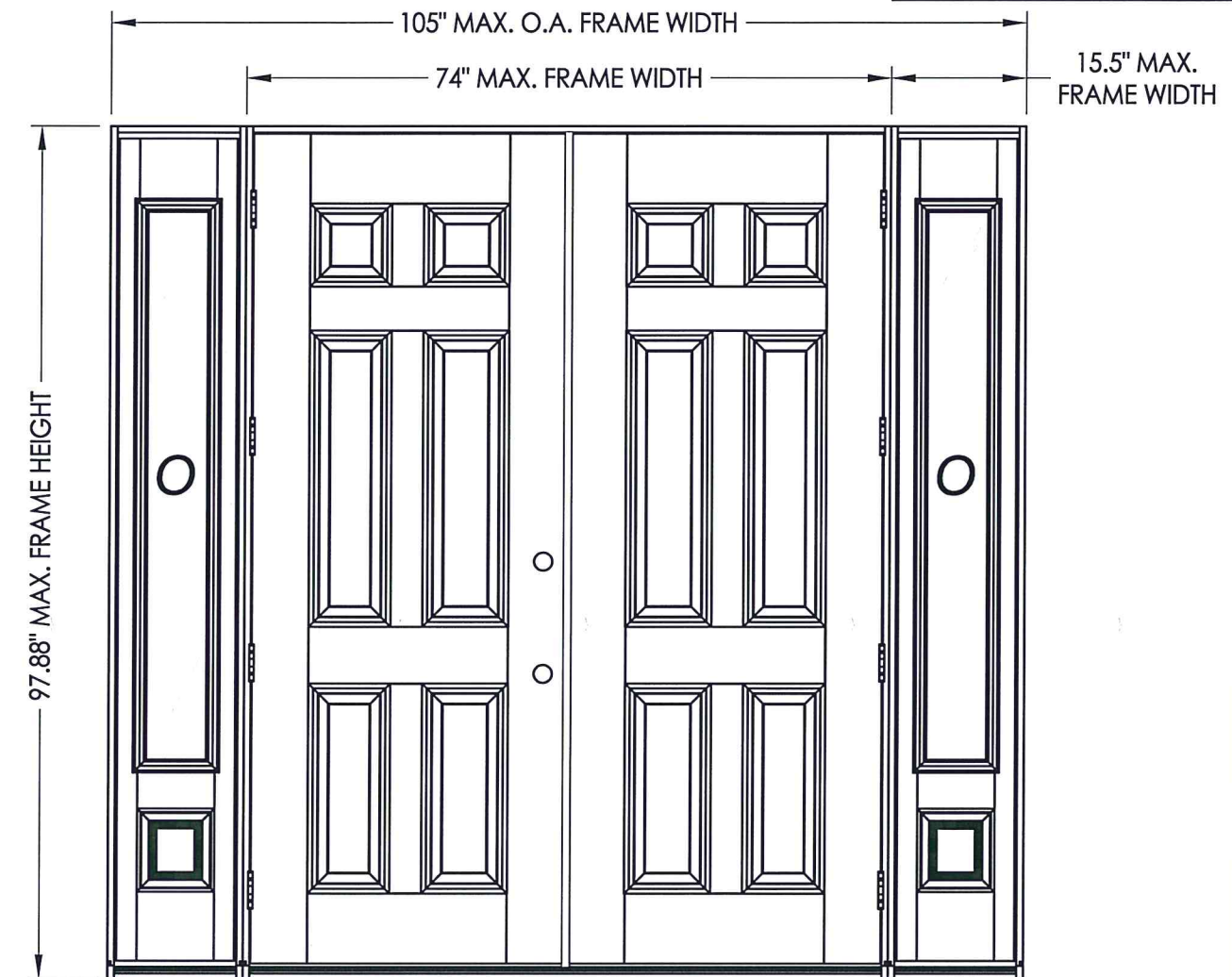


**6'0 X 8'0**  
**OPAQUE PREMIUM FIBERGLASS**  
**DOUBLE DOOR WITH SIDELITES (BOXED)**  
**IN SWING / OUT SWING**  
**"IMPACT" DOOR WITH "NON-IMPACT" SIDELITE**



**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.

TABLE OF CONTENTS	
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	Vertical cross sections
6	Vertical cross sections
7	Frame anchoring
8	Components
9	Endura astragal details
10	Bill of materials

ASTRAGAL TYPE	SWING	MAX. FRAME DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
ENDURA	IN SWING	105.0" x 97.88"	G1	+47.0	-47.0
	OUT SWING	105.0" x 96.75"		+47.0	-47.0

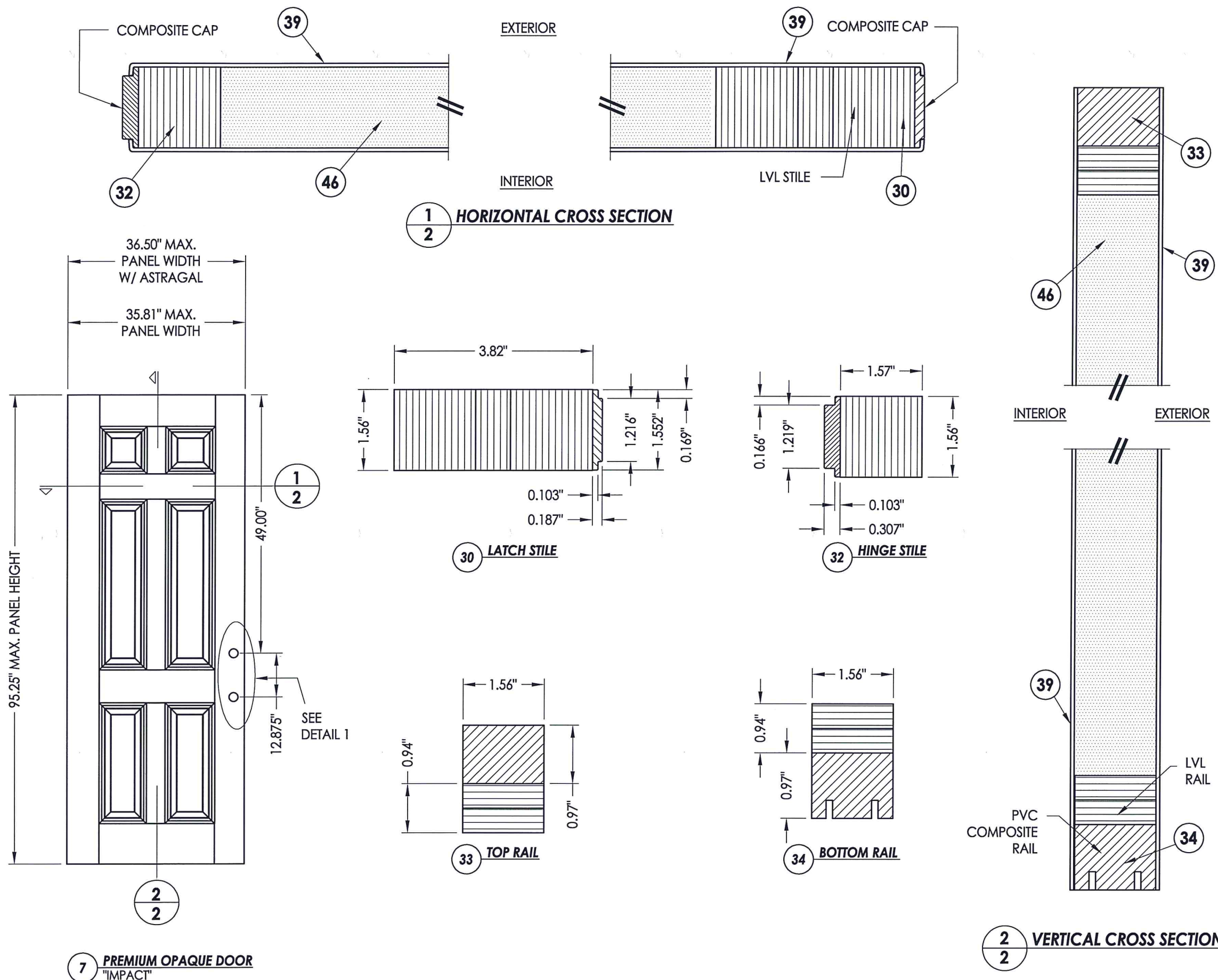
PRODUCT: TRINITY GLASS INT'L 8'0 PREMIUM OPAQUE  
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

