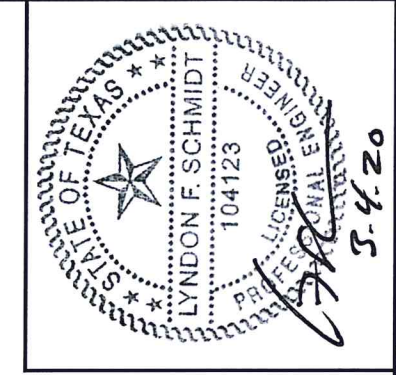
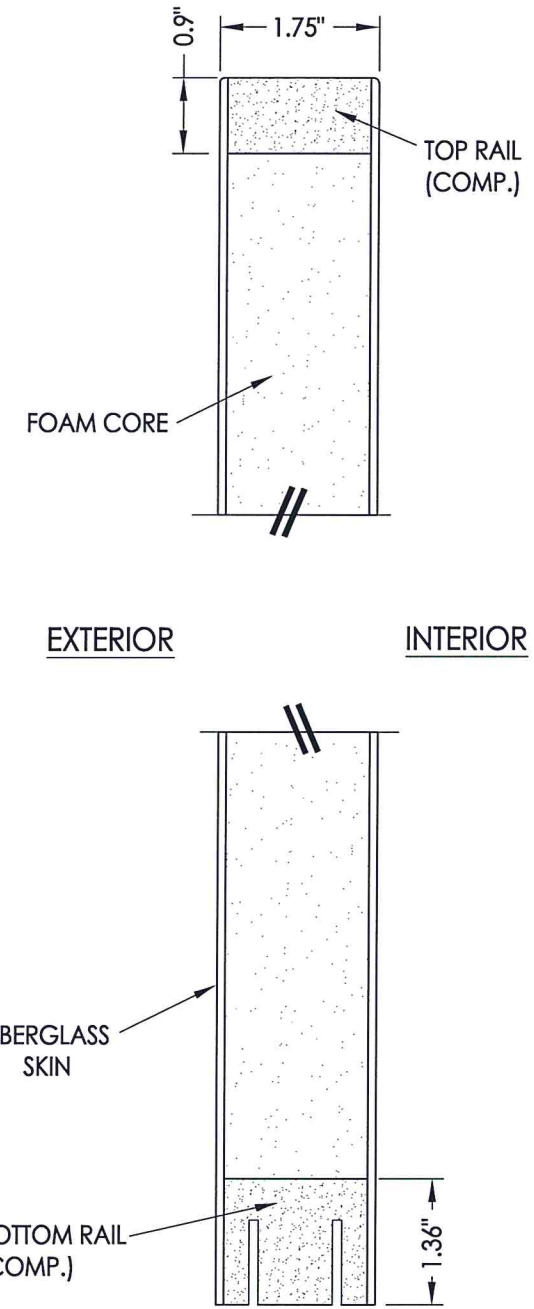
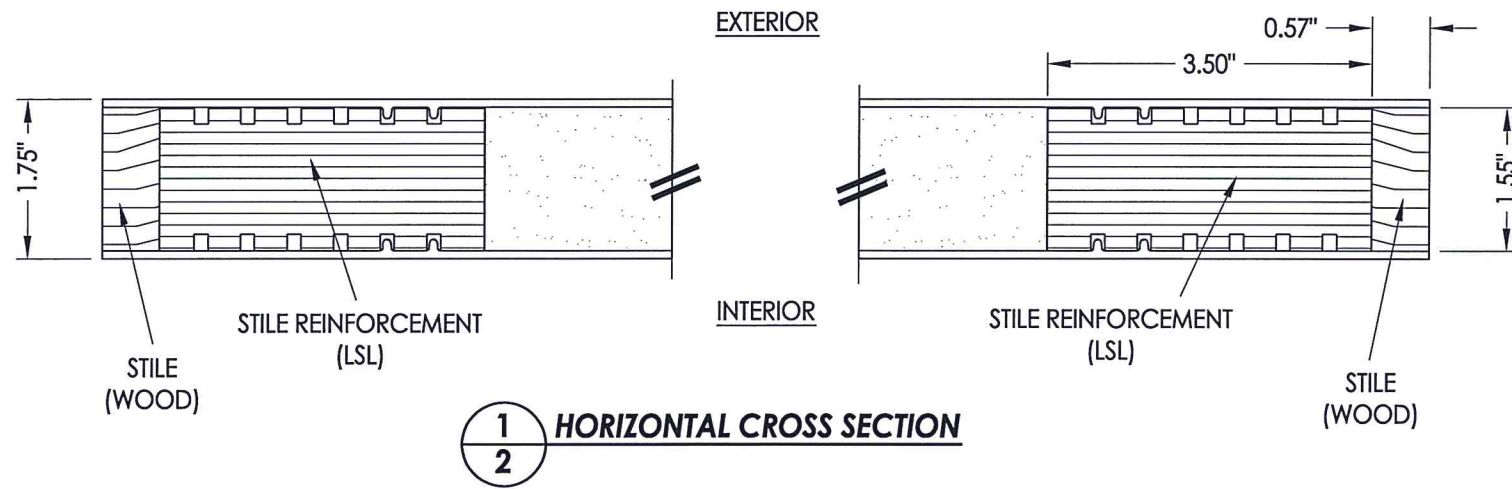


**40 DOOR PANEL**  
Mastergrain

FIBERGLASS DOOR SKIN: 0.095" MIN. THK.  
FOAM CORE: POLYURETHANE - 1.9 PCF MIN.



