

G:\2023 FBC Drawings 1.26.26\Metal Mfg Industries\FL-12166 RA\FL-12166.1-9.dwg



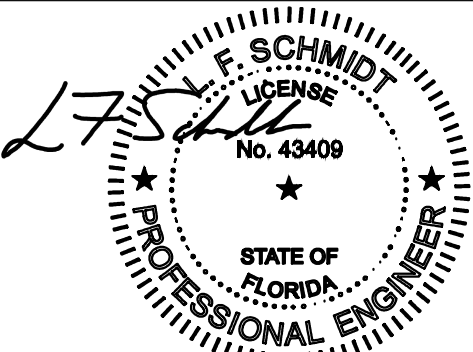
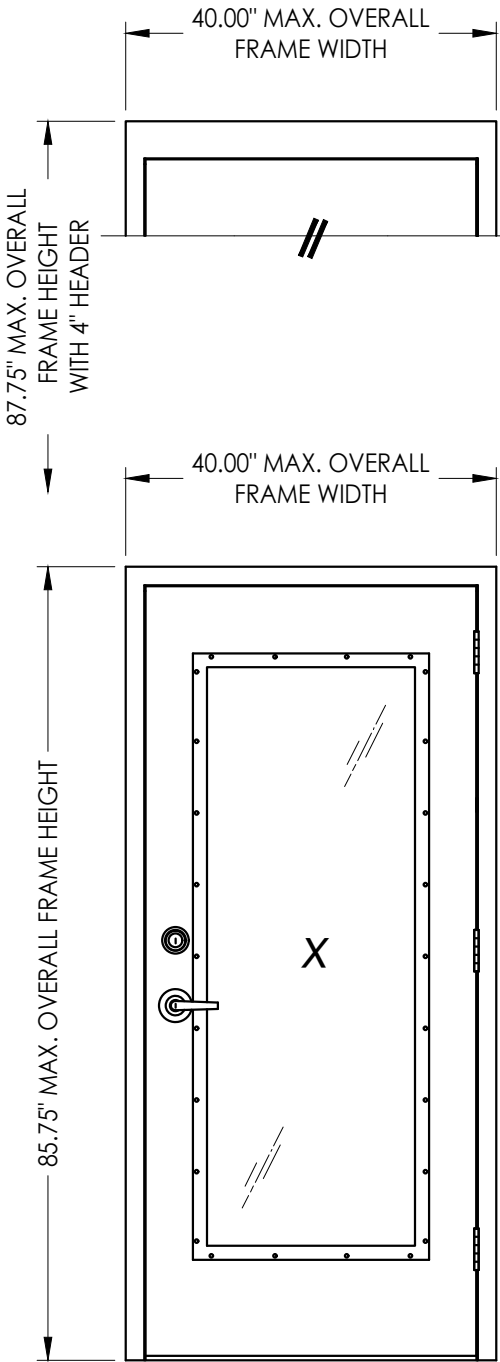
PRIV. DE RIO SANTIAGO #30
COL. LA RAZA
SOLEDAD DE GRACIANO SANCHEZ
SAN LUIS POTOSI, C.P. 78433

"N" SERIES
COMMERCIAL STEEL DOOR
OUTSWING
"NON-IMPACT"

GENERAL NOTES

1. This product has been evaluated and is in compliance with the 9th Edition (2026) Florida Building Code (FBC) structural requirements excluding 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 areas requiring wind borne debris protection this product is required to be protected with an impact resistant covering that complies with Section 1609.1.2 of the FBC.
4. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
5. The "N" door achieves a Class III stiffness classification per Section 8.2.2 of ANSI A250.13 (based on opaque door).

OVERALL FRAME DIMENSION	OVERALL D.L.O. DIMENSION	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
40.00" x 85.75"	22.50" x 62.50"	+65.0	-70.0



Digitally signed by Lyndon F Schmidt
Date: 2026.07.01 14:27:16 -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

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

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

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
NO.	DATE			BY

REVISIONS

DATE: 2/23/09

SCALE: N.T.S.

