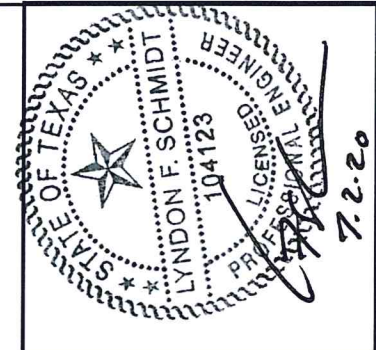




6605 Flotilla Street
City of Commerce
CA 90040

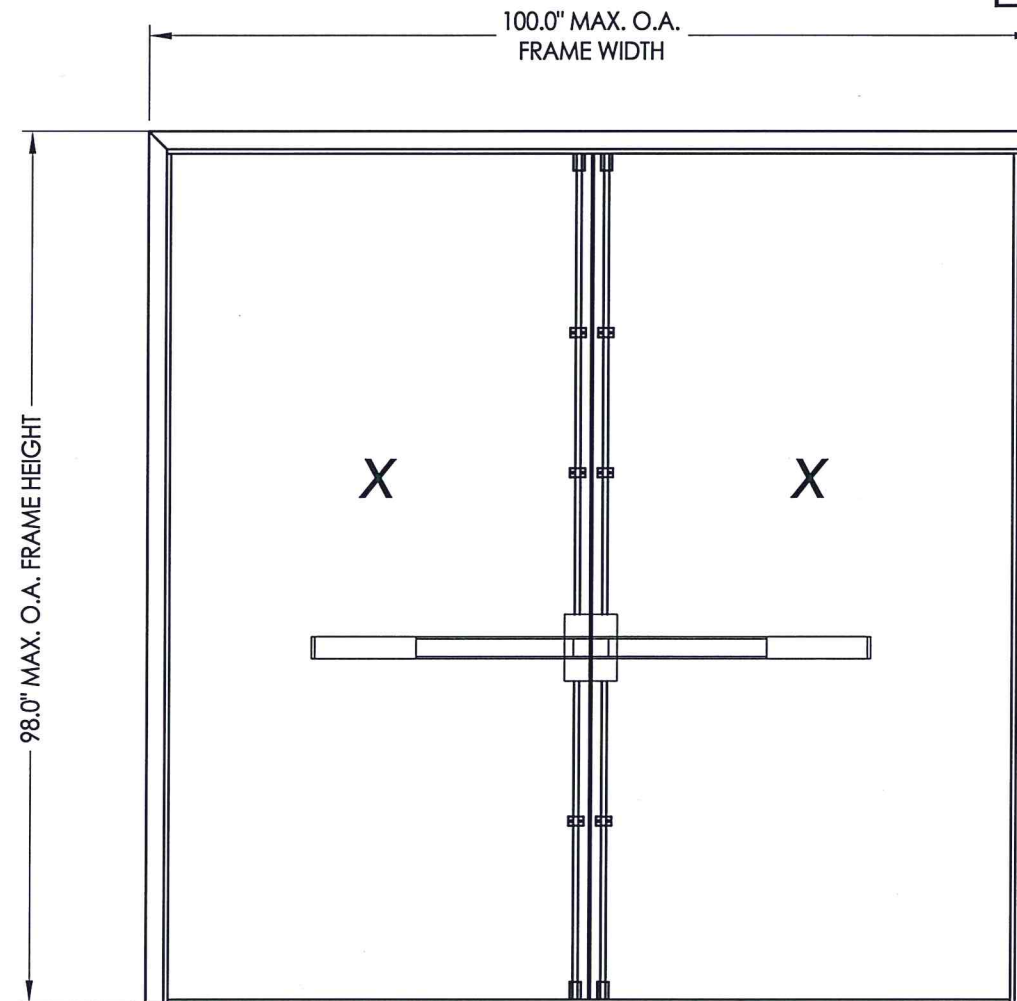


Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

R.W. 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

DKS SERIES 1800 STEEL COMMERCIAL DOUBLE DOOR OUTSWING "IMPACT"



Panic Bar Exit Device w/ Vertical Rods
"7700-V Series"

MAX FRAME DIMENSION	LOCK TYPE	DESIGN PRESSURE (PSF) OUTSWING	
		POSITIVE	NEGATIVE
100.0" x 98.0"	PANIC BAR EXIT DEVICE w/ VERTICAL RODS "7700-V Series"	+50.0	-50.0

EVALUATED FOR USE IN THE STATE OF TEXAS

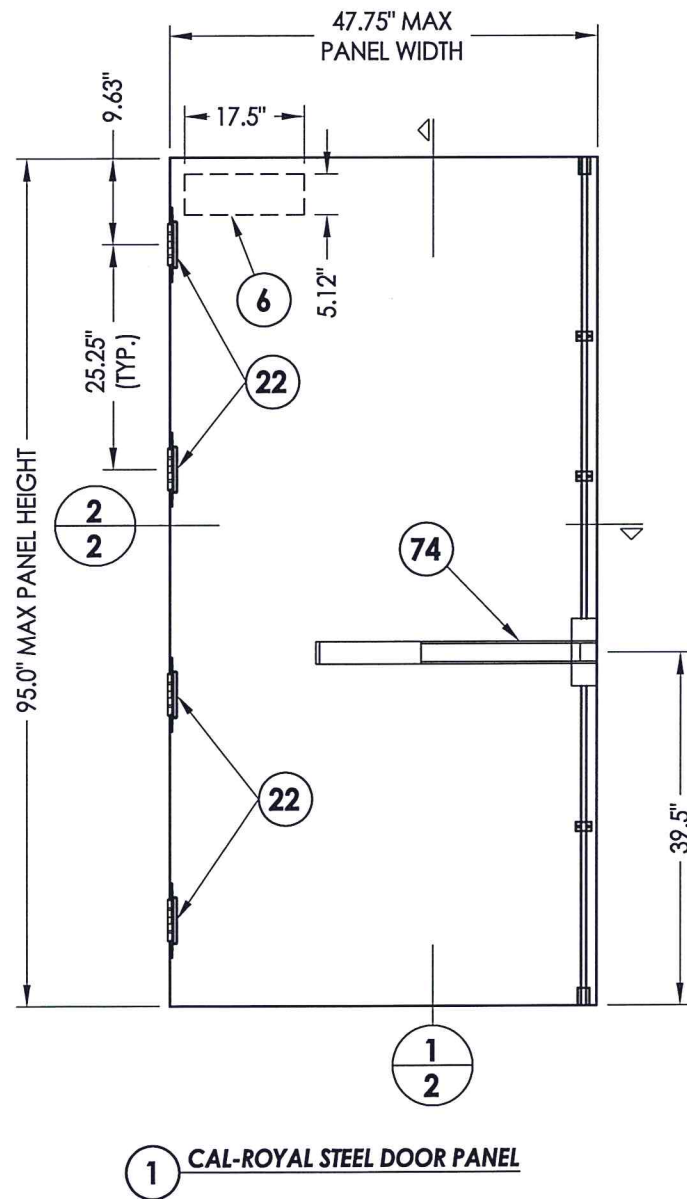
The Steel Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

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. When used in areas requiring wind-borne debris protection, the opaque door does not require impact protection while 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 1609.2 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.