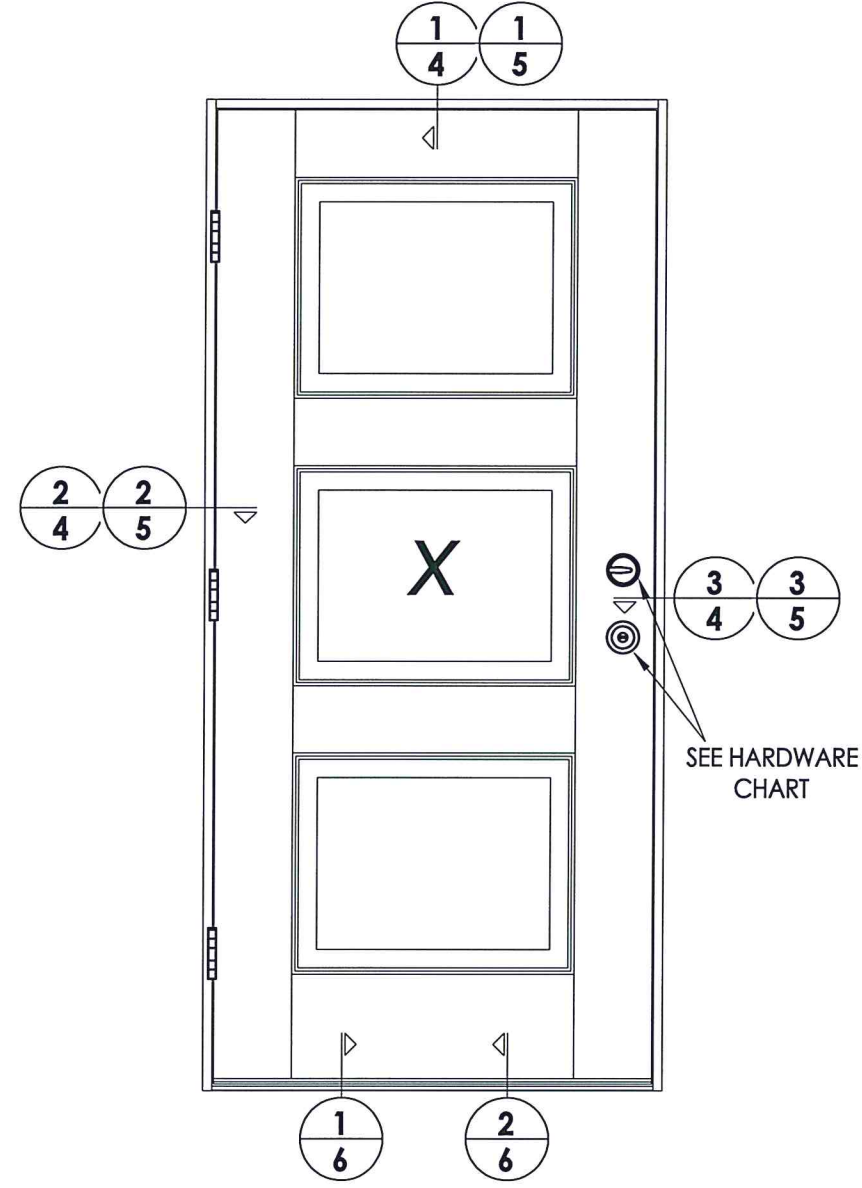
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

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

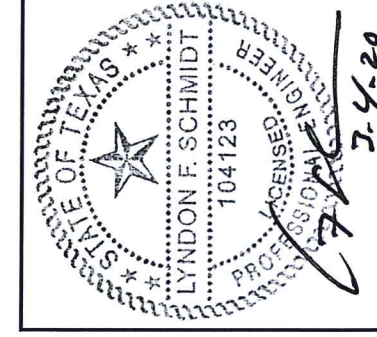
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	MASTERGRAIN FIBERGLASS DOOR	
PART OR ASSEMBLY:	DOOR PANEL DETAILS	
NO.	DATE	BY
1	3/04/20	LFS
UPDATE TO 2018 IBC/IRC CODE		
REVISIONS		

DATE:	8/28/18
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4880
SHEET	2 OF 8



HARDWARE TABLE		
MANUFACTURER	MODEL	MAX. DESIGN PRESSURE
PAMEX	KNOB: FLU600 DEADBOLT: FD261	90 PSF
KWIKSET	KNOB: SIGNATURE SERIES DEADBOLT: SIGNATURE SERIES (980)	85 PSF
SCHLAGE	KNOB: F51 DEADBOLT: B60N	85 PSF
HOPPE	MULTIPOINT: HLS™ ONE (3 pt. Manual Tongue)	85 PSF



