



**TRINITY GLASS**  
INTERNATIONAL

33615 1st Way S, Federal Way, WA 98003

**3'0 X 8'0**  
**OPAQUE PREMIUM FIBERGLASS**  
**SINGLE DOOR WITH SIDELITE(S) (CHS)**  
**IN SWING / OUT SWING**  
**"IMPACT" DOOR WITH "NON-IMPACT" SIDELITE(S)**

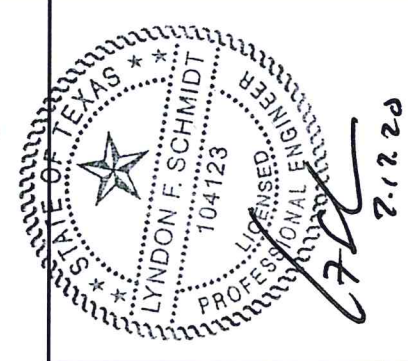
**EVALUATED FOR USE IN THE STATE OF TEXAS**

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 wind borne debris regions, the opaque door panel has been tested and evaluated as an impact resistant product and does not require the use of an approved impact resistant covering. The sidelites must be protected with an impact resistant covering that complies with Sections R301.2.1.2 and 1609.1.2. This opaque door meets missile level "D" as defined in ASTM E 1996.
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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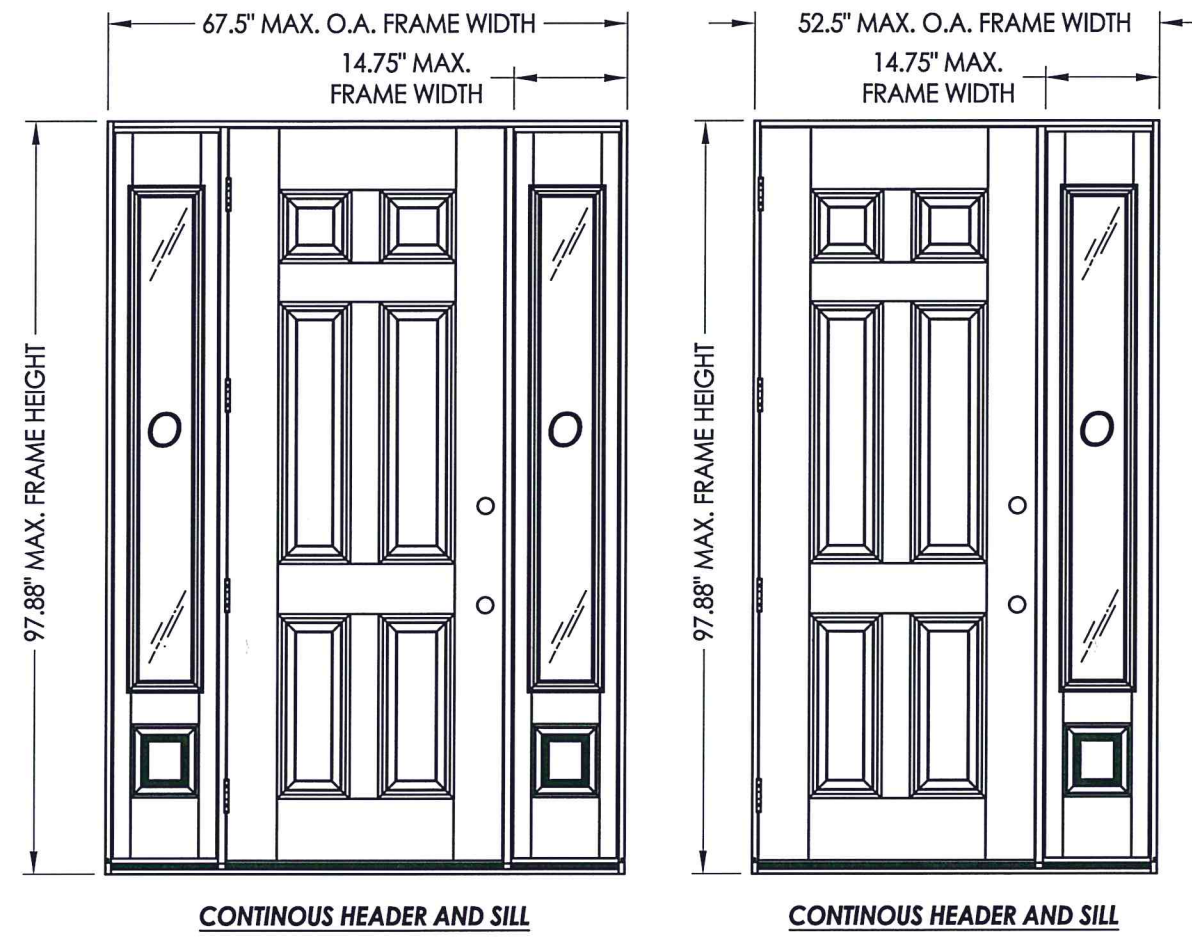
SHEET #	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel construction details
3	Sidelite panel construction details & glazing details
4	Horizontal cross sections
5	Horizontal cross sections
6	Vertical cross sections
7	Vertical cross sections
8	Frame anchoring (XO)
9	Frame anchoring (OXO)
10	Components
11	Bill of materials



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

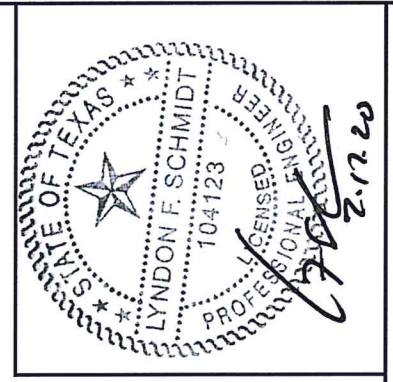
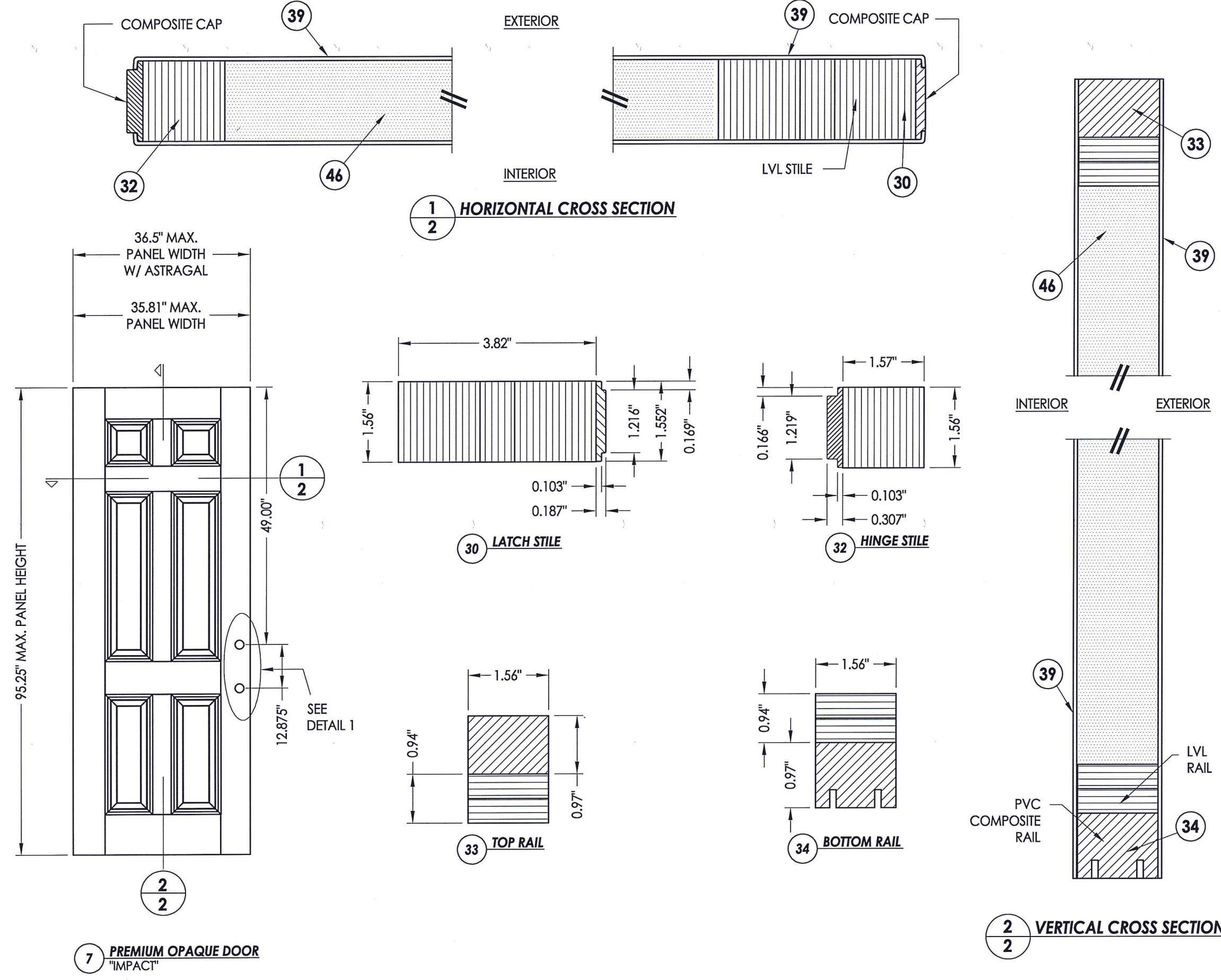


UNIT TYPE	SWING	MAX. FRAME DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
SINGLE W/ SIDELITES	IN SWING	67.50" x 97.88"	G1	+47.0	-47.0
	OUT SWING	67.50" x 96.75"		+47.0	-47.0
SINGLE W/ SIDELITE	IN SWING	52.50" x 97.88"	G1	+47.0	-47.0
	OUT SWING	52.50" x 96.75"		+47.0	-47.0

