Trinity Glass INTERNATIONAL

4621 192nd STREET TACOMA, WA 98446

3'0 X 6'8 FLUSH-GLAZED FIBERGLASS SINGLE DOOR WITH SIDELITES (BOXED) INSWING / OUTSWING

"NON-IMPACT"

EVALUATED FOR USE IN THE STATE OF TEXAS

The Trinity FLUSH-GLAZED 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 06-0223-3 and TEL 08-01370020, 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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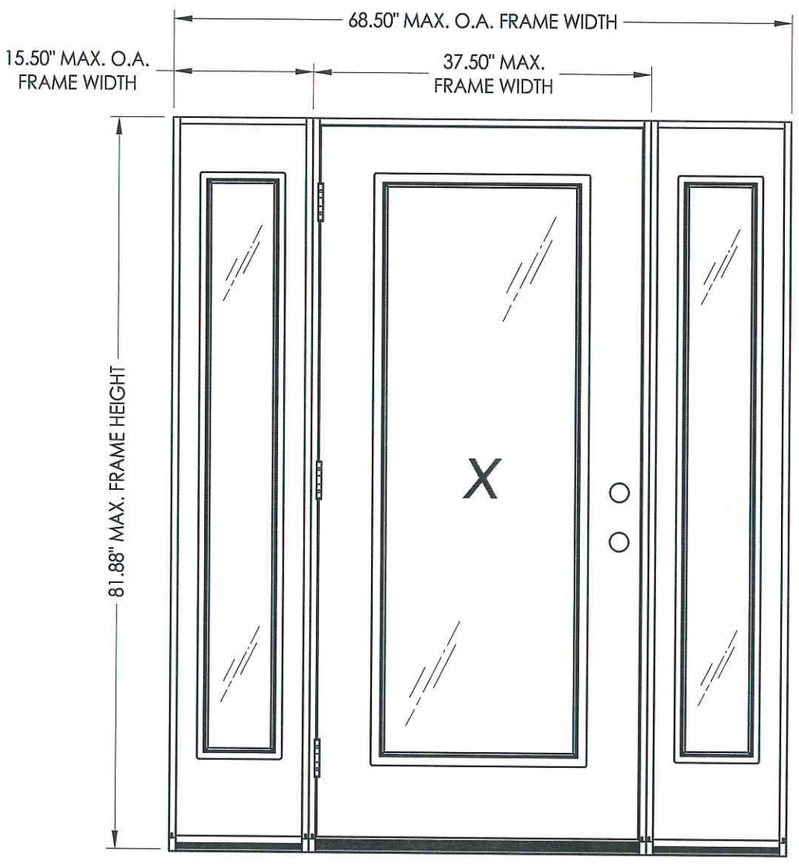
1	Typical elevations, design pressures & general notes
2	Door panel construction details & glazing details
3	Sidelite panel construction details & glazing details
4	Horizontal cross sections
5	Vertical cross sections
6	Vertical cross sections
7	Frame anchoring
8	Components
9	Bill of materials & components



SINGLE WITH BOXED SIDELITES

SWING	MAX. FRAME DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
			POSITIVE	NEGATIVE
INSWING	68.50" x 81.88"	G1, G2 & G3	+55.0	-55.0
OUTSWING	68.50" x 80.75"		+55.0	-55.0

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

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

7.7.10

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 FLUSH-GLAZED

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

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

DATE: 8/29/05

SCALE: N.T.S.

DWG. BY: WH

CHK. BY: LFS

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SHEET 1 OF 9

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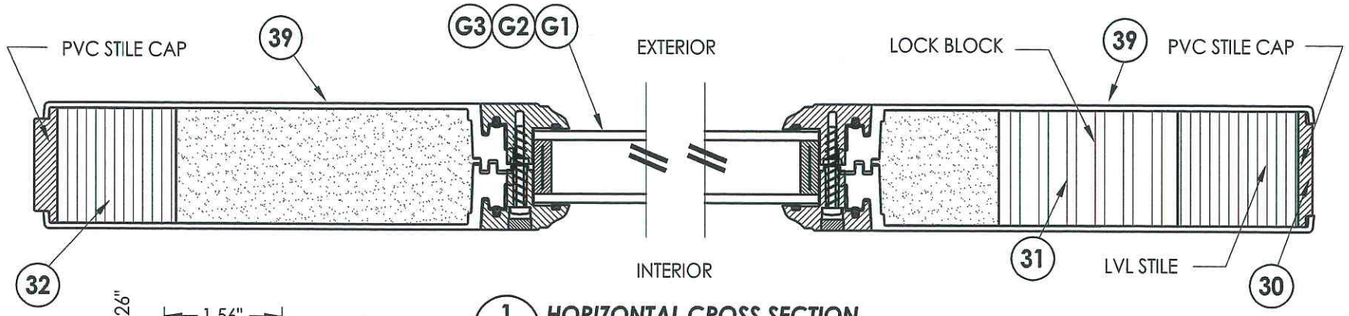
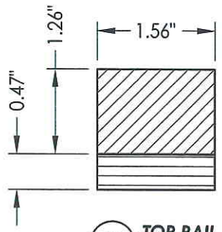
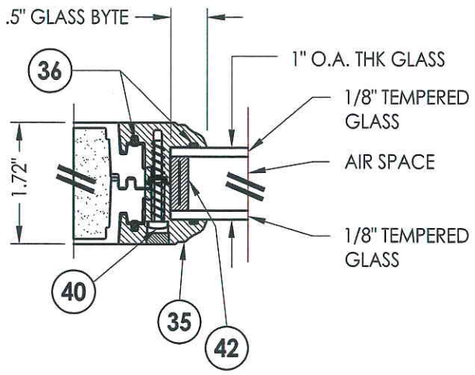


