

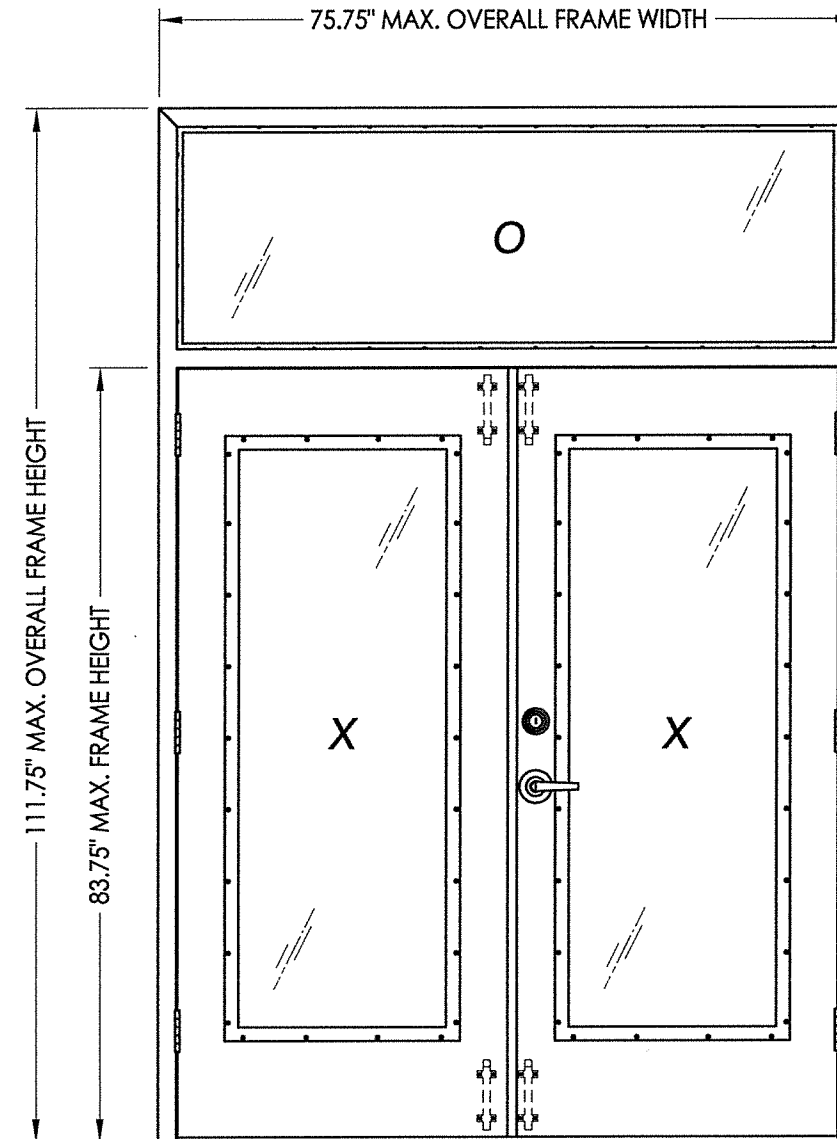
3228 6th AVENUE NORTH  
P.O. BOX 635  
BIRMINGHAM, AL 35201

**"D" SERIES  
COMMERCIAL STEEL DOOR  
w/ TRANSOM  
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 sill item #40 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.
6. All steel shall be protected as specified in Section 2222.6 of the FBC.

| TABLE OF CONTENTS |                                                     |
|-------------------|-----------------------------------------------------|
| SHEET #           | DESCRIPTION                                         |
| 1                 | Typical elevation, design pressures & general notes |
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| 3                 | Horizontal cross sections                           |
| 4                 | Vertical cross sections                             |
| 5                 | Anchoring details                                   |
| 6                 | Components                                          |
| 7                 | Bill of materials, glazing details & components     |



| OVERALL<br>FRAME<br>DIMENSION | DOOR<br>D.L.O.<br>DIMENSION | TRANSOM<br>D.L.O.<br>DIMENSION | DESIGN PRESSURE (PSF) |          |
|-------------------------------|-----------------------------|--------------------------------|-----------------------|----------|
|                               |                             |                                | POSITIVE              | NEGATIVE |
| 75.75" x 111.75"              | 22.5" x 62.5"               | 70.5" x 22.75"                 | +65.0                 | -70.0    |



**E. SCHMIDT**  
**FLORIDA**  
**PROFESSIONAL ENGINEER**  
**License No. 43409**  
**STATE OF FLORIDA**

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

**October 6, 2020**

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

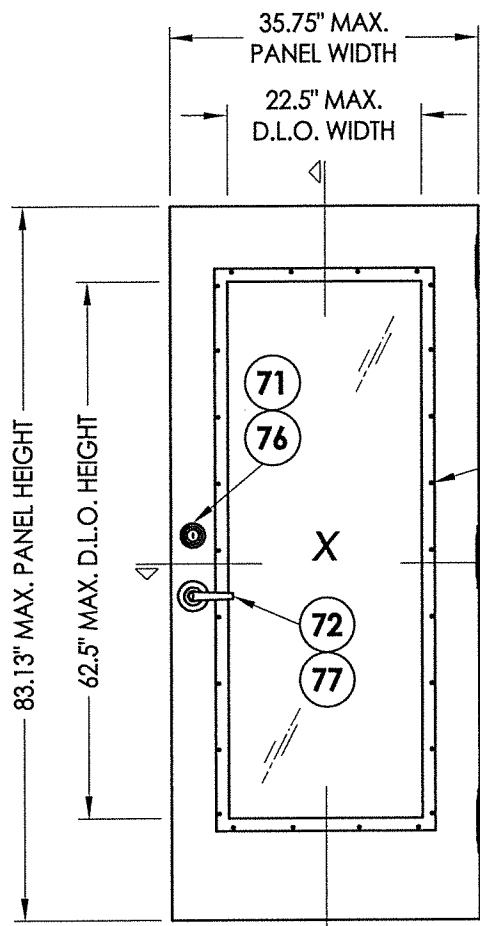
**PRODUCT:**  
**MEGAMET INDUSTRIES, INC.**  
**"D" STEEL DOOR**

