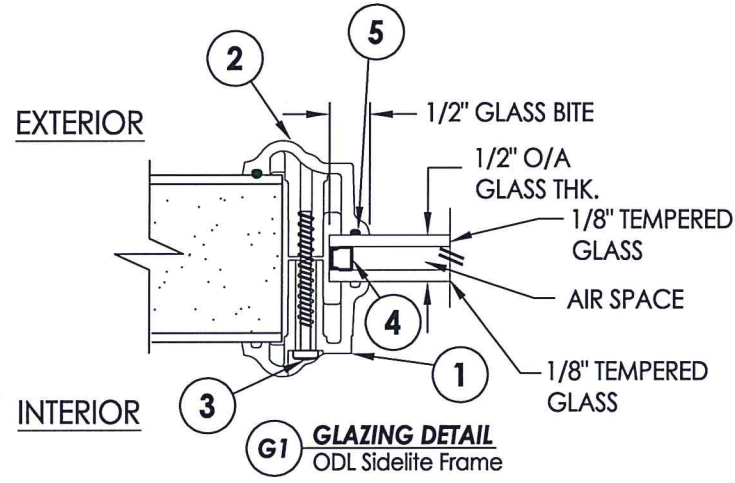
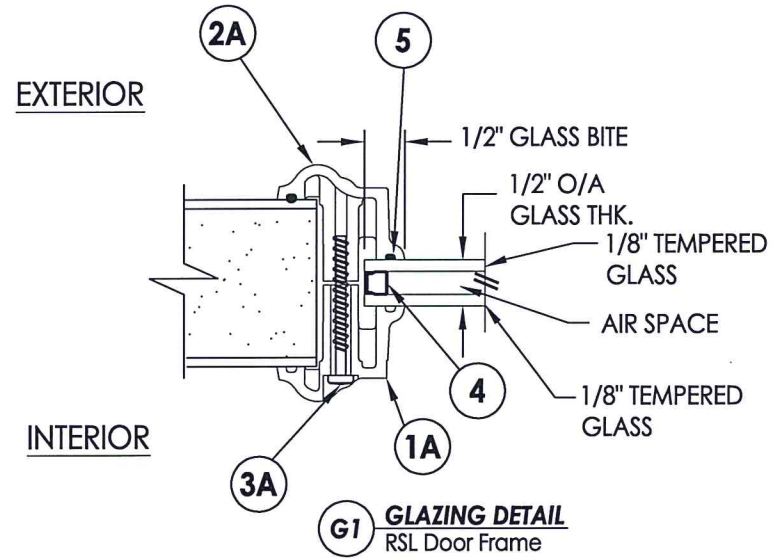
**CONCRETE ANCHOR NOTES:**

- 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-4093  
SHEET 7 OF 10



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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: STEVES AND SONS  
FIBERGLASS DOOR

PART OR ASSEMBLY:

GLAZING DETAILS

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

DATE: 5/19/10

SCALE: N.T.S.

