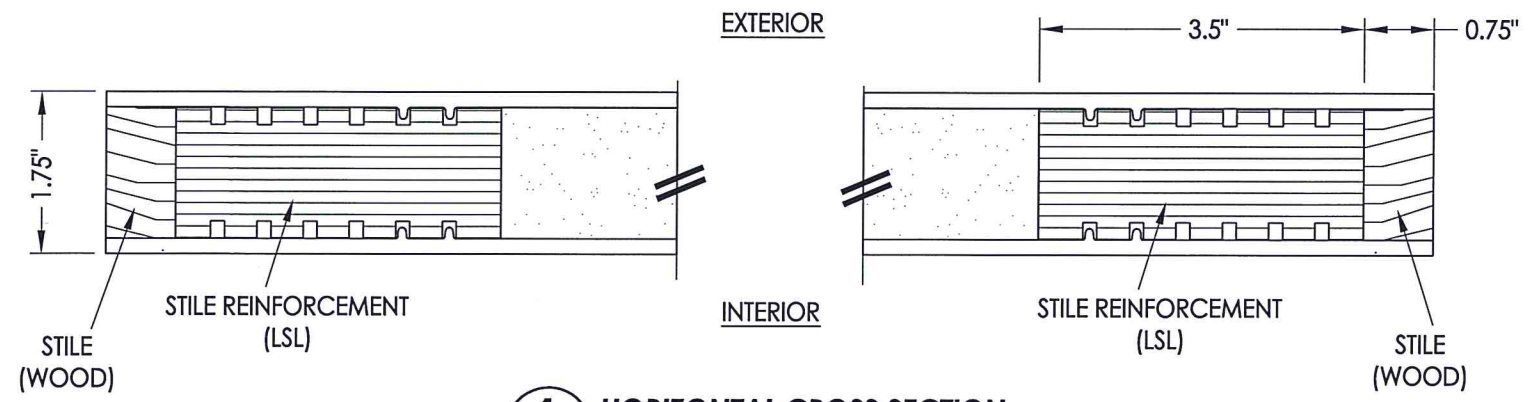
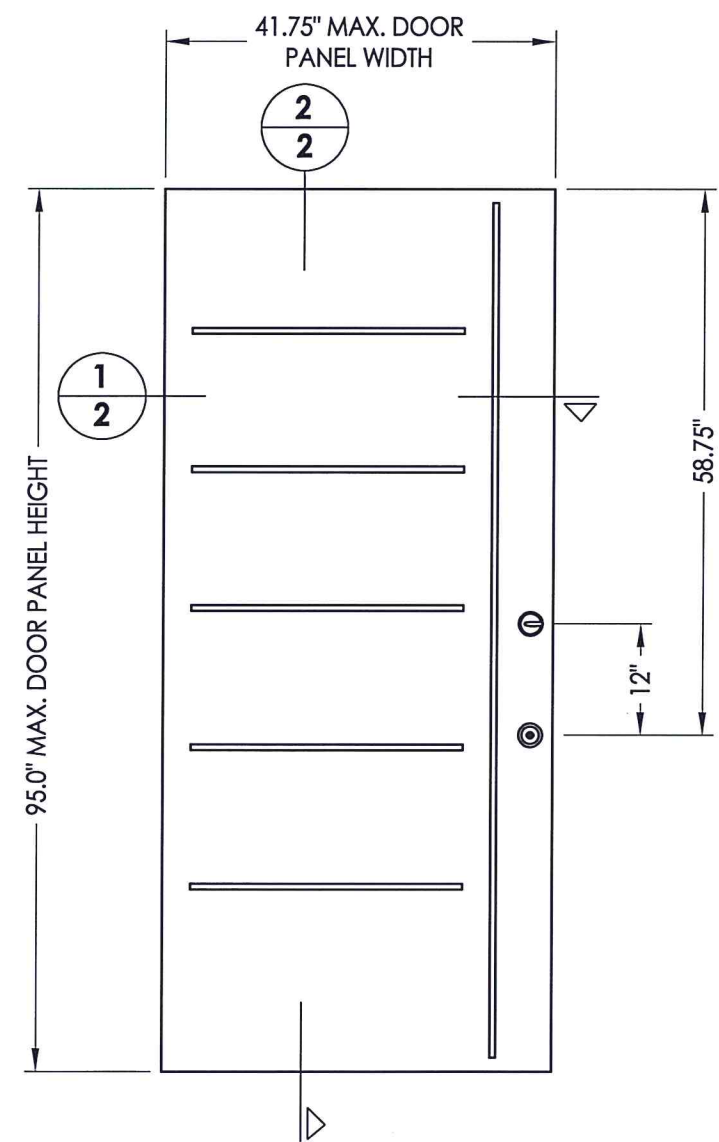


R:\Clients\Mastergrain PERMANENT\B - Texas Dept of Ins\TDI - DR 987 Fiberglass Door - Opaque, Impact (600 Series)\C - Drawings\TX-4878.dwg, 2.1

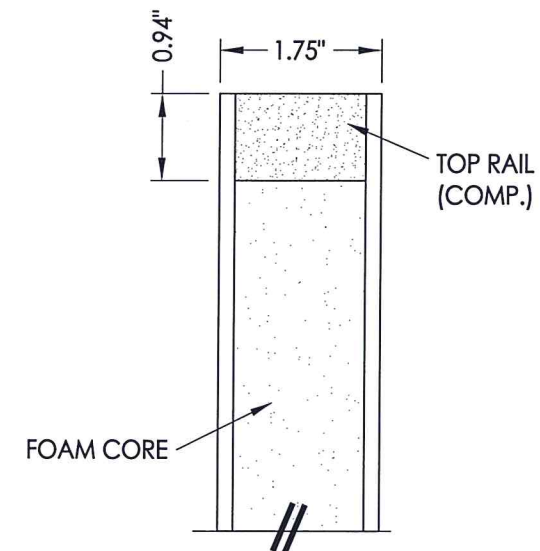


1
2 HORIZONTAL CROSS SECTION



40 DOOR PANEL (ROUTED)
MasterGrain

FIBERGLASS DOOR SKIN: 0.166" MIN. THK.
FOAM CORE: POLYURETHANE - 1.9 PCF MIN.



