

**6'0 X 6'8**  
**OPAQUE PREMIUM FIBERGLASS**  
**DOUBLE DOOR**  
**w/ SIDELITES (BOXED)**  
**INSWING / OUTSWING**  
**"IMPACT" DOUBLE DOOR**  
**w/ "NON-IMPACT" SIDELITES**

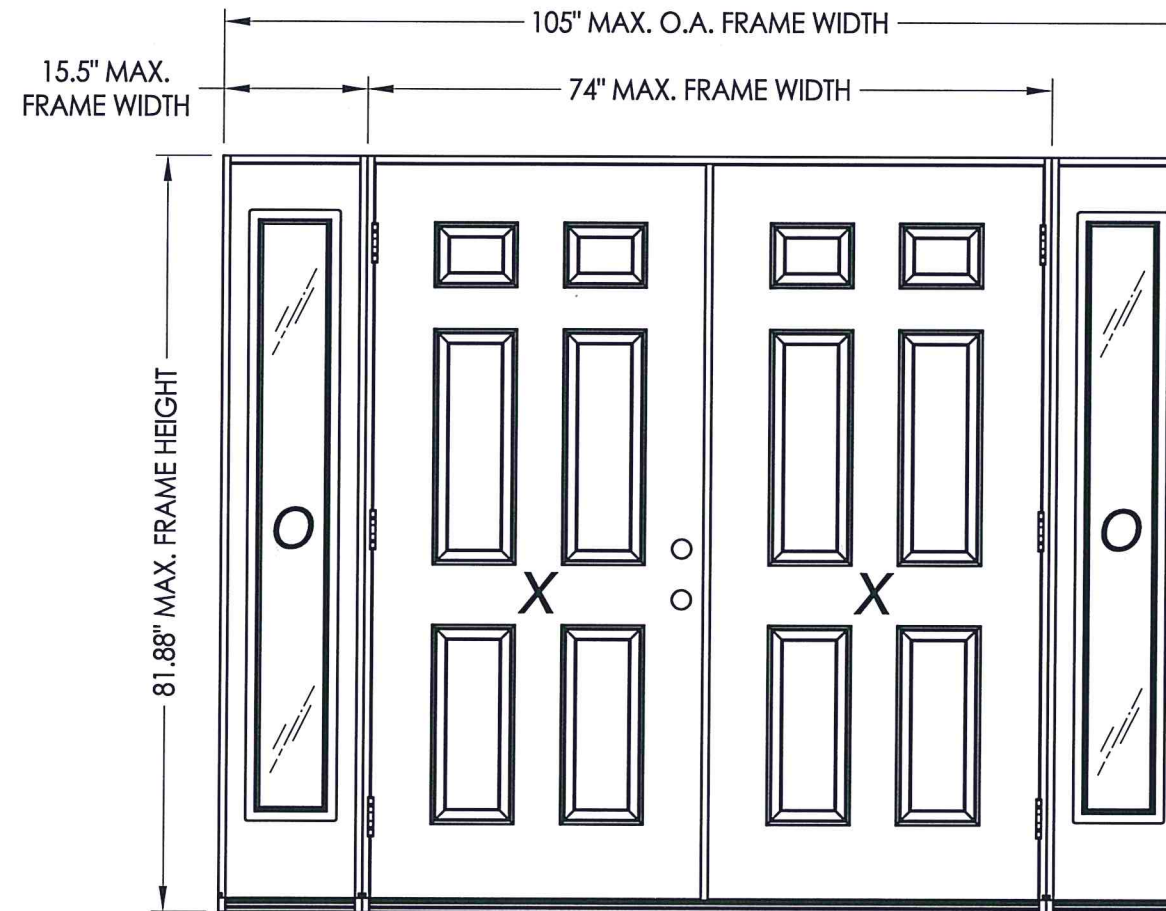
EVALUATED FOR USE IN THE STATE OF TEXAS

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:

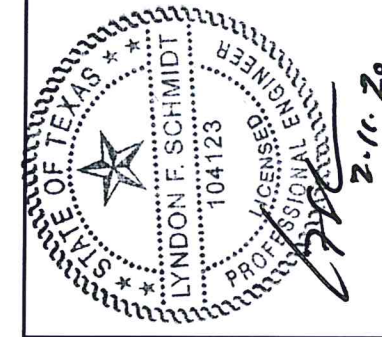
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. When used in wind borne debris regions, the opaque door panel has been tested and evaluated as an impact resistant product and does not require the use of an approved impact resistant covering. The sidelite 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.

**TABLE OF CONTENTS**

SHEET #	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel construction details & glazing details
3	Sidelite panel construction details & glazing details
4	Horizontal cross sections
5	Vertical cross sections
6	Vertical cross sections
7	Frame anchoring
8	Components
9	Bill of materials
10	Endura astragal details



ASTRAGAL TYPE	SWING	MAX. FRAME DIMENSION	DESIGN PRESSURE PSF	
			POSITIVE	NEGATIVE
ENDURA	INSWING	105.0" x 81.88"	+55.0	-55.0
	OUTSWING	105.0" x 80.75"	+55.0	-55.0



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

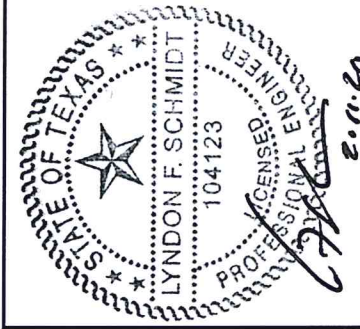
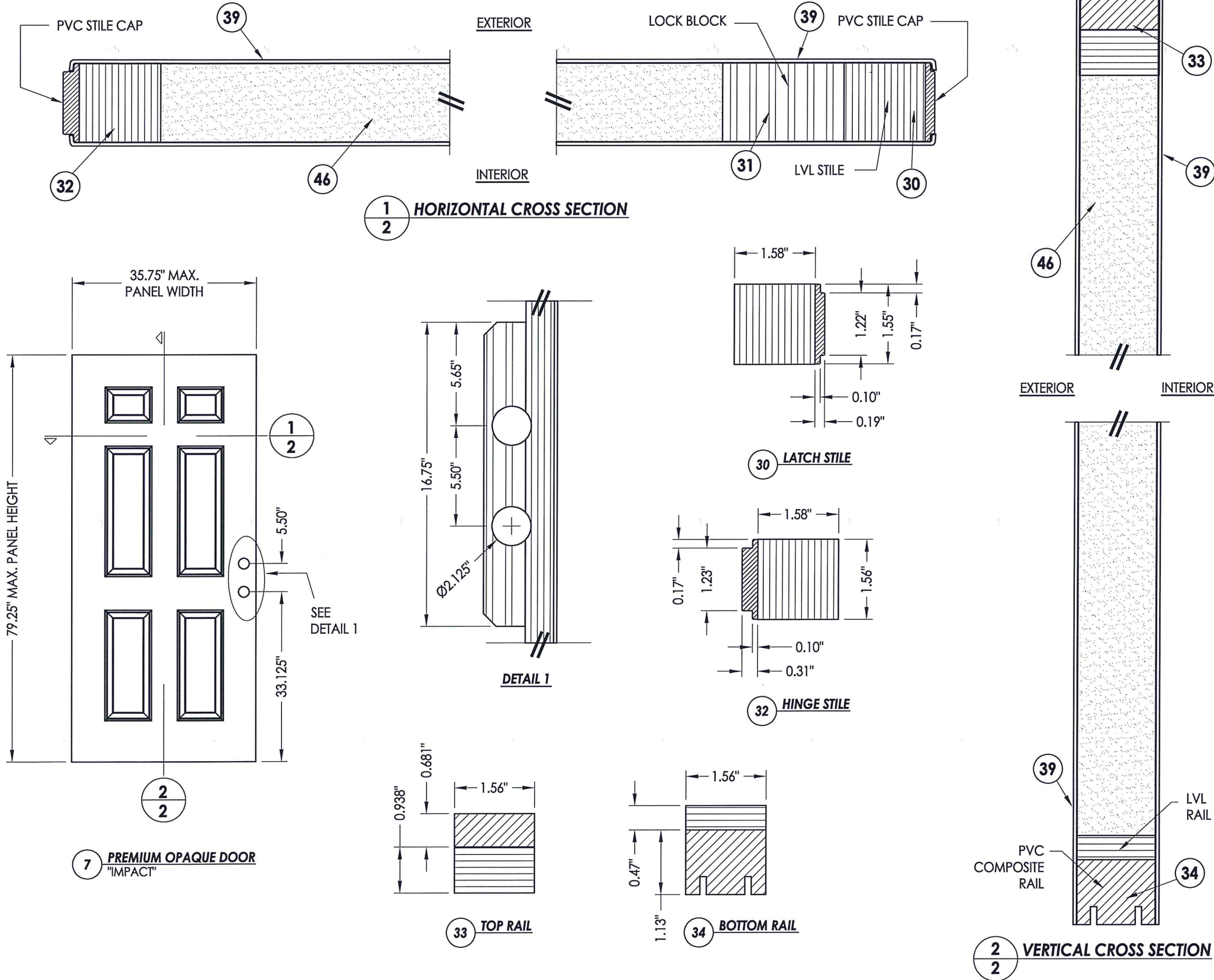
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: TRINITY GLASS INT'L  
6'8 PREMIUM OPAQUE

