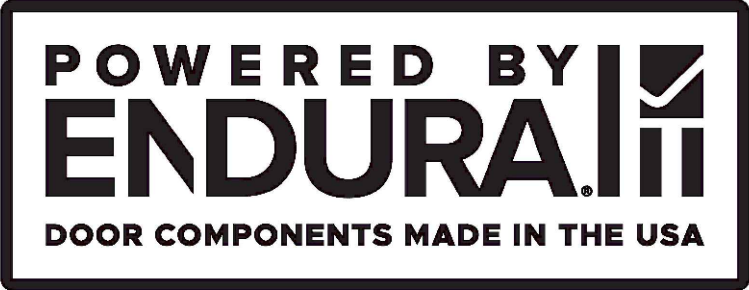


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Ultimate Hurricane Astragal

INSWING / OUTSWING

"NON-IMPACT"

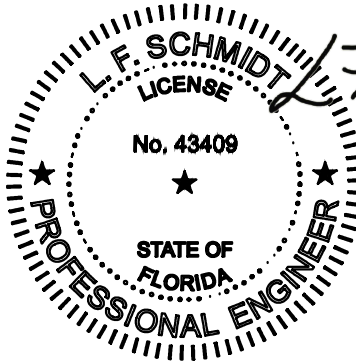
GENERAL NOTES

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 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. This product has been tested and is approved for use in the door panels as specified in this approval. Substitution into a similar product that possess a comparable current Florida Statewide product approval may be approved for use by the local Authority Having Jurisdiction.
6. 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 and general notes
2	Astragal details
3	Door panel details
4	Horizontal and vertical cross sections
5	Threshold details
6	Buck and frame anchoring



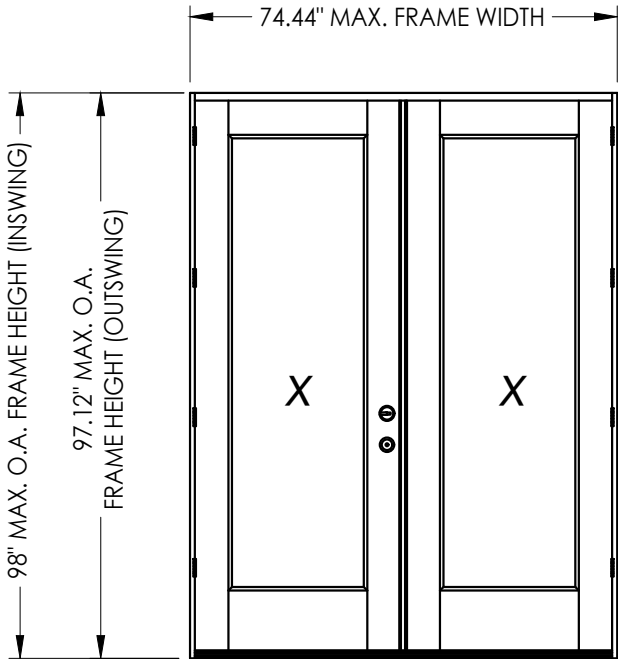
Ultimate Hurricane Astragal



Digitally signed by Lyndon F Schmidt
Date: 2026.07.18 11:03:32 -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



ULTIMATE HURRICANE ASTRAGAL by ENDURA				
MAXIMUM FRAME SIZE			DESIGN PRESSURE RATING (PSF)	
			POSITIVE	NEGATIVE
THERMA TRU Flush Glazed (FIBERGLASS)	INSWING	74.44" X 98"	+40.0	-40.0
	OUTSWING	74.44" X 97.12"	+40.0	-40.0

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

ENDURA

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

7

7/03/26

UPDATE TO 9TH ED. (2026)

FBC

LFS

6

7/07/23

UPDATE TO 8TH ED. (2023)

FBC

LFS

5

8/12/20

UPDATE TO 7TH ED. (2020)

FBC

LFS

NO.

