Trinity Glass INTERNATIONAL

4621 192nd STREET EAST TACOMA, WA 98446

3'0 X 6'8 OPAQUE PREMIUM FIBERGLASS SINGLE DOOR

INSWING / OUTSWING "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 number TEL 08-01370020-A and TEL 05-0418-1, signed by Wendell W. Haney, P.E.
2. Calculations (Anchoring) 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
2	Door panel construction details
3	Horizontal cross sections
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6	Components
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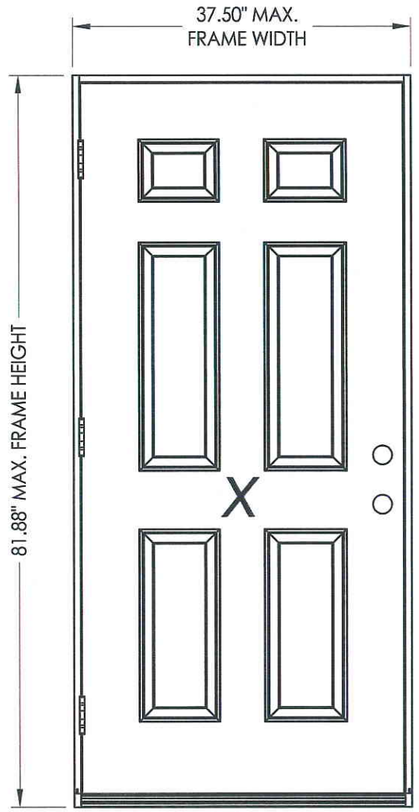

SWING	MAX. FRAME DIMENSION	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
INSWING	37.50" x 81.88"	+75.0	-75.0
OUTSWING	37.50" x 80.75"	+75.0	-75.0

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

STATE OF TEXAS * LYNDON F. SCHMIDT 104123 LICENSED PROFESSIONAL ENGINEER *

1-6-10

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

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

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

REVISIONS

NO.	DATE	BY
2	7/27/09	AL
1	6/28/06	EW

TDI PRODUCT EVALUATION UPDATE
REVISED LOCKSET NOMENCLATURE

DATE: 8/24/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-584
SHEET 1 OF 7

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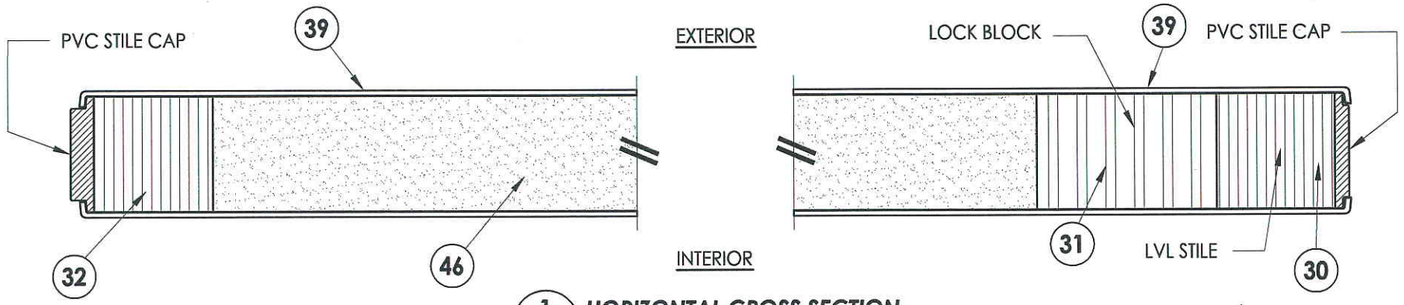
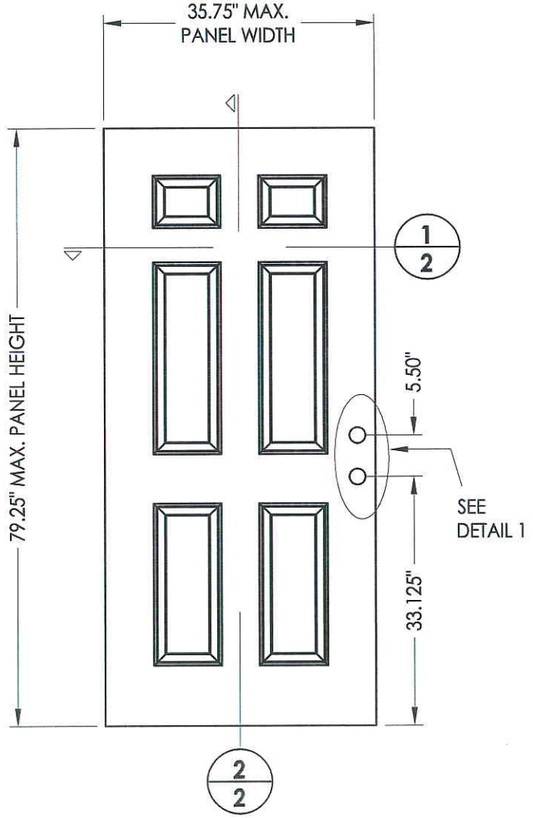
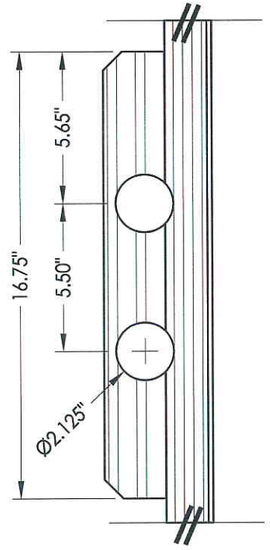