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

NO.	DATE	REVISIONS
3	2/10/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE

DATE: 8/24/05  
SCALE: N.T.S.  
DWG. BY: EW  
CHK. BY: LFS  
DRAWING NO.: TX-588  
SHEET 1 OF 10



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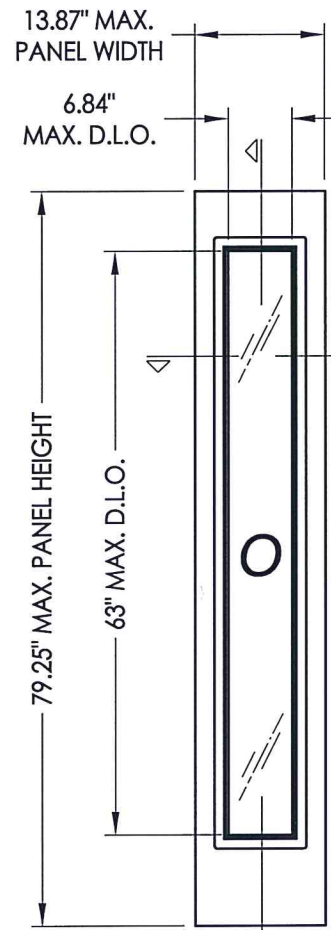
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
 CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: TRINITY GLASS INT'L  
 6 8 PREMIUM OPAQUE

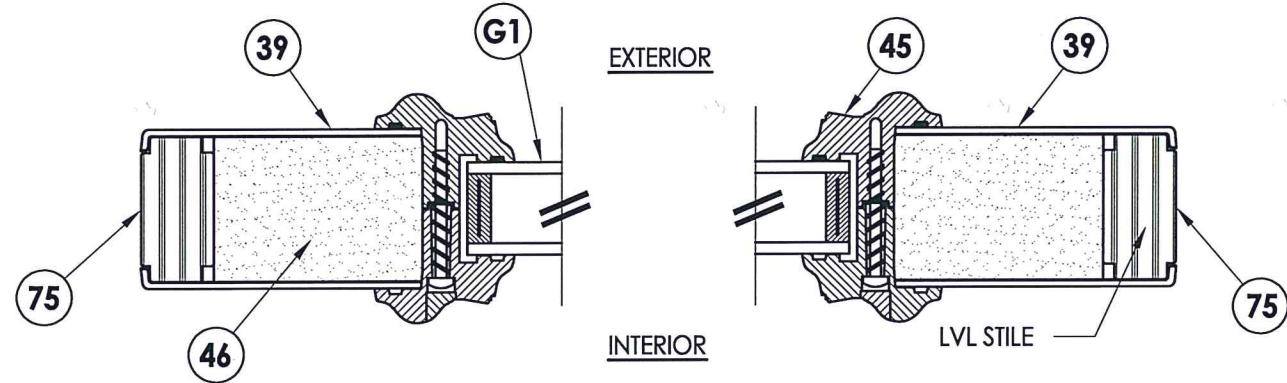
PART OR ASSEMBLY: DOOR PANEL  
 CONSTRUCTION DETAILS

REVISIONS	
NO.	DATE
3	2/10/20
2	7/27/09
1	6/28/06
	NO. DATE

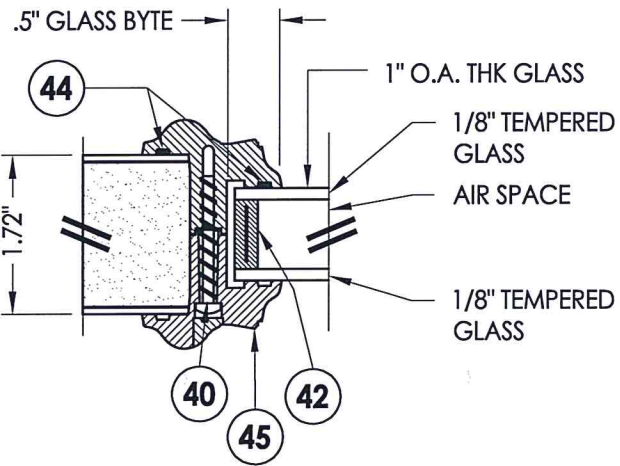
DATE: 8/24/05  
 SCALE: N.T.S.  
 DWG. BY: EW  
 CHK. BY: LFS  
 DRAWING NO.: TX-588  
 SHEET 2 of 10



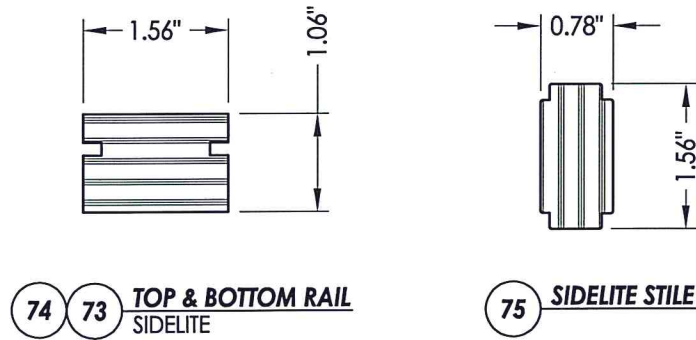
66 FIBERGLASS SIDELITE  
"NON-IMPACT"