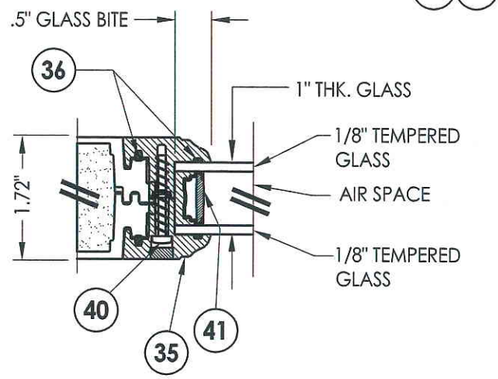
1/2 **HORIZONTAL CROSS SECTION**



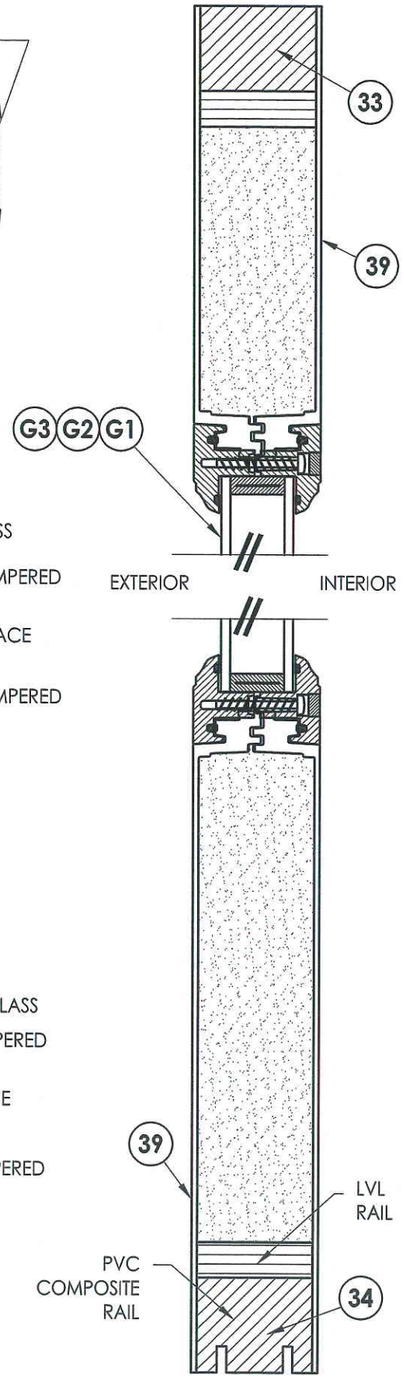
33 **TOP RAIL**

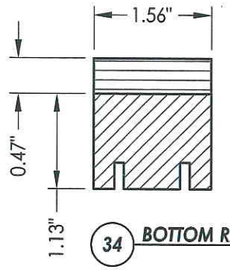


G1 **GLAZING DETAIL**

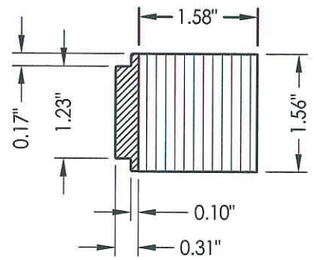


G2 **GLAZING DETAIL**

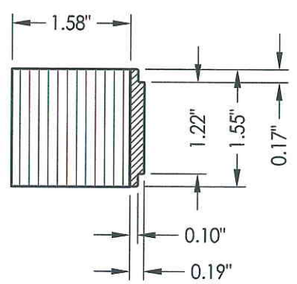




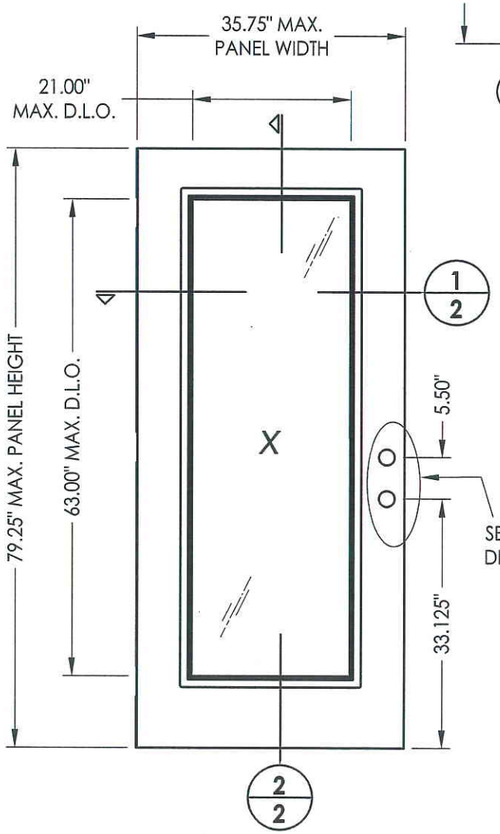
34 **BOTTOM RAIL**



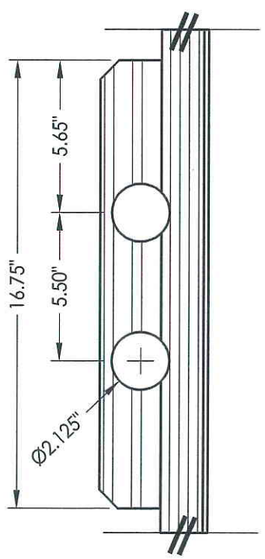
32 **HINGE STILE**



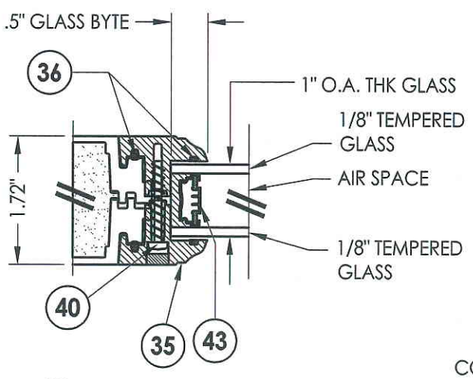
30 **LATCH STILE**



IMPACT FLUSH-GLAZED DOOR



DETAIL 1



G3 **GLAZING DETAIL**

2/2 **VERTICAL CROSS SECTION**

