



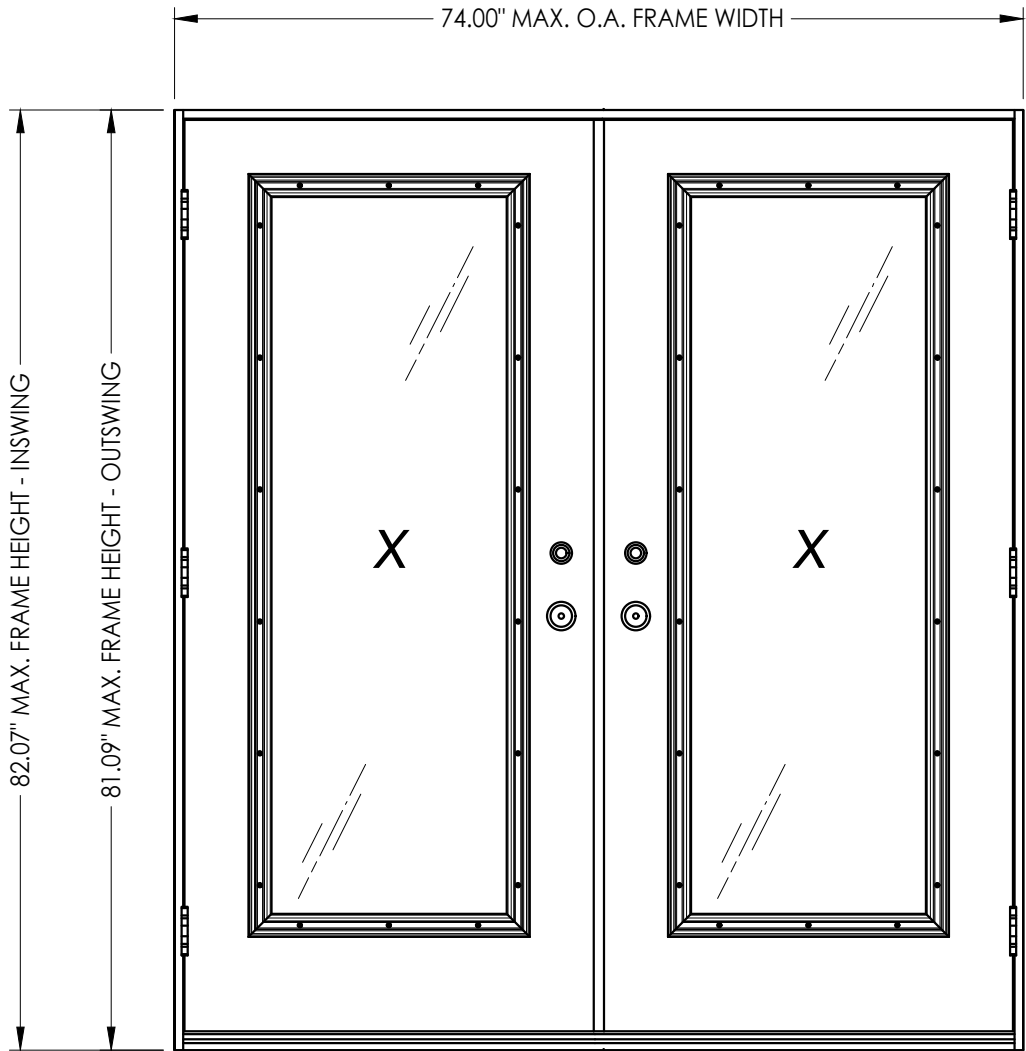
STEVES AND SONS
203 Humble Ave.
San Antonio, TX 78225

GLAZED FIBERGLASS DOOR
INSWING / OUTSWING
"NON-IMPACT"

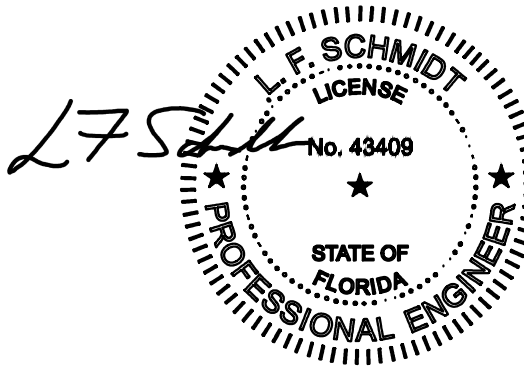
GENERAL NOTES

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). See the Certification Agency Certificate for sizes, specifications & ratings.
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 elevations, design pressures & general notes
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7	Frame anchoring - 1X buck masonry construction
8	Endura astragal details
9	Bill of materials & components



SWING	MAX. FRAME DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
			POSITIVE	NEGATIVE
INSWING	74.00" x 82.07"	G1	+47.0	-47.0
OUTSWING	74.00" x 81.09"		+47.0	-47.0



Digitally signed by Lyndon F Schmidt
Date: 2023.08.08 07:26:50 -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

PRODUCT: STEVES AND SONS

DATE: 7/18/15

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-17901.14

SHEET 1 OF 9

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

REVISIONS

DATE: 7/18/15

SCALE: N.T.S.