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-717  
SHEET 1 of 10

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

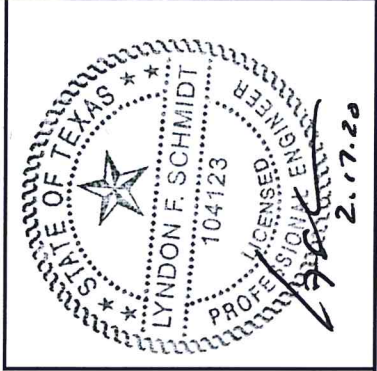




**7** PREMIUM OPAQUE DOOR  
"IMPACT"

**1**  
**2** HORIZONTAL CROSS SECTION

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



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TEXAS P.E. #104123

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Phone No.: 813.659.9197

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

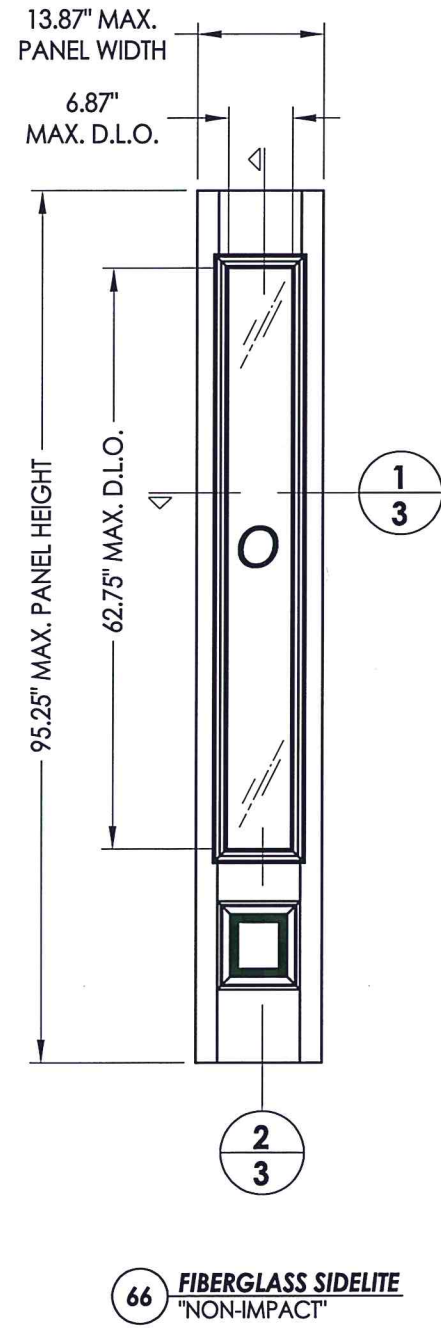
PRODUCT: TRINITY GLASS INT'L  
8'0 PREMIUM OPAQUE

PART OR ASSEMBLY: DOOR PANEL  
CONSTRUCTION DETAILS

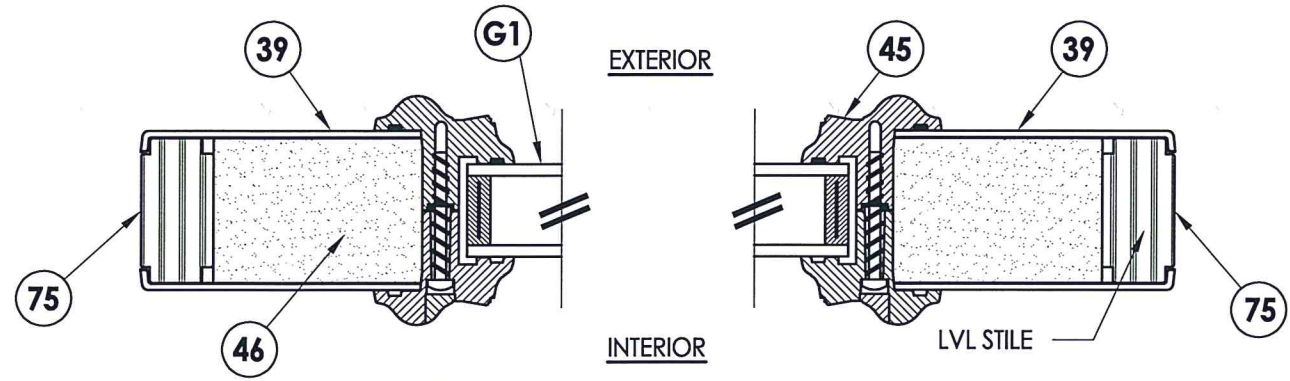
NO.	DATE	REVISIONS
3	2/13/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE
		EW
		BY

DATE: 11/21/05  
SCALE: N.T.S.  
DWG. BY: AEM  
CHK. BY: LFS  
DRAWING NO.: TX-717  
SHEET 2 of 10

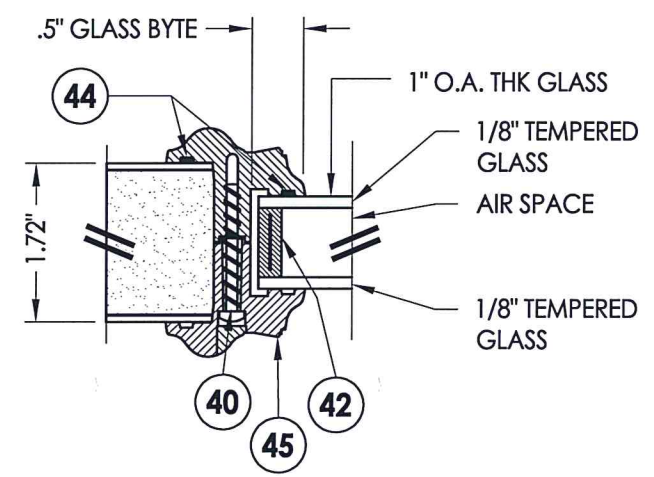




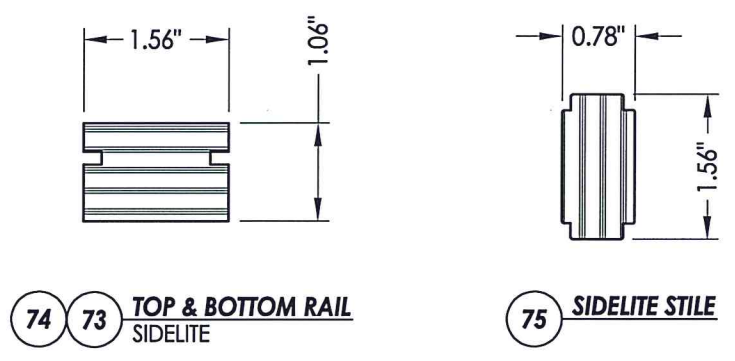
**66 FIBERGLASS SIDELITE**  
"NON-IMPACT"