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

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

1.7.10

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

PART OR ASSEMBLY: DOOR PANEL CONSTRUCTION DETAILS & GLAZING DETAILS

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

DATE: 8/29/05
SCALE: N.T.S.
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CHK. BY: LFS
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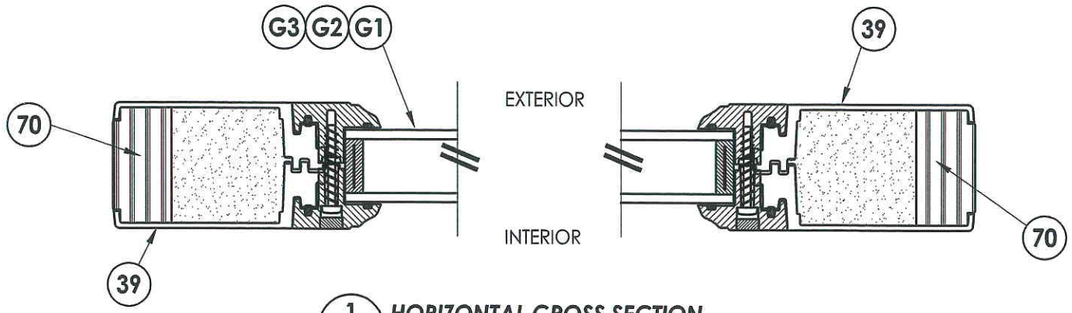
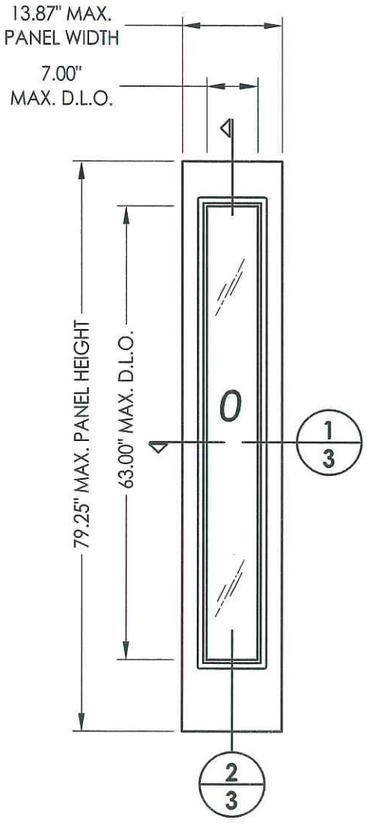
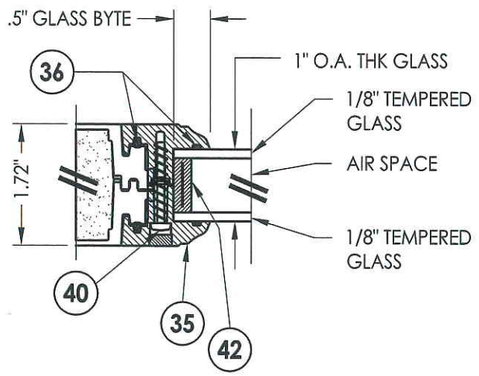