DWG. BY: JK

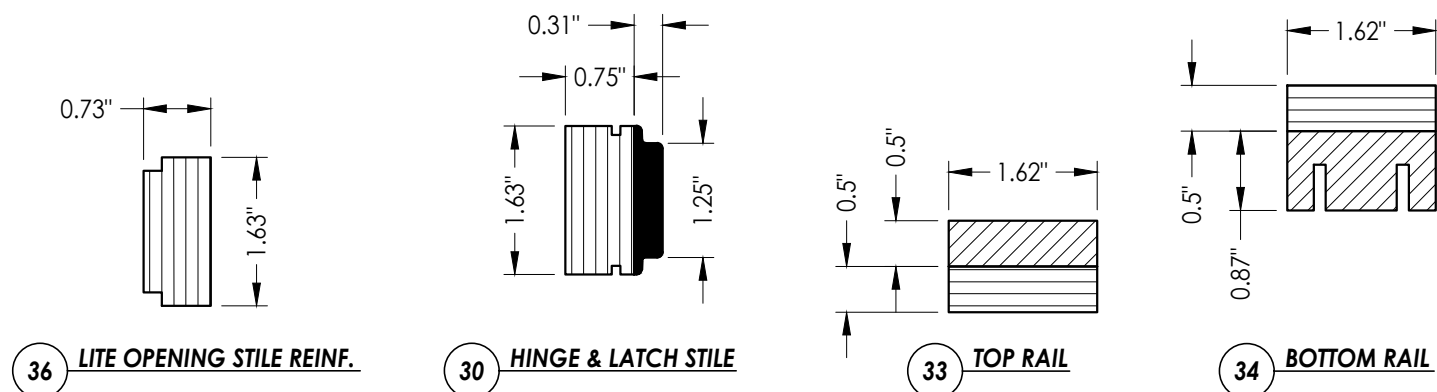
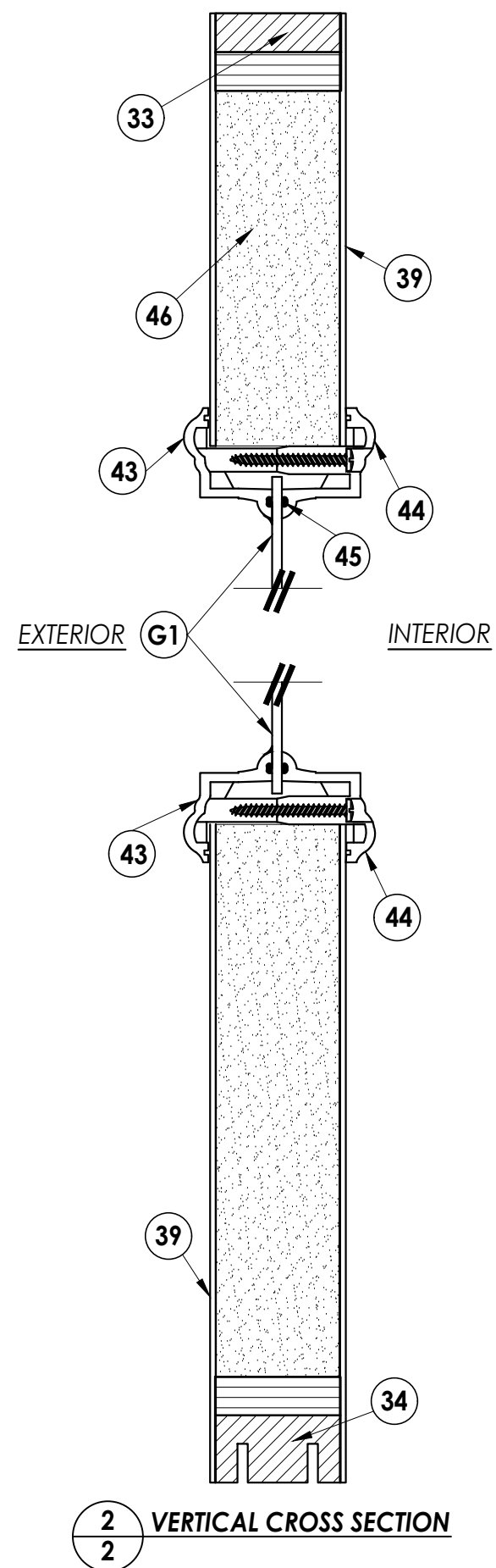
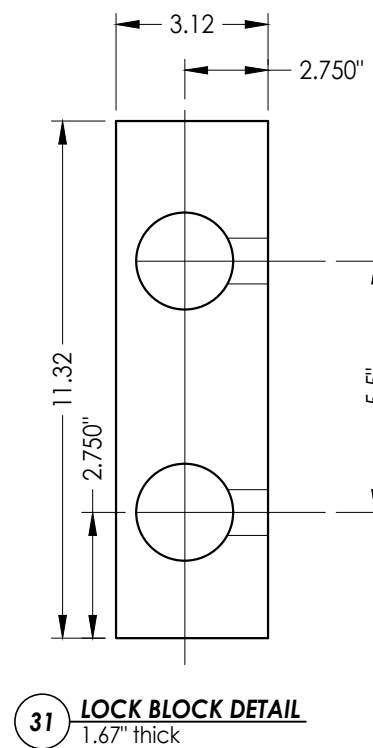
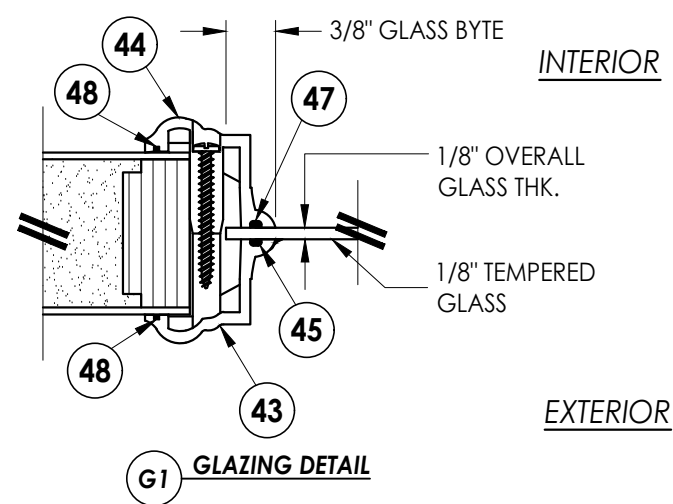
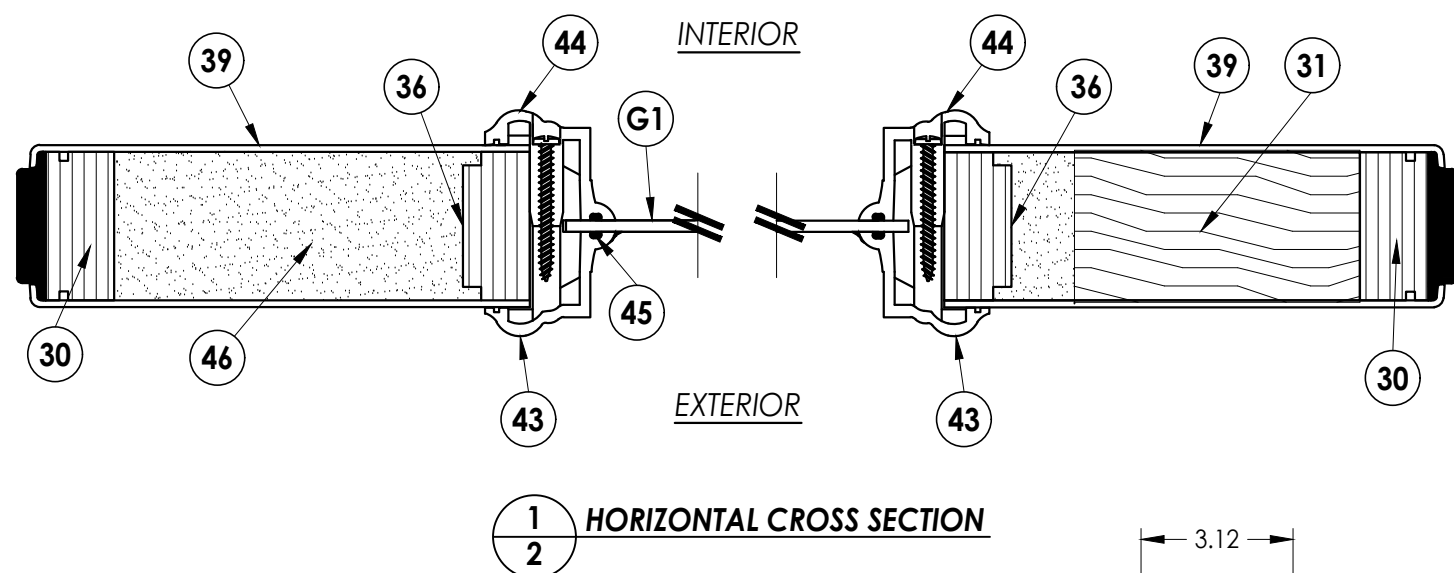
CHK. BY: LFS

DRAWING NO.: FL-17901.14

SHEET 1 OF 9

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

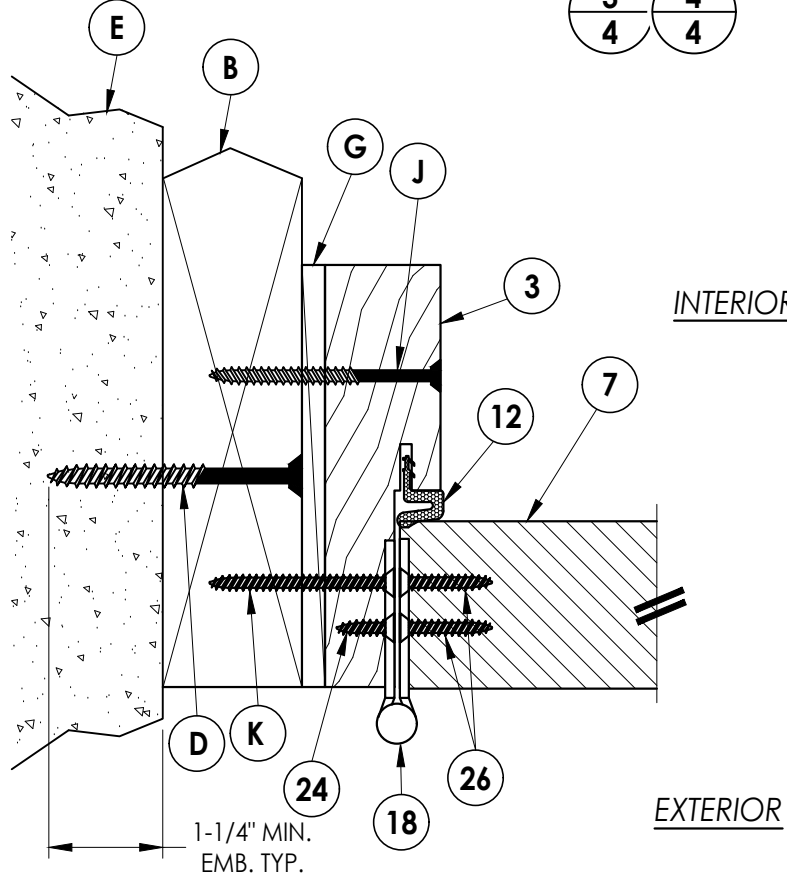
© 2015 R.W. BUILDING CONSULTANTS INC.

