



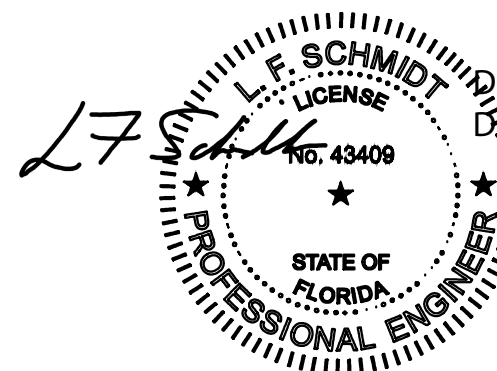
PRIV. DE RIO SANTIAGO #30
COL. LA RAZA
SOLEDAD DE GRACIANO SANCHEZ
SAN LUIS POTOSI, C.P. 78433

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

GENERAL NOTES

1. This product has been evaluated and is in compliance with the 8th Edition (2023) 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 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.
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).

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	Vertical cross sections
6	Anchoring details
7	Glazing detail & components
8	Bill of materials & components

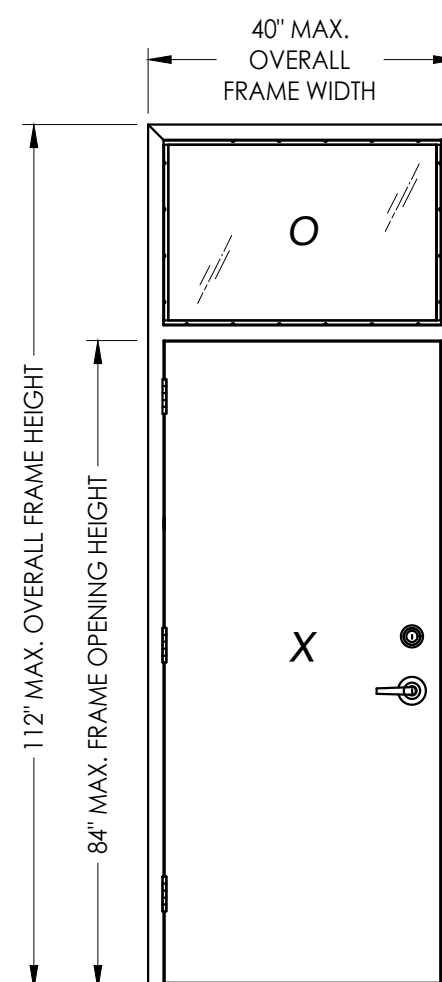


Digitally signed by Lyndon F Schmidt
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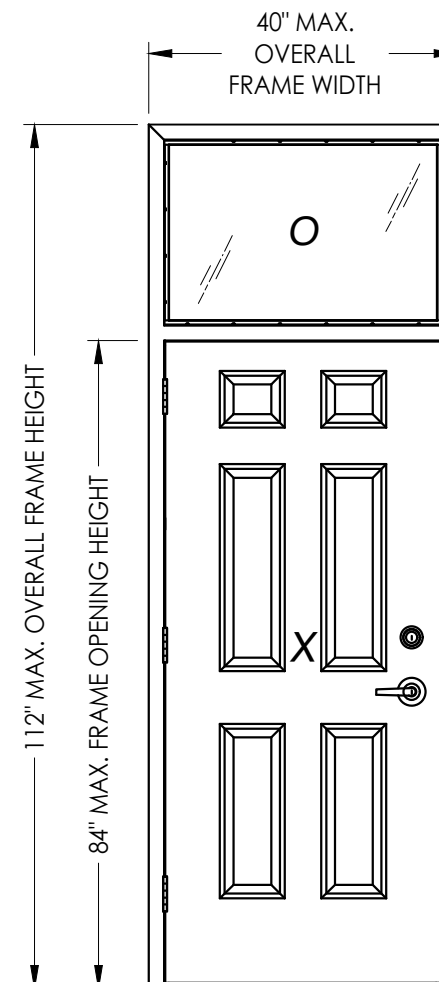
This item has been digitally signed and sealed by
L. F. Schmidt, P.E. on the date adjacent to the seal.

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



(Shown as flush panel)

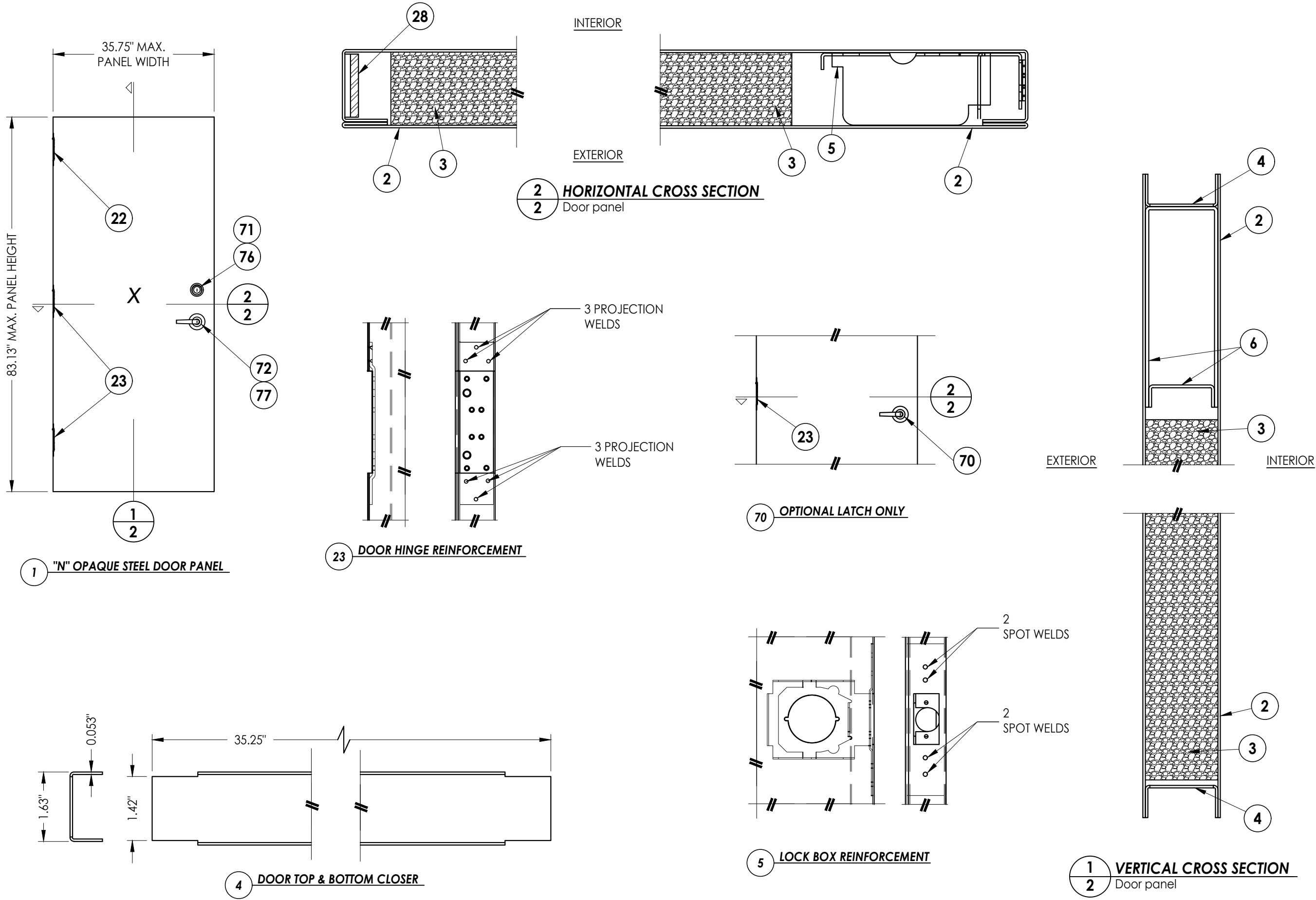


(Shown as embossed panel)

