



STEVES AND SONS

203 Humble Ave.
San Antonio, TX 78225

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

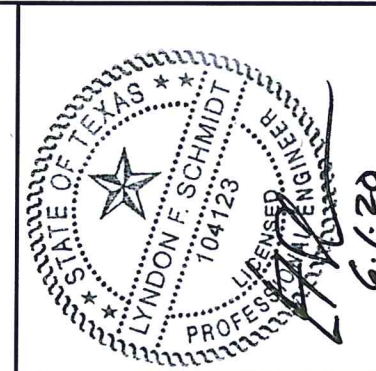
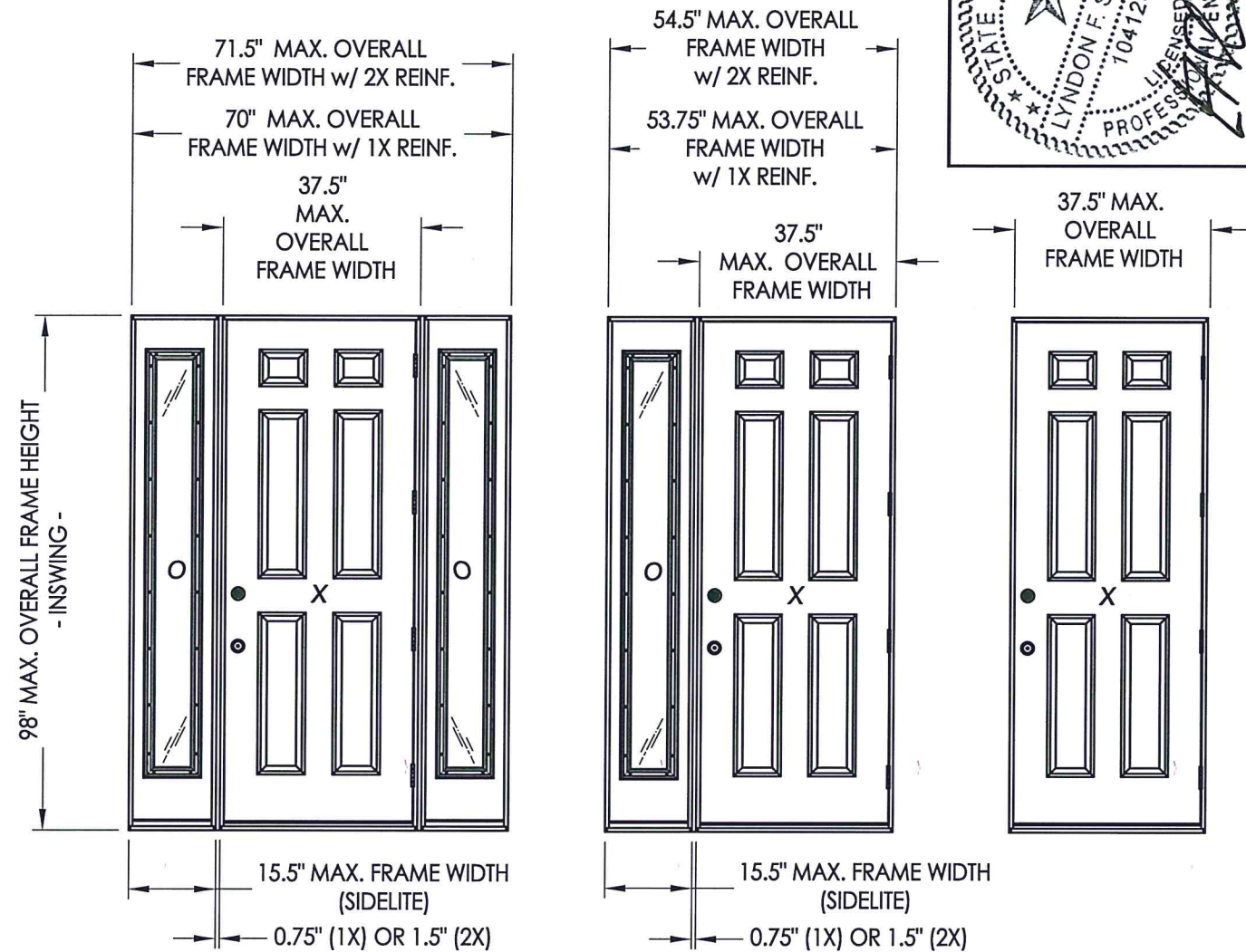
EVALUATED FOR USE IN THE STATE OF TEXAS

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.

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1	Typical elevations, design pressures & general notes
2	Door panel details
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8	Buck & frame anchoring
9	Glazing Details
10	Bill of materials & components



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

RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Vairico FL 33595
Phone No.: 813.659.9197

TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: STEVES AND SONS FIBERGLASS DOOR

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

CONFIGURATION	MAX. FRAME DIMENSION	MAX. D.L.O. DIMENSION	DESIGN PRESSURE (PSF) INSWING	
			POSITIVE	NEGATIVE
X	37.5" x 98.0"	N/A	+40.0	-45.0
X**	37.5" x 98.0"	N/A	+50.0	-55.0
OX / XO w/1x Mull Reinforcement	53.75" x 98.0"	7.0" x 79.87"	+40.0	-45.0
OX / XO** w/2x Mull Reinforcement	54.5" x 98.0"	7.0" x 79.87"	+50.0	-55.0
O XO w/1x Mull Reinforcement	70.0" x 98.0"	7.0" x 79.87"	+40.0	-45.0
O XO** w/2x Mull Reinforcement	71.5" x 98.0"	7.0" x 79.87"	+50.0	-55.0

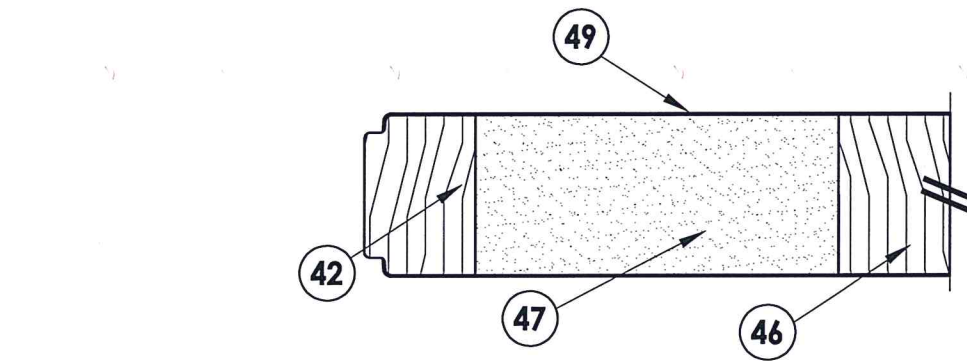
** Requires Security Strike (Item #24A) and Corner Screw (Item #59).

