



TRINITY GLASS

INTERNATIONAL

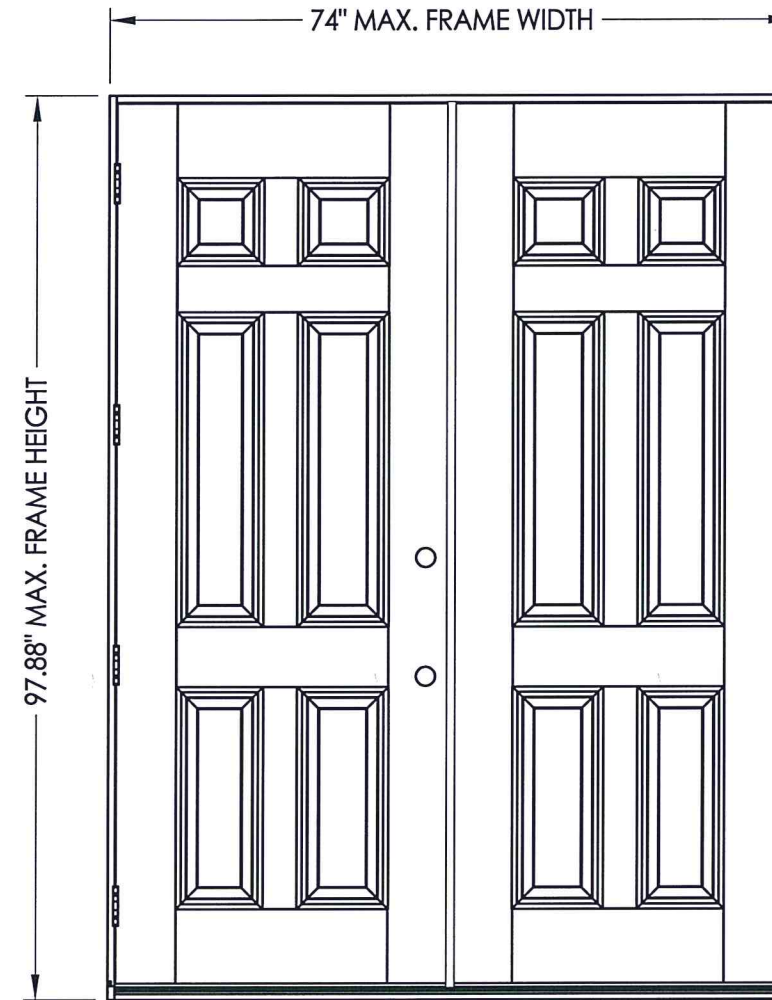
33615 1st Way S, Federal Way, WA 98003

**6'0 X 8'0
OPAQUE PREMIUM FIBERGLASS
DOUBLE DOOR
IN SWING / OUT SWING
"IMPACT"**

EVALUATED FOR USE IN THE STATE OF TEXAS

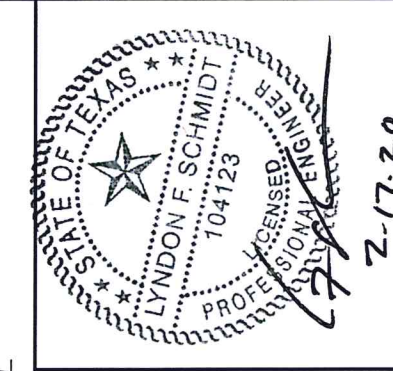
The Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

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. This system has been tested and evaluated as a large missile impact protective system for installation in areas requiring wind-borne debris protection. This product 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.



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

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



Documents Prepared By: Lyndon F. Schmidt, P.E.
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RW BUILDING CONSULTANTS, INC.
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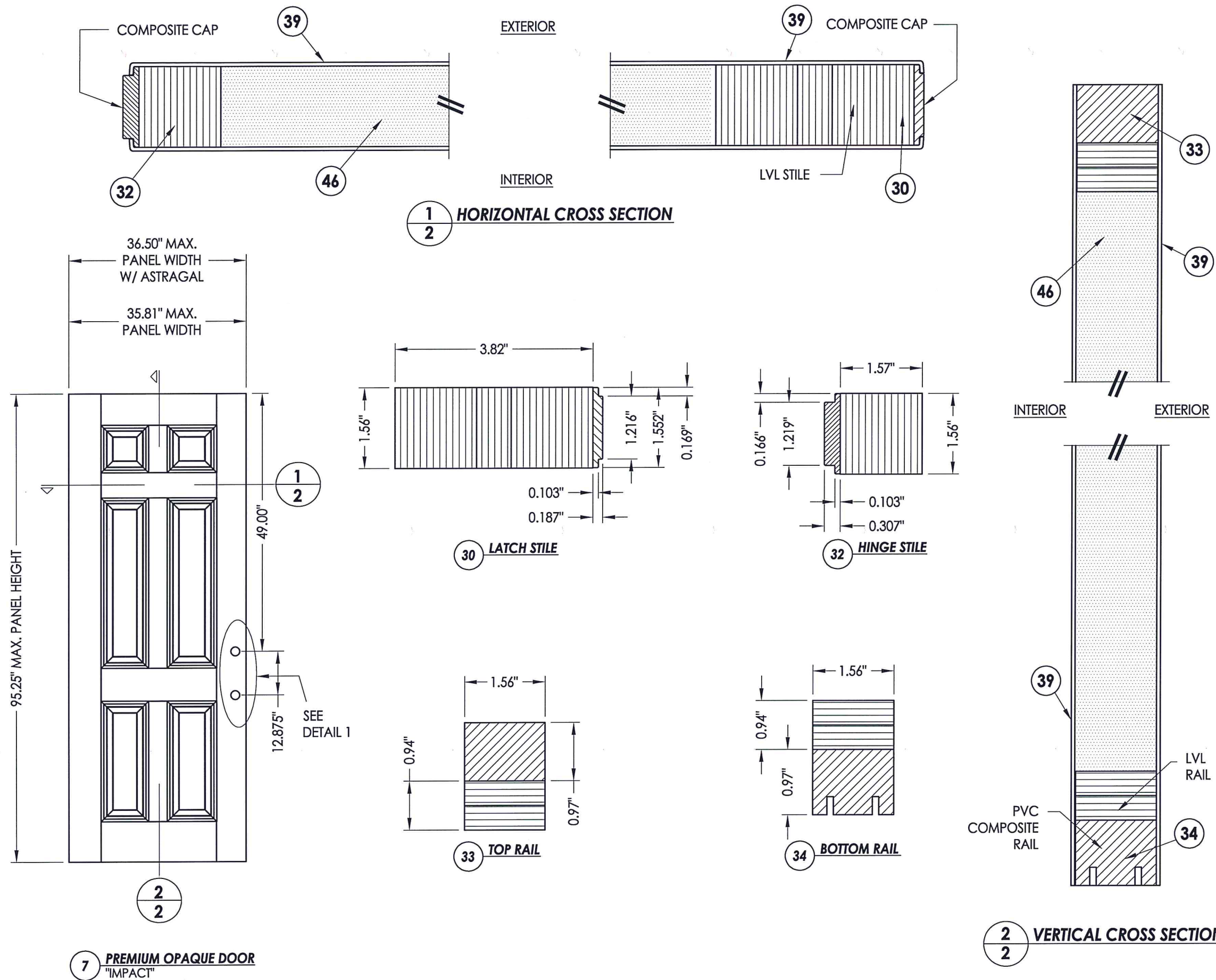
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