PRODUCT:	TRINITY GLASS INT'L 80 PREMIUM OPAQUE		
PART OR ASSEMBLY:	TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES		
DATE	NO.	BY	REVISIONS
2/13/20	3	LFS	UPDATE TO 2018 IRC/IBC
7/27/09	2	AL	TDI PRODUCT EVALUATION UPDATE
6/28/06	1	EW	REVISED LOCKSET NOMENCLATURE
DATE	NO.	BY	REVISIONS
11/21/05			
SCALE:	N.T.S.		
DWG. BY:	AEM		
CHK. BY:	LFS		
DRAWING NO.:	TX-716		
SHEET	1 OF 11		



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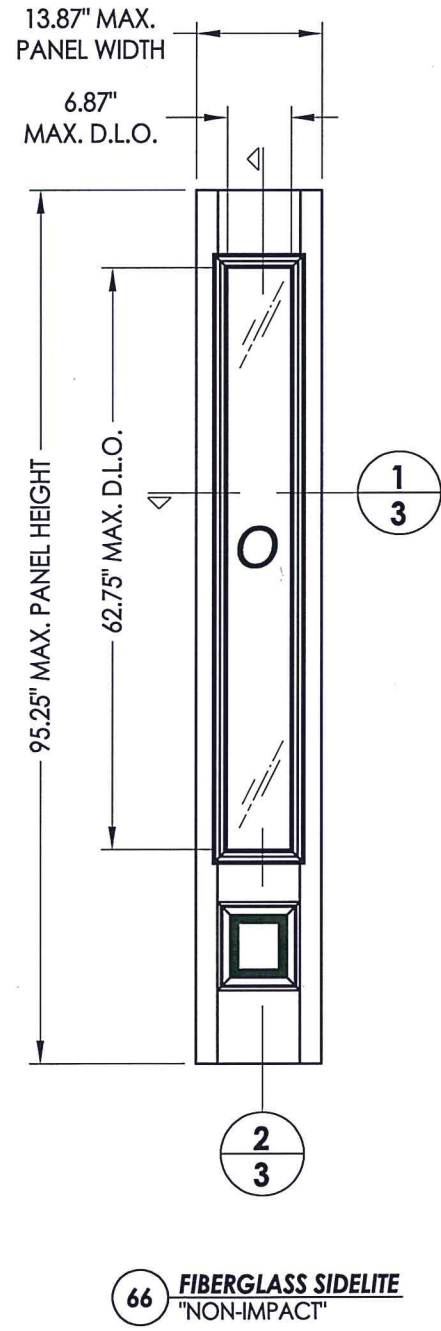
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	TRINITY GLASS INT'L 8'0 PREMIUM OPAQUE
PART OR ASSEMBLY:	DOOR PANEL CONSTRUCTION DETAILS

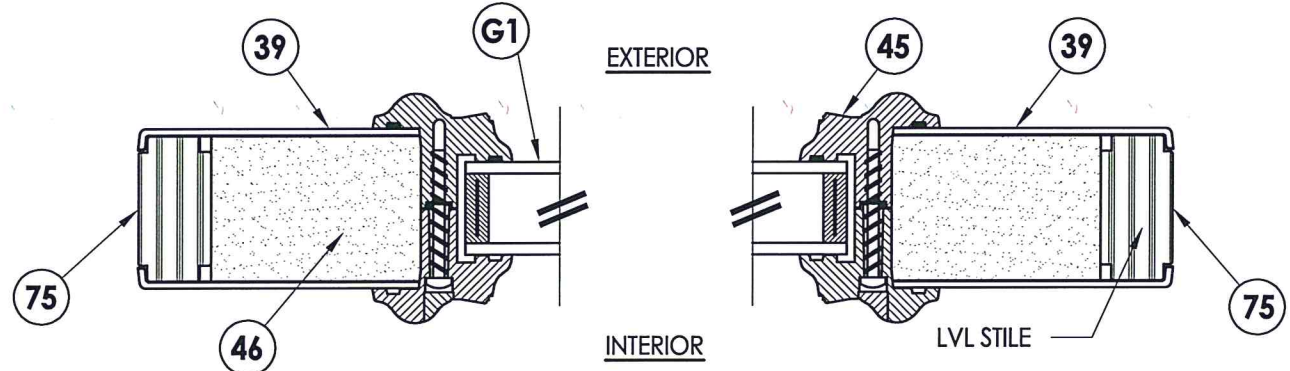
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3	2/13/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE
		BY

DATE:	11/21/05
SCALE:	N.T.S.
DWG. BY:	AEM
CHK. BY:	LFS
DRAWING NO.:	TX-716
SHEET	2 OF 11

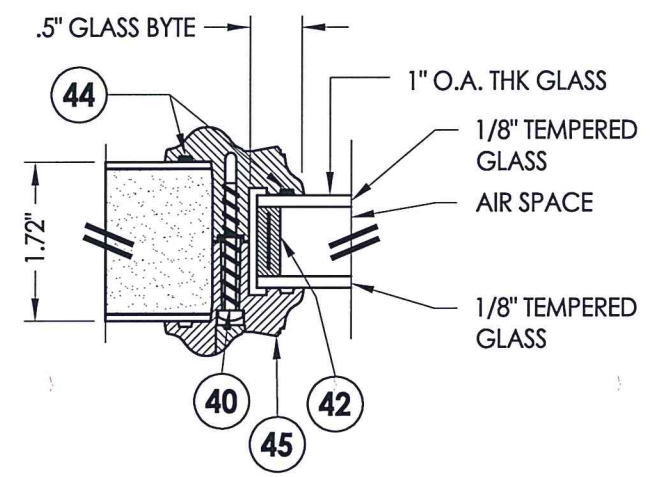




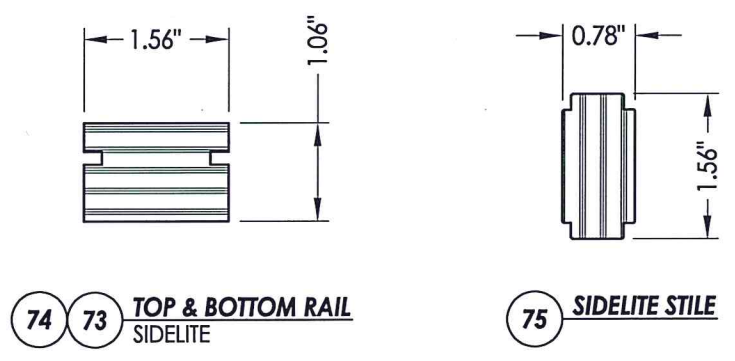
66 **FIBERGLASS SIDELITE**  
"NON-IMPACT"



