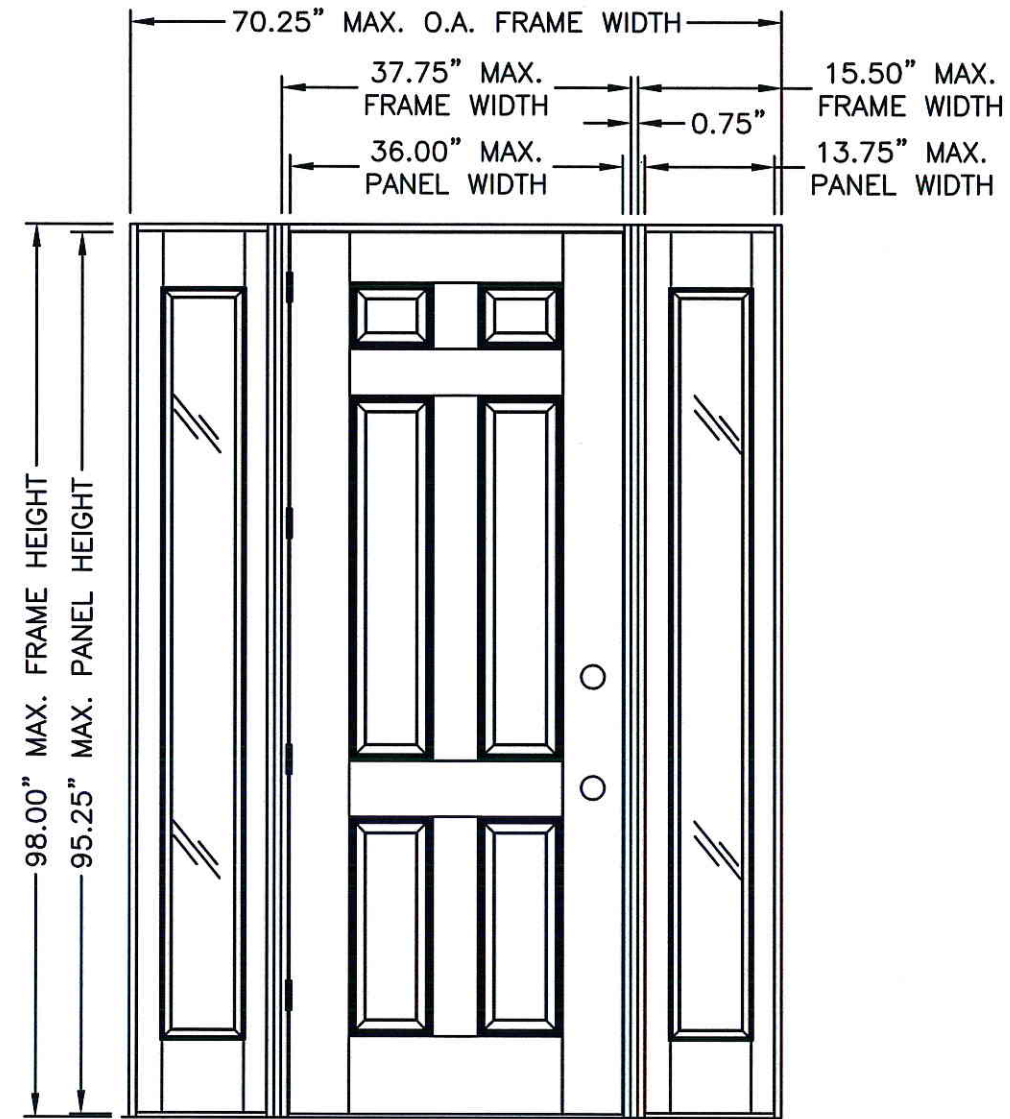


# THERMA TRU®

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

## SMOOTH STAR & FIBER CLASSIC

### SINGLE "IMPACT" DOOR WITH "NON-IMPACT" SIDELITES IN SWING / OUTSWING



"SMOOTH STAR" & "FIBER CLASSIC"

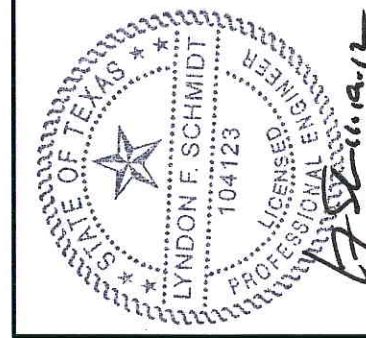
#### EVALUATED FOR USE IN THE STATE OF TEXAS

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.

TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES
2	DOOR PANEL DETAILS (SMOOTH STAR)
3	DOOR PANEL DETAILS (FIBER CLASSIC)
4	SIDELITE PANEL DETAILS
5	HORIZONTAL CROSS SECTIONS & GLAZING DETAILS
6	VERTICAL CROSS SECTIONS
7	VERTICAL CROSS SECTIONS
8	FRAME ANCHORING
9	COMPONENTS
10	BILL OF MATERIALS

DOOR TYPE	SWING	OVERALL FRAME DIMENSION	OVERALL SIDELITE D.L.O. DIMENSION	DESIGN PRESSURE	
				POSITIVE	NEGATIVE
SMOOTH STAR	OUTSWING	70.25" X 96.50"	6.75"	+65.0	-65.0
	IN SWING	70.25" X 98.00"		+65.0	-65.0
FIBER CLASSIC	OUTSWING	70.25" X 96.50"	79.00"	+65.0	-65.0
	IN SWING	70.25" X 98.00"		+65.0	-65.0



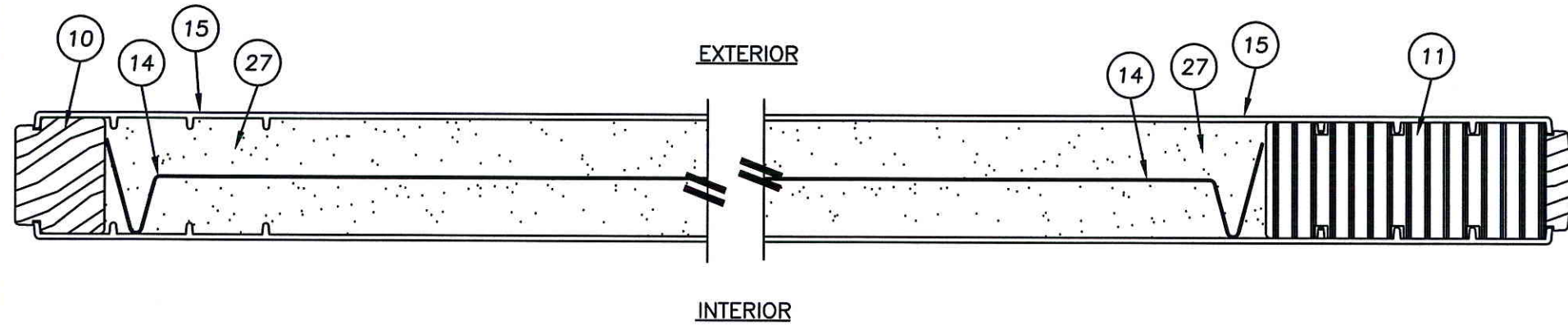
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

RW BUILDING CONSULTANTS, INC.  
P.O. Box 230 Vairico FL 33595  
Phone No.: 813.659.9197

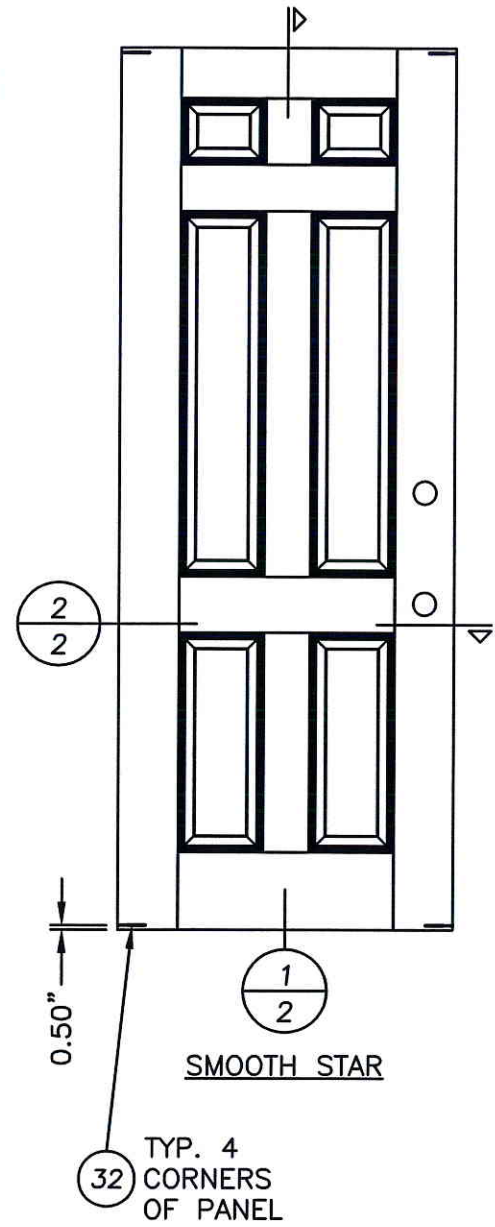
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	REVISIONS
SINGLE OPAQUE FIBERGLASS DOOR W/ SIDELITES "IMPACT" IN SWING / OUTSWING	
PART OR ASSEMBLY:	
TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES	
NO.	DATE
BY	