Documents Prepared By: Lyndon F. Schmidt, P.E.  
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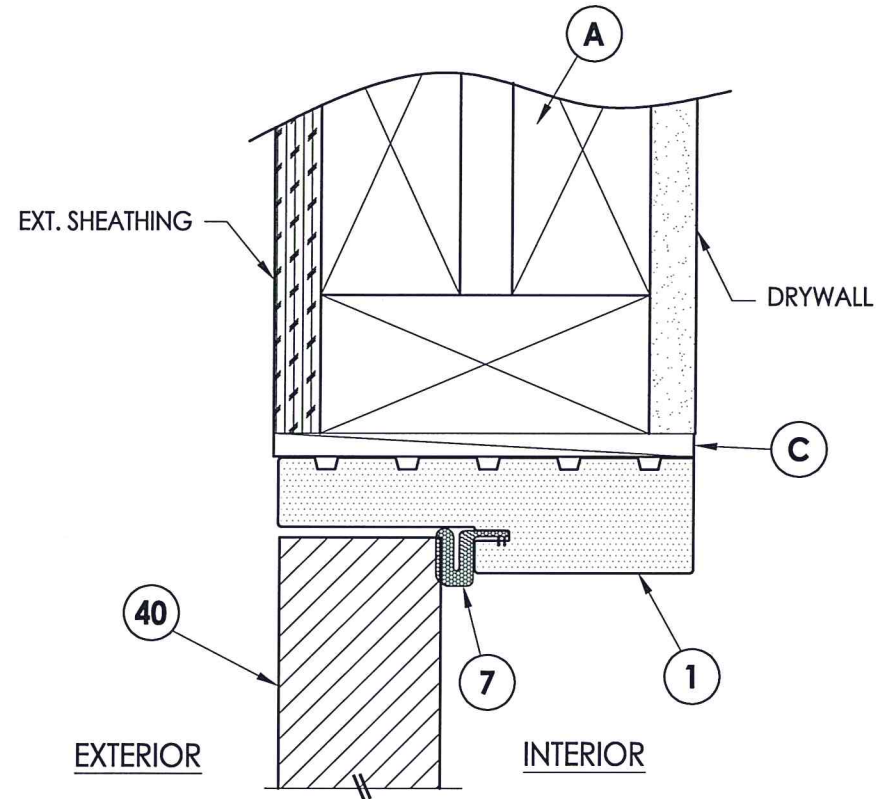
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL, 33595  
Phone No.: 813.659.9197

