

# THERMA TRU®

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

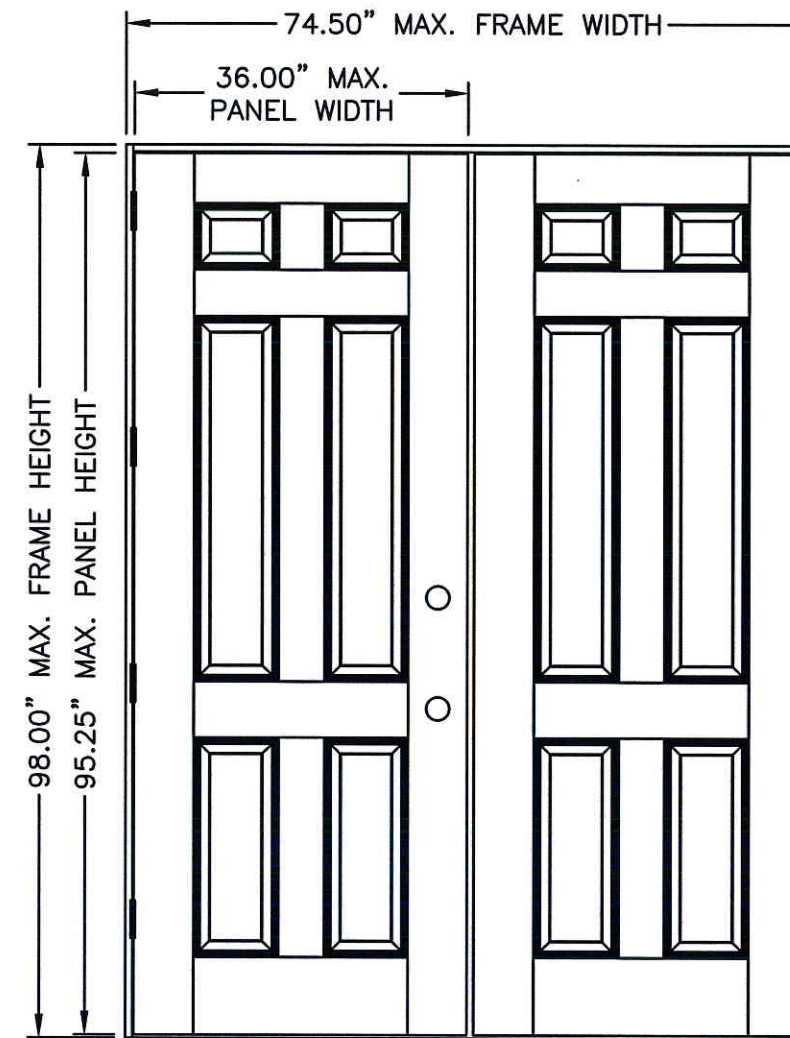
## SMOOTH STAR, FIBER CLASSIC, CLASSIC CRAFT & CLASSIC CRAFT RUSTIC DOUBLE "IMPACT" DOOR INSWING / OUTSWING

### EVALUATED FOR USE IN THE STATE OF TEXAS

The Fiberglass Glazed 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:

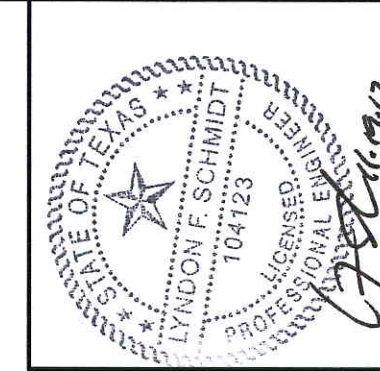
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. This system has been tested and evaluated as a large missile impact protective system for installation in the Seaward, Inland I and Inland II areas. This product meets missile level "D" as defined in ASTM E 1996.
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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"SMOOTH STAR", "CLASSIC CRAFT", "CLASSIC CRAFT RUSTIC" & "FIBER CLASSIC"

DOOR TYPE	SWING	OVERALL FRAME DIMENSION	DESIGN PRESSURE	
			POSITIVE	NEGATIVE
CLASSIC CRAFT	OUTSWING	74.50" X 96.50"	+65.0	-65.0
	INSWING	74.50" X 98.00"	+65.0	-65.0
FIBER CLASSIC	OUTSWING	74.50" X 96.50"	+65.0	-65.0
	INSWING	74.50" X 98.00"	+65.0	-65.0
SMOOTH STAR	OUTSWING	74.50" X 96.50"	+65.0	-65.0
	INSWING	74.50" X 98.00"	+65.0	-65.0
CLASSIC CRAFT RUSTIC	OUTSWING	74.50" X 96.50"	+65.0	-65.0
	INSWING	74.50" 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 Valrico FL 33595  
Phone No.: 813.659.9197

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

PRODUCT: DOUBLE OPAQUE  
FIBERGLASS DOOR  
"IMPACT" INSWING / OUTSWING  
PART OR ASSEMBLY:  
TYPICAL ELEVATION, DESIGN  
PRESSURES & GENERAL NOTES

NO.	DATE	BY

DATE: 7/16/12

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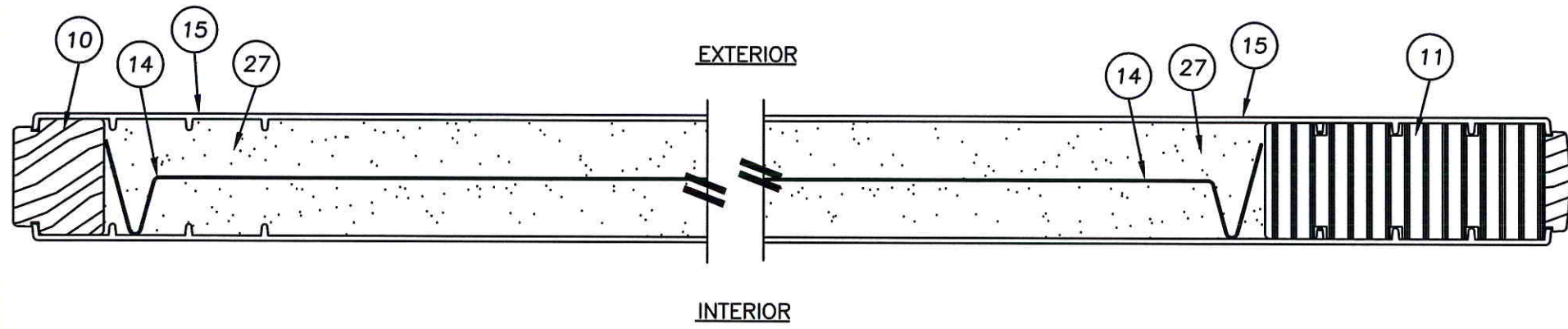
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CHK. BY: LFS

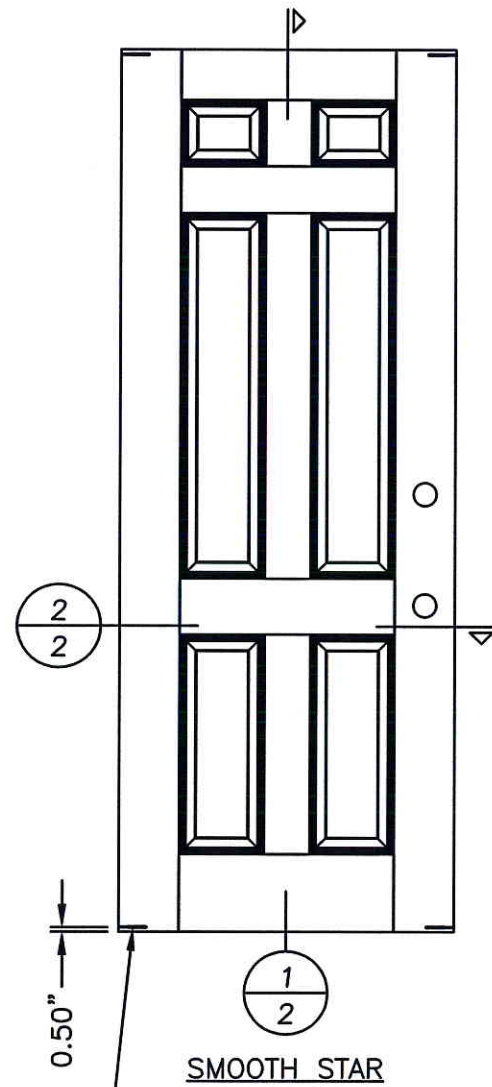
DRAWING NO.:

TX-4176

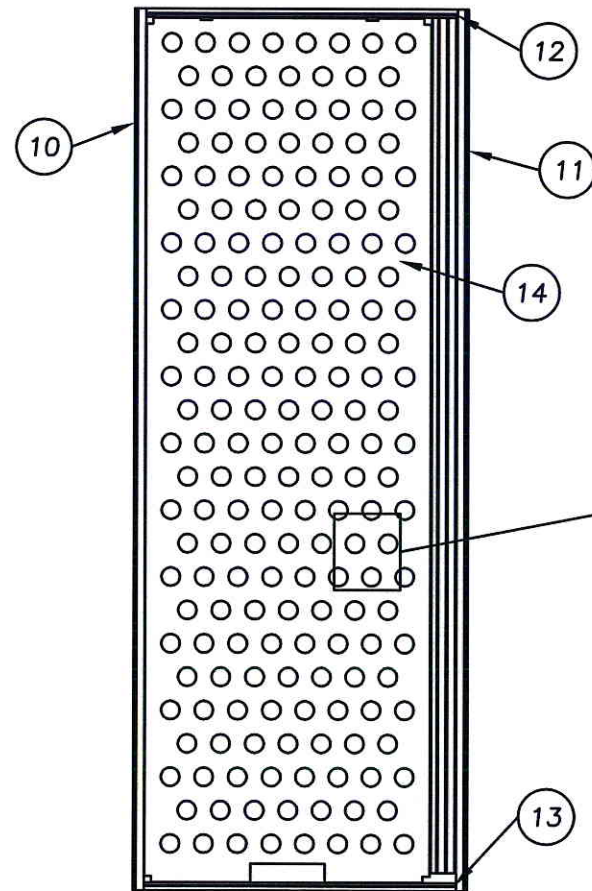
SHEET 1 OF 10



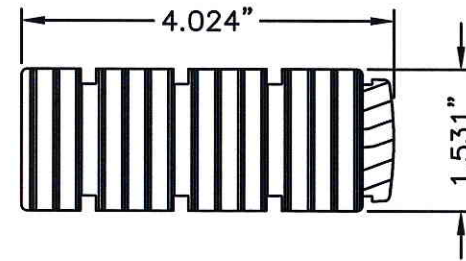
2 HORIZONTAL CROSS SECTION  
2 SMOOTH STAR



