

6'0 X 6'8
FLUSH-GLAZED FIBERGLASS
DOUBLE DOOR
IN SWING / OUT SWING
"NON-IMPACT"

EVALUATED FOR USE IN THE STATE OF TEXAS

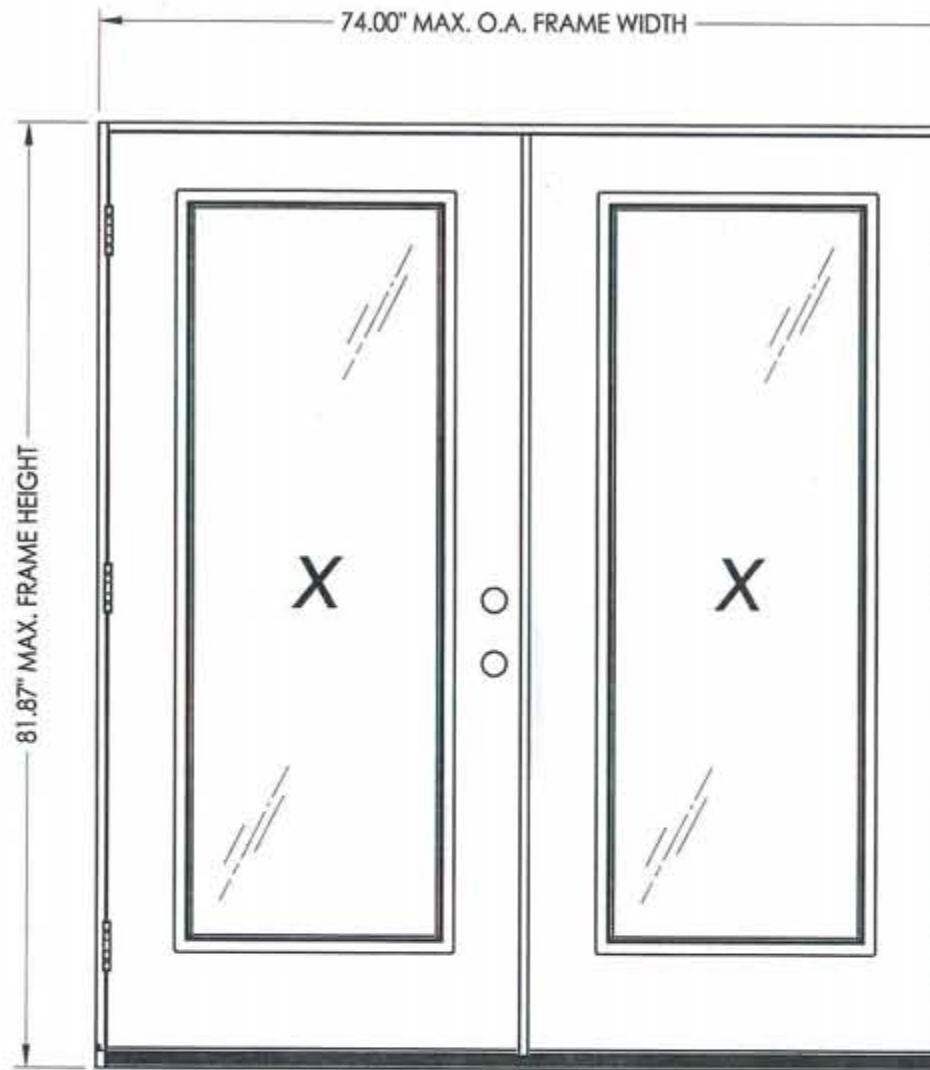
The Trinity Flush-Glazed Premium Fiberglass Double Door described herein complies with the 2006 International Residential Code (IRC), Sections R301 & R613 and the 2006 International Building Code (IBC), Sections 1405.12, 1609, 1714.5, 2403 and 2404 (including Texas revisions) subject to the following 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.

SUPPORTING DOCUMENTS & EVIDENCE

1. Testing per ASTM E330-02 as performed by Testing Evaluation Laboratories Inc. and reported in test report numbers TEL 05-0411-7, TEL 08-01370020 and TEL 06-0223-3 signed by Wendell W. Haney, P.E.
2. Calculations (Anchoring and Glass load resistance report ASTM E1300-04) prepared by Lyndon F. Schmidt, P.E.
3. Certificate of Participation issued by the National Accreditation and Management Institute, Inc., certifying that Trinity Glass Int'l is manufacturing products within a Quality Assurance program.

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1	Typical elevations, design pressures & general notes
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5	Frame anchoring
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7	Endura astragal details
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10	Columbia astragal details
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

PRODUCT: TRINITY GLASS INT'L
6'8 FLUSH-GLAZED

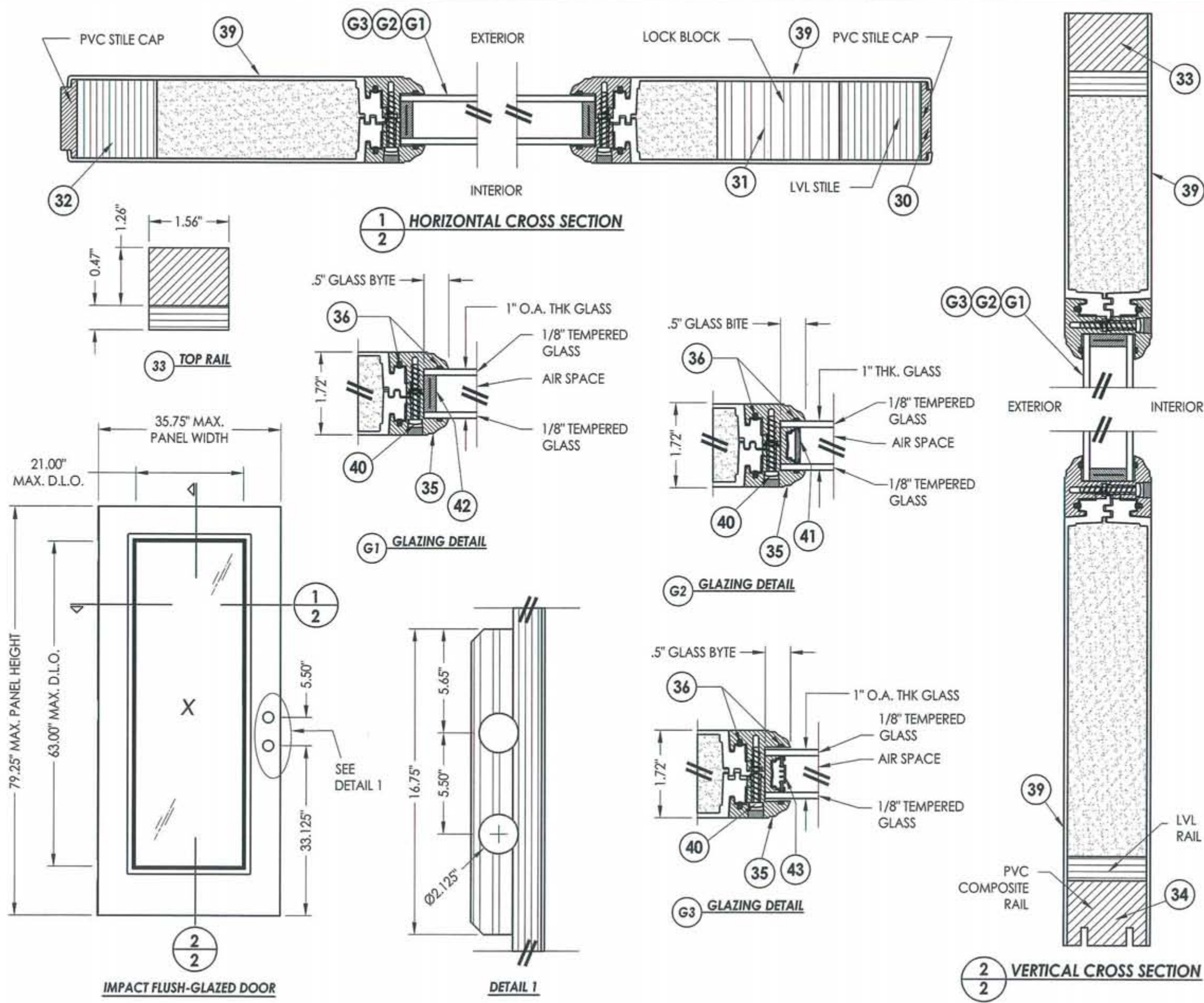
PART OR ASSEMBLY:
TYPICAL ELEVATION, DESIGN
PRESSURES & GENERAL NOTES

ASTRAGAL TYPE	SWING	MAX. FRAME DIMENSION	GLASS TYPE	DESIGN PRESSURE PSF	
				POSITIVE	NEGATIVE
ENDURA	IN SWING	74.00" x 81.88"	G1, G2 & G3	+55.0	-60.0
	OUT SWING	74.00" x 80.75"		+55.0	-55.0
TRC	IN SWING	74.00" x 81.88"	G1, G2 & G3	+65.0	-65.0
	OUT SWING	74.00" x 80.75"		+65.0	-65.0
PVC	IN SWING	74.00" x 81.88"	G1, G2 & G3	+43.0	-47.0
	OUT SWING	74.00" x 80.75"		+43.0	-43.0
COLUMBIA	IN SWING	74.00" x 81.88"	G1, G2 & G3	+47.0	-55.0
	OUT SWING	74.00" x 80.75"		+47.0	-47.0

