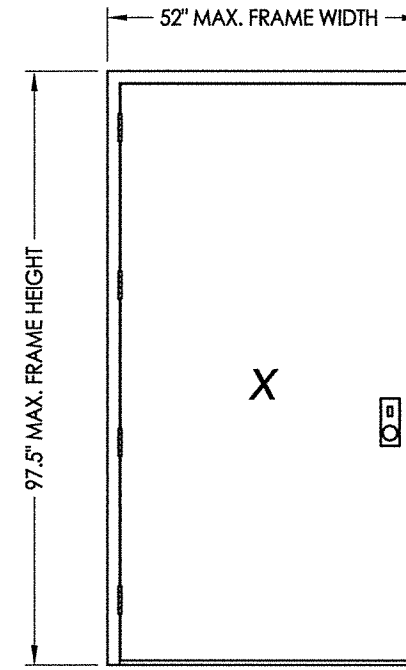


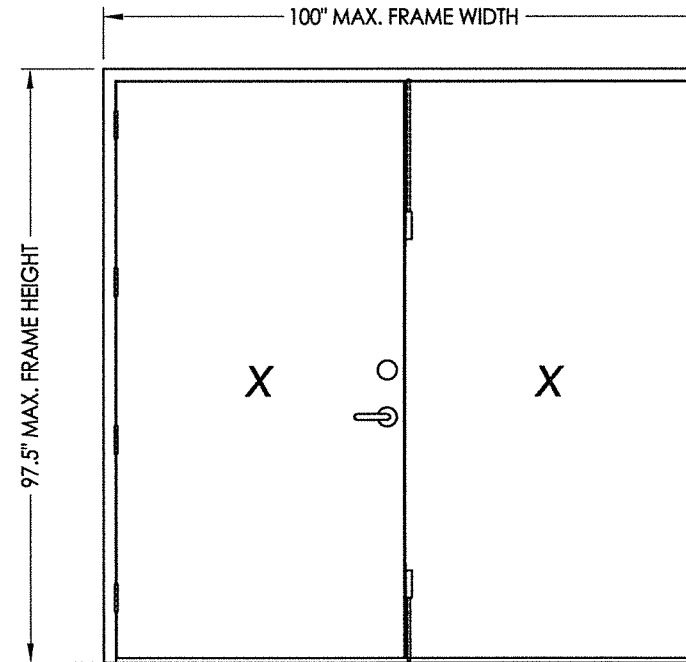
Vision Hollow Metal Limited

400 Zenway Blvd. Unit #1
Woodbridge, ON L4H 0S7

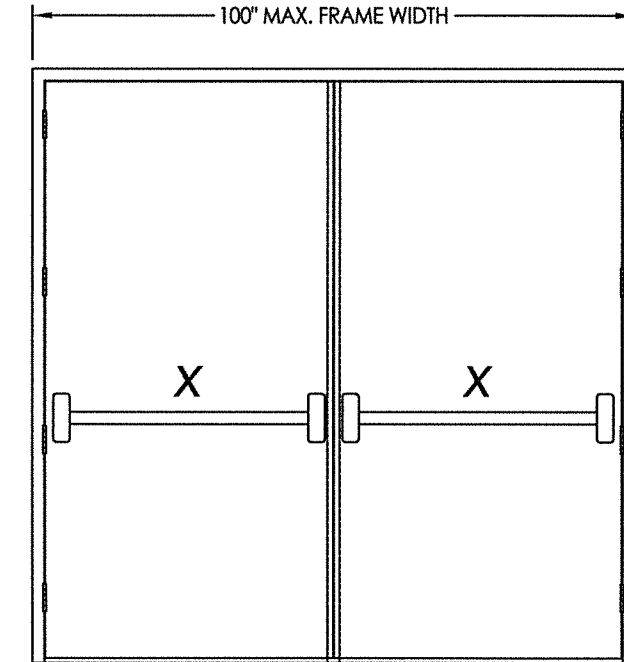
LS1875 STEEL DOOR OUTSWING "IMPACT"



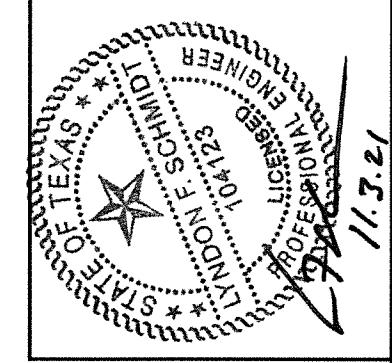
MORTISE LOCK & DEADBOLT



CYLINDRICAL LOCK & DEADBOLT



PANIC BAR EXIT DEVICE w/ REMOVABLE MULLION



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: VISION HOLLOW METAL
PART OR ASSEMBLY: TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES

EVALUATED FOR USE IN THE STATE OF TEXAS

TDI DR-894

The Steel 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. This system has been tested and evaluated as a large missile impact protective system for installation in areas that require wind borne debris protection. 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.

TABLE OF CONTENTS

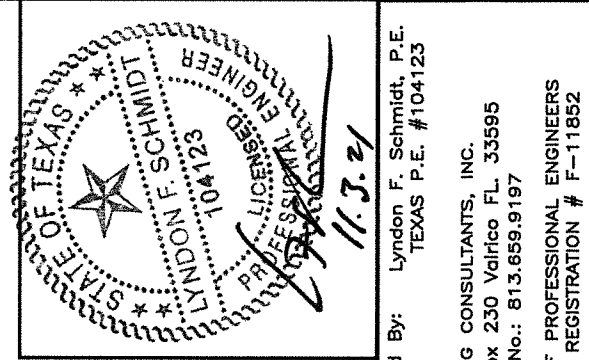
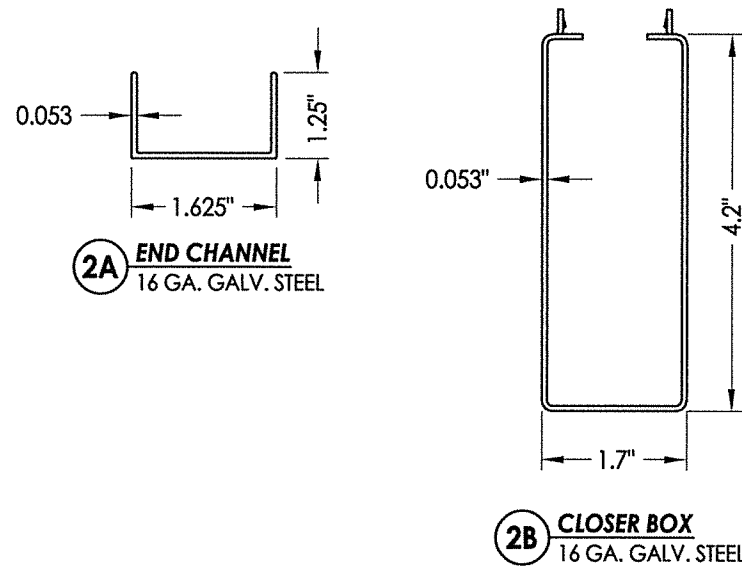
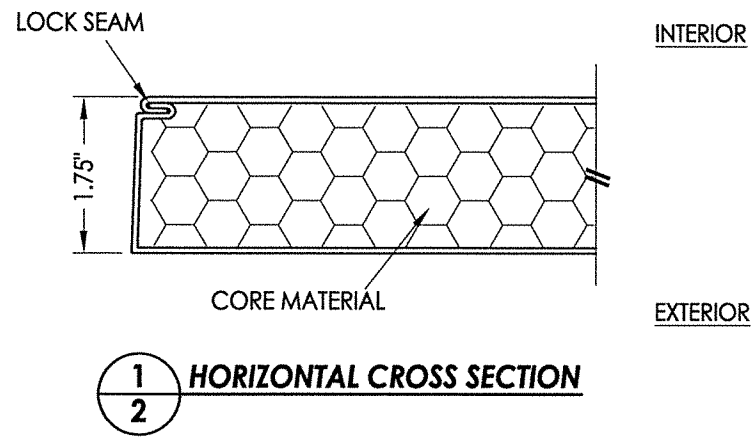
SHEET#	DESCRIPTION
1	Typical elevation, design pressures & general notes
2	Door panel details
3	Elevations
4	Horizontal cross sections
5	Horizontal & vertical cross sections
6	Frame anchoring
7	Frame anchoring
8	Frame anchoring
9	Hardware Details
10	Bill of materials and components

CONFIGURATION	MAX. OVERALL DIMENSION	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
X	52" X 97.5"	+75.0	-75.0
XX	100" X 97.5"	+75.0	-75.0

NO.	DATE	REVISIONS
1	11/4/21	UPDATE TO 2018 IBC/IRC
		LFS
		BY

DATE: 6/06/17
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4704
SHEET 1 OF 10