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

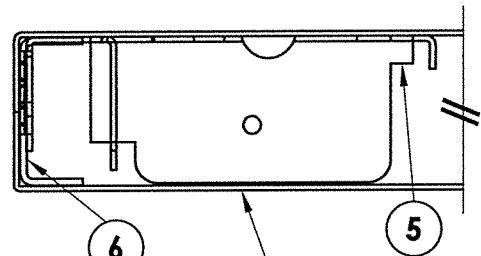
|     |          | REVISONS  |         |        |         |
|-----|----------|-----------|---------|--------|---------|
| NO. | DATE     | UPDATE TO | ED.     | (2014) | BY      |
| 3   | 10/05/20 | UPDATE TO | 7TH ED. | (2020) | FBC LFS |
| 2   | 10/16/17 | UPDATE TO | 6TH ED. | (2017) | FBC LFS |
|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

**DATE:** 7/17/13  
**SCALE:** N.T.S.  
**DWG. BY:** JK  
**CHK. BY:** LFS  
**DRAWING NO.:** FL-16494.9

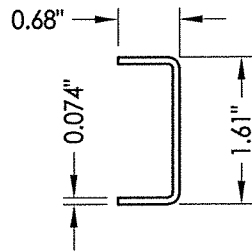
**SHEET** 1 **OF** 7



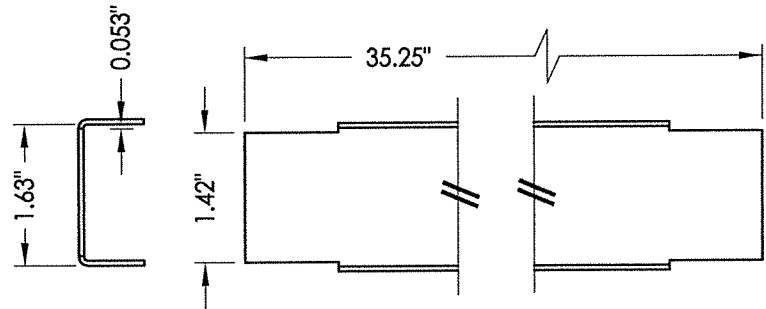
1 "D" STEEL DOOR PANEL



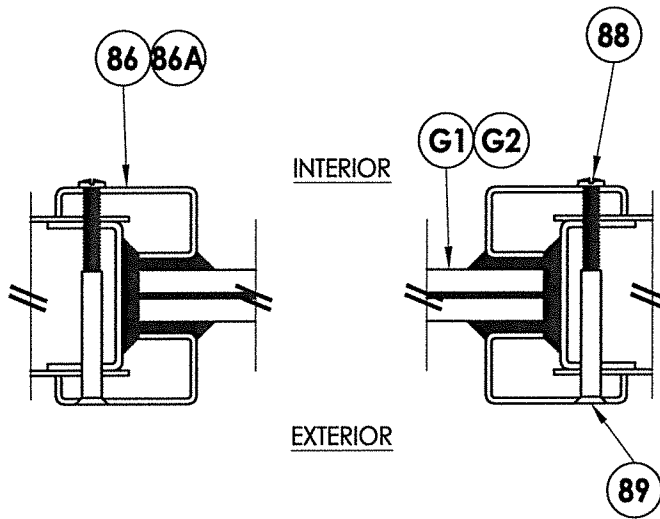
Glass stop retaining screws  
2" from corners and  
7-3/4" max. o.c.