OVERALL FRAME DIMENSION	TRANSOM D.L.O. DIMENSION	LOCK TYPE	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
40" x 112"	34.75" x 22.75"	161 LATCH (SCHLAGE)	G1, G2	+55.0	-55.0
		161 LATCH & DEADBOLT (DESIGN HARDWARE)		+65.0	-65.0

Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		Building Consultants, Inc. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 Fax: 813.659.9197	
PRODUCT: MMJ "N" STEEL DOOR		PART OR ASSEMBLY: TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES	
4	7/11/23	UPDATE TO 8TH ED. (2023)	FBC LFS
3	7/30/20	UPDATE TO 7TH ED. (2020)	FBC DAC
2	7/18/17	UPDATE TO 6TH ED. (2017)	FBC LFS
1	10/14/16	UPDATE TO 5TH ED. (2014)	FBC JK
NO.	DATE		BY
		REVISIONS	
DATE: 11/3/08			
SCALE: N.T.S.			
DWG. BY: AL			
CHK. BY: LFS			
DRAWING NO.: FL-12186.5			
SHEET 1 OF 8			

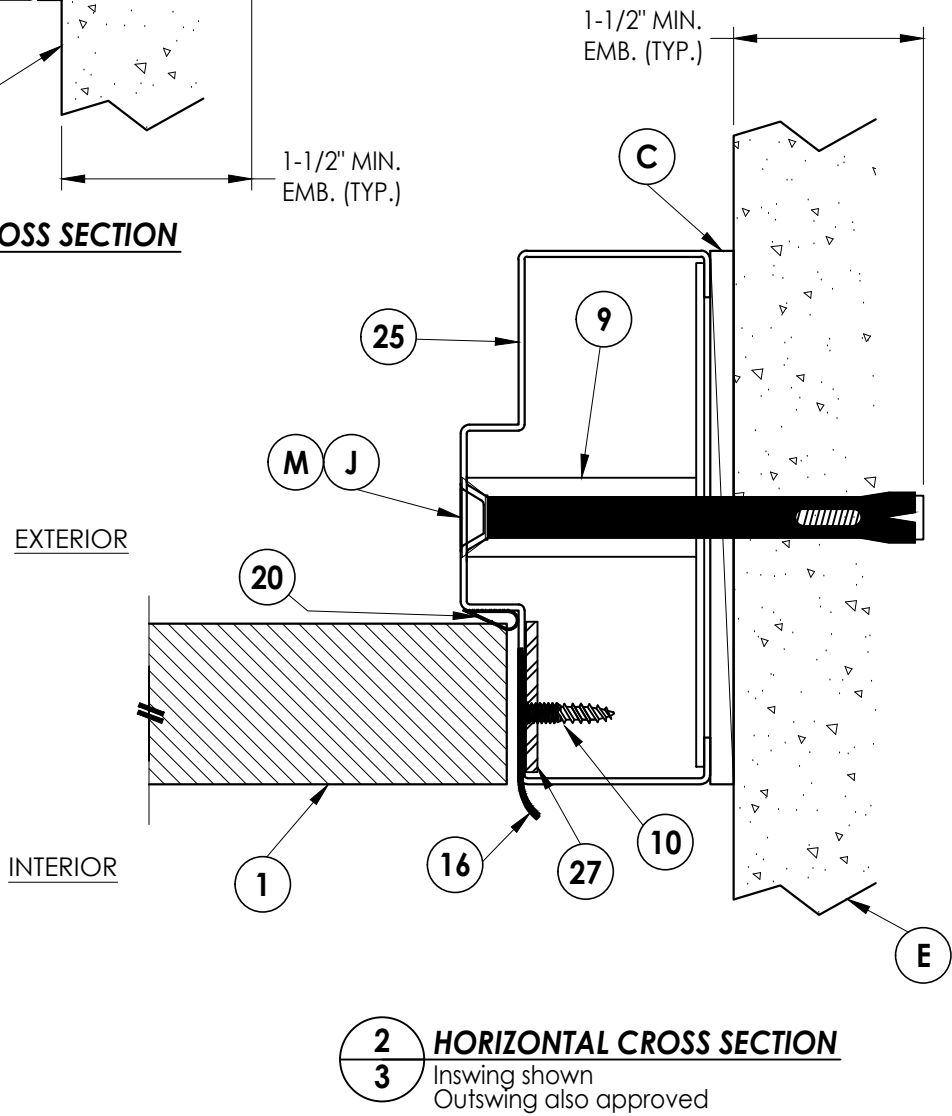
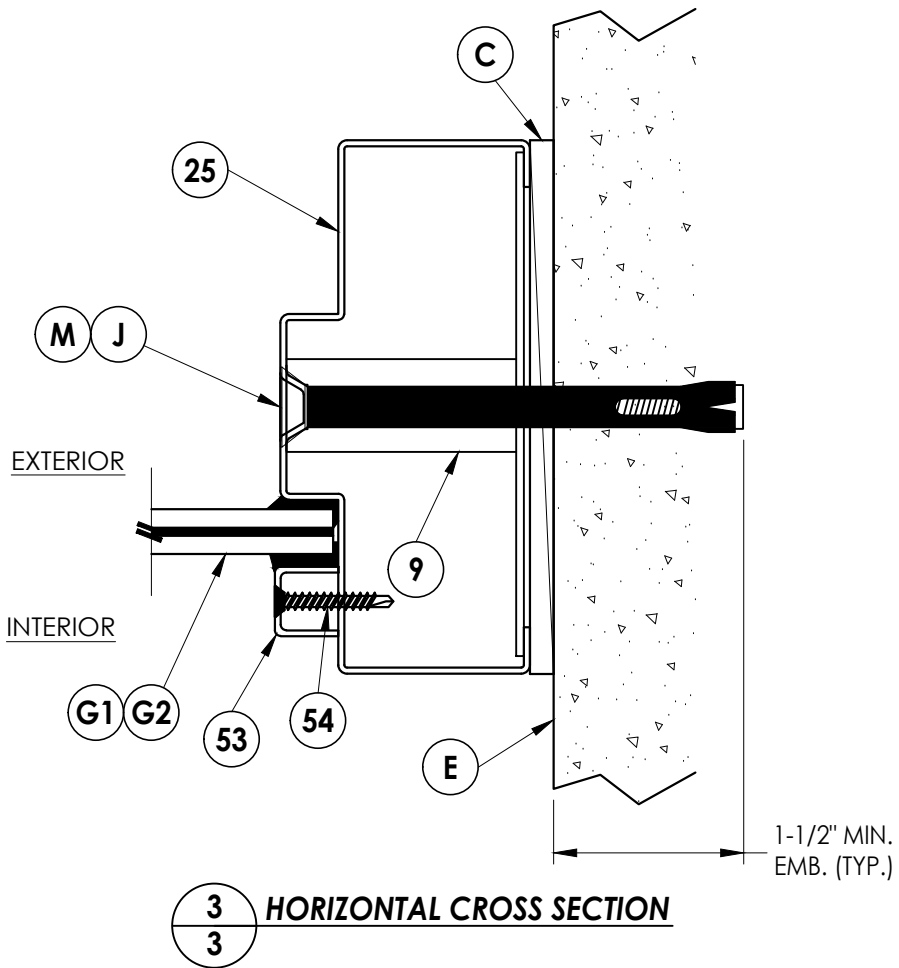
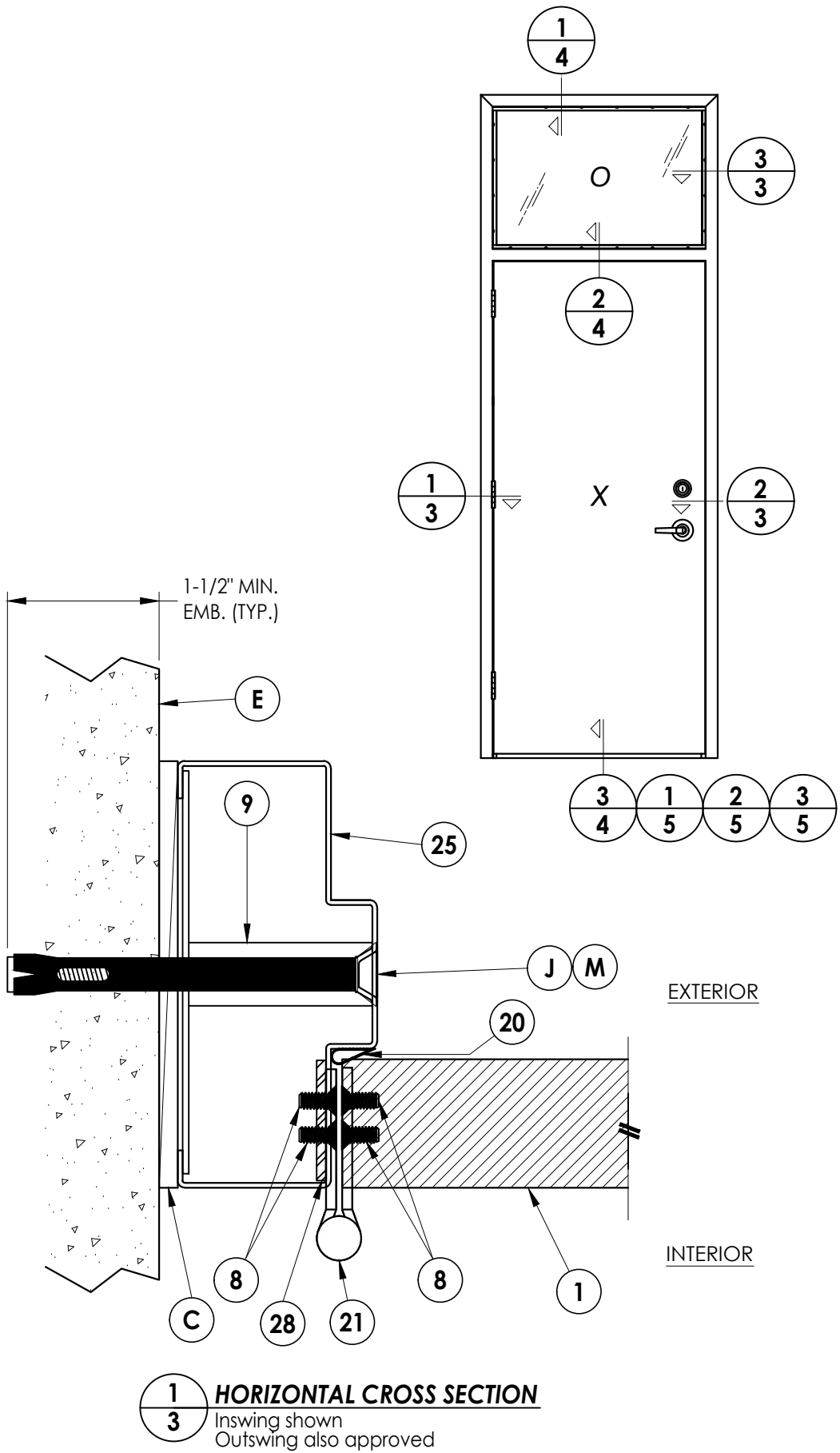
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NOTE: ALL WELDING TO CONFORM w/ AMERICAN WELDING SOCIETY, ANSI/AWS AS PER FBC SECTION 2214.3.4.

