

# THERMA TRU®

118 INDUSTRIAL DR., EDGERTON, OH 43517  
TEL. (419)298-1740

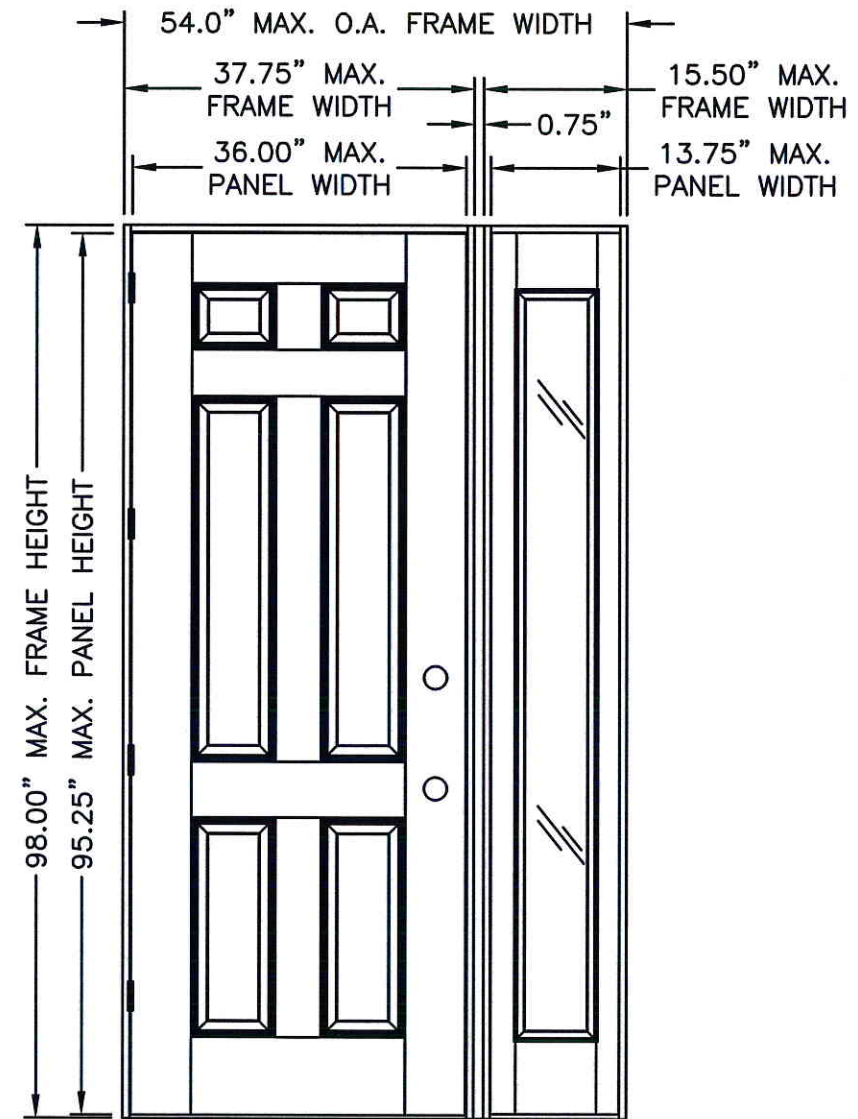
## SMOOTH STAR & FIBER CLASSIC SINGLE "IMPACT" DOOR WITH "NON-IMPACT" SIDELITE INSWING / OUTSWING

### EVALUATED FOR USE IN THE STATE OF TEXAS

The Fiberglass Opaque 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:

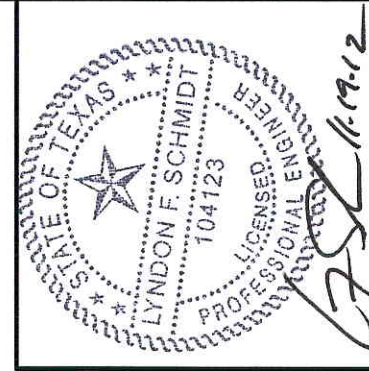
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. The opaque door has been tested and evaluated as a large missile impact protective system for installation in the Seaward, Inland I and Inland II areas. The opaque door meets missile level "D" as defined in ASTM E 1996. The non-impact sidelites require an impact protective system when installed in the Seaward, Inland I and Inland II areas.
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.

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5	HORIZONTAL CROSS SECTIONS & GLAZING DETAILS
6	VERTICAL CROSS SECTIONS
7	VERTICAL CROSS SECTIONS
8	FRAME ANCHORING
9	COMPONENTS
10	BILL OF MATERIALS



"SMOOTH STAR" & "FIBER CLASSIC"

DOOR TYPE	SWING	OVERALL FRAME DIMENSION	OVERALL SIDELITE D.L.O. DIMENSION	DESIGN PRESSURE	
				POSITIVE	NEGATIVE
SMOOTH STAR	OUTSWING	54.0" X 96.50"	6.75"	+65.0	-65.0
	INSWING	54.0" X 98.00"		+65.0	-65.0
FIBER CLASSIC	OUTSWING	54.0" X 96.50"	79.00"	+65.0	-65.0
	INSWING	54.0" X 98.00"		+65.0	-65.0



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

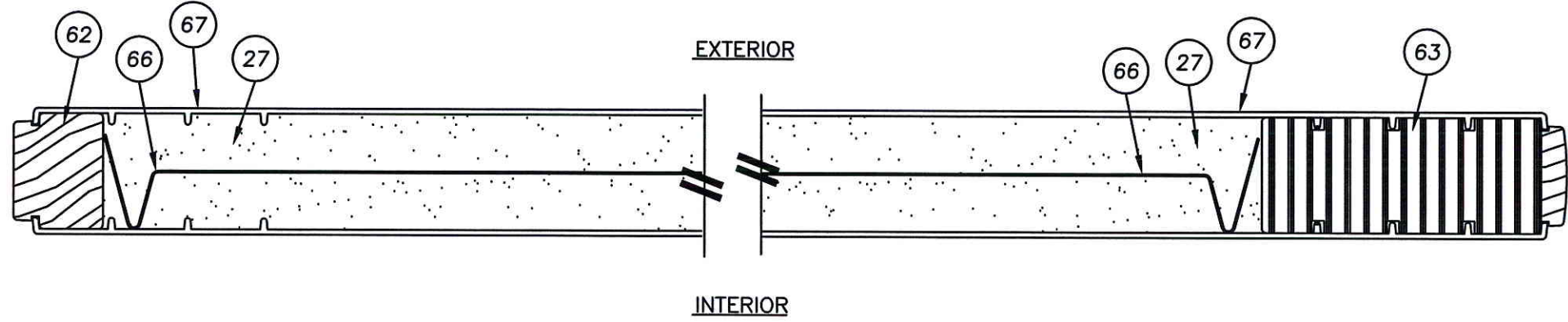
PRODUCT: SINGLE OPAQUE  
FIBERGLASS DOOR W/SIDELITE  
"IMPACT" INSWING / OUTSWING  
PART OR ASSEMBLY:  
TYPICAL ELEVATIONS, DESIGN  
PRESSURES & GENERAL NOTES

