



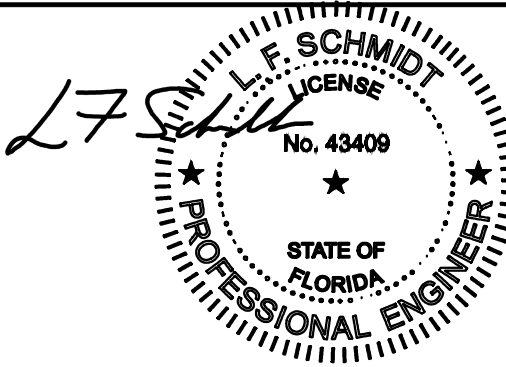
STEEL DOOR & FRAME SYSTEMS, INC.

DKS SERIES 1800
STEEL COMMERCIAL DOOR
OUTSWING
"IMPACT"

GENERAL NOTES

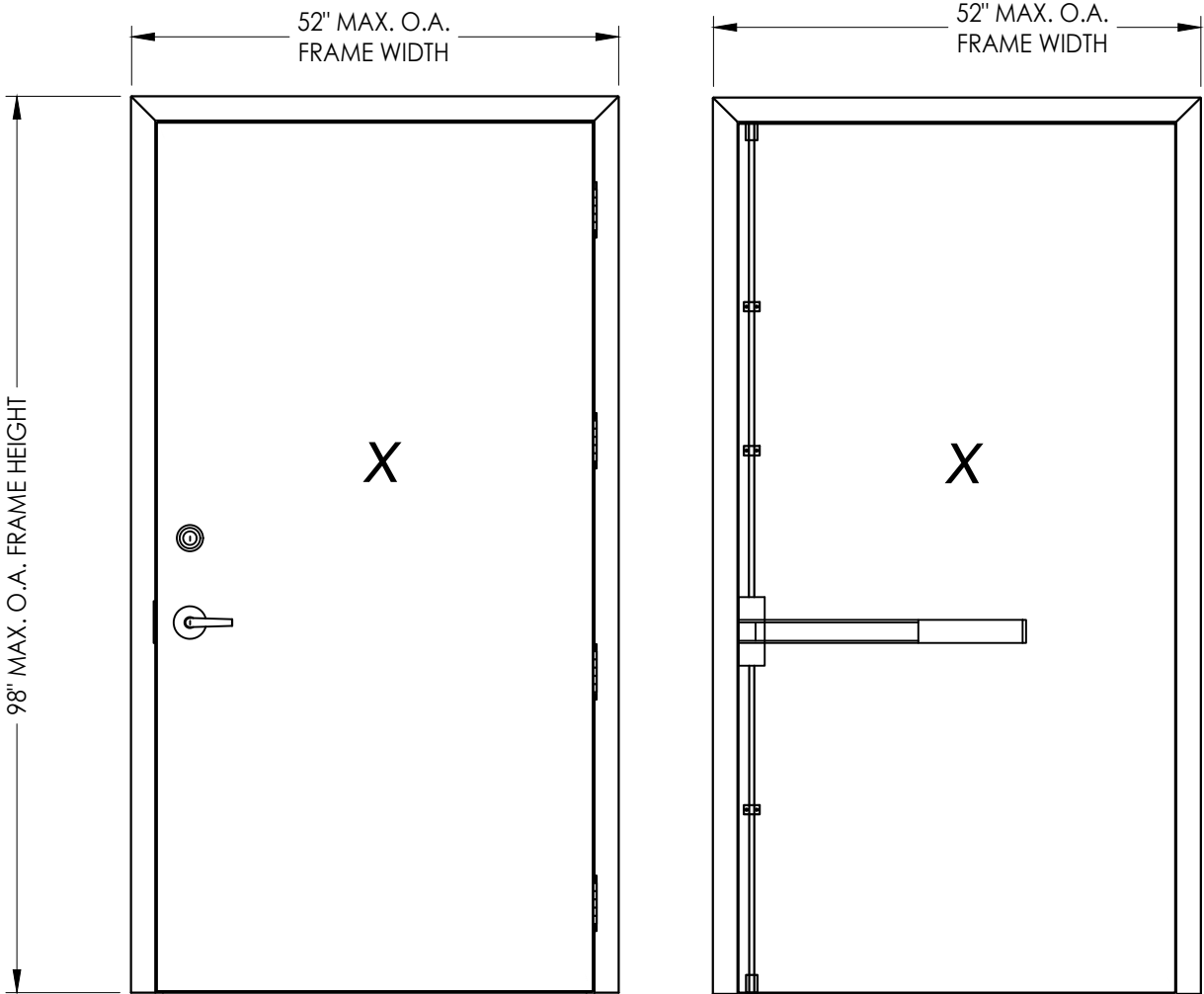
1. This product has been evaluated and is in compliance with the 8th Edition (2023) Florida Building Code (FBC) structural requirements including the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. When used in the "HVHZ" this product complies with Section 1626 of the Florida Building Code and does not require an impact resistant covering.
4. When used in areas outside of the "HVHZ" 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 includes Wind Zone 4 as defined in ASTM E 1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
5. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
6. This product does not meet the water infiltration requirements for the "HVHZ" and shall be installed only in non-habitable areas or at habitable locations protected by an overhang or canopy such that the angle between the edge of canopy or overhang to sill is less than 45 degrees.
7. When used in the "HVHZ", steel must be protected as specified in FBC Section 2222.6

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



This item has been digitally signed and sealed by
L. F. Schmidt, P.E. on the date adjacent to the seal.
Printed copies of this document are not
considered signed and sealed and the signature
must be verified on any electronic copies.