DWG. BY: AL

CHK. BY: LFS

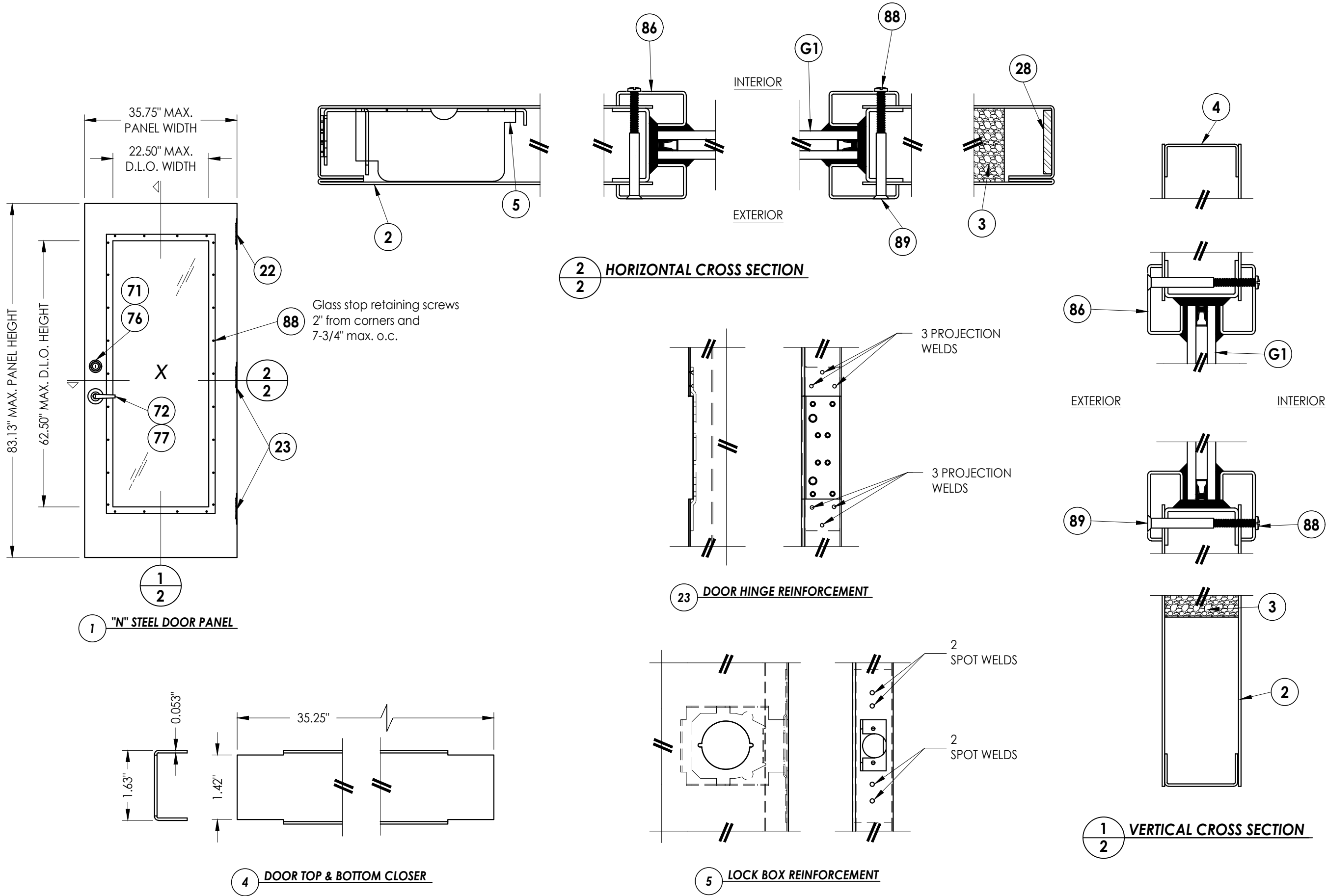
DRAWING NO.: FL-12166.8

SHEET 1 OF 7

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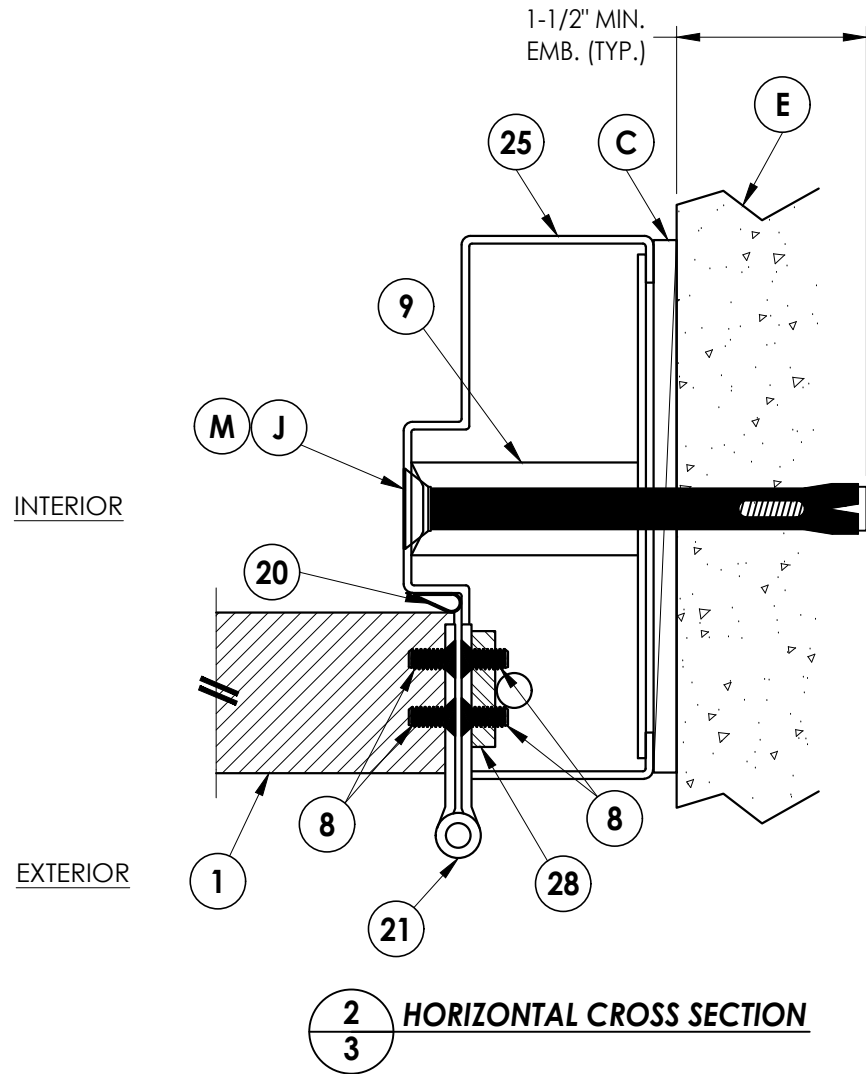
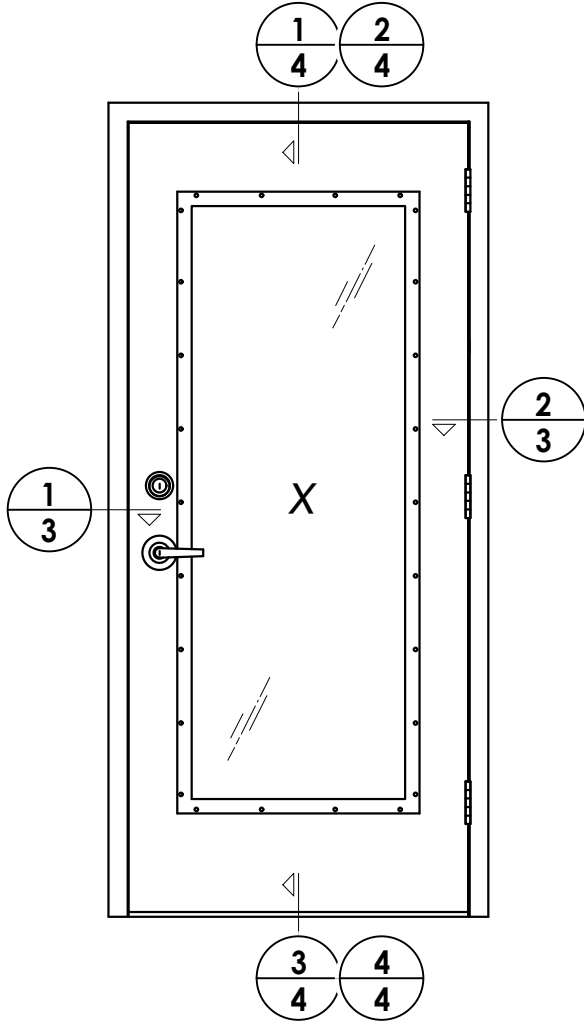
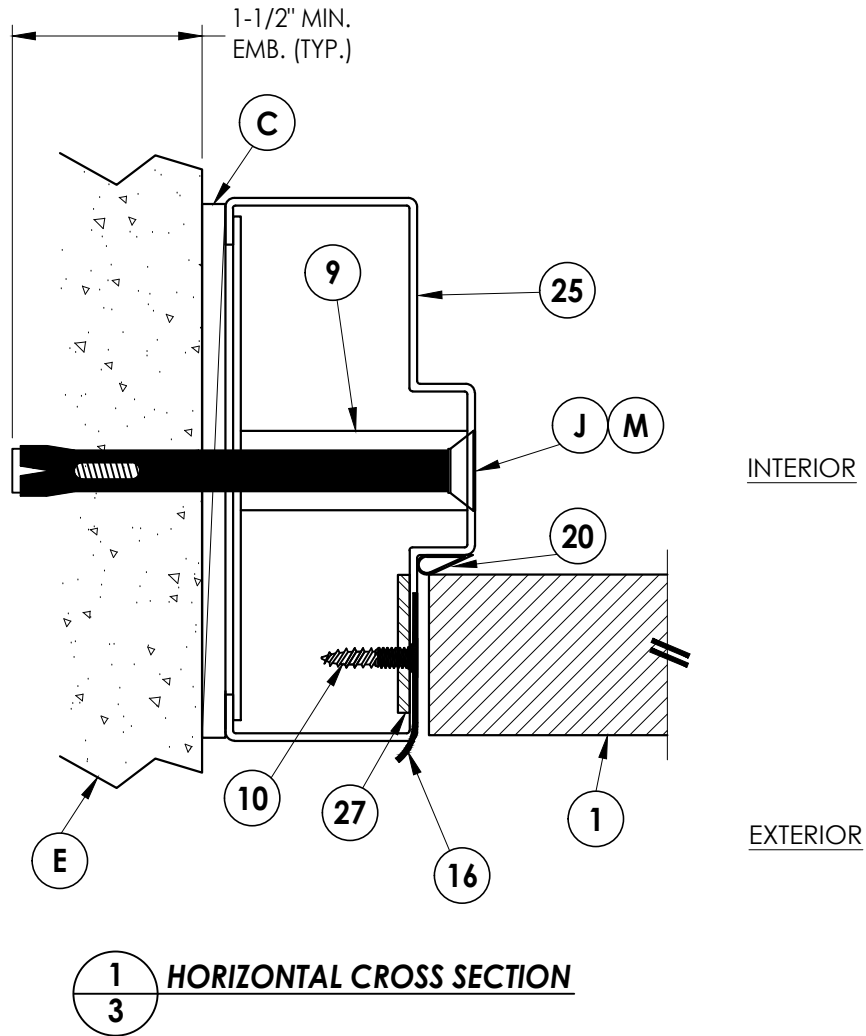
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

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

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PRODUCT: METAL MANUFACTURING INDUSTRIES "N" STEEL DOOR		PART OR ASSEMBLY: DOOR PANEL DETAILS	
5	7/01/26	UPDATE TO 9TH ED. (2026)	FBC
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NO. DATE		REVISIONS	
DATE: 2/23/09			
SCALE: N.T.S.			
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DRAWING NO.: FL-12166.8			
SHEET 2 OF 7			



5	7/01/26	UPDATE TO 9TH ED. (2026)	FBC	LFS
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DWG. BY: AL