**1 HORIZONTAL CROSS SECTION**

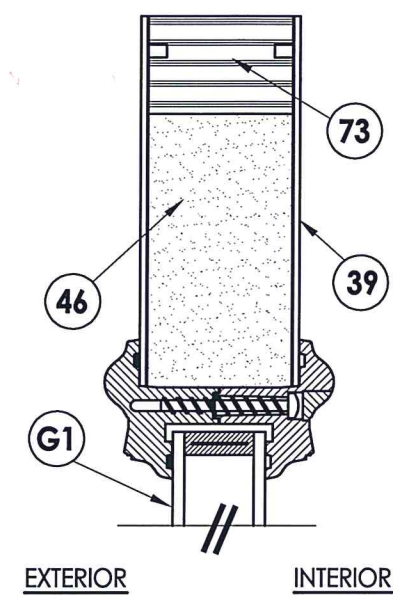


**G1 GLAZING DETAIL**

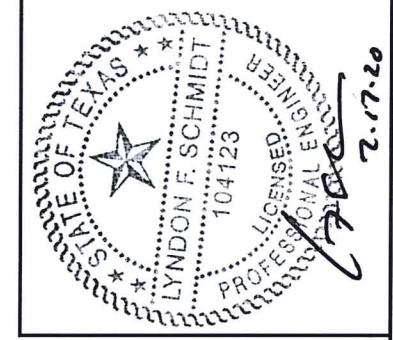


**74 73 TOP & BOTTOM RAIL**  
SIDELITE

**75 SIDELITE STILE**



**2 VERTICAL CROSS SECTION**



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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:  
SIDELITE PANEL CONSTRUCTION  
DETAILS AND GLAZING DETAILS

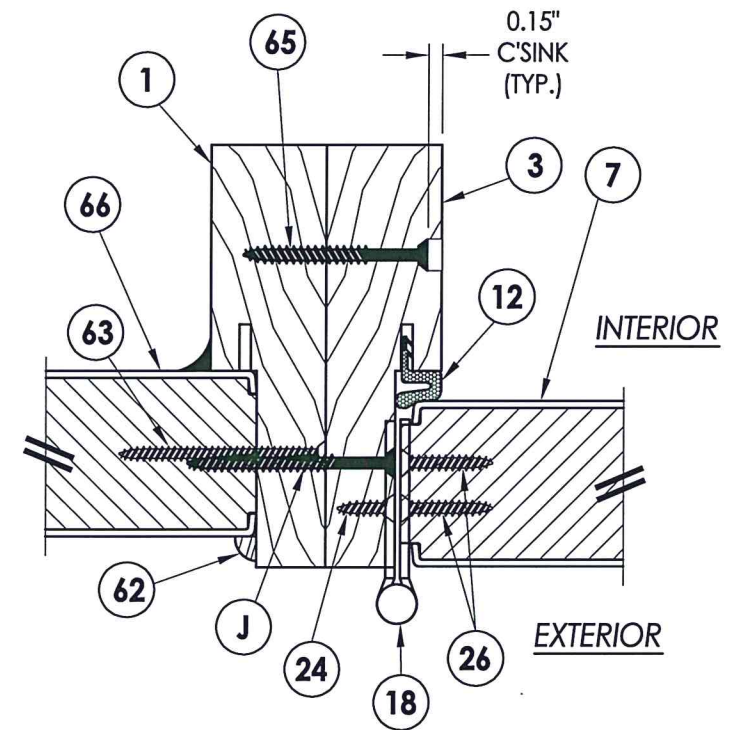
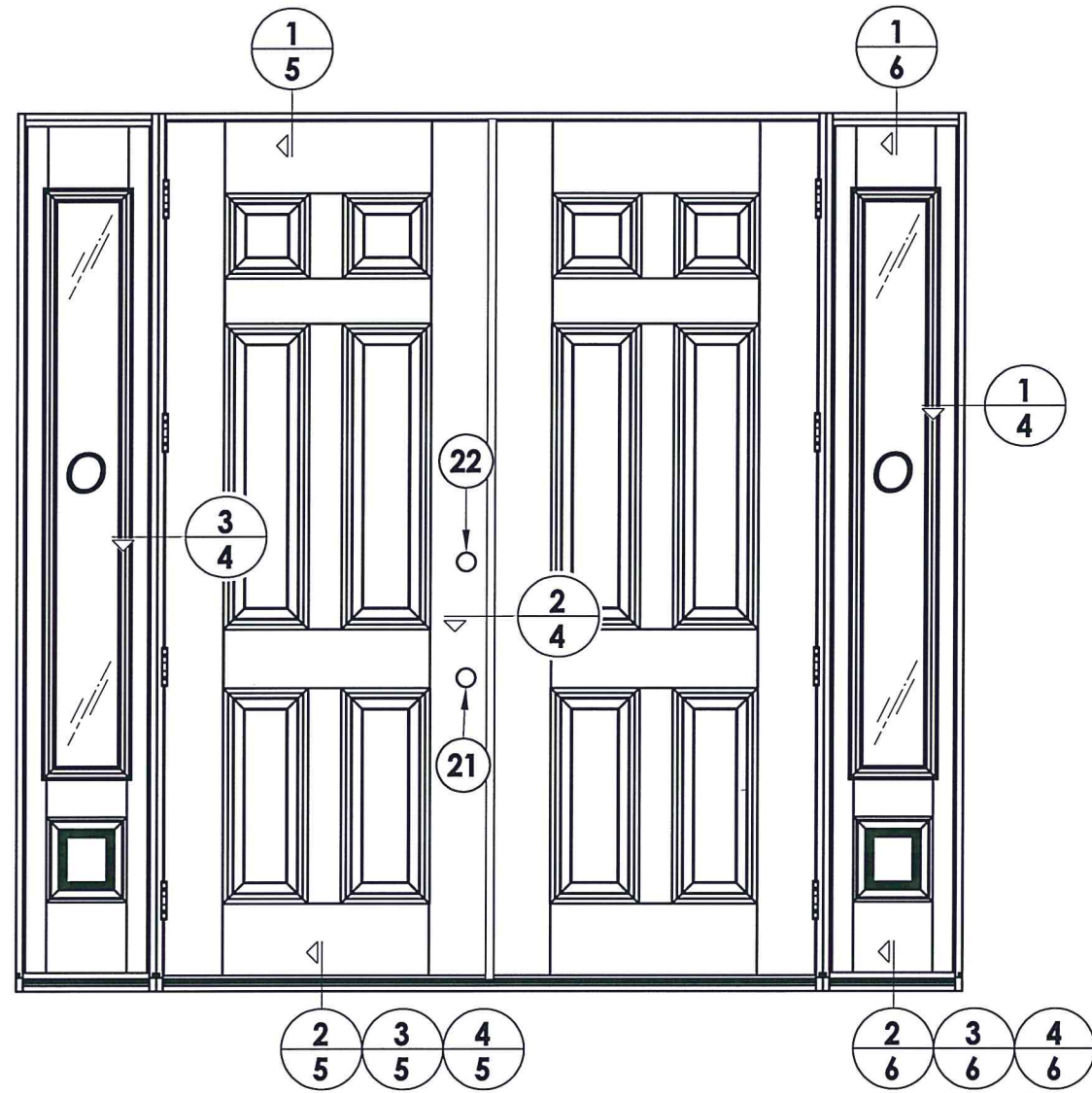
NO.	DATE	REVISIONS
3	2/13/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE
		BY