THIS PRODUCT APPROVAL IS VALID
ONLY FOR THE STATE OF FLORIDA



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

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

OVERALL FRAME DIMENSION	LOCK TYPE	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
52.0" x 98.0"	161 LATCH & DEADBOLT "PIONEER SL/CSL & T300 Series"	+80.0	-80.0
40.0" x 98.0"	PANIC BAR EXIT DEVICE w/ VERTICAL RODS "7700-V Series"	+70.0	-70.0
52.0" x 98.0"	PANIC BAR EXIT DEVICE w/ VERTICAL RODS "7700-V Series"	+50.0	-50.0

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

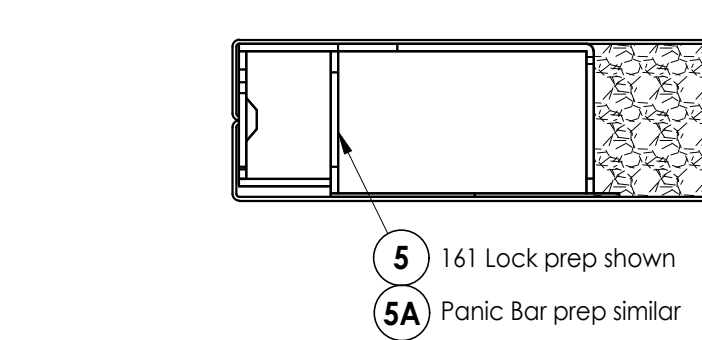
PRODUCT: DKS
STEEL COMMERCIAL DOOR

PART OR ASSEMBLY:
TYPICAL ELEVATION, DESIGN
PRESSURES & GENERAL NOTES

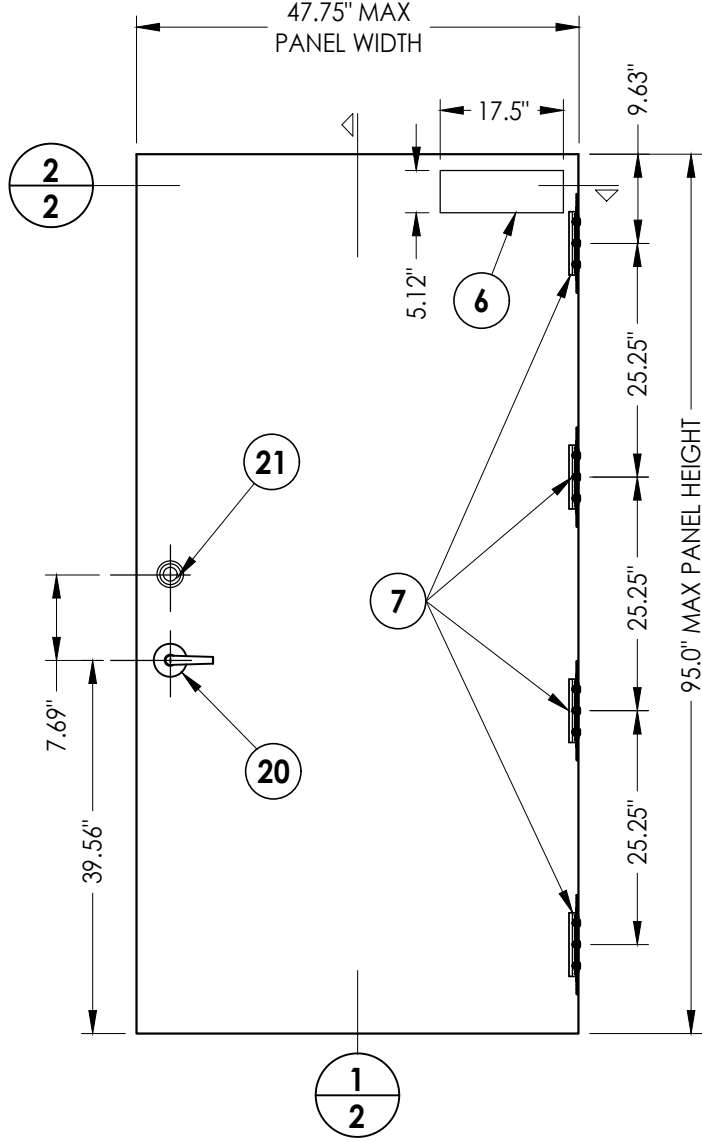
NO.	DATE	REVISIONS
1	7/01/23	UPDATE TO 8TH ED. (2023) FBC
		LFS
		BY

DATE: 3/21/22
SCALE: N.T.S.
DWG. BY: LFS
CHK. BY: RW
DRAWING NO.:
FL-41130.2
SHEET 1 OF 5

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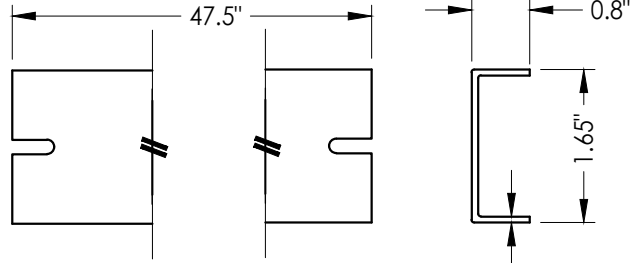