2
2 VERTICAL CROSS SECTION



Documents Prepared By: Lyndon F. Schmidt, P.E.
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Phone No.: 813.659.9197

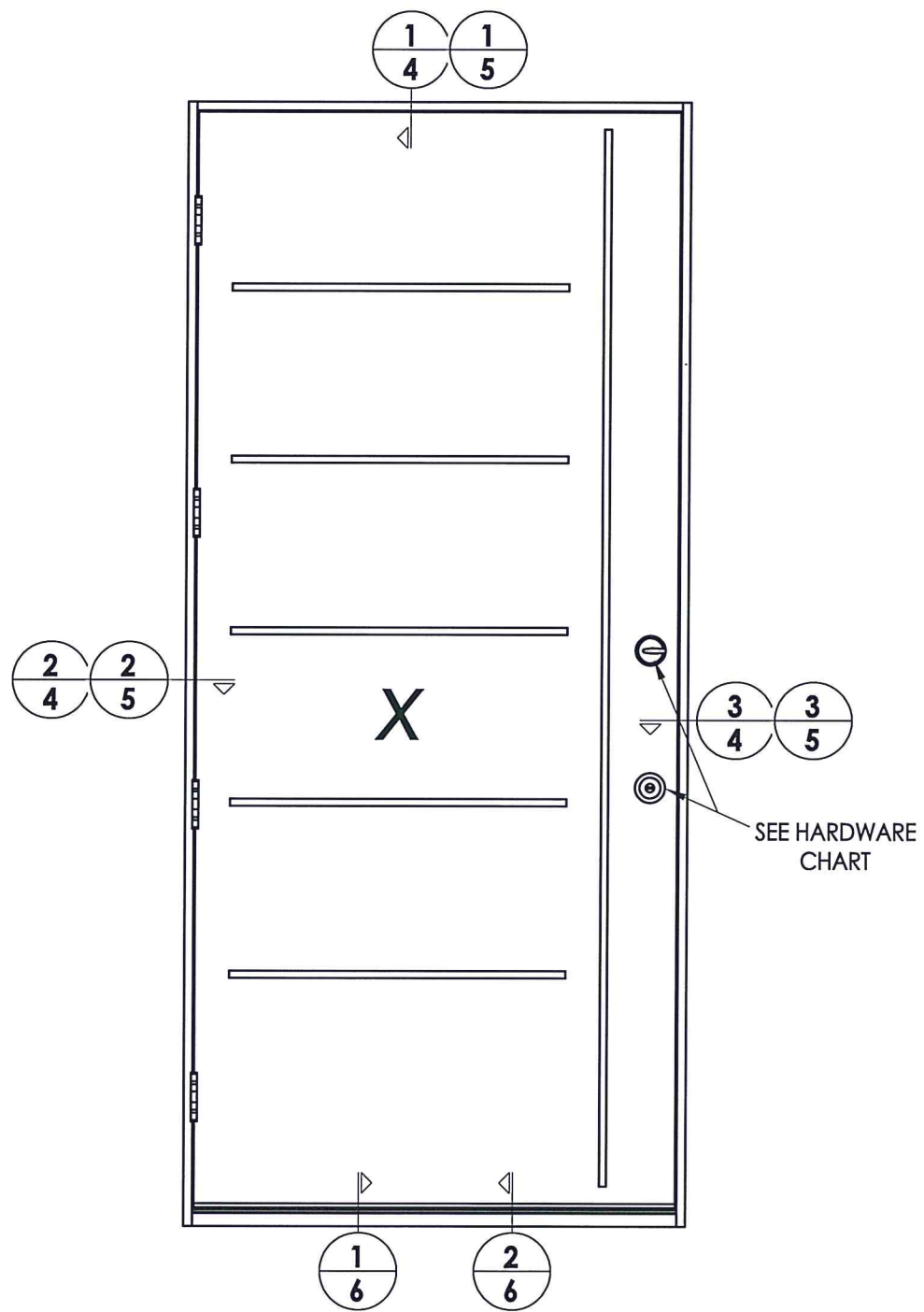
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: MASTERGRAIN FIBERGLASS DOOR

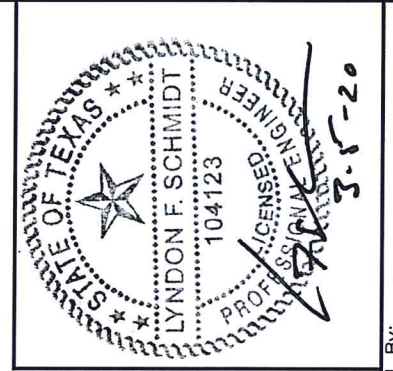
PART OR ASSEMBLY: DOOR PANEL DETAILS

NO.	DATE	DESCRIPTION	BY
1	3/05/20	UPDATE TO 2018 IBC/IRC CODE	LFS
REVISIONS			

DATE: 8/28/18
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4878
SHEET 2 of 8