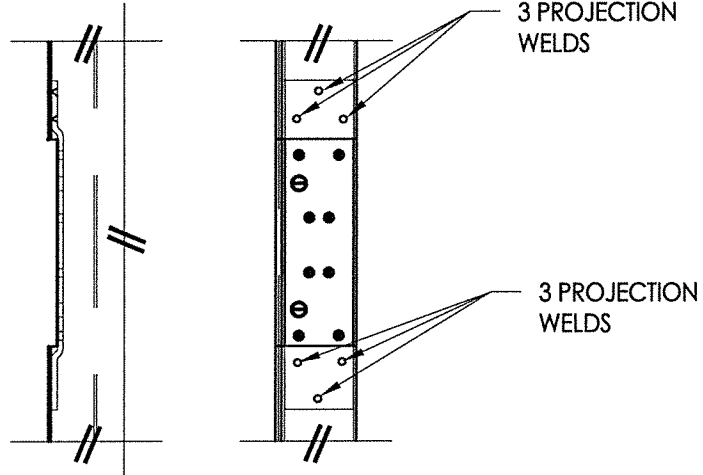
6 DOOR STILE EDGE Reinforcement



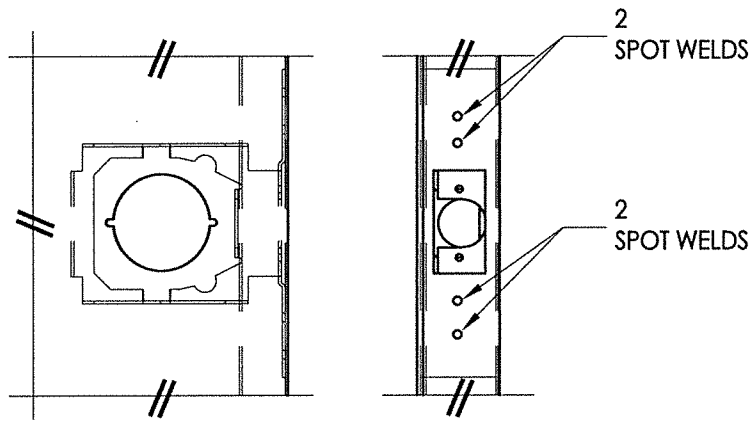
4 DOOR TOP & BOTTOM CLOSER



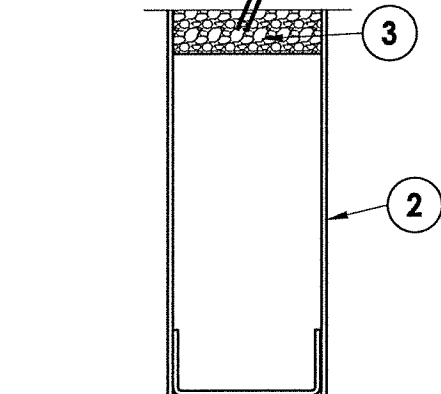
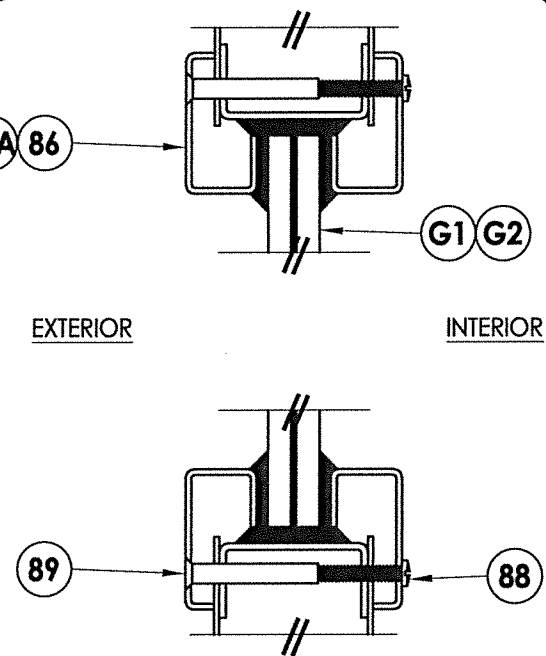
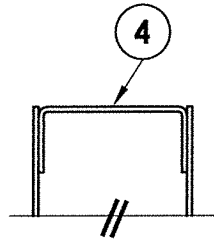
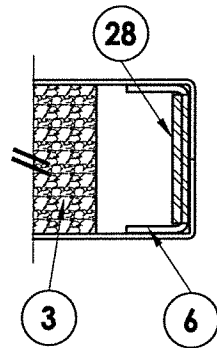
2/2 HORIZONTAL CROSS SECTION