Refer to Table (sheet 3) for Passage Lock Rating Limitations

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

DATE: 8/29/05
SCALE: N.T.S.
DWG. BY: WH
CHK. BY: LFS
DRAWING NO.: TX-601
SHEET 1 OF 11

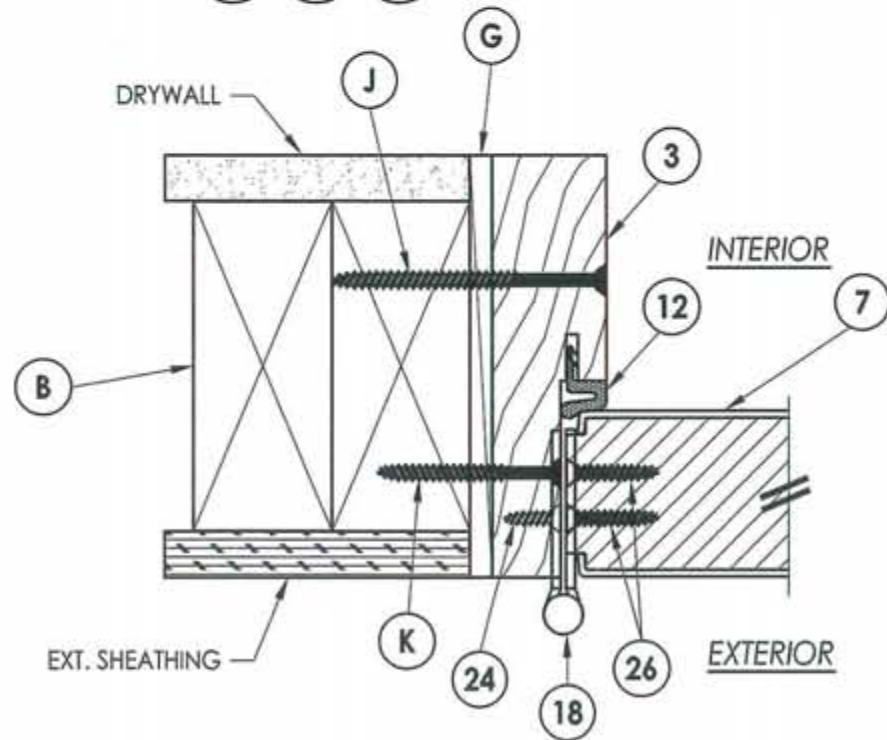
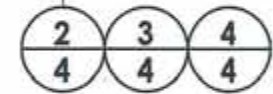
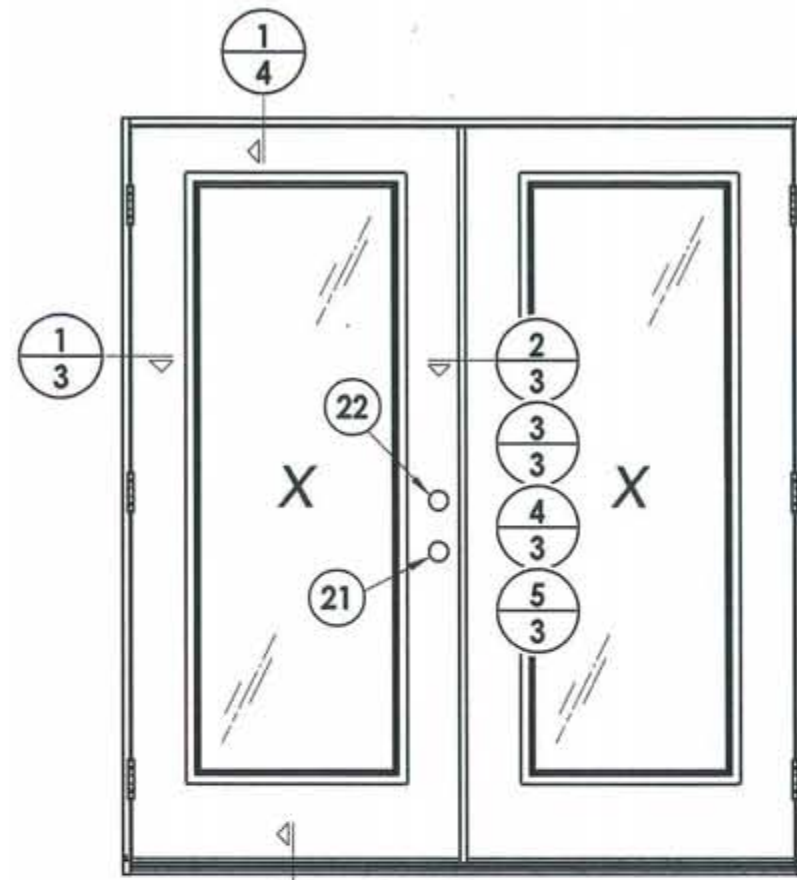


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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:		TRINITY GLASS INT'L 6'8" FLUSH-GLAZED	
PART OR ASSEMBLY:		DOOR PANEL CONSTRUCTION DETAILS AND GLAZING DETAILS	
NO.	DATE	BY	REVISIONS
2	7/27/09	AL	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	EW	REVISED LOCKSET NOMENCLATURE
DATE: 8/29/05			
SCALE: N.T.S.			
DWG. BY: WH			
CHK. BY: LFS			
DRAWING NO.: TX-601			
SHEET 2 OF 11			



1
3 HORIZONTAL CROSS SECTION
Outswing shown
Inswing also approved

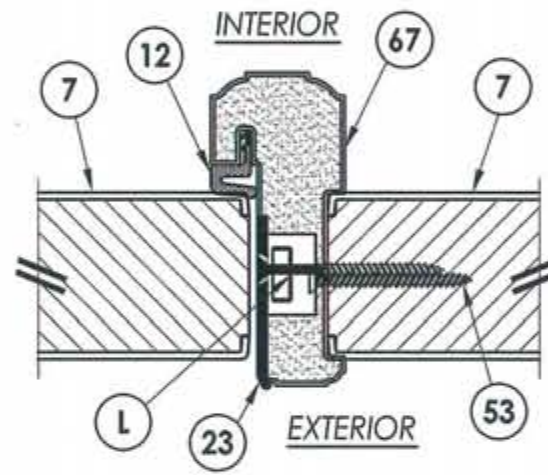
LOCK & DEADBOLT RATINGS CHART				
MANUFACTURER	MODEL	ITEM #	MAX. DESIGN PRESSURE (PSF)	
			POSITIVE	NEGATIVE
KWIKSET	LOCK: 740	21	+65.0	-65.0
	DEADBOLT: 780	22		
KWIKSET	LOCK: COMBO 660	21	+65.0	-65.0
	DEADBOLT: COMBO 660	22		
SCHLAGE	LOCK: MAX. SECURITY	21	+60.0	-60.0
	DEADBOLT: MAX. SECURITY	22		