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-4094
SHEET 1 OF 10

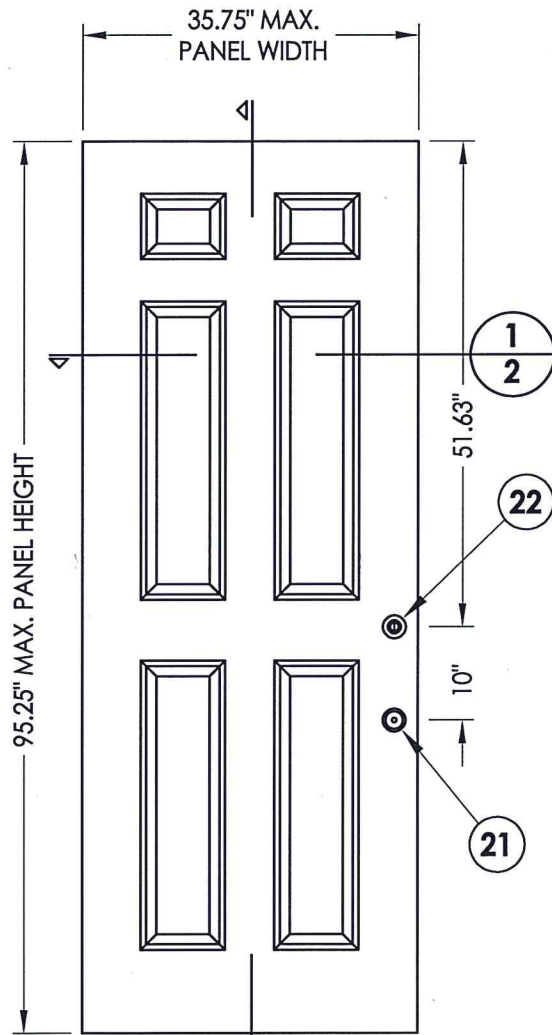
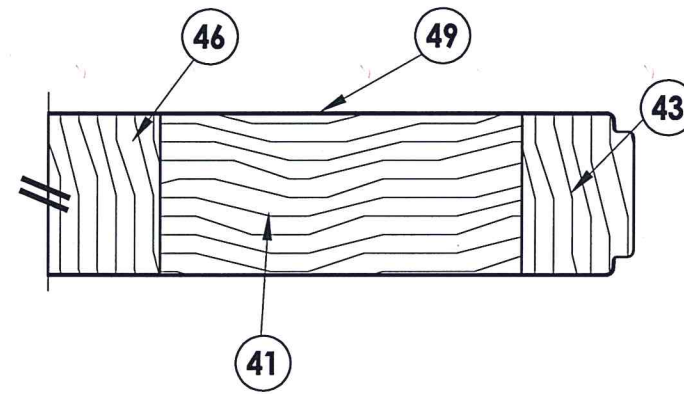
R:\Clients\Steves and Sons - Permanent\B - Texas Dept of Ins\Hinged Doors-Fiberglass\DR 431 Opaque Fiberglass Doors\C - Drawings\TX-4094-95.dwg, TX-4094

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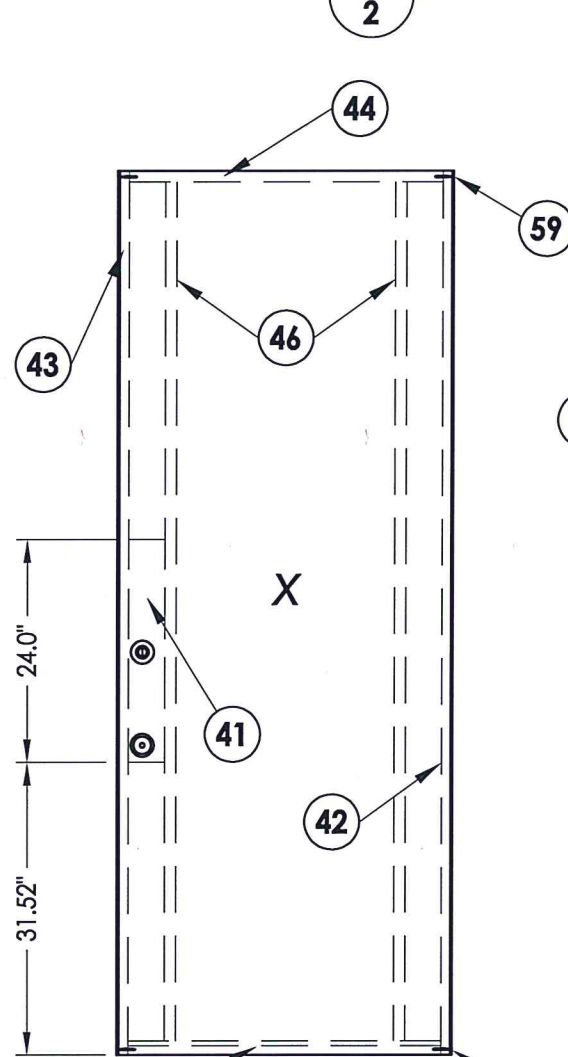
EXTERIOR

INTERIOR

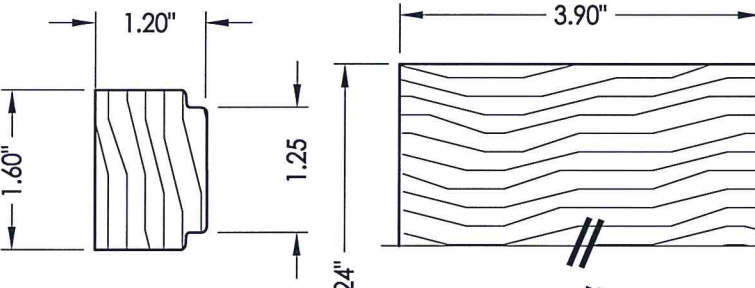


40 DOOR PANEL
Fiberglass

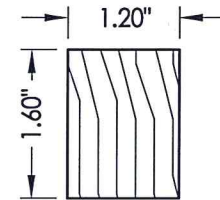
1
2 **HORIZONTAL CROSS SECTION**



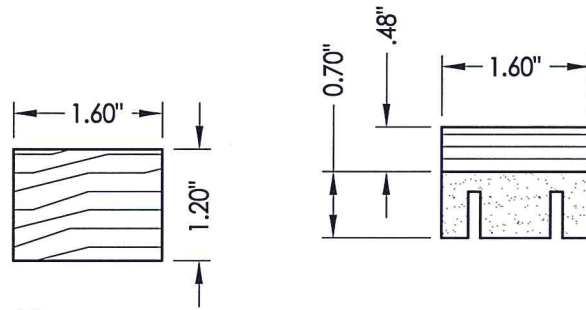
42 43 HINGE AND LATCH STILE
Wood



41 LOCK BLOCK
Wood



46 LITE FRAME REINFORCMENT
Wood



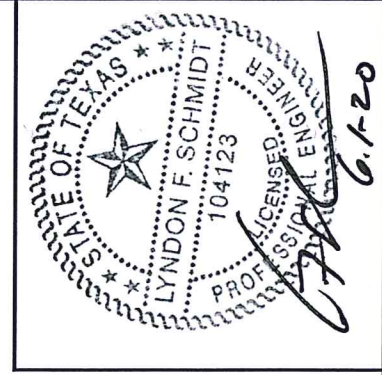
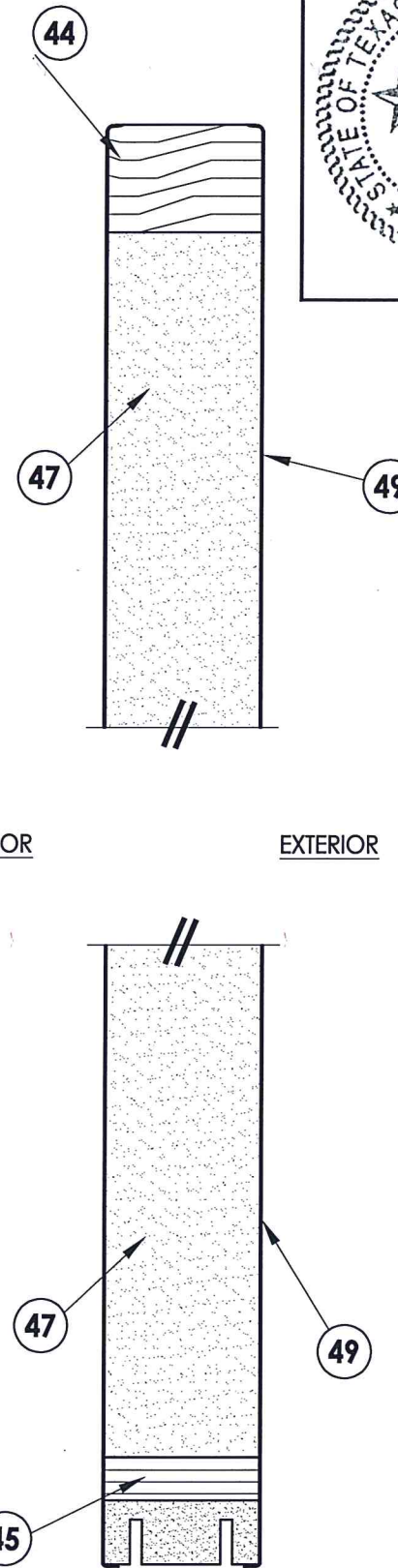
44 TOP RAIL
Wood