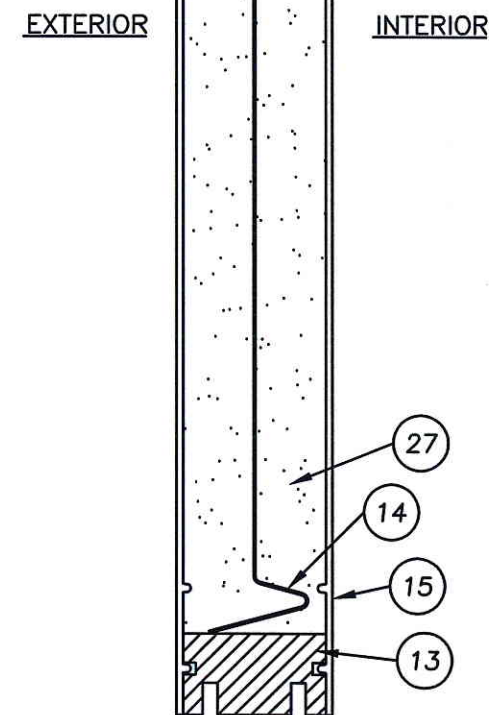
1 TYP. 4 CORNERS OF PANEL  
2 SMOOTH STAR



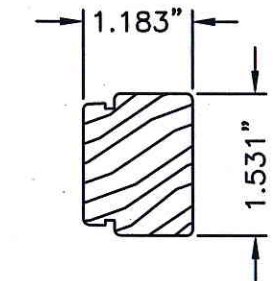
Ø2" DIA. MAX.  
28.86% OPEN AREA MAX.



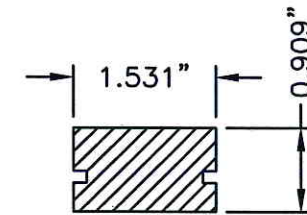
11 LOCK STILE SMOOTH STAR



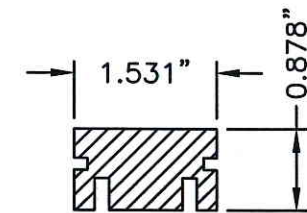
1 VERTICAL CROSS SECTION  
2 SMOOTH STAR



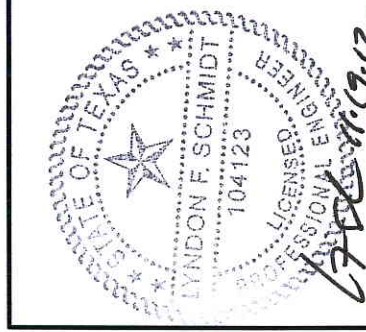
10 HINGE STILE SMOOTH STAR



12 TOP RAIL SMOOTH STAR



13 BOTTOM RAIL SMOOTH STAR



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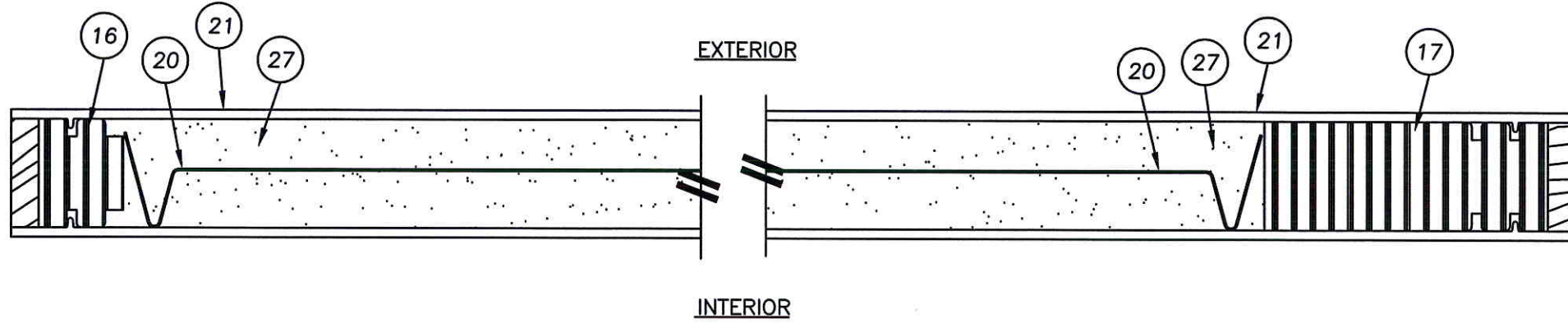
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: DOUBLE OPAQUE FIBERGLASS DOOR "IMPACT" INSWING / OUTSWING PART OR ASSEMBLY: DOOR PANEL DETAILS (SMOOTH STAR)

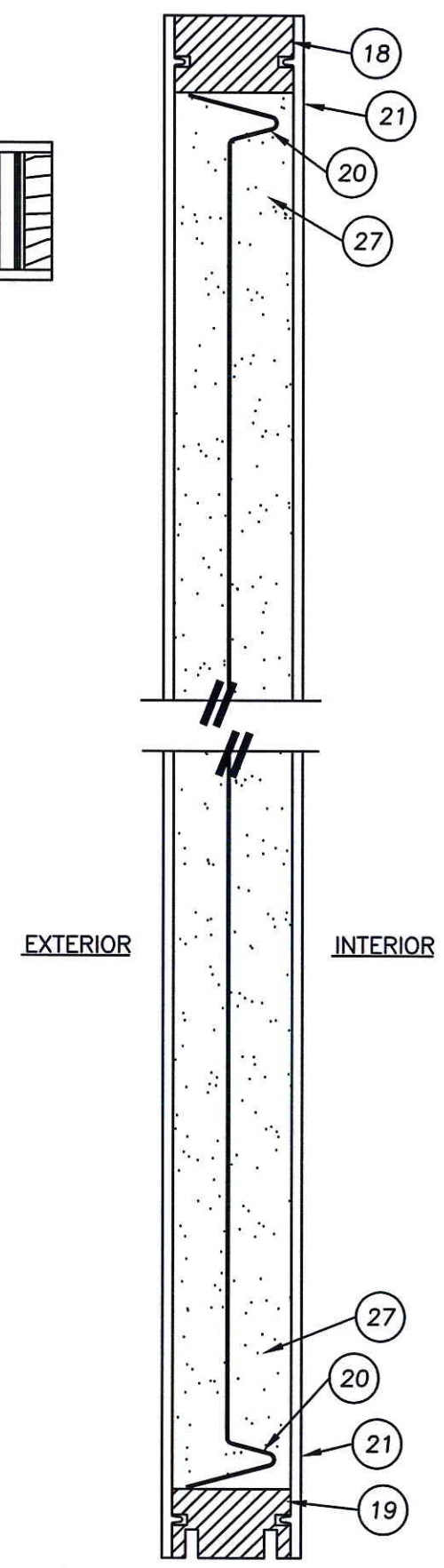
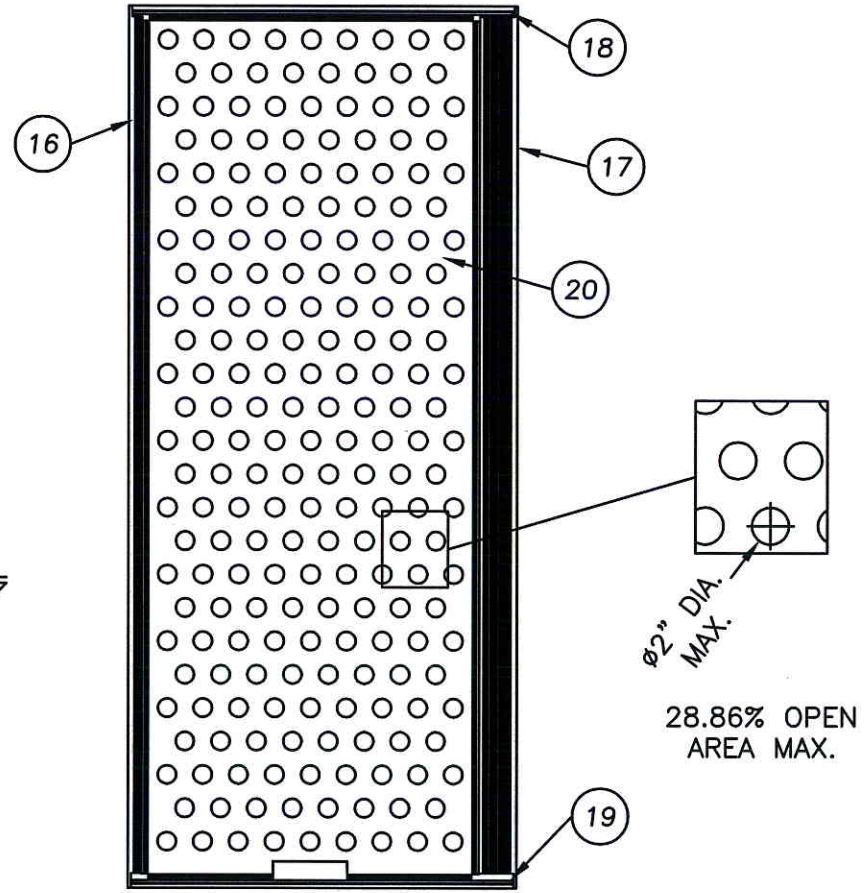
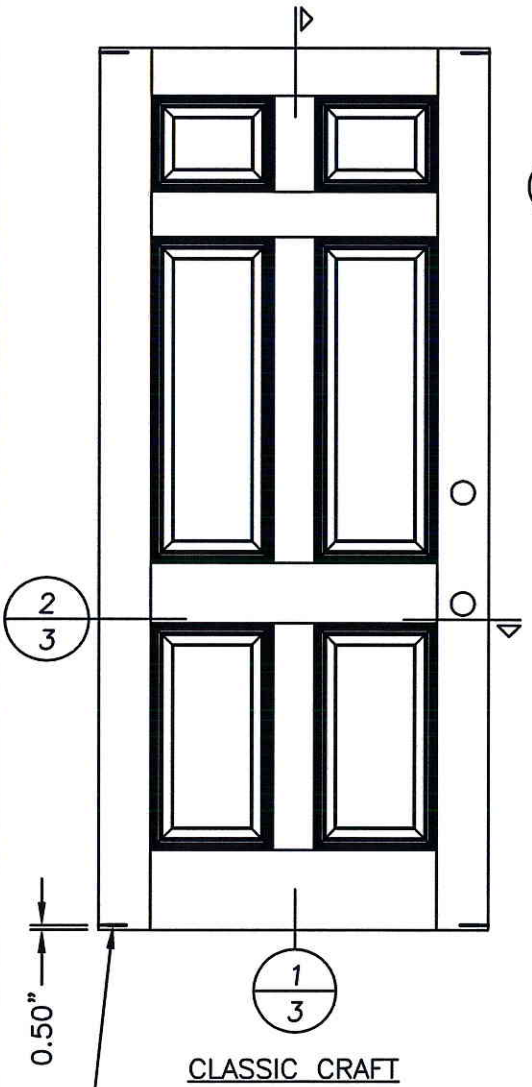
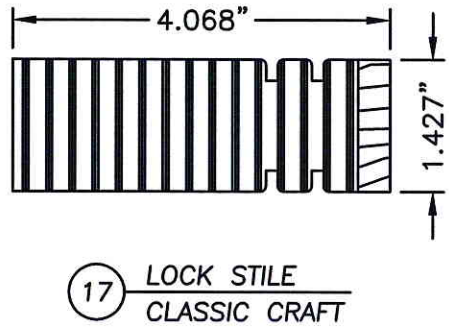
NO.	DATE	BY	REVISIONS