1 HORIZONTAL CROSS SECTION  
3

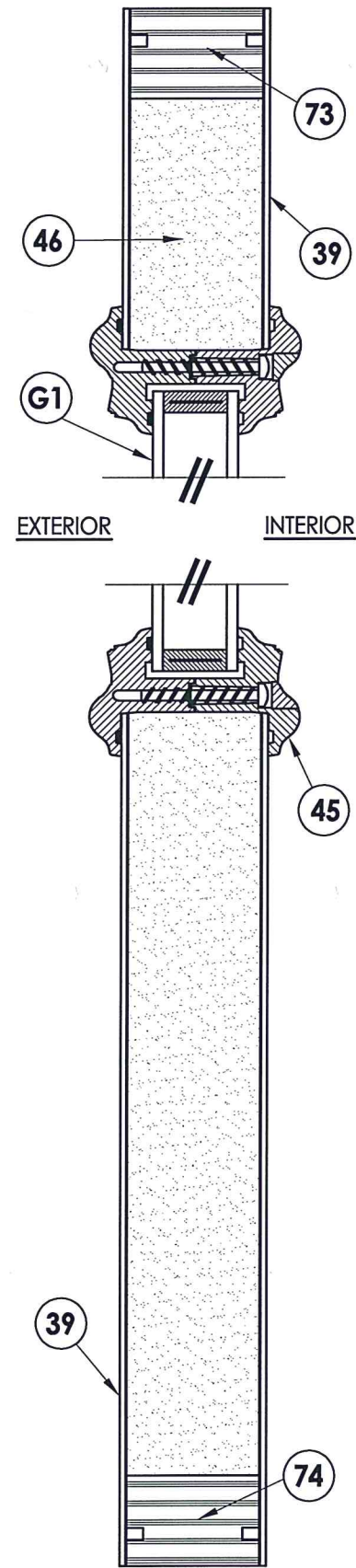


G1 GLAZING DETAIL

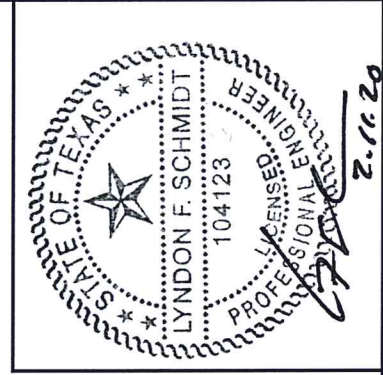


74 73 TOP & BOTTOM RAIL  
SIDELITE

75 SIDELITE STILE



2 VERTICAL CROSS SECTION  
3



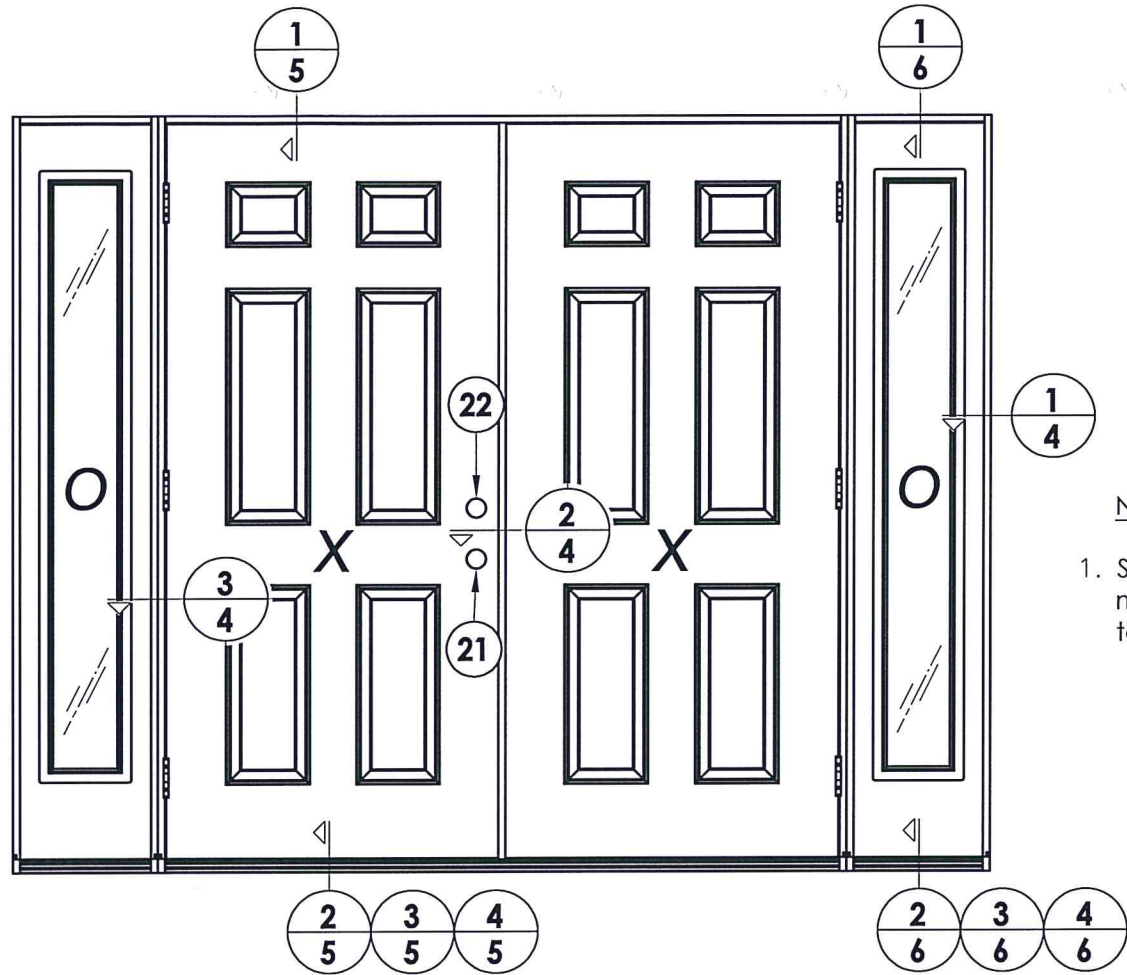
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PRODUCT: TRINITY GLASS INT'L  
6'8\"/>

NO.	DATE	REVISIONS
3	2/10/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE
		EW
		BY

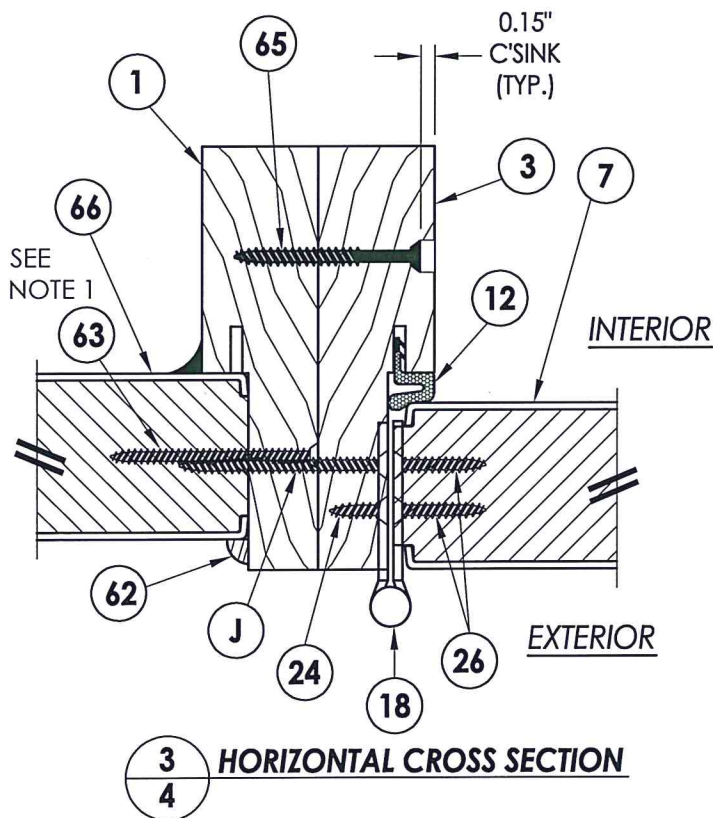
DATE: 8/24/05  
SCALE: N.T.S.  
DWG. BY: EW  
CHK. BY: LFS  
DRAWING NO.: TX-588  
SHEET 3 OF 10



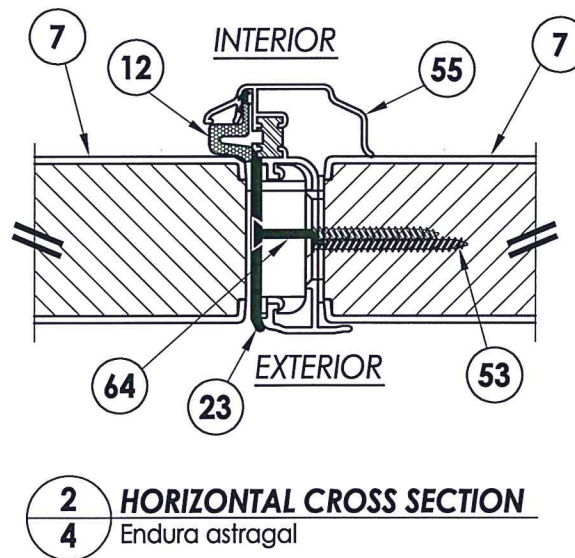
HARDWARE CHART		
MANUFACTURER	MODEL	ITEM #
KWIKSET	LOCK: 740	21
	DEADBOLT: 780	22
KWIKSET	LOCK: COMBO 660	21
	DEADBOLT: COMBO 660	22
SCHLAGE	LOCK: MAX. SECURITY	21
	DEADBOLT: MAX. SECURITY	22

**NOTE:**

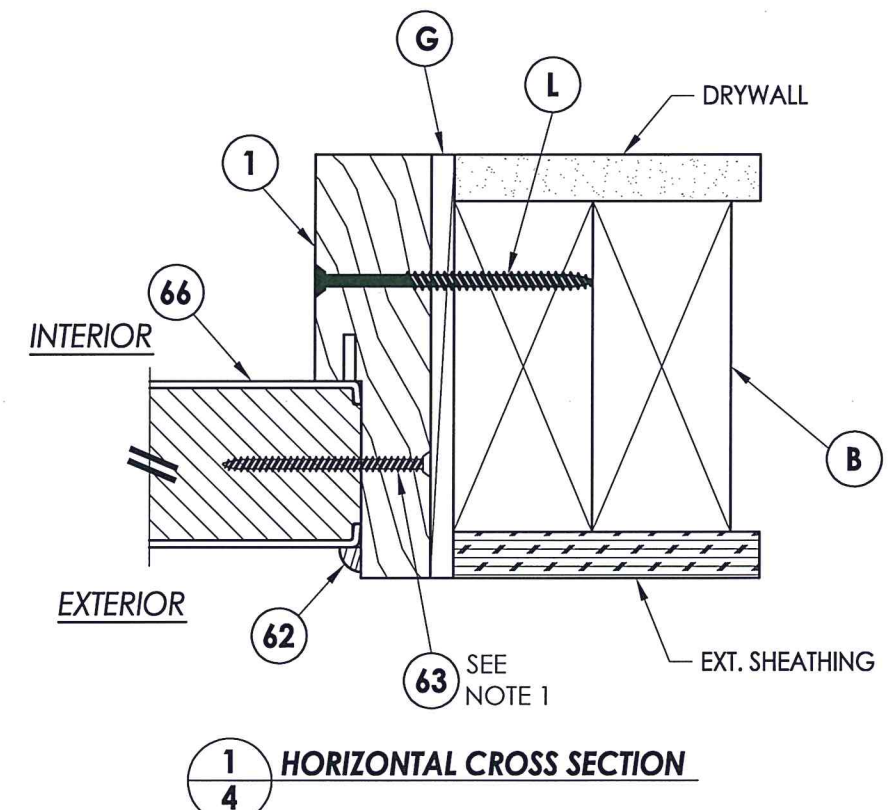
- Sidelite ass'y fastener: 6" from each end and 4 more screws equally spaced between (6 screws total per jamb).



