

THERMA TRU®

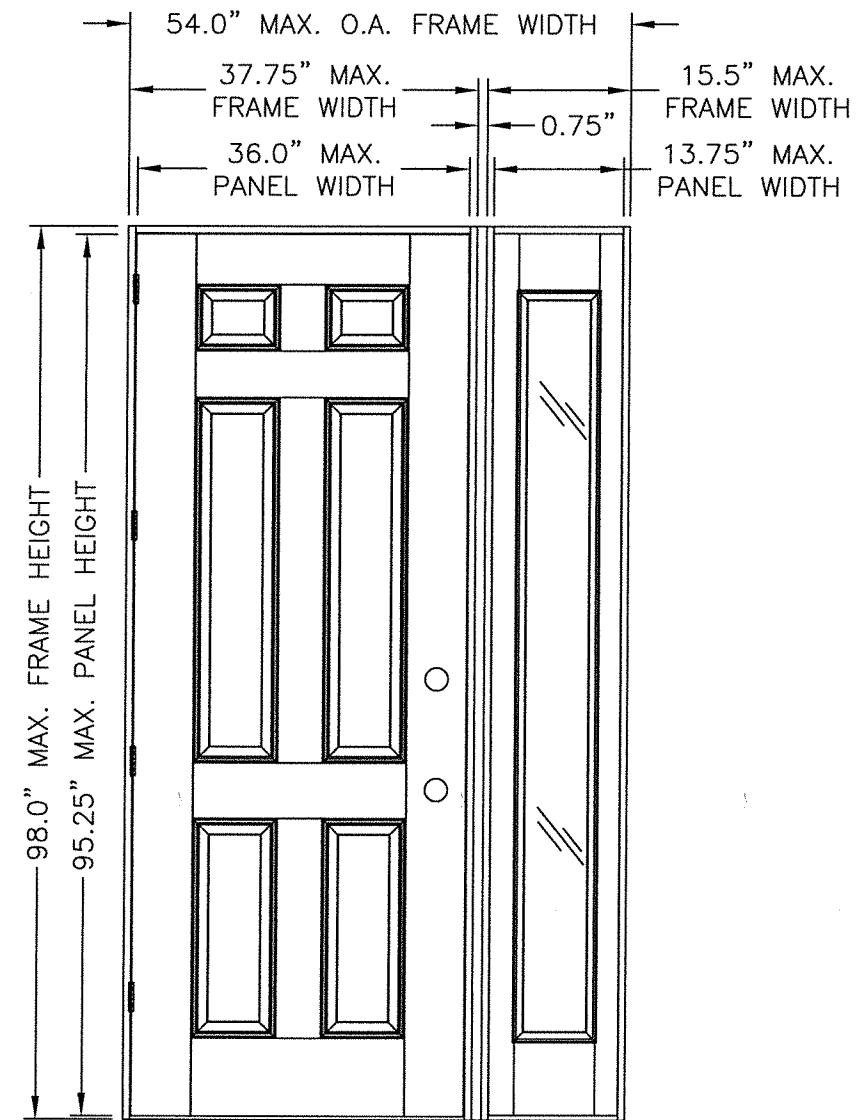
118 INDUSTRIAL DR., EDGERTON, OH 43517

SMOOTH-STAR & FIBER-CLASSIC SINGLE "IMPACT" DOOR WITH "NON-IMPACT" SIDELITE IN SWING / OUT SWING

EVALUATED FOR USE IN THE STATE OF TEXAS

The Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

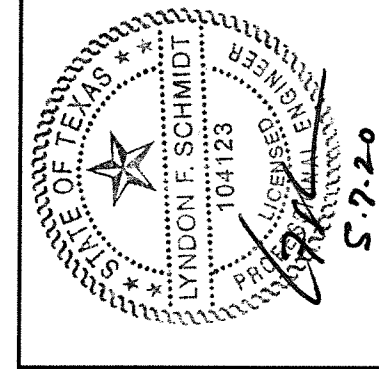
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. When used in areas requiring wind-borne debris protection, the opaque door does not require impact protection and meets missile level "D" as defined in ASTM E 1996. The sidelites are 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.
5. Fiber-Classic and Smooth-Star Door and Sidelite panels require the use of "J" part numbers. These door and sidelite panels must be stained or painted within six months of installation.



"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 96.5"	6.75"	+65.0	-65.0
	IN SWING	54.0" X 98.0"		+65.0	-65.0
FIBER-CLASSIC	OUTSWING	54.0" X 96.5"	79.0"	+65.0	-65.0
	IN SWING	54.0" X 98.0"		+65.0	-65.0

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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



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

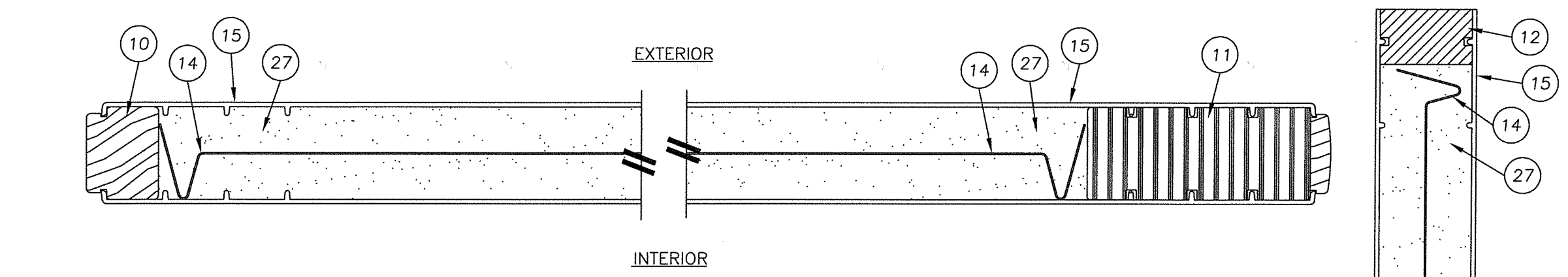
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Vailico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

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

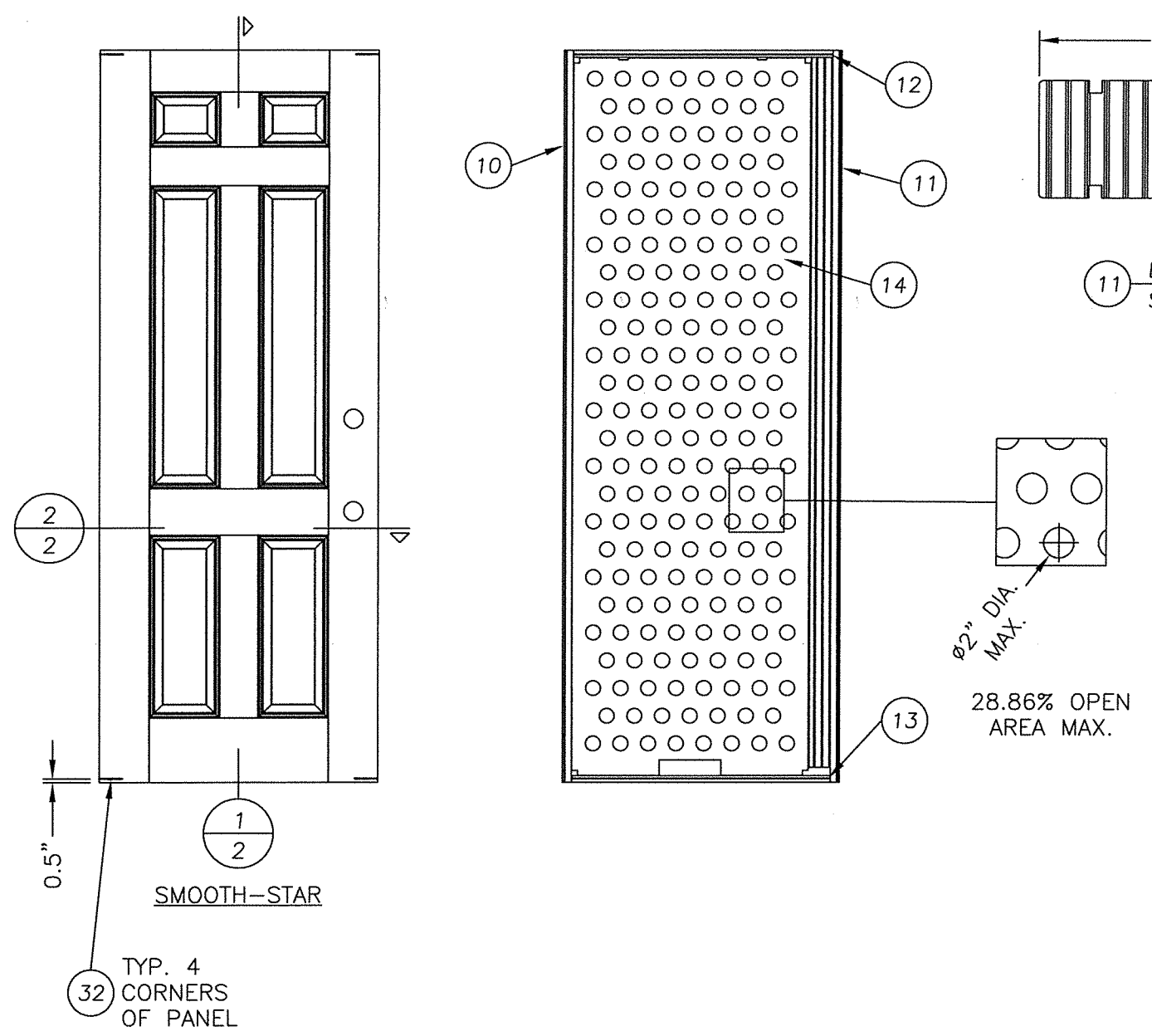
NO.	DATE	REVISIONS
2	5/07/20	UPDATE TO 2018 IBC/IRC CODE
1	7/22/15	ADDED GENERAL NOTE 5.

