

MEGAMET INDUSTRIES, INC.

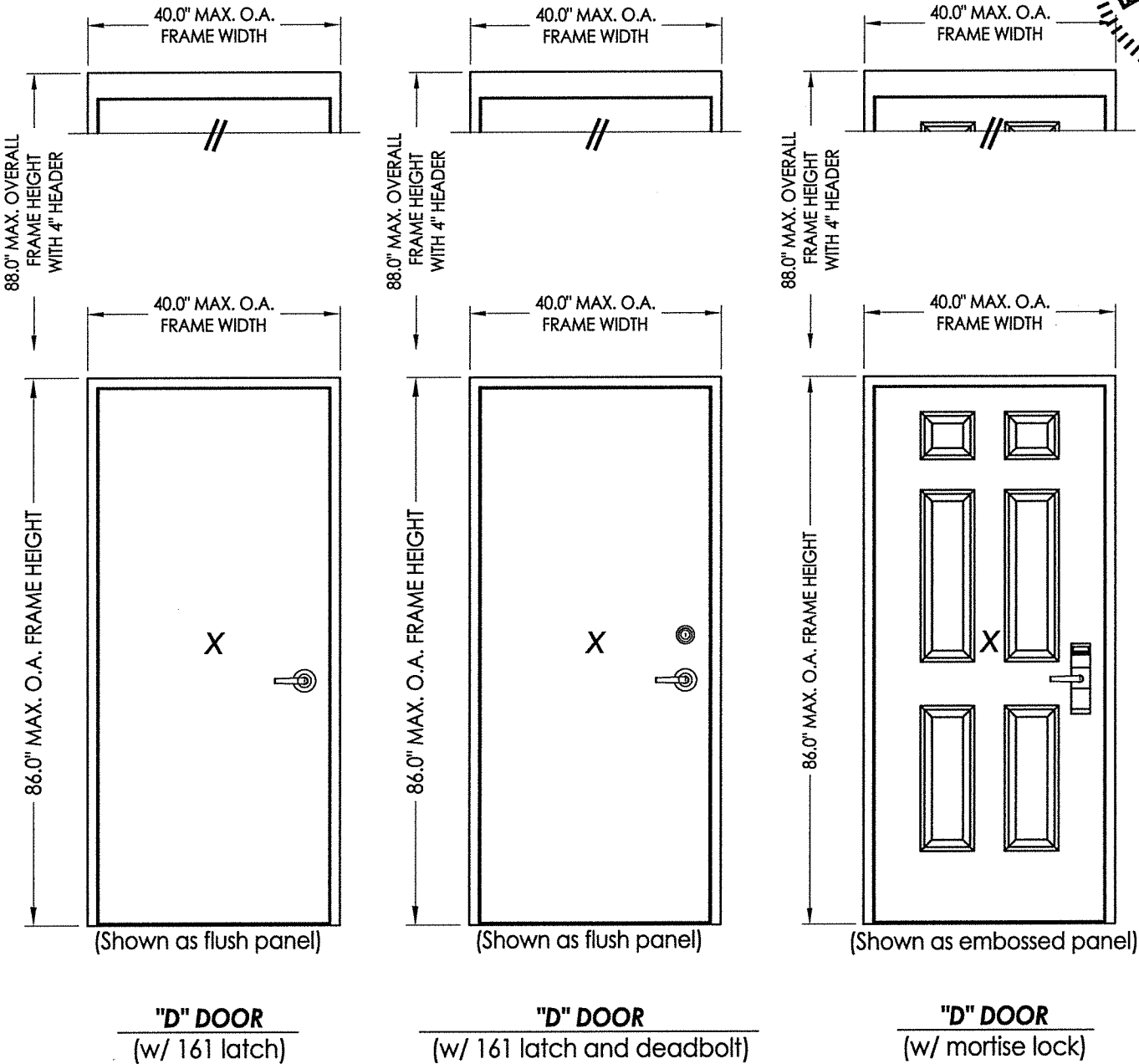
3228 6th AVENUE NORTH
P.O. BOX 635
BIRMINGHAM, AL 35201

"D" SERIES
COMMERCIAL STEEL DOOR
INSWING
"IMPACT"

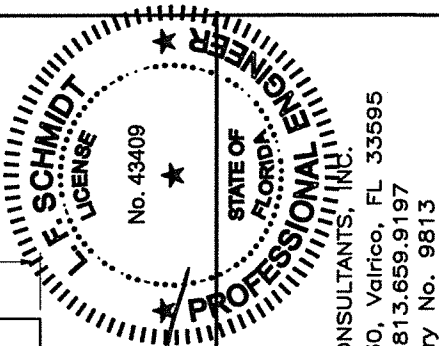
GENERAL NOTES

1. This product has been evaluated and is in compliance with the 7th Edition (2020) 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. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
5. Inswing configurations do not meet the water infiltration requirements for the "HVHZ". Inswing units 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.
6. All steel shall be protected as specified in Section 2222.6 of the FBC.

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1	Typical elevations, design pressures, & general notes
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6	Horizontal cross sections
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8	Frame anchoring
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OVERALL FRAME DIMENSION	LOCK TYPE	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
40.0\"	161 LATCH (SCHLAGE)	+55.0	-55.0
40.0\"	161 LATCH & DEADBOLT (DESIGN HARDWARE)	+70.0	-75.0
40.0\"	86E MORTISE LOCK (ONITY)	+60.0	-75.0



October 6, 2020

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

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

PRODUCT:
MEGAMET INDUSTRIES, INC.
"D" STEEL DOOR

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

NO.	DATE	REVISIONS
3	10/05/20	UPDATE TO 7TH ED. (2020) FBC LFS
2	10/16/17	UPDATE TO 6TH ED. (2017) FBC LFS
1	1/06/15	UPDATE TO 5th ED. (2014) FBC LFS

DATE: 7/17/13

SCALE: N.T.S.

DWG. BY: JK

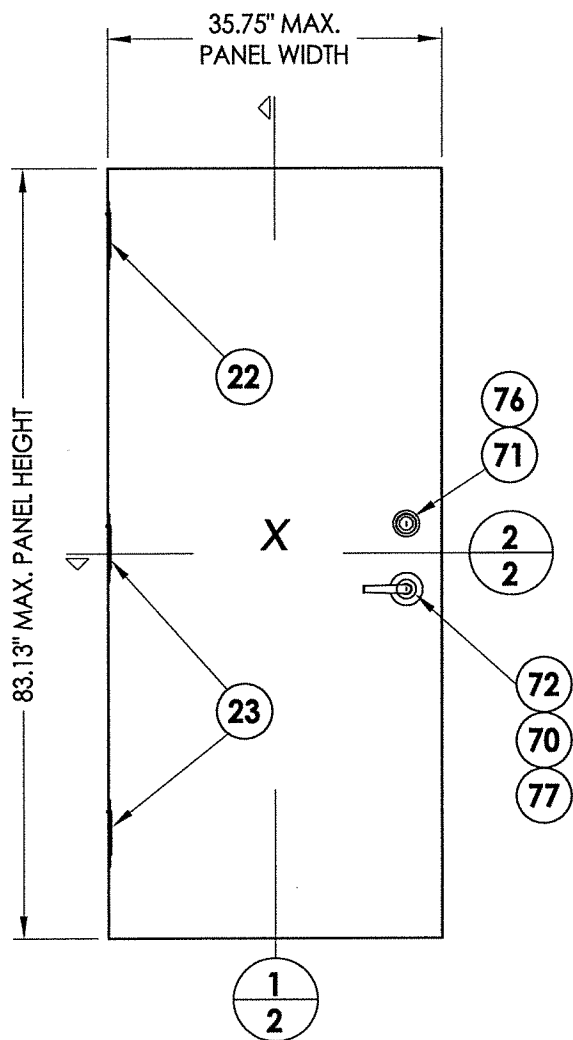
CHK. BY: LFS

DRAWING NO.:

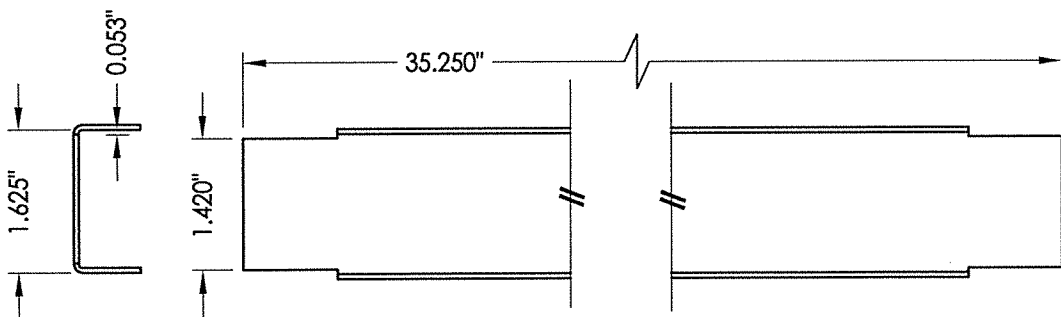
FL-16494.3

SHEET 1 OF 11

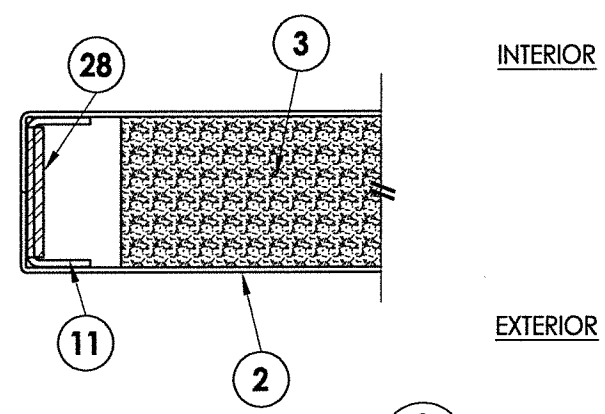
R:\Clients\Megamet PERMANENTVA - Florida Product Approvals\FL-16494\C - Drawings\FL-16494 (2020)\FL-16494.1-13.dwg, 2.3