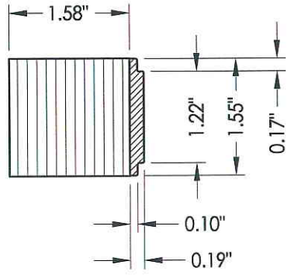
1/2 **HORIZONTAL CROSS SECTION**



7 **PREMIUM OPAQUE DOOR**
"IMPACT"



DETAIL 1



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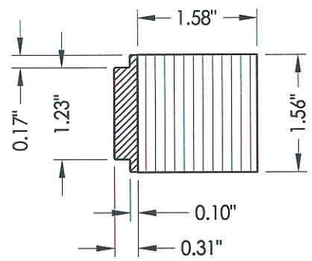
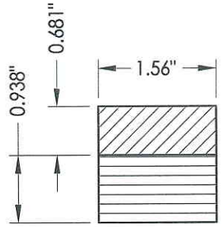
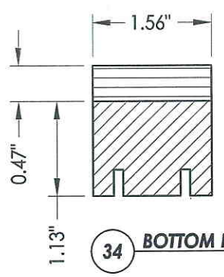


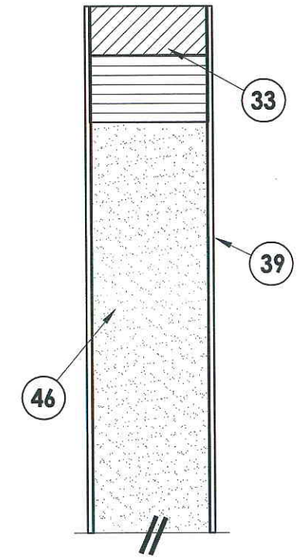
32 **HINGE STILE**

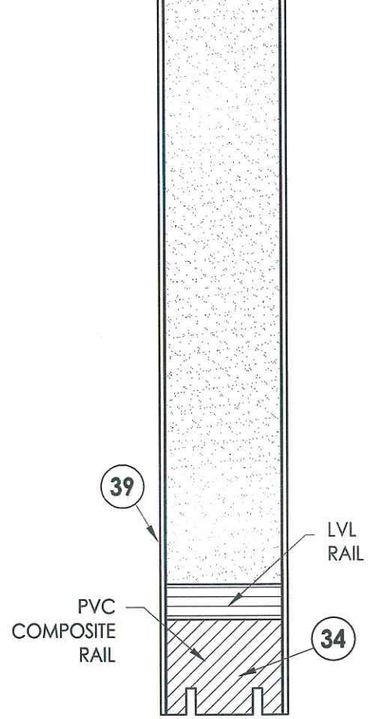


33 **TOP RAIL**



34 **BOTTOM RAIL**





2/2 **VERTICAL CROSS SECTION**

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

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

PART OR ASSEMBLY: DOOR PANEL CONSTRUCTION DETAILS

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

DATE: 8/24/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-584
SHEET 2 OF 7

