

6'0 X 6'8
OPAQUE PREMIUM FIBERGLASS
DOUBLE DOOR

IN SWING / OUT SWING
"IMPACT"

EVALUATED FOR USE IN THE STATE OF TEXAS

The Trinity Opaque Premium Fiberglass 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 wind borne debris regions, the opaque door panel complies with Sections R301.2.1.2 of the IRC and 1609.1.2 of the IRC as an impact resistant product and does not require the use of an approved impact resistant covering. This product does not meet the requirements for enhanced protection of essential facilities as defined in ASTM E1996.
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, ASTM E1886-02 and ASTM E1996-02 as performed by Testing Evaluation Laboratories, Inc. and reported in test report numbers TEL 08-01370020-A, TEL 08-01370020 and TEL 05-0411-3, 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.

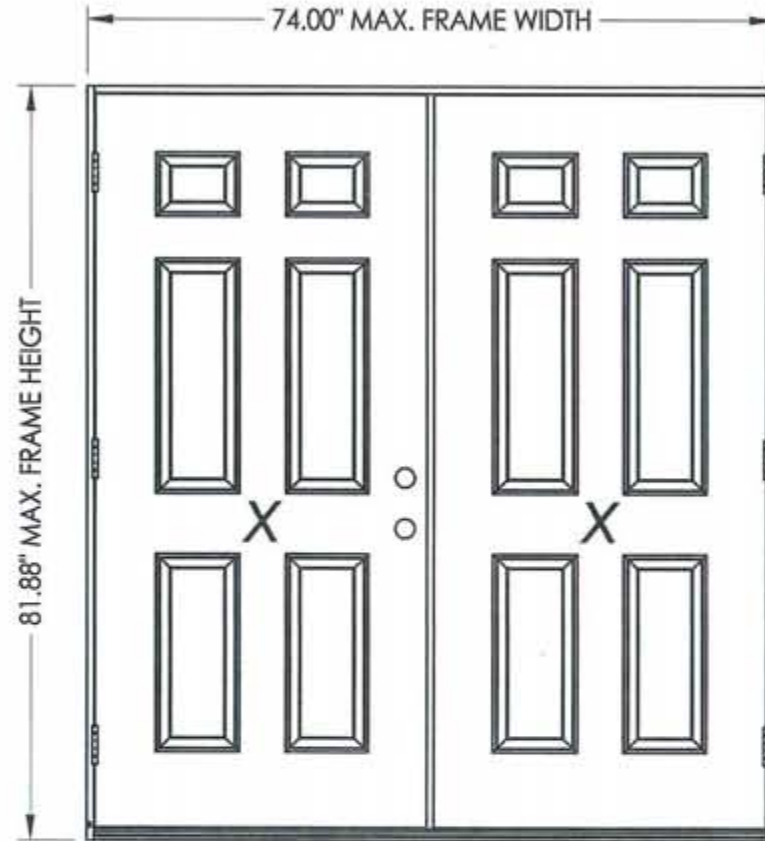


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ASTRAGAL TYPE	SWING	MAX. FRAME DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
ENDURA	IN SWING	74.00" x 81.88"	G1	+55.0	-55.0
TRC		74.00" x 81.88"		+55.0	-55.0
PVC		74.00" x 81.88"		+43.0	-47.0
COLUMBIA		74.00" x 81.88"		+55.0	-55.0
ENDURA	OUT SWING	74.00" x 80.75"	G1	+55.0	-55.0
TRC		74.00" x 80.75"		+55.0	-55.0
PVC		74.00" x 80.75"		+43.0	-43.0
COLUMBIA		74.00" x 80.75"		+55.0	-55.0

Refer to Table (sheet 4) for Passage Lock Rating Limitations



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

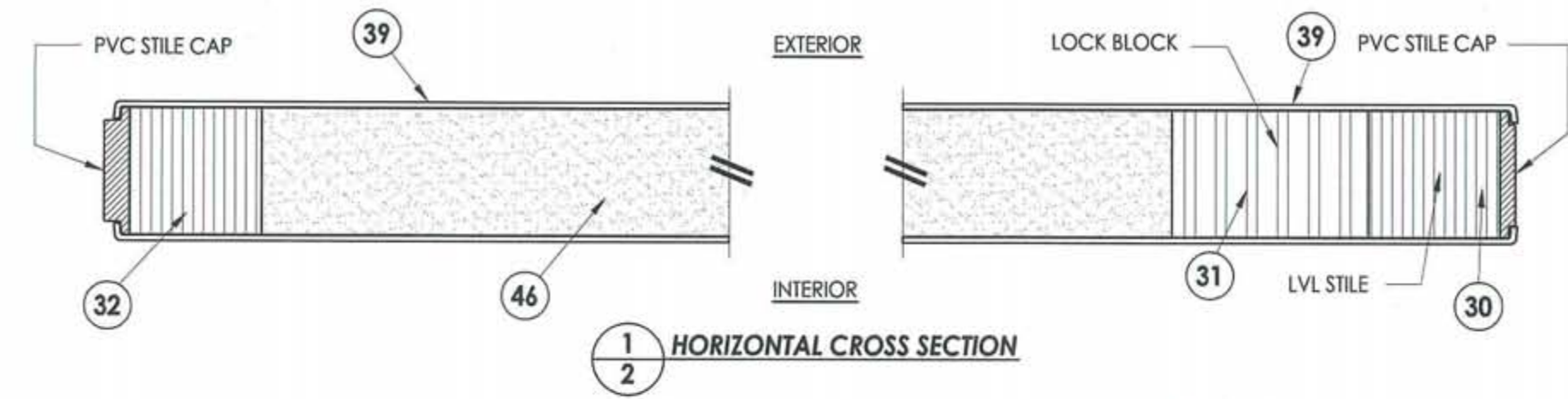
PRODUCT: TRINITY GLASS INT'L
6'8 PREMIUM OPAQUE

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

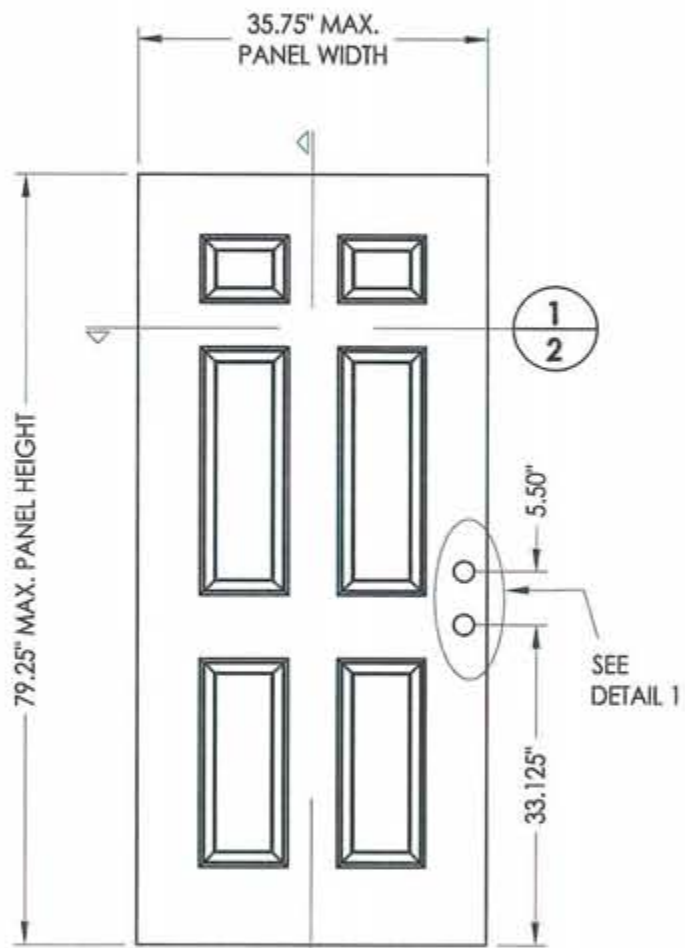
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1	6/28/06	REVISED LOCKSET NOMENCLATURE
		EW
		BY

DATE: 8/24/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-585
SHEET 1 OF 11

