



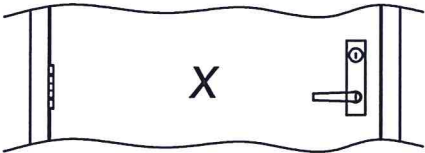
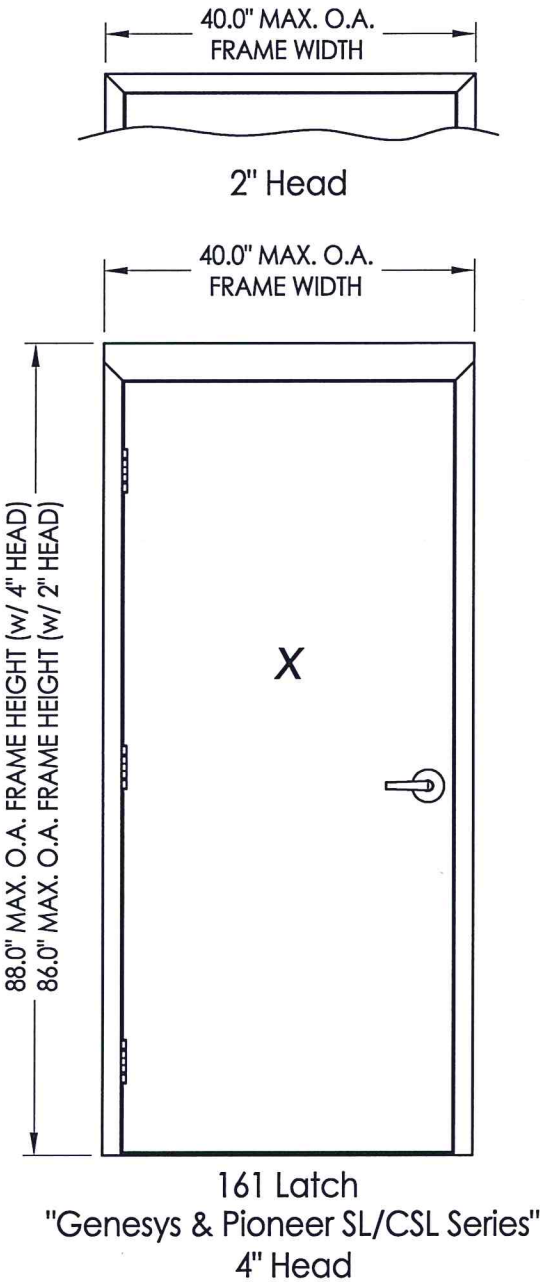
6605 Flotilla Street
City of Commerce
CA 90040

DKS SERIES 1800
STEEL COMMERCIAL SINGLE DOOR
INSWING / OUTSWING
"IMPACT"

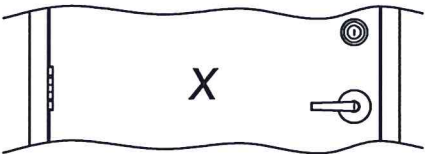
GENERAL NOTES

1. This product has been evaluated and is in compliance with the 7th Edition (2020) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. When used in areas requiring wind borne debris protection this product complies with FBC Sections 1609.1.2 & R301.2.1.2 and does not require an impact resistant covering. This product meets missile level "D" and excludes Wind Zone 4 as defined in ASTM E1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
4. This door achieves a Class I Stiffness classification per Section 8.2.2 of ANSI A250.13.
5. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.

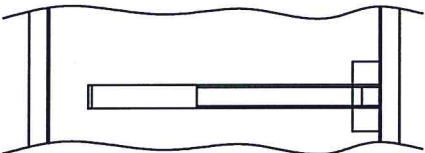
TABLE OF CONTENTS	
SHEET#	DESCRIPTION
1	Typical elevation, design pressures & general notes
2	Door panel details
3	Horizontal cross sections
4	Vertical cross sections
5	Frame anchoring
6	Frame anchoring details
7	Components
8	Bill of materials and components



86E Mortise Lock
"M Series"

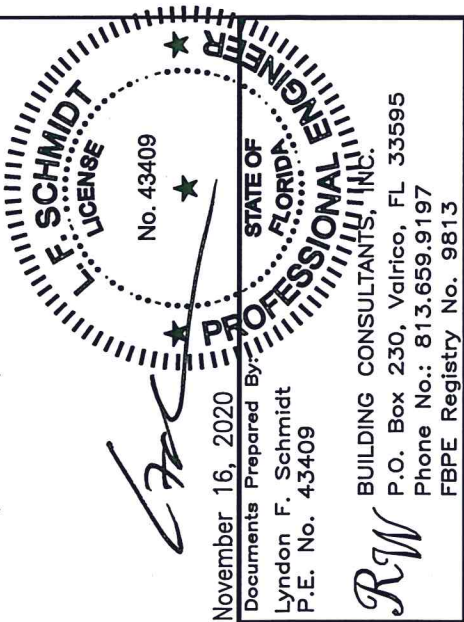


161 Latch & Deadbolt
"Pioneer SL/CSL Series" Latch
"T300 Series" Deadbolt



"F5000/5000 & F7700/7700 Series"
Panic Bar Exit Device

MAX FRAME DIMENSION	LOCK TYPE	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
40.00" x 88.00"	161 LATCH "Pioneer SL/CSL Series"	+55.0	-55.0	+55.0	-55.0
40.00" x 88.00"	161 LATCH & DEADBOLT "Pioneer SL/CSL & T300 Series"	+55.0	-55.0	+55.0	-55.0
40.00" x 88.00"	161 LATCH "Genesys Series"	+70.0	-70.0	+70.0	-70.0
40.00" x 88.00"	PANIC BAR EXIT DEVICE "F5000/5000 Series"	N/A	N/A	+50.0	-50.0
40.00" x 88.00"	PANIC BAR EXIT DEVICE "F7700/7700 Series"	N/A	N/A	+70.0	-70.0
40.00" x 88.00"	86E Mortise Lock "M Series"	+80.0	-80.0	+80.0	-80.0



November 16, 2020

Documents Prepared By:

Lyndon F. Schmidt

P.E. No. 43409

RW

BUILDING CONSULTANTS, INC.

P.O. Box 230, Valrico, FL 33595

Phone No.: 813.659.9197

FBPE Registry No. 9813

PRODUCT:

CAL-ROYAL DOOR

STEEL COMMERCIAL DOOR

PART OR ASSEMBLY:

TYPICAL ELEVATION, DESIGN

PRESSURES & GENERAL NOTES

REVISIONS

DATE

NO.

6 11/16/20 UPDATE TO 7TH ED. (2020) FBC

5 9/27/17 UPDATE TO 6TH ED. (2017) FBC

4 1/27/15 UPDATE TO 5TH ED. (2014) FBC

3 7/31/14 ADD 5000/PIONEER SERIES HDWR

2 1/26/12 UPDATE TO 2010 FBC

1 1/4/11 REVISE PANIC BAR MODEL NO.

DATE

NO.

DATE: 05/25/10

SCALE: N.T.S.

