Trinity Glass INTERNATIONAL

4621 192nd STREET EAST TACOMA, WA 98446

3'0 X 6'8
GLAZED PREMIUM FIBERGLASS SINGLE DOOR WITH SIDELITES (BOXED) INSWING / OUTSWING
"NON-IMPACT"

EVALUATED FOR USE IN THE STATE OF TEXAS

The Trinity Glazed Premium Fiberglass Door with boxed sidelites 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 08-01370020, TEL 05-0411-6 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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4	Horizontal cross sections
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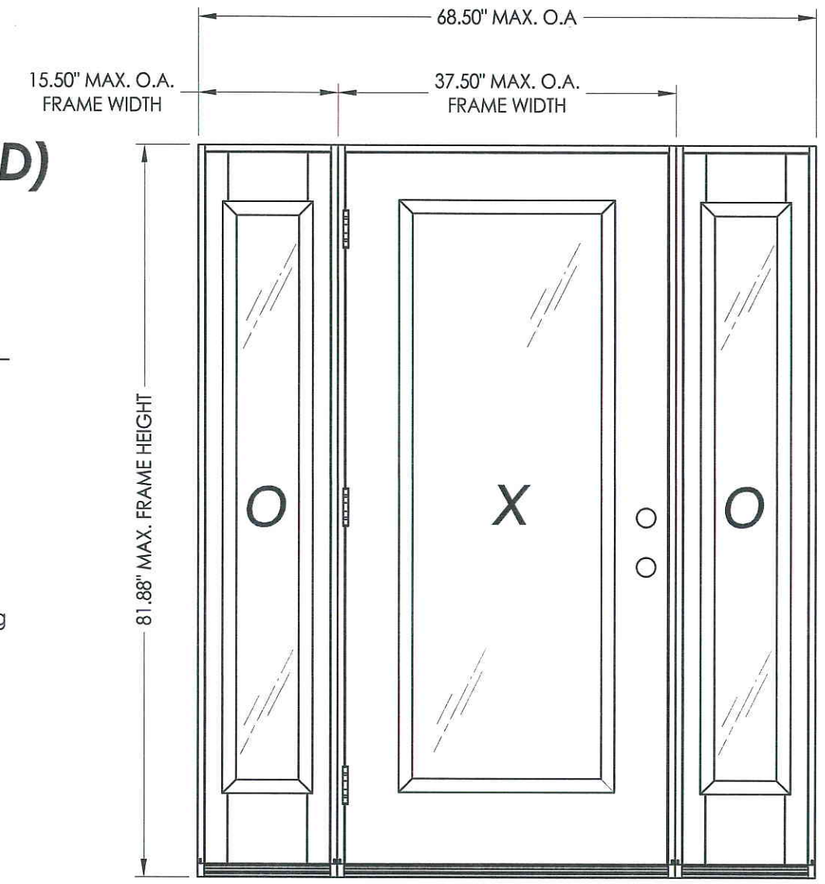
6	Vertical cross sections
7	Frame anchoring
8	Components
9	Bill of materials



SINGLE with BOXED SIDELITES

SWING	MAX. FRAME DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
			POSITIVE	NEGATIVE
INSWING	68.50" x 81.88"	G1	+55.0	-55.0
OUTSWING	68.50" x 80.75"		+55.0	-55.0

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 PREMIUM LIPLITE FIBERGLASS

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

NO.	DATE	REVISIONS	BY
2	7/23/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW

DATE: 8/26/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-594
SHEET 1 OF 9

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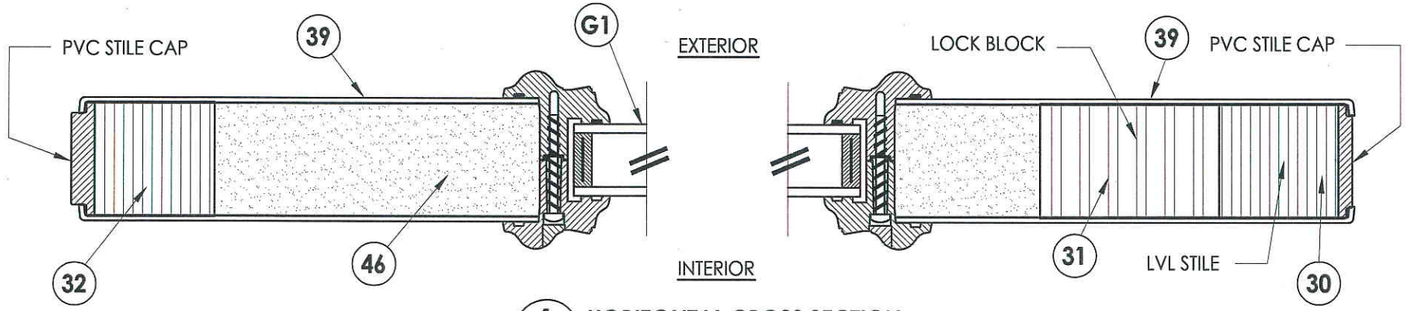
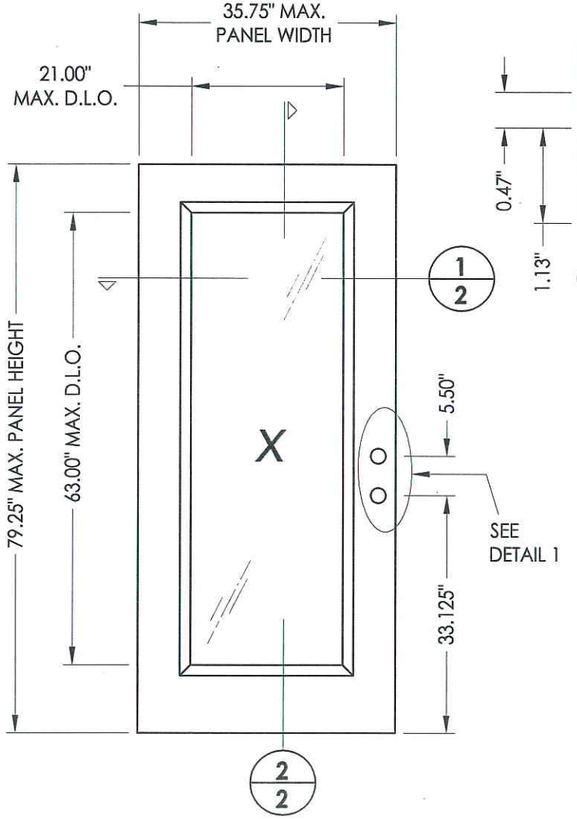
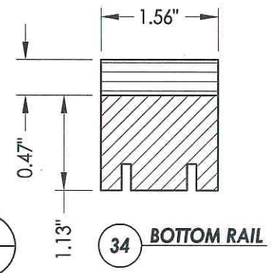


