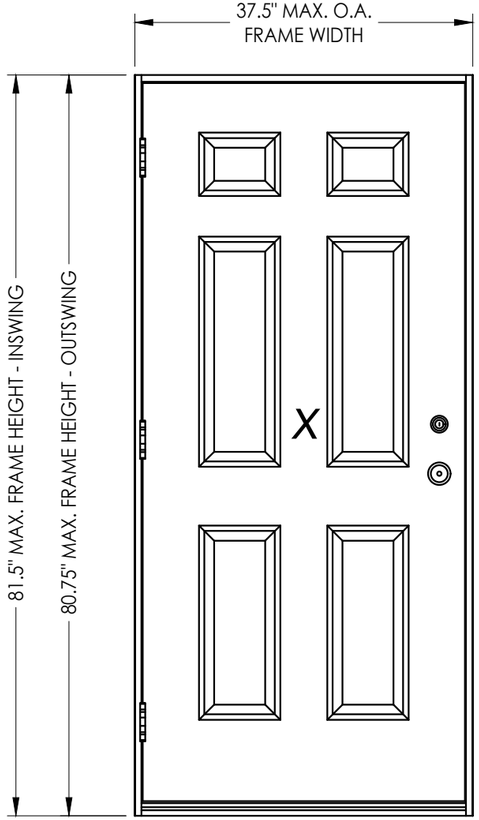
STEVES AND SONS
203 Humble Ave.
San Antonio, TX 78225

OPAQUE STEEL DOOR
INSWING / OUTSWING
"NON-IMPACT"



GENERAL NOTES

1. This product anchoring drawing has been evaluated and is in compliance with the 8th Edition (2023) Florida Building Code (FBC) 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 FBC Sections 1609.1.2 & R301.2.1.2.
4. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
5. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.

TABLE OF CONTENTS	
SHEET #	**DESCRIPTION**
1	Typical elevation, design pressures & general notes
2	Door panel construction details
3	Horizontal cross sections
4	Vertical cross sections
5	Buck and frame anchoring - 2X buck masonry construction
6	Frame anchoring - 1X buck masonry construction
7	Bill of materials & components

SWING	MAX. FRAME DIMENSION	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
INSWING	37.5" x 81.5"	+70.0	-75.0
OUTSWING	37.5" x 80.75"	+70.0	-70.0

L F Schmidt

L. F. SCHMIDT LICENSE No. 43409 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Lyndon F Schmidt
Date: 2023.08.07 08:58:56 -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

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
FBPE Registry No. 9813

PRODUCT: STEVES AND SONS

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

NO.	DATE	BY
3	8/07/23	UPDATE TO 8TH ED. (2023) FBC	LFS
2	9/16/20	UPDATE TO 7TH ED. (2020) FBC	LFS
1	10/08/17	UPDATE TO 6TH ED. (2017) FBC	JK

REVISIONS

DATE: 10/19/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-17903.3
SHEET 1 OF 7