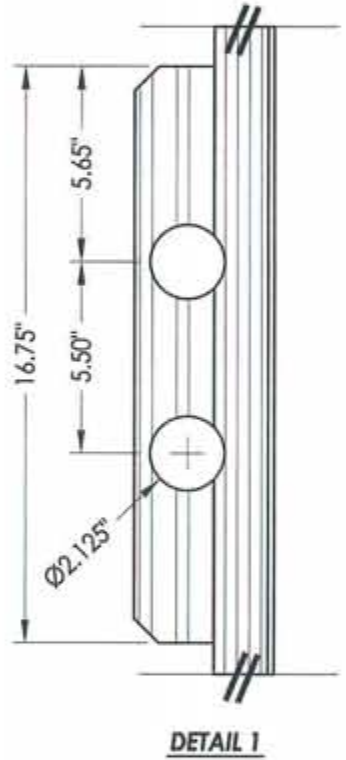
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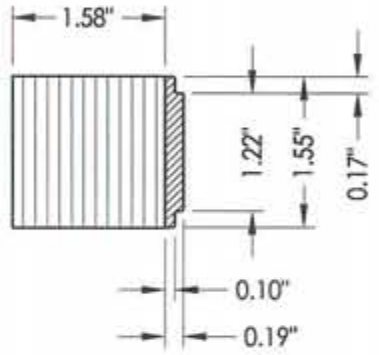
1
2 HORIZONTAL CROSS SECTION



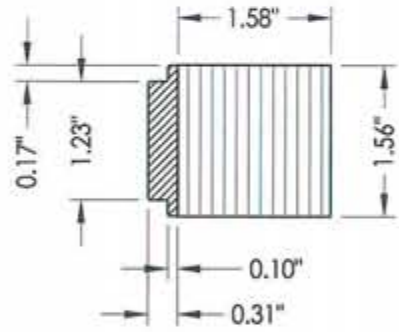
7 PREMIUM OPAQUE DOOR "IMPACT"



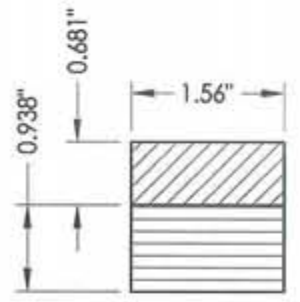
DETAIL 1



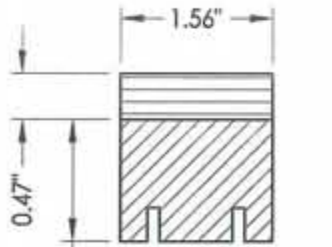
30 LATCH STILE



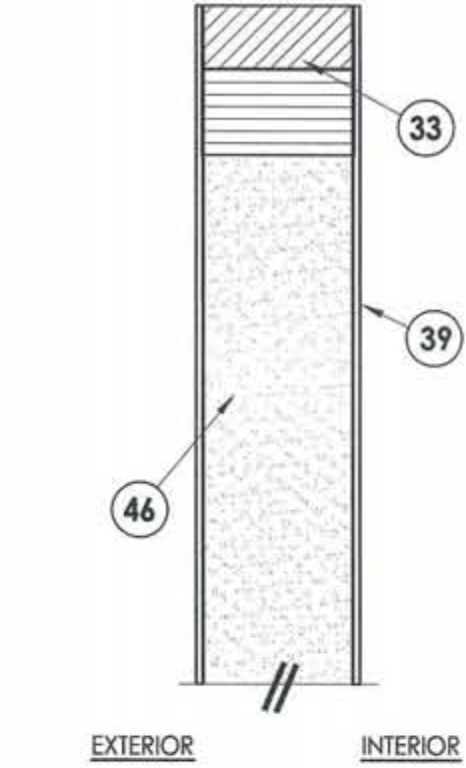
32 HINGE STILE



33 TOP RAIL



34 BOTTOM RAIL



2
2 VERTICAL CROSS SECTION



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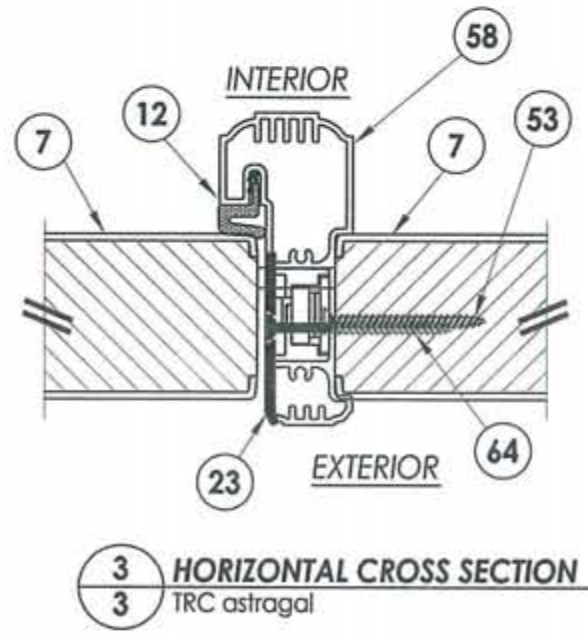
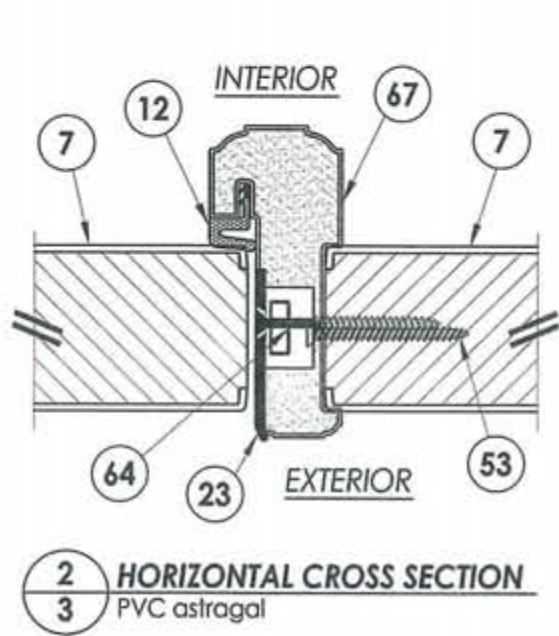
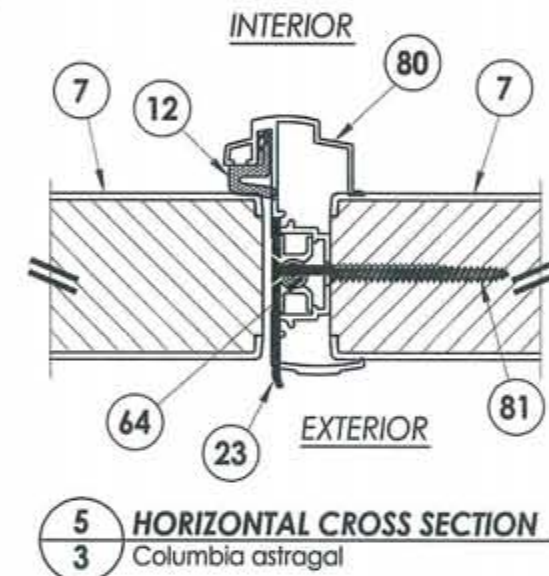
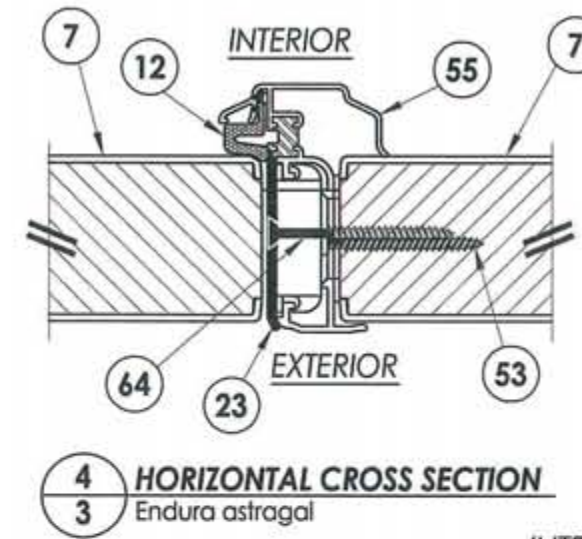
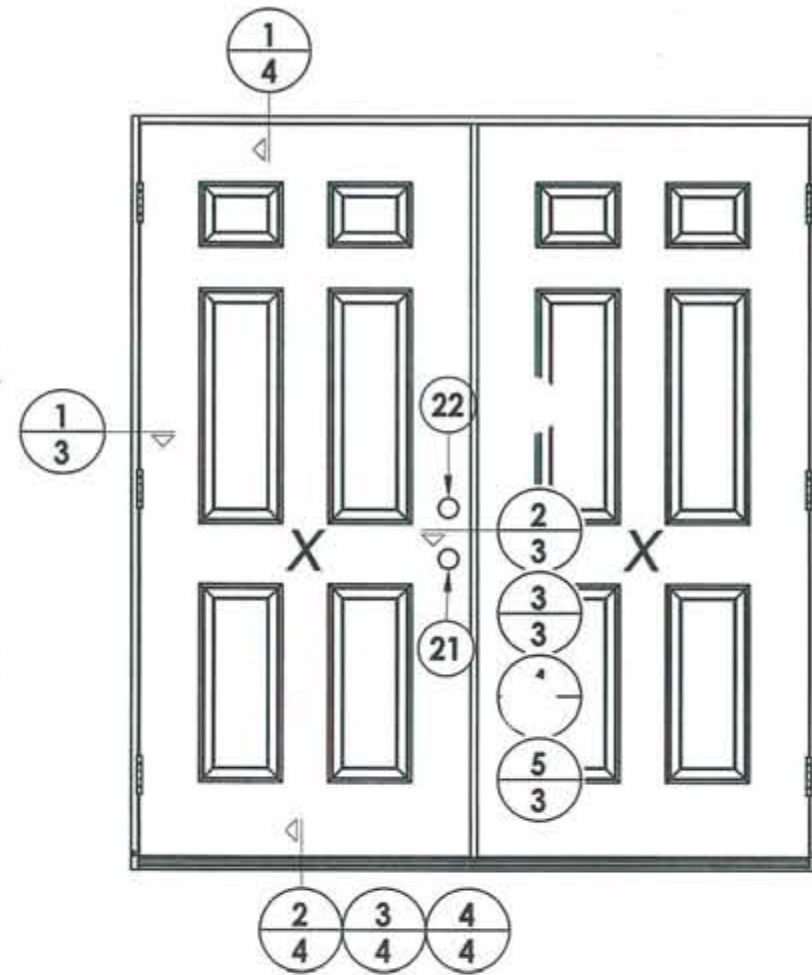
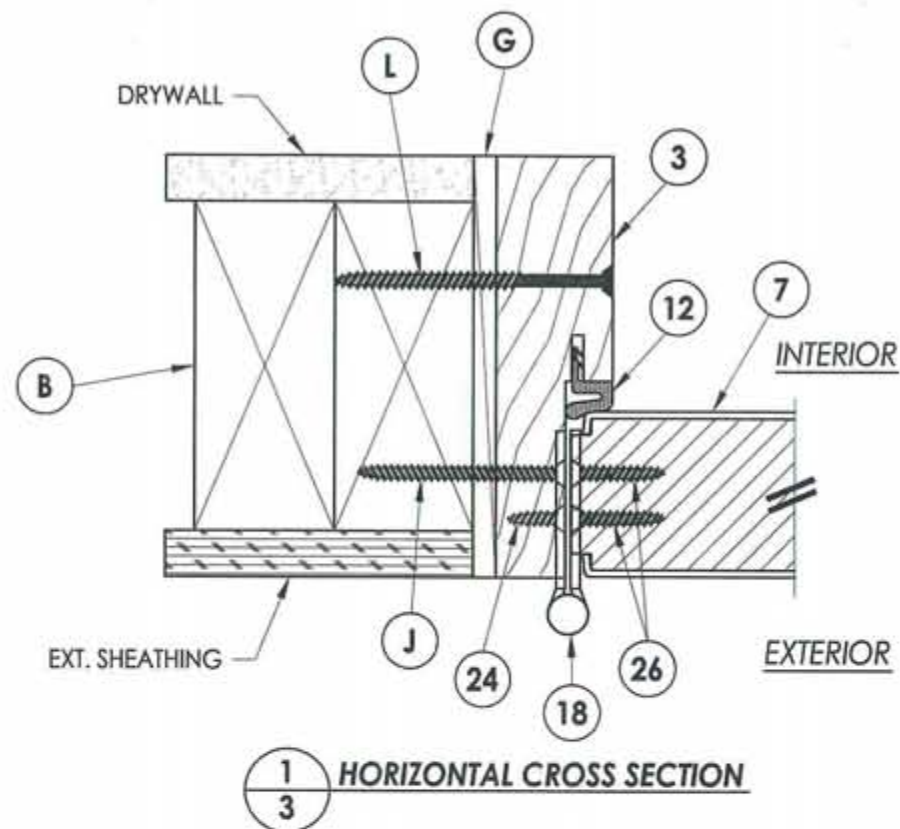
PRODUCT: TRINITY GLASS INT'L
6'8 PREMIUM OPAQUE