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

PART OR ASSEMBLY:
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-722
SHEET 1 OF 8



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

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 2.17.20

R.W. BUILDING CONSULTANTS, INC.

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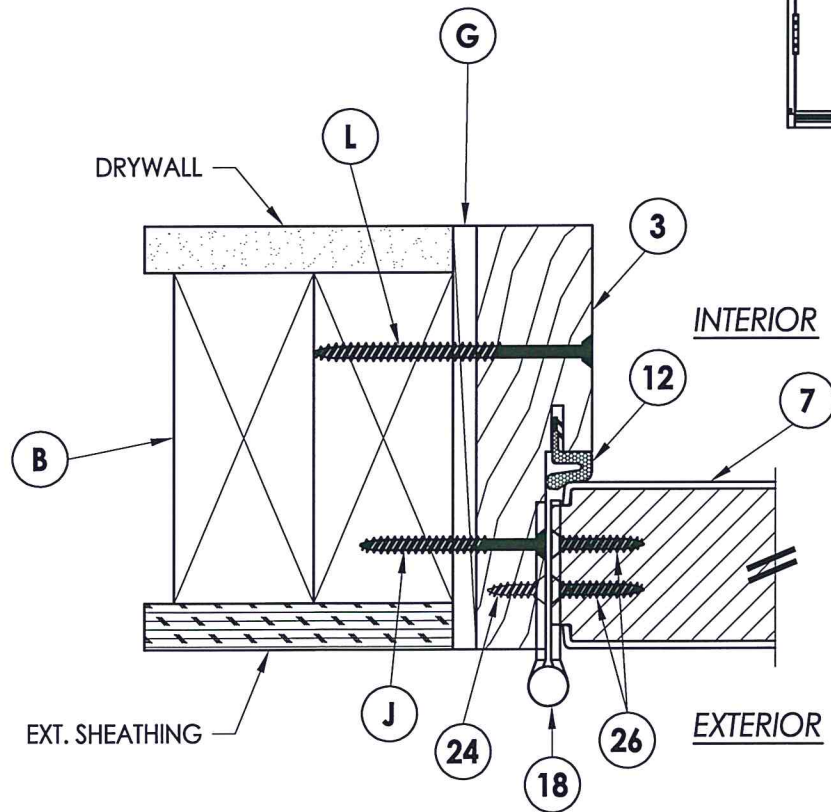
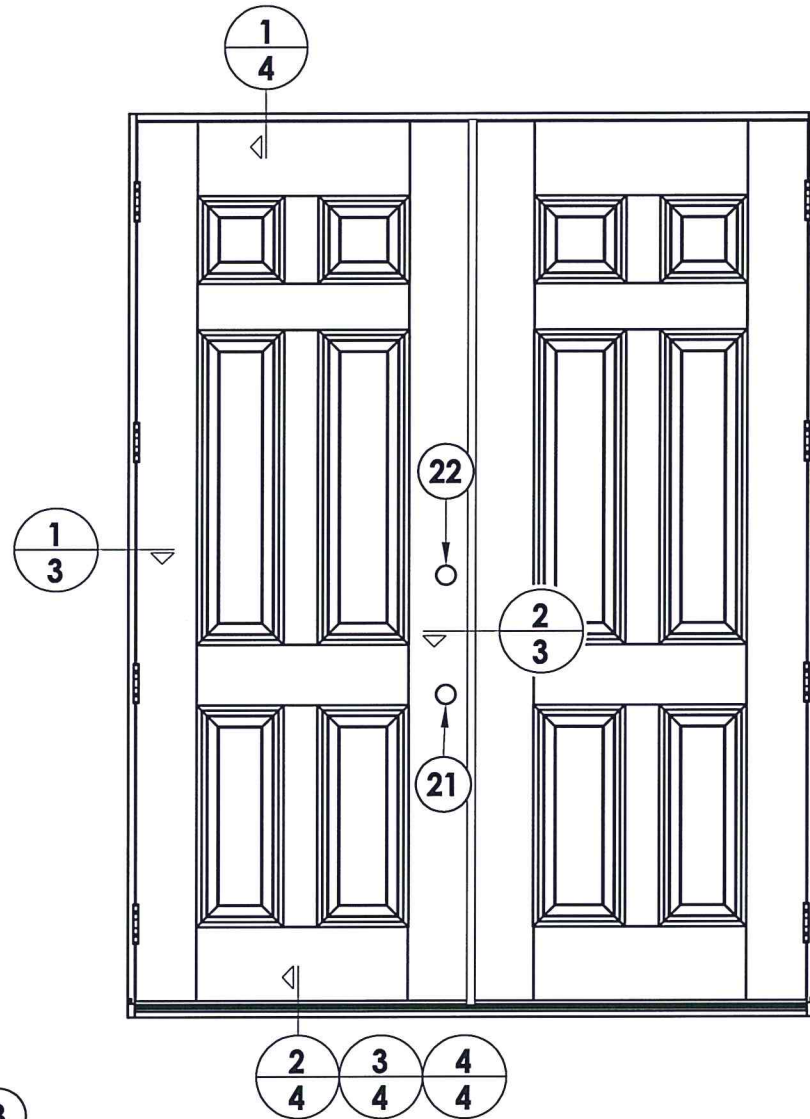
 TEXAS BOARD OF PROFESSIONAL ENGINEERS

