

Z:\2023 FBC Drawings\Metal Mfg Industries\FL-12166 R5\FL-12166.1-9.dwg



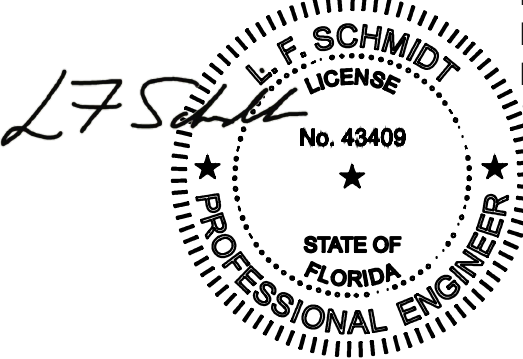
PRIV. DE RIO SANTIAGO #30  
COL. LA RAZA  
SOLEDAD DE GRACIANO SANCHEZ  
SAN LUIS POTOSI, C.P. 78433

"N" SERIES  
COMMERCIAL STEEL DOOR  
w/ TRANSOM  
OUTSWING  
"IMPACT"

GENERAL NOTES

1. This product has been evaluated and is in compliance with the 9th Edition (2026) 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 Section 1609.1.2 of the FBC and does not require an impact resistant covering. This product meets missile level "D" and includes Wind Zone 4 as defined in ASTM E1996.
5. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
6. 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.
7. The "N" door achieves a Class III stiffness classification per Section 8.2.2 of ANSI A250.13 (based on opaque door).
8. 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 cross sections                           |
| 4                 | Vertical cross sections                             |
| 5                 | Anchoring details                                   |
| 6                 | Components                                          |
| 7                 | Bill of materials, glazing details & components     |



Digitally signed by  
Lyndon F Schmidt  
Date: 2026.07.23  
17:07:57 -04'00'

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

| 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"              | 22.50" x 62.50"             | 70.50" x 22.75"                | +65.0                 | -70.0    |

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

PRODUCT:  
METAL MANUFACTURING  
INDUSTRIES  
"N" STEEL DOOR

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

57/01/26UPDATE TO 9TH ED. (2026) FBCLFS

47/11/23UPDATE TO 8TH ED. (2023) FBCLFS

37/30/20UPDATE TO 7TH ED. (2020) FBCDAC

27/19/17UPDATE TO 6TH ED. (2017) FBCLFS

110/14/16UPDATE TO 5TH ED. (2014) FBCJK

NO. DATEBY

DATE: 2/23/09

SCALE: N.T.S.