DWG. BY: JK

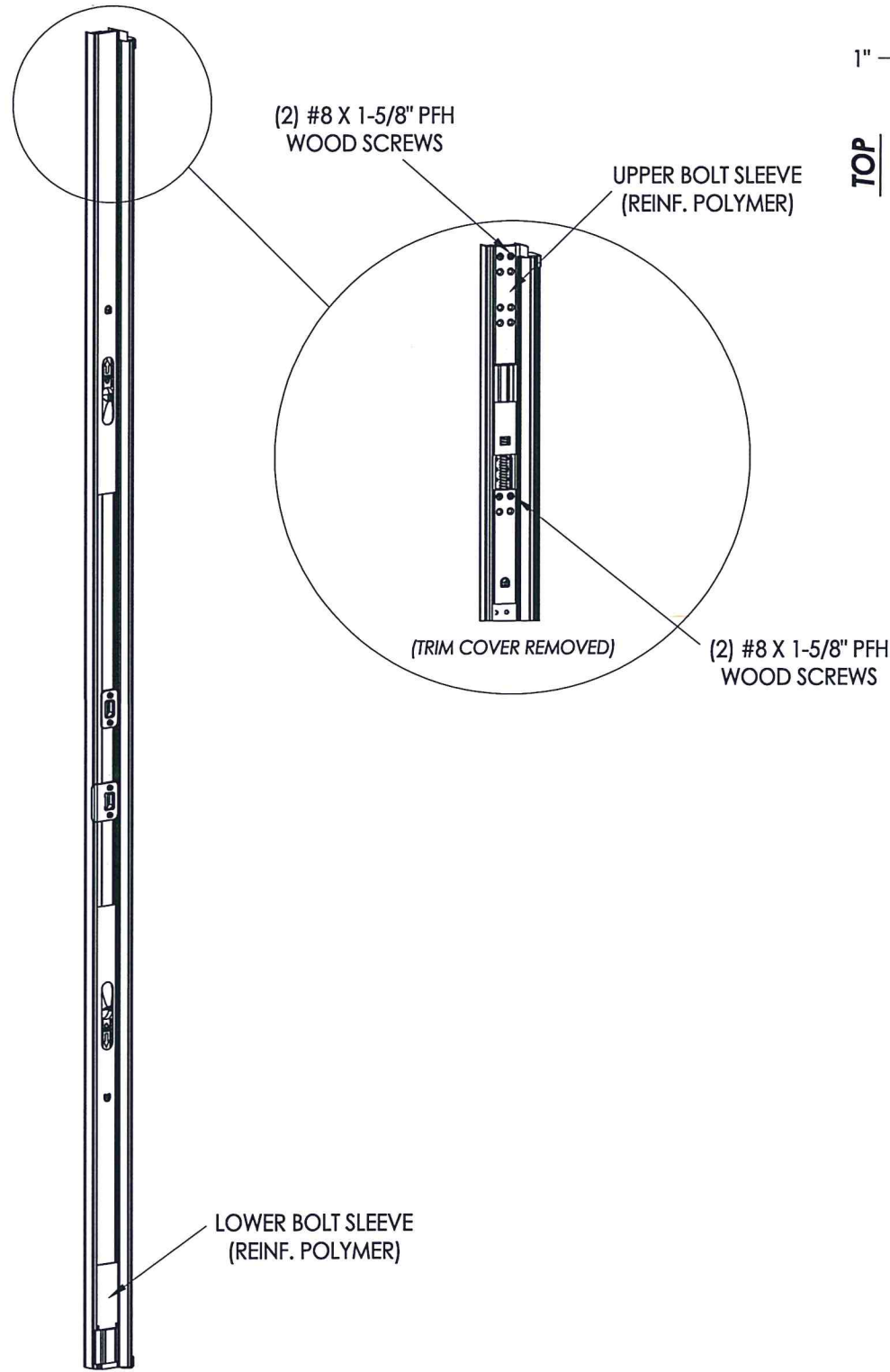
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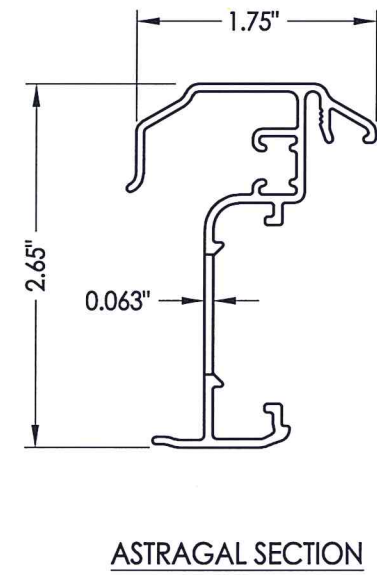
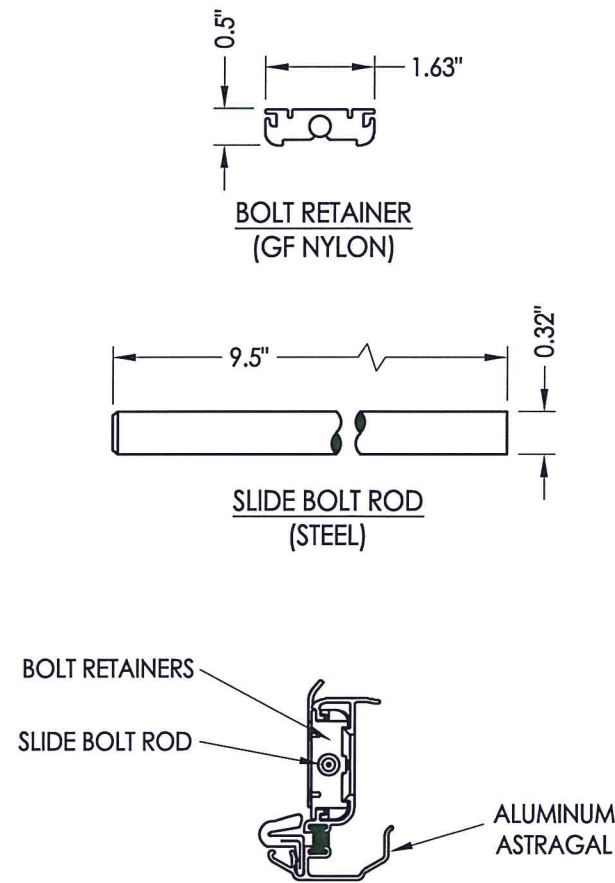
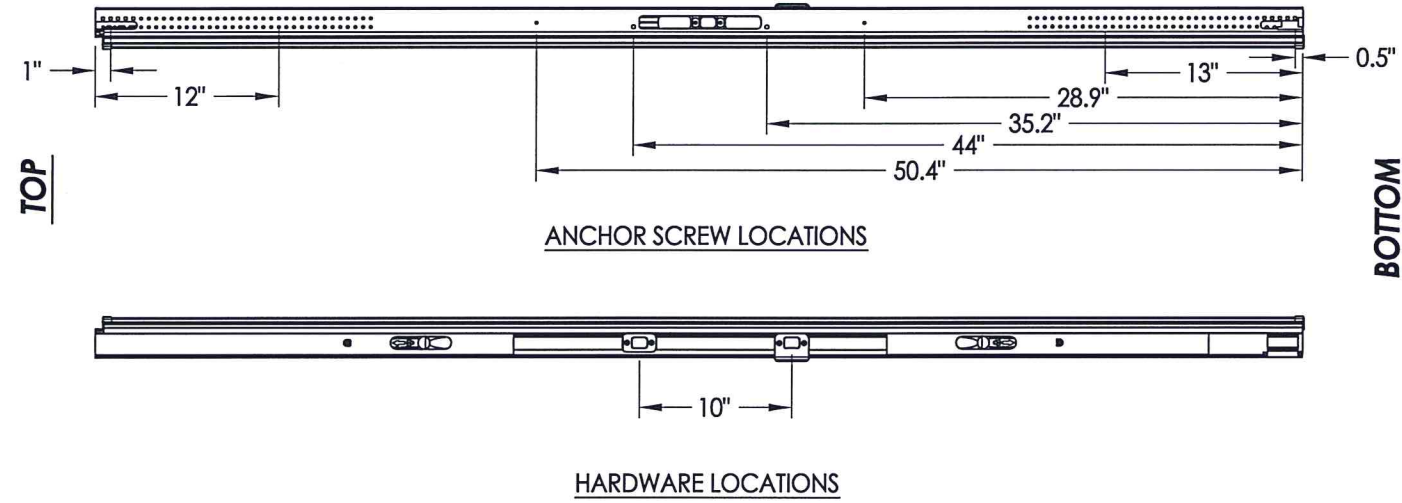
TX-4093