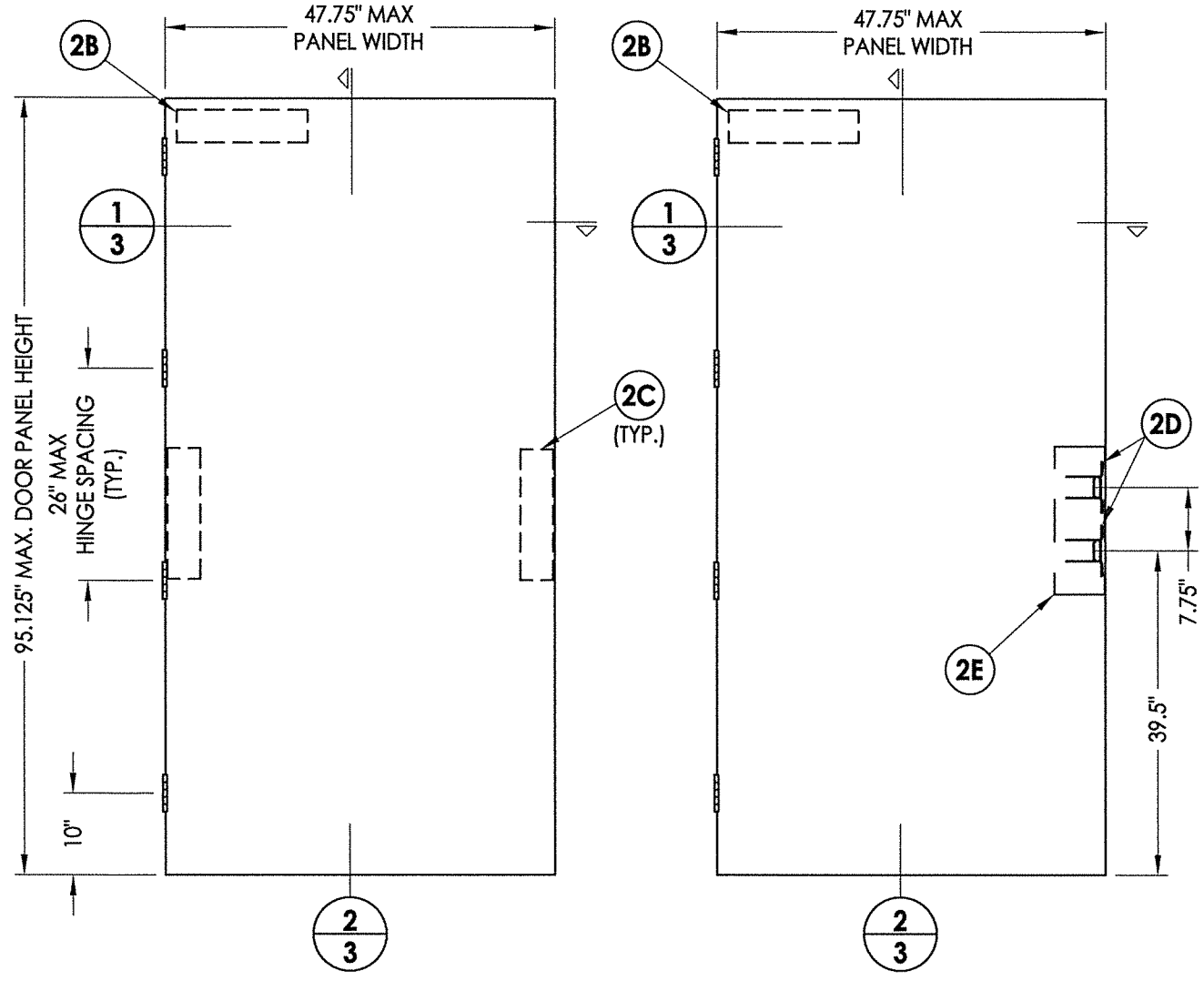
Z:\Clients\Vision Hollow Metal Permanent\B - Texas Dept of Ins\TDI - DR-894 7'0" Opaque Comm. Steel Doors\C - Drawings\TX-4704.dwg



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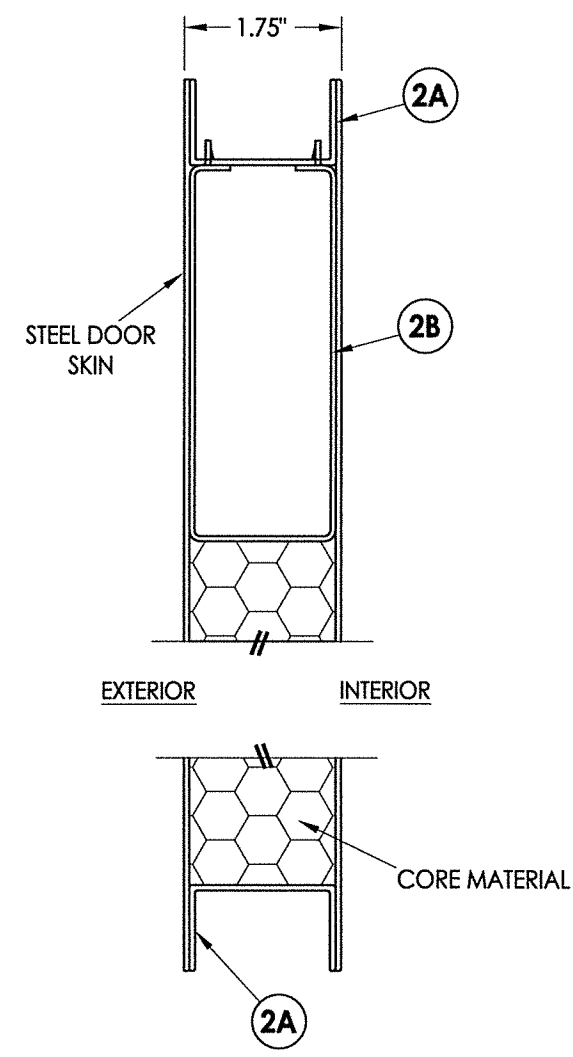
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P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197

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

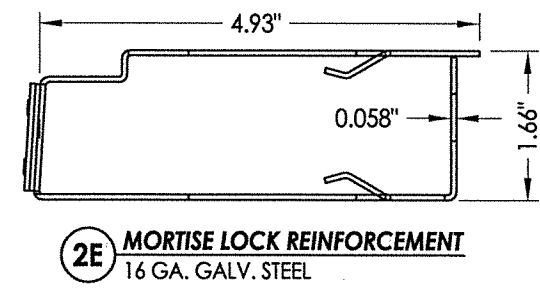
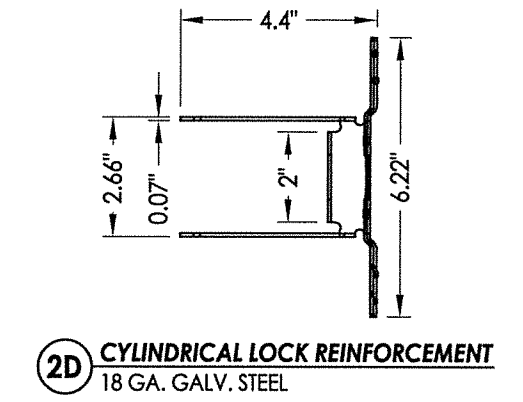
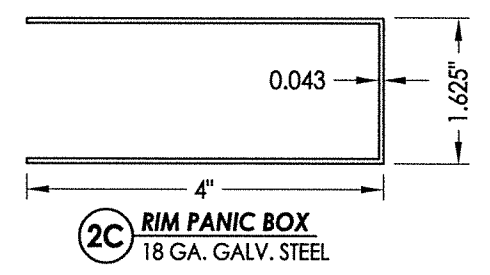


40 **OPAQUE DOOR PANEL**
8-0" Door w/ Rim Panic Exit Device

40 **OPAQUE DOOR PANEL**
8-0" Door w/ Cylindrical Lock & Deadbolt or w/ Mortise Lock & Deadbolt



2
2 **VERTICAL CROSS SECTION**



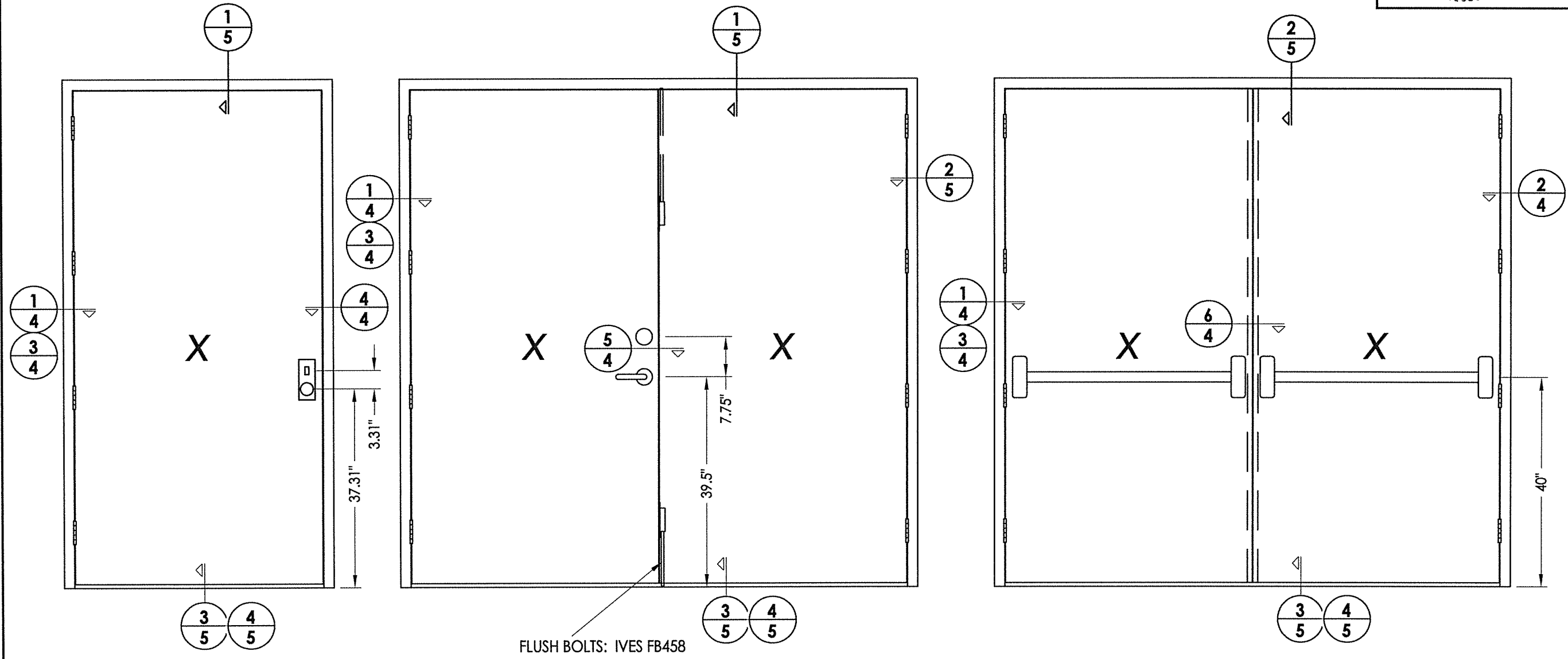
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PART OR ASSEMBLY:		DOOR PANEL DETAILS	
NO.	DATE	BY	REVISIONS
1	11/3/21	LFS	UPDATE TO 2018 IBC/IRC
DATE: 6/06/17			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4704			
SHEET 2 of 10			

STEEL DOOR SKIN: 18 GA. (MIN. 0.044" THK.) GALV. STEEL (Fy = 54,000 PSI MIN.)
CORE MATERIAL: EPS FOAM (POLYSTYRENE - 1.0 PCF MIN. DENSITY)