45 BOTTOM RAIL
Composite / LVL

INTERIOR

EXTERIOR

2
2 **VERTICAL CROSS SECTION**



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:
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
JK		Manuf./Product Name Change
BY		

DATE: 5/19/10

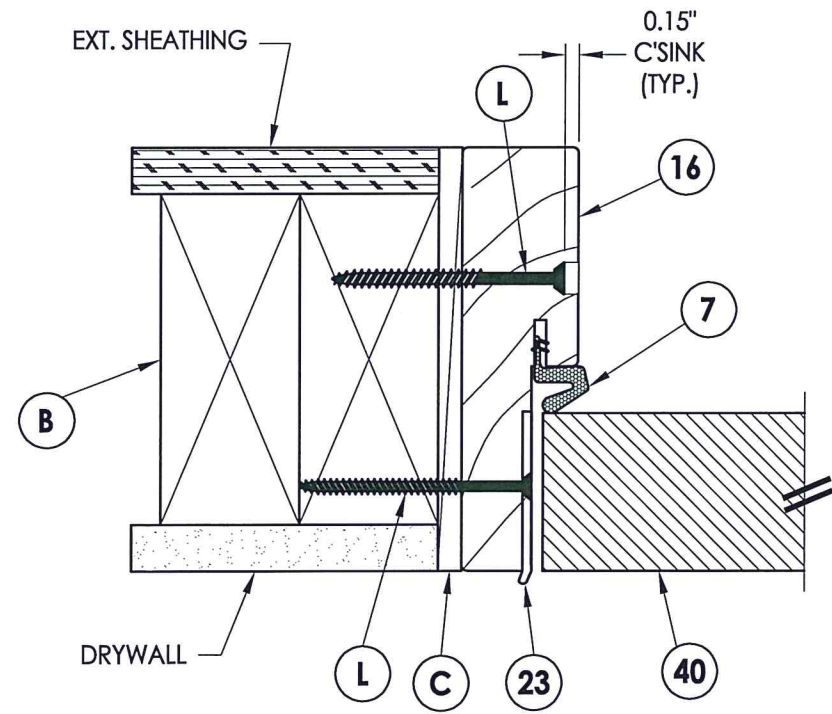
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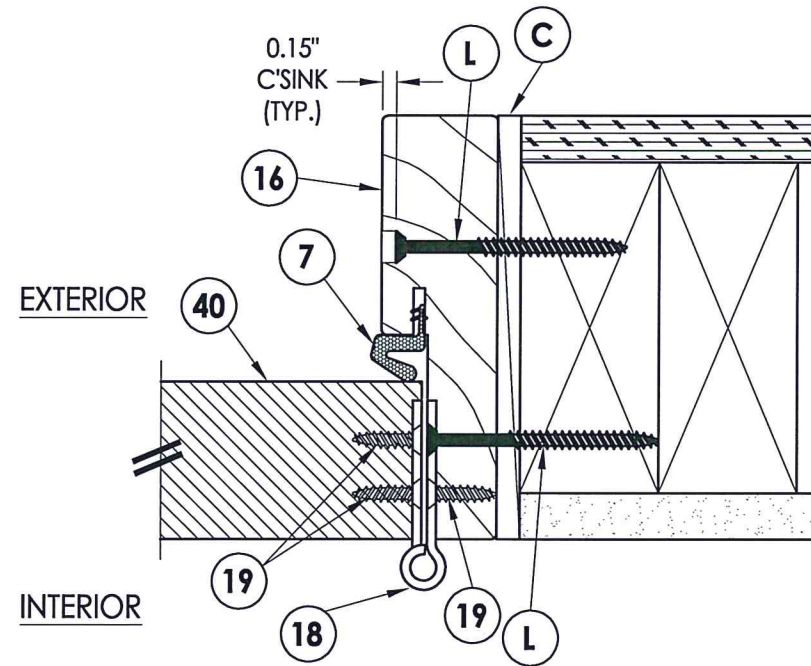
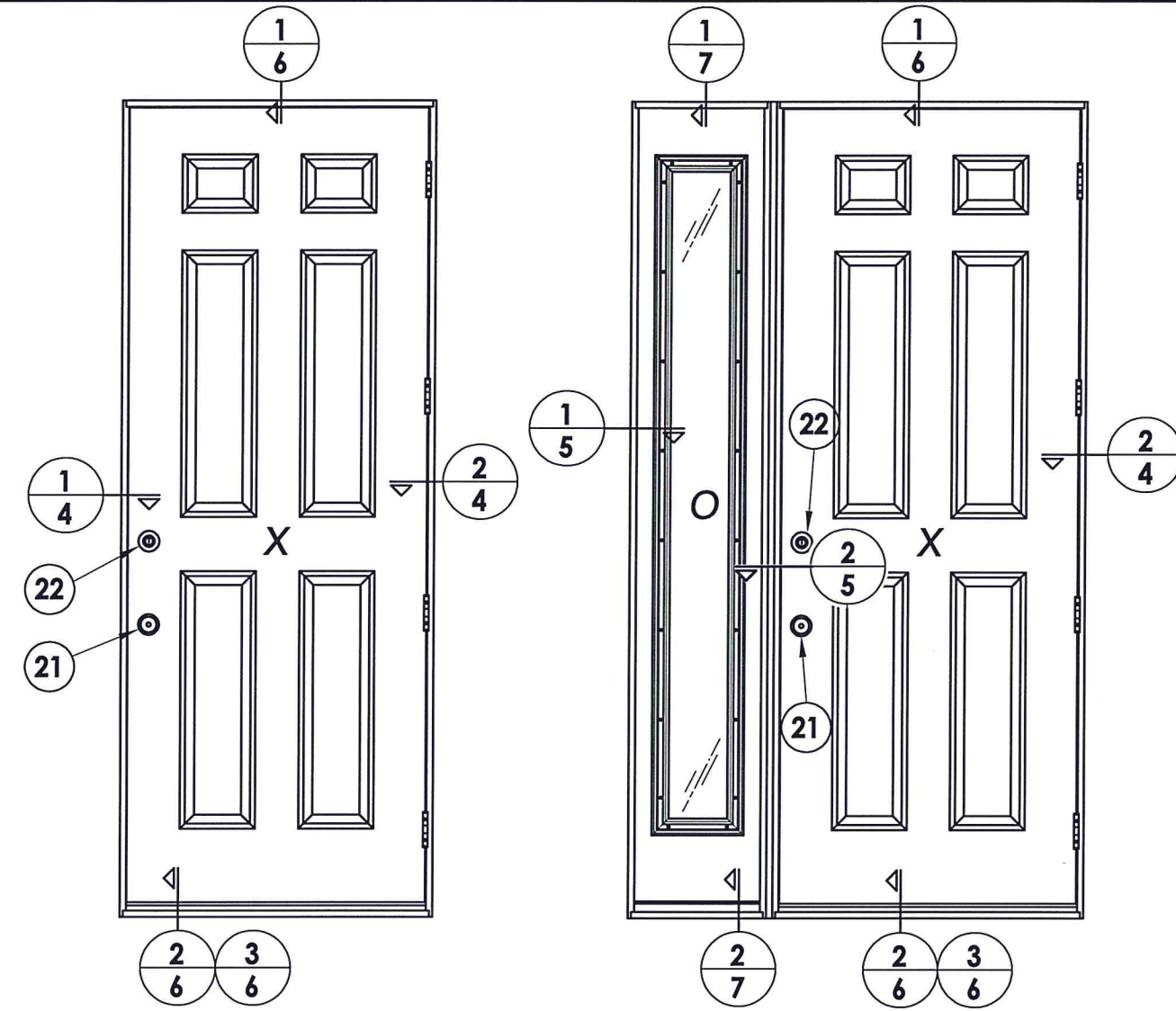
CHK. BY: LFS