 CERTIFICATE OF REGISTRATION # F-11852

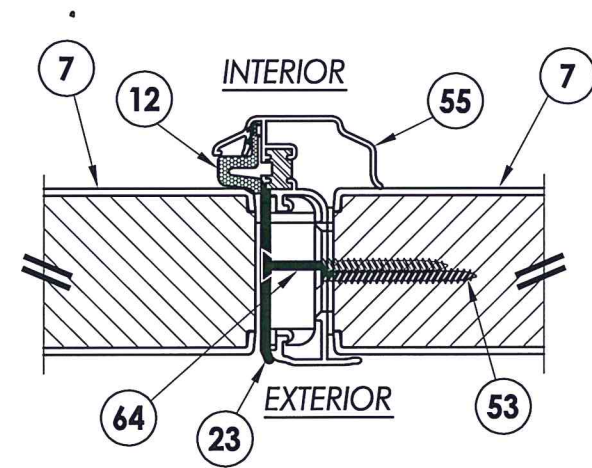
PRODUCT:		TRINITY GLASS INT'L 8'0 PREMIUM OPAQUE	
PART OR ASSEMBLY:		DOOR PANEL CONSTRUCTION DETAILS	
NO.	DATE	BY	REVISIONS
3	2/13/20	LFS	UPDATE TO 2018 IBC/IRC
2	7/27/09	AL	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	EW	REVISED LOCKSET NOMENCLATURE
DATE	11/21/05		
SCALE:	N.T.S.		
DWG. BY:	AEM		
CHK. BY:	LFS		
DRAWING NO.:	TX-722		
SHEET	2 OF 8		

NOTE:

- Item #63 - #8 x 2-1/4" PFH screws thru jamb into sidelite located @ 6", 27", 50-1/4", & 72-1/8" from top of frame typ. both side jambs.

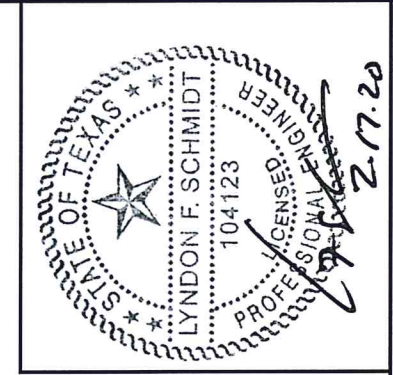


1 HORIZONTAL CROSS SECTION
3 Outswing shown
 Inswing also approved



2 HORIZONTAL CROSS SECTION
3 Endura astragal

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



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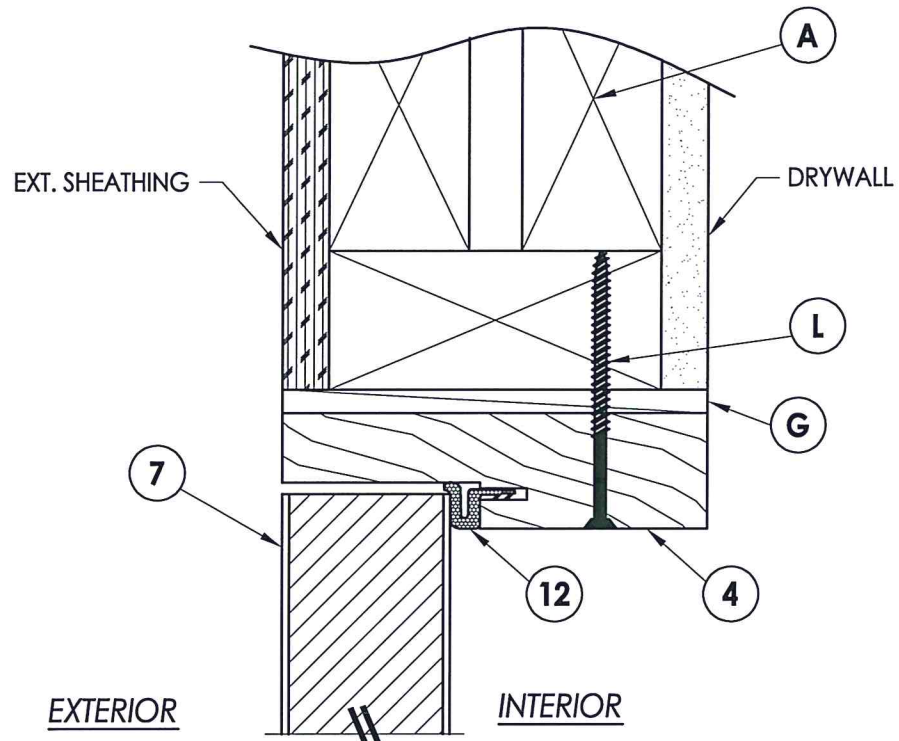
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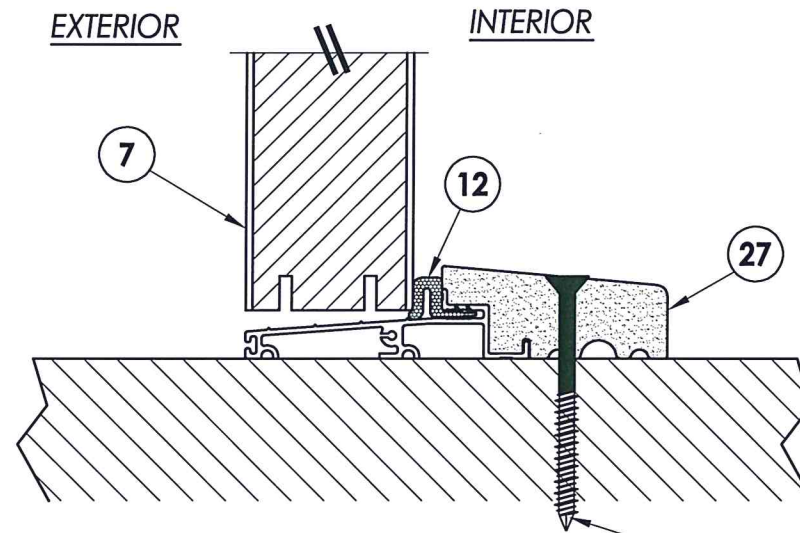
PART OR ASSEMBLY:
 HORIZONTAL CROSS SECTIONS