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CHK. BY: LFS  
DRAWING NO.: TX-4176  
SHEET 2 OF 10

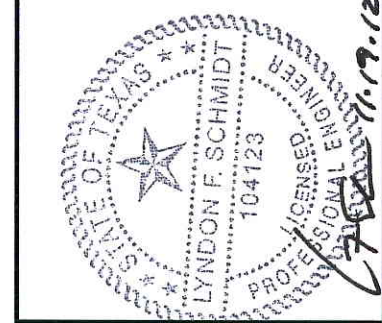
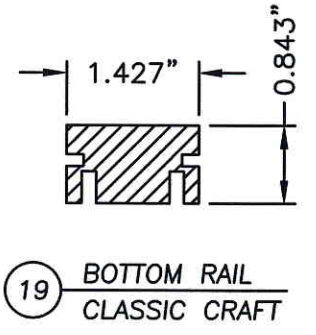
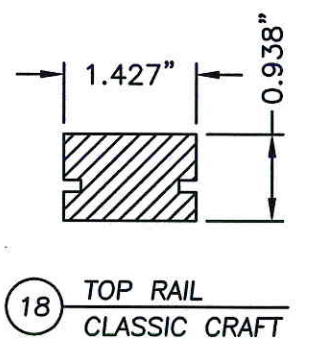
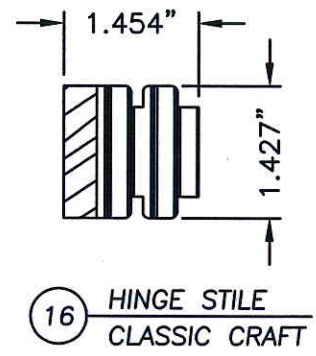
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2 HORIZONTAL CROSS SECTION  
3 CLASSIC CRAFT



1 VERTICAL CROSS SECTION  
3 CLASSIC CRAFT



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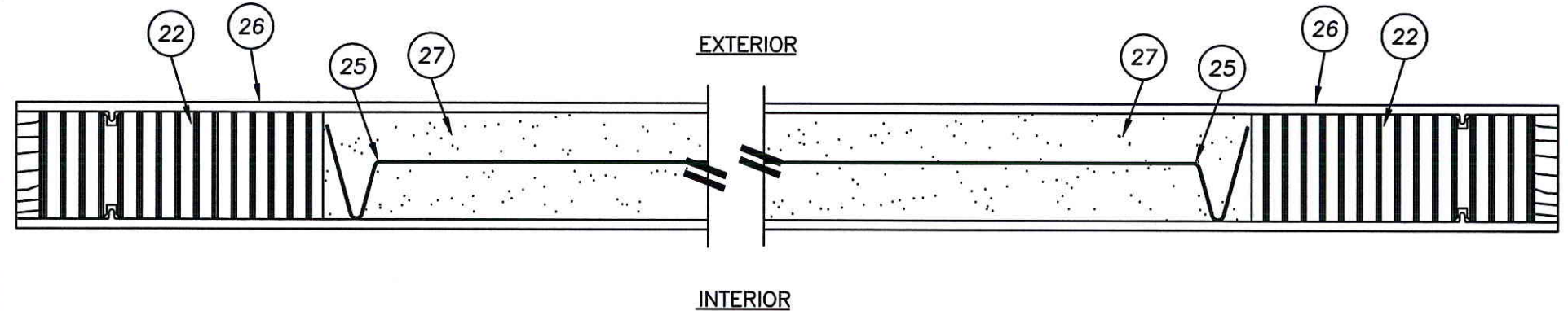
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: DOUBLE OPAQUE  
FIBERGLASS DOOR  
"IMPACT" INSWING / OUTSWING  
PART OR ASSEMBLY:

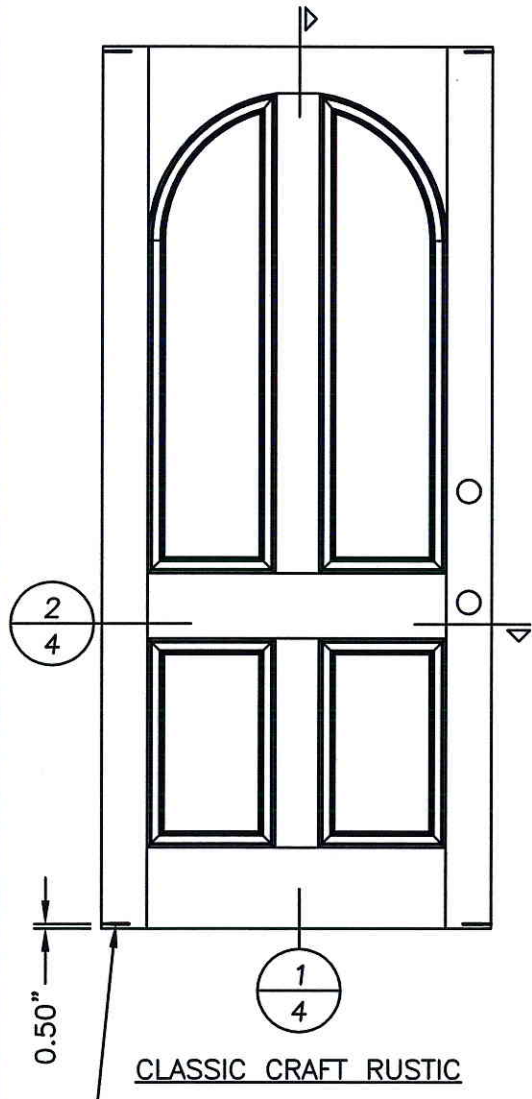
DOOR PANEL DETAILS  
(CLASSIC CRAFT)

REVISIONS	
NO.	DATE

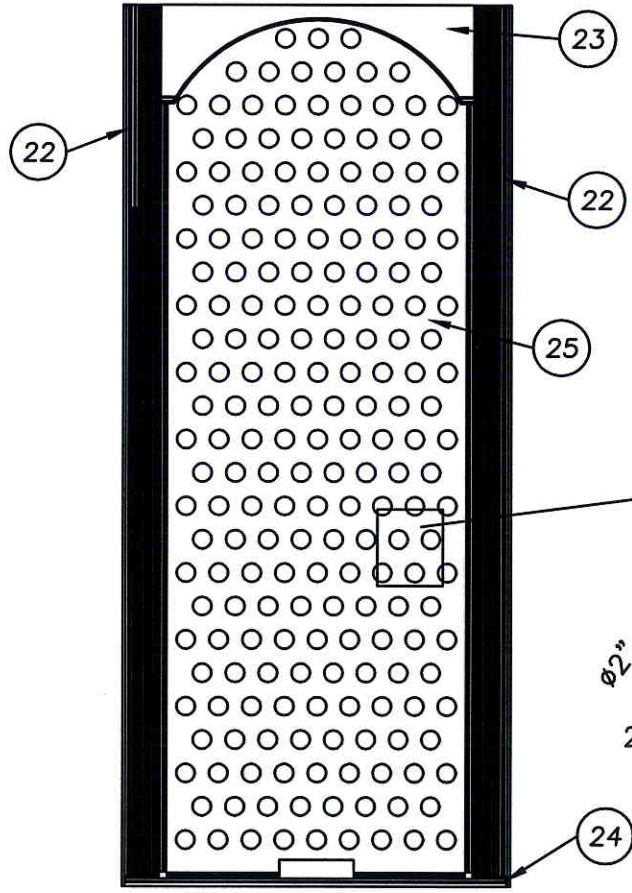
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CHK. BY: LFS  
DRAWING NO.: TX-4176  
SHEET 3 OF 10