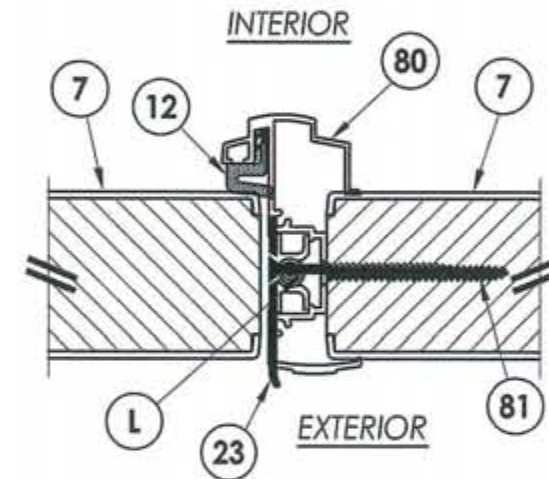
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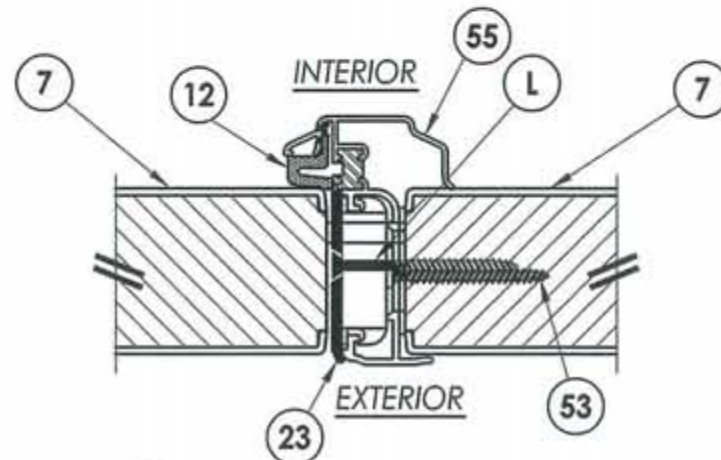
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852



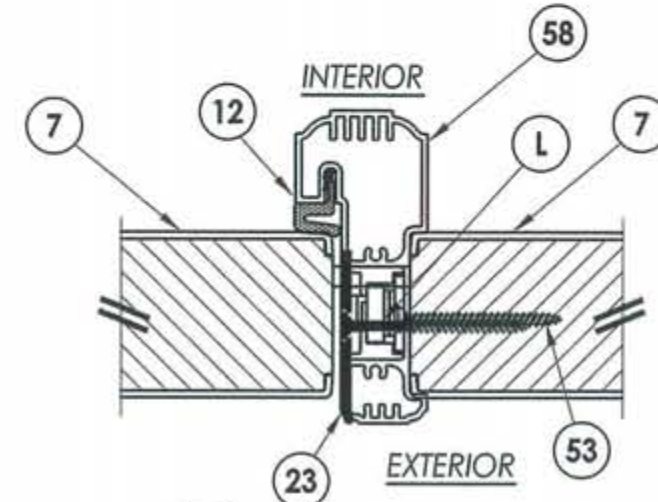
4
3 HORIZONTAL CROSS SECTION
PVC astragal



5
3 HORIZONTAL CROSS SECTION
Columbia astragal



2
3 HORIZONTAL CROSS SECTION
Endura astragal



3
3 HORIZONTAL CROSS SECTION
TRC astragal

PRODUCT: TRINITY GLASS INT'L
6'8" FLUSH-GLAZED

PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	REVISIONS
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1	6/28/06	REVISED LOCKSET NOMENCLATURE

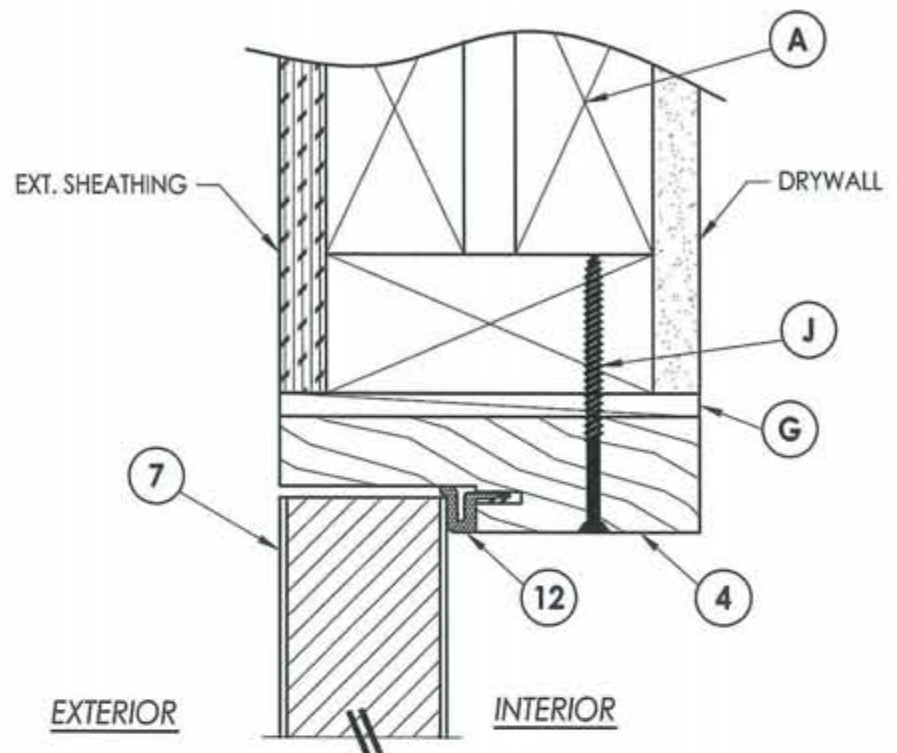
DATE: 8/29/05
SCALE: N.T.S.
DWG. BY: WH
CHK. BY: LFS
DRAWING NO.: TX-601
SHEET 3 OF 11



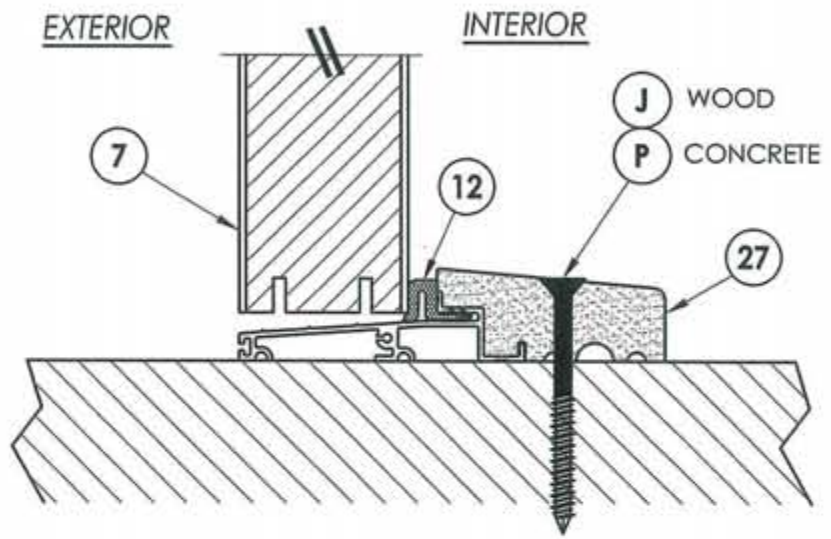
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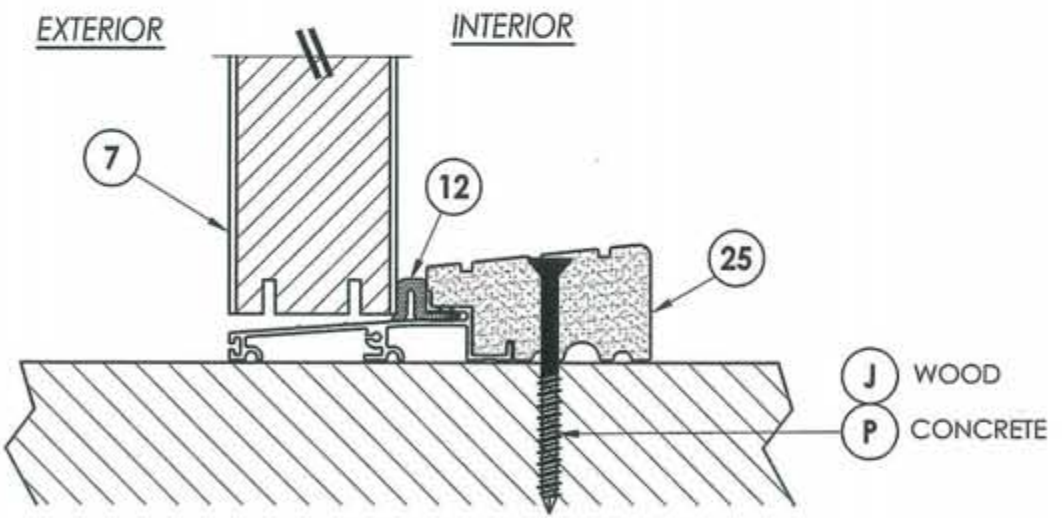
TEXAS BOARD OF PROFESSIONAL ENGINEERS
 CERTIFICATE OF REGISTRATION # F-11852