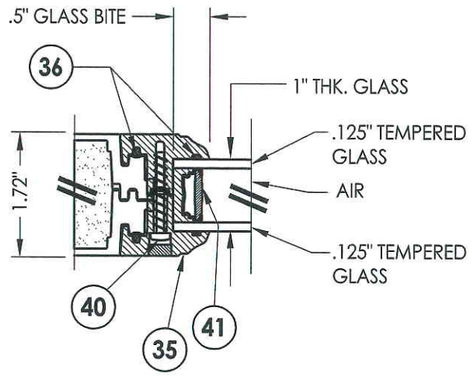
1/3 **HORIZONTAL CROSS SECTION**



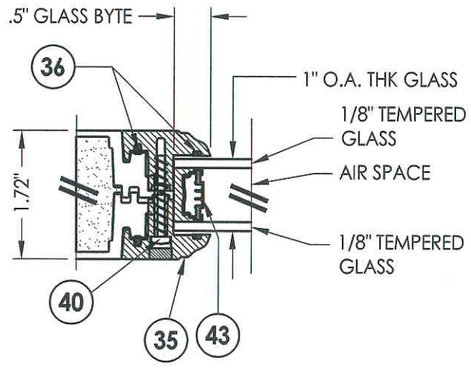
FLUSH-GLAZED SIDELITE



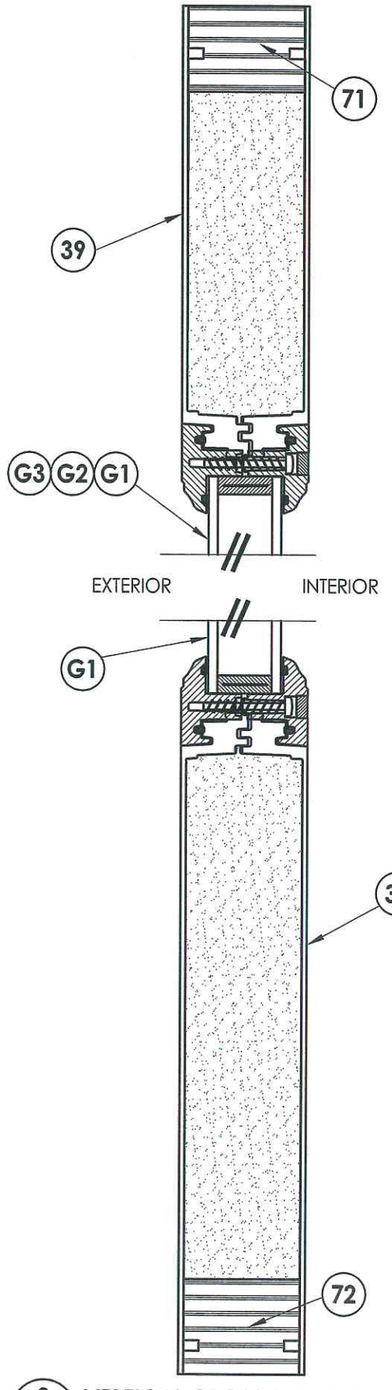
G1 **GLAZING DETAIL**



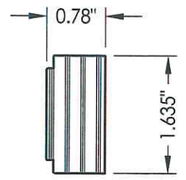
G2 **GLAZING DETAIL**



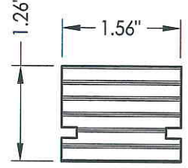
G3 **GLAZING DETAIL**



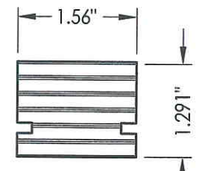
2/3 **VERTICAL CROSS SECTION**



70 **SIDELITE STILE**



71 **TOP RAIL**



72 **BOTTOM RAIL**

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

STATE OF TEXAS · LYNDON F. SCHMIDT · 104123 · LICENSED PROFESSIONAL ENGINEER · 1-7-10

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

PART OR ASSEMBLY: SIDELITE PANEL CONSTRUCTION DETAILS & GLAZING DETAILS

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

DATE: 8/29/05
SCALE: N.T.S.
DWG. BY: WH
CHK. BY: LFS
DRAWING NO.: TX-4037
SHEET 3 OF 9

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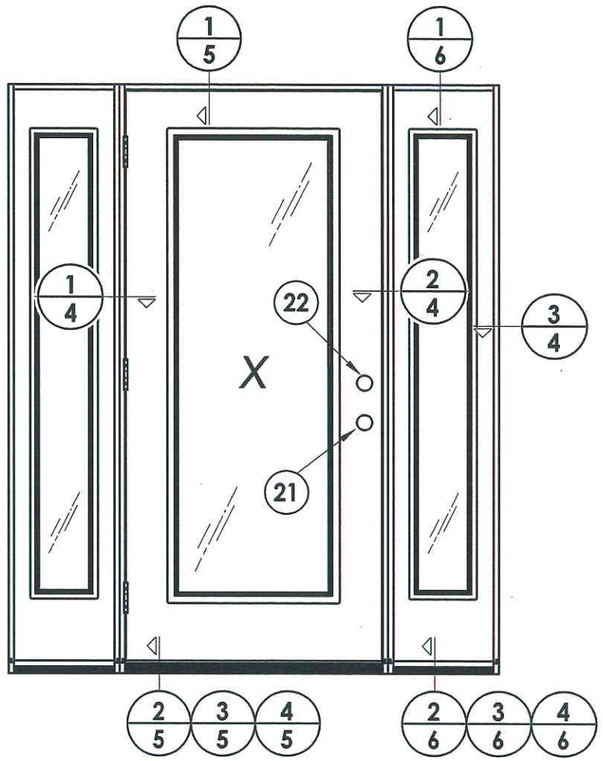
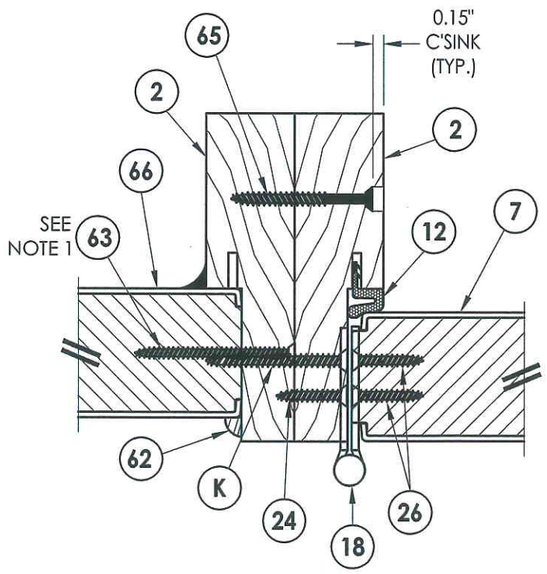
NOTE:

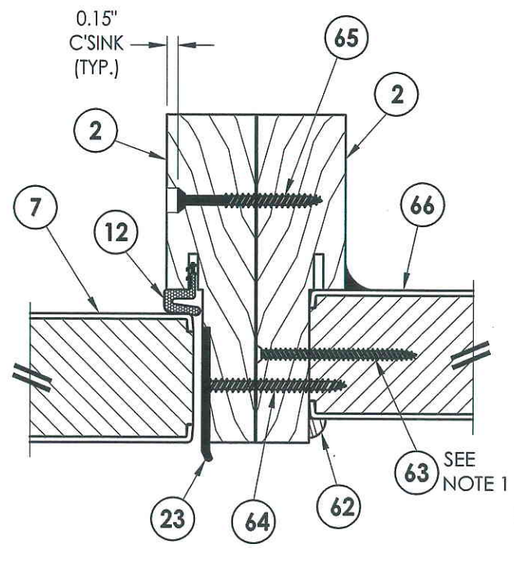
1. Sidelite ass'y fastener: 6" from each end and 4 more screws equally spaced between (6 screws total per jamb).