NO.	DATE	REVISIONS
3	2/13/20	UPDATE TO 2018 IBC/IRC
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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-722
 SHEET 3 OF 8

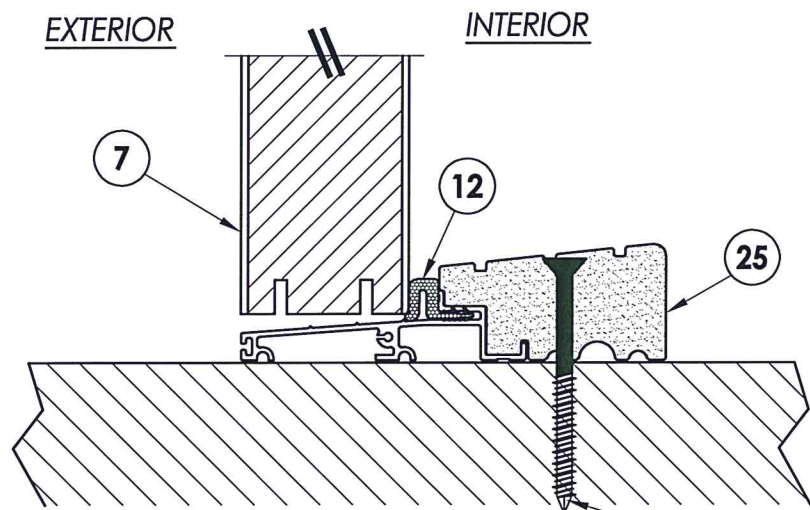


1 VERTICAL CROSS SECTION
4 Outswing shown
 Inswing also approved



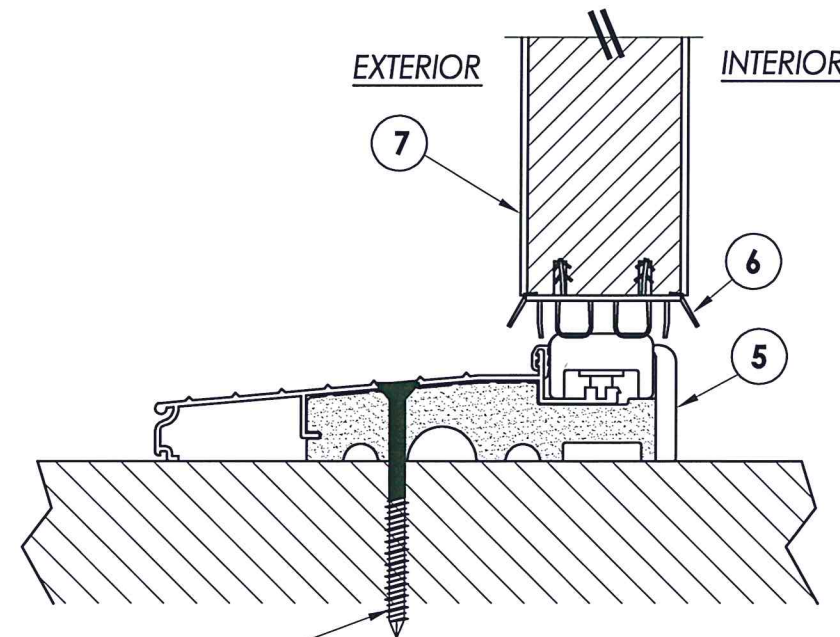
2 VERTICAL CROSS SECTION
4 Outswing configuration