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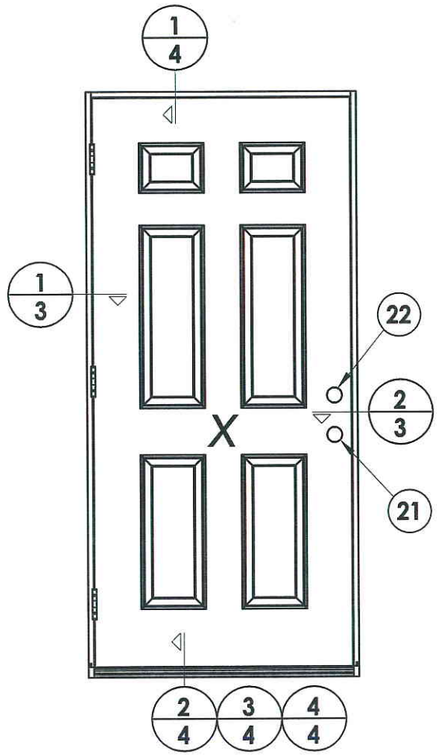
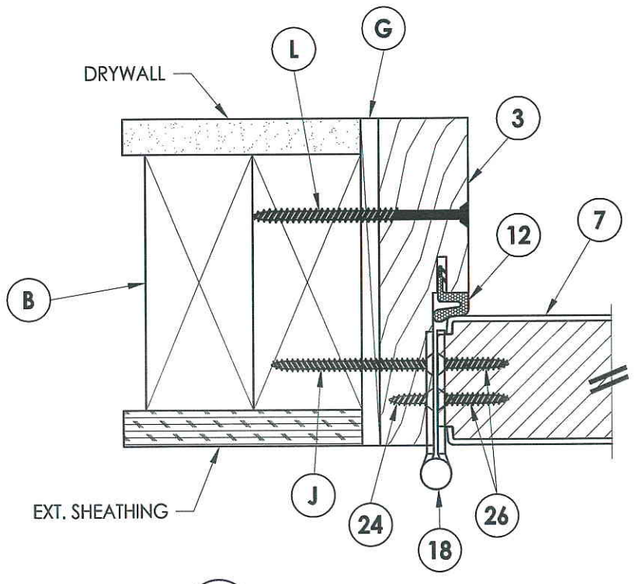


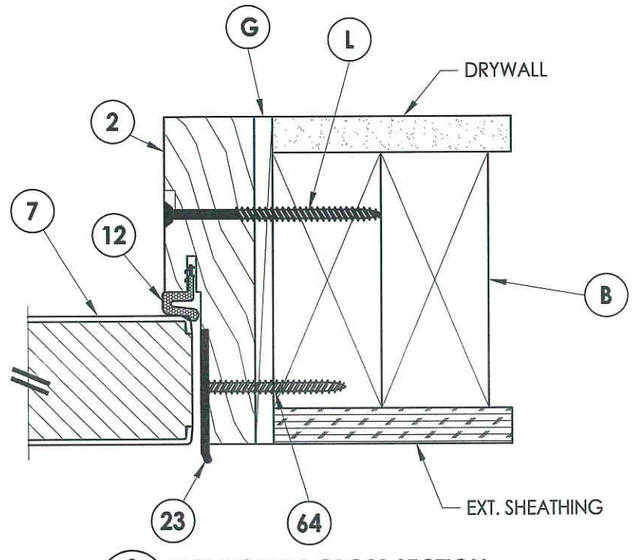
LOCK & DEADBOLT RATINGS CHART				
MANUFACTURER	MODEL	ITEM #	MAX. DESIGN PRESSURE (PSF)	
			POSITIVE	NEGATIVE
KWIKSET	LOCK: 740 DEADBOLT: 780	21 22	+75.0	-75.0
KWIKSET	LOCK: COMBO 660 DEADBOLT: COMBO 660	21 22	+65.0	-65.0
SCHLAGE	LOCK: MAX. SECURITY DEADBOLT: MAX. SECURITY	21 22	+60.0	-60.0