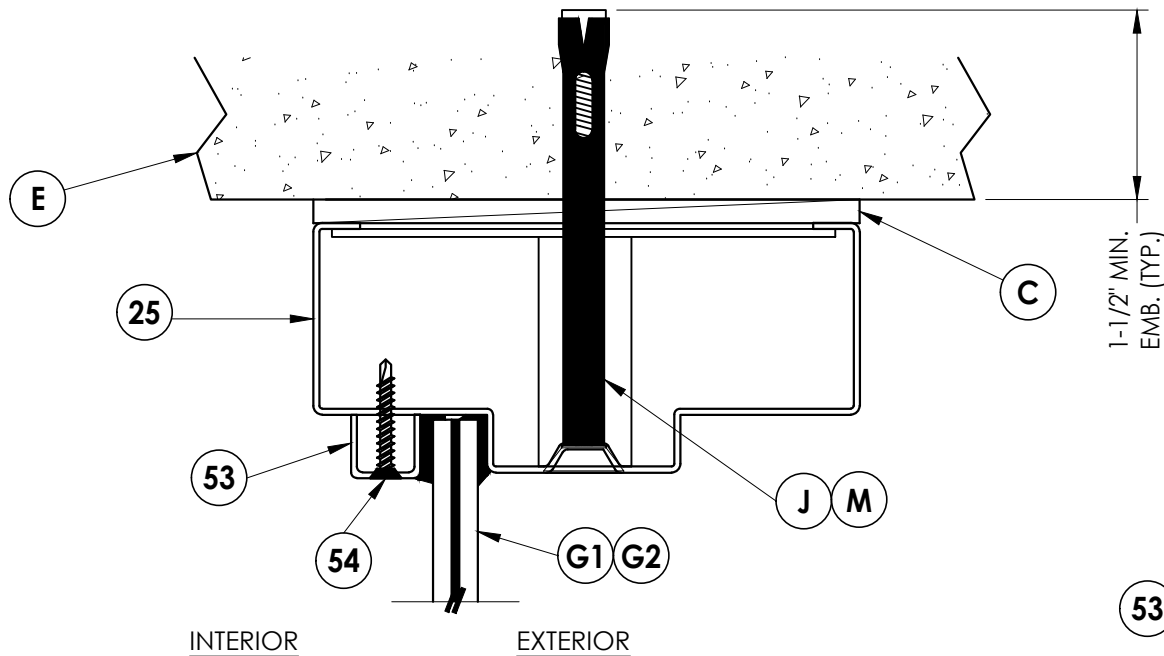
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PRODUCT: MMI "N" STEEL DOOR		PART OR ASSEMBLY: DOOR PANEL SECTIONS 161 LOCK PREP	
4	7/11/23	UPDATE TO 8TH ED. (2023)	FBC LFS
3	7/30/20	UPDATE TO 7th ED. (2020)	FBC DAC
2	7/18/17	UPDATE TO 6TH ED. (2017)	FBC LFS
1	10/14/16	UPDATE TO 5TH ED. (2014)	FBC JK
NO.	DATE		BY
REVISIONS			
DATE: 11/3/08			
SCALE: N.T.S.			
DWG. BY: AL			
CHK. BY: LFS			
DRAWING NO.: FL-12186.5			
SHEET 2 OF 8			