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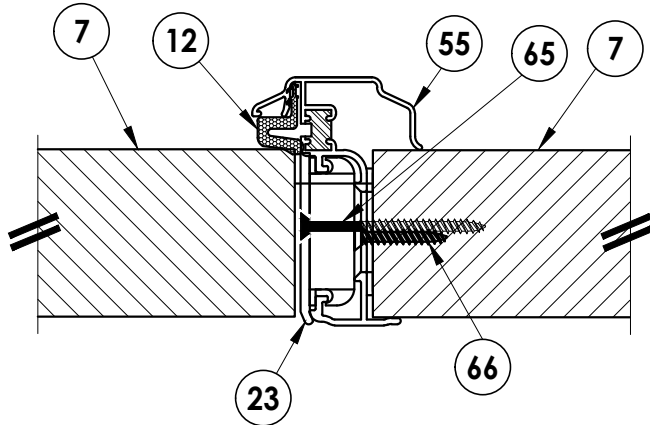
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

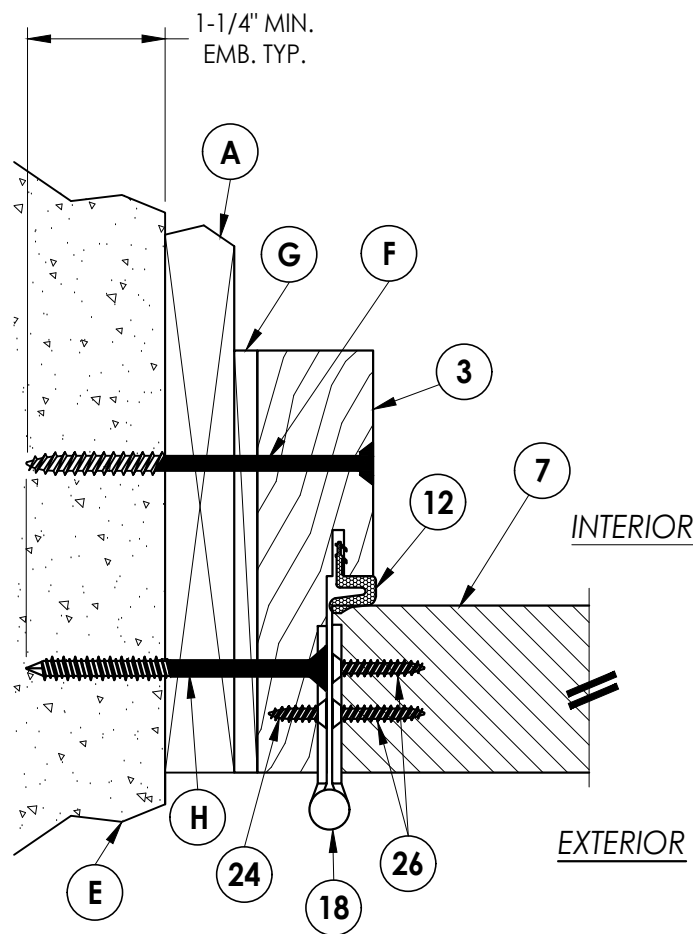
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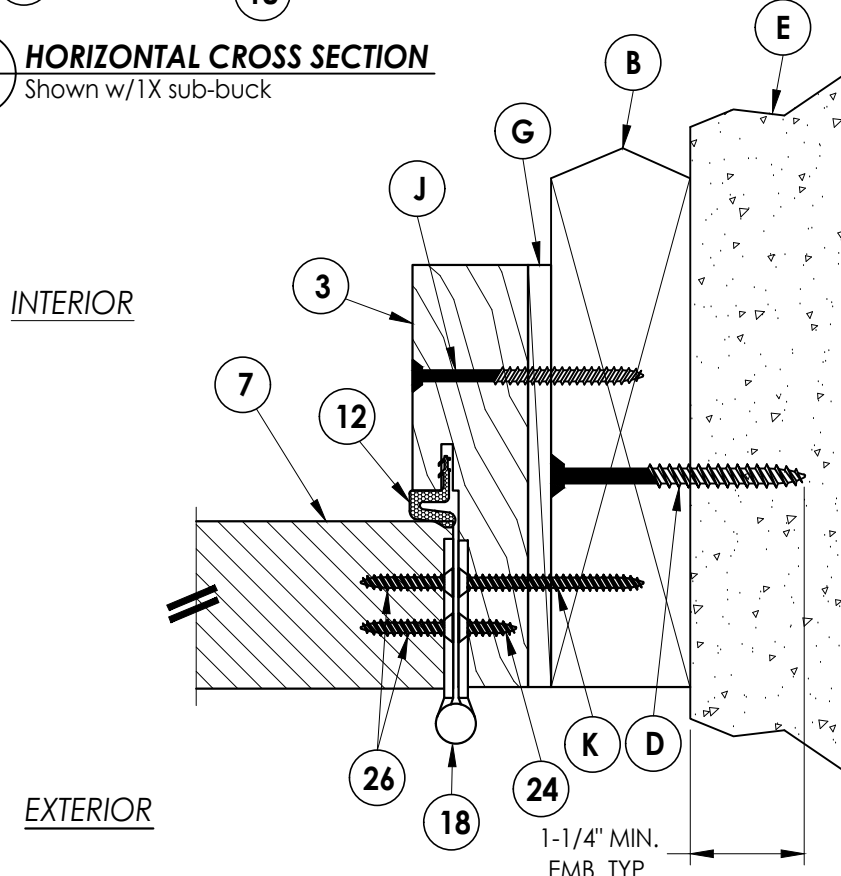
1
3 **HORIZONTAL CROSS SECTION**
Outswing shown - inswing
also approved



2
3 **HORIZONTAL CROSS SECTION**



4
3 **HORIZONTAL CROSS SECTION**
Shown w/1X sub-buck



3
3 **HORIZONTAL CROSS SECTION**
Outswing shown - inswing
also approved

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:
STEVES AND SONS

PART OR ASSEMBLY:
HORIZONTAL CROSS SECTIONS

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

DATE: 7/18/15

SCALE: N.T.S.