NO.	DATE	BY	REVISIONS

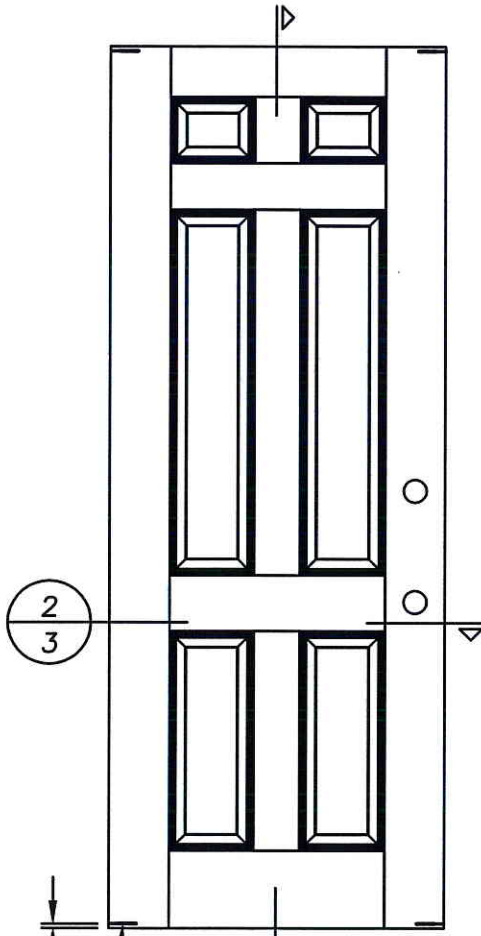
DATE: 7/16/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4180  
SHEET 1 OF 10



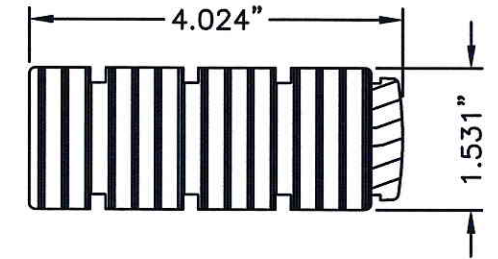
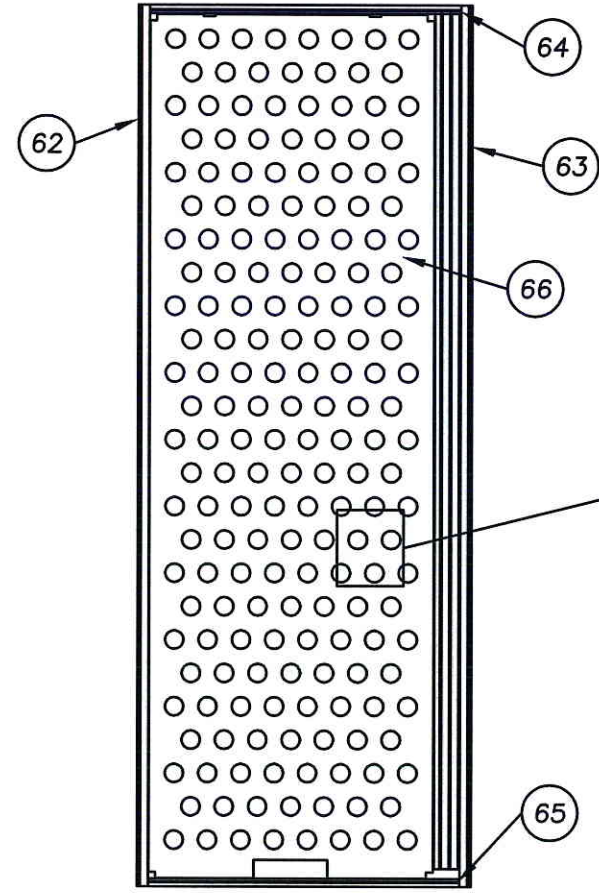
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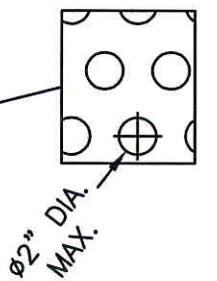
2 HORIZONTAL CROSS SECTION  
3 FIBER CLASSIC



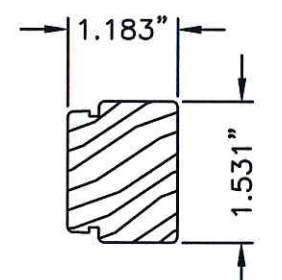
32 TYP. 4 CORNERS OF PANEL  
1/3 FIBER CLASSIC



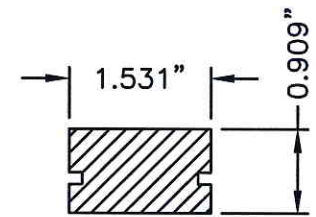
63 LOCK STILE FIBER CLASSIC



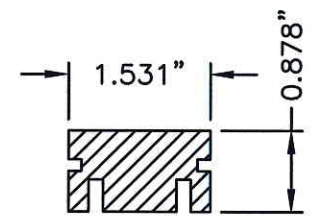
28.86% OPEN AREA MAX.



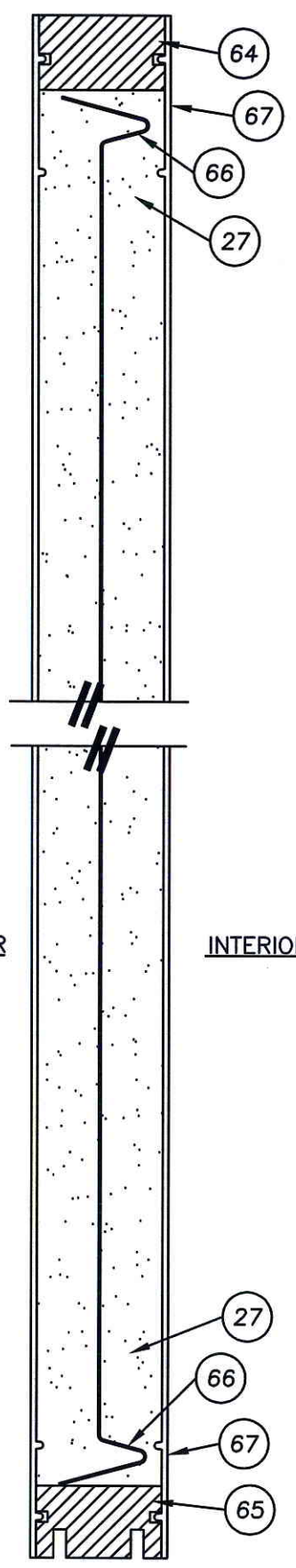
62 HINGE STILE FIBER CLASSIC



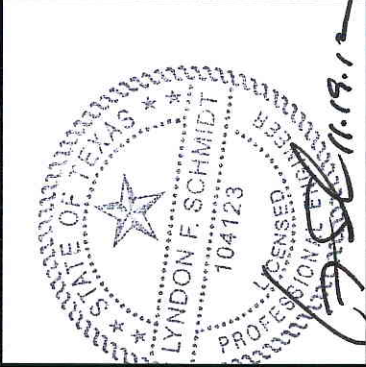
64 TOP RAIL FIBER CLASSIC



65 BOTTOM RAIL FIBER CLASSIC



1 VERTICAL CROSS SECTION  
3 FIBER CLASSIC



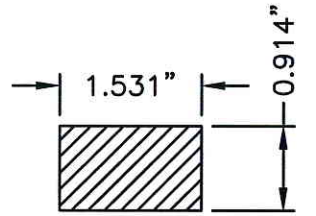
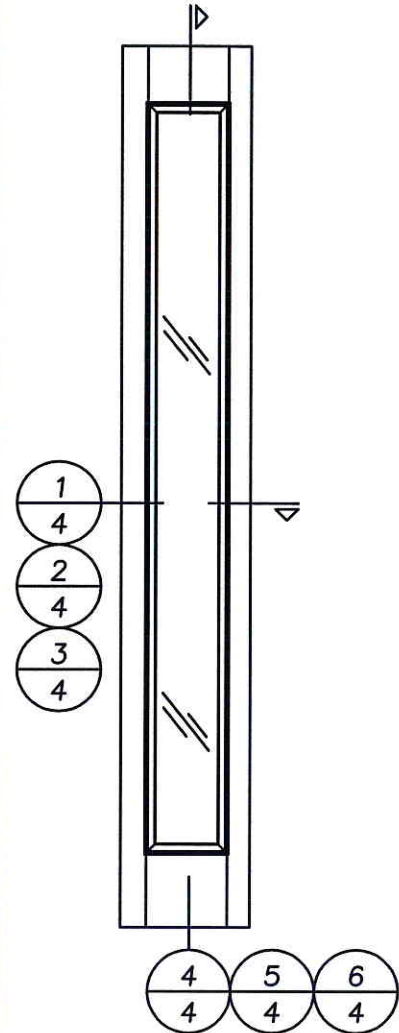
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123  
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: SINGLE OPAQUE FIBERGLASS DOOR W/SIDELITE "IMPACT" INSWING / OUTSWING  
PART OR ASSEMBLY: DOOR PANEL DETAILS (FIBER CLASSIC)