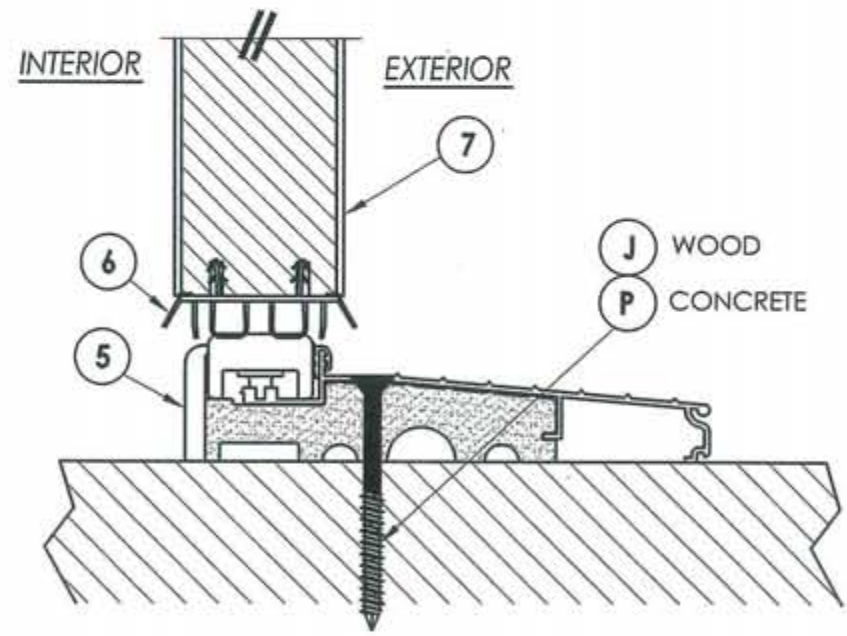
1 VERTICAL CROSS SECTION
4 Outswing shown
 Inswing also approved



2 VERTICAL CROSS SECTION
4 Outswing configuration



3 VERTICAL CROSS SECTION
4 Outswing configuration



4 VERTICAL CROSS SECTION
4 Inswing configuration

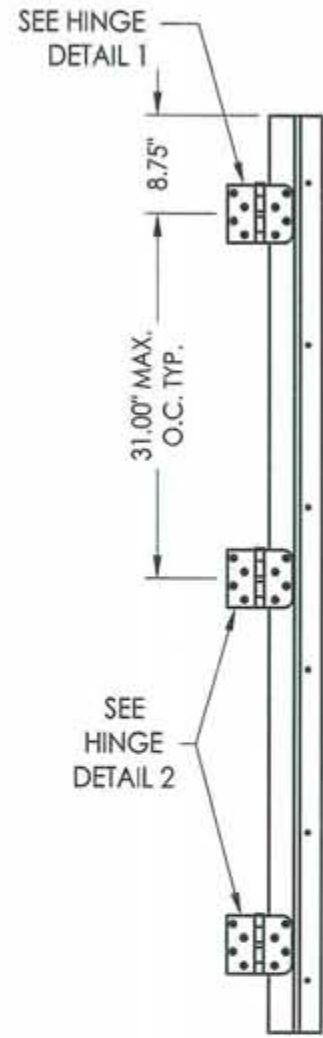
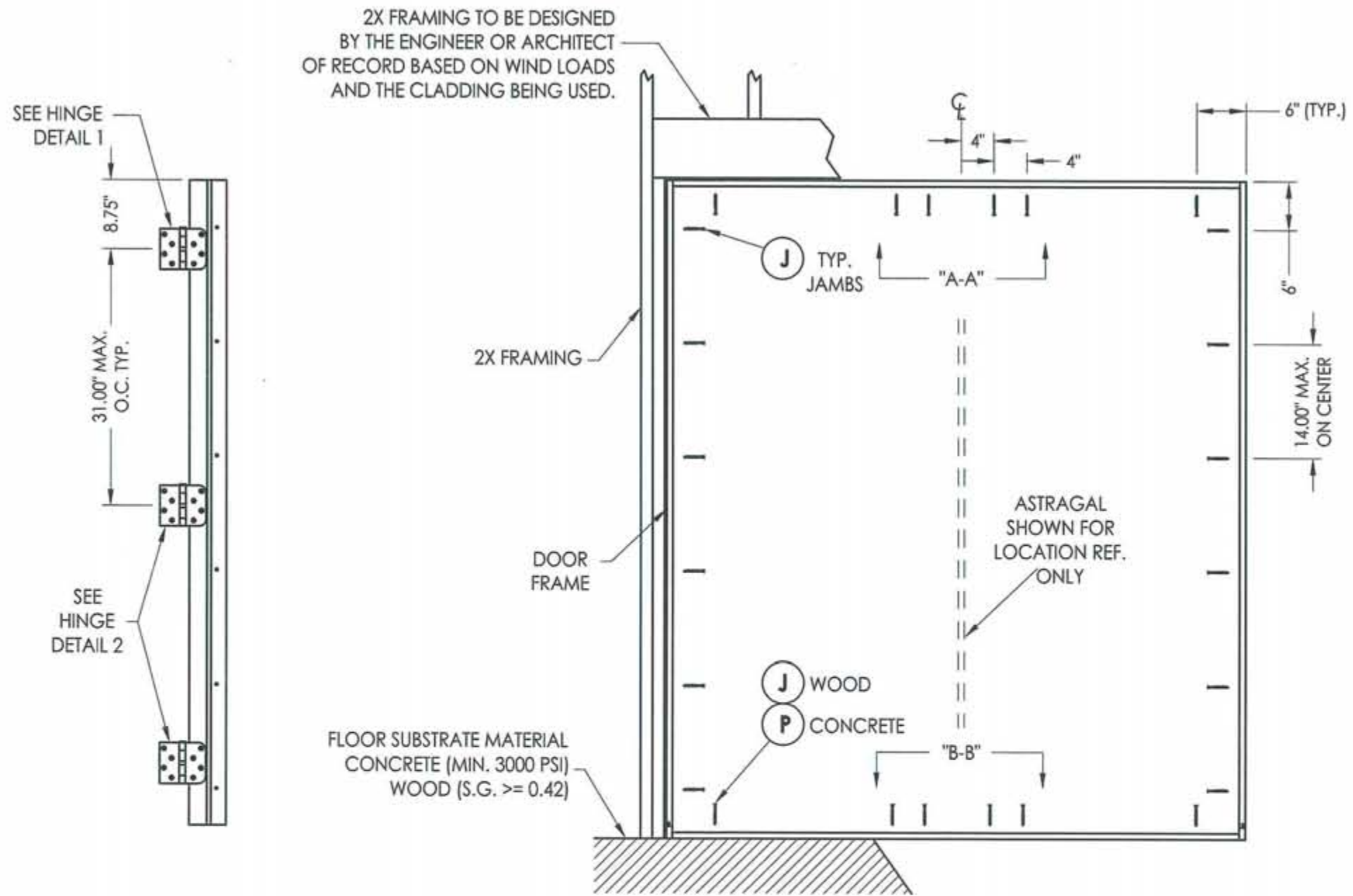
PRODUCT: TRINITY GLASS INT'L
 6 8 FLUSH-GLAZED