PART OR ASSEMBLY:
DOOR PANEL
CONSTRUCTION DETAILS

NO.	DATE	BY	REVISIONS
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-585
SHEET 2 OF 11

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LOCK & DEADBOLT RATINGS CHART				
MANUFACTURER	MODEL	ITEM #	MAX. DESIGN PRESSURE (PSF)	
			POSITIVE	NEGATIVE
KWIKSET	LOCK: 740	21	+55.0	-55.0
	DEADBOLT: 780	22		
KWIKSET	LOCK: COMBO 660	21	+55.0	-55.0
	DEADBOLT: COMBO 660	22		
SCHLAGE	LOCK: MAX. SECURITY	21	+55.0	-55.0
	DEADBOLT: MAX. SECURITY	22		



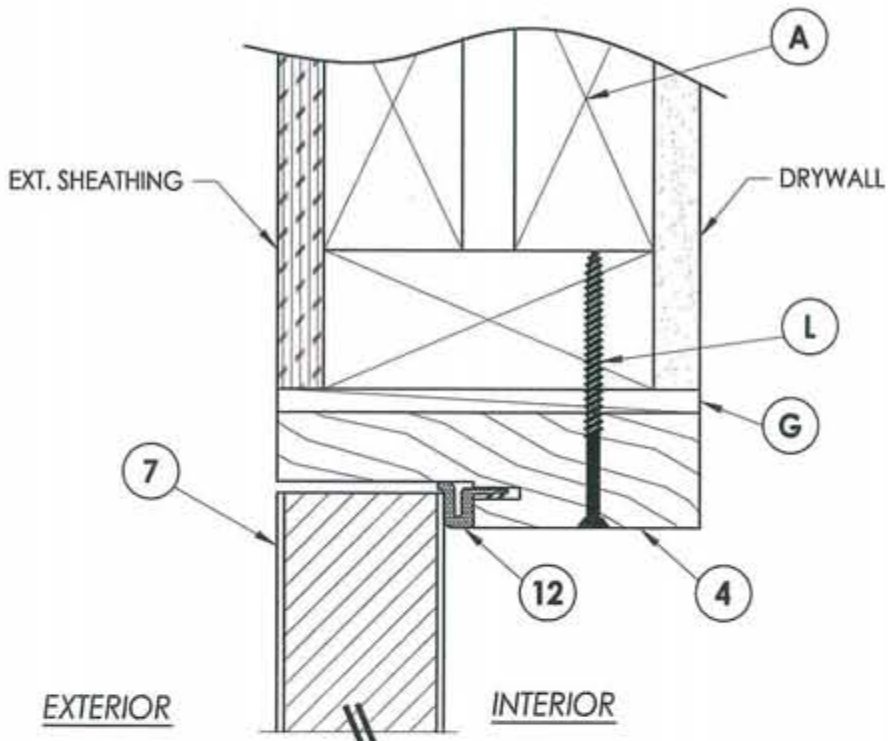
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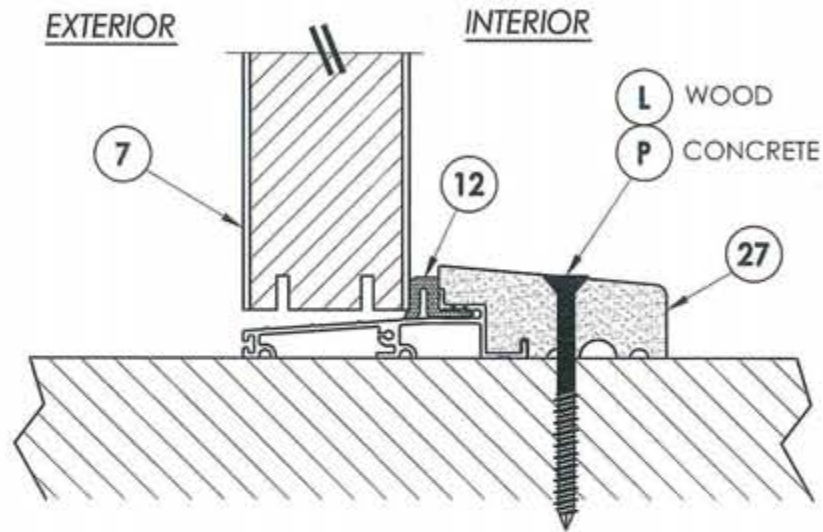
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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	TRINITY GLASS INT'L 6'8 PREMIUM OPAQUE
PART OR ASSEMBLY:	HORIZONTAL CROSS SECTIONS
DATE:	8/24/05
SCALE:	N.T.S.
DWG. BY:	EW
CHK. BY:	LFS
DRAWING NO.:	TX-585
SHEET	3 OF 11