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

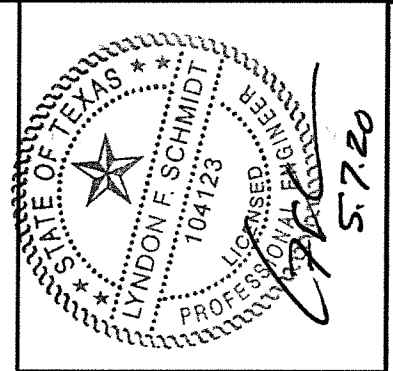
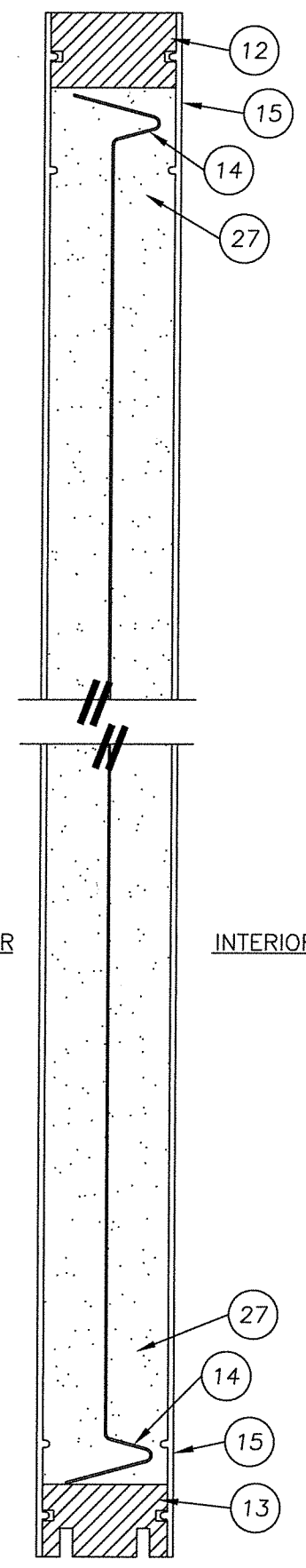
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2 HORIZONTAL CROSS SECTION
2 SMOOTH-STAR



1 VERTICAL CROSS SECTION
2 SMOOTH-STAR

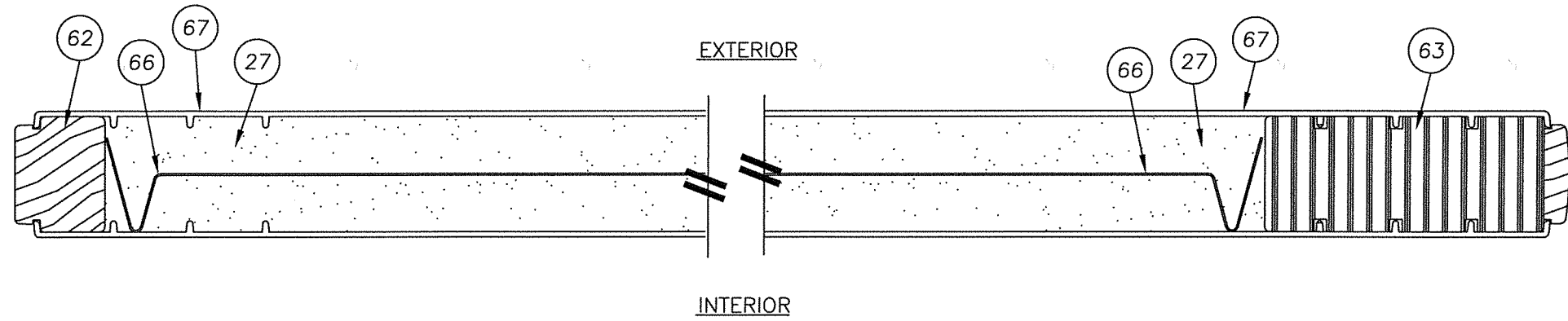


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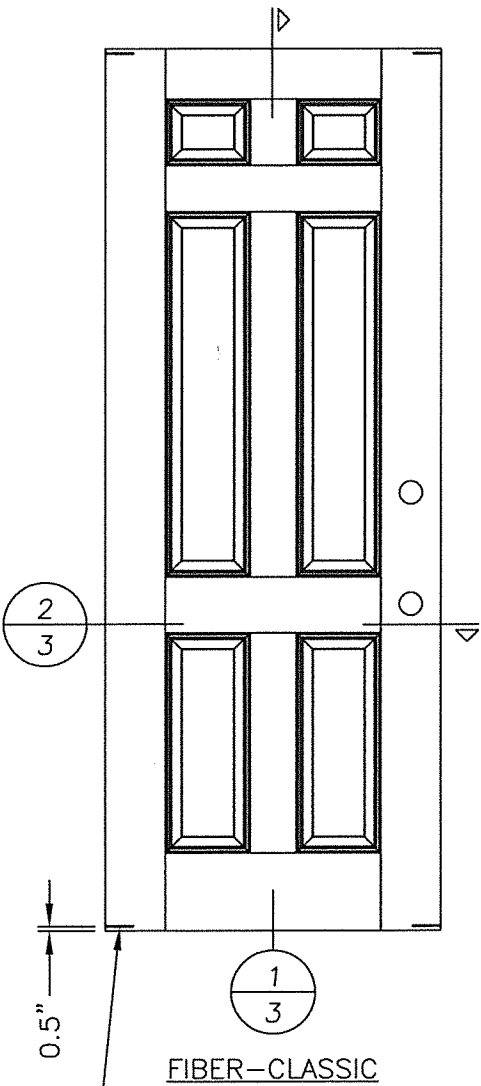
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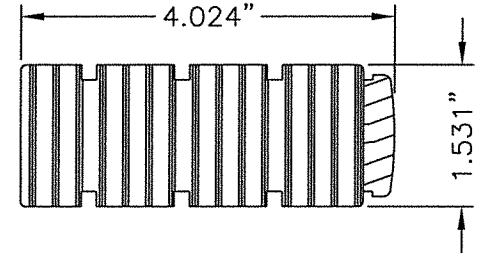
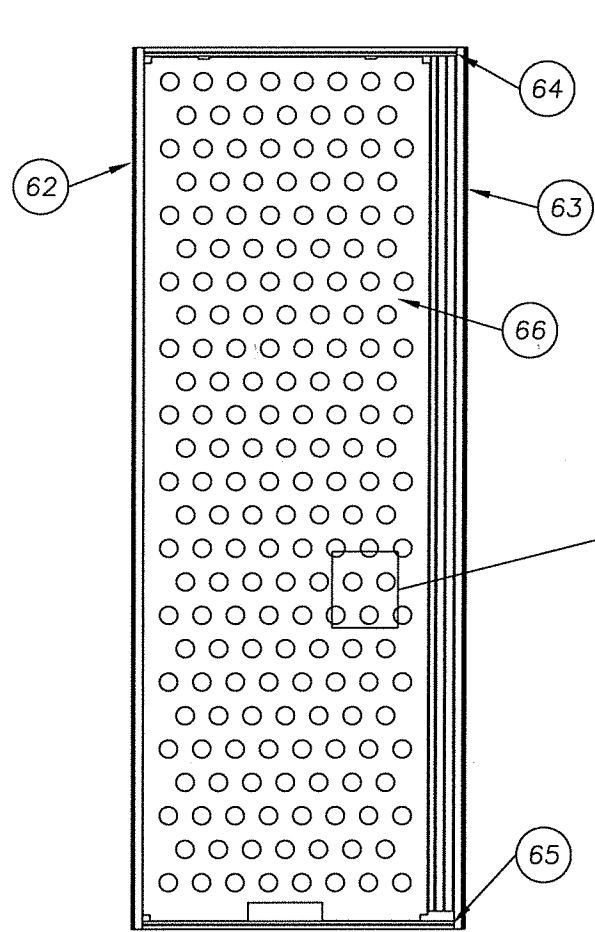
PRODUCT:		SINGLE OPAQUE FIBERGLASS DOOR W/SIDELITE "IMPACT" INSWING / OUTSWING PART OR ASSEMBLY:		
		DOOR PANEL DETAILS (SMOOTH-STAR)		
		5/07/20	UPDATE TO 2018 IBC/IRC CODE	LFS
		7/22/15	ADDED GENERAL NOTE 5.	LFS
		NO.	DATE	BY
				REVISIONS
DATE:		7/16/12		
SCALE:		N.T.S.		
DWG. BY:		JK		
CHK. BY:		LFS		
DRAWING NO.:		TX-4180		
SHEET		2 OF 10		



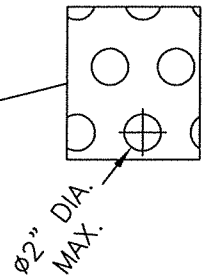
2 HORIZONTAL CROSS SECTION
3 FIBER-CLASSIC



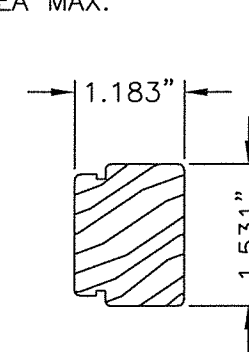
32 TYP. 4 CORNERS OF PANEL



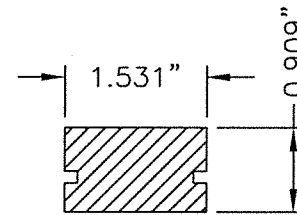
63 LOCK STILE
FIBER-CLASSIC



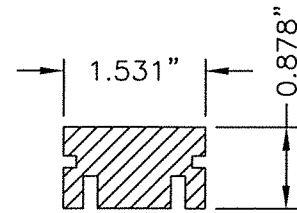
28.86% OPEN AREA MAX.