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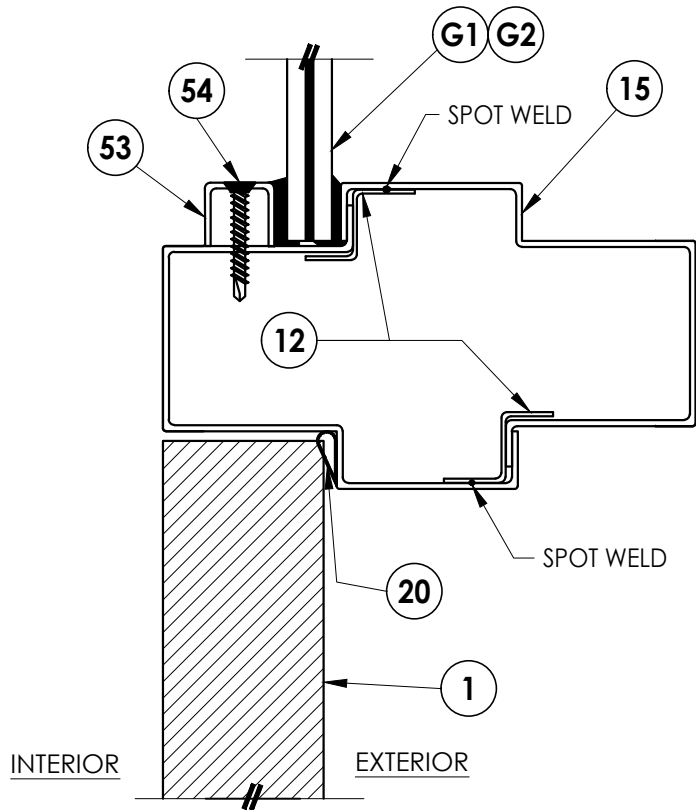


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PRODUCT: MMI "N" STEEL DOOR		PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS	
4	7/11/23	UPDATE TO 8TH ED. (2023)	FBC LFS
3	7/30/20	UPDATE TO 7TH ED. (2020)	FBC DAC
2	7/18/17	UPDATE TO 6TH ED. (2017)	FBC LFS
1	10/14/16	UPDATE TO 5TH ED. (2014)	FBC JK
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DATE: 11/3/08			
SCALE: N.T.S.			
DWG. BY: AL			
CHK. BY: LFS			
DRAWING NO.: FL-12186.5			
SHEET 3 OF 8			

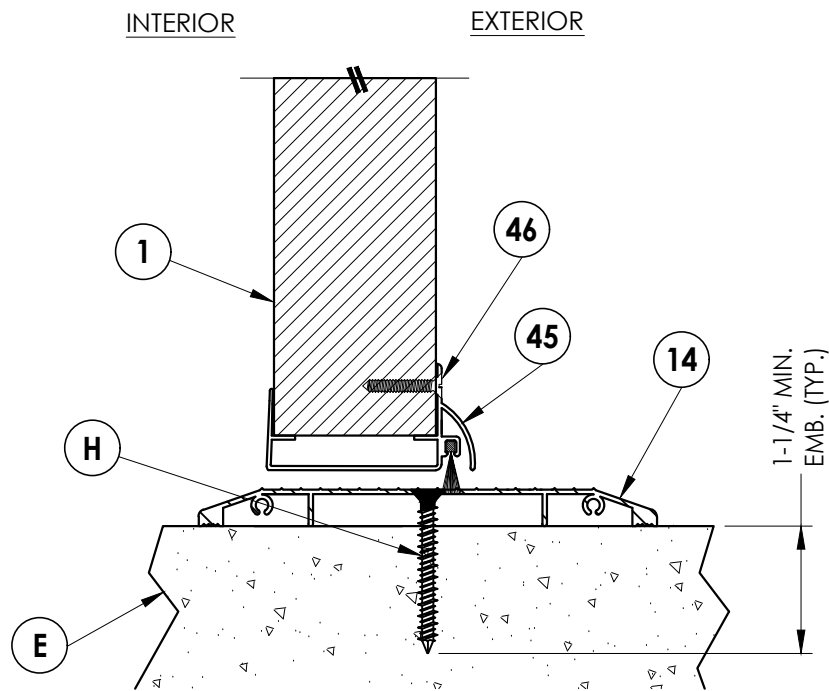
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1 VERTICAL CROSS SECTION
4 Inswing shown
Outswing also approved



2 VERTICAL CROSS SECTION
4 Inswing shown
Outswing also approved



3 VERTICAL CROSS SECTION
4 Optional inswing shown

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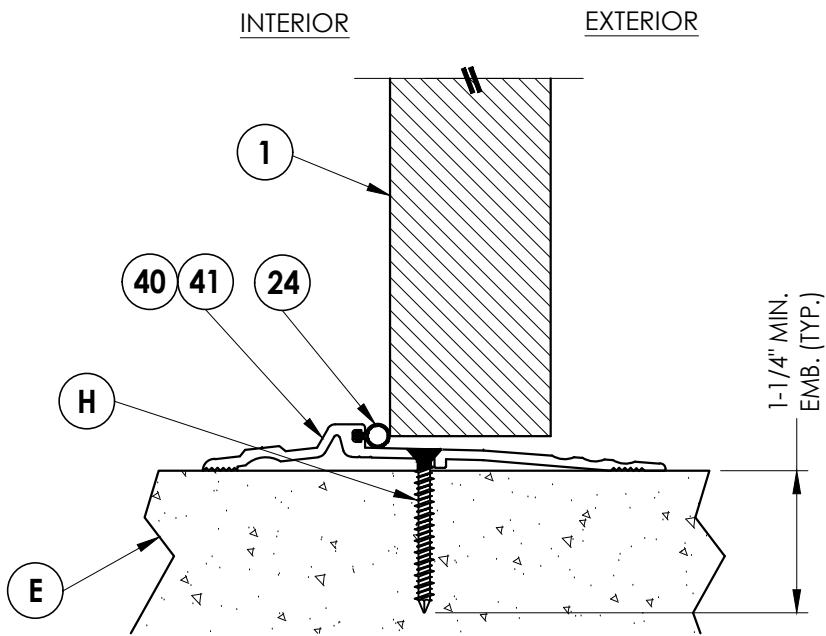
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P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:	MMI "N" STEEL DOOR
PART OR ASSEMBLY:	VERTICAL CROSS SECTIONS

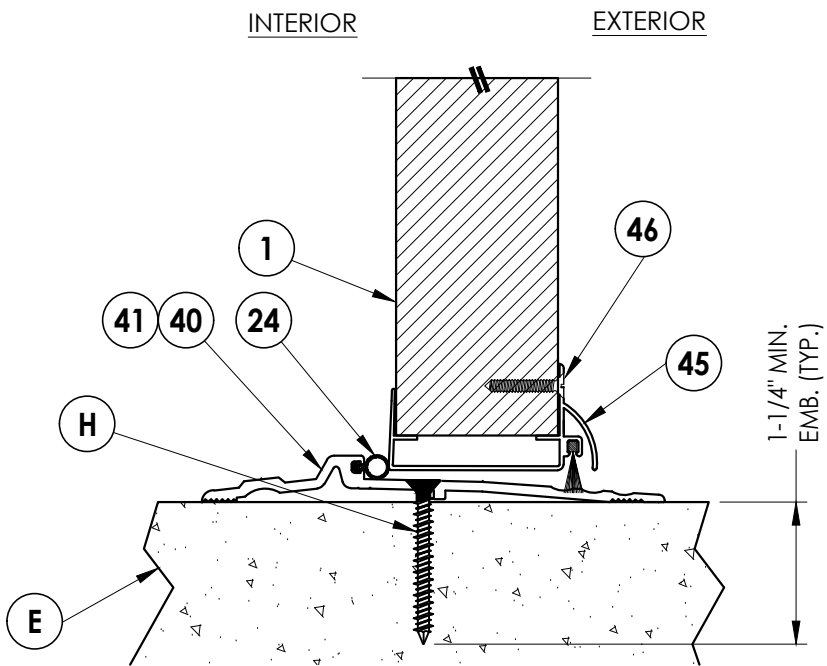
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1	10/14/16	UPDATE TO 5TH ED. (2014) FBC JK