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



LOCK HARDWARE
 MORTISE LOCK w/ DEADBOLT: SCHLAGE L9453P

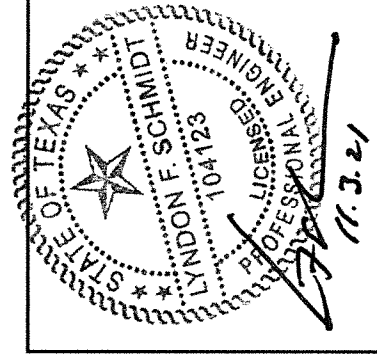
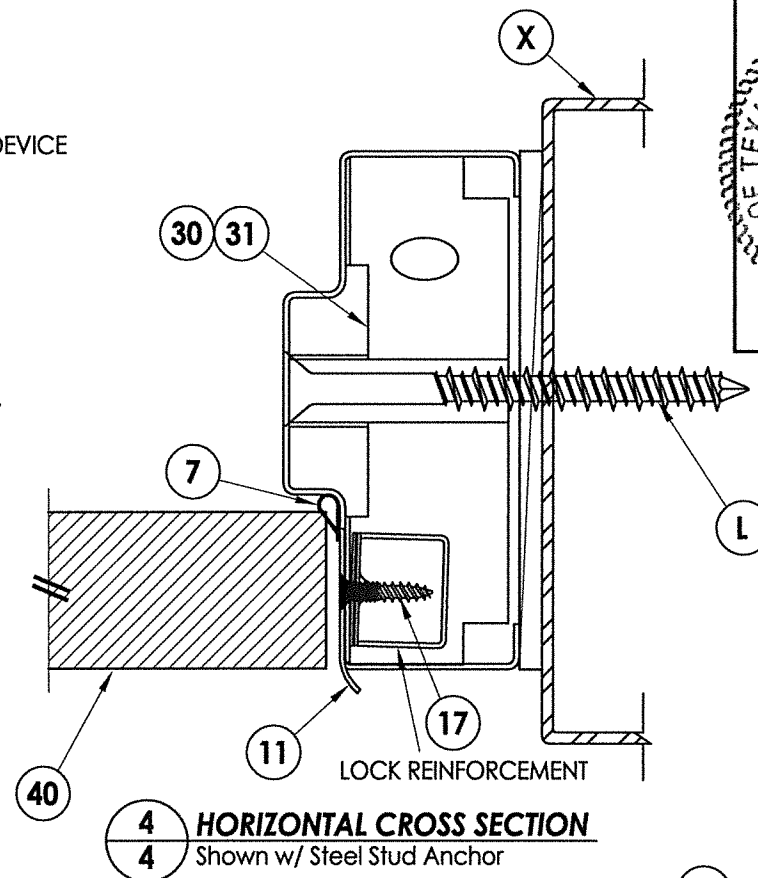
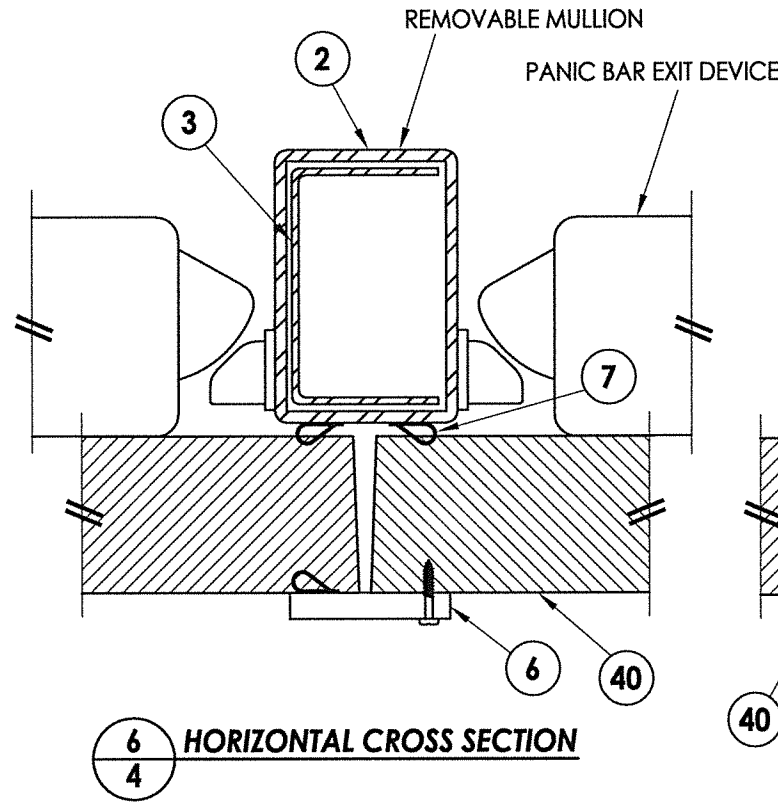
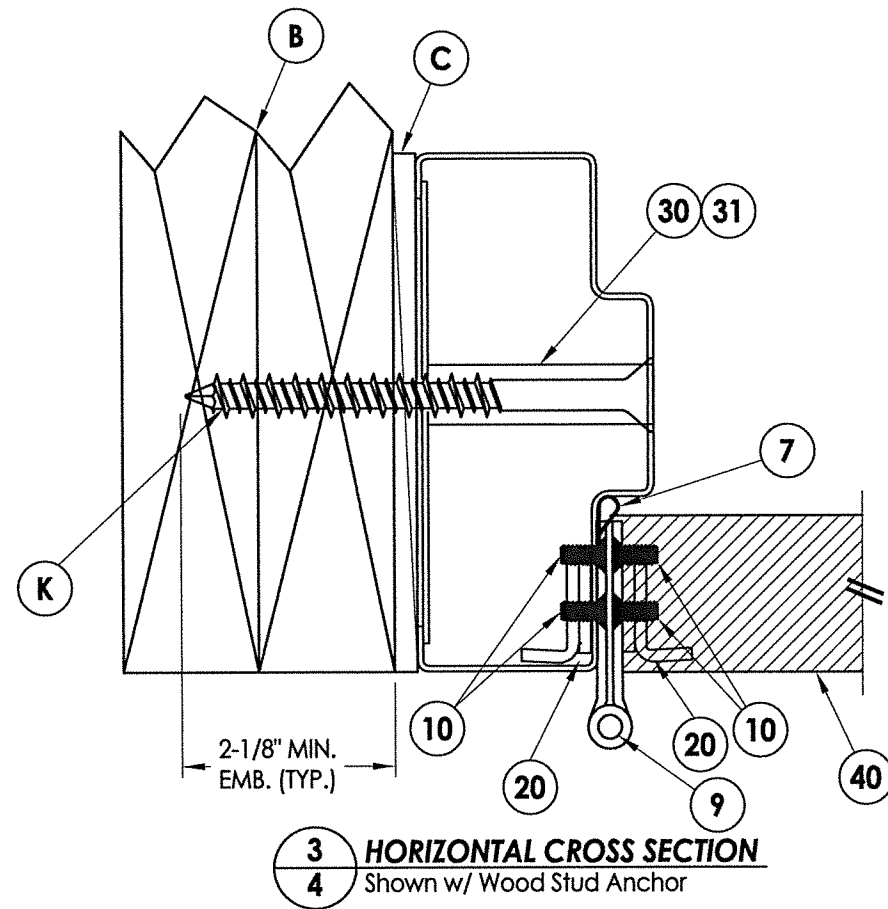
LOCK HARDWARE
 CYLINDRICAL LOCK: SCHLAGE AL53PD
 DEADBOLT: SCHLAGE B660P