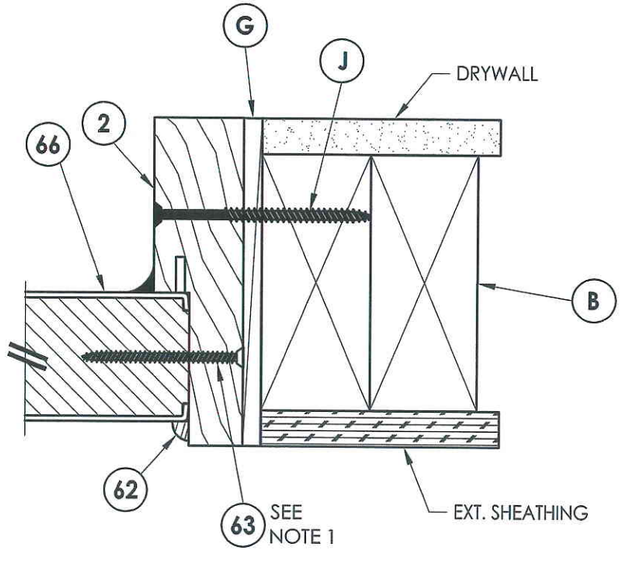
LOCK & DEADBOLT RATINGS CHART				
MANUFACTURER	MODEL	ITEM #	MAX. DESIGN PRESSURE (PSF)	
			POSITIVE	NEGATIVE
KWIKSET	LOCK: 740 DEADBOLT: 780	21 22	+55.0	-55.0
KWIKSET	LOCK: COMBO 660 DEADBOLT: COMBO 660	21 22	+55.0	-55.0
SCHLAGE	LOCK: MAX. SECURITY DEADBOLT: MAX. SECURITY	21 22	+55.0	-55.0



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



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



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

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED PROFESSIONAL ENGINEER
1-7-10

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P.O. Box 230 Valrico FL 33595
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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: 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: 8/29/05
SCALE: N.T.S.
DWG. BY: WH
CHK. BY: LFS
DRAWING NO.: TX-4037
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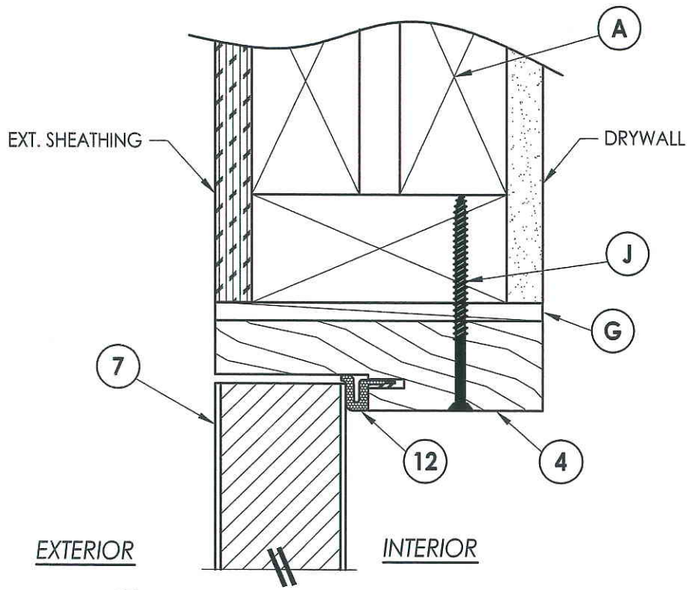
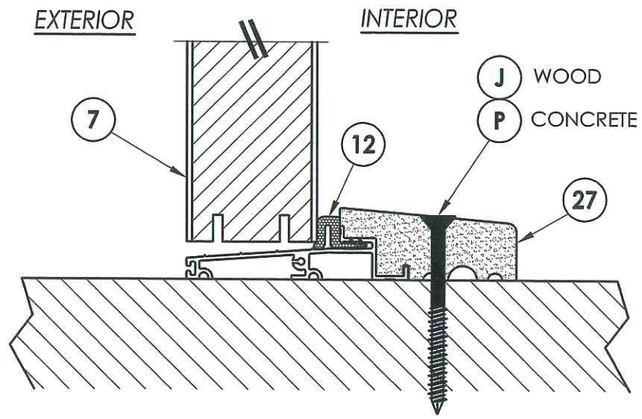
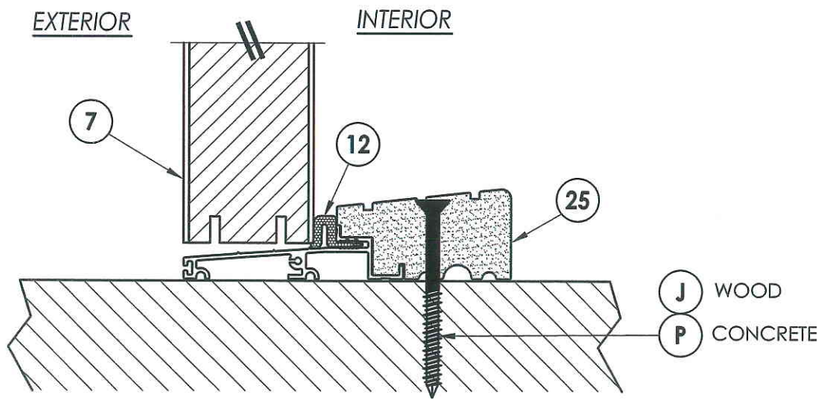


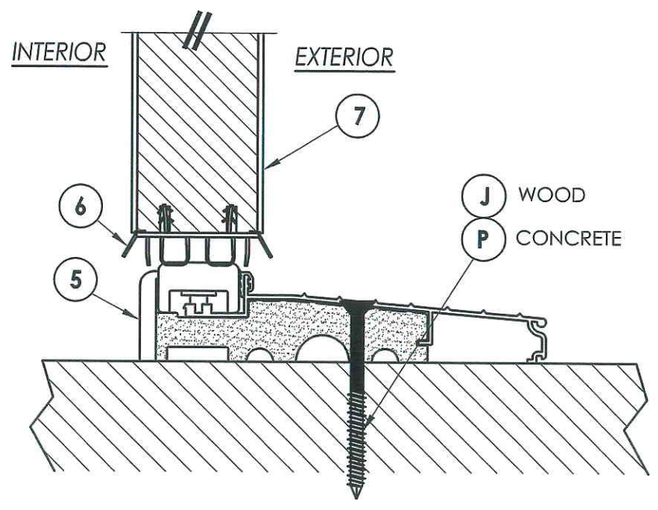
1/5 **VERTICAL CROSS SECTION**
Outswing shown
Inswing also approved