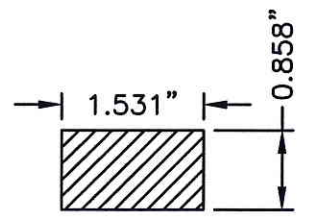
REVISIONS		NO.	DATE	BY

DATE: 7/16/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4180  
SHEET 3 OF 10

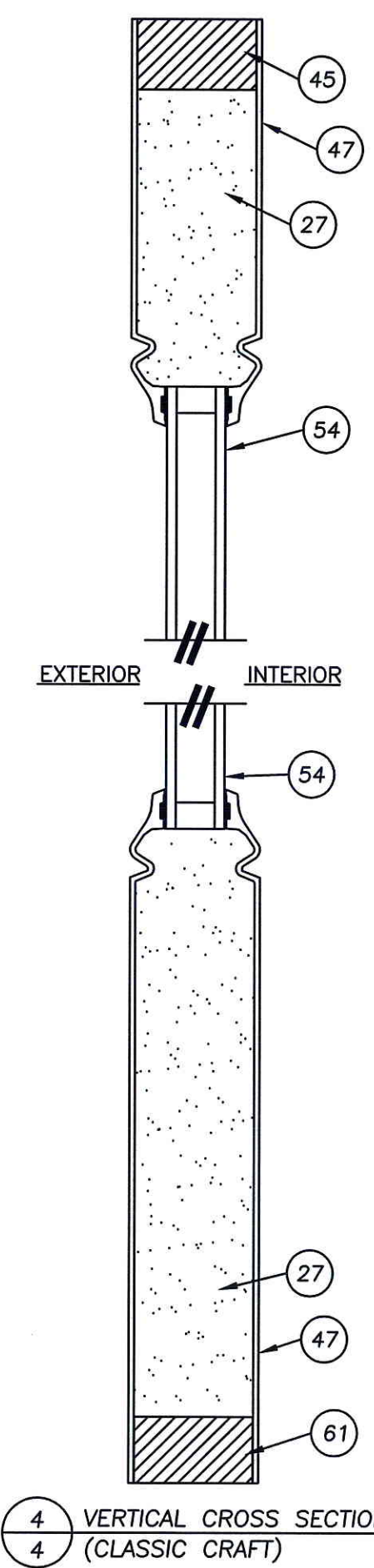
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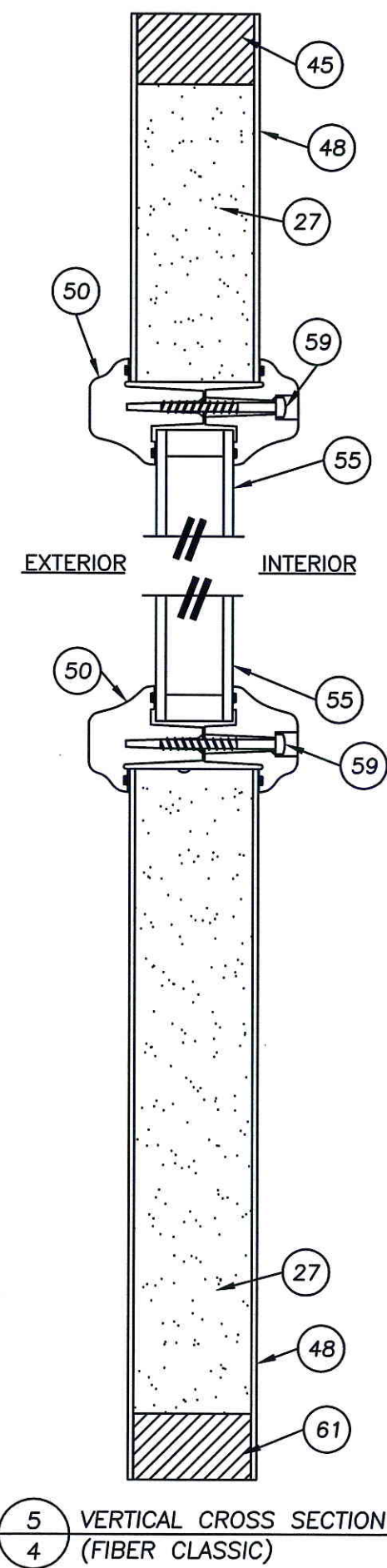
45 TOP RAIL SIDELITE