2
2 **HORIZONTAL CROSS SECTION**
Door panel

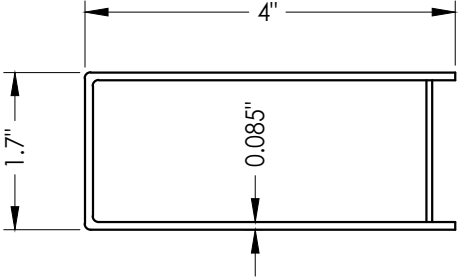


1
2 **DKS STEEL DOOR PANEL**

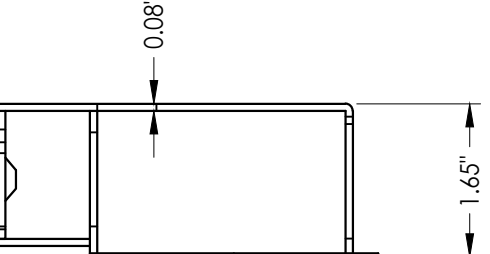
STEEL DOOR SKIN (18 GA.): MIN. 0.045" THK.
STEEL GRADE: ASTM A1008 GALV. STEEL (F_y = 33,000 PSI MIN.)
CORE MATERIAL: EPS FOAM (POLYSTYRENE - 1.0 PCF MIN. DENSITY)



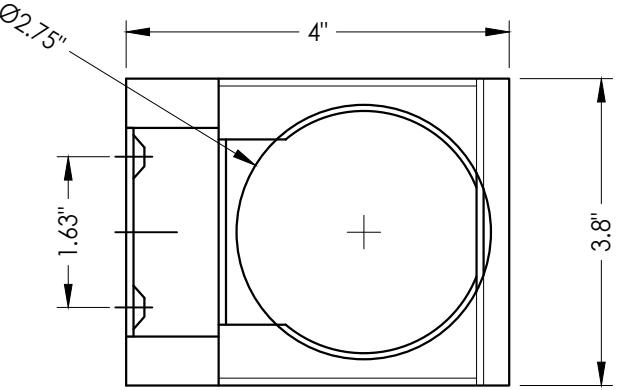
4 **FLUSH TOP CHANNEL**
Steel



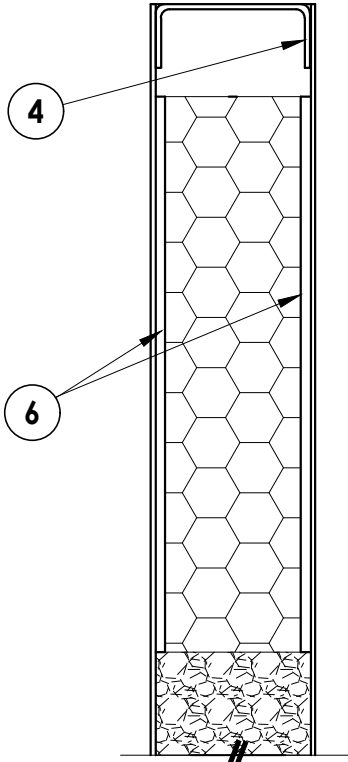
5A **STEEL LOCK BOX REINFORCEMENT**
Panic Bar Prep



5 **STEEL LOCK BOX REINFORCEMENT**
161 Lock Prep



3 **BOTTOM CHANNEL**
Steel



1
2 **VERTICAL CROSS SECTION**
Door panel

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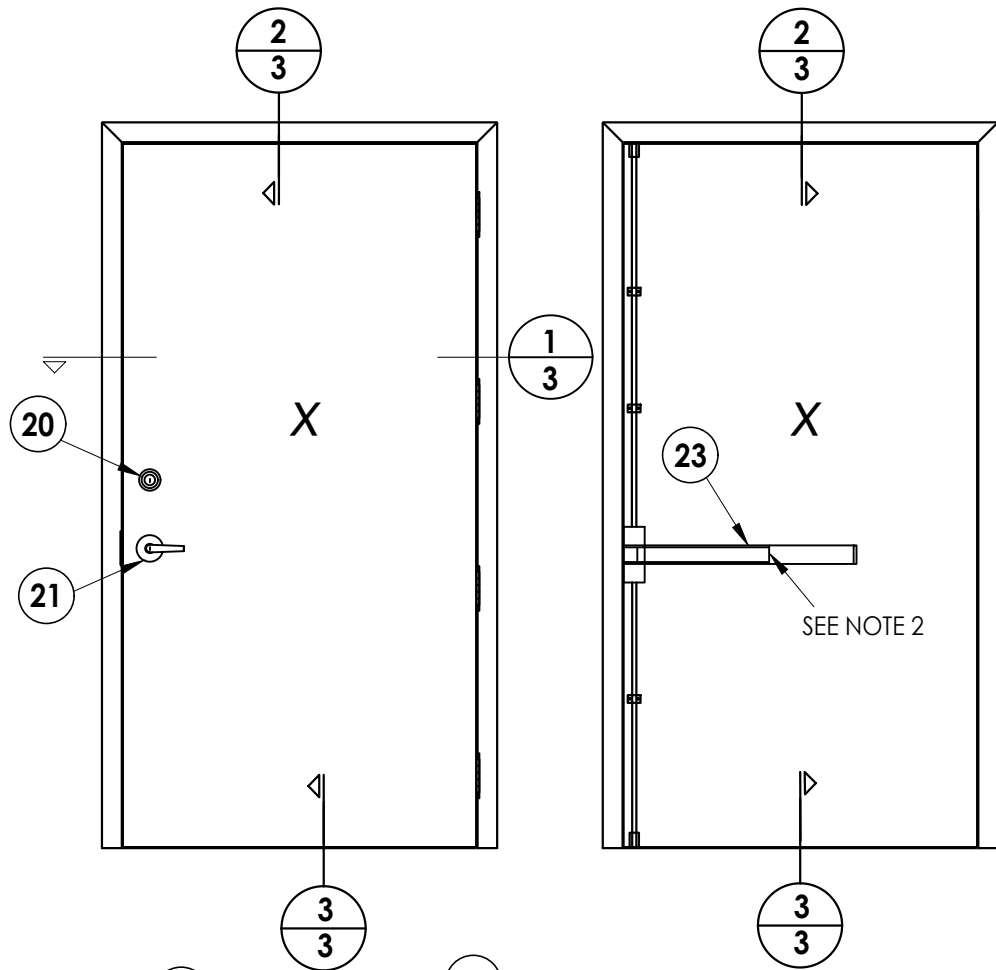
PRODUCT: DKS
STEEL COMMERCIAL DOOR