1  
3 **HORIZONTAL CROSS SECTION**

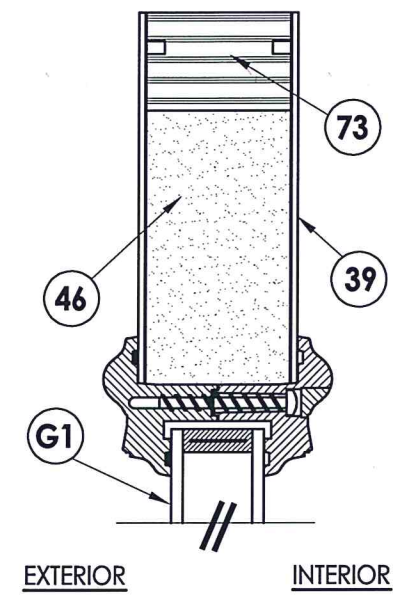


G1 **GLAZING DETAIL**

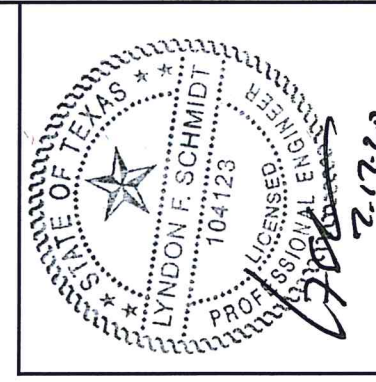


74 73 **TOP & BOTTOM RAIL**  
SIDELITE

75 **SIDELITE STILE**



2  
3 **VERTICAL CROSS SECTION**



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PRODUCT: TRINITY GLASS INT'L  
80 PREMIUM OPAQUE

PART OR ASSEMBLY:  
SIDELITE PANEL CONSTRUCTION  
DETAILS AND GLAZING DETAILS

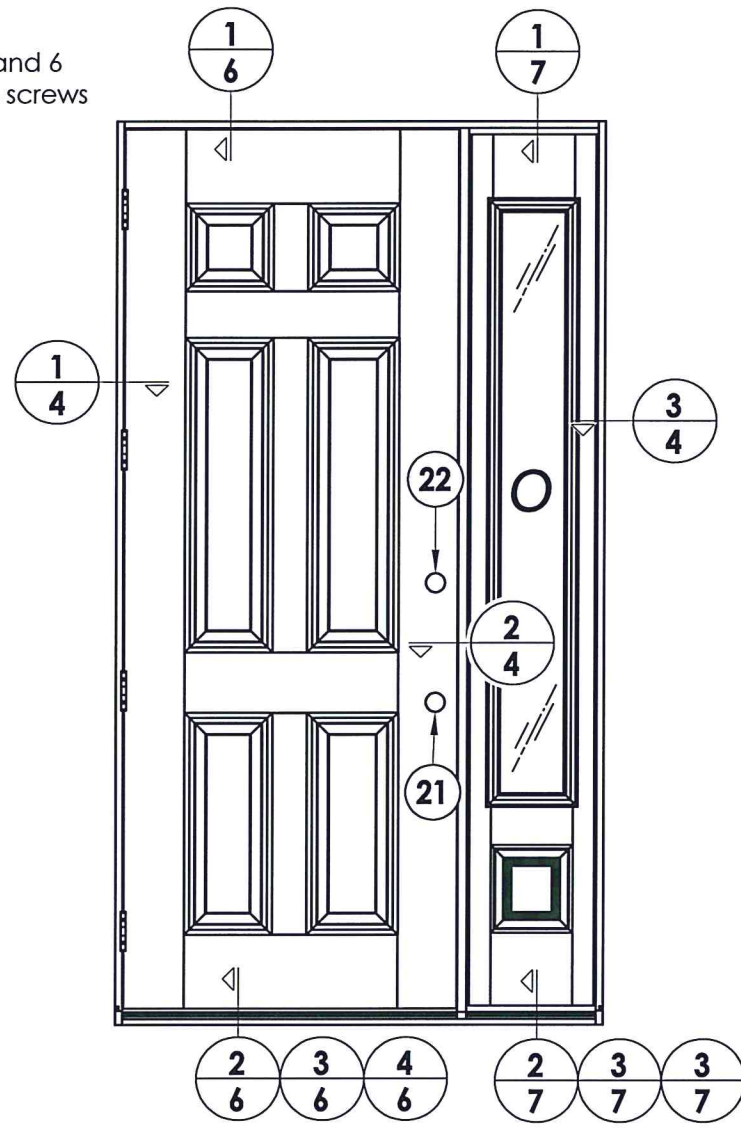
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		BY

DATE: 11/21/05  
SCALE: N.T.S.  
DWG. BY: AEM  
CHK. BY: LFS  
DRAWING NO.: TX-716  
SHEET 3 OF 11

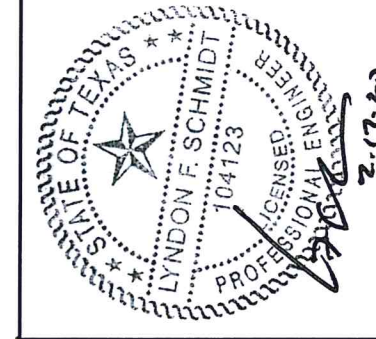


**NOTE:**

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



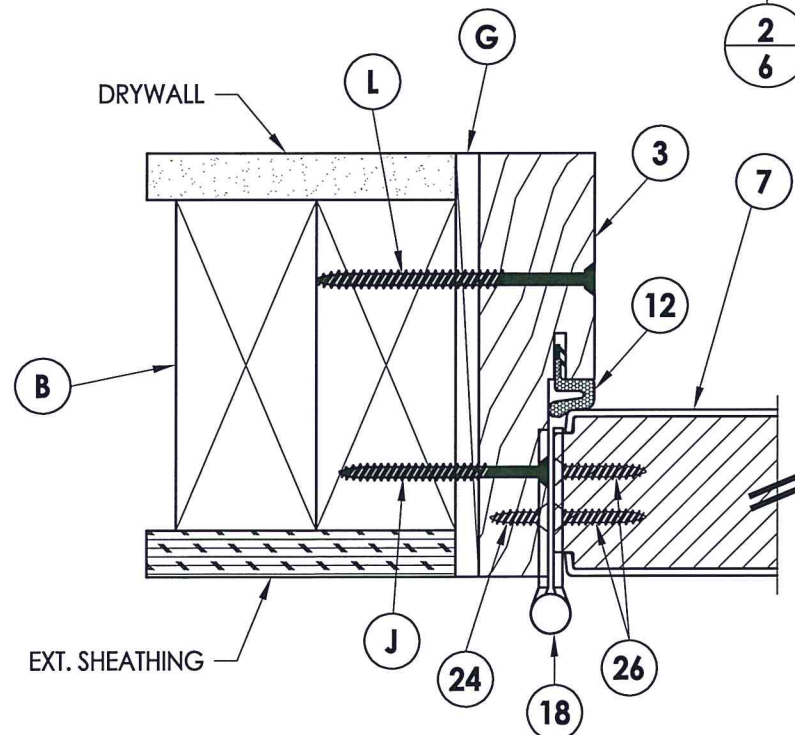
HARDWARE CHART		
MANUFACTURER	MODEL	ITEM #
KWIKSET	LOCK: 740	21
	DEADBOLT: 780	22



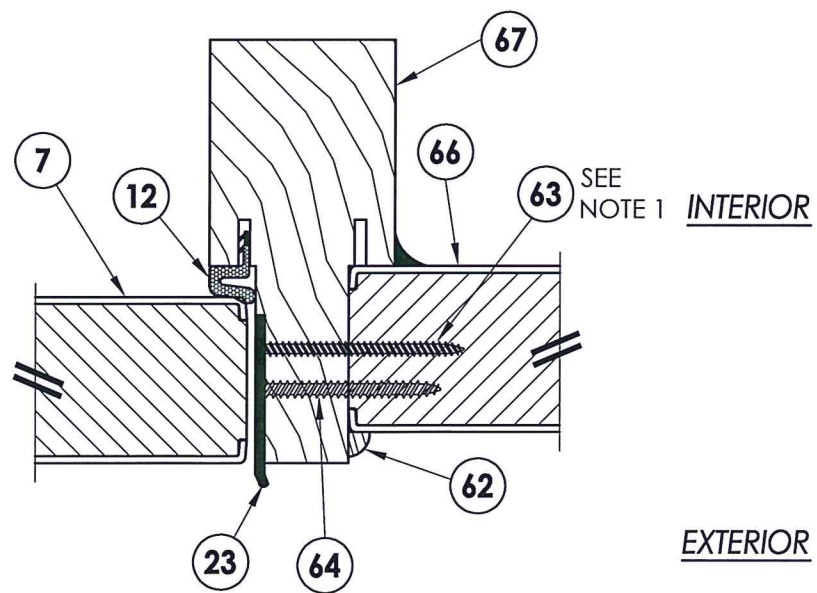
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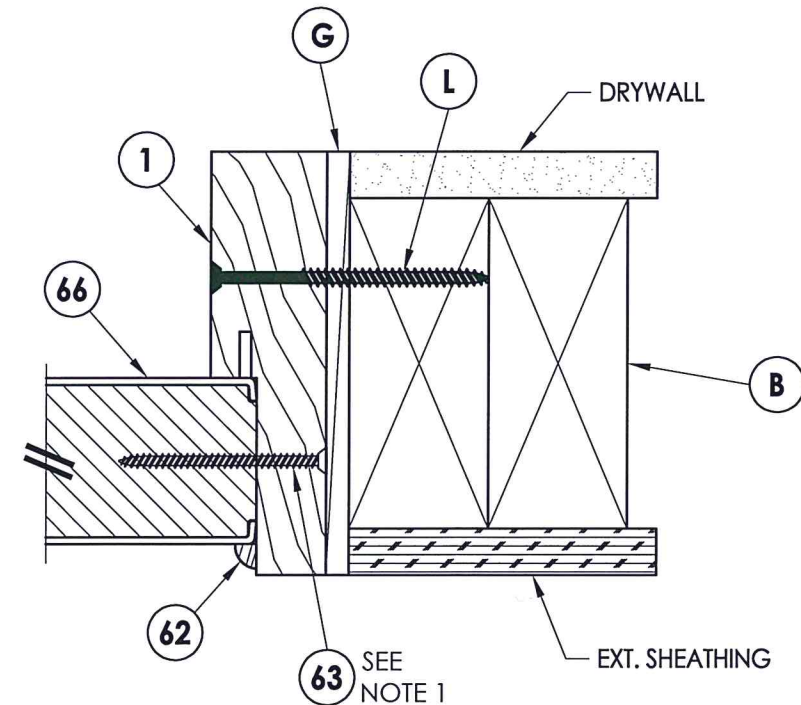
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**1** HORIZONTAL CROSS SECTION  
**4** Outswing shown  
Inswing also approved



**2** HORIZONTAL CROSS SECTION  
**4** Outswing shown  
Inswing also approved



**3** HORIZONTAL CROSS SECTION  
**4** Outswing shown  
Inswing also approved

PRODUCT: TRINITY GLASS INT'L  
8'0 PREMIUM OPAQUE

PART OR ASSEMBLY:  
HORIZONTAL CROSS SECTIONS

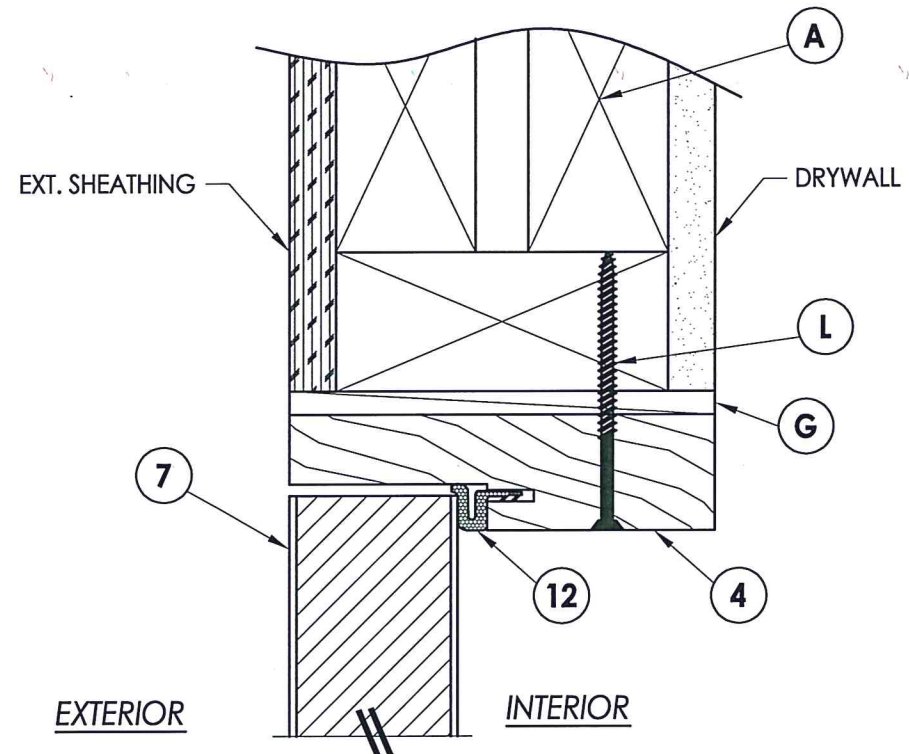
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3	2/13/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE