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SHEET 2 OF 10



1
4 HORIZONTAL CROSS SECTION



2
4 HORIZONTAL CROSS SECTION



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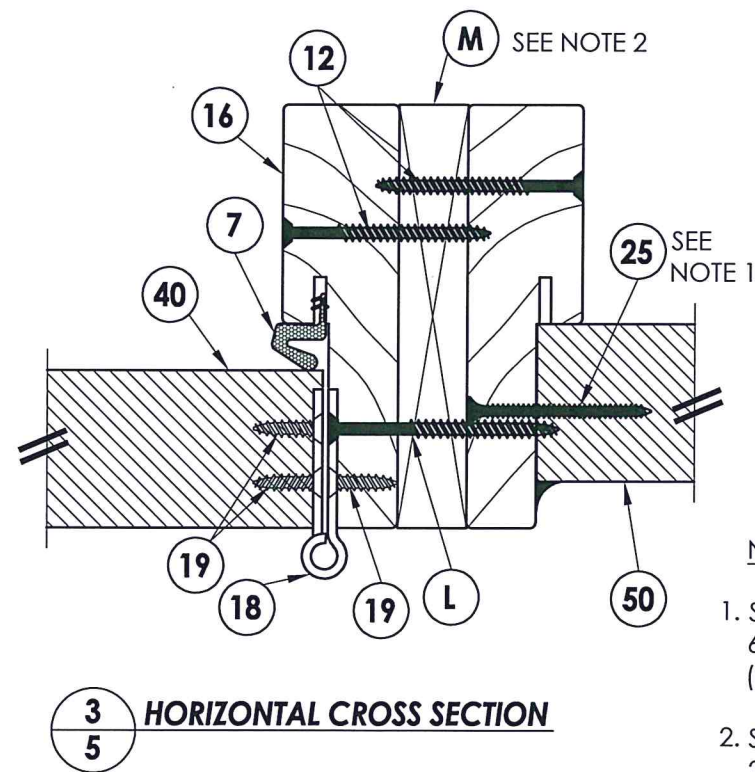
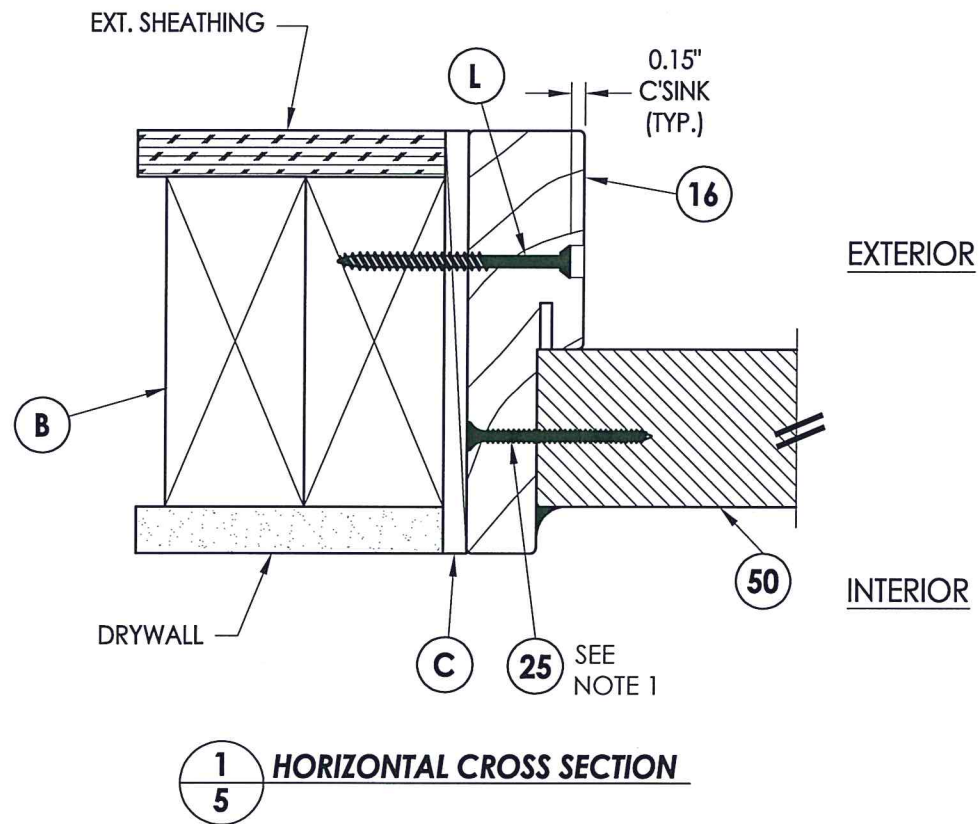
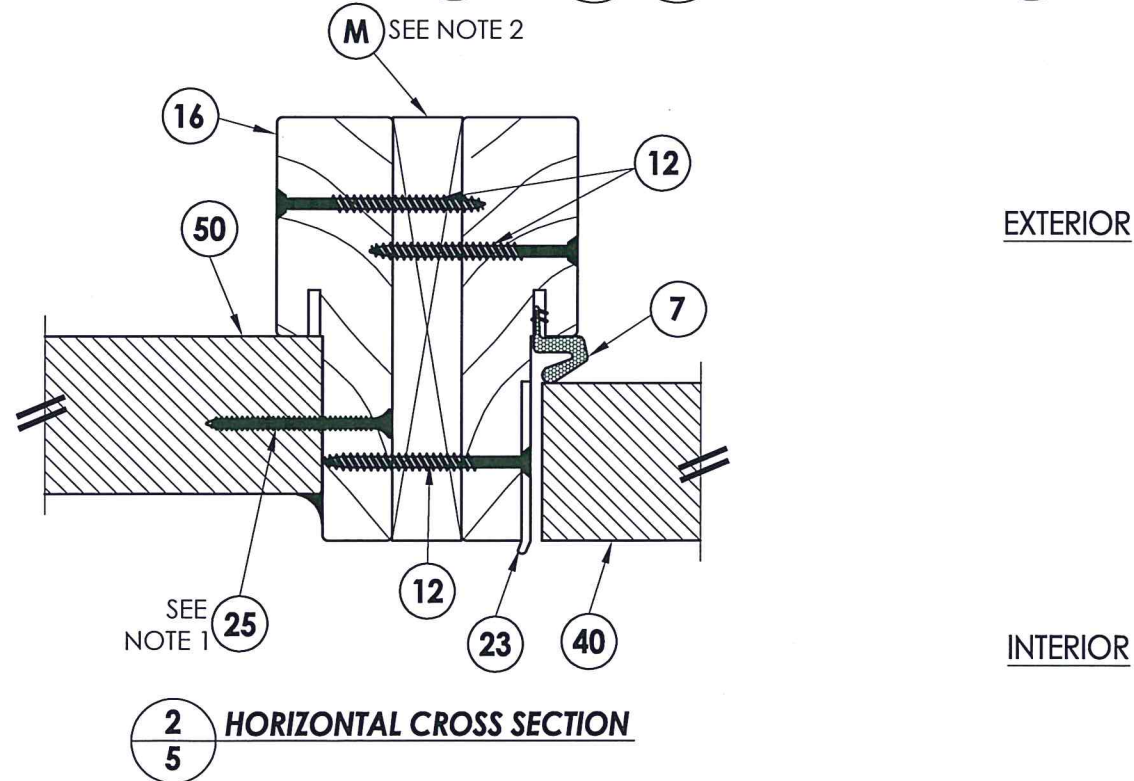
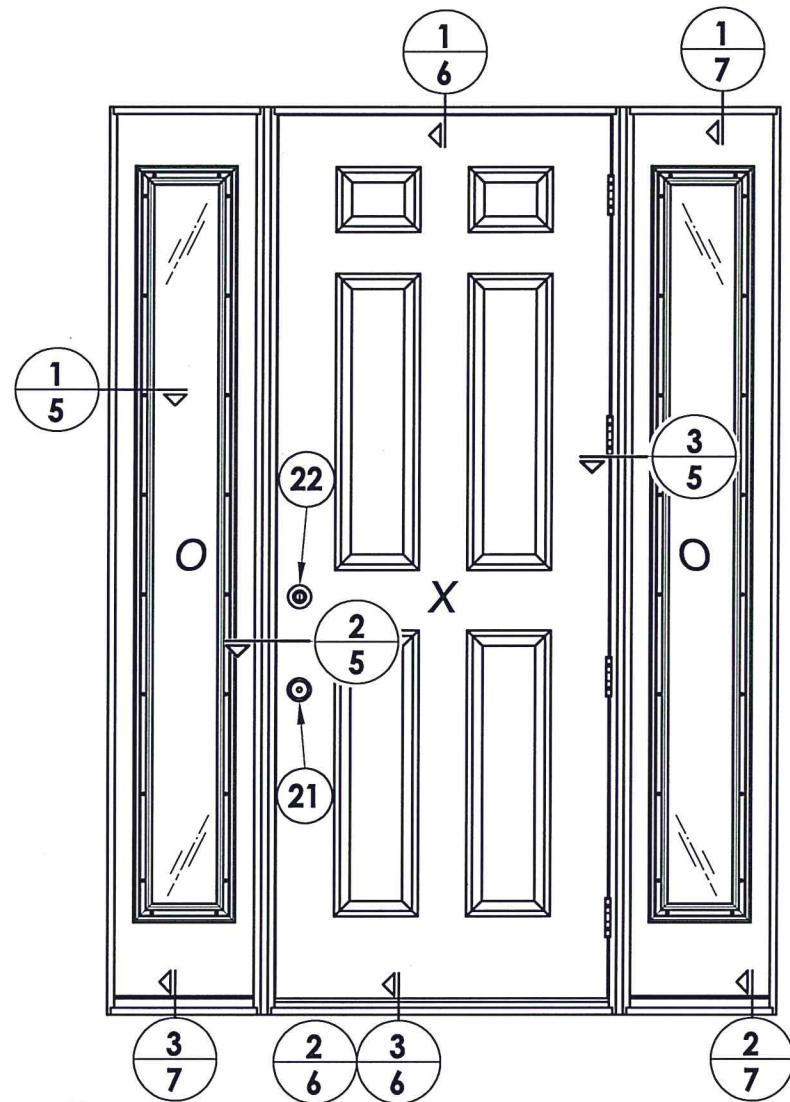
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FIBERGLASS DOOR