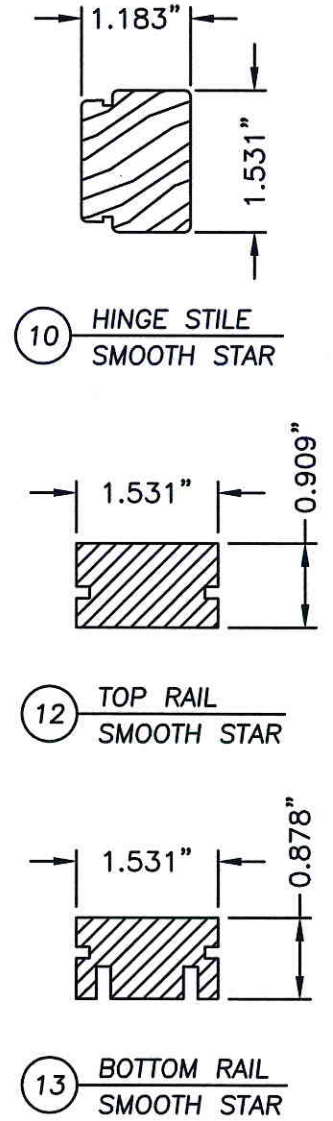
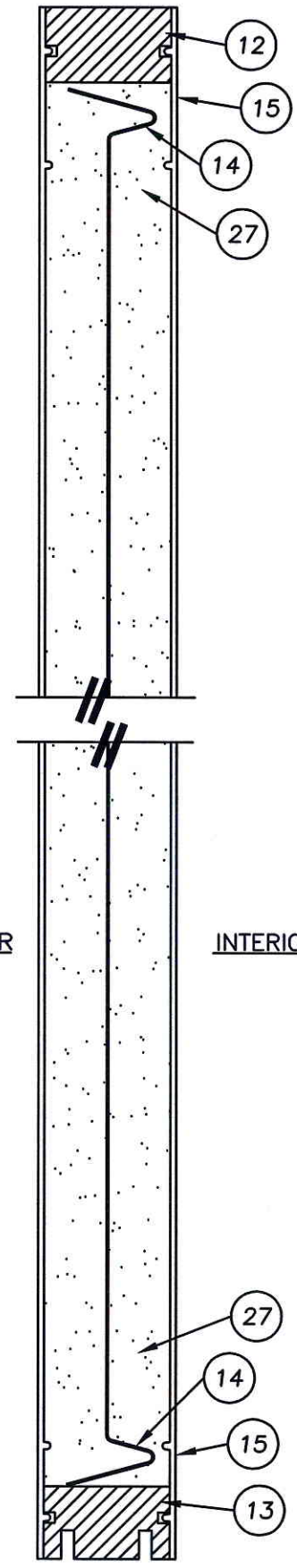
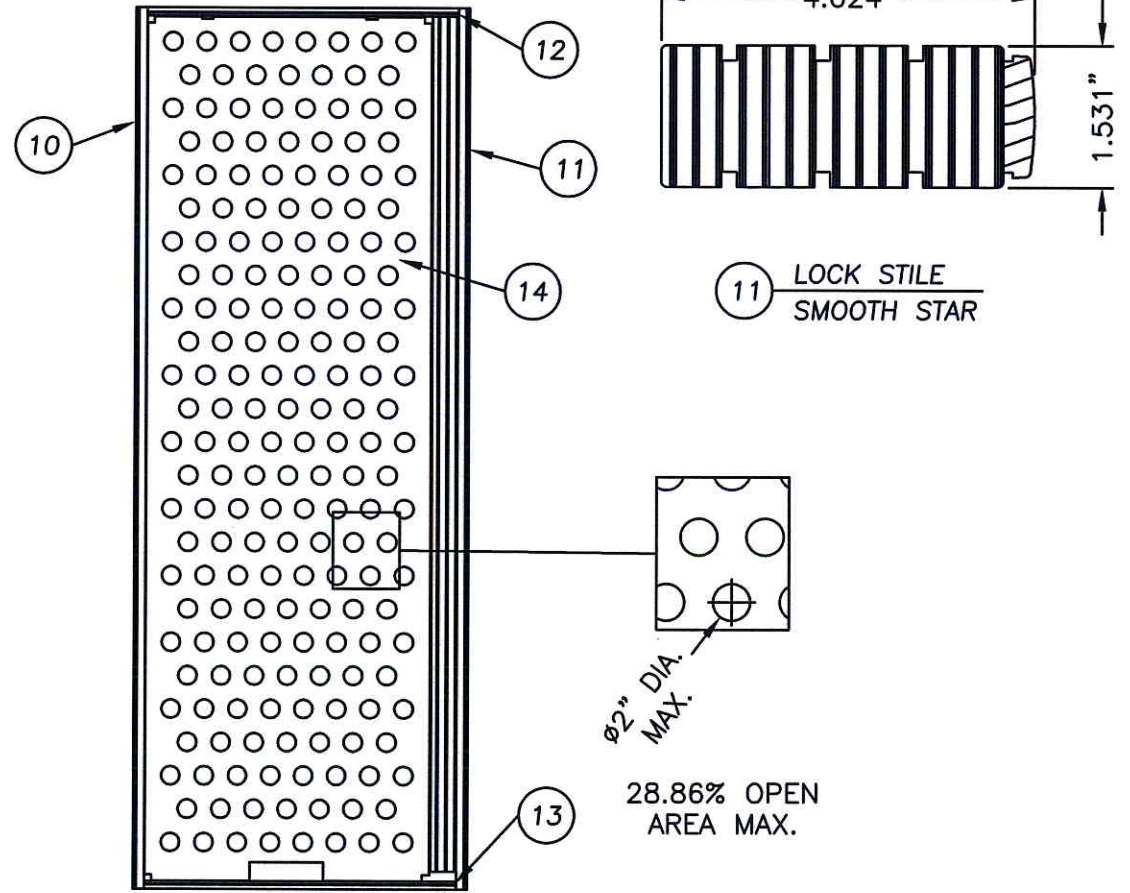
DATE: 7/16/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4182  
SHEET 1 OF 10



2 HORIZONTAL CROSS SECTION  
2 SMOOTH STAR



1 VERTICAL CROSS SECTION  
2 SMOOTH STAR



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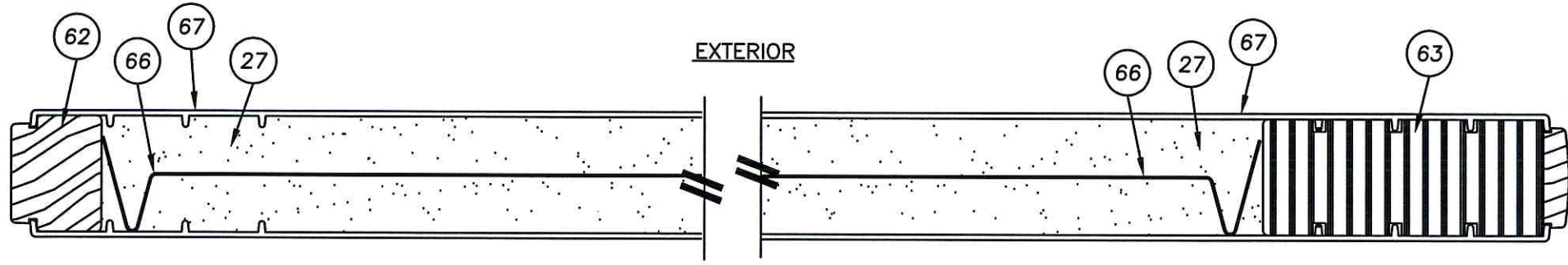
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: SINGLE OPAQUE  
FIBERGLASS DOOR W/ SIDELITES  
"IMPACT" INSURING / OUTSWING

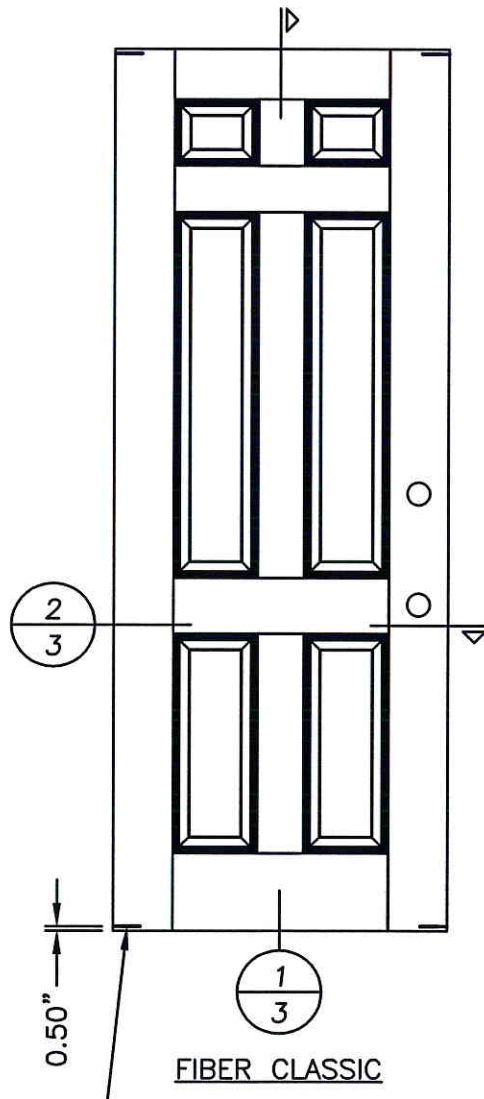
PART OR ASSEMBLY:  
DOOR PANEL DETAILS  
(SMOOTH STAR)

NO.	DATE	BY

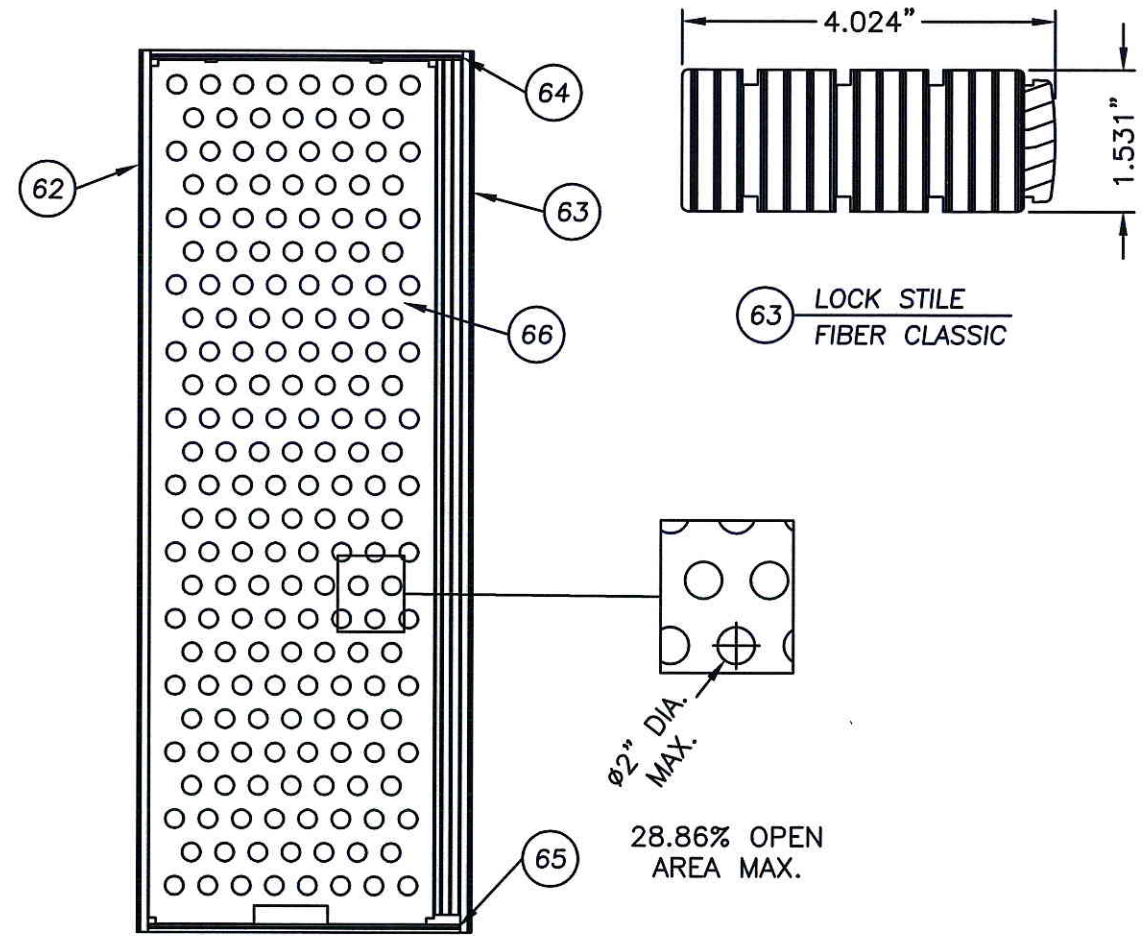
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CHK. BY: LFS  
DRAWING NO.: TX-4182  
SHEET 2 OF 10