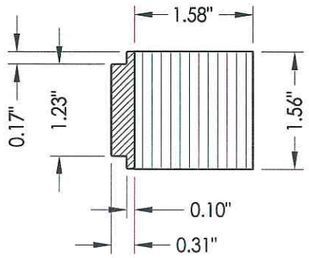
1/2 **HORIZONTAL CROSS SECTION**



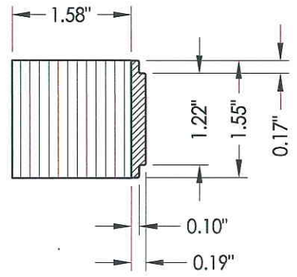
7 **PREMIUM LIPLITE FIBERGLASS DOOR**



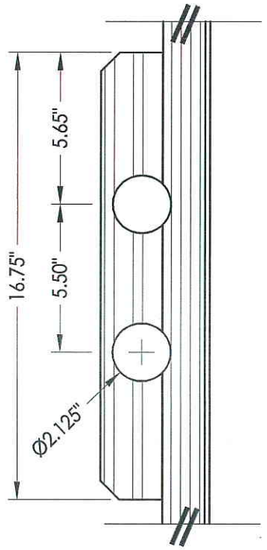
34 **BOTTOM RAIL**



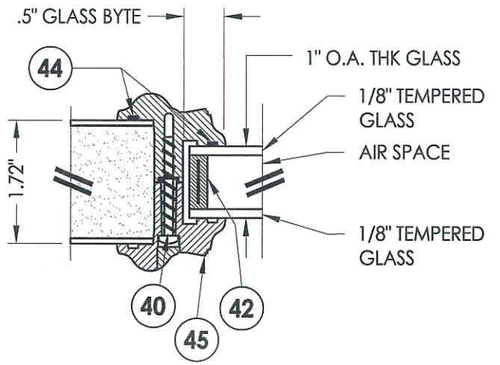
32 **HINGE STILE**



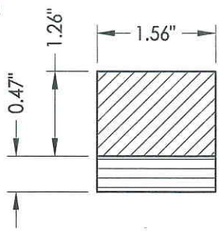
30 **LATCH STILE**



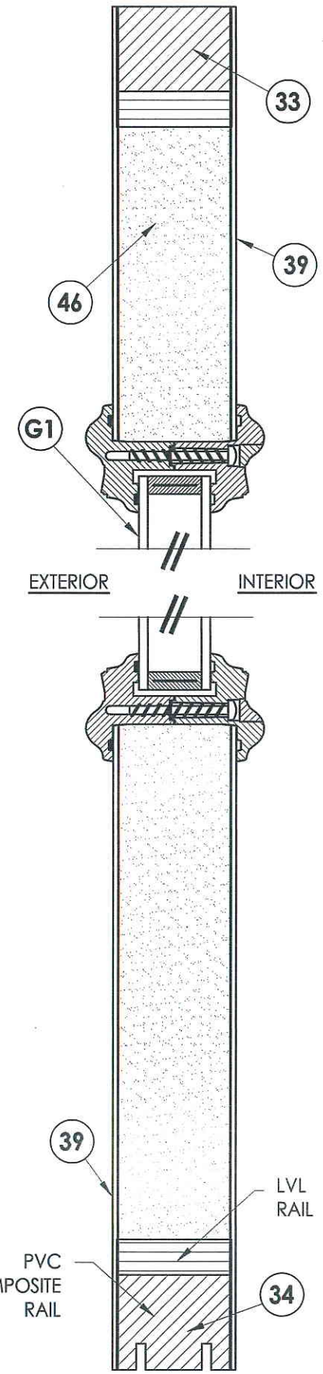
DETAIL 1



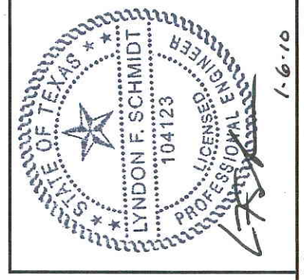
G1 **GLAZING DETAIL**



33 **TOP RAIL**



2/2 **VERTICAL CROSS SECTION**



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

PRODUCT: TRINITY GLASS INT'L
PREMIUM LIPLITE FIBERGLASS

PART OR ASSEMBLY:
DOOR PANEL CONSTRUCTION
DETAILS AND GLAZING DETAILS

NO.	DATE	REVISIONS	BY
2	7/23/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW

DATE: 8/26/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-594
SHEET 2 OF 9