PART OR ASSEMBLY:
 VERTICAL CROSS SECTIONS

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

DATE: 8/29/05
 SCALE: N.T.S.
 DWG. BY: WH
 CHK. BY: LFS
 DRAWING NO.: TX-601
 SHEET 4 of 11

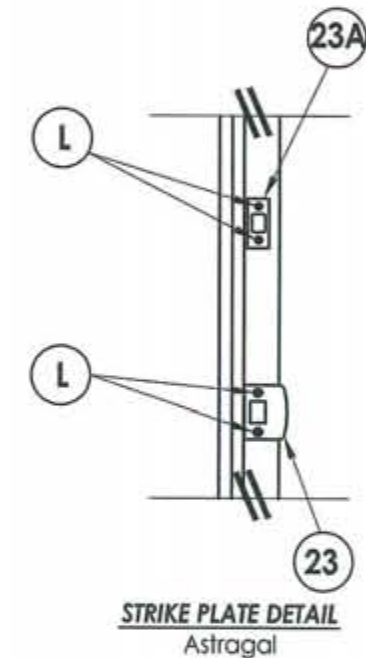
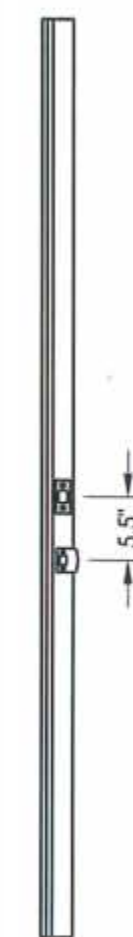
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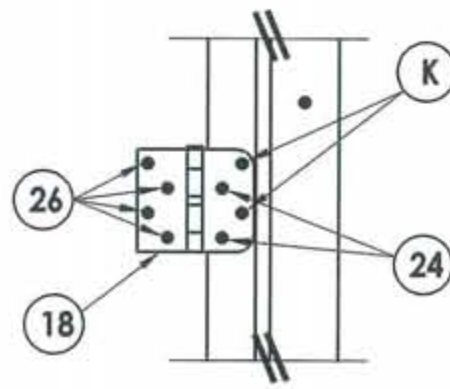
HINGE JAMB

FRAME ANCHORING
Stud construction

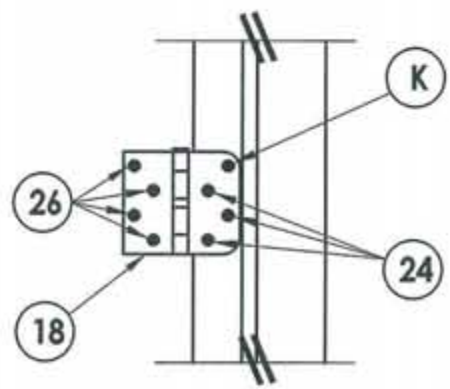
ASTRAGAL



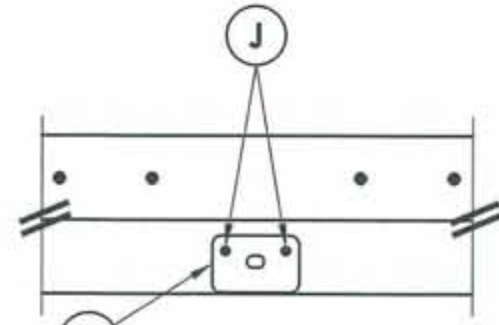
STRIKE PLATE DETAIL
Astragal



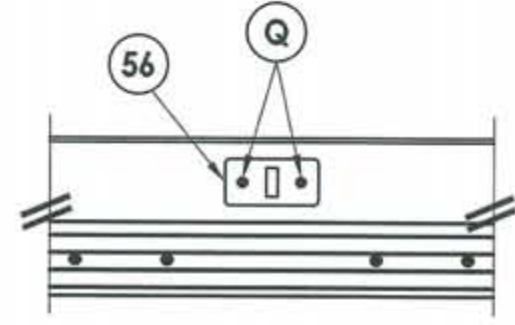
HINGE DETAIL 1



HINGE DETAIL 2



VIEW A-A
Astragal strike @ head



VIEW B-B
Astragal strike @ sill



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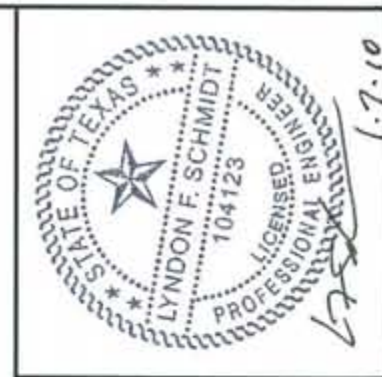
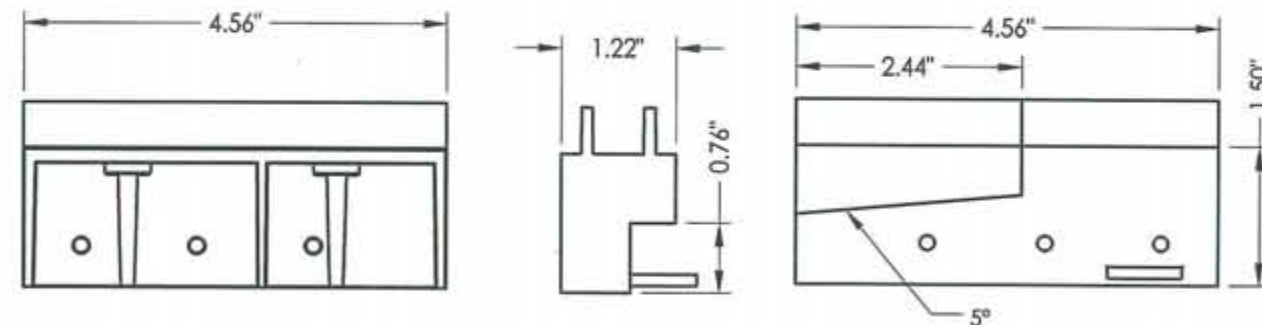
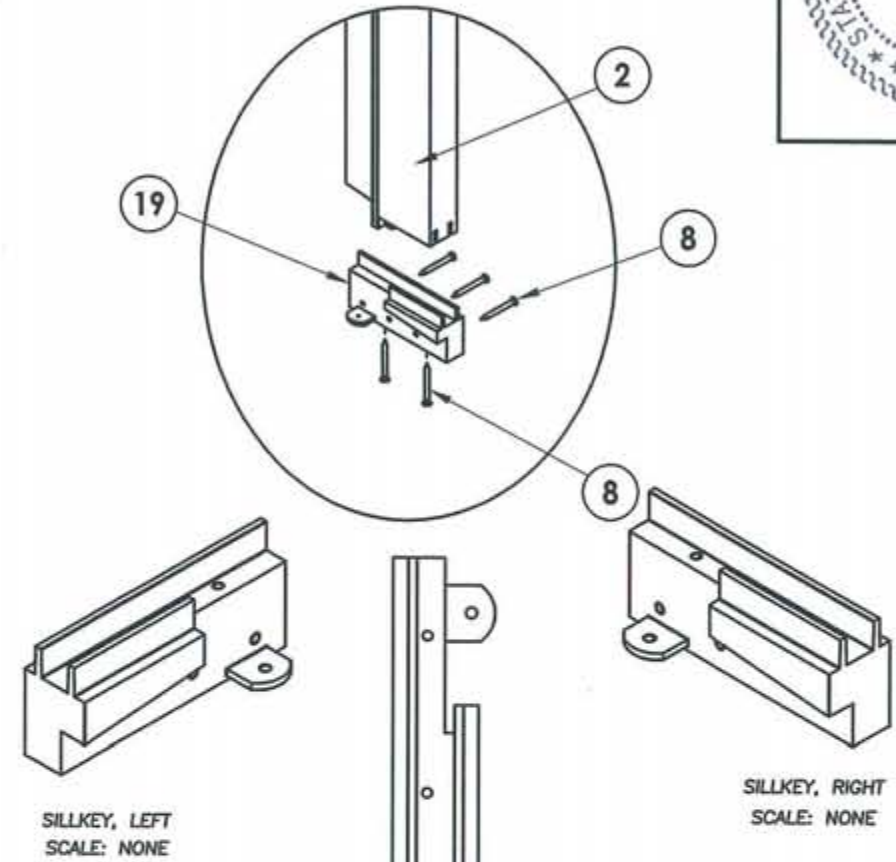
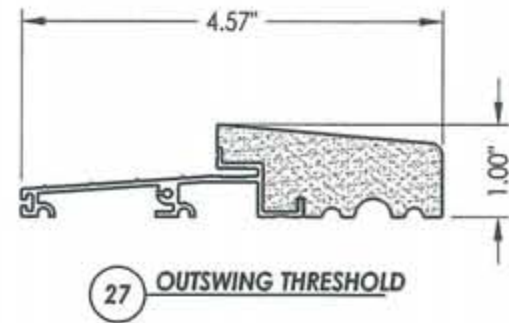
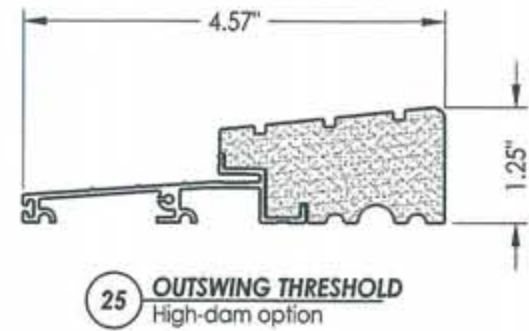
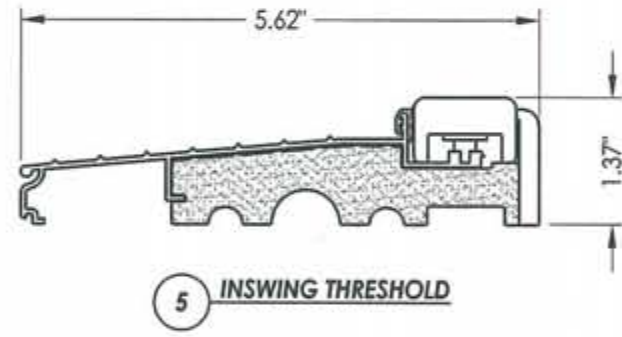
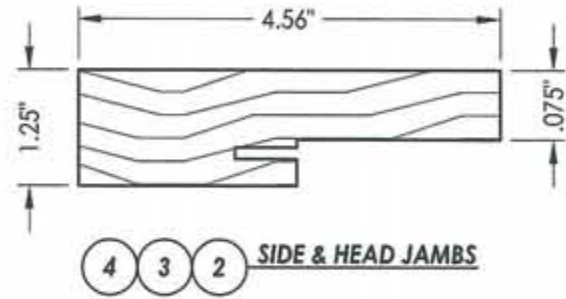
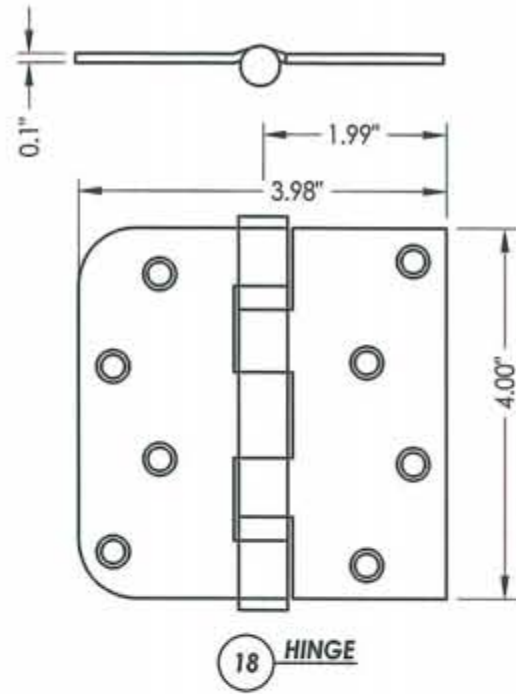
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: TRINITY GLASS INT'L
6"8 FLUSH-GLAZED