DATE: 11/21/05  
SCALE: N.T.S.  
DWG. BY: AEM  
CHK. BY: LFS  
DRAWING NO.: TX-717  
SHEET 3 OF 10

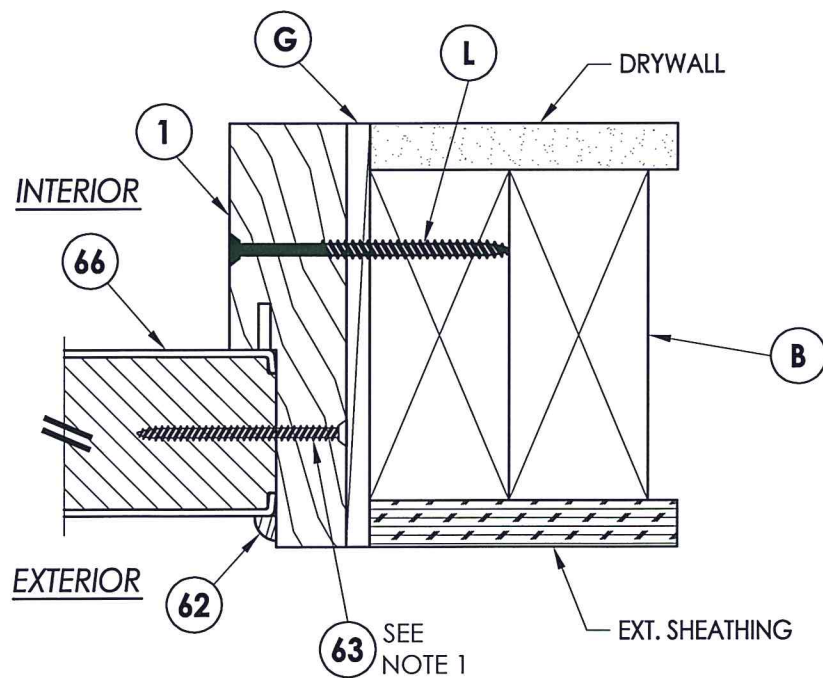


**NOTE:**

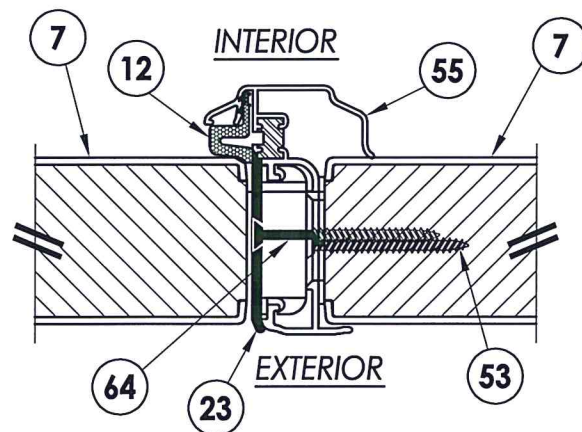
- Sidelite ass'y fastener: 6" from each end and 6 more screws equally spaced between (8 screws total per jamb).



**3**  
**4** HORIZONTAL CROSS SECTION



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



**2**  
**4** HORIZONTAL CROSS SECTION  
Endura astragal

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



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CERTIFICATE OF REGISTRATION # F-11852

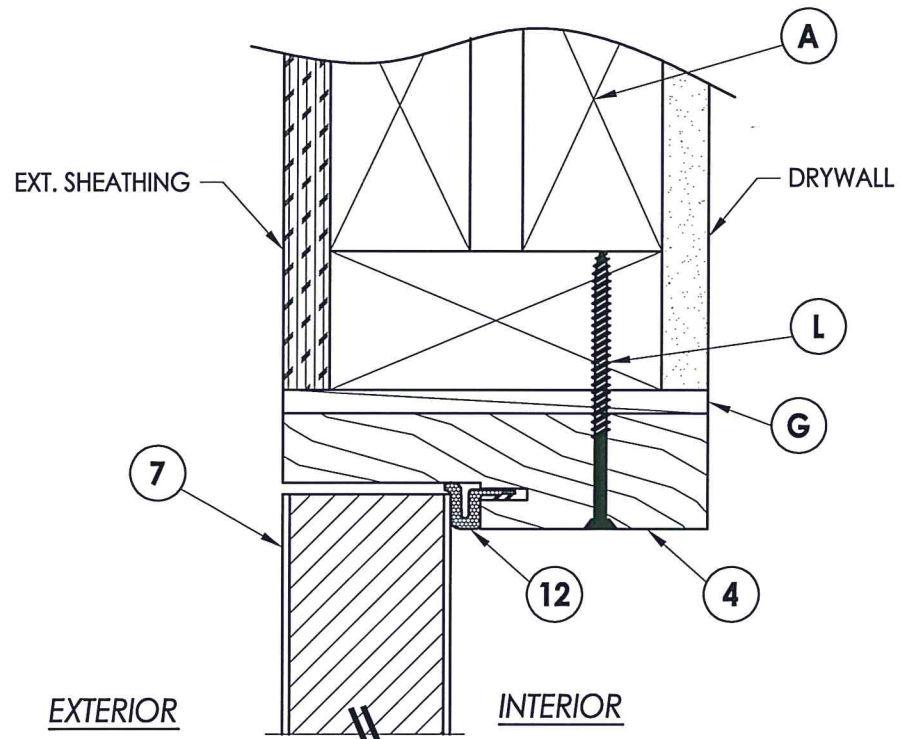
PRODUCT: TRINITY GLASS INT'L  
8'0 PREMIUM OPAQUE

PART OR ASSEMBLY:  
HORIZONTAL CROSS SECTIONS

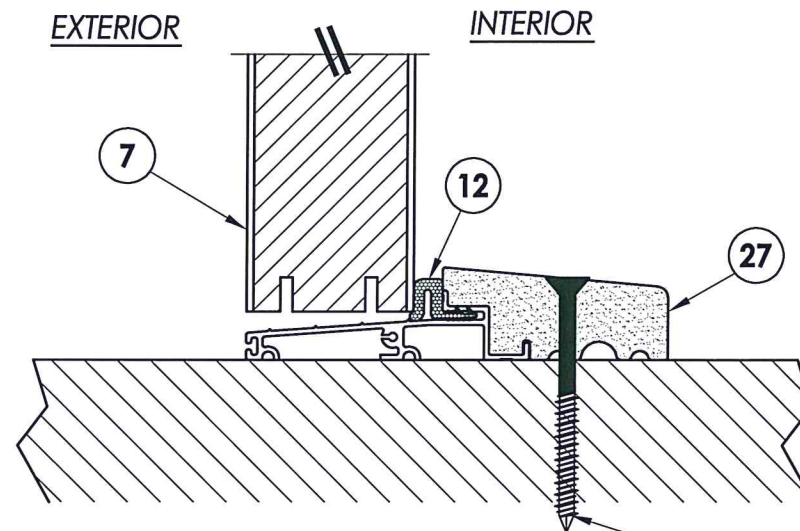
NO.	DATE	REVISIONS
3	2/13/20	UPDATE TO 2018 IBC/IRC
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE
		BY

