

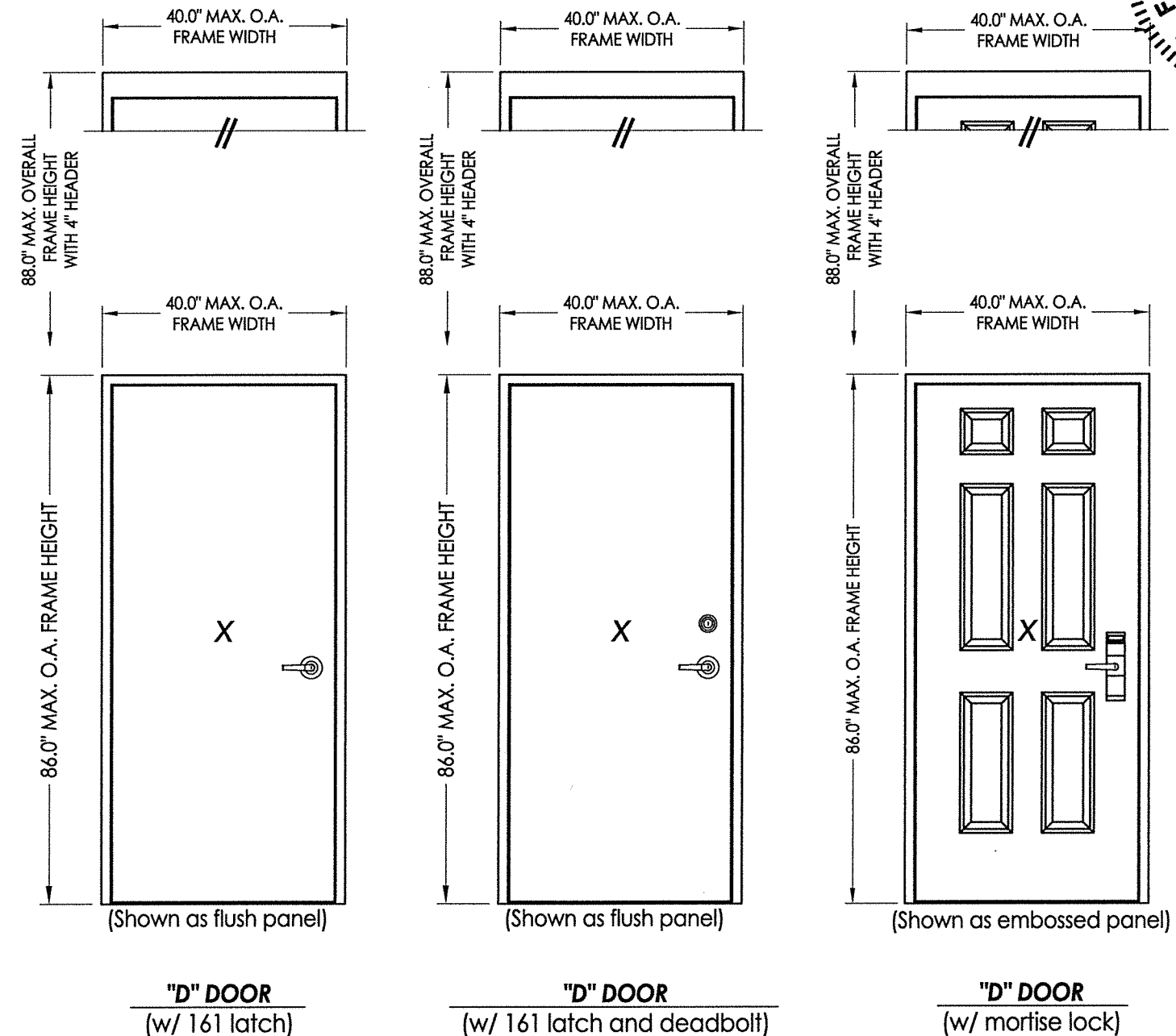
3228 6th AVENUE NORTH
P.O. BOX 635
BIRMINGHAM, AL 35201

**"D" SERIES
COMMERCIAL STEEL DOOR
OUTSWING
"IMPACT"**

GENERAL NOTES

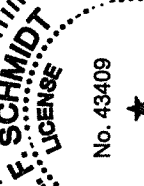
1. This product has been evaluated and is in compliance with the 7th Edition (2020) Florida Building Code (FBC) structural requirements including the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be 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. Outswing configurations using high water dam threshold item #78 meet water infiltration requirements for "HVHZ".
6. Outswing configurations using sill item #40, #41 and #42 do 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. All steel shall be protected as specified in Section 2222.6 of the FBC.

TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical elevations, design pressures, & general notes
2	Door panel sections 161 lock prep
3	Door panel sections 86E mortise lock prep
4	Horizontal cross sections
5	Horizontal cross sections
6	Horizontal cross sections
7	Vertical cross sections
8	Frame anchoring
9	Anchoring details
10	Components
11	Bill of materials & components



OVERALL FRAME DIMENSION	LOCK TYPE	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
40.0" x 86.0"	161 LATCH (SCHLAGE)	+55.0	-55.0
40.0" x 86.0"	161 LATCH & DEADBOLT (DESIGN HARDWARE)	+70.0	-70.0
40.0" x 86.0"	86E MORTISE LOCK (ONITY)	+60.0	-60.0

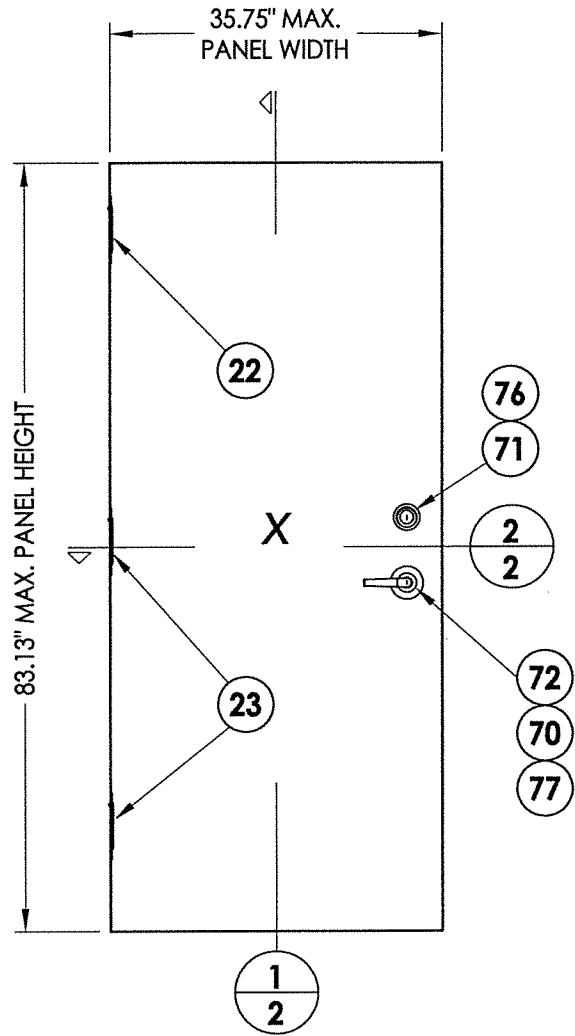
DATE: 7/17/13						PRODUCT: MEGAMET INDUSTRIES, INC. "D" STEEL DOOR PART OR ASSEMBLY: TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES
SCALE: N.T.S.						
DWG. BY: JK						
CHK. BY: LFS						
DRAWING NO.: FL-16494.4						
SHEET 1 OF 11						
3	10/05/20	UPDATE TO 7TH ED.	(2020)	FBC	LFS	
2	10/16/17	UPDATE TO 6TH ED.	(2017)	FBC	LFS	
1	1/06/15	UPDATE TO 5th ED.	(2014)	FBC	LFS	
NO.	DATE				BY	
						REVISIONS



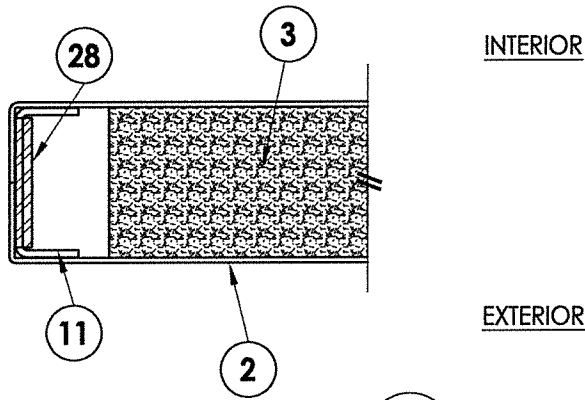
October 6, 2020

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

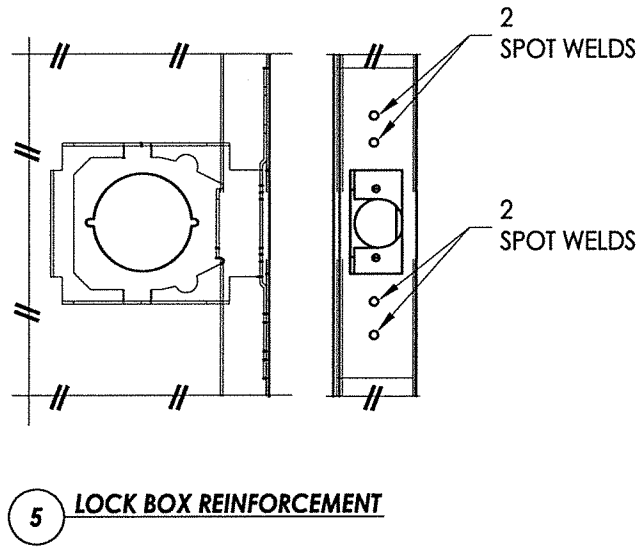
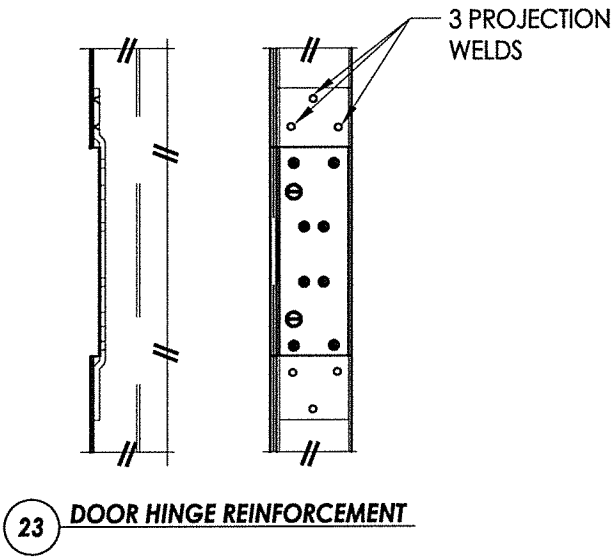
RFW BUILDING CONSULTANTS, INC.
 P.O. Box 230, Valrico, FL 33595
 Phone No.: 813.659.9197
 FBPE Registry No. 9813