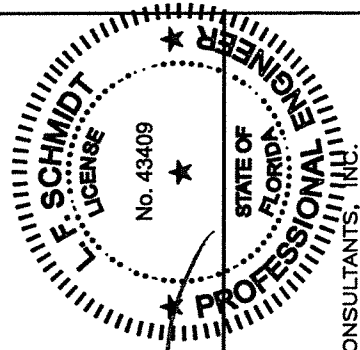
23 DOOR HINGE REINFORCEMENT



5 LOCK BOX REINFORCEMENT



1/2 VERTICAL CROSS SECTION

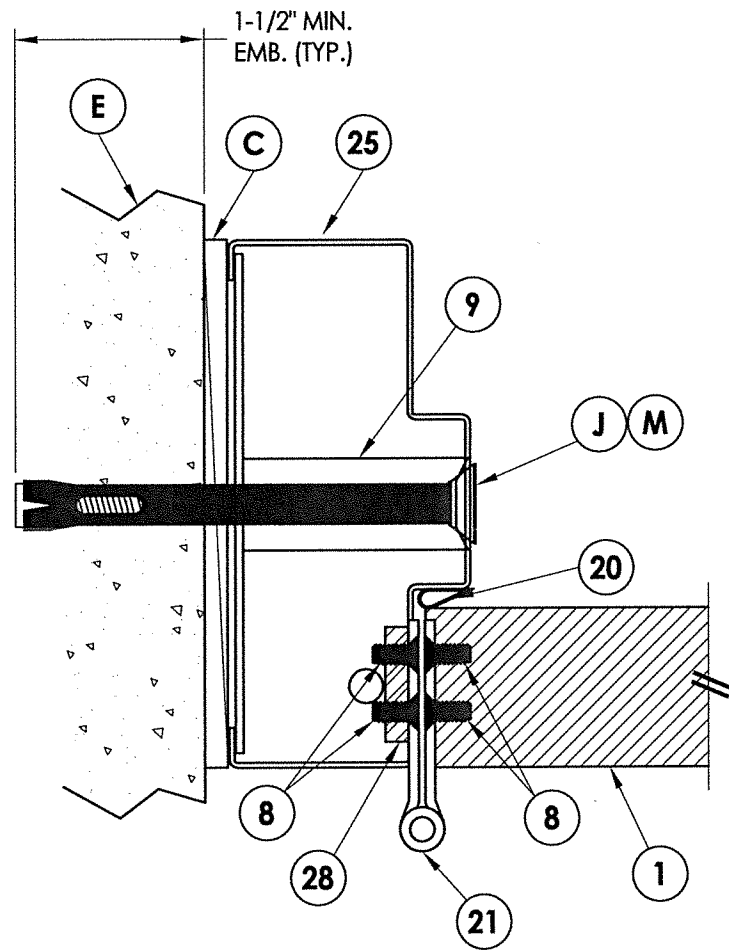


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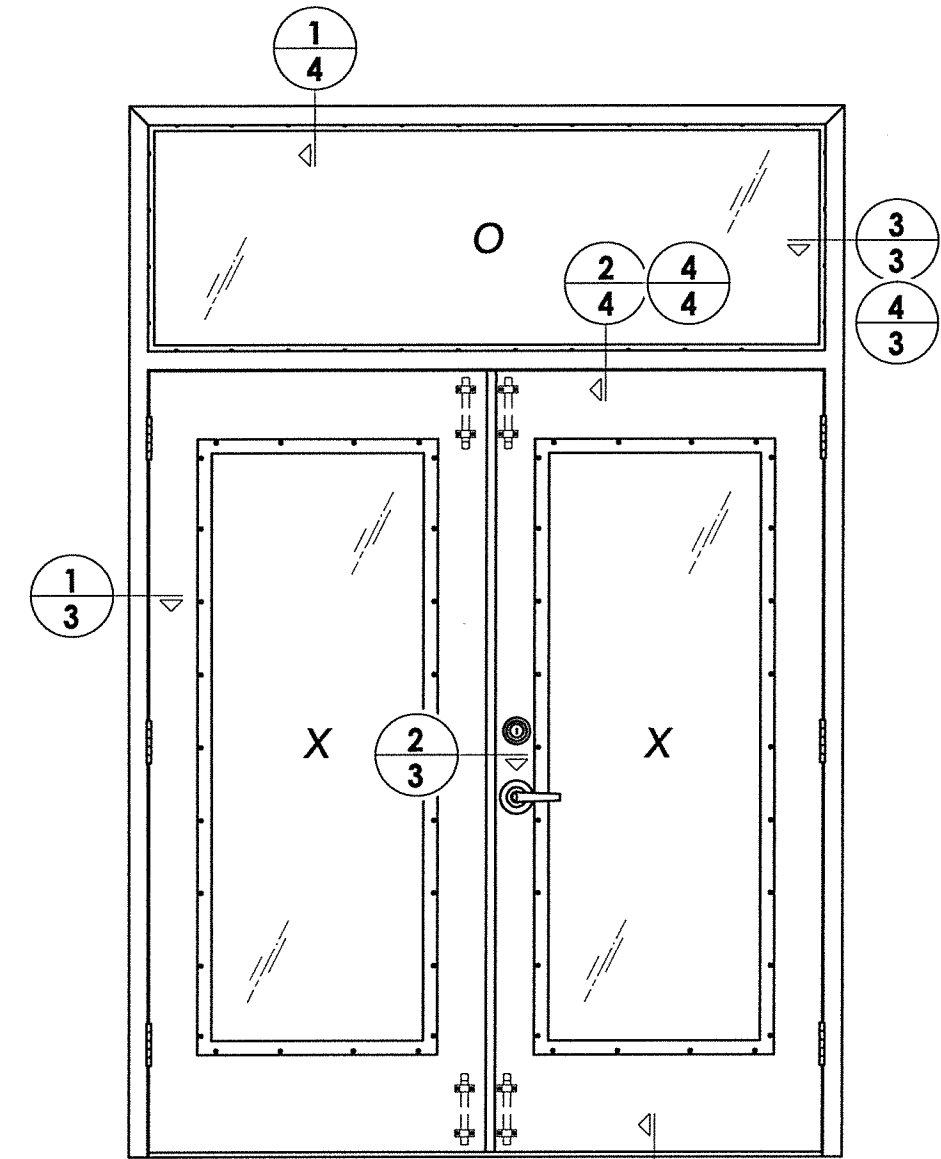
R.W. BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

|                         |          |                          |      |                |  |
|-------------------------|----------|--------------------------|------|----------------|--|
| PRODUCT:                |          | MEGAMET INDUSTRIES, INC. |      | "D" STEEL DOOR |  |
| PART OR ASSEMBLY:       |          | DOOR PANEL DETAILS       |      |                |  |
| 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.           |          |                          |      |                |  |
| DWG. BY: JK             |          |                          |      |                |  |
| CHK. BY: LFS            |          |                          |      |                |  |
| DRAWING NO.: FL-16494.9 |          |                          |      |                |  |
| SHEET 2 OF 7            |          |                          |      |                |  |

R:\Clients\Megamet PERMANENT\A - Florida Product Approvals\FL-16494\C - Drawings\FL-16494 (2020)\FL-16494.1-13.dwg, 3.9