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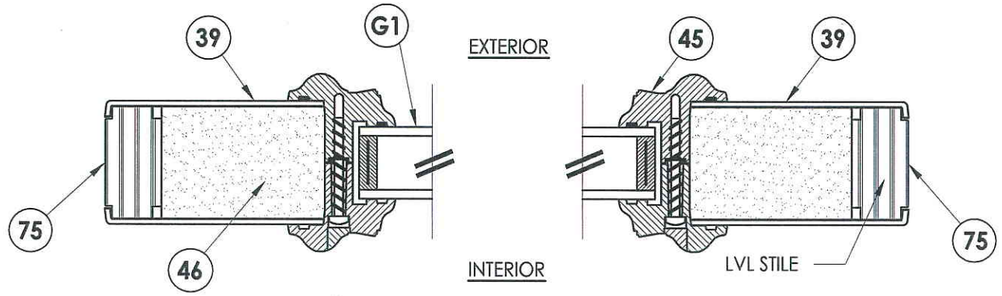
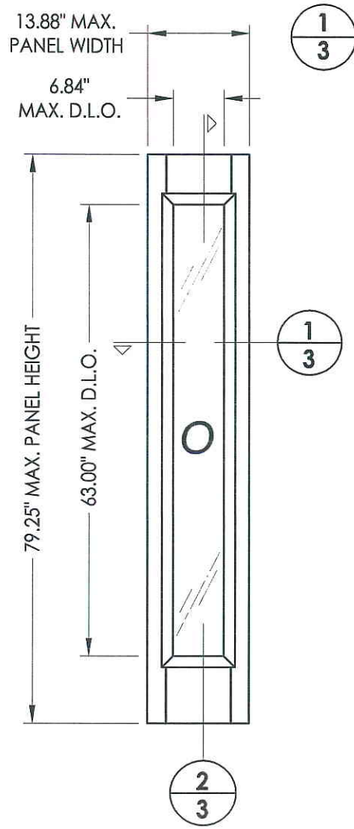
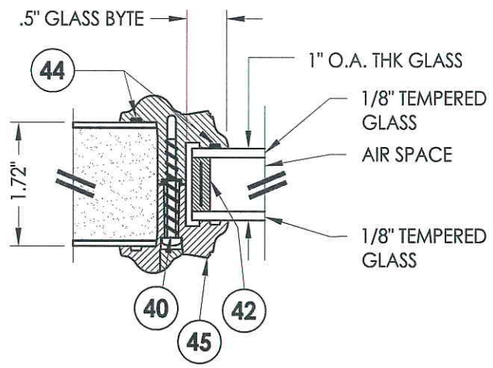


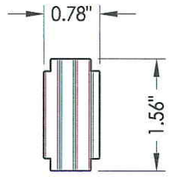
1/3 **HORIZONTAL CROSS SECTION**



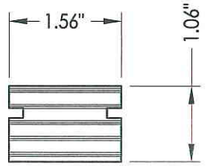
66 **PREMIUM LIPLITE FIBERGLASS SIDELITE**



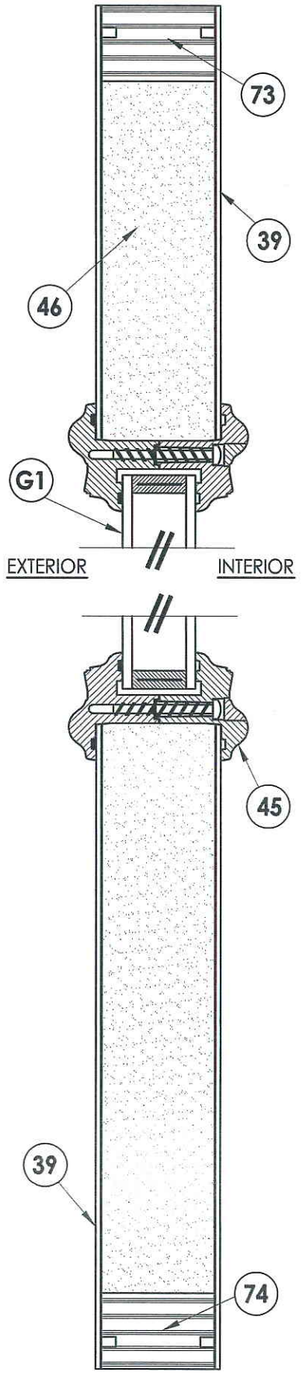
G1 **GLAZING DETAIL**



75 **SIDELITE STILE**



74 73 **TOP & BOTTOM RAIL**
SIDELITE



2/3 **VERTICAL CROSS SECTION**

1-6-10

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PREMIUM LIPLITE FIBERGLASS

PART OR ASSEMBLY:
SIDELITE PANEL CONSTRUCTION
DETAILS AND GLAZING DETAILS

NO.	DATE	REVISIONS	BY
2	7/23/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW

DATE: 8/26/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-594
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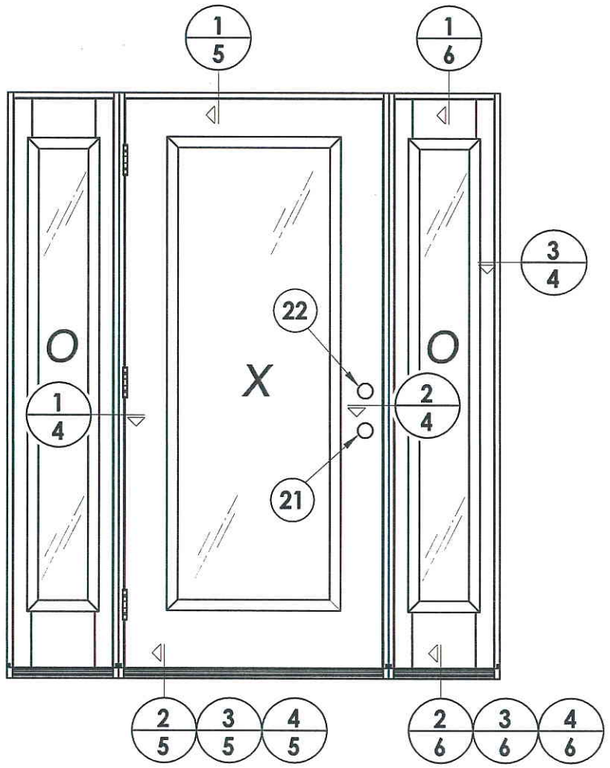
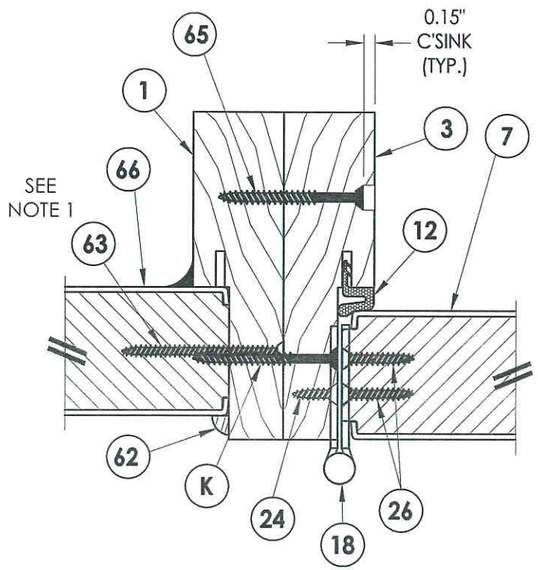
NOTE:

1. Sidelite ass'y fastener: 6" from each end and 4 more screws equally spaced between (6 screws total per jamb).



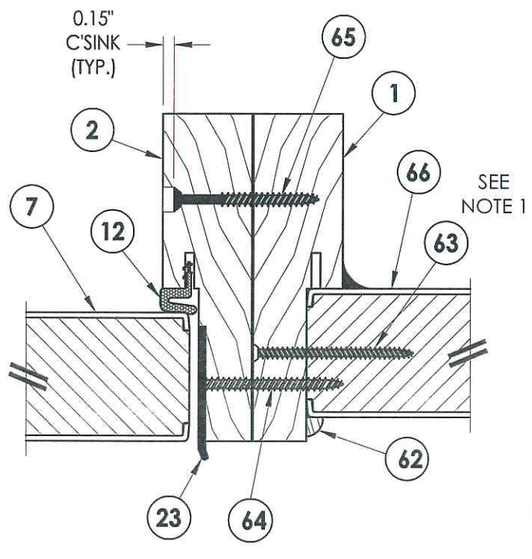
LOCK & DEADBOLT RATINGS CHART				
MANUFACTURER	MODEL	ITEM #	MAX. DESIGN PRESSURE (PSF) POSITIVE	MAX. DESIGN PRESSURE (PSF) NEGATIVE
KWIKSET	LOCK: 740 DEADBOLT: 780	21 22	+55.0	-55.0
KWIKSET	LOCK: COMBO 660 DEADBOLT: COMBO 660	21 22	+55.0	-55.0
SCHLAGE	LOCK: MAX. SECURITY DEADBOLT: MAX. SECURITY	21 22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



INTERIOR

EXTERIOR

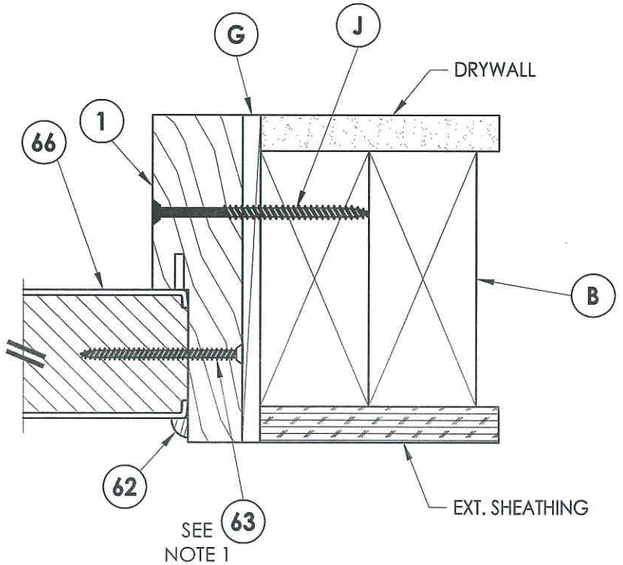
1/4 **HORIZONTAL CROSS SECTION**
Outswing shown
Inswing also approved



INTERIOR

EXTERIOR

2/4 **HORIZONTAL CROSS SECTION**
Outswing shown
Inswing also approved



3/4 **HORIZONTAL CROSS SECTION**
Outswing shown
Inswing also approved

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

PRODUCT: TRINITY GLASS INT'L
PREMIUM LIPLITE FIBERGLASS

PART OR ASSEMBLY:
HORIZONTAL CROSS SECTION

NO.	DATE	REVISIONS	BY
2	7/23/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW

DATE: 8/26/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-594
SHEET 4 OF 9