DATE

BY

REVISIONS

DATE: 10/24/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

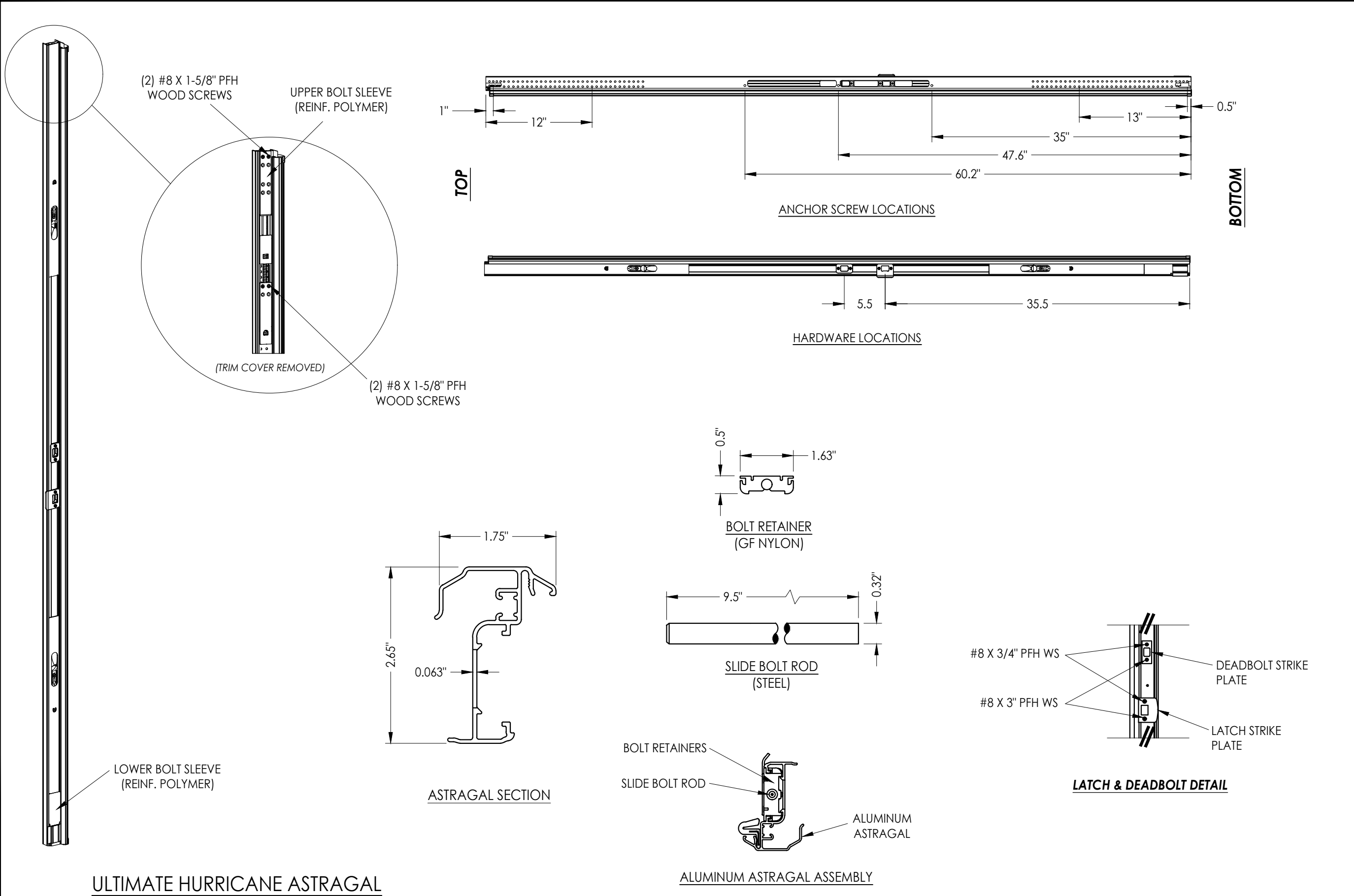
DRAWING NO.:
FL-16634.11

SHEET 1 OF 6