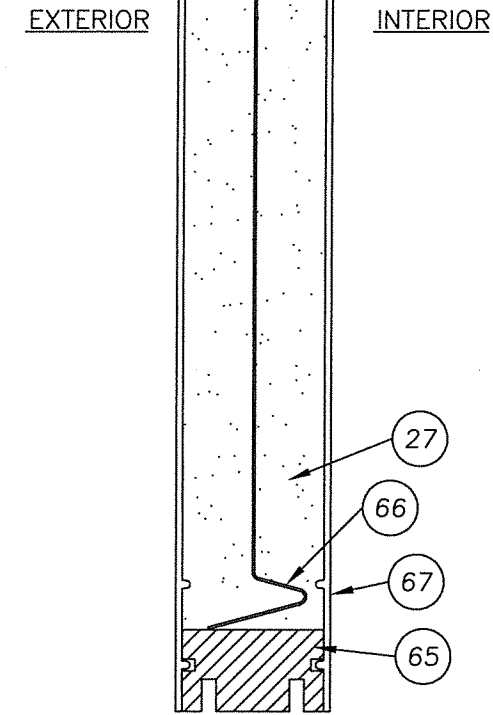
62 HINGE STILE
FIBER-CLASSIC



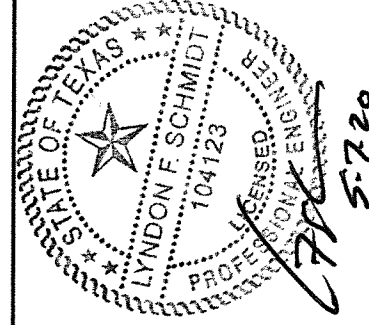
64 TOP RAIL
FIBER-CLASSIC



65 BOTTOM RAIL
FIBER-CLASSIC



1 VERTICAL CROSS SECTION
3 FIBER-CLASSIC



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

NO.	DATE	REVISIONS
2	5/07/20	UPDATE TO 2018 IBC/IRC CODE
1	7/22/15	ADDED GENERAL NOTE 5.
LFS		BY

DATE: 7/16/12

SCALE: N.T.S.

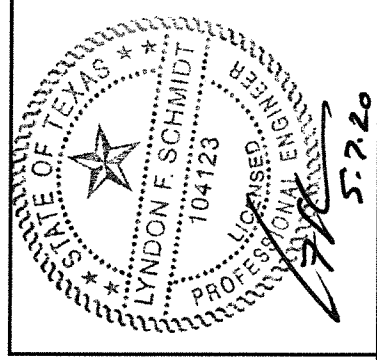
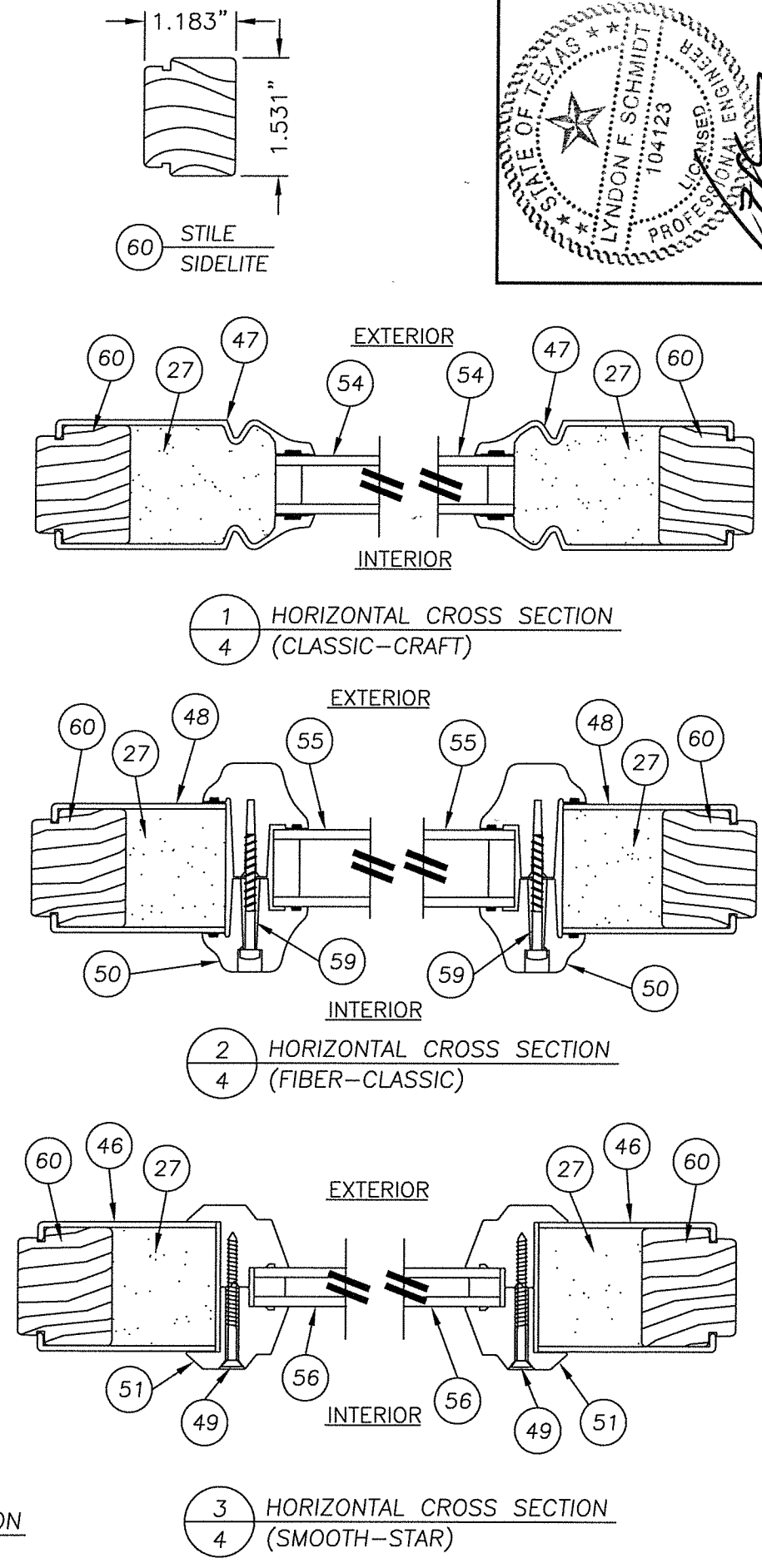
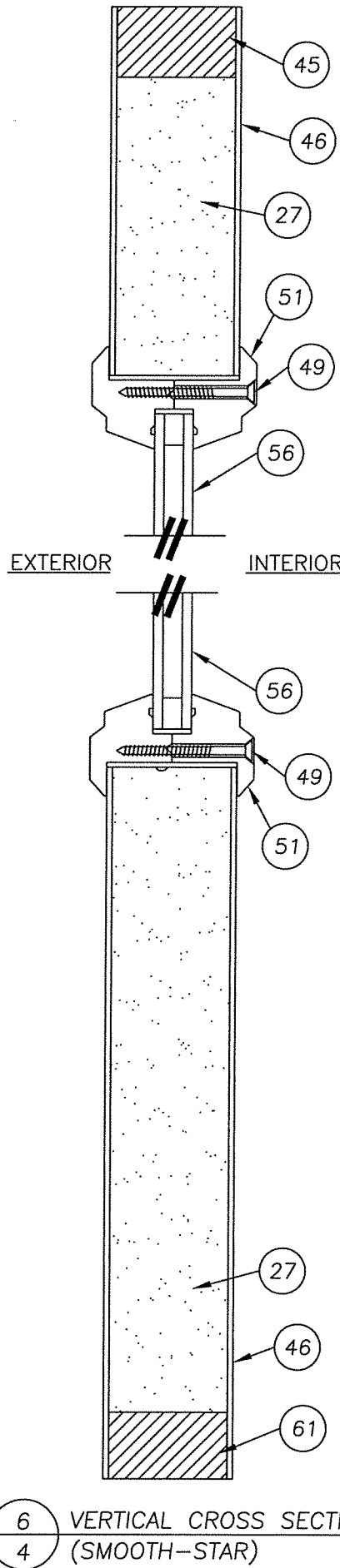
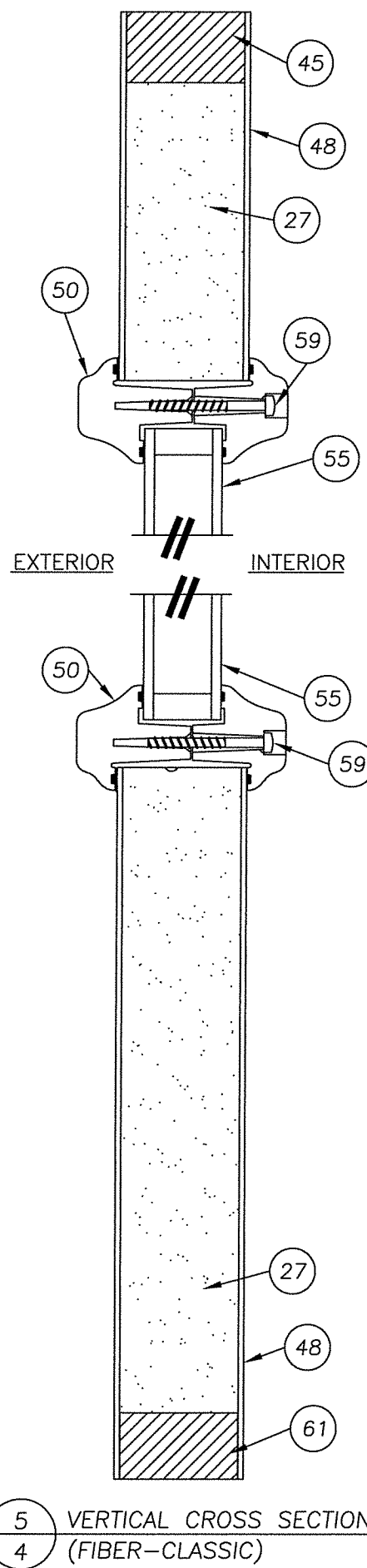
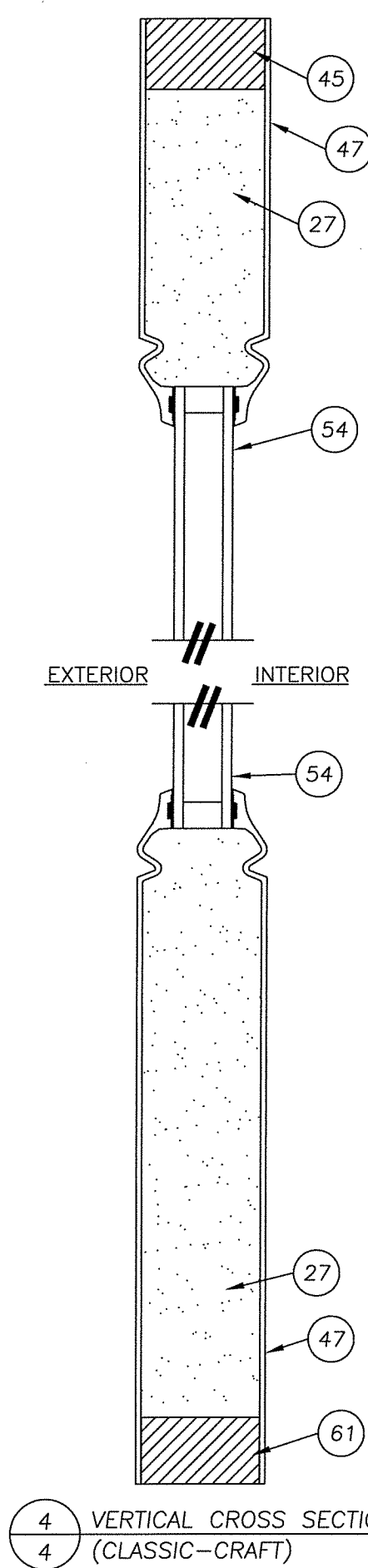
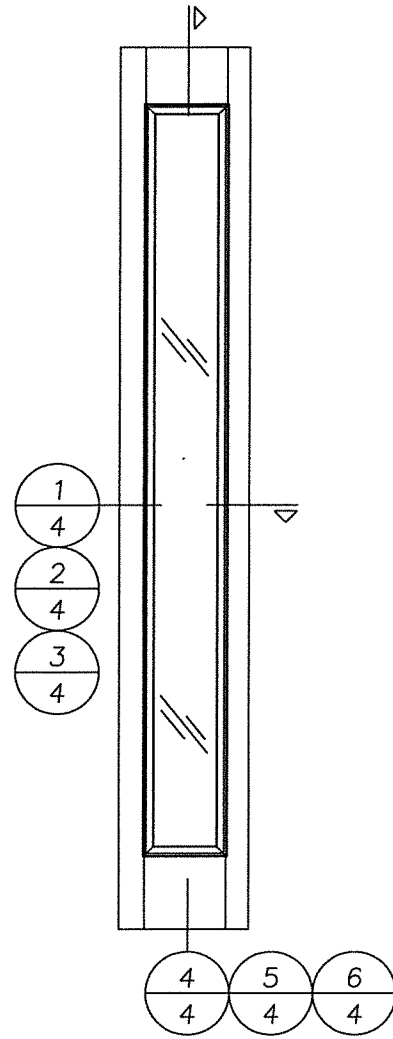
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