DATE: 11/21/05  
SCALE: N.T.S.  
DWG. BY: AEM  
CHK. BY: LFS  
DRAWING NO.: TX-717  
SHEET 4 OF 10



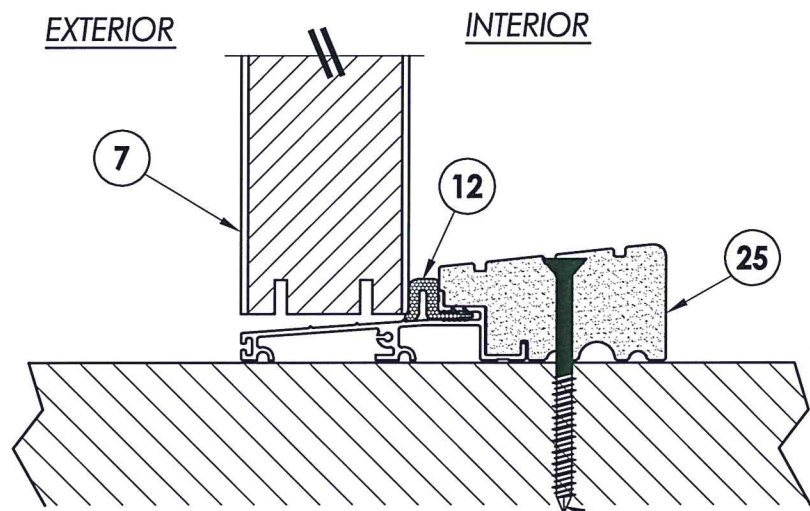


**1** VERTICAL CROSS SECTION  
**5** Outswing shown  
 Inswing also approved



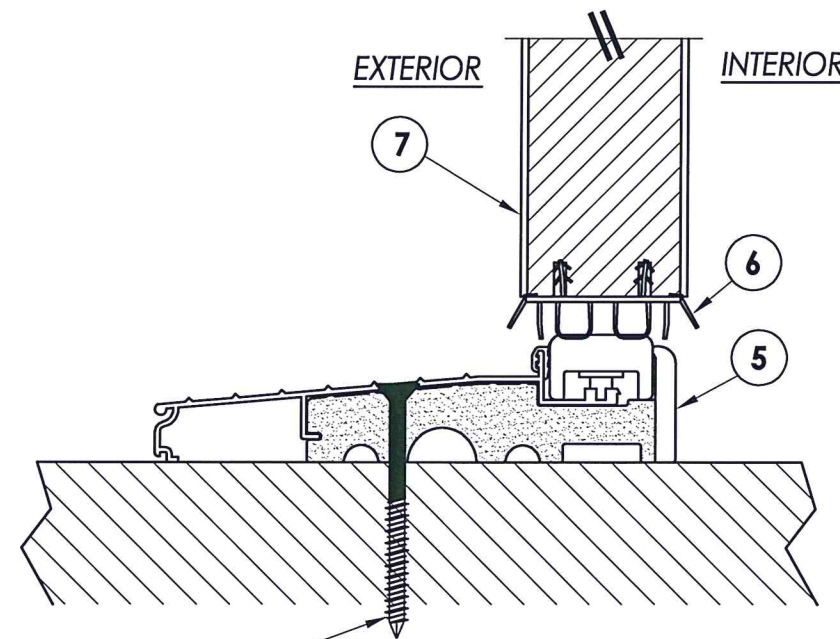
**2** VERTICAL CROSS SECTION  
**5** Outswing configuration

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

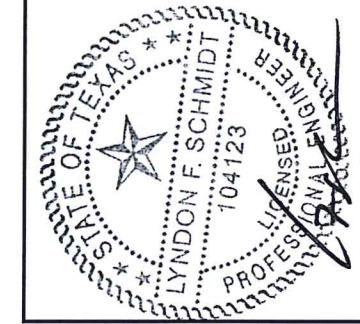


**3** VERTICAL CROSS SECTION  
**5** Outswing configuration

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



WOOD **L**  
 CONCRETE **P**  
**4** VERTICAL CROSS SECTION  
**5** Inswing configuration



Documents Prepared By: Lyndon F. Schmidt, P.E.  
 TEXAS P.E. #104123  
 2-17-20

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 Phone No.: 813.659.9197  
 TEXAS BOARD OF PROFESSIONAL ENGINEERS  
 CERTIFICATE OF REGISTRATION # F-11852

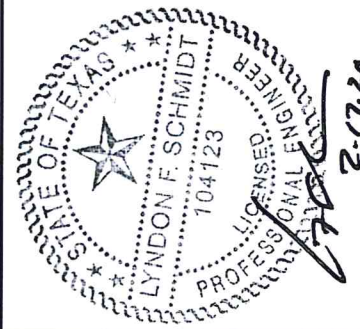
PRODUCT: TRINITY GLASS INT'L  
 8'0 PREMIUM OPAQUE  
 PART OR ASSEMBLY:  
 VERTICAL CROSS SECTIONS

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-717  
 SHEET 5 OF 10



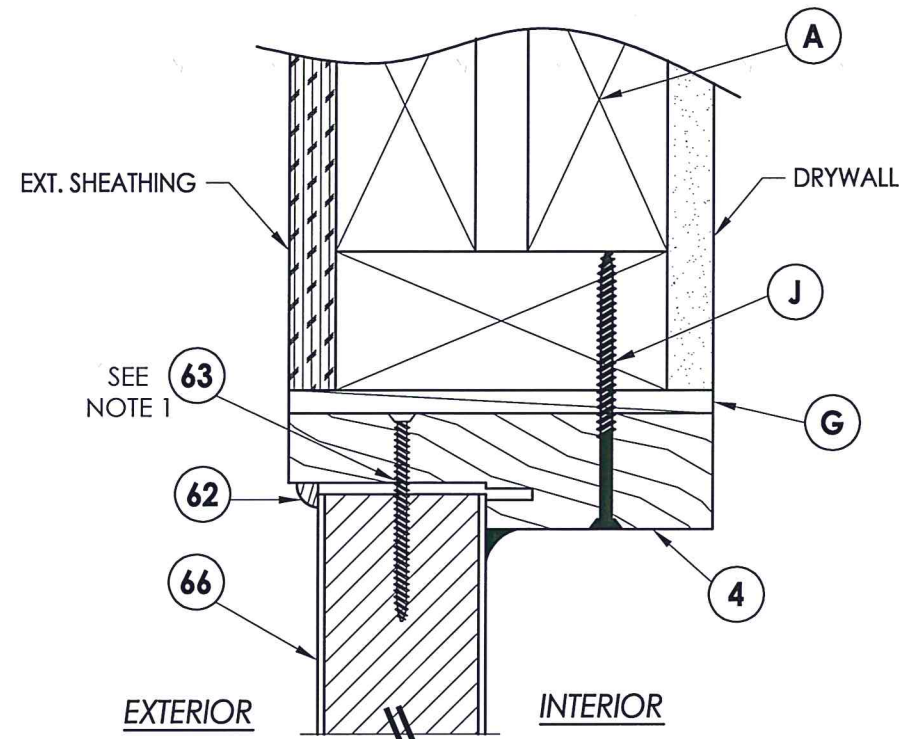
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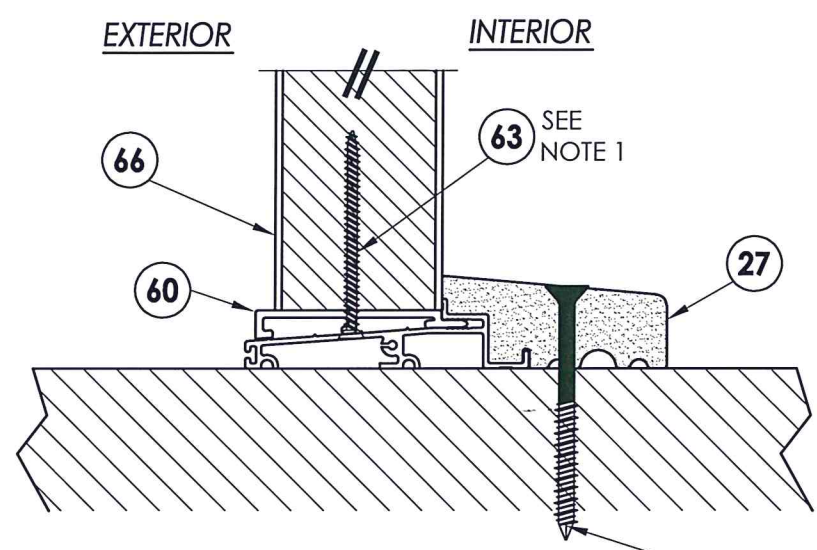
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

**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



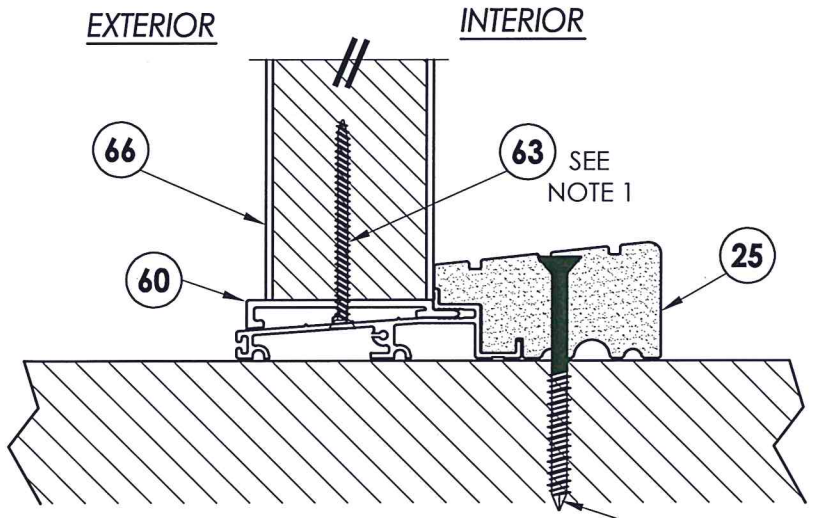
**1 VERTICAL CROSS SECTION**  
6 Outswing shown  
Inswing also approved