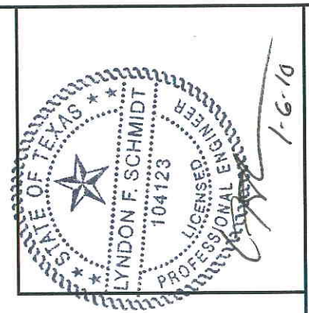
1/3 HORIZONTAL CROSS SECTION

INTERIOR

EXTERIOR



2/3 HORIZONTAL CROSS SECTION



1-6-10

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

PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

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

DATE: 8/24/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-584
SHEET 3 OF 7

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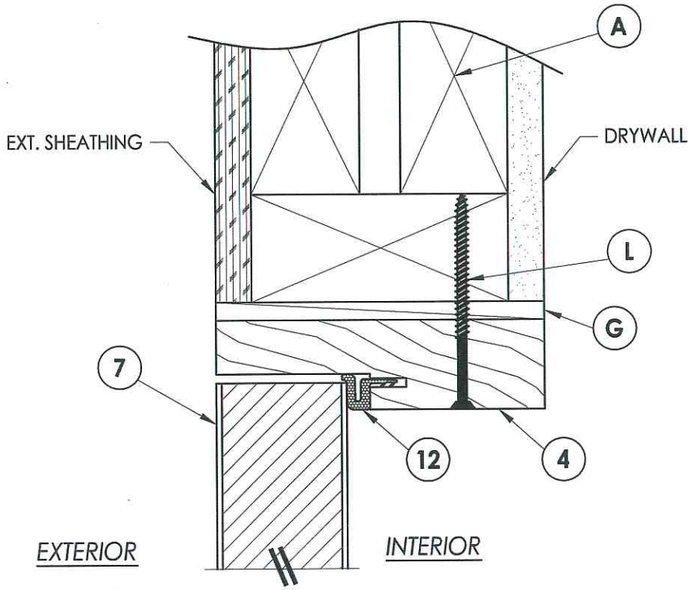
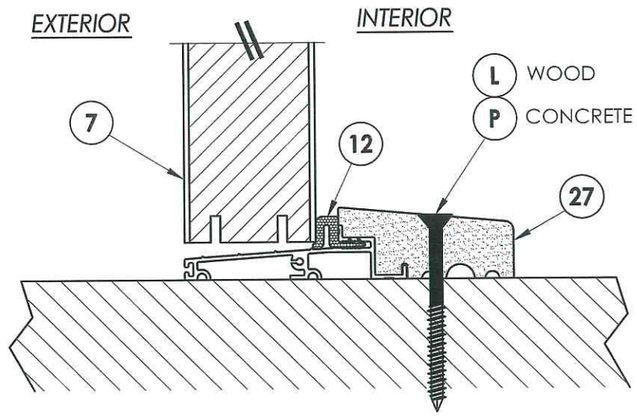
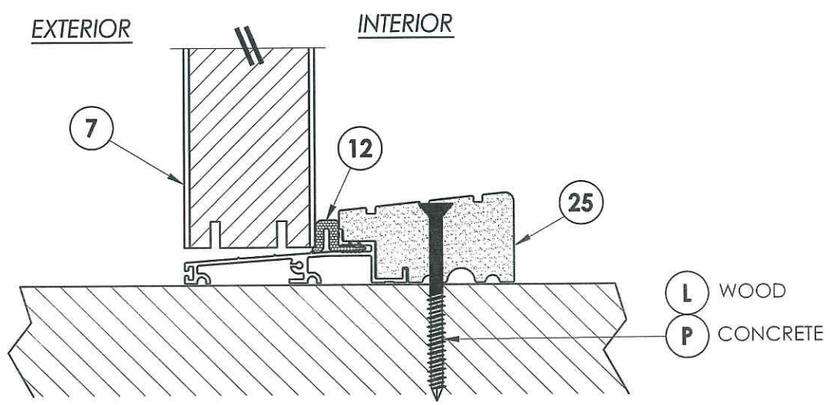