TABLE OF CONTENTS

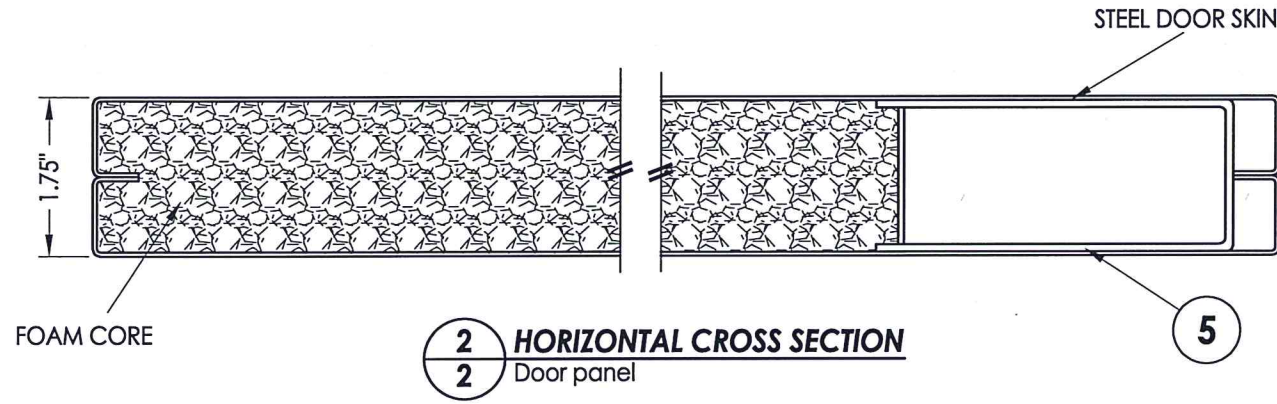
SHEET#	DESCRIPTION
1	Typical elevation, design pressures & general notes
2	Door panel details
3	Horizontal cross sections
4	Vertical cross sections
5	Frame anchoring
6	Frame anchoring
7	Bill of materials and components

PRODUCT:	CAL-ROYAL STEEL COMMERCIAL DOOR	
PART OR ASSEMBLY:	TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES	
NO.	DATE	REVISIONS
1	7/02/20	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY
DATE: 10/1/14		
SCALE: N.T.S.		
DWG. BY: JK		
CHK. BY: LFS		
DRAWING NO.: TX-4486		
SHEET 1 OF 7		

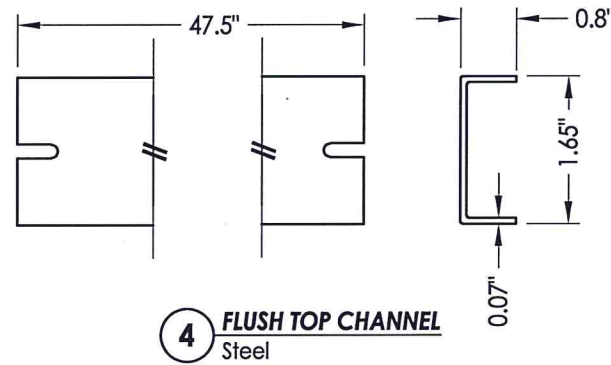


1 CAL-ROYAL STEEL DOOR PANEL

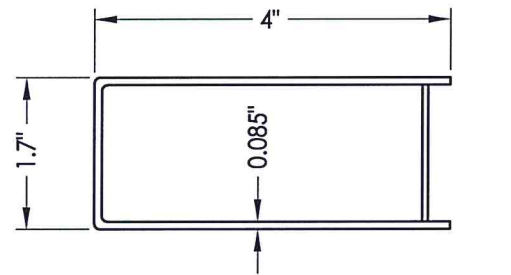
STEEL DOOR SKIN (18 GA.): MIN. 0.045" THK.
 STEEL GRADE: ASTM A1008 GALV. STEEL (Fy = 33,000 PSI MIN.)
 CORE MATERIAL: EPS FOAM (POLYSTYRENE - 1.0 PCF MIN. DENSITY)



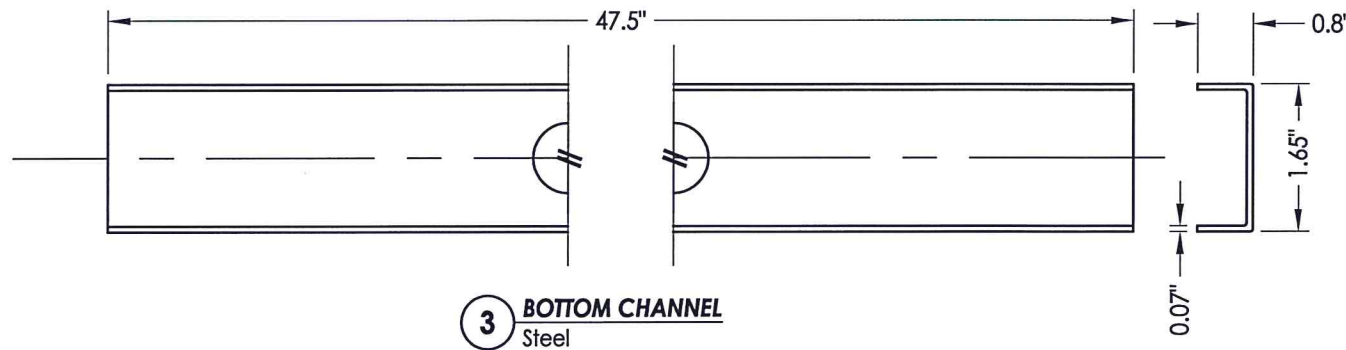
2 HORIZONTAL CROSS SECTION
 2 Door panel



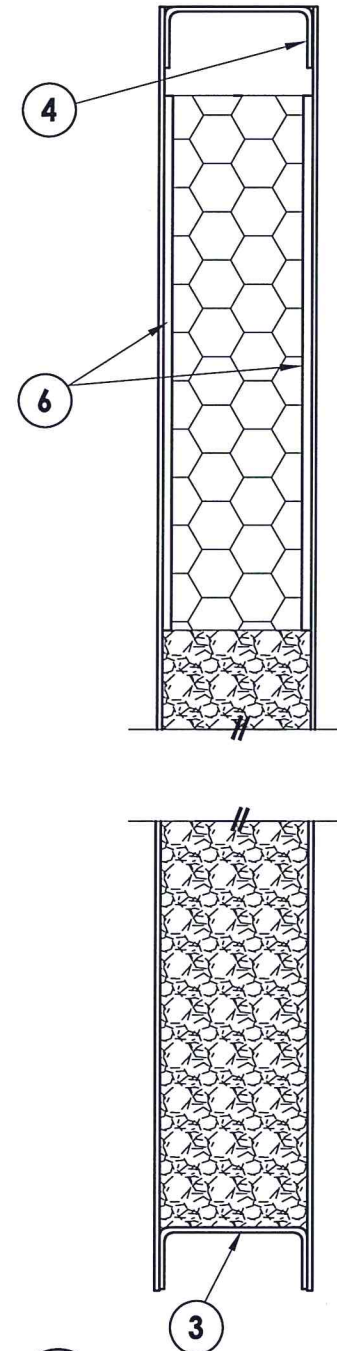
4 FLUSH TOP CHANNEL
 Steel



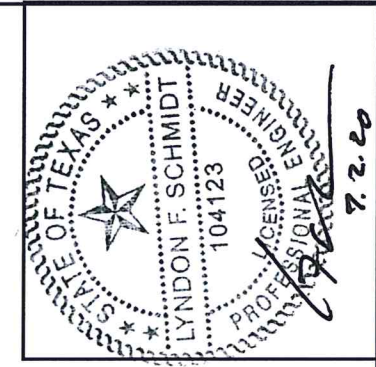
5 STEEL LOCK BOX REINFORCEMENT
 Panic Bar Prep (10.5" long)