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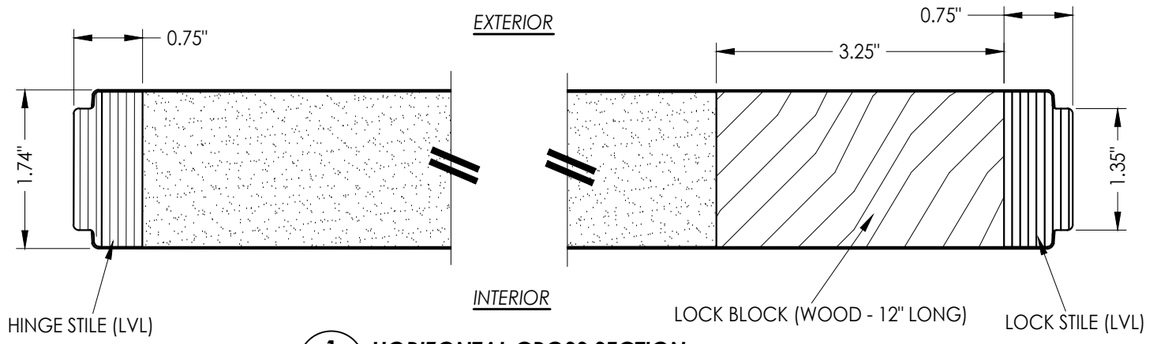
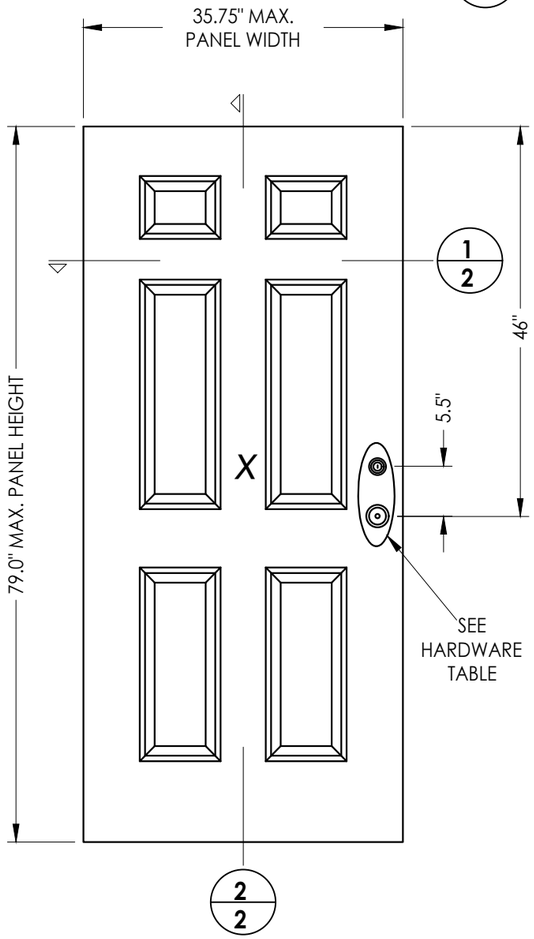
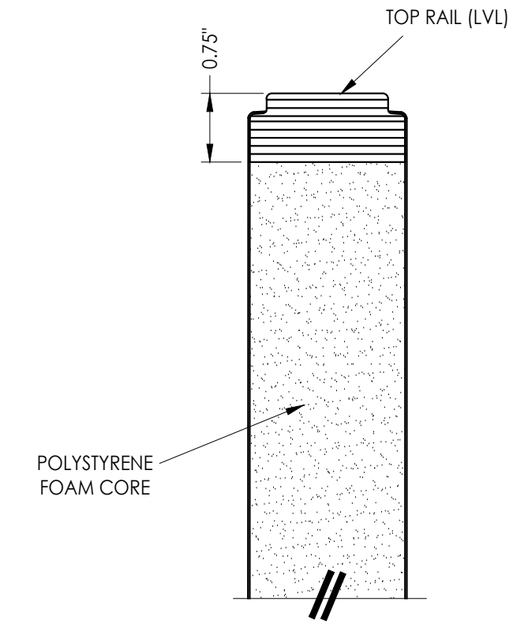


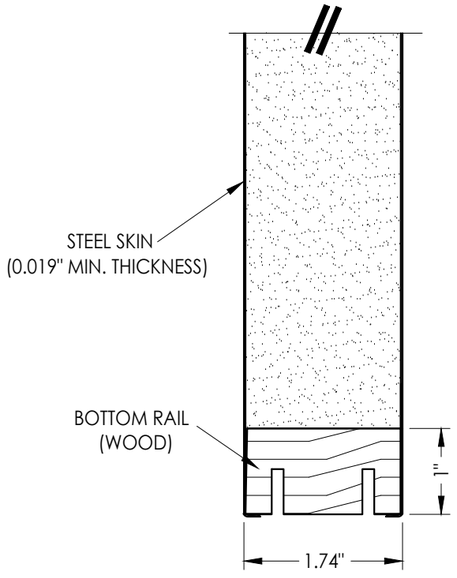
1/2 **HORIZONTAL CROSS SECTION**



7 **STEEL DOOR** OPAQUE

HARDWARE TABLE	
MANUFACTURER	MODEL
KWIKSET	KNOB: SERIES (400) DEADBOLT: SERIES (660)