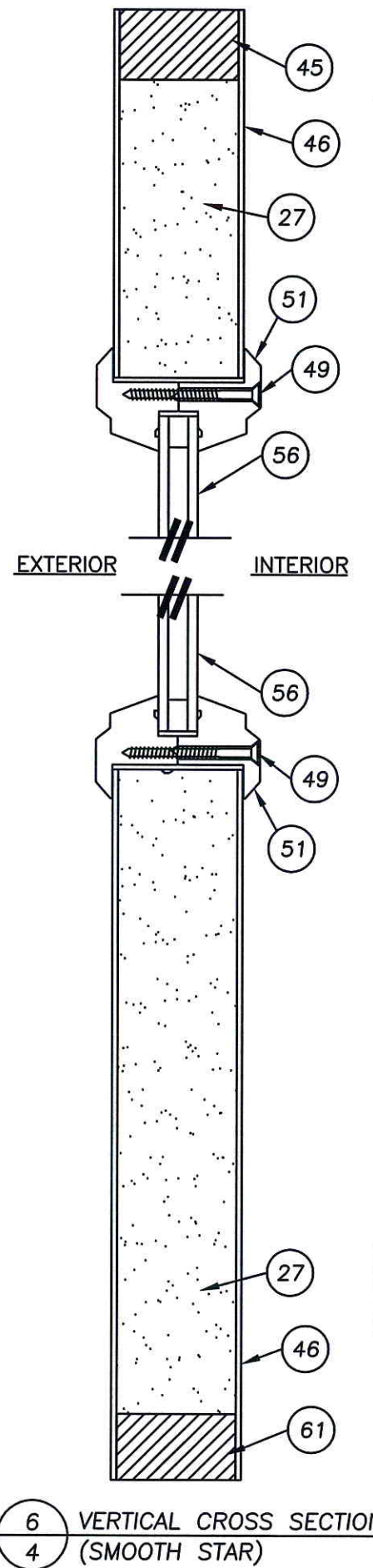
61 BOTTOM RAIL SIDELITE



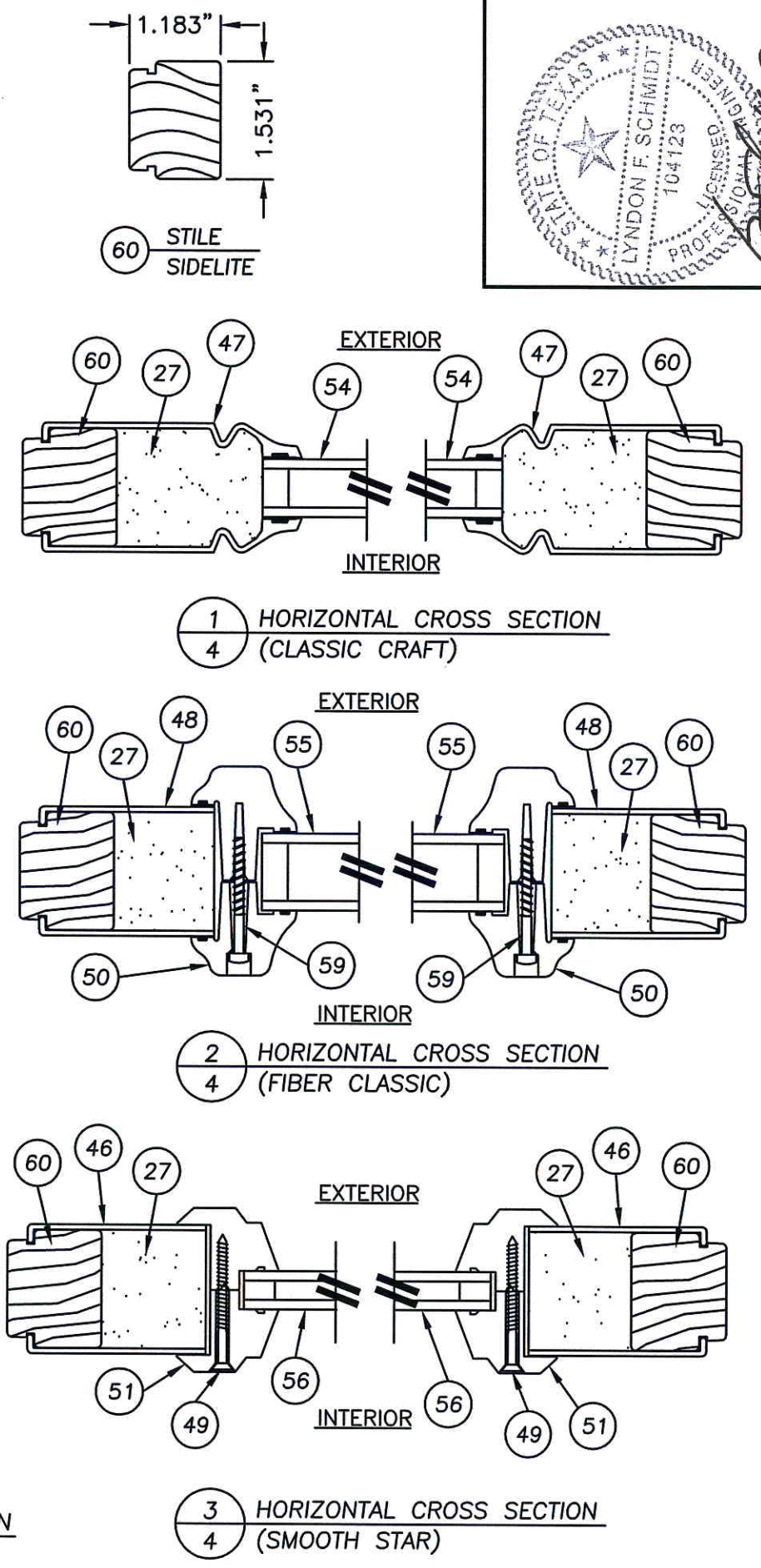
4 VERTICAL CROSS SECTION (CLASSIC CRAFT)



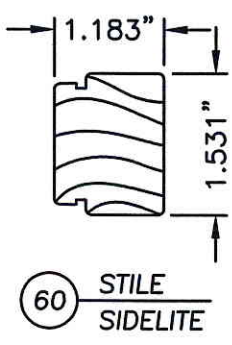
5 VERTICAL CROSS SECTION (FIBER CLASSIC)



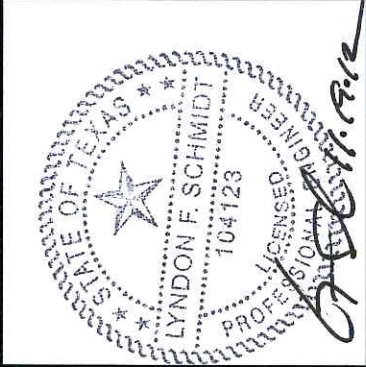
6 VERTICAL CROSS SECTION (SMOOTH STAR)