PART OR ASSEMBLY: FRAME ANCHORING

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

DATE: 8/29/05
SCALE: N.T.S.
DWG. BY: WH
CHK. BY: LFS
DRAWING NO.: TX-601
SHEET 5 OF 11



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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

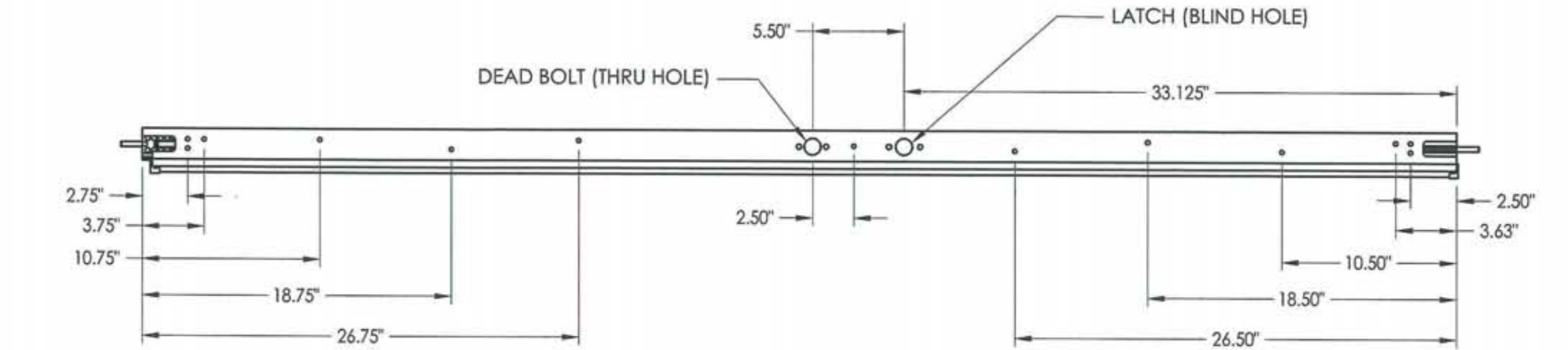
PRODUCT: TRINITY GLASS INT'L
6 8 FLUSH-GLAZED

PART OR ASSEMBLY: COMPONENTS

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

DATE: 8/29/05
SCALE: N.T.S.
DWG. BY: WH
CHK. BY: LFS
DRAWING NO.: TX-601
SHEET 6 of 11

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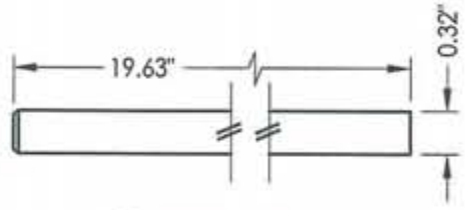


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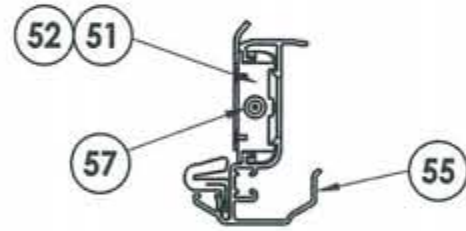
BOTTOM

A-A

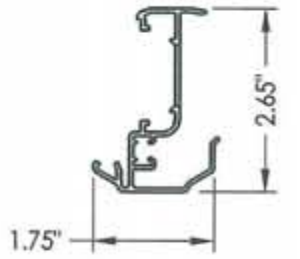
6'8 ALUMINUM ASTRAGAL ASSEMBLY
By Endura Products



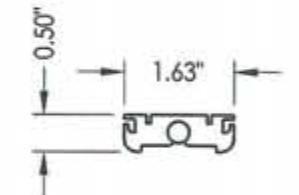
57 SLIDE BOLT ROD
MATL: Steel



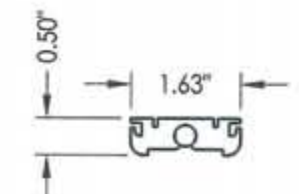
VIEW A-A
Aluminum Astragal Assembly



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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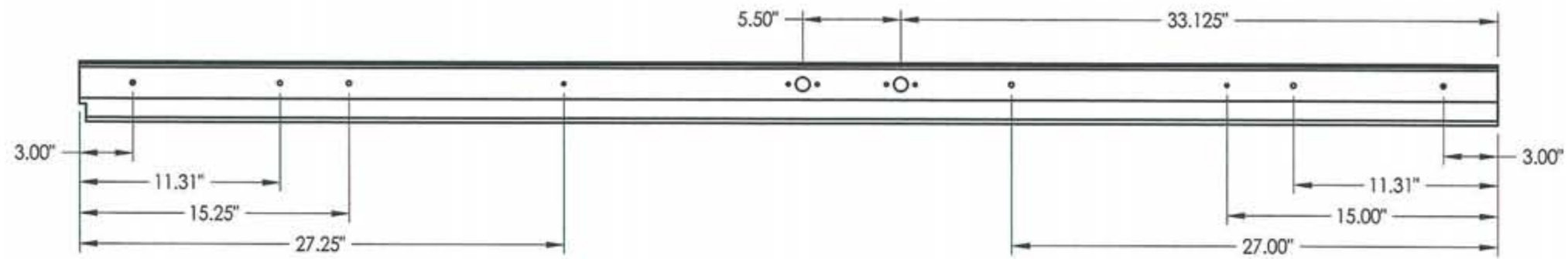
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.859.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	TRINITY GLASS INT'L 6'8 FLUSH-GLAZED
PART OR ASSEMBLY:	ENDURA ASTRAGAL DETAILS