DWG. BY: JK

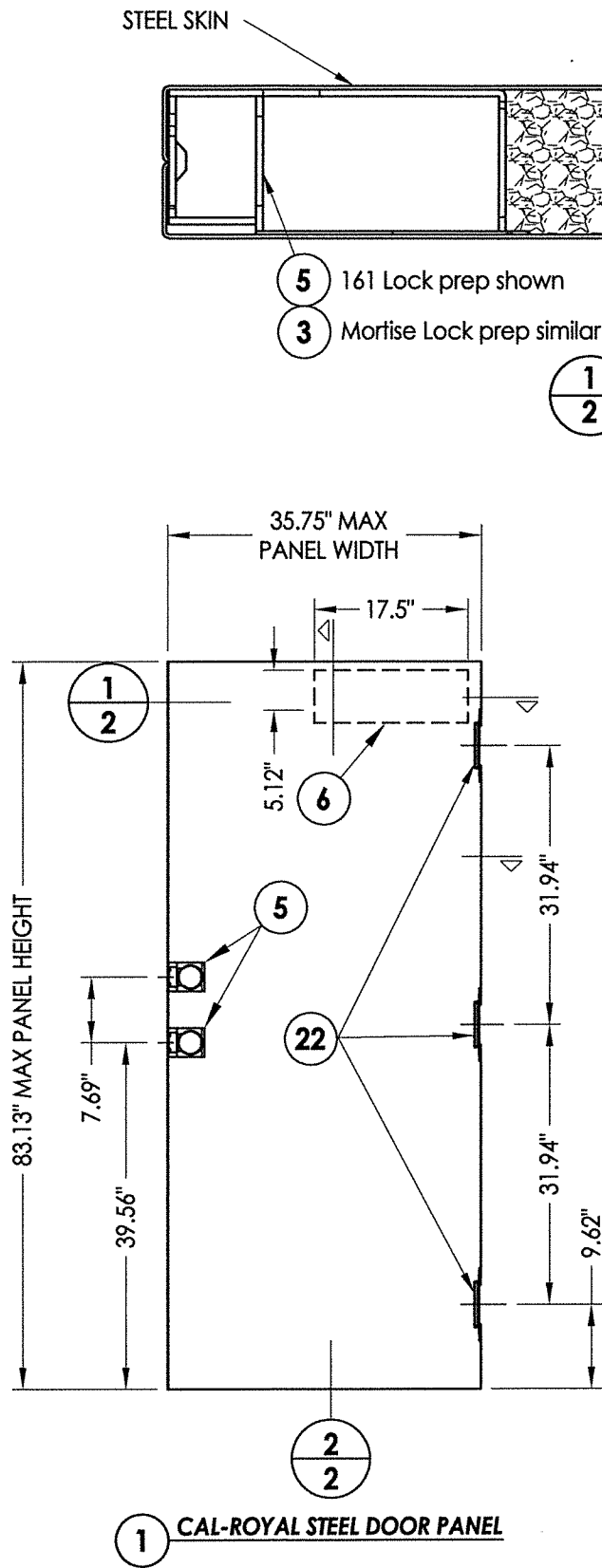
CHK. BY: LFS

DRAWING NO.:

FL-13624.3

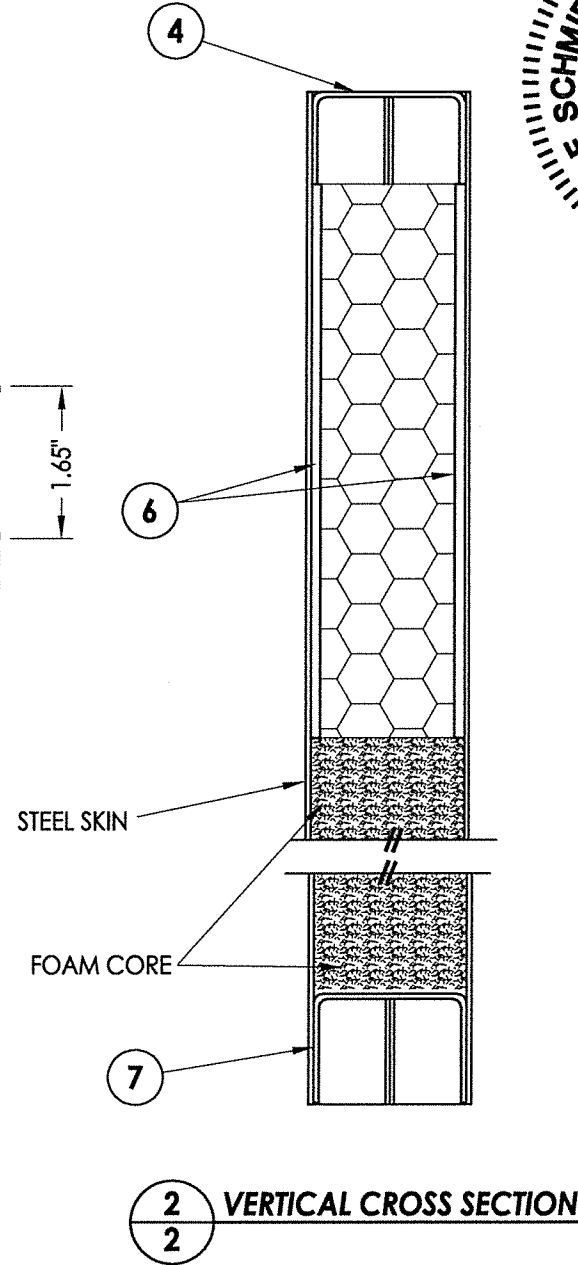
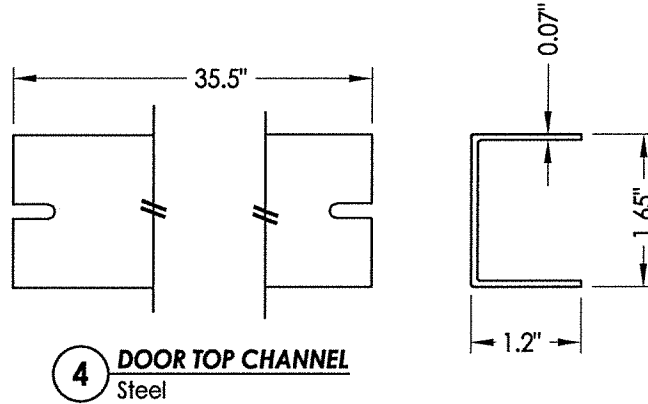
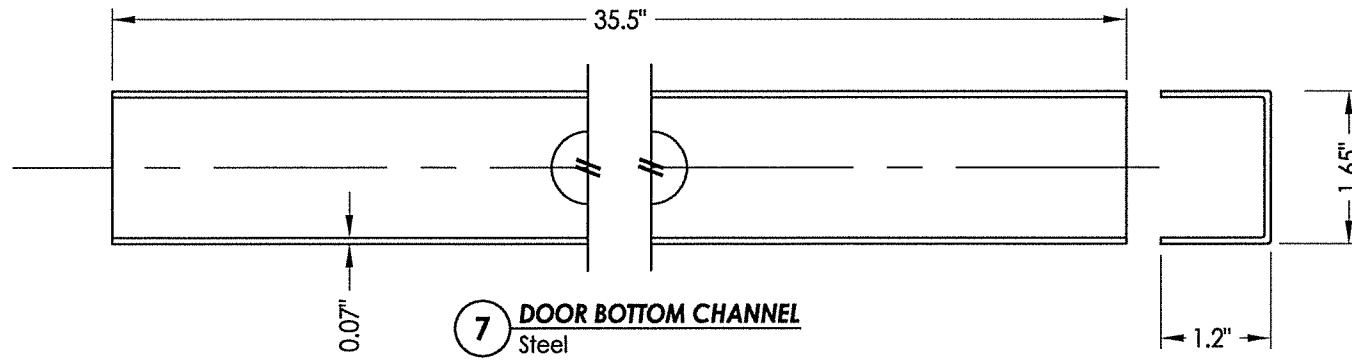
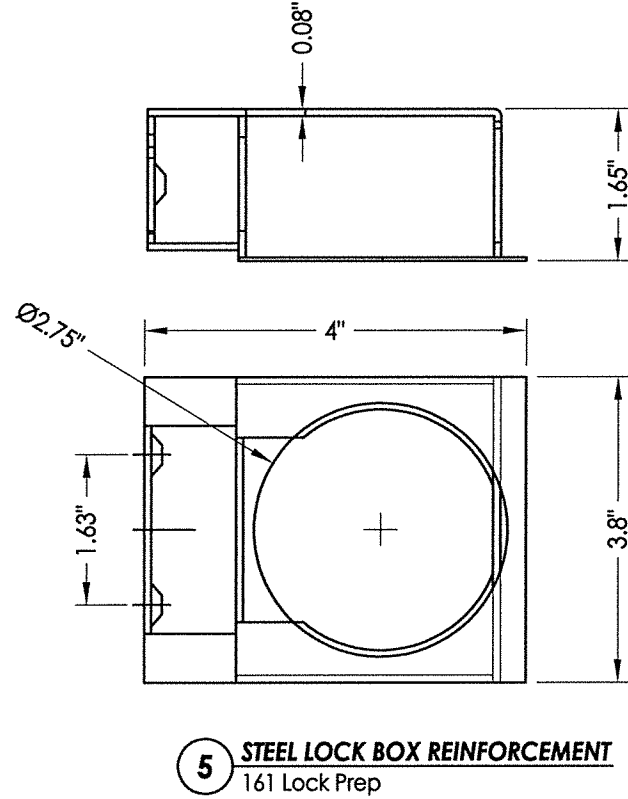
SHEET 1 OF 8

\\dc01\wbc\Clients\Cal-Royal PERMANENTVA - Florida Product Approvals\FL-13624\C - Drawings\FL 13624 (2020) R8\FL-13624.3-6.dwg



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

1
2 HORIZONTAL CROSS SECTION



Professional Engineer Seal: F. SCHMIDT, License No. 43409, State of Florida.