2 HORIZONTAL CROSS SECTION  
4 CLASSIC CRAFT RUSTIC



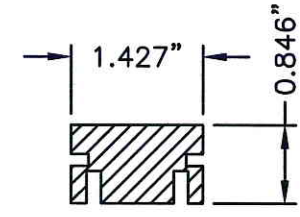
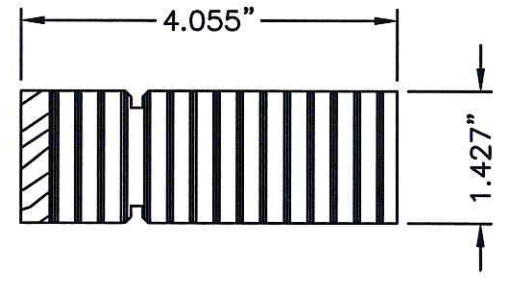
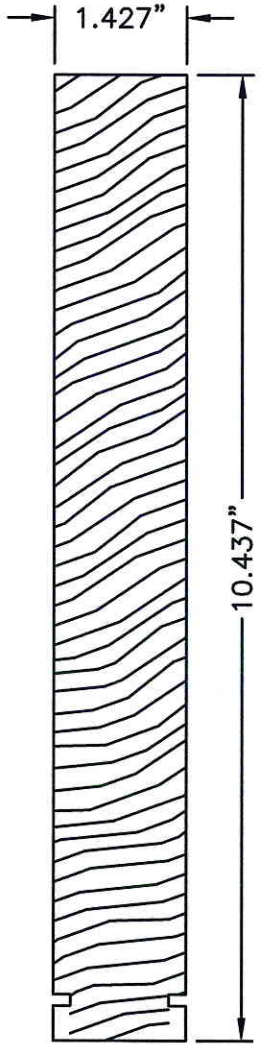
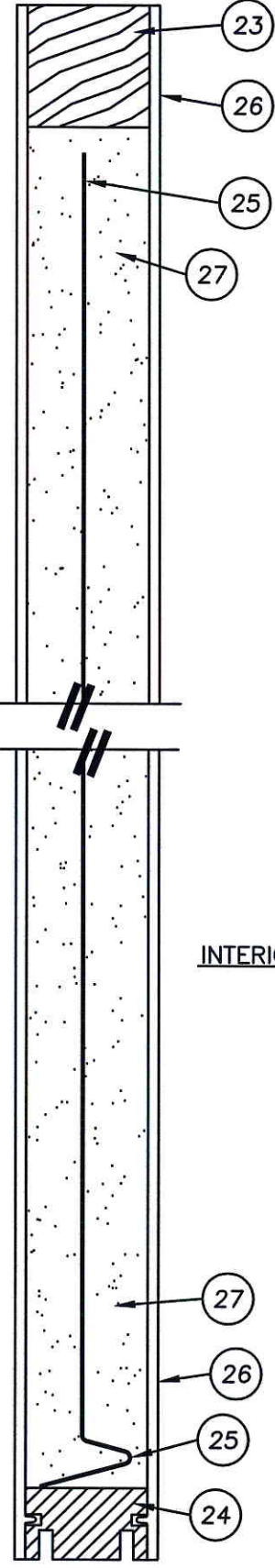
1 VERTICAL CROSS SECTION  
4 CLASSIC CRAFT RUSTIC



22 LOCK & HINGE STILE  
CLASSIC CRAFT RUSTIC

24 BOTTOM RAIL  
CLASSIC CRAFT RUSTIC

23 TOP RAIL  
CLASSIC CRAFT RUSTIC



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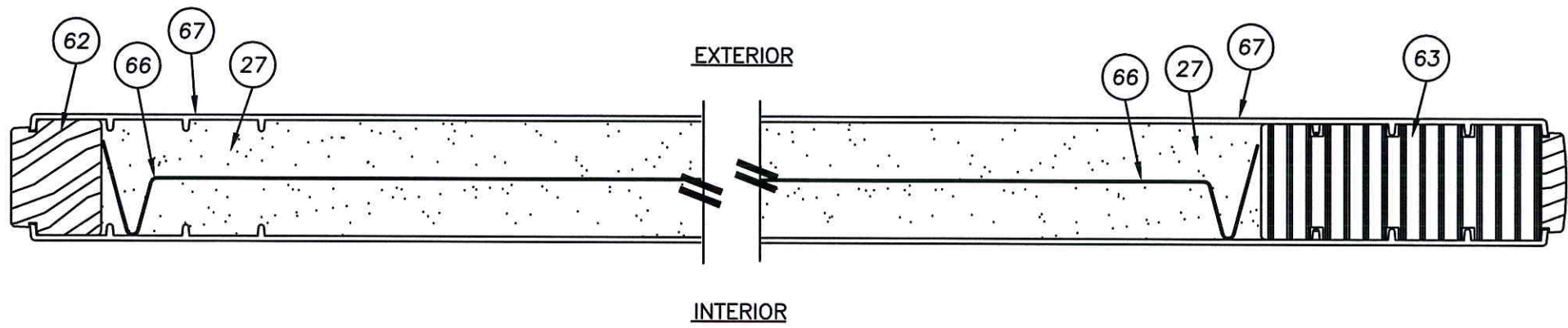
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CERTIFICATE OF REGISTRATION # F-11852

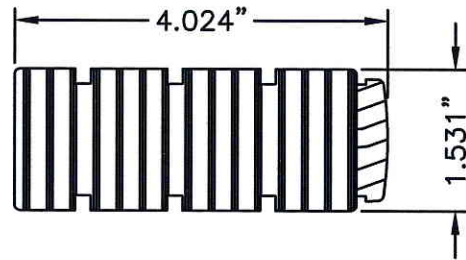
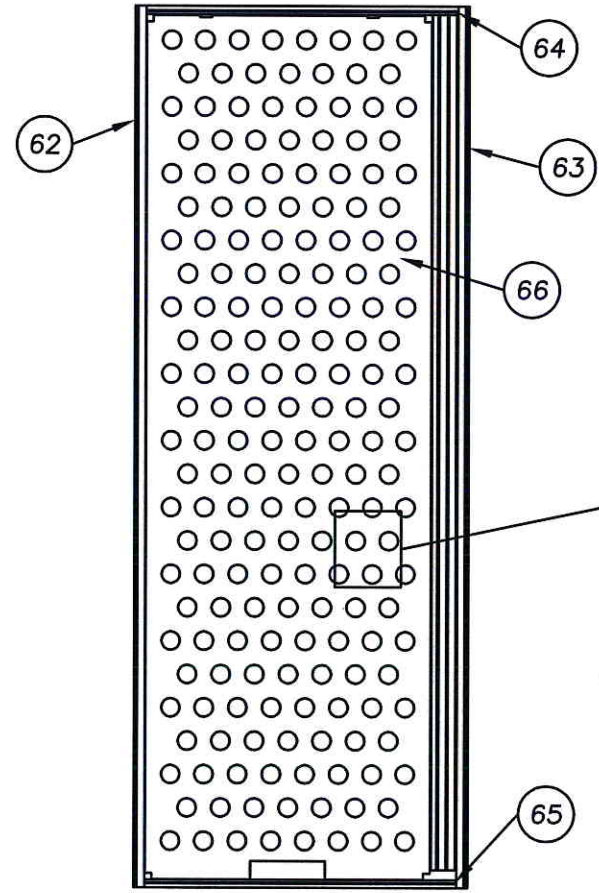
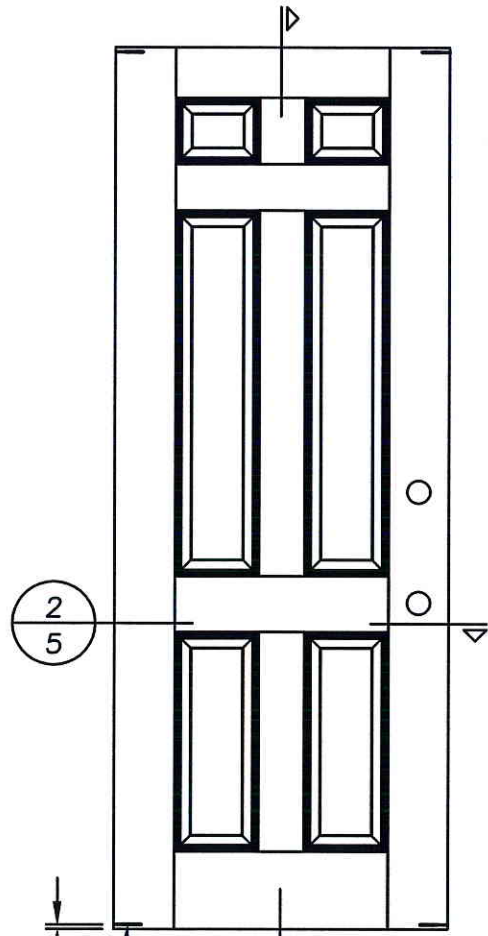
PRODUCT: DOUBLE OPAQUE  
FIBERGLASS DOOR  
"IMPACT" INSWING / OUTSWING  
PART OR ASSEMBLY:  
DOOR PANEL DETAILS  
(CLASSIC CRAFT RUSTIC)

NO.	DATE	BY

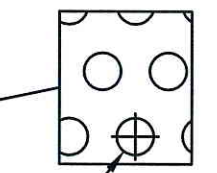
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DRAWING NO.: TX-4176  
SHEET 4 OF 10



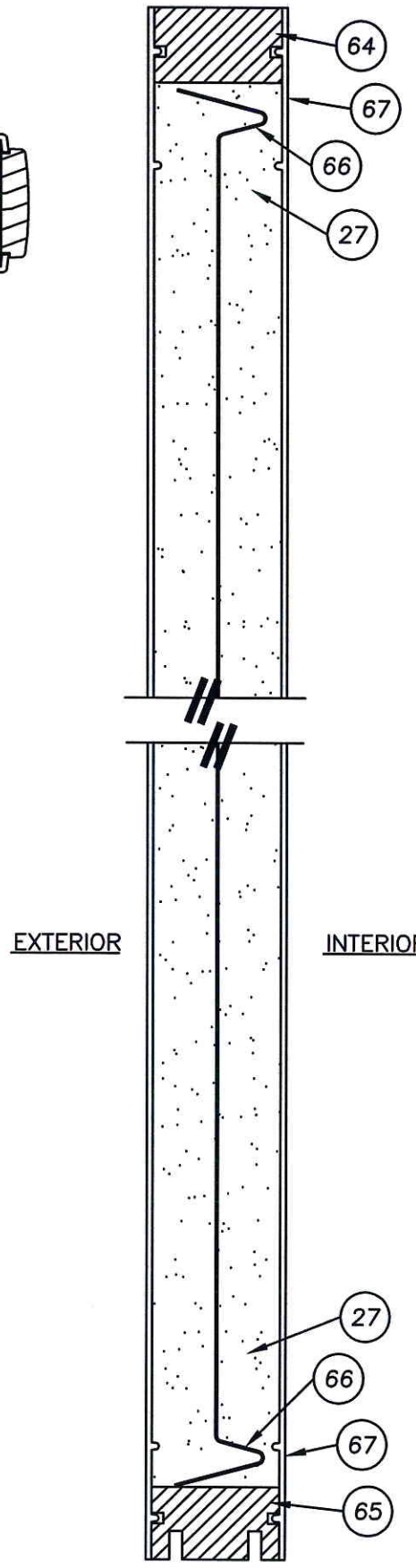
2 HORIZONTAL CROSS SECTION  
5 FIBER CLASSIC



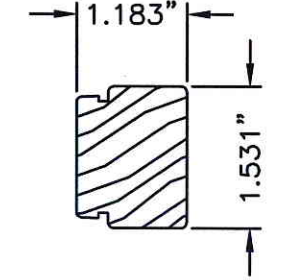
63 LOCK STILE  
FIBER CLASSIC



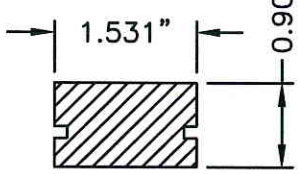
28.86% OPEN AREA MAX.