**2 VERTICAL CROSS SECTION**  
6 Outswing sill

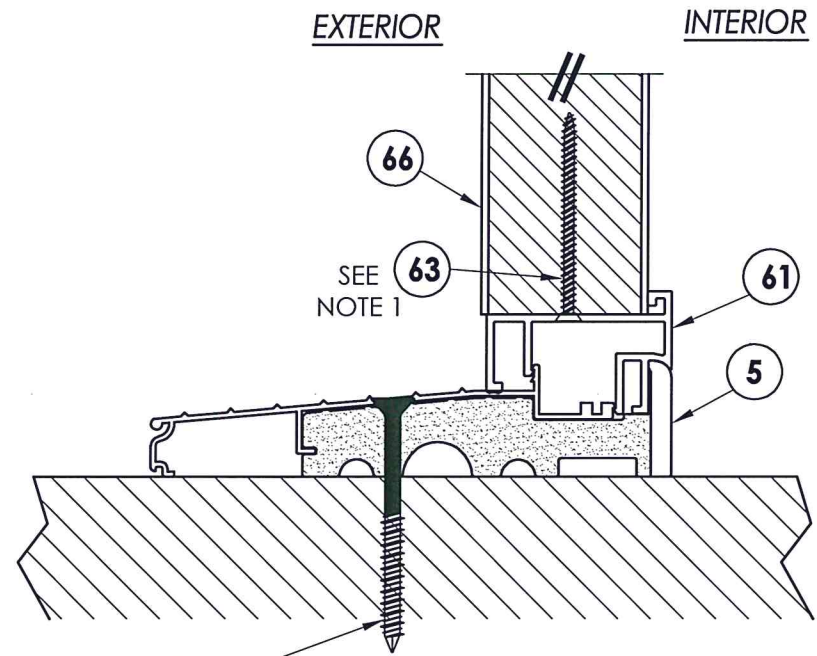
L WOOD  
P CONCRETE

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



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

L WOOD  
P CONCRETE



**4 VERTICAL CROSS SECTION**  
6 Inswing sill

L WOOD  
P CONCRETE

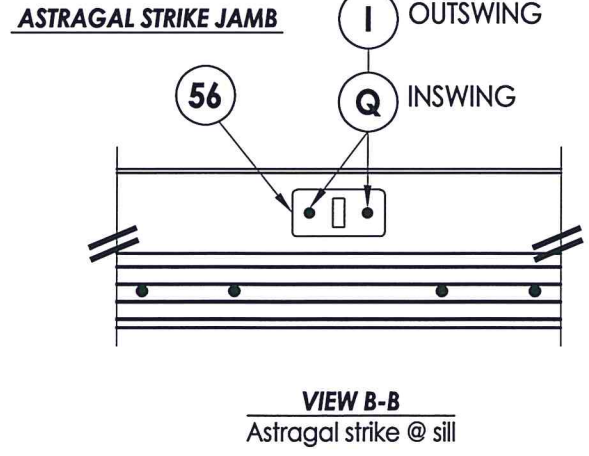
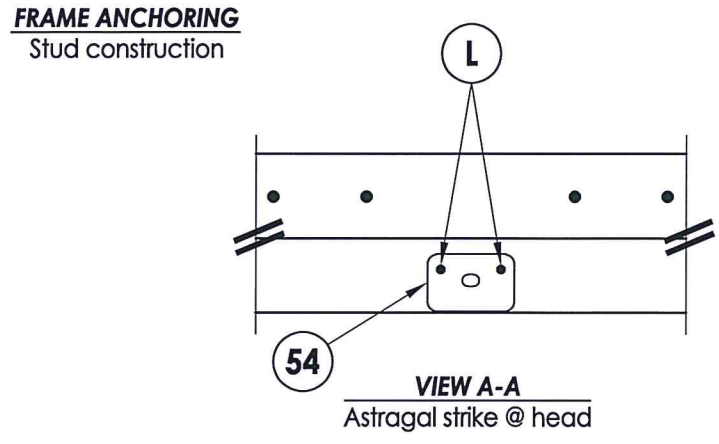
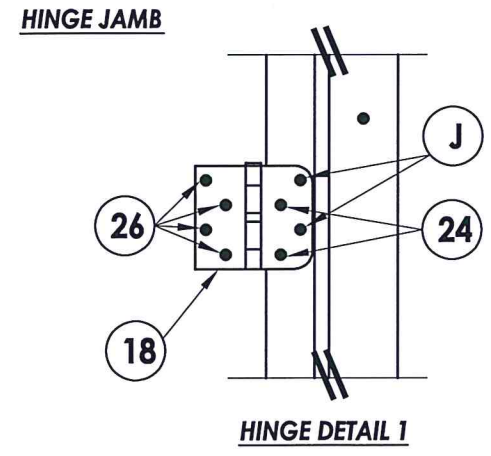
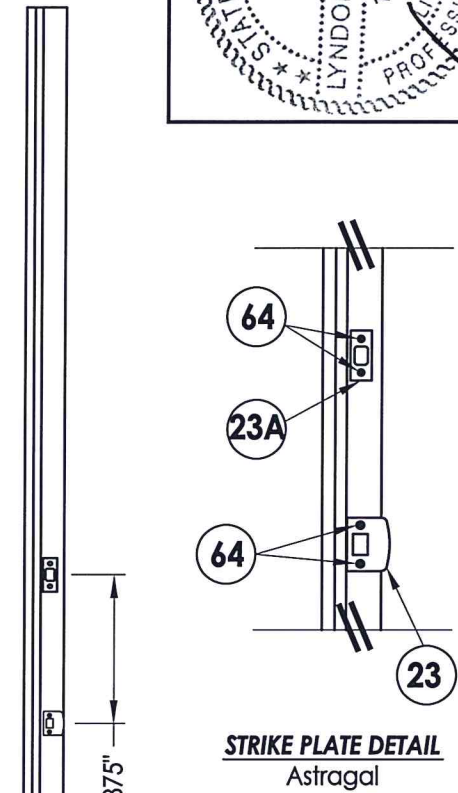
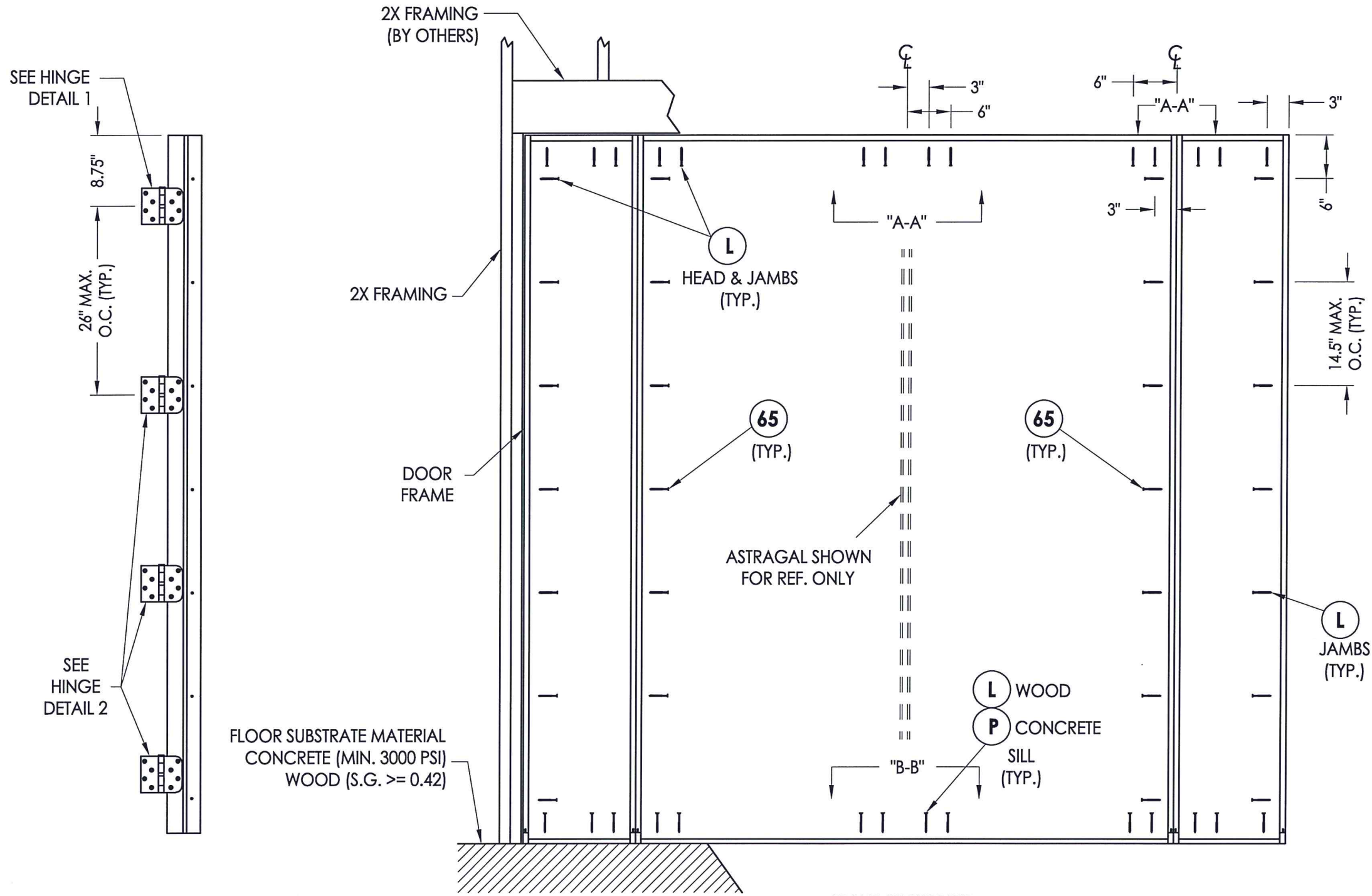
PRODUCT: TRINITY GLASS INT'L  
8'0 PREMIUM OPAQUE