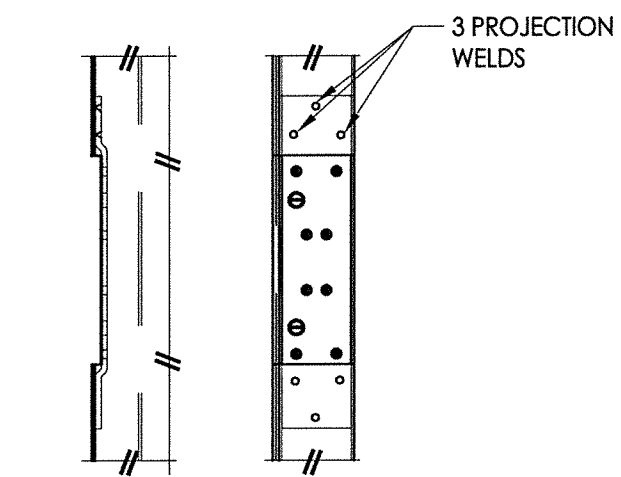
1 "D" OPAQUE STEEL DOOR PANEL



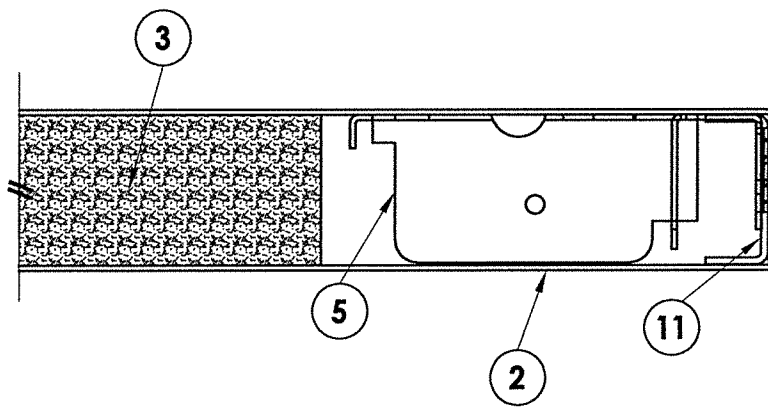
4 DOOR TOP & BOTTOM CLOSER



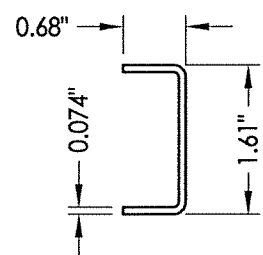
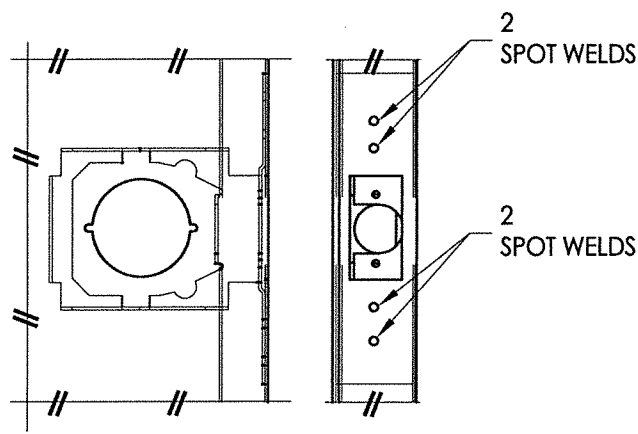
2 HORIZONTAL CROSS SECTION
2 Door panel



23 DOOR HINGE REINFORCEMENT



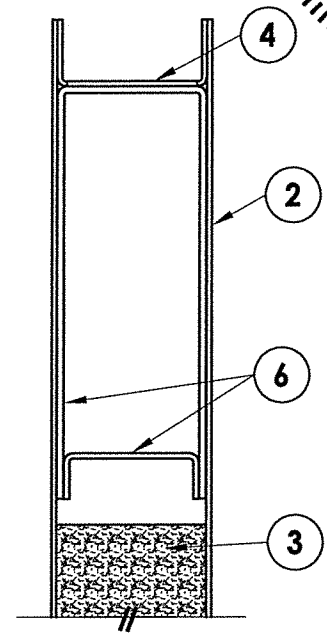
5 LOCK BOX REINFORCEMENT



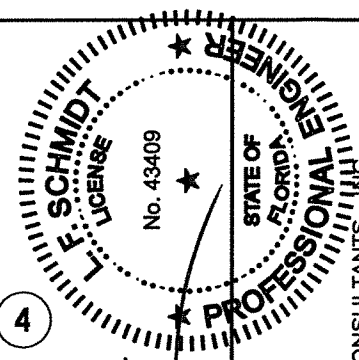
11 DOOR STILE EDGE
Reinforcement

EXTERIOR

INTERIOR



1 VERTICAL CROSS SECTION
2 Door panel



October 6, 2020

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

PRODUCT:
MEGAMET INDUSTRIES, INC.
"D" STEEL DOOR

PART OR ASSEMBLY:
DOOR PANEL SECTIONS
161 LOCK PREP

REVISIONS		NO.	DATE	BY
3	10/05/20	UPDATE TO 7TH ED. (2020)	FBC	LFS
2	10/16/17	UPDATE TO 6TH ED. (2017)	FBC	LFS
1	1/06/15	UPDATE TO 5TH ED. (2014)	FBC	LFS

DATE: 7/17/13

SCALE: N.T.S.

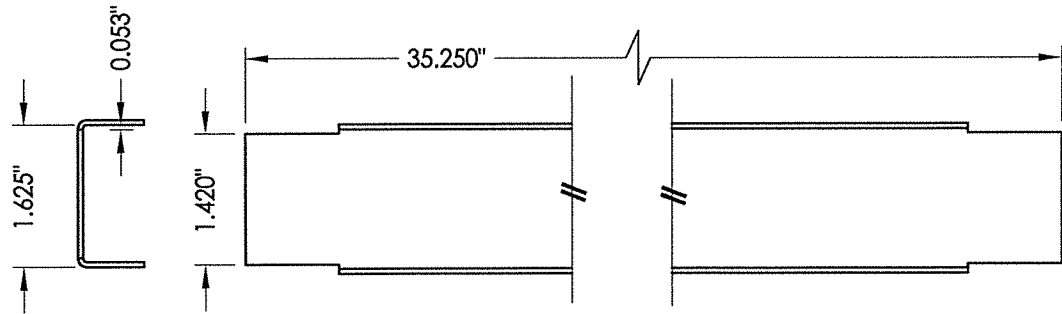
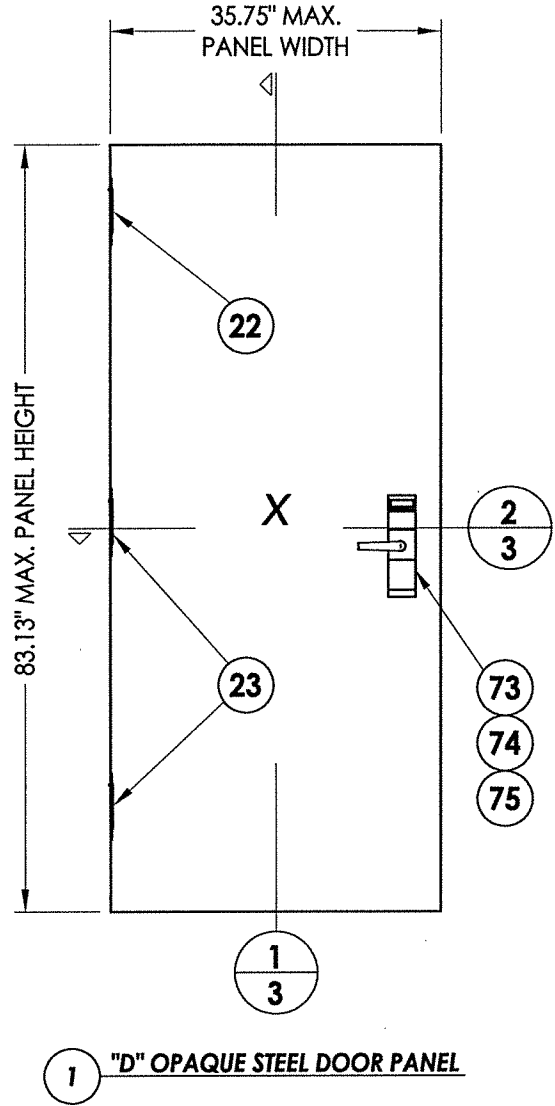
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CHK. BY: LFS

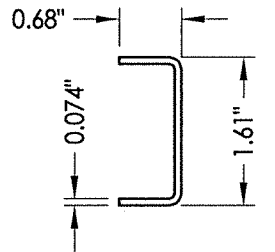
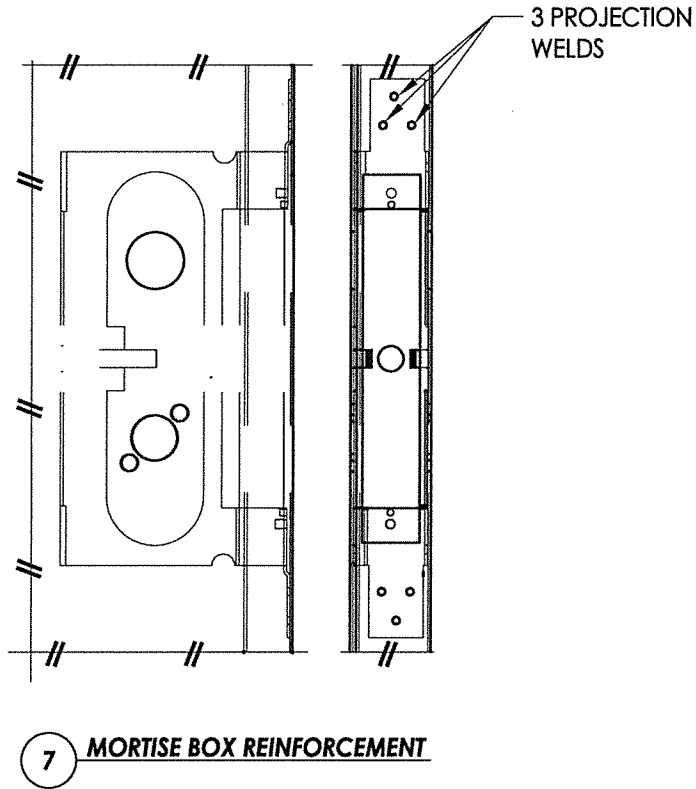
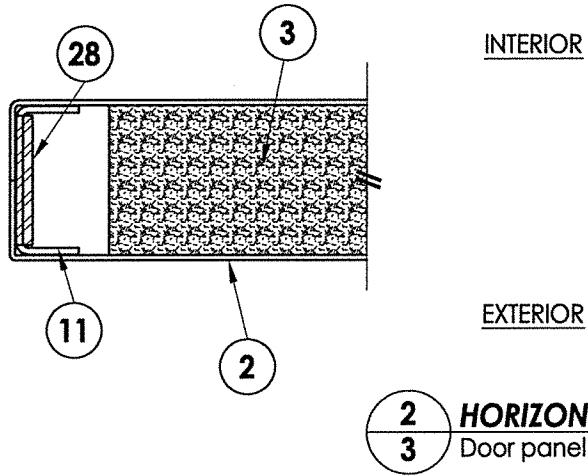
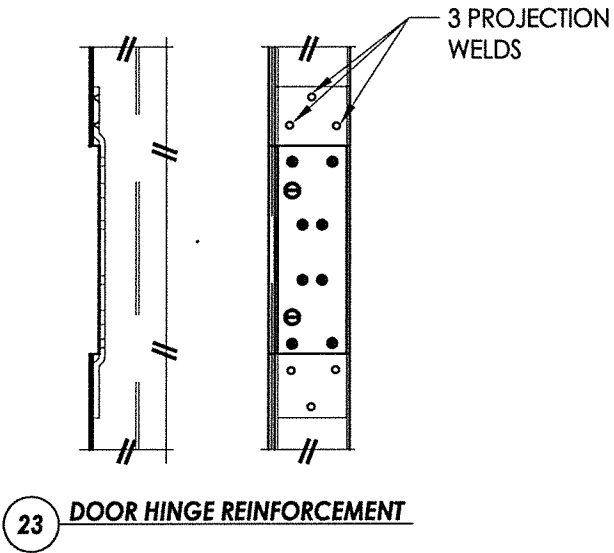
DRAWING NO.: FL-16494.3