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

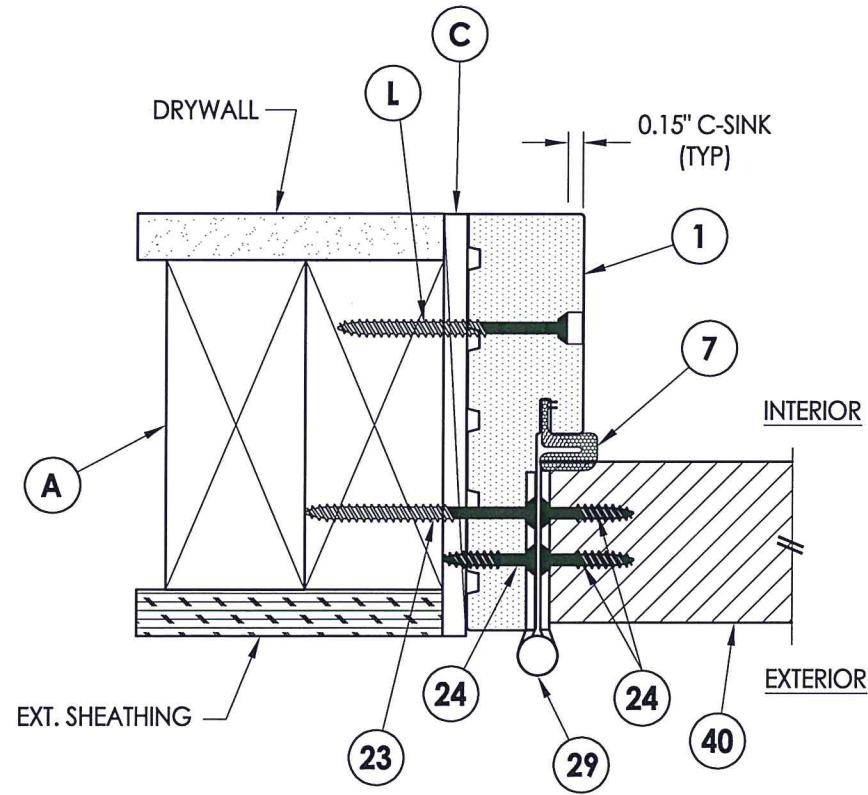
PRODUCT: MASTERGRAIN FIBERGLASS DOOR  
PART OR ASSEMBLY: ELEVATION

REVISIONS	
NO.	DATE
1	3/04/20
	UPDATE TO 2018 IBC/IRC CODE
	LFS
	BY

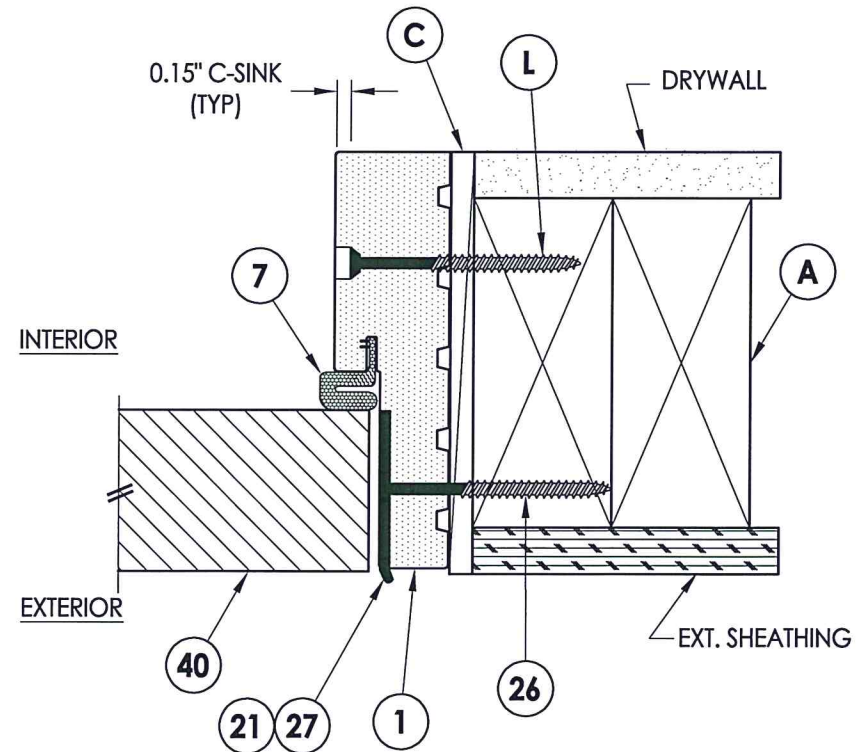
DATE: 8/28/18  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4880  
SHEET 3 OF 8



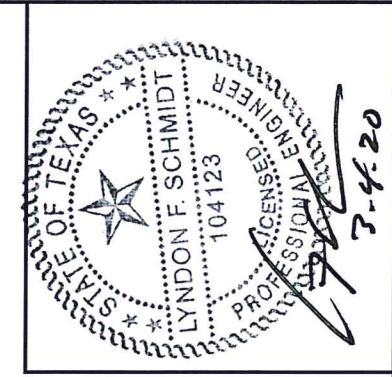
**1 VERTICAL CROSS SECTION**  
**4** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)



**2 HORIZONTAL CROSS SECTION**  
**4** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)



**3 HORIZONTAL CROSS SECTION**  
**4** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)



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:	MASTERGRAIN FIBERGLASS DOOR
PART OR ASSEMBLY:	HORIZONTAL & VERTICAL CROSS SECTIONS (2X FRAMING)

NO.	DATE	REVISIONS	BY
1	3/04/20	UPDATE TO 2018 IBC/IRC CODE	LFS

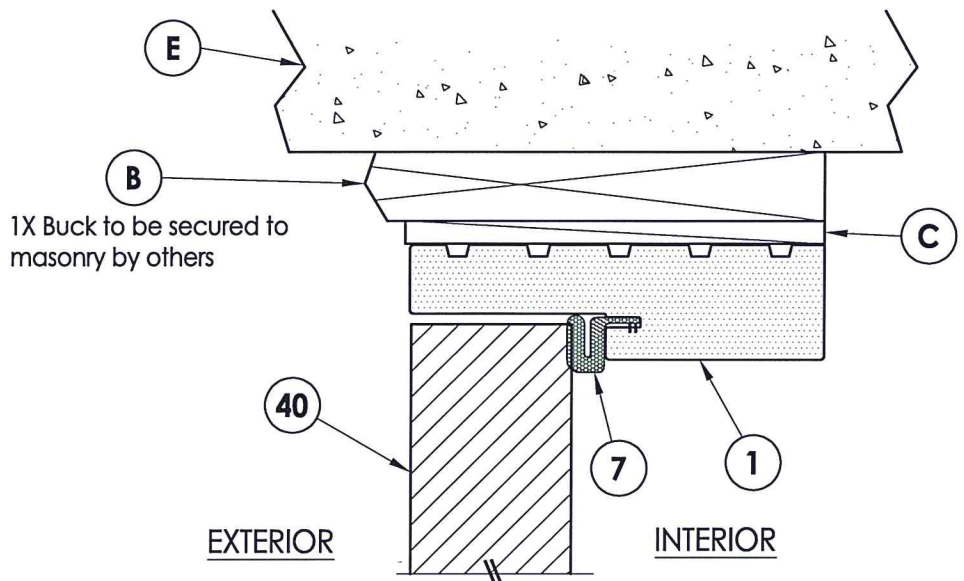
DATE:	8/28/18
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4880
SHEET	4 OF 8



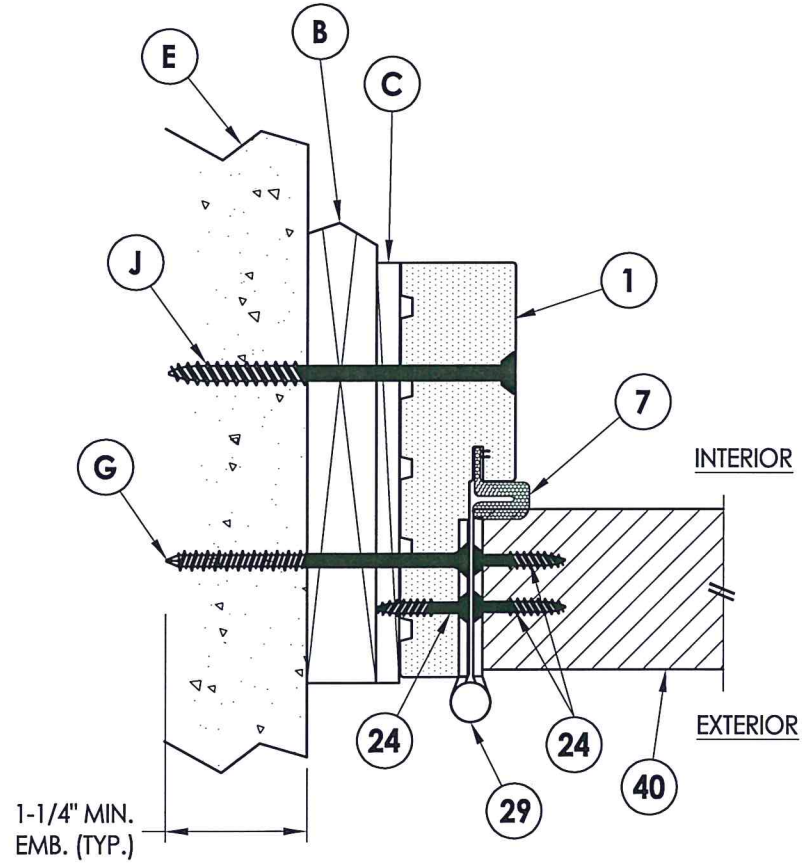
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