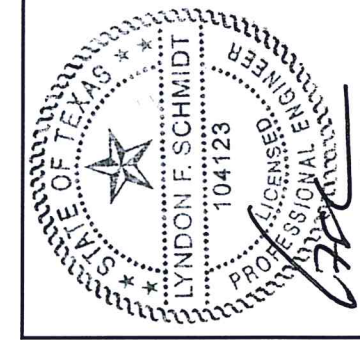
**3 HORIZONTAL CROSS SECTION**  
4



**2 HORIZONTAL CROSS SECTION**  
4 Endura astragal



**1 HORIZONTAL CROSS SECTION**  
4



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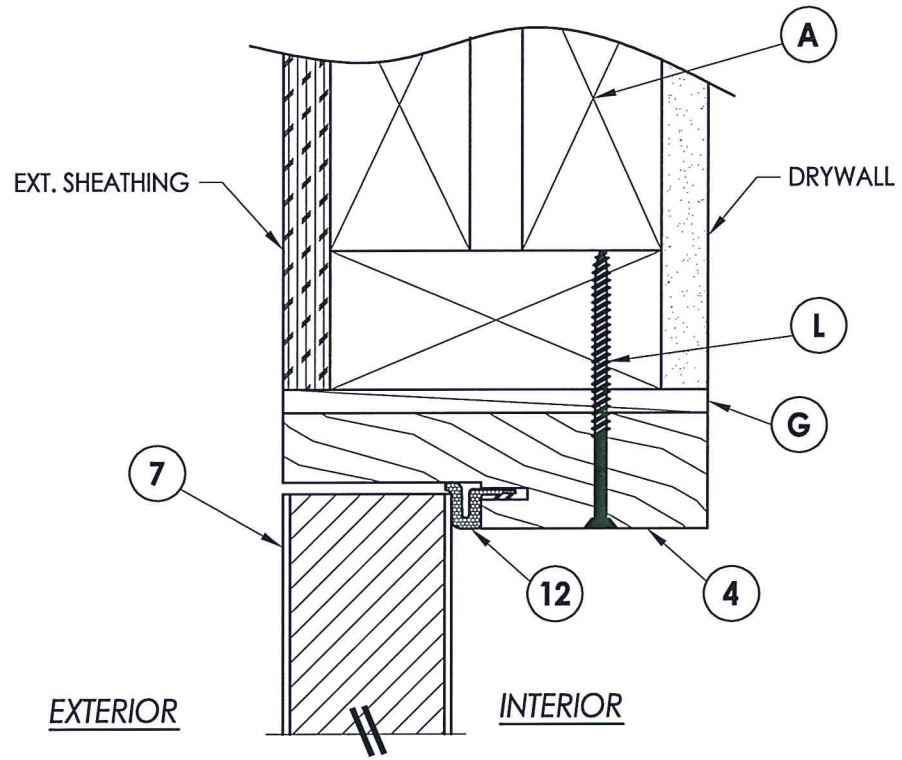
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PRODUCT: TRINITY GLASS INT'L  
6'8 PREMIUM OPAQUE  
PART OR ASSEMBLY:  
HORIZONTAL CROSS SECTIONS

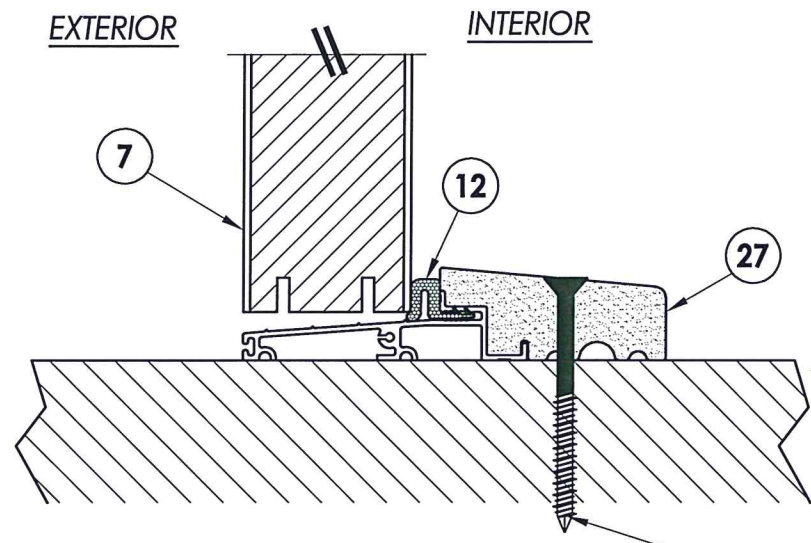
NO.	DATE	REVISIONS
3	2/10/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE
		BY

DATE: 8/24/05  
SCALE: N.T.S.  
DWG. BY: EW  
CHK. BY: LFS  
DRAWING NO.: TX-588  
SHEET 4 OF 10

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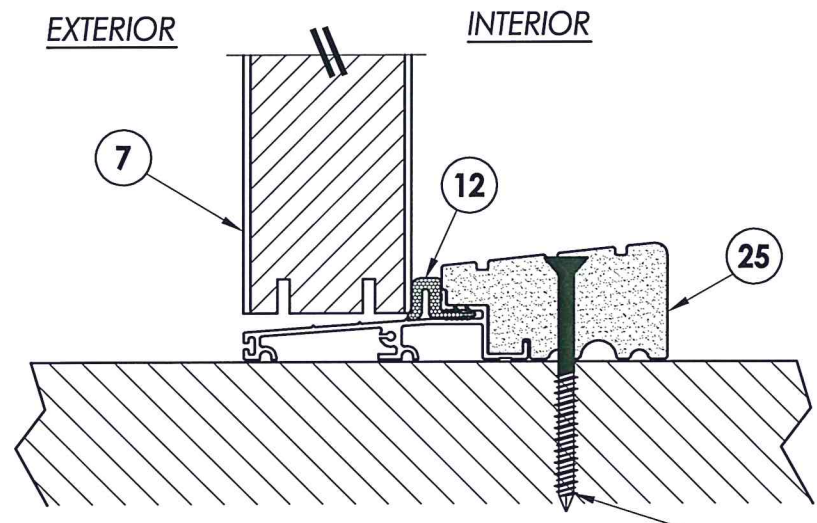


**1** VERTICAL CROSS SECTION  
**5** Outswing shown  
 Inswing also approved



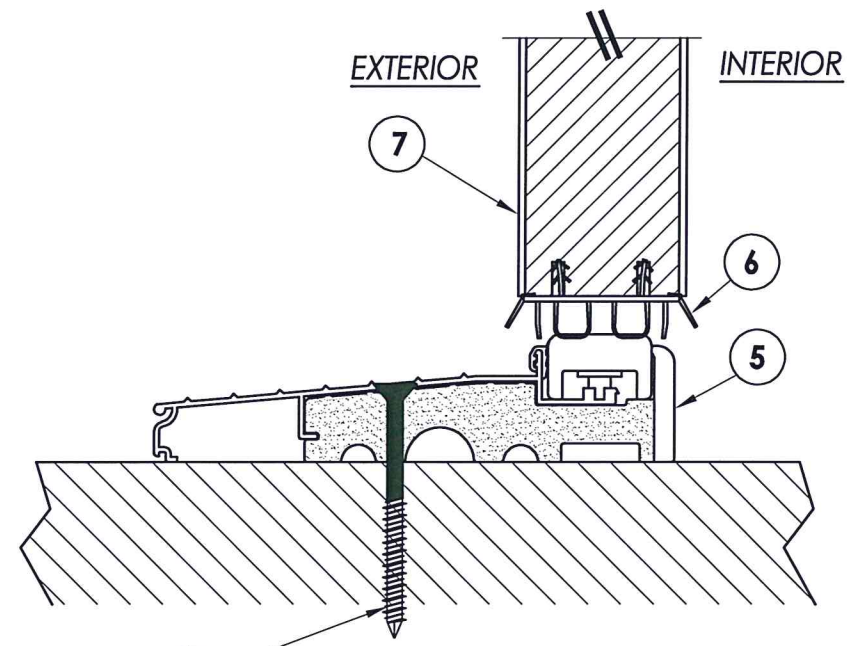
**2** VERTICAL CROSS SECTION  
**5** Outswing configuration