SHEET 2 OF 11

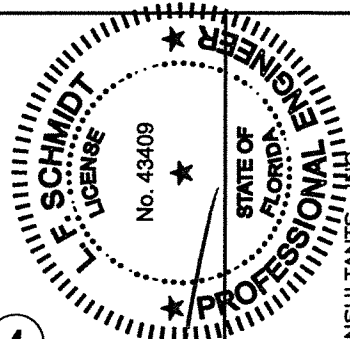
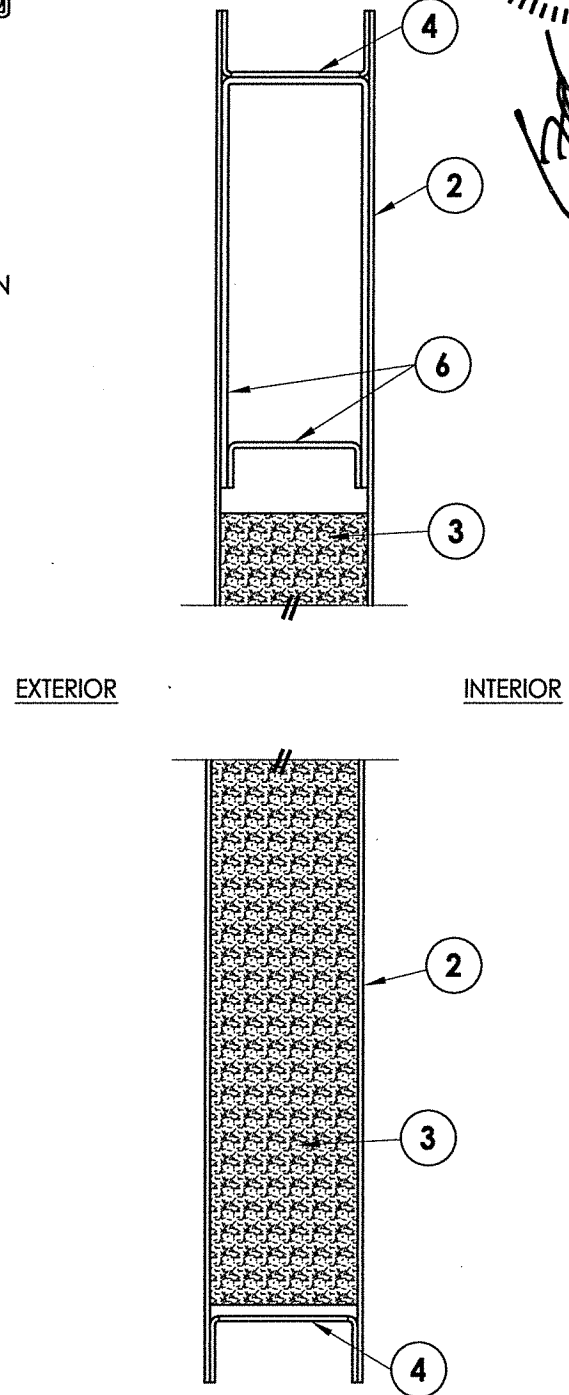
BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813



DOOR TOP & BOTTOM CLOSER



DOOR STILE EDGE Reinforcement



October 6, 2020

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Lyndon F. Schmidt
P.E. No. 43409

R.W.
BUILDING CONSULTANTS, INC.
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FBPE Registry No. 9813

PRODUCT:
MEGAMET INDUSTRIES, INC.
"D" STEEL DOOR

PART OR ASSEMBLY:
DOOR PANEL SECTIONS
86E MORTISE LOCK PREP

NO.	DATE	REVISIONS
3	10/05/20	UPDATE TO 7TH ED. (2020) FBC LFS
2	10/16/17	UPDATE TO 6TH ED. (2017) FBC LFS
1	1/06/15	UPDATE TO 5th ED. (2014) FBC LFS

DATE: 7/17/13

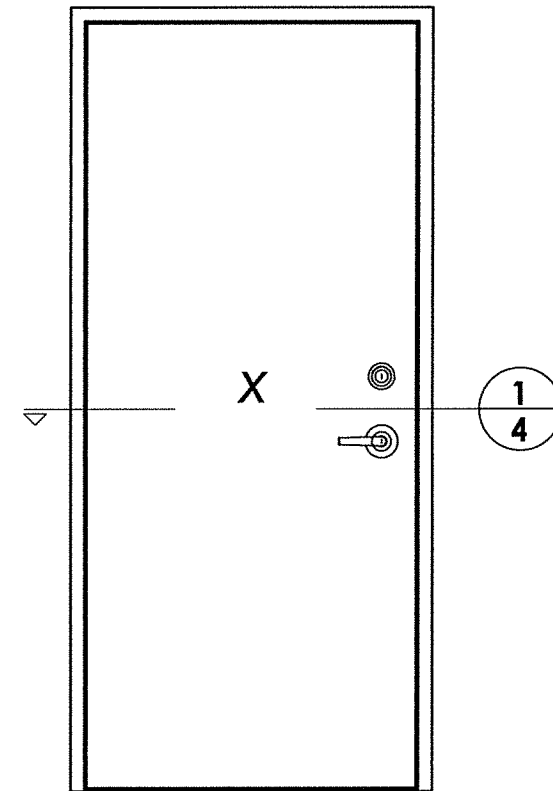
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DWG. BY: JK

CHK. BY: LFS

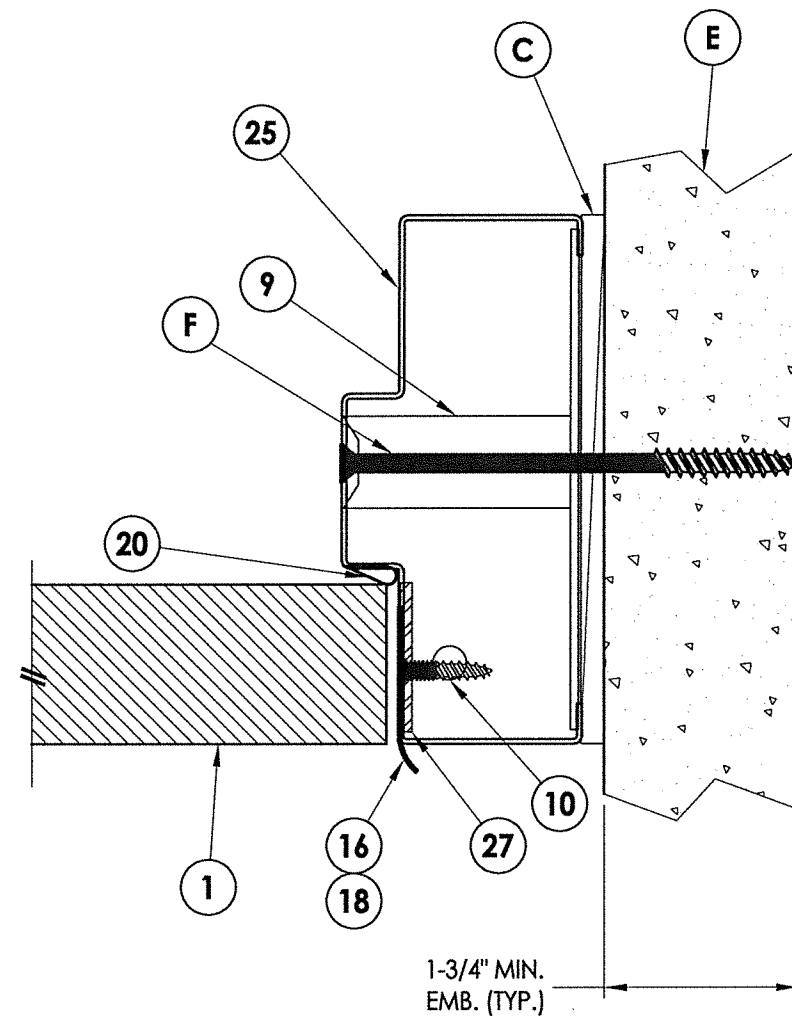
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SHEET 3 OF 11

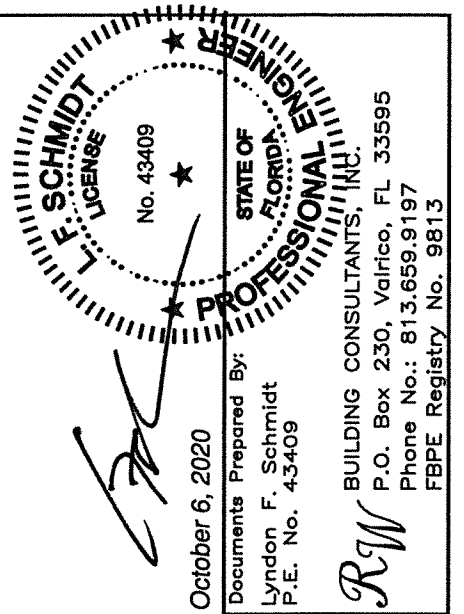


INTERIOR

1 **HORIZONTAL CROSS SECTION**
4



1-3/4" MIN.
EMB. (TYP.)



