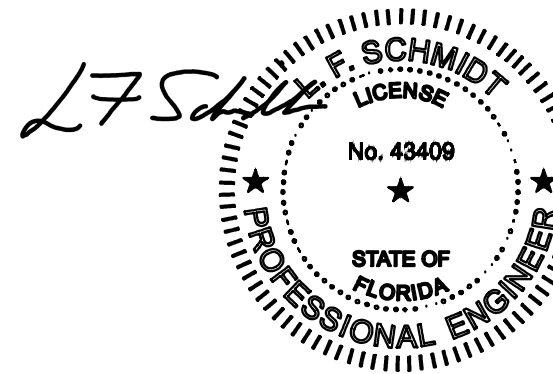


GENERAL NOTES

1. This product has been evaluated and is in compliance with the 8th Edition (2023) 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 and Section 1609.1.2.2 of the FBC.
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 high water dam threshold item #78 meet water infiltration requirements for "HVHZ".
7. Outswing configurations using sill item #40, #41 or #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.
8. The "N" door achieves a Class III stiffness classification per Section 8.2.2 of ANSI A250.13 (based on opaque door).
9. When used in the "HVHZ", steel must be protected as specified in FBC Section 2222.6.

TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical elevations, design pressures, & general notes
2	Door panel sections 161 lock prep
3	Horizontal cross sections
4	Vertical cross sections
5	Anchoring details
6	Glazing detail & components
7	Bill of materials & components

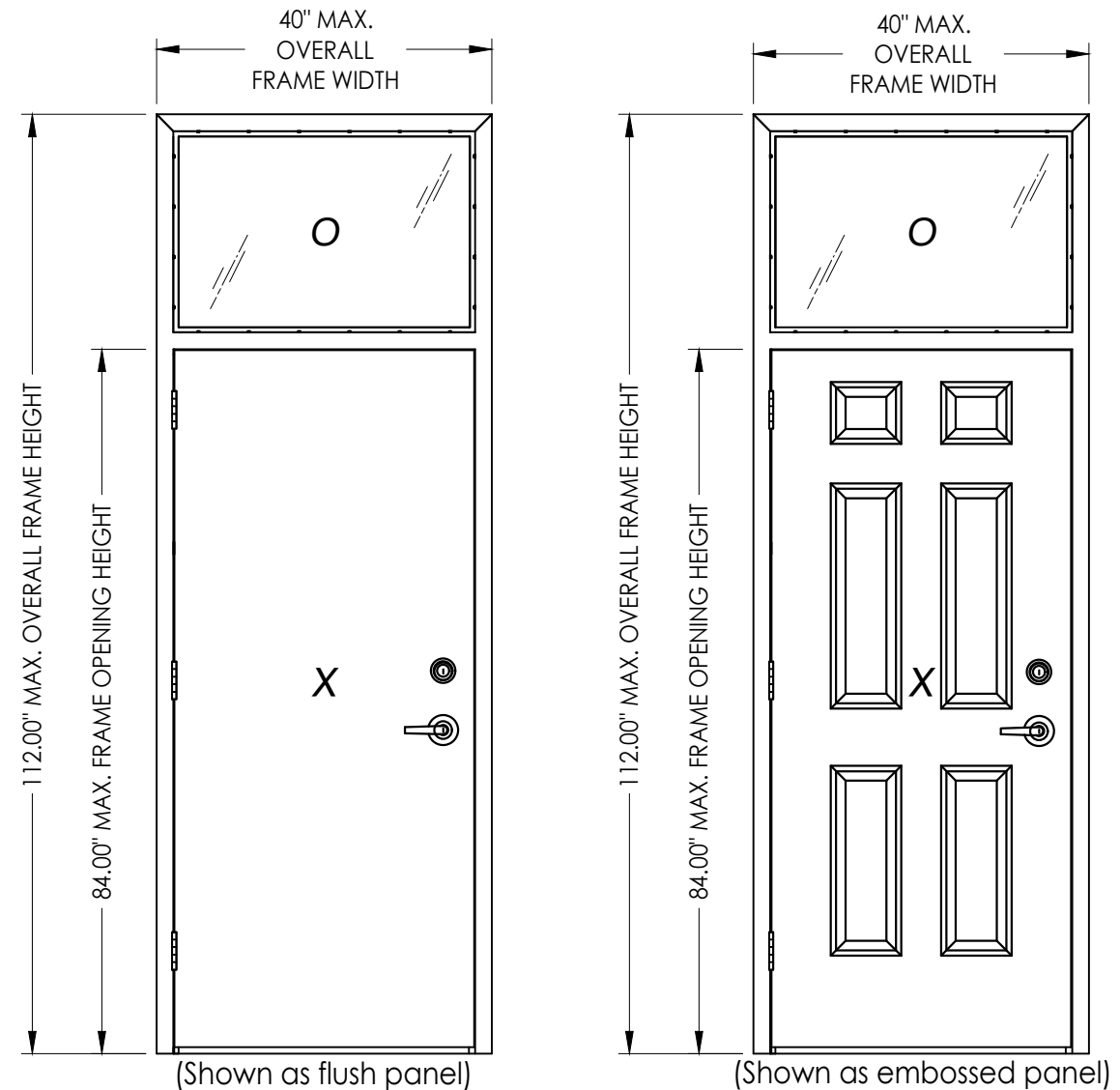


Digitally signed by Lyndon F
Schmidt
Date: 2023.07.11 08:59:45 -04'00'

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 FRAME DIMENSION	TRANSOM D.L.O. DIMENSION	LOCK TYPE	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
40.00" x 112.00"	34.75" x 22.75"	161 LATCH (SCHLAGE)	G1	+55.0	-55.0
		161 LATCH & DEADBOLT (DESIGN HARDWARE)		+65.0	-65.0

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

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P.O. Box 230, Valrico, FL 333

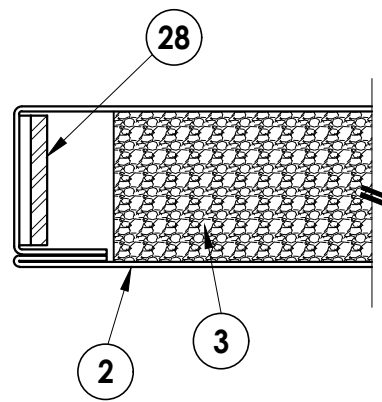
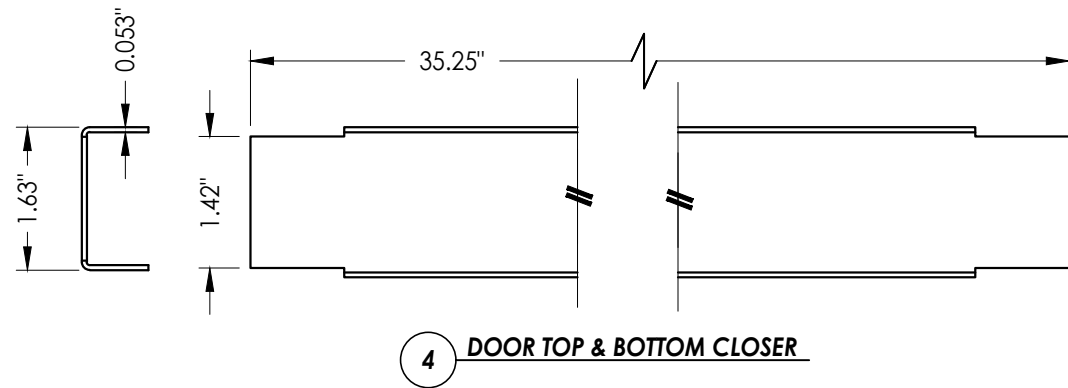
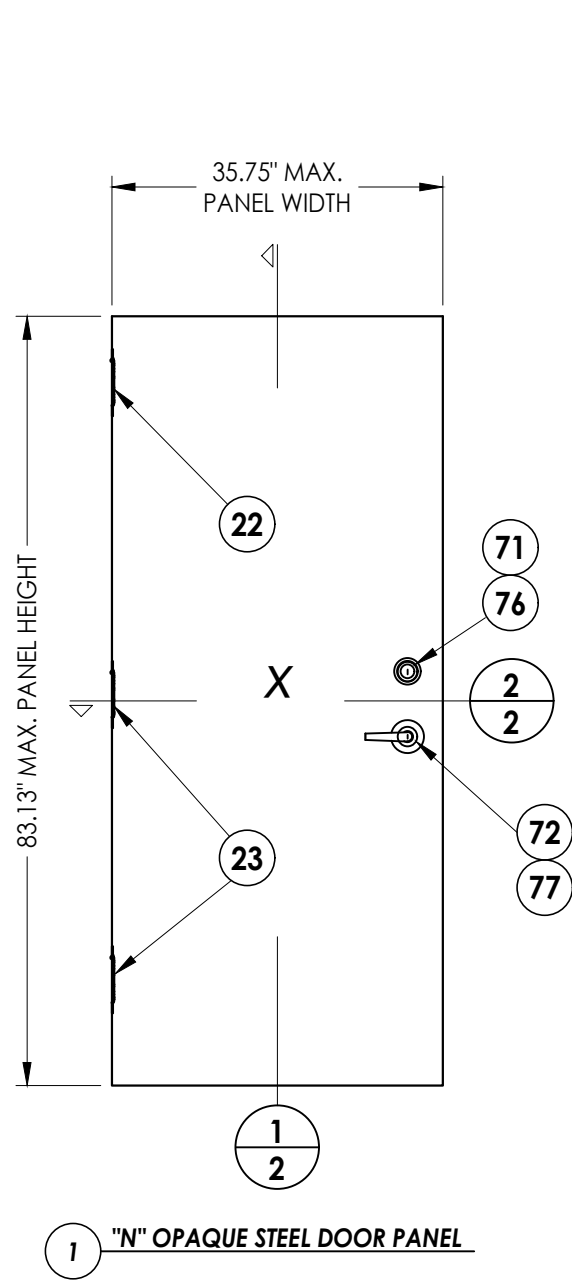
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:	METAL MANUFACTURING INDUSTRIES "N" STEEL DOOR
PART OR ASSEMBLY:	TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES

[illegible]

DATE:	2/19/09
SCALE:	N.T.S.
DWG. BY:	AL
CHK. BY:	LFS
DRAWING NO.:	FL-12169.1
SHEET	1 OF 7

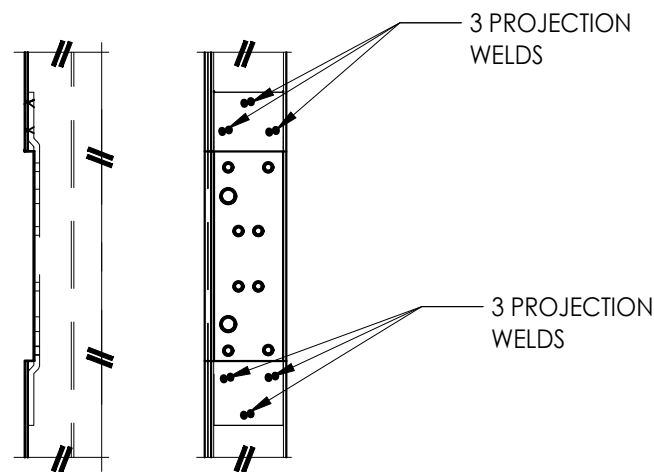
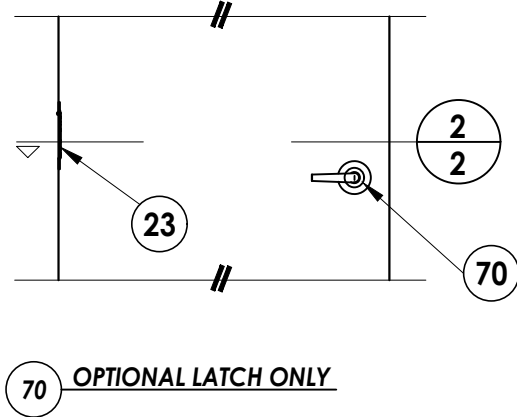
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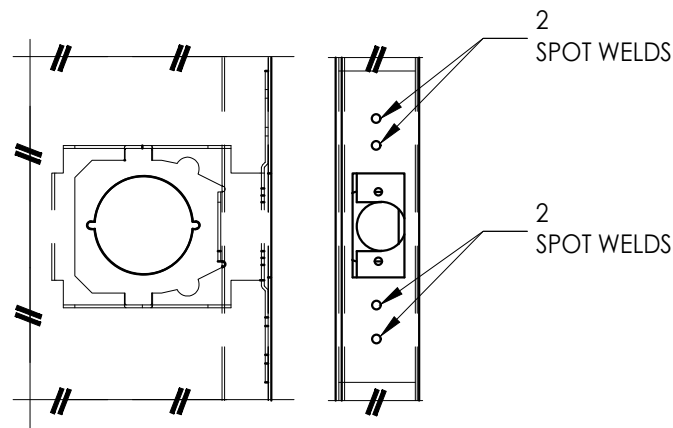
INTERIOR

EXTERIOR

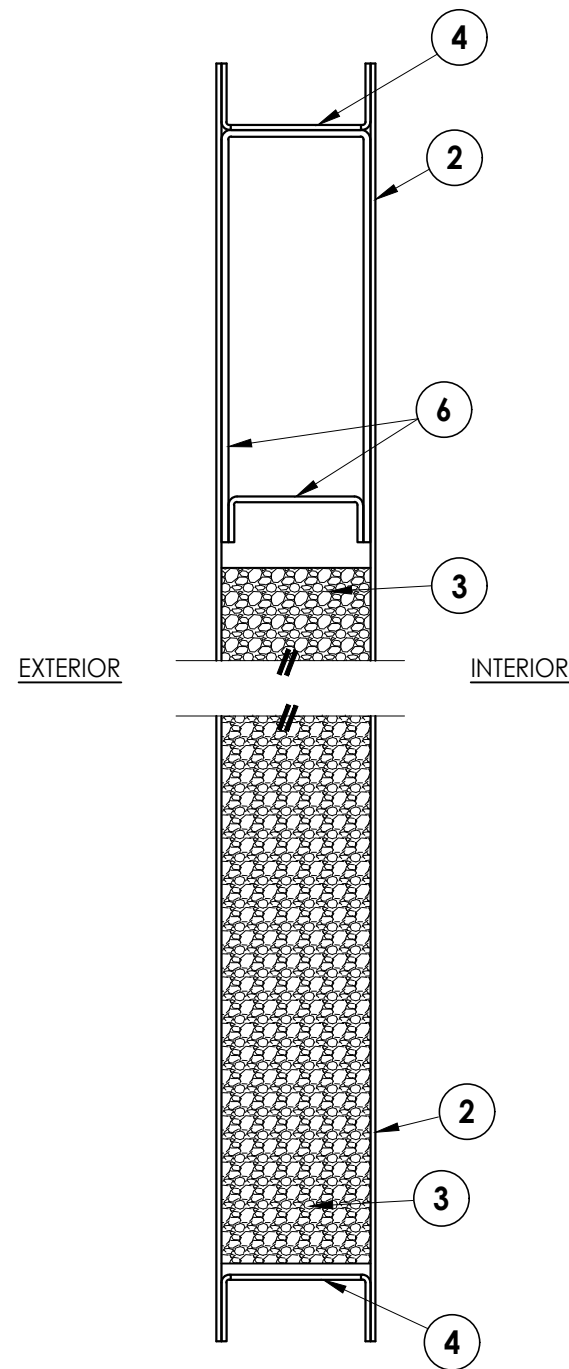
2
2 **HORIZONTAL CROSS SECTION**
Door panel