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DRAWING NO.: FL-12166.8

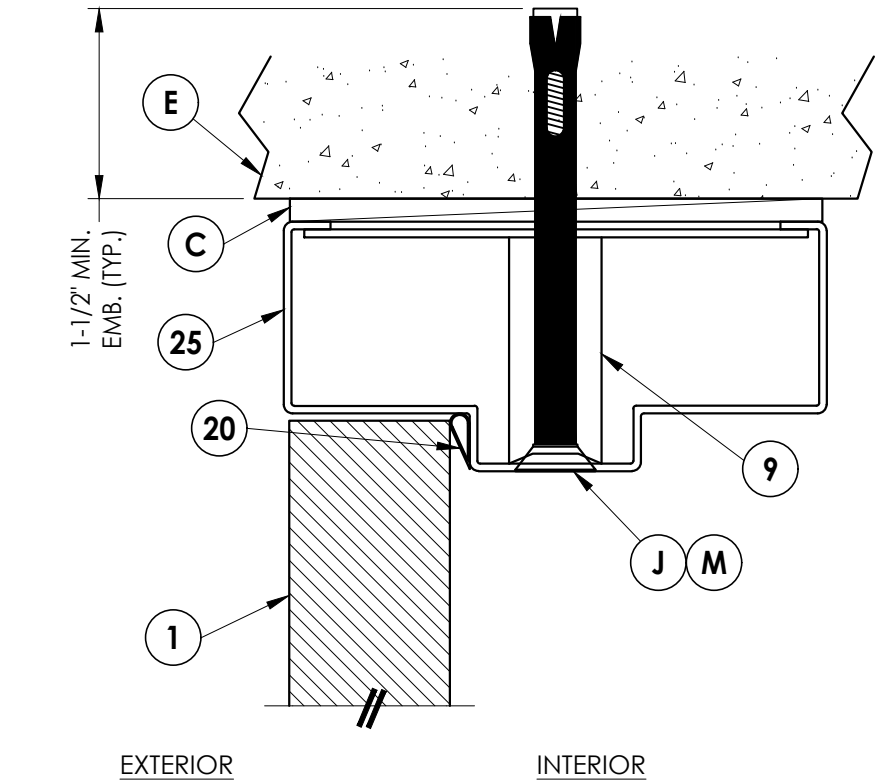
SHEET 3 OF 7

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

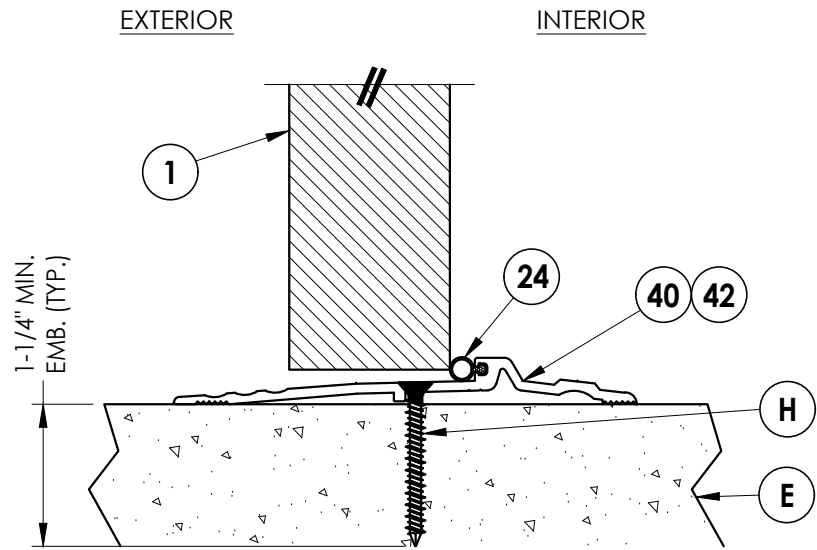
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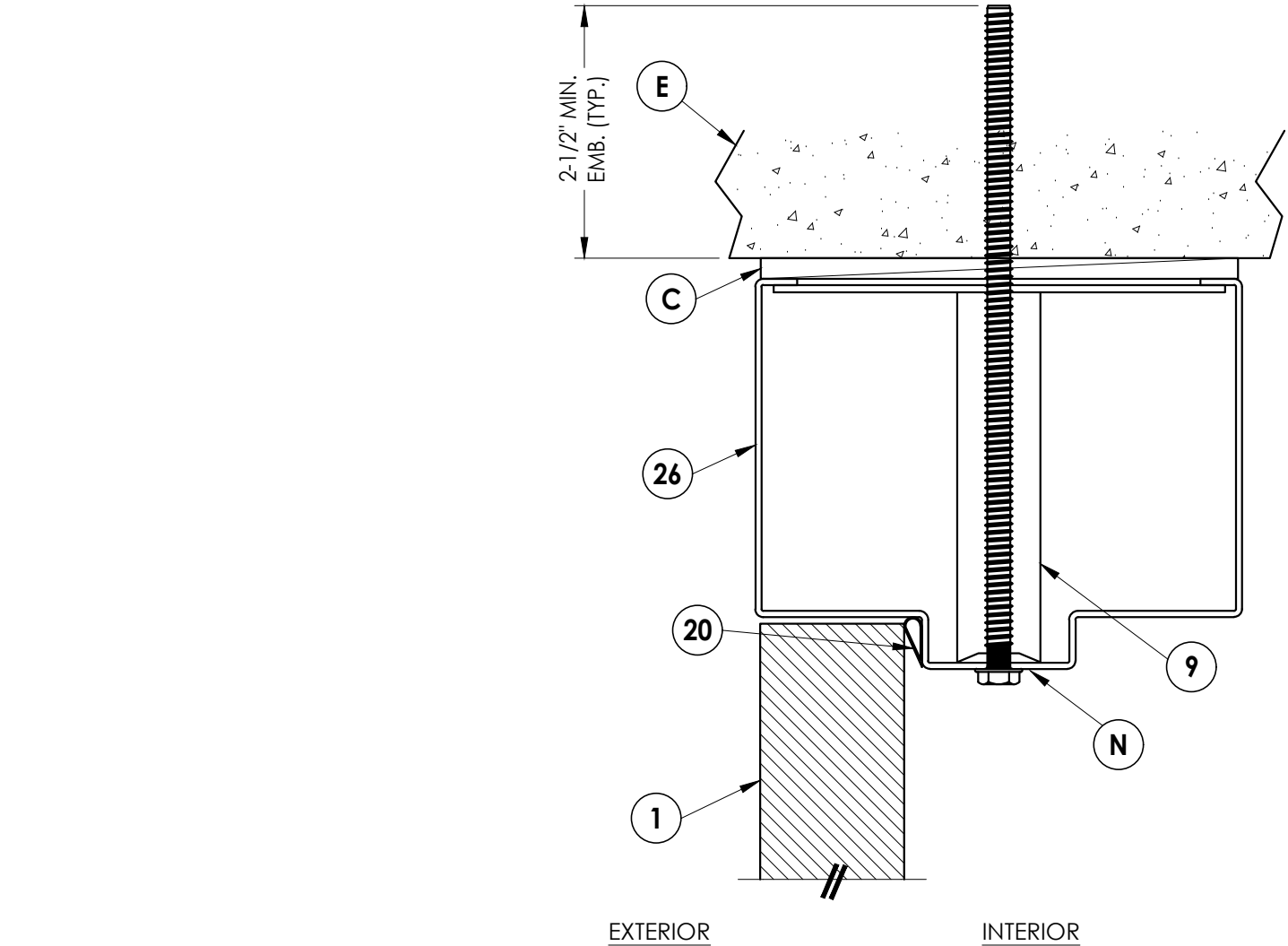
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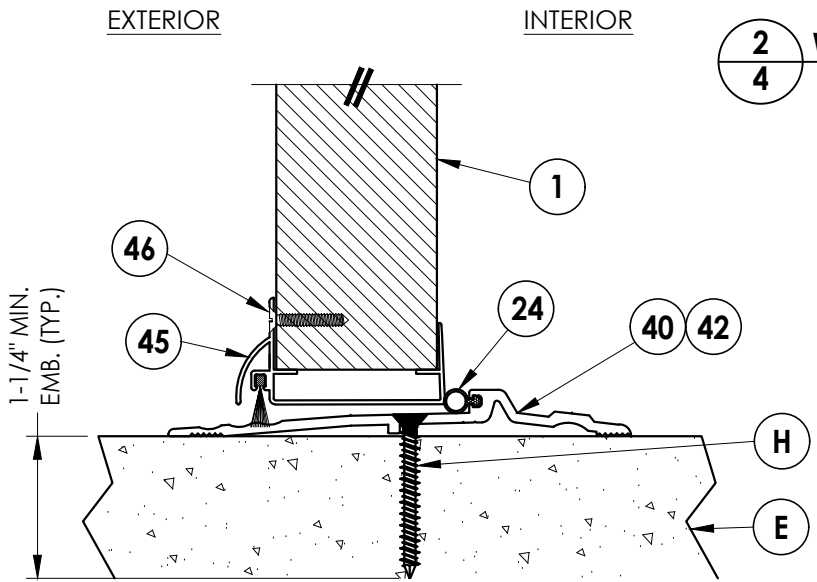
1
4 VERTICAL CROSS SECTION