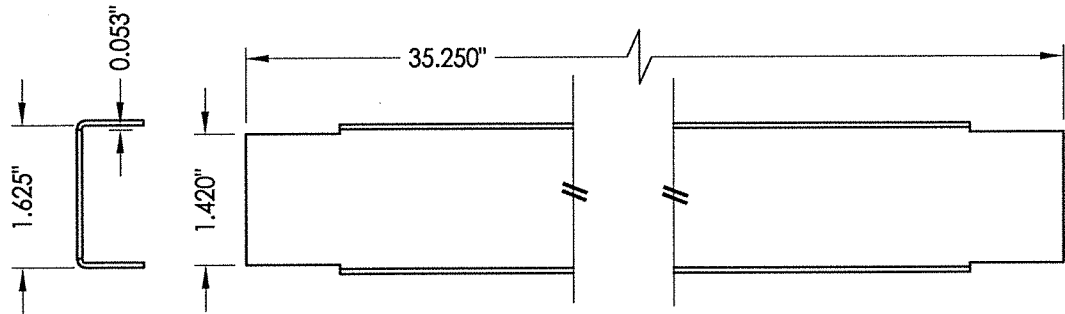
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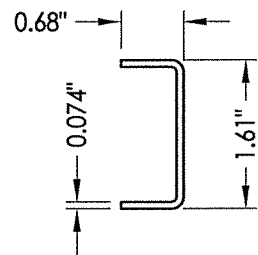
2/2 HORIZONTAL CROSS SECTION
Door panel



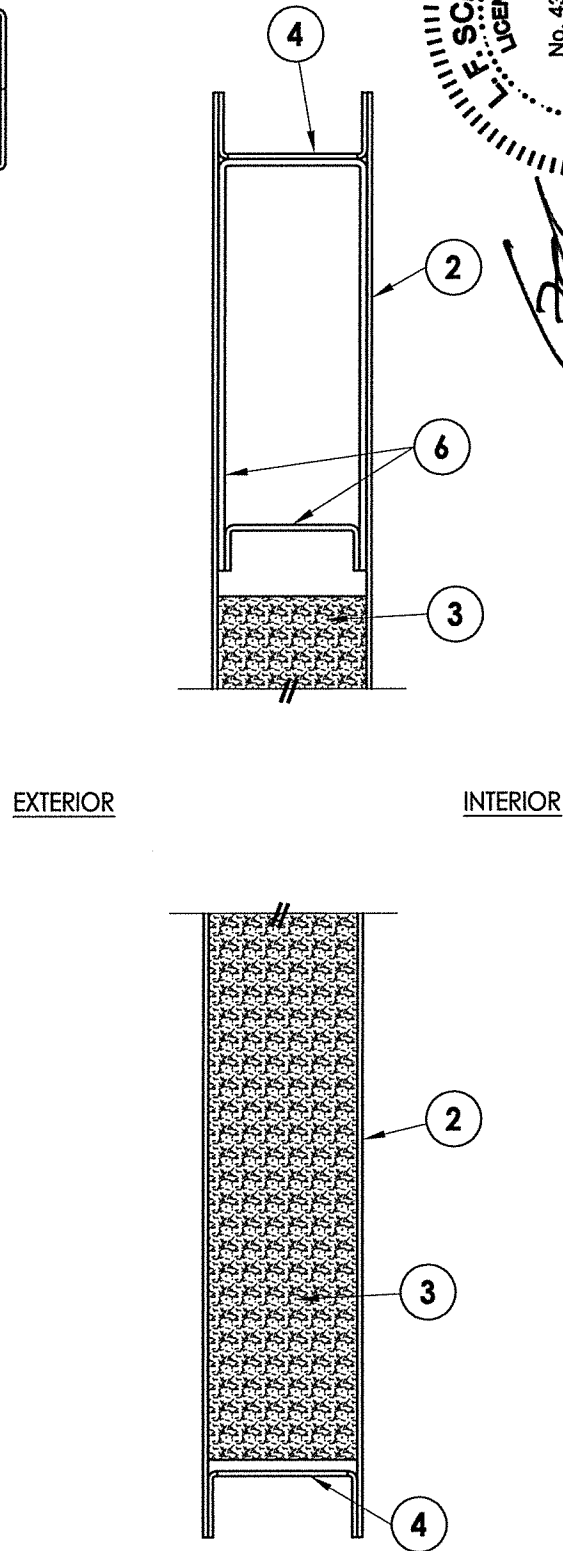
5 LOCK BOX REINFORCEMENT



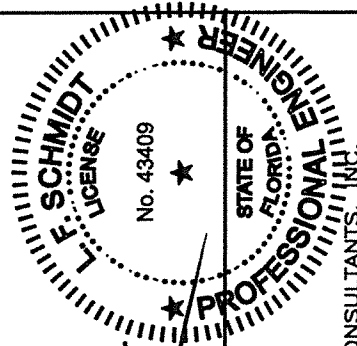
4 DOOR TOP & BOTTOM CLOSER



11 DOOR STILE EDGE
Reinforcement



1/2 VERTICAL CROSS SECTION
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

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.

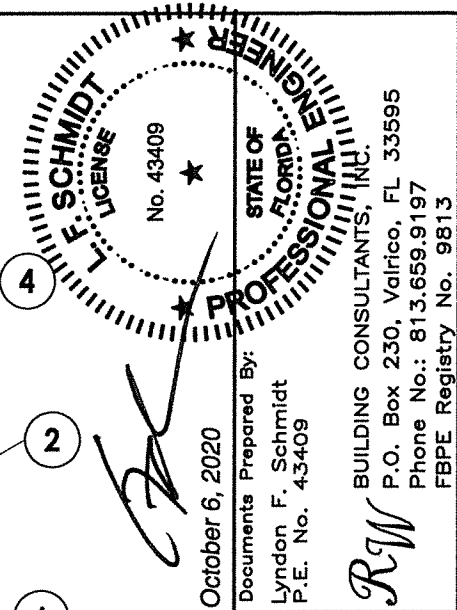
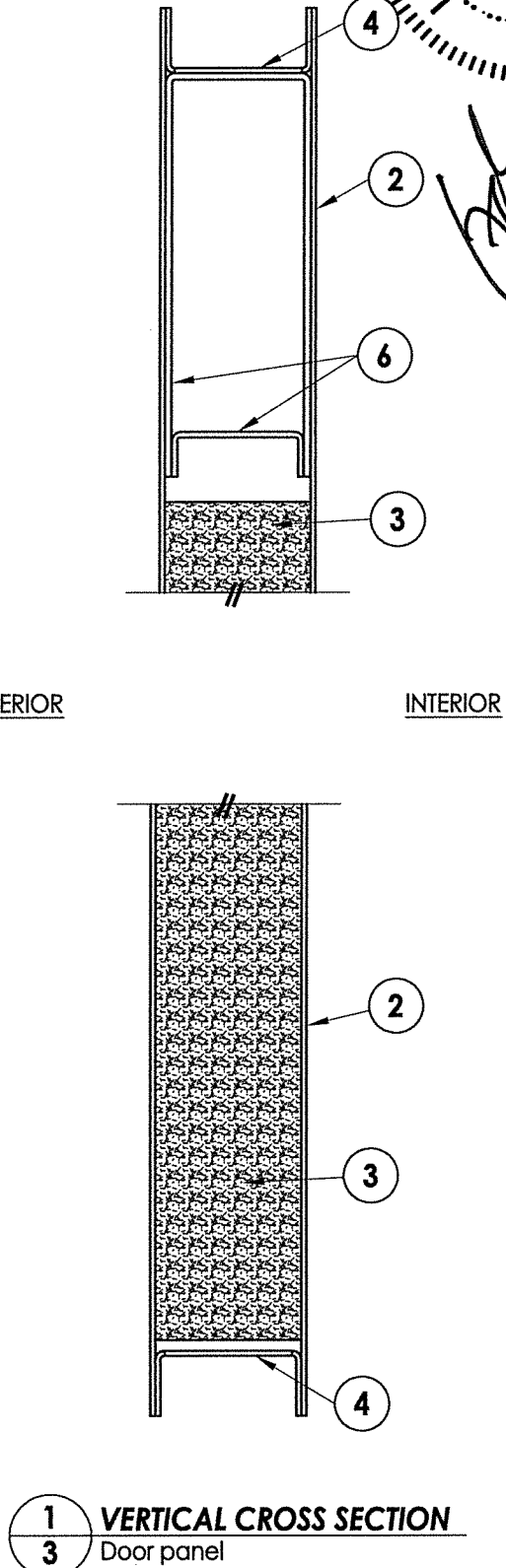
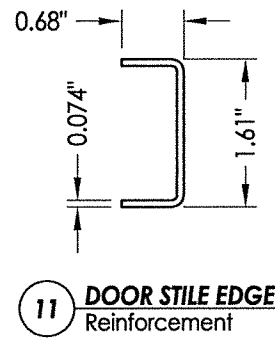
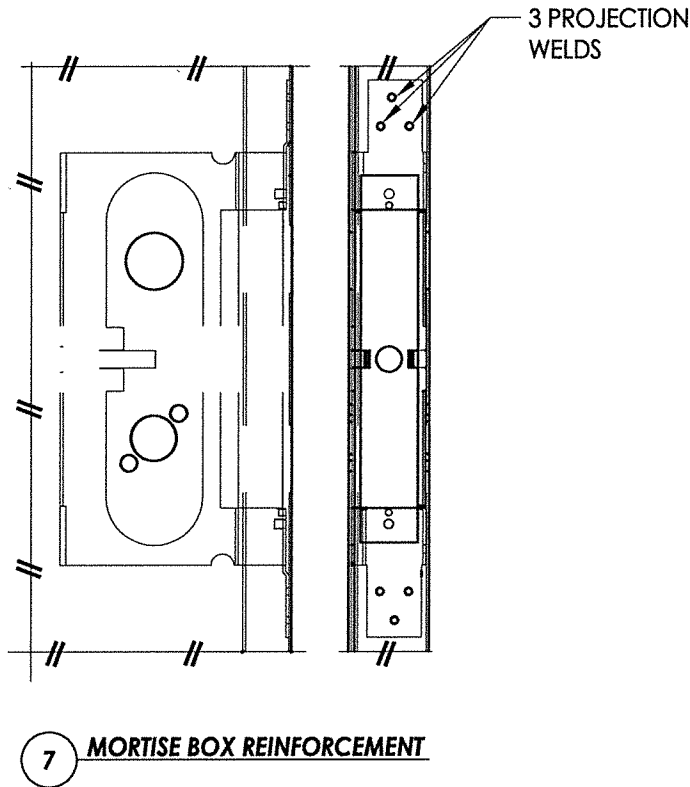
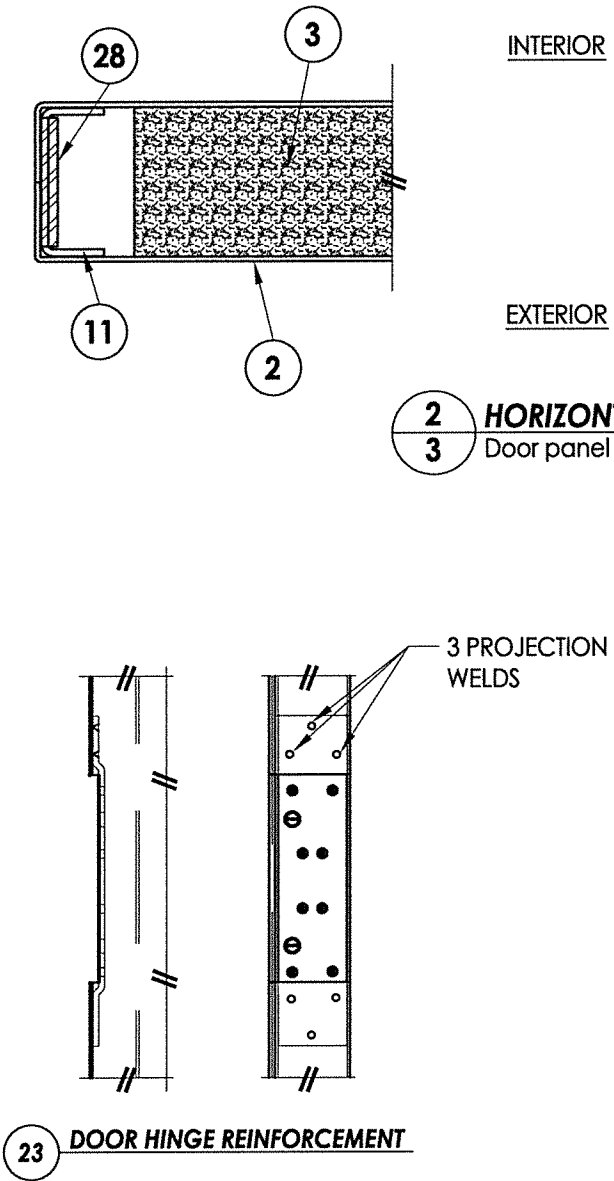
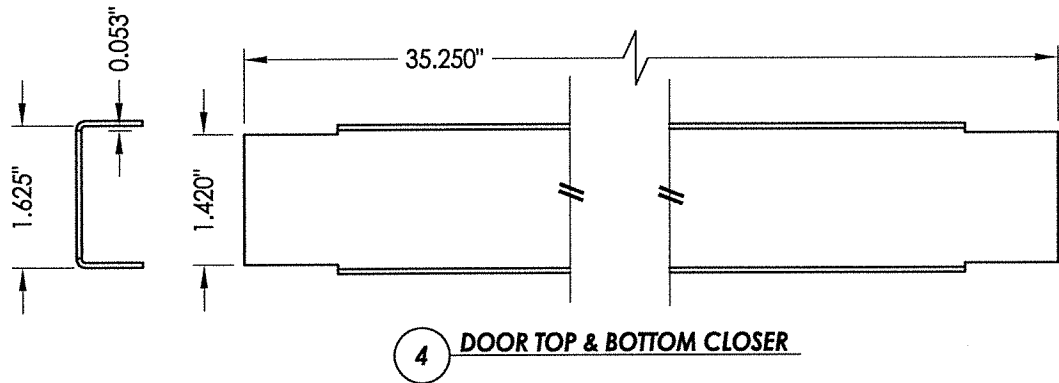
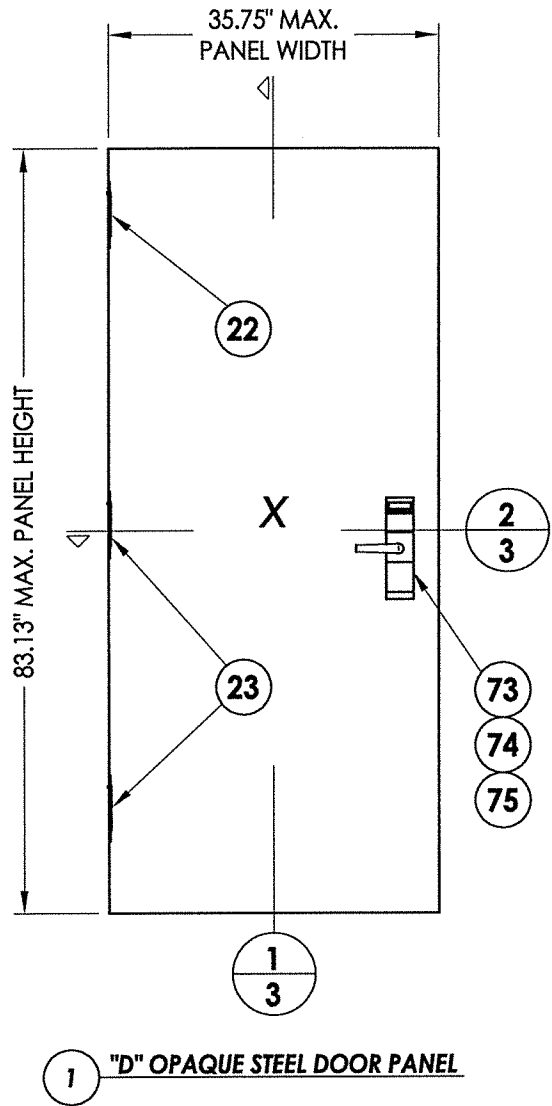
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CHK. BY: LFS