SHEET 8 OF 10





**ULTIMATE HURRICANE ASTRAGAL**



Documents Prepared By: Lyndon F. Schmidt, P.E.  
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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: STEVES AND SONS FIBERGLASS DOOR

PART OR ASSEMBLY: ASTRAGAL DETAILS

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

DATE: 05/19/10

SCALE: N.T.S.

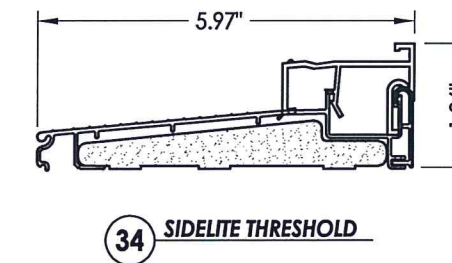
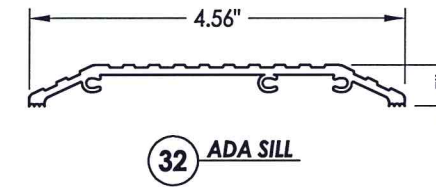
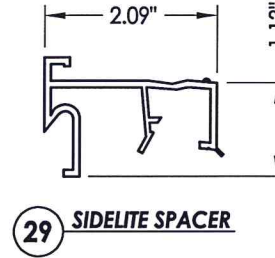
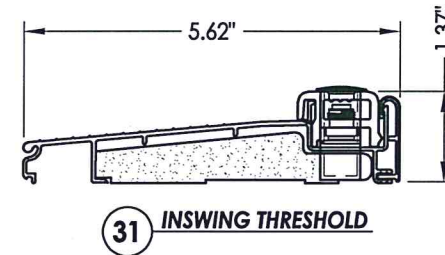
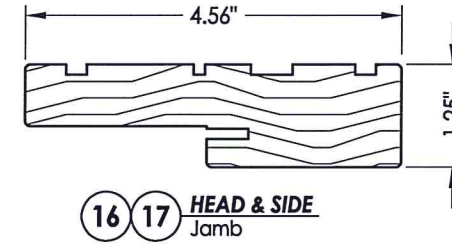
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4093

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	LITE 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

PART OR ASSEMBLY:  
BILL OF MATERIALS  
& COMPONENTS

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SHEET 10 OF 10