DWG. BY: AL

CHK. BY: LFS

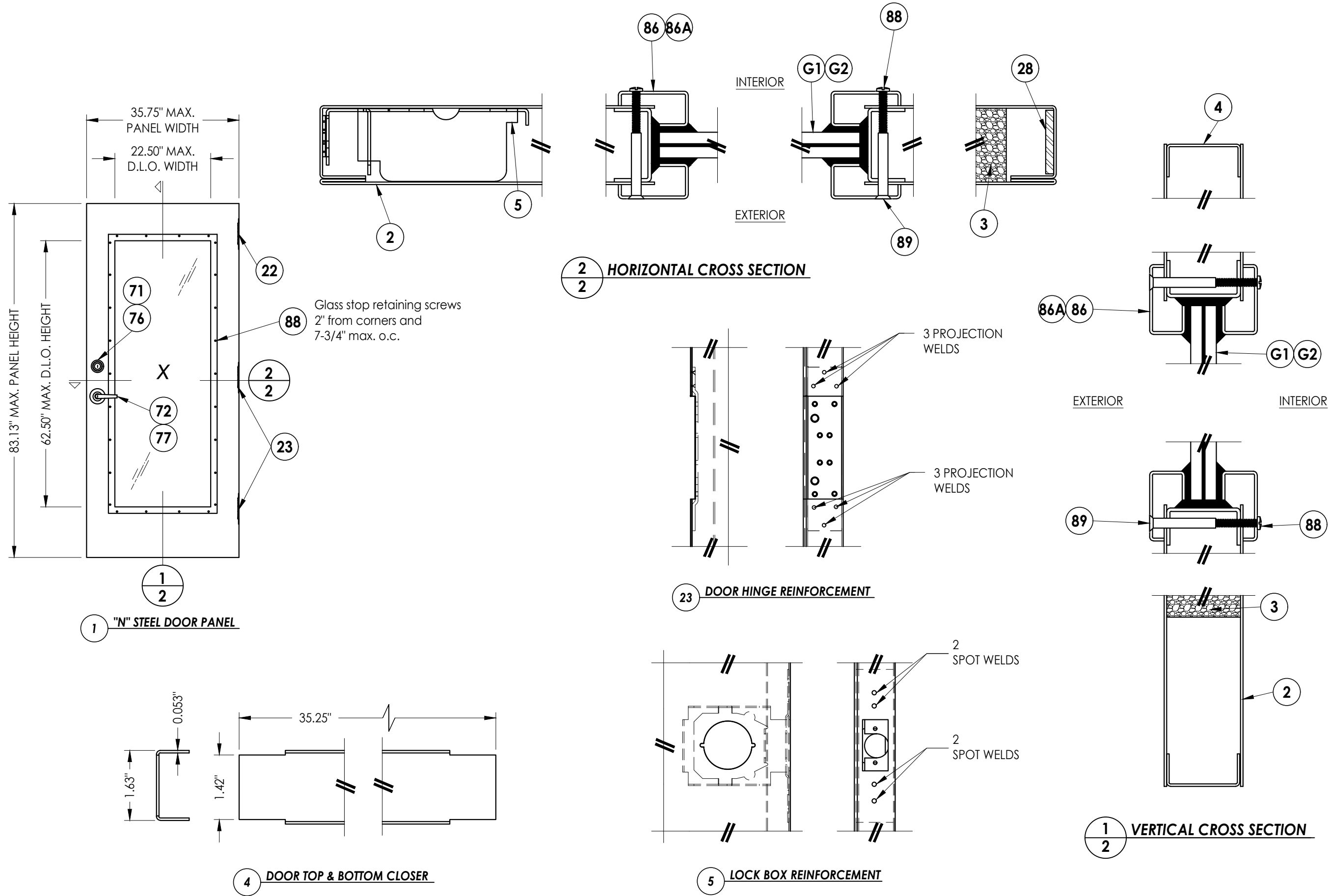
DRAWING NO.: FL-12166.3

SHEET 1 OF 7

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

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NOTE: ALL WELDING TO CONFORM w/ AMERICAN WELDING SOCIETY, ANSI/AWS AS PER FBC SECTION 2214.3.4.

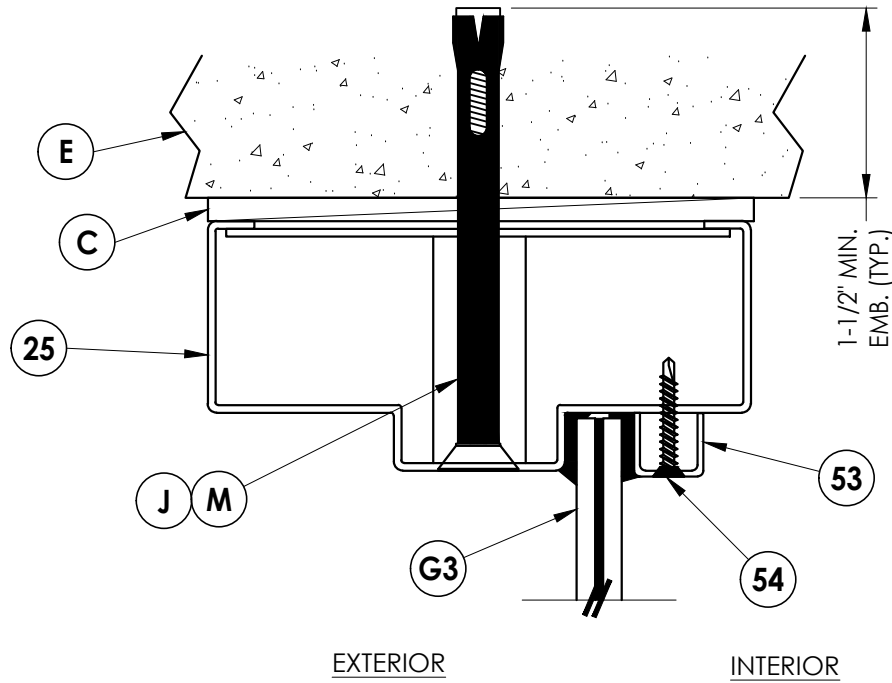
|                                                                 |          |                          |     |                                                                                                                    |  |  |  |
|-----------------------------------------------------------------|----------|--------------------------|-----|--------------------------------------------------------------------------------------------------------------------|--|--|--|
| Documents Prepared By:<br>Lyndon F. Schmidt<br>P.E. No. 43409   |          |                          |     | BUILDING CONSULTANTS, INC.<br>P.O. Box 230, Vairico, FL 33595<br>Phone No.: 813.659.9197<br>FBPE Registry No. 9813 |  |  |  |
| PRODUCT:<br>METAL MANUFACTURING<br>INDUSTRIES<br>"N" STEEL DOOR |          |                          |     | PART OR ASSEMBLY:<br>DOOR PANEL DETAILS                                                                            |  |  |  |
|                                                                 |          |                          |     |                                                                                                                    |  |  |  |
| 5                                                               | 7/01/26  | UPDATE TO 9TH ED. (2026) | FBC |                                                                                                                    |  |  |  |
| 4                                                               | 7/11/23  | UPDATE TO 8TH ED. (2023) | FBC |                                                                                                                    |  |  |  |
| 3                                                               | 7/30/20  | UPDATE TO 7TH ED. (2020) | FBC |                                                                                                                    |  |  |  |
| 2                                                               | 7/19/17  | UPDATE TO 6TH ED. (2017) | FBC |                                                                                                                    |  |  |  |
| 1                                                               | 10/14/16 | UPDATE TO 5TH ED. (2014) | FBC |                                                                                                                    |  |  |  |
| NO.                                                             | DATE     |                          |     |                                                                                                                    |  |  |  |
|                                                                 |          |                          |     | REVISIONS                                                                                                          |  |  |  |
| DATE: 2/23/09                                                   |          |                          |     |                                                                                                                    |  |  |  |
| SCALE: N.T.S.                                                   |          |                          |     |                                                                                                                    |  |  |  |
| DWG. BY: AL                                                     |          |                          |     |                                                                                                                    |  |  |  |
| CHK. BY: LFS                                                    |          |                          |     |                                                                                                                    |  |  |  |
| DRAWING NO.: FL-12166.3                                         |          |                          |     |                                                                                                                    |  |  |  |
| SHEET 2 OF 7                                                    |          |                          |     |                                                                                                                    |  |  |  |