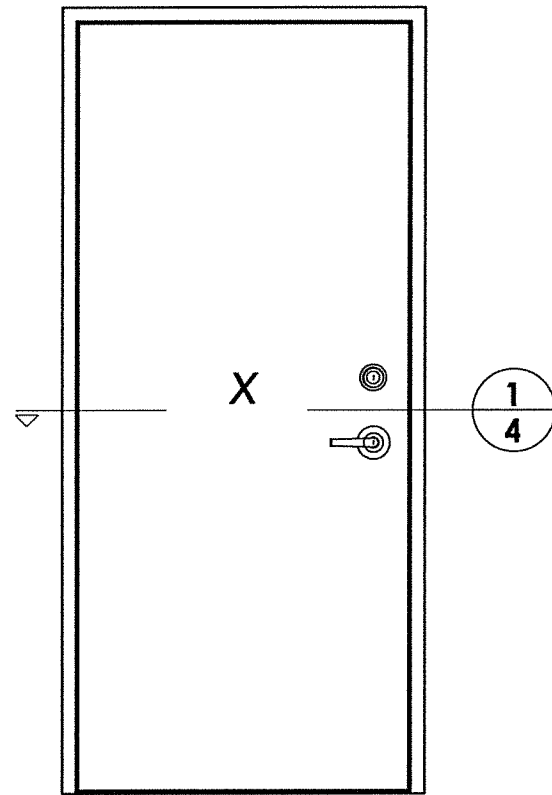
DRAWING NO.: FL-16494.4

SHEET 2 OF 11

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Phone No.: 813.659.9197
FBPE Registry No. 9813

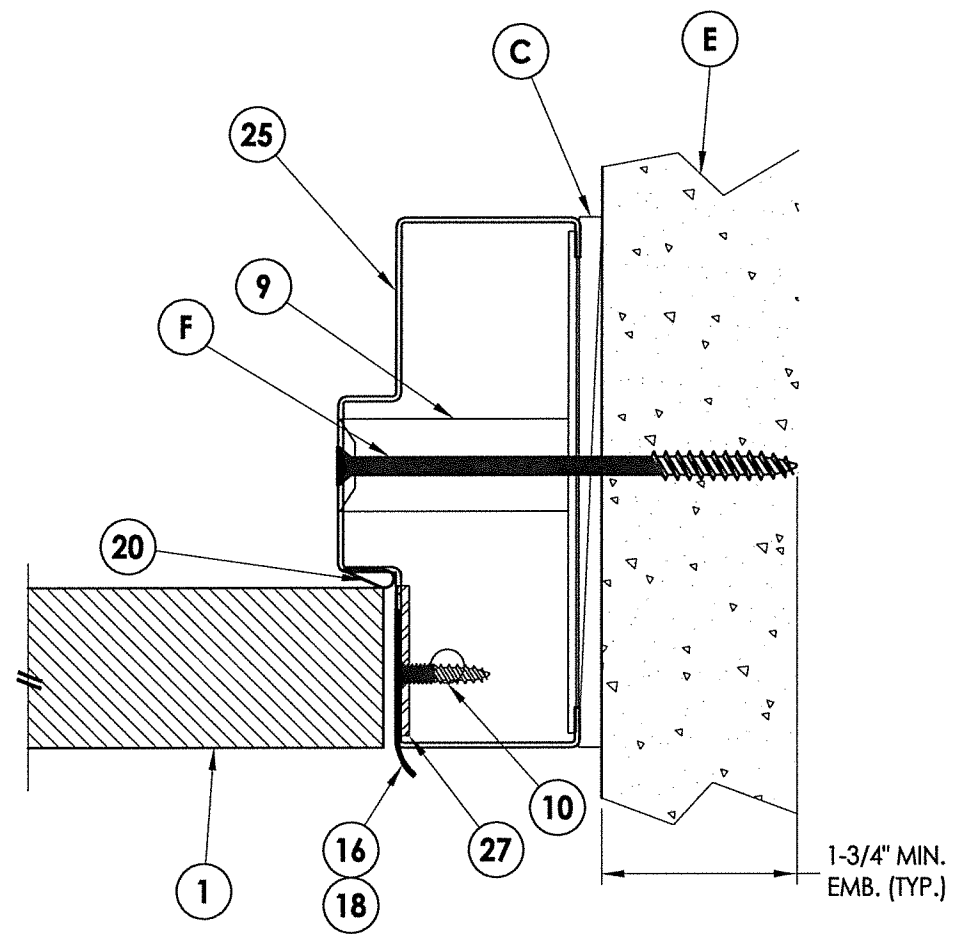


PRODUCT:		MEGAMET INDUSTRIES, INC.	
		"D" STEEL DOOR	
PART OR ASSEMBLY:		DOOR PANEL SECTIONS	
		86E MORTISE LOCK PREP	
DATE:	7/17/13		
SCALE:	N.T.S.		
DWG. BY:	JK		
CHK. BY:	LFS		
DRAWING NO.:	FL-16494.4		
SHEET	3	OF	11