HARDWARE TABLE		
MANUFACTURER	MODEL	MAX. DESIGN PRESSURE
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



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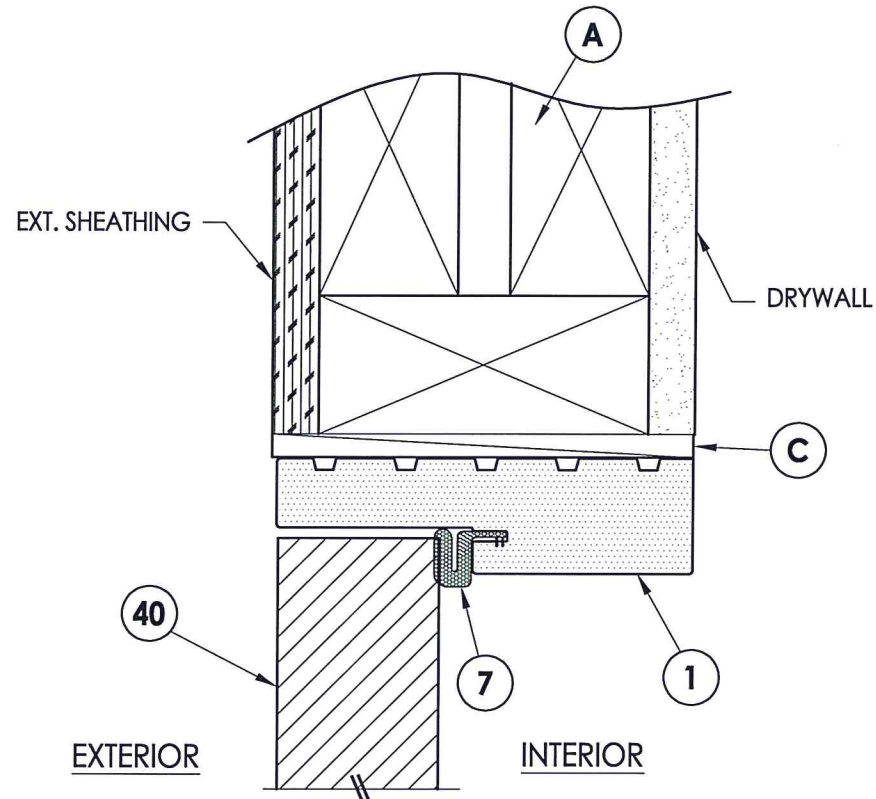
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197