3
4 VERTICAL CROSS SECTION



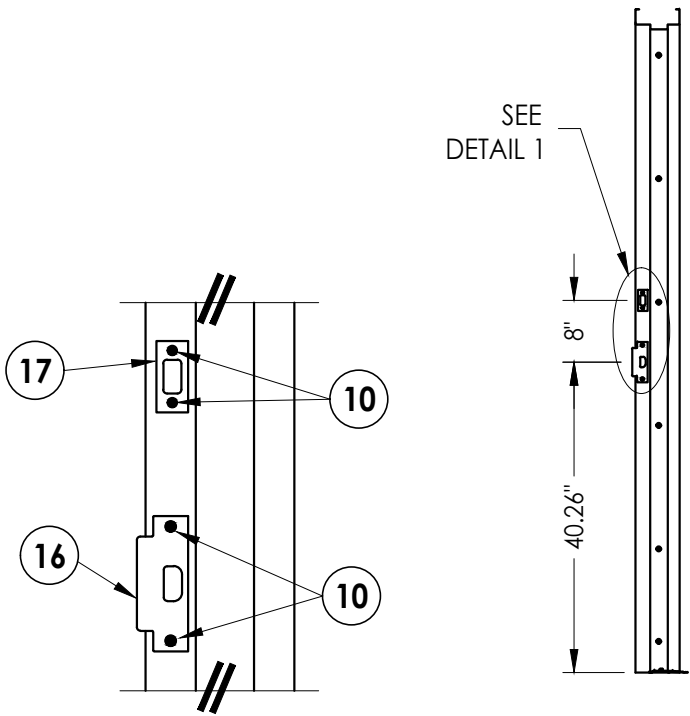
2
4 VERTICAL CROSS SECTION



4
4 VERTICAL CROSS SECTION

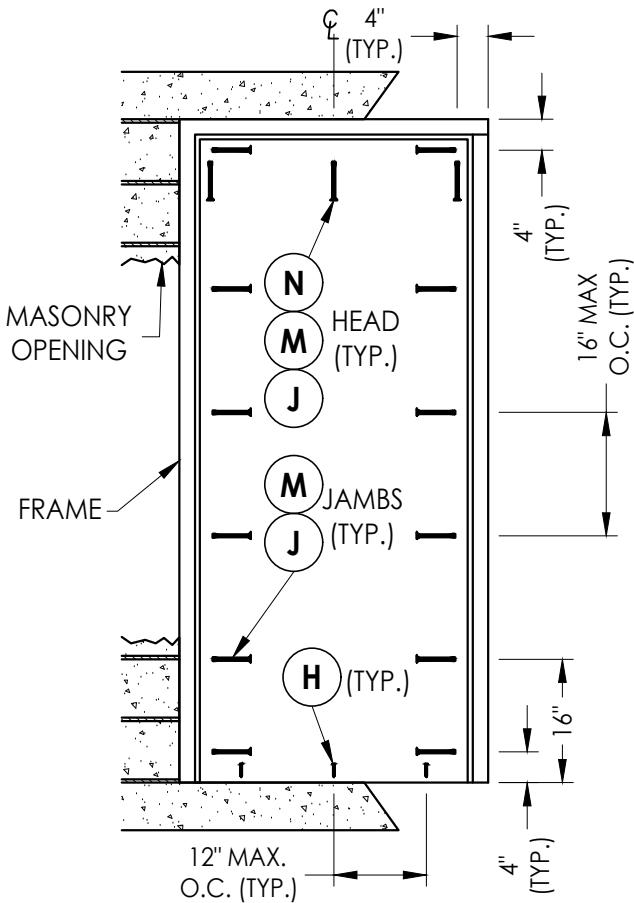
DATE: 2/23/09		PRODUCT:		Documents Prepared By:	
SCALE: N.T.S.		METAL MANUFACTURING INDUSTRIES		Lyndon F. Schmidt	
DWG. BY: AL		"N" STEEL DOOR		P.E. No. 43409	
CHK. BY: LFS		PART OR ASSEMBLY:		<	