DATE: 11/3/08
SCALE: N.T.S.
DWG. BY: AL
CHK. BY: LFS
DRAWING NO.: FL-12186.5
SHEET 4 OF 8

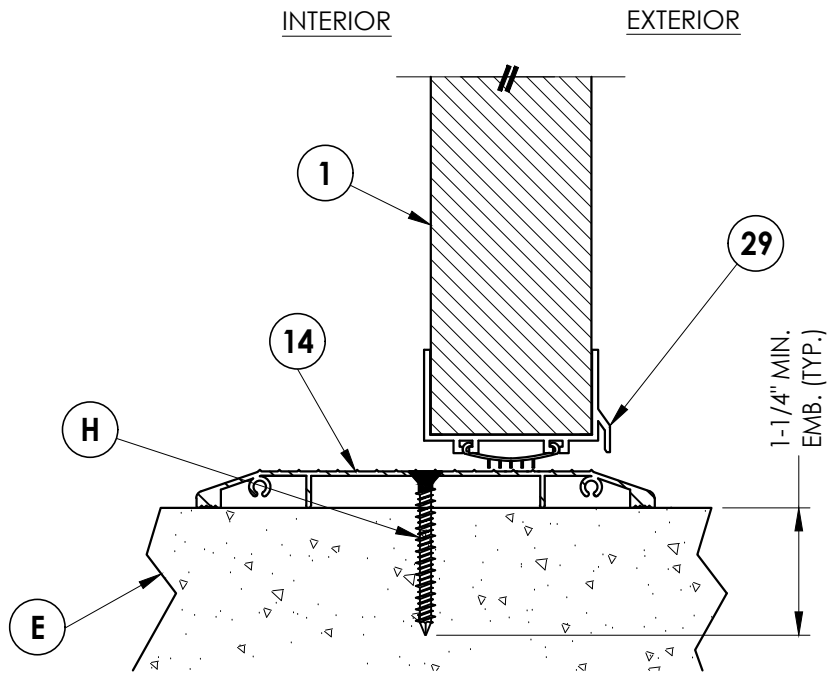
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1
5 **VERTICAL CROSS SECTION**
Optional outswing shown



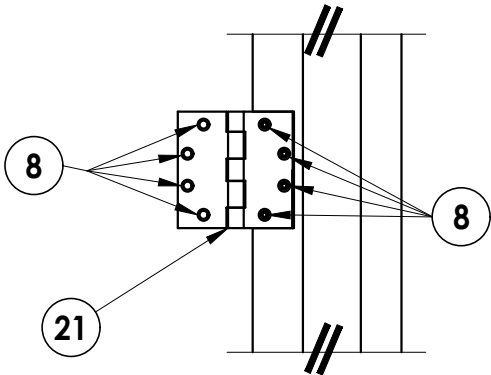
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5 **VERTICAL CROSS SECTION**
Optional Outswing shown



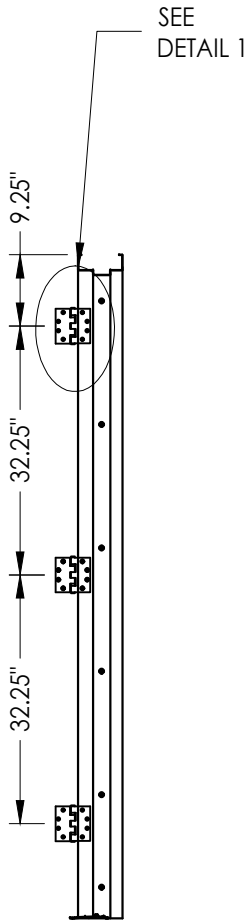
3
5 **VERTICAL CROSS SECTION**
Optional Outswing shown

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PRODUCT:		MMI "N" STEEL DOOR		PART OR ASSEMBLY: VERTICAL CROSS SECTIONS			
				LFS	FBC	LFS	BY
		4	7/11/23	UPDATE TO 8TH ED. (2023)	FBC	DAC	JK
		3	7/30/20	UPDATE TO 7th ED. (2020)	FBC	LFS	BY
		2	7/18/17	UPDATE TO 6TH ED. (2017)	FBC	LFS	JK
		1	10/14/16	UPDATE TO 5TH ED. (2014)	FBC	LFS	BY
			NO.	DATE			
REVISIONS							
DATE: 11/3/08							
SCALE: N.T.S.							
DWG. BY: AL							
CHK. BY: LFS							
DRAWING NO.: FL-12186.5							
SHEET 5 OF 8							

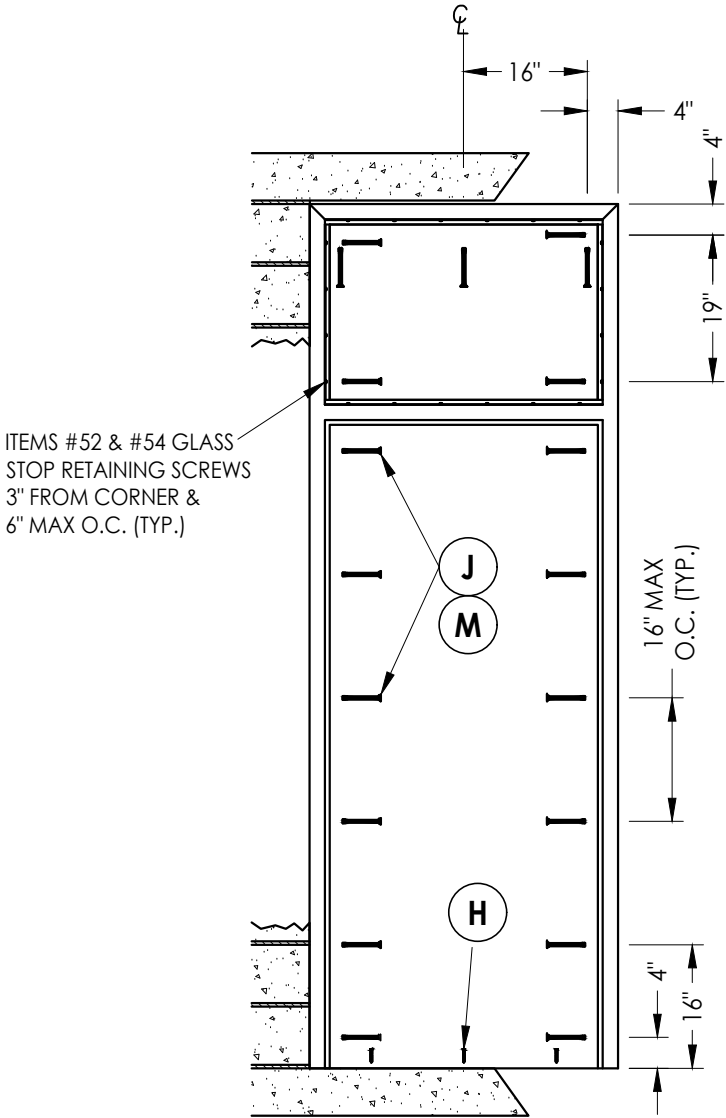
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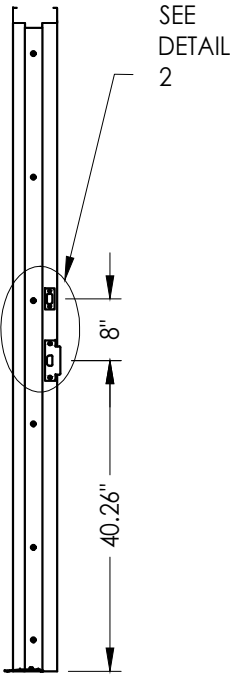
DETAIL 1



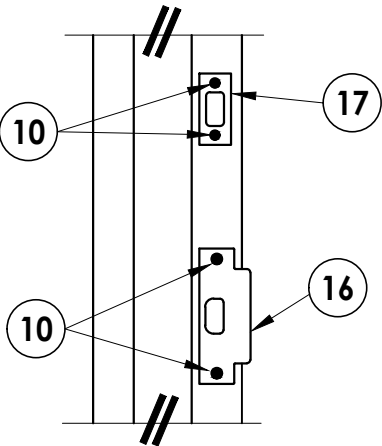
HINGE JAMB



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

MMI
"N" STEEL DOOR

PART OR ASSEMBLY:
ANCHORING DETAILS

REVISIONS

NO.	DATE	BY
4	7/11/23	UPDATE TO 8TH ED. (2023)
3	7/30/20	UPDATE TO 7TH ED. (2020)
2	7/18/17	UPDATE TO 6TH ED. (2017)
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SCALE: N.T.S.