DATE: 11/21/05  
SCALE: N.T.S.  
DWG. BY: AEM  
CHK. BY: LFS  
DRAWING NO.: TX-716  
SHEET 4 OF 11

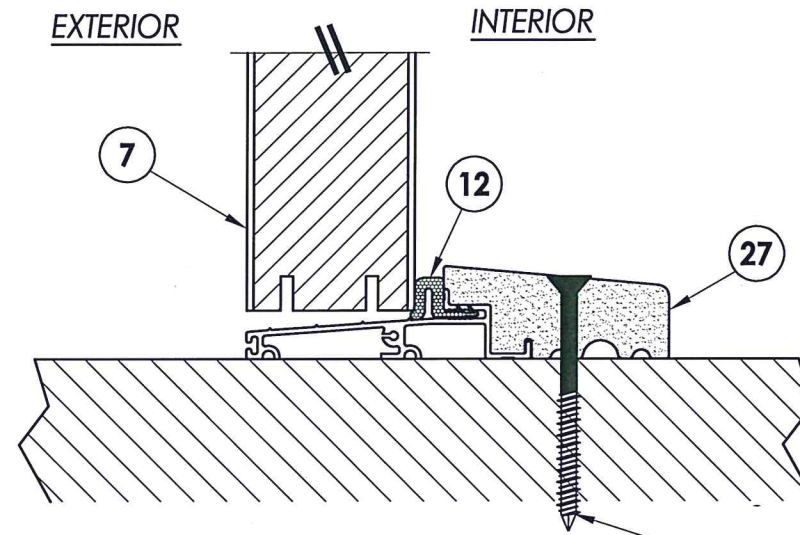






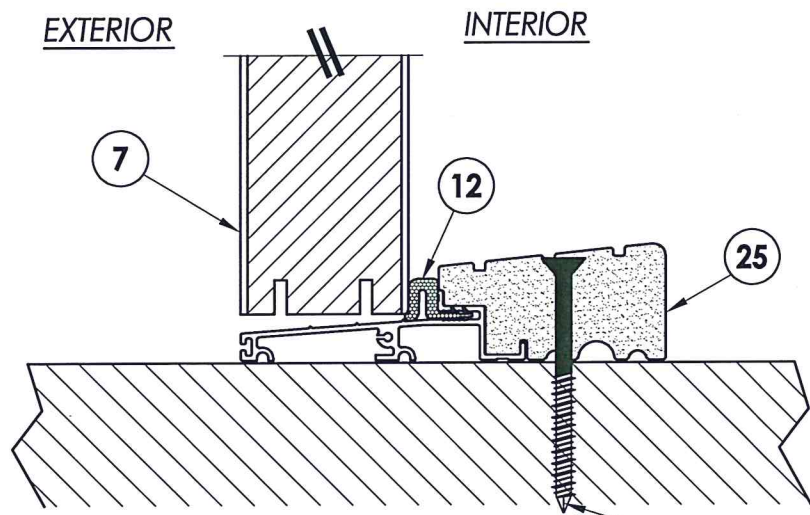


**1** VERTICAL CROSS SECTION  
**6** Outswing shown  
 Inswing also approved



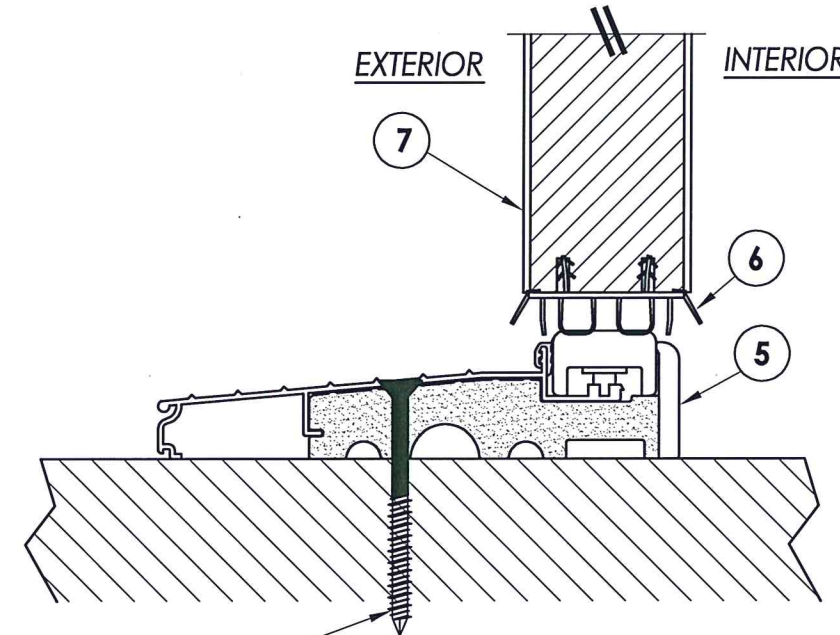
**2** VERTICAL CROSS SECTION  
**6** Outswing configuration

**L** WOOD  
**P** CONCRETE



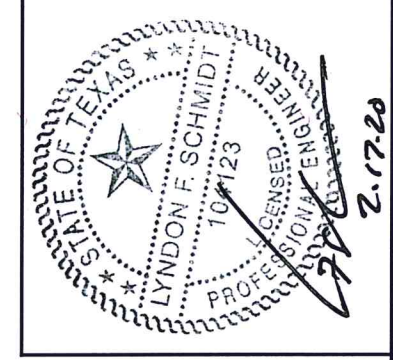
**3** VERTICAL CROSS SECTION  
**6** Outswing configuration

**L** WOOD  
**P** CONCRETE



**4** VERTICAL CROSS SECTION  
**6** Inswing configuration

WOOD **L**  
 CONCRETE **P**



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 8'0 PREMIUM OPAQUE

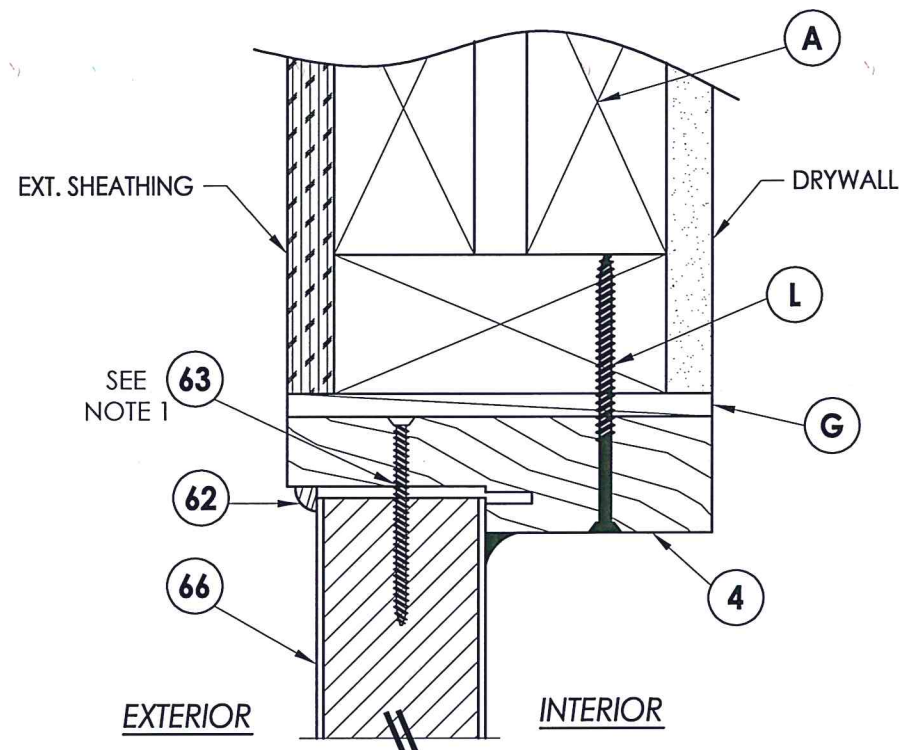
PART OR ASSEMBLY:  
 VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
3	2/13/20	UPDATE TO 2018 IBC/IRC
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		BY

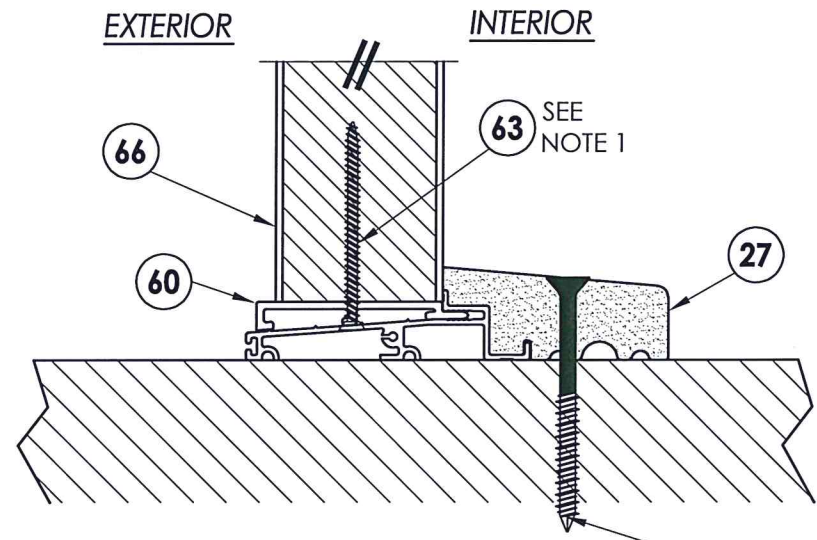
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 SCALE: N.T.S.  
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 CHK. BY: LFS  
 DRAWING NO.: TX-716  
 SHEET 6 OF 11