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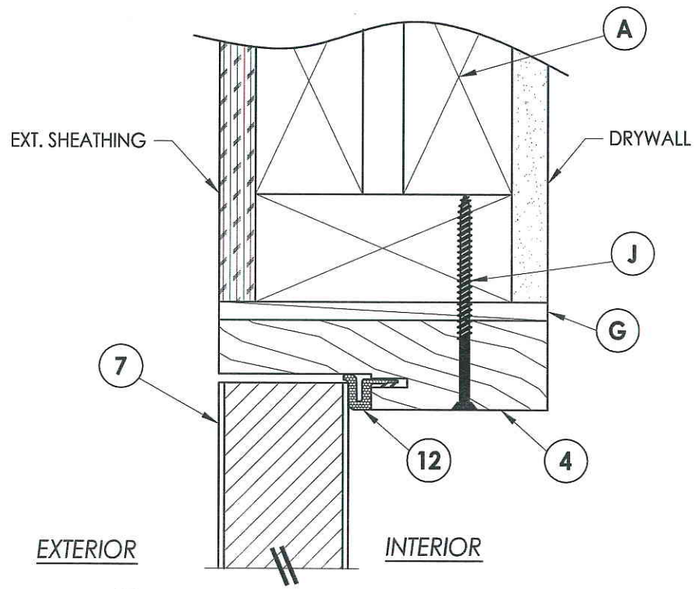
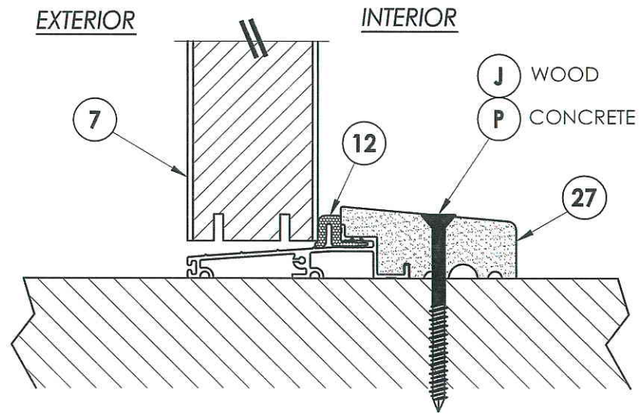
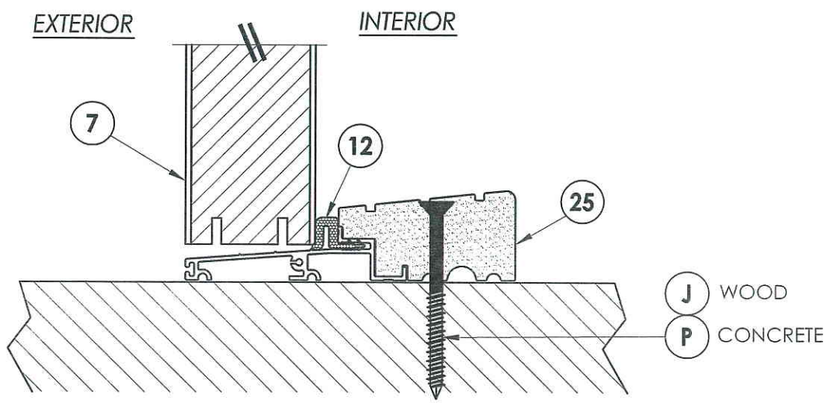


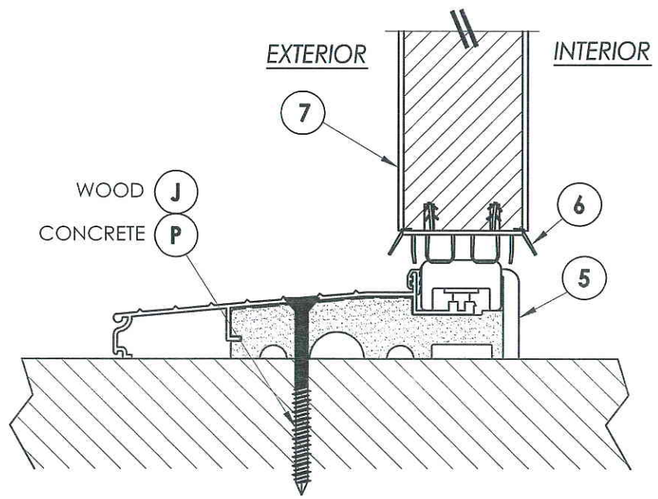
1/5 VERTICAL CROSS SECTION
Outswing shown
Inswing also approved



2/5 VERTICAL CROSS SECTION
Outswing configuration



3/5 VERTICAL CROSS SECTION
Outswing configuration



4/5 VERTICAL CROSS SECTION
Inswing configuration

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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: TRINITY GLASS INT'L
PREMIUM LIPLITE FIBERGLASS

PART OR ASSEMBLY:
VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY
2	7/23/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW

DATE: 8/26/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-594
SHEET 5 OF 9

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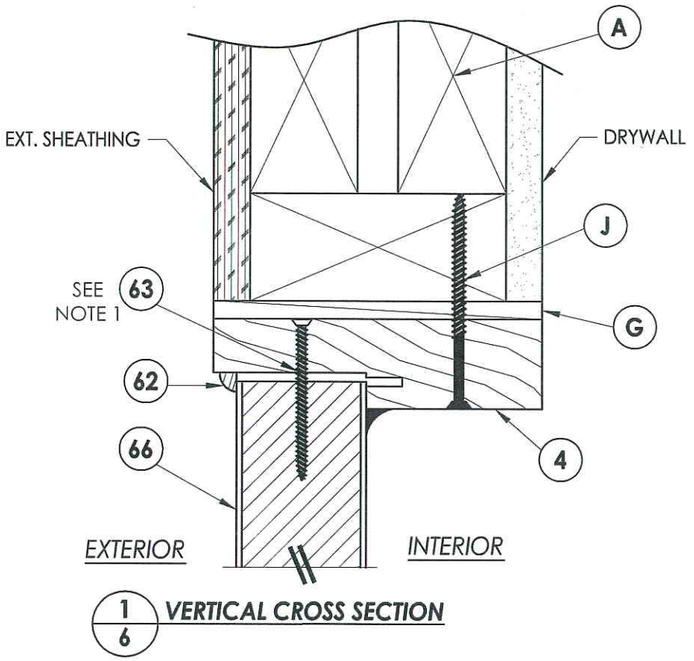
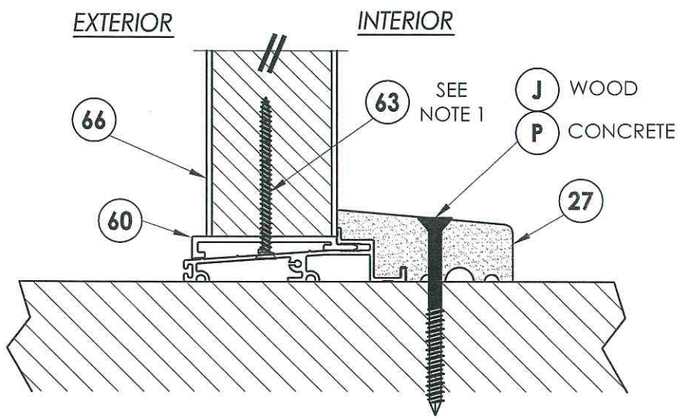