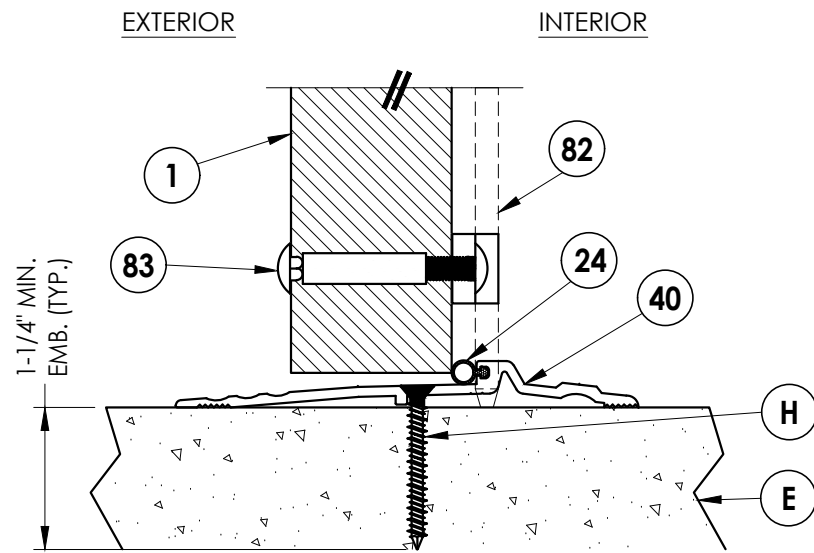
|                                                                 |                                                   |
|-----------------------------------------------------------------|---------------------------------------------------|
| PRODUCT:<br>METAL MANUFACTURING<br>INDUSTRIES<br>"N" STEEL DOOR | PART OR ASSEMBLY:<br>HORIZONTAL<br>CROSS SECTIONS |
|-----------------------------------------------------------------|---------------------------------------------------|

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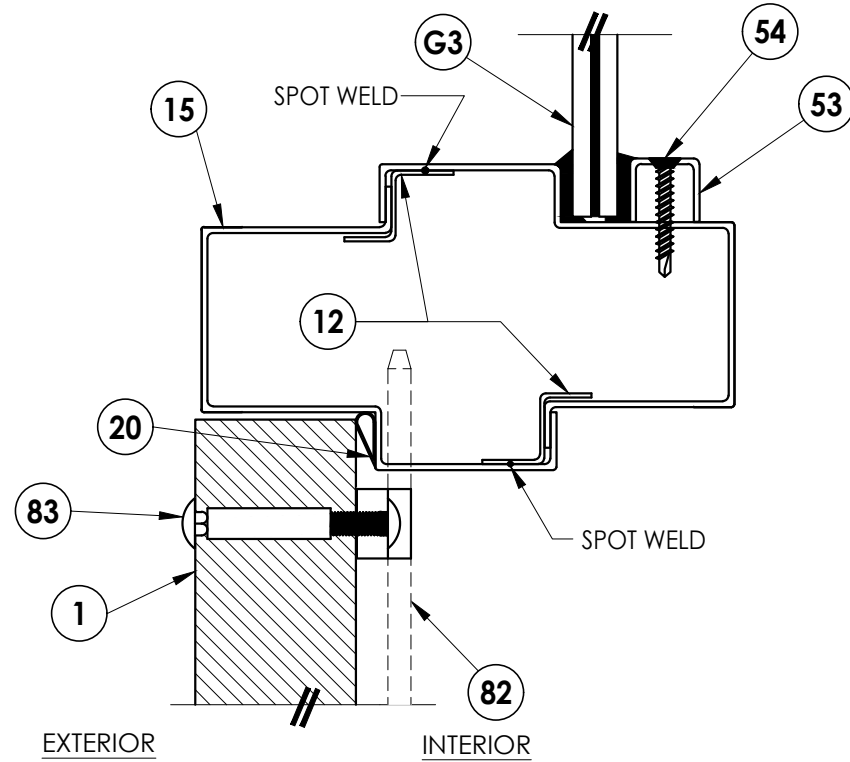
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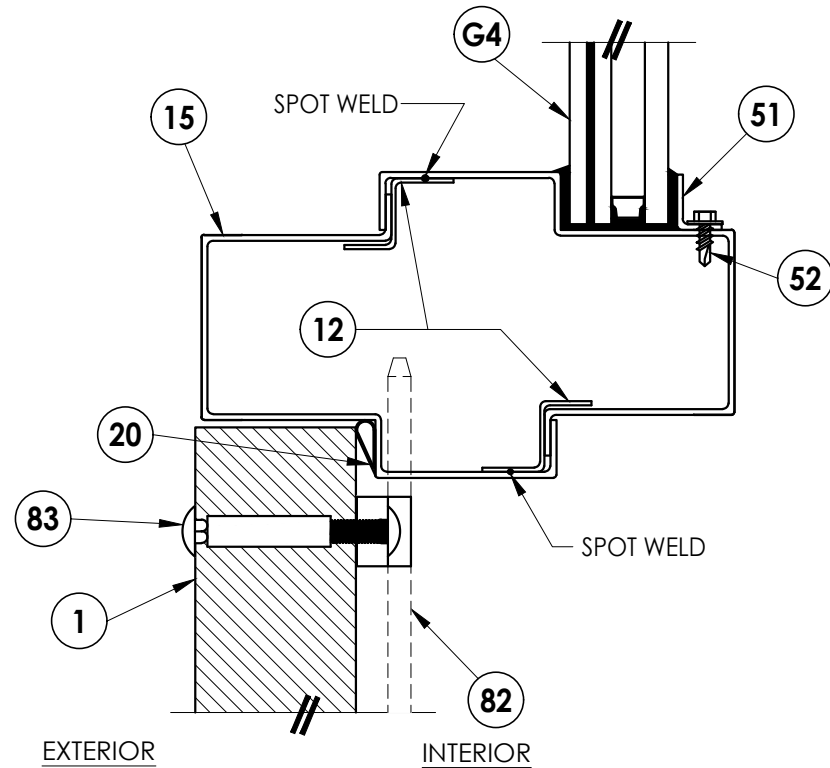
1  
4 VERTICAL CROSS SECTION