PART OR ASSEMBLY:
DOOR PANEL DETAILS

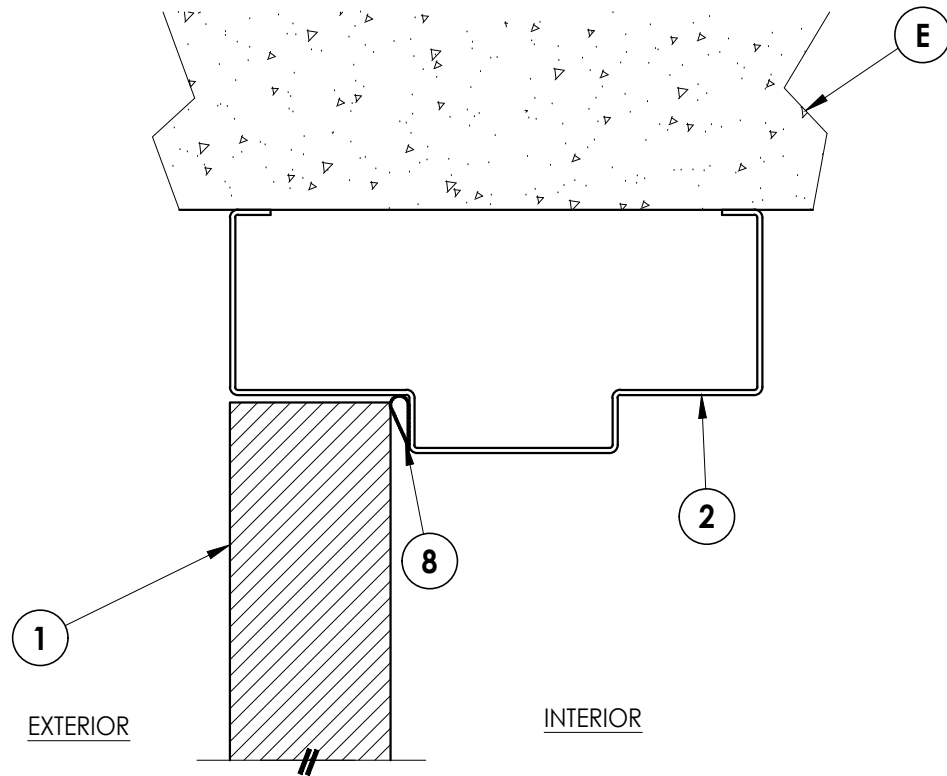
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		LFS
		BY