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

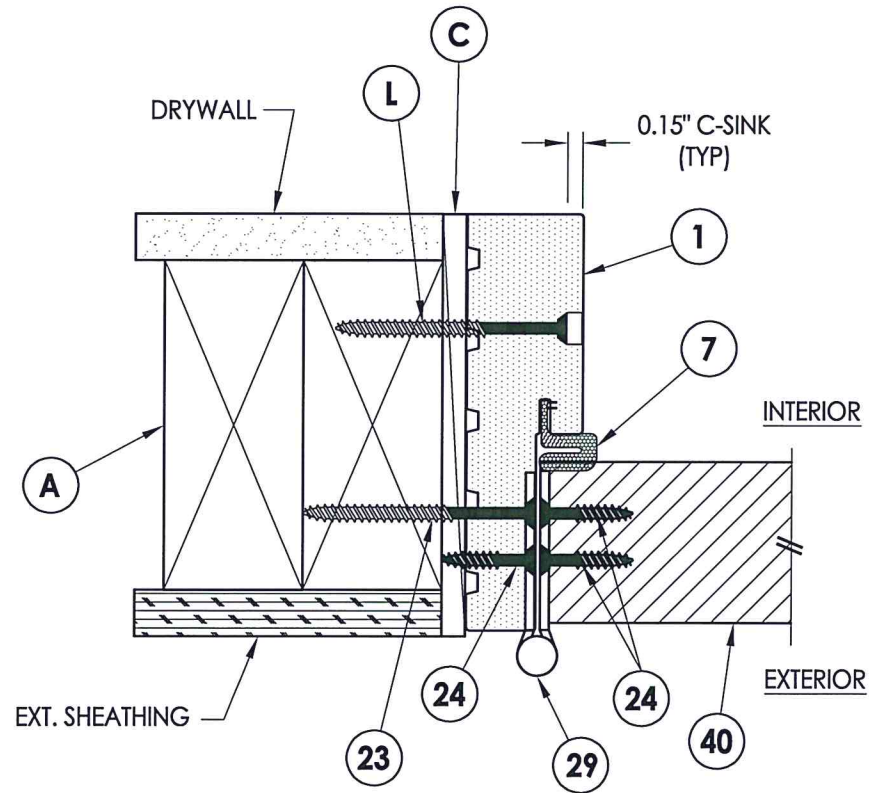
PRODUCT: MASTERGRAIN FIBERGLASS DOOR
PART OR ASSEMBLY: ELEVATION

NO.	DATE	REVISIONS
1	3/05/20	UPDATE TO 2018 IBC/IRC CODE
		LFS BY

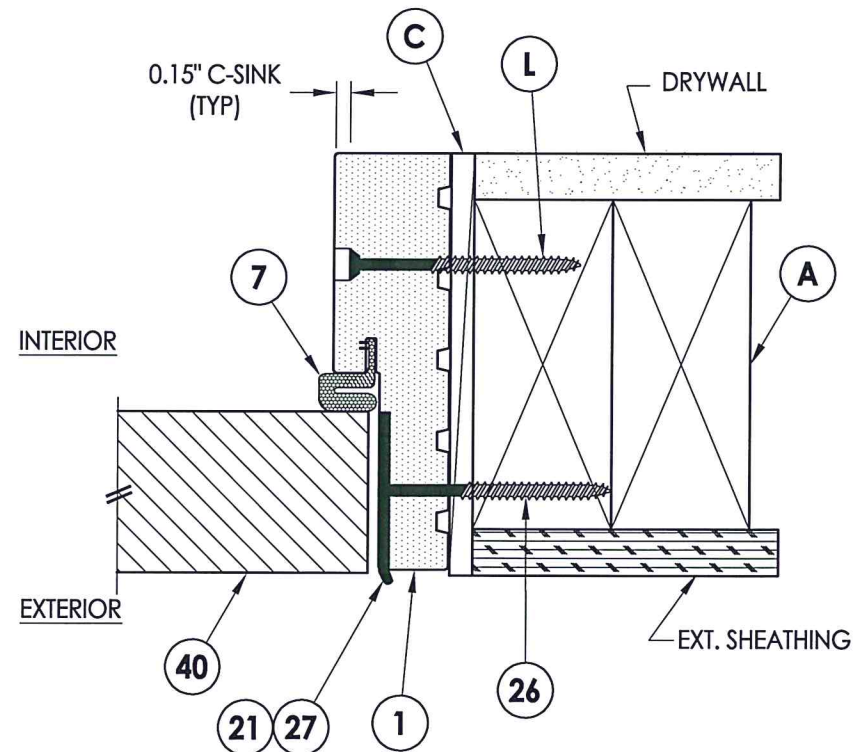
DATE: 8/28/18
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4878
SHEET 3 OF 8



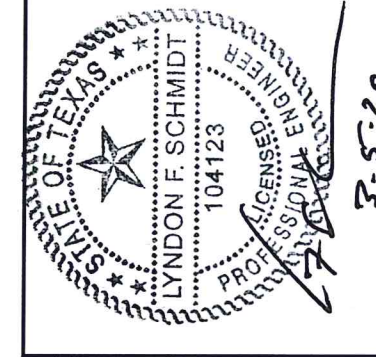
1 VERTICAL CROSS SECTION
 Shown w/ 2X Buck
 Outswing shown (Inswing similar)



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



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



Documents Prepared By: Lyndon F. Schmidt, P.E.
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 Phone No.: 813.659.9197

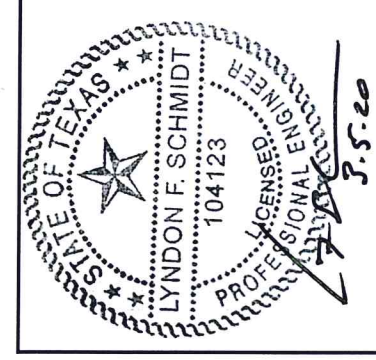
TEXAS BOARD OF PROFESSIONAL ENGINEERS
 CERTIFICATE OF REGISTRATION # F-11852

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

NO.	DATE	REVISIONS	BY
1	3/05/20	UPDATE TO 2018 IBC/IRC CODE	LFS

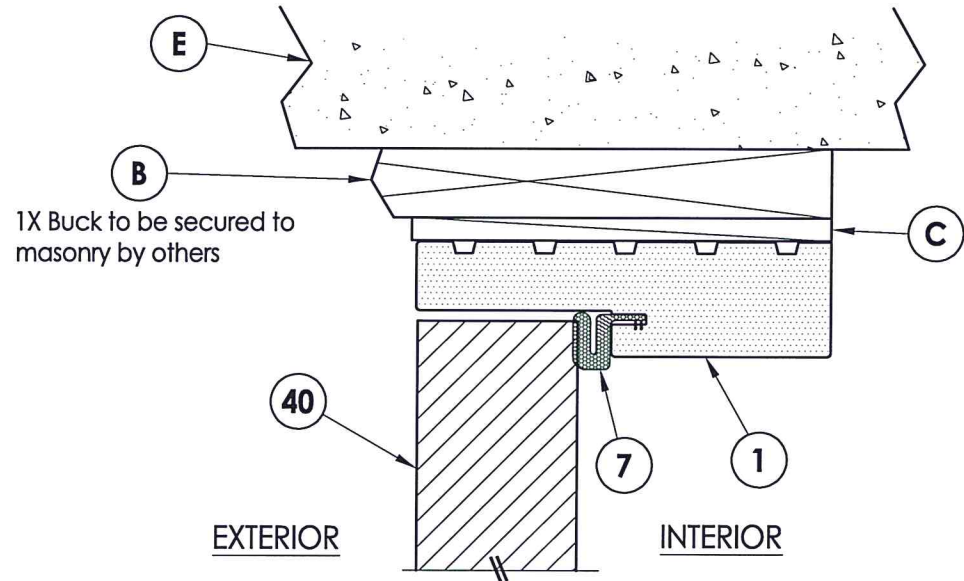
DATE: 8/28/18
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4878