23 **DOOR HINGE REINFORCEMENT**



5 **LOCK BOX REINFORCEMENT**



1
2 **VERTICAL CROSS SECTION**
Door panel

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

PRODUCT:
METAL MANUFACTURING
INDUSTRIES
"N" STEEL DOOR

PART OR ASSEMBLY:
DOOR PANEL SECTIONS
161 LOCK PREP

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

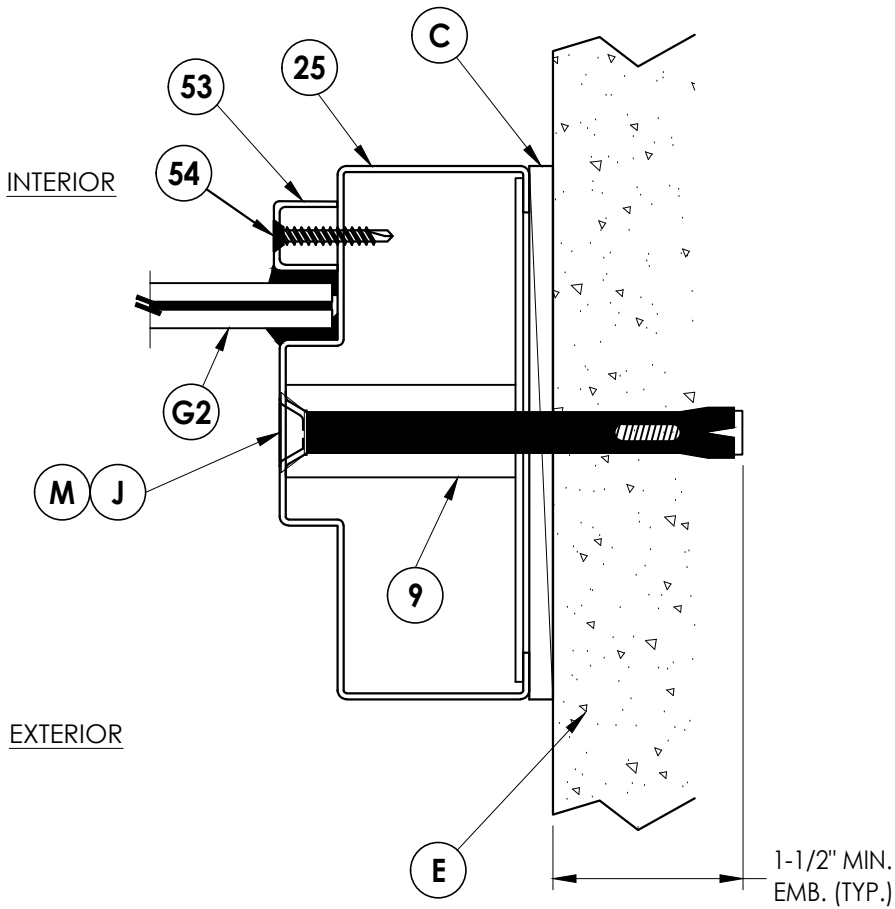
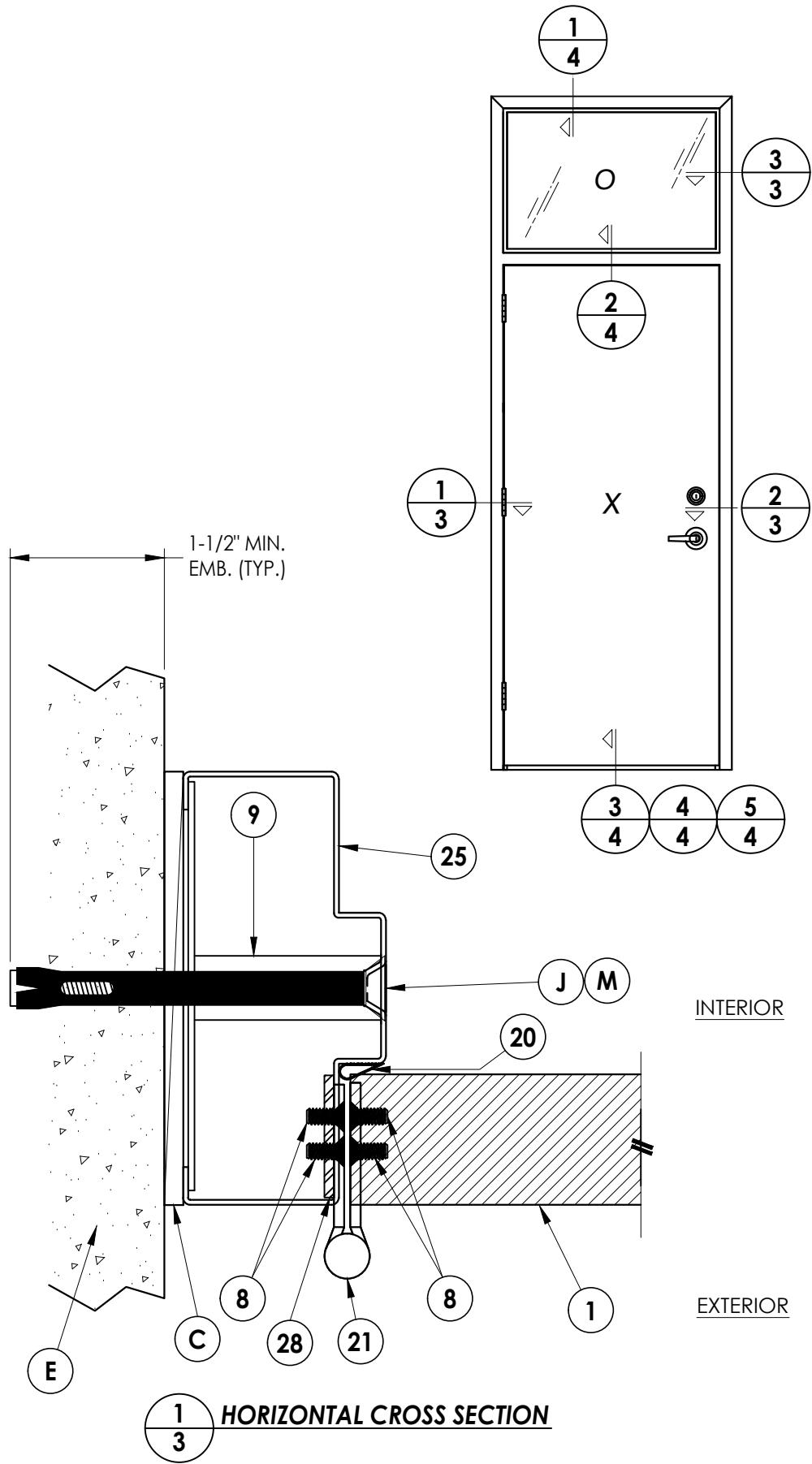
DATE: 2/19/09
SCALE: N.T.S.
DWG. BY: AL
CHK. BY: LFS
DRAWING NO.: FL-12169.1
SHEET 2 OF 7

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Phone No.: 813.659.9197
FBPE Registry No. 9813