DWG. BY: AL

CHK. BY: LFS

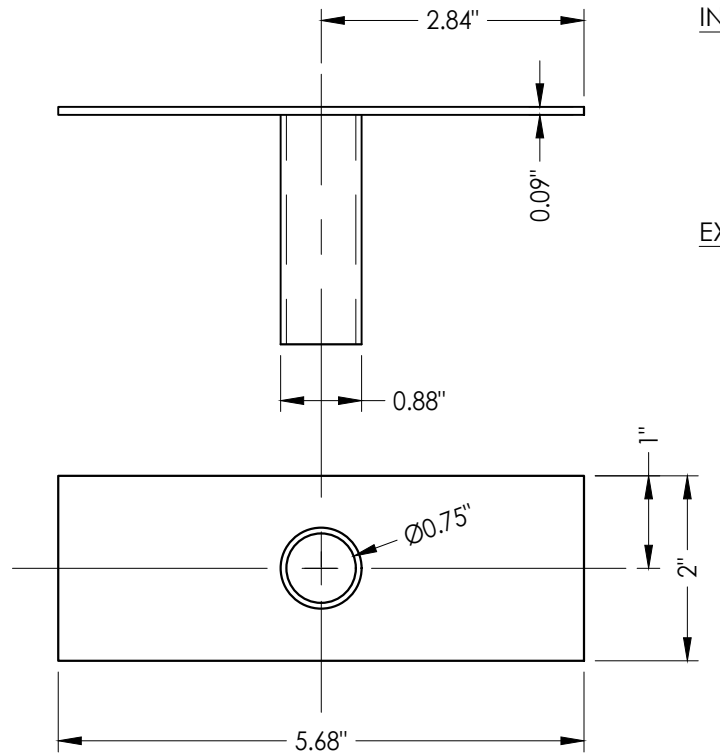
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SHEET 6 OF 8

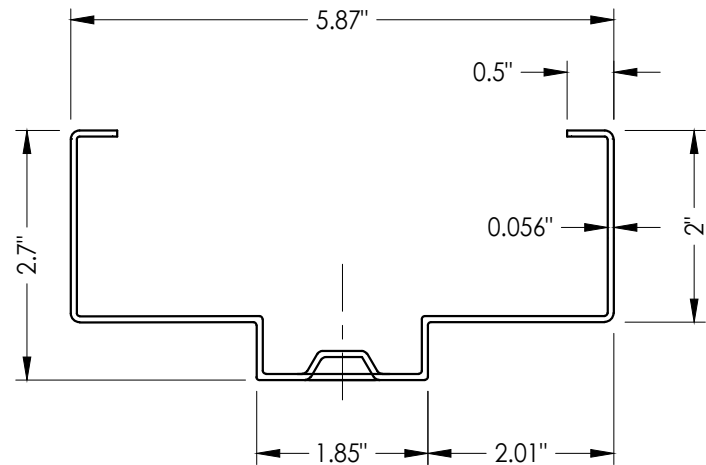
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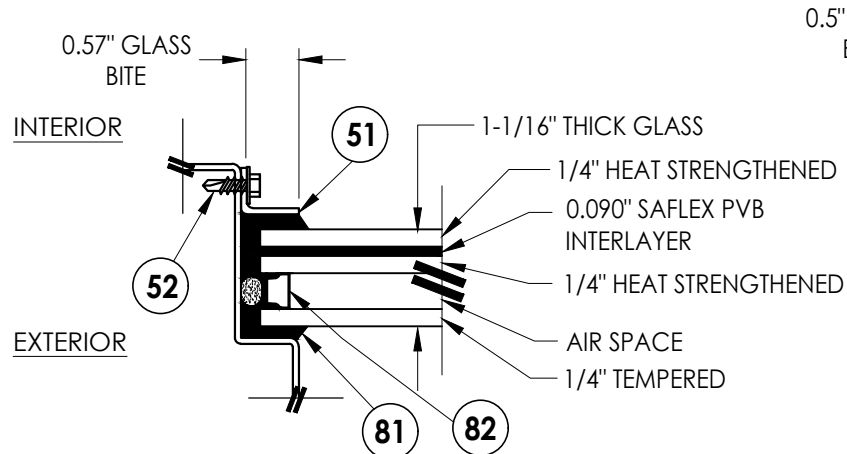
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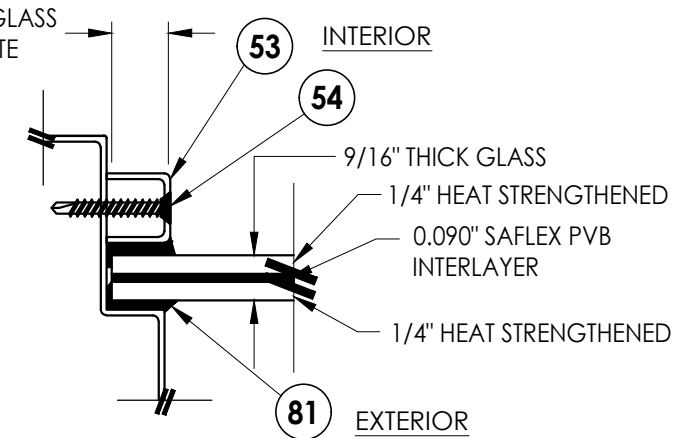
9 TUBE ANCHOR