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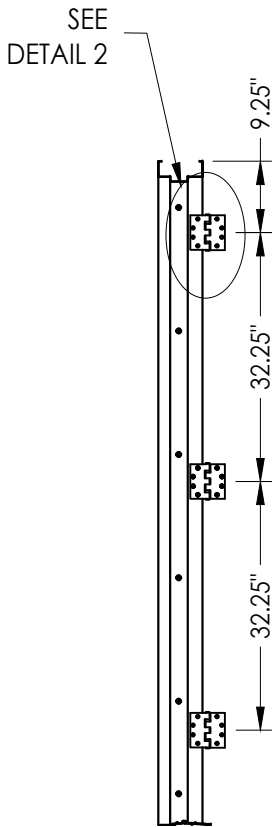


DETAIL 1

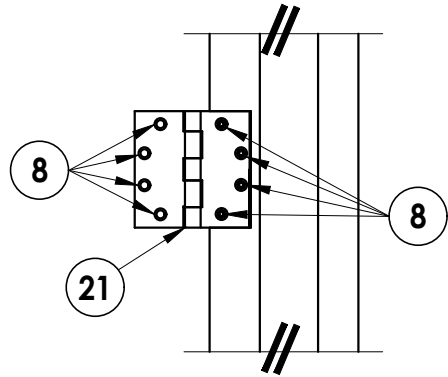
STRIKE JAMB



FRAME ANCHORING



HINGE JAMB



DETAIL 2

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"
SCREW-BOLT+™	1/2"	2-1/2"	6"	6"

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

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PRODUCT:
METAL MANUFACTURING
INDUSTRIES
"N" STEEL DOOR

PART OR ASSEMBLY:
ANCHORING DETAILS

5	7/01/26	UPDATE TO 9TH ED. (2026)	FBC	LFS
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REVISIONS

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SCALE: N.T.S.

DWG. BY: AL

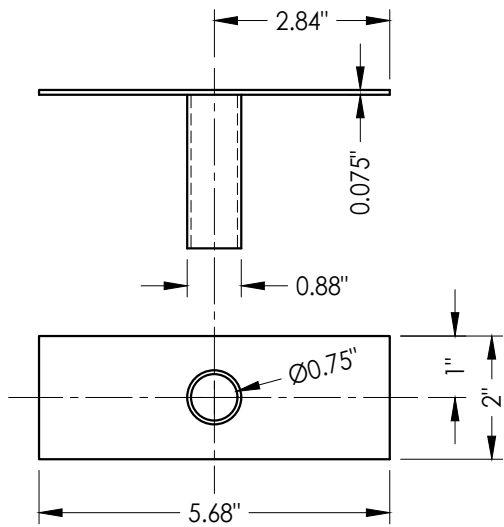
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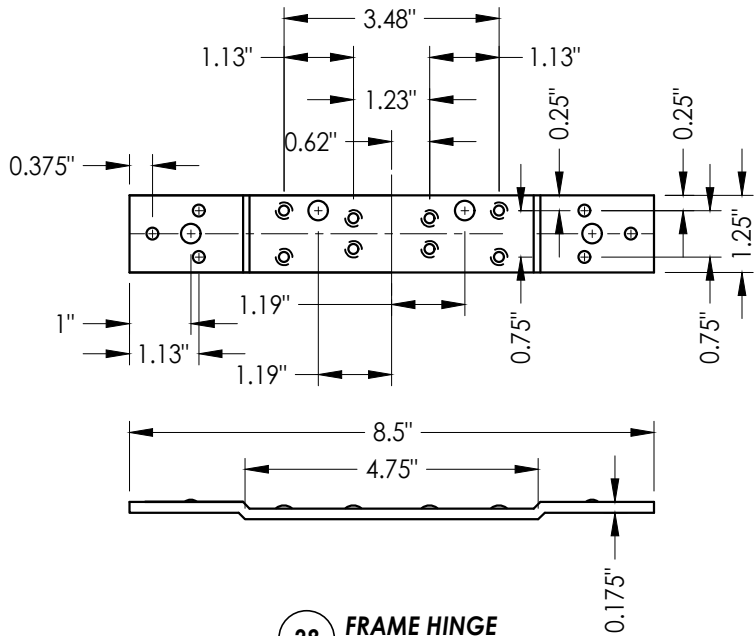
FL-12166.8

SHEET 5 OF 7

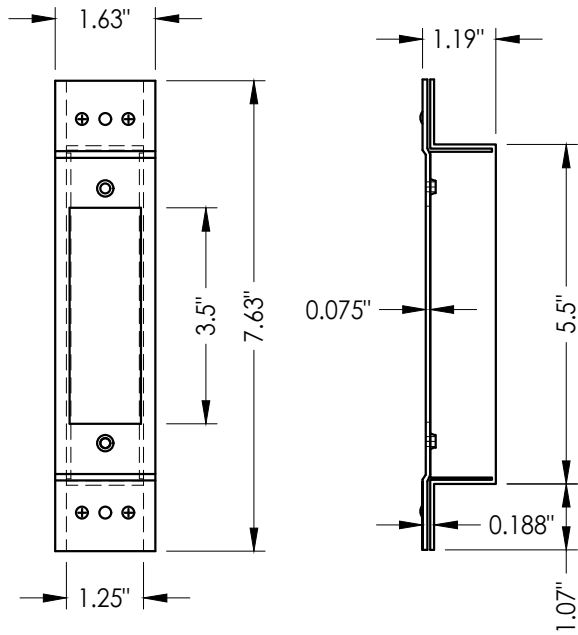
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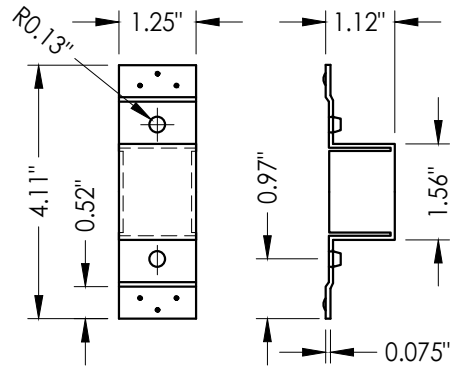
9 **TUBE ANCHOR**