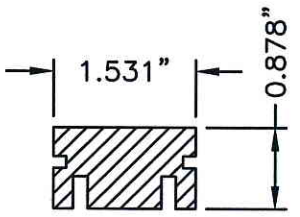
1 VERTICAL CROSS SECTION  
5 FIBER CLASSIC



62 HINGE STILE  
FIBER CLASSIC



64 TOP RAIL  
FIBER CLASSIC



65 BOTTOM RAIL  
FIBER CLASSIC



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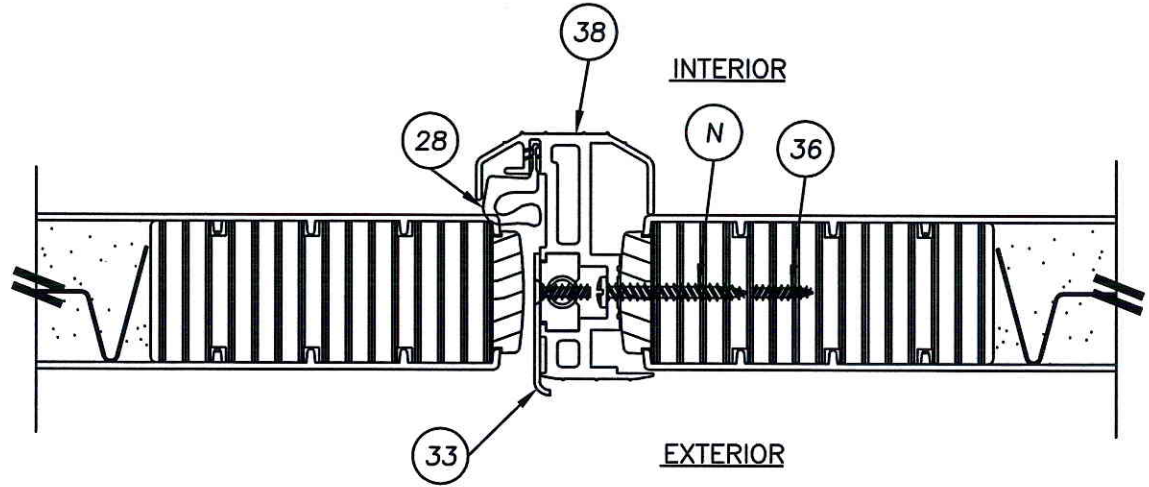
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: DOUBLE OPAQUE  
FIBERGLASS DOOR  
"IMPACT" INSURING / OUTSWING  
PART OR ASSEMBLY:  
DOOR PANEL DETAILS  
(FIBER CLASSIC)

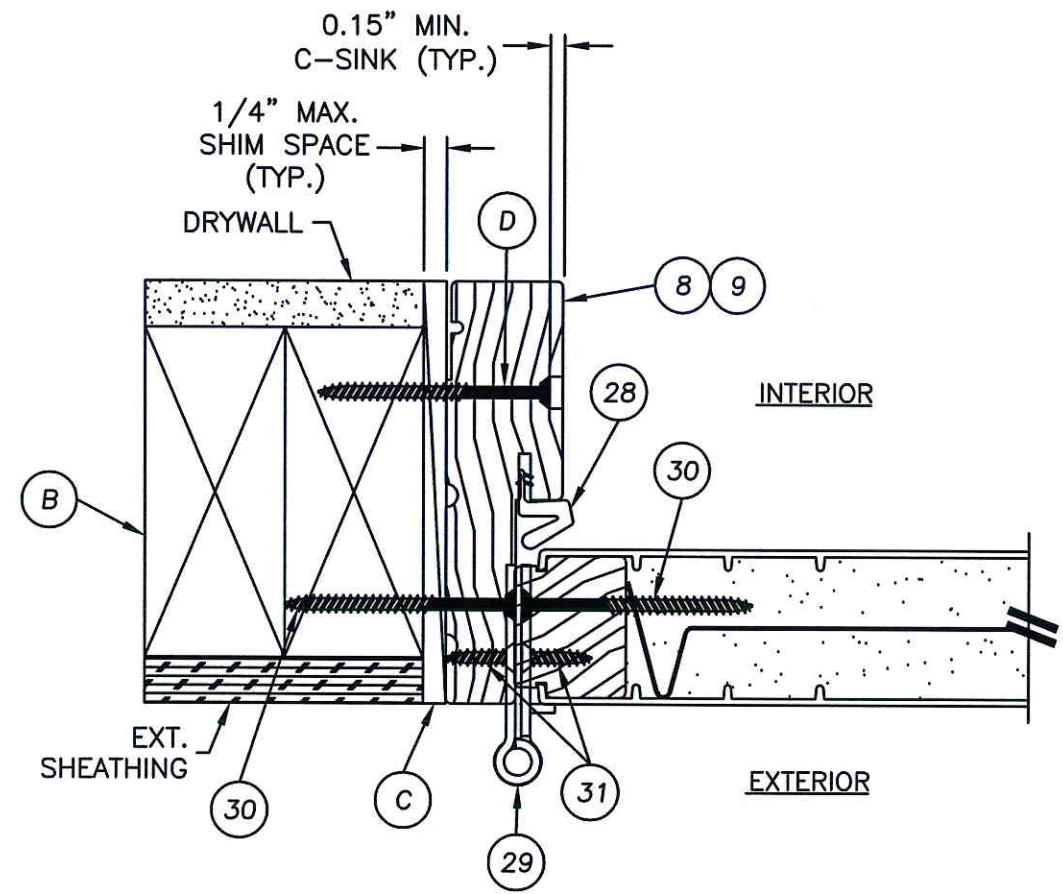
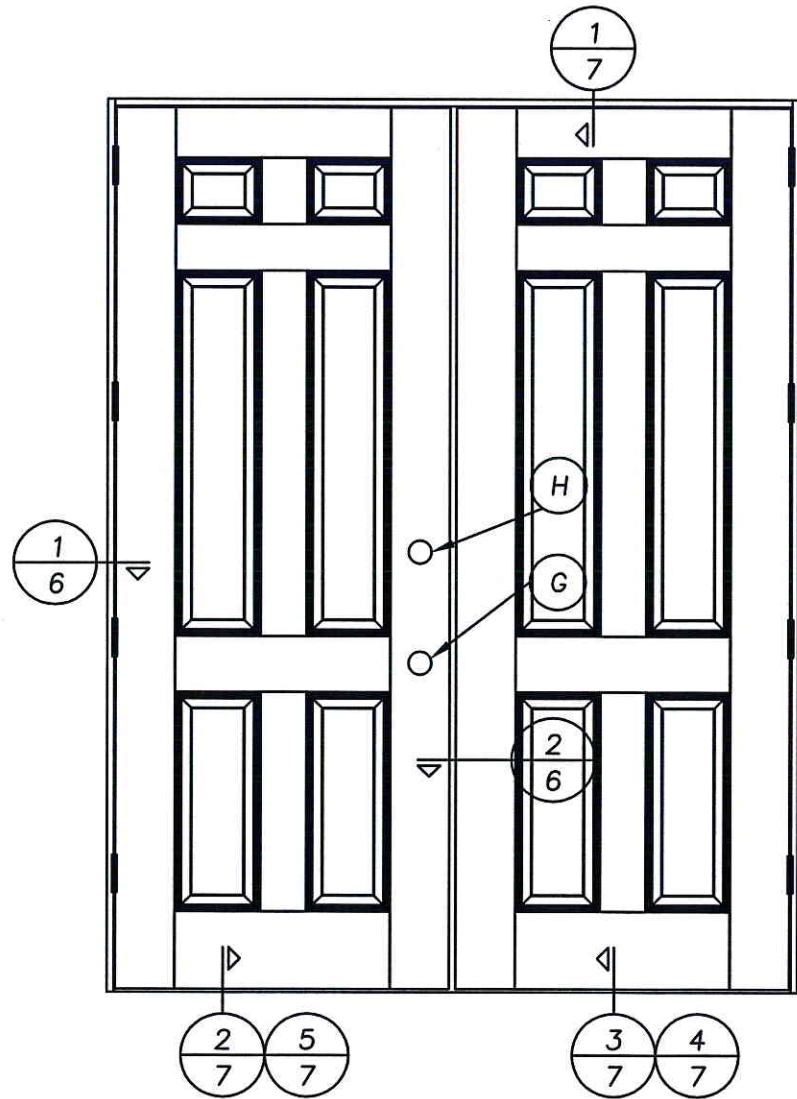
REVISIONS	
NO.	DATE

DATE: 7/16/12  
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CHK. BY: LFS  
DRAWING NO.: TX-4176  
SHEET 5 OF 10

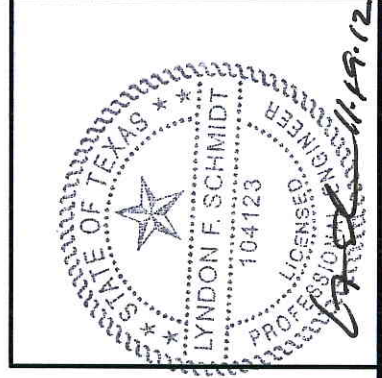
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2 HORIZONTAL CROSS SECTION  
 6 OUTSWING SHOWN (INSWING ALSO APPROVED)  
 SMOOTH STAR PANEL SHOWN  
 SEE DOOR PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