November 16, 2020
Documents Prepared By: Lyndon F. Schmidt
P.E. No. 43409

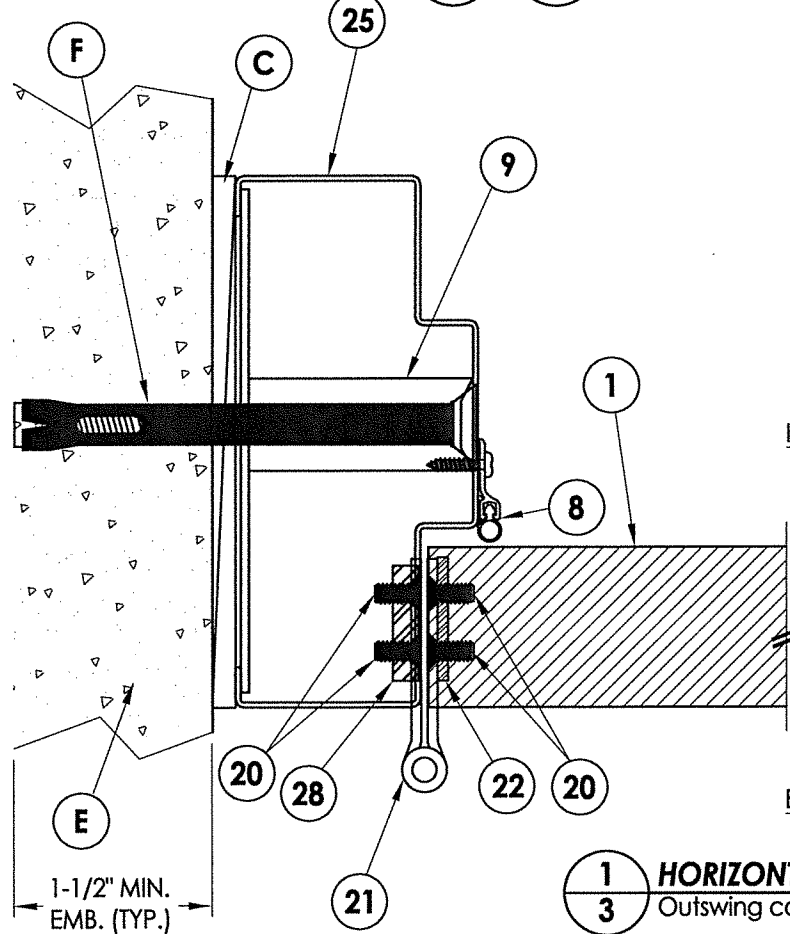
Product: CAL-ROYAL STEEL COMMERCIAL DOOR
Part or Assembly: DOOR PANEL DETAILS

NO.	DATE	REVISIONS
6	11/16/20	UPDATE TO 7TH ED. (2020) FBC
5	9/27/17	UPDATE TO 6TH ED. (2017) FBC
4	1/27/15	UPDATE TO 5TH ED. (2014) FBC
3	7/31/14	ADD 5000/PIONEER SERIES HDWR
2	1/26/12	UPDATE TO 2010 FBC
1	1/4/11	REVISE PANIC BAR MODEL NO.

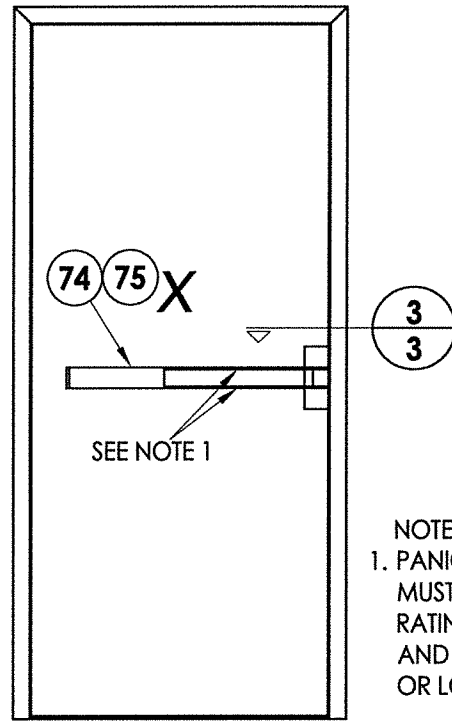
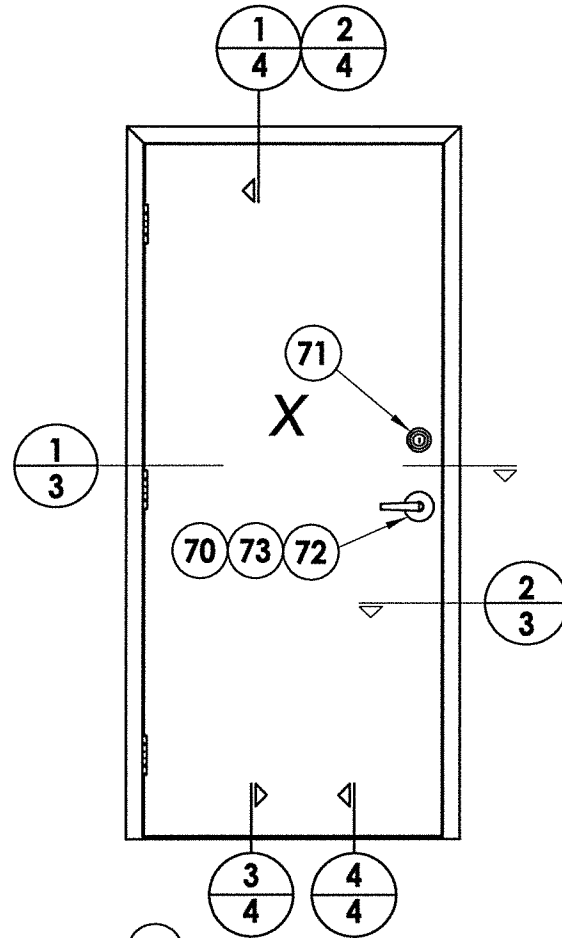
DATE: 05/25/10
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-13624.3
SHEET 2 OF 8

© 2010 R.W. BUILDING CONSULTANTS INC.