3 HORIZONTAL CROSS SECTION (SMOOTH STAR)



60 STILE SIDELITE



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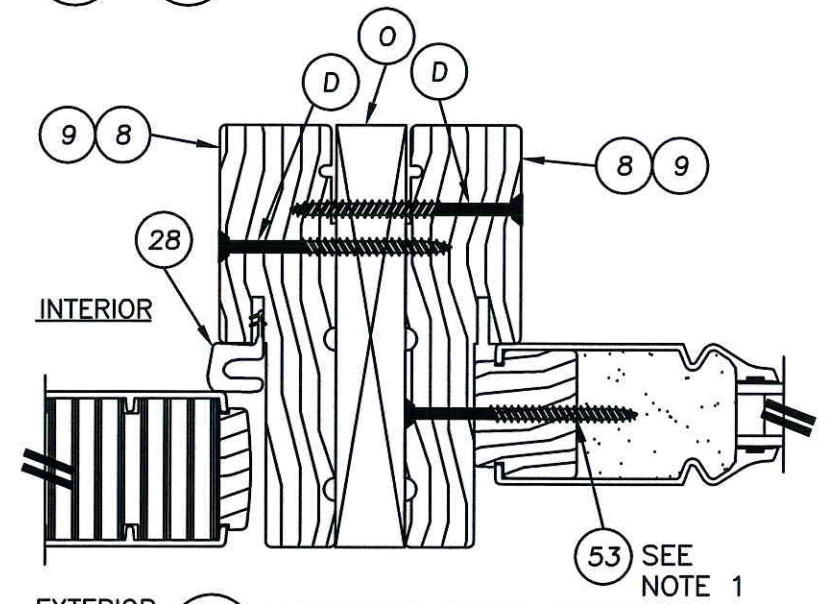
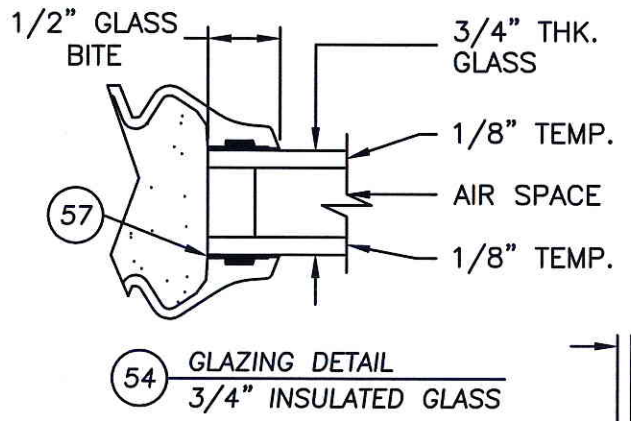
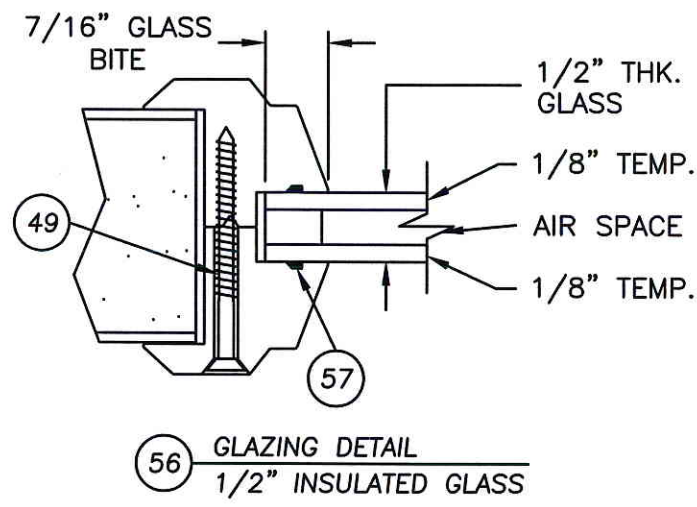
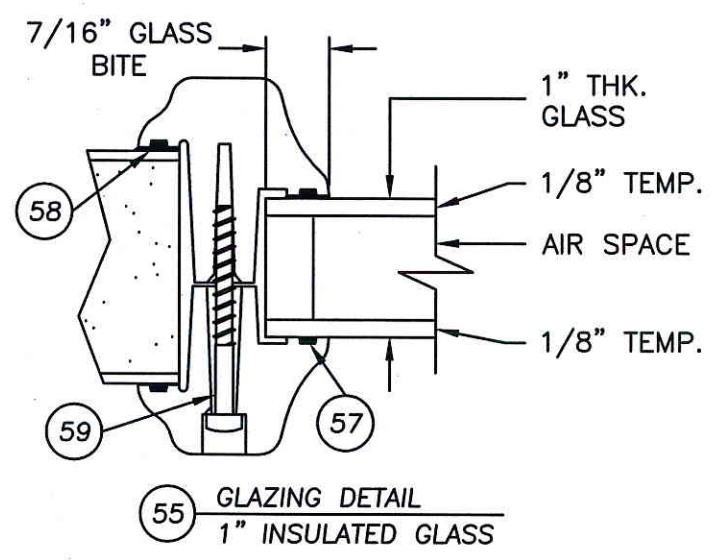
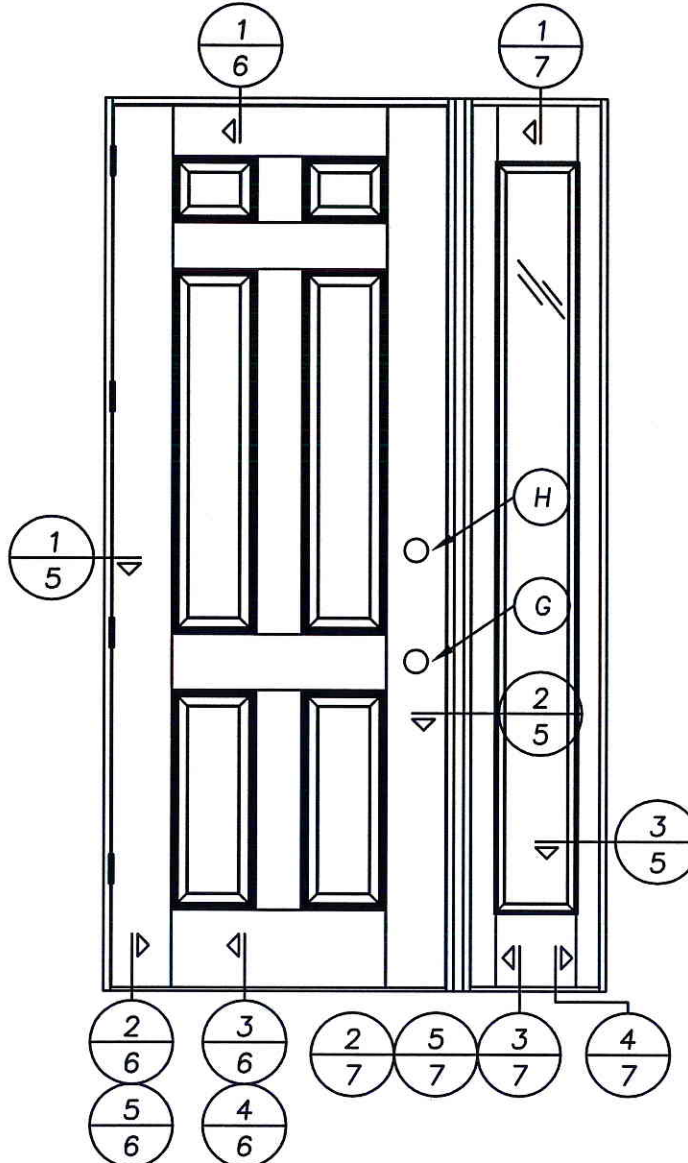
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: SINGLE OPAQUE FIBERGLASS DOOR W/SIDELITE "IMPACT" INSWING / OUTSWING PART OR ASSEMBLY:

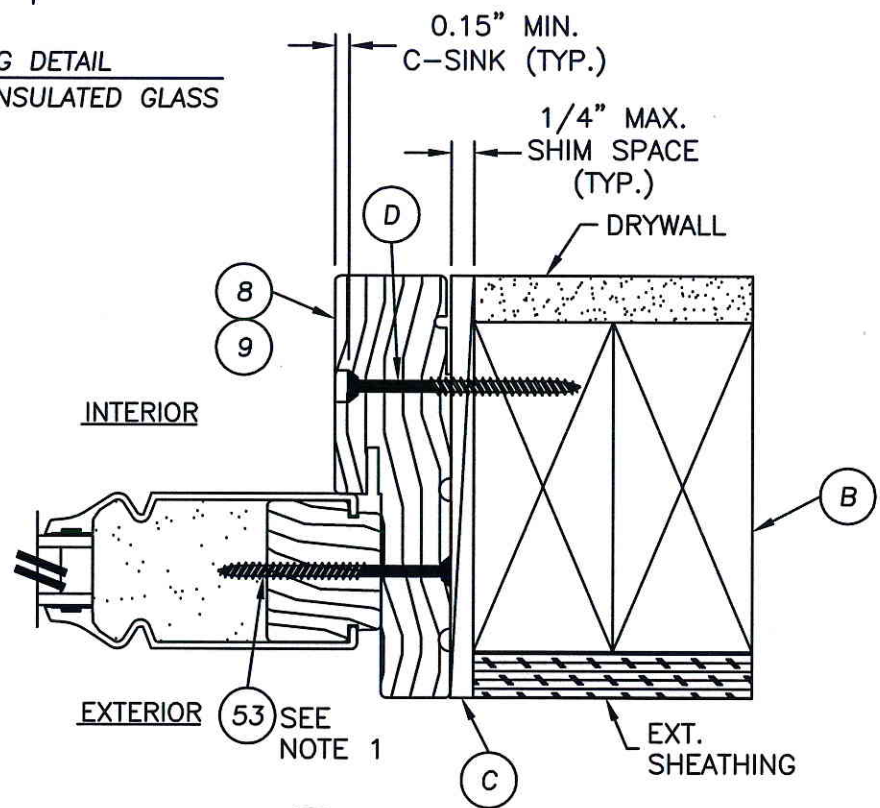
SIDELITE PANEL DETAILS

NO.	DATE	REVISIONS	BY

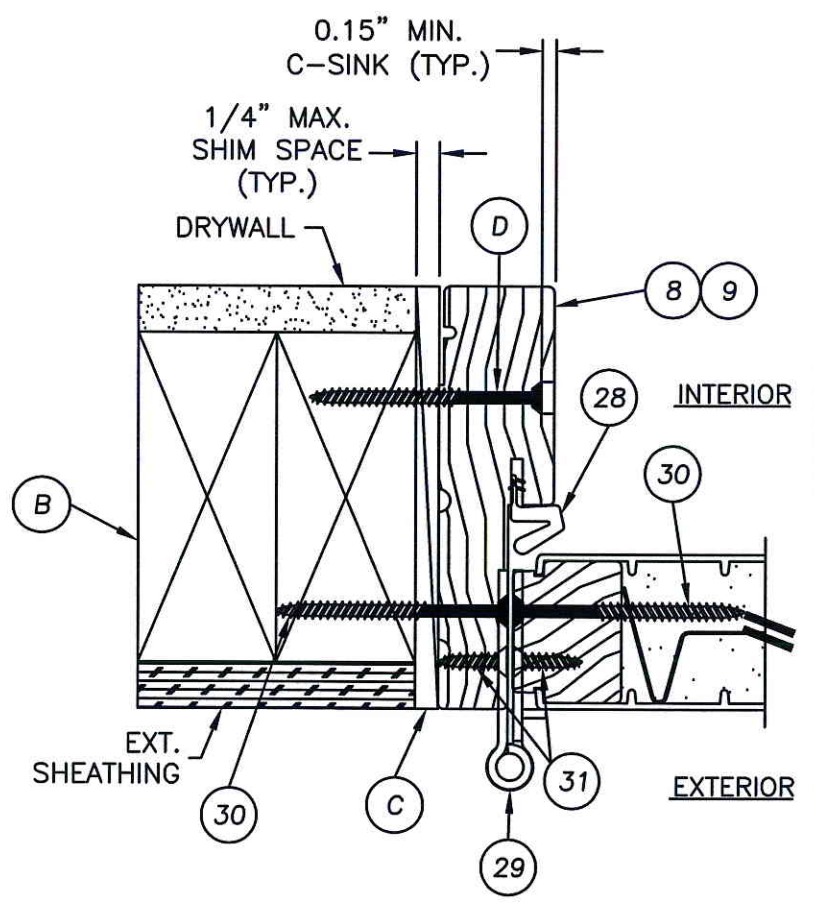
DATE: 7/16/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4180  
SHEET 4 OF 10



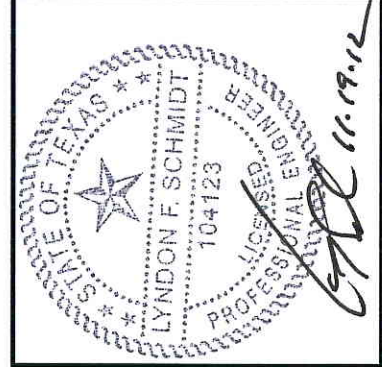
2 HORIZONTAL CROSS SECTION  
5 OUTSWING SHOWN (INSWING ALSO APPROVED)  
SMOOTH STAR PANEL SHOWN  
SEE PANEL DETAILS FOR  
OPTIONAL PANEL TYPES



3 HORIZONTAL CROSS SECTION  
5 OUTSWING SHOWN (INSWING ALSO APPROVED)  
CLASSIC CRAFT PANEL SHOWN  
SEE SIDELITE PANEL DETAILS FOR  
OPTIONAL PANEL TYPES



1 HORIZONTAL CROSS SECTION  
5 OUTSWING SHOWN (INSWING ALSO APPROVED)  
SMOOTH STAR PANEL SHOWN  
SEE DOOR PANEL DETAILS FOR  
OPTIONAL PANEL TYPES



NOTE:  
1. SIDELITE ASSEMBLY SCREWS LOCATED 4" FROM ENDS AND 5 MORE EQUALLY SPACED (7 TOTAL).

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PRODUCT: SINGLE OPAQUE  
FIBERGLASS DOOR W/SIDELITE  
"IMPACT" INSWING / OUTSWING

PART OR ASSEMBLY:

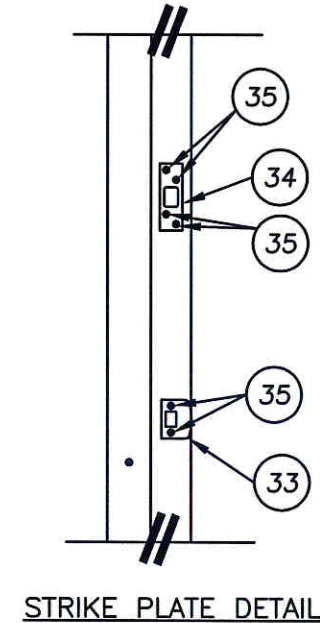
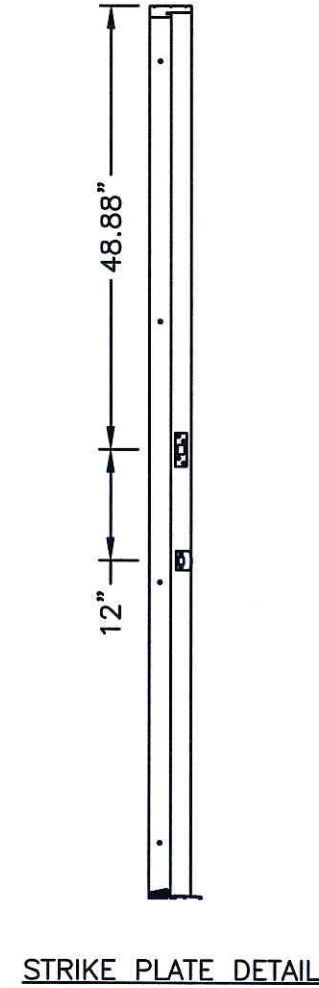
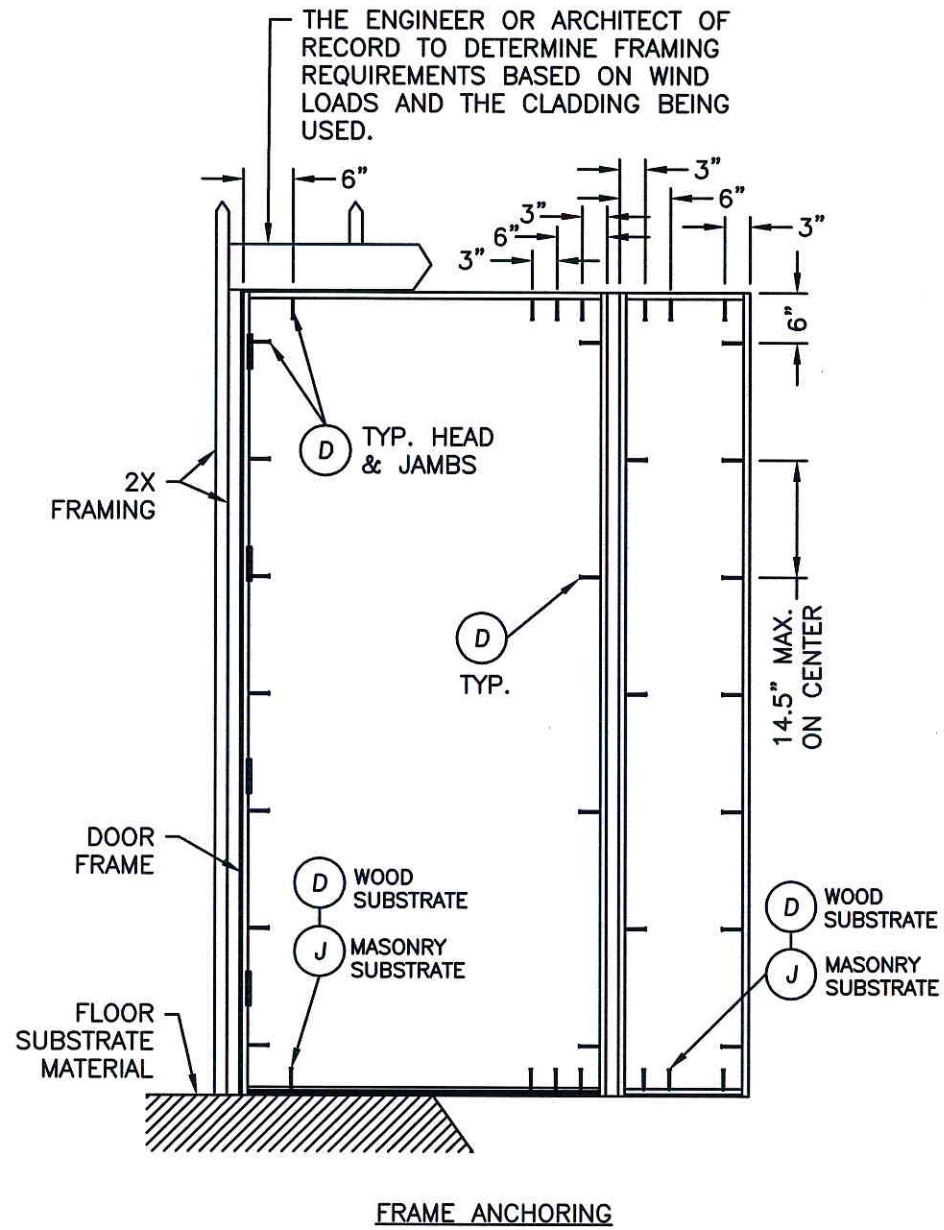
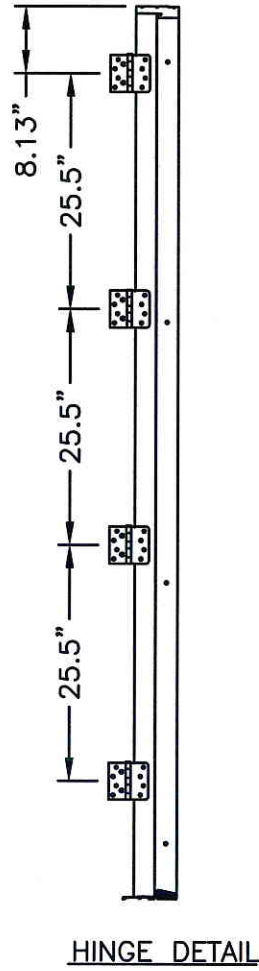
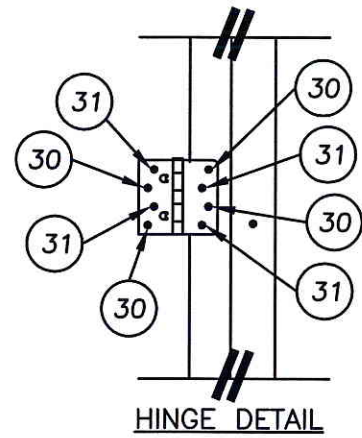
HORIZONTAL CROSS SECTIONS  
& GLAZING DETAILS