3  
4 VERTICAL CROSS SECTION



2  
4 VERTICAL CROSS SECTION



4  
4 VERTICAL CROSS SECTION  
Optional glazing

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

PRODUCT:  
METAL MANUFACTURING  
INDUSTRIES  
"N" STEEL DOOR

PART OR ASSEMBLY:

VERTICAL  
CROSS SECTIONS

*RW* BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
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| NO. | DATE     | REVISIONS                |         |                          |     |     |  |
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| 1   | 10/14/16 | UPDATE TO 5TH ED. (2014) | FBC     | JK                       |     |     |  |
|     |          |                          |         | BY                       |     |     |  |

DATE: 2/23/09

SCALE: N.T.S.

DWG. BY: AL

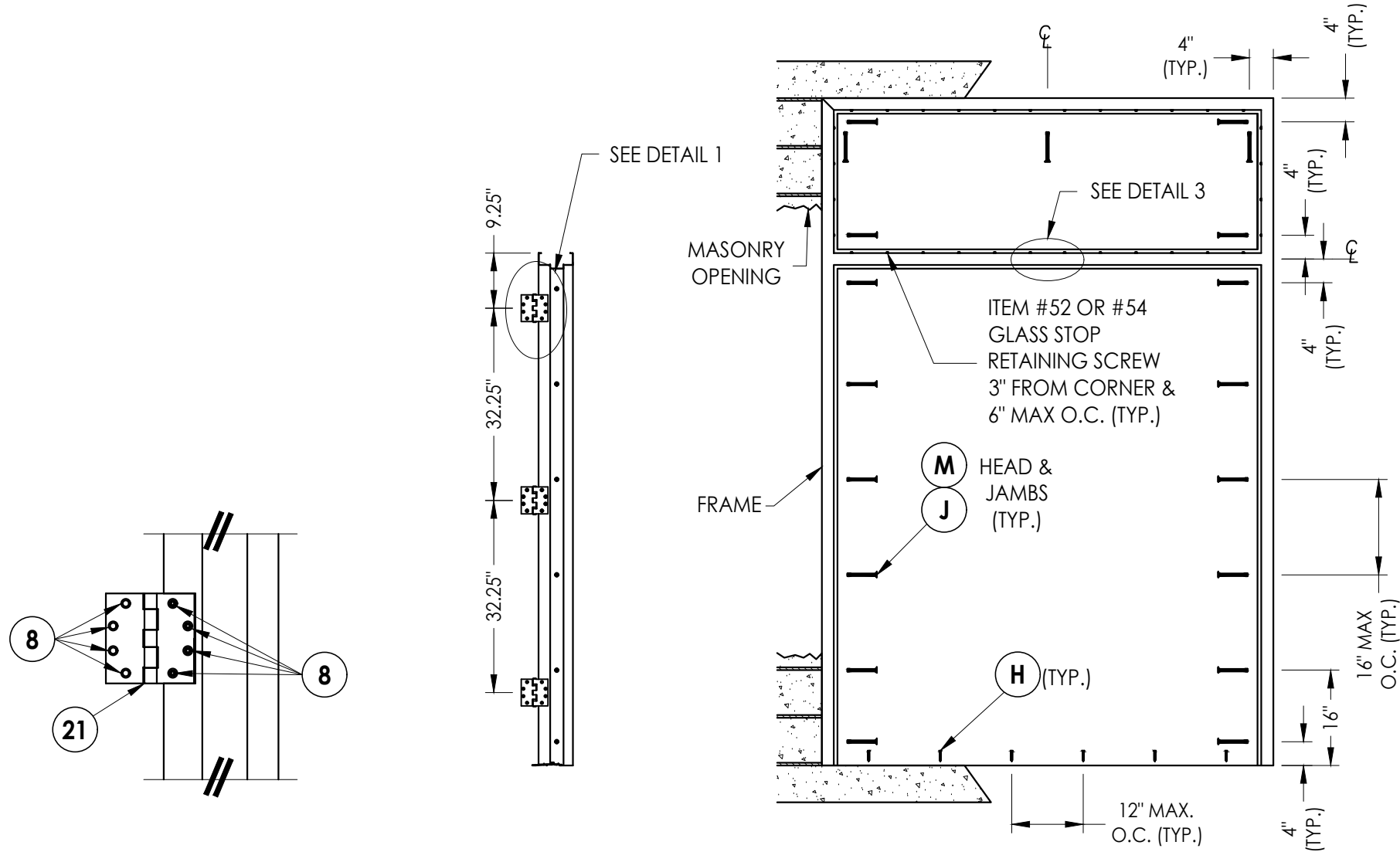
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SHEET 4 OF 7