SHEET 4 OF 8

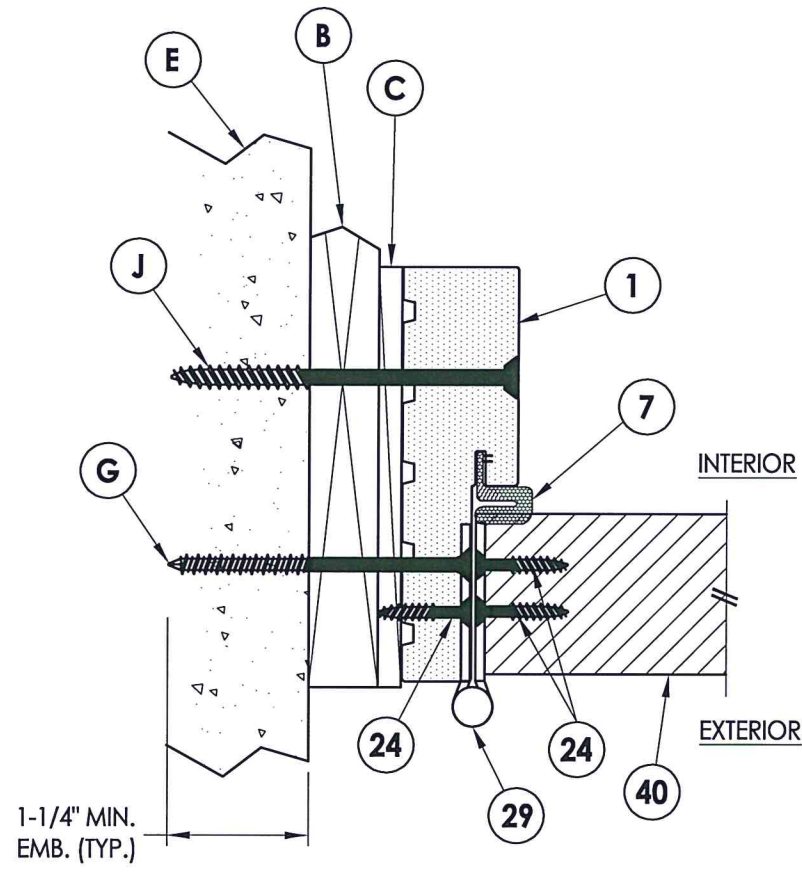


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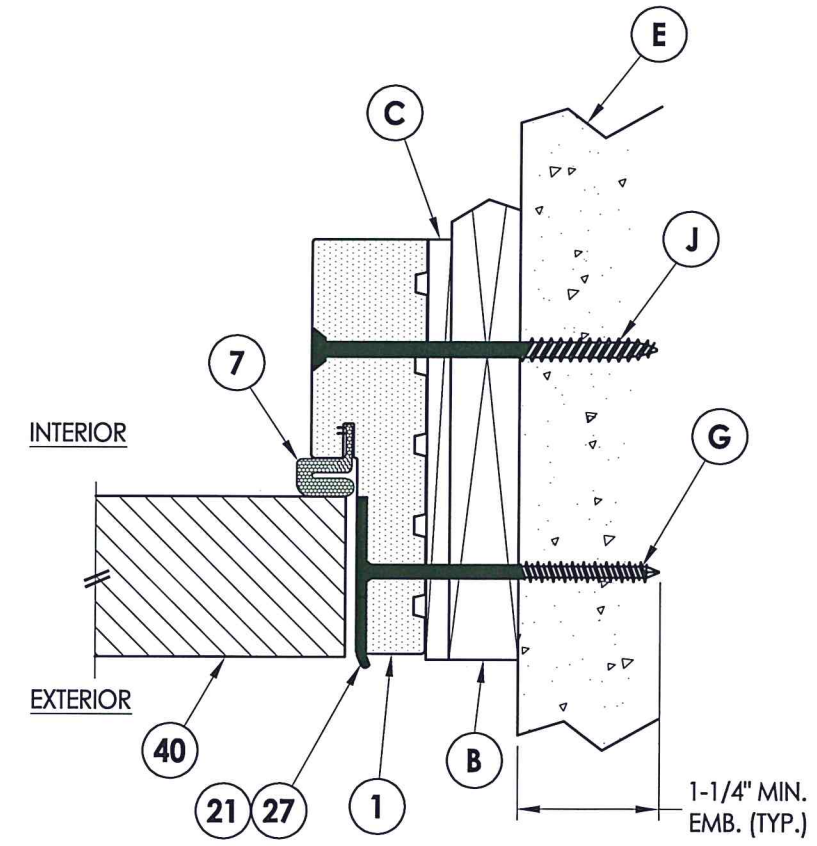
RW BUILDING CONSULTANTS, INC.
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Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852