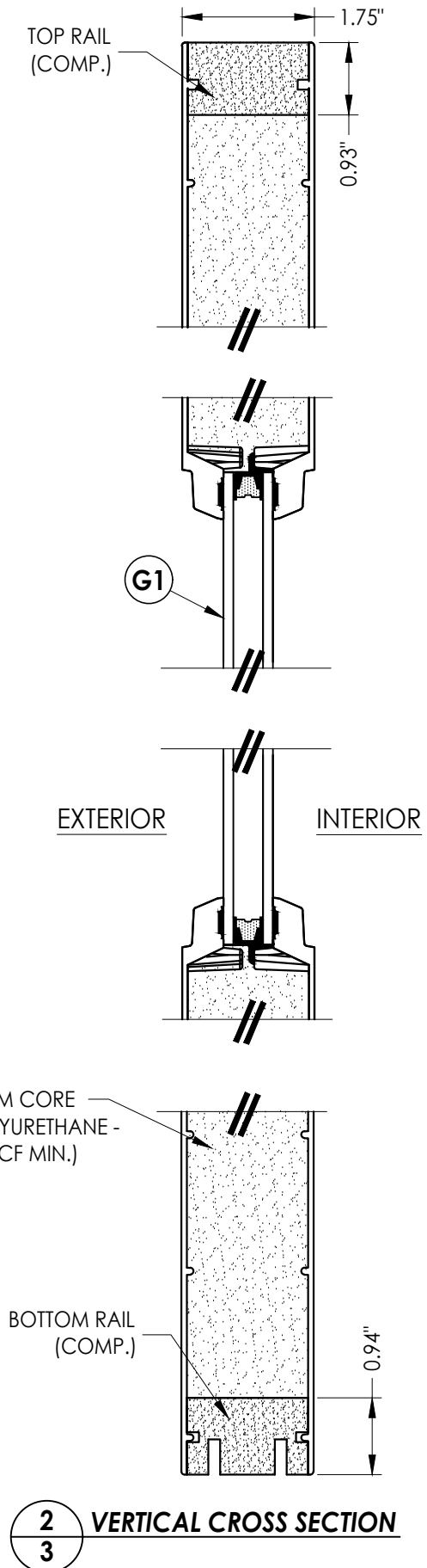
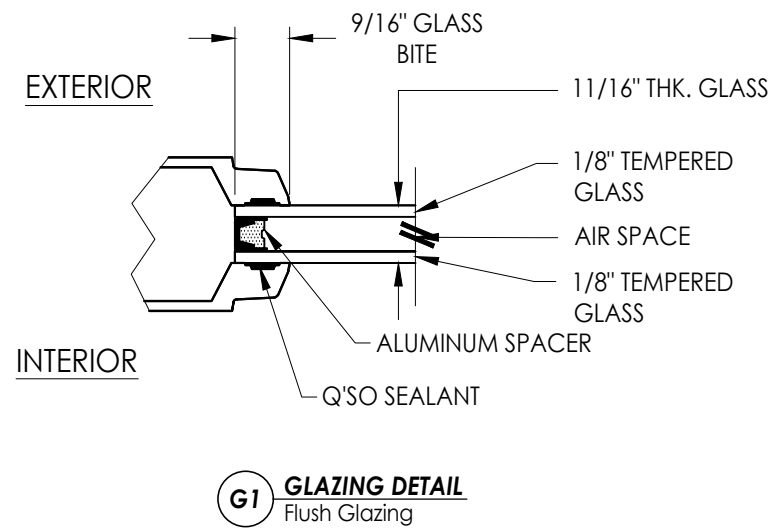
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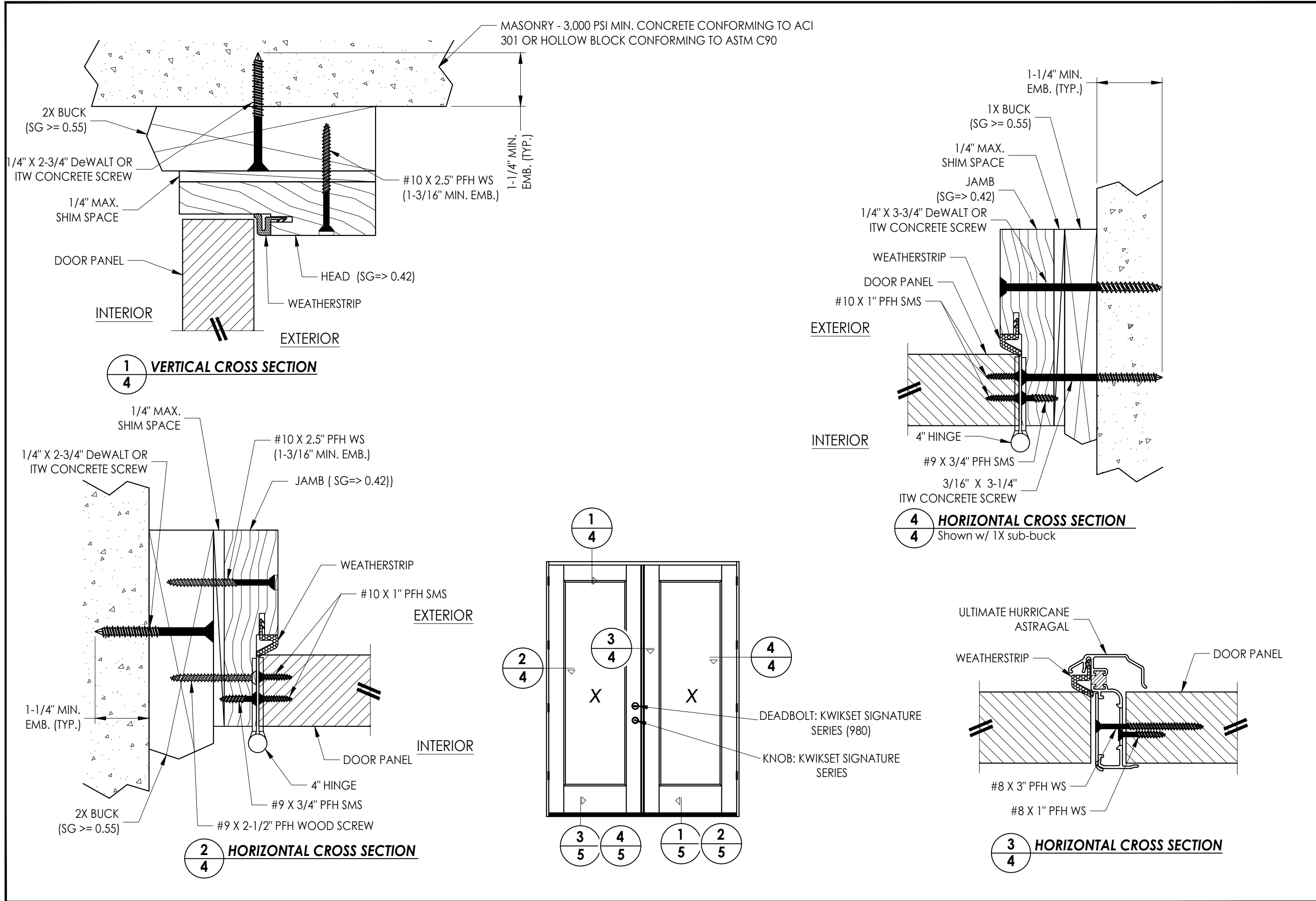


Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	
PRODUCT: ENDURA		PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE HURRICANE)	
		LFS	BY
		LFS	
		LFS	
		DATE	
		REVISIONS	
7	7/03/26	UPDATE TO 9TH ED. (2026)	FBC
6	7/07/23	UPDATE TO 8TH ED. (2023)	FBC
5	8/12/20	UPDATE TO 7TH ED. (2020)	FBC
DATE: 10/24/13			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-16634.11			
SHEET 2 OF 6			

[illegible]

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

PRODUCT: ENDURA

FOR OR ASSEMBLY:
HORIZONTAL AND VERTICAL
CROSS SECTIONS

7	7/03/26	UPDATE TO 9TH ED.	(2026)	FBC	LFS
6	7/07/23	UPDATE TO 8TH ED.	(2023)	FBC	LFS
5	8/12/20	UPDATE TO 7TH ED.	(2020)	FBC	LFS
NO	DATE				
		REVISIONS			

DATE: 10/24/13

SCALE: *N.T.S.*

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-16634.11

SHEET 4 OF 6

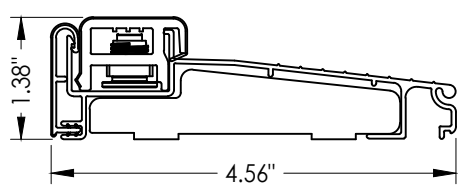
1 **VERTICAL CROSS SECTION**
5 Inswing Adjustable Threshold

2 VERTICAL CROSS SECTION

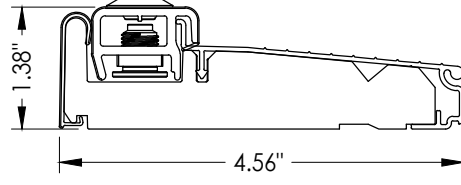
5 Inswing Articulating Threshold w/ Pin Capture