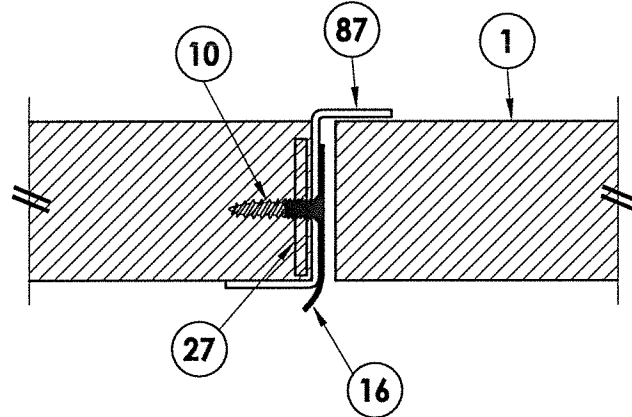


**1**  
**3** HORIZONTAL CROSS SECTION

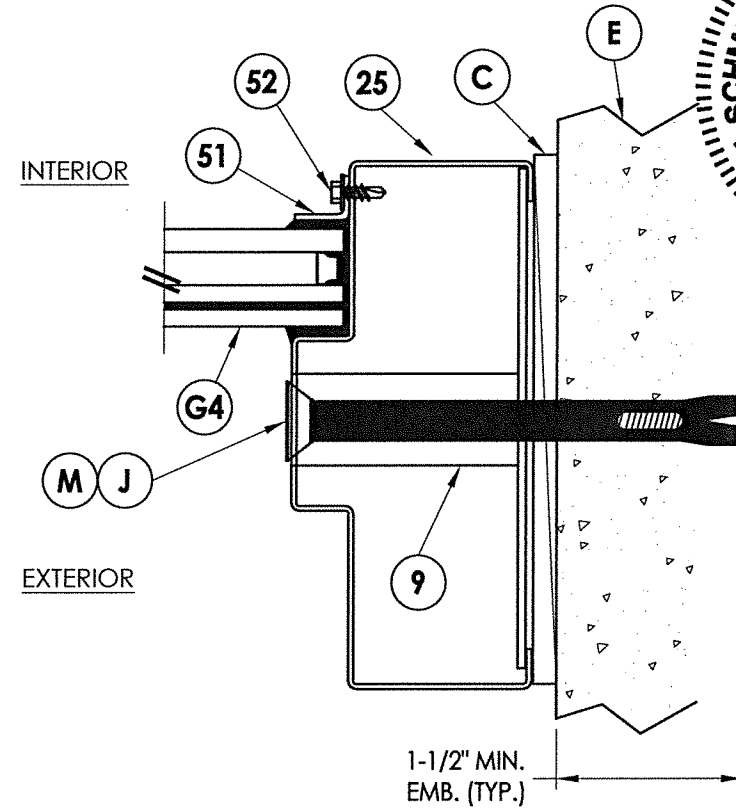


INTERIOR

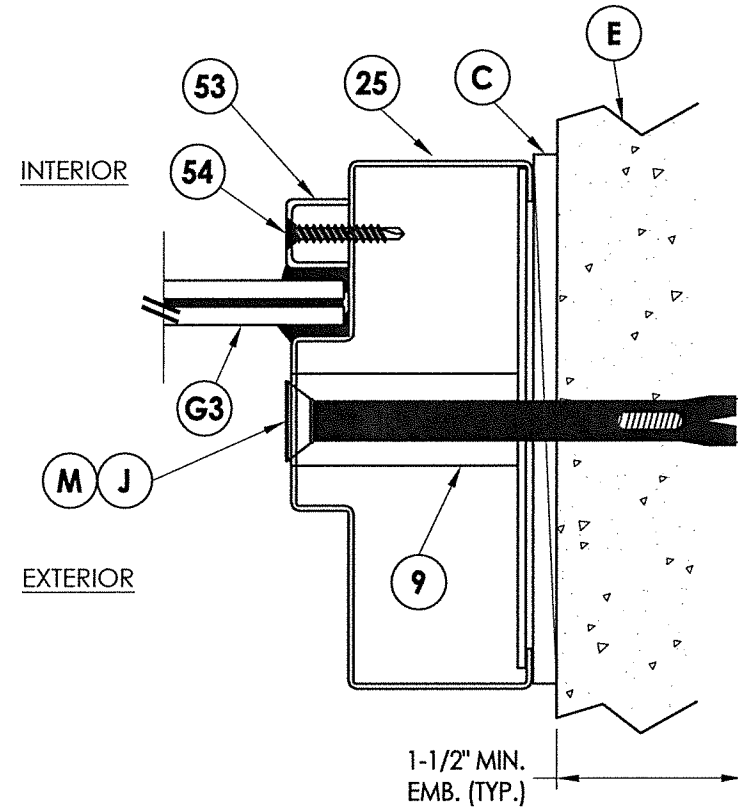
EXTERIOR



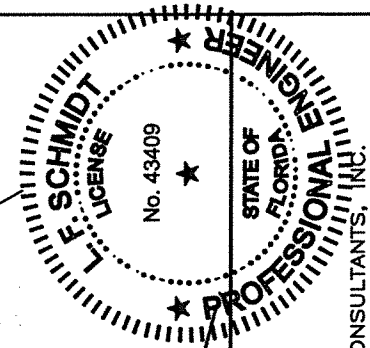
**2**  
**3** HORIZONTAL CROSS SECTION



**4**  
**3** HORIZONTAL CROSS SECTION  
Optional glazing



**3**  
**3** HORIZONTAL CROSS SECTION



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:  
HORIZONTAL  
CROSS SECTIONS

| NO. | DATE     | REVISIONS                    | 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.

DWG. BY: JK

CHK. BY: LFS

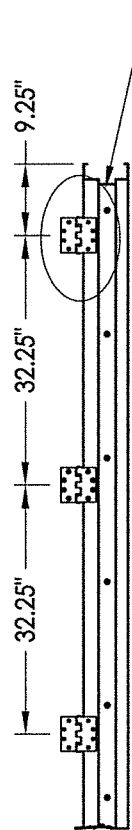
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FL-16494.9