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

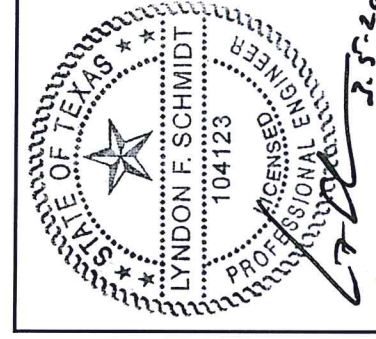
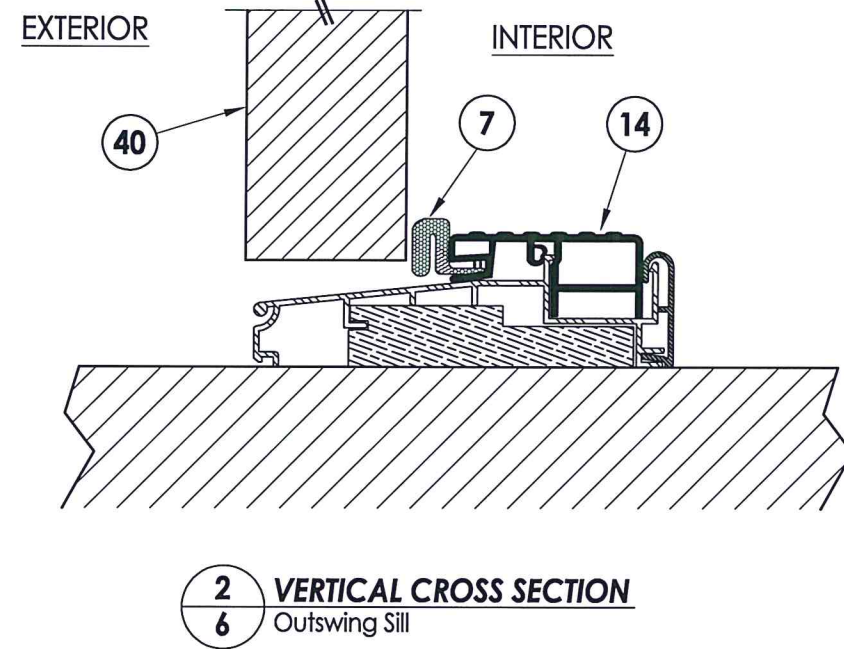
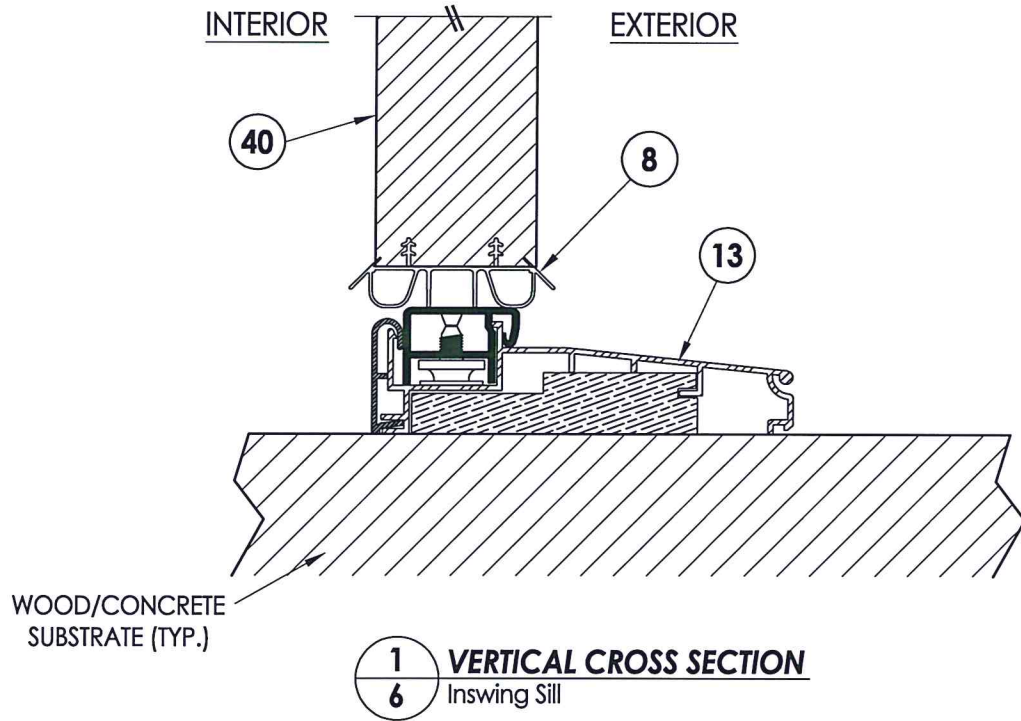


2 HORIZONTAL CROSS SECTION
5 Shown w/ 1X sub-buck
Outswing shown (Inswing similar)



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)	
NO.	DATE
1	3/05/20
UPDATE TO 2018 IBC/IRC CODE	
LFS	BY
REVISIONS	
DATE: 8/28/18	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: TX-4878	
SHEET 5	OF 8



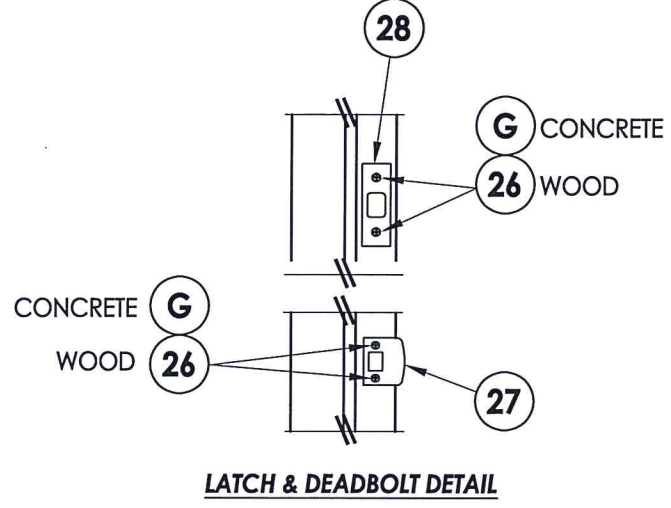
Documents Prepared By: Lyndon F. Schmidt, P.E.
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Phone No.: 813.659.9197

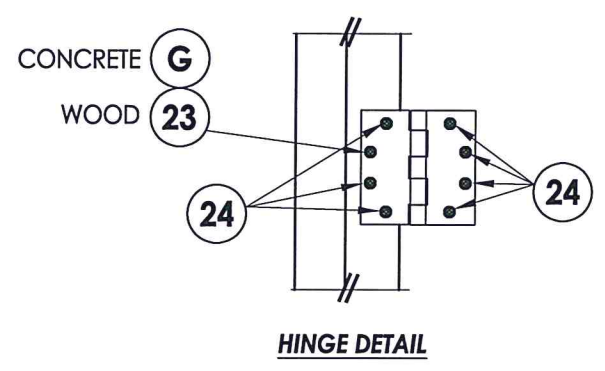
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: MASTERGRAIN FIBERGLASS DOOR	
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS (THRESHOLDS)	
NO.	DATE
1	3/05/20
UPDATE TO 2018 IBC/IRC CODE	
LFS	BY
REVISIONS	
DATE: 8/28/18	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: TX-4878	
SHEET 6 OF 8	