3 BOTTOM CHANNEL
 Steel



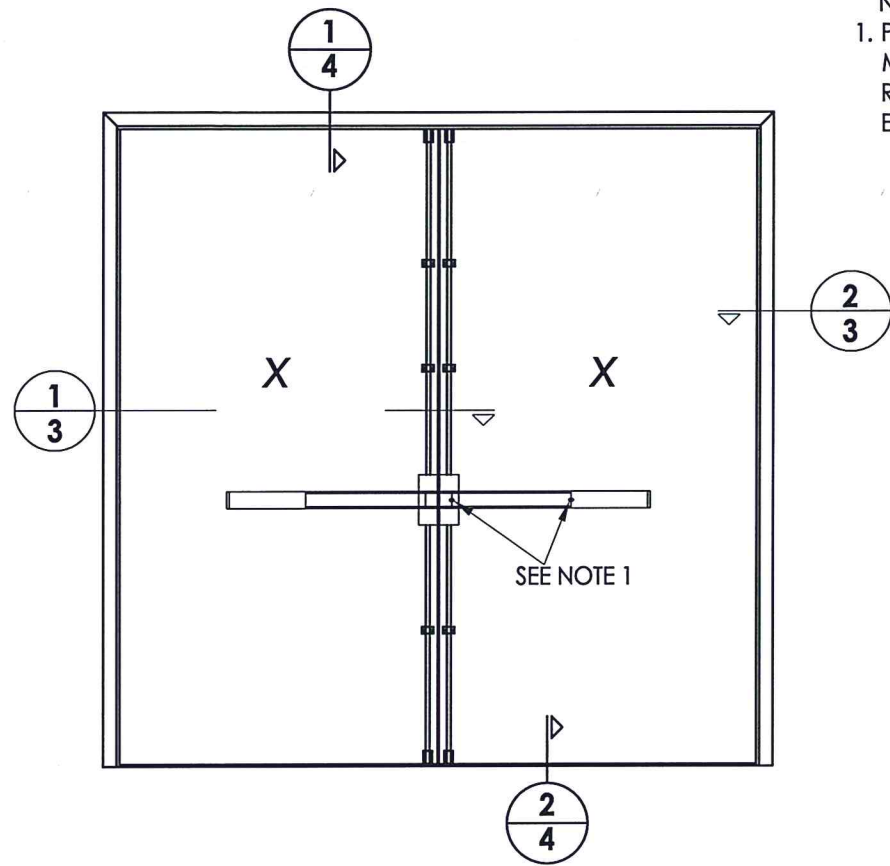
1 VERTICAL CROSS SECTION
 2 Door panel



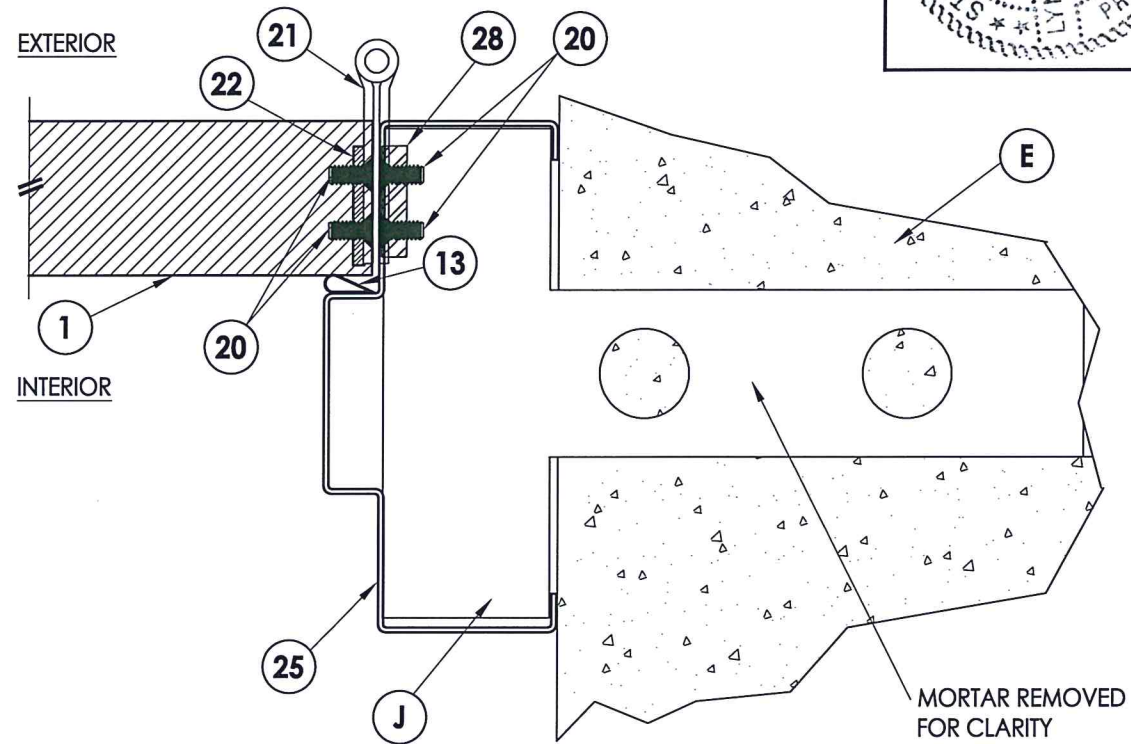
Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123

RW BUILDING CONSULTANTS, INC.
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 TEXAS BOARD OF PROFESSIONAL ENGINEERS
 CERTIFICATE OF REGISTRATION # F-11852