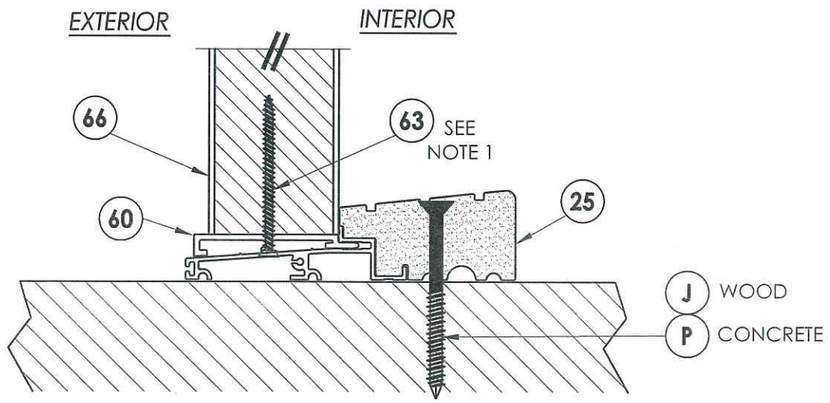
1/6 **VERTICAL CROSS SECTION**



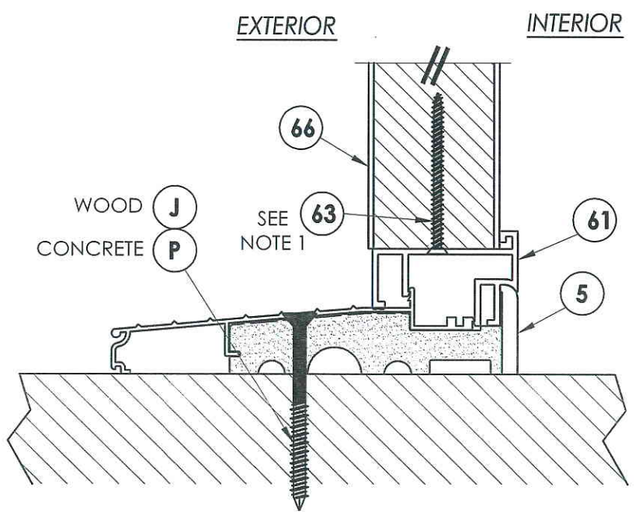
2/6 **VERTICAL CROSS SECTION**
Outswing sill

NOTE:

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



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



4/6 **VERTICAL CROSS SECTION**
Inswing sill

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CERTIFICATE OF REGISTRATION # F-11852

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED PROFESSIONAL ENGINEER

1-6-10

PRODUCT: TRINITY GLASS INT'L PREMIUM LIPLITE FIBERGLASS

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY
2	7/23/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW

DATE: 8/26/05
SCALE: N.T.S.
DWG. BY: EW
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DRAWING NO.: TX-594
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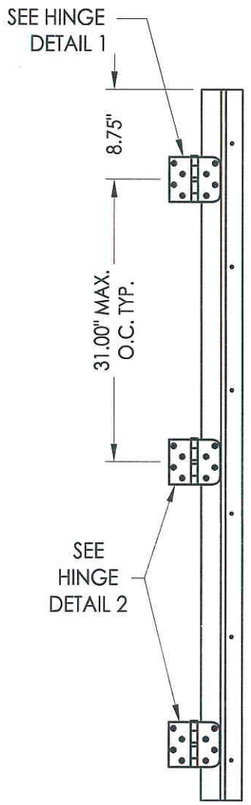
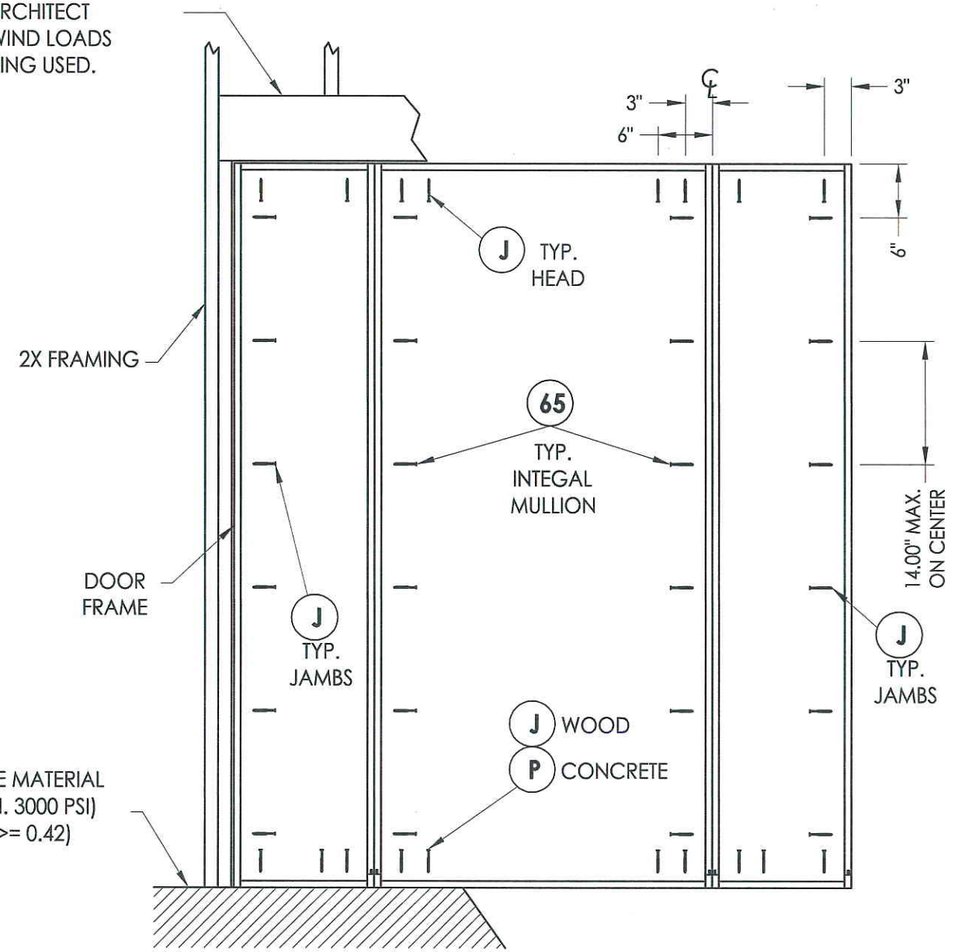
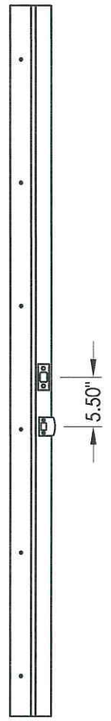
2X FRAMING TO BE DESIGNED
BY THE ENGINEER OR ARCHITECT
OF RECORD BASED ON WIND LOADS
AND THE CLADDING BEING USED.