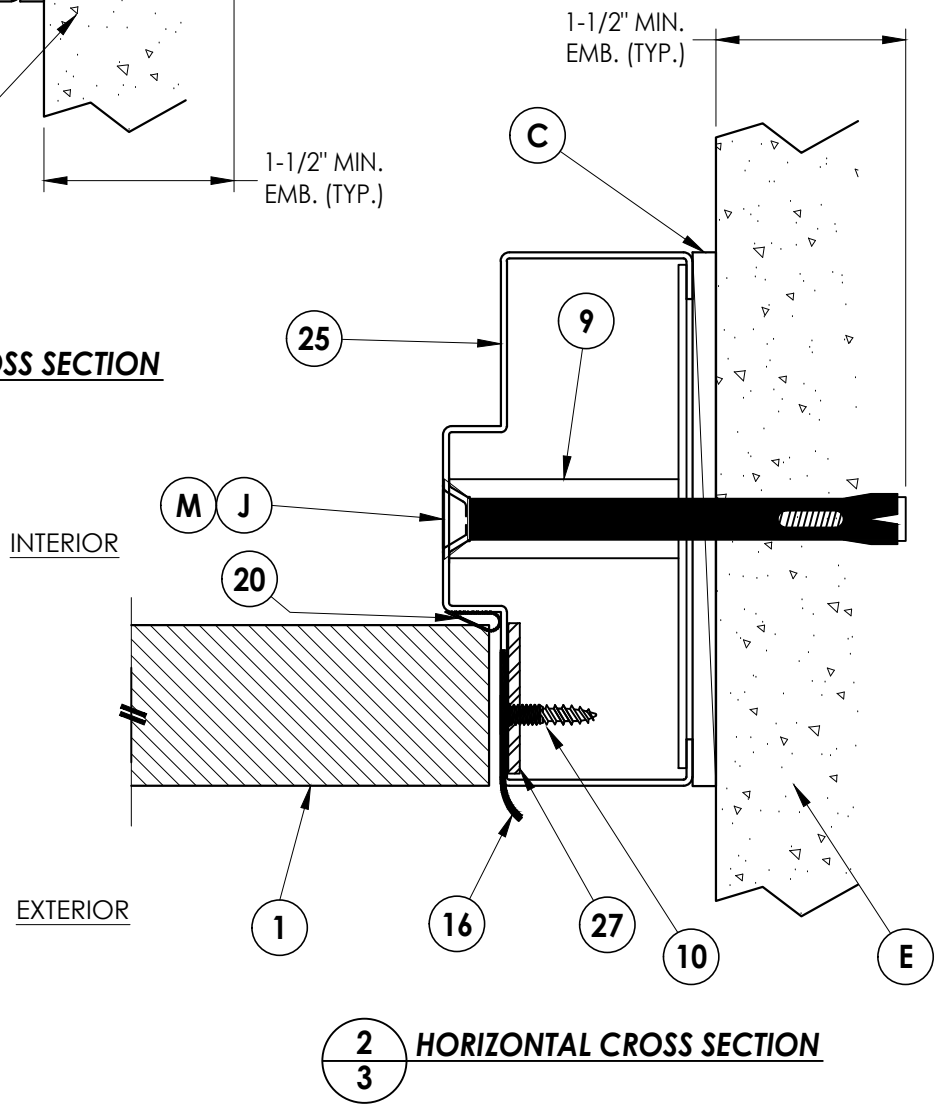
© 2009 R.W. BUILDING CONSULTANTS INC.

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

Z:\2023 FBC Drawings\Metal Mfg Industries\FL-12169 R4\FL-12169.1-4.dwg



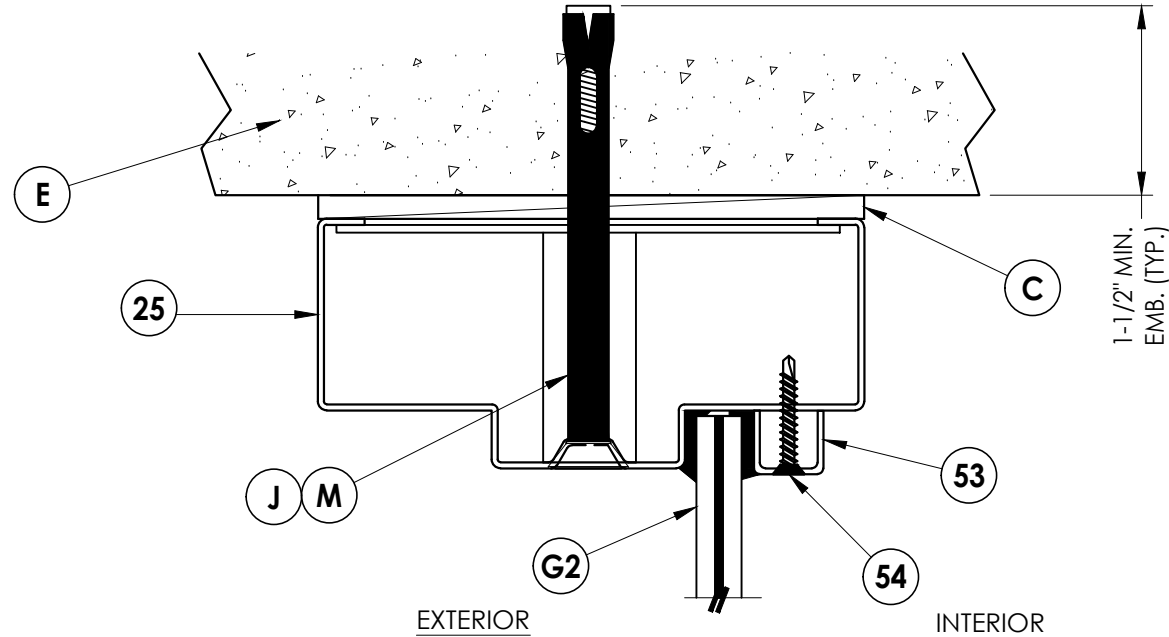
3/3 HORIZONTAL CROSS SECTION



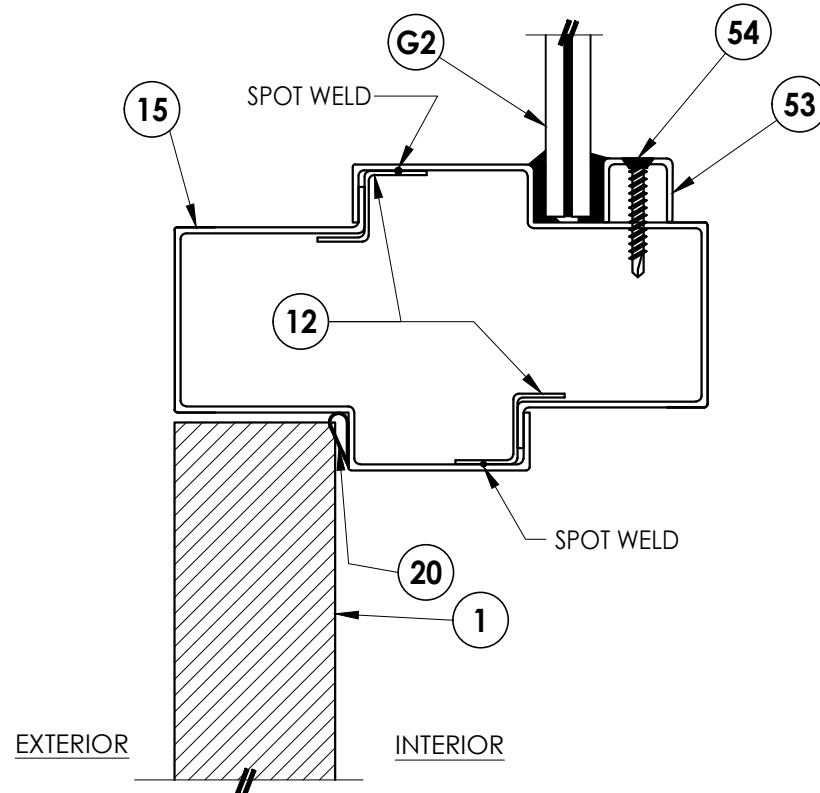
2/3 HORIZONTAL CROSS SECTION

PRODUCT:		METAL MANUFACTURING INDUSTRIES "N" STEEL DOOR		PART OR ASSEMBLY:		HORIZONTAL CROSS SECTIONS	
DOCUMENTS PREPARED BY:		Lyndon F. Schmidt		P.E. No. 43409		BUILDING CONSULTANTS, INC.	
DATE:		2/19/09		SCALE:		N.T.S.	
DWG. BY:		AL		CHK. BY:		LFS	
DRAWING NO.:		FL-12169.1		SHEET		3 OF 7	
NO.		DATE		REVISIONS		BY	
4		7/11/23		UPDATE TO 8TH ED. (2023)		FBC	
3		7/30/20		UPDATE TO 7TH ED. (2020)		FBC	
2		7/17/17		UPDATE TO 6TH ED. (2017)		FBC	
1		10/14/16		UPDATE TO 5TH ED. (2014)		FBC	
P.O. Box 230, Valrico, FL 33595		Phone No.: 813.659.9197		FBPE Registry No. 9813			