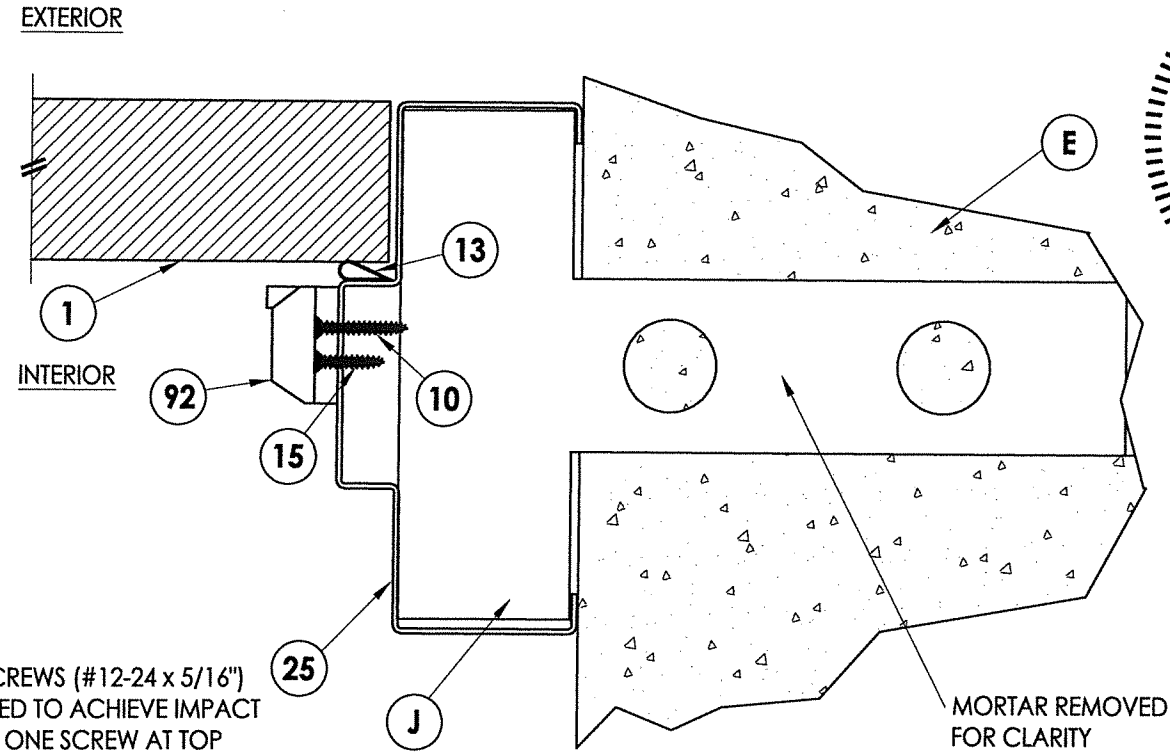
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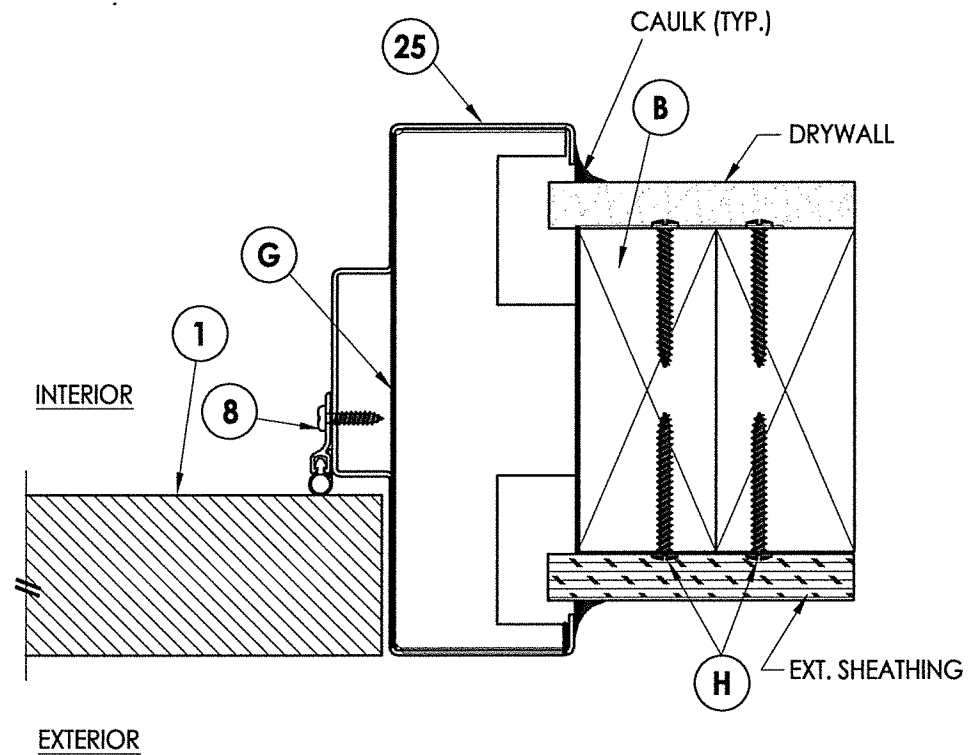
1
3 **HORIZONTAL CROSS SECTION**
Outswing configuration - Inswing also approved



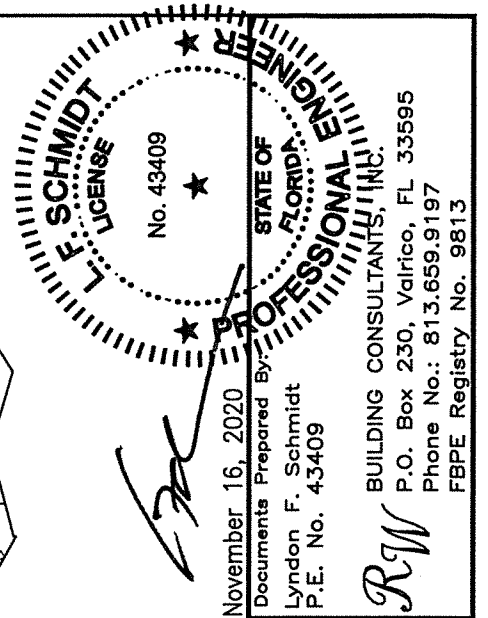
NOTE:
1. PANIC BAR SET SCREWS (#12-24 x 5/16")
MUST BE ACTIVATED TO ACHIEVE IMPACT
RATING. LOCATE ONE SCREW AT TOP
AND BOTTOM AT CENTER OF PUSH RAIL
OR LOCATE ONE SCREW AT EACH END OF BAR.



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



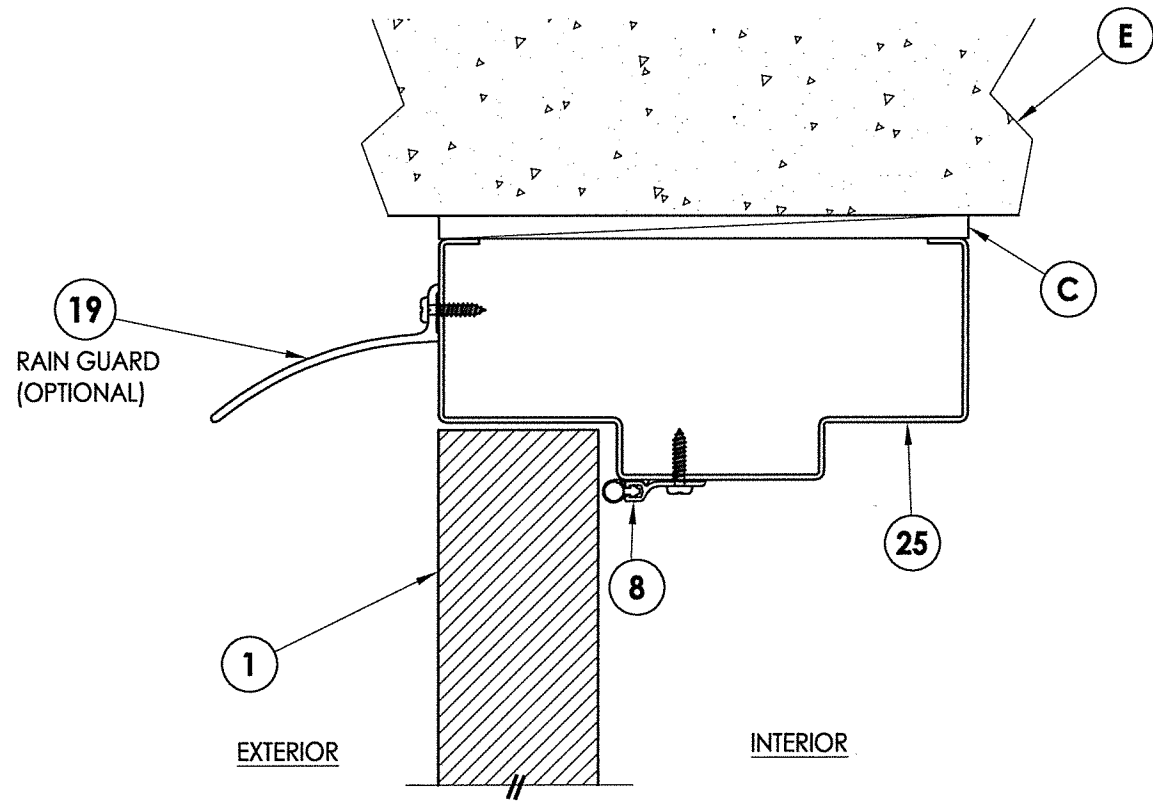
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3 **HORIZONTAL CROSS SECTION**
2X Stud Construction
Wood Stud Anchor