FLOOR SUBSTRATE MATERIAL
CONCRETE (MIN. 3000 PSI)
WOOD (S.G. >= 0.42)

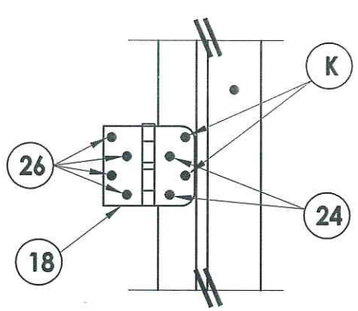




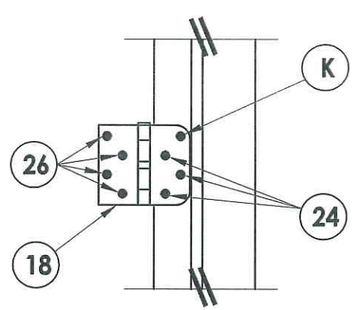
HINGE JAMB

FRAME ANCHORING
Stud construction

STRIKE JAMB



HINGE DETAIL 1



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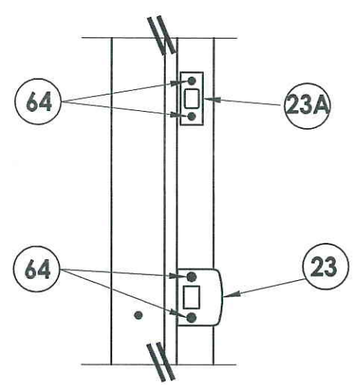

STRIKE PLATE DETAIL

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

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

PRODUCT: *TRINITY GLASS INT'L PREMIUM LIPLITE FIBERGLASS*

PART OR ASSEMBLY: *FRAME ANCHORING*

NO.	DATE	REVISIONS	BY
2	7/23/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW

DATE: 8/26/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-594
SHEET 7 OF 9

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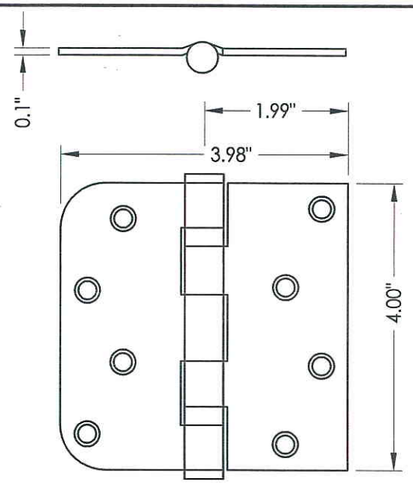
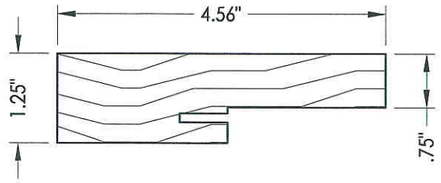
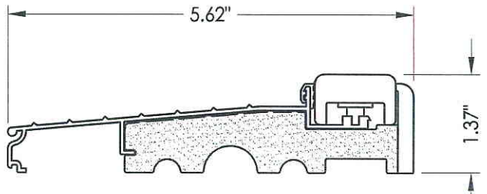


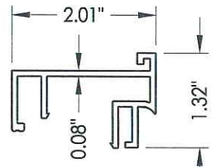
18 **HINGE**



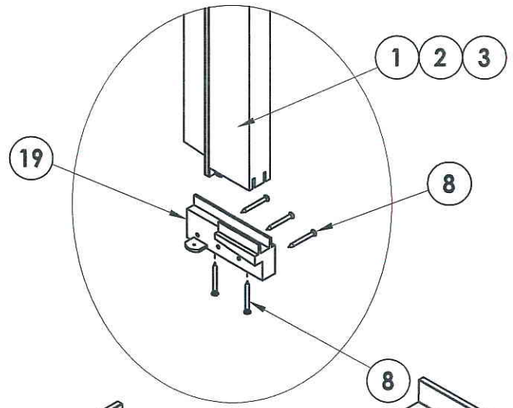
4 3 2 1 **SIDE & HEAD JAMBS**

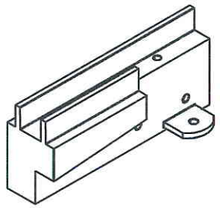


5 **INSWING THRESHOLD**

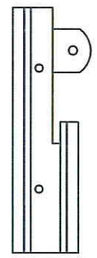


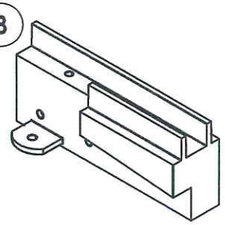
61 **SIDELITE SPACER**
Inswing





SILLKEY, LEFT
SCALE: NONE





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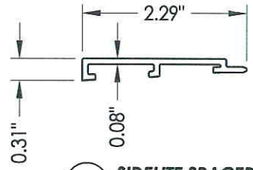
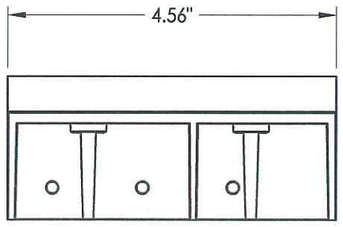
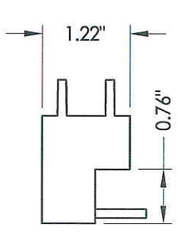
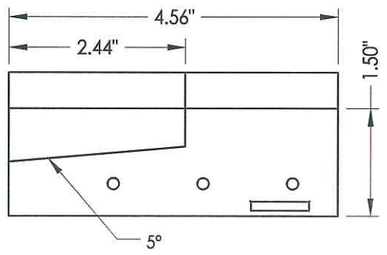