2/2 **VERTICAL CROSS SECTION**

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FBPE Registry No. 9813

PRODUCT: *STEVES AND SONS*

PART OR ASSEMBLY: *DOOR PANEL CONSTRUCTION DETAILS*

NO.	DATE	REVISIONS	BY
3	8/07/23	UPDATE TO 8TH ED. (2023) FBC	LFS
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1	10/08/17	UPDATE TO 6TH ED. (2017) FBC	JK

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SHEET 2 OF 7

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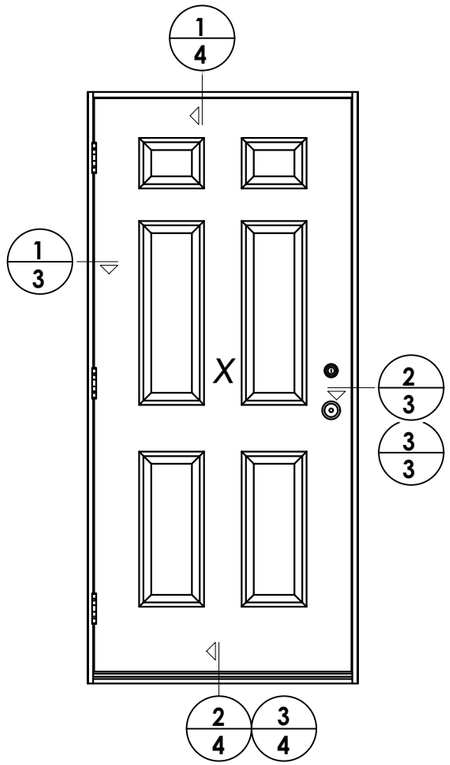
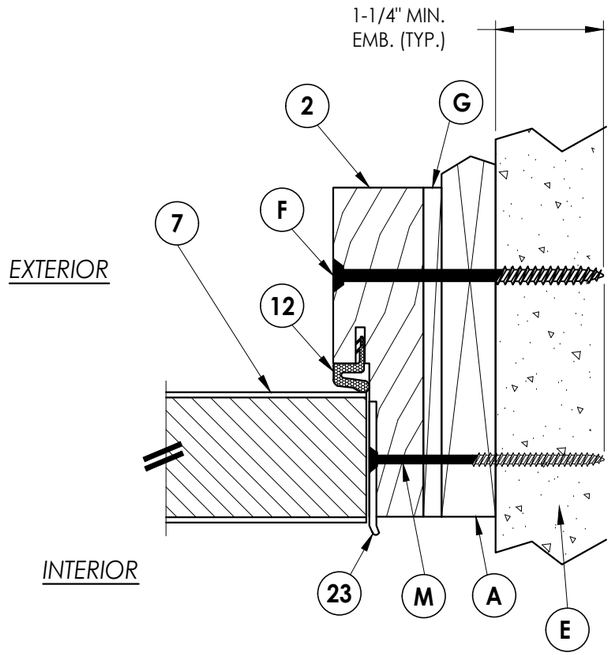
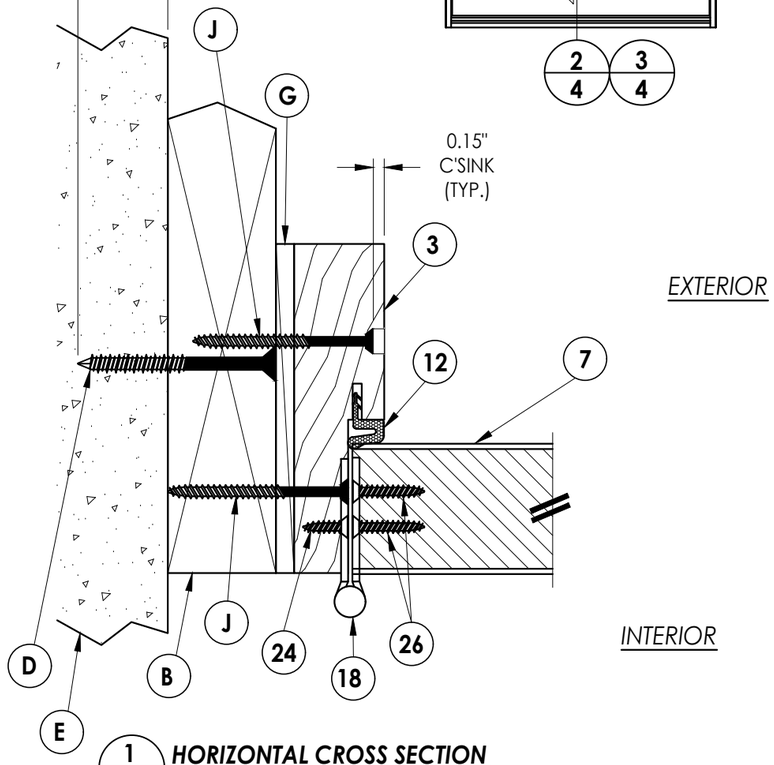
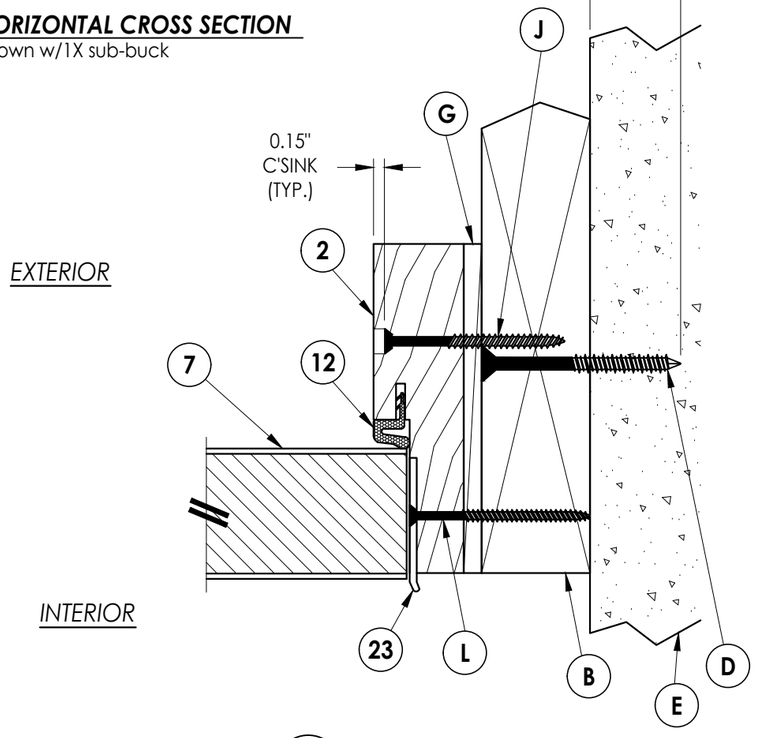