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

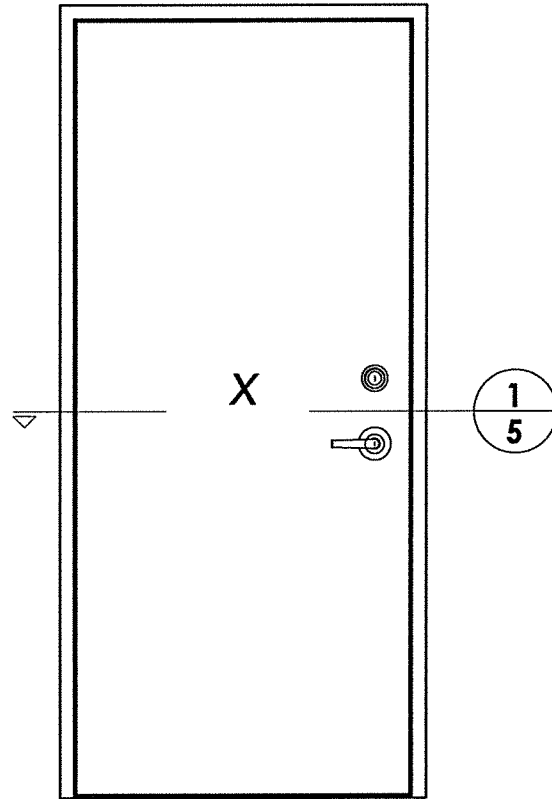
RW
BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: MEGAMET INDUSTRIES, INC.
"D" STEEL DOOR

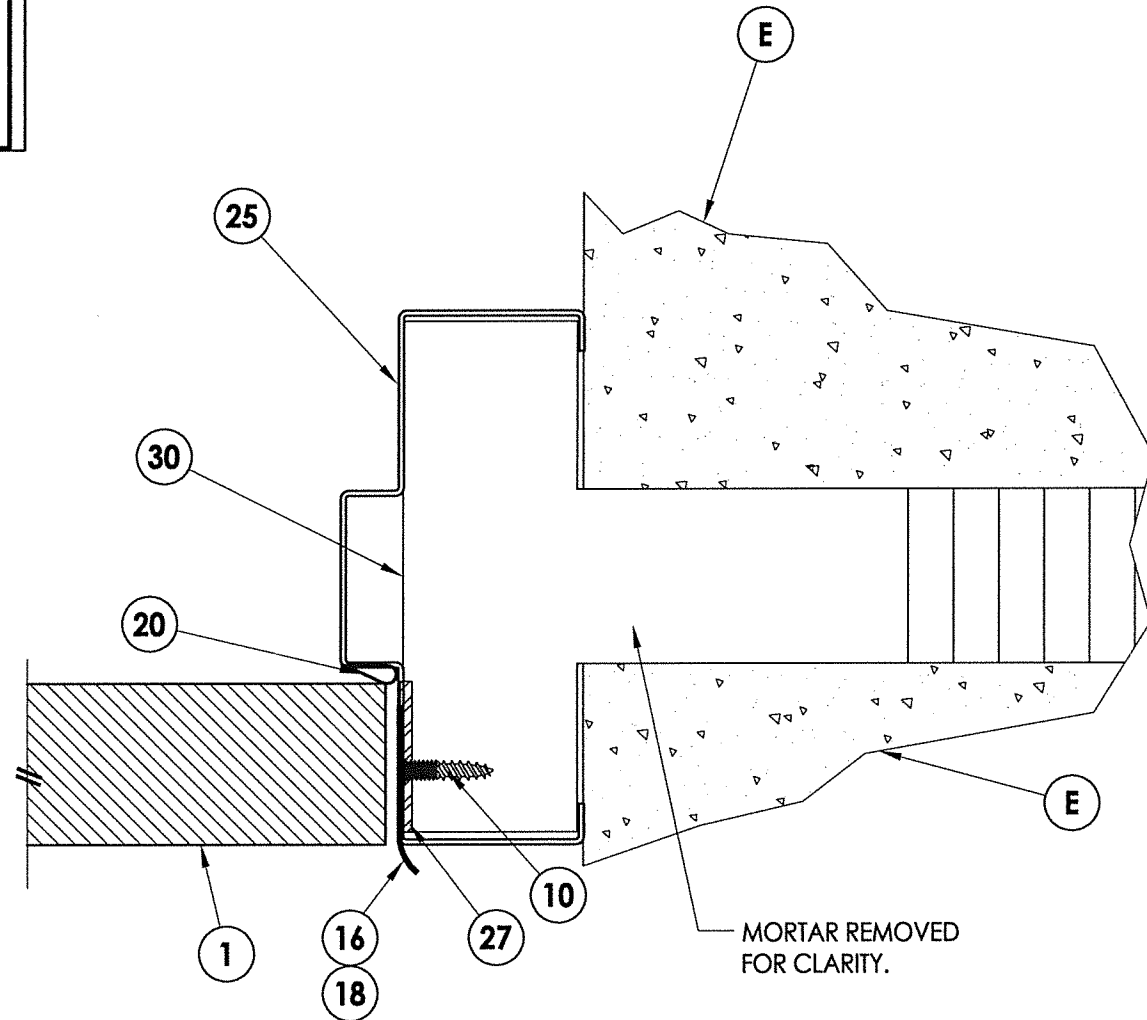
PART OR ASSEMBLY:
HORIZONTAL CROSS SECTIONS

[illegible]

INTERIOR



1 **HORIZONTAL CROSS SECTION**
5



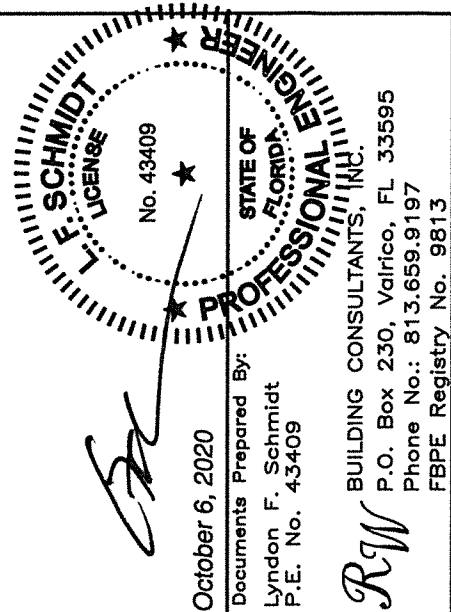
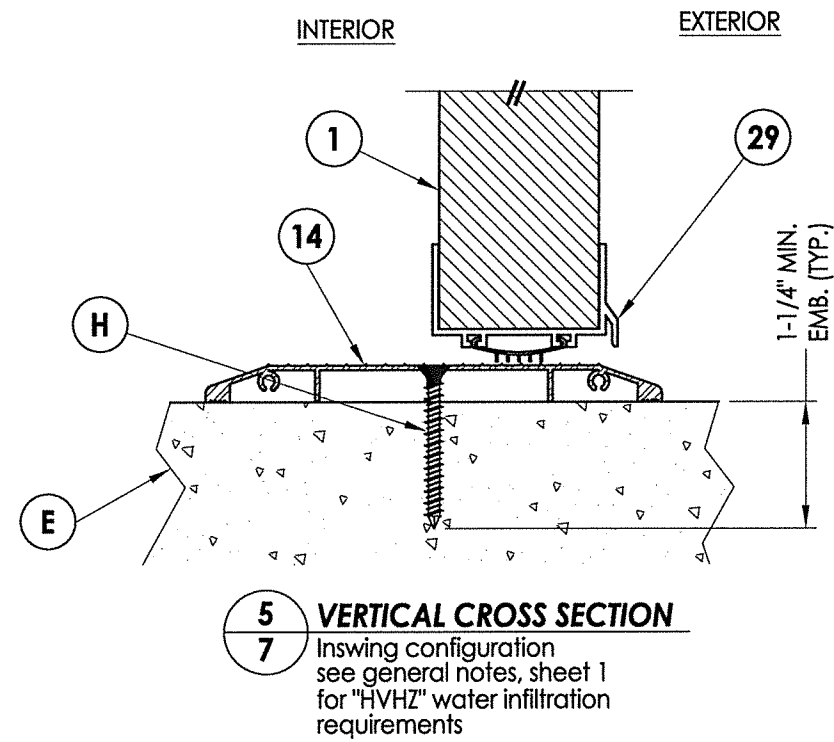
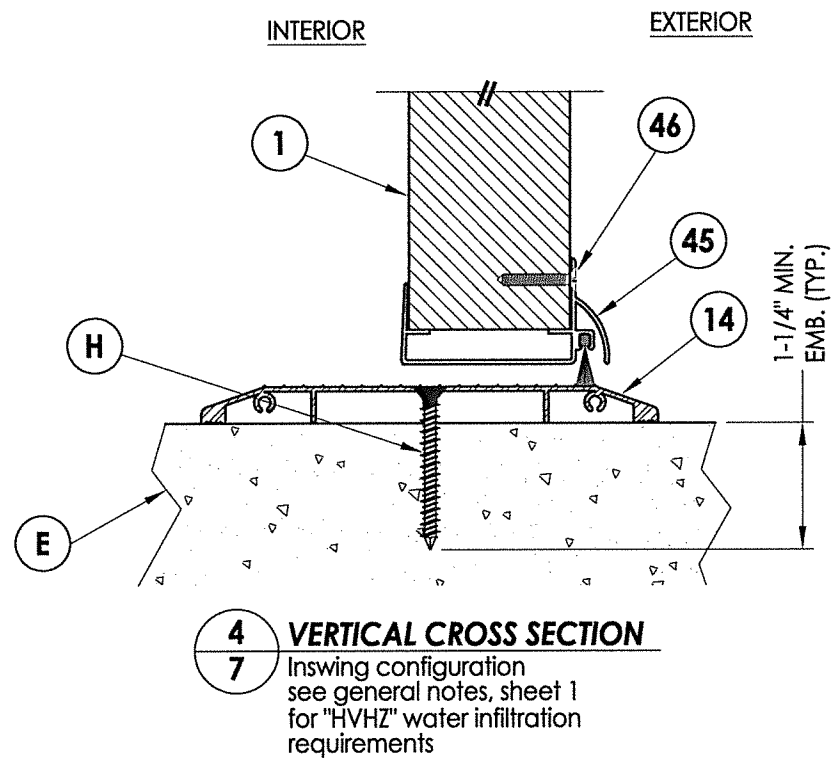
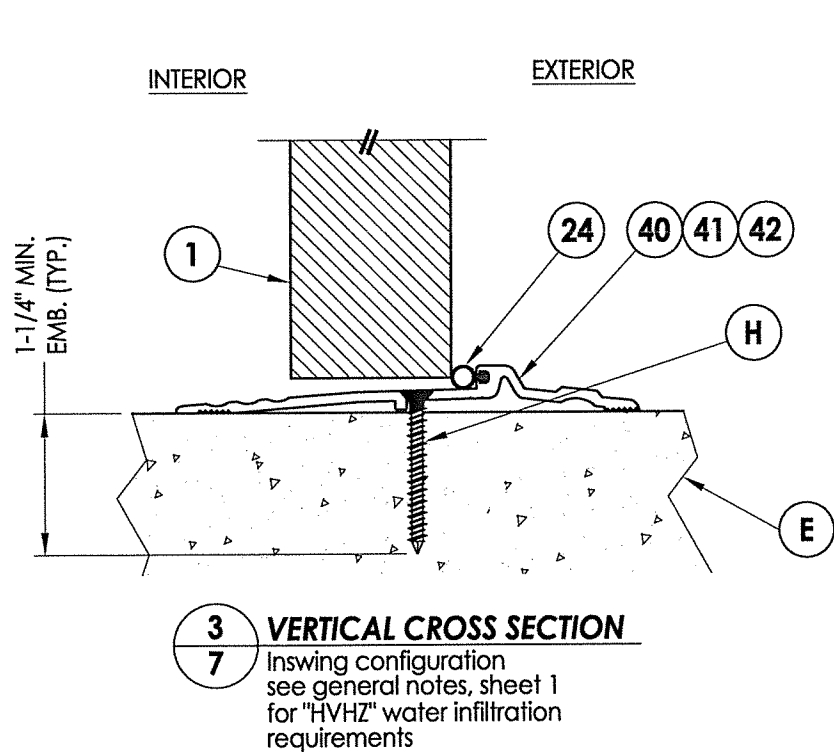
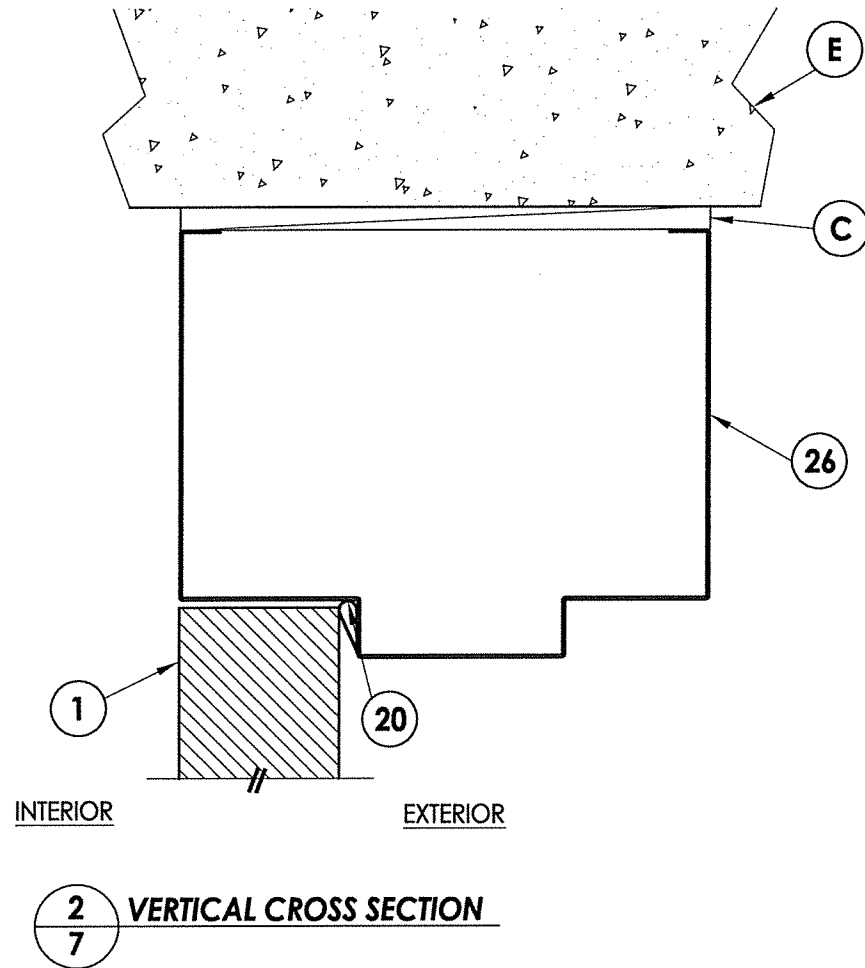
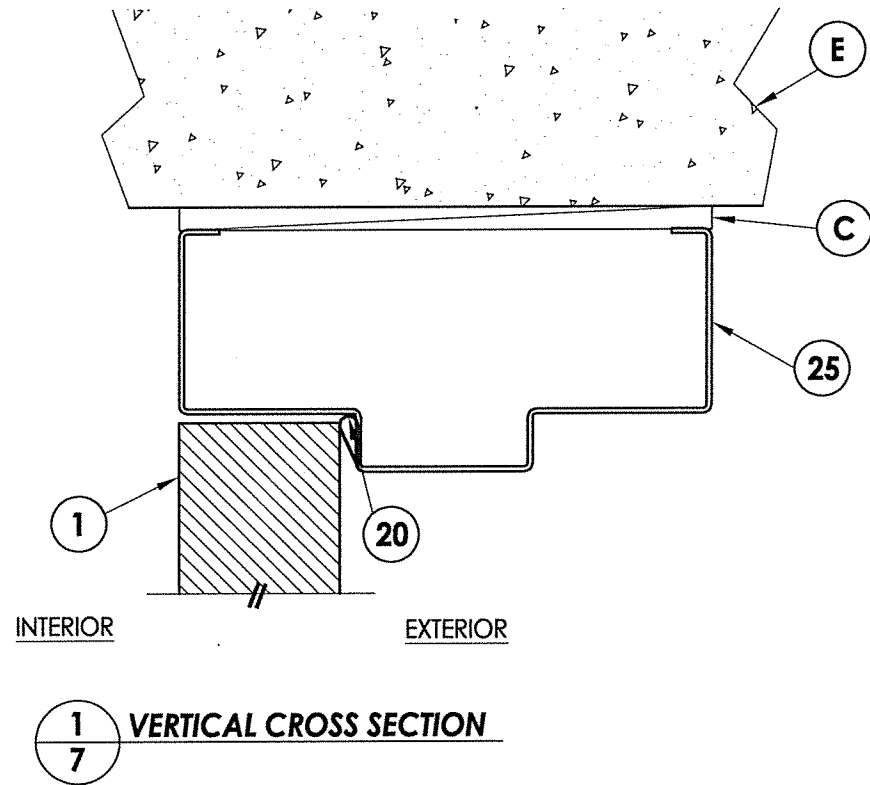
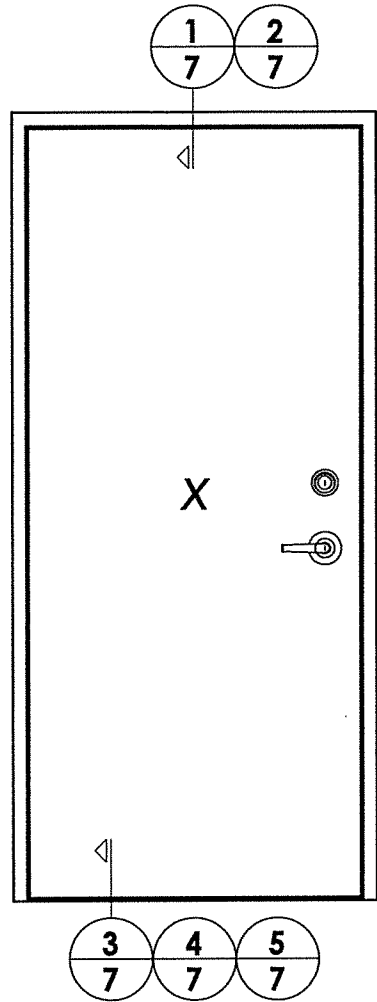
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SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-16494.3
SHEET	5 OF 11