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

1.9.10

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

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

DATE: 8/29/05
SCALE: N.T.S.
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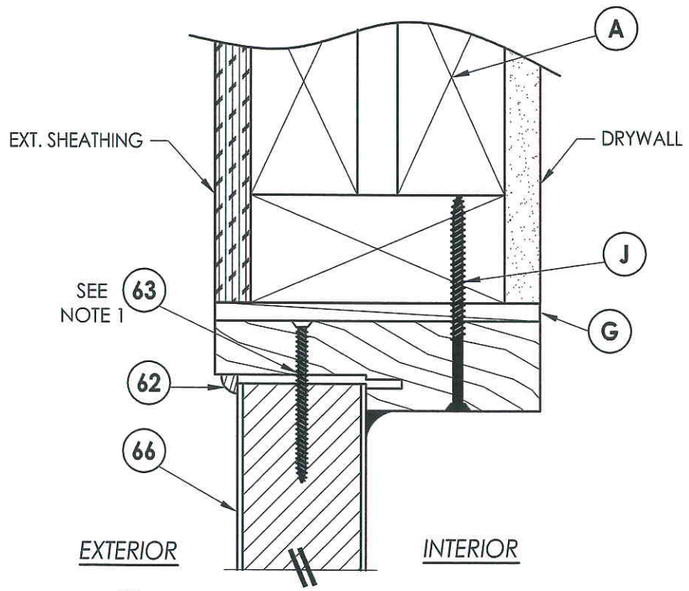
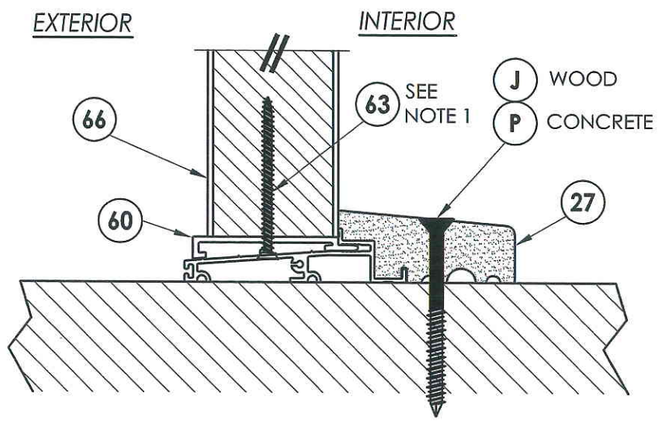


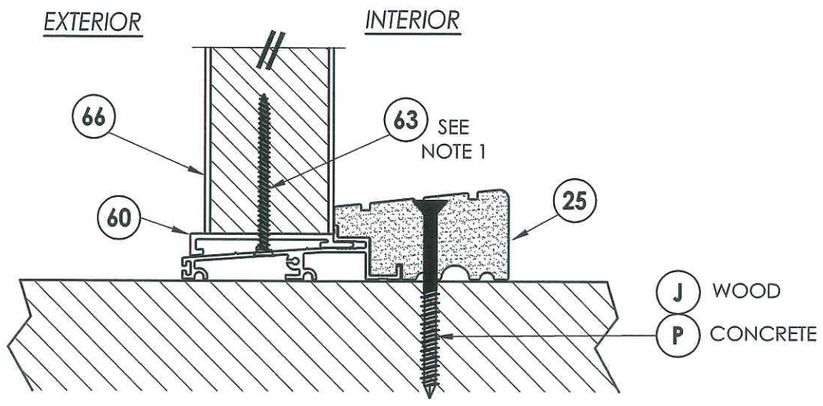
1/6 **VERTICAL CROSS SECTION**
Outswing shown
Inswing also approved



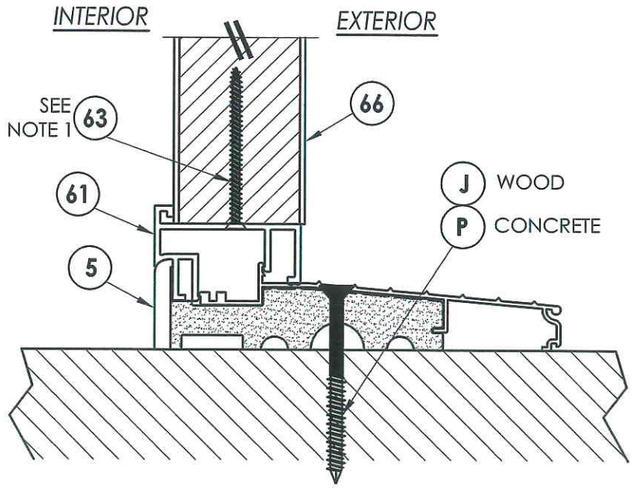
2/6 **VERTICAL CROSS SECTION**
Outswing configuration

NOTE:

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



3/6 **VERTICAL CROSS SECTION**
Outswing configuration



4/6 **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 FLUSH-GLAZED

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

DATE: 8/29/05
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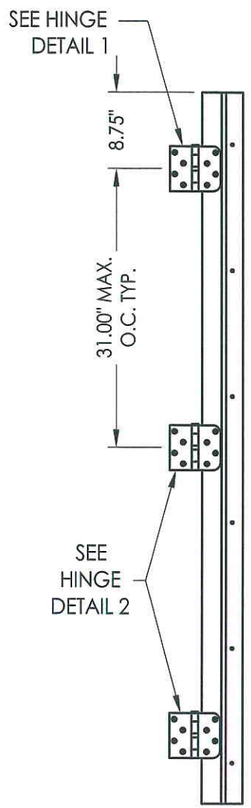
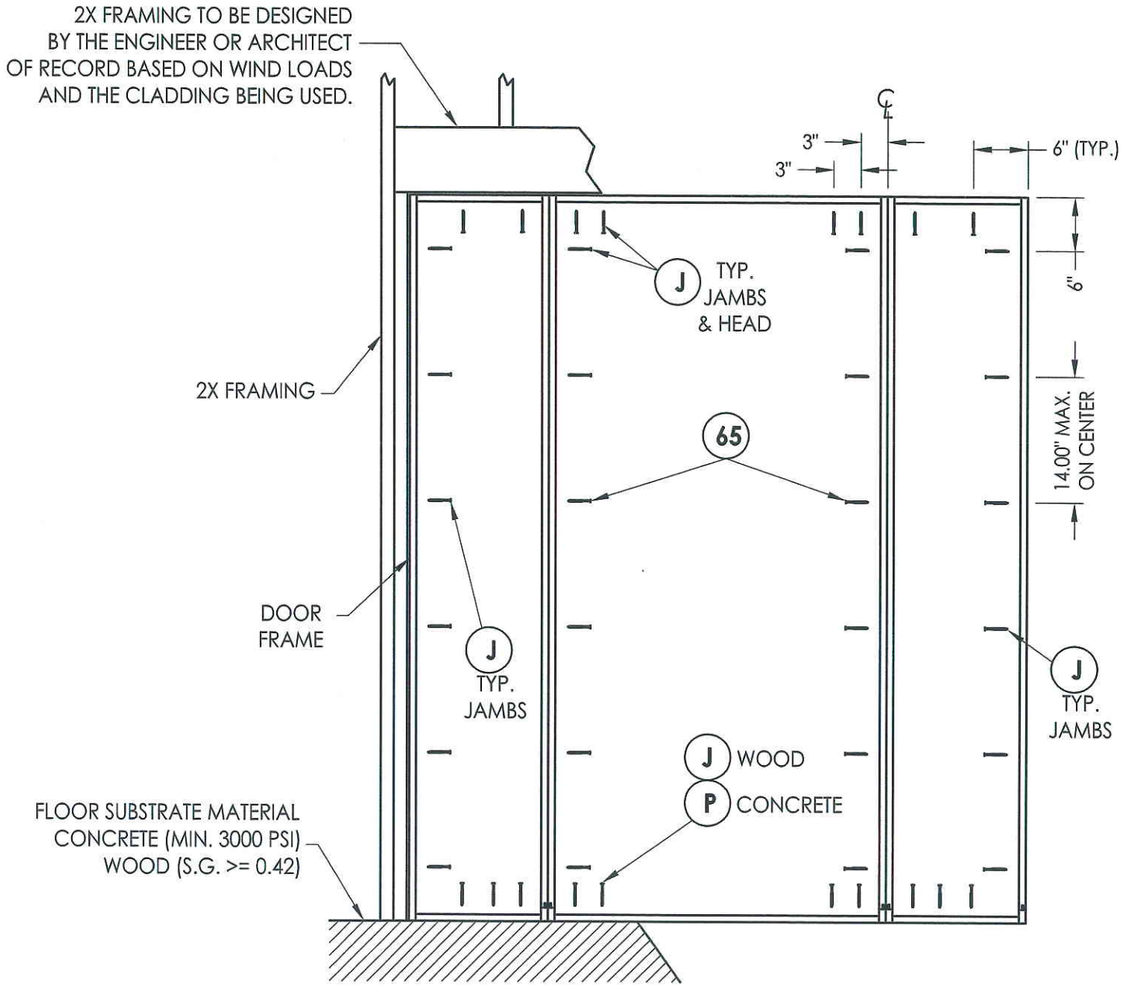
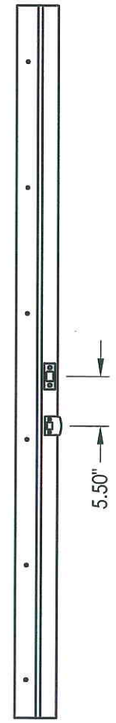


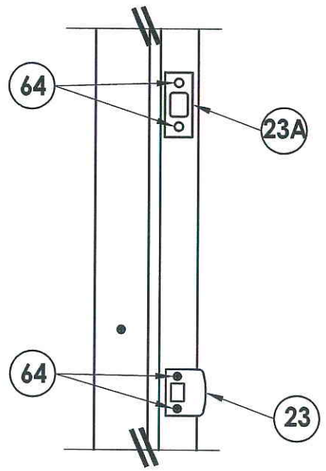
HINGE JAMB



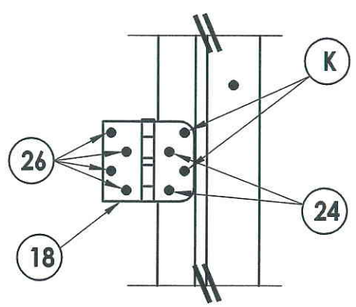
FRAME ANCHORING
Stud construction



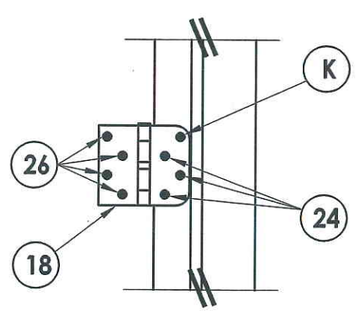
STRIKE JAMB



STRIKE PLATE DETAIL



HINGE DETAIL 1



HINGE DETAIL 2

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

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

7-7-10

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

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: 8/29/05
SCALE: N.T.S.
DWG. BY: WH
CHK. BY: LFS
DRAWING NO.: TX-4037
SHEET 7 OF 9

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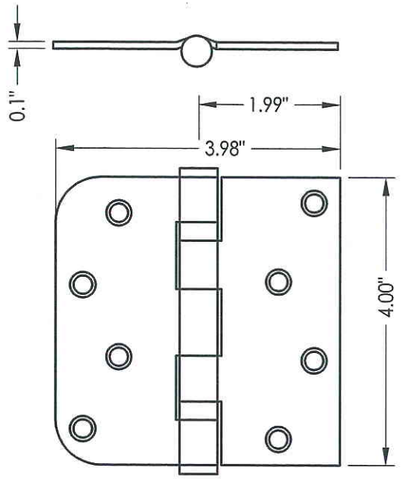
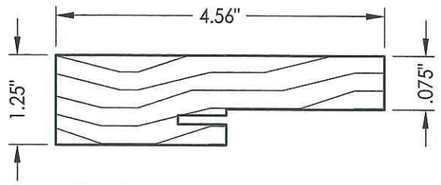
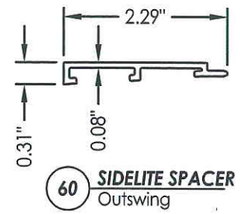