TX-4180

SHEET 3 OF 10



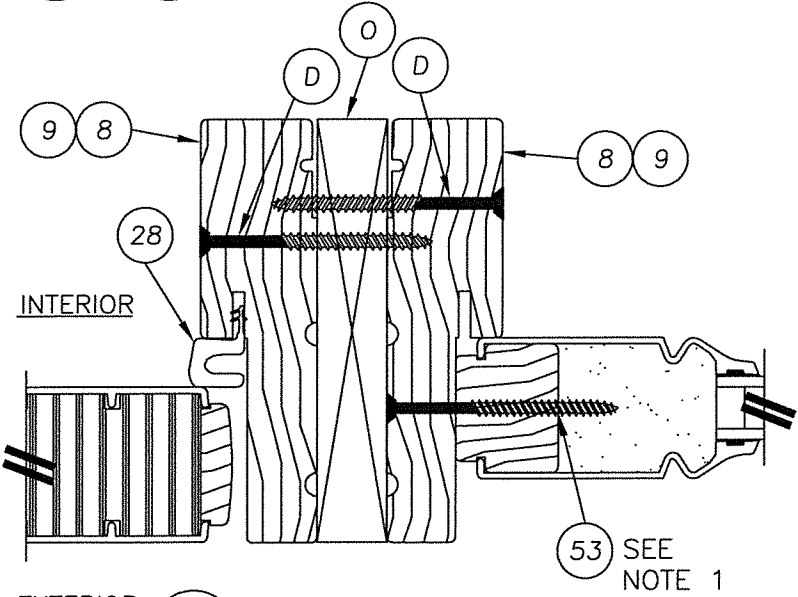
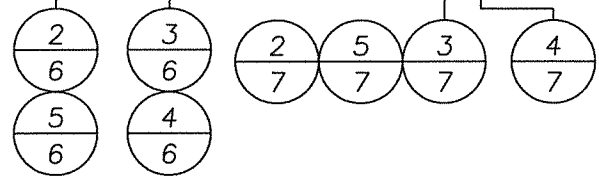
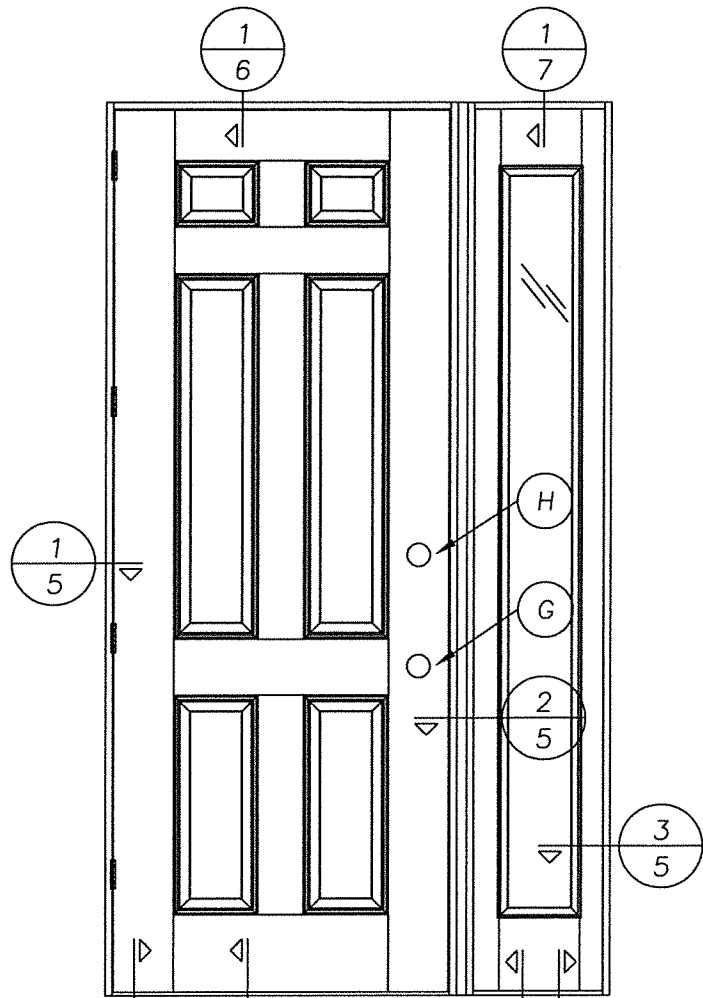
Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123

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

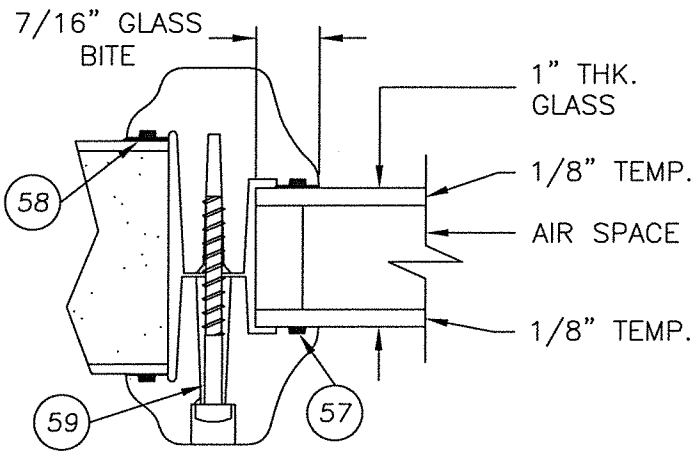
TEXAS BOARD OF PROFESSIONAL ENGINEERS
 CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:		SINGLE OPAQUE FIBERGLASS DOOR W/SIDELITE "IMPACT" INSWING / OUTSWING	
PART OR ASSEMBLY:		SIDELITE PANEL DETAILS	
NO.	DATE	REVISIONS	BY
2	5/07/20	UPDATE TO 2018 IBC/IRC CODE	LFS
1	7/22/15	ADDED GENERAL NOTE 5.	LFS

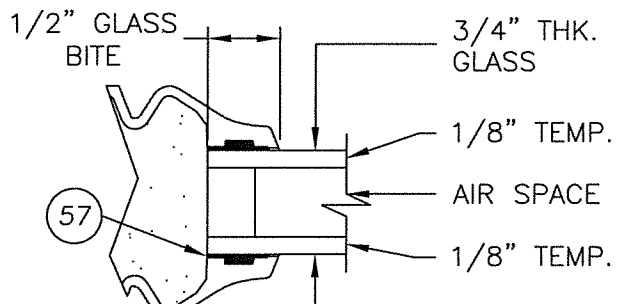
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 DRAWING NO.: TX-4180
 SHEET 4 OF 10



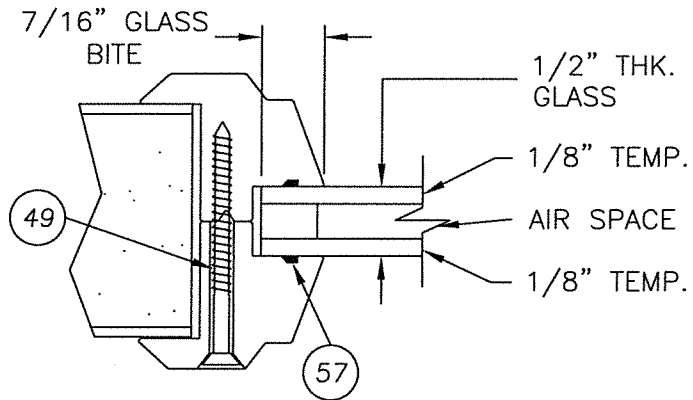
2 HORIZONTAL CROSS SECTION
5 OUTSWING SHOWN (INSWING ALSO APPROVED)
SMOOTH-STAR PANEL SHOWN
SEE PANEL DETAILS FOR
OPTIONAL PANEL TYPES