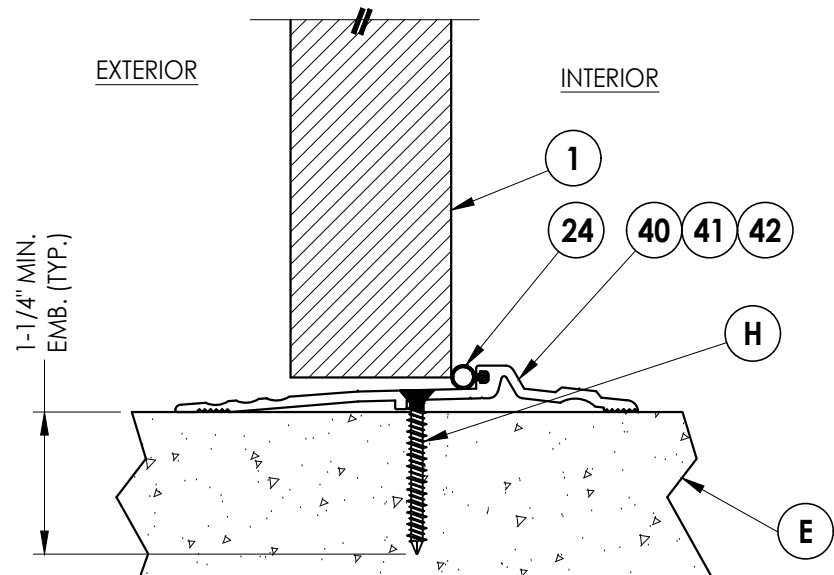
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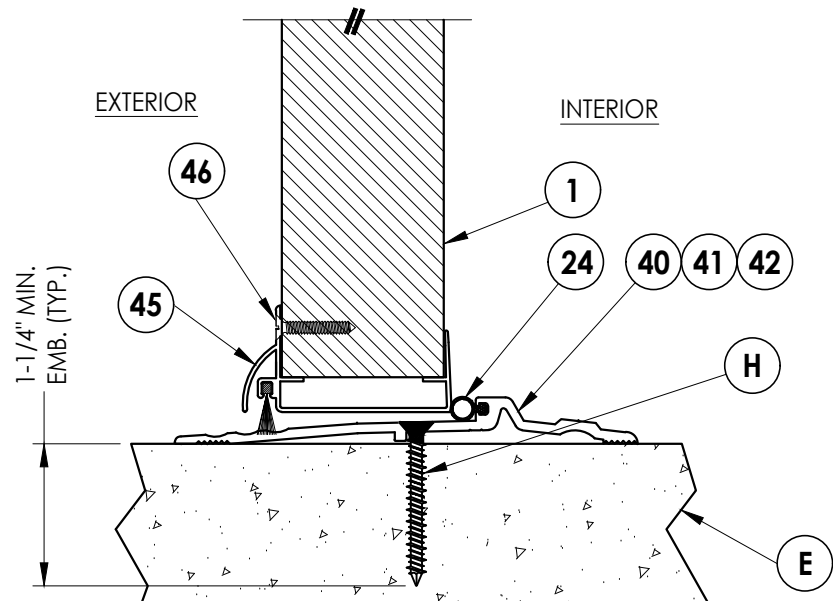
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4 VERTICAL CROSS SECTION



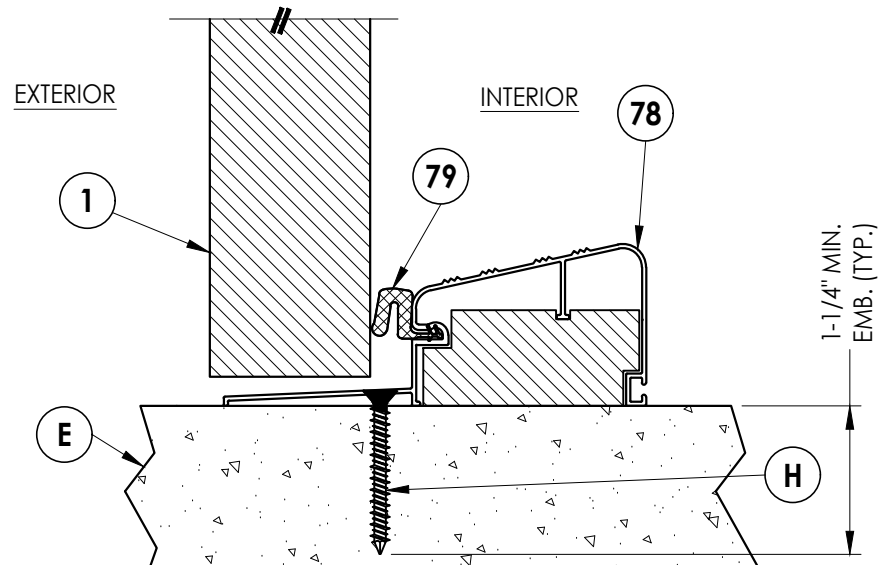
2
4 VERTICAL CROSS SECTION



3
4 VERTICAL CROSS SECTION
See general notes, sheet 1
for "HVHZ" water infiltration
requirements



4
4 VERTICAL CROSS SECTION
See general notes, sheet 1
for "HVHZ" water infiltration
requirements



5
4 VERTICAL CROSS SECTION
See general notes, sheet 1
for "HVHZ" water infiltration
requirements

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
FBPE Registry No. 9813

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

DATE: 2/19/09

SCALE: N.T.S.

DWG. BY: AL

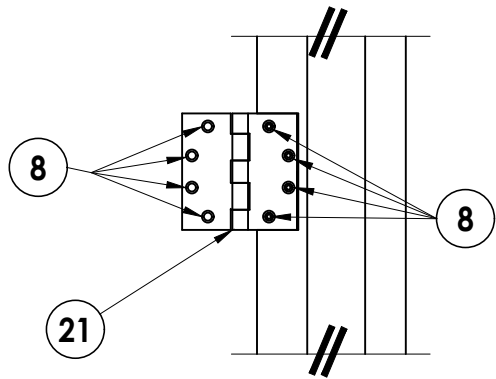
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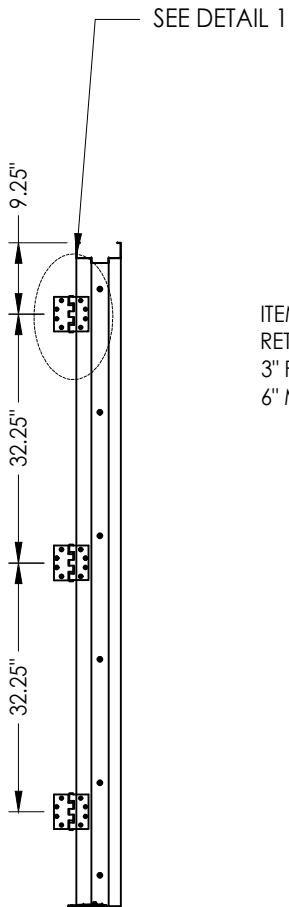
FL-12169.1

SHEET 4 OF 7

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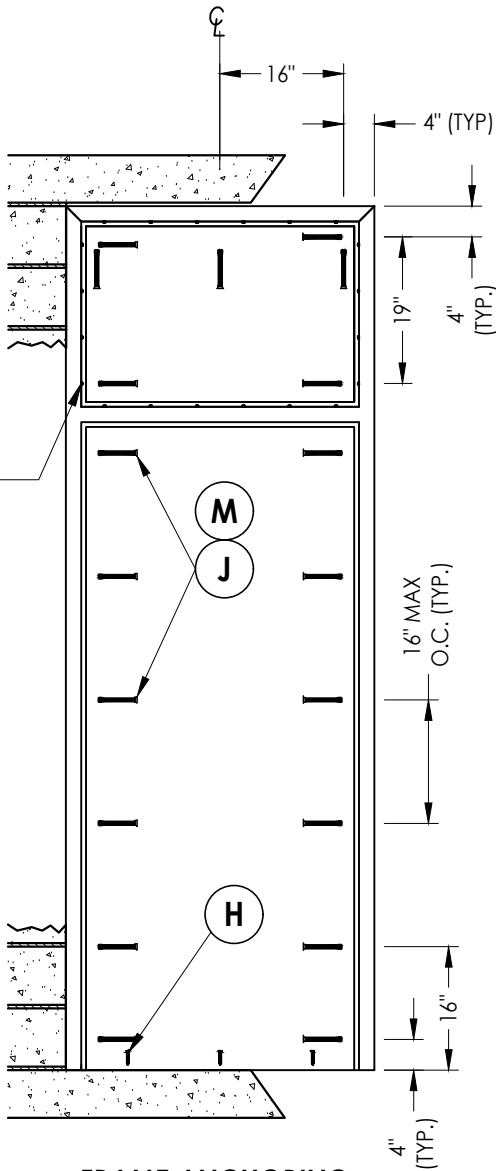