L WOOD
P CONCRETE

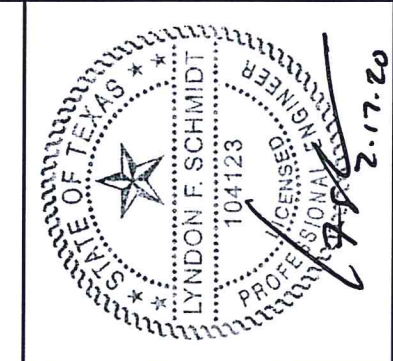


3 VERTICAL CROSS SECTION
4 Outswing configuration

L WOOD
P CONCRETE



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

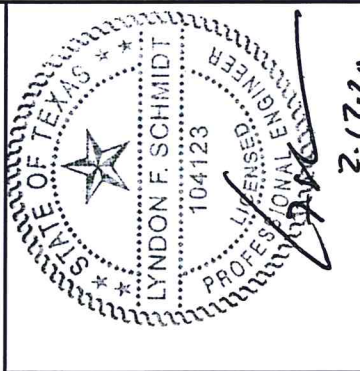
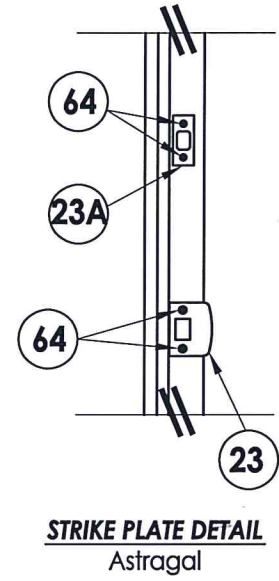