EXTERIOR

1 **HORIZONTAL CROSS SECTION**
4



1-3/4" MIN. EMB. (TYP.)	DATE: 7/17/13
	SCALE: N.T.S.
	DWG. BY: JK
	CHK. BY: LFS
	DRAWING NO.: FL-16494.4
	SHEET 4 OF 11

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

PART OR ASSEMBLY:
HORIZONTAL CROSS SECTIONS

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

L. F. SCHMIDT
LICENSE
No. 43409
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

CONSULTANTS, INC.
O, Vairico, FL 33595
813.659.9197
ry No. 9813

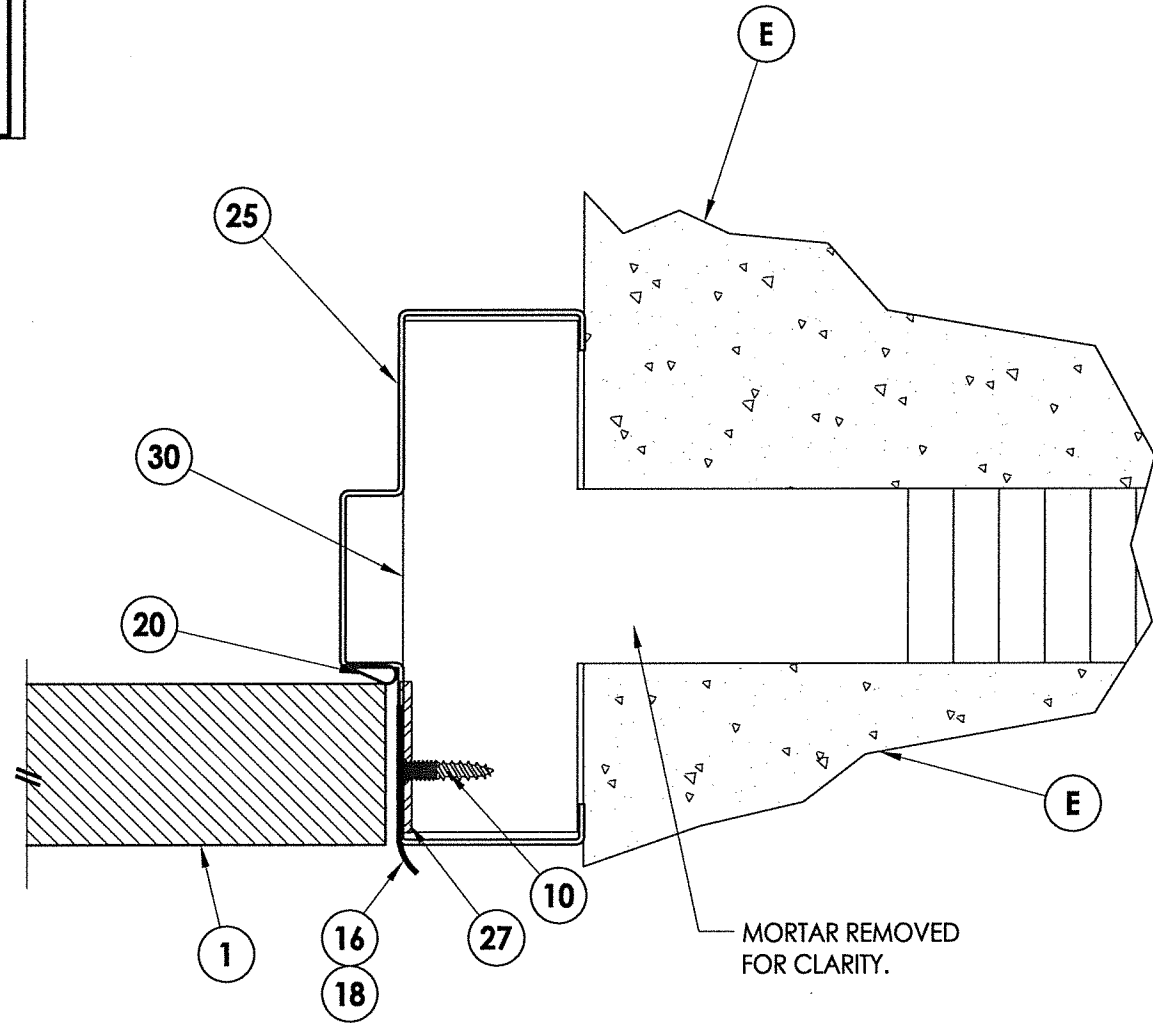
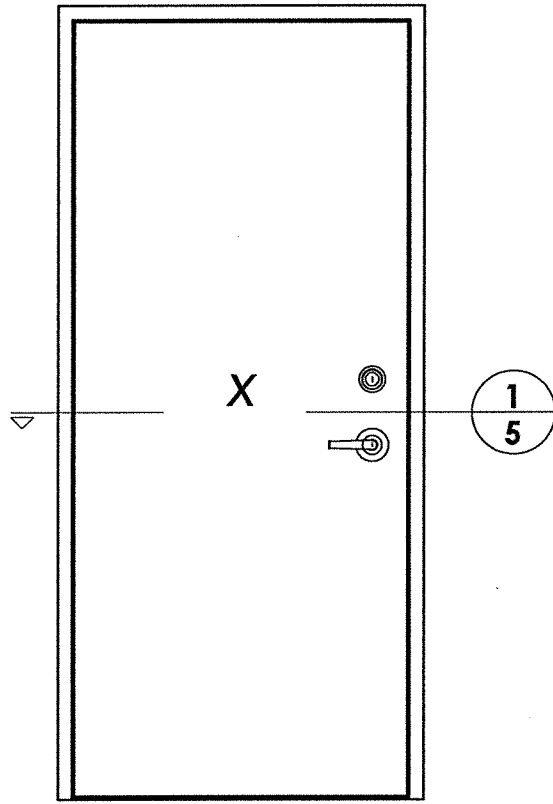
© 2013 R.W. BUILDING CONSULTANTS INC.