LOCK HARDWARE
 RIM PANIC EXIT DEVICE: DESIGN HARDWARE 2000 SERIES
 REMOVABLE MULLION: LOCKWOOD MG 950F

FLUSH BOLTS: IVES FB458

NOTE: ALL LOCK HARDWARE SHOWN MAY BE UTILIZED ON SINGLE DOOR OR ACTIVE DOUBLE DOOR

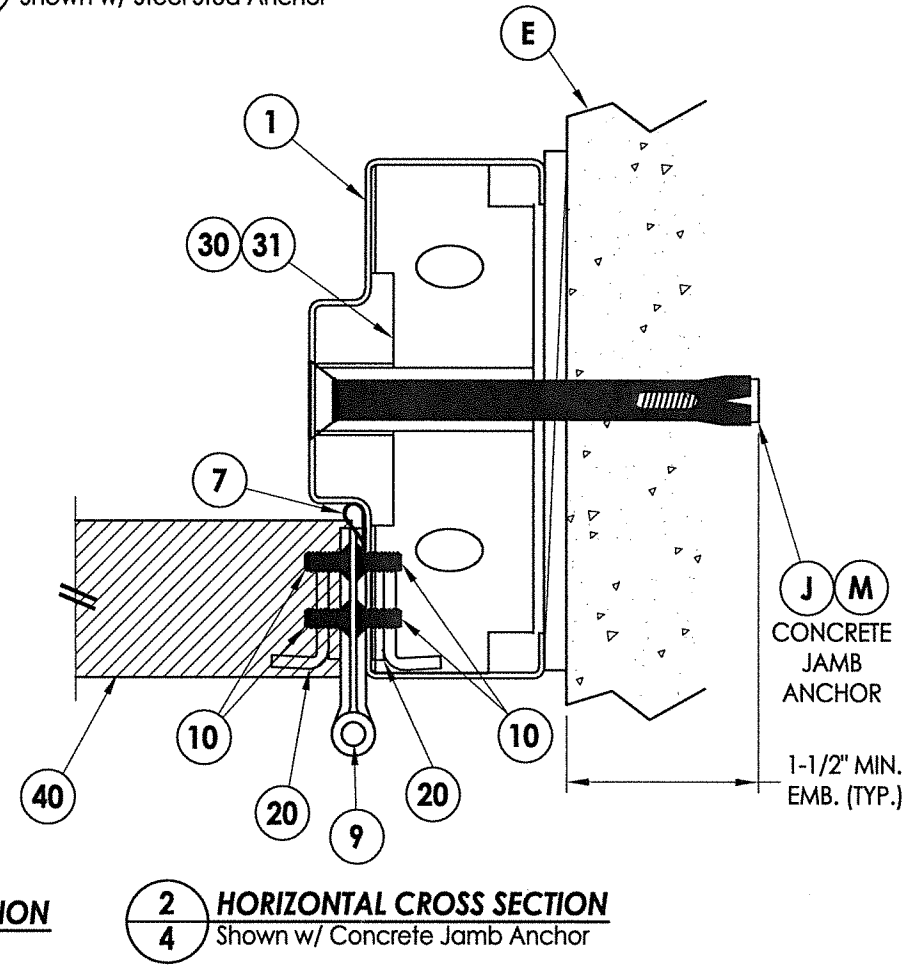
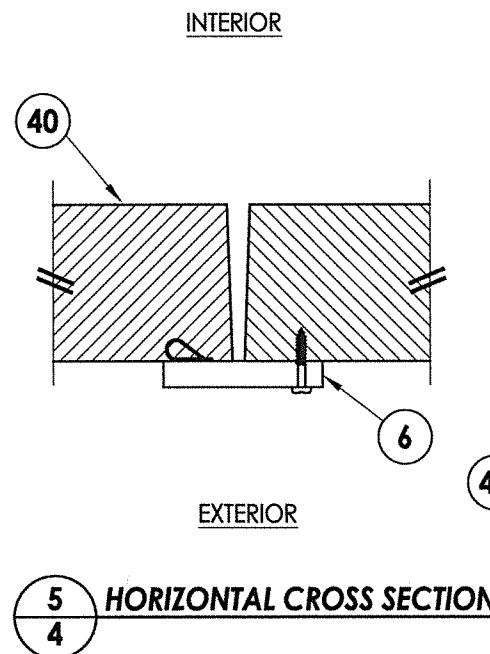
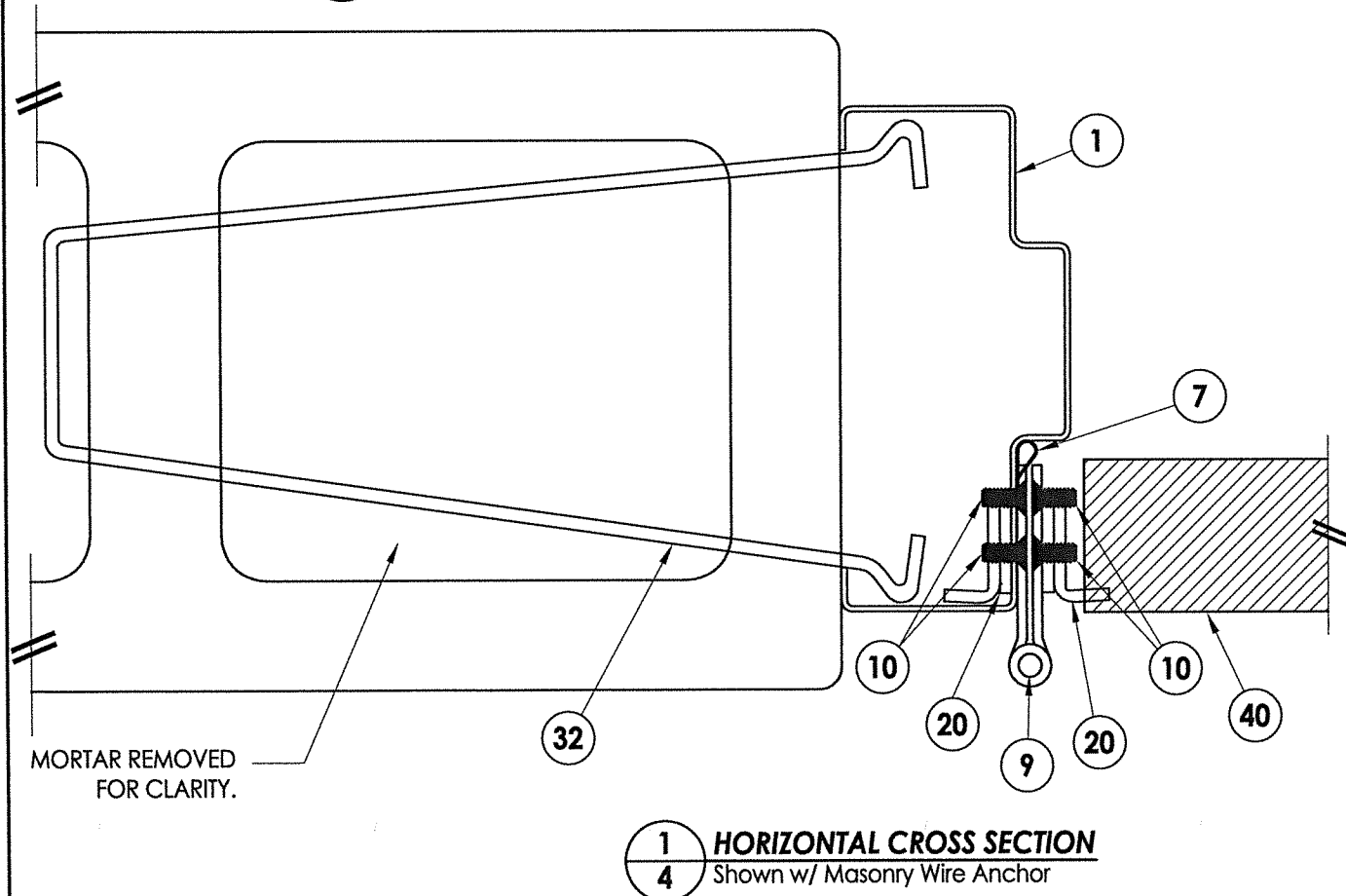
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PART OR ASSEMBLY:		ELEVATIONS	
NO.	DATE	REVISIONS	
1	11/3/21	UPDATE TO 2018 IBC/IRC	LFS
			BY
DATE: 6/06/17			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4704			
SHEET 3 of 10			



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

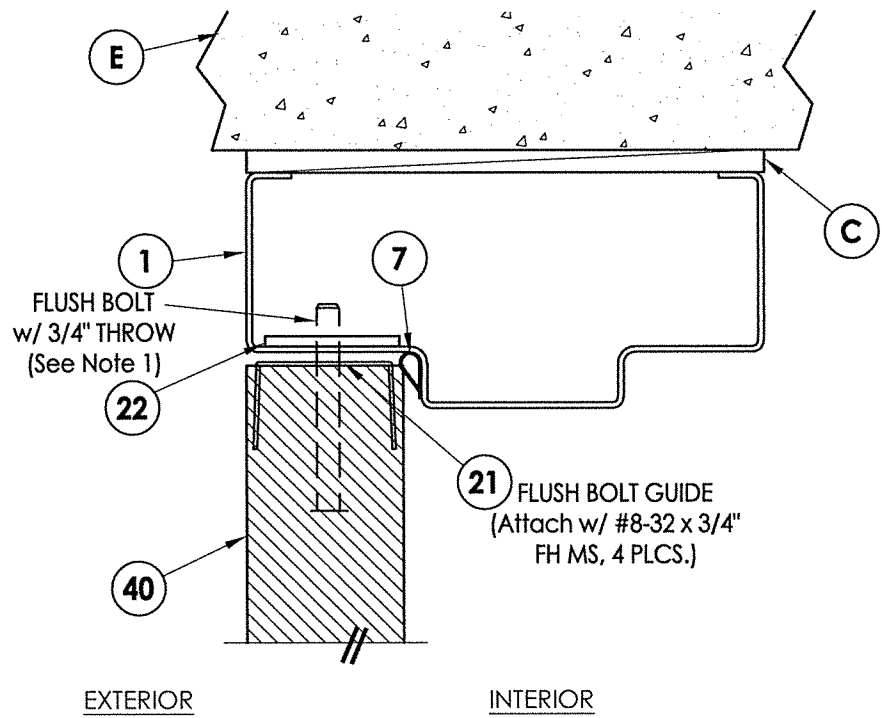
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 P.O. Box 230 Vairico FL. 33595
 Phone No.: 813.659.9197

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

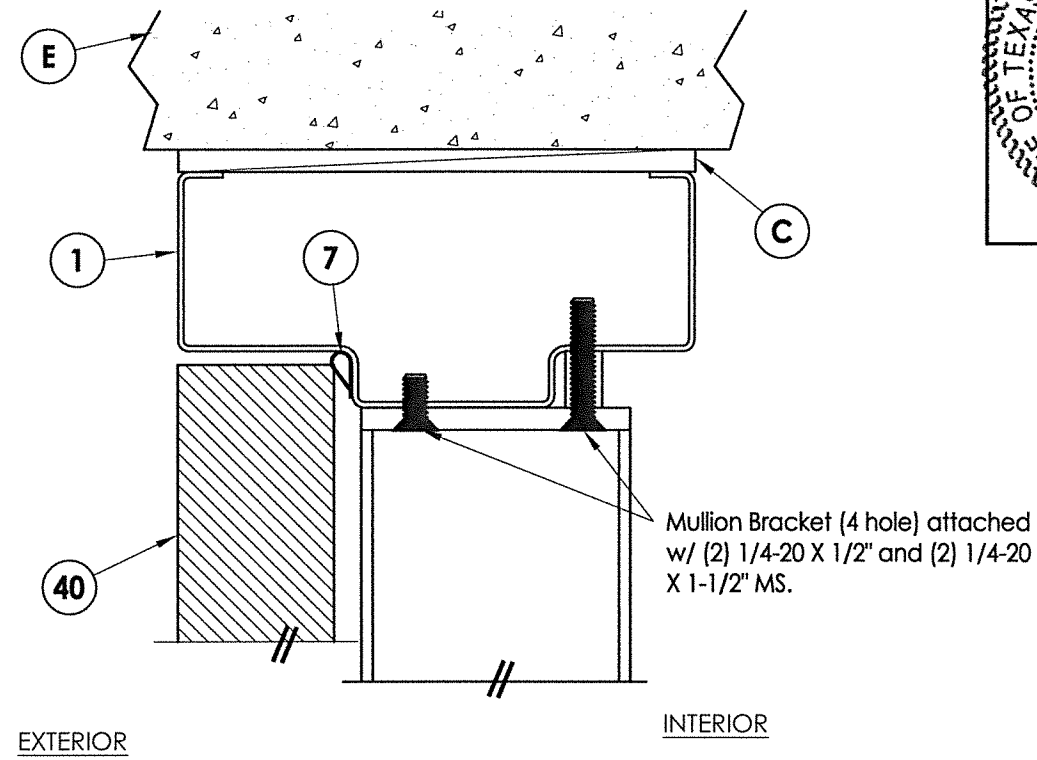


PRODUCT:	VISION HOLLOW METAL
PART OR ASSEMBLY:	HORIZONTAL CROSS SECTIONS
DATE:	6/06/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4704
SHEET	4 OF 10