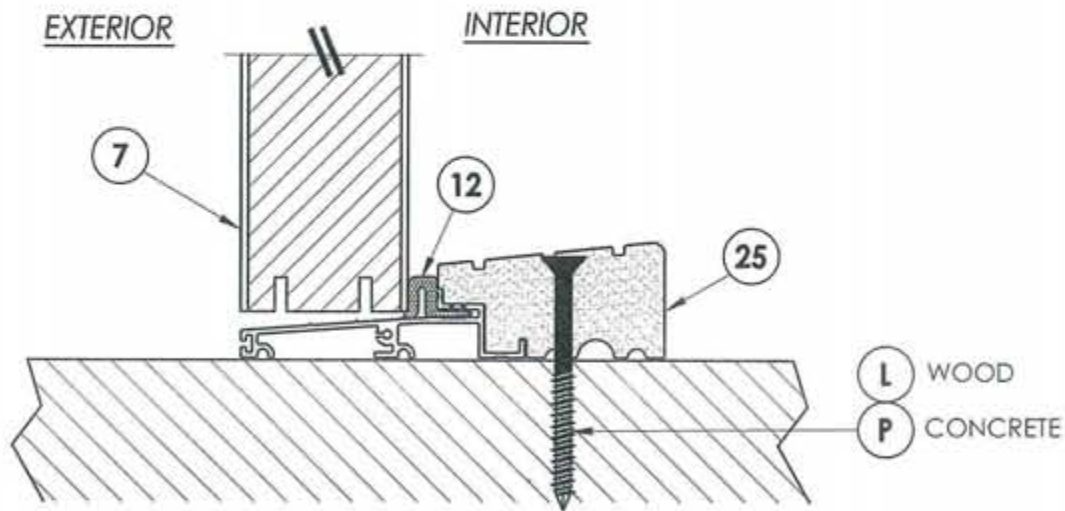
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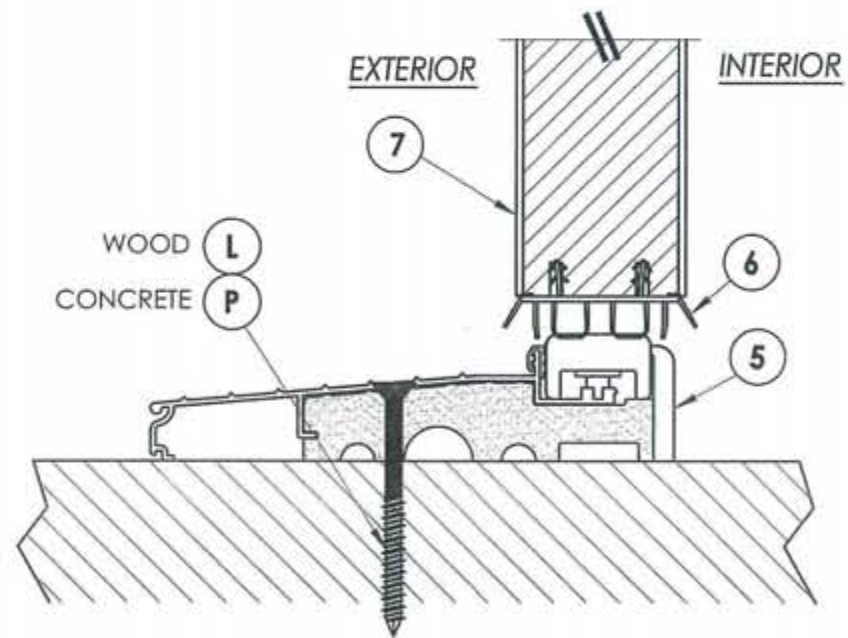
1 VERTICAL CROSS SECTION
4 Outswing shown
 Inswing also approved



2 VERTICAL CROSS SECTION
4 Outswing configuration



3 VERTICAL CROSS SECTION
4 Outswing configuration



4 VERTICAL CROSS SECTION
4 Inswing configuration



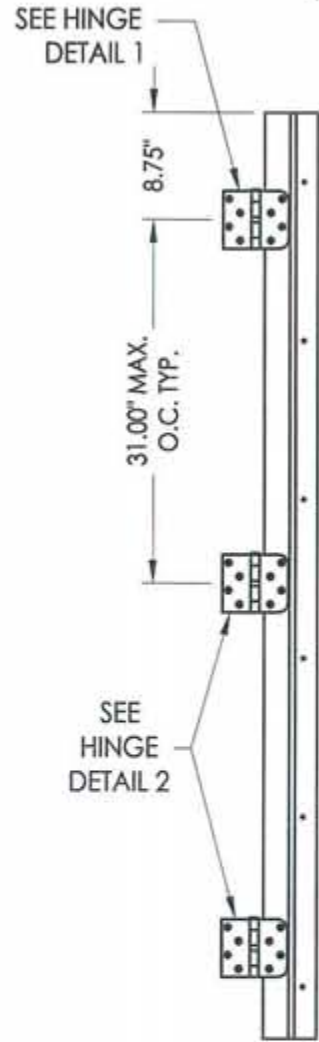
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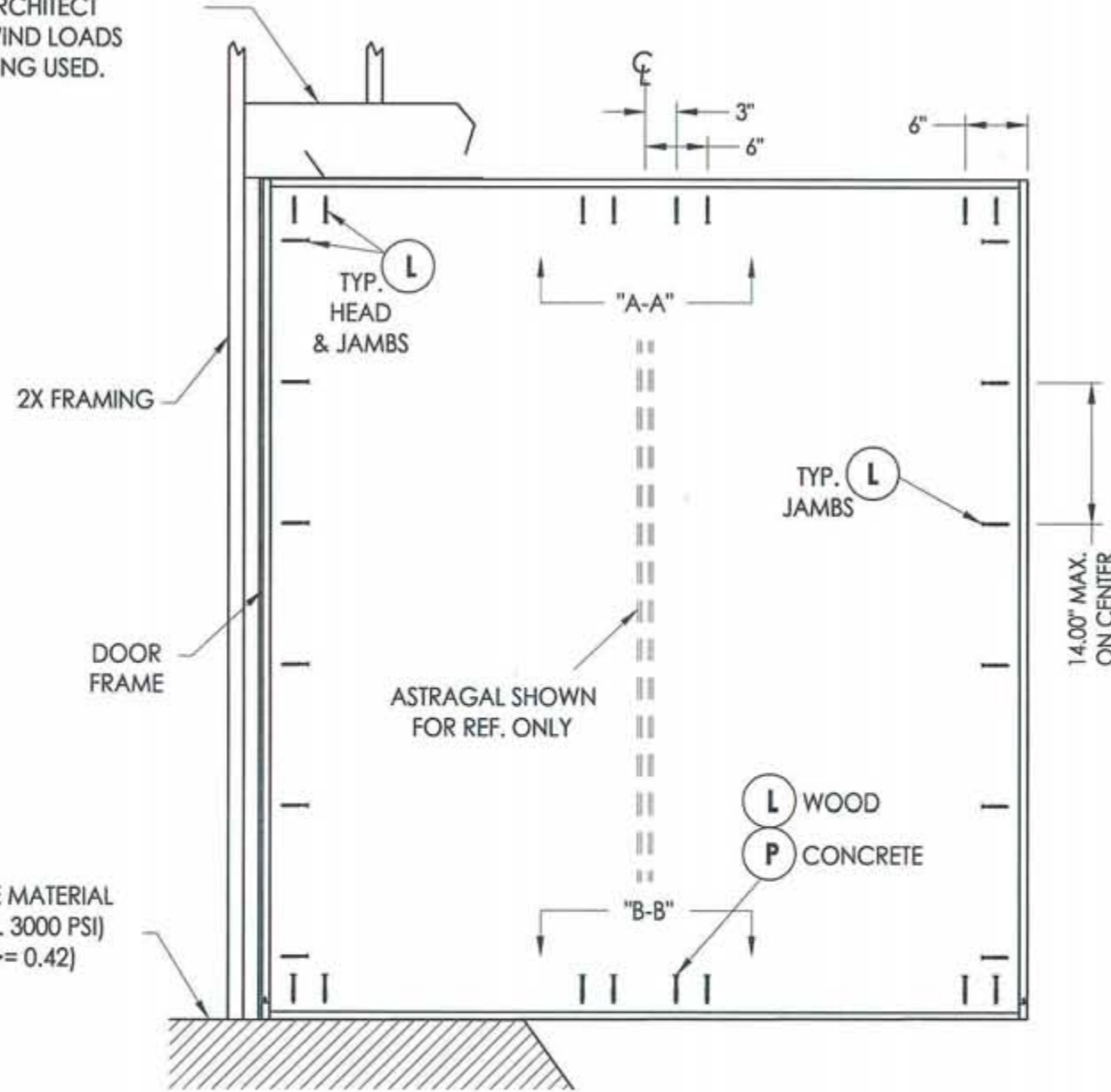
TEXAS BOARD OF PROFESSIONAL ENGINEERS
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PRODUCT:		TRINITY GLASS INT'L 6-8 PREMIUM OPAQUE	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
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1	6/28/06	EW	REVISED LOCKSET NOMENCLATURE
DATE: 8/24/05			
SCALE: N.T.S.			
DWG. BY: EW			
CHK. BY: LFS			
DRAWING NO.: TX-585			
SHEET 4 OF 11			