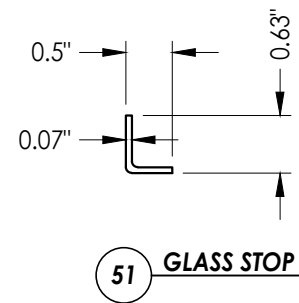
25 HOLLOW METAL FRAME



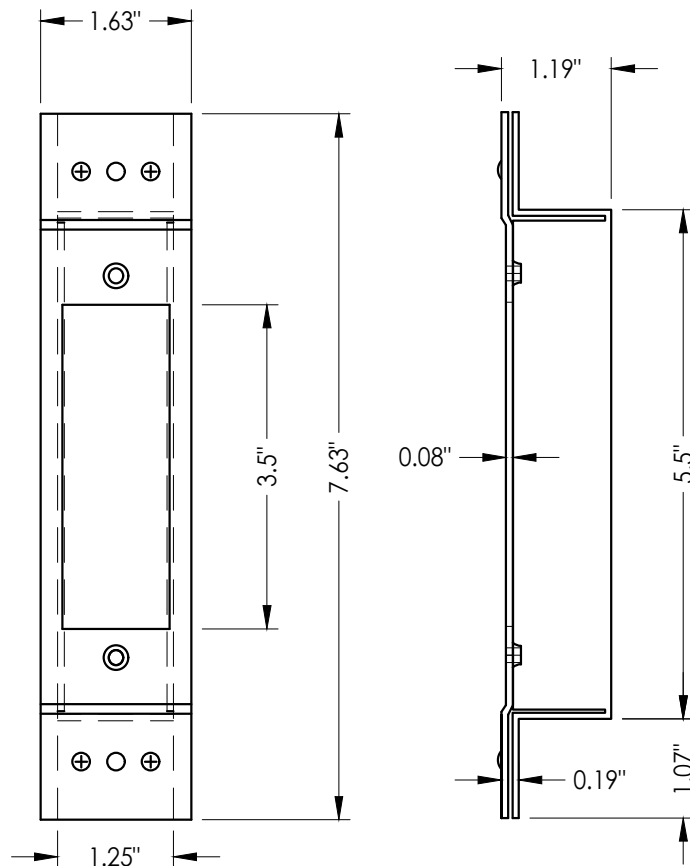
G1 GLAZING DETAIL



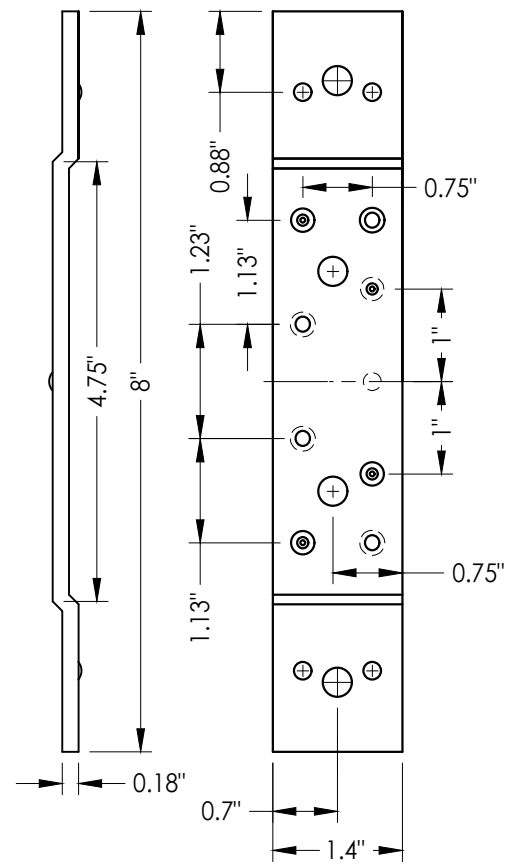
G2 GLAZING DETAIL
9/16" Monolithic glass
Produced by Old Castle



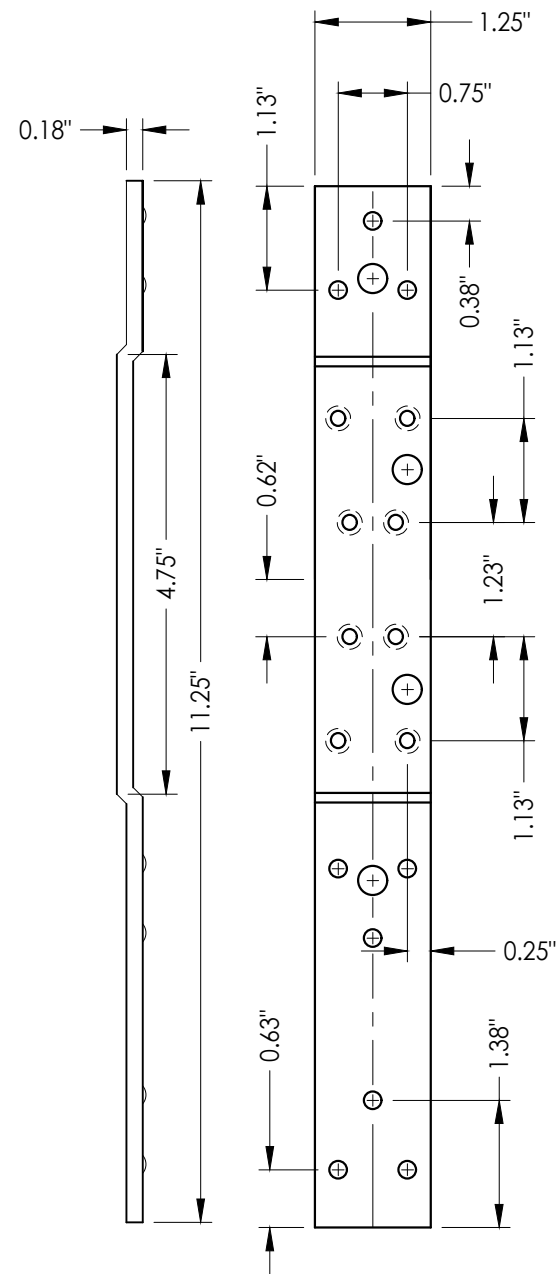
51 GLASS STOP



27 LATCH STRIKE REINFORCEMENT



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



22 STANDARD (LONG) DOOR HINGE
Reinforcement top hinge

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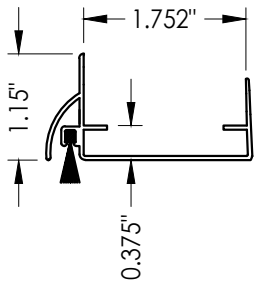
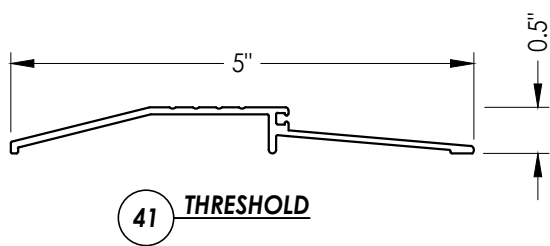
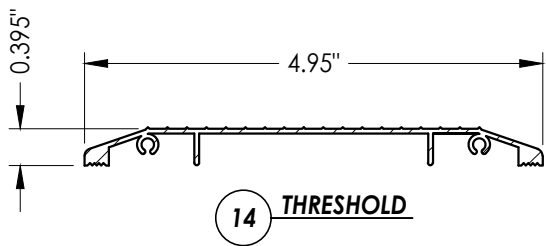
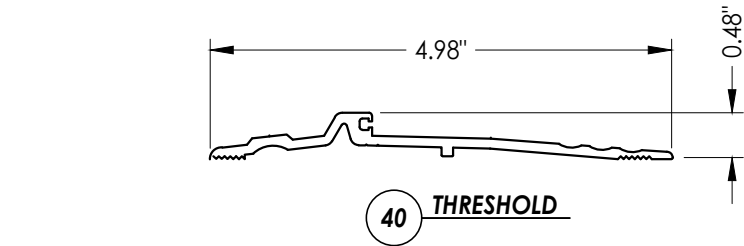
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P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		MMI		"N" STEEL DOOR	
PART OR ASSEMBLY:		GLAZING DETAILS & COMPONENTS			
REVISIONS					
NO.	DATE	DESCRIPTION	BY	DATE	DESCRIPTION
4	7/11/23	UPDATE TO 8TH ED. (2023)	FBC	LFS	
3	7/30/20	UPDATE TO 7TH ED. (2020)	FBC	DAC	
2	7/18/17	UPDATE TO 6TH ED. (2017)	FBC	LFS	
1	10/14/16	UPDATE TO 5TH ED. (2014)	FBC	JK	

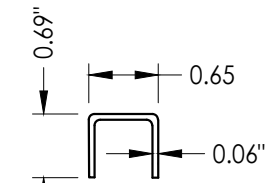
DATE: 11/3/08
SCALE: N.T.S.
DWG. BY: AL
CHK. BY: LFS
DRAWING NO.: FL-12186.5
SHEET 7 OF 8