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



**3** VERTICAL CROSS SECTION  
**5** Outswing configuration

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



**4** VERTICAL CROSS SECTION  
**5** Inswing configuration

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



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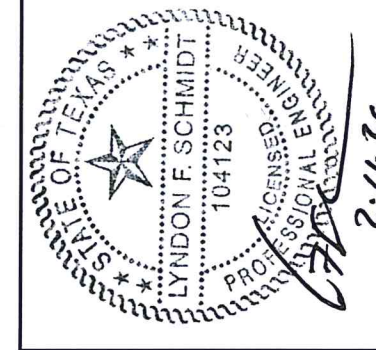
PRODUCT: TRINITY GLASS INT'L  
 6'8 PREMIUM OPAQUE

PART OR ASSEMBLY:  
 VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
3	2/10/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE
		NO. DATE

DATE: 8/24/05  
 SCALE: N.T.S.  
 DWG. BY: EW  
 CHK. BY: LFS  
 DRAWING NO.: TX-588  
 SHEET 5 OF 10

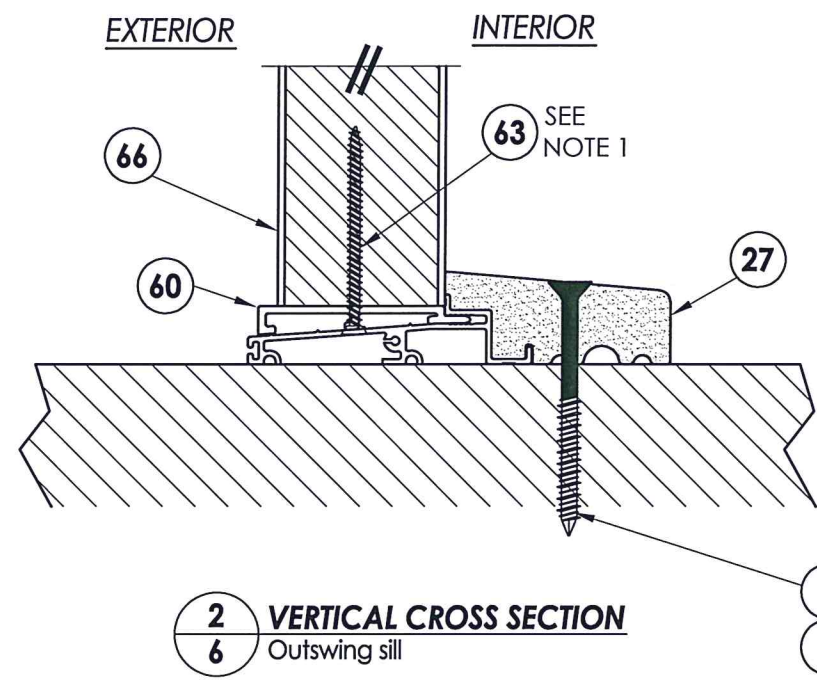
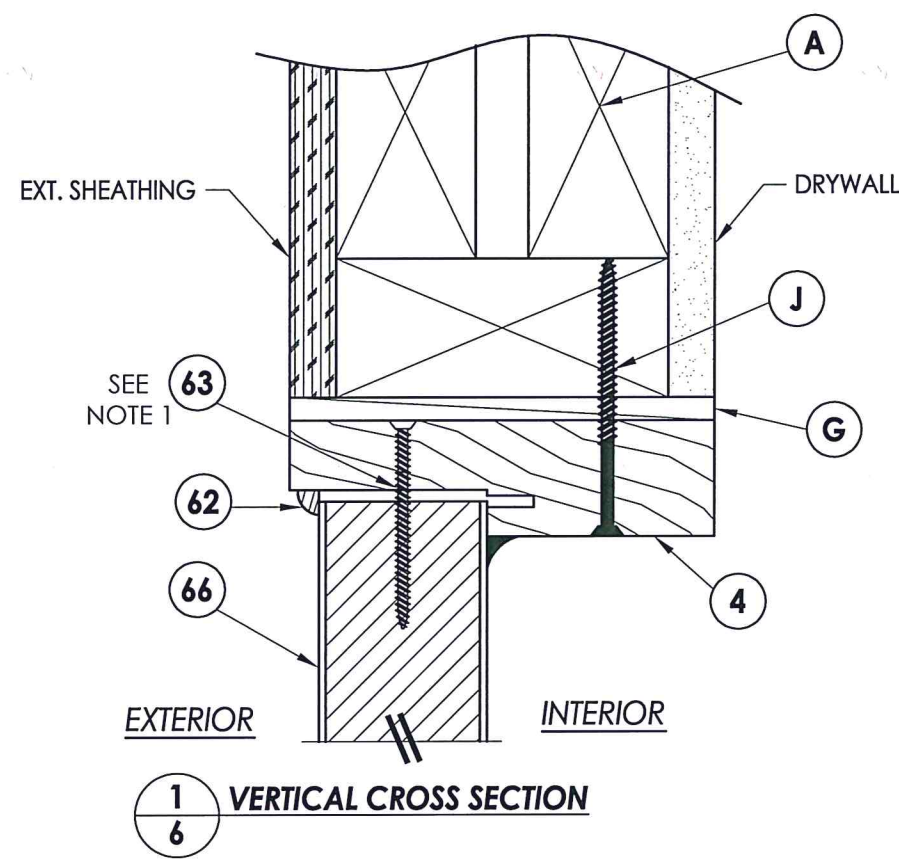
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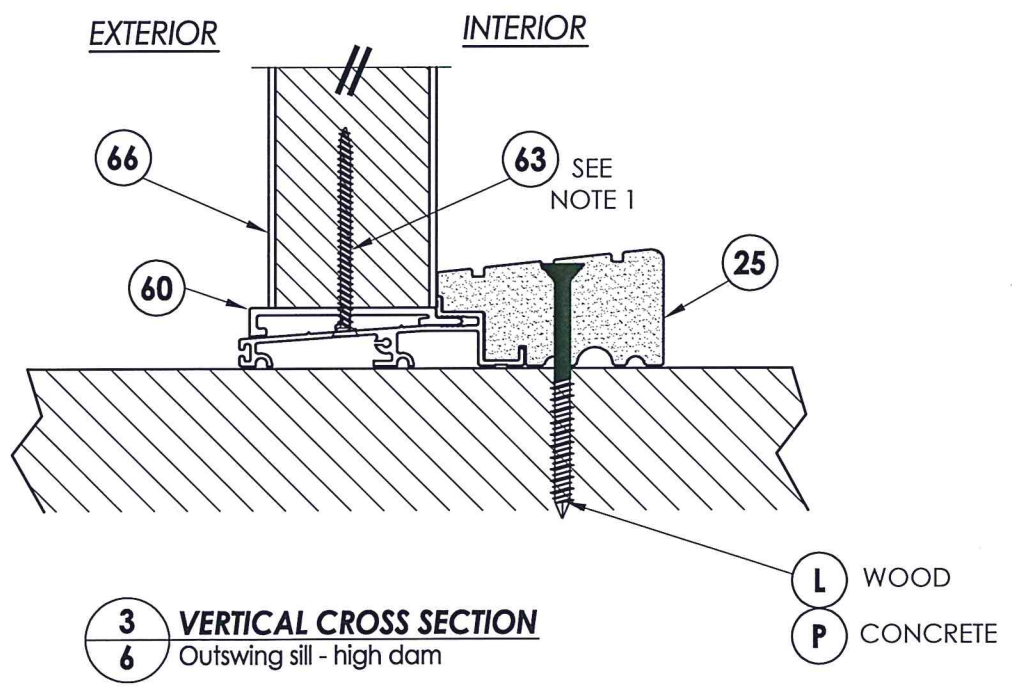
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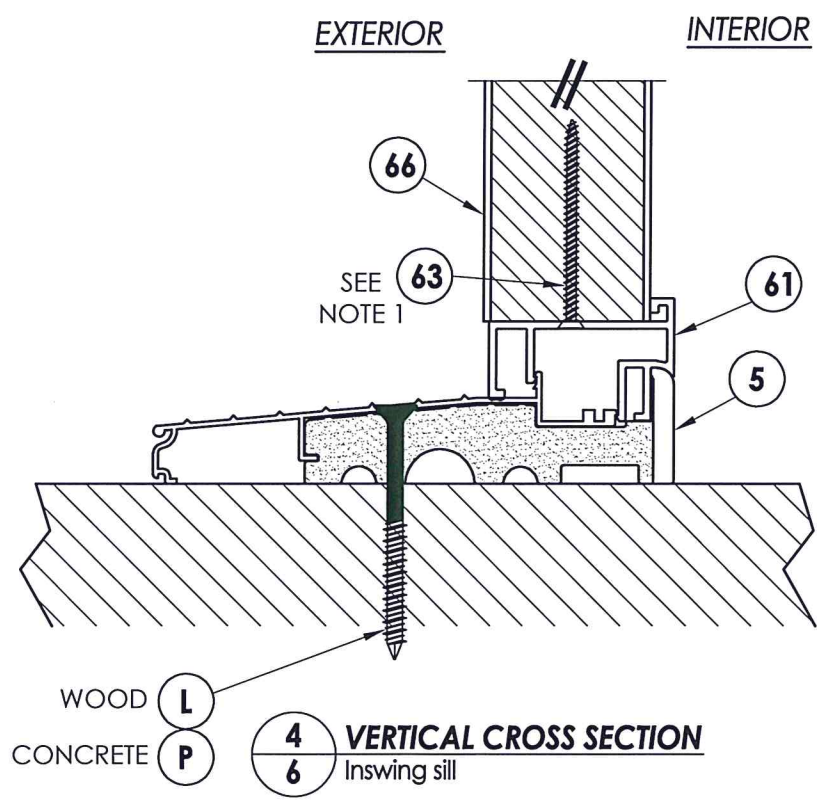