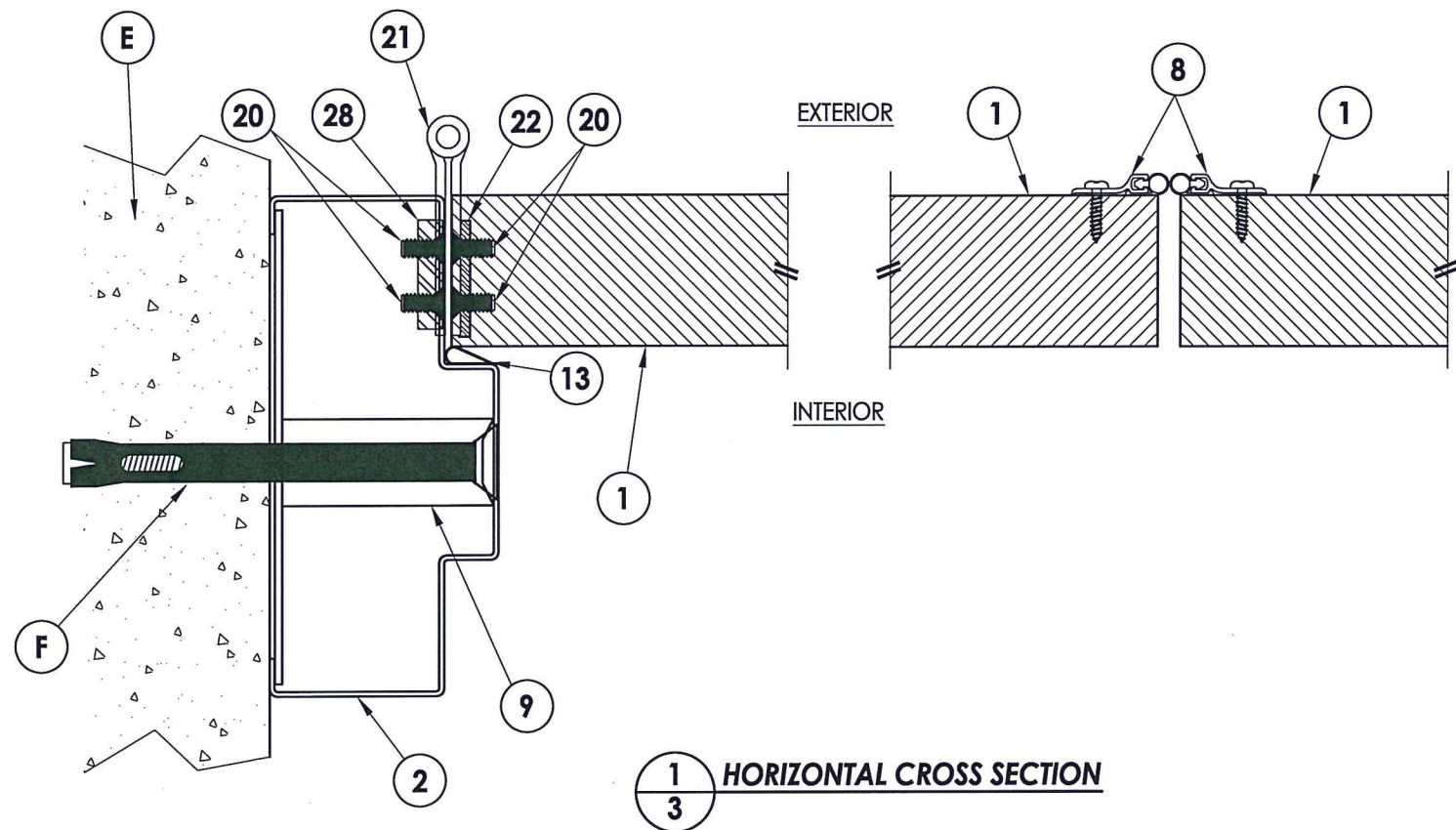
PRODUCT: CAL-ROYAL	
STEEL COMMERCIAL DOOR	
PART OR ASSEMBLY: DOOR PANEL DETAILS	
NO.	DATE
1	7/02/20
UPDATE TO 2018 IBC/IRC CODE	
LFS	BY
REVISIONS	
DATE: 10/1/14	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: TX-4486	
SHEET 2 OF 7	



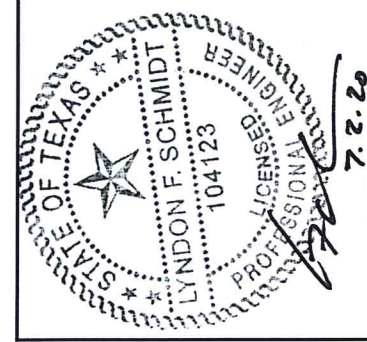
NOTE:
 1. PANIC BAR SET SCREWS (#12-24 x 5/16")
 MUST BE ACTIVATED TO ACHIEVE IMPACT
 RATING. LOCATE ONE SCREW AT THE
 END OF EACH PUSH BAR.



2 HORIZONTAL CROSS SECTION
 3 Masonry Construction
 Masonry "Tee" Anchor



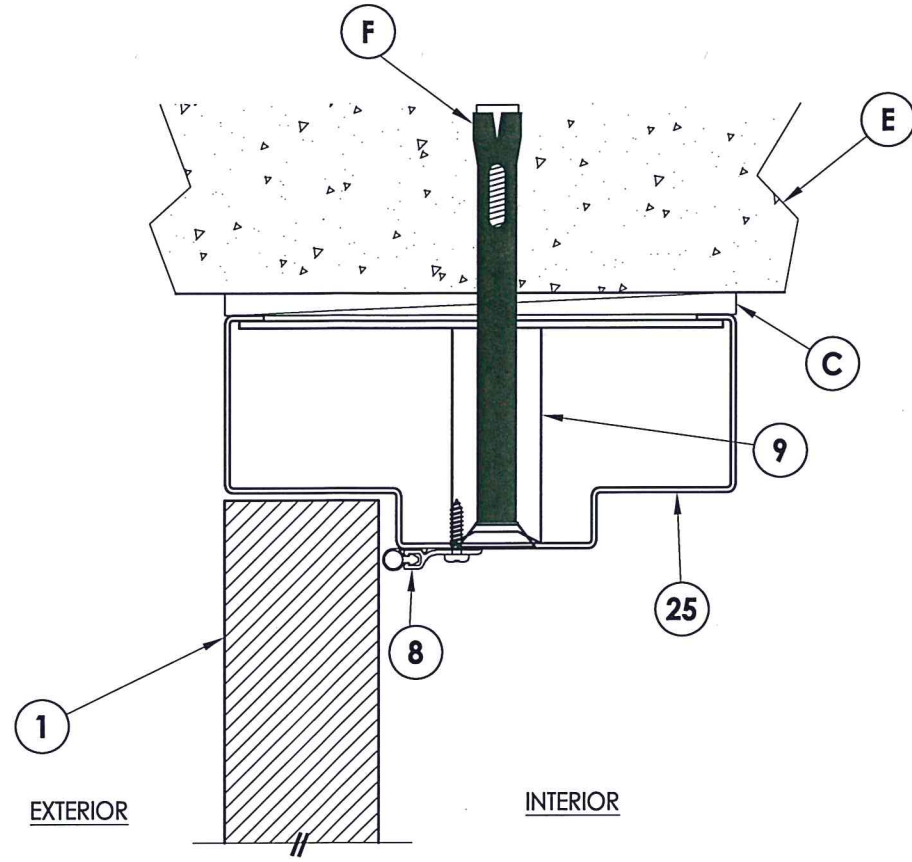
1 HORIZONTAL CROSS SECTION
 3



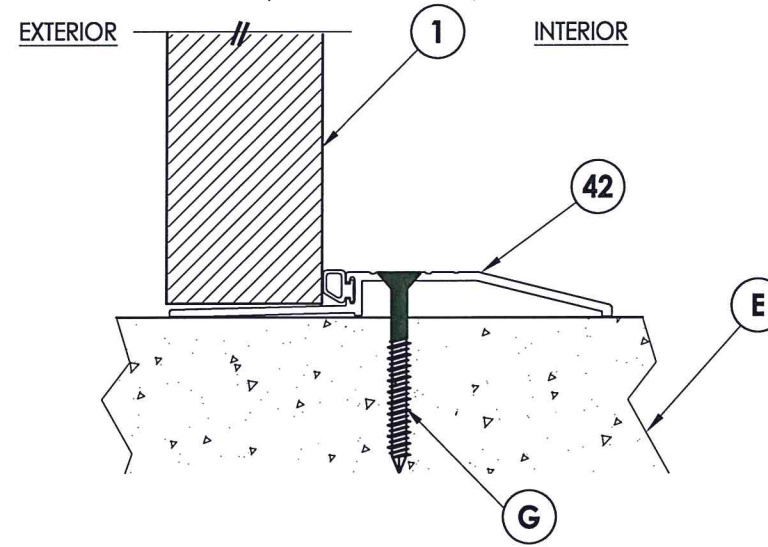
Documents Prepared By: Lyndon F. Schmidt, P.E.
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 P.O. Box 230 Valrico FL 33595
 Phone No.: 813.659.9197
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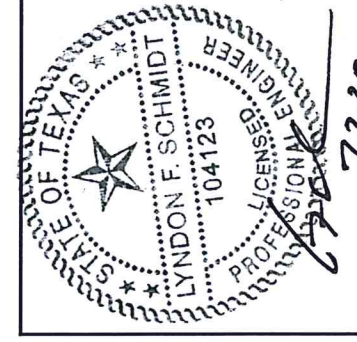
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PART OR ASSEMBLY:		HORIZONTAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
1	7/02/20	LFS	UPDATE TO 2018 IBC/IRC CODE
DATE: 10/1/14			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4486			
SHEET 3 OF 7			