3/3 **HORIZONTAL CROSS SECTION**
Shown w/1X sub-buck



1/3 **HORIZONTAL CROSS SECTION**
Inswing Shown - Outswing
also approved



2/3 **HORIZONTAL CROSS SECTION**
Inswing Shown - Outswing
also approved

Documents Prepared By:
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FBPE Registry No. 9813

PRODUCT: *STEVES AND SONS*

PART OR ASSEMBLY: *HORIZONTAL CROSS SECTIONS*

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3	8/07/23	UPDATE TO 8TH ED. (2023) FBC	LFS
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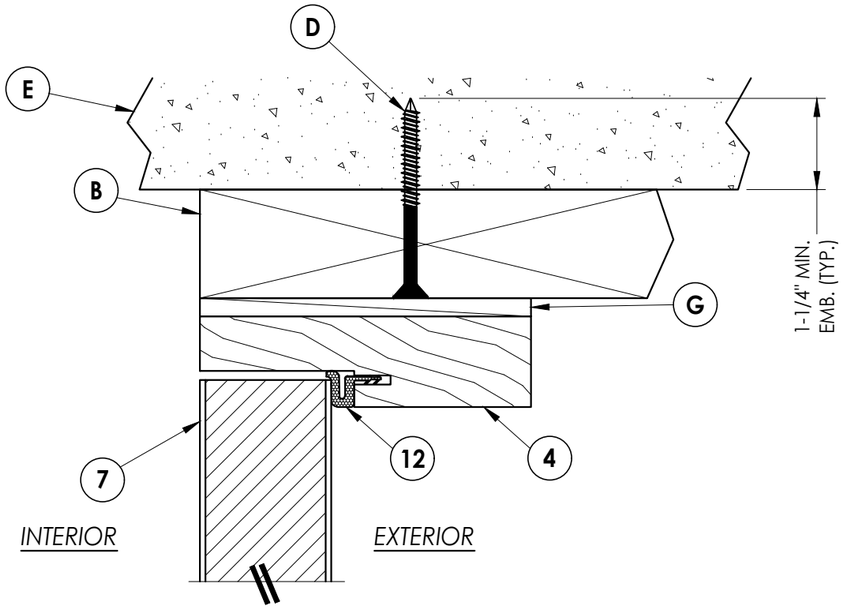
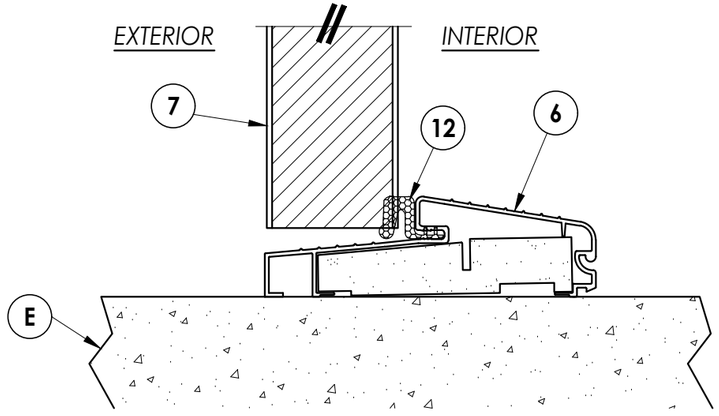
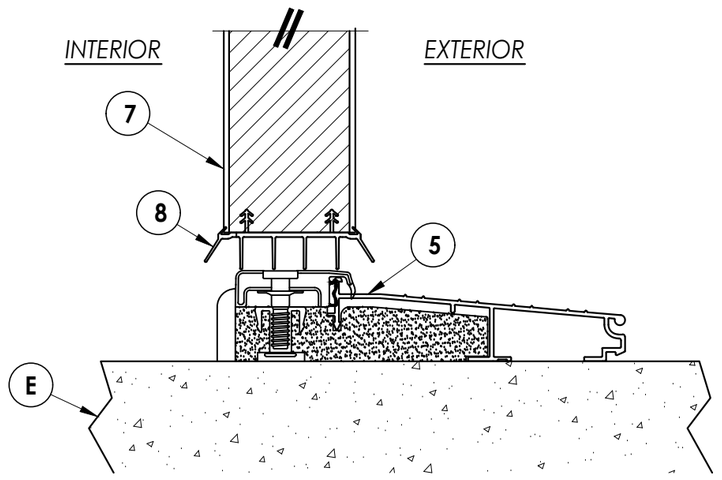


1/4 **VERTICAL CROSS SECTION**
Inswing Shown - Outswing also approved



2/4 **VERTICAL CROSS SECTION**
Outswing sill



3/4 **VERTICAL CROSS SECTION**
Inswing sill

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Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: STEVES AND SONS