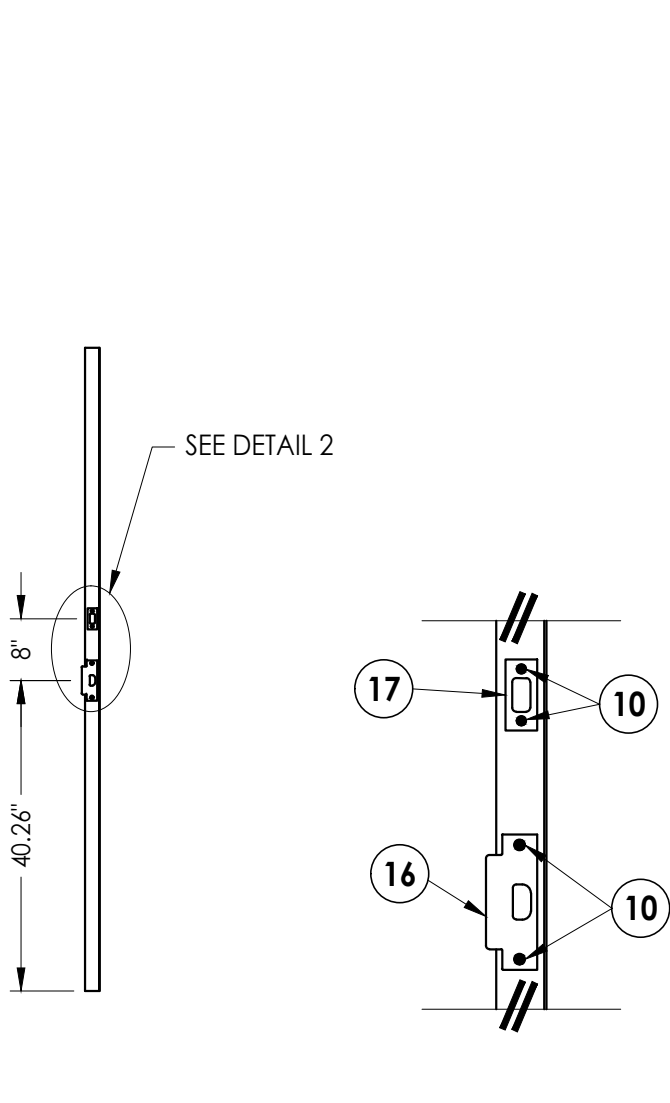
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DETAIL 1

HINGE JAMB

FRAME ANCHORING



STRIKE JAMB

DETAIL 2

DETAIL 3

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"                                |
| DYNABOLT SLEEVE ANCHOR | 3/8"        | 1-1/2"         | 2-1/4"                         | 4-1/2"                            |
| TAPPER                 | 3/8"        | 1-1/2"         | 4-1/4"                         | 6"                                |

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

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

PRODUCT:  
METAL MANUFACTURING INDUSTRIES  
"N" STEEL DOOR

PART OR ASSEMBLY:  
ANCHORING DETAILS

REVISIONS

| NO. | DATE     | DESCRIPTION                  |
|-----|----------|------------------------------|
| 5   | 7/01/26  | UPDATE TO 9TH ED. (2026) FBC |
| 4   | 7/11/23  | UPDATE TO 8TH ED. (2023) FBC |
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| 1   | 10/14/16 | UPDATE TO 5TH ED. (2014) FBC |

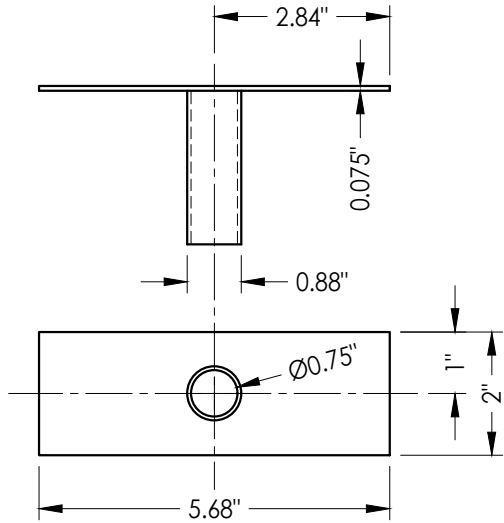
DATE: 2/23/09  
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CHK. BY: LFS  
DRAWING NO.: FL-12166.3  
SHEET 5 OF 7