NO.	DATE	BY	REVISIONS
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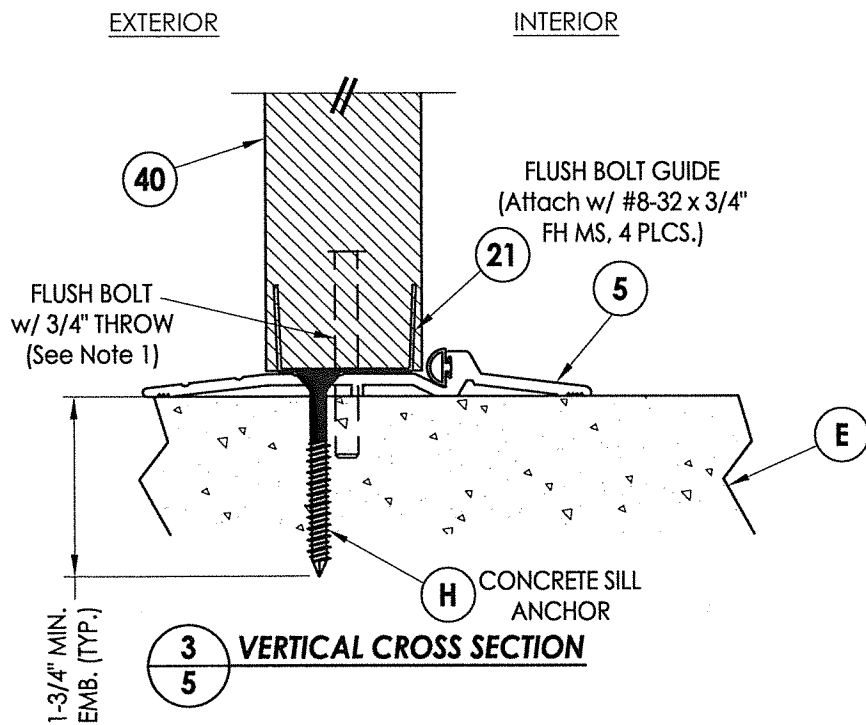


1
5 VERTICAL CROSS SECTION

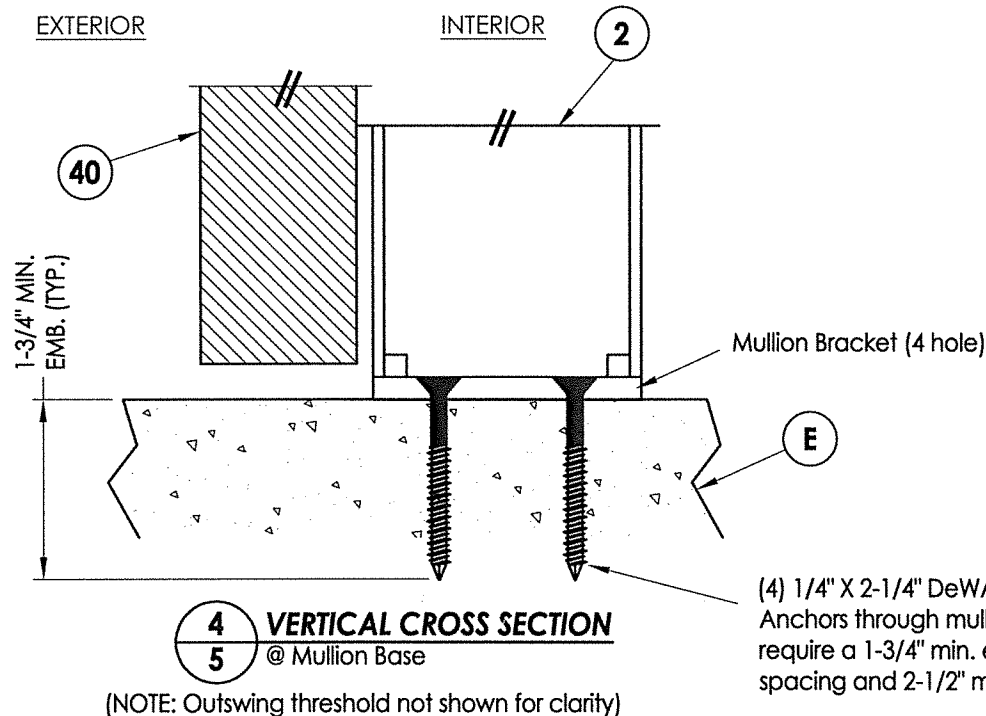


2
5 VERTICAL CROSS SECTION

Note 1:
Flush Bolt required for inactive door panel w/ Mortise and Cylindrical Lock & Deadbolt only.

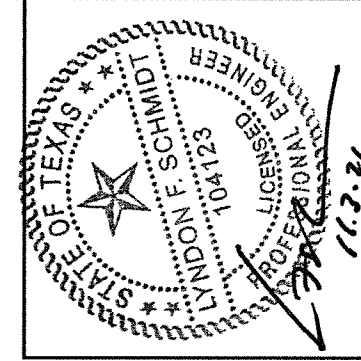


3
5 VERTICAL CROSS SECTION



4
5 VERTICAL CROSS SECTION @ Mullion Base

(4) 1/4" X 2-1/4" DeWALT ULTRACON+ Concrete Anchors through mullion base plate. Anchors require a 1-3/4" min. embedment, 1-1/2" min. o.c. spacing and 2-1/2" min. edge distance.

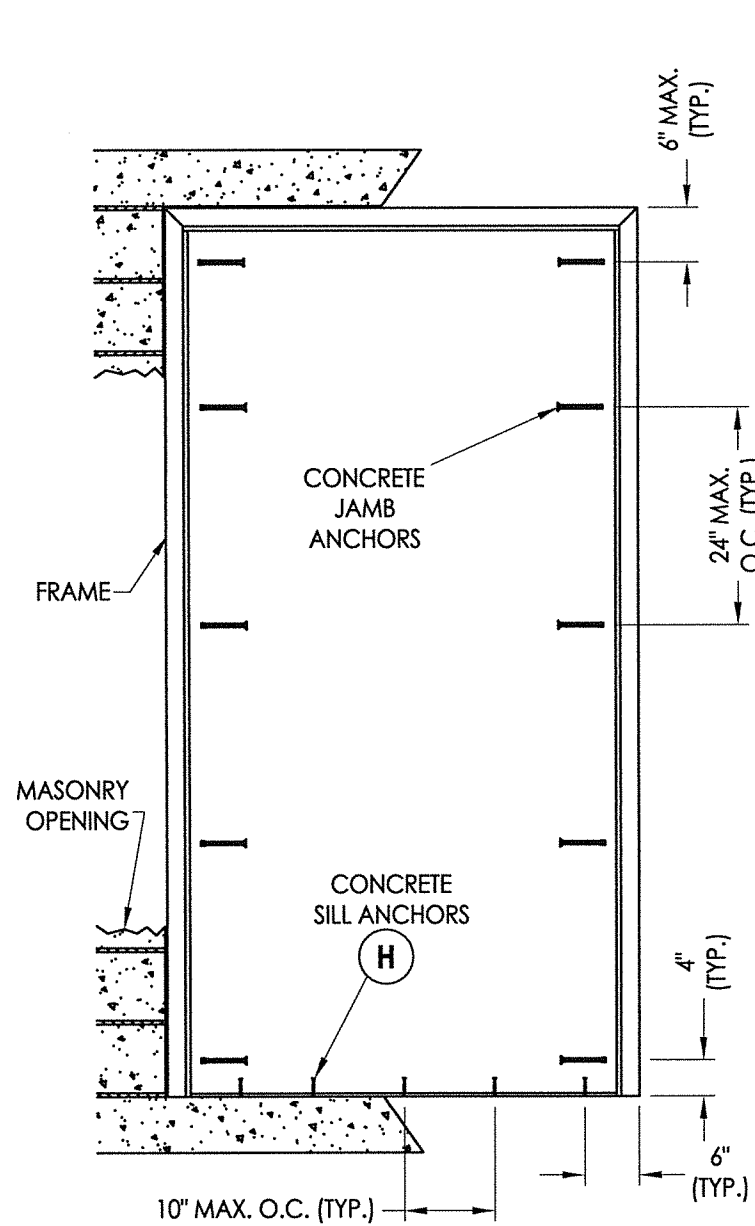


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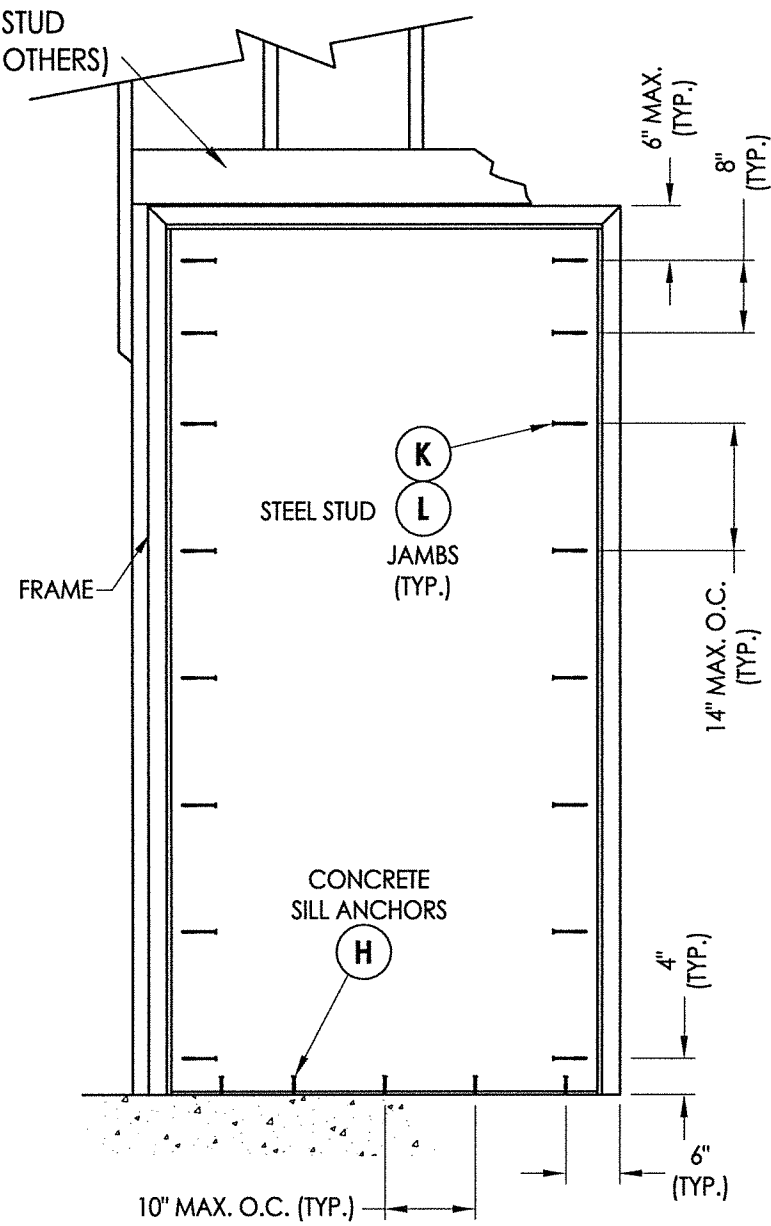
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P.O. Box 230 Valrico FL, 33595
Phone No.: 813.659.9197

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CERTIFICATE OF REGISTRATION # F-11852