3	10/05/20	UPDATE TO 7TH ED.	(2020)	FBC	LFS
2	10/16/17	UPDATE TO 6TH ED.	(2017)	FBC	LFS
1	1/06/15	UPDATE TO 5th ED.	(2014)	FBC	LFS
NO.	DATE				BY
REVISIONS					

PART OR ASSEMBLY:
HORIZONTAL CROSS SECTIONS

A circular seal for the State of Florida Professional Engineer. The outer ring contains the text "PROFESSIONAL ENGINEER" at the top and "STATE OF FLORIDA" at the bottom, separated by small dots. The center of the seal is blank.

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



October 6, 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:
MEGAMET INDUSTRIES, INC.
"D" STEEL DOOR

PART OR ASSEMBLY:
VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
3	10/05/20	UPDATE TO 7TH ED. (2020) FBC LFS
2	10/16/17	UPDATE TO 6TH ED. (2017) FBC LFS
1	1/06/15	UPDATE TO 5TH ED. (2014) FBC LFS

DATE: 7/17/13

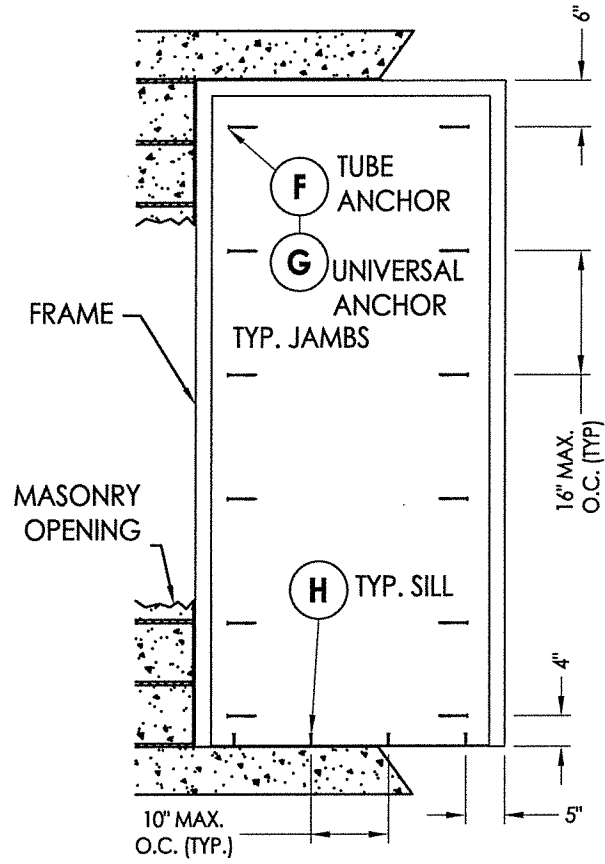
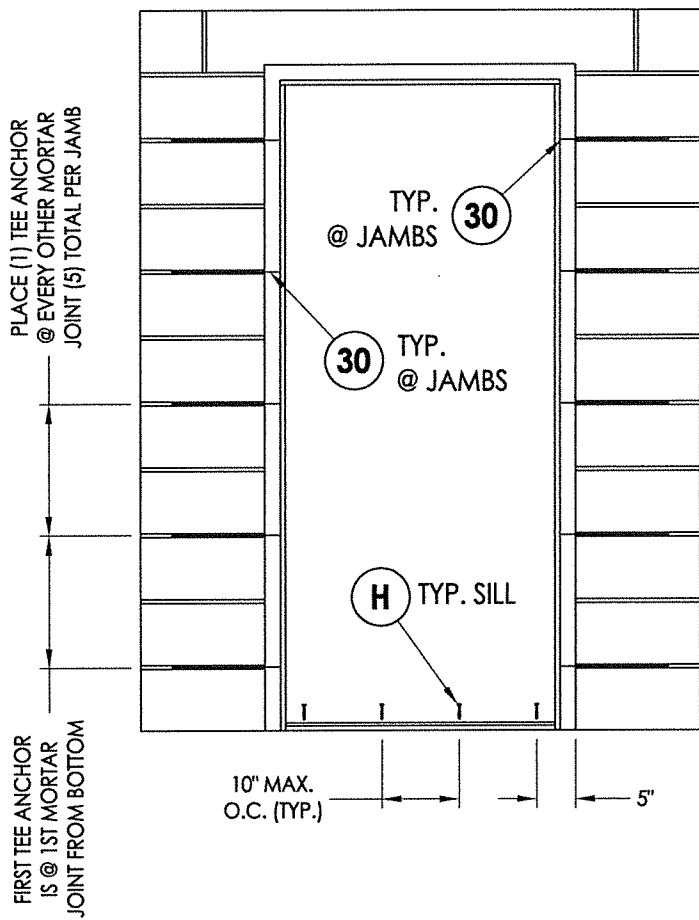
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DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-16494.3