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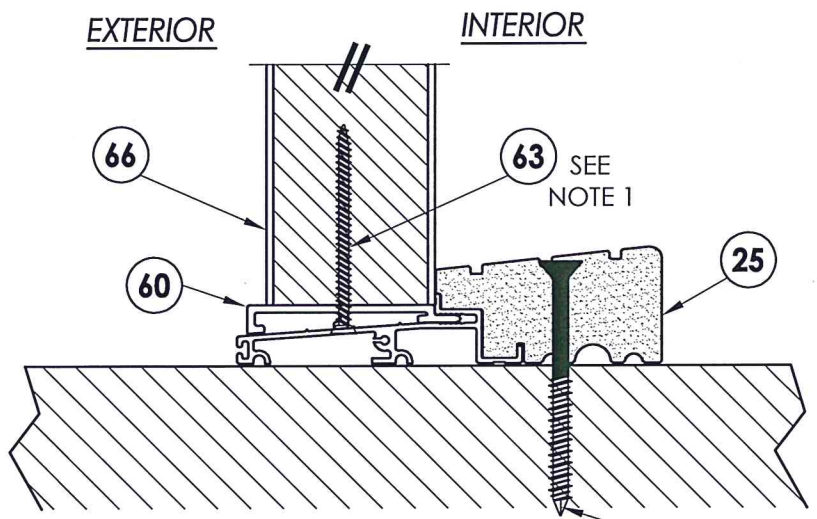
**1** VERTICAL CROSS SECTION  
**7** Outswing shown  
 Inswing also approved



**2** VERTICAL CROSS SECTION  
**7** Outswing sill

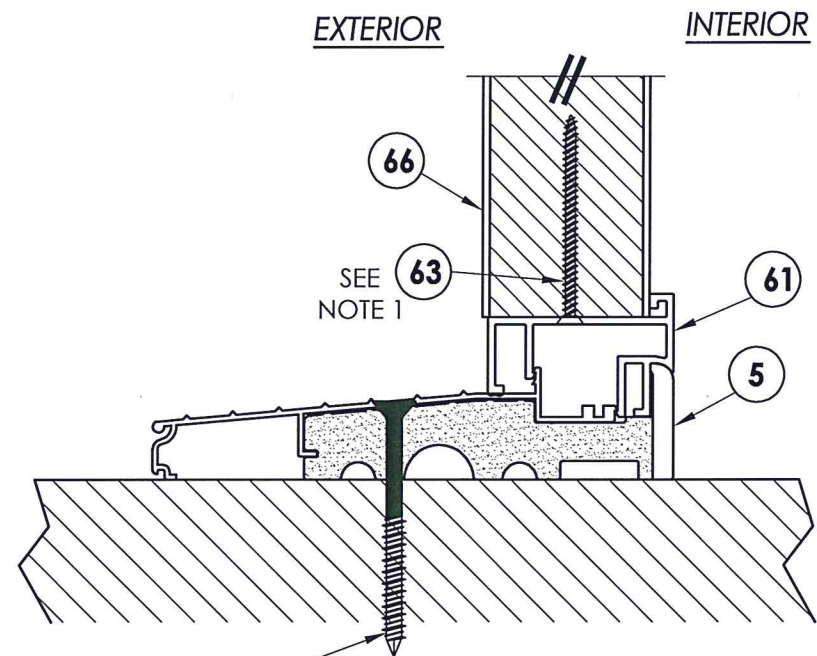
**L** WOOD  
**P** CONCRETE

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



**3** VERTICAL CROSS SECTION  
**7** Outswing sill - high dam

**L** WOOD  
**P** CONCRETE



WOOD **L**  
 CONCRETE **P**  
**4** VERTICAL CROSS SECTION  
**7** Inswing sill



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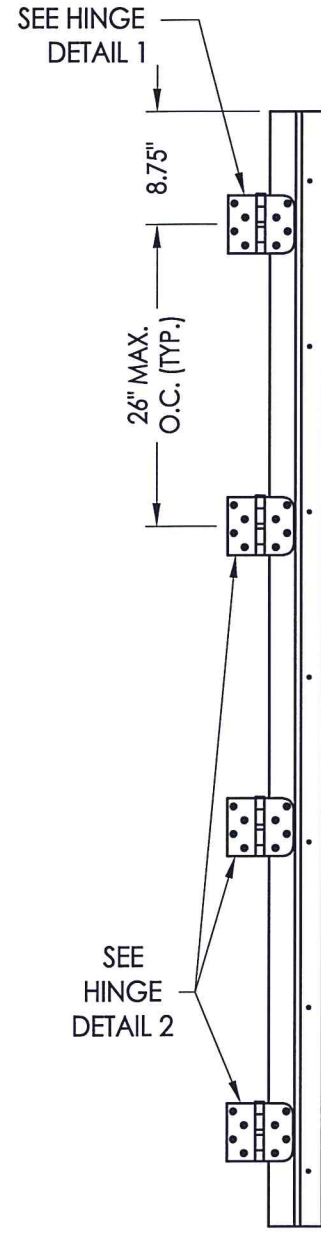
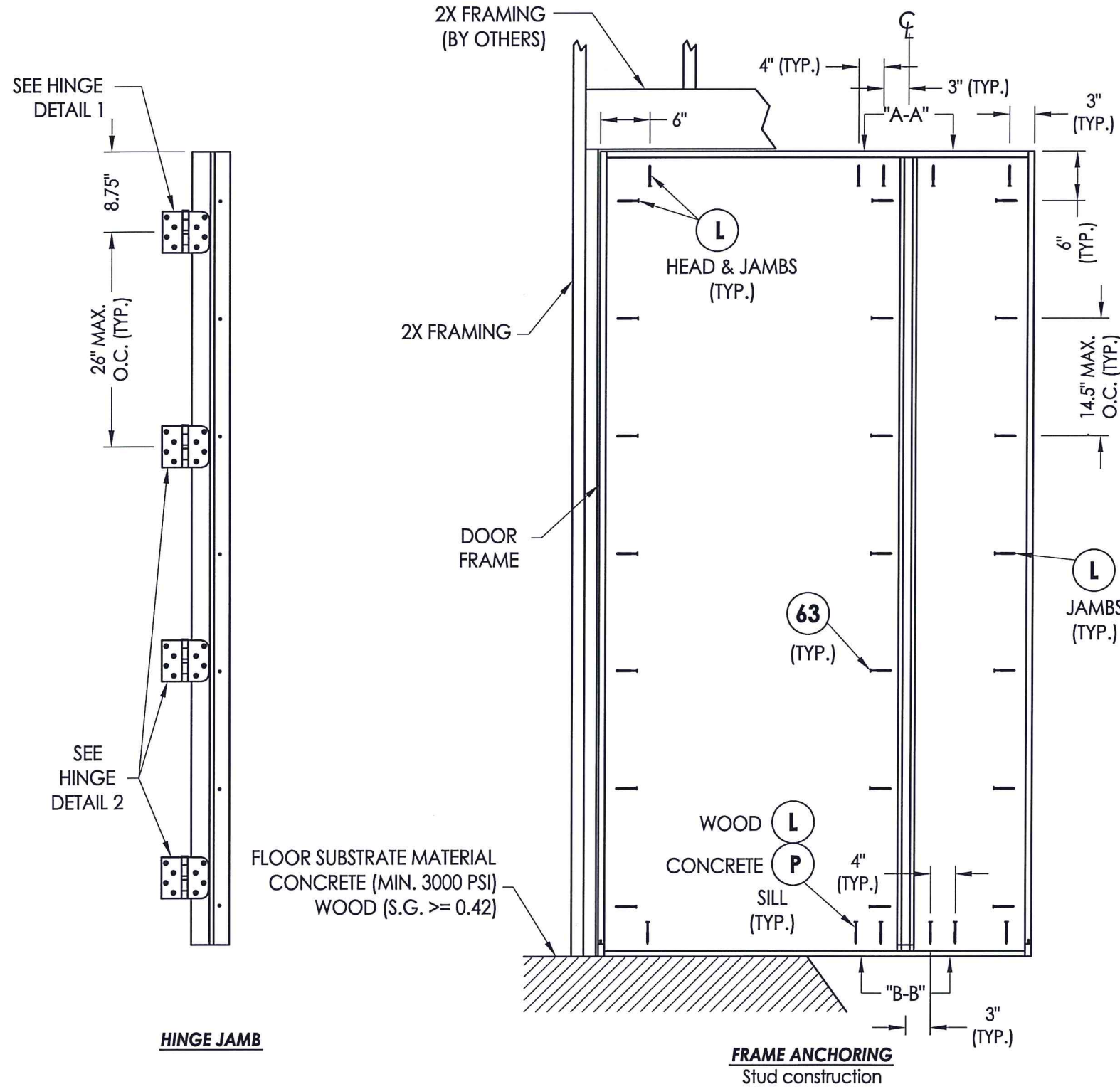
PRODUCT: TRINITY GLASS INT'L  
 80 PREMIUM OPAQUE  
 PART OR ASSEMBLY:  
 VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
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2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE