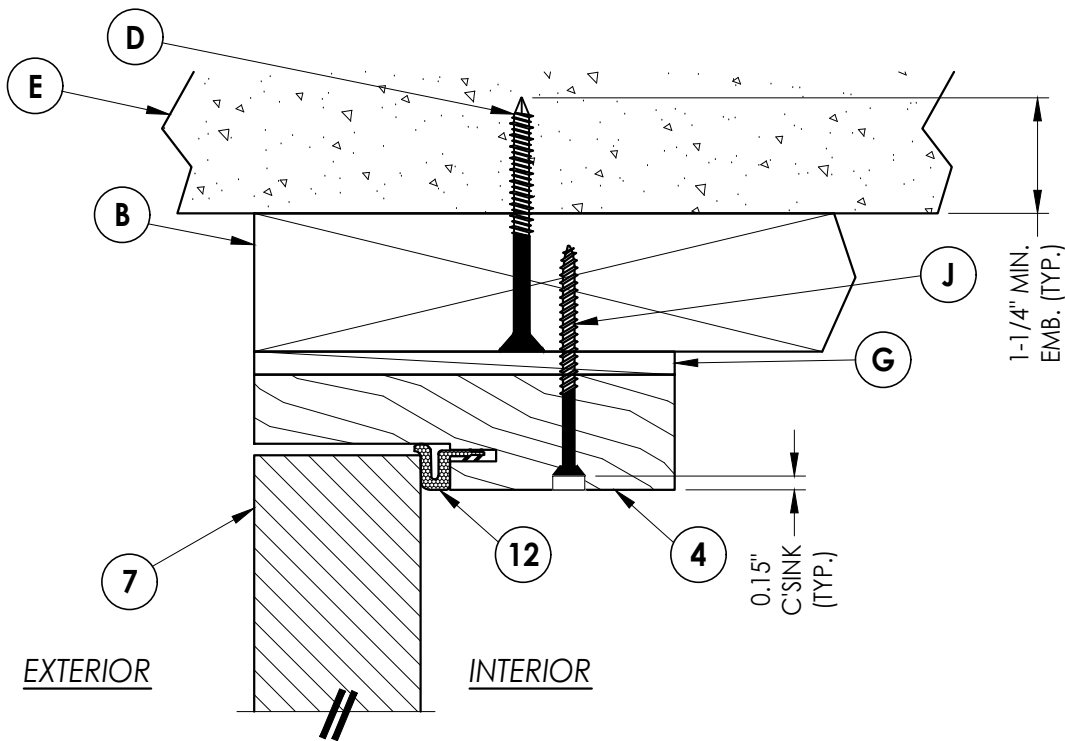
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CHK. BY: LFS

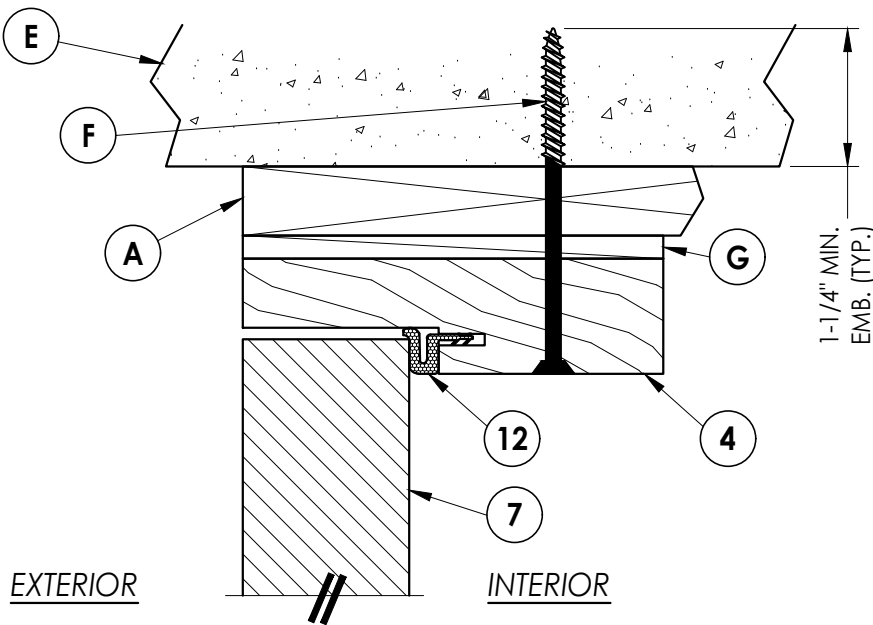
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FL-17901.14

SHEET 3 OF 9

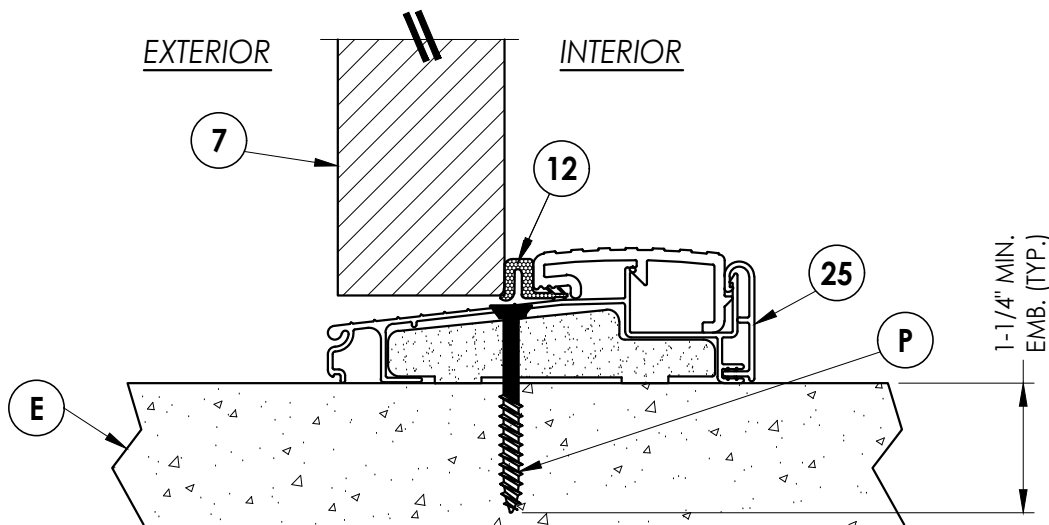
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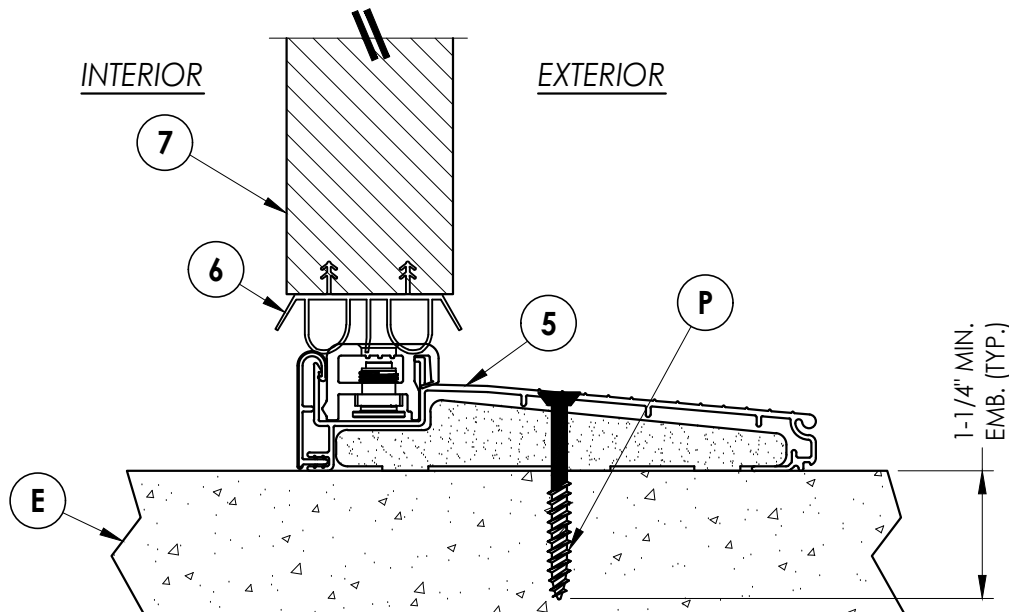
1
4 **VERTICAL CROSS SECTION**
Outswing shown - inswing
also approved



2
4 **VERTICAL CROSS SECTION**
Shown w/1X sub-buck



3
4 **VERTICAL CROSS SECTION**
Outswing sill



4
4 **VERTICAL CROSS SECTION**
Inswing sill

Documents Prepared By:
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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: STEVES AND SONS

PART OR ASSEMBLY:
VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
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