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graph TD
    A(( )) --- B((28))
    A --- C((21))
    B --- D((8))
    C -- arrow --> A
  
```

1 **HORIZONTAL CROSS SECTION**
5

EXTERIOR



— MORTAR REMOVED
FOR CLARITY.

[illegible]

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

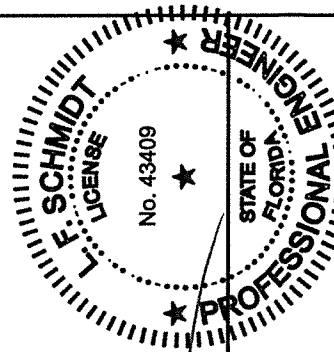
PART OR ASSEMBLY:
HORIZONTAL CROSS SECTIONS

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

October 6, 2020

STATE OF
FLORIDA
PROFESSIONAL ENGINEER

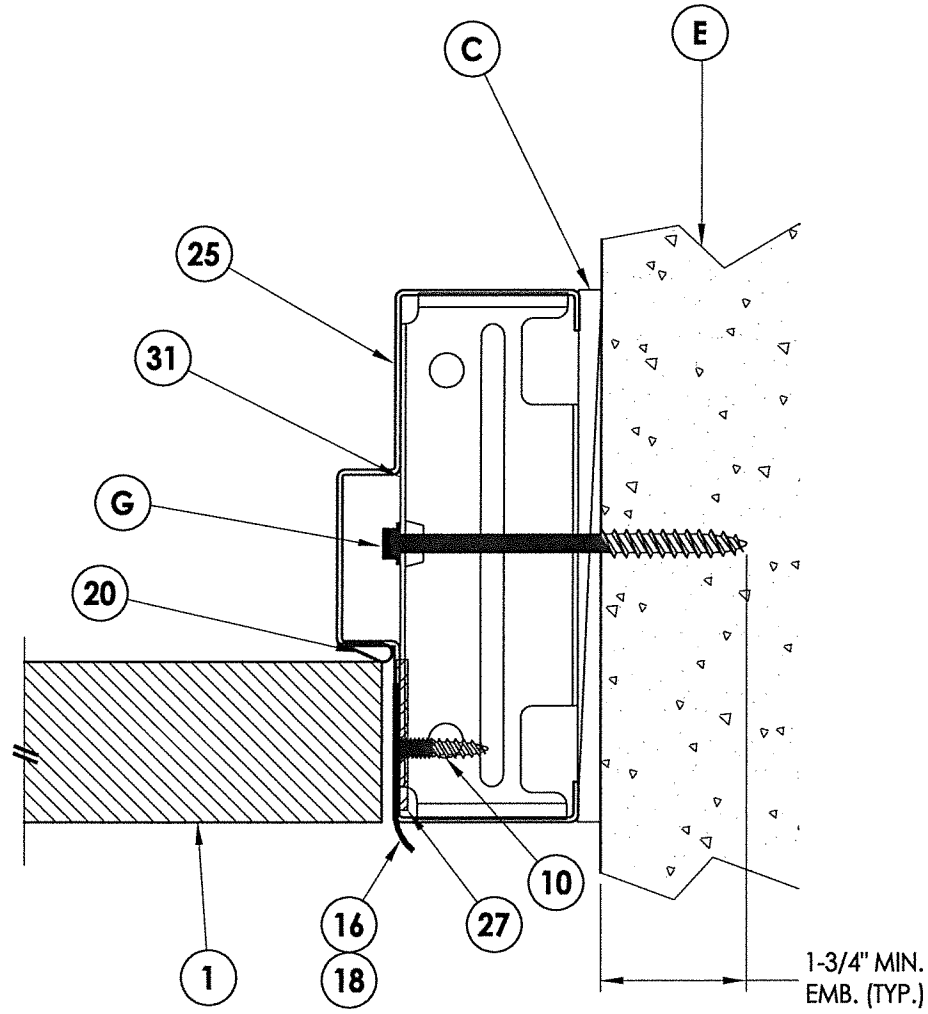
RW
BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813



A diagram of a door with a handle and lock. A horizontal line passes through the center of the door. On the left side of the line, there is a small triangle pointing downwards. On the right side of the line, there is a handle and a lock. The handle is a horizontal bar with a circular end. The lock is a circular knob. To the left of the handle, there is a large 'X'. To the right of the handle, there is a circle containing the number '1' above the number '6'.

EXTERIOR

1 **HORIZONTAL CROSS SECTION**
6



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

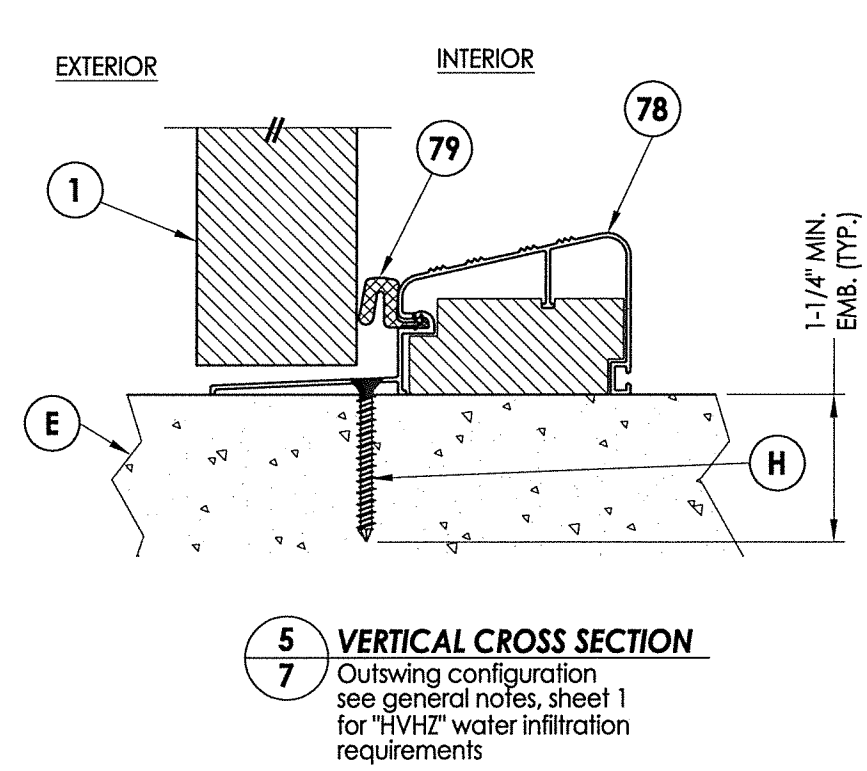
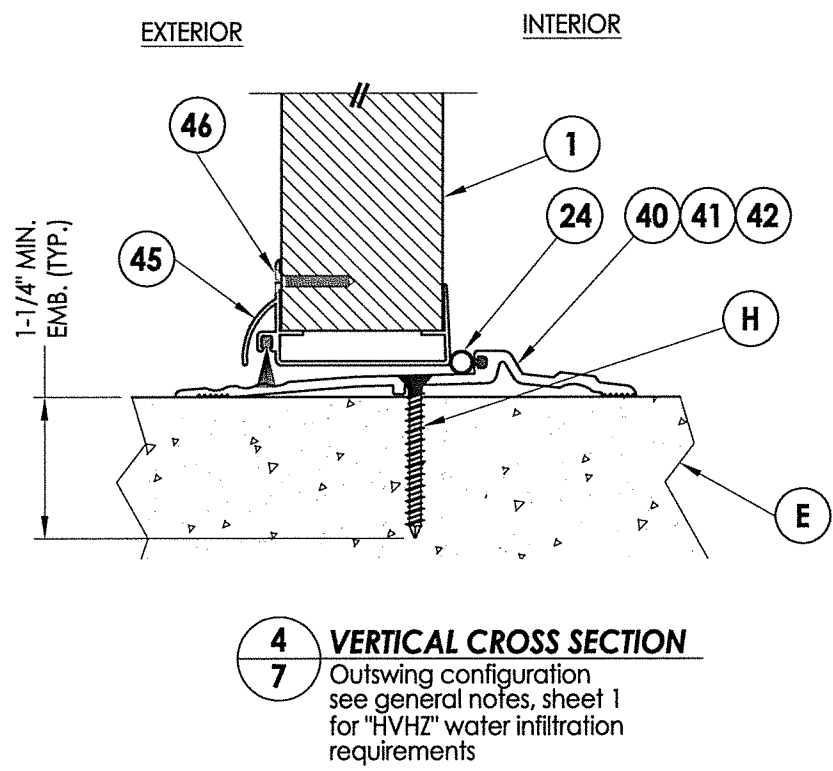
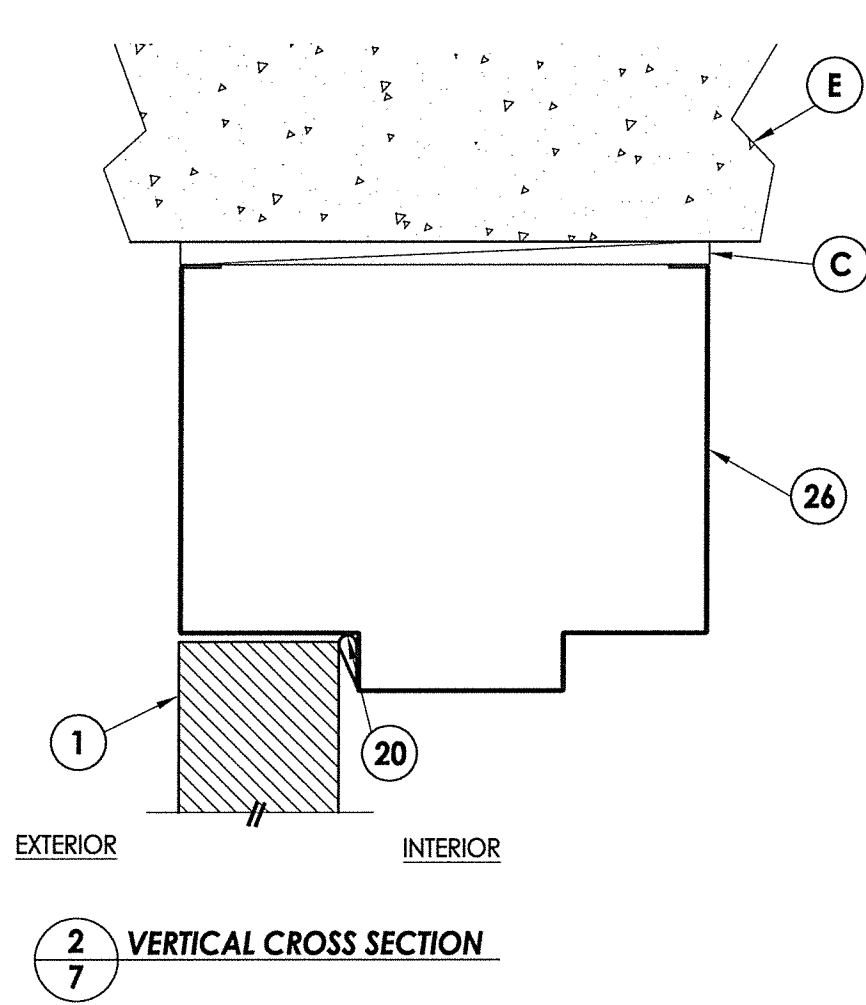


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P.E. No. 43409



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Phone No.: 813.659.9197
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[illegible]



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

October 6, 2020

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