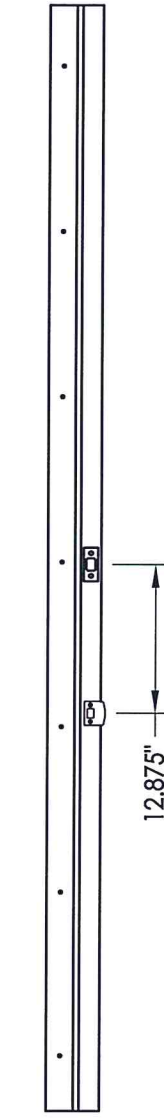
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 DRAWING NO.: TX-716  
 SHEET 7 OF 11



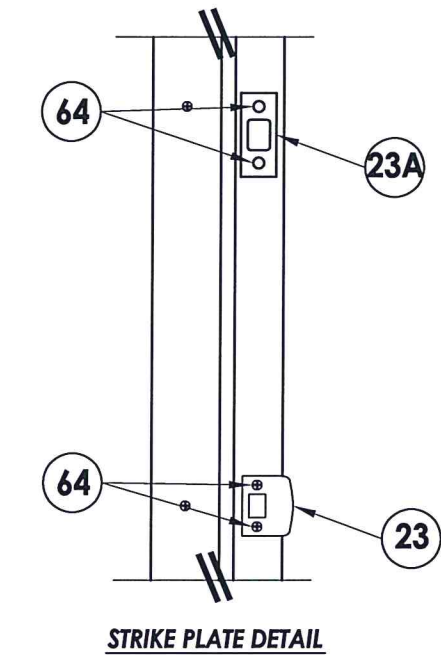
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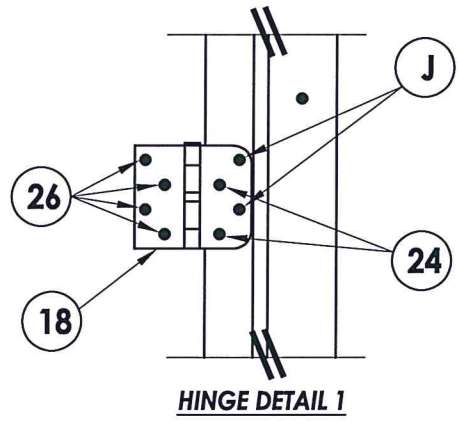
**HINGE JAMB**



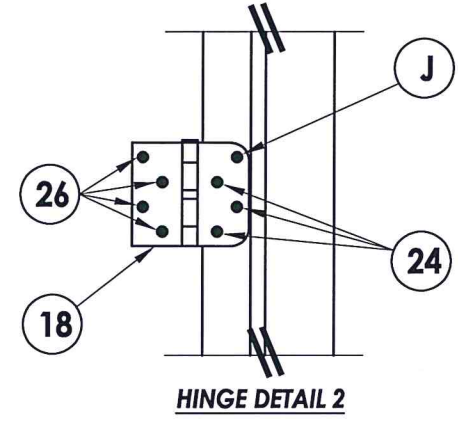
**STRIKE JAMB**



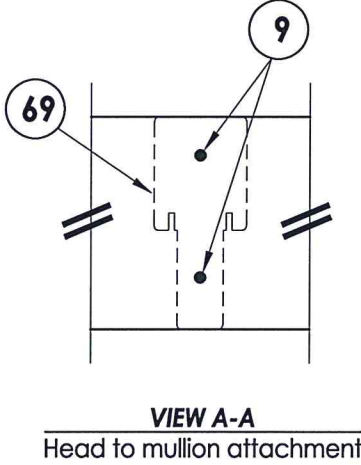
**STRIKE PLATE DETAIL**



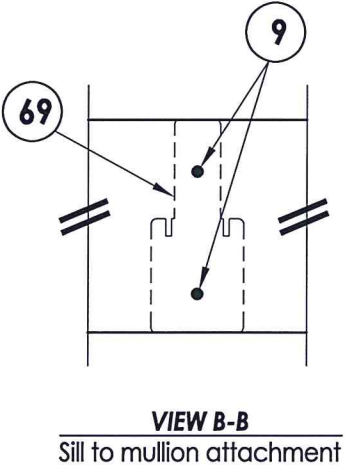
**HINGE DETAIL 1**



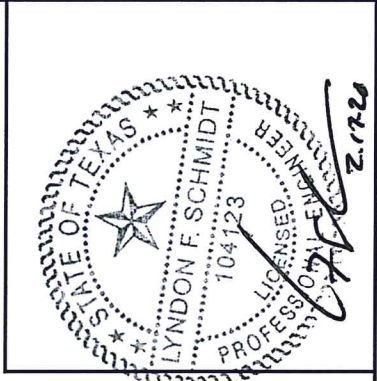
**HINGE DETAIL 2**



**VIEW A-A**  
Head to mullion attachment



**VIEW B-B**  
Sill to mullion attachment



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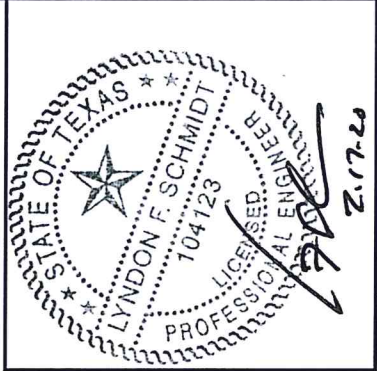
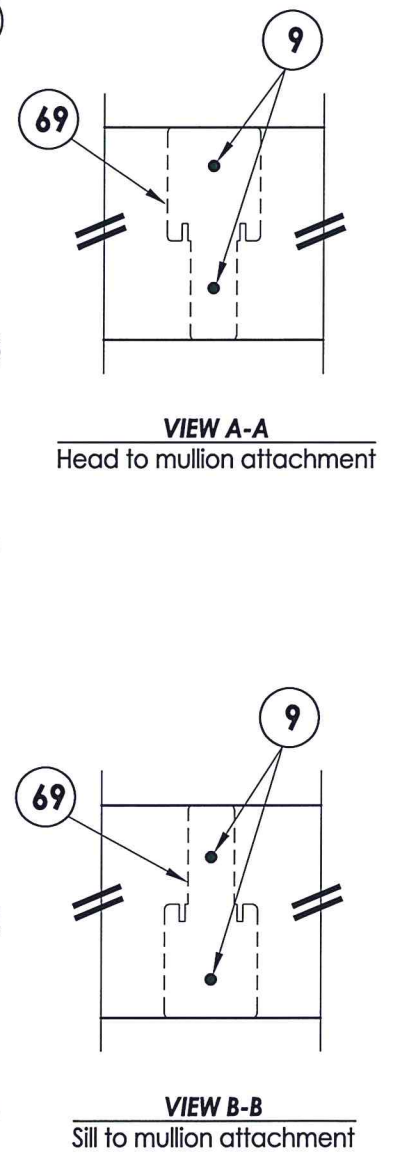
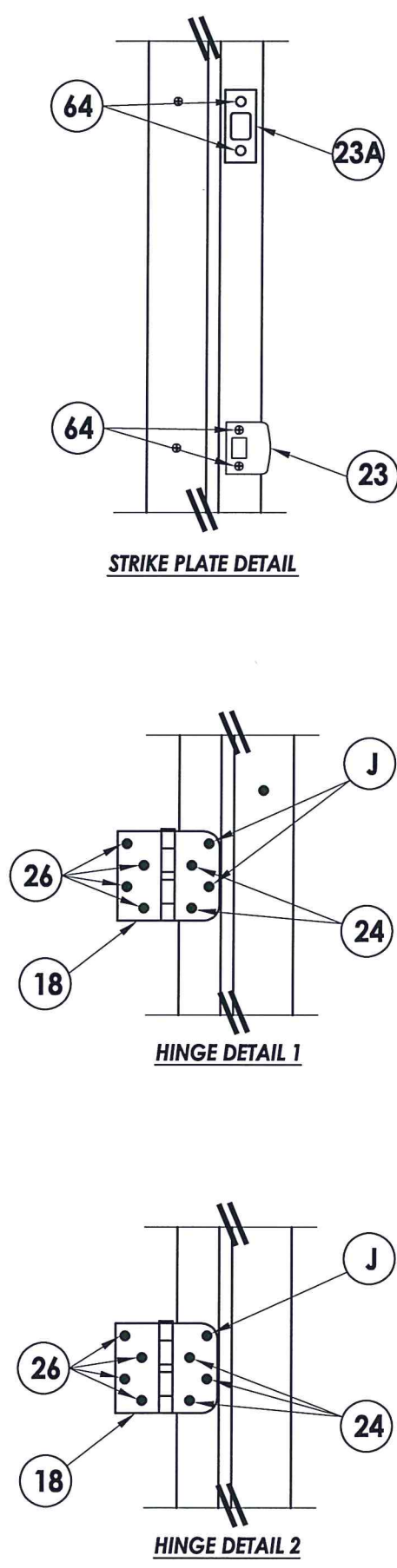
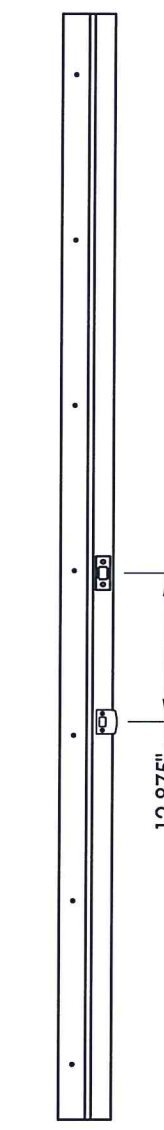
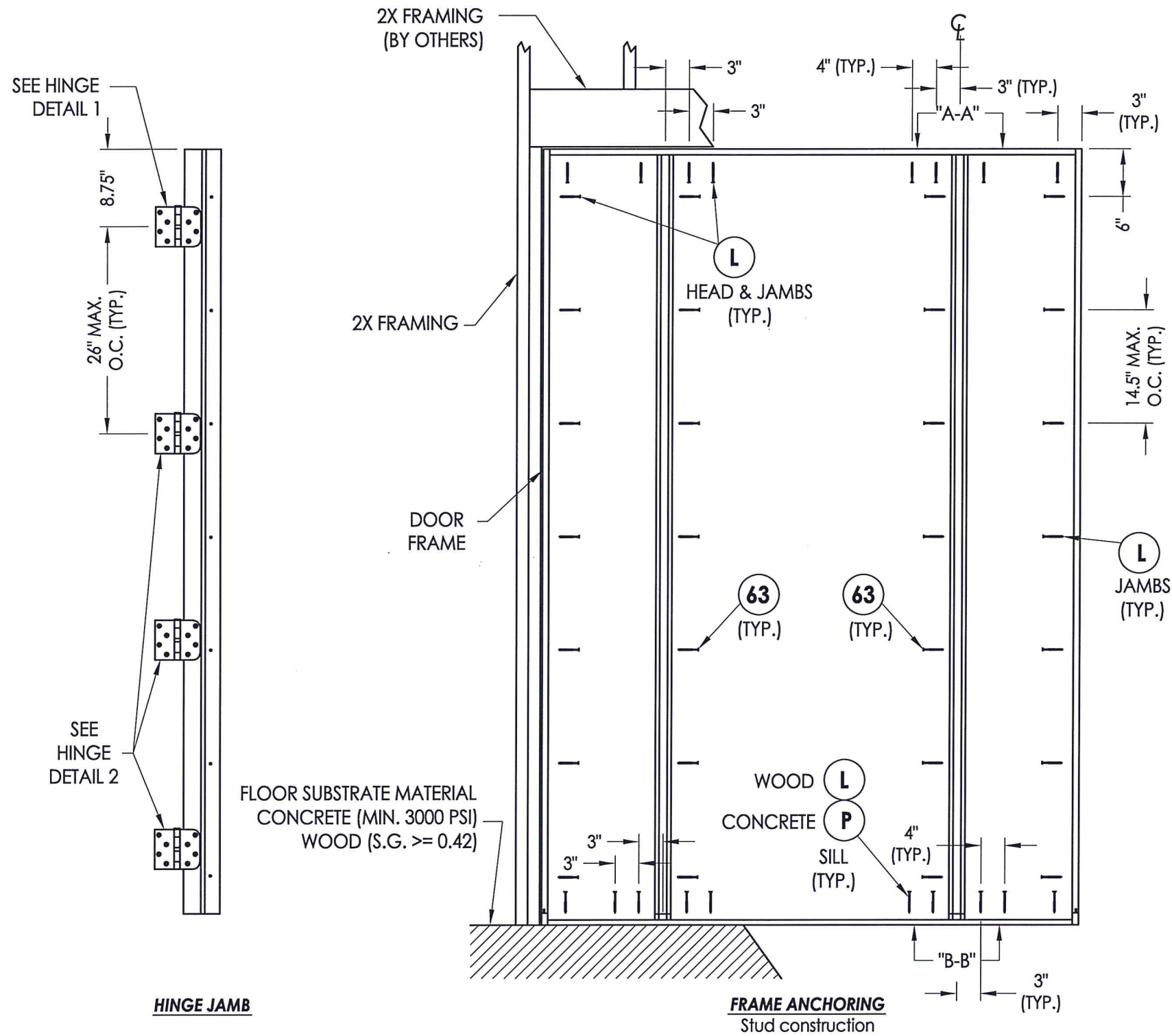
PRODUCT: TRINITY GLASS INT'L  
8'0 PREMIUM OPAQUE