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



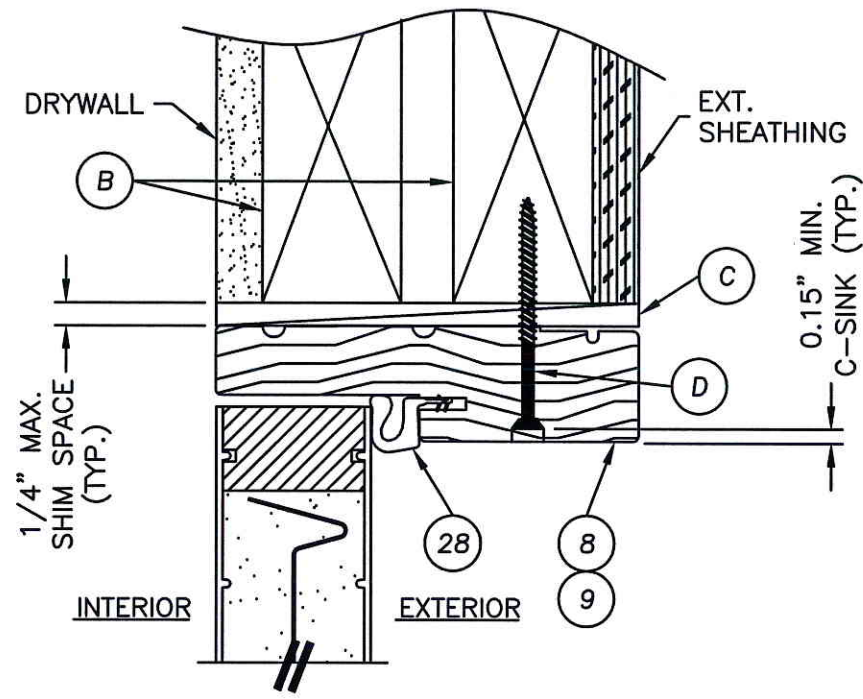
Documents Prepared By: Lyndon F. Schmidt, P.E.  
 TEXAS P.E. #104123  
 R.W. BUILDING CONSULTANTS, INC.  
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 Phone No.: 813.659.9197  
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PRODUCT: DOUBLE OPAQUE  
 FIBERGLASS DOOR  
 "IMPACT" INSWING / OUTSWING  
 PART OR ASSEMBLY:  
 HORIZONTAL CROSS SECTIONS

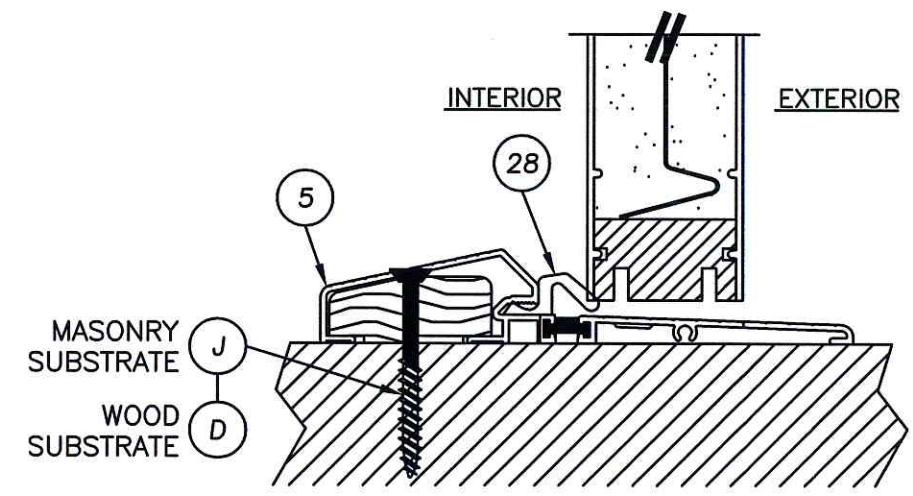
NO.	DATE	BY	REVISIONS

DATE: 7/16/12  
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 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4176  
 SHEET 6 OF 10

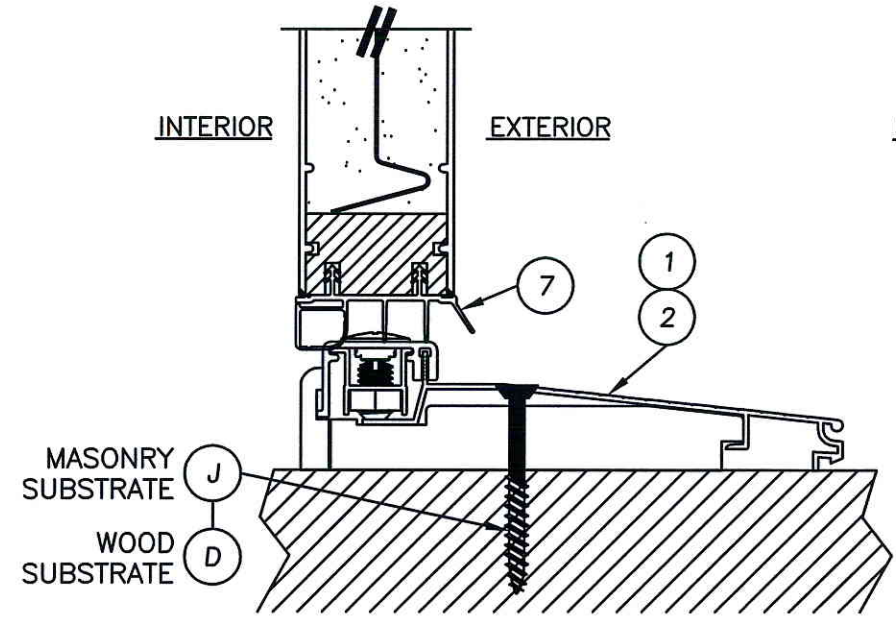
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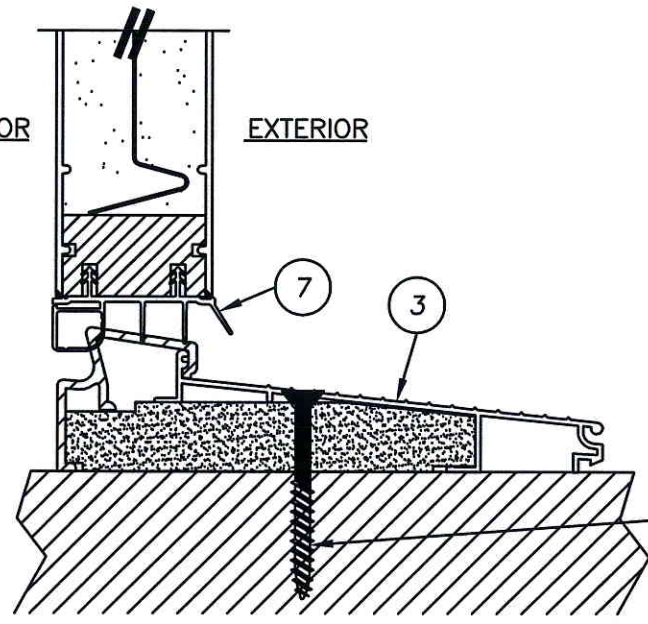
1 VERTICAL CROSS SECTION  
 7 INSWING SHOWN (OUTSWING ALSO APPROVED)  
 SMOOTH STAR PANEL SHOWN  
 SEE DOOR PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



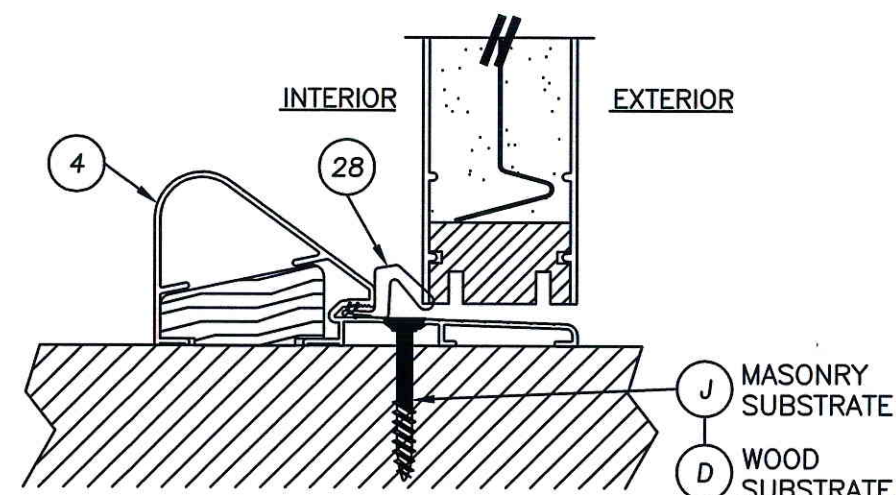
2 VERTICAL CROSS SECTION  
 7 @ THRESHOLD  
 SMOOTH STAR PANEL SHOWN  
 SEE DOOR PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



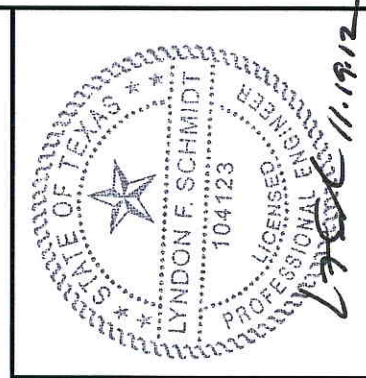
3 VERTICAL CROSS SECTION  
 7 @ THRESHOLD  
 SMOOTH STAR PANEL SHOWN  
 SEE DOOR PANEL DETAILS FOR  
 OPTIONAL PANEL TYPES



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



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



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 TEXAS P.E. #104123

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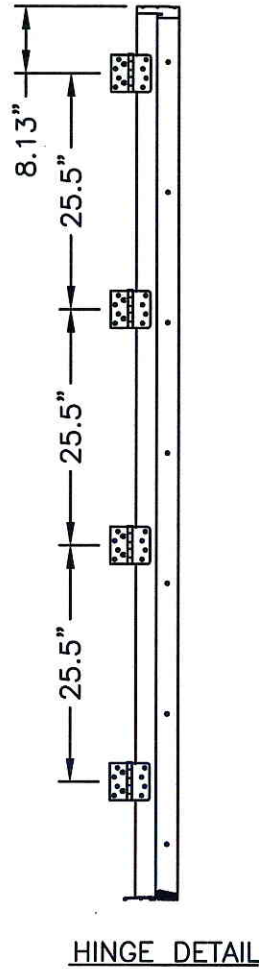
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
 CERTIFICATE OF REGISTRATION # F-11852