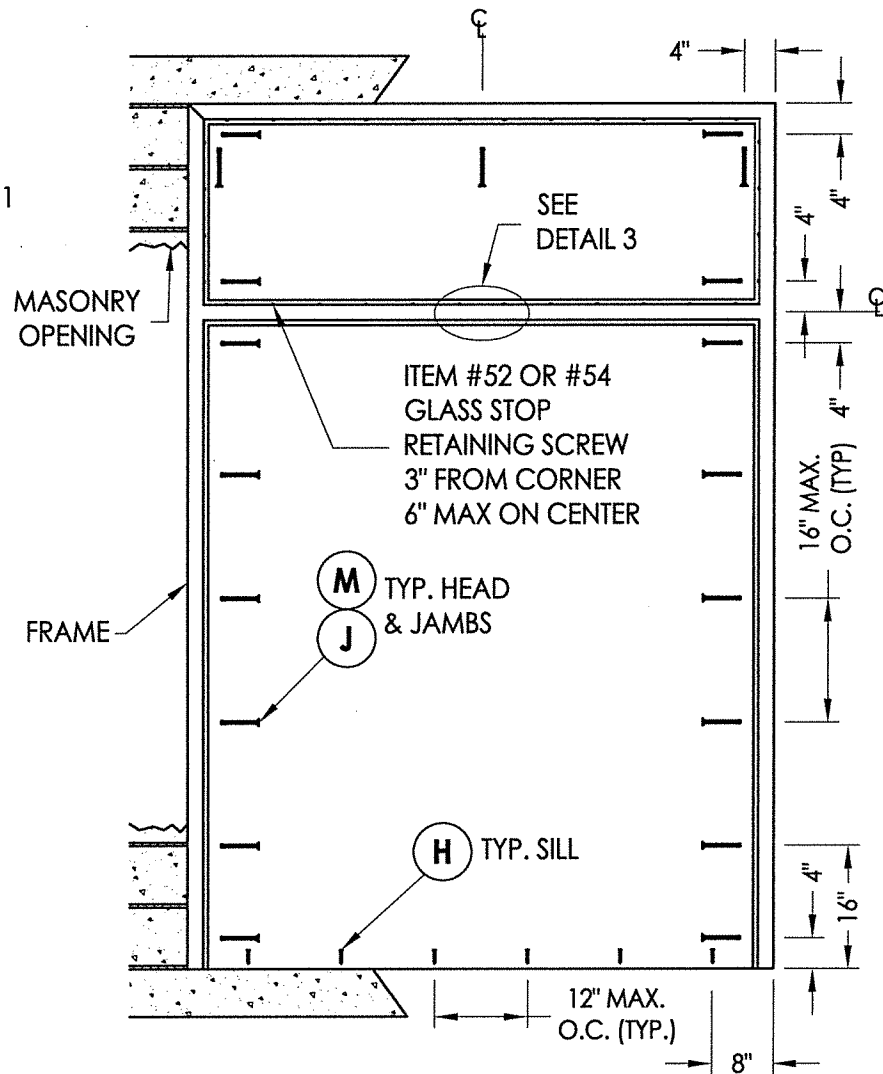
SHEET 3 OF 7



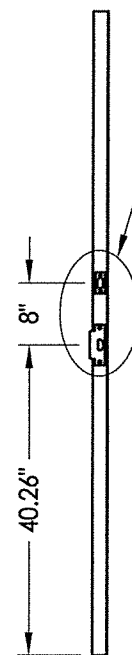
### HINGE JAMB



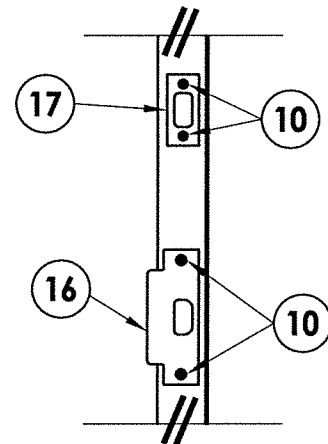
## **FRAME ANCHORING**



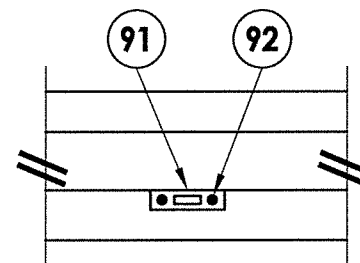
### STRIKE JAMB



**DETAIL 2**

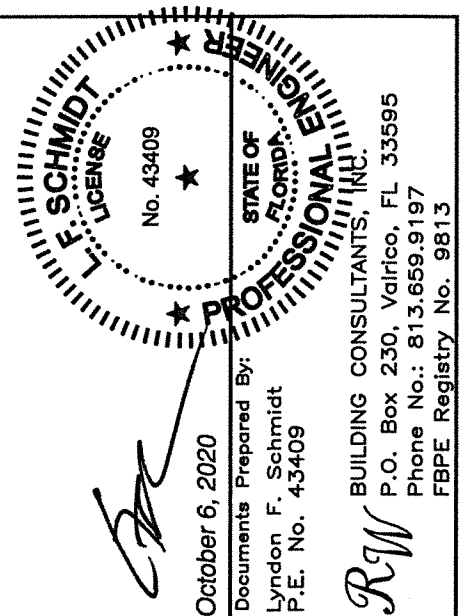


**DETAIL 3**  
(Each Surface Bolt)



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 | MINIMUM EMBEDMENT | MINIMUM CLEARANCE TO MASONRY EDGE | MINIMUM CLEARANCE TO ADJACENT ANCHOR |
|------------------------|-------------|-------------------|-----------------------------------|--------------------------------------|
| ITW TAPCON®            | 1/4"        | 1-1/4"            | 2-1/2"                            | 4"                                   |
| DYNABOLT SLEEVE ANCHOR | 3/8"        | 1-1/2"            | 2-1/4"                            | 4-1/2"                               |
| POWERS TAPPER          | 3/8"        | 1-1/2"            | 4"                                | 3-3/4"                               |



October 6, 2020  
Documents Prepared By:  
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**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Vairco, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

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

**PART OR ASSEMBLY:**  
**ANCHORING DETAILS**

|    |          |           |         |        |     |           |
|----|----------|-----------|---------|--------|-----|-----------|
|    |          |           |         |        |     |           |
|    |          |           |         |        |     |           |
|    |          |           |         |        |     |           |
| 3  | 10/05/20 | UPDATE TO | 7TH ED. | (2020) | FBC | LFS       |
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| 1  | 1/06/15  | UPDATE TO | 5th ED. | (2014) | FBC | LFS       |
| NO | DATE     |           |         |        |     | BY        |
|    |          |           |         |        |     | REVISIONS |

DATE: 7/17/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-16494.9

SHEET 5 OF 7

Technical drawing of a frame hinge, showing front and side views with dimensions in inches.

**Front View Dimensions:**

- Overall width: 3.48"
- Distance from left edge to first hole center: 1.13"
- Distance between first and second hole centers: 1.23"
- Distance from second hole center to right edge: 1.13"
- Overall height: 0.375"
- Distance from top edge to hole center line: 0.62"
- Distance from bottom edge to hole center line: 0.75"
- Distance from left edge to first hole center (bottom view): 1.13"
- Distance between first and second hole centers (bottom view): 1.19"
- Distance from second hole center to right edge (bottom view): 1.19"
- Distance from top edge to hole center line (bottom view): 0.25"
- Distance from bottom edge to hole center line (bottom view): 0.75"
- Distance from right edge to hole center line (bottom view): 0.25"
- Distance from right edge to hole center line (bottom view): 1.25"

**Side View Dimensions:**

- Overall length: 8.5"
- Distance from left edge to hole center line: 4.75"
- Overall thickness: 0.175"

Technical drawing of a square nut. The drawing shows a top view of the nut, which has a square outer profile with rounded corners and a central circular hole. The dimensions are as follows:

- Top horizontal dimension: 3.88"
- Left vertical dimension: 3.5"
- Bottom horizontal dimension: 4.68"
- Right vertical dimension: 6.73"
- Top right corner dimension: .060"

Technical drawing of a rectangular component. The drawing includes two views: a top view and a side view. The top view shows a rectangle with a width of 1.63" and a height of 7.63". The height is divided into three sections: a top section with three circular features, a middle section with one circular feature and a central rectangular cutout, and a bottom section with three circular features. The middle section has a height of 3.5". The side view shows the component's profile with a thickness of 0.075" and a top flange width of 1.19". The bottom flange width is 0.188". The total height of the component is 5.5".

0.175" →

4.75"

6"

[illegible]

Technical drawing of a surface bolt plate. The top view shows a rectangular plate with a width of 2.88" and a height of 0.76". It features two circular holes and a central rectangular slot. The side view shows a plate with a thickness of 0.075" and a height of 1.56". The side view also shows a central rectangular slot with a depth of 0.97". The top view includes a dimension of 1.25" for the distance from the left edge to the center of the first hole, and a dimension of 1.12" for the distance from the right edge to the center of the second hole. The side view includes a dimension of 0.13" for the radius of the top corner.