SHEET 7 OF 11

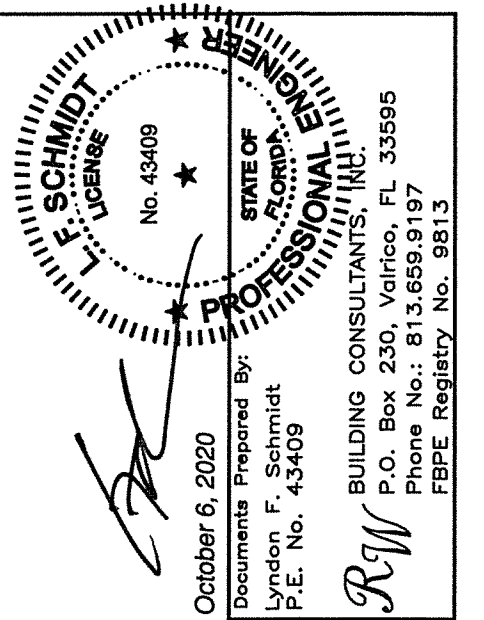


CONCRETE ANCHOR NOTES:

1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. 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.
3. Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2-1/2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	2-1/2"	4"
ITW TAPCON® XL	5/16"	1-3/4"	2-1/2"	5"
DeWALT ULTRACON®	5/16"	1-3/4"	3-1/8"	5"

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



October 6, 2020

Documents Prepared By:
Lyndon F. Schmidt

PART OR ASSEMBLY:

FRAME ANCHORING

REVISIONS

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DATE: 7/17/13

SCALE: N.T.S.

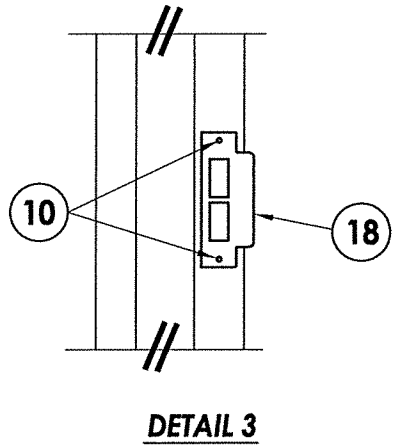
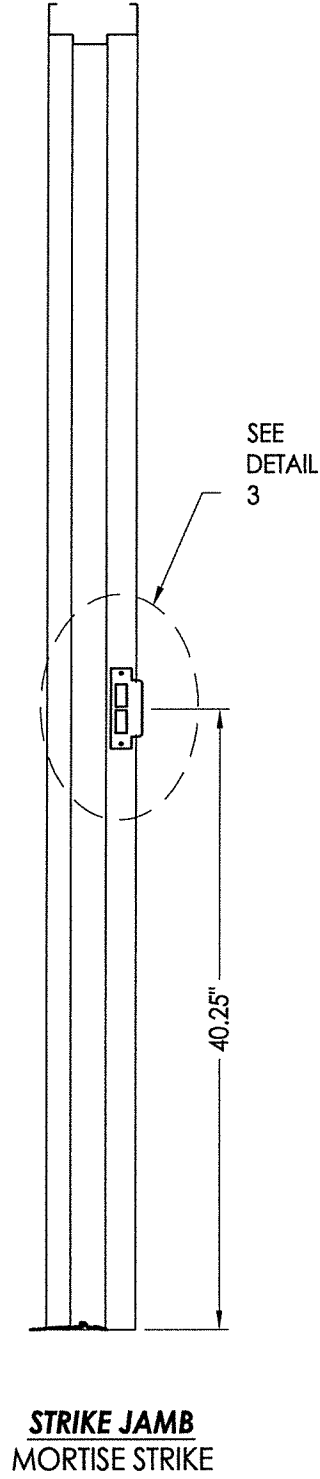
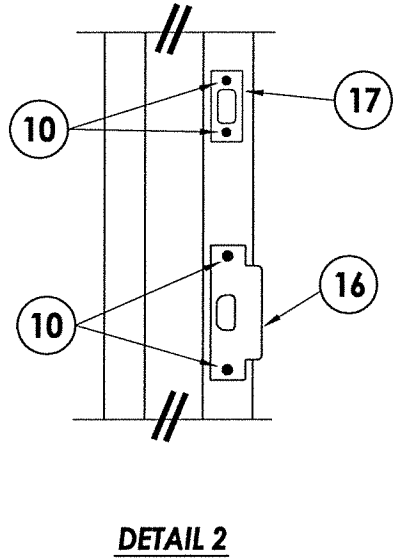
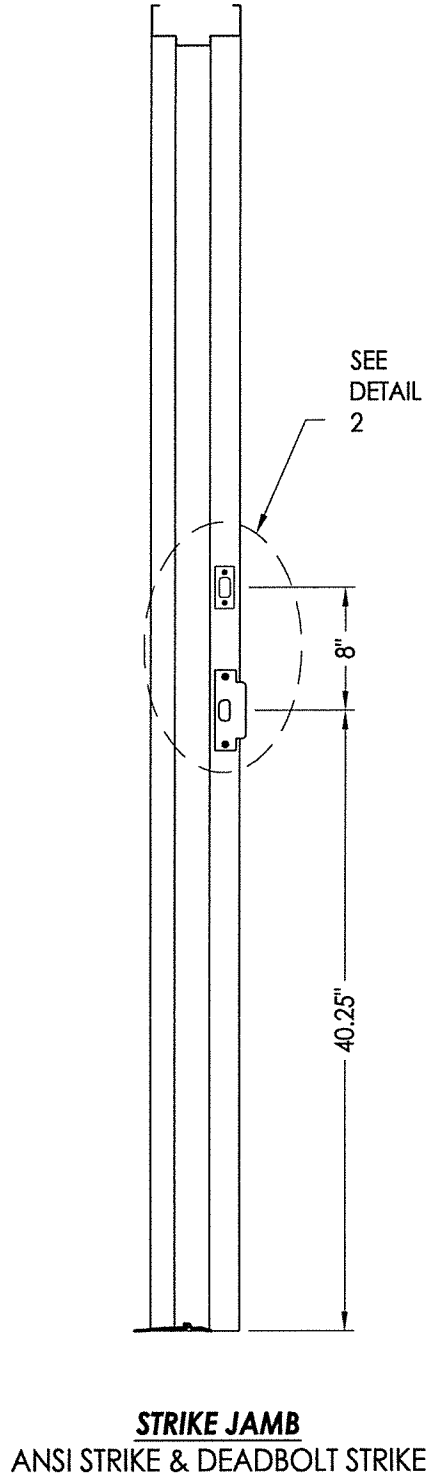
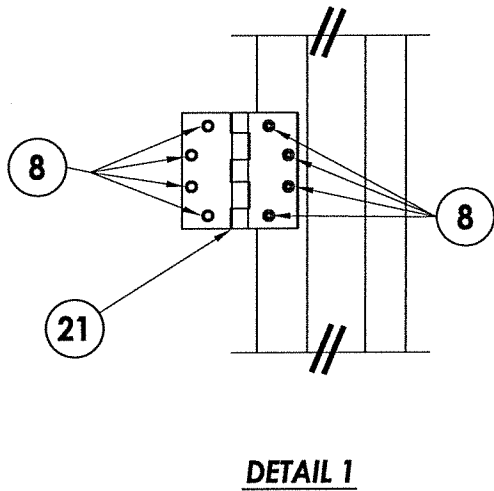
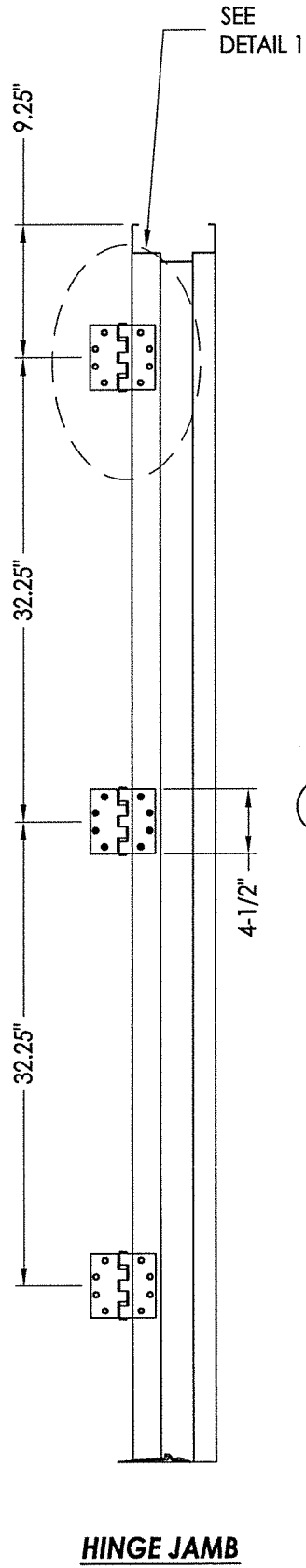
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-16494.3

SHEET 8 OF 11



October 6, 2020

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

PRODUCT:
MEGAMET INDUSTRIES, INC.
"D" STEEL DOOR

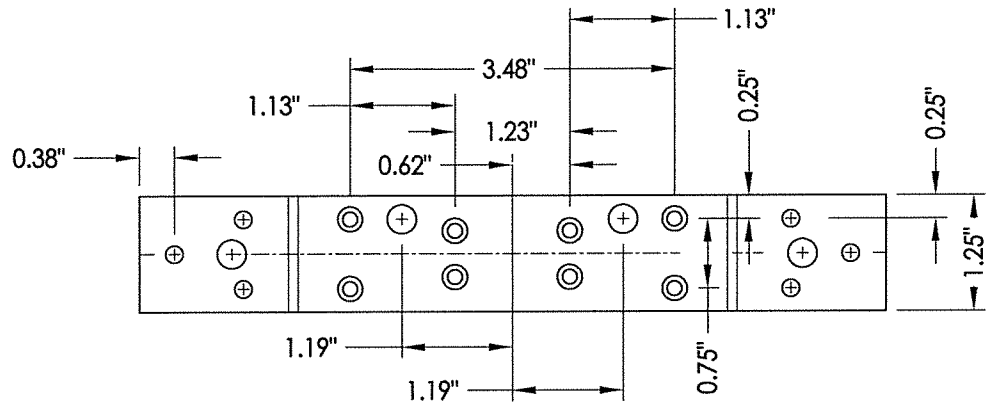
PART OR ASSEMBLY:
ANCHORING DETAILS

NO.	DATE	REVISIONS
3	10/05/20	UPDATE TO 7TH ED. (2020) FBC LFS
2	10/16/17	UPDATE TO 6TH ED. (2017) FBC LFS
1	1/06/15	UPDATE TO 5th ED. (2014) FBC LFS