PART OR ASSEMBLY:
HORIZONTAL CROSS SECTIONS

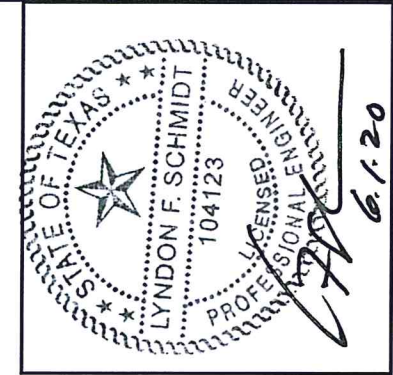
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1	7/16/15	Manuf./Product Name Change
		JK
		BY

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DWG. BY: JK
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DRAWING NO.: TX-4094
SHEET 4 OF 10



NOTE:

1. Sidelite ass'y fastener; 6" from each end and 6 more screws equally spaced between. (8 screws total per jamb.)
2. Shown with 1X mull reinforcement. 2X reinforcement similar.



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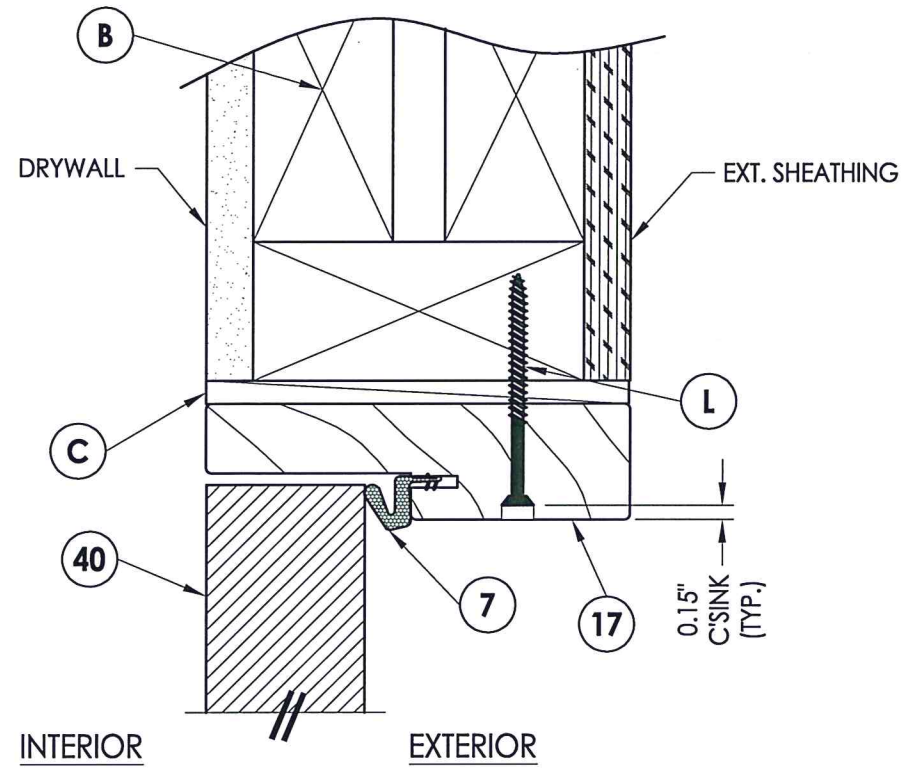
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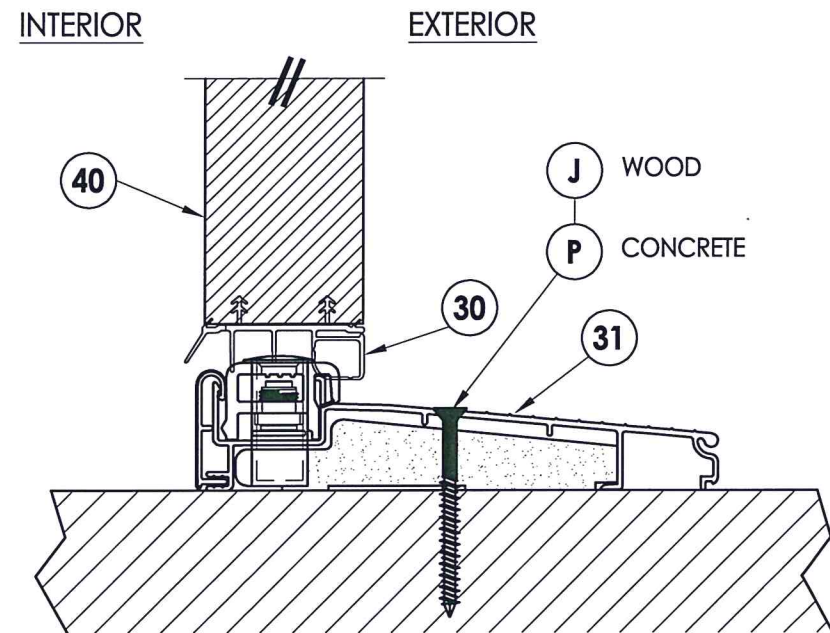
PRODUCT: STEVES AND SONS FIBERGLASS DOOR
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

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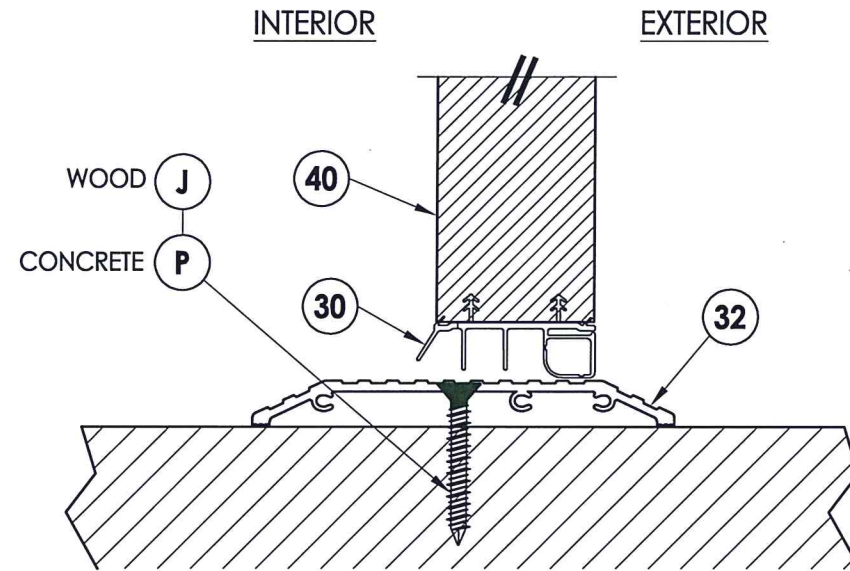
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DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4094
SHEET 5 of 10