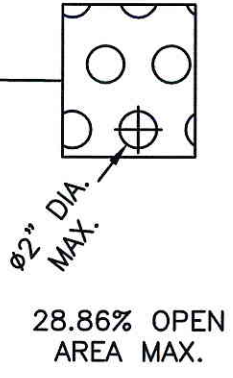
2 HORIZONTAL CROSS SECTION  
3 FIBER CLASSIC



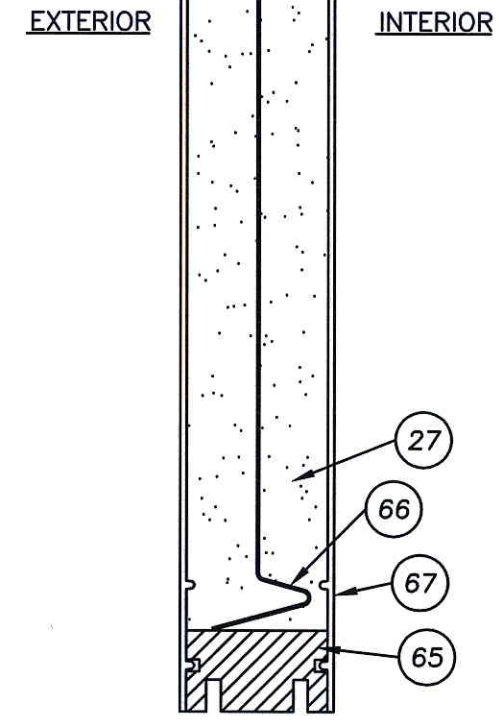
32 TYP. 4 CORNERS OF PANEL



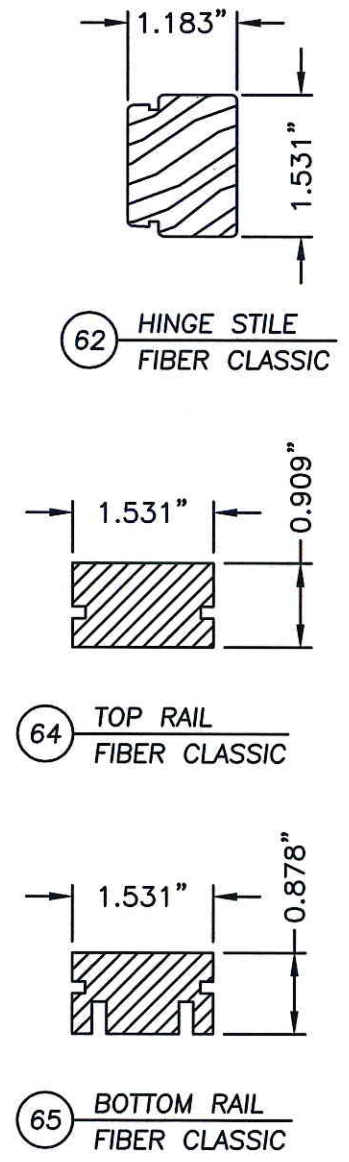
63 LOCK STILE  
FIBER CLASSIC



28.86% OPEN AREA MAX.  
2" DIA. MAX.



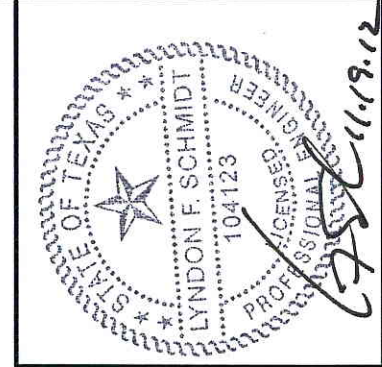
1 VERTICAL CROSS SECTION  
3 FIBER CLASSIC



62 HINGE STILE  
FIBER CLASSIC

64 TOP RAIL  
FIBER CLASSIC

65 BOTTOM RAIL  
FIBER CLASSIC



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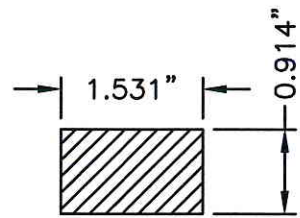
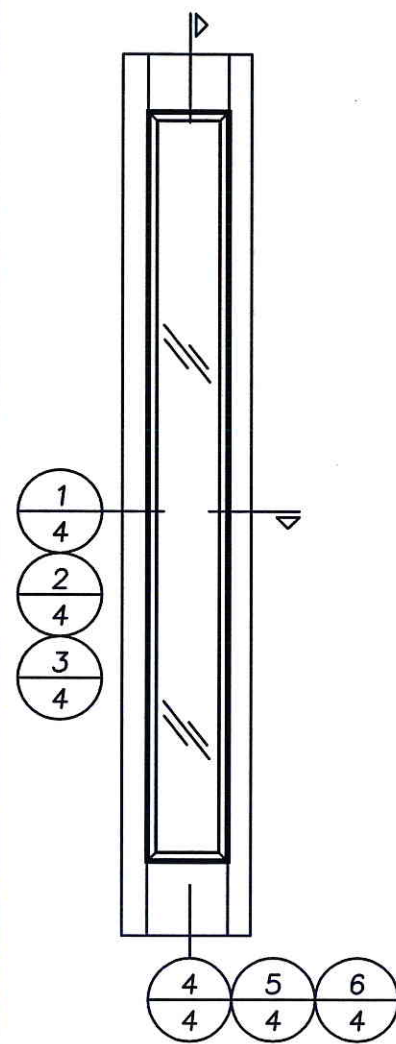
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

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

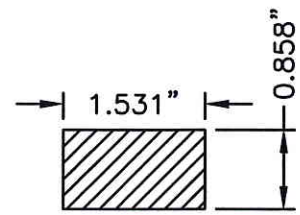
PART OR ASSEMBLY:  
DOOR PANEL DETAILS  
(FIBER CLASSIC)

NO.	DATE	BY	REVISIONS

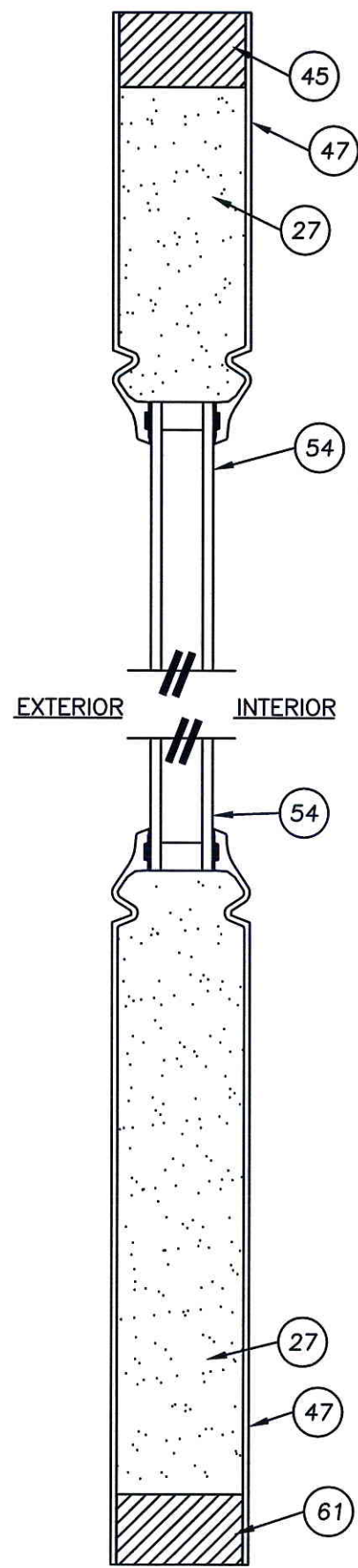
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DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4182  
SHEET 3 OF 10