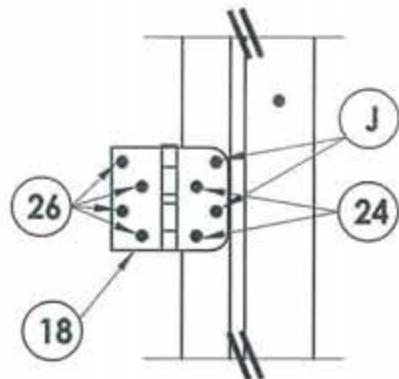
2X FRAMING TO BE DESIGNED BY THE ENGINEER OR ARCHITECT OF RECORD BASED ON WIND LOADS AND THE CLADDING BEING USED.



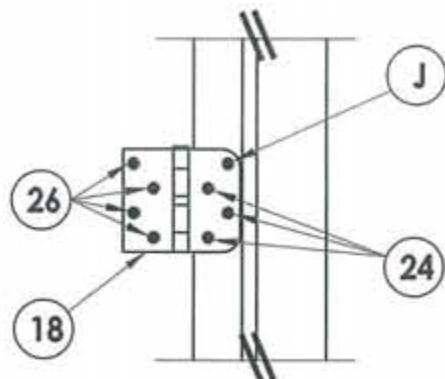
HINGE JAMB



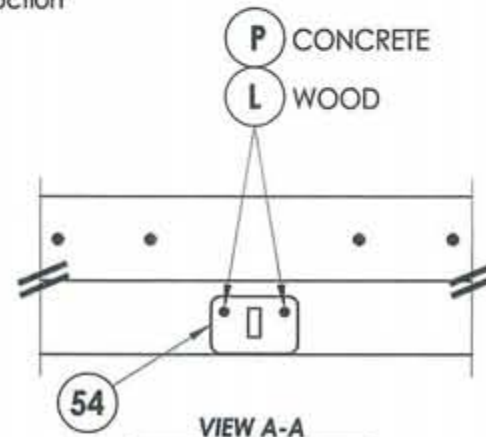
FRAME ANCHORING
Stud construction



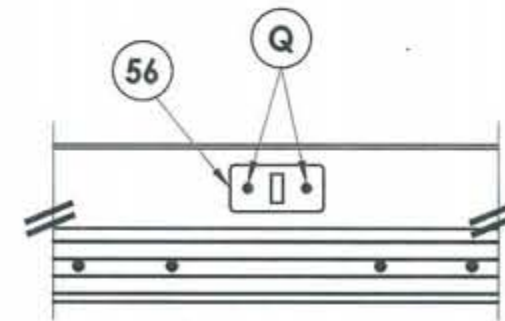
HINGE DETAIL 1



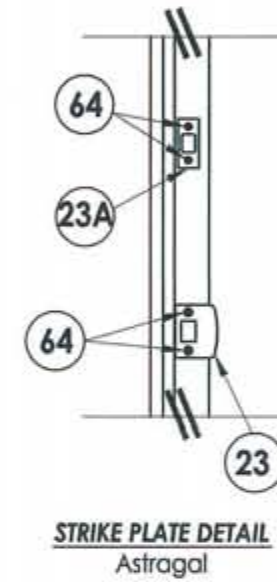
HINGE DETAIL 2



VIEW A-A
Astragal strike @ head



VIEW B-B
Astragal strike @ sill



STRIKE PLATE DETAIL
Astragal

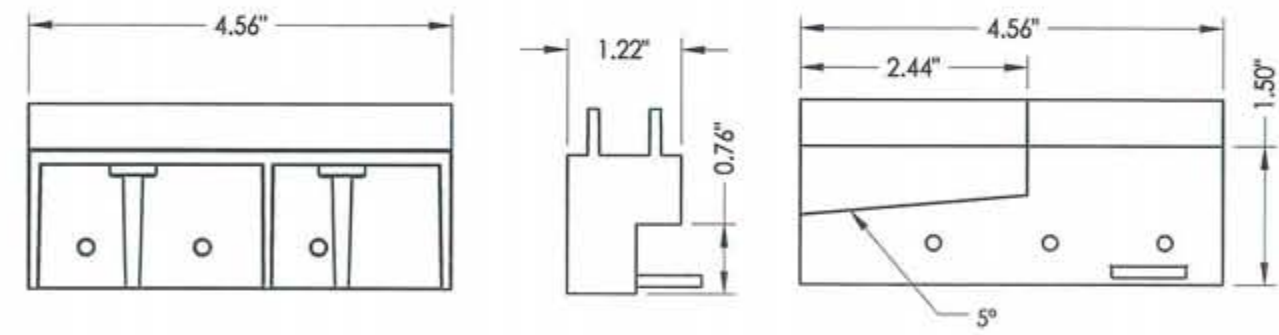
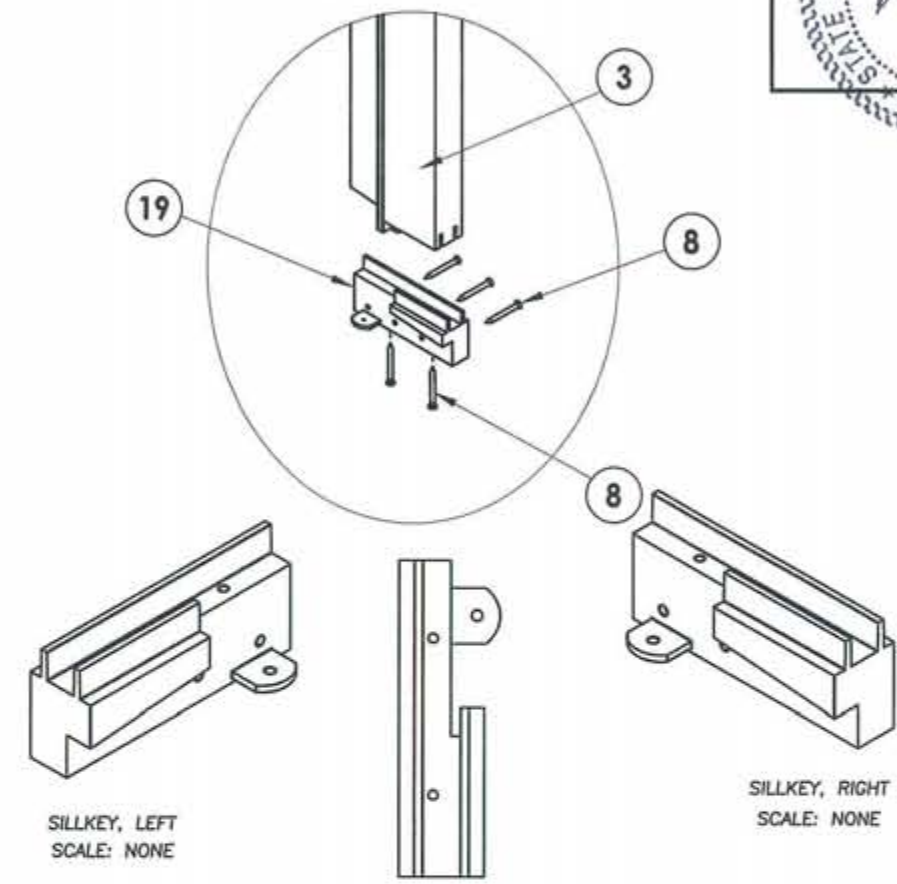
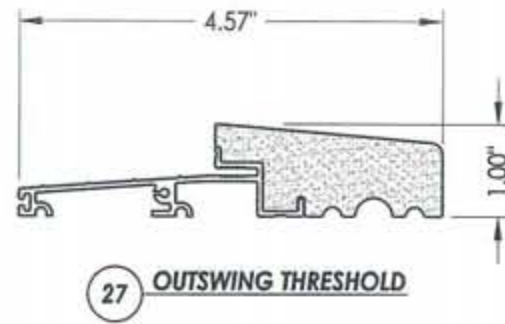
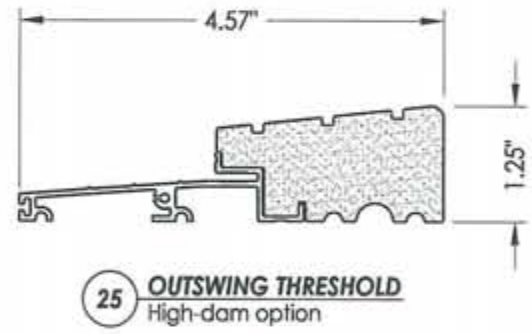
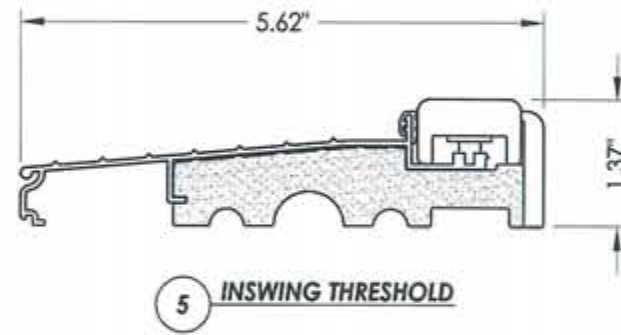
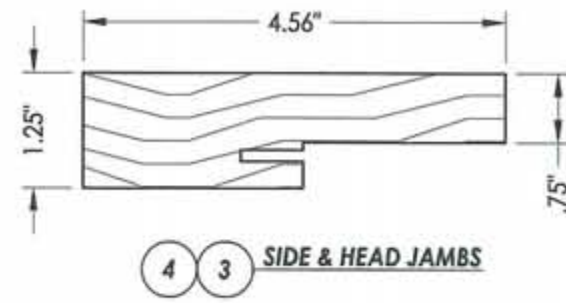
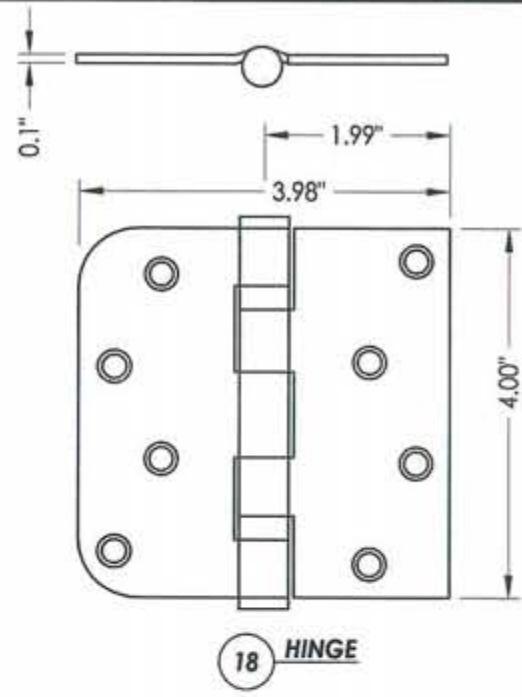


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PRODUCT:		TRINITY GLASS INT'L 6"8 PREMIUM OPAQUE	