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

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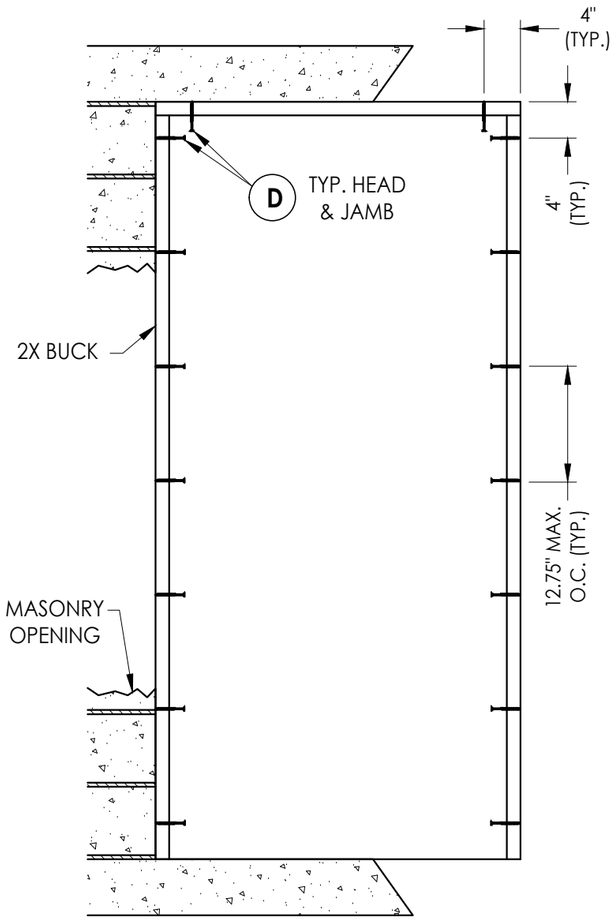
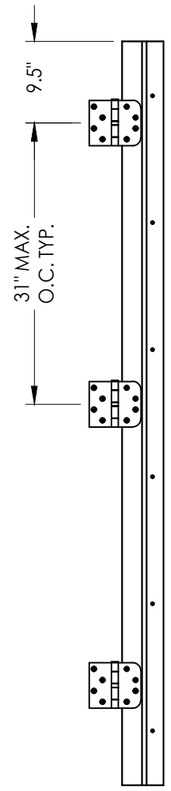
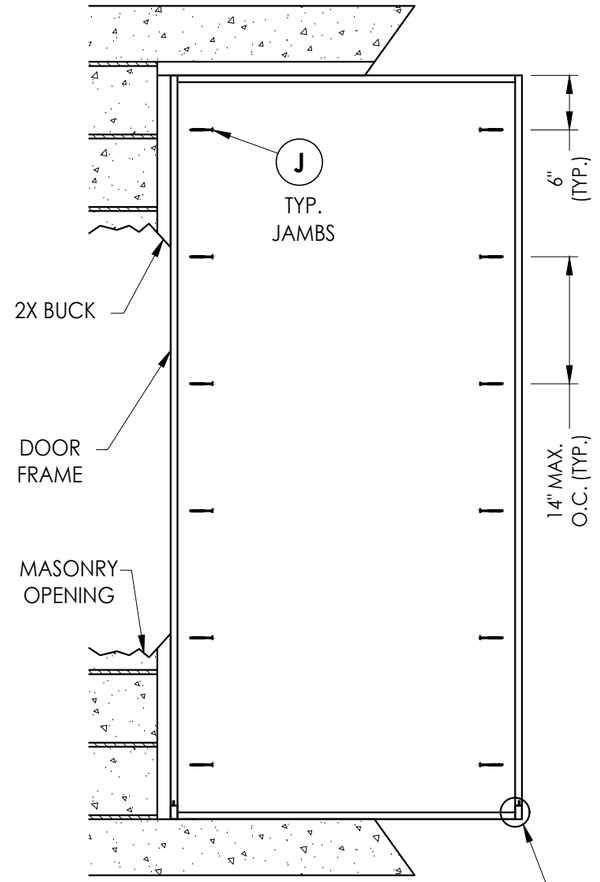


BUCK ANCHORING

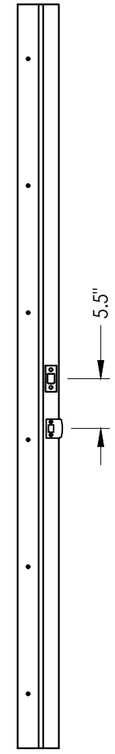


HINGE JAMB

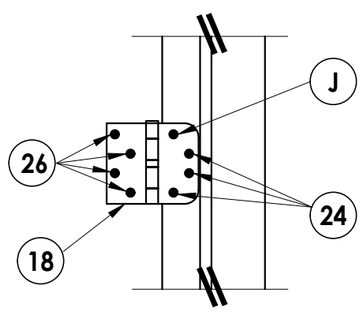


FRAME ANCHORING
Masonry 2X buck construction

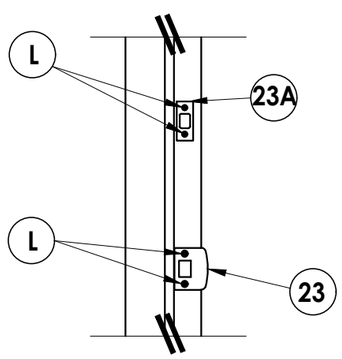
(3) #8 X 2-1/2" PFH WS
@ FRAME CORNERS (TYP.)