DETAIL 1

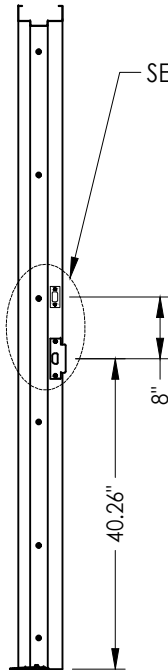


HINGE JAMB

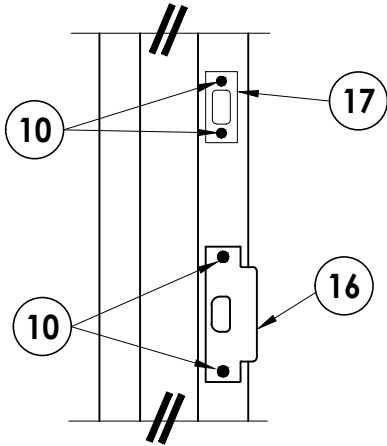
ITEM #54 GLASS STOP
RETAINING SCREW
3" FROM CORNER &
6" MAX O.C. (TYP.)



FRAME ANCHORING



STRIKE 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"

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

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:
METAL MANUFACTURING
INDUSTRIES
"N" STEEL DOOR

PART OR ASSEMBLY:
ANCHORING DETAILS

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

DATE: 2/19/09

SCALE: N.T.S.

DWG. BY: AL

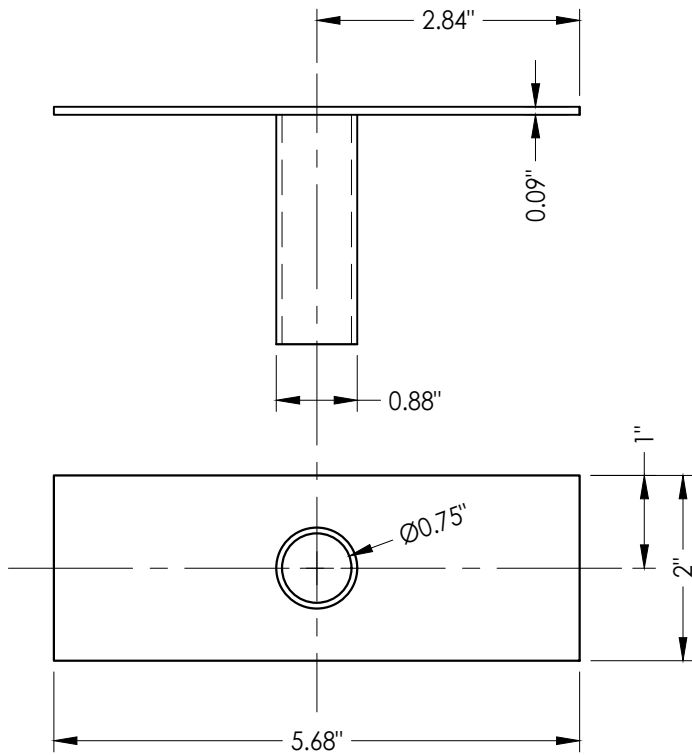
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DRAWING NO.:

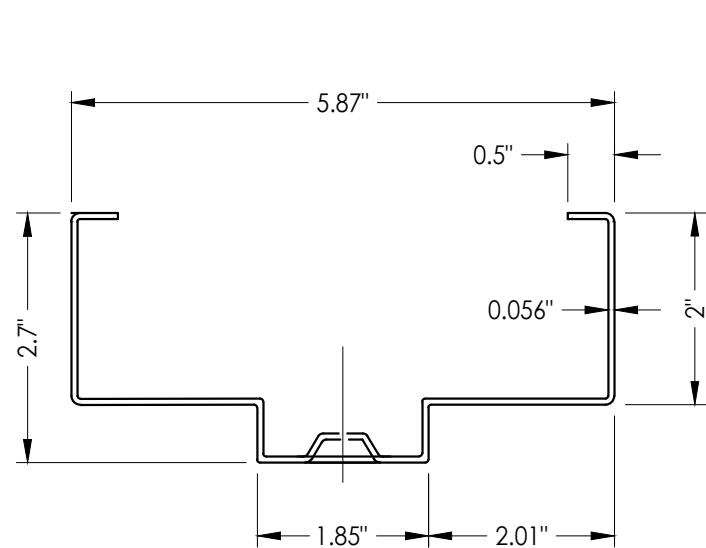
FL-12169.1

SHEET 5 OF 7

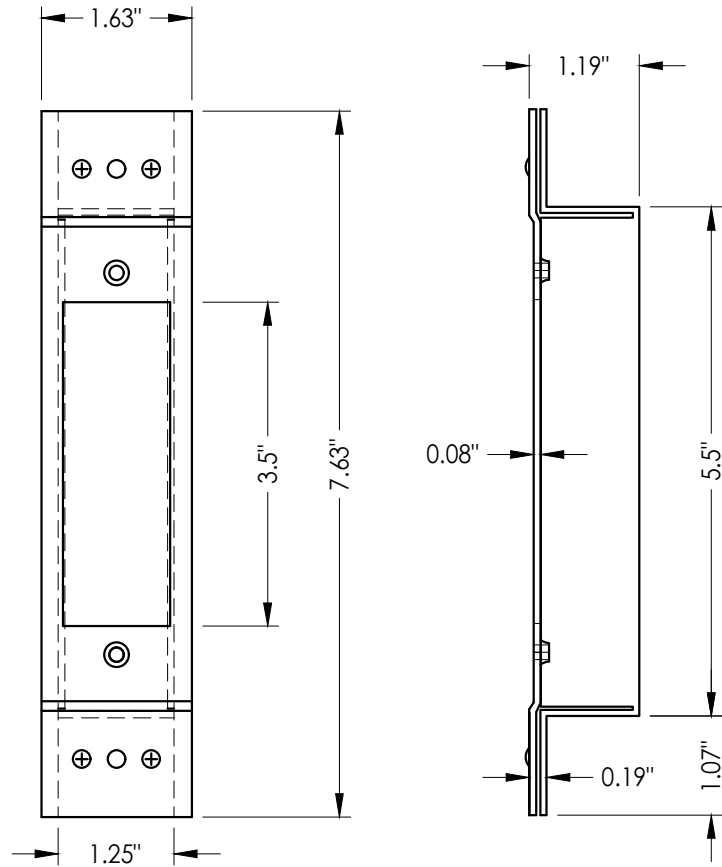
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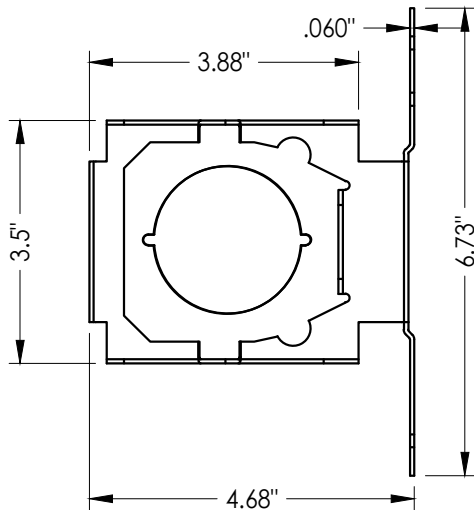
9 TUBE ANCHOR