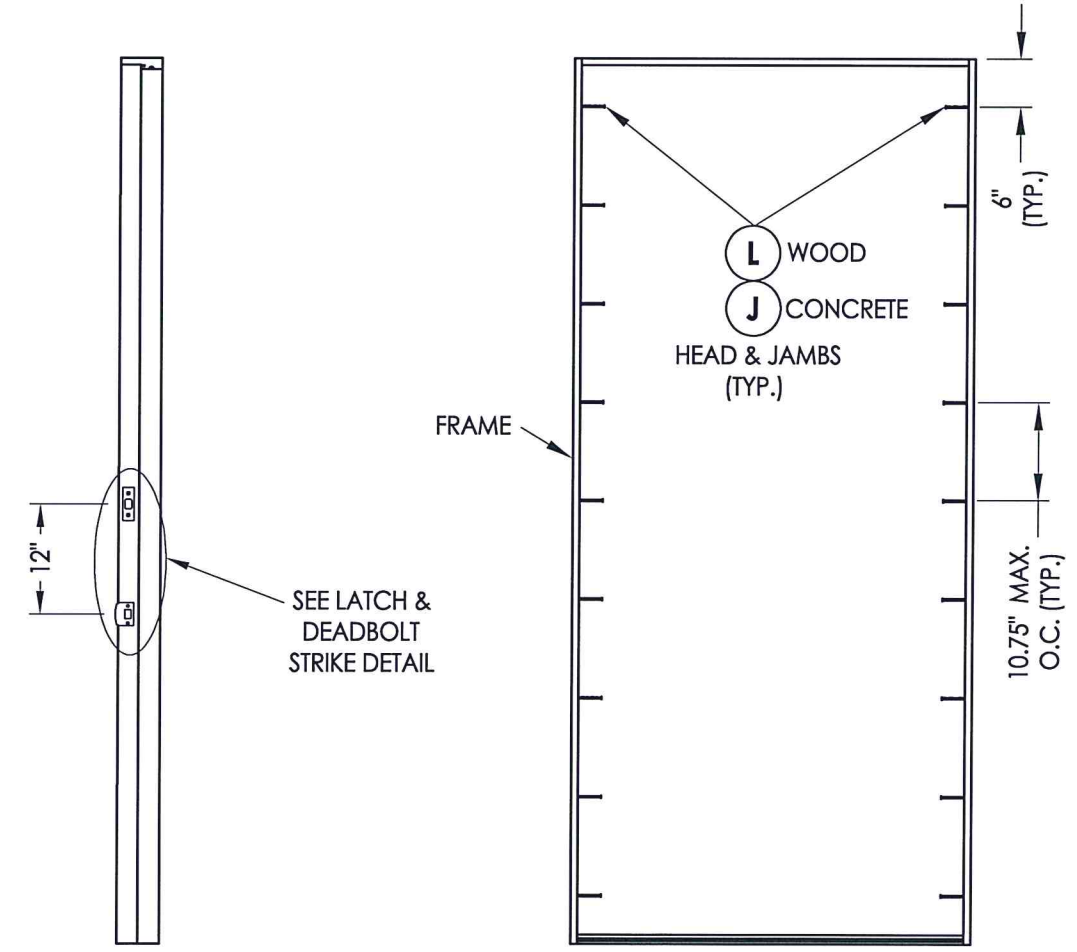
R:\Clients\Mastergrain PERMANENT\B - Texas Dept of Ins\TDI - DR 987 Fiberglass Door - Opaque, Impact (600 Series)\C - Drawings\TX-4878.dwg, 7.1