1/4 **VERTICAL CROSS SECTION**
Outswing shown
Inswing also approved



2/4 **VERTICAL CROSS SECTION**
Outswing configuration



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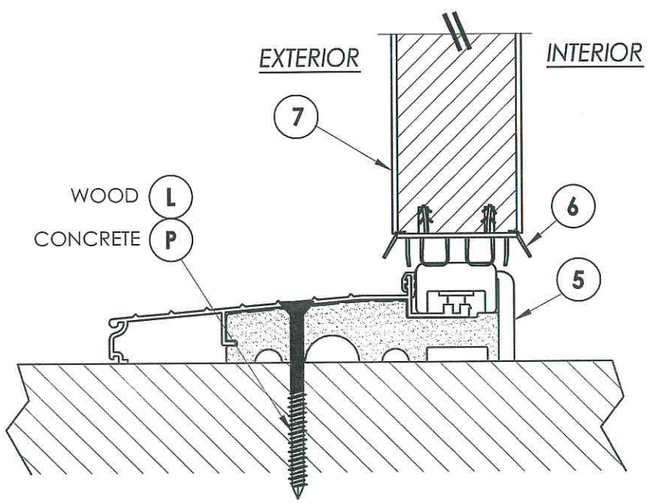
Outswing configuration



4/4 **VERTICAL CROSS SECTION**
Inswing configuration

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

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

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

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

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SCALE: N.T.S.
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CHK. BY: LFS
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SHEET 4 OF 7

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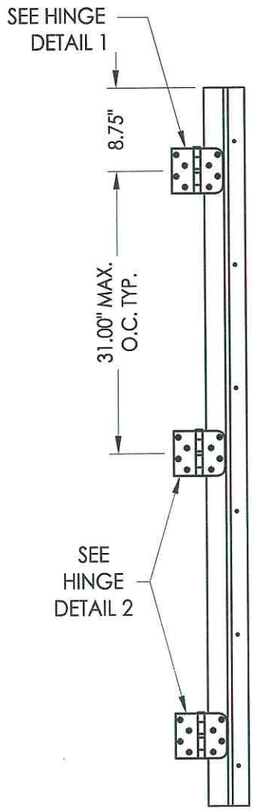
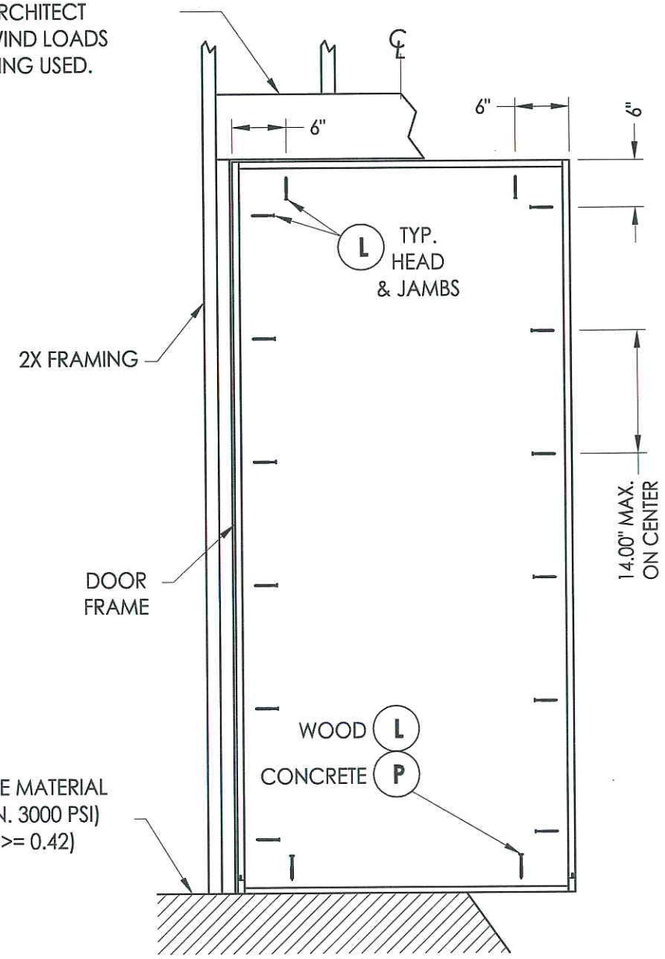
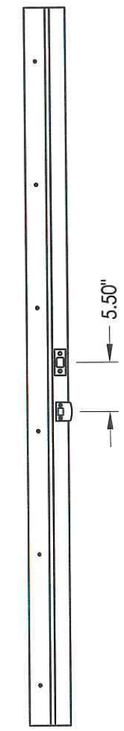