PART OR ASSEMBLY:		FRAME ANCHORING	
NO.	DATE	BY	REVISIONS
2	7/27/09	AL	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	EW	REVISED LOCKSET NOMENCLATURE
DATE:		8/24/05	
SCALE:		N.T.S.	
DWG. BY:		EW	
CHK. BY:		LFS	
DRAWING NO.:		TX-585	
SHEET		5 OF 11	



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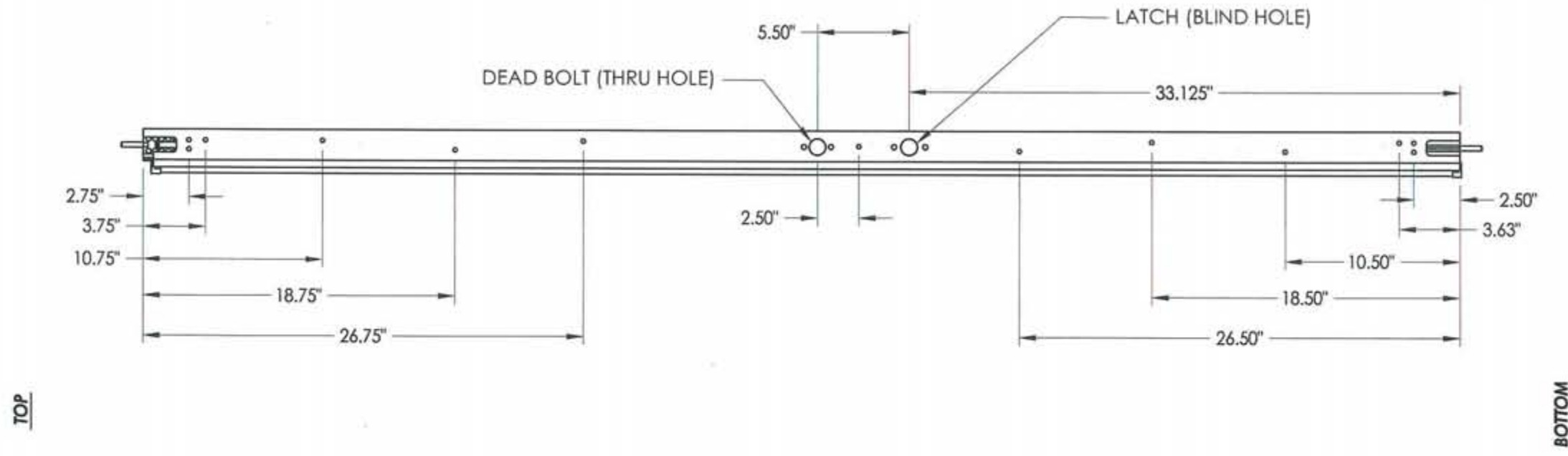
PRODUCT: TRINITY GLASS INT'L
6'8 PREMIUM OPAQUE

PART OR ASSEMBLY:
COMPONENTS

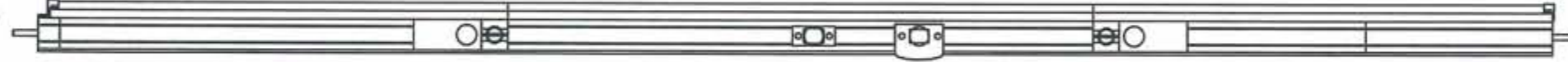
NO.	DATE	BY	REVISIONS
2	7/27/09	AL	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	EW	REVISED LOCKSET NOMENCLATURE

DATE: 8/24/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-585
SHEET 6 OF 11

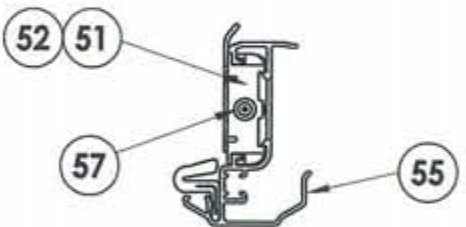
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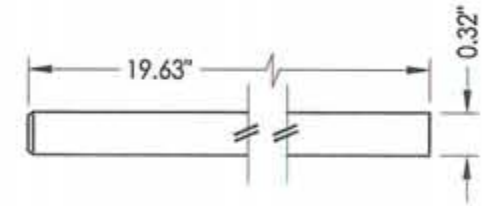
A-A