3 VERTICAL CROSS SECTION
5 Outswing Bump Threshold

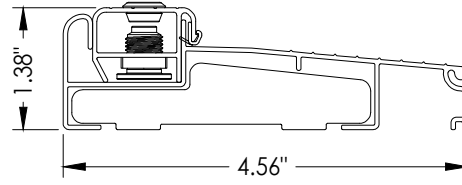
4 VERTICAL CROSS SECTION



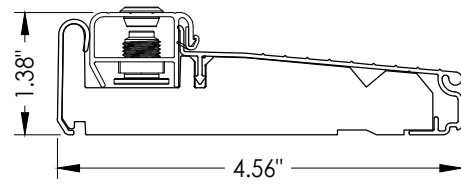
1 INSWING ADJUSTABLE THRESHOLD



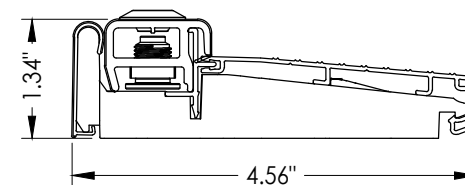
2 INSWING ADJUSTABLE THRESHOLD



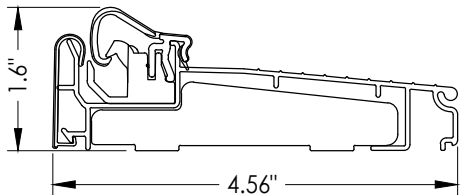
3 INSWING ADJUSTABLE THRESHOLD



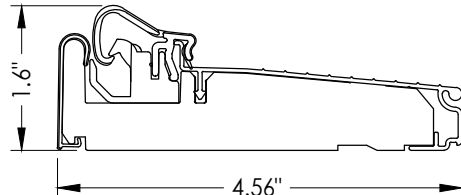
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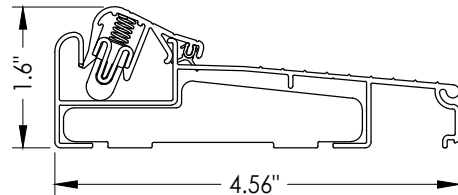
5 INSWING ADJUSTABLE THRESHOLD



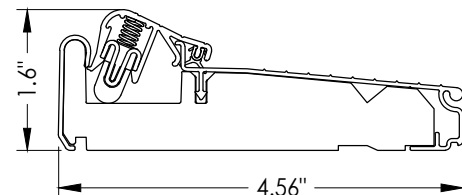
6 INSWING ARTICULATING THRESHOLD



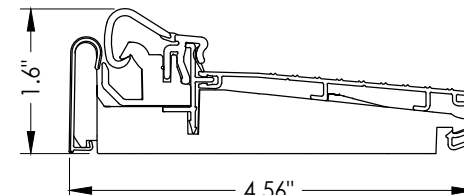
7 INSWING ARTICULATING THRESHOLD
ZAC4565FN