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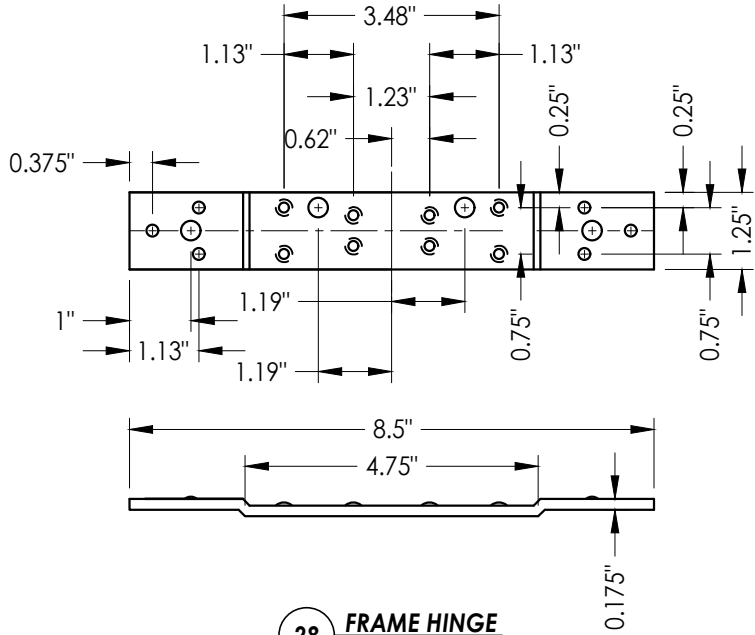
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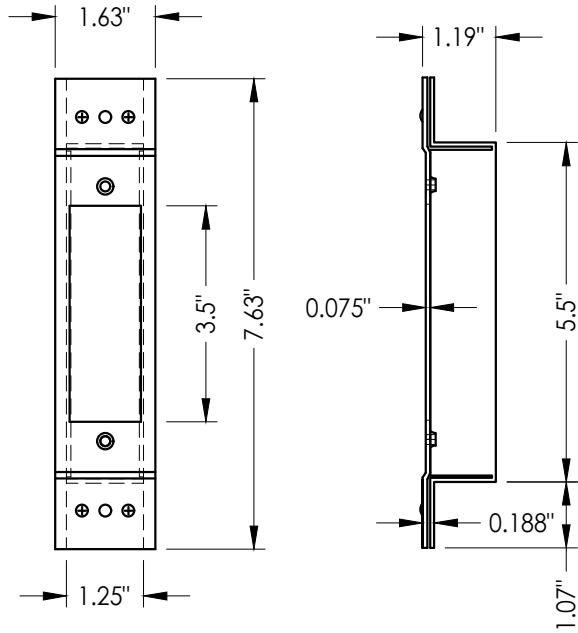
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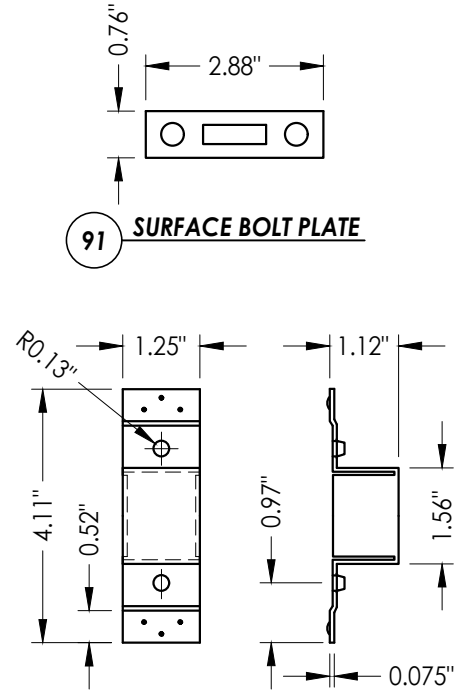
9 **TUBE ANCHOR**