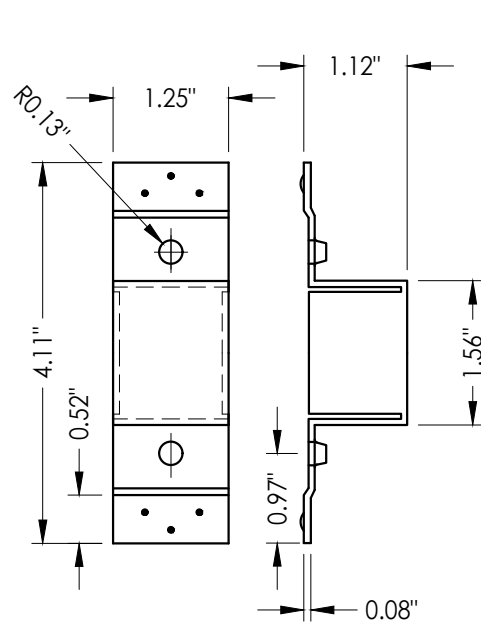
25 HOLLOW METAL FRAME



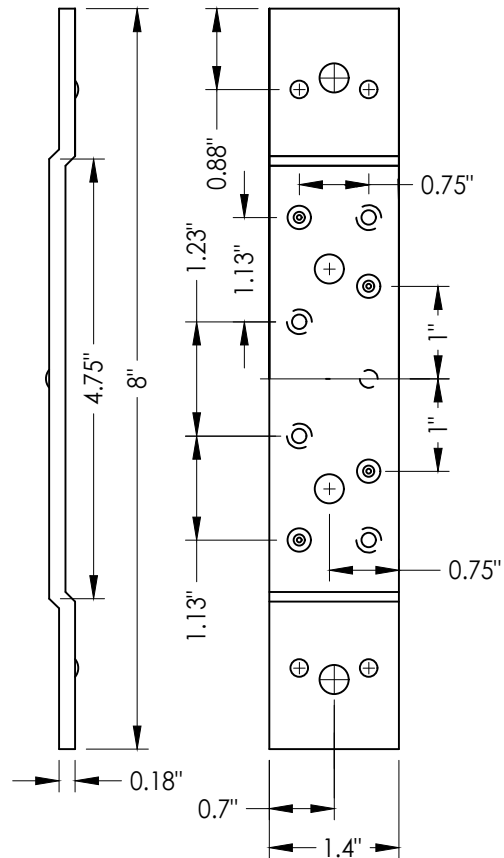
27 LATCH STRIKE REINFORCEMENT



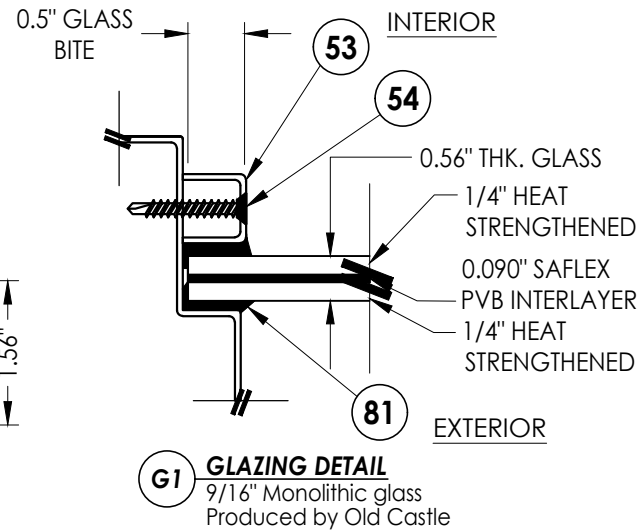
5 LOCK BOX REINFORCEMENT



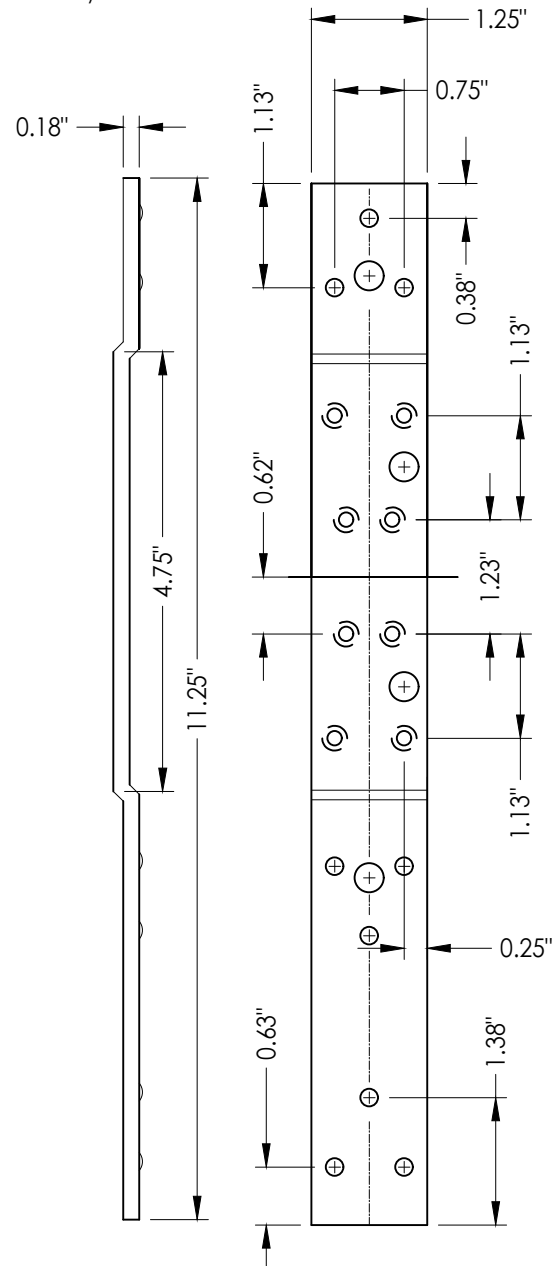
19 DEADBOLT STRIKE REINFORCEMENT



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



G1 GLAZING DETAIL
9/16" Monolithic glass
Produced by Old Castle



22 STANDARD (LONG) DOOR HINGE
Reinforcement top hinge

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

PRODUCT:
METAL MANUFACTURING
INDUSTRIES
"N" STEEL DOOR

PART OR ASSEMBLY:
GLAZING DETAIL AND
COMPONENTS

DATE: 2/19/09

SCALE: N.T.S.

DWG. BY: AL

CHK. BY: LFS

DRAWING NO.:

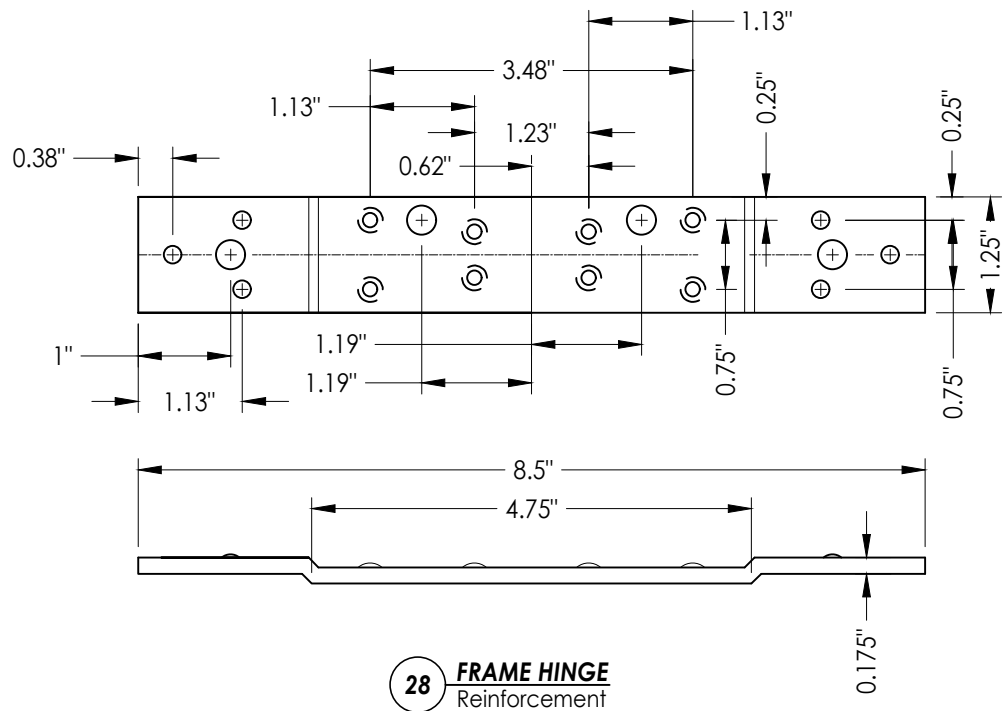
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SHEET 6 OF 7