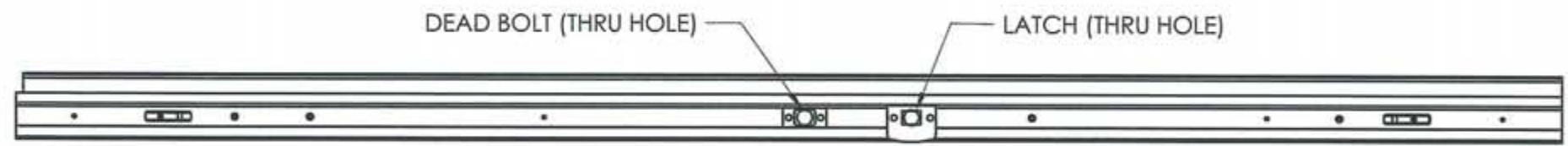
NO.	DATE	REVISIONS
2	7/27/09	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	REVISED LOCKSET NOMENCLATURE
		AL
		EW
		BY

DATE:	8/29/05
SCALE:	N.T.S.
DWG. BY:	WH
CHK. BY:	LFS
DRAWING NO.:	TX-601
SHEET	7 OF 11

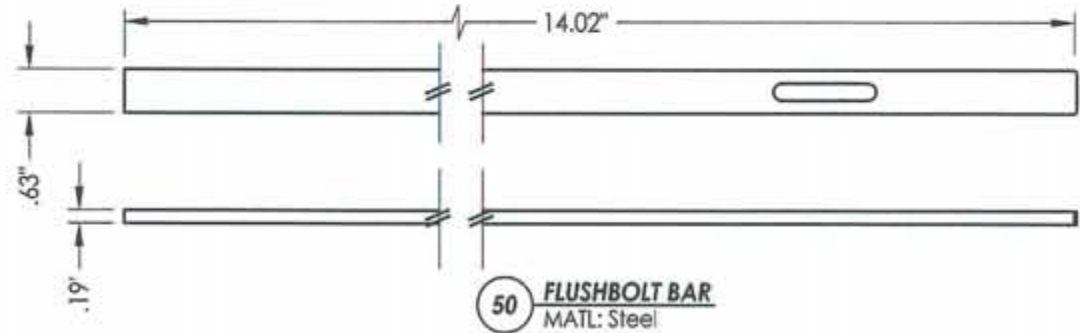
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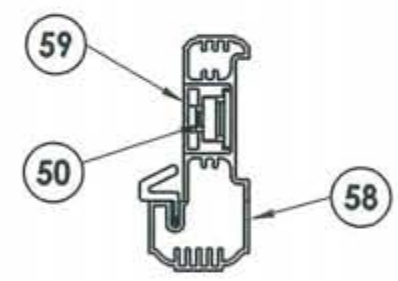
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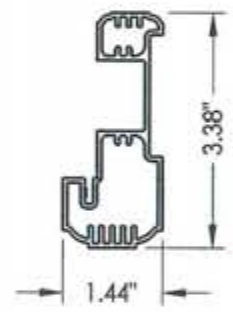
6'8 ALUMINUM ASTRAGAL ASSEMBLY
By Trinity



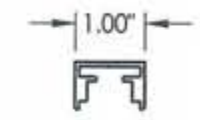
50 FLUSHBOLT BAR
MATL: Steel



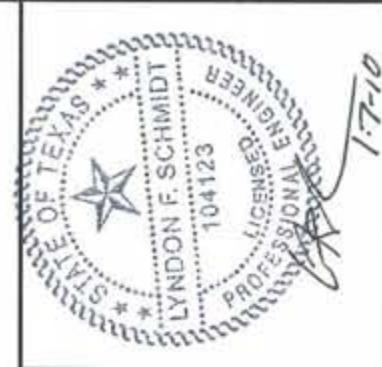
VIEW B-B
Aluminum Astragal Assembly



58 TRC ALUMINUM ASTRAGAL
By Trinity



59 TRC ASTRAGAL CHANNEL
By Trinity



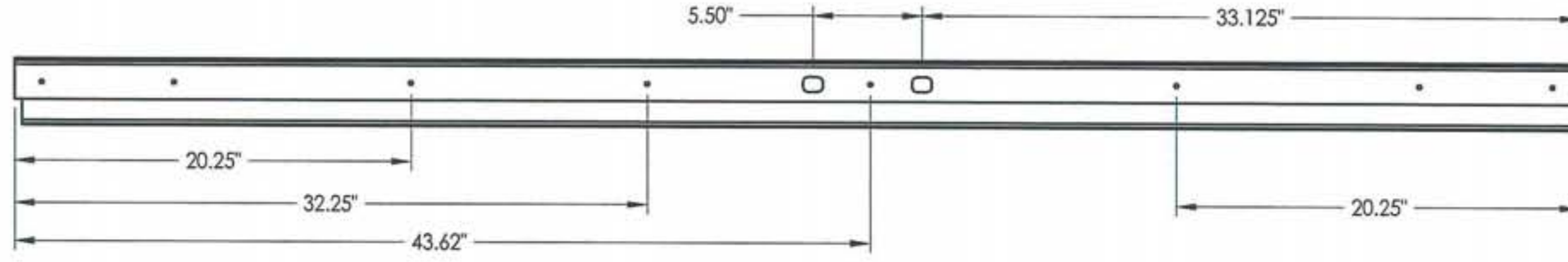
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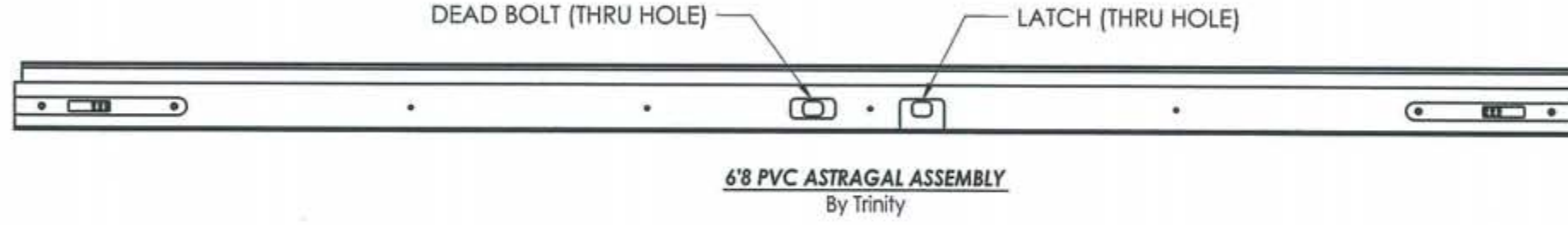
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:		TRINITY GLASS INT'L 6'8 FLUSH-GLAZED	
PART OR ASSEMBLY:		TRC ASTRAGAL DETAILS	
NO.	DATE	REVISIONS	
2	7/27/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW
			BY
DATE:		8/29/05	
SCALE:		N.T.S.	
DWG. BY:		WH	
CHK. BY:		LFS	
DRAWING NO.:		TX-601	
SHEET		8 of 11	

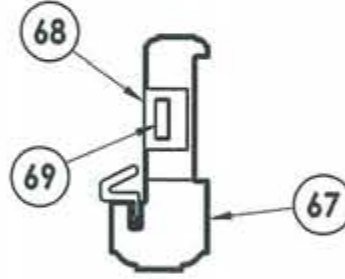
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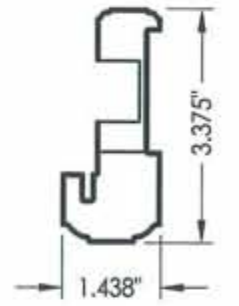
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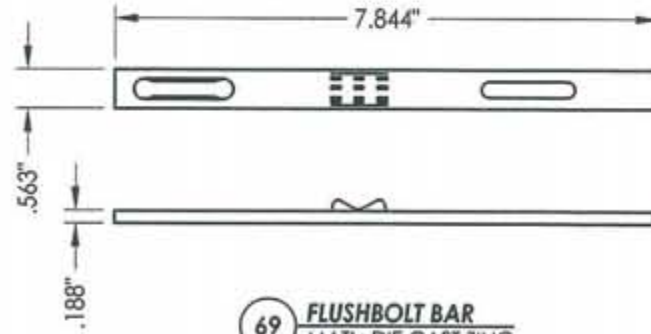
C-C