HINGE JAMB

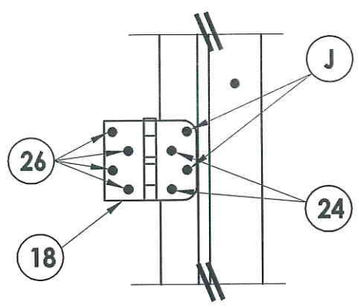
2X FRAMING TO BE DESIGNED BY THE ENGINEER OR ARCHITECT OF RECORD BASED ON WIND LOADS AND THE CLADDING BEING USED.



FRAME ANCHORING
Stud construction



STRIKE JAMB



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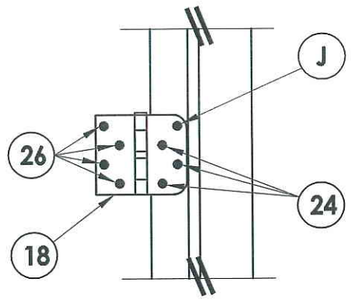
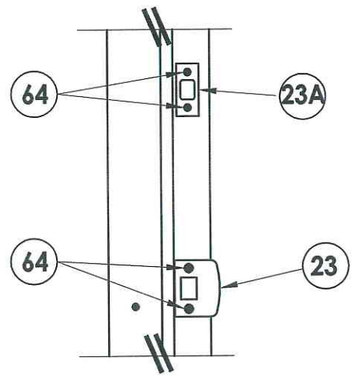


HINGE DETAIL 2



STRIKE PLATE DETAIL

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LICENSED PROFESSIONAL ENGINEER
7-6-10

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

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

PART OR ASSEMBLY: FRAME ANCHORING

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

DATE: 8/24/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-584
SHEET 5 OF 7

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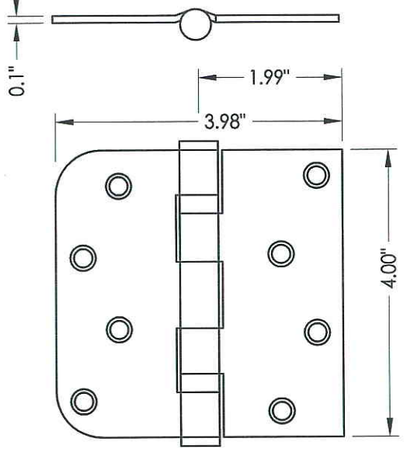
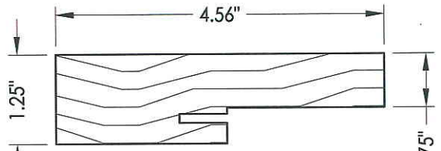
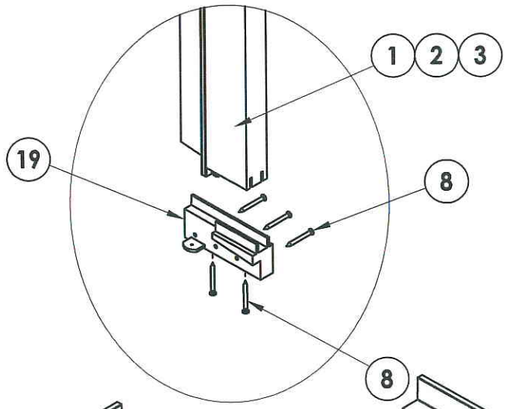
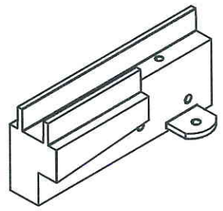