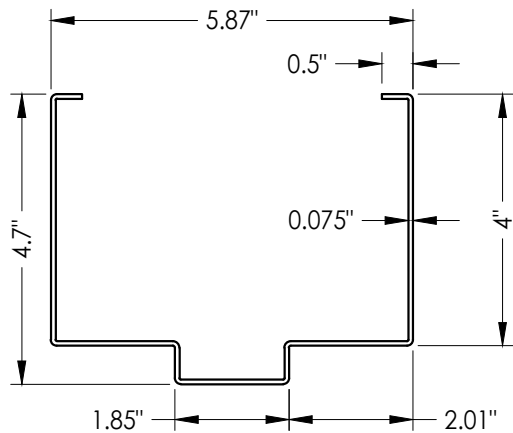
28 **FRAME HINGE**
Reinforcement



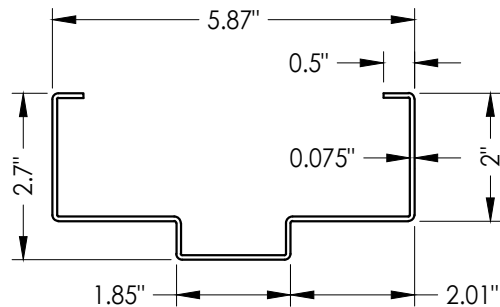
27 **LATCH STRIKE REINFORCEMENT**



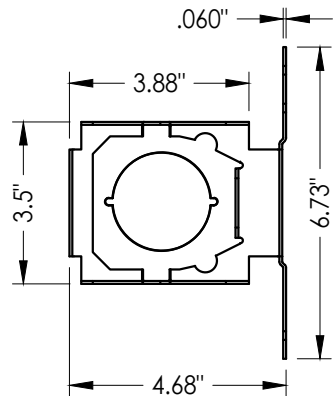
19 **DEADBOLT STRIKE REINFORCEMENT**



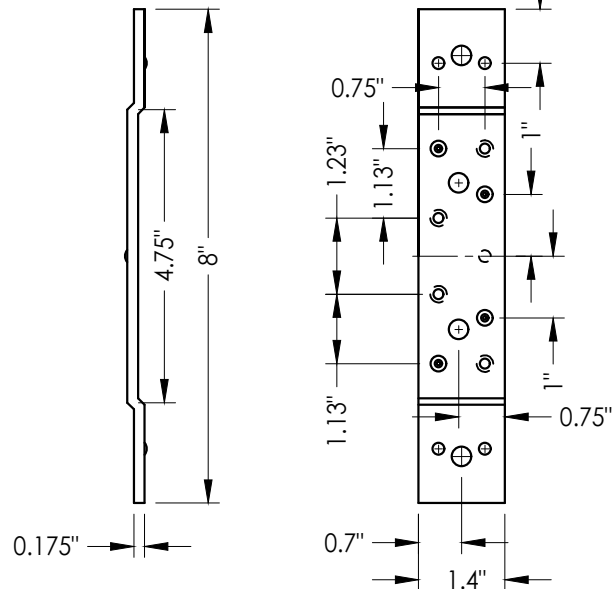
26 **FRAME**



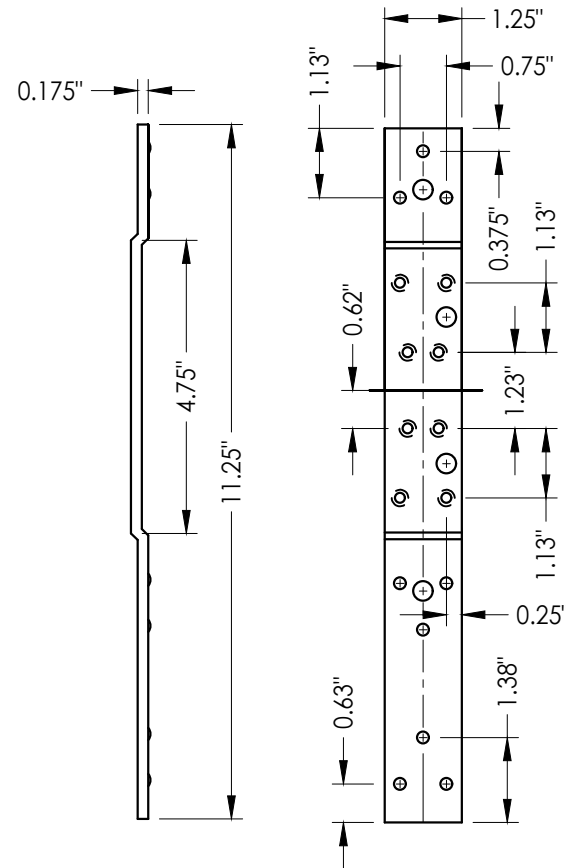
25 **HOLLOW METAL FRAME**



5 **LOCK BOX REINFORCEMENT**



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

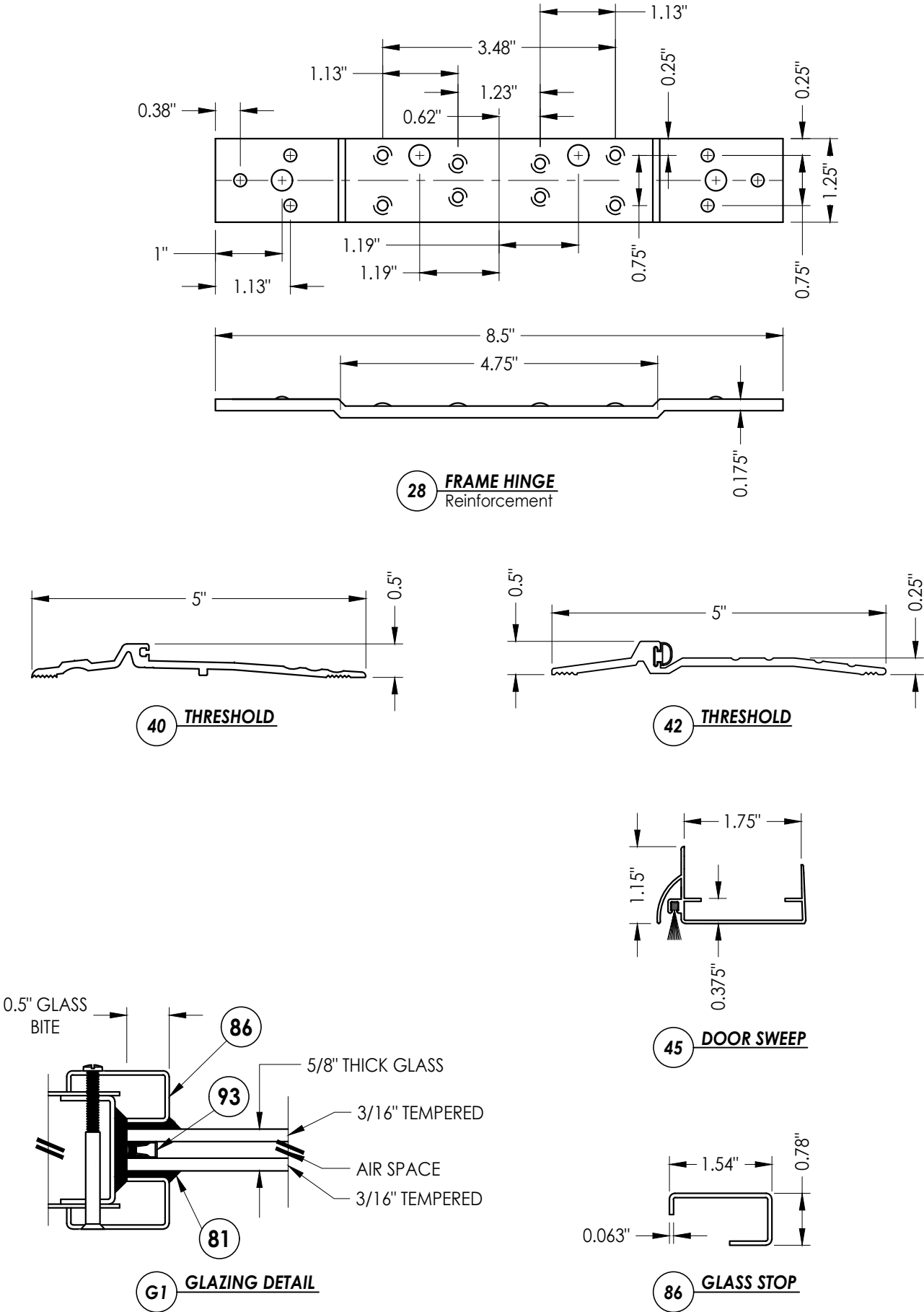


22 **STANDARD (LONG) DOOR HINGE**
Reinforcement top hinge

PRODUCT:		METAL MANUFACTURING INDUSTRIES		"N" STEEL DOOR		PART OR ASSEMBLY:		COMPONENTS	
Documents Prepared By:		Lyndon F. Schmidt		P.E. No. 43409		BUILDING CONSULTANTS, INC.		P.O. Box 230, Vairico, FL 33595	
DATE:		2/23/09		SCALE:		N.T.S.		DWG. BY:	
CHK. BY:		LFS		DRAWING NO.:		FL-12166.8		SHEET	
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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 ITW CONCRETE 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