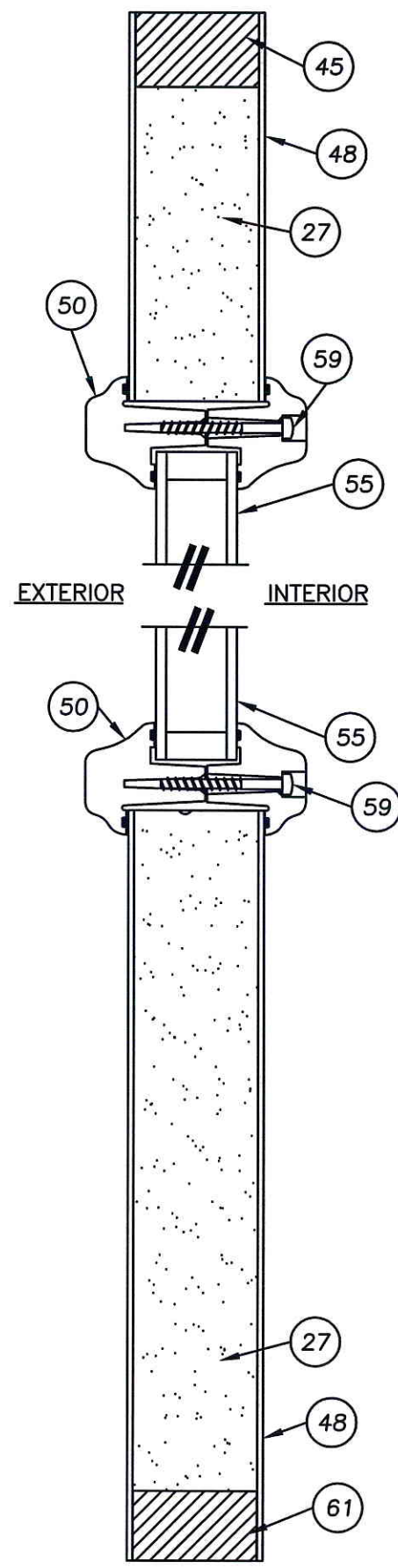
45 TOP RAIL SIDELITE



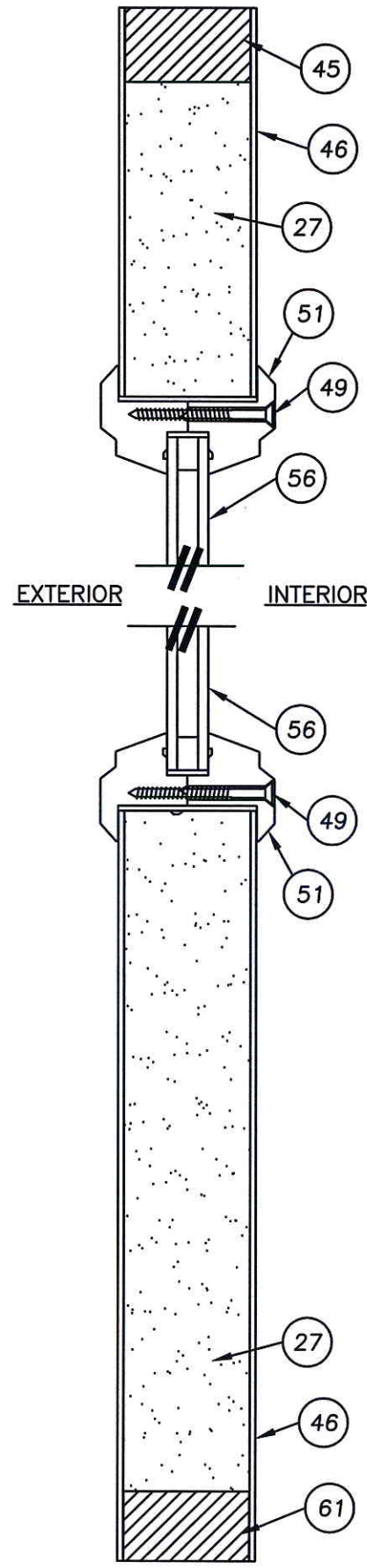
61 BOTTOM RAIL SIDELITE



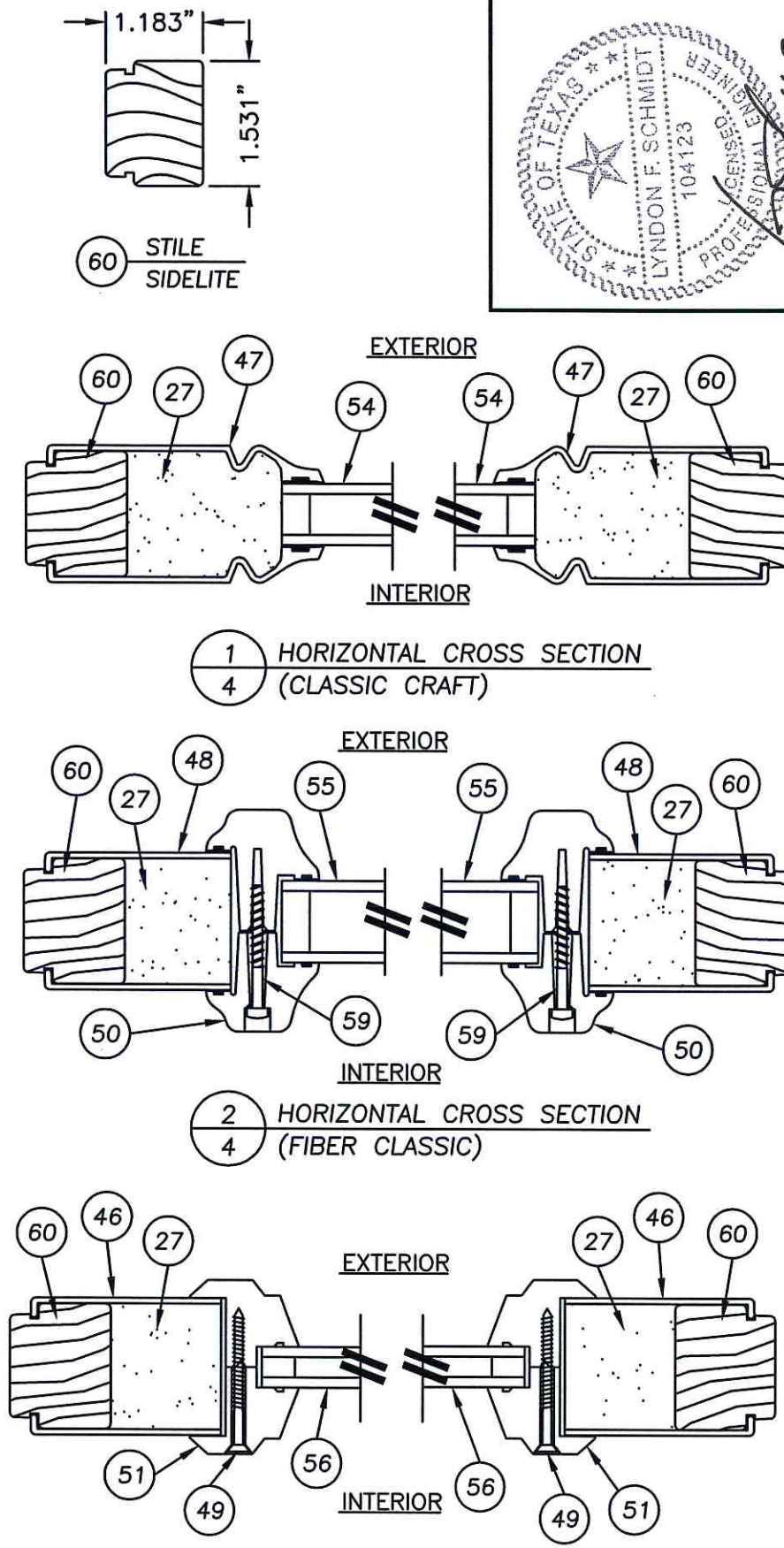
4 VERTICAL CROSS SECTION 4 (CLASSIC CRAFT)



5 VERTICAL CROSS SECTION 4 (FIBER CLASSIC)



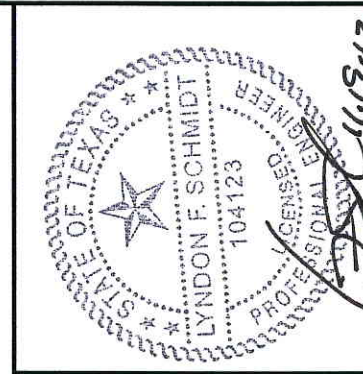
6 VERTICAL CROSS SECTION 4 (SMOOTH STAR)



1 HORIZONTAL CROSS SECTION 4 (CLASSIC CRAFT)

2 HORIZONTAL CROSS SECTION 4 (FIBER CLASSIC)

3 HORIZONTAL CROSS SECTION 4 (SMOOTH STAR)



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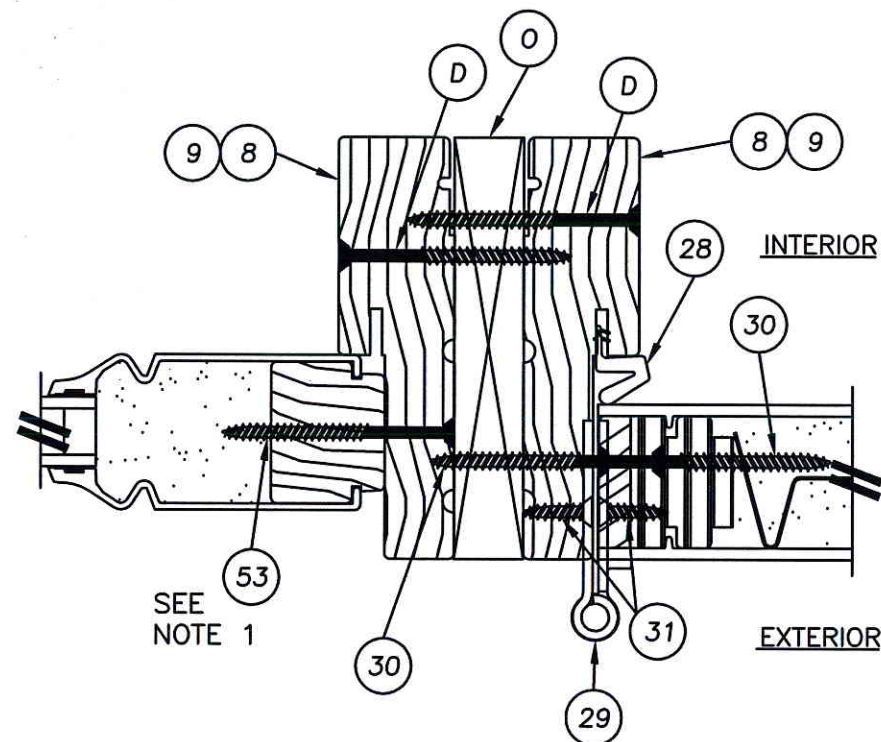
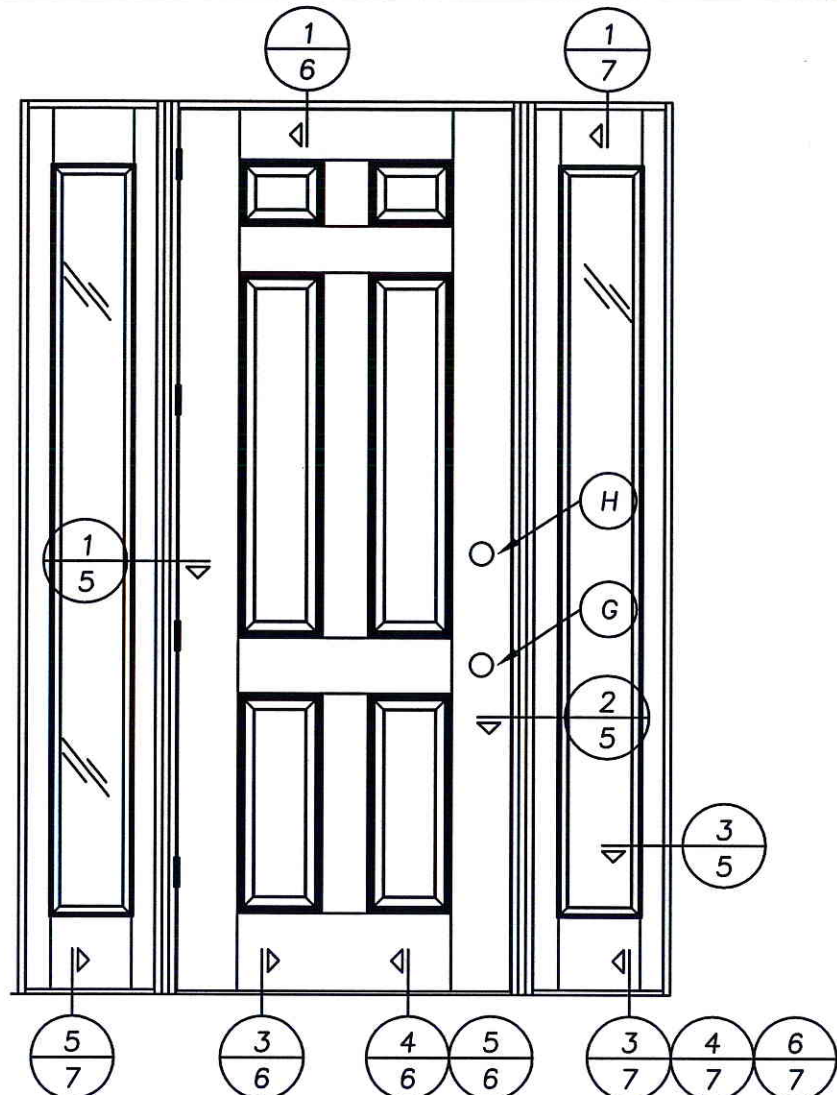
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P.O. Box 230 Valrico FL 33595  
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CERTIFICATE OF REGISTRATION # F-11852