1
4 VERTICAL CROSS SECTION



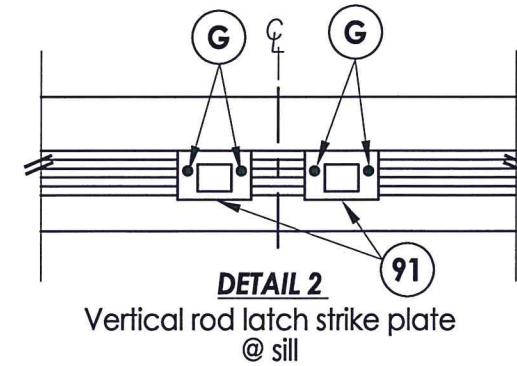
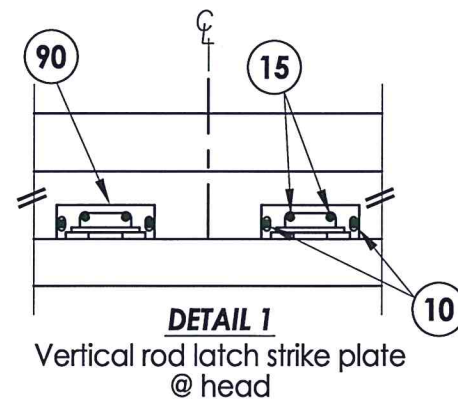
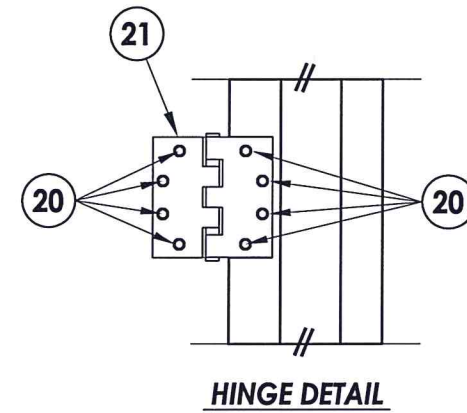
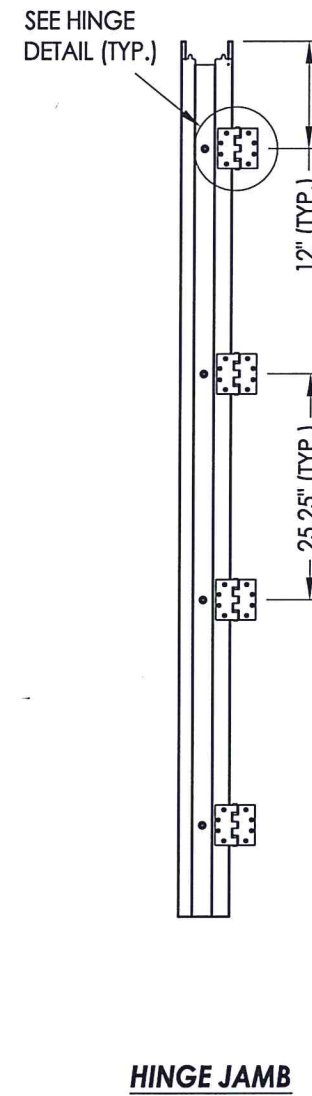
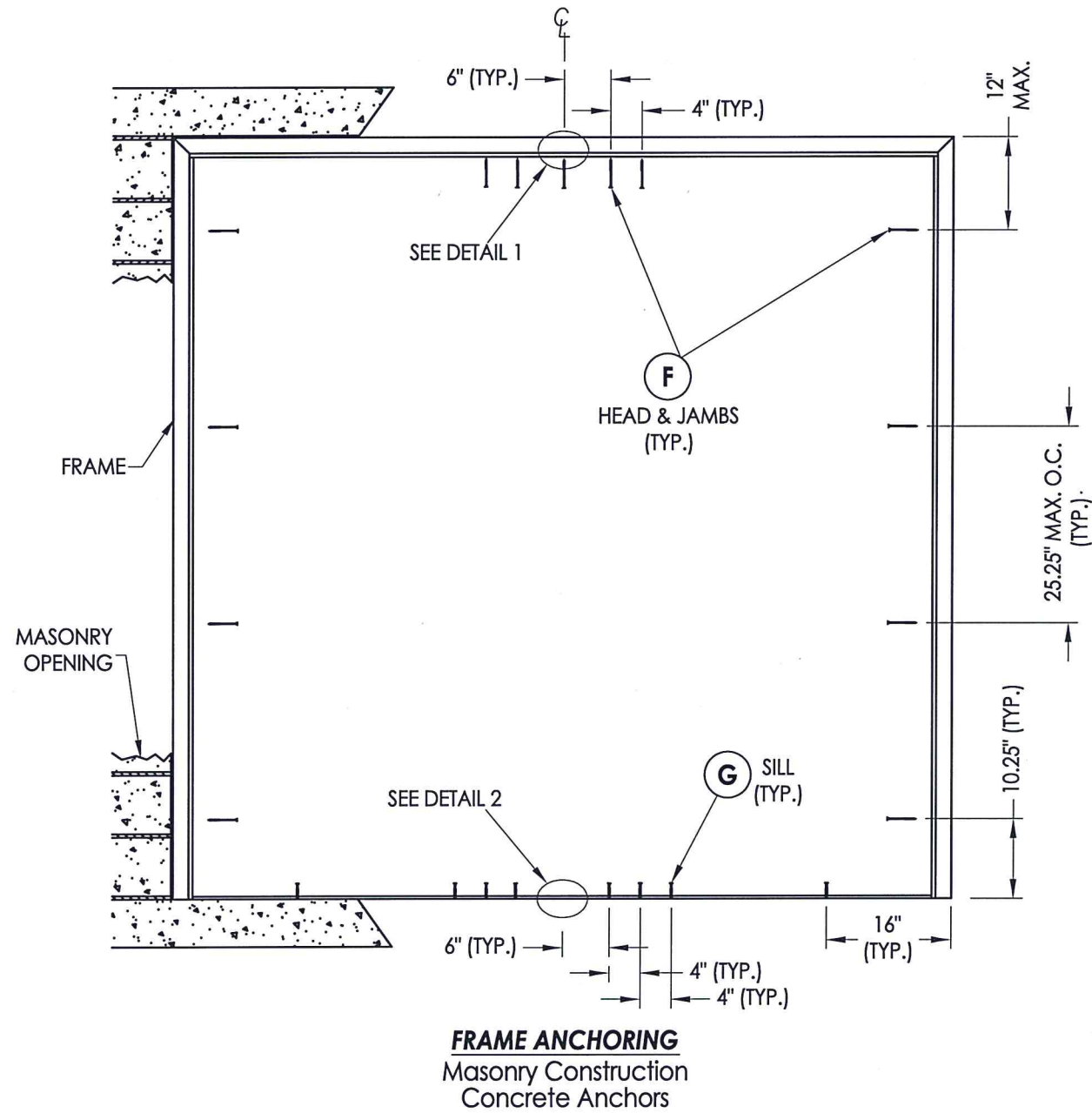
2
4 VERTICAL CROSS SECTION
Outswing configuration