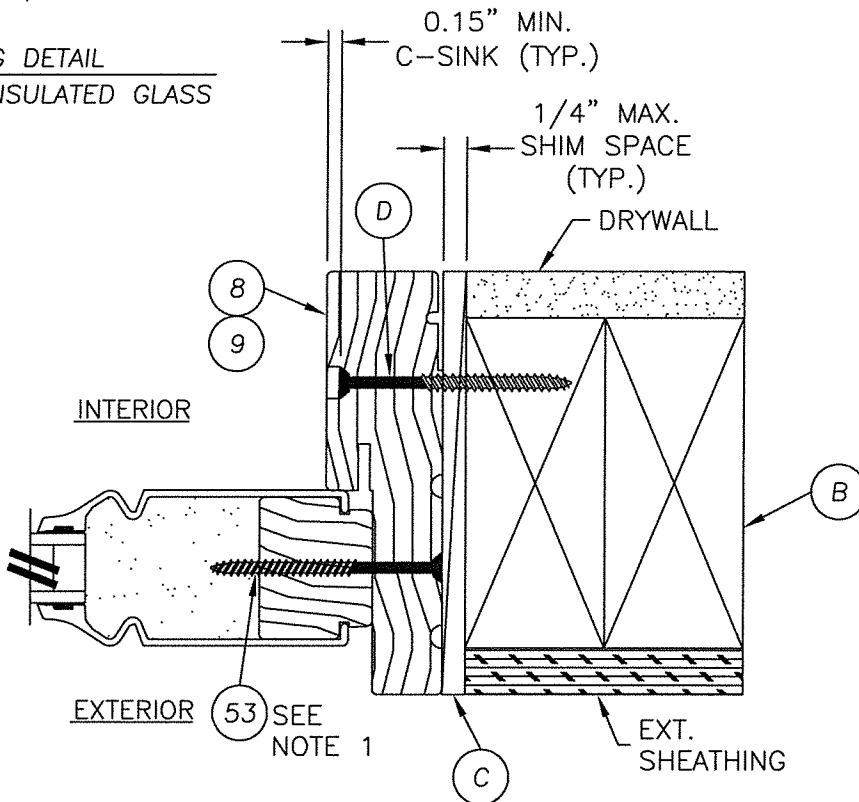
55 GLAZING DETAIL
1" INSULATED GLASS



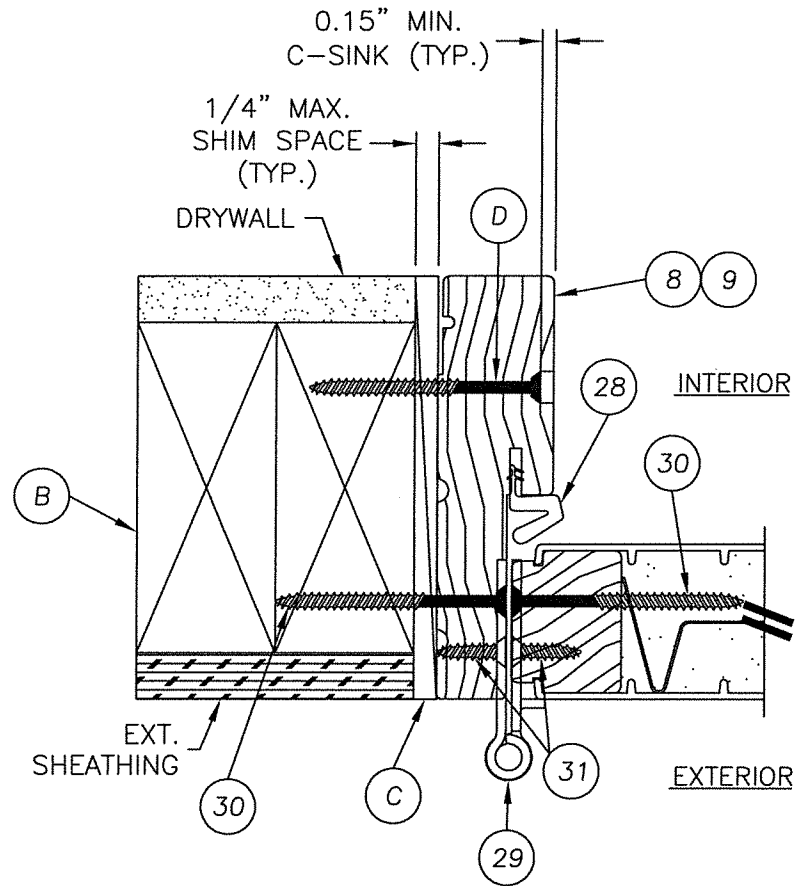
54 GLAZING DETAIL
3/4" INSULATED GLASS



56 GLAZING DETAIL
1/2" INSULATED GLASS

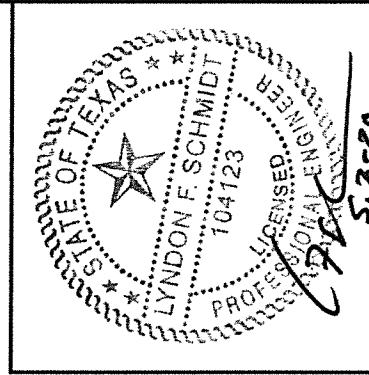


3 HORIZONTAL CROSS SECTION
5 OUTSWING SHOWN (INSWING ALSO APPROVED)
CLASSIC-CRAFT PANEL SHOWN
SEE SIDELITE PANEL DETAILS FOR
OPTIONAL PANEL TYPES



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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P.O. Box 230 Valrico FL 33595
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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:
HORIZONTAL CROSS SECTIONS
& GLAZING DETAILS

NO.	DATE	REVISIONS
2	5/07/20	UPDATE TO 2018 IBC/IRC CODE
1	7/22/15	ADDED GENERAL NOTE 5.

DATE: 7/16/12

SCALE: N.T.S.

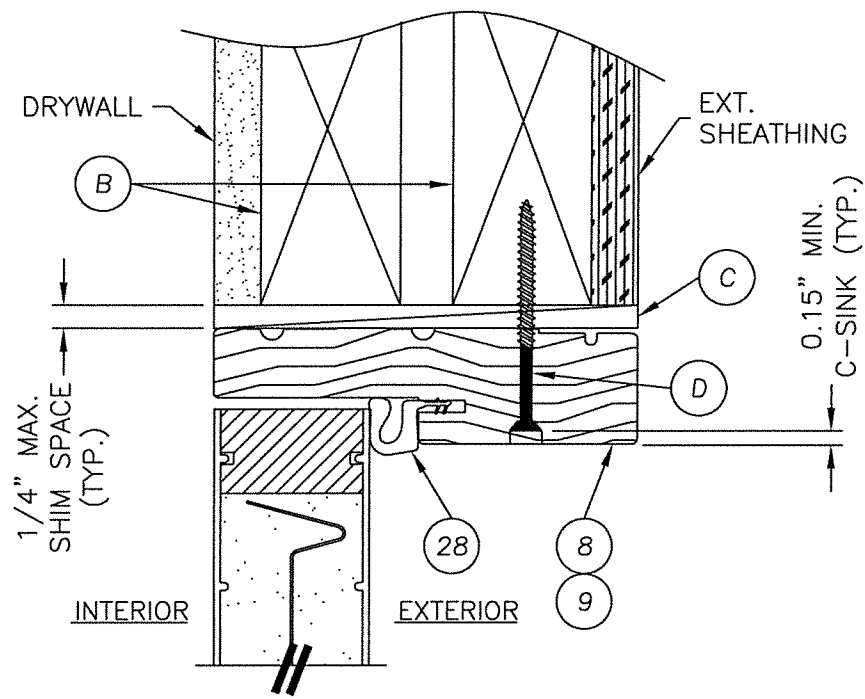
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CHK. BY: LFS