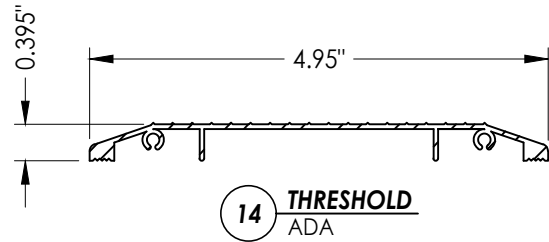
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Phone No.: 813.659.9197
FBPE Registry No. 9813

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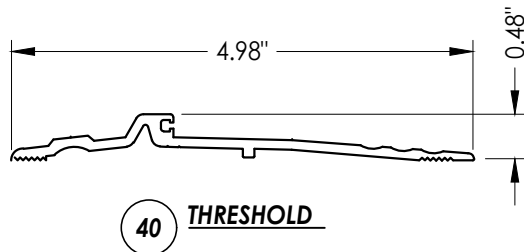
BILL OF MATERIALS					
ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
C	MAX. 1/4" SHIM SPACE	-	23	STANDARD (SHORT) DOOR HINGE MIDDLE BOTTOM REINFORCEMENT	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE	24	WEATHER STRIP (THRESHOLD)	NEOPRENE
H	1/4" x 1-3/4" ITW PFH CONCRETE SCREW	STEEL	25	FRAME 5-3/4" X 2" MIN. (0.056" THK)	STEEL
J	3/8" X 5" PFH ITW DYNABOLT SLEEVE ANCHOR	STEEL	27	LATCH STRIKE REINFORCEMENT	STEEL
M	3/8" X 5" TAPPER CONCRETE SCREW BY POWERS FASTENERS	STEEL	28	FRAME HINGE REINFORCEMENT	STEEL
1	"N" OPAQUE STEEL DOOR PANEL	-	40	THRESHOLD NATIONAL GUARD PRODUCTS, INC. #896	ALUMINUM
2	DOOR SKIN (0.042" THK. STEEL, Fy = 40,300 PSI MIN.)	STEEL	41	THRESHOLD NATIONAL GUARD PRODUCTS, INC. #950	ALUMINUM
3	FOAM 1.0 PCF MIN. DENSITY	POLYSTYRENE	42	OUTSWING THRESHOLD PEMKO #2005V	ALUMINUM
4	DOOR TOP & BOTTOM CLOSER	STEEL	45	95WHA DOOR SWEEP NATIONAL GUARD PRODUCTS, INC.	ALUMINUM
5	LOCK BOX REINFORCEMENT	STEEL	46	#6 X 3/4" PHILIPS HEAD SMS	STEEL
6	CLOSER REINFORCEMENT	STEEL	53	U-CHANNEL GLASS STOP	STEEL
8	#12-24 x 1/2" SELF TAPPER	STEEL	54	#8 X 1.25" PFH SHEET METAL SCREW	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
12	MULLION Z BRACKET	STEEL	72	DESIGN HARDWARE "Z" SERIES ENTRY	STEEL
14	COLUMBIA ADA THRESHOLD #6510	ALUMINUM	76	DESIGN HARDWARE D2-S SERIES DEADBOLT	STEEL
15	MULLION MIN. (0.056" THK)	STEEL	77	DESIGN HARDWARE "X" SERIES ENTRY	STEEL
16	ANSI LATCH STRIKE	STEEL	78	OUTSWING THRESHOLD QOSH BY DLP	ALUM/WOOD
17	DEADBOLT STRIKE	STEEL	79	WEATHER-STRIP	FOAM
19	DEADBOLT STRIKE REINFORCEMENT	STEEL	81	DOW 995 STRUCTURAL SILICONE	SILICONE
20	WEATHER-STRIP	NEOPRENE			
21	4-1/2" X 4-1/2" X 0.125" TEMPLATE HINGE	STEEL			
22	STANDARD (LONG) DOOR HINGE TOP HINGE REINFORCEMENT	STEEL			



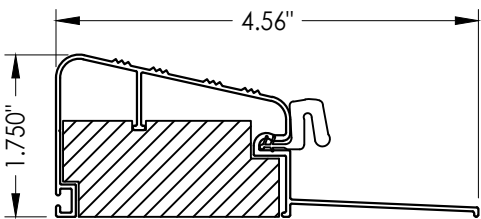
28 **FRAME HINGE**
Reinforcement



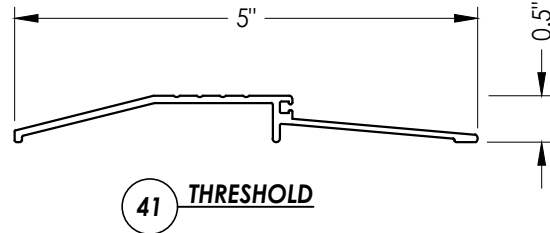
14 **THRESHOLD**
ADA



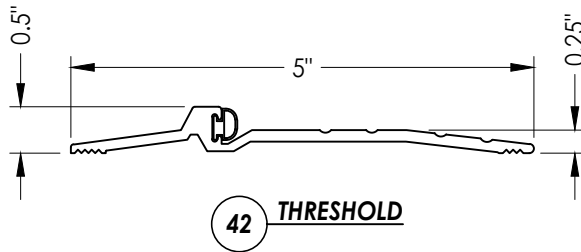
40 **THRESHOLD**



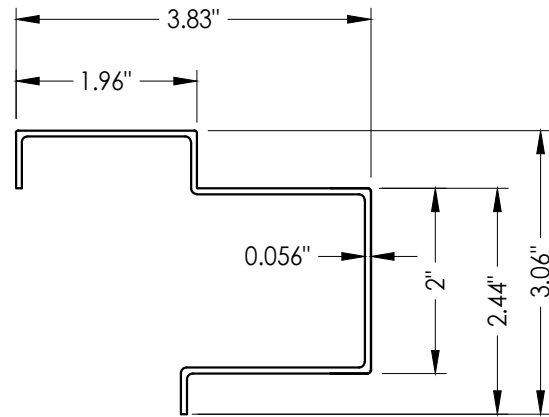
78 **OUTSWING THRESHOLD**



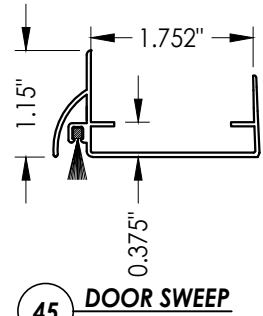
41 **THRESHOLD**



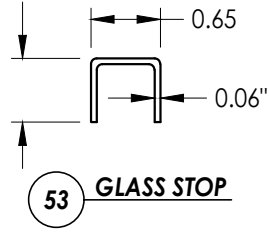
42 **THRESHOLD**



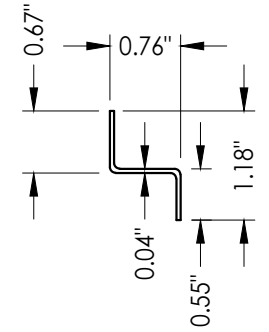
15 **MULLION**



45 **DOOR SWEEP**



53 **GLASS STOP**



12 **MULLION Z BRACKET**

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

PRODUCT:
METAL MANUFACTURING
INDUSTRIES
"N" STEEL DOOR

PART OR ASSEMBLY:

BILL OF MATERIALS AND
COMPONENTS

NO.	DATE	REVISIONS
4	7/11/23	UPDATE TO 8TH ED. (2023) FBC LFS
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1	10/14/16	UPDATE TO 5TH ED. (2014) FBC JK

DATE:	2/19/09
SCALE:	N.T.S.
DWG. BY:	AL
CHK. BY:	LFS
DRAWING NO.:	FL-12169.1
SHEET	7 OF 7

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Phone No.: 813.659.9197
FBPE Registry No. 9813