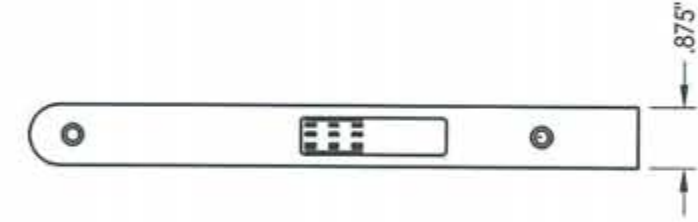
VIEW C-C
PVC ASTRAGAL ASSEMBLY



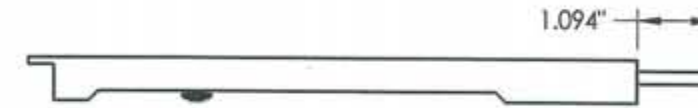
67 PVC ASTRAGAL
BY Trinity



69 FLUSHBOLT BAR
MATL: DIE CAST ZINC



68 FLUSHBOLT
MATL: 8.75" DIE CAST ZINC



1-7-10

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TRINITY GLASS INT'L
6'8 FLUSH-GLAZED

PART OR ASSEMBLY:
PVC ASTRAGAL DETAILS

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

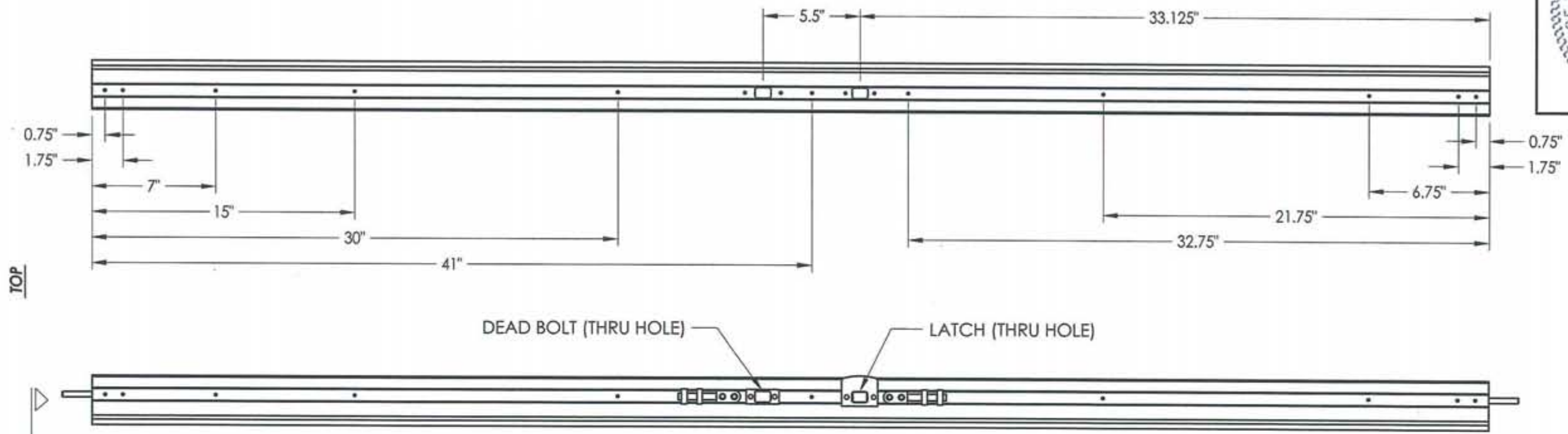
DATE: 8/29/05
SCALE: N.T.S.
DWG. BY: WH
CHK. BY: LFS
DRAWING NO.: TX-601
SHEET 9 of 11



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
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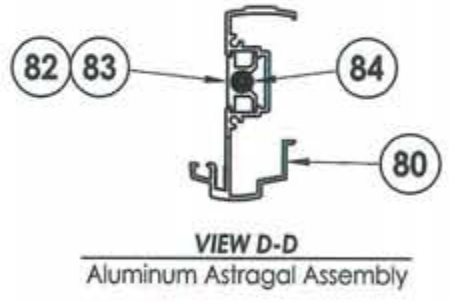


DEAD BOLT (THRU HOLE) LATCH (THRU HOLE)

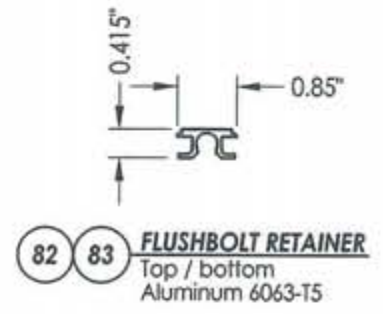
6'8 ALUMINUM ASTRAGAL ASSEMBLY
By Columbia



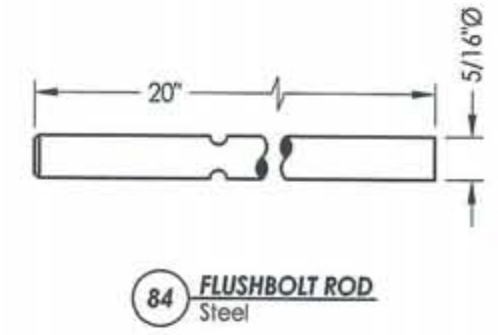
80 ALUMINUM ASTRAGAL
By Columbia



VIEW D-D
Aluminum Astragal Assembly



82 83 FLUSHBOLT RETAINER
Top / bottom
Aluminum 6063-T5



84 FLUSHBOLT ROD
Steel

PRODUCT: TRINITY GLASS INT'L
6'8 FLUSH-GLAZED

PART OR ASSEMBLY:
COLUMBIA ASTRAGAL DETAILS

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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	#10 X 3" PFH WS	STEEL
K	#9 X 2" PFH WS	STEEL
L	#8 X 2-1/2" 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
2	STRIKE 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
35	LITE FRAME	PC/ASA
36	GLAZING COMPOUND	SILICONE
39	FIBERGLASS SKIN 0.079" MIN. THICKNESS (Fy = 5,203 PSI MIN.)	FIBERGLASS
40	#8 X 1-1/8" SELF THREDDING SCREW	STEEL
41	POLYPROPYLENE & ALUMINUM COMBINATION GLAZING SPACER	POLY./ALUM.
42	ALUMINUM & BUTYL SPACER SYSTEM	ALUM./BUTYL
43	PVC & ALUMINUM SPACER SYSTEM	PVC/ ALUM.
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" PFH SMS	STEEL
54	ASTRAGAL STRIKE @ HEAD	STEEL
55	ASTRAGAL BY ENDURA PRODUCT	ALUMINUM
56	ASTRAGAL STRIKE @ SILL	STEEL
57	SLIDE BOLT ROD	STEEL



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BILL OF MATERIALS

ITEM	DESCRIPTION	MATERIAL
58	ASTRAGAL BY TRC	ALUMINUM
59	ASTRAGAL CHANNEL BY TRC	ALUMINUM
67	PVC ASTRAGAL BY TRC	PVC
68	ASTRAGAL CHANNEL BY TRC	DIE CAST ZINC
69	#8 x 2" PFH SCREW	DIE CAST ZINC
80	EXTRUDED ALUMINUM ASTRAGAL BY COLUMBIA ALUM. PROD.	ALUMINUM
81	#8 X 2-1/2" PFH WS	STEEL
82	TOP FLUSHBOLT RETAINER 6063-T5	ALUM. /STEEL
83	BOTTOM FLUSHBOLT RETAINER 6063-T5	ALUM. /STEEL
84	5/16"Ø X 20" LONG FLUSHBOLT ROD	STEEL

CONCRETE ANCHOR NOTES:

1. Substitution of equal concrete anchors from a different supplier may have different edge distance and center distance requirements.
2. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints. If 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" dimensions are not exceeded.
3. Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW	3/16"	1-3/4"	2-5/8"	2-1/4"
ELCO	3/16"	1-3/4"	1"	3"

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