DATE: 3/21/22
SCALE: N.T.S.
DWG. BY: LFS
CHK. BY: RW
DRAWING NO.: FL-41130.2
SHEET 2 OF 5

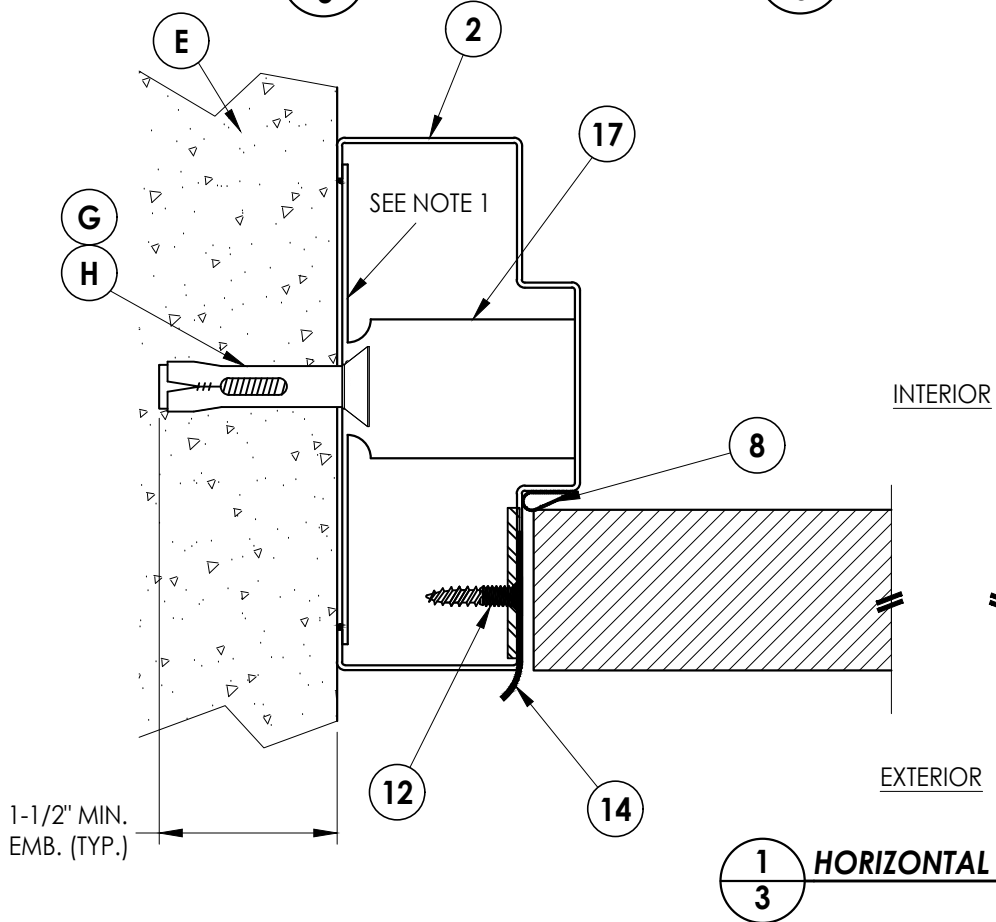
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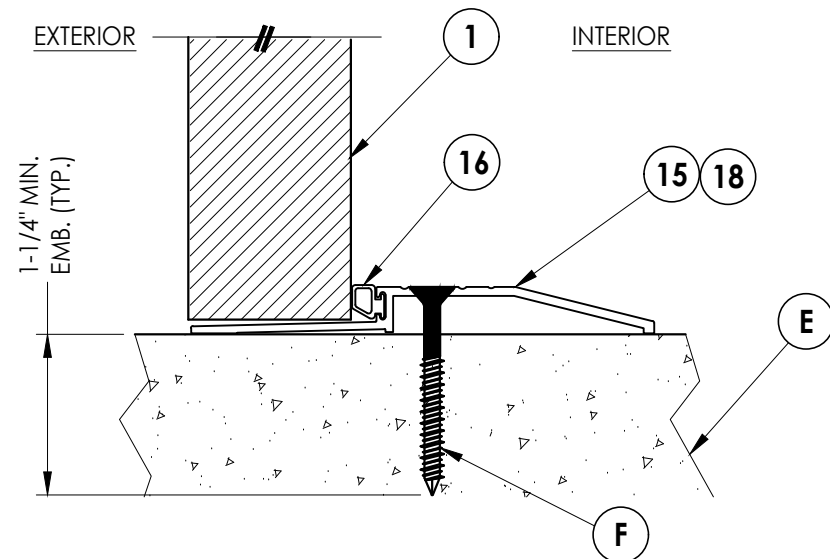
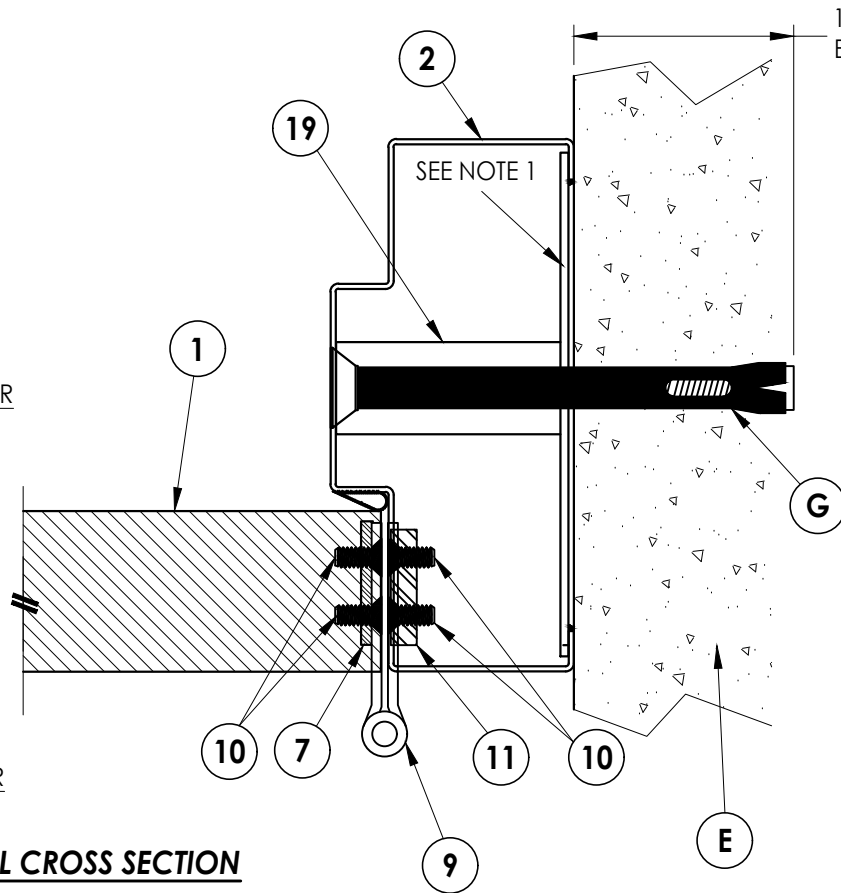
- NOTES:
1. Anchor strap (3/4" wide, 18 gauge steel) or Tube Anchor tack welded to frame along each end.
 2. Panic Bar set screws (#12-24 x 5/16") must be activated to achieve impact rating. Locate one screw at top and bottom at center of push rail or locate one screw at each end of bar.