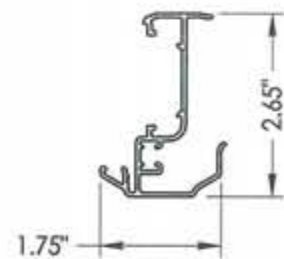
6'8 ALUMINUM ASTRAGAL ASSEMBLY
By Endura Products



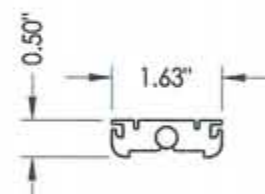
VIEW A-A
Aluminum Astragal Assembly



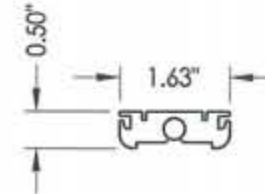
57 SLIDE BOLT ROD
MATL: Steel



55 ALUMINUM ASTRAGAL
By Endura Products



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



51 TOP BOLT RETAINER
MATL: 4-3/4\"/>



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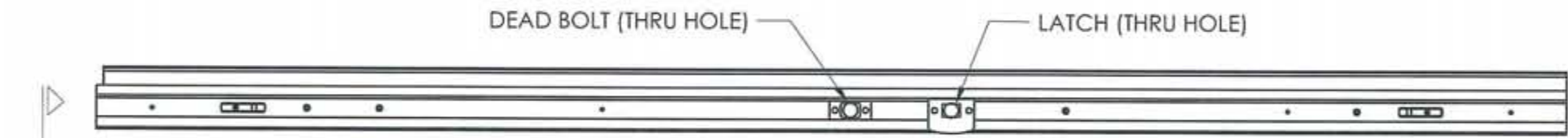
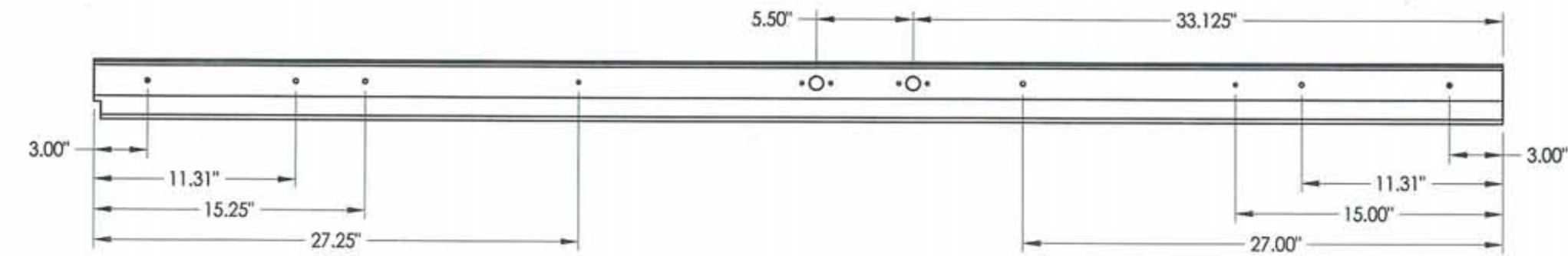
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PRODUCT: TRINITY GLASS INT'L
6'8 PREMIUM OPAQUE

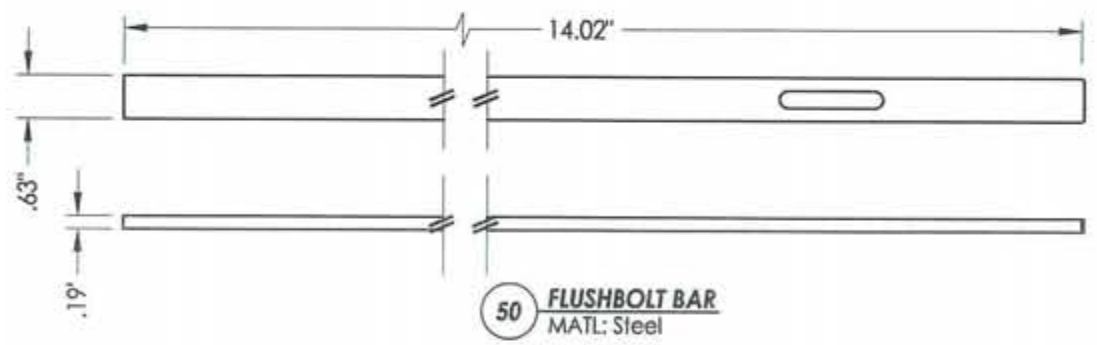
PART OR ASSEMBLY:
ENDURA ASTRAGAL DETAILS

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

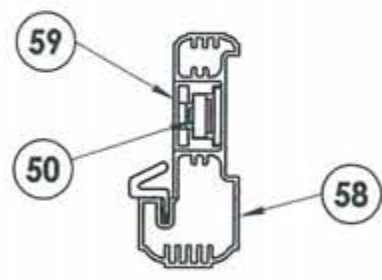
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SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-585
SHEET 7 OF 11



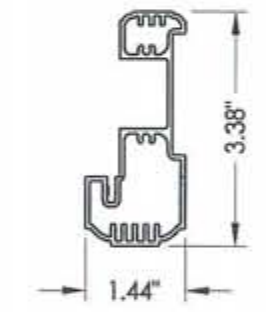
6'8 ALUMINUM ASTRAGAL ASSEMBLY
By Trinity



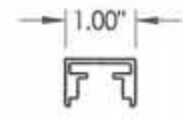
50 FLUSHBOLT BAR
MATL: Steel



VIEW B-B
Aluminum Astragal Assembly



58 TRC ALUMINUM ASTRAGAL
By Trinity



59 TRC ASTRAGAL CHANNEL
By Trinity



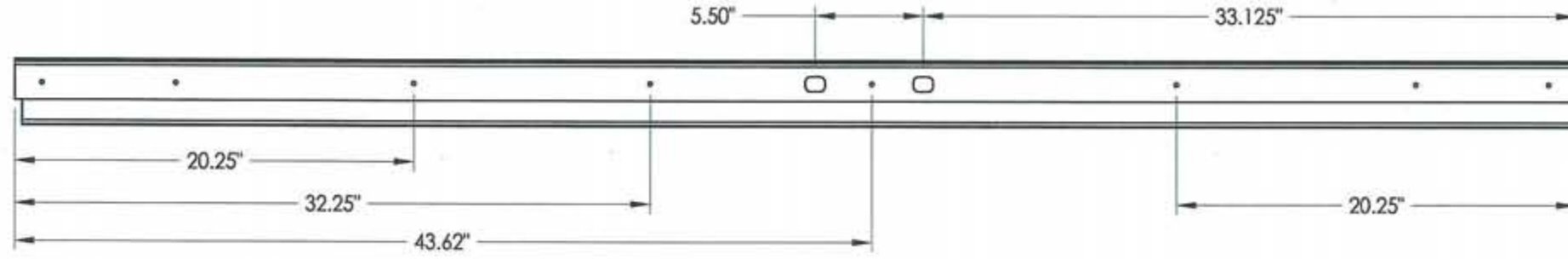
Documents Prepared By: Lyndon F. Schmidt, P.E.
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RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Veroico FL, 33595
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CERTIFICATE OF REGISTRATION # F-11852

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

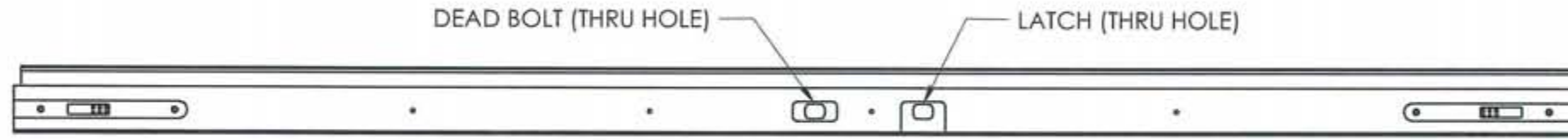
NO.	DATE	BY	REVISIONS
2	7/27/09	AL	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	EW	REVISED LOCKSET NOMENCLATURE