STRIKE JAMB



HINGE DETAIL



STRIKE PLATE DETAIL

Documents Prepared By:
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Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: *STEVES AND SONS*

PART OR ASSEMBLY:
BUCK AND FRAME ANCHORING
2X BUCK MASONRY CONSTRUCTION

NO.	DATE	REVISIONS	BY
3	8/07/23	UPDATE TO 8TH ED. (2023) FBC	LFS
2	9/16/20	UPDATE TO 7TH ED. (2020) FBC	LFS
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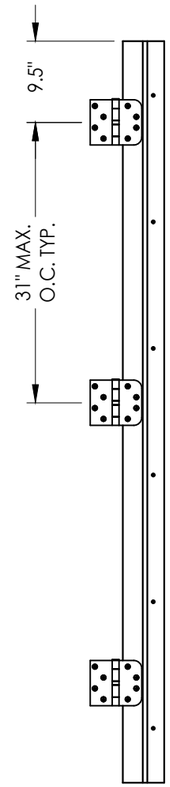
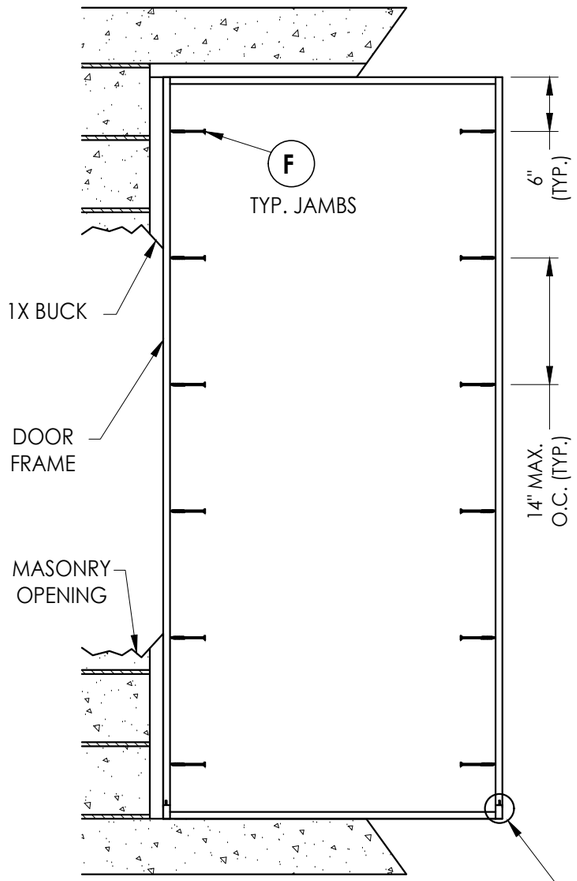
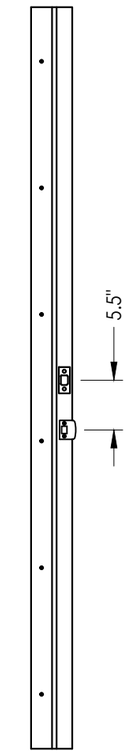


HINGE JAMB

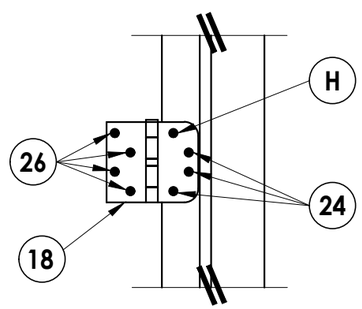


FRAME ANCHORING
Masonry 1X buck construction

(3) #8 X 2-1/2" PFH WS
@ FRAME CORNERS (TYP.)