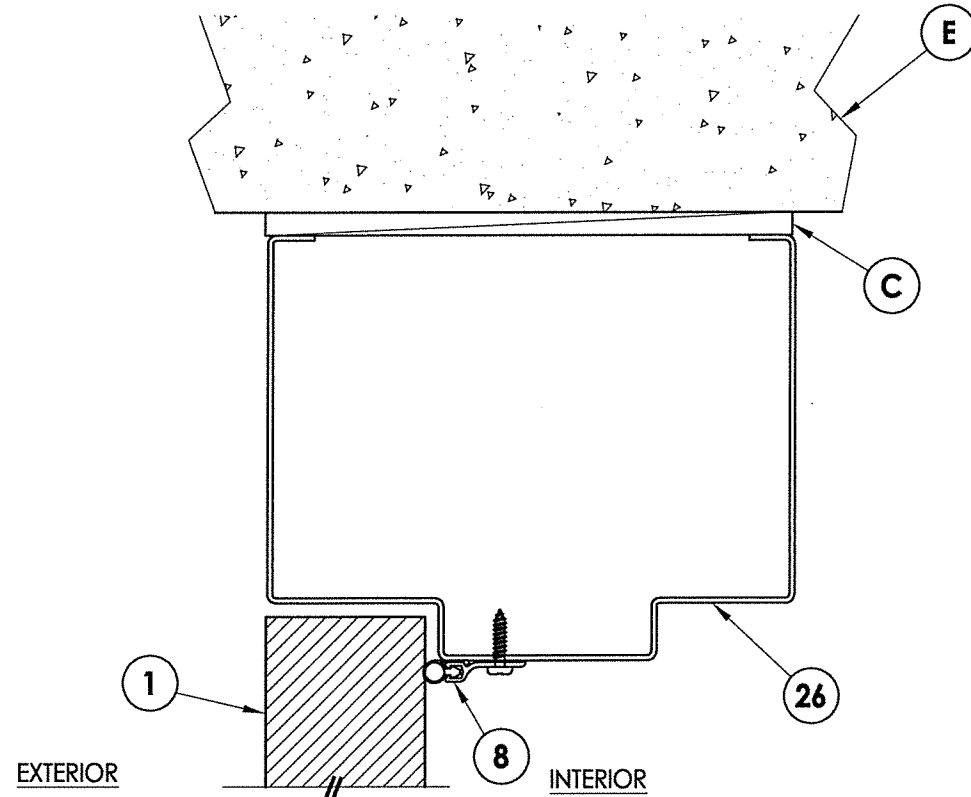
November 16, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		CAL-ROYAL		STEEL COMMERCIAL DOOR		PART OR ASSEMBLY:		HORIZONTAL CROSS SECTIONS	
LFS	JK	JK	JK	LFS	JK	LFS	BY	REVISIONS	
6	11/16/20	UPDATE TO 7TH ED. (2020)	FBC	JK	11/16/20	UPDATE TO 7TH ED. (2020)	FBC	DATE: 5/25/10	
5	9/27/17	UPDATE TO 6TH ED. (2017)	FBC	JK	9/27/17	UPDATE TO 6TH ED. (2017)	FBC	SCALE: N.T.S.	
4	1/27/15	UPDATE TO 5TH ED. (2014)	FBC	JK	1/27/15	UPDATE TO 5TH ED. (2014)	FBC	DWG. BY: JK	
3	7/31/14	ADD 5000/PIONEER SERIES HDWR	LFS	JK	7/31/14	ADD 5000/PIONEER SERIES HDWR	LFS	CHK. BY: LFS	
2	1/26/12	UPDATE TO 2010 FBC	JK	JK	1/26/12	UPDATE TO 2010 FBC	JK	DRAWING NO.: FL-13624.3	
1	1/4/11	REVISE PANIC BAR MODEL NO.	LFS	BY	1/4/11	REVISE PANIC BAR MODEL NO.	LFS	SHEET 3 OF 8	
NO.		DATE		REVISED		BY		DATE	

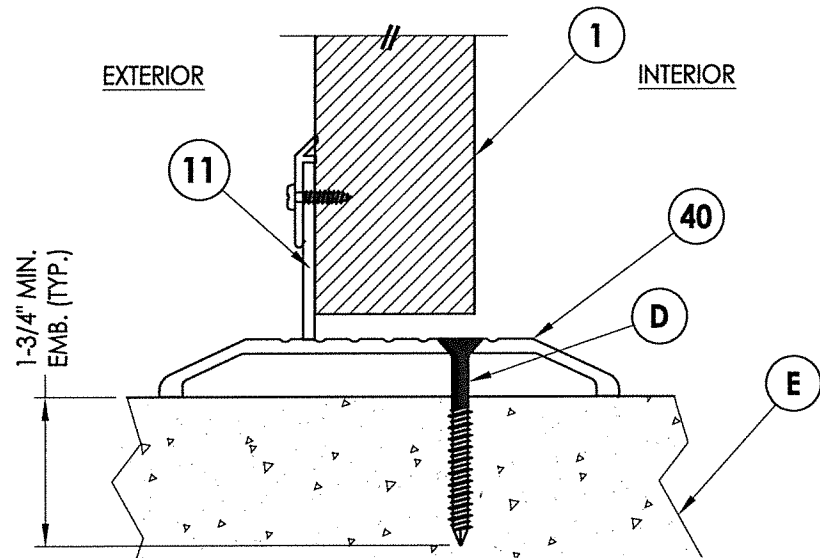
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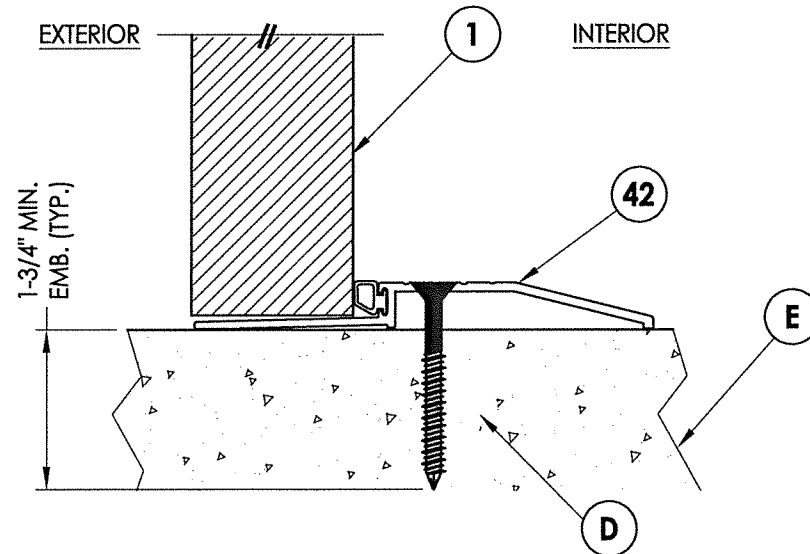
1 **VERTICAL CROSS SECTION**
4 Outswing configuration - Inswing also approved



2 **VERTICAL CROSS SECTION**
4 Outswing configuration - Inswing also approved



3 **VERTICAL CROSS SECTION**
4 Inswing configuration



4 **VERTICAL CROSS SECTION**
4 Outswing configuration

F. SCHMIDT
LICENSE
No. 43409

November 16, 2020

Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

STATE OF FLORIDA
PROFESSIONAL ENGINEER

R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		CAL-ROYAL	
		STEEL COMMERCIAL DOOR	
		PART OR ASSEMBLY:	
		VERTICAL CROSS SECTIONS	
NO.	DATE	REVISIONS	BY
6	11/16/20	UPDATE TO 7TH ED. (2020) FBC	LFS
5	9/27/17	UPDATE TO 6TH ED. (2017) FBC	JK
4	1/27/15	UPDATE TO 5TH ED. (2014) FBC	JK
3	7/31/14	ADD 5000/PIONEER SERIES HDWR	LFS
2	1/26/12	UPDATE TO 2010 FBC	JK
1	1/4/11	REVISE PANIC BAR MODEL NO.	LFS

DATE: 5/25/10

SCALE: N.T.S.