NO.	DATE	BY	REVISIONS

DATE: 7/16/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4180  
SHEET 5 OF 10







Documents Prepared By: Lyndon F. Schmidt, P.E.  
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TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: SINGLE OPAQUE  
FIBERGLASS DOOR W/SIDELITE  
"IMPACT" INSWING / OUTSWING  
PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	REVISIONS	BY

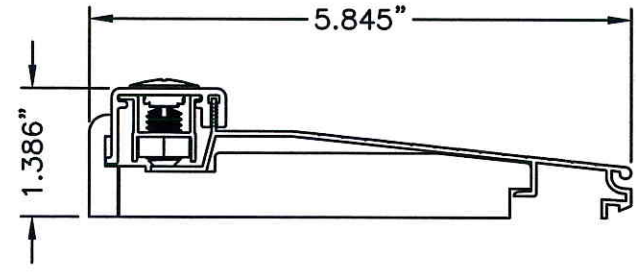
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SCALE: N.T.S.  
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CHK. BY: LFS  
DRAWING NO.: TX-4180  
SHEET 8 OF 10

**CONCRETE ANCHOR NOTES:**

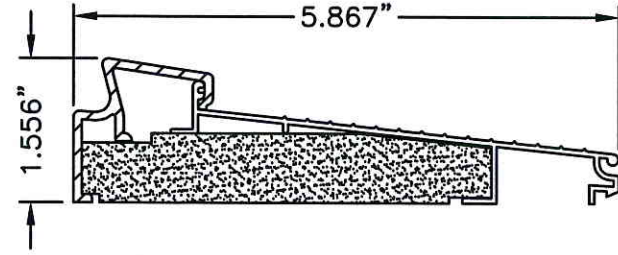
- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimension are not exceeded.
- Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-3/4"	2-1/2"	3"
ELCO ULTRACON®	1/4"	1-3/4"	1"	3"