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

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

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

DATE: 7/17/13

SCALE: N.T.S.

DWG. BY: JK

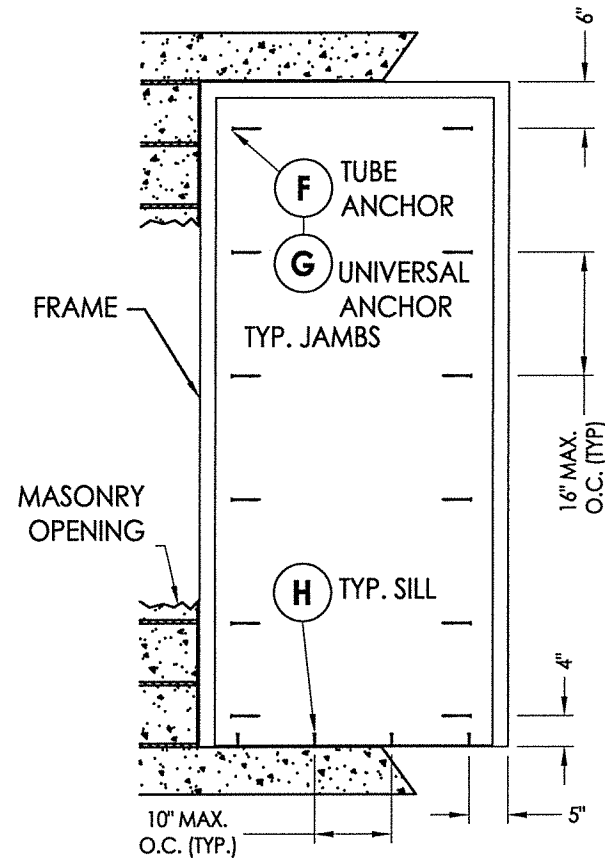
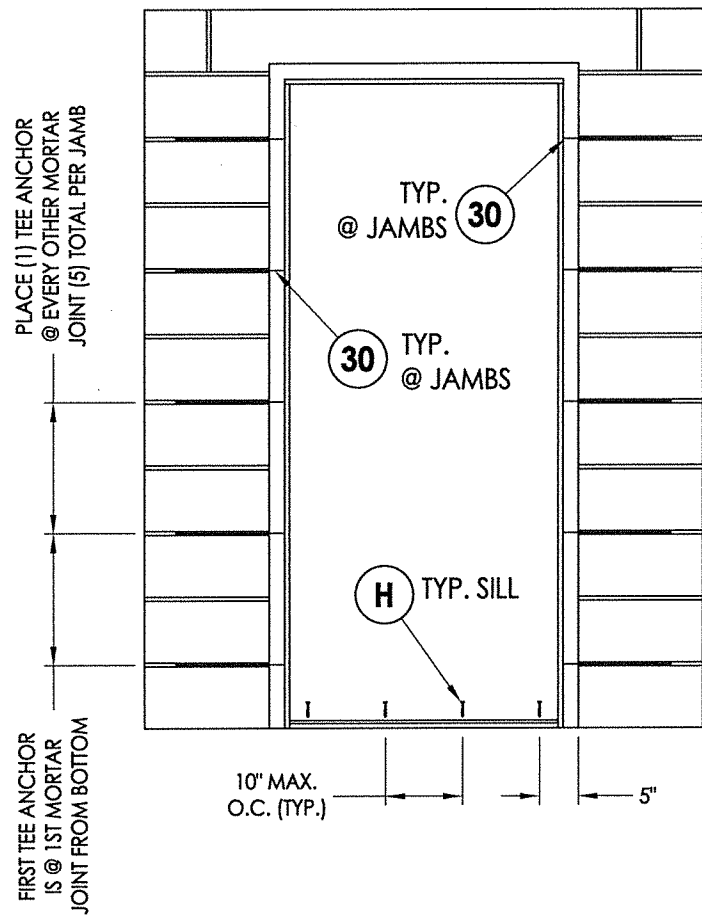
CHK. BY: LFS

DRAWING NO.:
FL-16494.4

SHEET 7 **OF** 11

STATE OF FLORIDA
PROFESSIONAL ENGINEER
L. F. SCHMIDT
LICENSE
No. 43409

R:\Clients\Megamet PERMANENT\A - Florida Product Approvals\FL-16494\C - Drawings\FL-16494 (2020)\FL-16494.1-13.dwg, 8.4

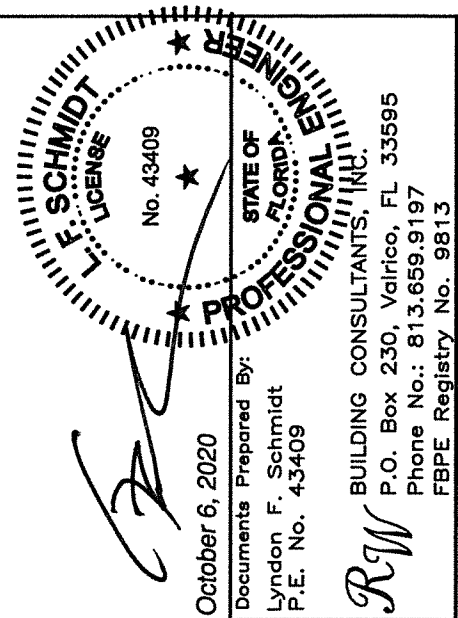


CONCRETE ANCHOR NOTES:

- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- 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.
- 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"

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



October 6, 2020

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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:
FRAME ANCHORING

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.

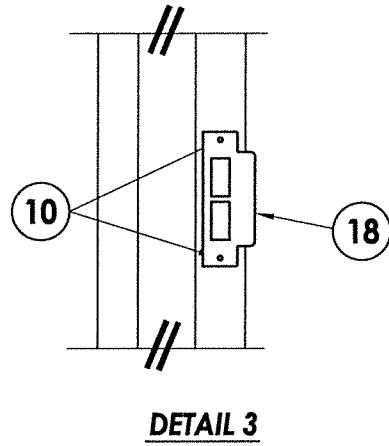
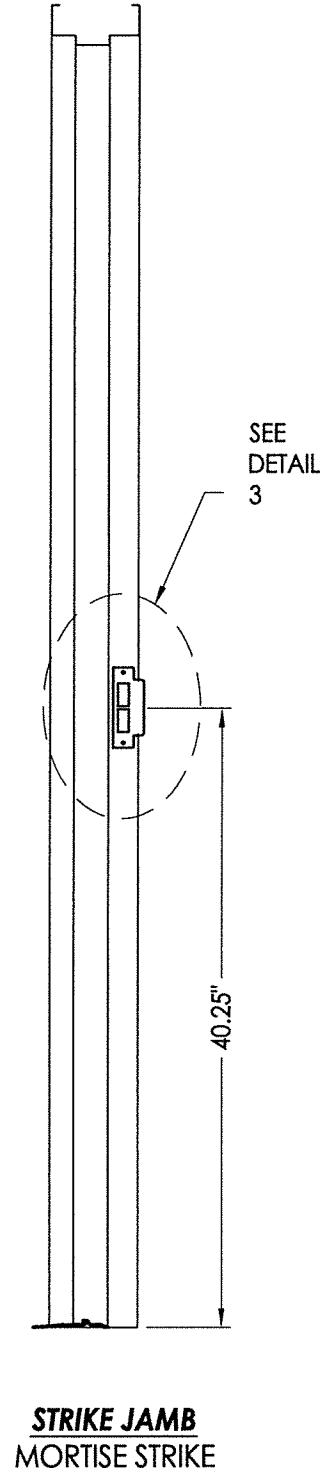
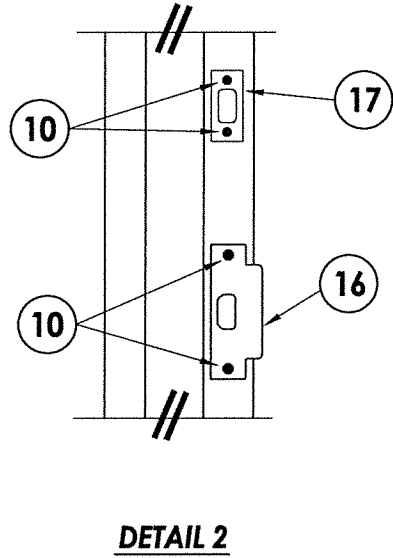
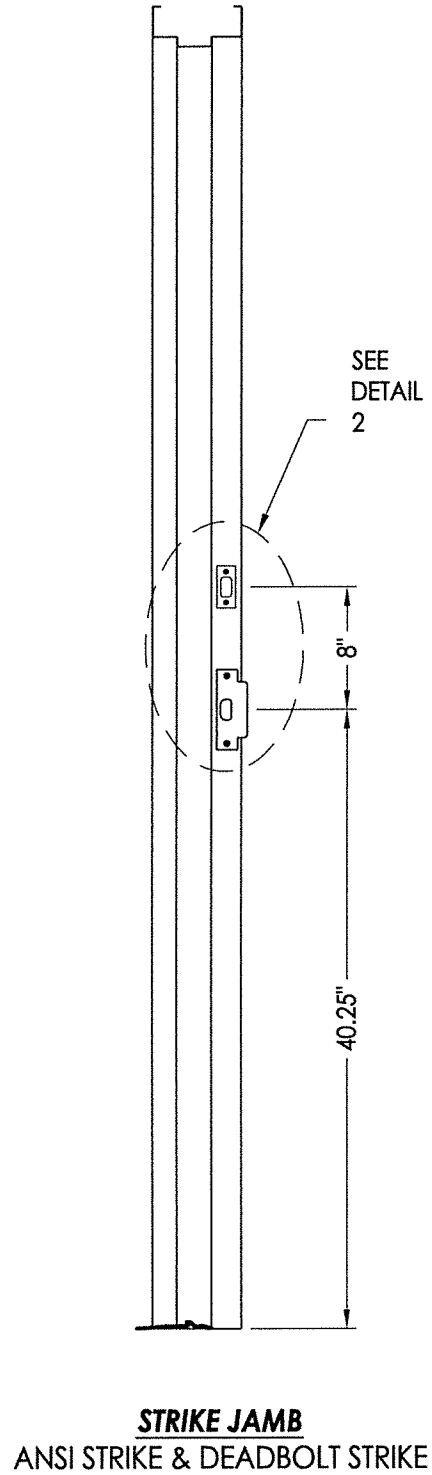
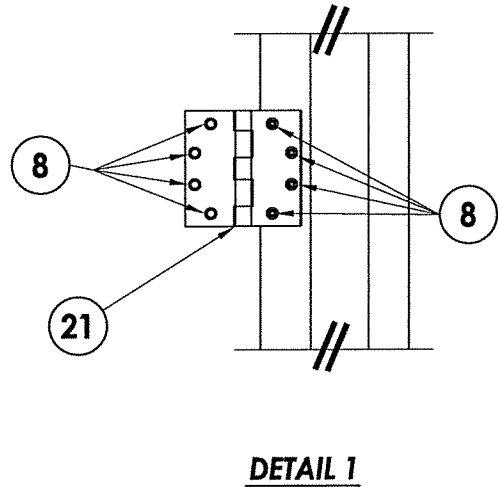
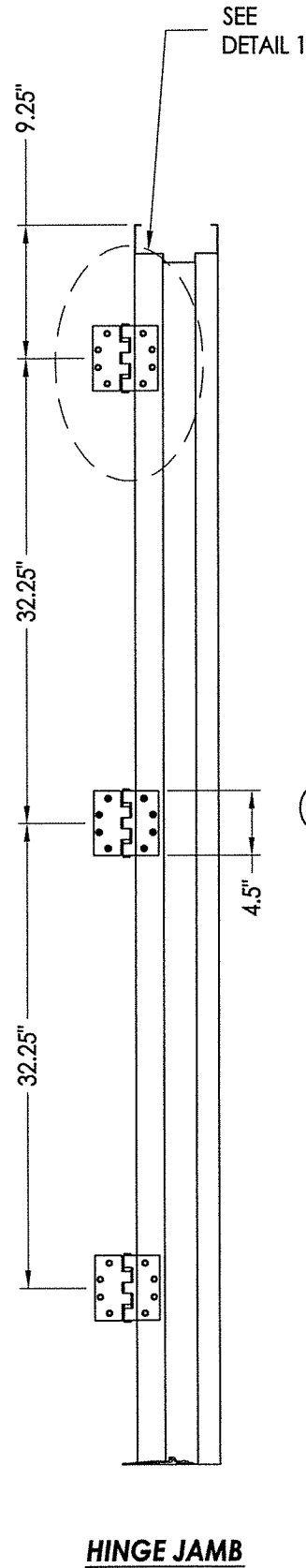
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-16494.4

SHEET 8 OF 11



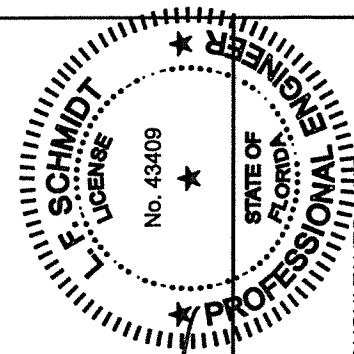
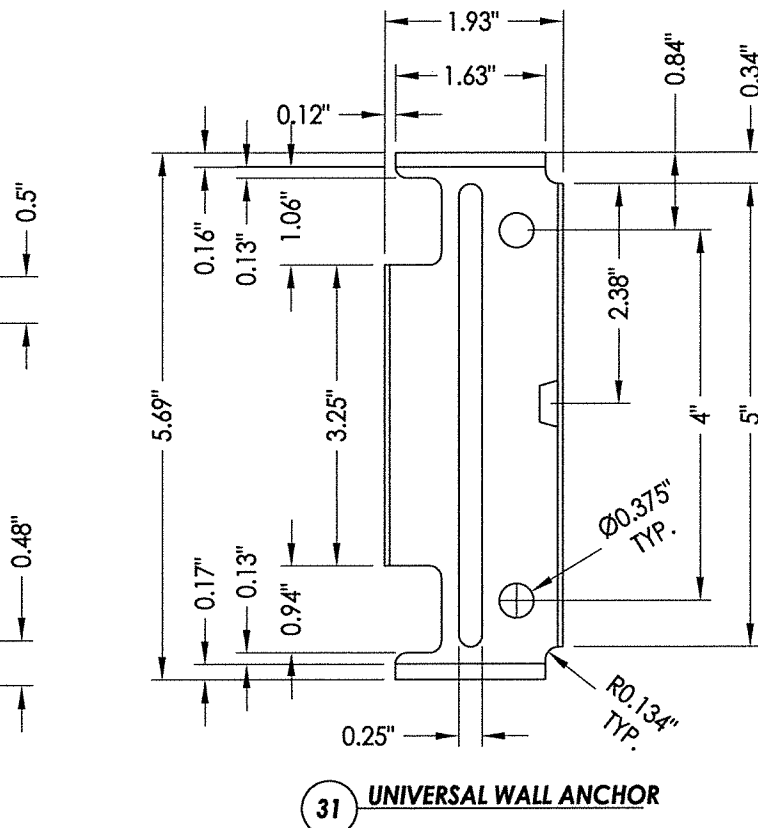
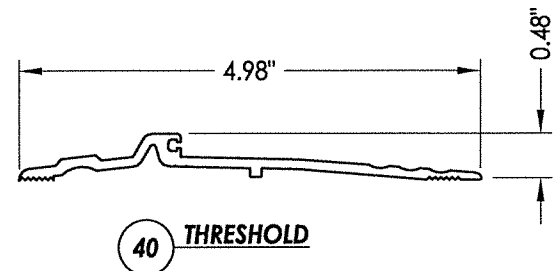
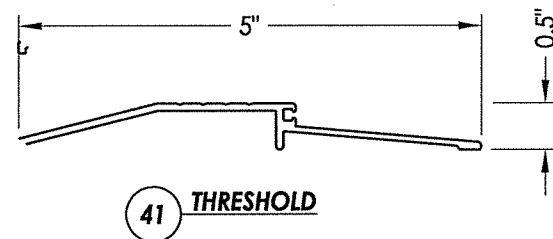
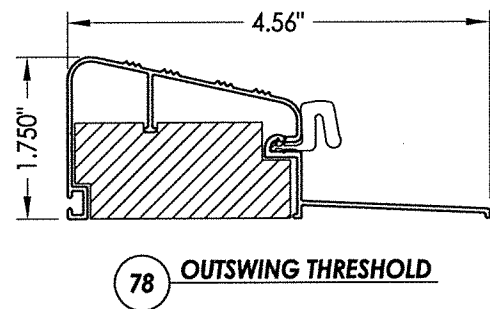
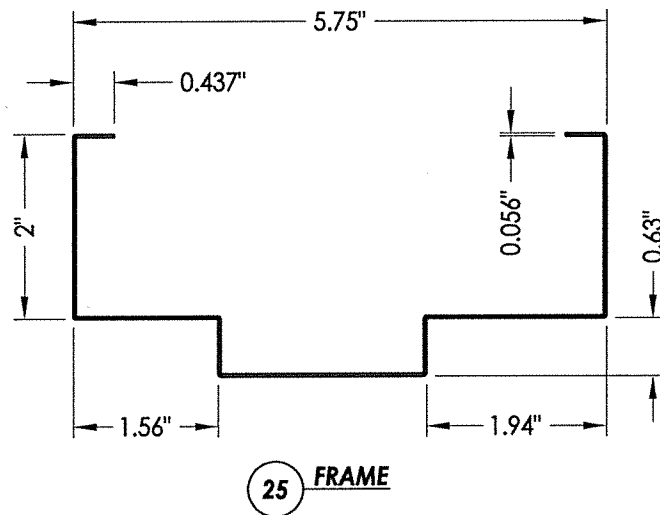
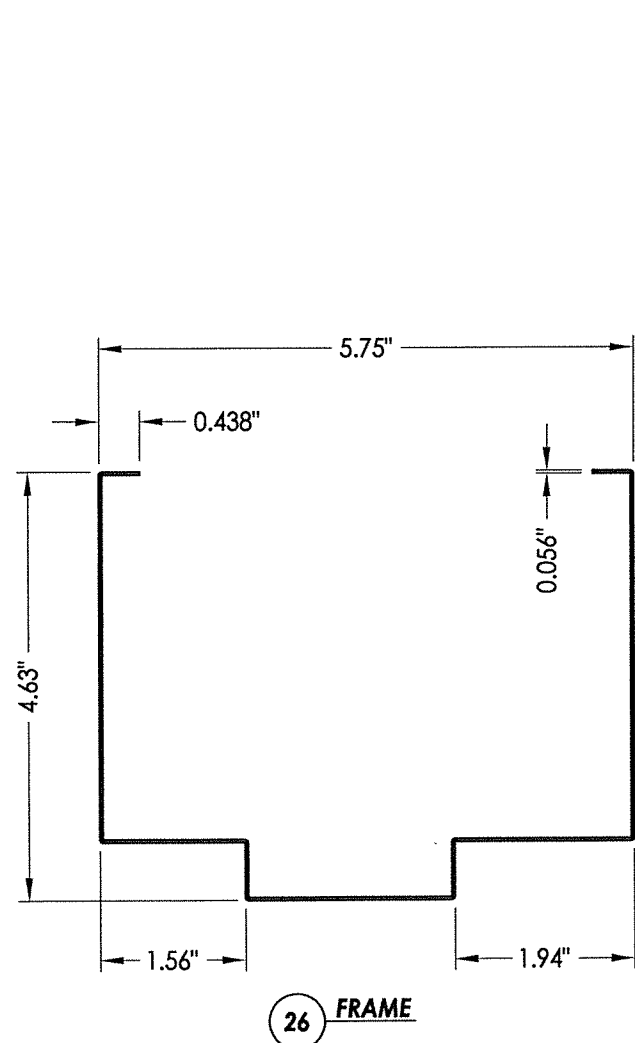