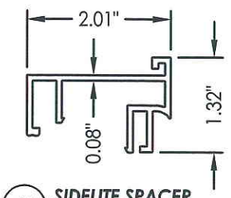
18 **HINGE**



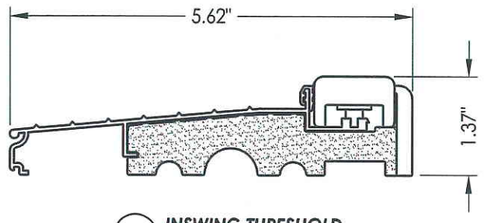
4 3 2 **SIDE & HEAD JAMBS**



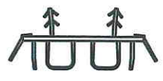
60 **SIDELITE SPACER**
Outswing



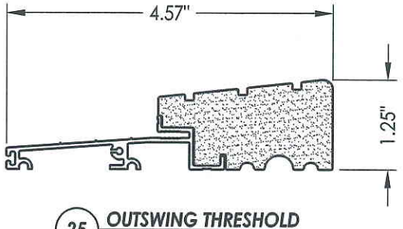
61 **SIDELITE SPACER**
Inswing



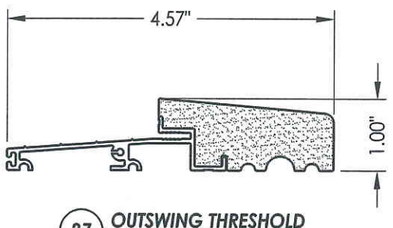
5 **INSWING THRESHOLD**



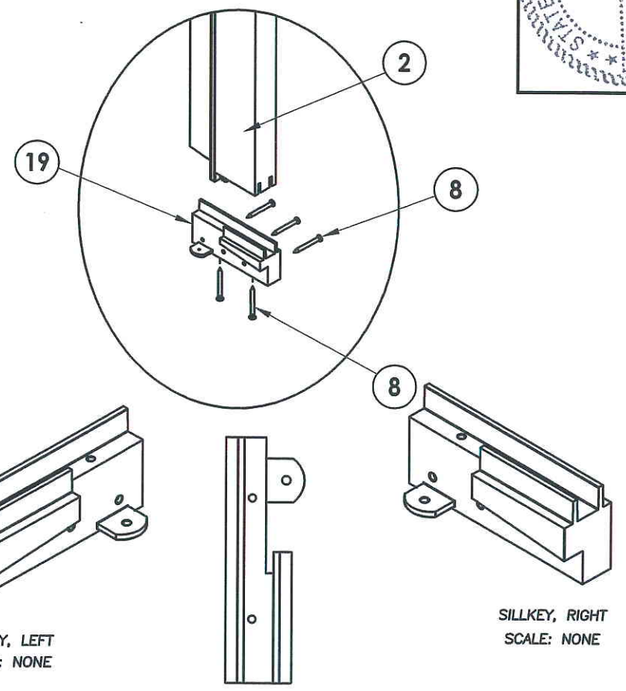
6 **DOOR BOTTOM SWEEP**



25 **OUTSWING THRESHOLD**
High-dam option

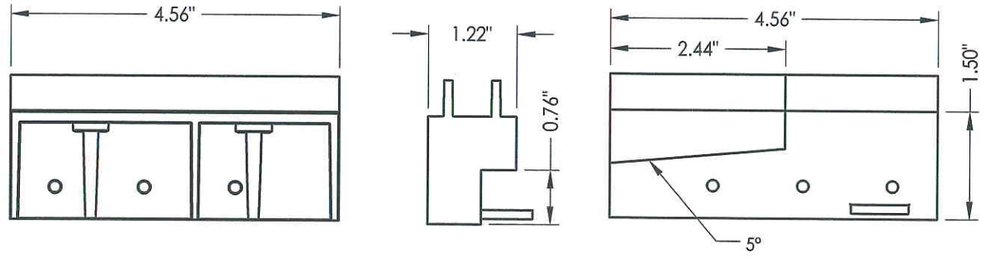


27 **OUTSWING THRESHOLD**

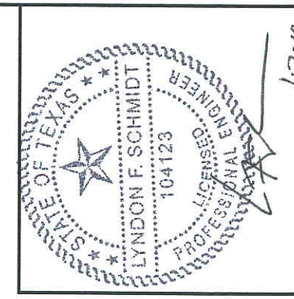


SILLKEY, LEFT
SCALE: NONE

SILLKEY, RIGHT
SCALE: NONE



19 **SILLKEY DETAILS**
Optional



1-7-10

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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: *COMPONENTS*

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

DATE: 8/29/05
SCALE: N.T.S.
DWG. BY: WH
CHK. BY: LFS
DRAWING NO.: TX-4037
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
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
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
9	#9 X 2-1/4" PFH WOOD 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
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 THREDING SCREW	STEEL
41	POLYPROPYLENE & PVC COMBINATION GLAZING SPACER	POLY.
42	ALUMINUM & BUTYL SPACER SYSTEM	ALUM./BUTYL
43	PVC & ALUMINUM SPACER SYSTEM	PVC/ ALUM.
60	SIDELITE SPACER - OUTSWING	PVC
61	SIDELITE SPACER - INSWING	PVC
62	QUARTER ROUND	WOOD
63	#8 X 2-1/4" PFH SCREW	STEEL
64	#8 X 2" PFH SCREW	STEEL
65	#10 X 2" PFH SCREW	STEEL
66	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
70	LVL SIDELITE STILE	POPLAR
71	LVL SIDELITE TOP RAIL	POPLAR
72	LVL SIDELITE BOTTOM RAIL	POPLAR

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

1-7-10

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