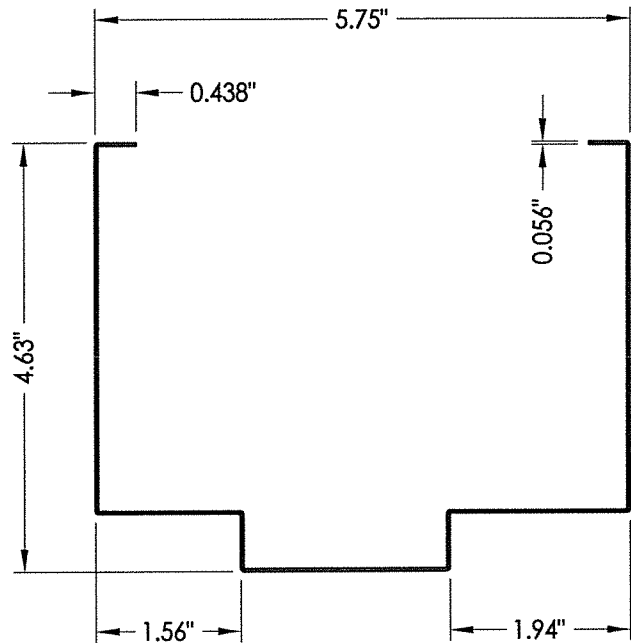
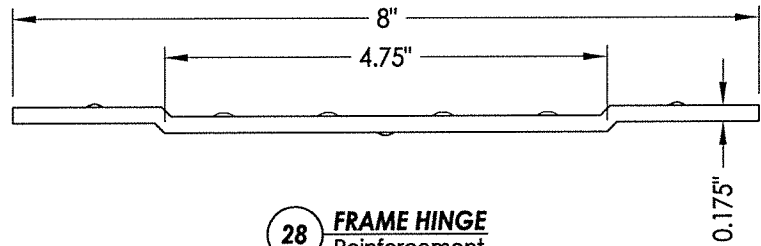
DATE: 7/17/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16494.3
SHEET 9 OF 11

PROFESSIONAL ENGINEER
E. SCHMIDT
LICENSE
No. 43409
STATE OF FLORIDA

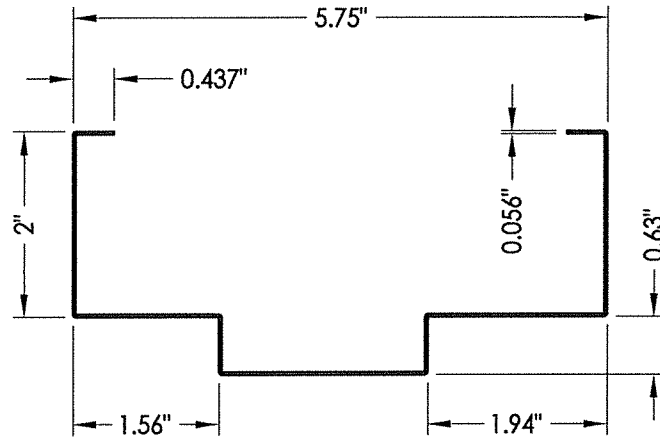
BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813



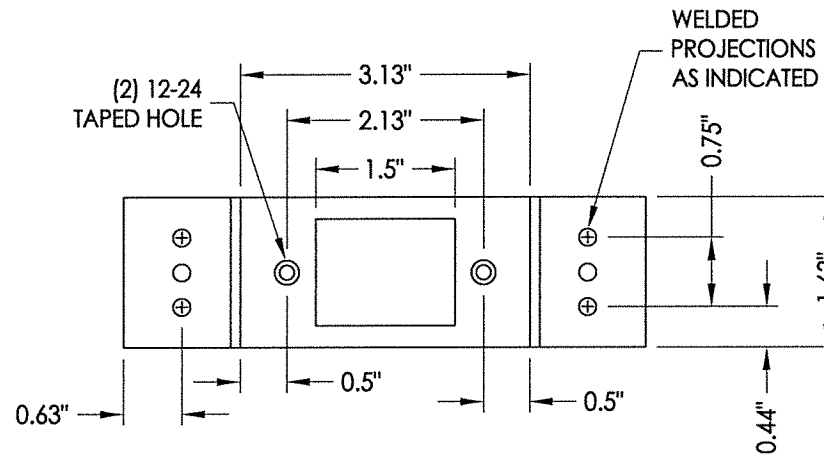
28 **FRAME HINGE**
Reinforcement



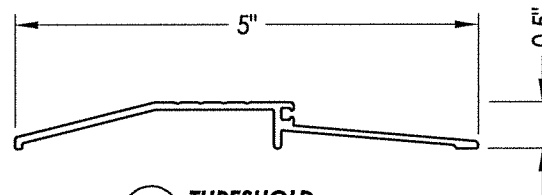
26 **FRAME**



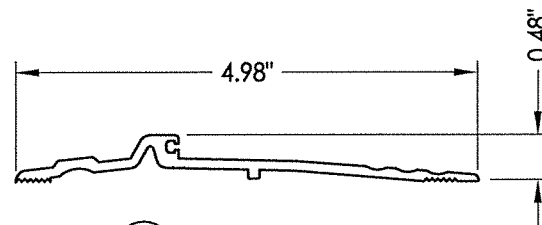
25 **FRAME**



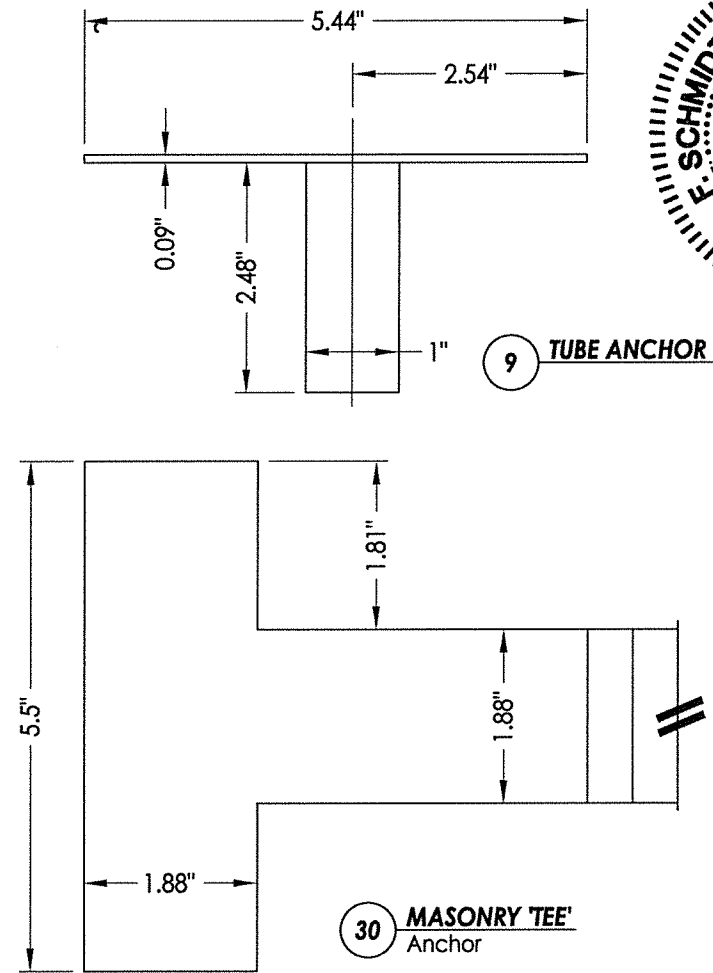
27 **FRAME STRIKE**
Reinforcement



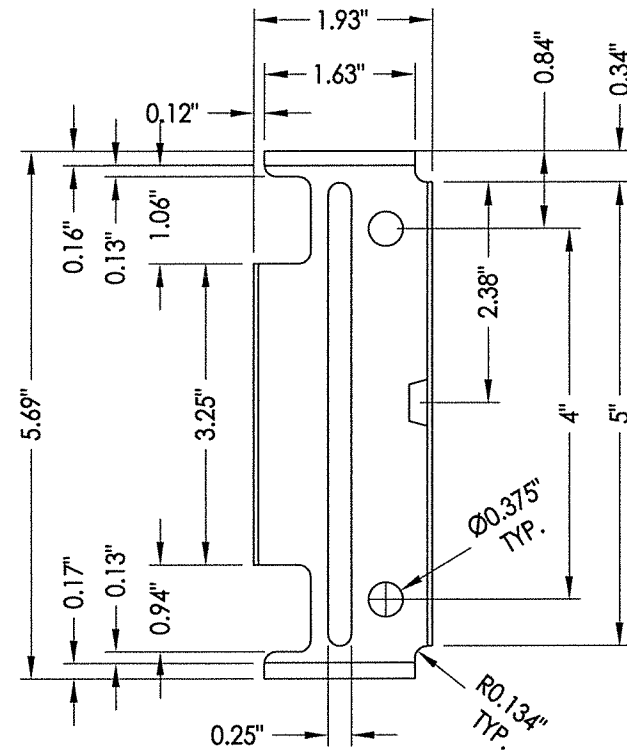
41 **THRESHOLD**



40 **THRESHOLD**



30 **MASONRY TEE**
Anchor



31 **UNIVERSAL WALL ANCHOR**

Professional Engineer
F. SCHMIDT
LICENSE
No. 43409
STATE OF FLORIDA
October 6, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409
BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:
MEGAMET INDUSTRIES, INC.
"D" STEEL DOOR

PART OR ASSEMBLY:
COMPONENTS

NO.	DATE	REVISIONS
3	10/05/20	UPDATE TO 7TH ED. (2020) FBC LFS
2	10/16/17	UPDATE TO 6TH ED. (2017) FBC LFS
1	1/06/15	UPDATE TO 5TH ED. (2014) FBC LFS