DATE: 7/18/15

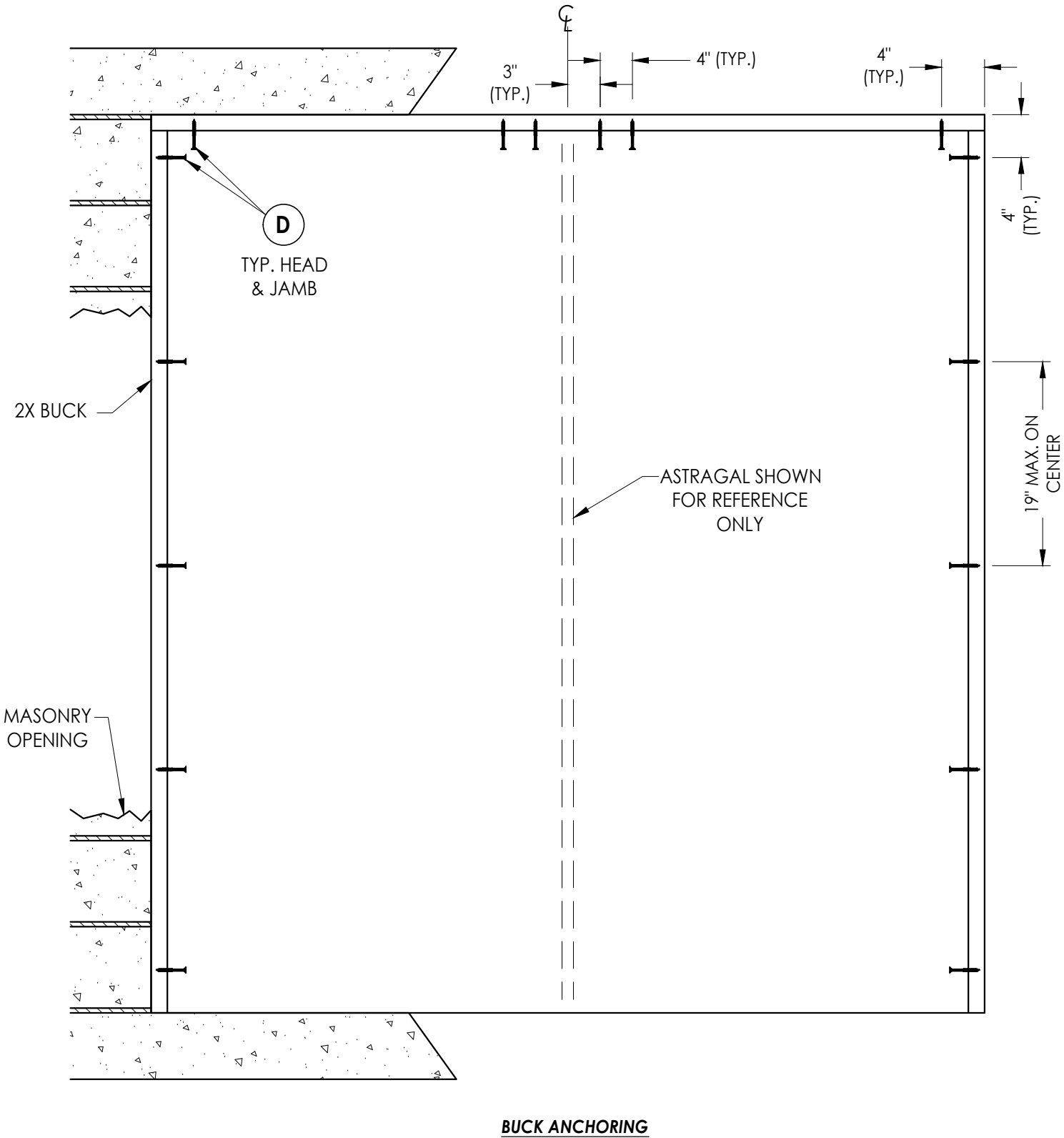
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DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:
FL-17901.14

SHEET 4 OF 9



DATE:	7/18/15
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-17901.14
SHEET	5 OF 9

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	
NO.	DATE			BY	
REVISIONS					

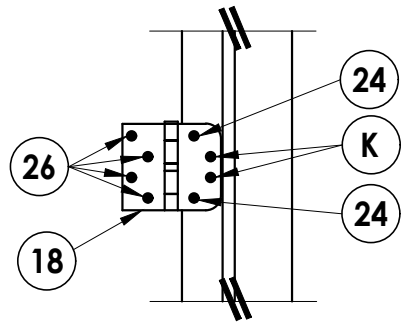
PRODUCT:	STEVES AND SONS
PART OR ASSEMBLY:	BUCK ANCHORING

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

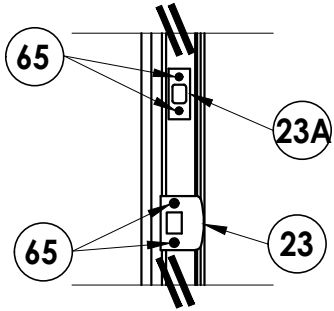
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Phone No.: 813.659.9197
FBPE Registry No. 9813

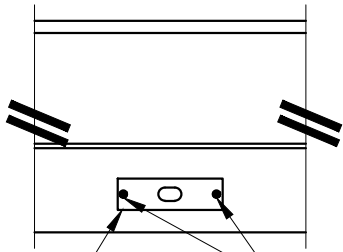
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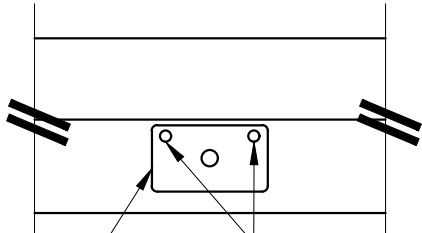
HINGE DETAIL