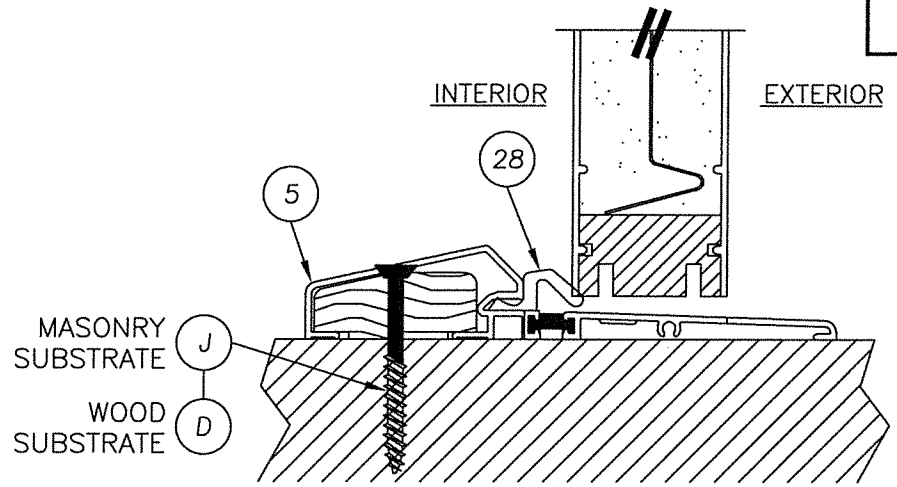
DRAWING NO.:
TX-4180

SHEET 5 OF 10

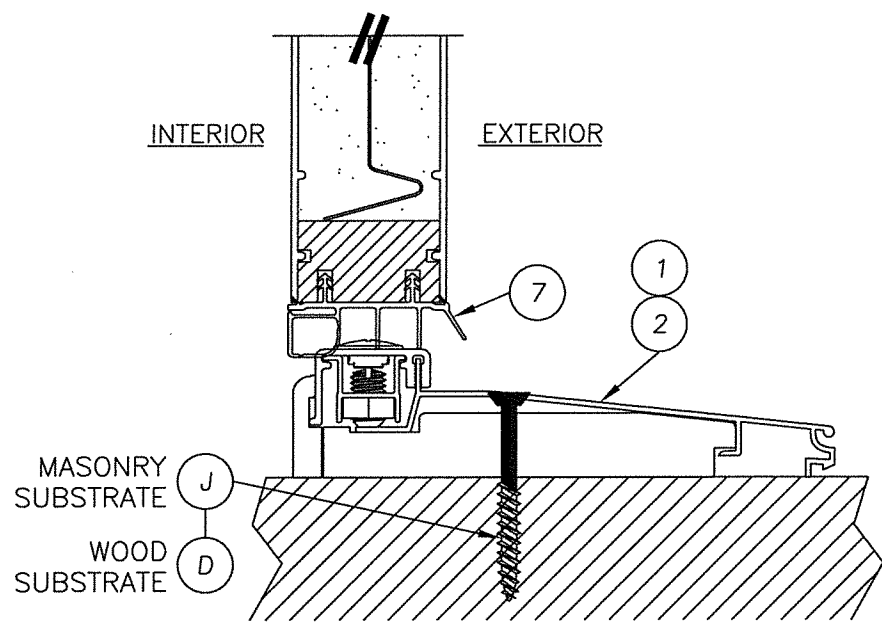
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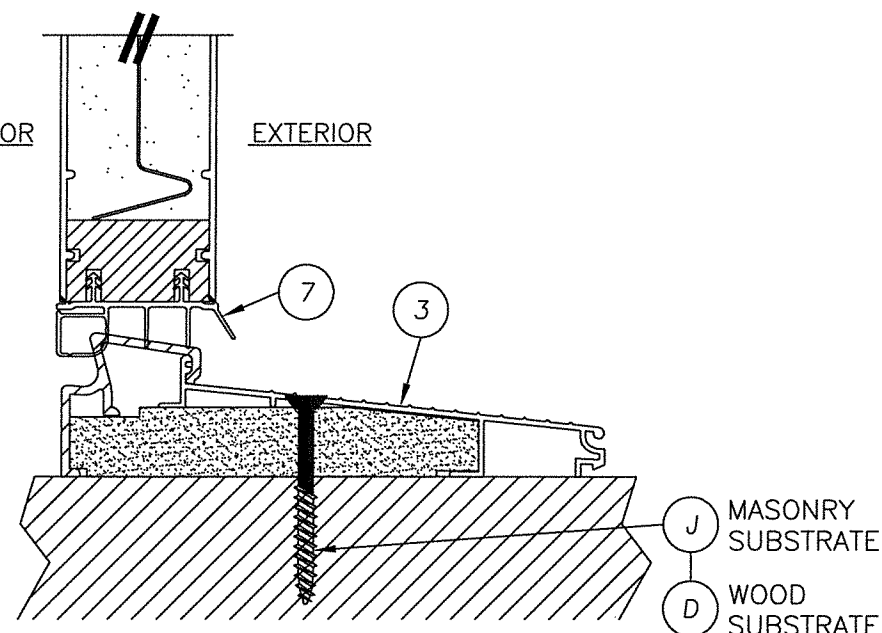
1 VERTICAL CROSS SECTION
 6 INSWING SHOWN (OUTSWING ALSO APPROVED)
 SMOOTH-STAR PANEL SHOWN
 SEE DOOR PANEL DETAILS FOR
 OPTIONAL PANEL TYPES



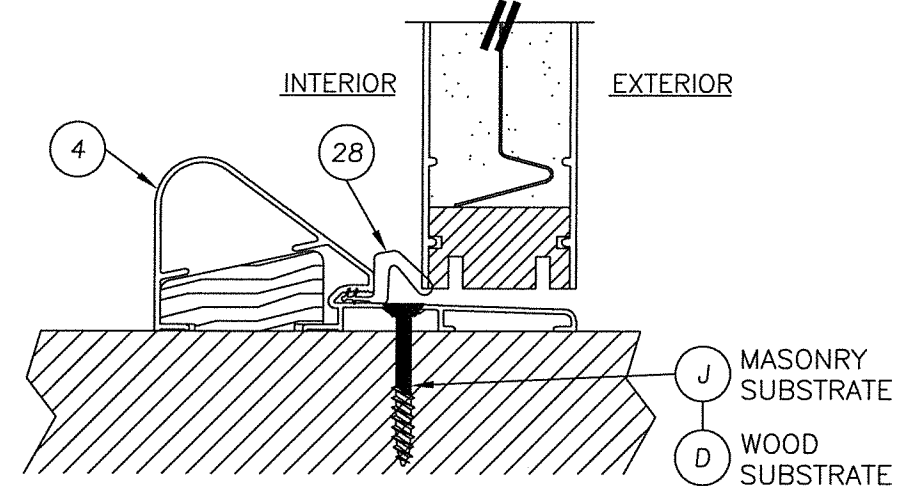
2 VERTICAL CROSS SECTION
 6 @ THRESHOLD
 SMOOTH-STAR PANEL SHOWN
 SEE DOOR PANEL DETAILS FOR
 OPTIONAL PANEL TYPES



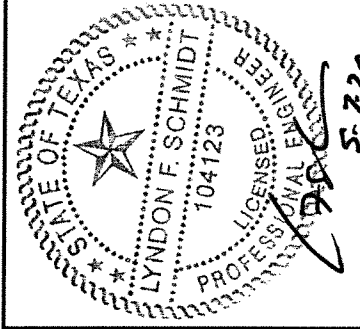
3 VERTICAL CROSS SECTION
 6 @ THRESHOLD
 SMOOTH-STAR PANEL SHOWN
 SEE DOOR PANEL DETAILS FOR
 OPTIONAL PANEL TYPES



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



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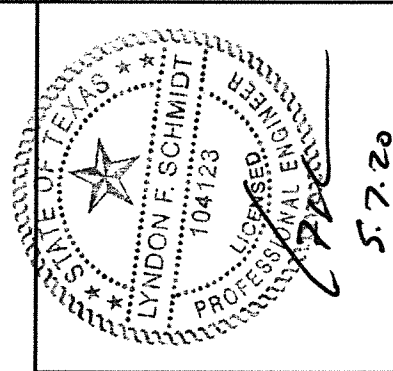
PRODUCT: SINGLE OPAQUE
 FIBERGLASS DOOR W/SIDELITE
 "IMPACT" INSWING / OUTSWING
 PART OR ASSEMBLY:
 VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS
2	5/07/20	LFS	UPDATE TO 2018 IBC/IRC CODE
1	7/22/15	LFS	ADDED GENERAL NOTE 5.

DATE: 7/16/12
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4180
 SHEET 6 of 10