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

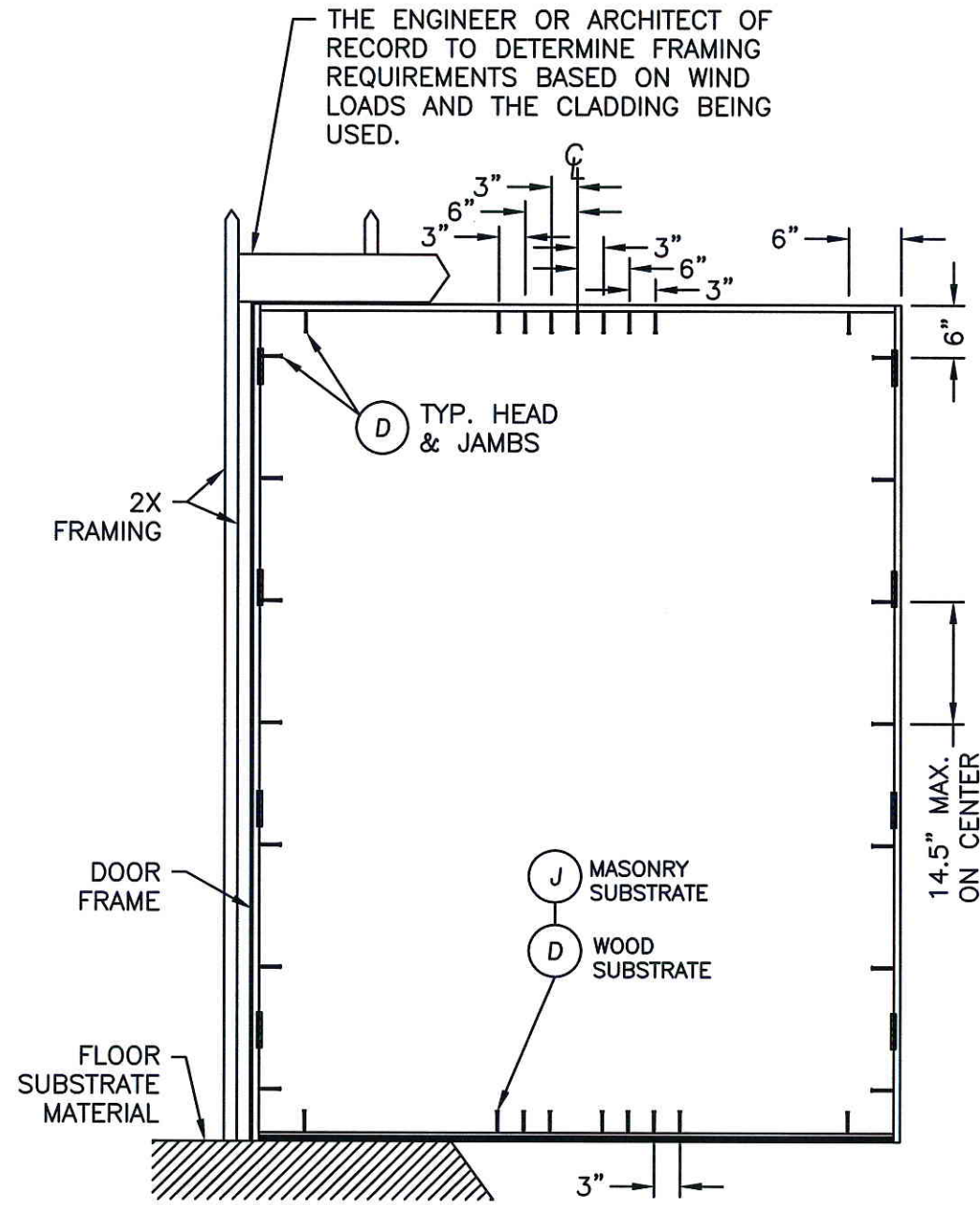
NO.	DATE	BY	REVISIONS

DATE: 7/16/12  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4176  
 SHEET 7 OF 10

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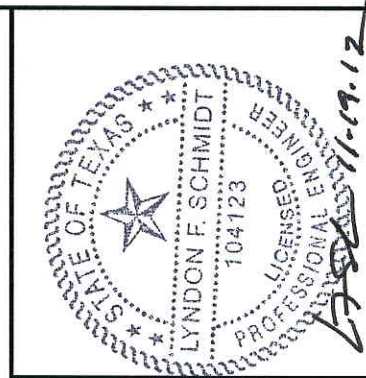


HINGE DETAIL



FRAME ANCHORING

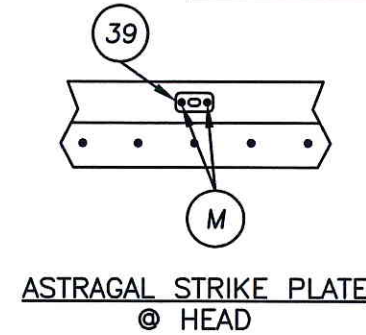
THE ENGINEER OR ARCHITECT OF RECORD TO DETERMINE FRAMING REQUIREMENTS BASED ON WIND LOADS AND THE CLADDING BEING USED.



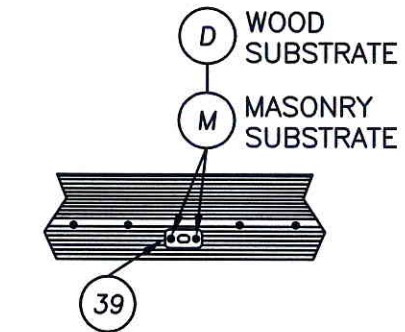
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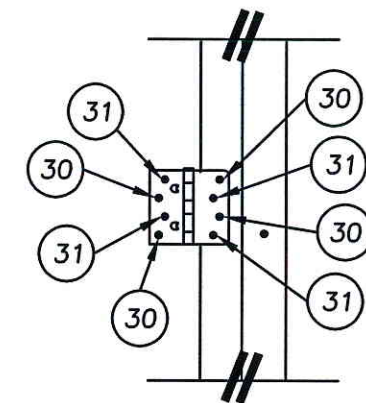
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852



ASTRAGAL STRIKE PLATE  
@ HEAD



ASTRAGAL STRIKE PLATE  
@ THRESHOLD



HINGE DETAIL

**CONCRETE ANCHOR NOTES:**

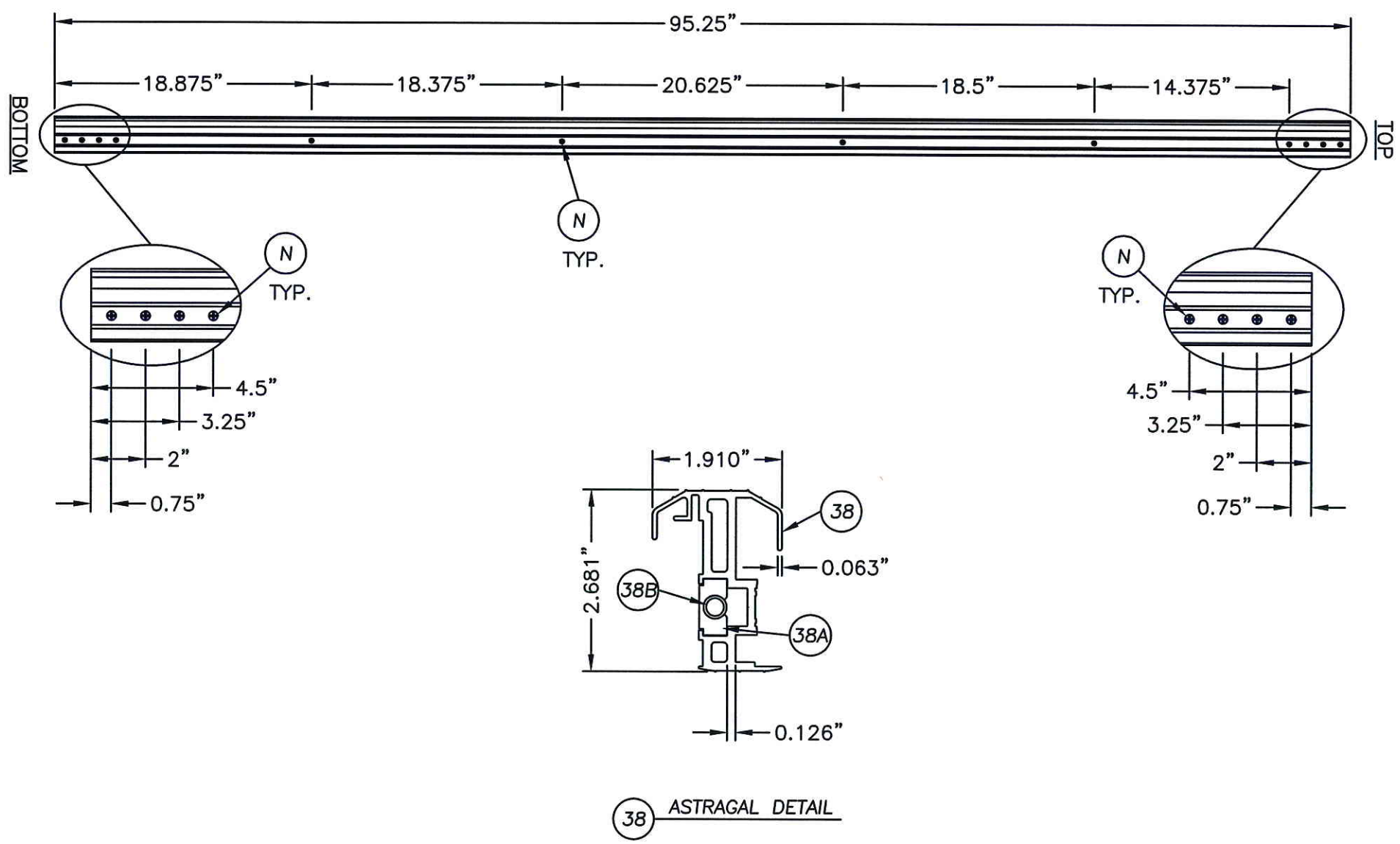
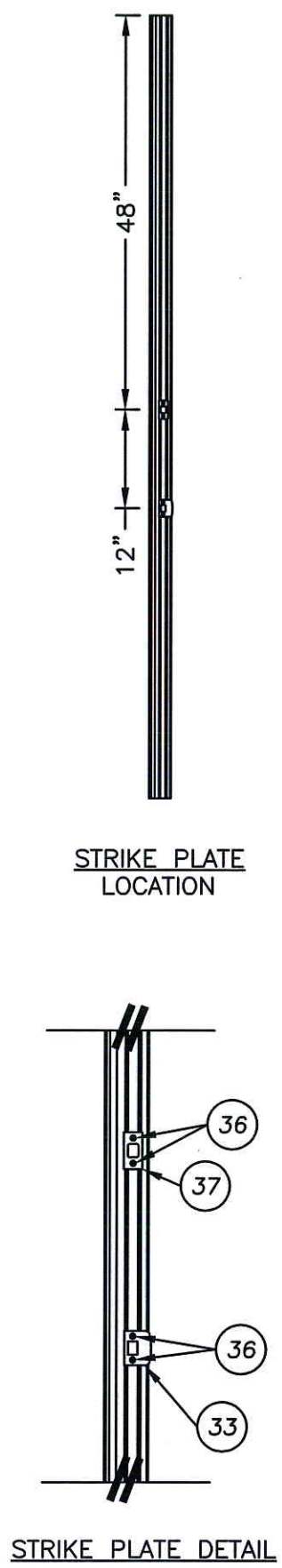
1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. 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®	3/16" 1/4"	1-3/4" 1-3/4"	2-5/8" 2-1/2"	1-1/8" 3"
ELCO ULTRACON®	1/4"	1-3/4"	1"	3"