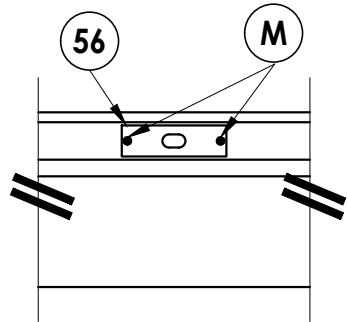
ASTRAGAL DETAIL



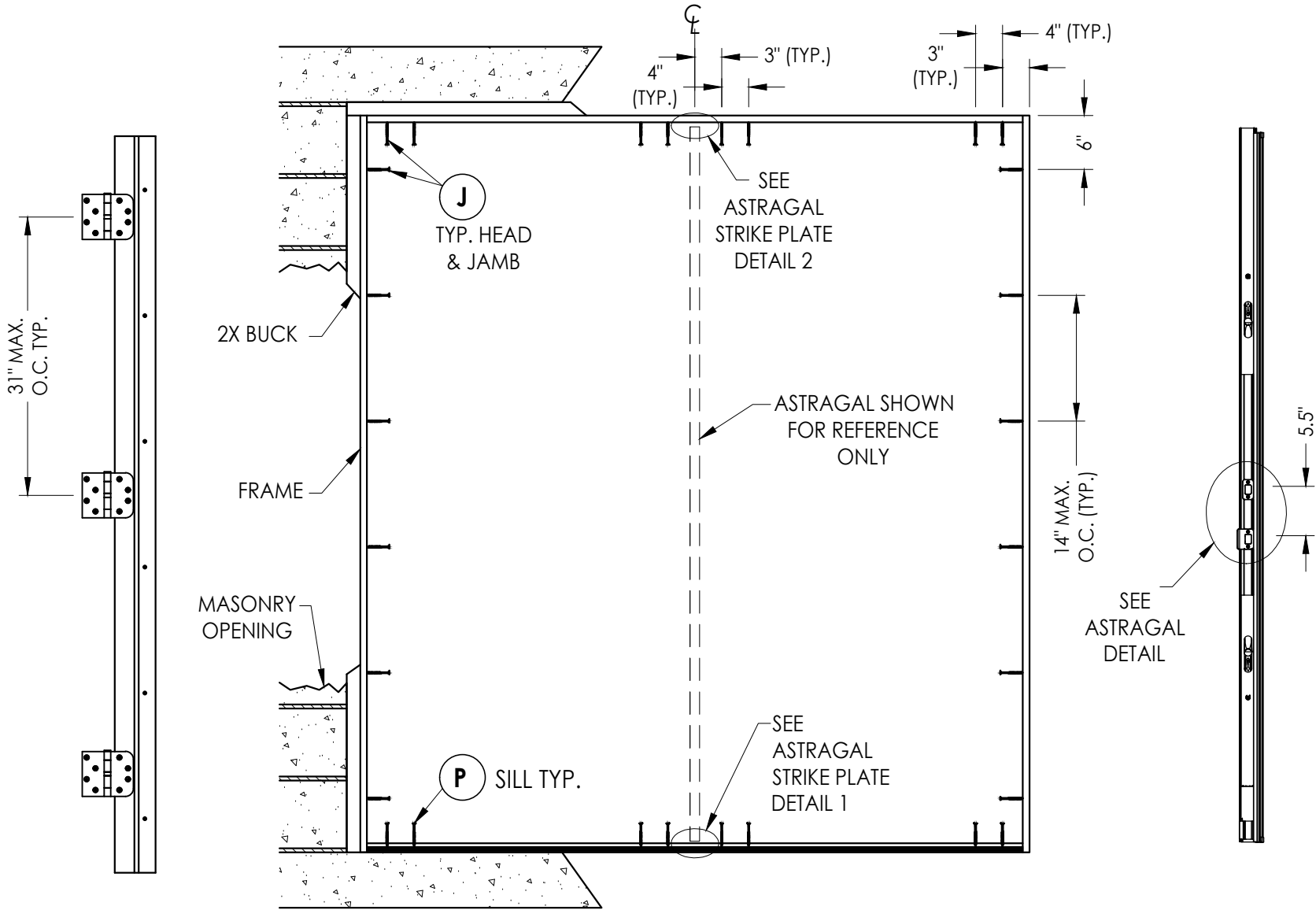
ASTRAGAL STRIKE PLATE
"DETAIL 1" - OUTSWING



ASTRAGAL STRIKE PLATE
"DETAIL 2"



ASTRAGAL STRIKE PLATE
"DETAIL 1" - INSWING



HINGE JAMB

FRAME ANCHORING
Masonry 2X buck construction

ASTRAGAL

DATE: 7/18/15

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-17901.14

SHEET 6 OF 9

PRODUCT: STEVES AND SONS

PART OR ASSEMBLY:

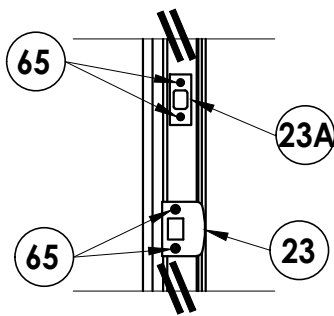
FRAME ANCHORING

2X BUCK MASONRY CONSTRUCTION

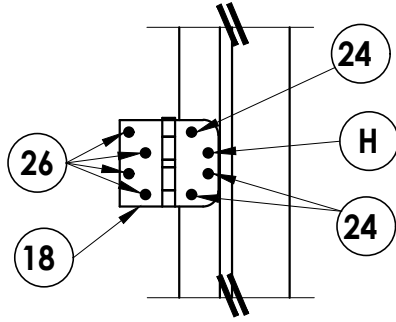
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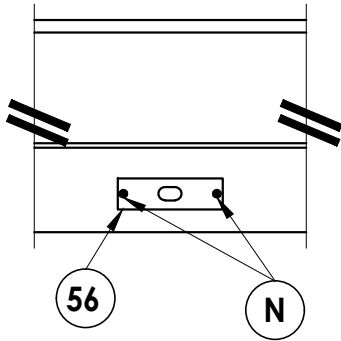
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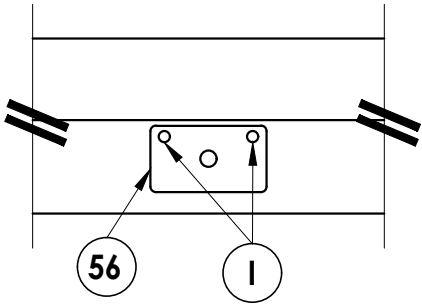
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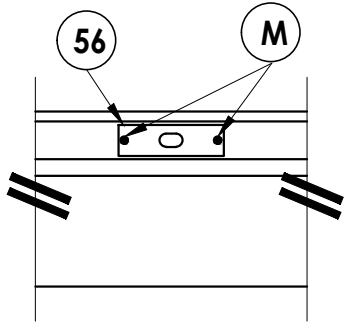
HINGE DETAIL



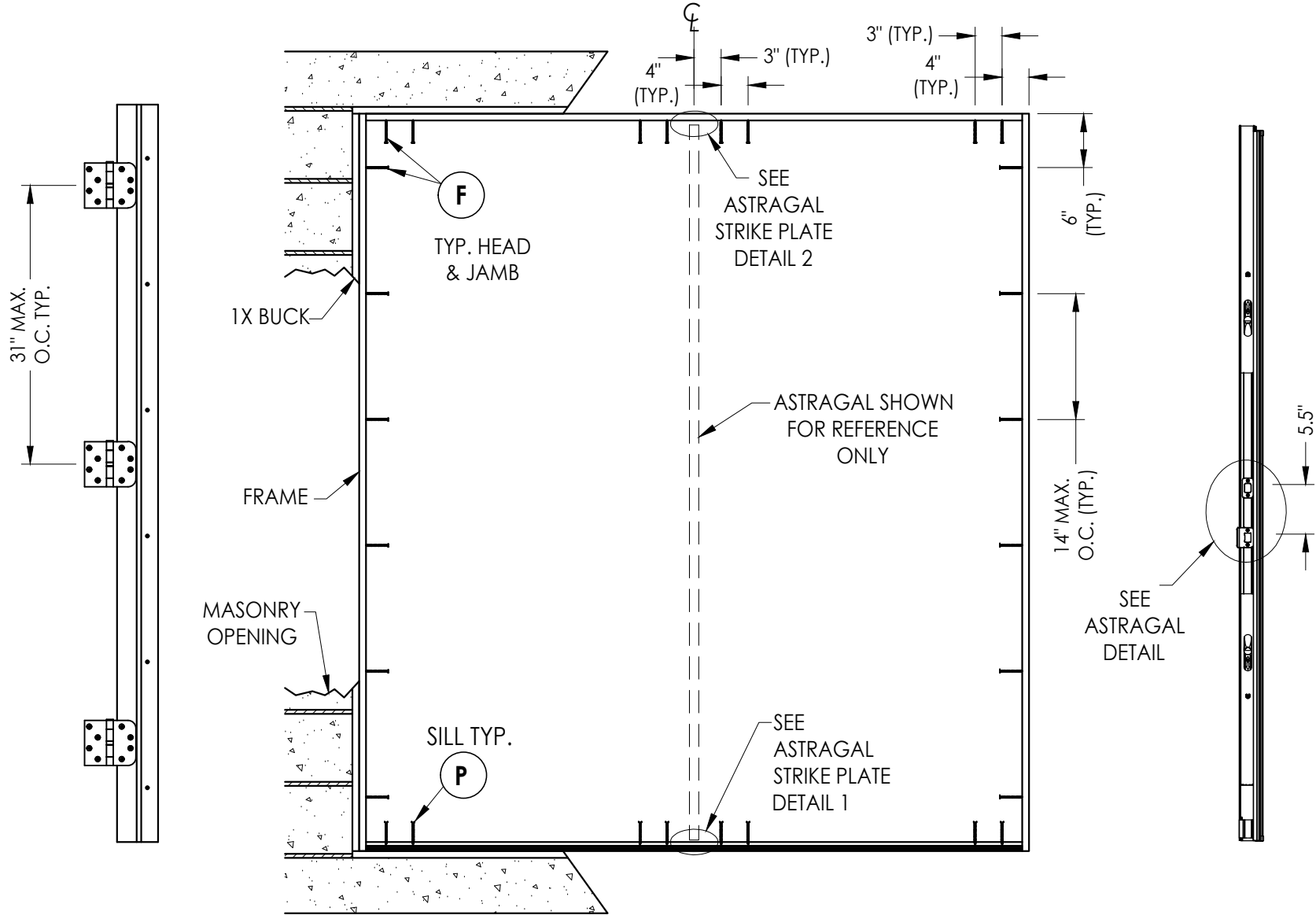
ASTRAGAL STRIKE PLATE
"DETAIL 1" - OUTSWING