PART OR ASSEMBLY:  
FRAME ANCHORING (XO)

NO.	DATE	REVISIONS
3	2/13/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE

DATE: 11/21/05  
SCALE: N.T.S.  
DWG. BY: AEM  
CHK. BY: LFS  
DRAWING NO.: TX-716  
SHEET 8 OF 11





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PRODUCT: TRINITY GLASS INT'L  
 80 PREMIUM OPAQUE

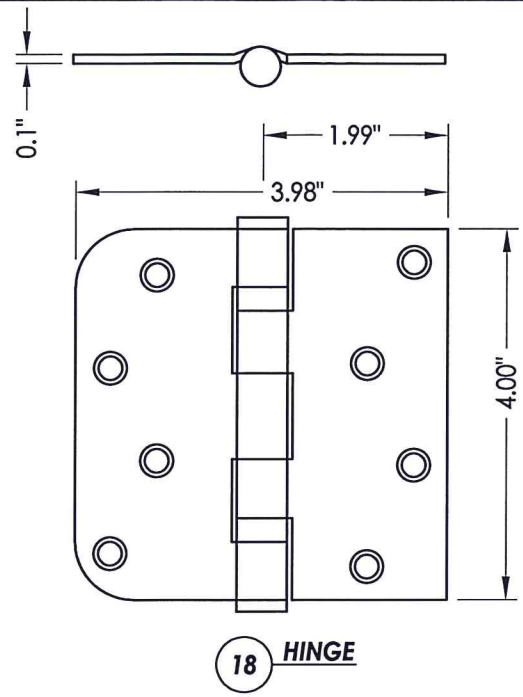
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 FRAME ANCHORING (OXO)

NO.	DATE	REVISIONS
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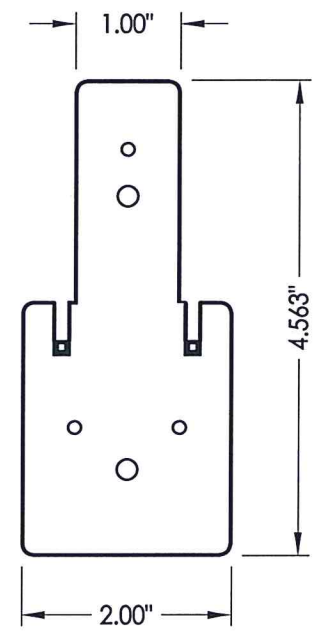
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 CHK. BY: LFS  
 DRAWING NO.: TX-716  
 SHEET 9 OF 11



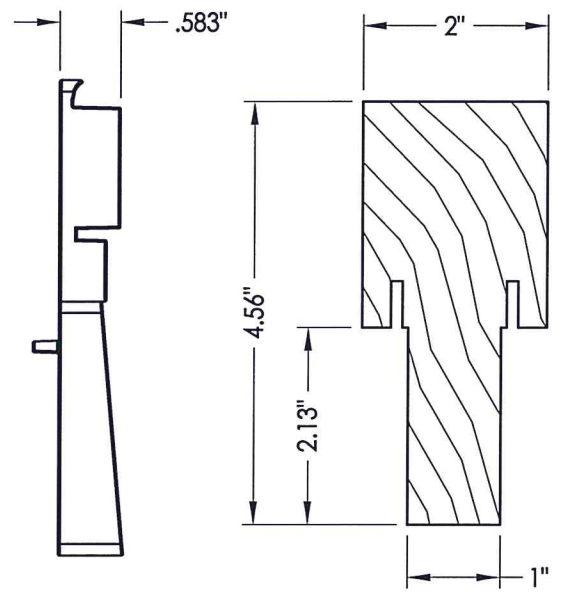
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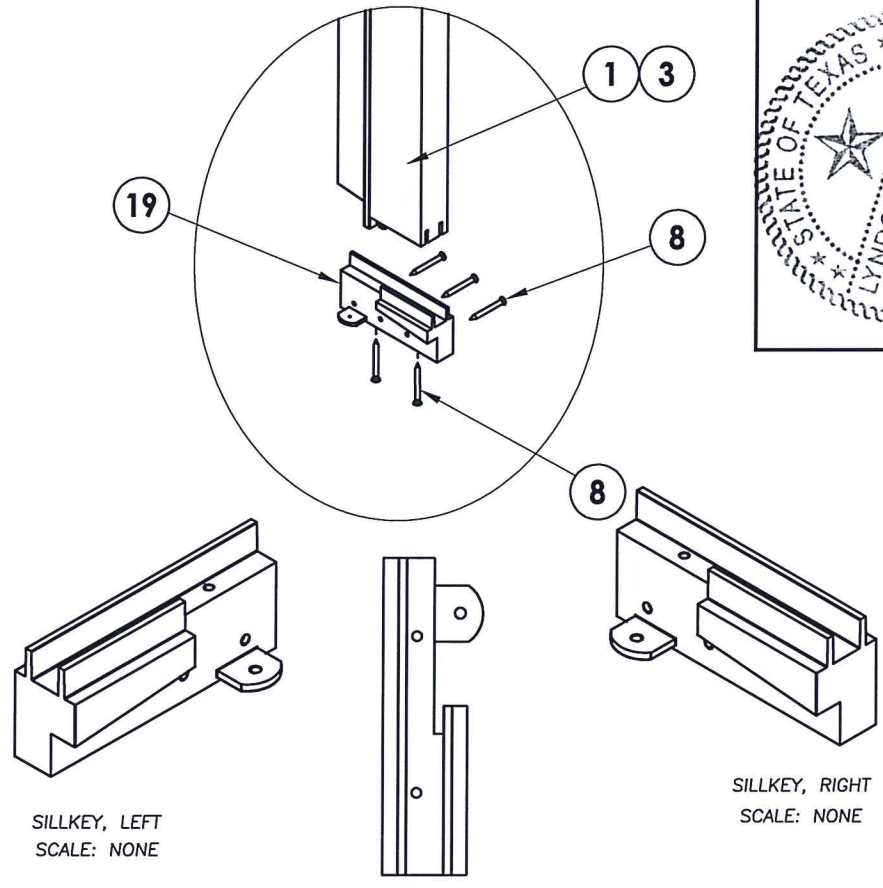
18 HINGE