STRIKE JAMB



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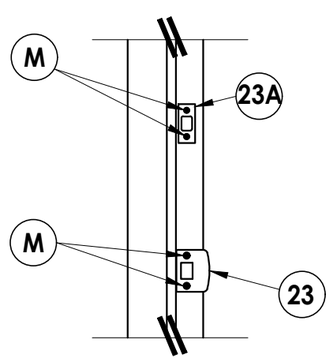

STRIKE PLATE DETAIL

Documents Prepared By:
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Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: *STEVES AND SONS*

PART OR ASSEMBLY:
FRAME ANCHORING
1X BUCK MASONRY CONSTRUCTION

NO.	DATE	REVISIONS	BY
3	8/07/23	UPDATE TO 8TH ED. (2023) FBC	LFS
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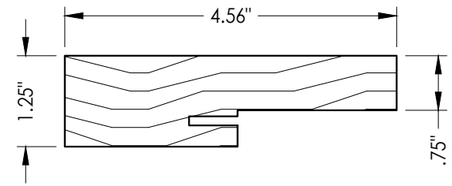
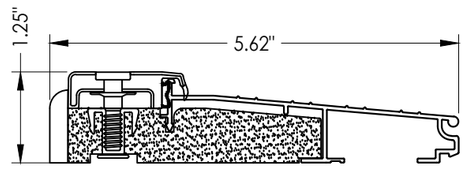
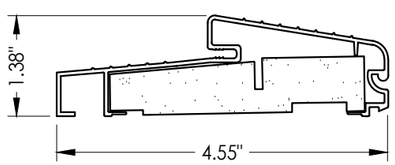
BILL OF MATERIALS		
ITEM	**DESCRIPTION**	**MATERIAL**
A	1X BUCK (SG >= 0.42)	WOOD
B	2X BUCK (SG >= 0.42)	WOOD
D	1/4" X 2-3/4" DeWALT OR ITW PFH CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	1/4" X 3-3/4" DeWALT OR ITW PFH CONCRETE SCREW	STEEL
G	MAX. 1/4" SHIM SPACE	WOOD
H	1/4" X 3-1/4" DeWALT OR ITW PFH CONCRETE SCREW	STEEL
J	#10 X 2-1/2" PFH WS (1.15" MIN. EMBEDMENT)	STEEL
L	#8 X 2-1/2" PFH WS	STEEL
M	3/16" X 3-1/4" ITW PFH CONCRETE SCREW	STEEL
P	1/4" X 2-1/4" DeWALT OR ITW PFH CONCRETE SCREW	STEEL
2	STRIKE JAMB - FINGER-JOINT PINE - SG >= 0.42	WOOD
3	HINGE JAMB - FINGER-JOINT PINE - SG >= 0.42	WOOD
4	HEAD - FINGER-JOINT PINE - SG >= 0.42	WOOD
5	INSWING THRESHOLD	ALUM/COMP.
6	OUTSWING THRESHOLD	ALUM/COMP.
7	STEEL DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
8	DOOR BOTTOM SWEEP	PVC
12	WEATHERSTRIP (Q-LON)	-
18	4" X 4" HINGE	STEEL
23	STRIKE PLATE	STEEL
23A	DEADBOLT STRIKE	STEEL
24	#10 X 3/4" PFH WS	STEEL
26	#10 X 1" PFH WS	STEEL



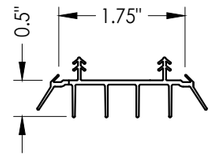
4 3 2 **SIDE & HEAD JAMBS**



5 **INSWING THRESHOLD**
AFCO



6 **OUTSWING THRESHOLD**
AFCO



8 **SWEEP**

CONCRETE ANCHOR NOTES:

1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. 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.
3. 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"	4"
DeWALT ULTRACON+®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

WOOD SCREW INSTALLATION NOTES:

1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.

Documents Prepared By:
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FBPE Registry No. 9813

PRODUCT: STEVES AND SONS

PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS

NO.	DATE	REVISIONS	BY
3	8/07/23	UPDATE TO 8TH ED. (2023) FBC	LFS
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