28 **FRAME HINGE**  
Reinforcement

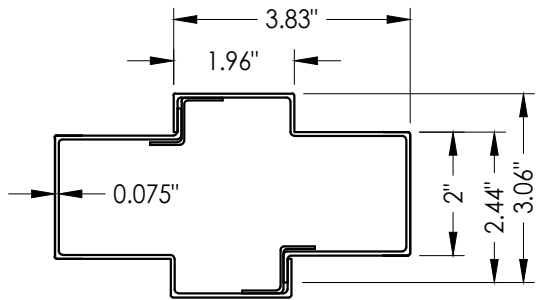


27 **LATCH STRIKE REINFORCEMENT**

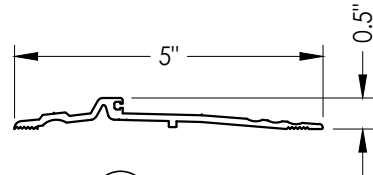


19 **DEADBOLT STRIKE REINFORCEMENT**

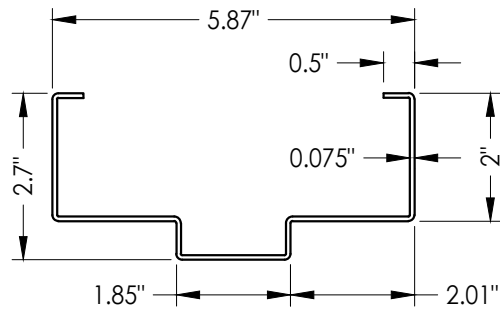
91 **SURFACE BOLT PLATE**



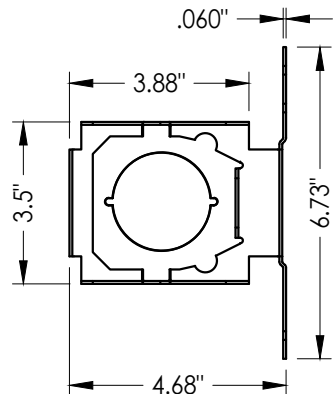
15 **MULLION**



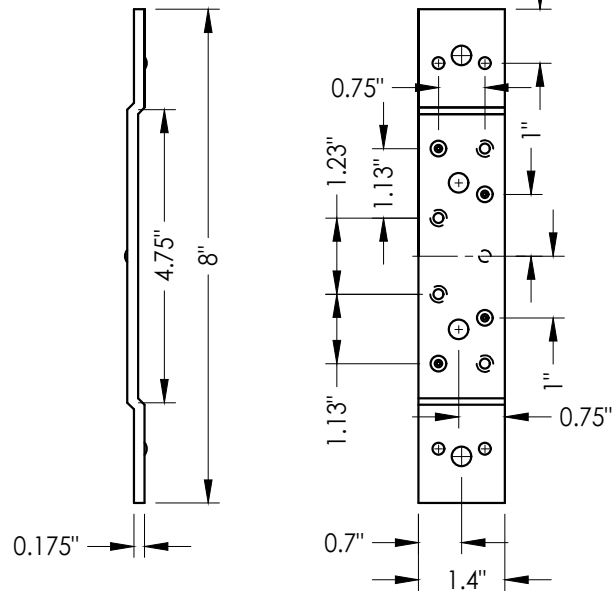
40 **THRESHOLD**



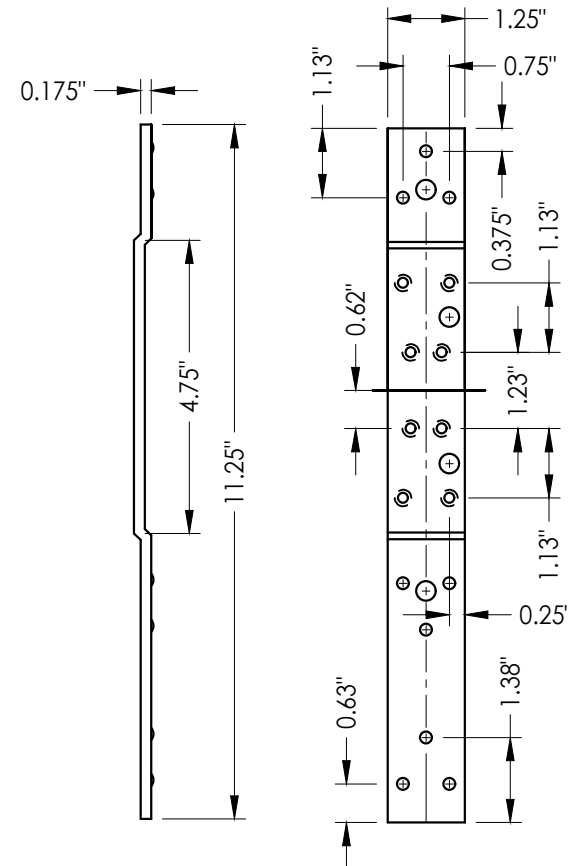
25 **HOLLOW METAL FRAME**



5 **LOCK BOX REINFORCEMENT**



23 **STANDARD (SHORT) DOOR HINGE**  
Reinforcement middle and bottom hinge



22 **STANDARD (LONG) DOOR HINGE**  
Reinforcement top hinge

| NO. | DATE     | REVISIONS         |         |                   |        |     |     |
|-----|----------|-------------------|---------|-------------------|--------|-----|-----|
|     |          | 5                 | 7/01/26 | UPDATE TO 9TH ED. | (2026) | FBC | LFS |
| 4   | 7/11/23  | UPDATE TO 8TH ED. | (2023)  | FBC               | LFS    |     |     |
| 3   | 7/30/20  | UPDATE TO 7TH ED. | (2020)  | FBC               | DAC    |     |     |
| 2   | 7/19/17  | UPDATE TO 6TH ED. | (2017)  | FBC               | LFS    |     |     |
| 1   | 10/14/16 | UPDATE TO 5TH ED. | (2014)  | FBC               | JK     |     |     |
|     |          |                   |         |                   | BY     |     |     |

DATE: 2/23/09

SCALE: N.T.S.

DWG. BY: AL

CHK. BY: LFS

DRAWING NO.:

FL-12166.3

SHEET 6 OF 7

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

PRODUCT:  
METAL MANUFACTURING  
INDUSTRIES  
"N" STEEL DOOR

PART OR ASSEMBLY:  
COMPONENTS

*RW* BUILDING CONSULTANTS, INC.