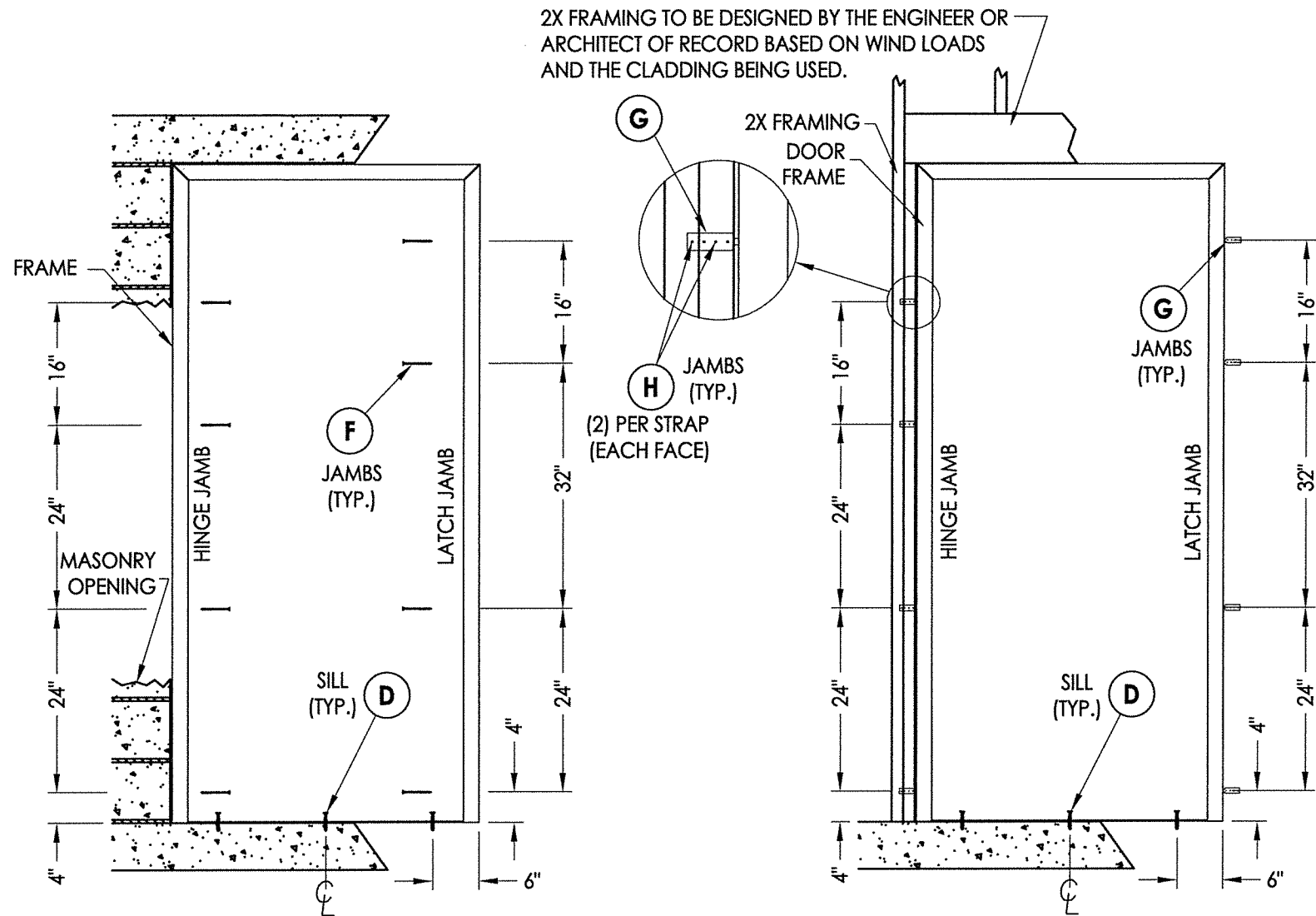
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CHK. BY: LFS

DRAWING NO.: FL-13624.3

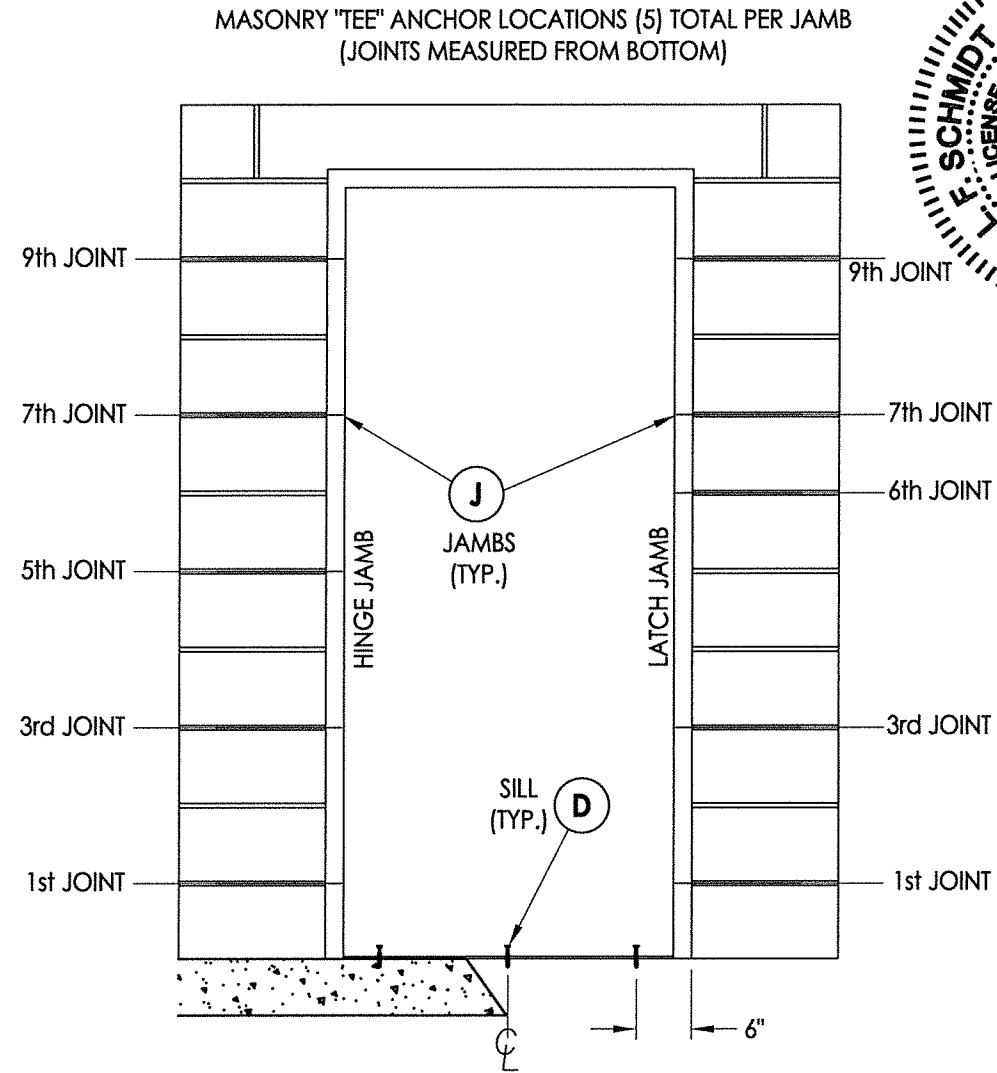
SHEET 4 OF 8

R:\Clients\Cal-Royal Permanent\A - Florida Product Approvals\FL-13624\C - Drawings\FL-13624.3-6.dwg, 3-5



FRAME ANCHORING
Masonry Construction
Concrete Anchors

FRAME ANCHORING
2X Stud Construction
Strap Anchors



FRAME ANCHORING
Masonry Construction
Masonry "Tee" Anchors

CONCRETE ANCHOR NOTES:

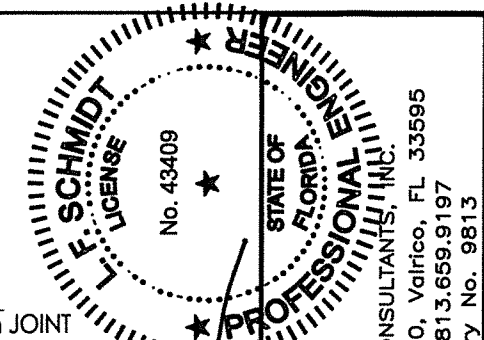
1. Substitution of equal concrete screws from a different supplier may have different edge distance and center distance requirements.
2. Concrete screw locations at the corners may be adjusted to maintain the minimum edge distance to mortar joints. If concrete screw locations noted as "MAX. ON CENTER"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

WOOD SCREW INSTALLATION NOTES:

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



November 16, 2020
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R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:
CAL-ROYAL
STEEL COMMERCIAL DOOR
PART OR ASSEMBLY:
FRAME ANCHORING

LFS	JFK	JFK	LFS	JFK	LFS	BY
6	11/16/20	UPDATE TO 7TH ED. (2020) FBC	5	9/27/17	UPDATE TO 6TH ED. (2017) FBC	JK
4	1/27/15	UPDATE TO 5TH ED. (2014) FBC	3	7/31/14	ADD 5000/PIONEER SERIES HDWR	JK
2	1/26/12	UPDATE TO 2010 FBC	1	1/4/11	REVISE PANIC BAR MODEL NO.	JK
NO.	DATE		NO.	DATE		

DATE: 05/25/10

SCALE: N.T.S.