1 VERTICAL CROSS SECTION
 6 Inswing shown - outswing also approved



3 VERTICAL CROSS SECTION
 6 Inswing configuration



2 VERTICAL CROSS SECTION
 6 Shown w/ ADA threshold



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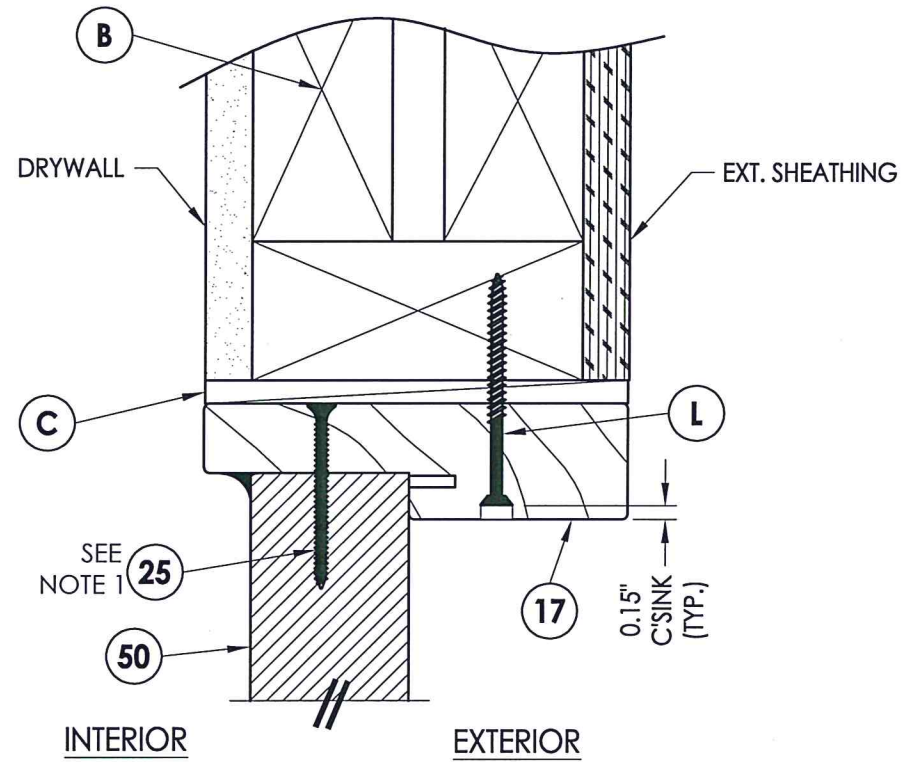
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PRODUCT: STEVES AND SONS FIBERGLASS DOOR
 PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

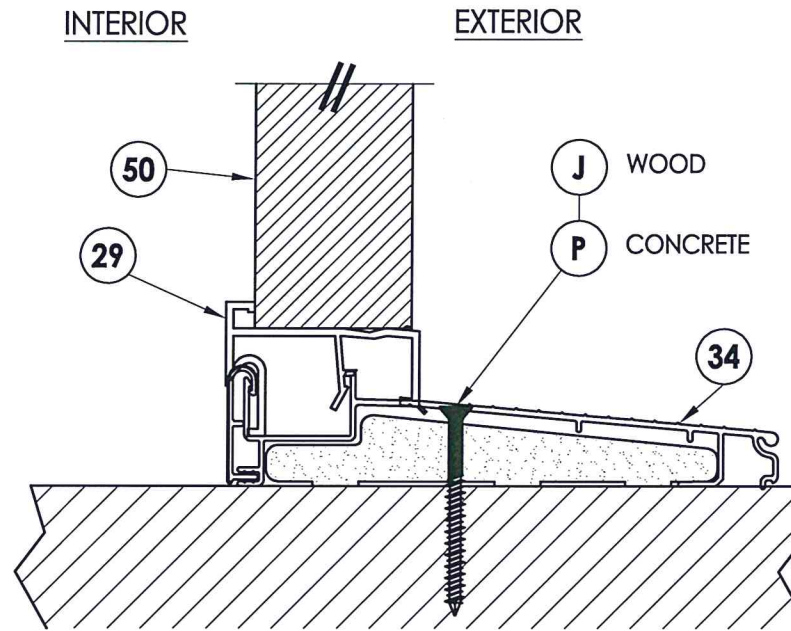
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1	7/16/15	Manuf./Product Name Change
		JK BY

DATE: 5/19/10
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 DRAWING NO.: TX-4094