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

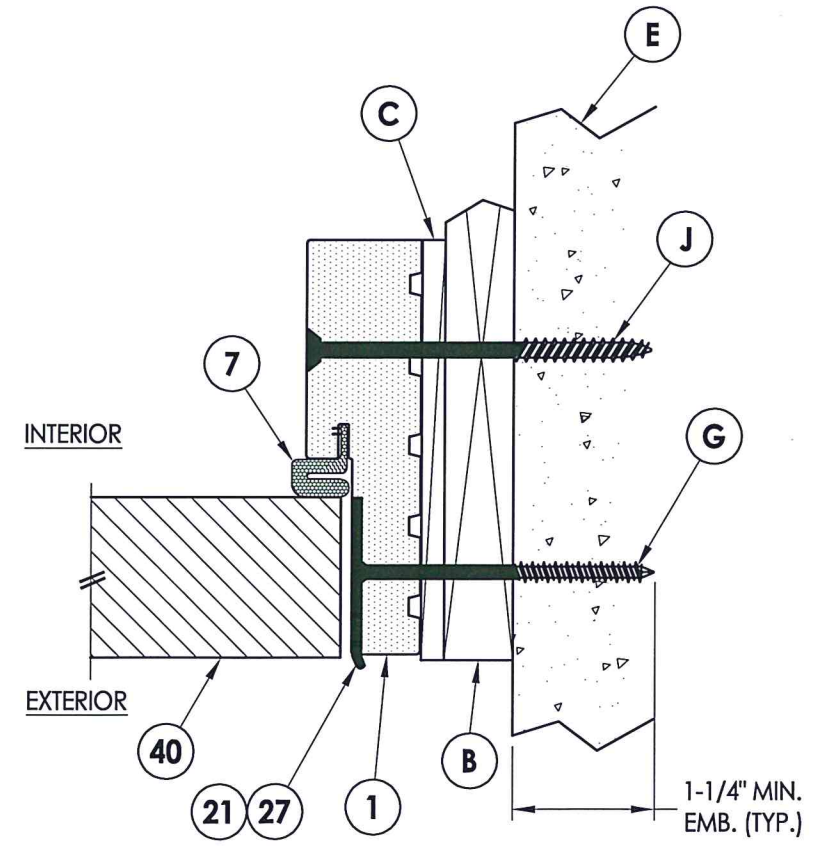
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852