PRODUCT:	DOUBLE OPAQUE FIBERGLASS DOOR "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-4176	
SHEET	8	OF 10



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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

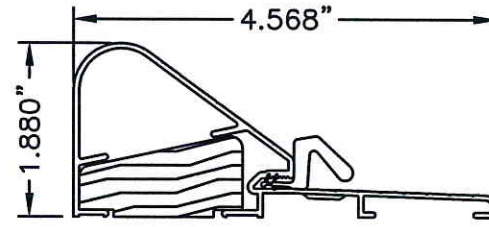
PRODUCT: DOUBLE OPAQUE FIBERGLASS DOOR "IMPACT" INSWING / OUTSWING PART OR ASSEMBLY: ASTRAGAL DETAILS

NO.	DATE	BY	REVISIONS

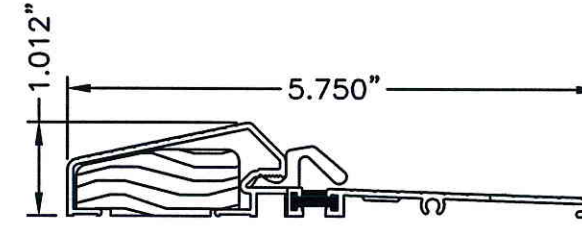
DATE: 7/16/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4176  
SHEET 9 OF 10

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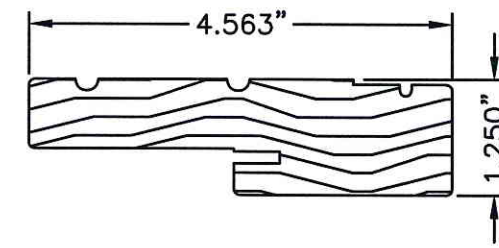
BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL
B	2X FRAMING (G >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	WOOD
D	#10 X 2-1/2" PFH WOOD SCREW	STEEL
G	KWIKSET 200 SERIES PASSAGE LOCK	STEEL
H	KWIKSET 600 SERIES DEADBOLT	STEEL
K	3/16" ITW CONCRETE SCREW (1-3/4" MIN. EMB.)	STEEL
M	#8 X 3" PFH SCREW (STRIKE PLATES @ HEAD & SILL)	STEEL
N	#10 X 1-1/2" PPH SCREW ASTRAGAL TO PANEL	STEEL
1	INSWING ADJUSTABLE THRESHOLD (IS300AJ)	ALUM./WOOD
2	INSWING THRESHOLD (IS300HP5)	ALUM./COMP.
3	INSWING SELF ADJUST THERMAL BREAK THRESHOLD (ISP30M)	ALUM./COMP.
4	OUTSWING COASTAL THRESHOLD	ALUM./WOOD
5	OUTSWING STANDARD THRESHOLD	ALUM./WOOD
7	DOOR BOTTOM SWEEP	VINYL
8	JAMB (OAK)	WOOD
9	JAMB (PINE)	WOOD
10	HINGE STILE (SMOOTH STAR)	WOOD
11	LOCK STILE (SMOOTH STAR)	LVL/WOOD
12	TOP RAIL (SMOOTH STAR)	PVC
13	BOTTOM RAIL (SMOOTH STAR)	PVC
14	PANEL REINFORCEMENT 0.023" THK. (SMOOTH STAR)	STEEL
15	DOOR SKIN 0.070" THK. (SMOOTH STAR) Fy = 6,000 PSI MIN.	FIBERGLASS
16	HINGE STILE (CLASSIC CRAFT)	WOOD/LVL
17	LOCK STILE (CLASSIC CRAFT)	WOOD/LVL
18	TOP RAIL (CLASSIC CRAFT)	PVC
19	BOTTOM RAIL (CLASSIC CRAFT)	PVC
20	PANEL REINFORCEMENT 0.023" THK. (CLASSIC CRAFT)	STEEL
21	DOOR SKIN 0.125" THK. (CLASSIC CRAFT) Fy = 6,000 PSI MIN.	FIBERGLASS
22	LOCK & HINGE STILE (CLASSIC CRAFT RUSTIC)	WOOD/LVL
23	TOP RAIL (CLASSIC CRAFT RUSTIC)	WOOD
24	BOTTOM RAIL (CLASSIC CRAFT RUSTIC)	PVC
25	PANEL REINFORCEMENT 0.023" THK. (CLASSIC CRAFT RUSTIC)	STEEL
26	DOOR SKIN 0.125" THK. (CC RUSTIC) Fy = 6,000 PSI MIN.	FIBERGLASS
27	FOAM CORE	POLYURETHANE
28	WEATHERSTRIP	FOAM
29	HINGE	STEEL
30	#10 X 2-1/2" PFH SCREW	STEEL
31	#10 X 3/4" PFH SCREW	STEEL
32	#9 X 3" PFH WOOD SCREW	STEEL
33	LATCH STRIKE PLATE	STEEL
36	#8 X 3" PFH SCREW	STEEL
37	DEADBOLT STRIKE PLATE	STEEL



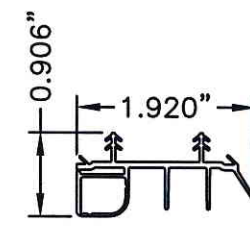
4 THRESHOLD  
OUTSWING COASTAL



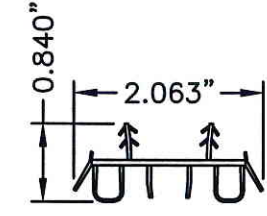
5 THRESHOLD  
OUTSWING STANDARD



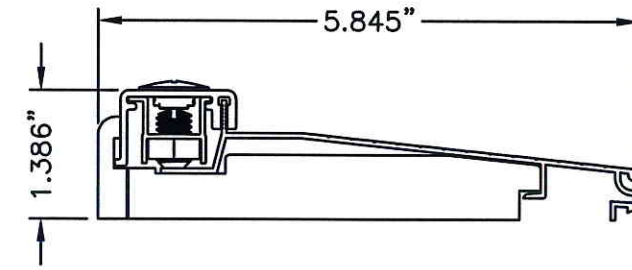
8 JAMB



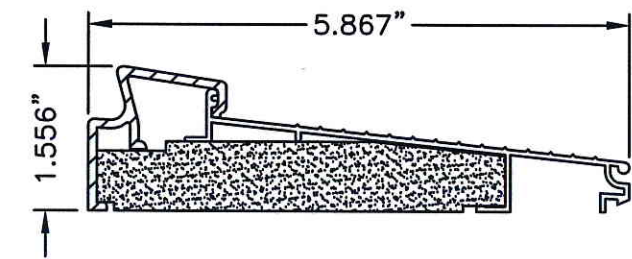
7 SWEEP



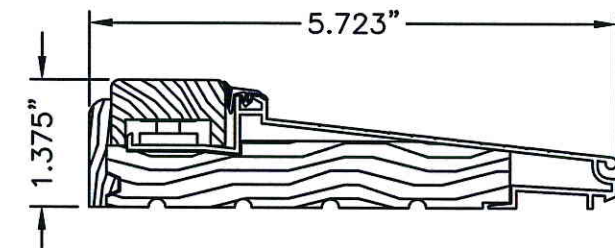
52 SWEEP



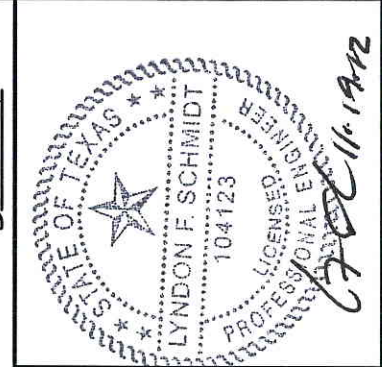
2 THRESHOLD  
INSWING ADJUSTABLE



3 THRESHOLD  
INSWING SELF-ADJUST



1 THRESHOLD  
INSWING ADJUSTABLE



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

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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: DOUBLE OPAQUE  
FIBERGLASS DOOR  
"IMPACT" INSWING / OUTSWING

PART OR ASSEMBLY:  
BILL OF MATERIALS  
& COMPONENTS

BILL OF MATERIALS			
ITEM	DESCRIPTION		MATERIAL
38	ASTRAGAL		ALUMINUM
38A	ASTRAGAL FLUSH BOLT		STEEL
38B	ASTRAGAL FLUSH BOLT RETAINER		ALUMINUM
39	ASTRAGAL STRIKE PLATE @ HEAD		STEEL
62	HINGE STILE (FIBER CLASSIC)		WOOD
63	LOCK STILE (FIBER CLASSIC)		LVL/WOOD
64	TOP RAIL (FIBER CLASSIC)		PVC
65	BOTTOM RAIL (FIBER CLASSIC)		PVC
66	PANEL REINFORCEMENT 0.023" THK. (FIBER CLASSIC)		STEEL
67	DOOR SKIN 0.070" THK. (FIBER CLASSIC) Fy = 6,000 PSI MIN.		FIBERGLASS

NO.	DATE	BY	REVISIONS

DATE: 7/16/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4176  
SHEET 10 OF 10

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