2
3 **VERTICAL CROSS SECTION**
Outswing configuration



1
3 **HORIZONTAL CROSS SECTION**



3
3 **VERTICAL CROSS SECTION**
Outswing configuration

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PRODUCT:
DKS
STEEL COMMERCIAL DOOR

PART OR ASSEMBLY:
HORIZONTAL AND VERTICAL
CROSS SECTIONS

NO.	DATE	BY	REVISIONS
1	7/01/23	LFS	UPDATE TO 8TH ED. (2023) FBC

DATE: 3/21/22

SCALE: N.T.S.

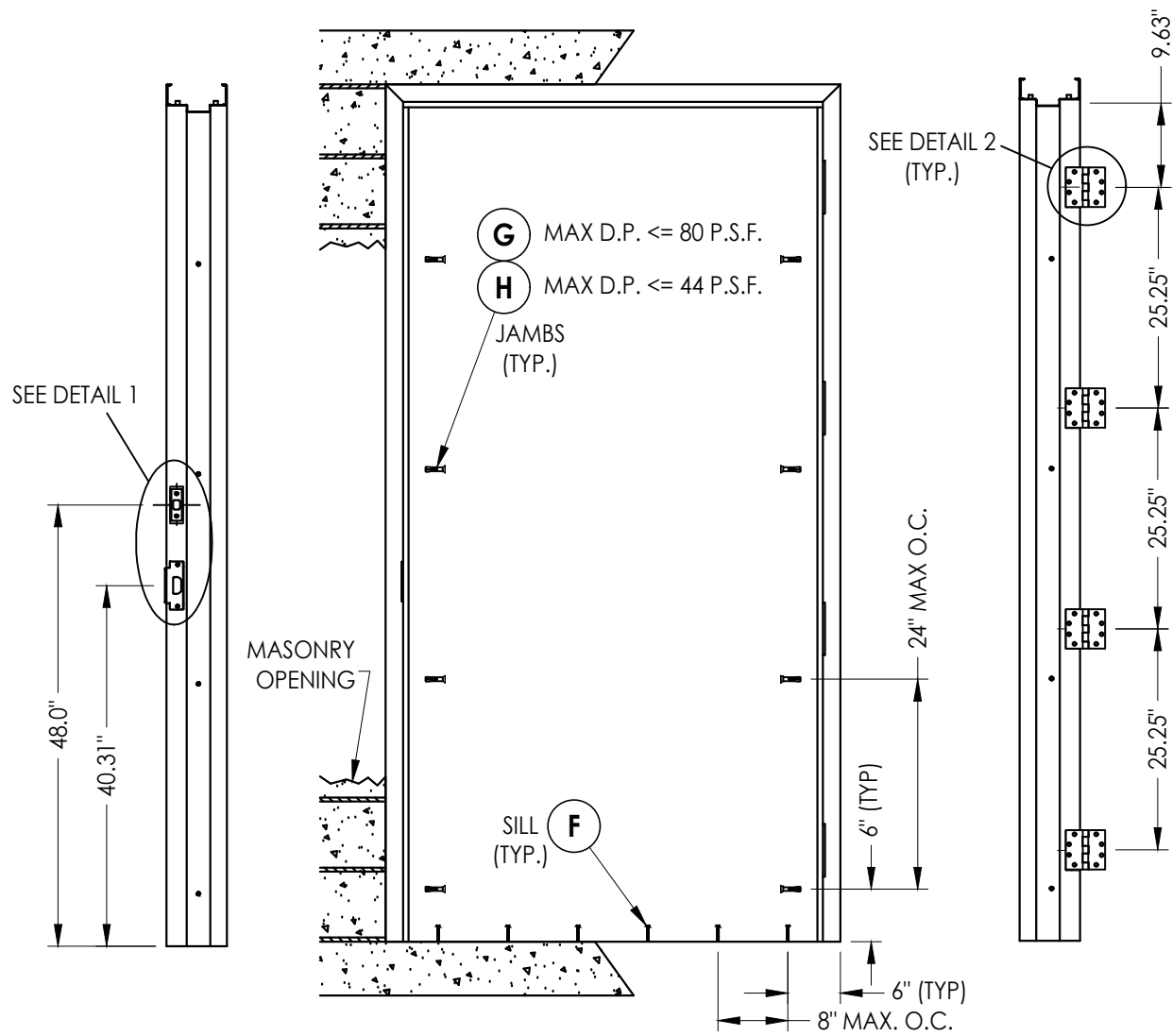
DWG. BY: LFS

CHK. BY: RW

DRAWING NO.:

FL-41130.2

SHEET 3 OF 5



FRAME ANCHORING

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	4"	2"
TAPPER	3/8"	1-1/2"	4-1/4"	3-3/4"
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.