ASTRAGAL STRIKE PLATE
"DETAIL 2"



ASTRAGAL STRIKE PLATE
"DETAIL 1" - INSWING



HINGE JAMB

FRAME ANCHORING
Masonry 1X buck construction

ASTRAGAL

DATE: 7/18/15

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-17901.14

SHEET 7 OF 9

PRODUCT: STEVES AND SONS

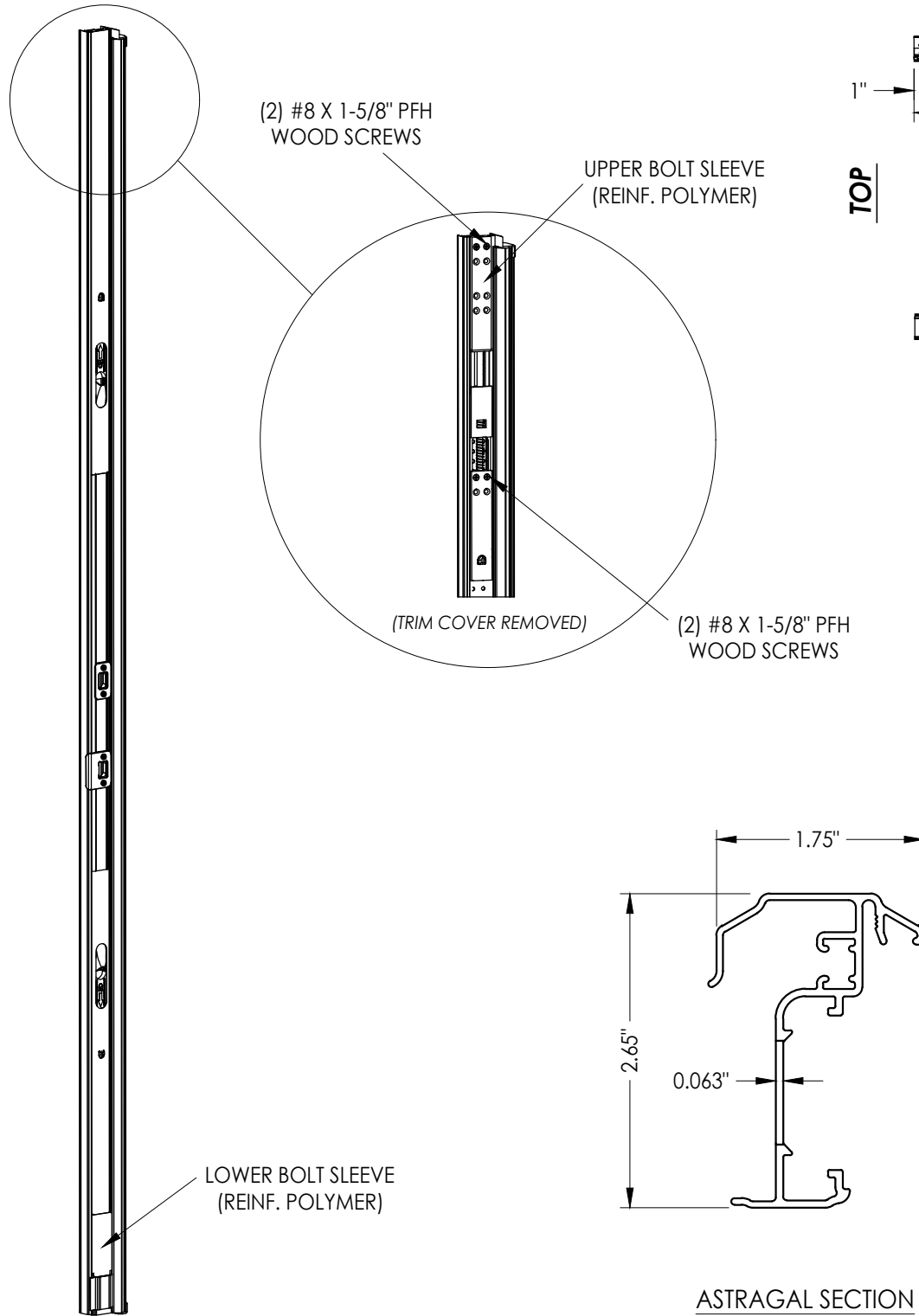
PART OR ASSEMBLY:

FRAME ANCHORING
1X BUCK MASONRY CONSTRUCTION

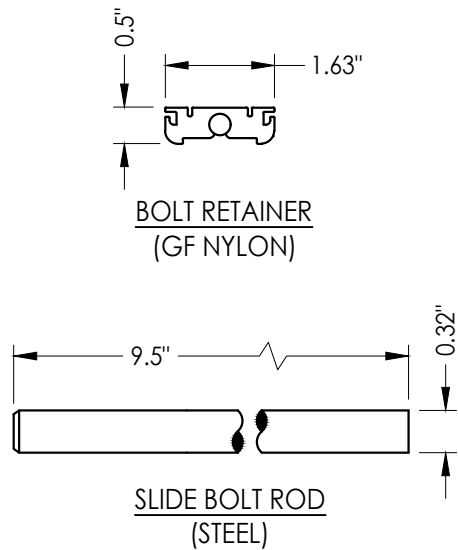
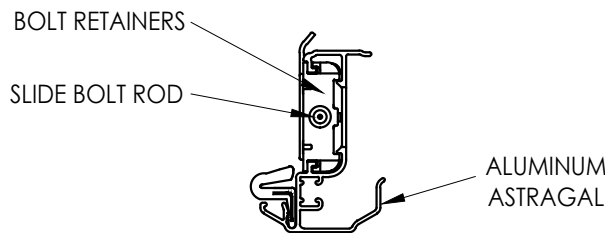
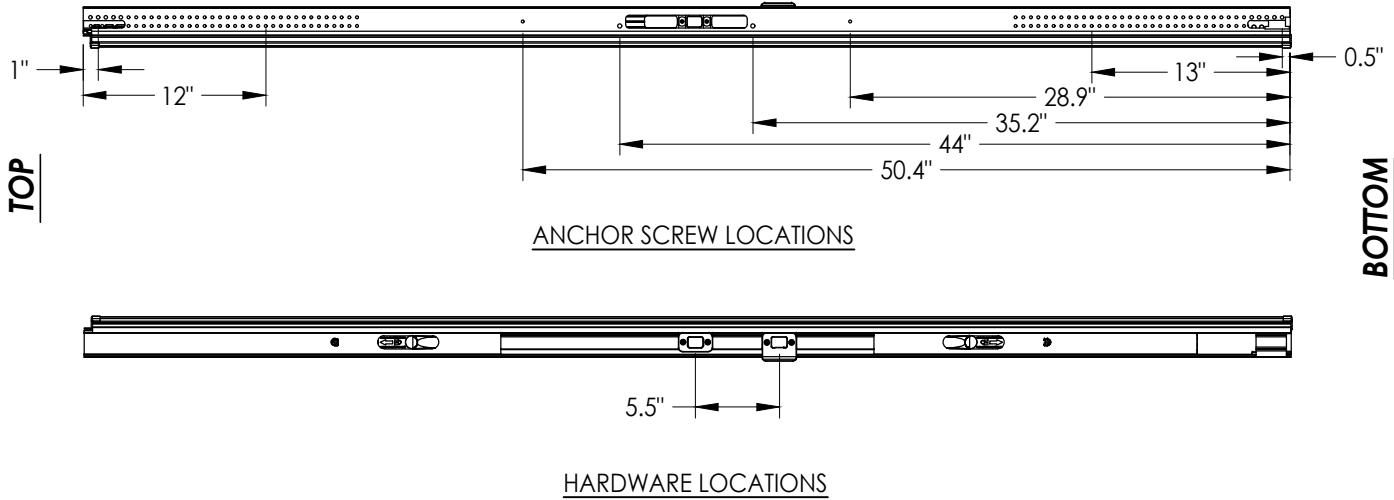
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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Phone No.: 813.659.9197
FBPE Registry No. 9813