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

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
		EW
		BY

DATE: 11/21/05  
SCALE: N.T.S.  
DWG. BY: AEM  
CHK. BY: LFS  
DRAWING NO.: TX-717  
SHEET 6 OF 10





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TEXAS P.E. #104123

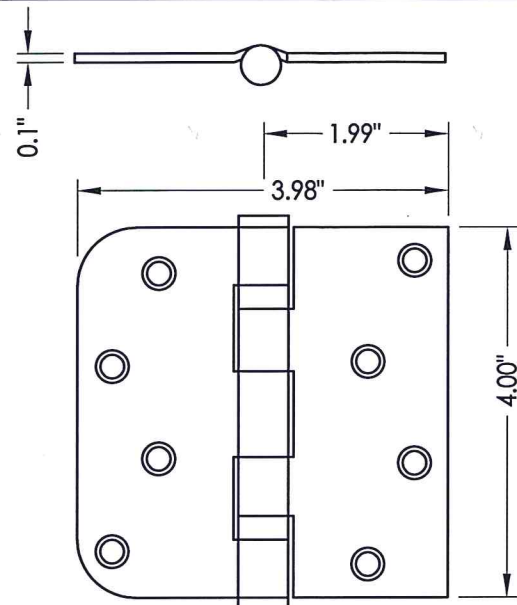
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Vairico FL 33595  
Phone No.: 813.659.9197

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

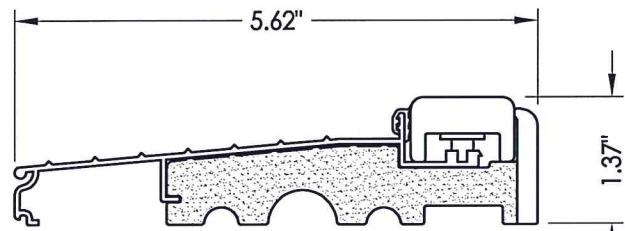
2.7.20

PRODUCT:	TRINITY GLASS INT'L 8'0 PREMIUM OPAQUE	
PART OR ASSEMBLY:	FRAME ANCHORING	
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
		EW
		BY

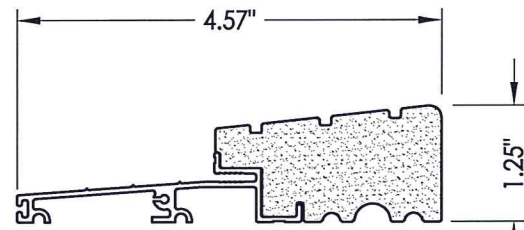
DATE: 11/21/05  
SCALE: N.T.S.  
DWG. BY: AEM  
CHK. BY: LFS  
DRAWING NO.: TX-717  
SHEET 7 OF 10



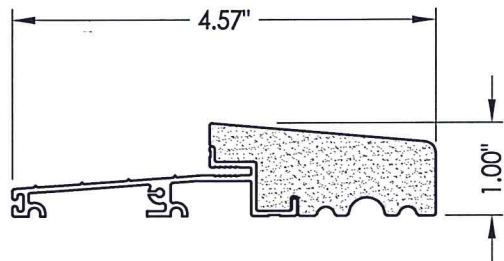
18 HINGE



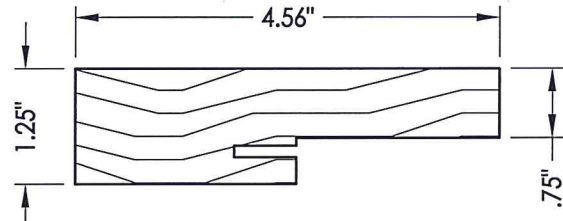
5 INSWING THRESHOLD



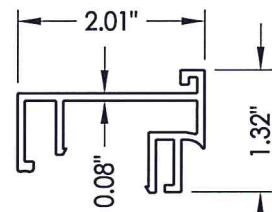
25 OUTSWING THRESHOLD  
High-dam option



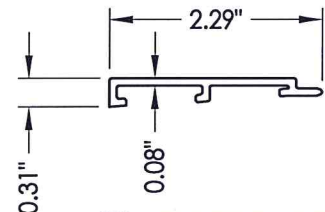
27 OUTSWING THRESHOLD



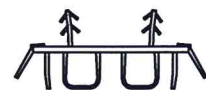
4 3 1 SIDE & HEAD JAMBS



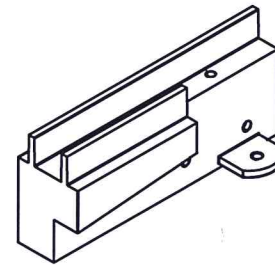
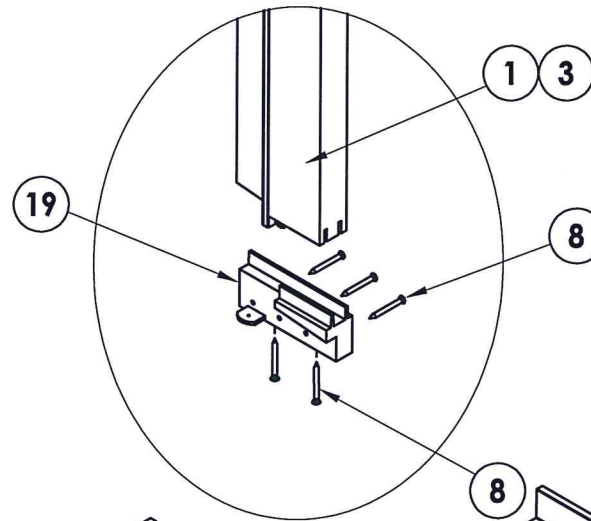
61 SIDELITE SPACER  
Inswing