FRAME ANCHORING
Panic Bar Exit Device
w/ Vertical Rods

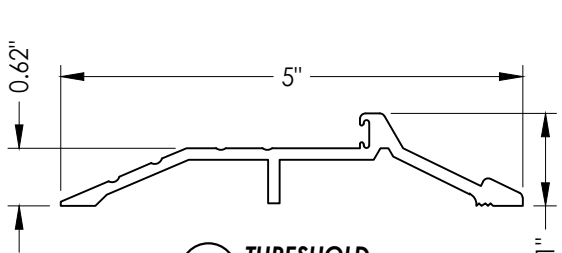
DETAIL 4
Vertical Rod Latch Strike Plate
@ sill

DETAIL 3 10
Vertical Rod Latch Strike Plate
@ head

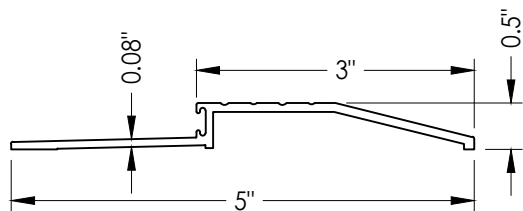
PRODUCT: DKS STEEL COMMERCIAL DOOR PART OR ASSEMBLY: FRAME ANCHORING		Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409	
DATE: 3/21/22		RW BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	
SCALE: N.T.S.			
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SHEET 4 OF 5			
NO. DATE			
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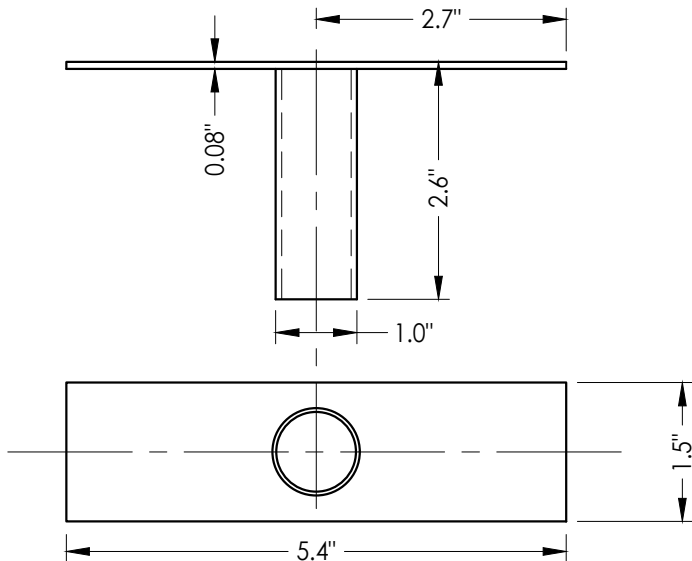
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	1/4" X 2-1/4" ITW PFH CONCRETE SCREW	STEEL
G	3/8" PFH ITW DYNABOLT SLEEVE ANCHOR	STEEL
H	3/8" PFH TAPPER CONCRETE SCREW BY POWERS FASTENERS	STEEL
1	DKS DOOR PANEL	STEEL
2	HOLLOW FRAME 2"	STEEL
3	BOTTOM CHANNEL	STEEL
4	FLUSH TOP CHANNEL	STEEL
5	LOCK BOX REINFORCEMENT	STEEL
5A	LOCK BOX REINFORCEMENT	STEEL
6	DOOR CLOSER REINFORCEMENT (11 GA.)	STEEL
7	DOOR HINGE REINFORCEMENT	STEEL
8	WEATHERSTRIP - COMPRESSION BULB 1/4" X 1/2" (PEMKO S88)	NEOPRENE
9	4-1/2" X 4-1/2" X 0.125" TEMPLATE HINGE	STEEL
10	#12-24 X 1/2" PFH MACHINE SCREW	STEEL
11	FRAME HINGE REINFORCEMENT	STEEL
12	#12-24 X 1" COMBINATION MACHINE / WOOD SCREW	STEEL
13	DEAD BOLT STRIKE	STEEL
14	ANSI LATCH STRIKE	STEEL
15	THRESHOLD (PEMKO #181_T)	ALUM
16	WEATHERSTRIP (THERMOSEAL™)	NEOPRENE
17	UNIVERSAL WALL ANCHOR REINFORCEMENT	STEEL
18	THRESHOLD (PEMKO 2001P)	ALUM
19	TUBE ANCHOR REINFORCEMENT	STEEL
20	CAL-ROYAL PIONEER SL/CSL SERIES GRADE 2 CYLINDRICAL LOCK	-
21	CAL-ROYAL T300 MAX. SECURITY HEAVY-DUTY DEAD BOLT GRADE 2 LOCK	-
22	#8-24 X 3/4" COMB. MACHINE / WOOD SCREW	STEEL
23	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