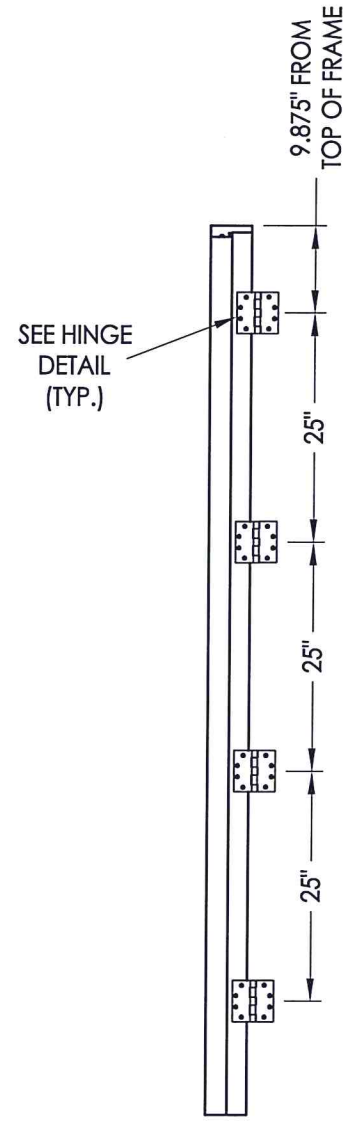
LATCH & DEADBOLT DETAIL



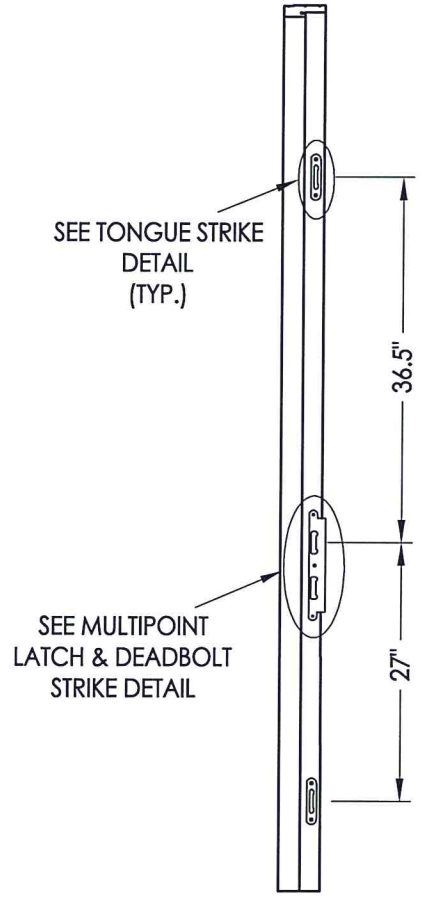
HINGE DETAIL



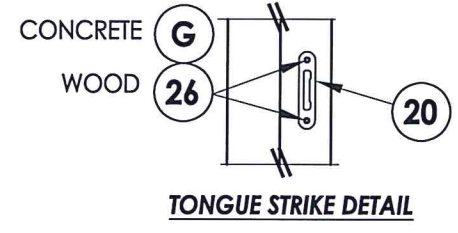
FRAME ANCHORING



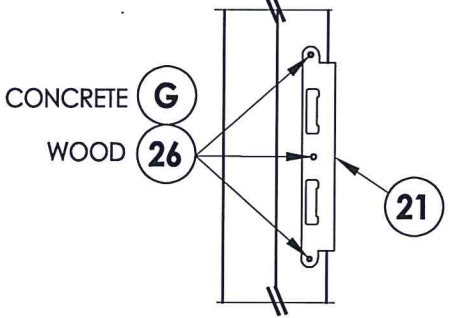
HINGE JAMB



STRIKE JAMB
Multipoint Lock



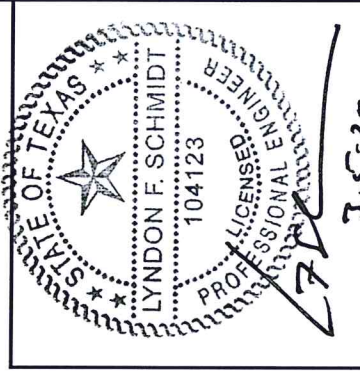
TONGUE STRIKE DETAIL



MULTIPOINT LATCH & DEADBOLT STRIKE DETAIL

LATCH & DEADBOLT HARDWARE DETAILS

MULTIPOINT LOCK HARDWARE DETAILS



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

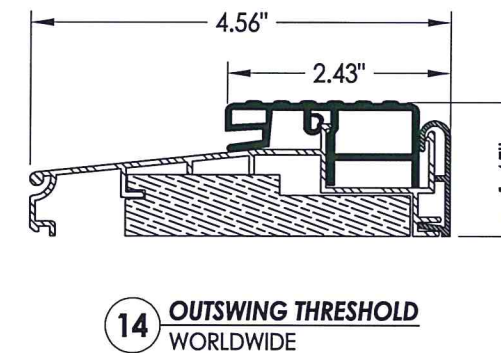
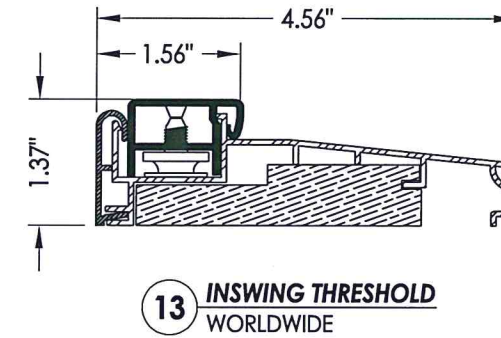
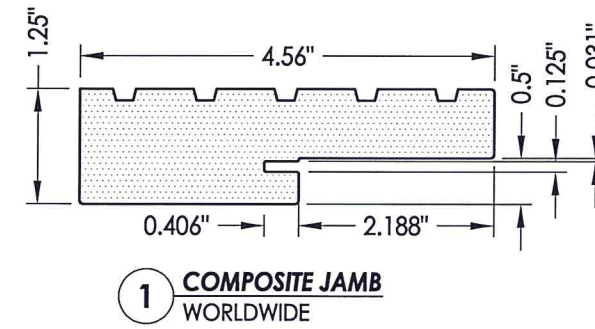
PRODUCT:	MASTERGRAIN FIBERGLASS DOOR
PART OR ASSEMBLY:	FRAME ANCHORING & HARDWARE DETAILS

NO.	DATE	DESCRIPTION	BY
1	3/05/20	UPDATE TO 2018 IBC/IRC CODE	LFS

DATE:	8/28/18
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4878
SHEET	7 OF 8

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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	-



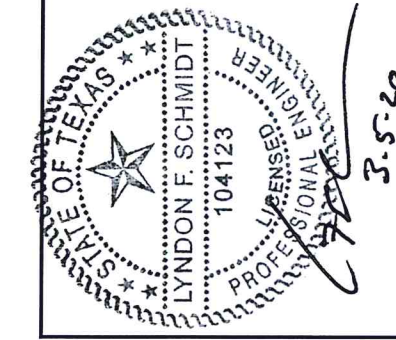
CONCRETE ANCHOR NOTES:

- 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.



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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	3/05/20			

DATE: 8/28/18
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4878
SHEET 8 OF 8