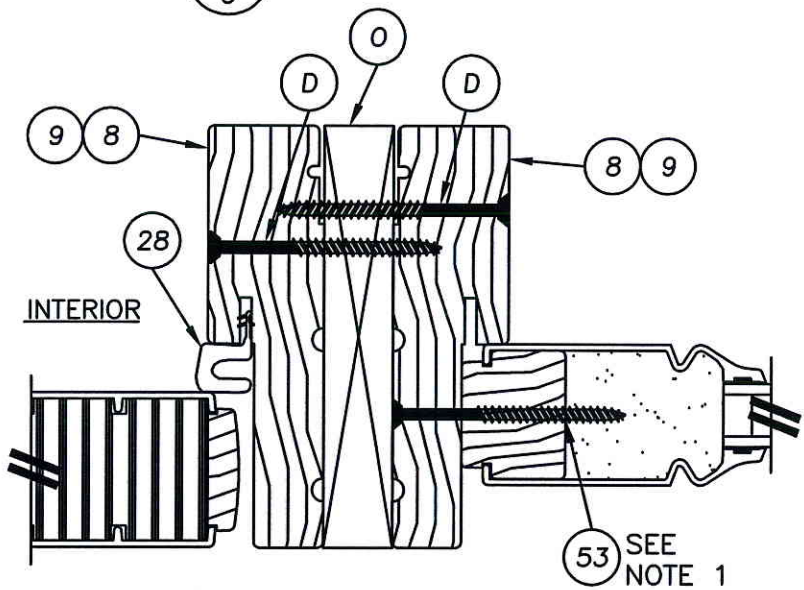
PRODUCT: SINGLE OPAQUE FIBERGLASS DOOR W/ SIDELITES "IMPACT" INSWING / OUTSWING  
PART OR ASSEMBLY: SIDELITE PANEL DETAILS

NO.	DATE	BY	REVISIONS

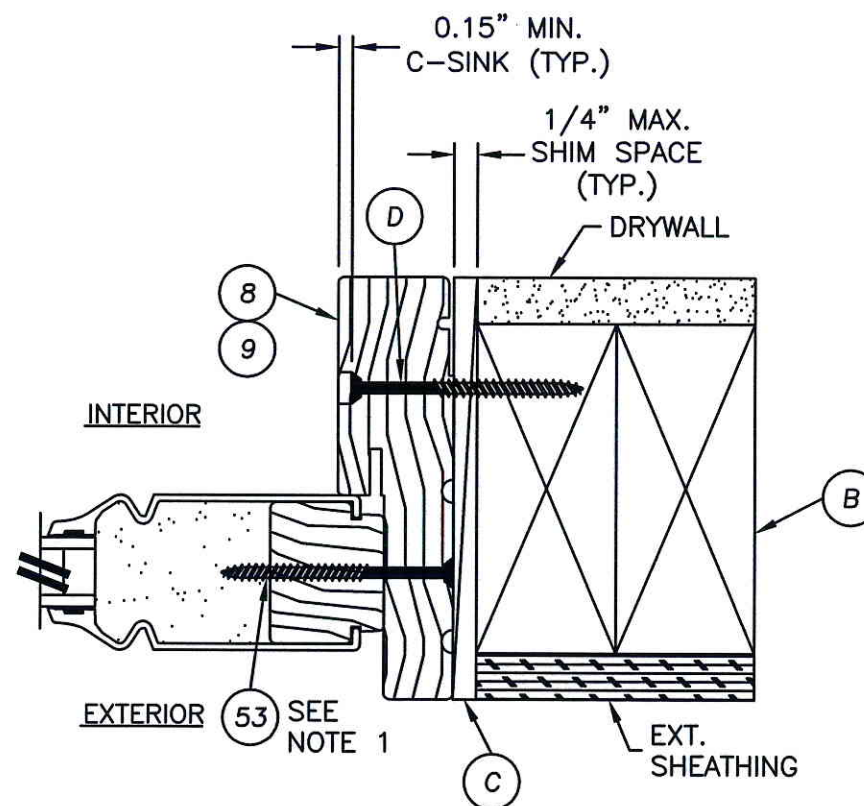
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SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4182  
SHEET 4 OF 10



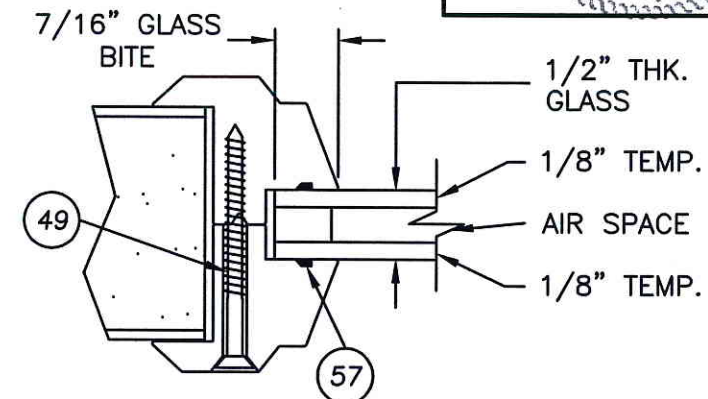
1 HORIZONTAL CROSS SECTION  
 5 OUTSWING SHOWN (INSWING ALSO APPROVED)  
 SMOOTH STAR PANEL SHOWN  
 SEE DOOR PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



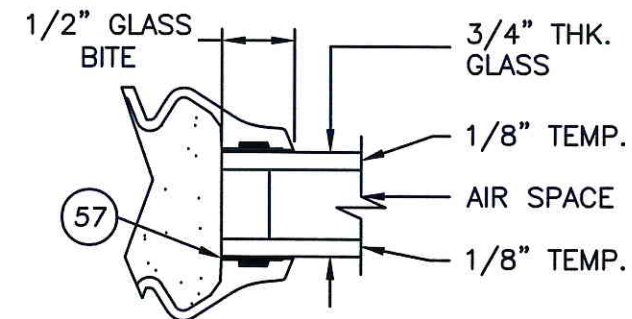
2 HORIZONTAL CROSS SECTION  
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 SEE PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



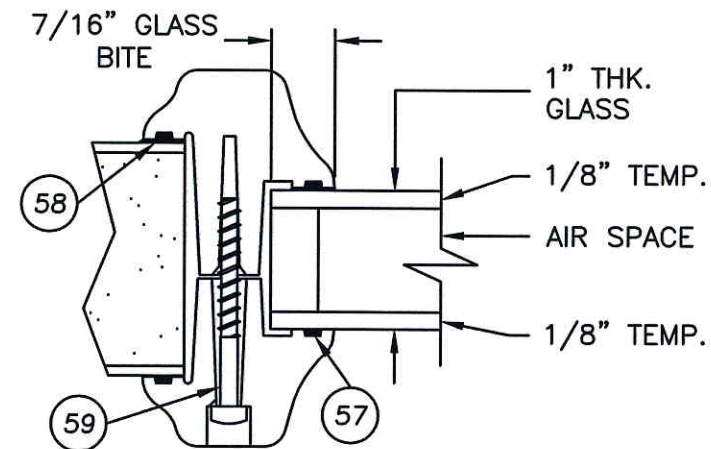
3 HORIZONTAL CROSS SECTION  
 5 OUTSWING SHOWN (INSWING ALSO APPROVED)  
 CLASSIC CRAFT PANEL SHOWN  
 SEE SIDELITE PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



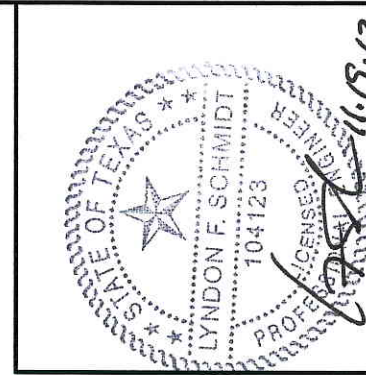
56 GLAZING DETAIL  
 1/2" INSULATED GLASS



54 GLAZING DETAIL  
 3/4" INSULATED GLASS



55 GLAZING DETAIL  
 1" INSULATED GLASS



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

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

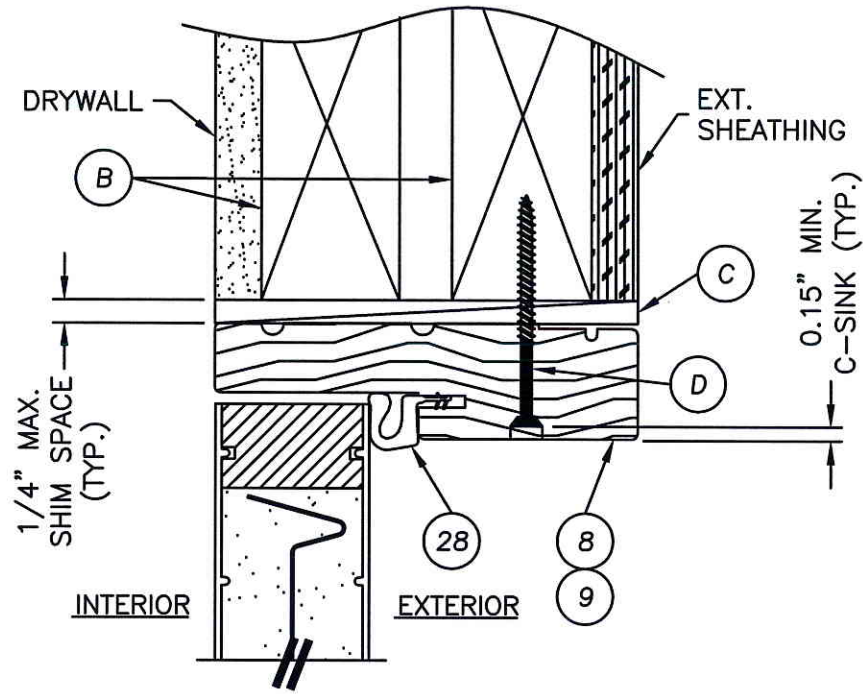
PART OR ASSEMBLY:

HORIZONTAL CROSS SECTIONS  
 & GLAZING DETAILS

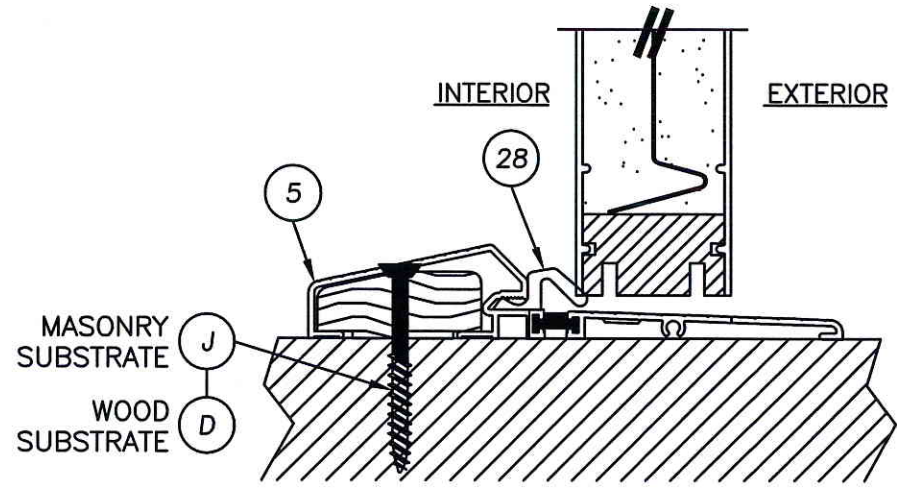
NO.	DATE	BY	REVISIONS

DATE: 7/16/12  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4182  
 SHEET 5 OF 10

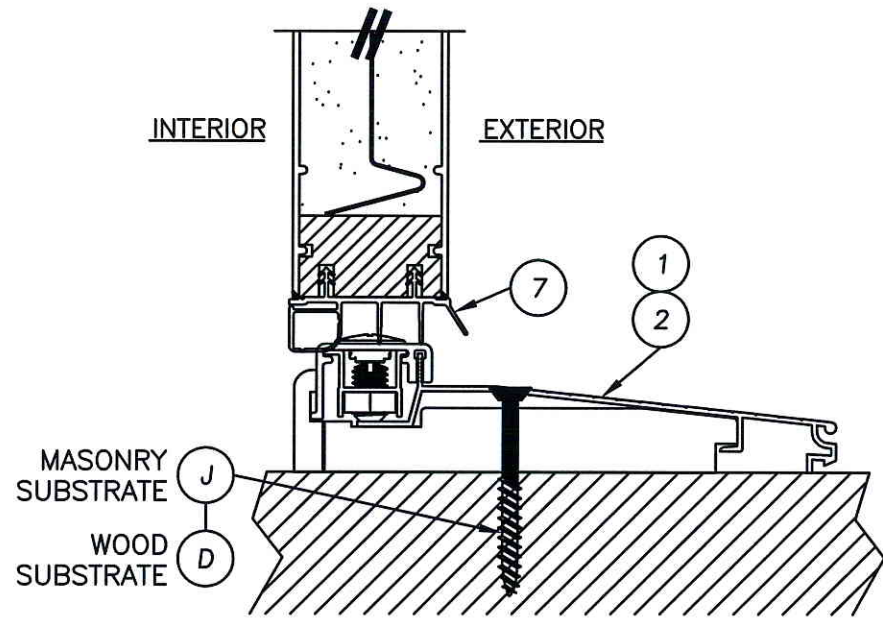
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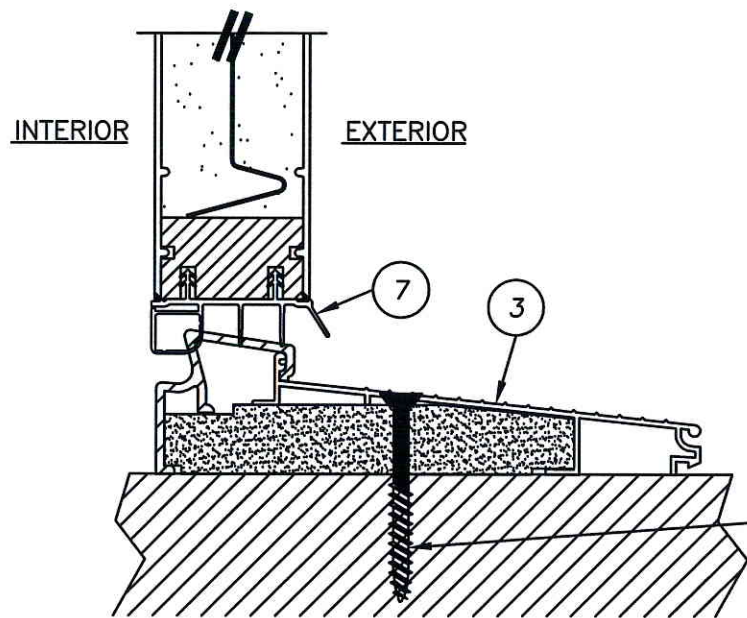
1 VERTICAL CROSS SECTION  
 6 INSWING SHOWN (OUTSWING ALSO APPROVED)  
 SMOOTH STAR PANEL SHOWN  
 SEE DOOR PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



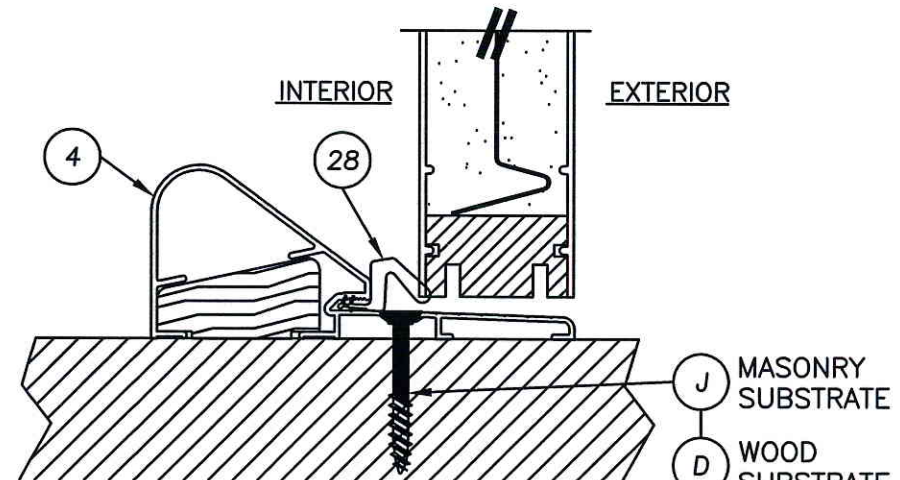
3 VERTICAL CROSS SECTION  
 6 @ THRESHOLD  
 SMOOTH STAR PANEL SHOWN  
 SEE DOOR PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



4 VERTICAL CROSS SECTION  
 6 @ THRESHOLD  
 SMOOTH STAR PANEL SHOWN  
 SEE DOOR PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



5 VERTICAL CROSS SECTION  
 6 @ THRESHOLD  
 SMOOTH STAR PANEL SHOWN  
 SEE DOOR PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



6 VERTICAL CROSS SECTION  
 6 @ THRESHOLD  
 SMOOTH STAR PANEL SHOWN  
 SEE DOOR PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



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 Phone No.: 813.659.9197

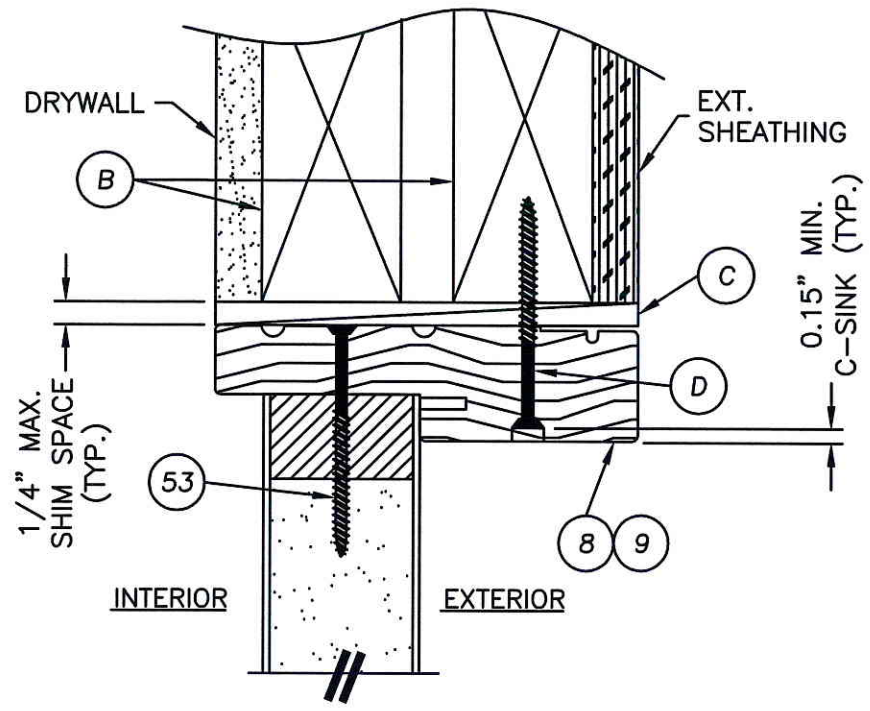
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
 CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: SINGLE OPAQUE  
 FIBERGLASS DOOR W/ SIDELITES  
 "IMPACT" INSWING / OUTSWING  
 PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS

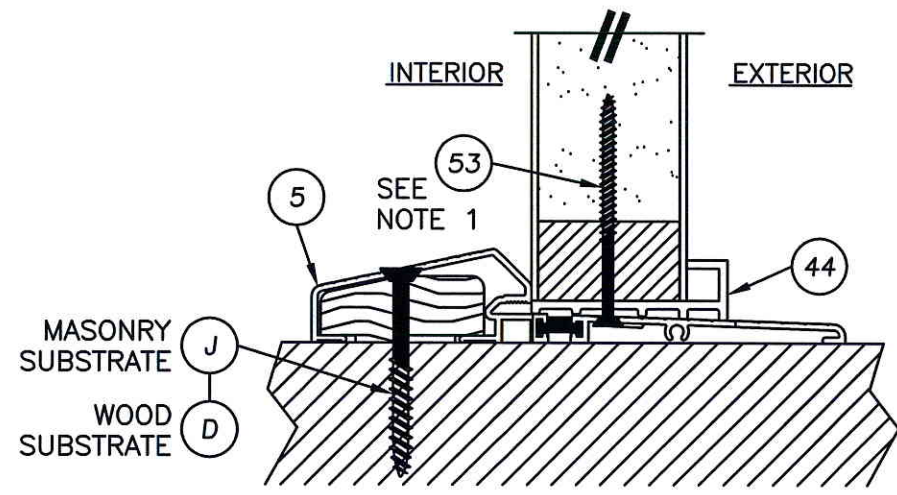
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 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4182  
 SHEET 6 OF 10