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

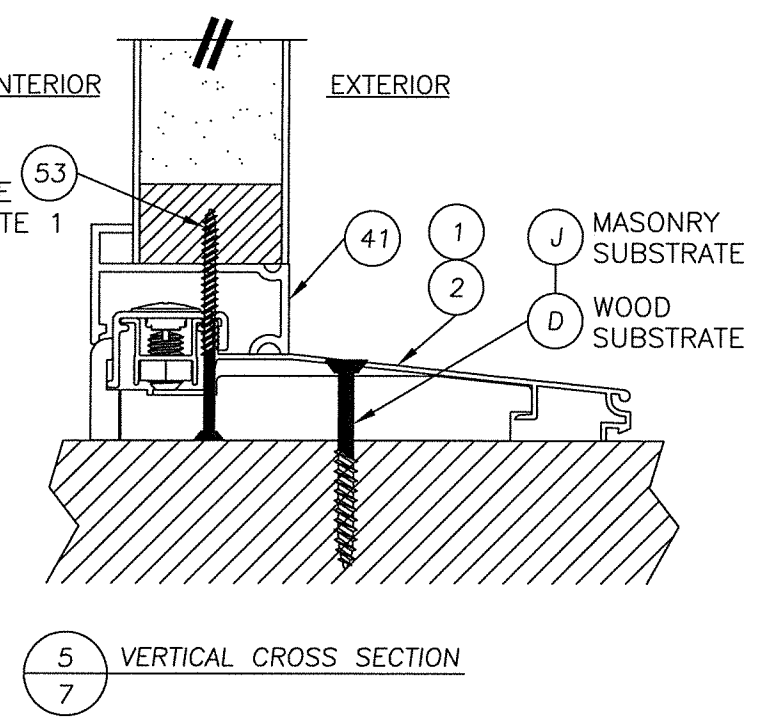
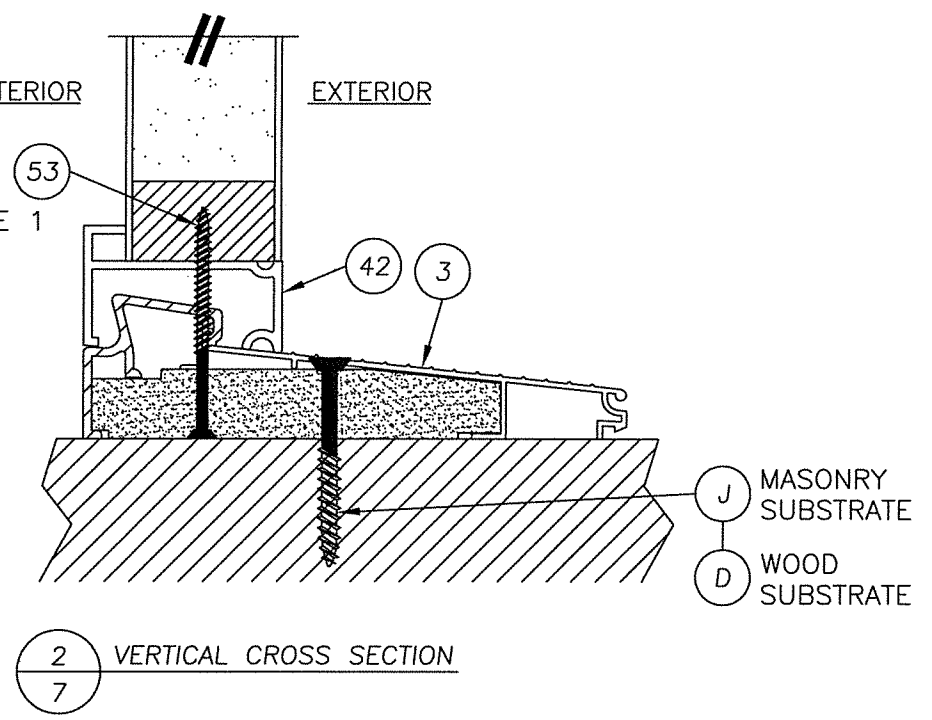
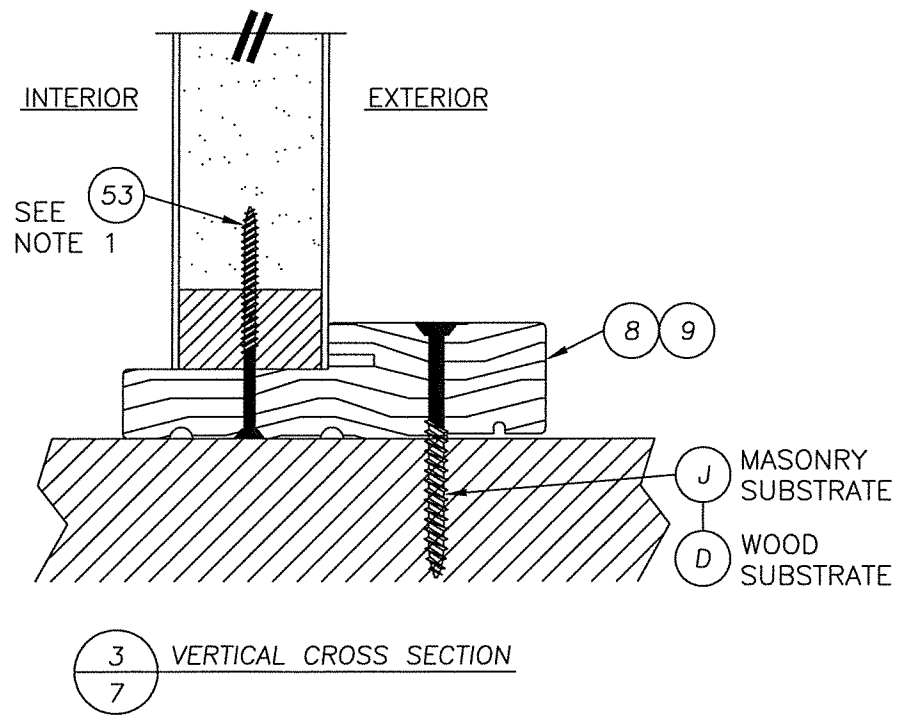
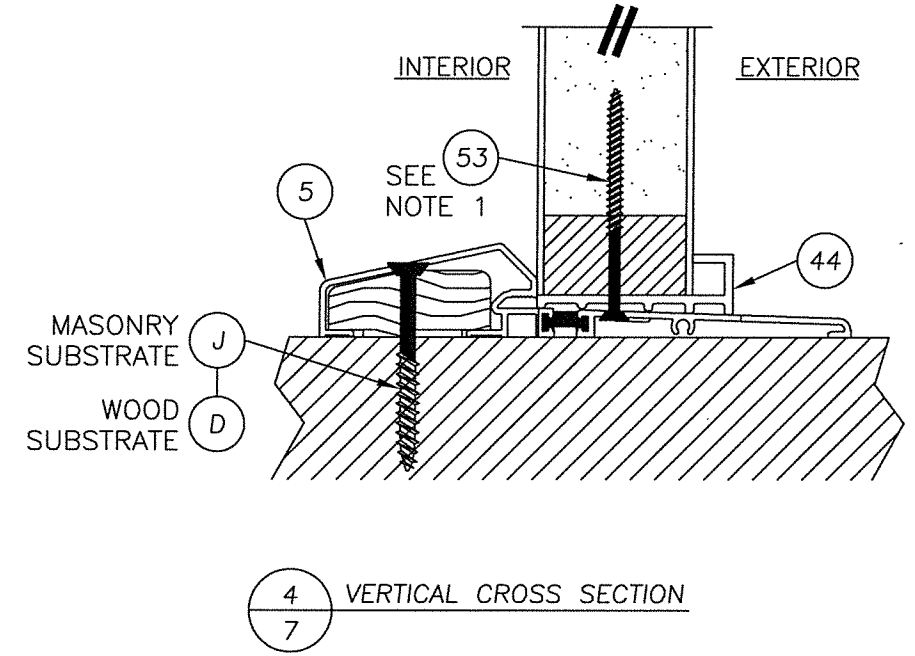
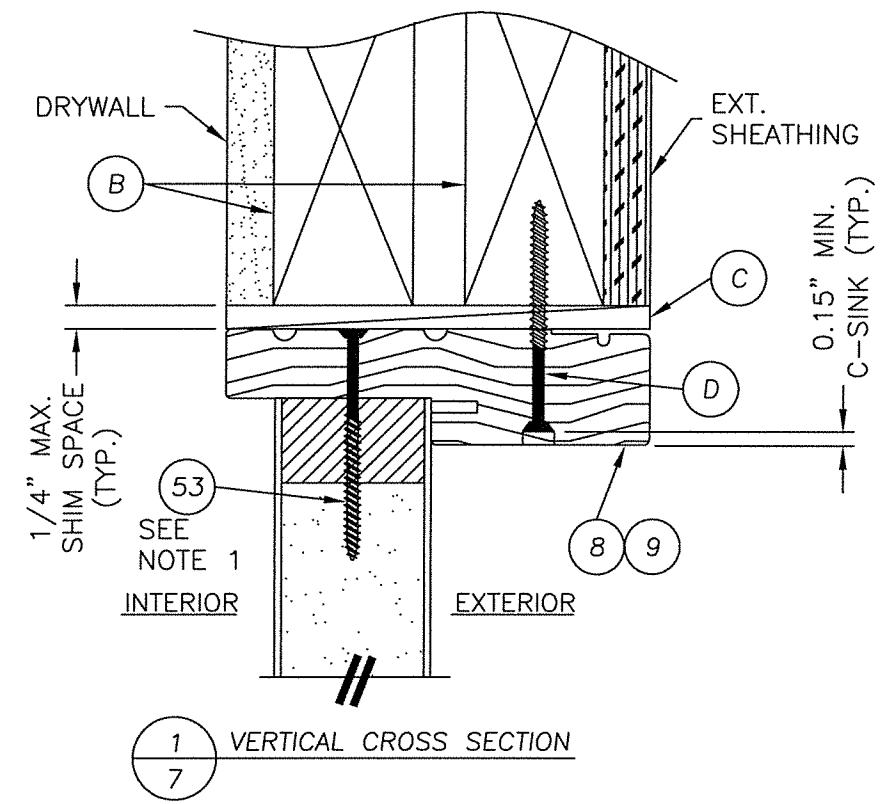


5.7.20

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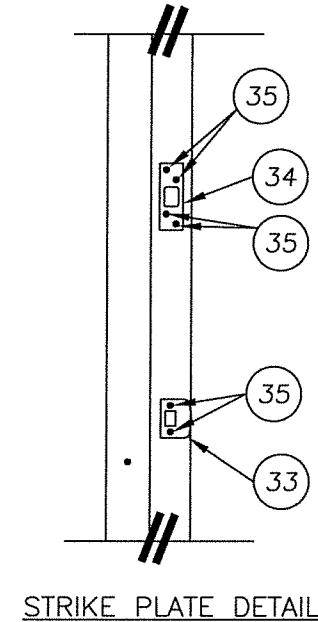
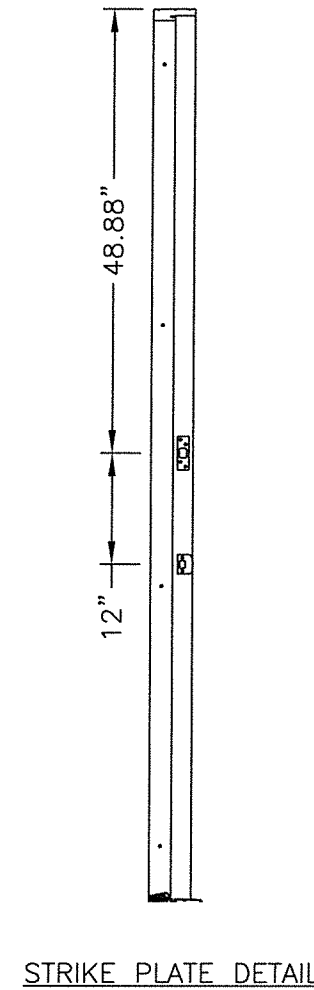
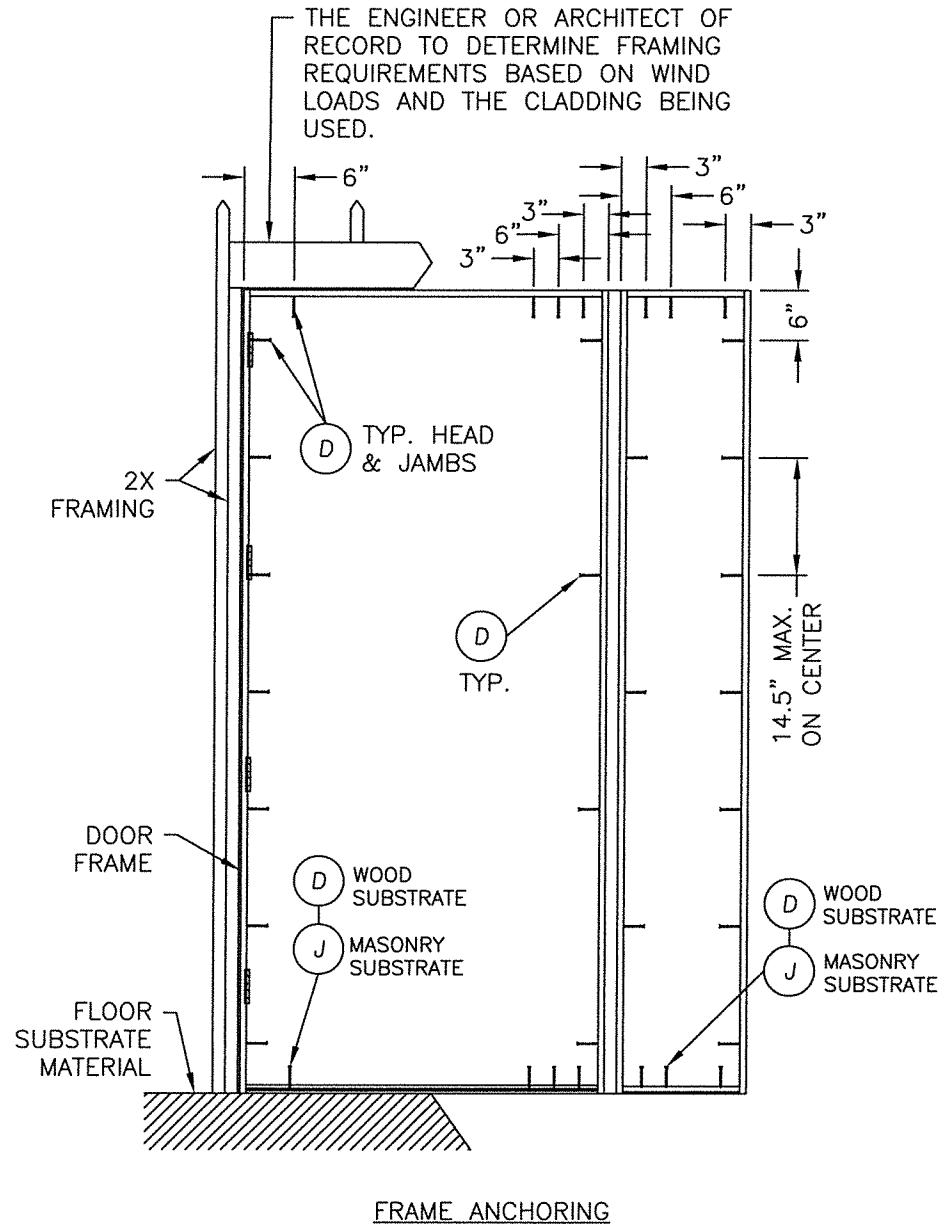
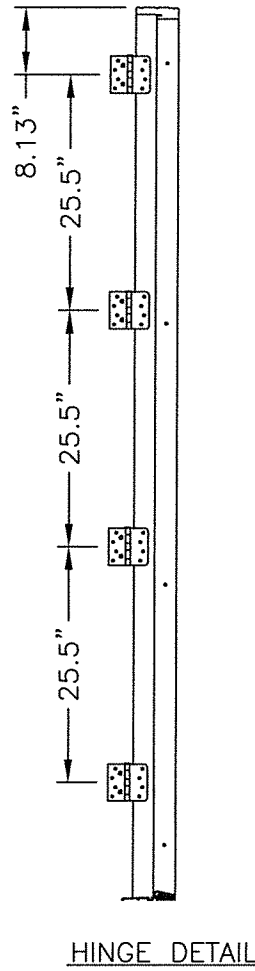
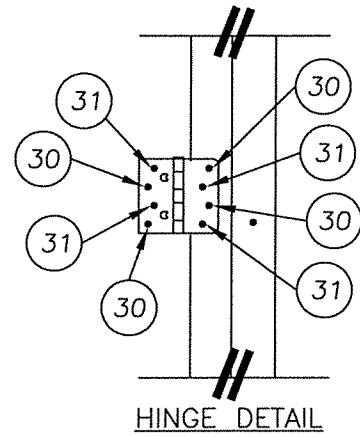
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852