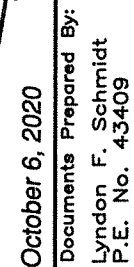
Technical drawing of a mechanical part showing two views: a side view and a top view.

**Side View Dimensions:**

- Overall length: 11.25"
- Central section length: 4.75"
- Thickness: 0.175"

**Top View Dimensions:**

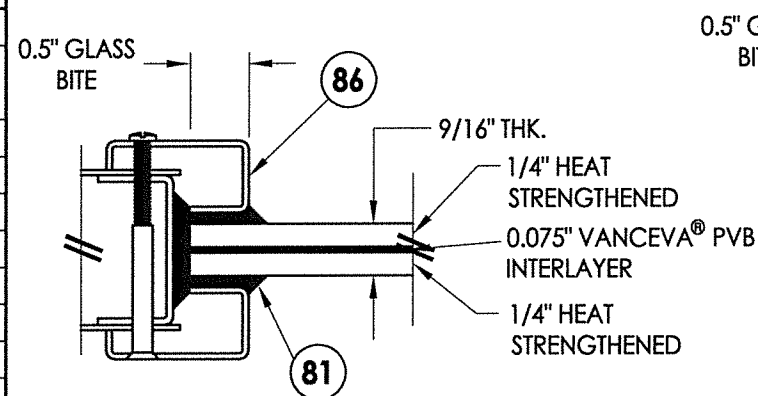
- Overall width: 1.13"
- Central section width: 0.62"
- Bottom section width: 0.63"
- Hole grid dimensions (from left to right): 1.25", 0.75", 0.375", 1.13", 1.23", 1.13", 0.25"
- Hole grid dimensions (from top to bottom): 1.38", 1.13", 0.25"



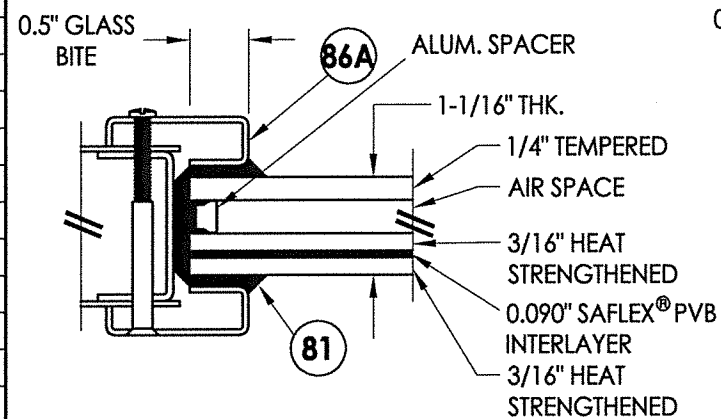
PART OR ASSEMBLY:

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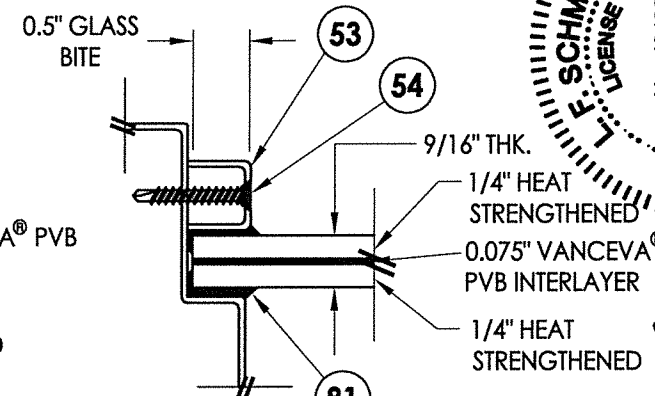
| BILL OF MATERIALS |                                                                                                |             |
|-------------------|------------------------------------------------------------------------------------------------|-------------|
| ITEM              | DESCRIPTION                                                                                    | MATERIAL    |
| C                 | MAX. 1/4" SHIM SPACE                                                                           | -           |
| E                 | MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90 | CONCRETE    |
| H                 | 1/4" x 1-3/4" ITW PFH CONCRETE SCREW                                                           | STEEL       |
| J                 | 3/8" X 5" PFH ITW DYNABOLT SLEEVE ANCHOR                                                       | STEEL       |
| M                 | 3/8" X 5" TAPPER CONCRETE SCREW BY POWERS FASTENERS                                            | STEEL       |
| 1                 | "D" STEEL DOOR PANEL                                                                           | -           |
| 2                 | DOOR SKIN - 16GA (0.060" THK. STEEL, Fy = 40,317 PSI MIN.)                                     | STEEL       |
| 3                 | FOAM 1.0 PCF MIN. DENSITY                                                                      | POLYSTYRENE |
| 4                 | DOOR TOP & BOTTOM CLOSER                                                                       | STEEL       |
| 5                 | LOCK BOX REINFORCEMENT                                                                         | STEEL       |
| 6                 | DOOR STILE EDGE REINFORCEMENT (D DOOR)                                                         | STEEL       |
| 8                 | #12-24 x 1/2" SELF TAPPER                                                                      | STEEL       |
| 9                 | TUBE ANCHOR                                                                                    | STEEL       |
| 10                | #12-24 X 1" COMBINATION MACHINE / WOOD SCREW                                                   | STEEL       |
| 12                | MULLION Z BRACKET                                                                              | STEEL       |
| 15                | MULLION                                                                                        | STEEL       |
| 16                | ANSI LATCH STRIKE                                                                              | STEEL       |
| 17                | DEADBOLT STRIKE                                                                                | STEEL       |
| 19                | DEADBOLT STRIKE REINFORCEMENT                                                                  | STEEL       |
| 20                | WEATHERSTRIP                                                                                   | NEOPRENE    |
| 21                | 4-1/2" X 4-1/2" X 0.125" TEMPLATE HINGE                                                        | STEEL       |
| 22                | STANDARD (LONG) DOOR HINGE TOP HINGE REINFORCEMENT                                             | STEEL       |
| 23                | STANDARD (SHORT) DOOR HINGE MIDDLE BOTTOM REINFORCEMENT                                        | STEEL       |
| 24                | WEATHERSTRIP (THRESHOLD)                                                                       | NEOPRENE    |
| 25                | FRAME - 14GA (0.075" THK)                                                                      | STEEL       |
| 27                | LATCH STRIKE REINFORCEMENT                                                                     | STEEL       |
| 28                | FRAME HINGE REINFORCEMENT                                                                      | STEEL       |
| 40                | THRESHOLD NATIONAL GUARD PRODUCTS, INC. #896                                                   | ALUMINUM    |
| 51                | L-CHANNEL FIXED GLASS STOP                                                                     | STEEL       |
| 52                | #8 X .5" HH SELF DRILLING SCREW                                                                | STEEL       |
| 53                | U-CHANNEL FIXED GLASS STOP                                                                     | STEEL       |
| 54                | #8 X 1.25" PFH SHEET METAL SCREW                                                               | STEEL       |
| 71                | DESIGN HARDWARE D1-S SERIES DEADBOLT                                                           | STEEL       |
| 72                | DESIGN HARDWARE "Z" SERIES ENTRY                                                               | STEEL       |
| 76                | DESIGN HARDWARE D2-S SERIES DEADBOLT                                                           | STEEL       |
| 77                | DESIGN HARDWARE "X" SERIES ENTRY                                                               | STEEL       |
| 81                | DOW 995 STRUCTURAL SILICONE                                                                    | SILICONE    |
| 82                | SURFACE BOLT                                                                                   | STEEL       |
| 83                | 1/4" X 2-1/2" PPH MS                                                                           | STEEL       |
| 86                | LITE FRAME BY AIR LOUVERS #1500-AJ-2464                                                        | STEEL       |
| 86A               | LITE FRAME BY AIR LOUVERS #VFIG-HRC-2464-01                                                    | STEEL       |
| 87                | Z ASTRAGAL                                                                                     | STEEL       |
| 88                | #8 X 1-1/2" PPH MS                                                                             | STEEL       |
| 89                | SCREW COVER                                                                                    | STEEL       |
| 91                | SURFACE BOLT PLATE                                                                             | STEEL       |
| 92                | #8 X 1-1/4" PPH SELF TAPPER                                                                    | STEEL       |