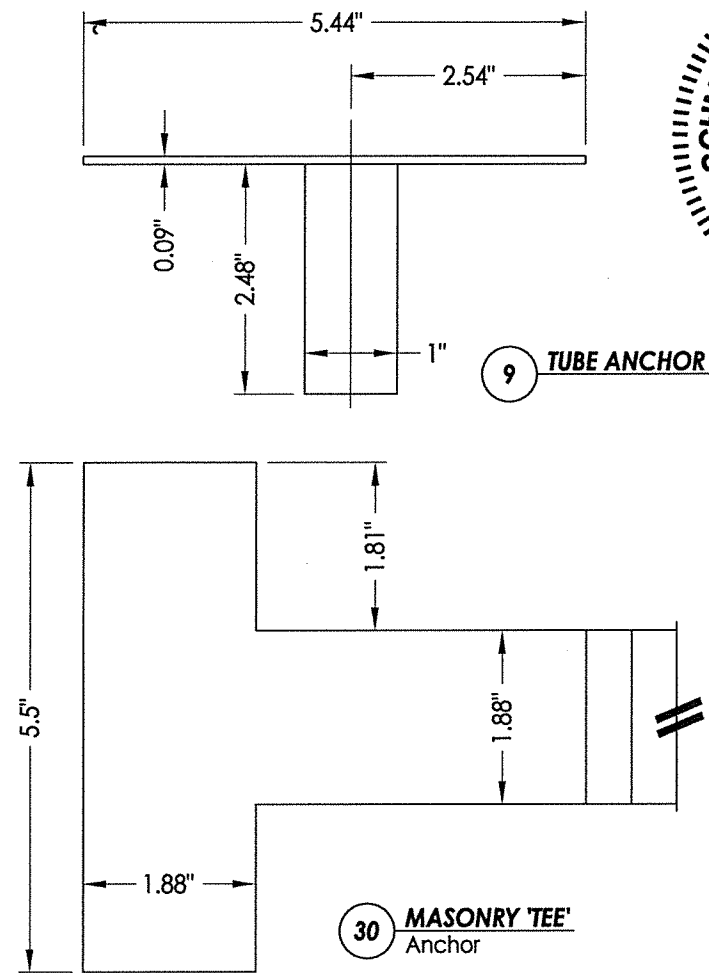
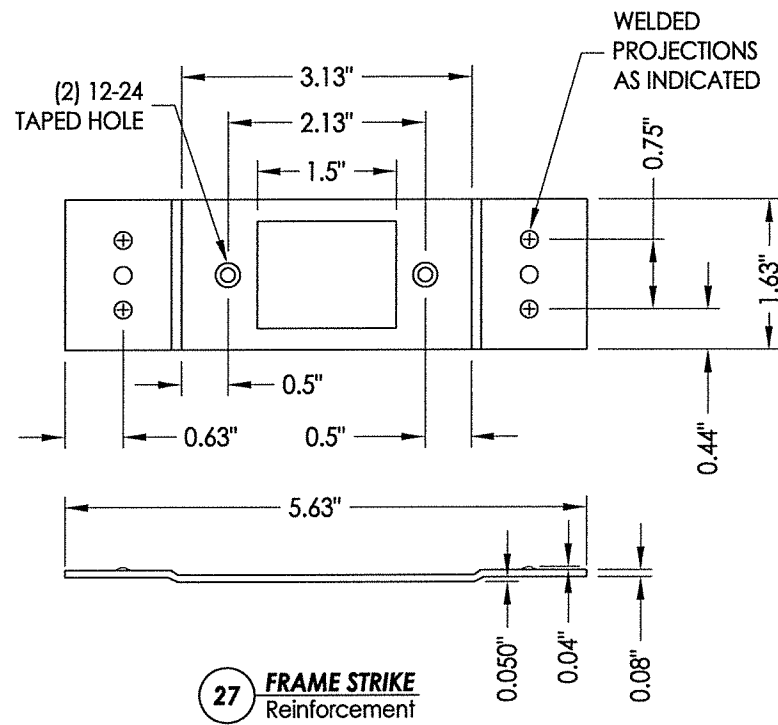
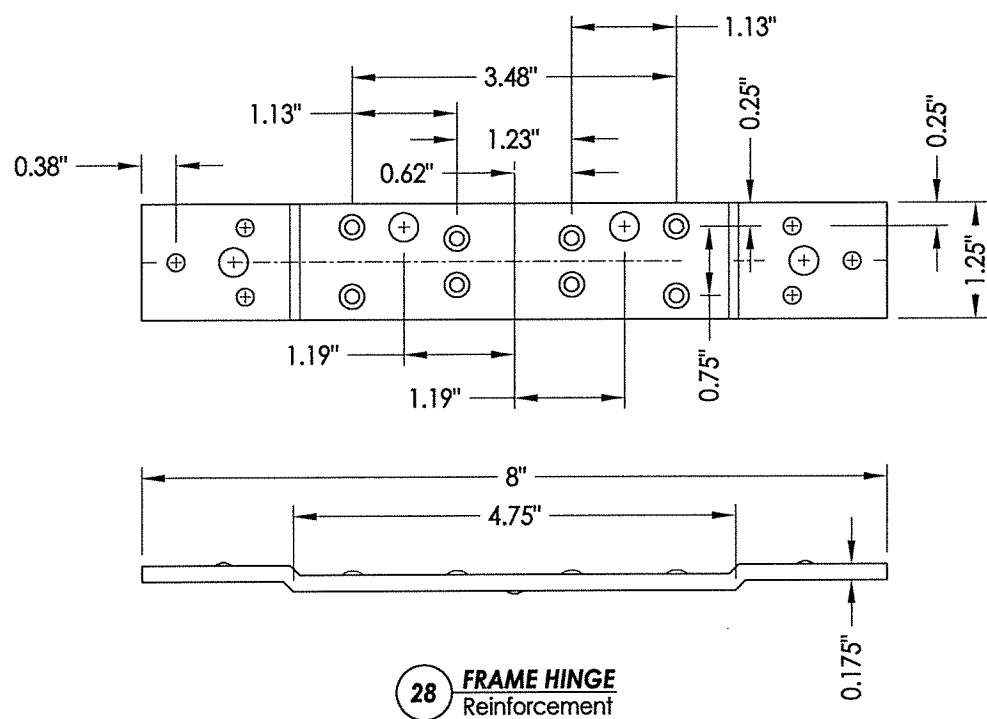
October 6, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

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:		ANCHORING DETAILS	
REVISIONS		NO.	DATE
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
		BY	
DATE: 7/17/13			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-16494.4			
SHEET 9 OF 11			

R:\Clients\Megamet PERMANENTVA - Florida Product Approvals\FL-16494\C - Drawings\FL-16494 (2020)\FL-16494.1-13.dwg, 10.4



October 6, 2020

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

PROFESSIONAL ENGINEER
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.

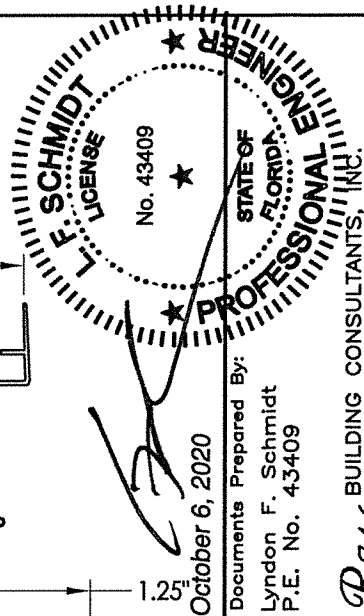
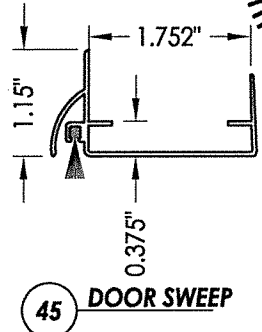
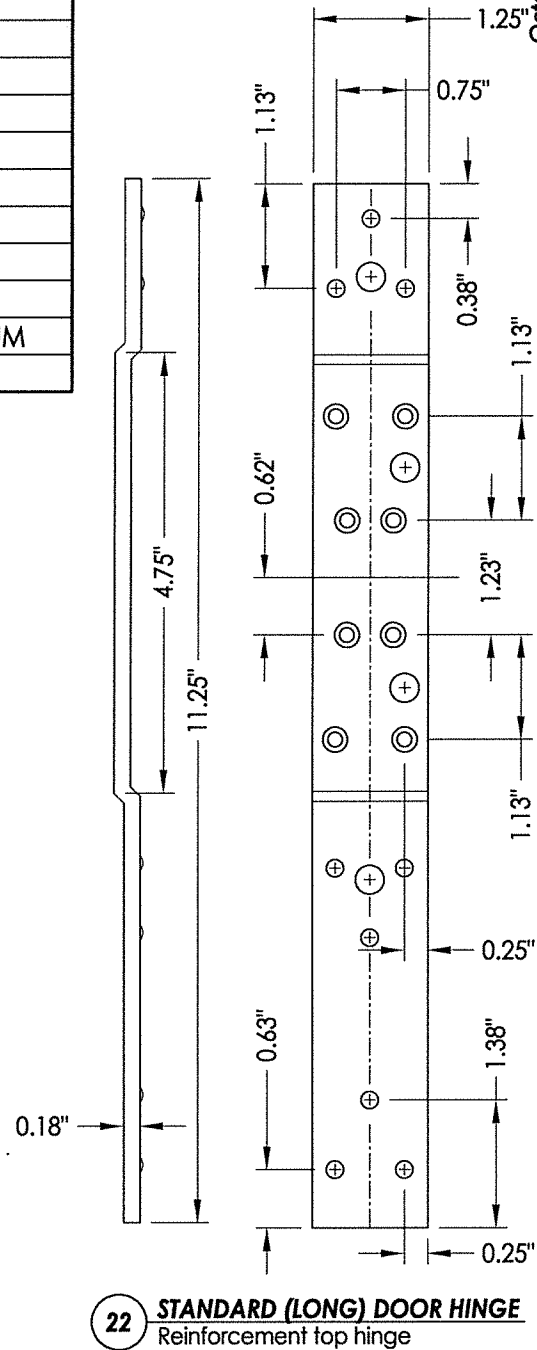
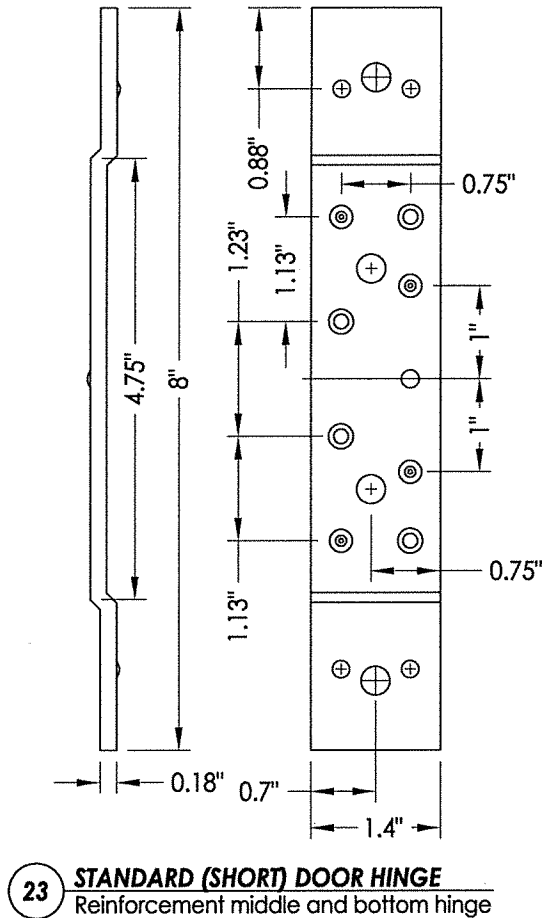
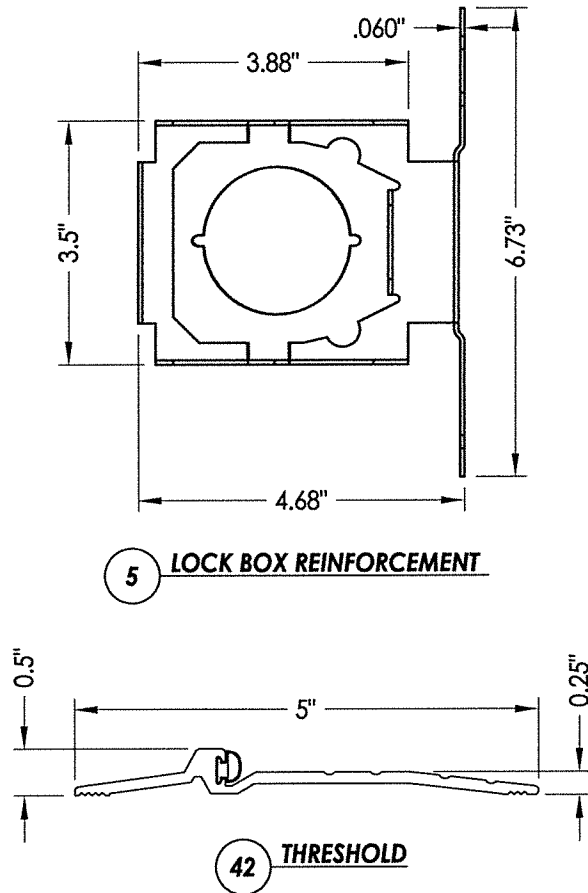
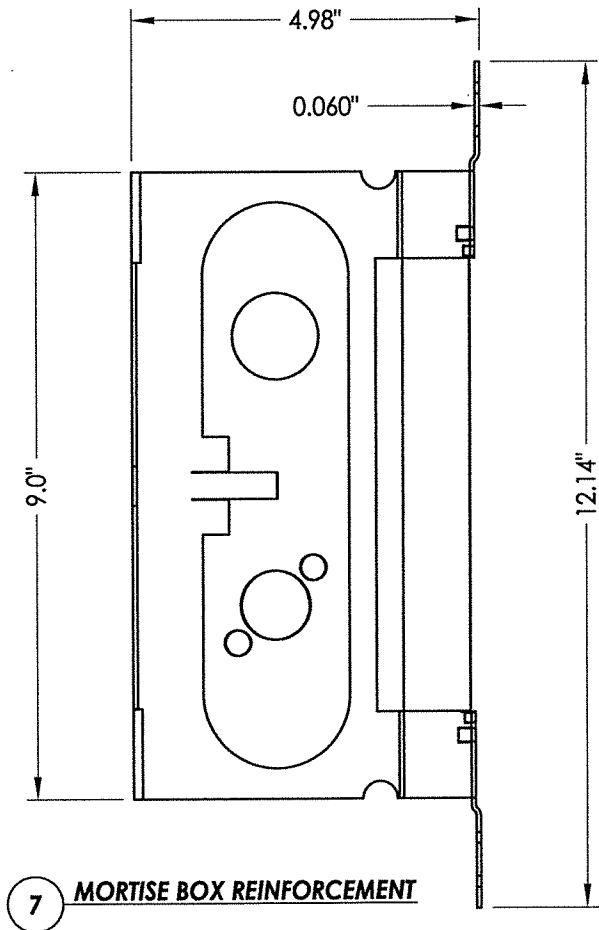
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-16494.4

SHEET 10 OF 11

BILL OF MATERIALS					
ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
C	MAX. 1/4" SHIM SPACE	-	23	STANDARD (SHORT) DOOR HINGE MIDDLE BOTTOM REINFORCEMENT	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE	24	WEATHER STRIP (THRESHOLD)	NEOPRENE
F	5/16" x 5" PFH ITW OR DeWALT PFH CONCRETE SCREW	STEEL	25	FRAME 5-3/4" MIN. (0.056" THK) BY MESKER	STEEL
G	5/16" x 4" HWH DeWALT OR ITW CONCRETE SCREW	STEEL	26	FRAME 5-3/4" MIN. WITH 4" HEAD	STEEL
H	1/4" x 1-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL	27	STRIKE REINFORCEMENT	STEEL