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

NO.	DATE	REVISIONS
2	5/07/20	UPDATE TO 2018 IBC/IRC CODE
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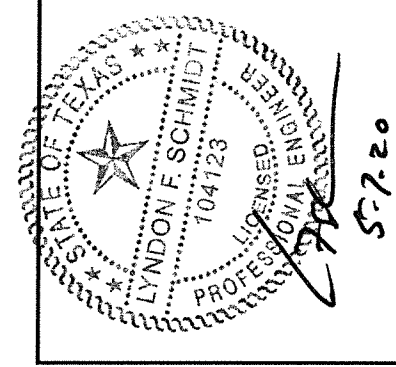
DATE: 7/16/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4180
SHEET 7 OF 10



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"



5-7-20

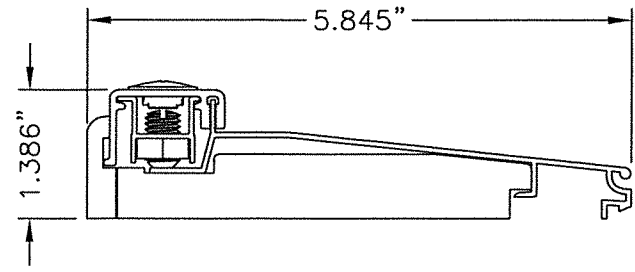
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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

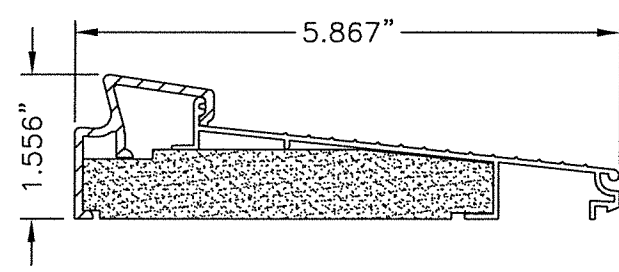
PRODUCT: SINGLE OPAQUE FIBERGLASS DOOR W/SIDELITE "IMPACT" INSWING / OUTSWING PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	BY	REVISIONS
2	5/07/20	LFS	UPDATE TO 2018 IBC/IRC CODE
1	7/22/15	LFS	ADDED GENERAL NOTE 5.

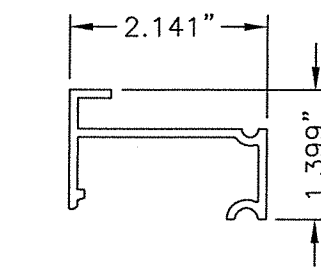
DATE: 7/16/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4180
SHEET 8 of 10



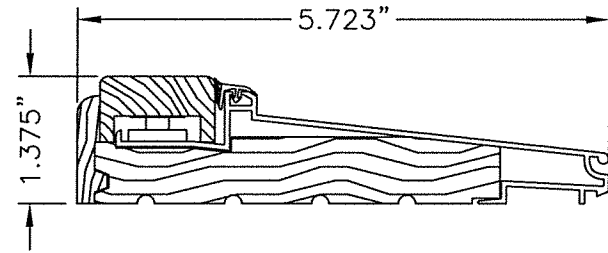
2 THRESHOLD
INSWING ADJUSTABLE



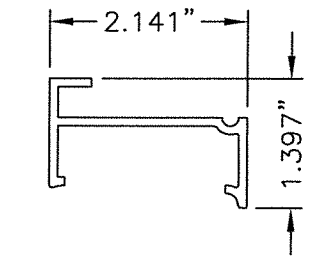
3 THRESHOLD
INSWING SELF-ADJUST



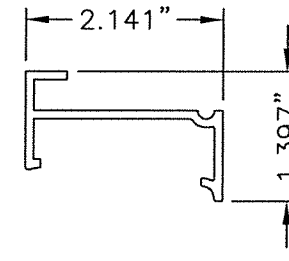
41 INSWING SIDELITE
SPACER



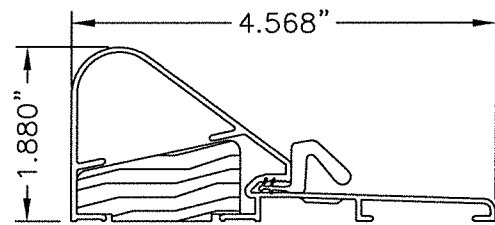
1 THRESHOLD
INSWING ADJUSTABLE



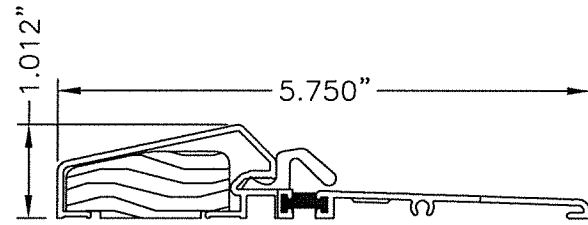
40 INSWING SIDELITE
SPACER



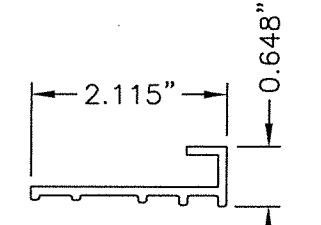
43 INSWING SIDELITE
SPACER



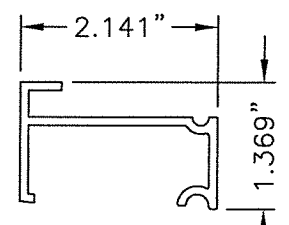
4 THRESHOLD
OUTSWING COASTAL



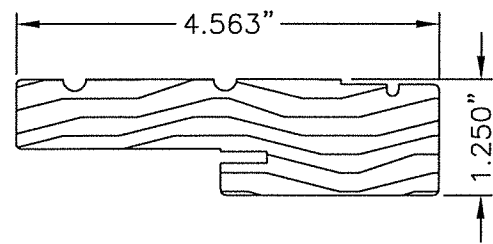
5 THRESHOLD
OUTSWING STANDARD



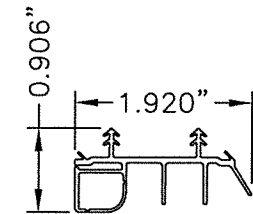
44 OUTSWING SIDELITE
SPACER



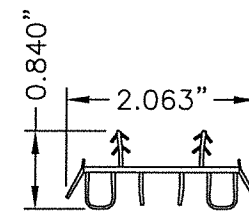
42 INSWING SIDELITE
SPACER



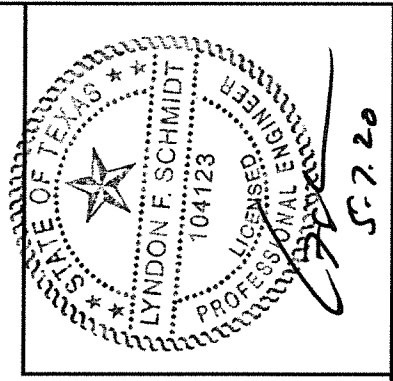
9 8 JAMB



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

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	REVISIONS	BY
2	5/07/20	UPDATE TO 2018 IBC/IRC CODE	LFS
1	7/22/15	ADDED GENERAL NOTE 5.	LFS

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



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

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

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/SIDELITE "IMPACT" INSWING / OUTSWING	
PART OR ASSEMBLY:	BILL OF MATERIALS	
NO.	DATE	BY
2	5/07/20	LFS
1	7/22/15	LFS

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