18 **HINGE**

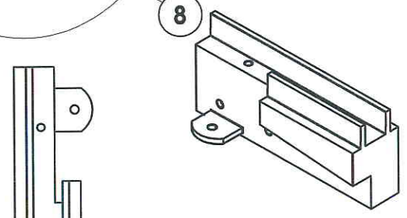


4 3 2 **SIDE & HEAD JAMBS**





SILLKEY, LEFT
SCALE: NONE



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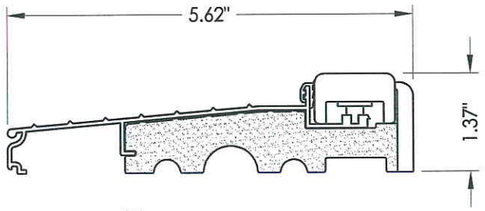
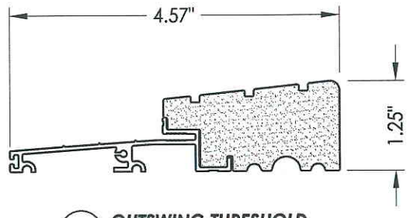
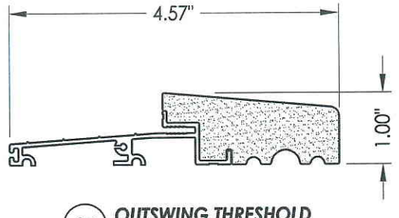


5 **INSWING THRESHOLD**

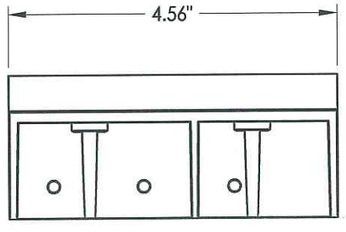


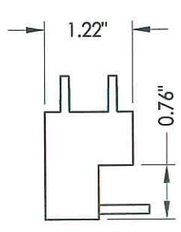
25 **OUTSWING THRESHOLD**
High-dam option

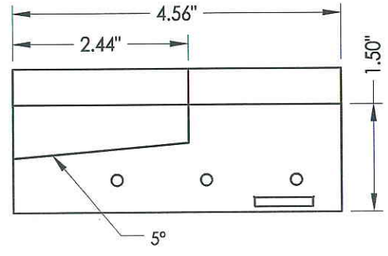


27 **OUTSWING THRESHOLD**

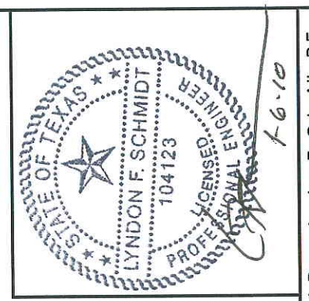
6 **DOOR BOTTOM SWEEP**







19 **SILLKEY DETAILS**
Optional



6-10

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

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

PART OR ASSEMBLY: COMPONENTS

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

DATE: 8/24/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-584
SHEET 6 OF 7

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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	#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
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" 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
64	#8 x 2" PFH SCREW	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"

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED
PROFESSIONAL ENGINEER
1-6-10

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CERTIFICATE OF REGISTRATION # F-11852

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

PART OR ASSEMBLY: BILL OF MATERIALS

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

DATE: 8/24/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-584
SHEET 7 OF 7

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