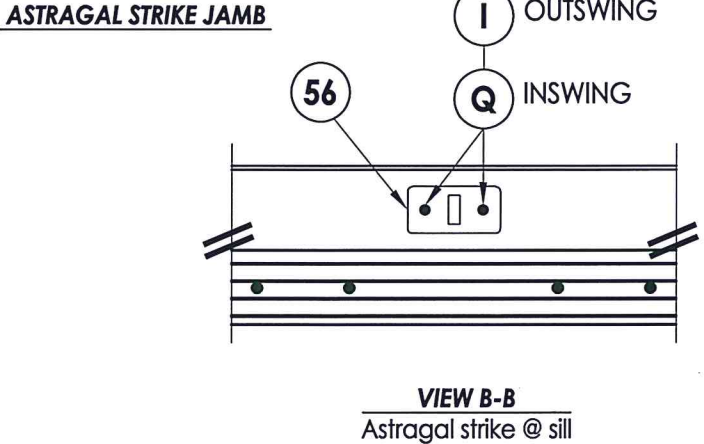
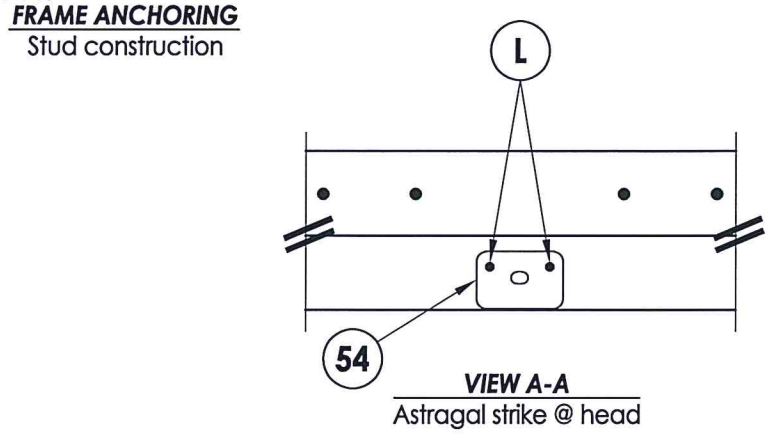
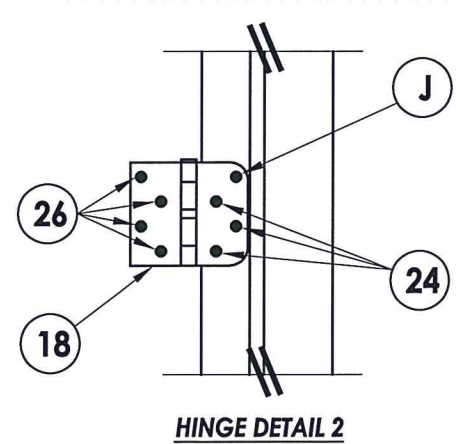
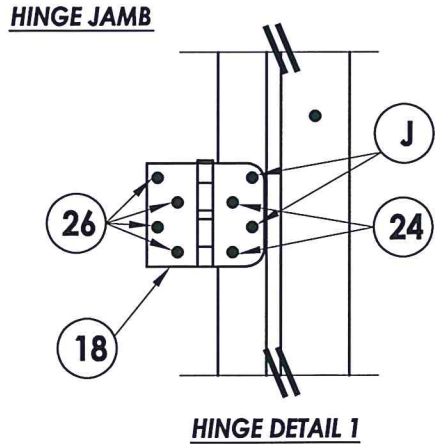
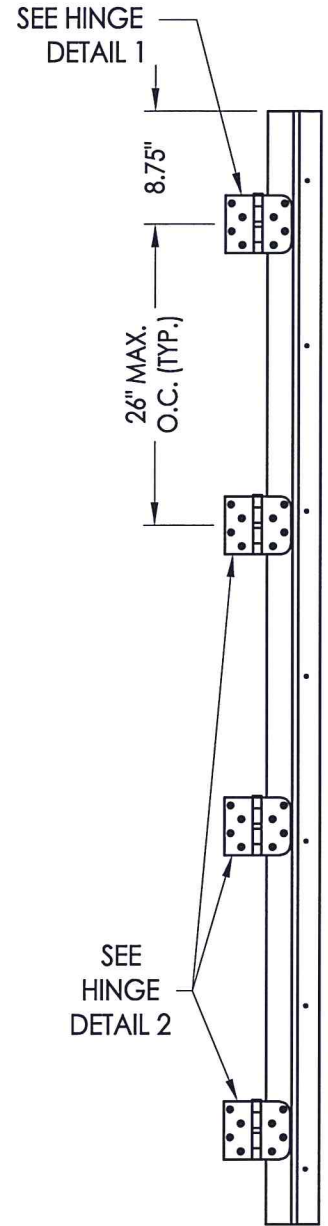
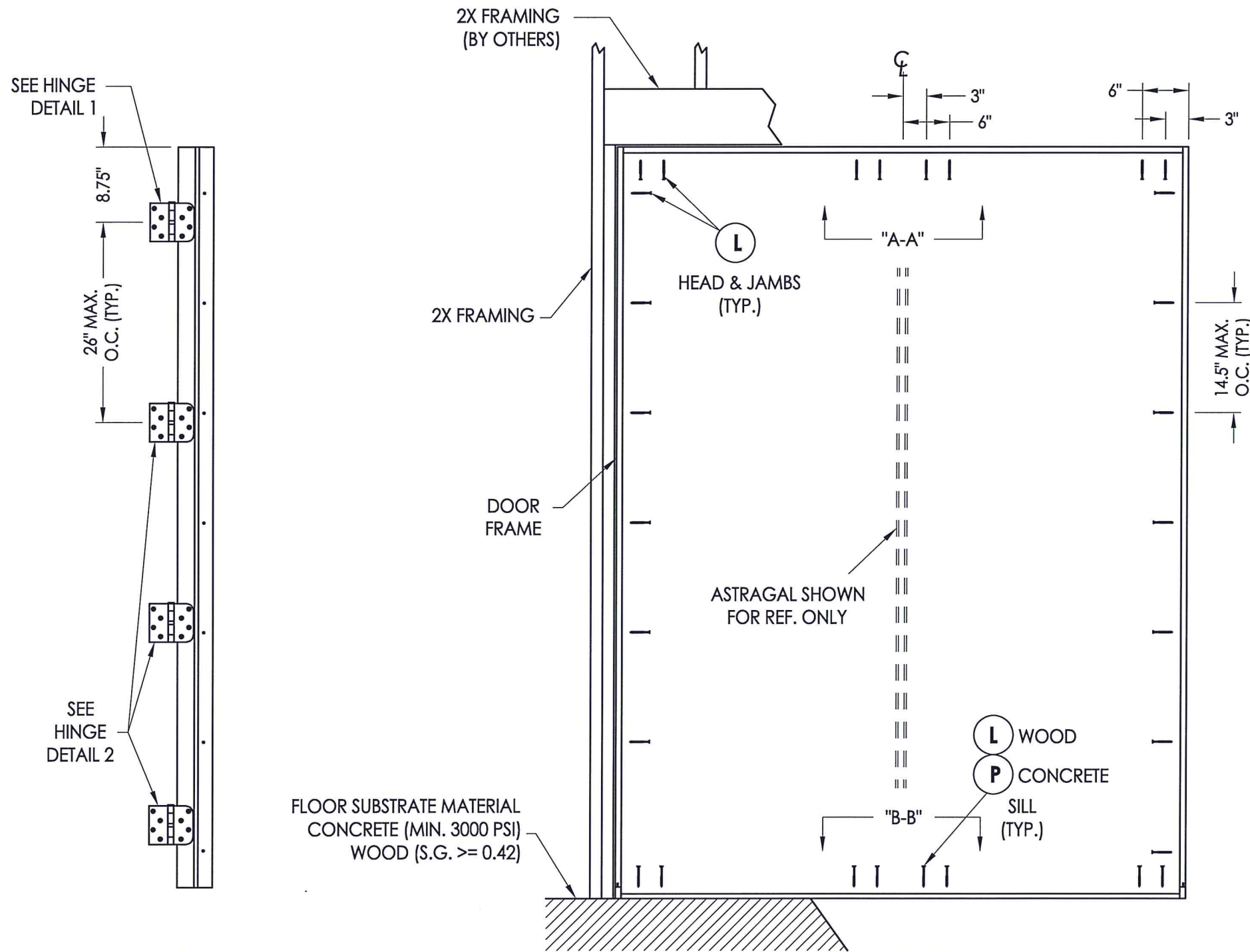