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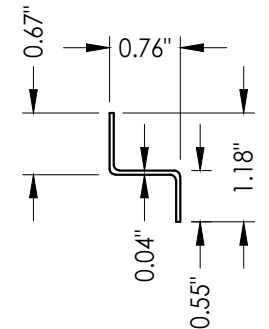
BILL OF MATERIALS					
ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
C	MAX. 1/4" SHIM SPACE	-	21	4-1/2" X 4-1/2" X 0.125" TEMPLATE HINGE	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE	22	STANDARD (LONG) DOOR HINGE TOP HINGE REINFORCEMENT	STEEL
H	1/4" x 1-3/4" ITW PFH CONCRETE SCREW	STEEL	23	STANDARD (SHORT) DOOR HINGE MIDDLE BOTTOM REINFORCEMENT	STEEL
J	3/8" X 5" PFH ITW DYNABOLT SLEEVE ANCHOR	STEEL	24	WEATHER STRIP (THRESHOLD)	NEOPRENE
M	3/8" X 5" TAPPER CONCRETE SCREW BY POWERS FASTENERS	STEEL	25	FRAME 5-3/4" X 2" MIN. (0.056" THK) BY MMI	STEEL
1	"N" OPAQUE STEEL DOOR PANEL	-	27	LATCH STRIKE REINFORCEMENT	STEEL
2	DOOR SKIN (0.042" THK. STEEL, Fy = 40,300 PSI MIN.)	STEEL	28	FRAME HINGE REINFORCEMENT	STEEL
3	FOAM 1.0 PCF MIN. DENSITY	POLYSTYRENE	29	COLUMBIA DOOR BOTTOM SWEEP #2580	ALUMINUM
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	45	95WHA DOOR SWEEP NATIONAL GUARD PRODUCTS, INC.	ALUMINUM
8	#12-24 x 1/2" SELF TAPPER	STEEL	46	#6 X 3/4" PHILIPS HEAD SMS	STEEL
9	TUBE ANCHOR	STEEL	51	L-CHANNEL GLASS STOP	STEEL
10	#12-24 x 1.0" COMBINATION MACHINE / WOOD SCREW	STEEL	52	#8 X .5" HH SELF DRILLING SCREW	STEEL
12	MULLION Z BRACKET	STEEL	53	U-CHANNEL GLASS STOP	STEEL
14	COLUMBIA ADA THRESHOLD #6510	ALUMINUM	54	#8 X 1.25" PFH SMS	STEEL
15	MULLION MIN. (0.056" THK) BY MMI	STEEL	70	SCHLAGE LOCK SET ASSEMBLY ND53PD	STEEL
16	ANSI LATCH STRIKE	STEEL	71	DESIGN HARDWARE D1-S SERIES DEADBOLT	STEEL
17	DEADBOLT STRIKE	STEEL	72	DESIGN HARDWARE "Z" SERIES ENTRY	STEEL
19	DEADBOLT STRIKE REINFORCEMENT	STEEL	76	DESIGN HARDWARE D2-S SERIES DEADBOLT	STEEL
20	WEATHER-STRIP	NEOPRENE	77	DESIGN HARDWARE "X" SERIES ENTRY	STEEL
			81	DOW 995 STRUCTURAL SILICONE	SILICONE
			82	GLASS SPACER	ALUMINUM



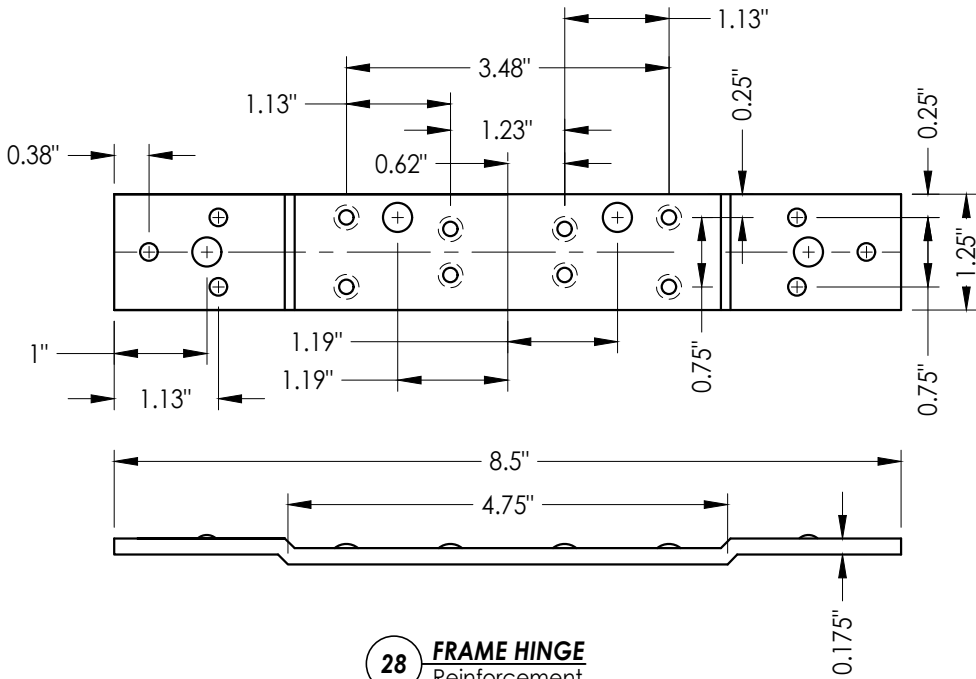
45 DOOR SWEEP



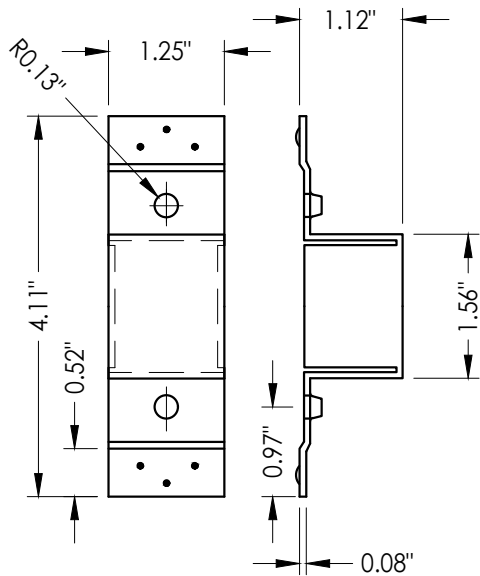
53 GLASS STOP



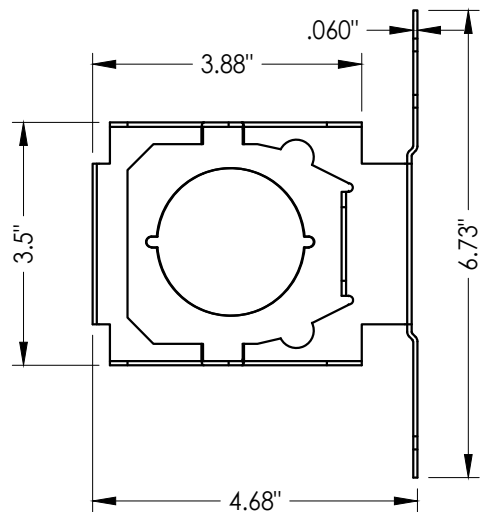
12 MULLION Z BRACKET



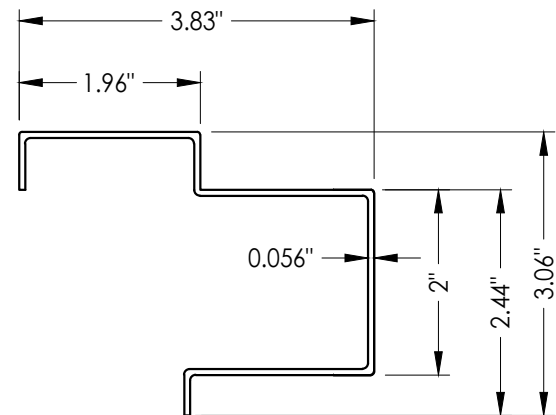
28 FRAME HINGE Reinforcement



19 DEADBOLT STRIKE REINFORCEMENT



5 LOCK BOX REINFORCEMENT



15 MULLION

Documents Prepared By:
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P.E. No. 43409

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FBPE Registry No. 9813

PRODUCT:

"N" STEEL DOOR,

PART OR ASSEMBLY:

BILL OF MATERIALS
& COMPONENTS

DATE: 11/3/08

SCALE: N.T.S.

DWG. BY: AL

CHK. BY: LFS

DRAWING NO.:

FL-12186.5

SHEET 8 OF 8

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