1	"D" OPAQUE STEEL DOOR PANEL	-	28	FRAME HINGE REINFORCEMENT	STEEL
2	DOOR SKIN (0.055" THK. STEEL, Fy = 40,317 PSI MIN.)	STEEL	30	MASONRY 'TEE' ANCHOR (MESKER PFMT5)	STEEL
3	FOAM 1.0 PCF MIN. DENSITY	POLYSTYRENE	31	UNIVERSAL WALL ANCHOR	STEEL
4	DOOR TOP & BOTTOM CLOSER	STEEL	40	THRESHOLD NATIONAL GUARD PRODUCTS, INC. #896	ALUMINUM
5	LOCK BOX REINFORCEMENT	STEEL	41	THRESHOLD NATIONAL GUARD PRODUCTS, INC. #950	ALUMINUM
6	CLOSER REINFORCEMENT	STEEL	42	THRESHOLD PEMKO #2005V	ALUMINUM
7	MORTISE BOX REINFORCEMENT	STEEL	45	95WHA DOOR SWEEP NATIONAL GUARD PRODUCTS, INC.	ALUMINUM
8	#12-24 x 1/2" SELF TAPPING	STEEL	46	#6 X 3/4" PHILLIPS HEAD SMS	STEEL
9	TUBE ANCHOR	STEEL	70	SCHLAGE LOCK SET ASSEMBLY ND53PD	STEEL
10	#12-24 x 1.0" COMBINATION MACHINE / WOOD SCREW	STEEL	71	DESIGN HARDWARE D1-S SERIES DEADBOLT	STEEL
11	DOOR STILE EDGE REINFORCEMENT (D DOOR)	STEEL	72	DESIGN HARDWARE "Z" SERIES ENTRY	STEEL
16	ANSI LATCH STRIKE	STEEL	73	86E MORTISE LOCK- ONITY CT SERIES	STEEL
17	DEADBOLT STRIKE	STEEL	74	86E MORTISE LOCK- ONITY HT SERIES	STEEL
18	ANSI MORTISE STRIKE	STEEL	75	86E MORTISE LOCK- ONITY ADVANCE SERIES	STEEL
20	WEATHER-STRIP	NEOPRENE	76	DESIGN HARDWARE D2-S SERIES DEADBOLT	STEEL
21	4-1/2" X 4-1/2" X 0.125" TEMPLATE HINGE	STEEL	77	DESIGN HARDWARE "X" SERIES ENTRY	STEEL
22	STANDARD (LONG) DOOR HINGE TOP HINGE REINFORCEMENT	STEEL	78	OUTSWING THRESHOLD BY DLP #QOSH	ALUMINUM
			79	WEATHER-STRIP	FOAM



October 6, 2020
Documents Prepared By:
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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:
BILL OF MATERIALS
& 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-16494.4
SHEET 11 OF 11