N	1/2" X 8" HH SCREW-BOLT+ CONCRETE ANCHOR BY DeWALT/POWERS	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
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) WITH 2" HEAD	STEEL
26	FRAME - 14GA (0.075" THK) WITH 4" HEAD	STEEL
27	LATCH STRIKE REINFORCEMENT	STEEL
28	FRAME HINGE REINFORCEMENT	STEEL
40	THRESHOLD NATIONAL GUARD PRODUCTS, INC. #896	ALUMINUM
42	OUTSWING THRESHOLD PEMKO #2005V	ALUMINUM
45	95WHA DOOR SWEEP NATIONAL GUARD PRODUCTS, INC.	ALUMINUM
46	#6 X 3/4" PHILIPS HEAD SMS	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
86	LITE FRAME BY AIR LOUVERS #1500-AJ-2464	STEEL
88	#8 X 1-1/2" PPH MS	STEEL
89	SCREW COVER	STEEL
93	GLASS SPACER	ALUMINUM



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METAL MANUFACTURING INDUSTRIES
"N" STEEL DOOR

PART OR ASSEMBLY:
BILL OF MATERIALS & COMPONENTS

DATE: 2/23/09

SCALE: N.T.S.

DWG. BY: AL

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SHEET 7 OF 7

REVISIONS

NO.	DATE	DESCRIPTION
1	10/14/16	UPDATE TO 5TH ED. (2014) FBC
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