**L** WOOD  
**P** CONCRETE

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

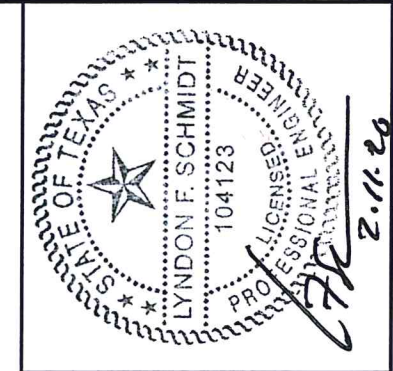
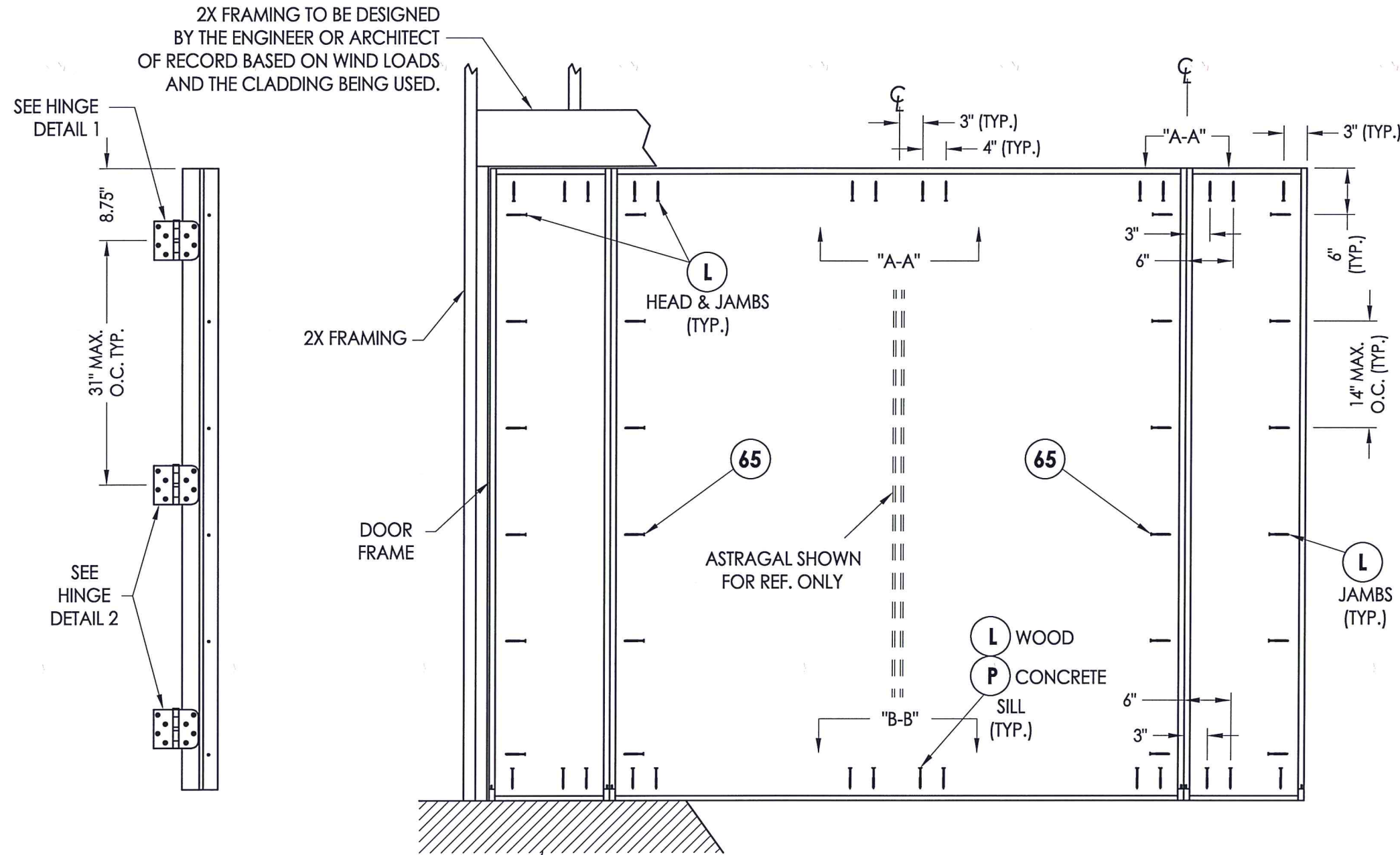


**L** WOOD  
**P** CONCRETE



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

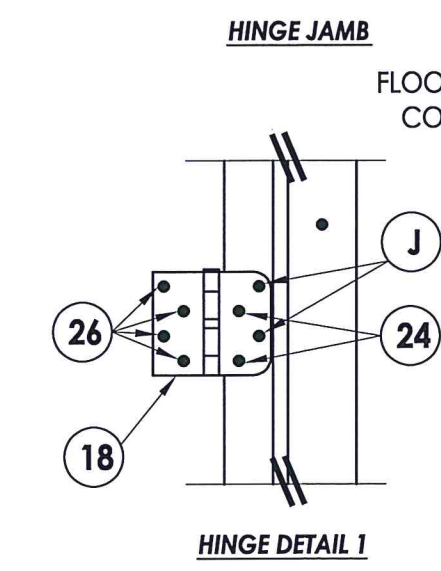
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PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
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2	7/27/09	AL	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	EW	REVISED LOCKSET NOMENCLATURE
DATE: 8/24/05			
SCALE: N.T.S.			
DWG. BY: EW			
CHK. BY: LFS			
DRAWING NO.: TX-588			
SHEET 6 of 10			