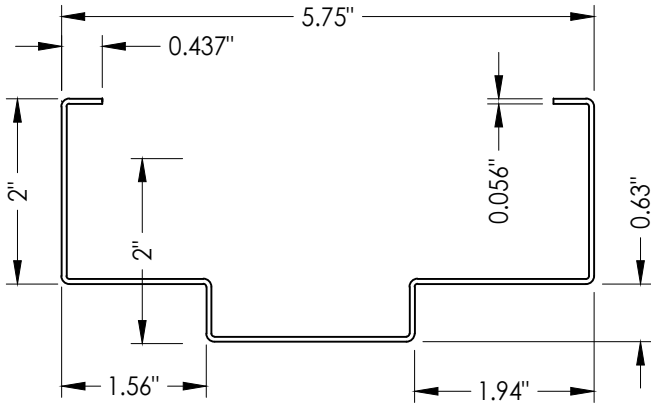
15 THRESHOLD



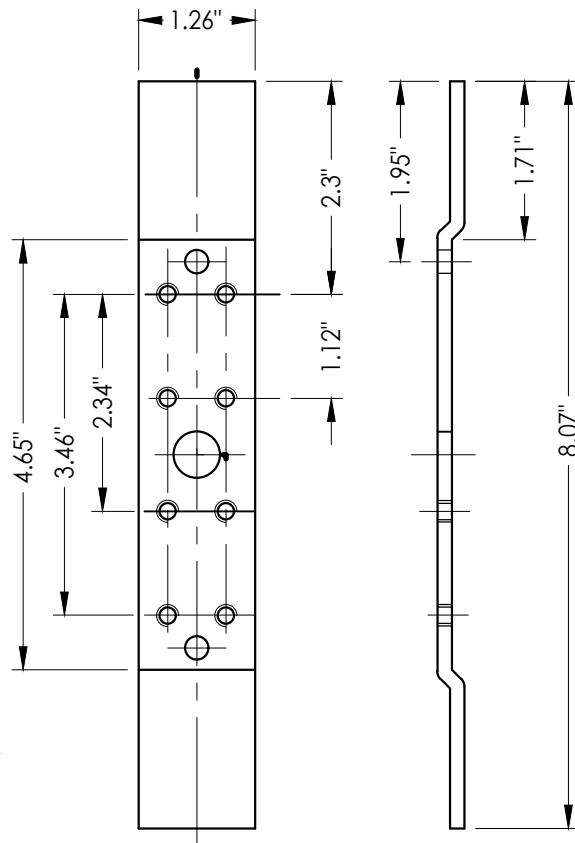
18 THRESHOLD



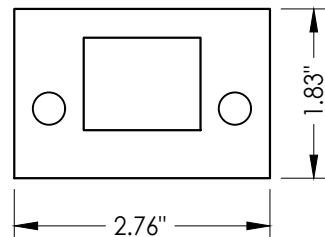
19 TUBE ANCHOR



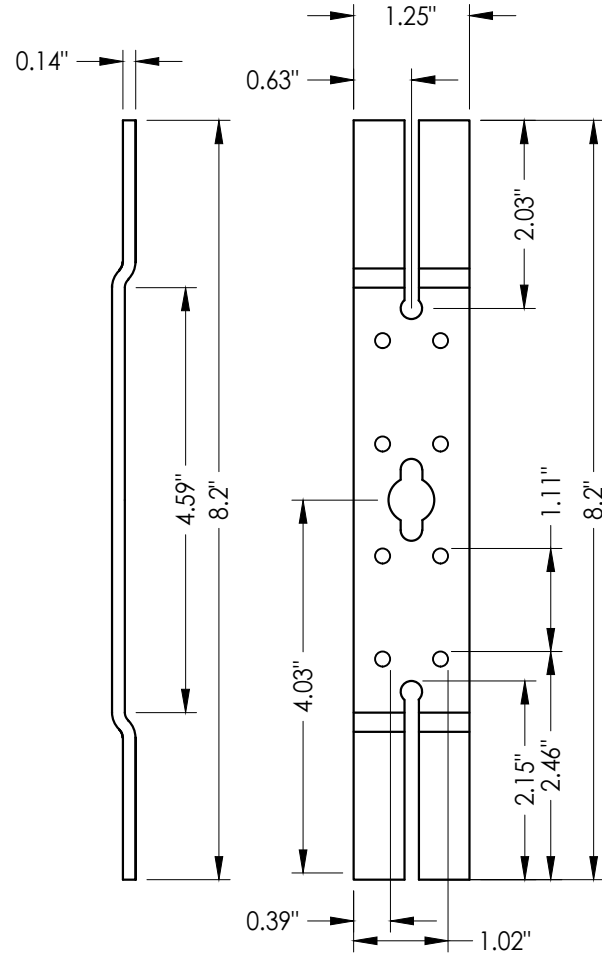
2 FRAME
16 Ga. Steel



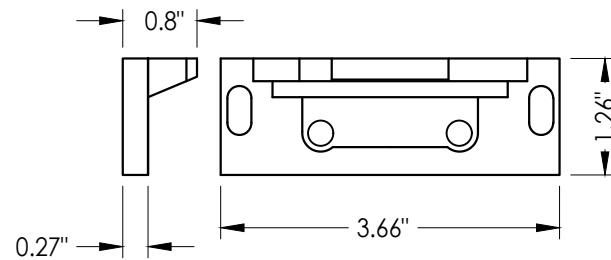
11 FRAME HINGE REINFORCEMENT
8 Ga. Steel



91 VERTICAL ROD LATCH STRIKE PLATE
@ Sill



7 DOOR HINGE REINFORCEMENT
8 Ga. Steel



90 VERTICAL ROD LATCH STRIKE PLATE
@ Head

Documents Prepared By:
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PRODUCT:
DKS
STEEL COMMERCIAL DOOR

PART OR ASSEMBLY:
BILL OF MATERIALS AND
COMPONENTS

NO.	DATE	DESCRIPTION	BY
1	7/01/23	UPDATE TO 8TH ED. (2023) FBC	LFS

REVISIONS

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CHK. BY: RW

DRAWING NO.:

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SHEET 5 OF 5