**1 VERTICAL CROSS SECTION**  
**5** Shown w/ 1X sub-buck  
Outswing shown (Inswing similar)



**2 HORIZONTAL CROSS SECTION**  
**5** Shown w/ 1X sub-buck  
Outswing shown (Inswing similar)



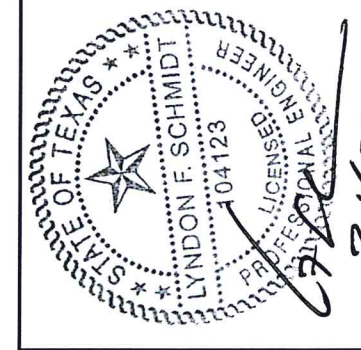
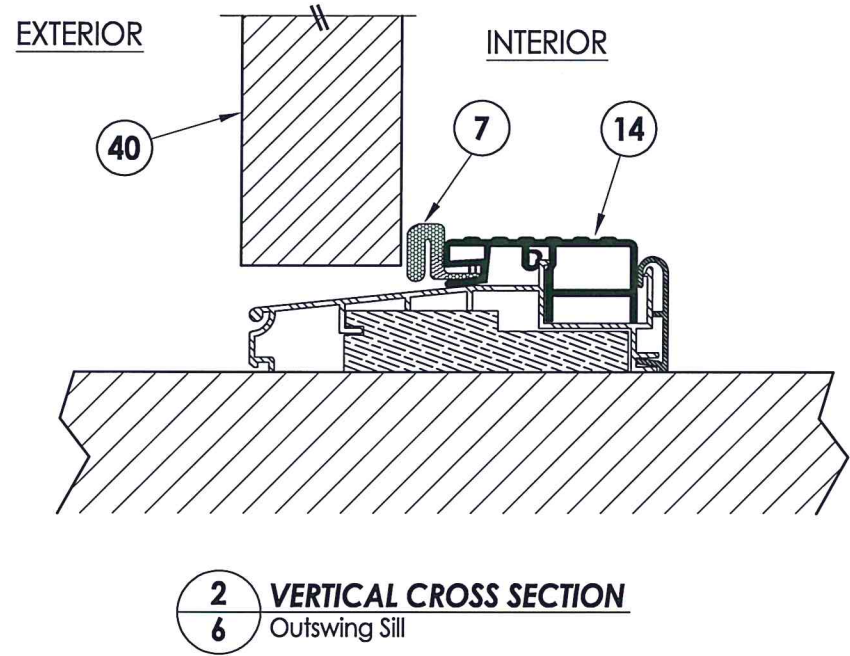
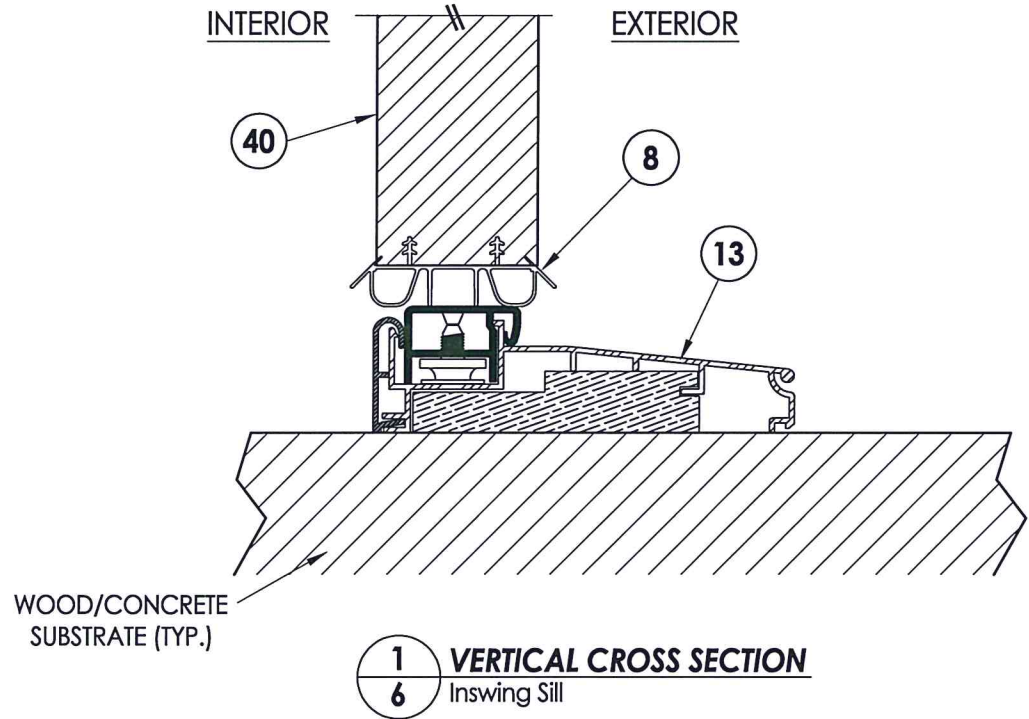
**3 HORIZONTAL CROSS SECTION**  
**5** Shown w/ 1X sub-buck  
Outswing shown (Inswing similar)

PRODUCT: MASTERGRAIN FIBERGLASS DOOR

PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (1X BUCK)

REVISIONS	
NO.	DATE
1	3/04/20
	UPDATE TO 2018 IBC/IRC CODE
	LFS BY

DATE: 8/28/18  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4880  
SHEET 5 OF 8

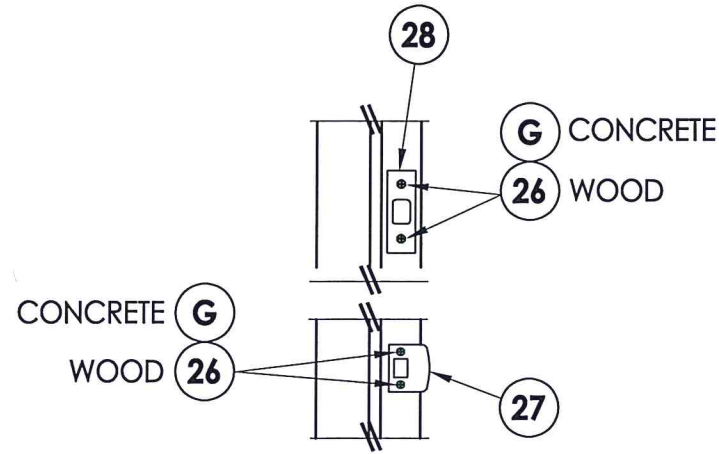


Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

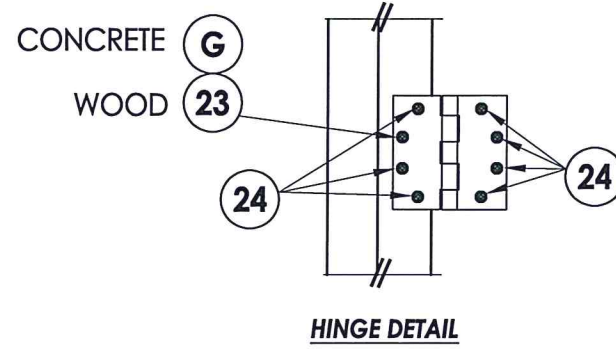
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Vairico FL. 33595  
Phone No.: 813.659.9197