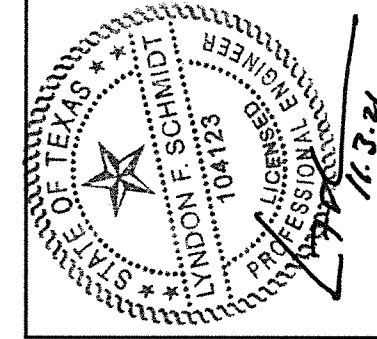
PRODUCT:	VISION HOLLOW METAL	
PART OR ASSEMBLY:	HORIZONTAL & VERTICAL CROSS SECTIONS	
NO.	DATE	REVISIONS
1	11/3/21	UPDATE TO 2018 IBC/IRC
		LFS BY
DATE: 6/06/17		
SCALE: N.T.S.		
DWG. BY: JK		
CHK. BY: LFS		
DRAWING NO.: TX-4704		
SHEET 5 OF 10		



FRAME ANCHORING
Masonry Construction
Concrete Anchors



FRAME ANCHORING
Wood/Steel Stud



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

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

PRODUCT: LS18 STEEL DOOR

PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	BY
1	11/4/21	LFS
UPDATE TO 2018 IBC/IRC		
REVISIONS		

DATE: 6/06/17

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

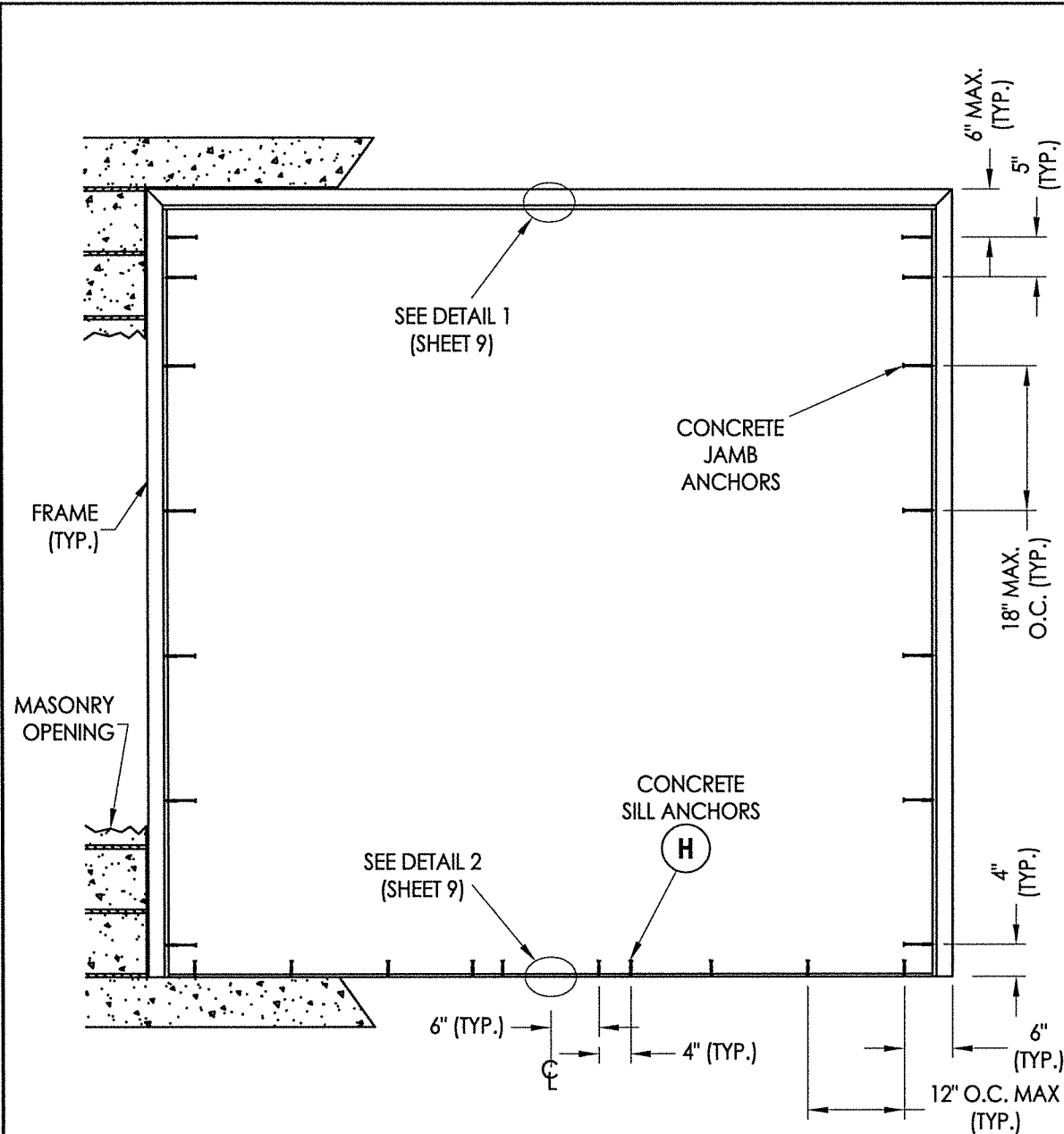
DRAWING NO.: TX-4704

SHEET 6 OF 10

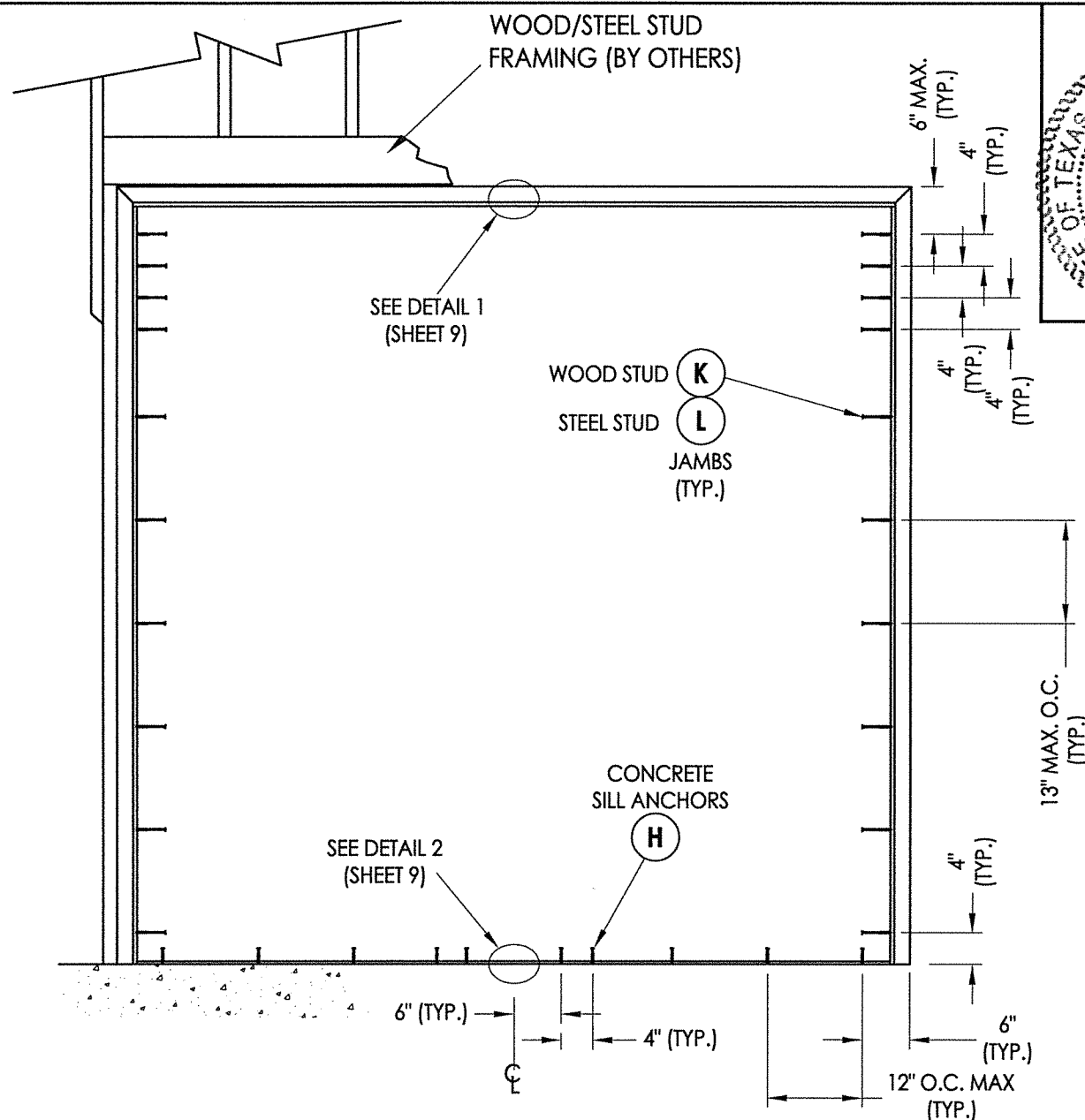
CONCRETE ANCHOR NOTES:

- Concrete screw locations at the corners may be adjusted to maintain a minimum 1" edge distance to mortar joints. If concrete screw locations noted as "MAX. O.C." must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.
- Concrete anchor table:

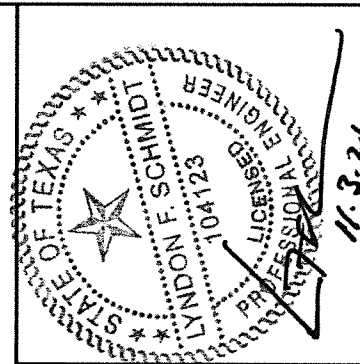
ANCHOR TYPE	ANCHOR LOCATION	ANCHOR SIZE	MANUFACTURER	MIN. EDGE DISTANCE	MIN. EMBEDMENT
CONCRETE ANCHOR SCREW	JAMBS	3/8"	LDT TAPCON® (ITW BUILDEX)	3"	1-1/2"
	SILL	1/4"	TAPCON® (ITW BUILDEX) ULTRACON+® (DeWALT)	2-1/2"	1-3/4"
CONCRETE SLEEVE ANCHOR	JAMBS	3/8"	DYNABOLT SLEEVE ANCHOR® (ITW REDHEAD)	2-1/4"	1-1/2"