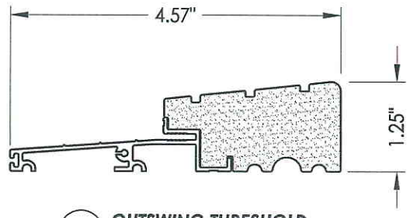
60 **SIDELITE SPACER**
Outswing



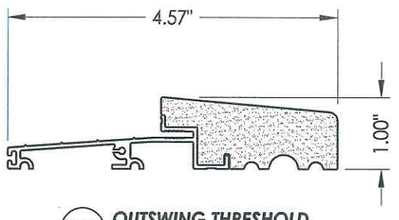




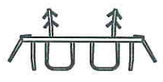
19 **SILLKEY DETAILS**
Optional



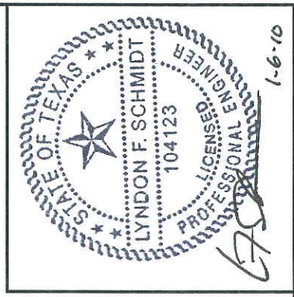
25 **OUTSWING THRESHOLD**
High-dam option



27 **OUTSWING THRESHOLD**



6 **DOOR BOTTOM SWEEP**



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

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

PRODUCT: TRINITY GLASS INT'L
PREMIUM LIPLITE FIBERGLASS

PART OR ASSEMBLY: COMPONENTS

NO.	DATE	REVISIONS	BY
2	7/23/09	TDI PRODUCT EVALUATION UPDATE	AL
1	6/28/06	REVISED LOCKSET NOMENCLATURE	EW

DATE: 8/26/05
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: TX-594
SHEET 8 OF 9

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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"

BILL OF MATERIALS

ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
A	2X HEADER FRAMING SG >= 0.42	WOOD	26	#9 X 1" PFH SCREW	STEEL
B	2X FRAMING SG >= 0.42	WOOD	27	OUTSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM./ COMP.
G	MAX. 1/4" SHIM SPACE	WOOD	30	LATCH STILE - SG >= 0.42	LVL/PVC
J	#10 X 3" PFH WS	STEEL	31	LVL LOCK BLOCK	POPLAR
K	#9 X 2" PFH WS	STEEL	32	HINGE STILE - SG >= 0.42	LVL/PVC
P	3/16" X 2-3/4" ELCO OR ITW PFH CONCRETE SCREW	STEEL	33	TOP RAIL - POPLAR LVL & WPC COMBINATION	POPLAR/WPC
1	SIDELITE JAMB - FINGER-JOINT PINE - SG >= 0.42	WOOD	34	BOTTOM RAIL - POPLAR LVL & WPC COMBINATION	POPLAR/WPC
2	STRIKE JAMB - FINGER-JOINT PINE - SG >= 0.42	WOOD	39	FIBERGLASS SKIN 0.079" MIN. THICKNESS (Fy = 5,203 PSI MIN.)	FIBERGLASS
3	HINGE JAMB - FINGER-JOINT PINE - SG >= 0.42	WOOD	40	#8 X 1-1/8" SELF THREADING SCREW	STEEL
4	HEAD - FINGER-JOINT PINE - SG >= 0.42	WOOD	42	ALUMINUM & BUTYL SPACER SYSTEM	ALUM./BUTYL
5	INSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUMINUM	44	HOT MELT SEALANT / SILICONE	-
6	DOOR BOTTOM SWEEP	PVC	45	LITE FRAME	PC/ASA
7	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-	46	FOAM CORE	POLYURETHANE
8	#6 X 1-1/4" PFH DRYWALL SCREW	STEEL	60	SIDELITE SPACER - OUTSWING	PVC
12	WEATHER STRIP QEBD650 Q-LON	-	61	SIDELITE SPACER - INSWING	PVC
18	3.983" X 4.0" HINGE MIN 0.098" THICK	STEEL	62	QUARTER ROUND	WOOD
19	SILLKEY	PC/ASA	63	#8 X 2-1/4" PFH SCREW	STEEL
21	LOCK (SEE LOCK & DEADBOLT RATINGS CHART)	STEEL	64	#8 X 2" PFH SCREW	STEEL
22	DEADBOLT (SEE LOCK & DEADBOLT RATINGS CHART)	STEEL	65	#10 X 2" PFH SCREW	STEEL
23	STRIKE PLATE	STEEL	66	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
23A	DEADBOLT PLATE	STEEL	73	LVL SIDELITE TOP RAIL (FULL LITE)	POPLAR
24	#9 X 5/8" PFH SCREW	STEEL	74	LVL SIDELITE BOTTOM RAIL (FULL LITE)	POPLAR
25	OUTSWING HIGH-DAM THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM./ COMP.	75	LVL SIDELITE STILE (FULL LITE)	POPLAR

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

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

PRODUCT: *TRINITY GLASS INT'L PREMIUM LIPLITE FIBERGLASS*

PART OR ASSEMBLY: *BILL OF MATERIALS*

NO.	DATE	REVISIONS	BY
2	7/23/09	TDI PRODUCT EVALUATION UPDATE	AL
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DATE: 8/26/05
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