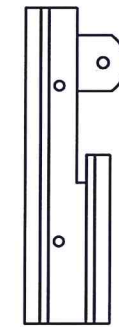
60 SIDELITE SPACER  
Outswing



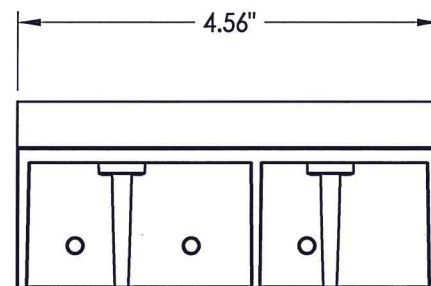
6 DOOR BOTTOM SWEEP



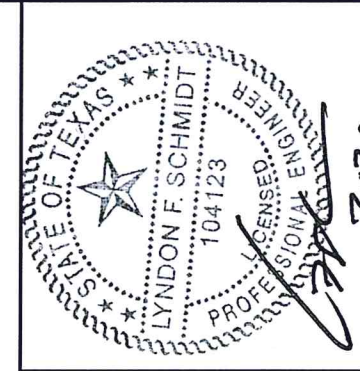
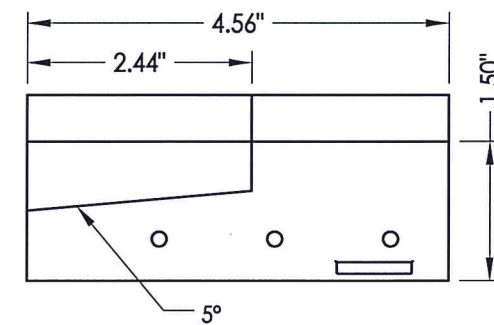
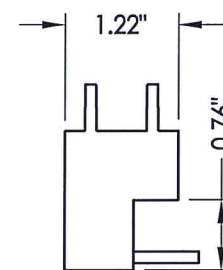
SILLKEY, LEFT  
SCALE: NONE



SILLKEY, RIGHT  
SCALE: NONE



19 SILLKEY DETAILS  
Optional



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  
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-717  
SHEET 8 of 10

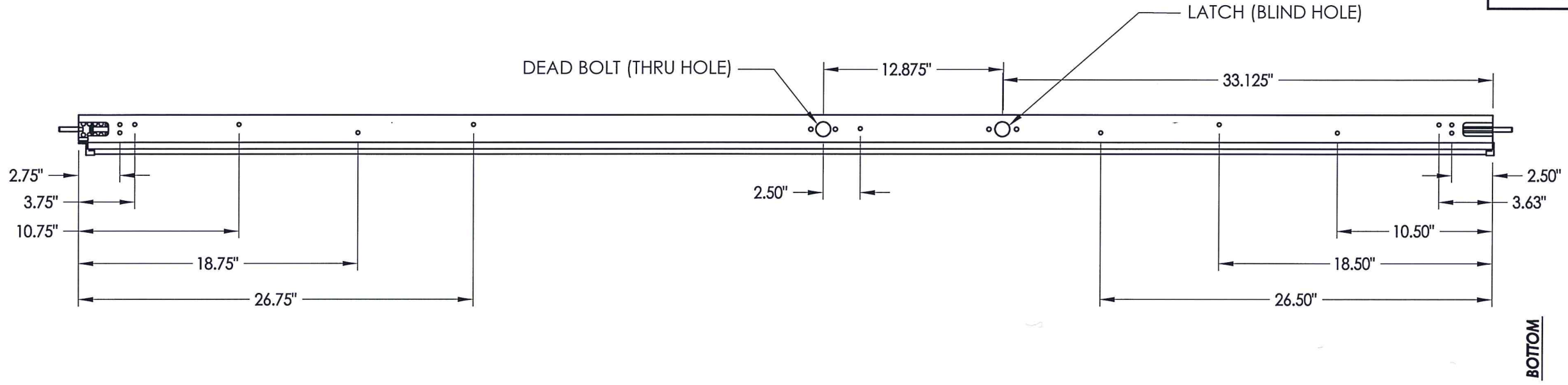




Documents Prepared By: Lyndon F. Schmidt, P.E.  
 TEXAS P.E. #104123

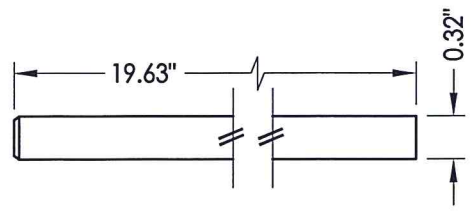
**RW** BUILDING CONSULTANTS, INC.  
 P.O. Box 230 Valrico FL 33595  
 Phone No.: 813.659.9197

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

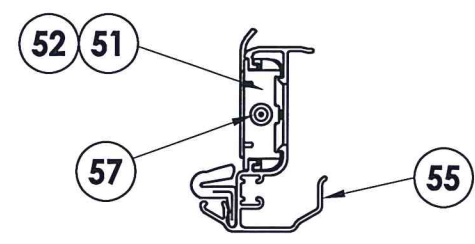


TOP  
 A-A

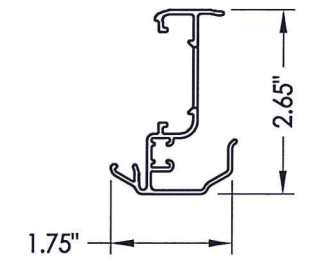
**8'-0" ALUMINUM ASTRAGAL ASSEMBLY**  
 By Endura Products



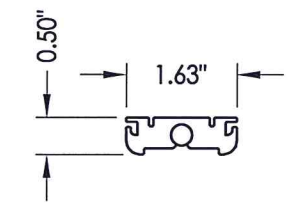
**57 SLIDE BOLT ROD**  
 MATL: Steel



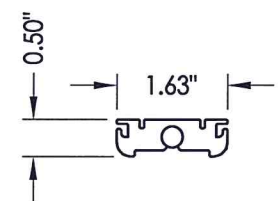
**VIEW A-A**  
 Aluminum Astragal Assembly



**55 ALUMINUM ASTRAGAL**  
 By Endura Products



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



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

PRODUCT:	TRINITY GLASS INT'L 8'0 PREMIUM OPAQUE
PART OR ASSEMBLY:	ENDURA ASTRAGAL DETAILS

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
		EW
		BY

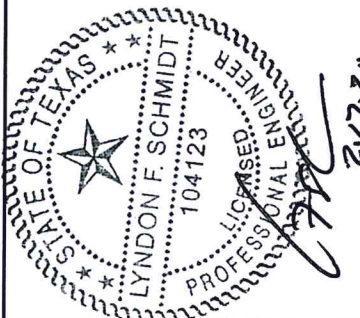
DATE:	11/21/05
SCALE:	N.T.S.
DWG. BY:	AEM
CHK. BY:	LFS
DRAWING NO.:	TX-717
SHEET	9 OF 10



R:\Clients\Trinity Glass Permanent\B - Texas Dept of Ins\DR-210\C - Drawings\DR-212 2018 IBC\TX-717.dwg, 10

**BILL OF MATERIALS**

ITEM	DESCRIPTION	MATERIAL
A	2X HEADER FRAMING SG >= 0.42	WOOD
B	2X FRAMING SG >= 0.42	WOOD
I	3/16"X 1-3/4" PFH ITW CONCRETE SCREW	STEEL
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
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
51	4-3/4" LENGTH TOP BOLT RETAINER	HDPE
52	9-8/4" LENGTH TOP BOLT RETAINER	ALUMINUM
53	#8 X 1-3/4" PFH 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 WS	STEEL
65	#10 x 2" PFH WS	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  
80 PREMIUM OPAQUE

PART OR ASSEMBLY: BILL OF MATERIALS

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

DATE: 11/21/05  
SCALE: N.T.S.  
DWG. BY: AEM  
CHK. BY: LFS  
DRAWING NO.: TX-717  
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