Documents Prepared By: Lyndon F. Schmidt, P.E.
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RW BUILDING CONSULTANTS, INC.
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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:		CAL-ROYAL	
		STEEL COMMERCIAL DOOR	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
1	7/02/20	LFS	UPDATE TO 2018 IBC/IRC CODE
DATE: 10/1/14			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4486			
SHEET 4 OF 7			

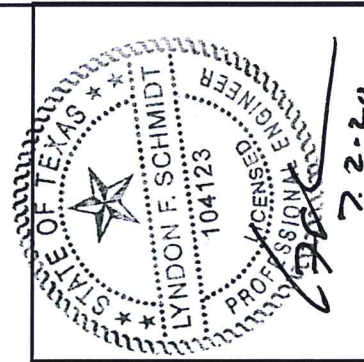


CONCRETE ANCHOR NOTES:

1. Substitution of equal concrete screws from a different supplier may have different edge distance and center distance requirements.
2. Concrete screw locations at the corners may be adjusted to maintain the minimum edge distance to mortar joints. If concrete screw locations noted as "MAX. ON CENTER" 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.
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"	2"
DYNABOLT SLEEVE ANCHOR	3/8"	1-1/2"	2-1/4"	4-1/2"

4. Embedment may be through 1-1/4" face shell of hollow block.



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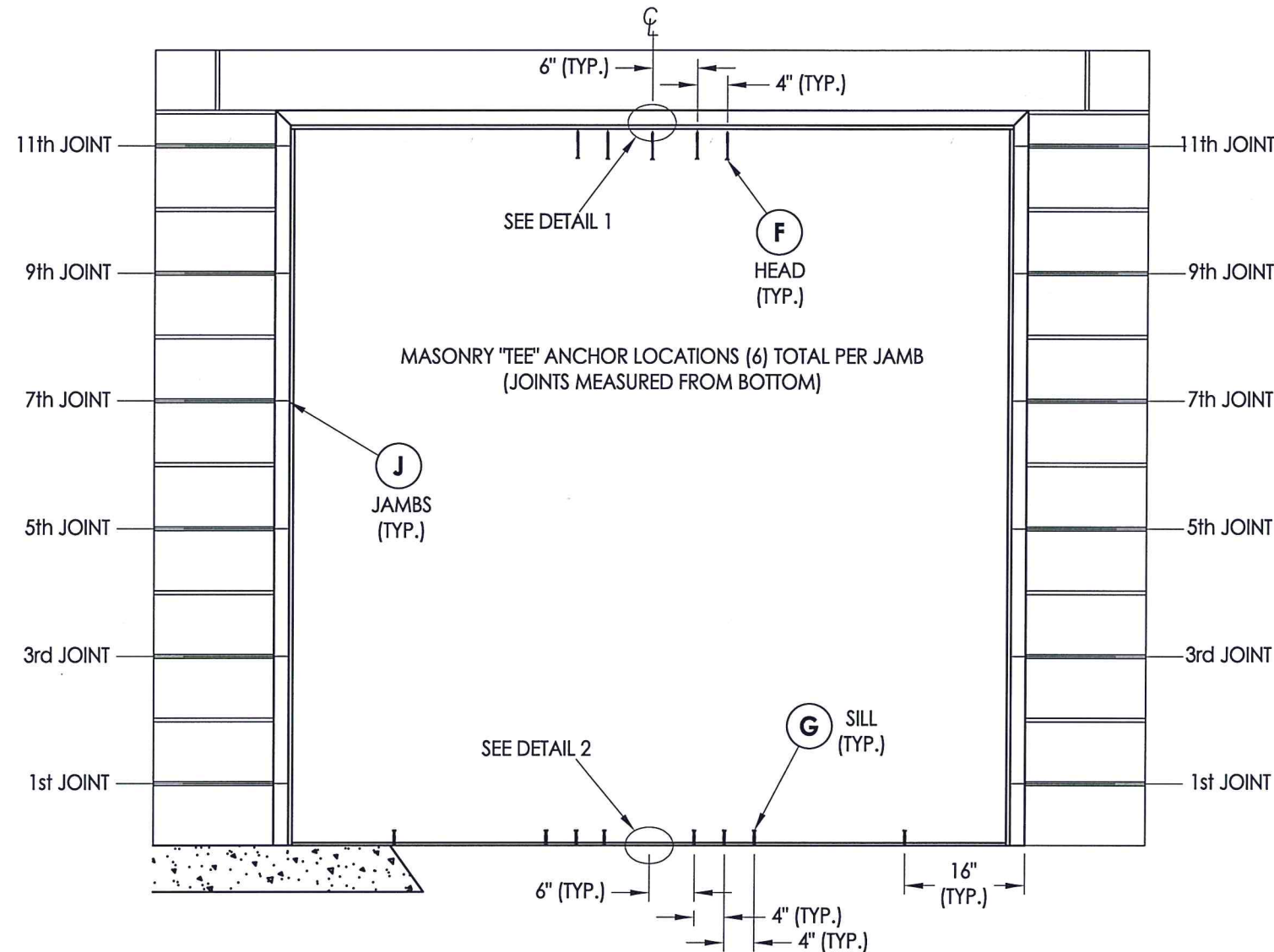
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: CAL-ROYAL
STEEL COMMERCIAL DOOR

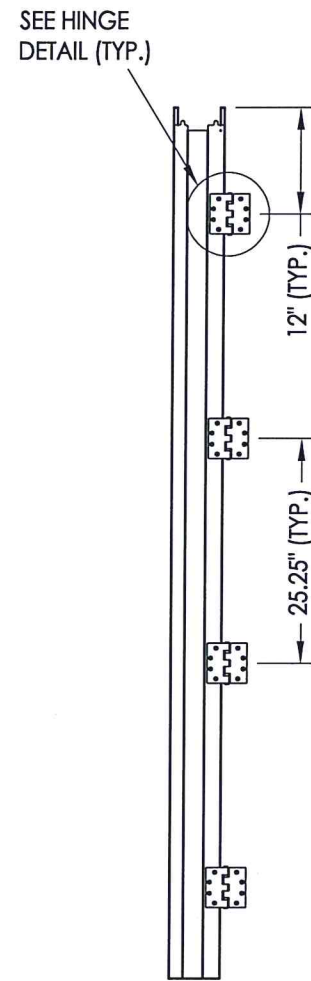
PART OR ASSEMBLY:
FRAME ANCHORING

NO.	DATE	REVISIONS
1	7/02/20	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY

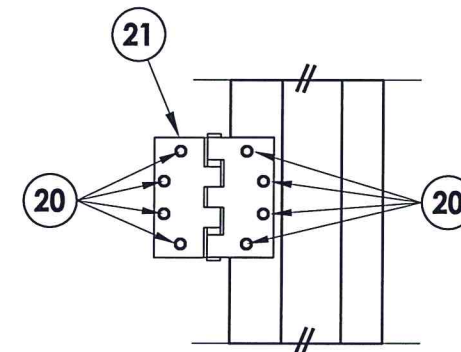
DATE: 10/1/14
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4486
SHEET 5 OF 7