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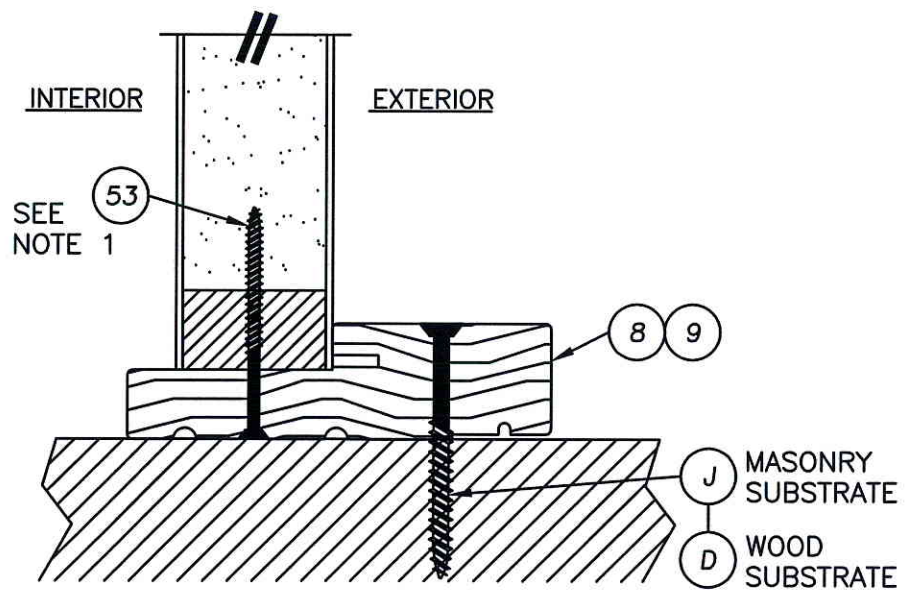


1 VERTICAL CROSS SECTION  
7

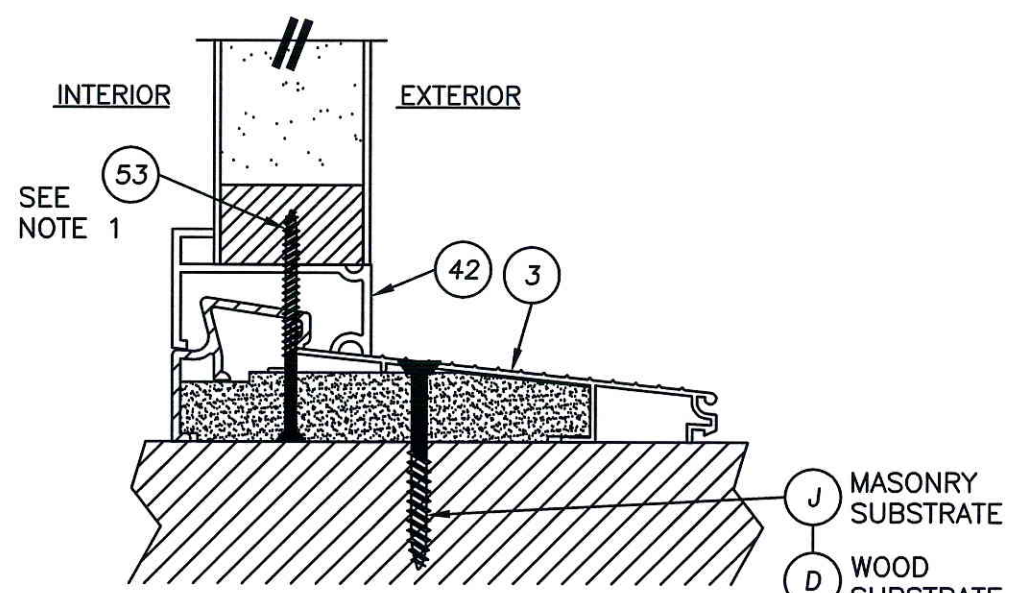
NOTE:  
1. SIDELITE ASSEMBLY SCREWS LOCATED 4.25" FROM ENDS (2 TOTAL).



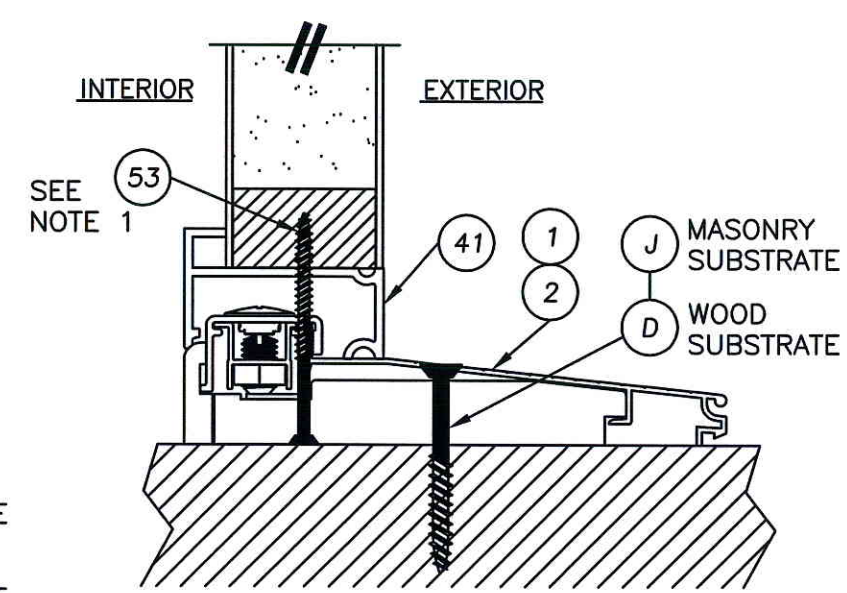
5 VERTICAL CROSS SECTION  
7



4 VERTICAL CROSS SECTION  
7



3 VERTICAL CROSS SECTION  
7



6 VERTICAL CROSS SECTION  
7



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CERTIFICATE OF REGISTRATION # F-11852

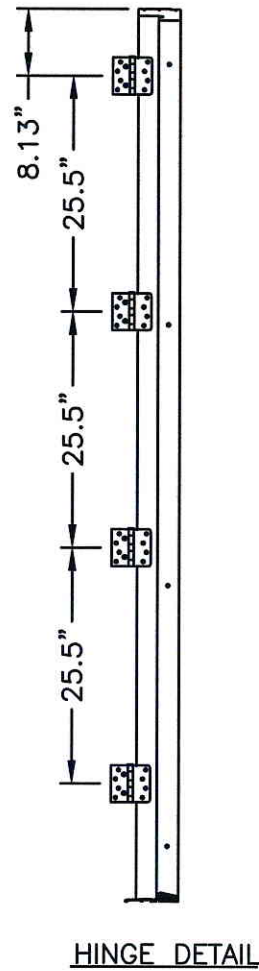
PRODUCT: SINGLE OPAQUE  
FIBERGLASS DOOR W/ SIDELITES  
"IMPACT" INSWING / OUTSWING

PART OR ASSEMBLY:  
VERTICAL CROSS SECTIONS

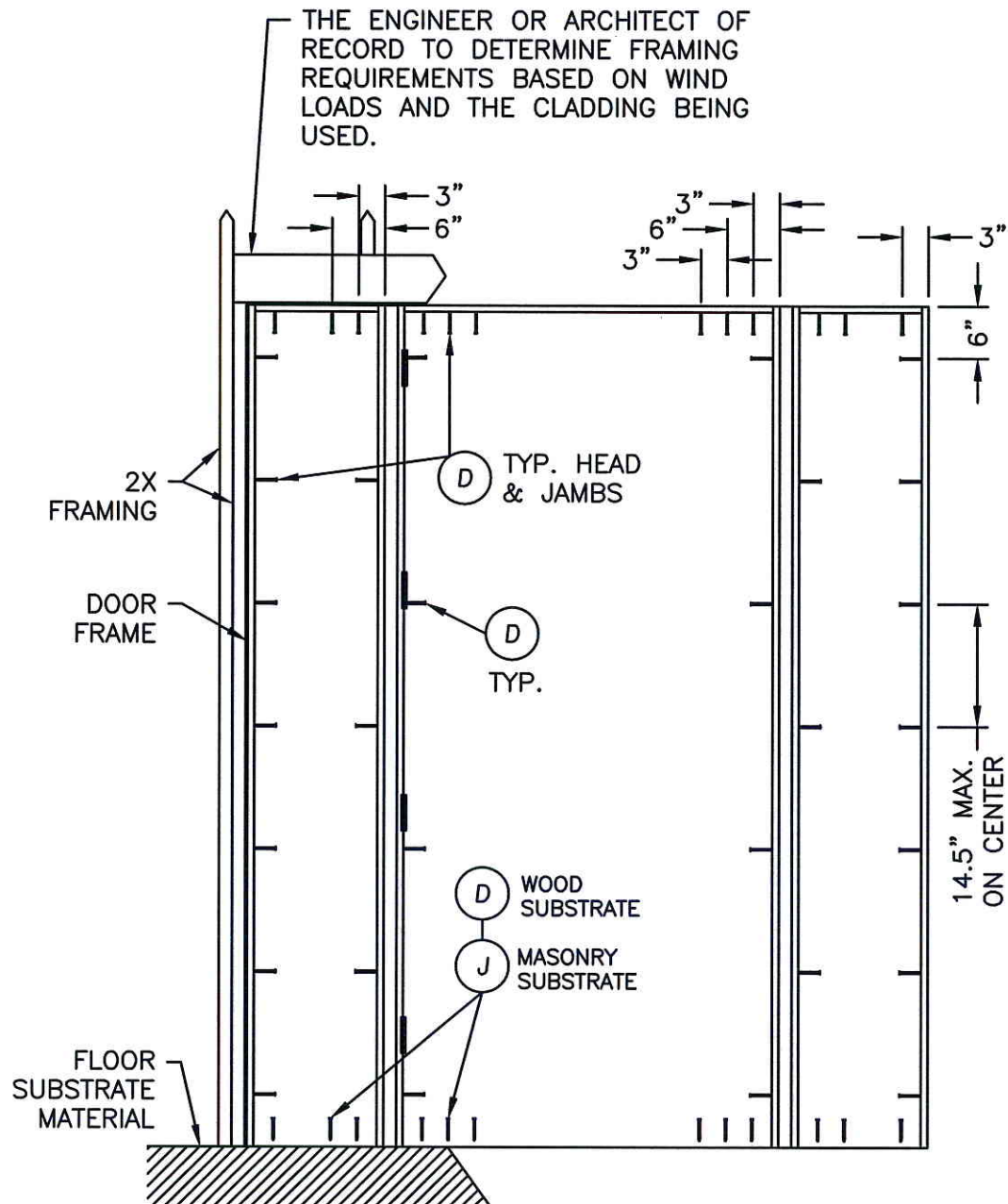
NO.	DATE	BY	REVISIONS

DATE: 7/16/12  
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DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4182  
SHEET 7 OF 10