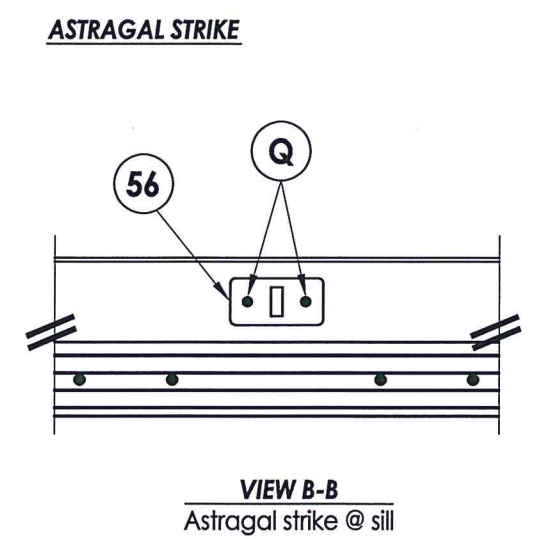
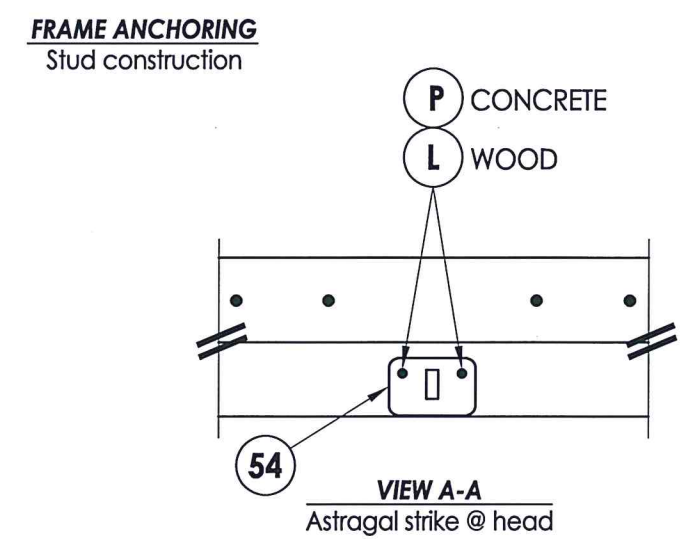
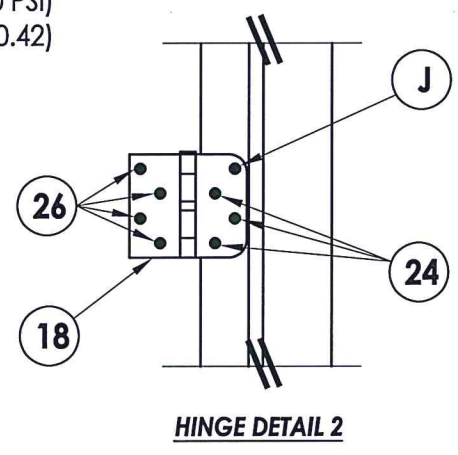
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 TEXAS P.E. #104123

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 Phone No.: 813.659.9197

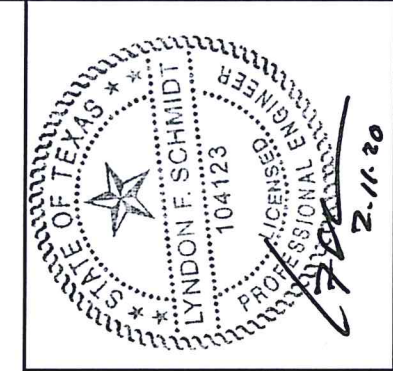
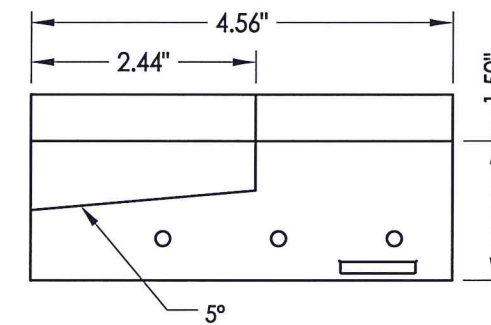
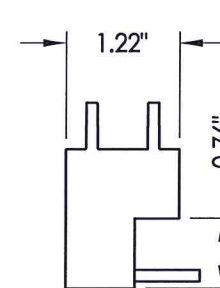
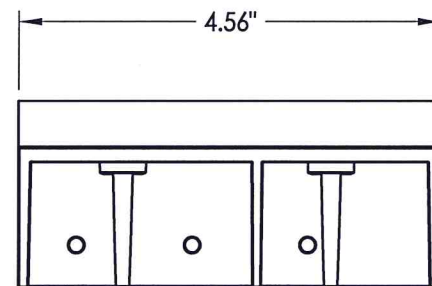
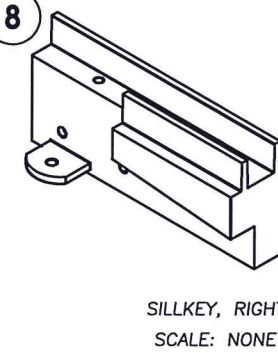
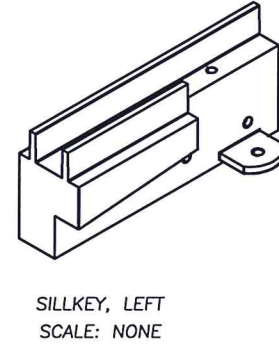
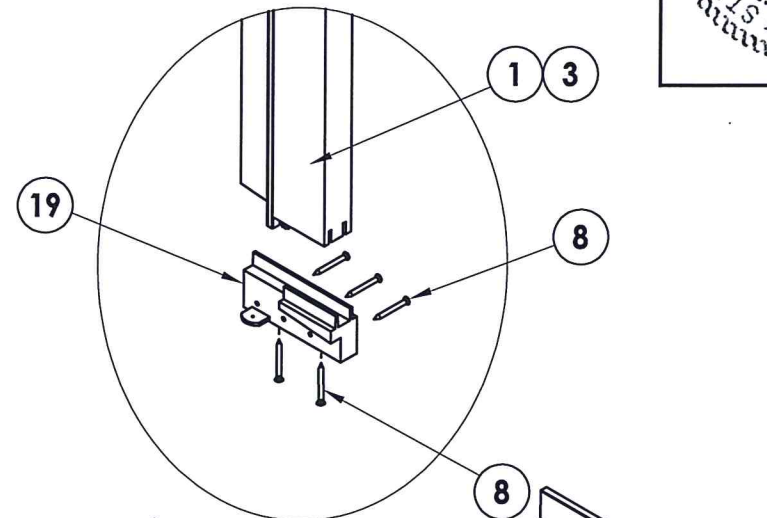
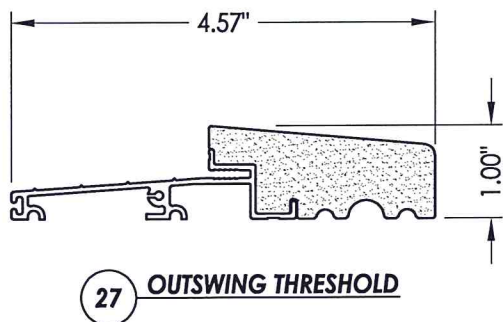
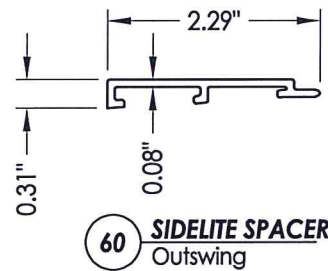
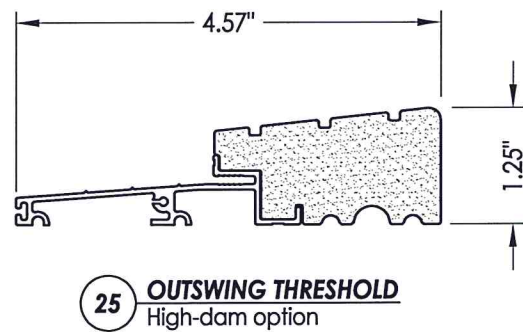
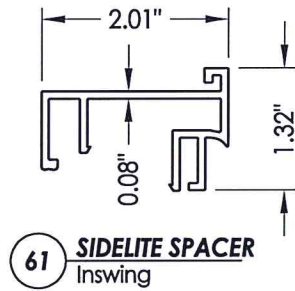
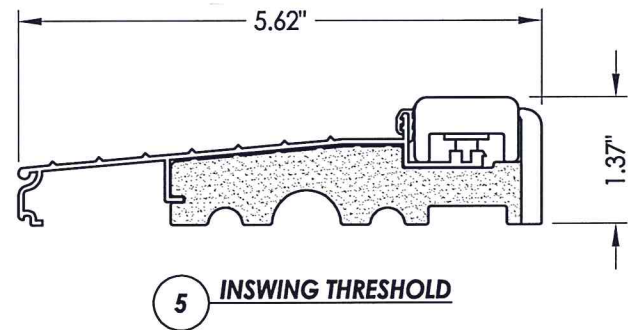
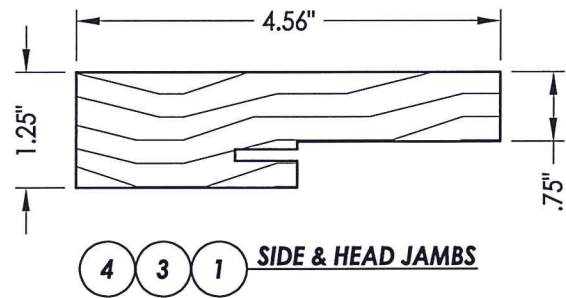
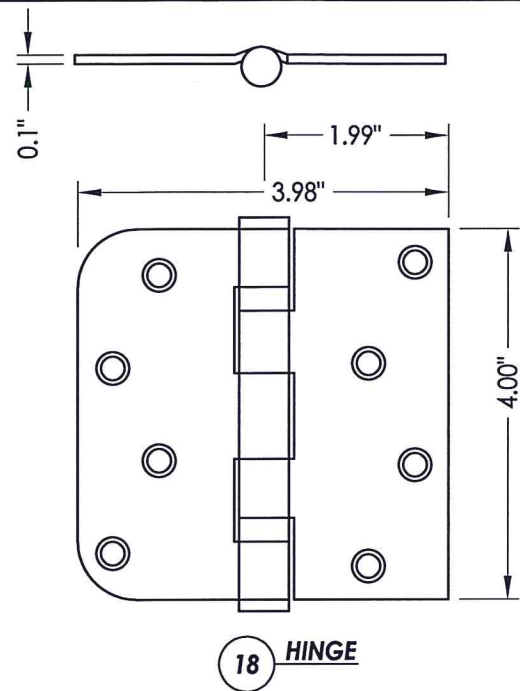
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FLOOR SUBSTRATE MATERIAL  
 CONCRETE (MIN. 3000 PSI)  
 WOOD (S.G. >= 0.42)