DWG. BY: JK

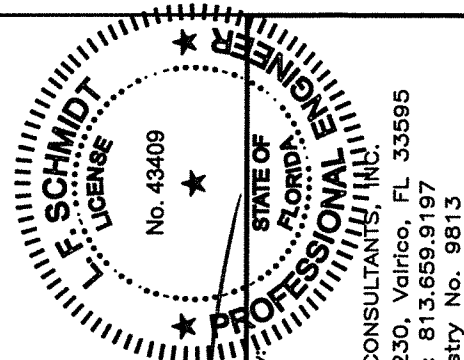
CHK. BY: LFS

DRAWING NO.:

FL-13624.3

SHEET 5 OF 8

Technical drawing of a vertical assembly. A central vertical component is shown between two vertical lines. Callout 10 points to the left side of the central component. Callout 15 points to the right side of the central component. Callout 92 points to the top of the central component. The drawing includes break lines at the top and bottom.



Documents Prepared By
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PART OR ASSEMBLY:

BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

6	11/16/20	UPDATE TO 7TH ED. (2020)	FBC	LFS
5	9/27/17	UPDATE TO 6TH ED. (2017)	FBC	JK
4	1/27/15	UPDATE TO 5TH ED. (2014)	FBC	JK
3	7/31/14	ADD 5000/PIONEER SERIES HDWR	LFS	
2	1/26/12	UPDATE TO 2010 FBC		JK
1	1/4/11	REVISE PANIC BAR MODEL NO.		LFS
NO.	DATE			BY
				REVISIONS

DATE: 05/25/10

SCALE: N.T.S.

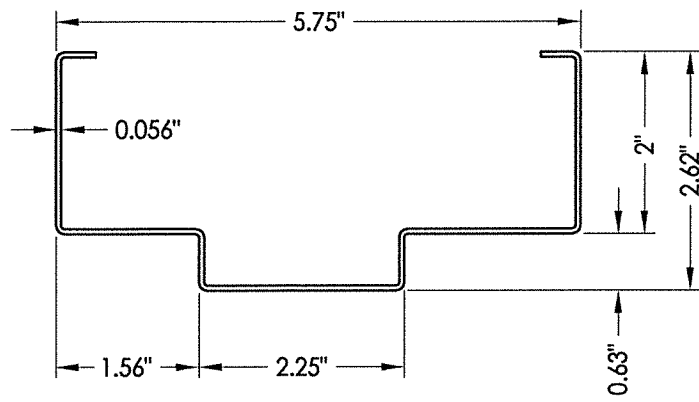
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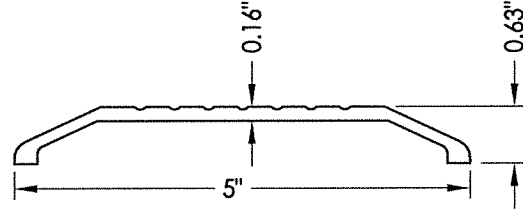
DRAWING NO.: FL-13624.3

SHEET 6 OF 8

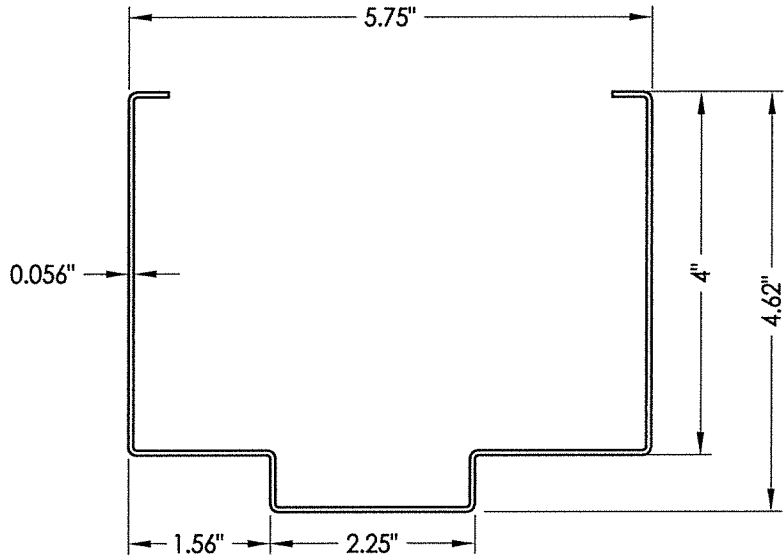
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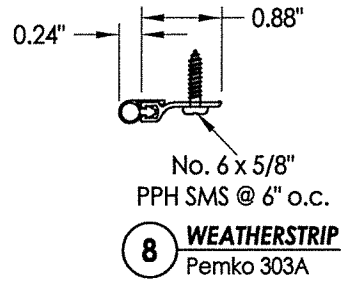
26 HOLLOW METAL FRAME
2" HEAD