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ULTIMATE HURRICANE ASTRAGAL

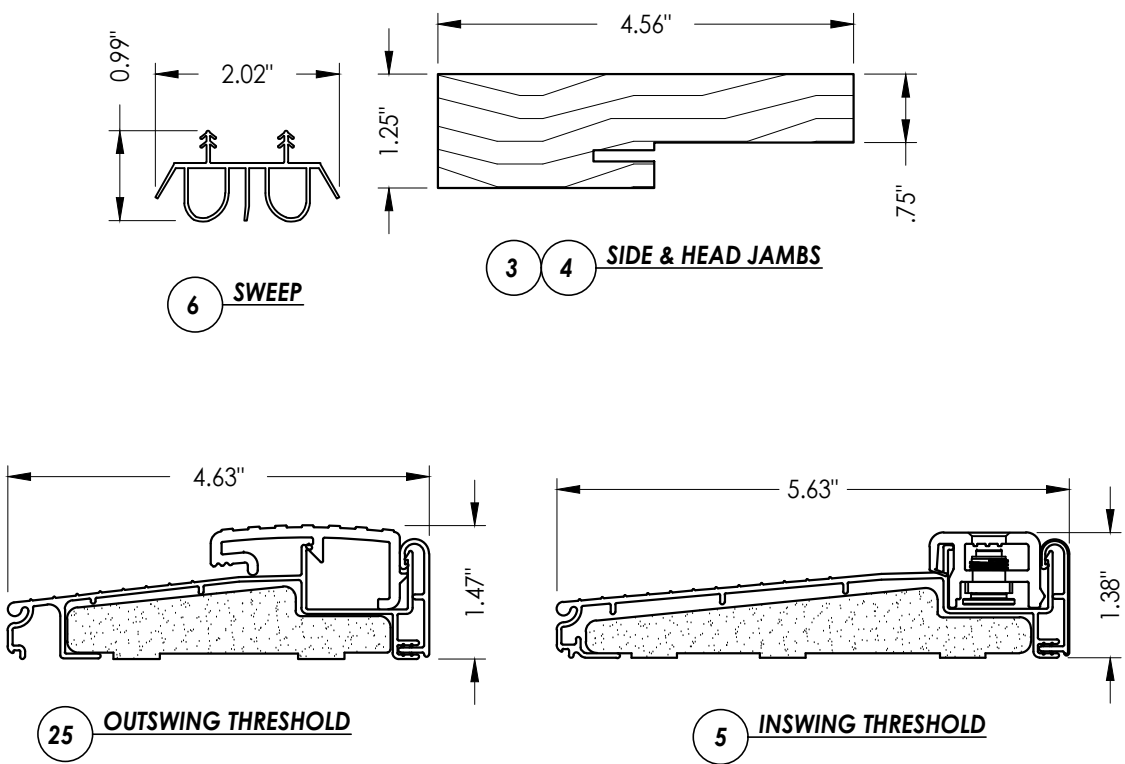


55 ALUMINUM ASTRAGAL
By Endura Products

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: ENDURA ASTRAGAL DETAILS			
			LFS				
		3	8/07/23	UPDATE TO 8TH ED. (2023)	FBC		
		2	9/16/20	UPDATE TO 7TH ED. (2020)	FBC		
		1	10/08/17	UPDATE TO 6TH ED. (2017)	FBC		
		NO.	DATE				
							REVISIONS
DATE: 7/18/15							
SCALE: N.T.S.							
DWG. BY: JK							
CHK. BY: LFS							
DRAWING NO.: FL-17901.14							
SHEET 8 OF 9							

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BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD
B	2X BUCK SG >= 0.55	WOOD
D	1/4" X 2-3/4" DeWALT 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" ITW PFH CONCRETE SCREW	STEEL
G	MAX. 1/4" SHIM SPACE	WOOD
H	1/4" X 3-1/4" ITW PFH CONCRETE SCREW	STEEL
I	3/16" X 3-3/4" ITW PFH CONCRETE SCREW	STEEL
J	#10 X 2-1/2" PFH WS (1-1/8" MIN. EMBEDMENT)	STEEL
K	#9 X 2" PFH WS	STEEL
M	3/16" X 3-1/4" ITW PFH CONCRETE SCREW	STEEL
N	3/16" X 2-1/4" ITW CONCRETE SCREW	STEEL
P	1/4" X 2-1/4" ITW CONCRETE SCREW	STEEL
3	HINGE JAMB - FINGER-JOINT PINE - SG >= 0.42	WOOD
4	HEAD - FINGER-JOINT PINE - SG >= 0.42	WOOD
5	INSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM/COMP.
6	DOOR BOTTOM SWEEP	PVC
7	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
12	WEATHER STRIP QEBD650 Q-LON	-
18	4" HINGE	STEEL
21	KWIKSET LOCK -SERIES 200 PASSAGE	STEEL
22	KWIKSET DEADBOLT -SERIES 600	STEEL
23	STRIKE PLATE	STEEL
23A	DEADBOLT STRIKE	STEEL
24	#9 X 5/8" PFH WS	STEEL
25	OUTSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM./ COMP.
26	#9 X 1" PFH WS	STEEL
30	LATCH AND HINGE STILE - SG >= 0.42	LVL/PVC
31	LOCK BLOCK	WOOD
33	TOP RAIL - POPLAR LVL & WPC COMBINATION	POPLAR/WPC
34	BOTTOM RAIL - POPLAR LVL & WPC COMBINATION	POPLAR/WPC
36	LITE OPENING STILE REINF. (SG>= 0.42)	WOOD
39	FIBERGLASS SKIN 0.079" MIN. THICKNESS (Fy = 5,200 PSI MIN.)	FIBERGLASS
40	#8 X 1-1/2" PANHEAD SMS (LIGHT FRAME SCREW)	STEEL
43	FEMALE LITE FRAME	PC/ASA
44	MALE LITE FRAME	PC/ASA
45	HOT MELT SEALANT	BUTYL
46	INSULATED FOAM CORE	POLYURETHANE
47	SILICONE SEALANT	SILICONE
48	PL PREMIUM POLYURETHANE ADHESIVE	POLYURETHANE
55	ULTIMATE HURRICANE ASTRAGAL (ENDURA)	ALUMINUM
56	ASTRAGAL STRIKE PLATE	STEEL
57	#8 X 2-1/2" PFH WOOD SCREW	STEEL
65	#8 X 2-1/4" PFH WOOD SCREW	STEEL
66	#8 X 1" PFH WOOD SCREW	STEEL



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"	4"
DeWALT ULTRAICON®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

WOOD SCREW INSTALLATION NOTES:

- 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: 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: BILL OF MATERIALS & COMPONENTS	
		REVISONS	
		3	8/07/23
		2	9/16/20
		1	10/08/17
		NO.	DATE
DATE: 7/18/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-17901.14			
SHEET 9 OF 9			