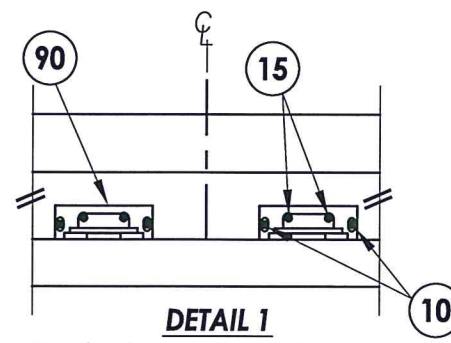
FRAME ANCHORING
Masonry Construction
Masonry "Tee" Anchors



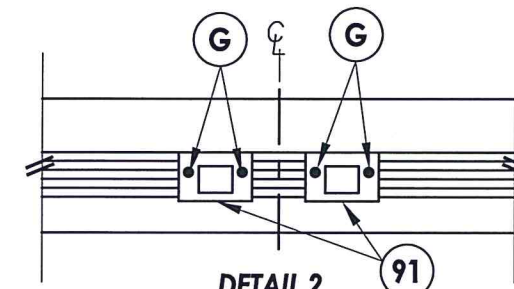
HINGE JAMB



HINGE DETAIL



DETAIL 1
Vertical rod latch strike plate
@ head

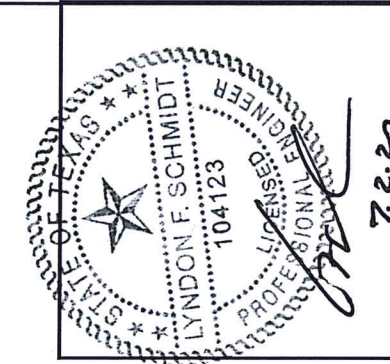


DETAIL 2
Vertical rod latch strike plate
@ sill

CONCRETE ANCHOR NOTES:

1. Substitution of equal concrete screws from a different supplier may have different edge distance and center distance requirements.
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Phone No.: 813.659.9197

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

PRODUCT: CAL-ROYAL
STEEL COMMERCIAL DOOR

PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	DESCRIPTION	BY
1	7/02/20	UPDATE TO 2018 IBC/IRC CODE	LFS

DATE: 10/1/14
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4486
SHEET 6 OF 7