SHEET 6 of 10

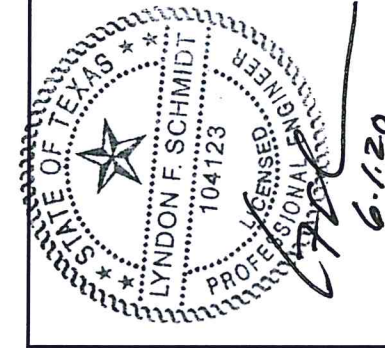


1
7 VERTICAL CROSS SECTION



2
7 VERTICAL CROSS SECTION
Inswing configuration

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



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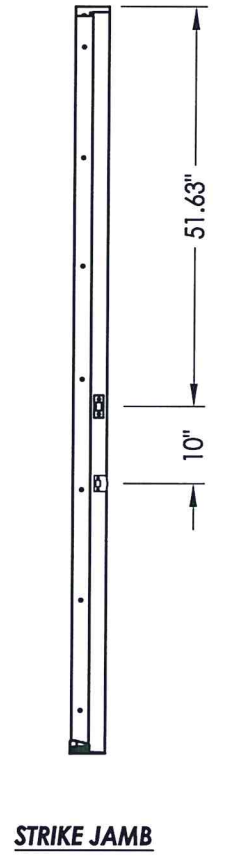
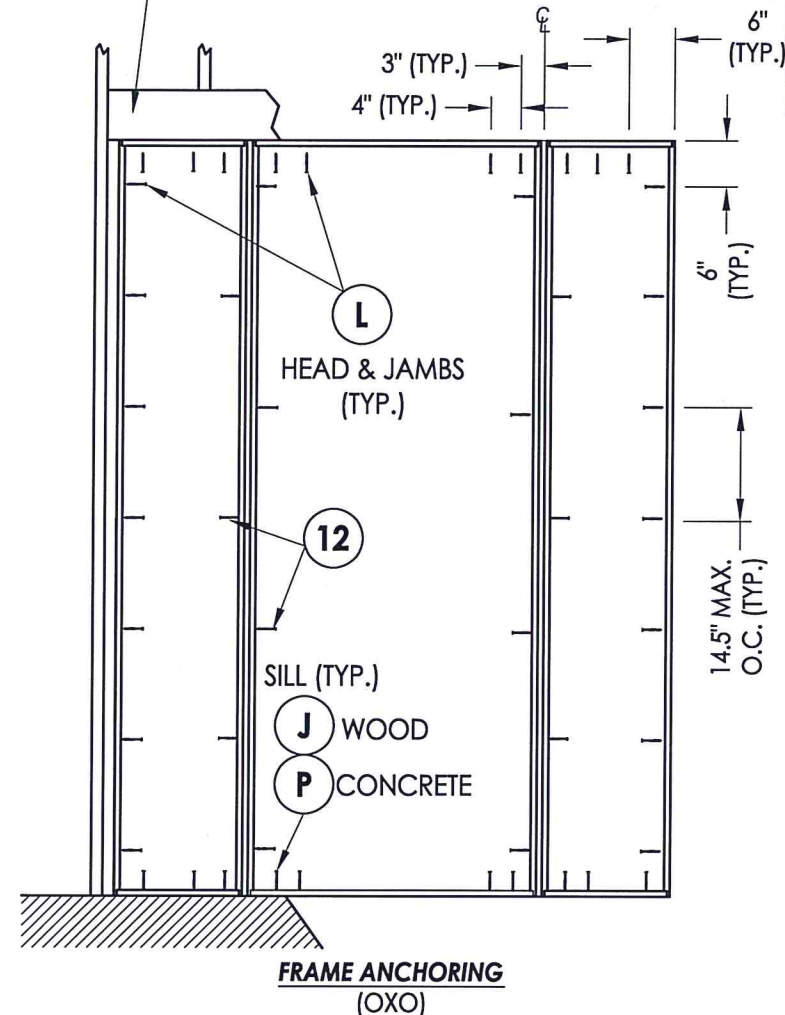
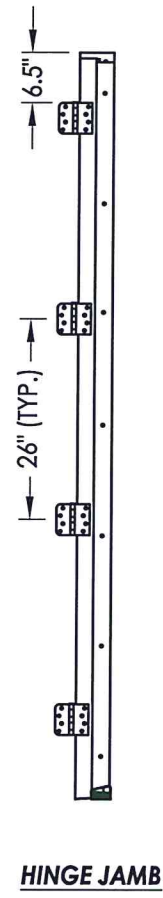
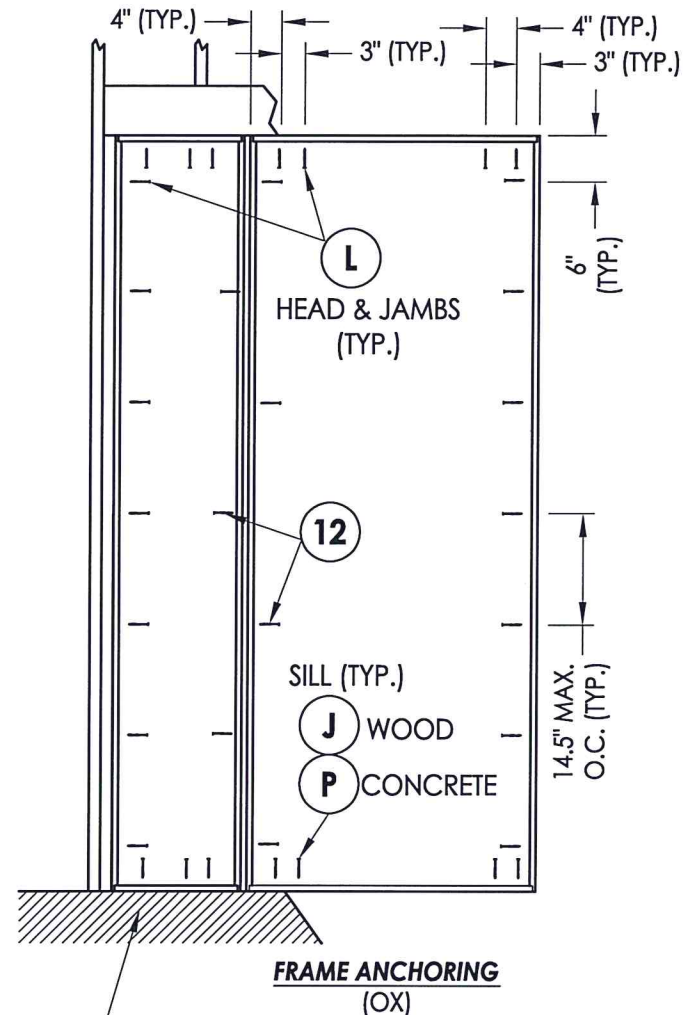
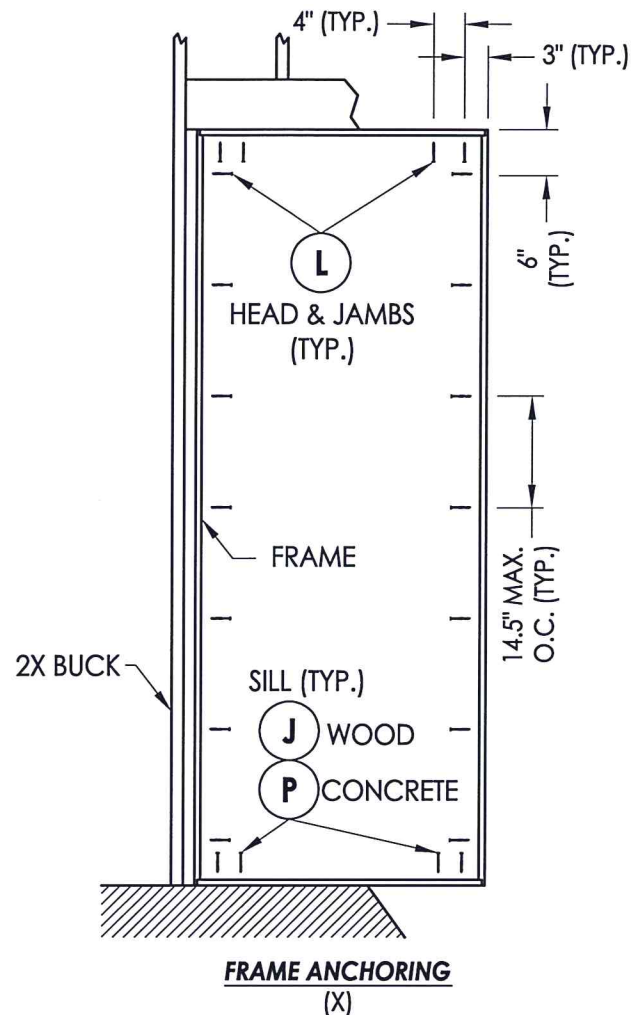
PRODUCT: STEVES AND SONS
FIBERGLASS DOOR

PART OR ASSEMBLY:
VERTICAL CROSS SECTIONS

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

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DRAWING NO.: TX-4094
SHEET 7 of 10

2X FRAMING TO BE DESIGNED BY THE ENGINEER OR ARCHITECT OF RECORD (TYP.)

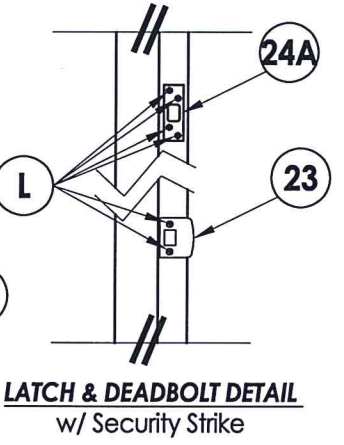
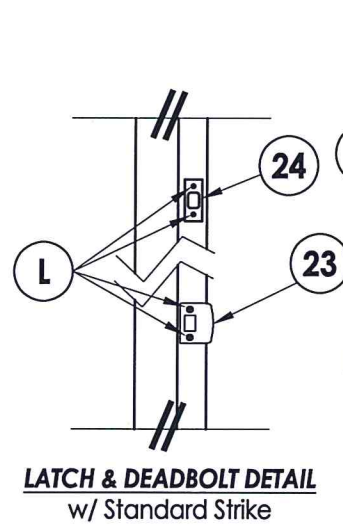
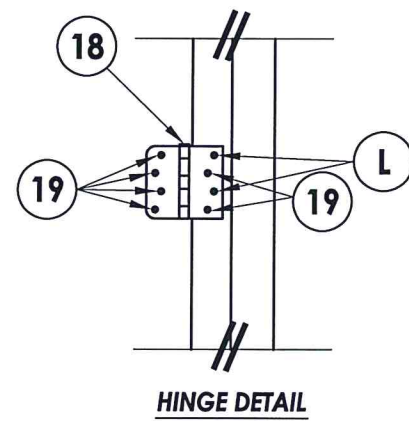


FLOOR SUBSTRATE MATERIAL
CONCRETE (MIN. 3000 PSI)
WOOD (S.G. >= 0.42) (TYP)