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 TEXAS BOARD OF PROFESSIONAL ENGINEERS
 CERTIFICATE OF REGISTRATION # F-11852

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

DATE: 11/21/05
 SCALE: N.T.S.
 DWG. BY: AEM
 CHK. BY: LFS
 DRAWING NO.: TX-722
 SHEET 4 OF 8



2.17.20

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

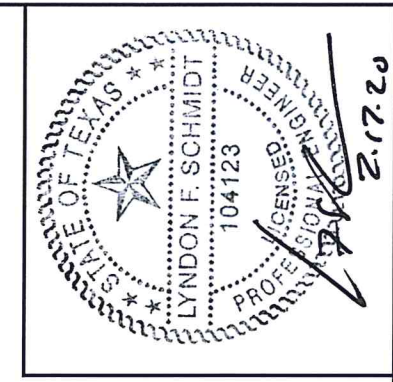
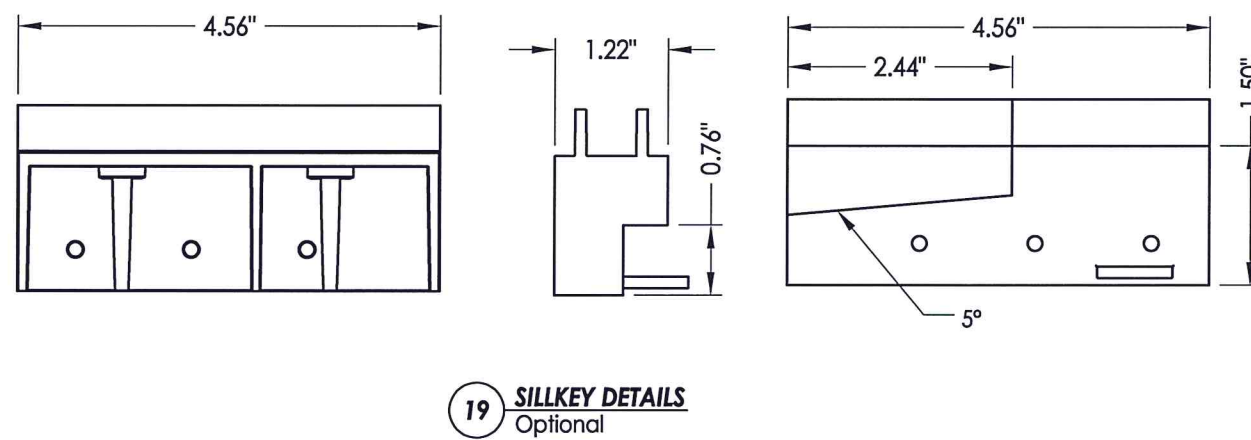
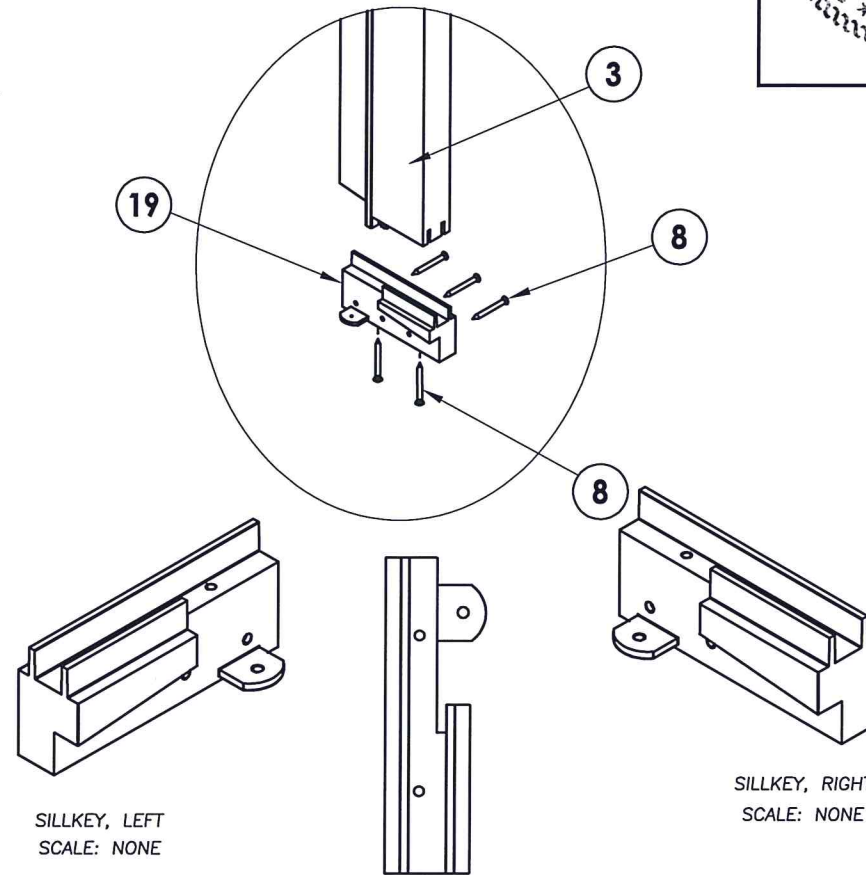
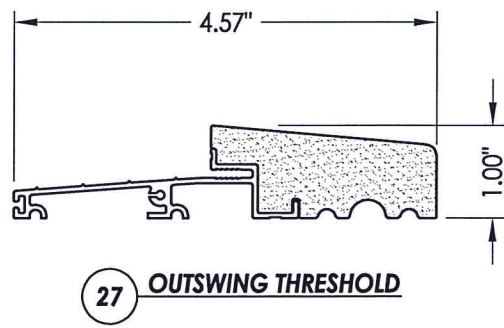
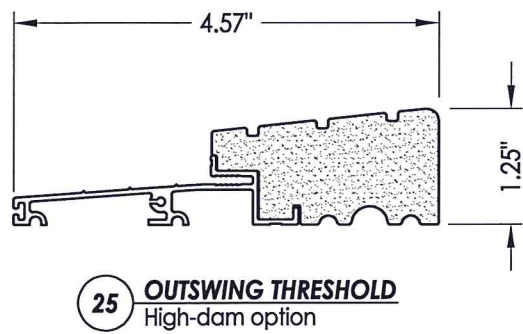
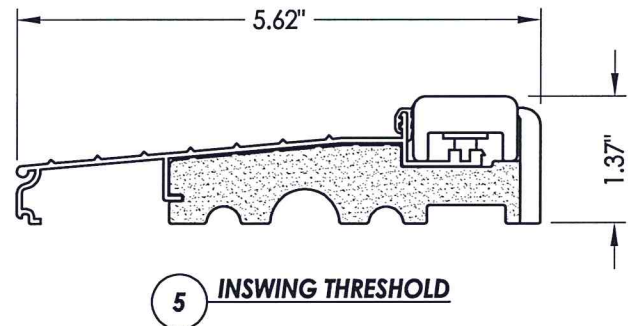
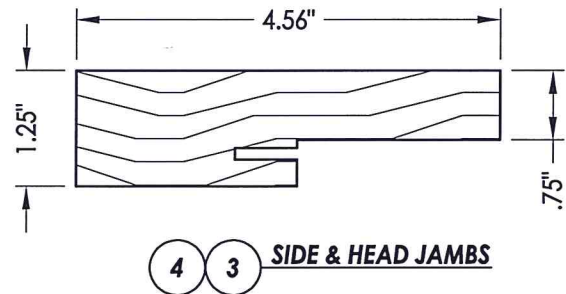
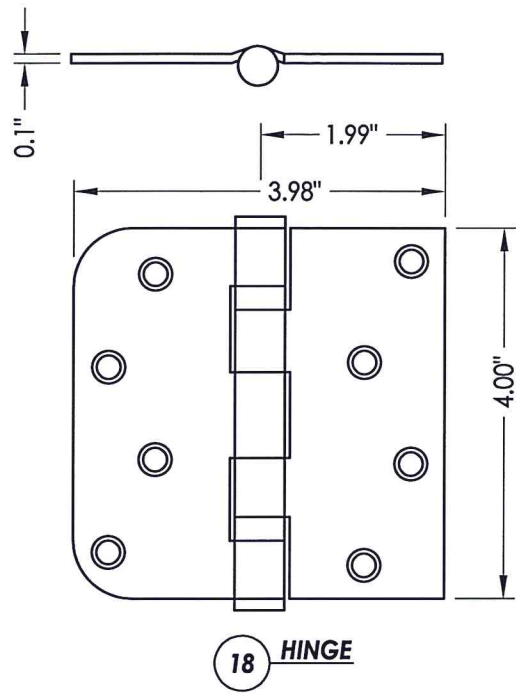
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CERTIFICATE OF REGISTRATION # F-11852

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
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1	6/28/06	REVISED LOCKSET NOMENCLATURE

DATE:	11/21/05
SCALE:	N.T.S.
DWG. BY:	AEM
CHK. BY:	LFS
DRAWING NO.:	TX-722
SHEET	5 OF 8



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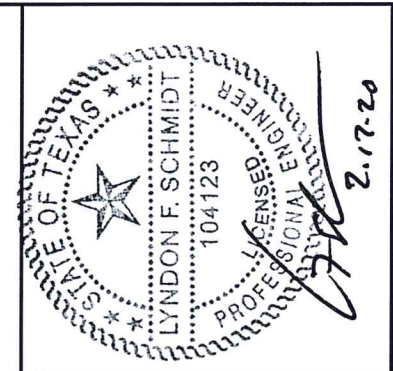
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CERTIFICATE OF REGISTRATION # F-11852