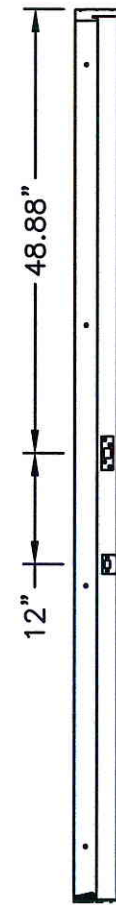
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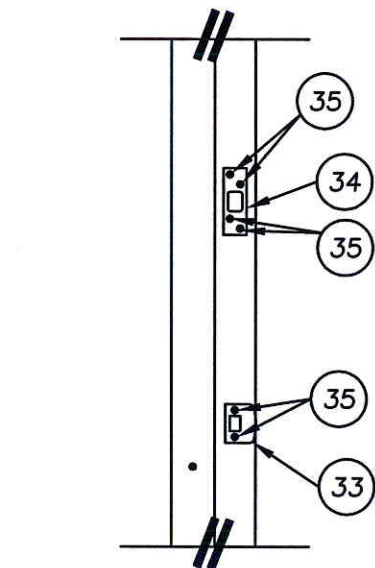
HINGE DETAIL



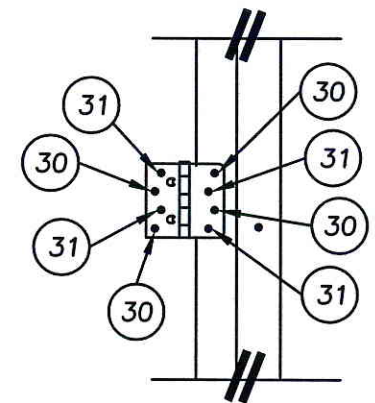
FRAME ANCHORING



STRIKE PLATE DETAIL

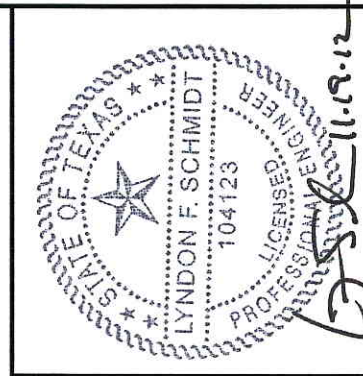


STRIKE PLATE DETAIL



HINGE DETAIL

THE ENGINEER OR ARCHITECT OF RECORD TO DETERMINE FRAMING REQUIREMENTS BASED ON WIND LOADS AND THE CLADDING BEING USED.



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TEXAS P.E. #104123

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Phone No.: 813.659.9197

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

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

PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	BY	REVISIONS

DATE: 7/16/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4182  
SHEET 8 OF 10

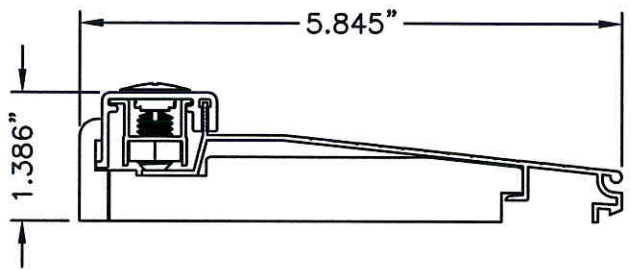
**CONCRETE ANCHOR NOTES:**

1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. 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.
3. Concrete anchor table:

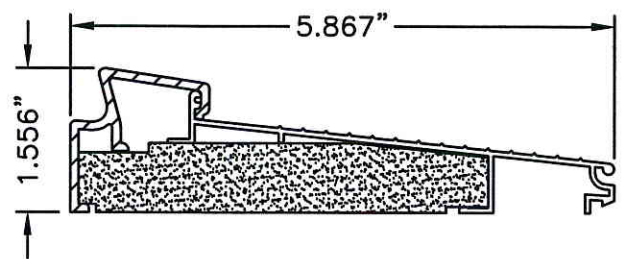
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-3/4"	2-1/2"	3"
ELCO ULTRACON®	1/4"	1-3/4"	1"	3"



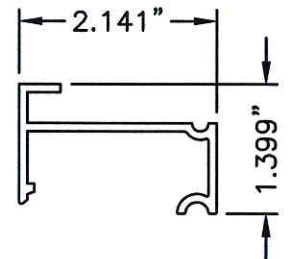
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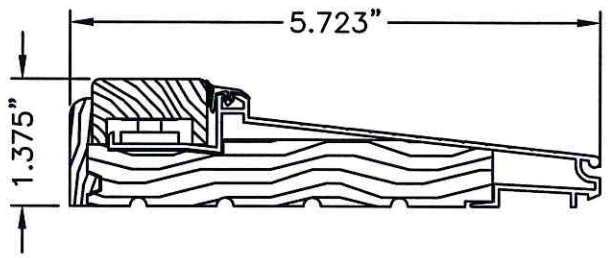
2 THRESHOLD  
INSWING ADJUSTABLE



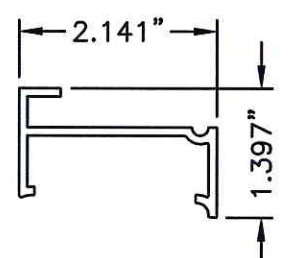
3 THRESHOLD  
INSWING SELF-ADJUST



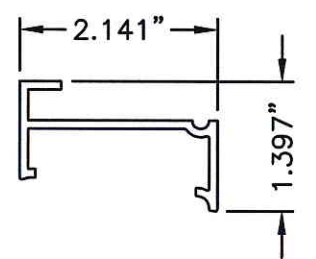
41 INSWING SIDELITE  
SPACER



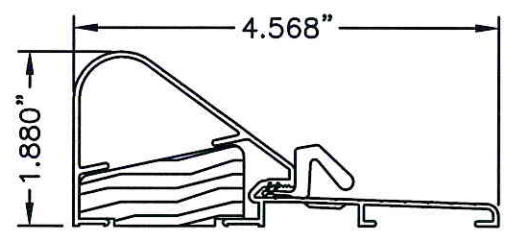
1 THRESHOLD  
INSWING ADJUSTABLE



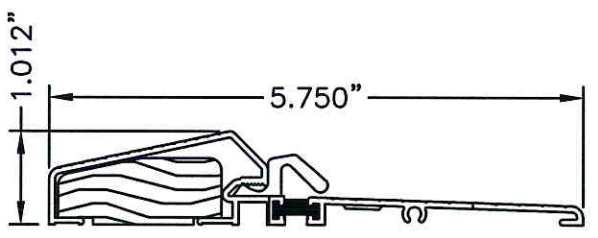
40 INSWING SIDELITE  
SPACER



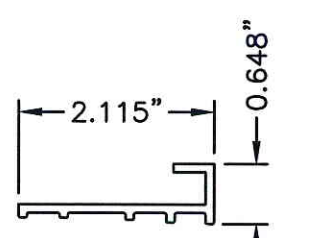
43 INSWING SIDELITE  
SPACER



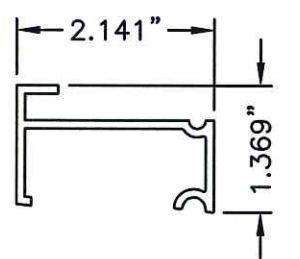
4 THRESHOLD  
OUTSWING COASTAL



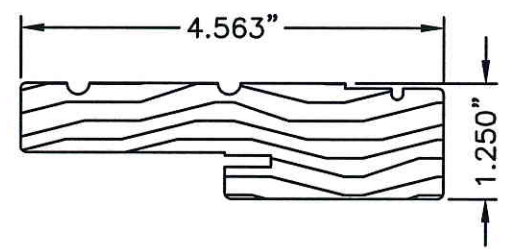
5 THRESHOLD  
OUTSWING STANDARD



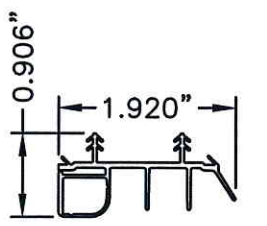
44 OUTSWING SIDELITE  
SPACER



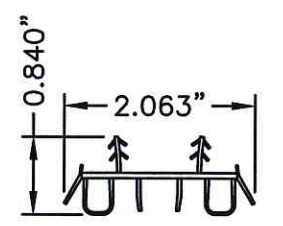
42 INSWING SIDELITE  
SPACER



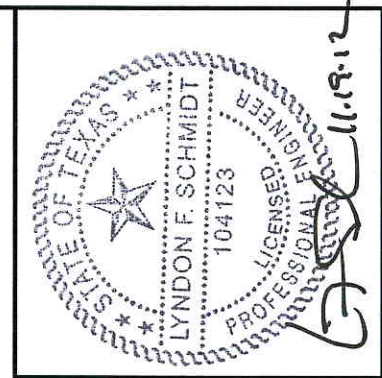
9 8 JAMB



7 SWEEP



52 SWEEP



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

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CERTIFICATE OF REGISTRATION # F-11852

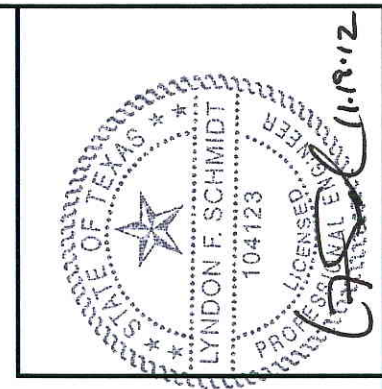
PRODUCT: SINGLE OPAQUE  
FIBERGLASS DOOR W/ SIDELITES  
"IMPACT" INSWING / OUTSWING

PART OR ASSEMBLY: COMPONENTS

REVISIONS		BY
NO.	DATE	

DATE: 7/16/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4182  
SHEET 9 OF 10

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

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BILL OF MATERIALS			BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
B	2X FRAMING (G >= 0.42)	WOOD	40	INSWING SIDELITE SPACER FOR ADJUSTABLE THRESHOLD (DB14AJA)	PVC
C	1/4" MAX. SHIM SPACE	WOOD	41	INSWING SIDELITE SPACER FOR HP THRESHOLD (DB14HPA)	PVC
D	#10 X 2-1/2" PFH WOOD SCREW	STEEL	42	INSWING SIDELITE SPACER FOR SELF ADJUST THRESHOLD (DB14)	PVC
G	KWIKSET 200 SERIES PASSAGE LOCK	STEEL	43	INSWING 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	INSWING ADJUSTABLE THRESHOLD (IS300AJ)	ALUM./WOOD	47	SIDELITE SKIN 0.090" THK. (CLASSIC CRAFT) Fy = 6,000 PSI MIN.	FIBERGLASS
2	INSWING THRESHOLD (IS300HP5)	ALUM./COMP.	48	SIDELITE SKIN 0.070" THK. (FIBER CLASSIC) Fy = 6,000 PSI MIN.	FIBERGLASS
3	INSWING 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/ SIDELITES "IMPACT" INSWING / OUTSWING
PART OR ASSEMBLY:		BILL OF MATERIALS
NO.	DATE	BY

DATE: 7/16/12  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4182  
 SHEET 10 OF 10

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