DATE: 7/17/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

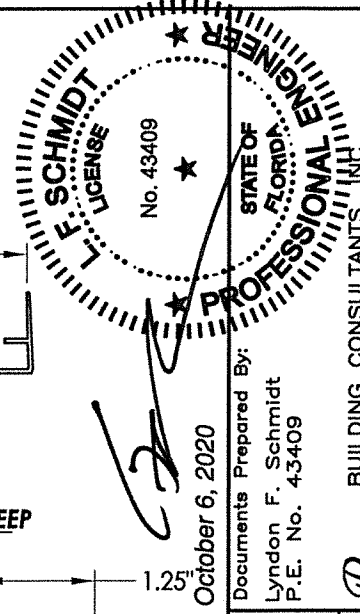
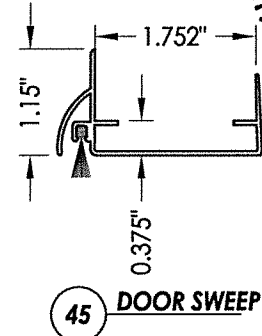
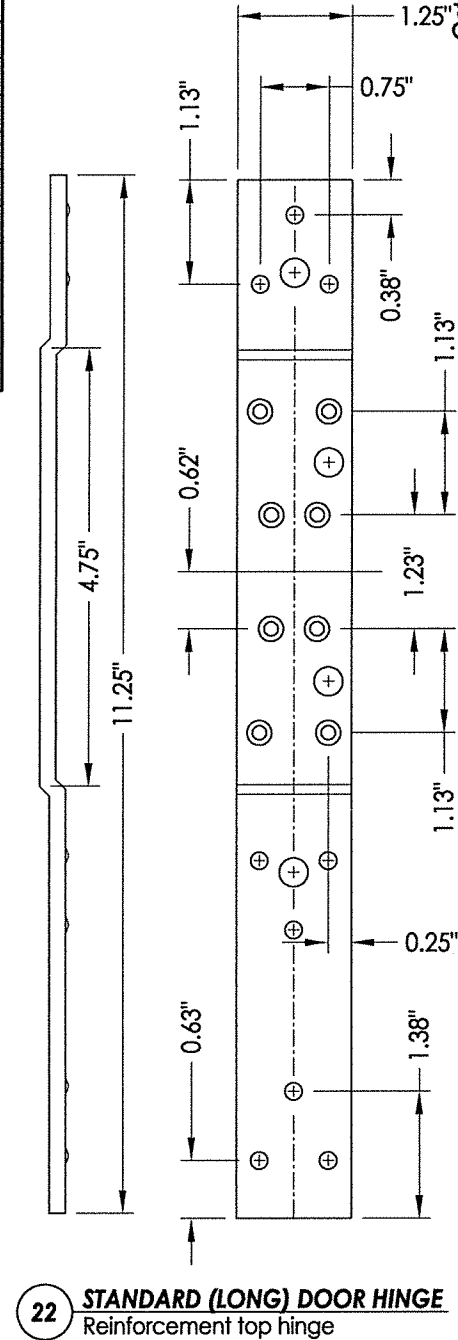
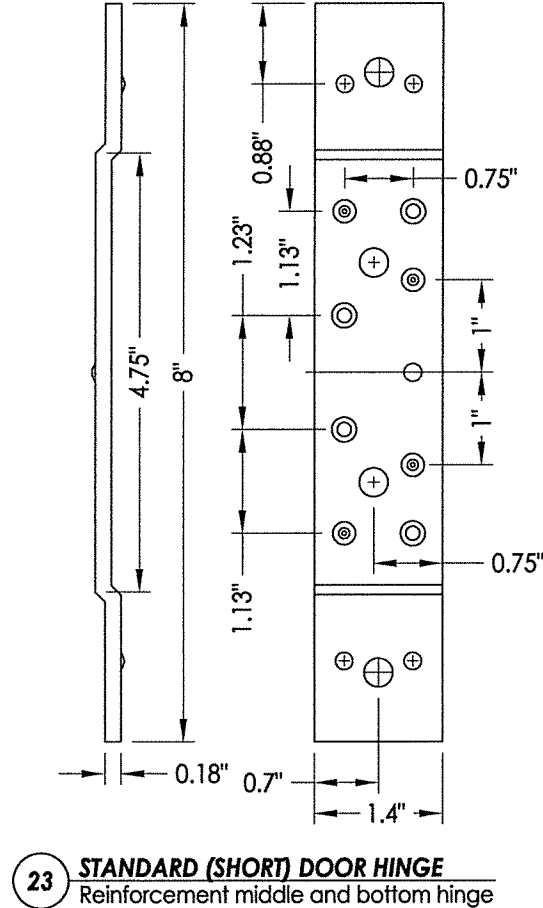
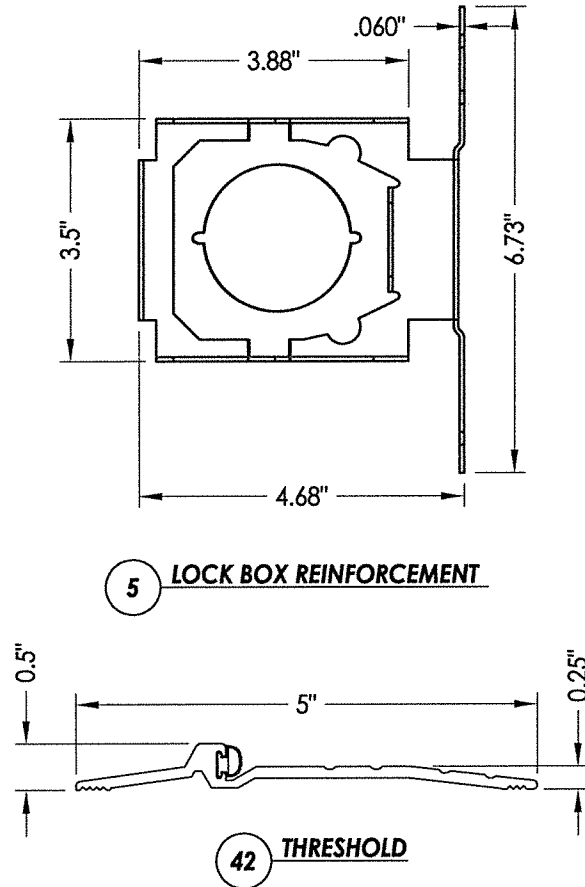
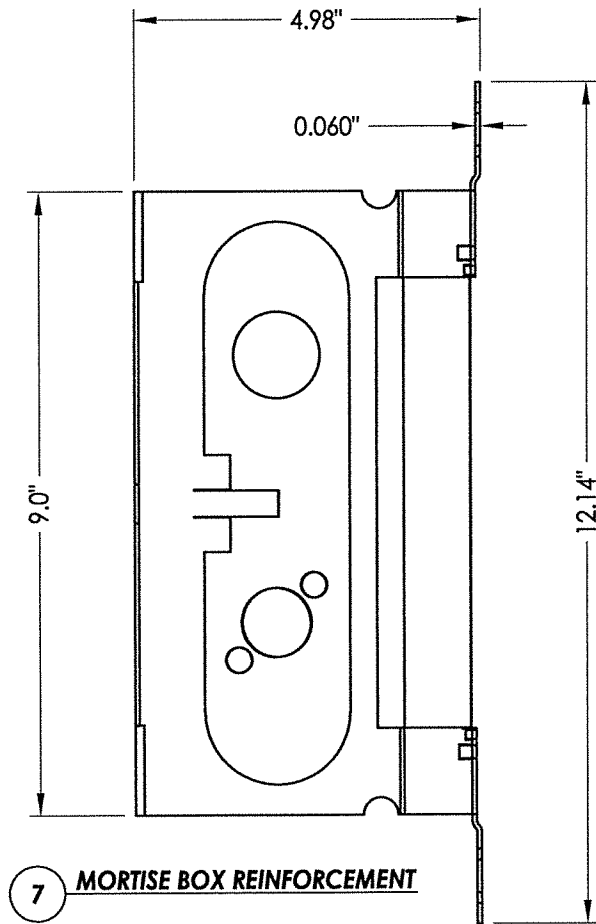
DRAWING NO.:

FL-16494.3

SHEET 10 OF 11

R:\Clients\Megamet PERMANENTVA - Florida Product Approvals\FL-16494\C - Drawings\FL-16494.1-13.dwg, 11.3

BILL OF MATERIALS					
ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
C	MAX. 1/4" SHIM SPACE	-	22	STANDARD (LONG) DOOR HINGE TOP HINGE REINFORCEMENT	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE	23	STANDARD (SHORT) DOOR HINGE MIDDLE BOTTOM REINFORCEMENT	STEEL
F	5/16" x 5" PFH DeWALT OR ITW CONCRETE SCREW	STEEL	24	WEATHER STRIP (THRESHOLD)	NEOPRENE
G	5/16" x 4" HWH DeWALT OR ITW CONCRETE SCREW	STEEL	25	FRAME 5-3/4" MIN. (0.056" THK) BY MESKER	STEEL
H	1/4" x 1-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL	26	FRAME 5-3/4" MIN. WITH 4" HEAD	STEEL
1	"D" OPAQUE STEEL DOOR PANEL	-	27	STRIKE REINFORCEMENT	STEEL
2	DOOR SKIN (0.055" THK. STEEL, Fy = 40,317 PSI MIN.)	STEEL	28	FRAME HINGE REINFORCEMENT	STEEL
3	FOAM 1.0 PCF MIN. DENSITY	POLYSTYRENE	29	COLUMBIA DOOR BOTTOM SWEEP #2580	ALUMINUM
4	DOOR TOP & BOTTOM CLOSER	STEEL	30	MASONRY 'TEE' ANCHOR (MESKER PFMT5)	STEEL
5	LOCK BOX REINFORCEMENT	STEEL	31	UNIVERSAL WALL ANCHOR	STEEL
6	CLOSER REINFORCEMENT	STEEL	40	THRESHOLD NATIONAL GUARD PRODUCTS, INC. #896	ALUMINUM
7	MORTISE BOX REINFORCEMENT	STEEL	41	THRESHOLD NATIONAL GUARD PRODUCTS, INC. #950	ALUMINUM
8	#12-24 x 1/2" SELF TAPPING	STEEL	42	THRESHOLD PEMKO #2005V	ALUMINUM
9	TUBE ANCHOR	STEEL	45	95WHA DOOR SWEEP NATIONAL GUARD PRODUCTS, INC.	ALUMINUM
10	#12-24 x 1.0" COMBINATION MACHINE / WOOD SCREW	STEEL	46	#6 X 3/4" PHILLIPS HEAD SMS	STEEL
11	DOOR STILE EDGE REINFORCEMENT (D DOOR)	STEEL	70	SCHLAGE LOCK SET ASSEMBLY ND53PD	STEEL
14	COLUMBIA ADA THRESHOLD #6510	ALUMINUM	71	DESIGN HARDWARE D1-S SERIES DEADBOLT	STEEL
16	ANSI LATCH STRIKE	STEEL	72	DESIGN HARDWARE "Z" SERIES ENTRY	STEEL
17	DEADBOLT STRIKE	STEEL	73	86E MORTISE LOCK- ONITY CT SERIES	STEEL
18	ANSI MORTISE STRIKE	STEEL	74	86E MORTISE LOCK- ONITY HT SERIES	STEEL
20	WEATHER-STRIP	NEOPRENE	75	86E MORTISE LOCK- ONITY ADVANCE SERIES	STEEL
21	4-1/2" X 4-1/2" X 0.125" TEMPLATE HINGE	STEEL	76	DESIGN HARDWARE D2-S SERIES DEADBOLT	STEEL
			77	DESIGN HARDWARE "X" SERIES ENTRY	STEEL



Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		October 6, 2020	
PRODUCT: MEGAMET INDUSTRIES, INC. "D" STEEL DOOR		PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS	
3	10/05/20	UPDATE TO 7TH ED. (2020)	FBC LFS
2	10/16/17	UPDATE TO 6TH ED. (2017)	FBC LFS
1	1/06/15	UPDATE TO 5TH ED. (2014)	FBC LFS
NO.	DATE	REVISIONS	
DATE: 7/17/13		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: FL-16494.3		SHEET 11 OF 11	