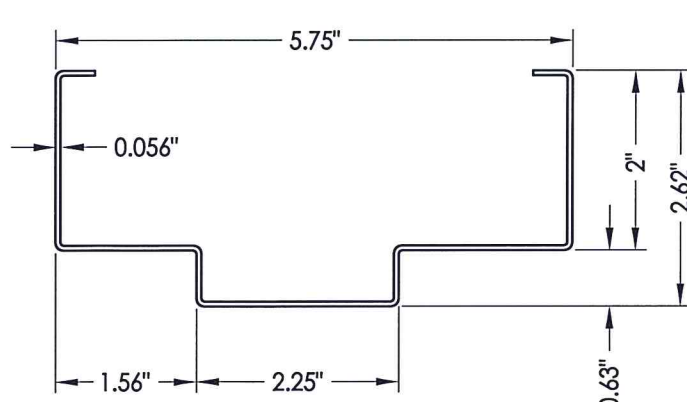
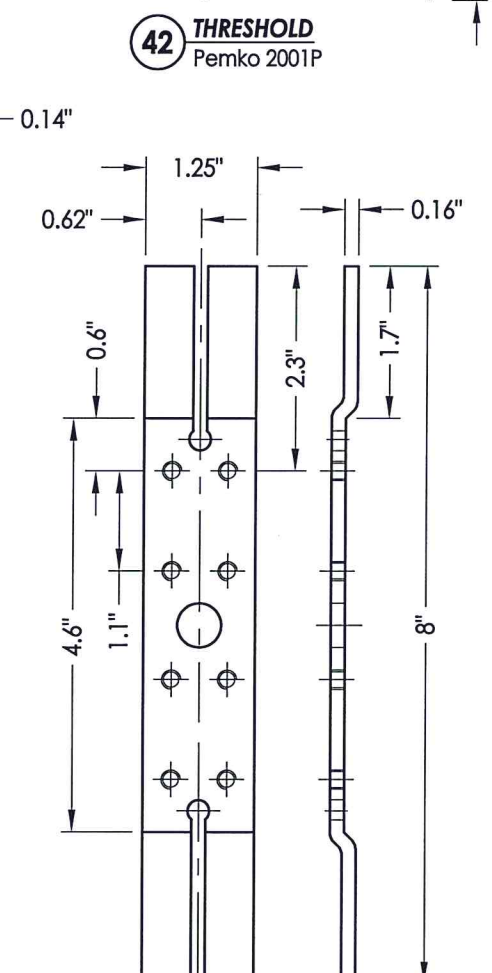
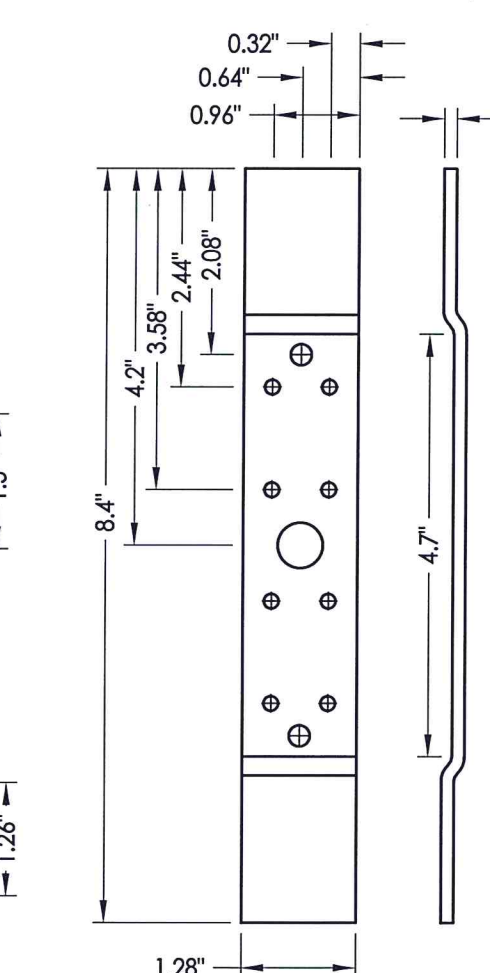
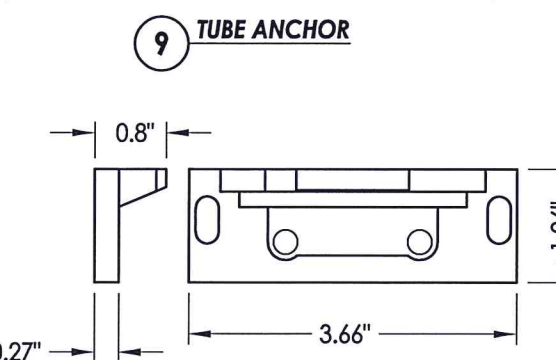
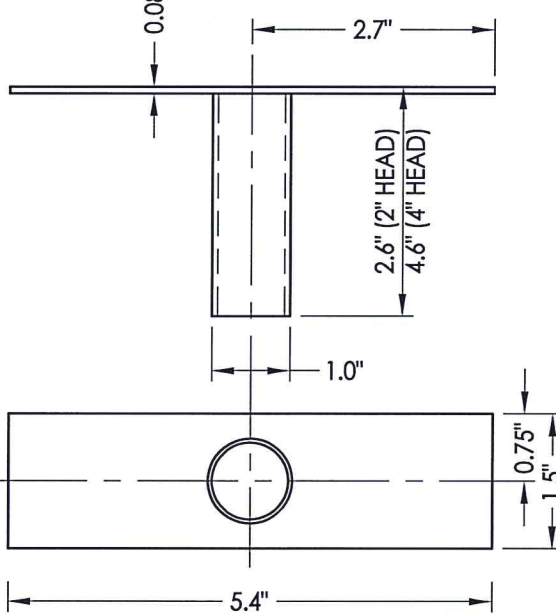
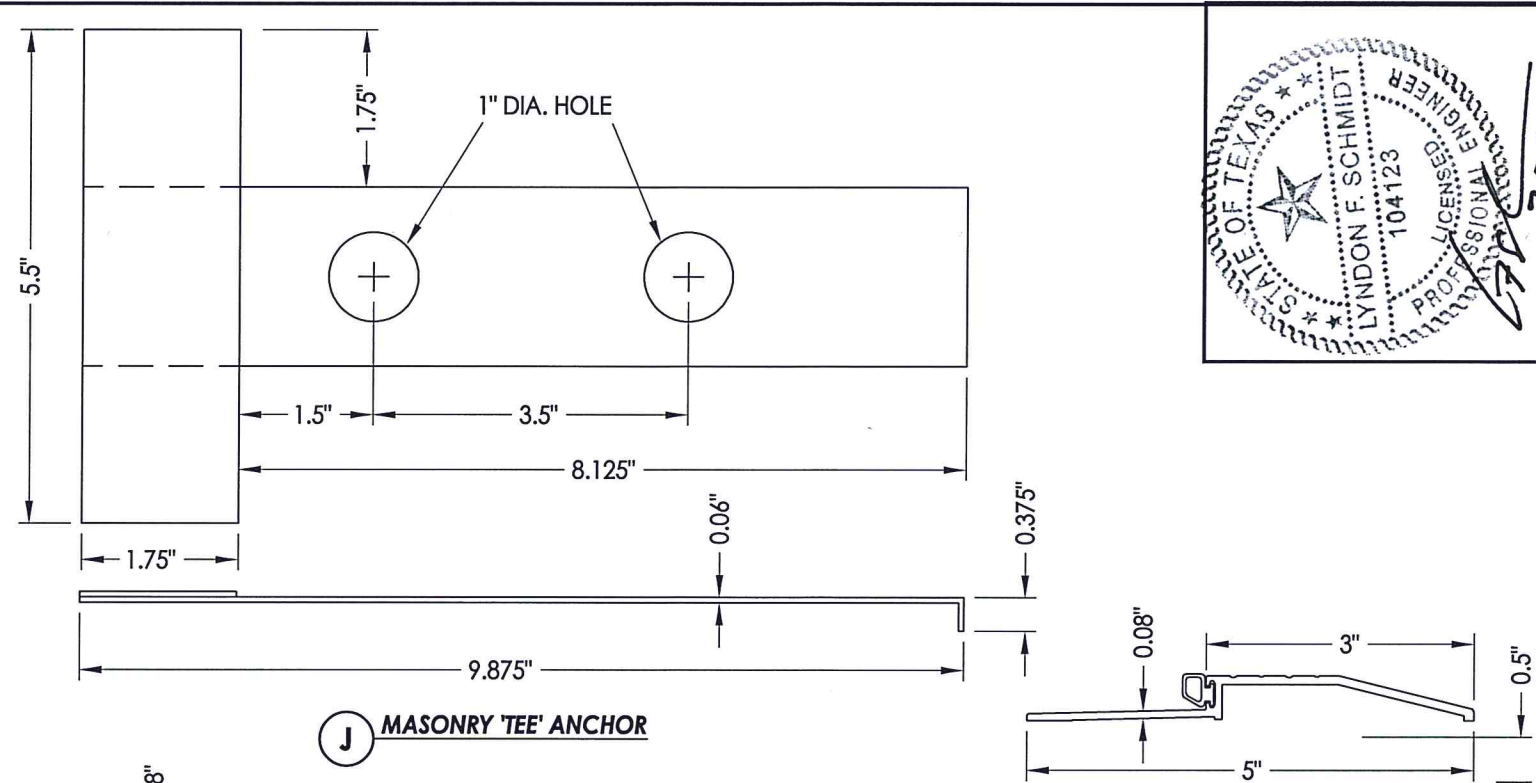
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
C	1/4" MAX. SHIM SPACE	-
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	3/8" PFH ITW DYNABOLT SLEEVE ANCHOR	STEEL
G	1/4" X 2-1/4" ITW PFH CONCRETE SCREW	STEEL
H	#8 X 1-1/2" PH WOOD SCREW	STEEL
J	MASONRY "TEE" ANCHOR	STEEL
1	CAL-ROYAL DOOR PANEL	-
3	DOOR BOTTOM CHANNEL	STEEL
4	DOOR TOP CHANNEL	STEEL
5	LOCK BOX REINFORCEMENT	STEEL
6	CLOSER REINFORCEMENT (11 gauge)	STEEL
8	WEATHERSTRIP - PEMKO 303A	NEOPRENE
9	TUBE ANCHOR	STEEL
10	#12-24 X 1" COMBINATION MACHINE / WOOD SCREW	STEEL
11	DOOR SWEEP - PEMKO 3151	PVC
13	WEATHERSTRIP - COMPRESSION BULB 1/4" X 1/2" (PEMKO S88)	NEOPRENE
15	#8-24 X 3/4" COMBINATION MACHINE / WOOD SCREW	STEEL
20	#12-24 X 1/2" PFH MACHINE SCREW	STEEL
21	4-1/2" X 4-1/2" X 0.125" TEMPLATE HINGE	STEEL
22	DOOR HINGE REINFORCEMENT	STEEL
25	HOLLOW FRAME 2"	STEEL
28	FRAME HINGE REINFORCEMENT	STEEL
29	DOOR BOTTOM REINFORCEMENT w/ STRIKE PLATE	STEEL
42	OUTSWING THRESHOLD - PEMKO 2001P	ALUM
74	CAL-ROYAL 7700-V SERIES VERTICAL ROD EXIT DEVICE	-
90	VERTICAL ROD LATCH STRIKE PLATE @ HEAD	STEEL
91	VERTICAL ROD LATCH STRIKE PLATE @ SILL	STEEL



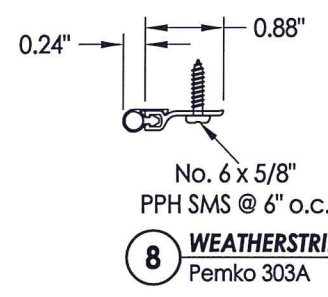
Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123

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

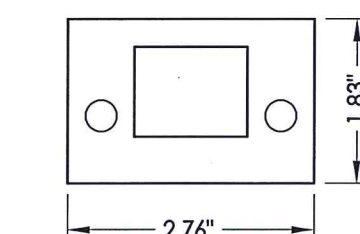
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 CERTIFICATE OF REGISTRATION # F-11852



25 HOLLOW METAL FRAME



8 WEATHERSTRIP Pemko 303A



91 VERTICAL ROD LATCH STRIKE PLATE @ Sill

42 THRESHOLD Pemko 2001P

28 FRAME HINGE REINFORCEMENT

22 DOOR HINGE REINFORCEMENT

PRODUCT:	CAL-ROYAL STEEL COMMERCIAL DOOR
PART OR ASSEMBLY:	BILL OF MATERIALS AND COMPONENTS
NO.	1
DATE	7/02/20
REVISIONS	UPDATE TO 2018 IBC/IRC CODE
LFS	BY
DATE	
DATE:	10/1/14
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4486
SHEET	7 OF 7