FRAME ANCHORING
Masonry Construction
Concrete Anchors



FRAME ANCHORING
Wood/Steel Stud



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

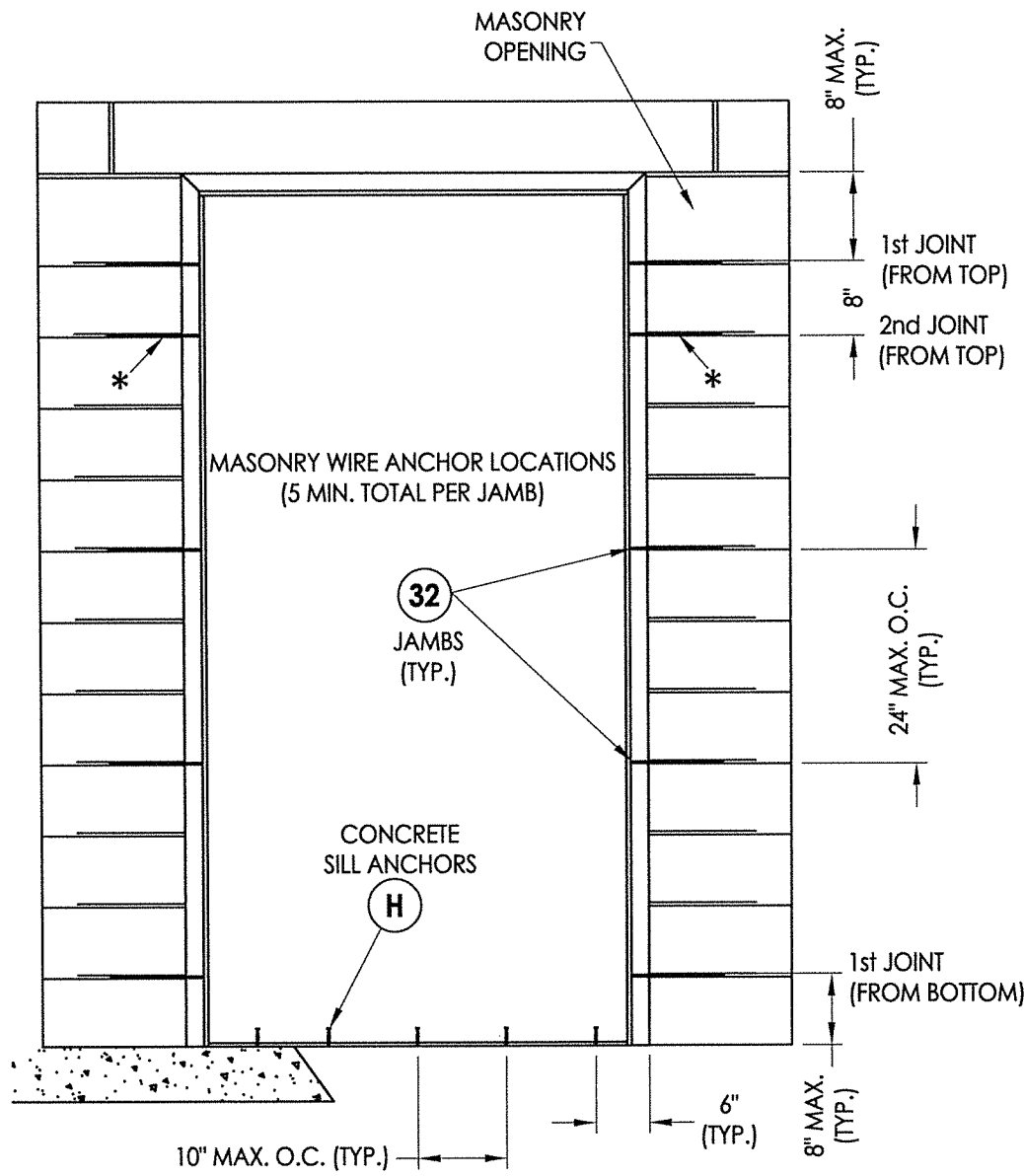
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

CONCRETE ANCHOR NOTES:

- Concrete screw locations at the corners may be adjusted to maintain a minimum 1" edge distance to mortar joints. If concrete screw locations noted as "MAX. O.C." must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.
- Concrete anchor table:

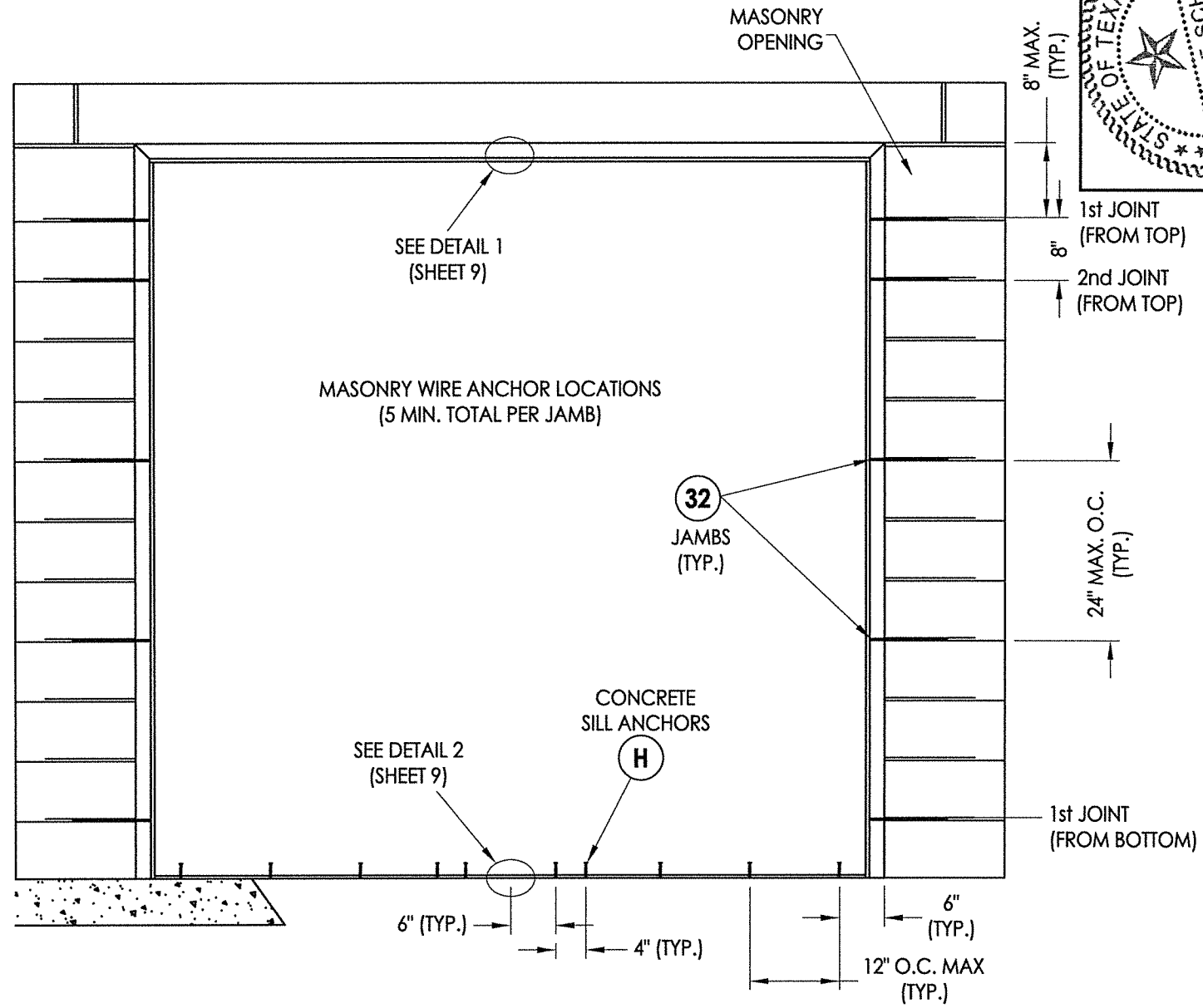
ANCHOR TYPE	ANCHOR LOCATION	ANCHOR SIZE	MANUFACTURER	MIN. EDGE DISTANCE	MIN. EMBEDMENT
CONCRETE ANCHOR SCREW	JAMBS	3/8"	LDT TAPCON® (ITW BUILDEX)	3"	1-1/2"
	SILL	1/4"	TAPCON® (ITW BUILDEX) ULTRACON+® (DeWALT)	2-1/2"	1-3/4"
CONCRETE SLEEVE ANCHOR	JAMBS	3/8"	DYNABOLT SLEEVE ANCHOR® (ITW REDHEAD)	2-1/4"	1-1/2"

PRODUCT:	VISION HOLLOW METAL	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	BY
1	11/4/21	LFS
UPDATE TO 2018 IBC/IRC		
REVISIONS		
DATE:	6/06/17	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4704	
SHEET	7 OF 10	



FRAME ANCHORING
Masonry Construction
Masonry Wire Anchors

* THIS ANCHOR REQUIRED FOR DESIGN PRESSURES > 50 PSF ONLY.

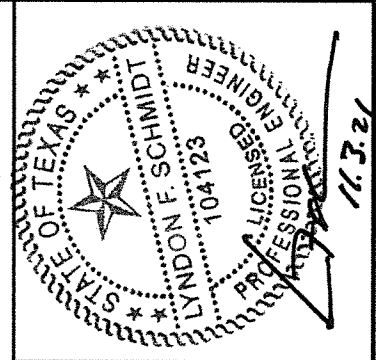


FRAME ANCHORING
Masonry Construction
Masonry Wire Anchors

CONCRETE ANCHOR NOTES:

- Concrete screw locations at the corners may be adjusted to maintain a minimum 1" edge distance to mortar joints. If concrete screw locations noted as "MAX. O.C." must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.
- Concrete anchor table:

ANCHOR TYPE	ANCHOR LOCATION	ANCHOR SIZE	MANUFACTURER	MIN. EDGE DISTANCE	MIN. EMBEDMENT
CONCRETE ANCHOR SCREW	SILL	1/4"	TAPCON® (ITW BUILDEX) ULTRACON+® (DeWALT)	2-1/2"	1-3/4"



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

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P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197

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

PRODUCT: VISION HOLLOW METAL

PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	BY	REVISIONS
1	11/4/21	LFS	UPDATE TO 2018 IBC/IRC