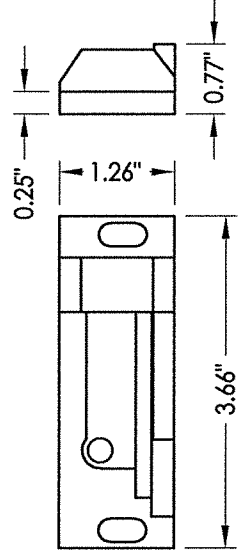
40 THRESHOLD
Pemko 156



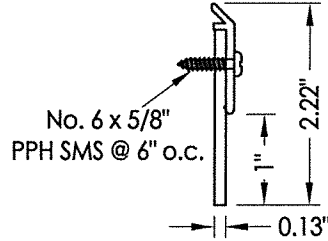
26 HOLLOW METAL FRAME
4" HEAD



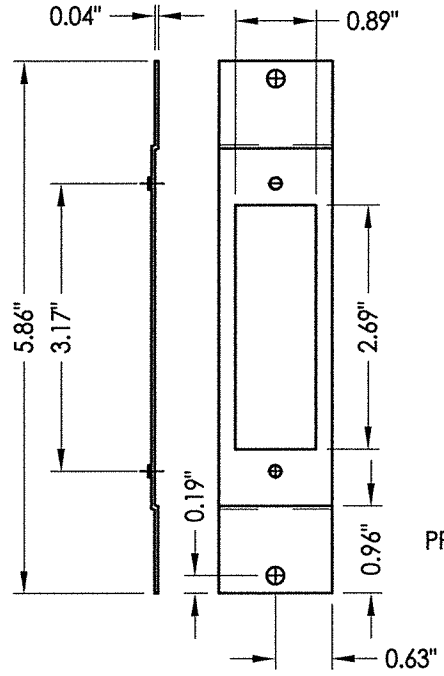
8 WEATHERSTRIP
Pemko 303A



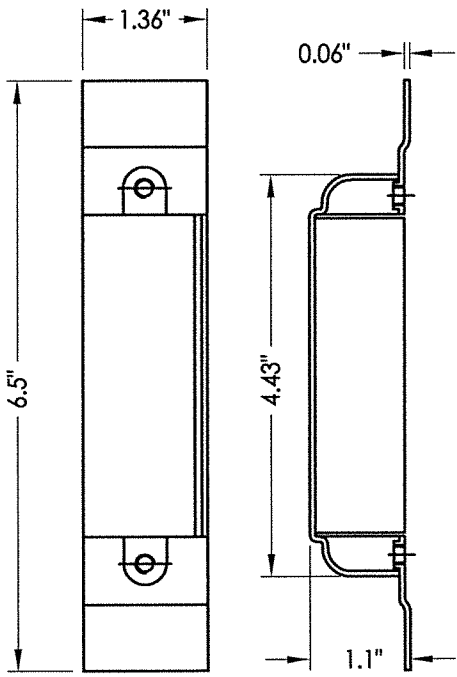
92 PANIC BAR LATCH STRIKE PLATE
@ Jamb



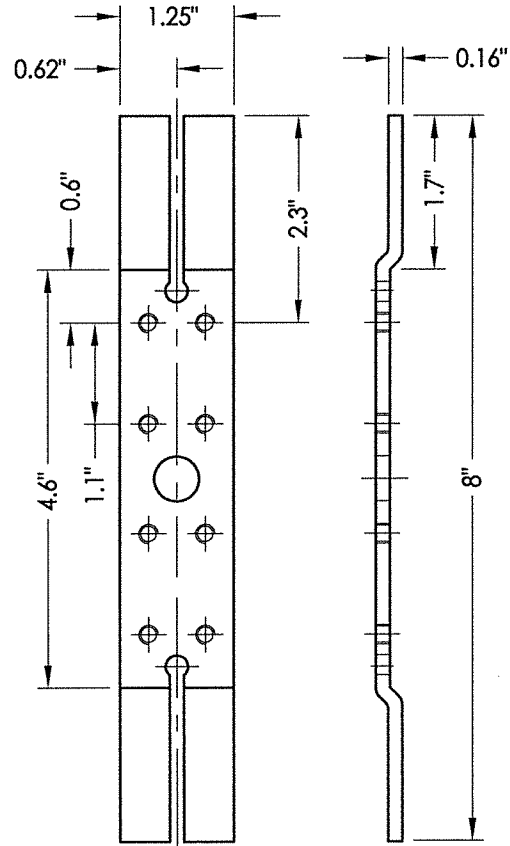
11 DOOR SWEEP
Pemko 3151



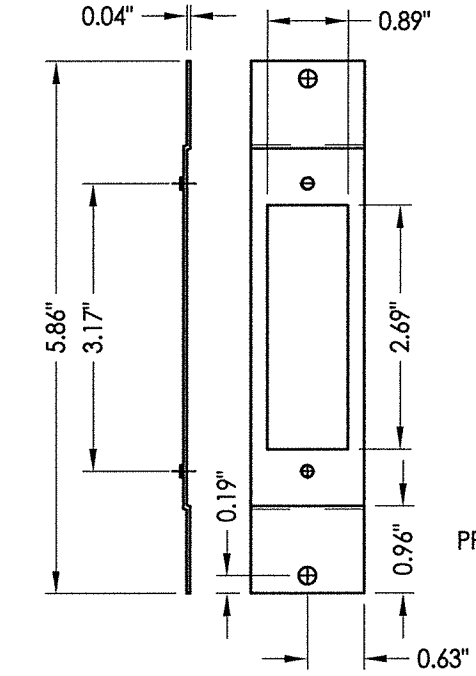
19 RAIN GUARD
Pemko 346



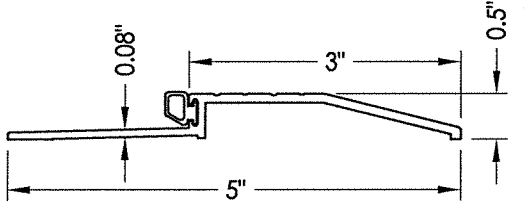
30 DOOR LATCH REINFORCEMENT
Mortise Lock only



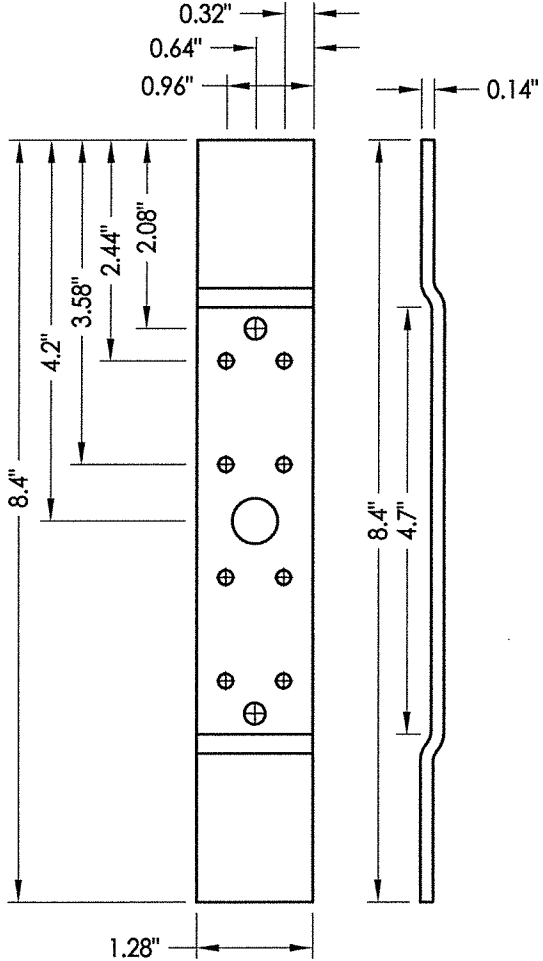
22 DOOR HINGE REINFORCEMENT



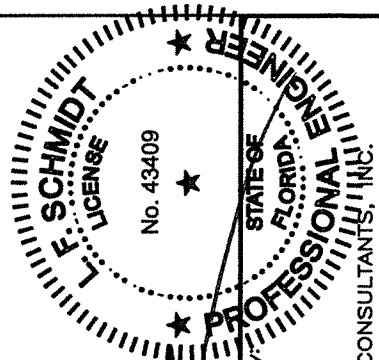
27 FRAME LATCH STRIKE REINFORCEMENT



42 THRESHOLD
Pemko 2001P



28 FRAME HINGE REINFORCEMENT

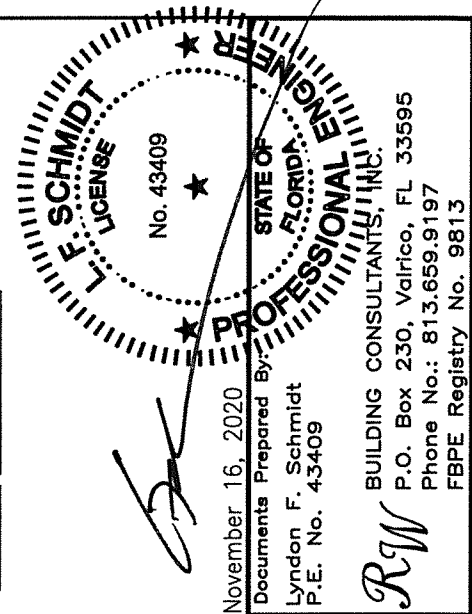


November 16, 2020
Documents Prepared By:
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R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		CAL-ROYAL		STEEL COMMERCIAL DOOR	
PART OR ASSEMBLY:		COMPONENTS			
REVISIONS		LFS	JK	JK	LFS
6	11/16/20	UPDATE TO 7TH ED. (2020)	FBC	FBC	FBC
5	9/27/17	UPDATE TO 6TH ED. (2017)	FBC	FBC	FBC
4	1/27/15	UPDATE TO 5TH ED. (2014)	FBC	FBC	FBC
3	7/31/14	ADD 5000/PIONEER SERIES HDWR	HDWR	HDWR	HDWR
2	1/26/12	UPDATE TO 2010 FBC	FBC	FBC	FBC
1	1/4/11	REVISE PANIC BAR MODEL NO.	MODEL NO.	MODEL NO.	MODEL NO.
NO.	DATE	BY			

DATE: 05/25/10
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-13624.3
SHEET 7 OF 8



SHEET		8		OF		8	
DRAWING NO.: FL-13624.3							
CHK. BY:		LFS					
DWG. BY:		JK					
SCALE:		N.T.S.					
DATE:		05/25/10					
6	11/16/20	UPDATE TO 7TH ED.	(2020)	FBC	LFS	PRODUCT: CAL-ROYAL STEEL COMMERCIAL DOOR	
5	9/27/17	UPDATE TO 6TH ED.	(2017)	FBC	JK		
4	1/27/15	UPDATE TO 5TH ED.	(2014)	FBC	JK		
3	7/31/14	ADD 5000/PIONEER SERIES HDWR			LFS		
2	1/26/12	UPDATE TO 2010 FBC			JK		
1	1/4/11	REVISE PANIC BAR MODEL NO.			LFS	PART OR ASSEMBLY: BILL OF MATERIALS AND COMPONENTS	
NO.	DATE				BY		
					REVISIONS		