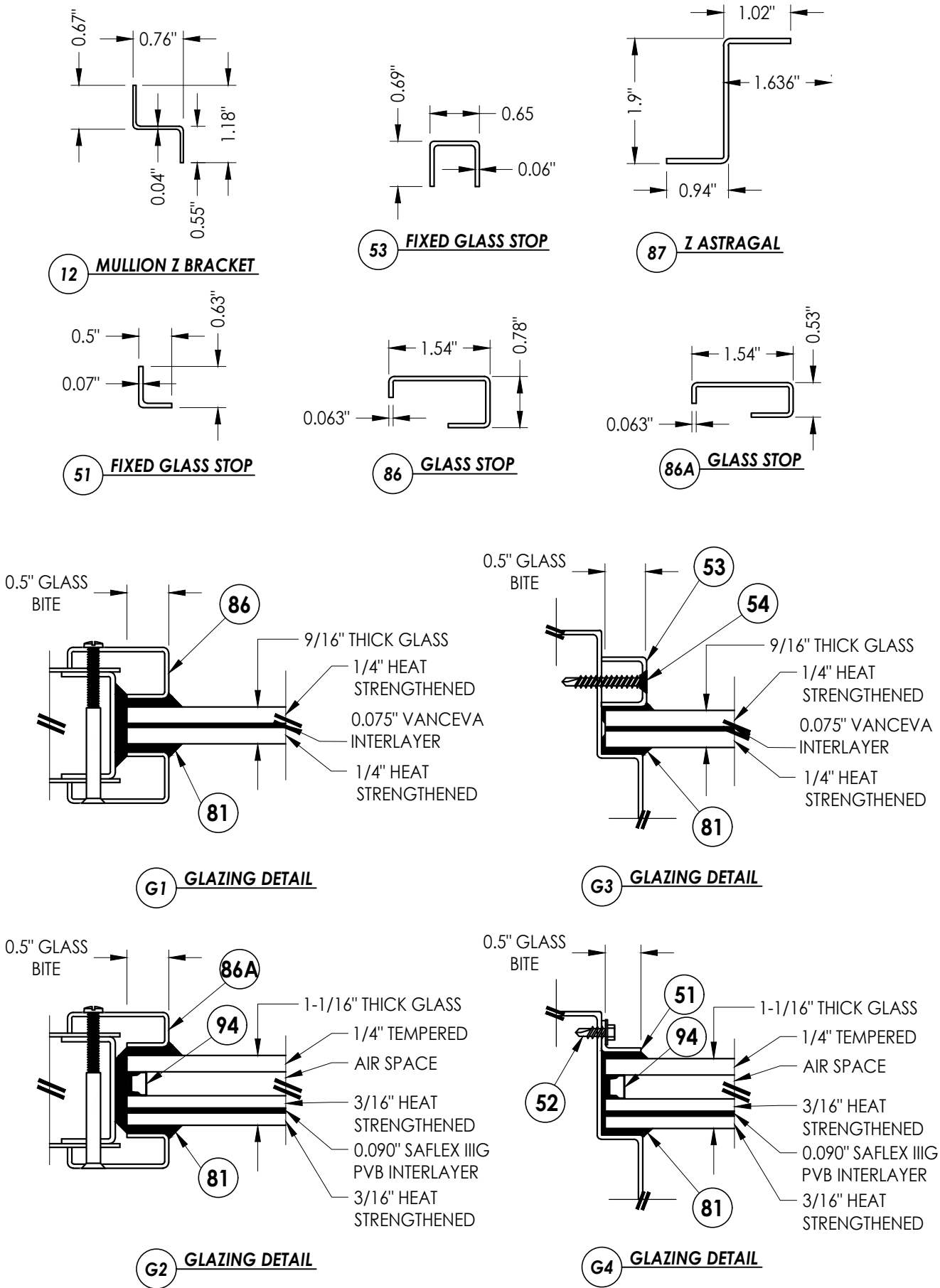
P.O. Box 230, Vairico, FL 33595

Phone No.: 813.659.9197

FBPE Registry No. 9813

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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" PFH ITWCONCRETE SCREW                                                            | STEEL       |
| J                 | 3/8" X 5" PFH ITW DYNABOLT SLEEVE ANCHOR                                                       | STEEL       |
| M                 | 3/8" X 5" PFH TAPPER CONCRETE SCREW BY POWERS FASTENERS                                        | STEEL       |
| 1                 | "N" OPAQUE STEEL DOOR PANEL                                                                    | -           |
| 2                 | DOOR SKIN - 16GA (0.060" THK. STEEL, Fy = 40,300 PSI MIN.)                                     | STEEL       |
| 3                 | FOAM 1.0 PCF MIN. DENSITY                                                                      | POLYSTYRENE |
| 4                 | DOOR TOP & BOTTOM CLOSER                                                                       | STEEL       |
| 5                 | LOCK BOX REINFORCEMENT                                                                         | 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 #VLFIG-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       |
| 94                | GLASS SPACER                                                                                   | ALUM        |



NOTE: GLAZING > 36\"/>

|                                                               |          |                          |     |                                                                                                                    |           |  |  |
|---------------------------------------------------------------|----------|--------------------------|-----|--------------------------------------------------------------------------------------------------------------------|-----------|--|--|
| Documents Prepared By:<br>Lyndon F. Schmidt<br>P.E. No. 43409 |          |                          |     | BUILDING CONSULTANTS, INC.<br>P.O. Box 230, Valrico, FL 33595<br>Phone No.: 813.659.9197<br>FBPE Registry No. 9813 |           |  |  |
| PRODUCT:<br>METAL MANUFACTURING INDUSTRIES<br>"N" STEEL DOOR  |          |                          |     | PART OR ASSEMBLY:<br>BILL OF MATERIALS, GLAZING DETAILS & COMPONENTS                                               |           |  |  |
| 5                                                             | 7/01/26  | UPDATE TO 9TH ED. (2026) | FBC | LFS                                                                                                                |           |  |  |
| 4                                                             | 7/11/23  | UPDATE TO 8TH ED. (2023) | FBC | LFS                                                                                                                |           |  |  |
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| DATE: 2/23/09                                                 |          |                          |     |                                                                                                                    |           |  |  |
| SCALE: N.T.S.                                                 |          |                          |     |                                                                                                                    |           |  |  |
| DWG. BY: AL                                                   |          |                          |     |                                                                                                                    |           |  |  |
| CHK. BY: LFS                                                  |          |                          |     |                                                                                                                    |           |  |  |
| DRAWING NO.: FL-12166.3                                       |          |                          |     |                                                                                                                    |           |  |  |
| SHEET 7 OF 7                                                  |          |                          |     |                                                                                                                    |           |  |  |