DATE: 6/06/17

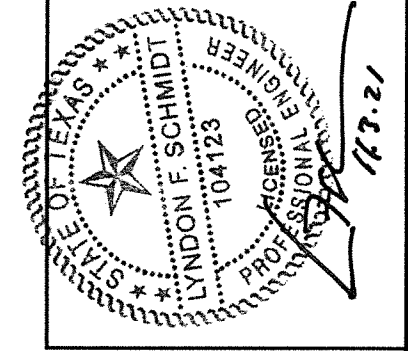
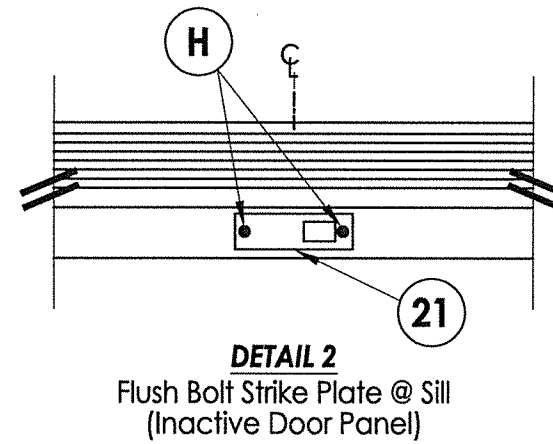
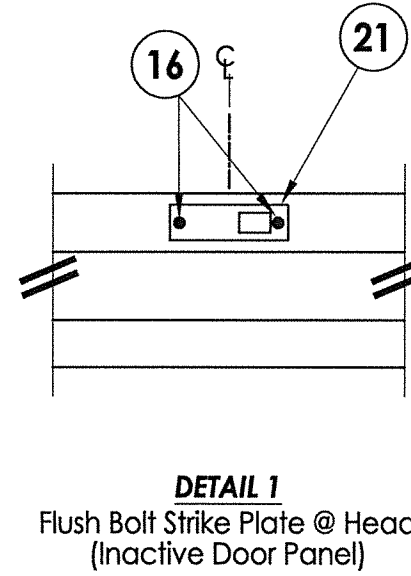
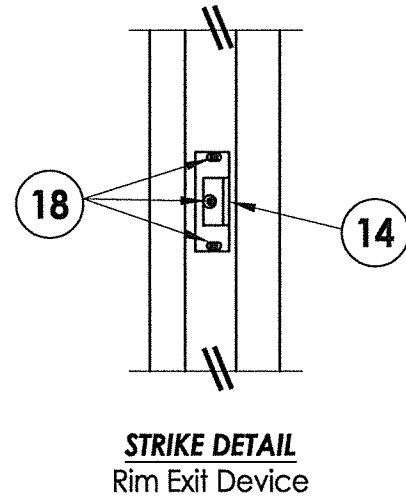
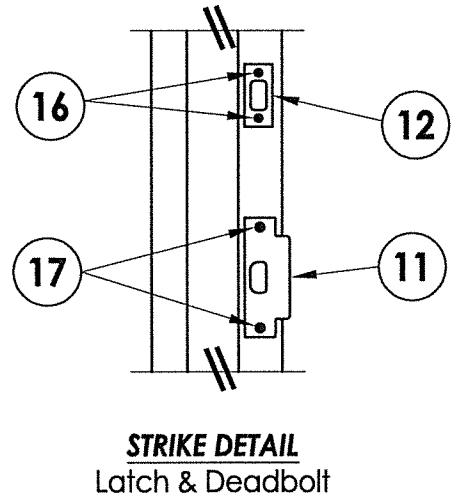
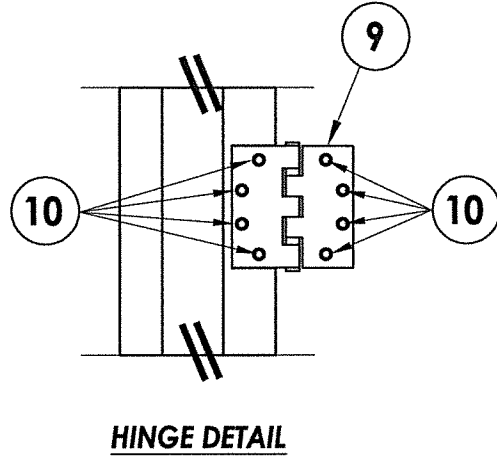
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DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4704

SHEET 8 OF 10



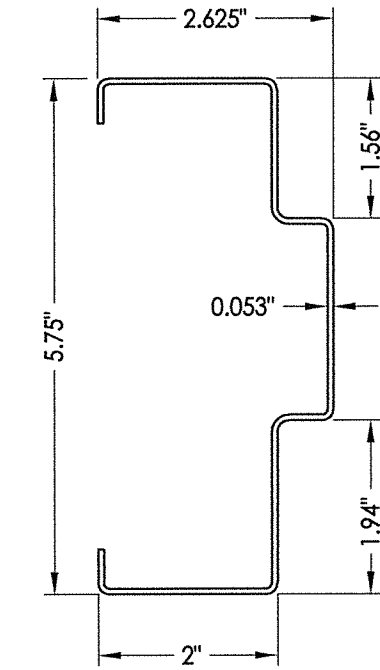
Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

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

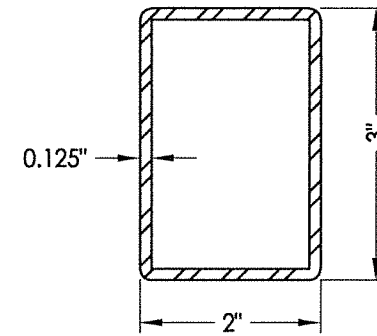
PRODUCT:		VISION HOLLOW METAL	
PART OR ASSEMBLY:		HARDWARE DETAILS	
NO.	DATE	REVISIONS	
1	11/4/21	UPDATE TO 2018 IBC/IRC	
		LFS	BY
DATE: 6/06/17			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4704			
SHEET 9 OF 10			

BILL OF MATERIALS

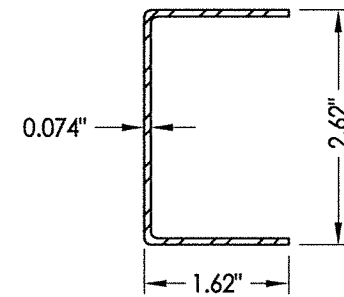
ITEM #	DESCRIPTION	MATERIAL
B	2X STUD FRAMING (G>= 0.55)	WOOD
C	1/4" MAX. SHIM SPACE	-
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK (GROUT FILLED) CONFORMING TO ASTM C90	CONCRETE
H	1/4" X 1-3/4" PFH CONCRETE SCREW (SEE CONCRETE ANCHOR TABLE)	STEEL
J	3/8" X 5" PFH DYNABOLT SLEEVE ANCHOR (SEE CONCRETE ANCHOR TABLE)	STEEL
K	3/8" X 5" FH LAG SCREW (2-1/8" MIN. EMBEDMENT)	STEEL
L	3/8" Ø SMS (MUST PENETRATE MIN. 3 THREADS THROUGH STEEL STUD)	STEEL
M	3/8" X 5" LDT TAPCON CONCRETE SCREW (SEE CONCRETE ANCHOR TABLE)	STEEL
X	STEEL STUD (0.125" MIN. THK, Fu = 50 ksi, Fy = 33 ksi)	STEEL
1	HOLLOW METAL FRAME	-
2	REMOVABLE MULLION	STEEL
3	MULLION REINFORCEMENT (ASTM A36 STEEL)	STEEL
5	OUTSWING BUMP THRESHOLD	ALUM
6	ASTRAGAL	STEEL
7	WEATHERSTRIP (HAGER 736 PRESS-ON)	-
9	HINGE 4.5" X 4.5"	STEEL
10	#12-24 x 1/2" FH MACHINE SCREW	STEEL
11	LATCH STRIKE PLATE	STEEL
12	DEADBOLT STRIKE PLATE	STEEL
13	VERTICAL ROD STRIKE PLATE	STEEL
14	RIM EXIT DEVICE STRIKE	STEEL
16	#8 X 3/4" FH SCREWS	STEEL
17	#12 X 1" FH SCREWS	STEEL
18	#12 X 1-1/8" PH SMS	STEEL
20	HINGE REINFORCEMENT (10 GA.)	STEEL
21	FLUSH BOLT GUIDE (0.050" THK.)	STEEL
22	FLUSH BOLT FRAME REINFORCEMENT (16 GA)	STEEL
30	EMA PIPE ANCHOR (18 GA)	STEEL
31	EMA BUTTERFLY ANCHOR (18 GA)	STEEL
32	MASONRY WIRE ANCHOR	STEEL
40	STEEL DOOR PANEL (8'-0" DOOR)	STEEL



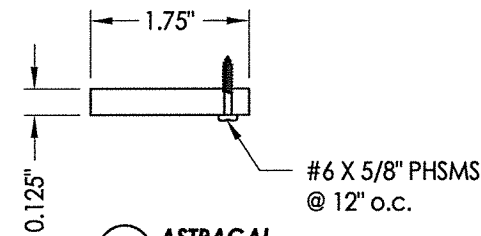
1 HOLLOW METAL FRAME



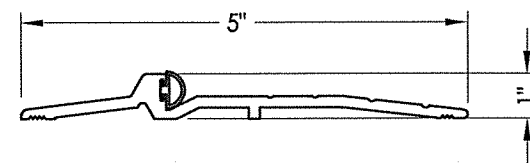
2 MULLION
LOCKWOOD MG 950F



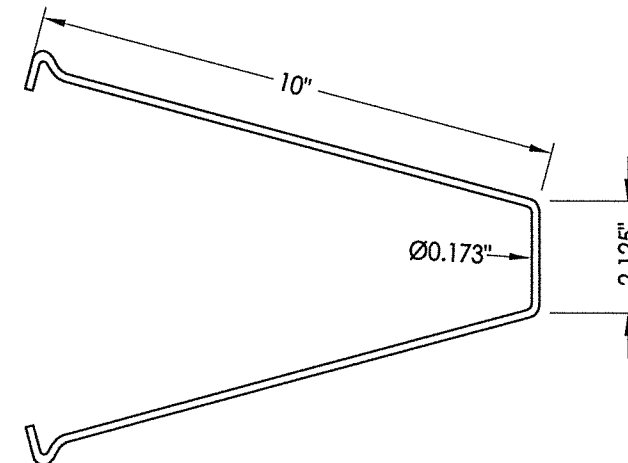
3 MULLION REINFORCEMENT



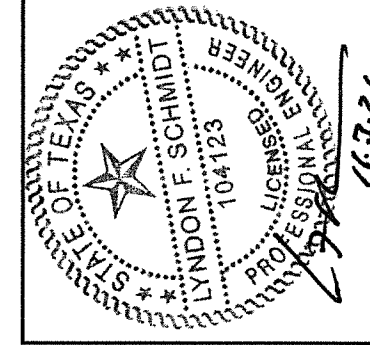
6 ASTRAGAL



5 OUTSWING BUMP THRESHOLD
HAGER 520S



32 MASONRY WIRE ANCHOR
60 KSI MIN.



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

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

PRODUCT: VISION HOLLOW METAL
PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS

NO.	DATE	DESCRIPTION	BY
1	11/3/21	UPDATE TO 2018 IBC/IRC	LFS

DATE: 6/06/17
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4704
SHEET 10 of 10