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

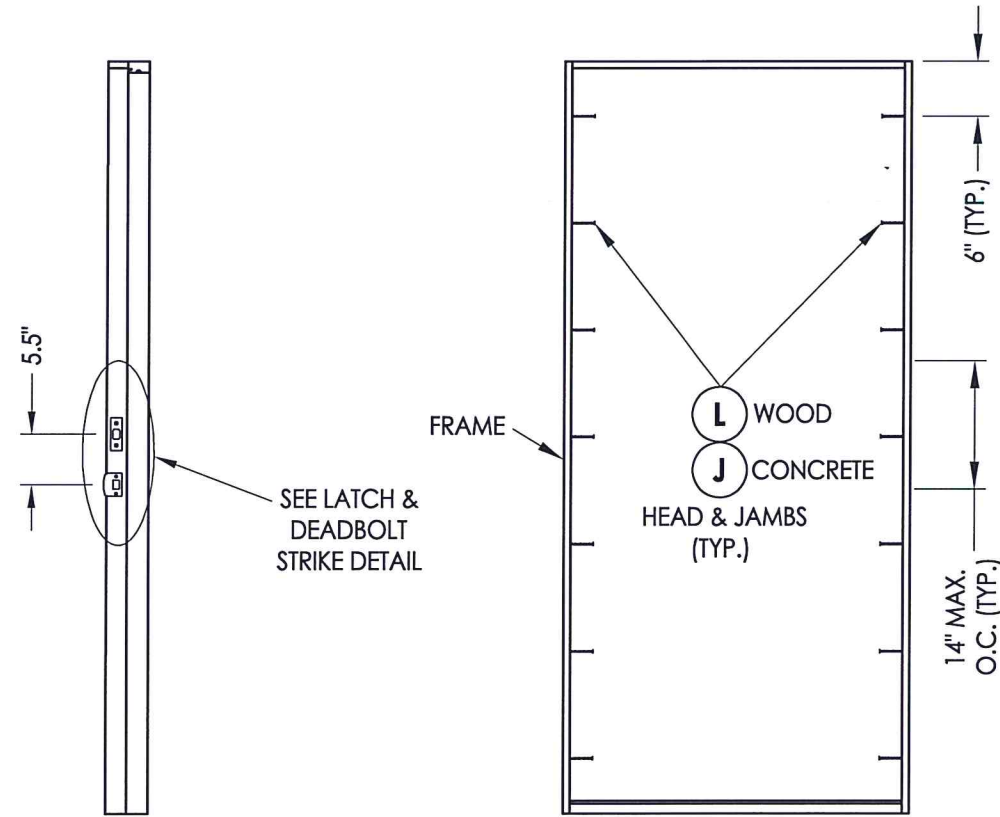
PRODUCT:		MASTERGRAIN FIBERGLASS DOOR	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS (THRESHOLDS)	
NO.	DATE	UPDATE TO 2018 IBC/IRC CODE	BY
1	3/04/20	LFS	BY
REVISIONS			
DATE: 8/28/18			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4880			
SHEET 6 OF 8			