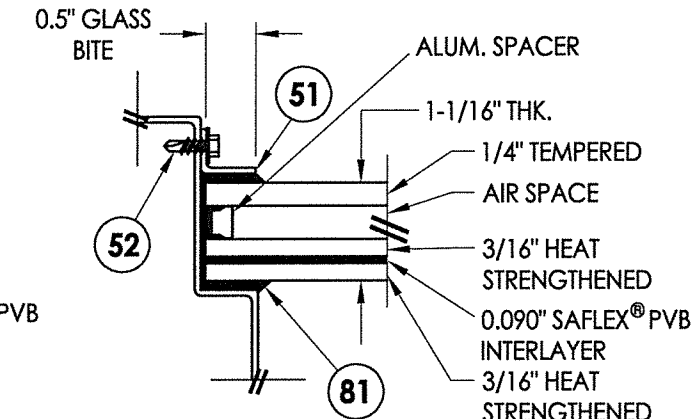
G1 GLAZING DETAIL



G2 GLAZING DETAIL

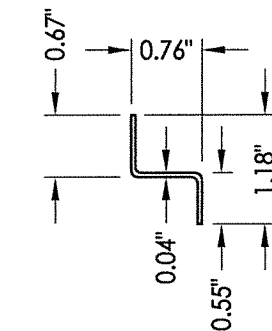


G3 GLAZING DETAIL

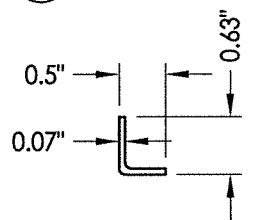


G4 GLAZING DETAIL

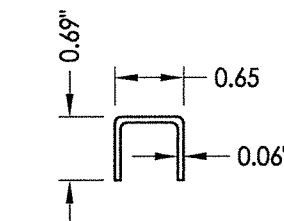
NOTE: GLAZING > 36" WIDE REQUIRES TWO (2) SETTING BLOCKS CONFORMING TO FBC SECTION 2411.3.3.1



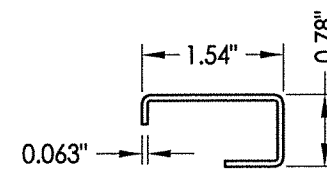
12 MULLION Z BRACKET



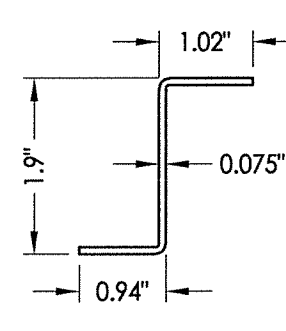
51 FIXED GLASS STOP



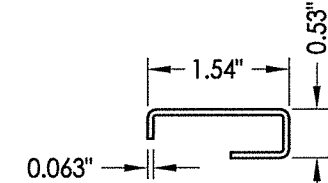
53 FIXED GLASS STOP



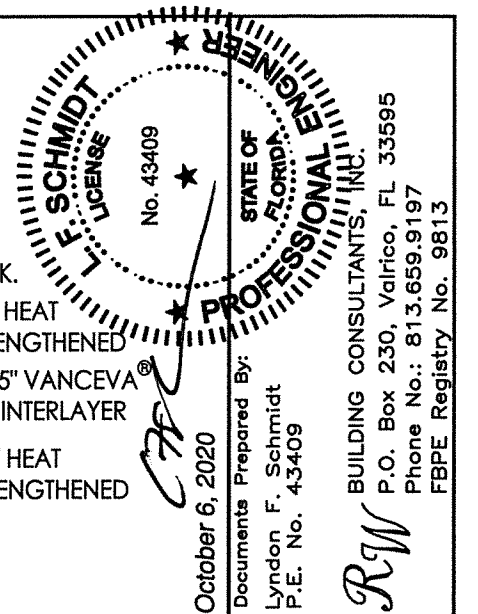
86 GLASS STOP



87 Z ASTRAGAL



86A GLASS STOP



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

PART OR ASSEMBLY:  
BILL OF MATERIALS, GLAZING  
DETAILS & 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-16494.9

SHEET 7 OF 7