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



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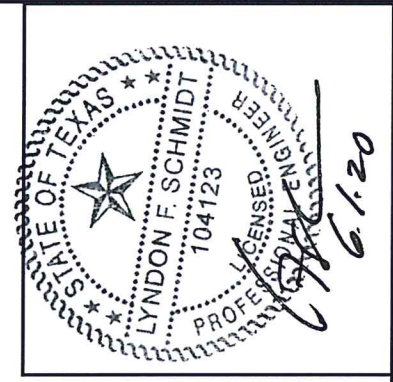
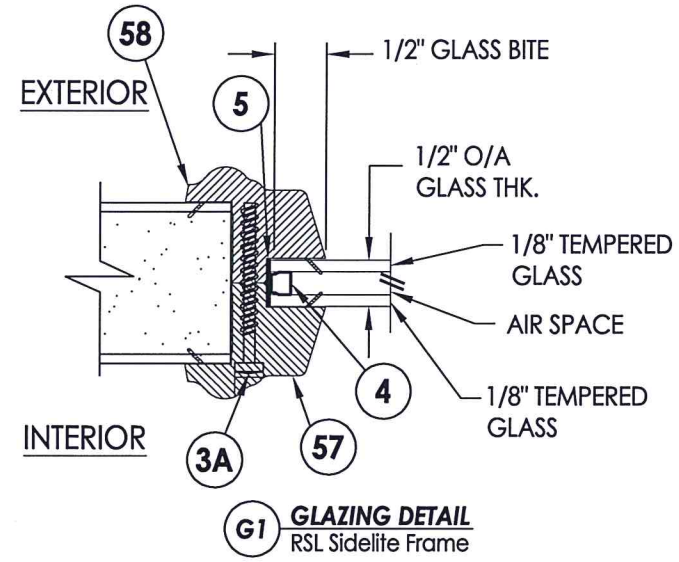
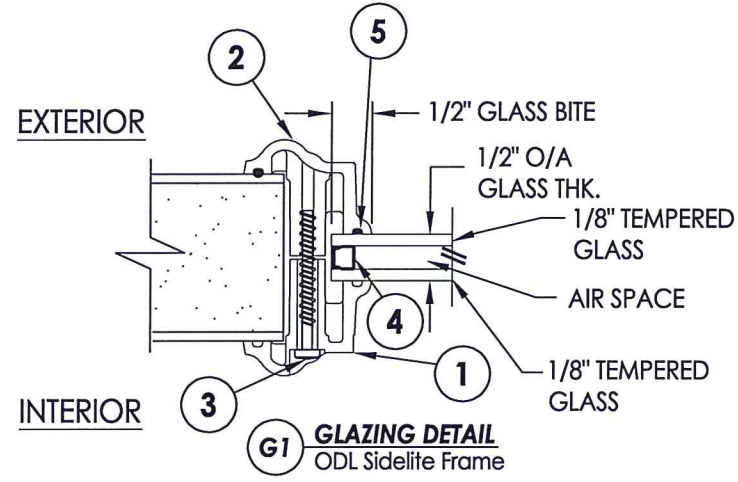
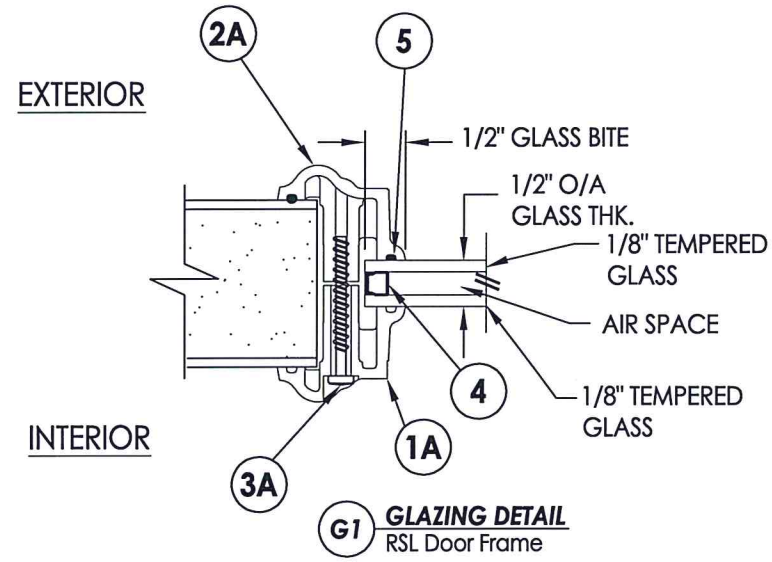
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: STEVES AND SONS FIBERGLASS DOOR

PART OR ASSEMBLY: BUCK & FRAME ANCHORING

NO.	DATE	REVISIONS
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SHEET 8 of 10



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TEXAS P.E. #104123

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Phone No.: 813.659.9197

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PRODUCT: STEVES AND SONS FIBERGLASS DOOR

PART OR ASSEMBLY: GLAZING 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
	NO.	DATE
	JK	BY

DATE: 5/19/10

SCALE: N.T.S.

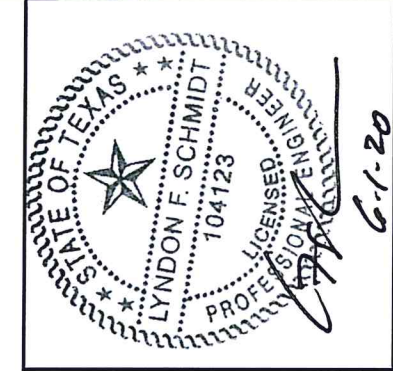
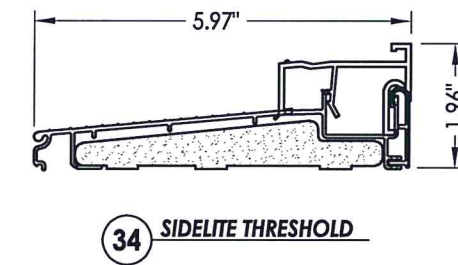
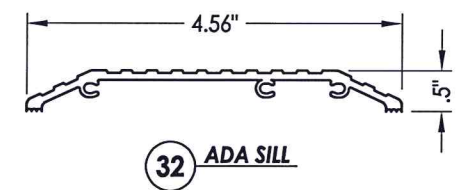
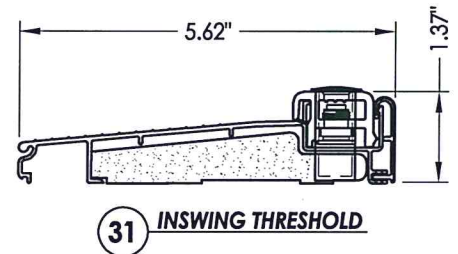
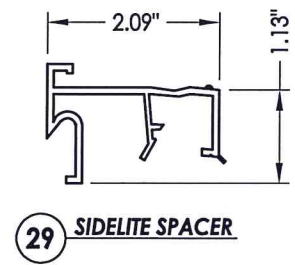
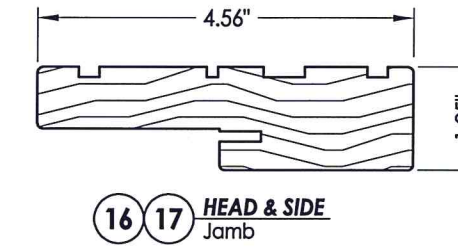
DWG. BY: JK

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DRAWING NO.: TX-4094

SHEET 9 OF 10

BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
B	2X FRAMING SG >= 0.42	WOOD
C	1/4" MAX. SHIM SPACE	-
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
24A	DEADBOLT SECURITY 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	-
52	SIDELITE STILE - SG >= 0.42	WOOD
53	SIDELITE BOTTOM RAIL	COMP./LVL
54	SIDELITE TOP RAIL	WOOD
56	SLIDE BOLT ROD	STEEL
57	SIDELITE FEMALE LITE FRAME - RSL	PVC
58	SIDELITE MALE LITE FRAME - RSL	PVC
59	#8 X 2" PFH WOOD SCREW	STEEL



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PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS

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DWG. BY: JK
CHK. BY: LFS
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