DATE:	8/24/05
SCALE:	N.T.S.
DWG. BY:	EW
CHK. BY:	LFS
DRAWING NO.:	TX-585
SHEET	8 OF 11

TOP

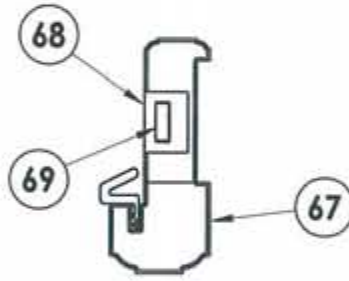


BOTTOM

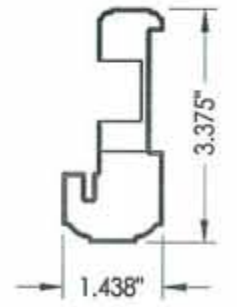


6'8 PVC ASTRAGAL ASSEMBLY
By Trinity

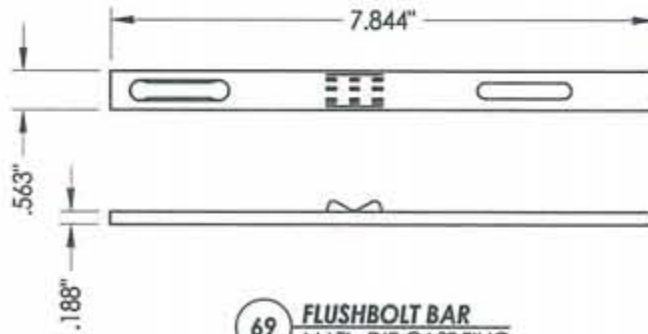
C-C



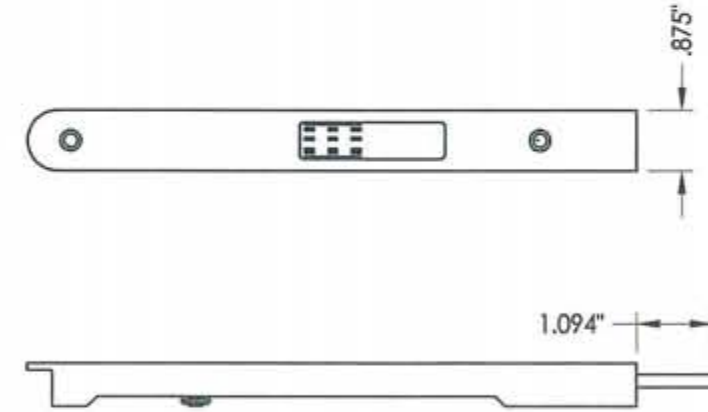
VIEW C-C
PVC ASTRAGAL ASSEMBLY



67 PVC ASTRAGAL
BY Trinity



69 FLUSHBOLT BAR
MATL: DIE CAST ZINC



68 FLUSHBOLT
MATL: 8.75" DIE CAST ZINC



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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 PREMIUM OPAQUE

PART OR ASSEMBLY:
PVC ASTRAGAL DETAILS

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

DATE: 8/24/05

SCALE: N.T.S.

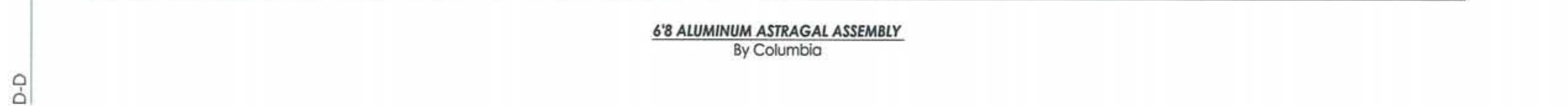
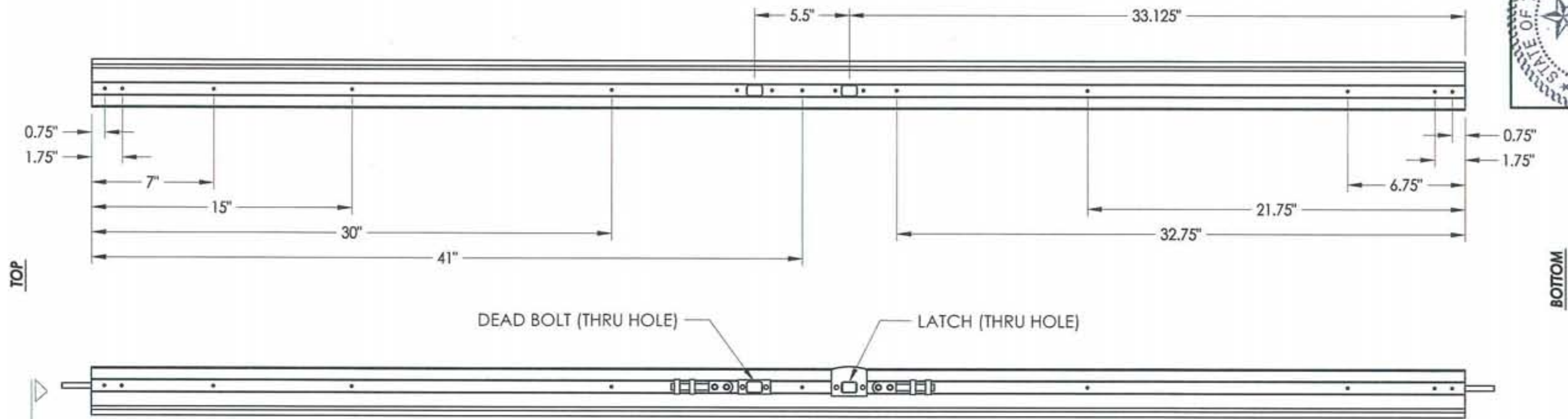
DWG. BY: EW

CHK. BY: LFS

DRAWING NO.:

TX-585

SHEET 9 of 11



TOP
D-D
BOTTOM

DEAD BOLT (THRU HOLE) LATCH (THRU HOLE)

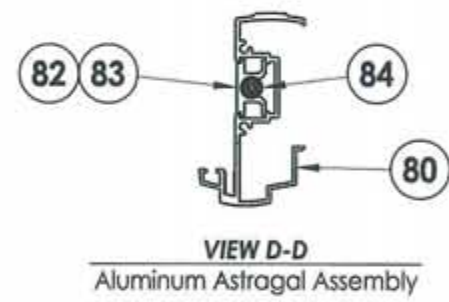
6'8 ALUMINUM ASTRAGAL ASSEMBLY
By Columbia



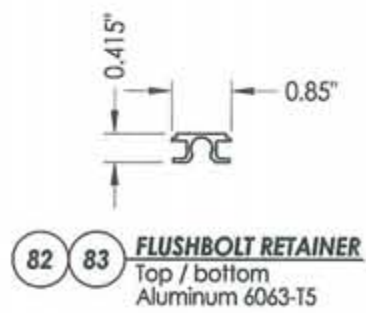
Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Veroico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
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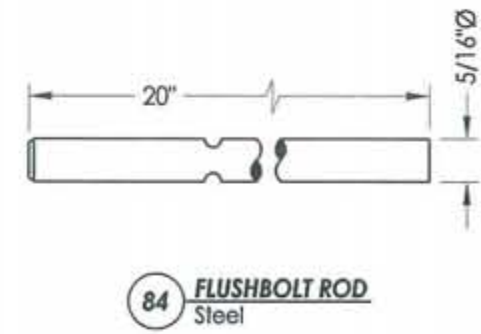
80 ALUMINUM ASTRAGAL
BY Columbia



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 PREMIUM OPAQUE	
PART OR ASSEMBLY:		COLUMBIA ASTRAGAL DETAILS	
NO.	DATE	BY	REVISIONS
2	7/27/09	AL	TDI PRODUCT EVALUATION UPDATE
1	6/28/06	EW	REVISED LOCKSET NOMENCLATURE

DATE: 8/24/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-585
SHEET 10 OF 11



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

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
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
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
58	TRINITY ASTRAGAL BY TRC	ALUMINUM
59	ASTRAGAL CHANNEL BY TRC	ALUMINUM
64	#8 x 2" PFH SCREW	STEEL
67	PVC ASTRAGAL BY TRC	PVC
68	FLUSHBOLT	DIE CAST ZINC
69	FLUSHBOLT BAR	DIE CAST ZINC

BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL
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"

PRODUCT:	TRINITY GLASS INT'L 6'8 PREMIUM OPAQUE
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DRAWING NO.:	TX-585
SHEET	11 of 11