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

PART OR ASSEMBLY:
COMPONENTS

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

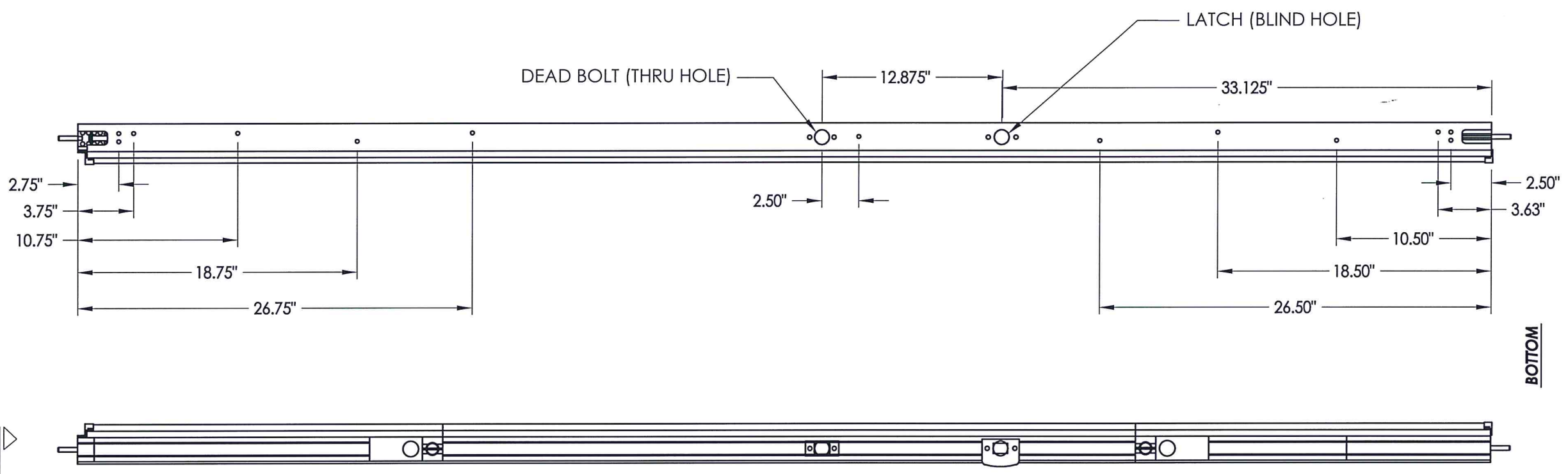
DATE: 11/21/05
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: LFS
DRAWING NO.: TX-722
SHEET 6 OF 8



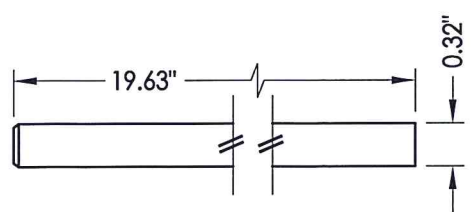
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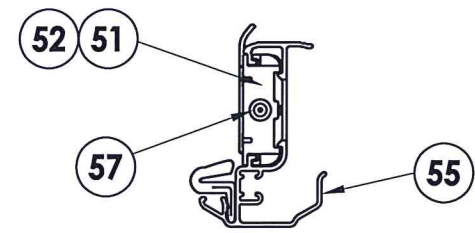
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852



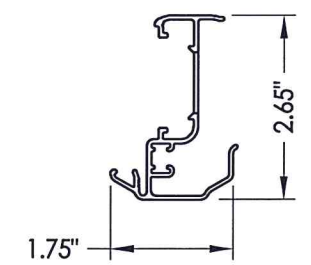
8'-0" ALUMINUM ASTRAGAL ASSEMBLY
By Endura Products



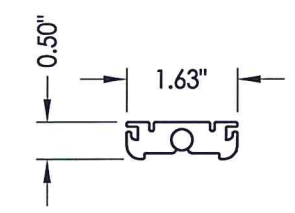
57 SLIDE BOLT ROD
MATL: Steel



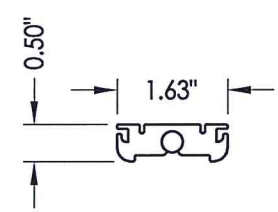
VIEW A-A
Aluminum Astragal Assembly



55 ALUMINUM ASTRAGAL
By Endura Products



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



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

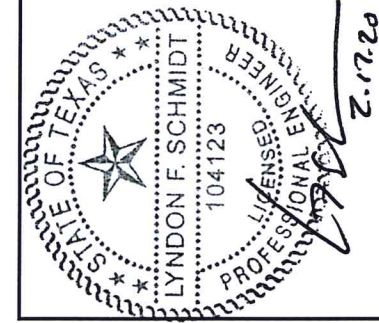
PRODUCT:	TRINITY GLASS INT'L 8'0 PREMIUM OPAQUE
PART OR ASSEMBLY:	ENDURA ASTRAGAL DETAILS

NO.	DATE	REVISIONS
3	2/13/20	UPDATE TO 2018 IBC/IRC
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1	6/28/06	REVISED LOCKSET NOMENCLATURE
		BY

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SCALE:	N.T.S.
DWG. BY:	AEM
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DRAWING NO.:	TX-722
SHEET	7 OF 8

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
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
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
64	#8 x 2" PFH WS	STEEL
65	#10 x 2" PFH WS	STEEL



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8 0 PREMIUM OPAQUE

PART OR ASSEMBLY:
BILL OF MATERIALS

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		BY

DATE: 11/21/05

SCALE: N.T.S.

DWG. BY: AEM

CHK. BY: LFS

DRAWING NO.: TX-722

SHEET 8 OF 8

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.