69 MULLION BASE KIT  
Optional

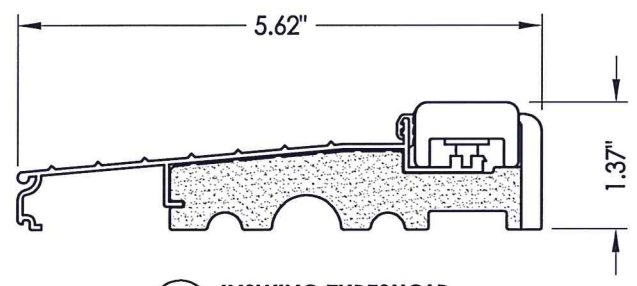


67 INTEGRAL MULLION

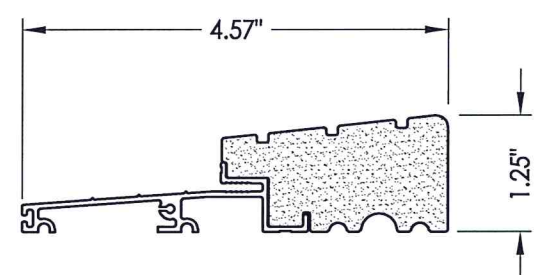


SILLKEY, LEFT  
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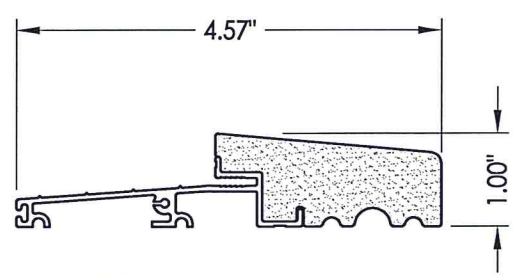
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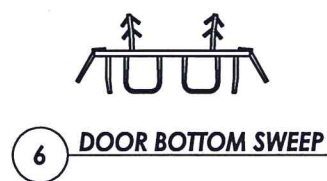
5 INSWING THRESHOLD



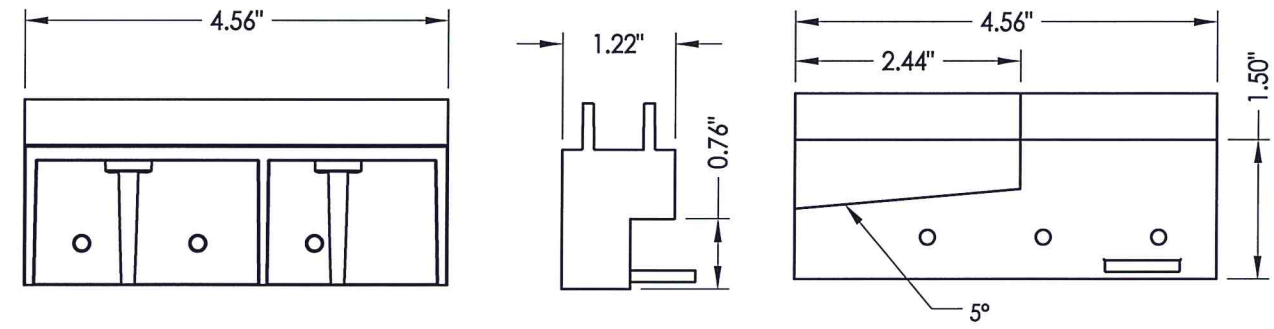
25 OUTSWING THRESHOLD  
High-dam option



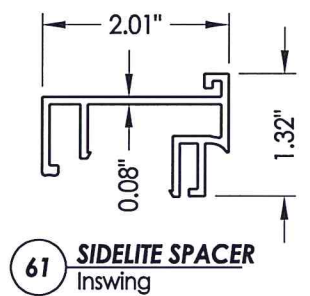
27 OUTSWING THRESHOLD



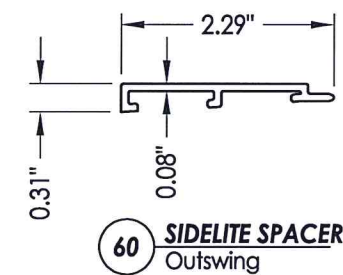
6 DOOR BOTTOM SWEEP



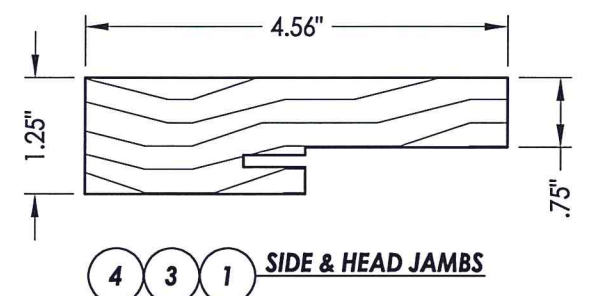
19 SILLKEY DETAILS  
Optional



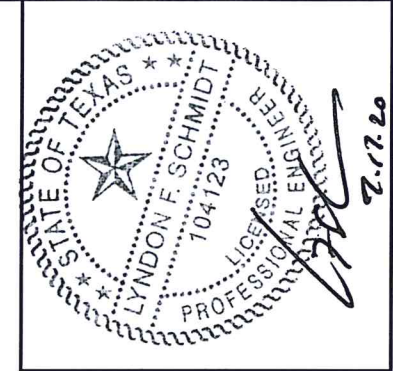
61 SIDELITE SPACER  
Inswing



60 SIDELITE SPACER  
Outswing



4 3 1 SIDE & HEAD JAMBS



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**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:	TRINITY GLASS INT'L 8'0 PREMIUM OPAQUE
PART OR ASSEMBLY:	COMPONENTS

NO.	DATE	REVISIONS	BY
3	2/13/20	UPDATE TO 2018 IBC/IRC	LFS
2	7/27/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW

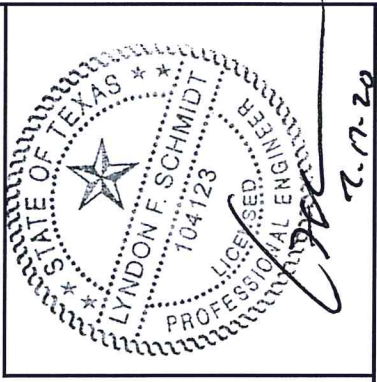
DATE:	11/21/05
SCALE:	N.T.S.
DWG. BY:	AEM
CHK. BY:	LFS
DRAWING NO.:	TX-716
SHEET	10 OF 11

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**BILL OF MATERIALS**

ITEM	DESCRIPTION	MATERIAL
A	2X HEADER FRAMING SG >= 0.42	WOOD
B	2X FRAMING SG >= 0.42	WOOD
G	MAX. 1/4" SHIM SPACE	WOOD
J	#9 X 2-1/4" PFH WS	STEEL
L	#8 X 3" PFH WS	STEEL
P	3/16" X 2-3/4" ELCO OR ITW PFH CONCRETE SCREW	STEEL
1	SIDELITE JAMB - FINGER-JOINT PINE - SG >= 0.42	WOOD
3	HINGE JAMB - FINGER-JOINT PINE - SG >= 0.42	WOOD
4	HEAD - FINGER-JOINT PINE - SG >= 0.42	WOOD
5	INSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUMINUM
6	DOOR BOTTOM SWEEP	PVC
7	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
8	#6 X 1-1/4 PFH DRYWALL SCREW	STEEL
9	#9 X 2-1/4" PFH SMS	STEEL
12	WEATHER STRIP QEBD650 Q-LON	-
18	3.983" X 4.0" HINGE MIN 0.098" THICK	STEEL
19	SILLKEY	PC/ASA
21	LOCK (SEE LOCK & DEADBOLT RATINGS CHART)	STEEL
22	DEADBOLT (SEE LOCK & DEADBOLT RATINGS CHART)	STEEL
23	STRIKE PLATE	STEEL
23A	DEADBOLT PLATE	STEEL
24	#9 X 5/8" PFH WS	STEEL
25	OUTSWING HIGH-DAM THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM./ COMP.
26	#9 X 1.0" PFH WS	STEEL
27	OUTSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM./ COMP.
30	LATCH STILE - SG >= 0.42	LVL/PVC
32	HINGE STILE - SG >= 0.42	LVL/PVC
33	TOP RAIL - POPLAR LVL & WPC COMBINATION	POPLAR/WPC
34	BOTTOM RAIL - POPLAR LVL & WPC COMBINATION	POPLAR/WPC
39	FIBERGLASS SKIN 0.079" MIN. THICKNESS	FIBERGLASS
40	#8 X 1-1/8" SELF THREADING SCREW	STEEL
42	ALUMINUM & BUTYL SPACER SYSTEM	ALUM./BUTYL
44	HOT MELT SEALANT	-
45	LITE FRAME	ABS
46	DOOR PANEL CORE FOAMED	POLYURETHANE
60	SIDELITE SPACER - OUTSWING	PVC
61	SIDELITE SPACER - INSWING	PVC
62	QUARTER ROUND	WOOD
63	#8 X 2-1/4" PFH SCREW	STEEL
64	#8 X 2" PFH SCREW	STEEL
66	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
67	INTEGRAL MULLION - FINGER JOINT PINE (SG >= 0.42)	WOOD
69	MULLION BASE KIT	PC/ASA
73	LVL SIDELITE TOP RAIL (FULL LITE)	POPLAR
74	LVL SIDELITE BOTTOM RAIL (FULL LITE)	POPLAR
75	LVL SIDELITE STILE (FULL LITE)	POPLAR



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

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

WOOD SCREW INSTALLATION NOTES:

- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.