**LATCH & DEADBOLT DETAIL**

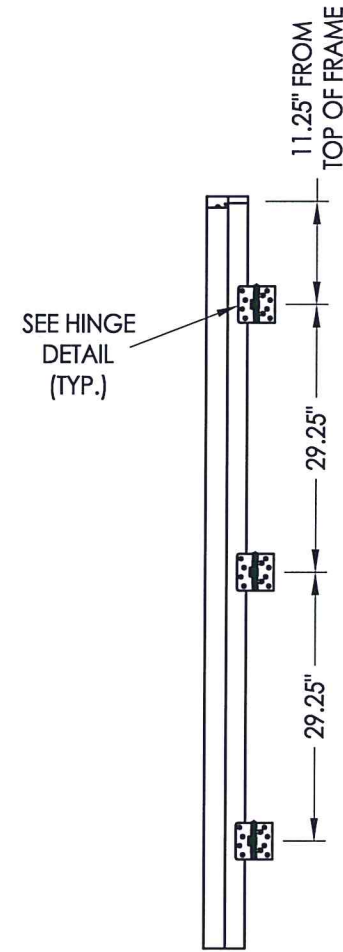


**HINGE DETAIL**

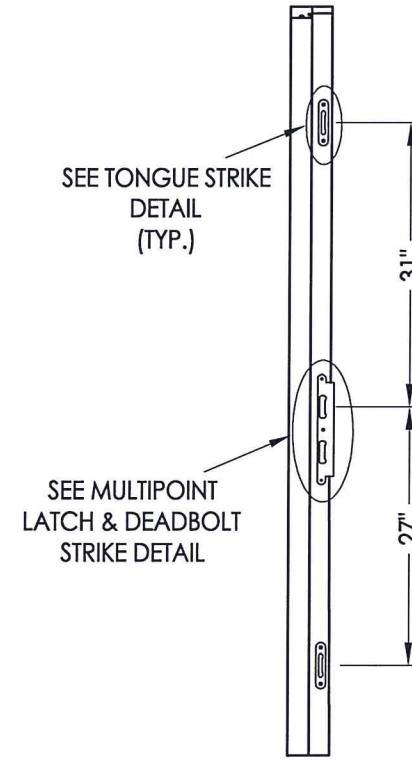


**STRIKE JAMB**  
Latch and Deadbolt

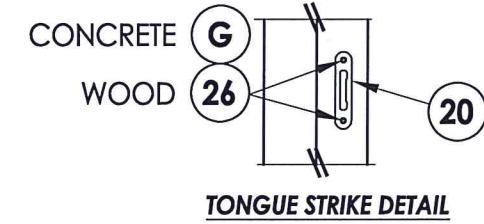
**FRAME ANCHORING**



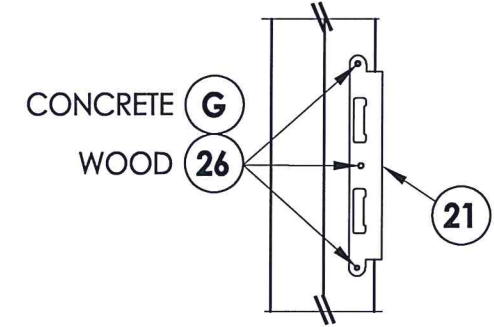
**HINGE JAMB**



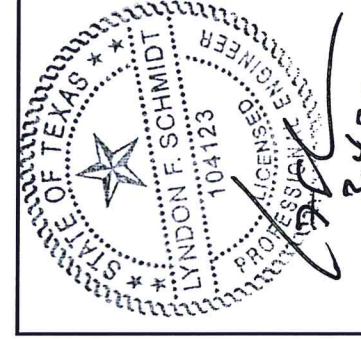
**STRIKE JAMB**  
Multipoint Lock



**TONGUE STRIKE DETAIL**



**MULTIPOINT LATCH & DEADBOLT STRIKE DETAIL**



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Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	MASTERGRAIN FIBERGLASS DOOR
PART OR ASSEMBLY:	FRAME ANCHORING & HARDWARE DETAILS

NO.	DATE	DESCRIPTION	BY
1	3/04/20	UPDATE TO 2018 IBC/IRC CODE	LFS

DATE:	8/28/18
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4880
SHEET	7 OF 8

**MULTIPOINT LOCK HARDWARE DETAILS**

**LATCH & DEADBOLT HARDWARE DETAILS**

R:\Clients\Mastergrain PERMANENT\B - Texas Dept of Ins\TDI - DR 985 Fiberglass Door - Opaque, Impact (Smooth Skin)\Drawings\TX-4880.dwg, 8.1

BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	2X FRAMING (SG >= 0.42)	WOOD
B	1X BUCK (SG >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
G	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL
J	1/4" X 3-3/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL
1	COMPOSITE JAMB	COMP
7	WEATHERSTRIP	FOAM
8	SWEEP	VINYL
13	INSWING ADJUSTABLE THRESHOLD	ALUM/COMP
14	OUTSWING BUMP THRESHOLD	ALUM/COMP
20	MULTIPOINT TONGUE STRIKE PLATE	STEEL
21	MULTIPOINT LATCH & DEADBOLT STRIKE PLATE	STEEL
23	#12 X 2-1/2" PFH WOOD SCREW	STEEL
24	#12 x 1" PFH WOOD SCREW	STEEL
26	#8 X 2-1/2" PFH WOOD SCREW	STEEL
27	LATCH STRIKE PLATE	STEEL
28	DEADBOLT STRIKE PLATE	STEEL
29	4.5" X 4.5" HINGE	STEEL
40	DOOR PANEL	-

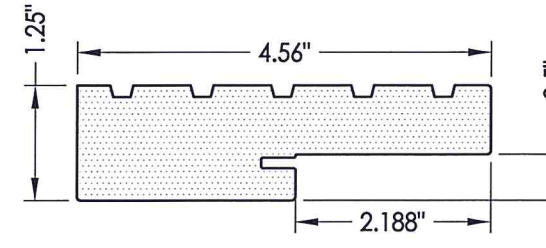
**CONCRETE ANCHOR NOTES:**

- 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:

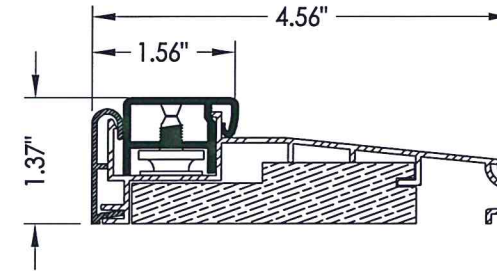
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
ELCO ULTRACON®	1/4"	1-1/4"	2-1/2"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

**WOOD SCREW INSTALLATION NOTES:**

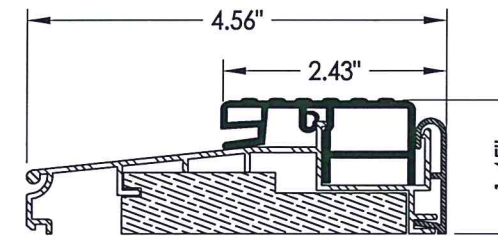
- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



**1 COMPOSITE JAMB**  
WORLDWIDE



**13 INSWING THRESHOLD**  
WORLDWIDE



**14 OUTSWING THRESHOLD**  
WORLDWIDE



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

PRODUCT: MASTERGRAIN  
FIBERGLASS DOOR

PART OR ASSEMBLY:  
BILL OF MATERIALS  
& COMPONENTS

NO.	DATE	UPDATE TO 2018 IBC/IRC CODE	LFS	BY
1	3/04/20			

DATE: 8/28/18

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

TX-4880

SHEET 8 OF 8