PRODUCT:		TRINITY GLASS INT'L 6 8 PREMIUM OPAQUE	
PART OR ASSEMBLY:		FRAME ANCHORING	
NO.	DATE	REVISIONS	BY
3	2/10/20	UPDATE TO 2018 IBC/IRC	LFS
2	7/27/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW
DATE: 8/24/05			
SCALE: N.T.S.			
DWG. BY: EW			
CHK. BY: LFS			
DRAWING NO.: TX-588			
SHEET 7 of 10			



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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: TRINITY GLASS INT'L  
6'8 PREMIUM OPAQUE

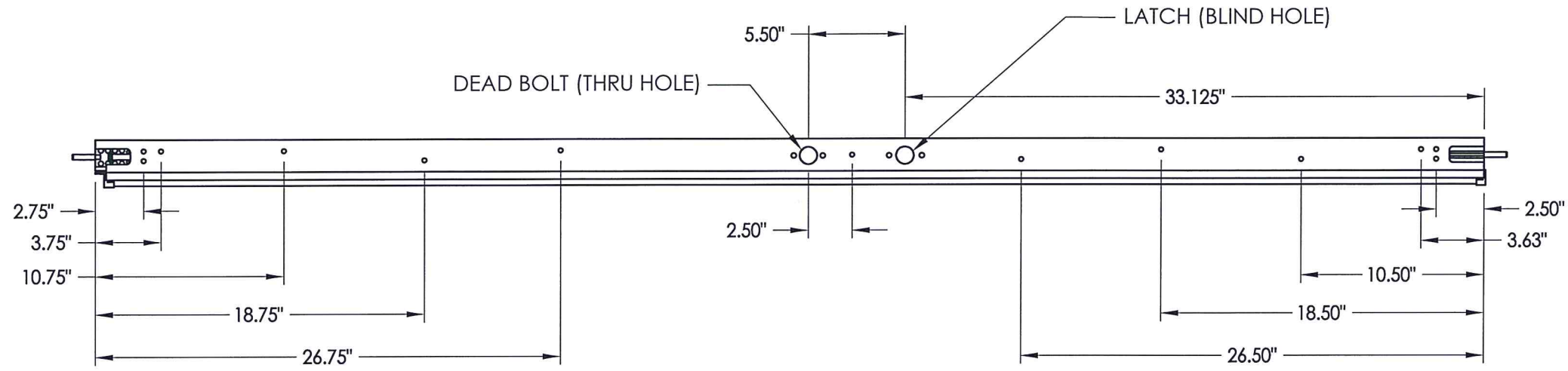
PART OR ASSEMBLY:  
COMPONENTS

NO.	DATE	REVISIONS
3	2/10/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE
		NO. DATE

DATE: 8/24/05  
SCALE: N.T.S.  
DWG. BY: EW  
CHK. BY: LFS  
DRAWING NO.: TX-588  
SHEET 8 OF 10

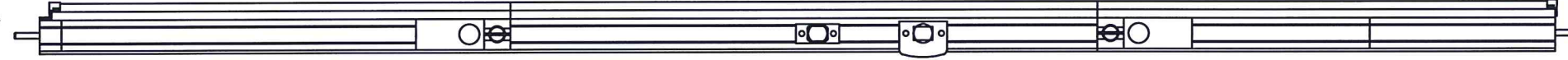


TOP

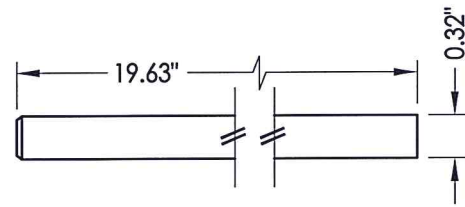


BOTTOM

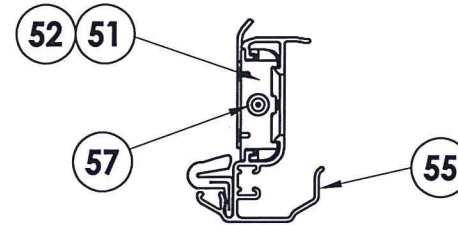
A-A



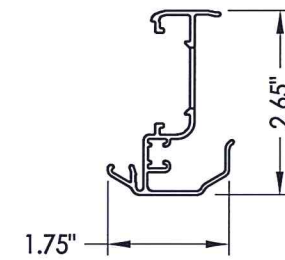
**6'8 ALUMINUM ASTRAGAL ASSEMBLY**  
By Endura Products



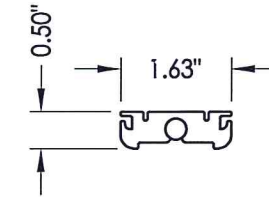
**57 SLIDE BOLT ROD**  
MATL: Steel



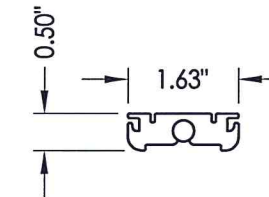
**VIEW A-A**  
Aluminum Astragal Assembly



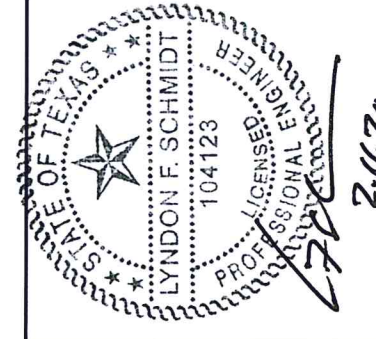
**55 ALUMINUM ASTRAGAL**  
By Endura Products



**52 TOP BOLT RETAINER**  
MATL: 9-3/4" Long Aluminum



**51 TOP BOLT RETAINER**  
MATL: 4-3/4" Long HDPE



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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	TRINITY GLASS INT'L 6'8 PREMIUM OPAQUE
PART OR ASSEMBLY:	ENDURA ASTRAGAL DETAILS

NO.	DATE	REVISIONS	BY
3	2/10/20	UPDATE TO 2018 IBC/IRC	LFS
2	7/27/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW

DATE:	8/24/05
SCALE:	N.T.S.
DWG. BY:	EW
CHK. BY:	LFS
DRAWING NO.:	TX-588
SHEET	9 OF 10

**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
Q	3/16" X 3-1/4" ITW 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
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
31	LVL LOCK BLOCK	POPLAR
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 (Fy = 5,203 PSI MIN.)	FIBERGLASS
40	#8 X 1-1/8" SELF THREDDING SCREW	STEEL
42	ALUMINUM & BUTYL SPACER SYSTEM	ALUM./BUTYL
44	HOT MELT SEALANT / SILICONE	-
45	LITE FRAME	PC/ASA
46	FOAM CORE	POLYURETHANE
50	FLUSHBOLT BAR	STEEL
51	4-3/4" LENGTH TOP BOLT RETAINER	HDPE
52	9-8/4" LENGTH TOP BOLT RETAINER	ALUMINUM
53	#8 X 1-3/4" FPH SMS	STEEL
54	ASTRAGAL STRIKE @ HEAD	STEEL
55	ENDURA ASTRAGAL BY ENDURA PRODUCTS	ALUMINUM
56	ASTRAGAL STRIKE @ SILL	STEEL
57	SLIDE BOLT ROD	STEEL



**BILL OF MATERIALS**

ITEM	DESCRIPTION	MATERIAL
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
65	#10 X 2" PFH SCREW	STEEL
66	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
73	LVL SIDELITE TOP RAIL (FULL LITE)	POPLAR
74	LVL SIDELITE BOTTOM RAIL (FULL LITE)	POPLAR
75	LVL SIDELITE STILE (FULL LITE)	POPLAR

**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.

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: TRINITY GLASS INT'L  
6'8" PREMIUM OPAQUE

PART OR ASSEMBLY:  
BILL OF MATERIALS

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