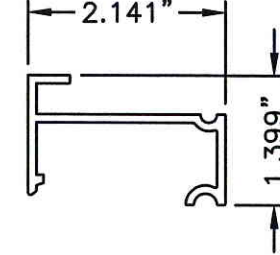




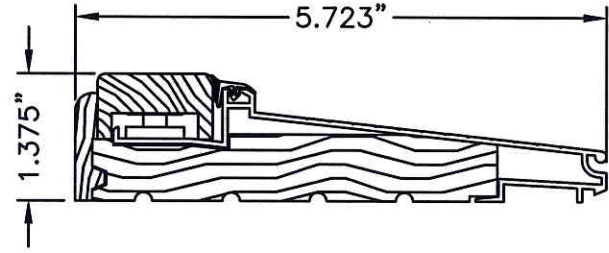
2 THRESHOLD  
INSWING ADJUSTABLE



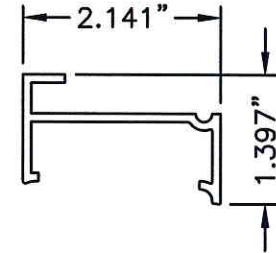
3 THRESHOLD  
INSWING SELF-ADJUST



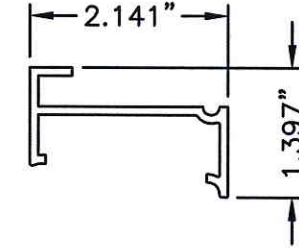
41 INSWING SIDELITE  
SPACER



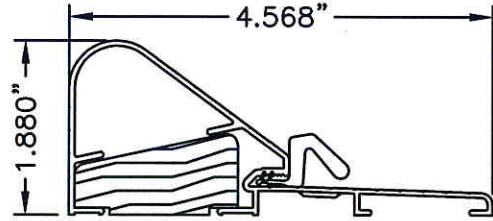
1 THRESHOLD  
INSWING ADJUSTABLE



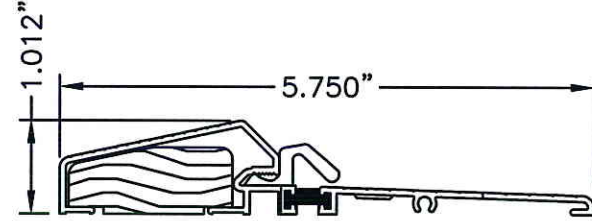
40 INSWING SIDELITE  
SPACER



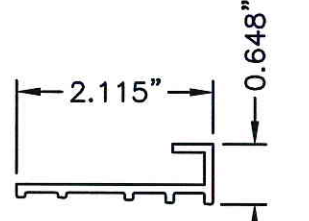
43 INSWING SIDELITE  
SPACER



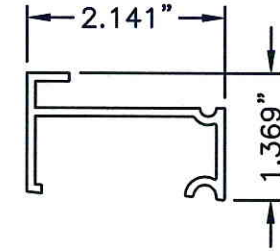
4 THRESHOLD  
OUTSWING COASTAL



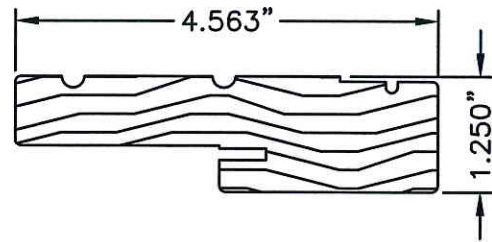
5 THRESHOLD  
OUTSWING STANDARD



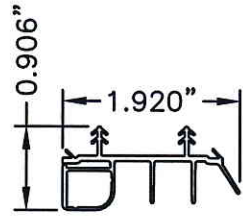
44 OUTSWING SIDELITE  
SPACER



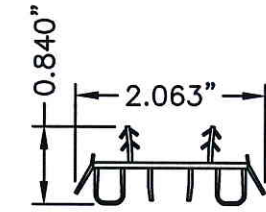
42 INSWING SIDELITE  
SPACER



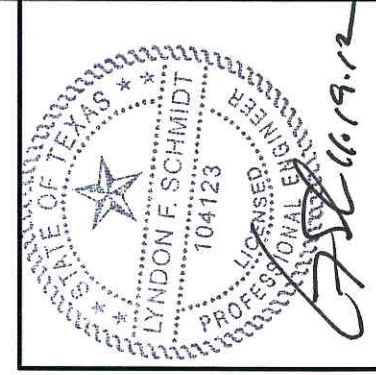
8 JAMB



7 SWEEP



52 SWEEP



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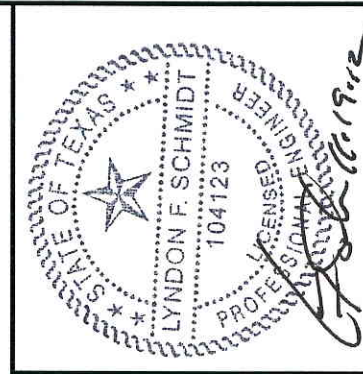
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: SINGLE OPAQUE  
FIBERGLASS DOOR W/SIDELITE  
"IMPACT" INSWING / OUTSWING  
PART OR ASSEMBLY: COMPONENTS

NO.	DATE	BY

DATE: 7/16/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4180  
SHEET 9 OF 10

R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\d. RWBC Drawings\TX-4175-83.dwg, OX10



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CERTIFICATE OF REGISTRATION # F-11852

BILL OF MATERIALS			BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
B	2X FRAMING (G >= 0.42)	WOOD	40	IN SWING SIDELITE SPACER FOR ADJUSTABLE THRESHOLD (DB14AJA)	PVC
C	1/4" MAX. SHIM SPACE	WOOD	41	IN SWING SIDELITE SPACER FOR HP THRESHOLD (DB14HPA)	PVC
D	#10 X 2-1/2" PFH WOOD SCREW	STEEL	42	IN SWING SIDELITE SPACER FOR SELF ADJUST THRESHOLD (DB14)	PVC
G	KWIKSET 200 SERIES PASSAGE LOCK	STEEL	43	IN SWING SIDELITE SPACER	PVC
H	KWIKSET 600 SERIES DEADBOLT	STEEL	44	OUTSWING SIDELITE SPACER	PVC
J	1/4" ELCO OR ITW CONCRETE SCREW (1-3/4" MIN. EMB.)	STEEL	45	SIDELITE TOP RAIL	PVC
O	1X MULLION (G >= 0.42)	WOOD	46	SIDELITE SKIN 0.070" THK. (SMOOTH STAR) Fy = 6,000 PSI MIN.	FIBERGLASS
1	IN SWING ADJUSTABLE THRESHOLD (IS300AJ)	ALUM./WOOD	47	SIDELITE SKIN 0.090" THK. (CLASSIC CRAFT) Fy = 6,000 PSI MIN.	FIBERGLASS
2	IN SWING THRESHOLD (IS300HP5)	ALUM./COMP.	48	SIDELITE SKIN 0.070" THK. (FIBER CLASSIC) Fy = 6,000 PSI MIN.	FIBERGLASS
3	IN SWING SELF ADJUST THERMAL BREAK THRESHOLD (ISP30M)	ALUM./COMP.	49	#6 X 1-3/4" PFH SCREW (LITE FRAME)	STEEL
4	OUTSWING COASTAL THRESHOLD	ALUM./WOOD	50	LITE FRAME FIBER CLASSIC	PVC
5	OUTSWING STANDARD THRESHOLD	ALUM./WOOD	51	LITE FRAME SMOOTH STAR	PVC
7	DOOR BOTTOM SWEEP	VINYL	52	DOOR BOTTOM SWEEP	VINYL
8	JAMB (OAK)	WOOD	53	#9 X 2-1/2" PFH WOOD SCREW (JAMB TO SIDELITE)	STEEL
9	JAMB (PINE)	WOOD	54	3/4" INSULATED GLASS	GLASS
10	HINGE STILE (SMOOTH STAR)	WOOD		1/8" TEMPERED - AIR - 1/8" TEMPERED	
11	LOCK STILE (SMOOTH STAR)	LVL/WOOD	55	1" INSULATED GLASS	GLASS
12	TOP RAIL (SMOOTH STAR)	PVC		1/8" TEMPERED - AIR - 1/8" TEMPERED	
13	BOTTOM RAIL (SMOOTH STAR)	PVC	56	1/2" INSULATED GLASS	GLASS
14	PANEL REINFORCEMENT 0.023" THK. (SMOOTH STAR)	STEEL		1/8" TEMPERED - AIR - 1/8" TEMPERED	
15	DOOR SKIN 0.070" THK. (SMOOTH STAR) Fy = 6,000 PSI MIN.	FIBERGLASS	57	GLAZING COMPOUND	SILICONE
27	FOAM CORE	POLYURETHANE	58	SEALANT	SILICONE
28	WEATHERSTRIP	FOAM	59	#9 X 1" PPH SCREW (LITE FRAME)	STEEL
29	HINGE	STEEL	60	SIDELITE STILE	WOOD
30	#10 X 2-1/2" PFH SCREW	STEEL	61	SIDELITE BOTTOM RAIL	PVC
31	#10 X 3/4" PFH SCREW	STEEL	62	HINGE STILE (FIBER CLASSIC)	WOOD
32	#9 X 3" PFH WOOD SCREW	STEEL	63	LOCK STILE (FIBER CLASSIC)	LVL/WOOD
33	LATCH STRIKE PLATE	STEEL	64	TOP RAIL (FIBER CLASSIC)	PVC
34	SECURITY STRIKE PLATE (SINGLE DOOR ONLY)	STEEL	65	BOTTOM RAIL (FIBER CLASSIC)	PVC
35	#8 X 3" PFH SCREW	STEEL	66	PANEL REINFORCEMENT 0.023" THK. (FIBER CLASSIC)	STEEL
			67	DOOR SKIN 0.070" THK. (FIBER CLASSIC) Fy = 6,000 PSI MIN.	FIBERGLASS

PRODUCT: SINGLE OPAQUE  
FIBERGLASS DOOR W/SIDELITE  
IMPACT IN SWING / OUTSWING

PART OR ASSEMBLY: BILL OF MATERIALS

NO.	DATE	BY

REVISIONS

DATE: 7/16/12  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4180  
 SHEET 10 OF 10