8 INSWING ARTICULATING THRESHOLD

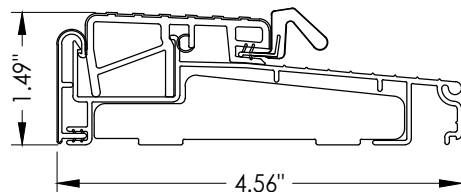


9 INSWING ARTICULATING THRESHOLD
ZACAA4565FN

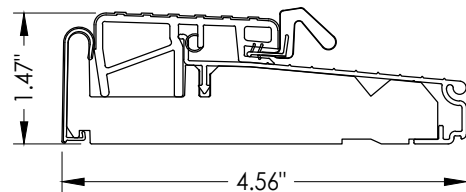


10 INSWING ARTICULATING THRESHOLD
ZAC4565RDS

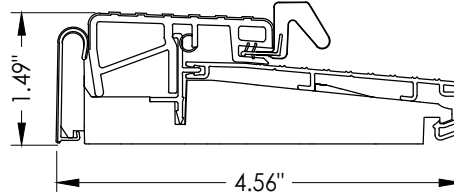
MAX. DESIGN PRESSURE = ± 35 PSF



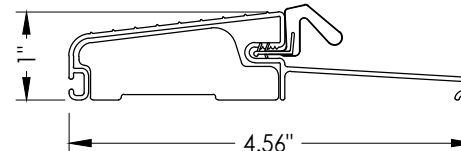
11 OUTSWING THRESHOLD



12 OUTSWING THRESHOLD



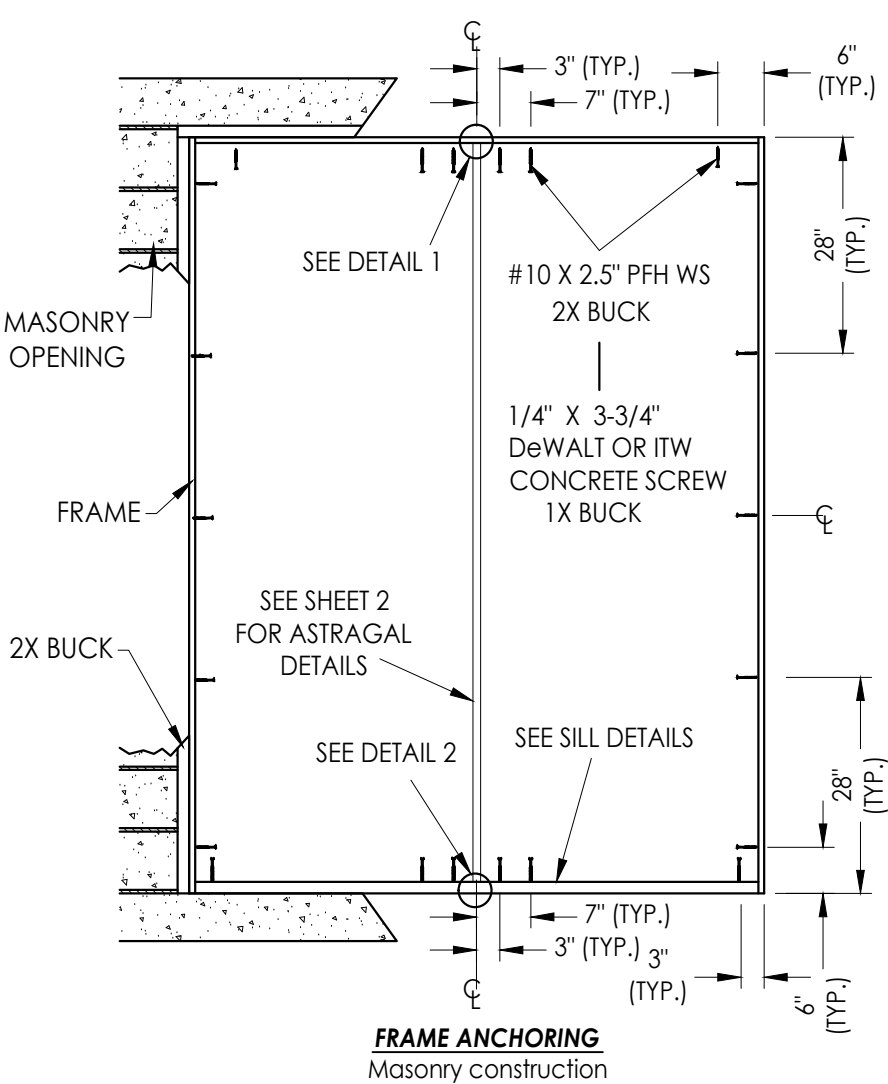
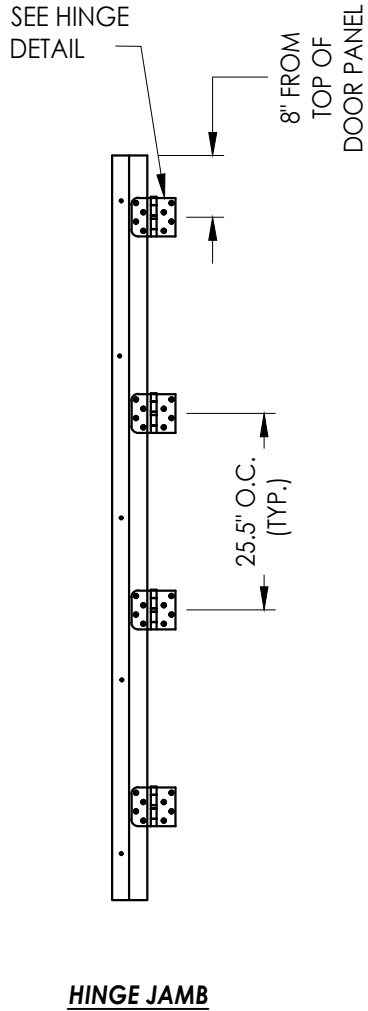
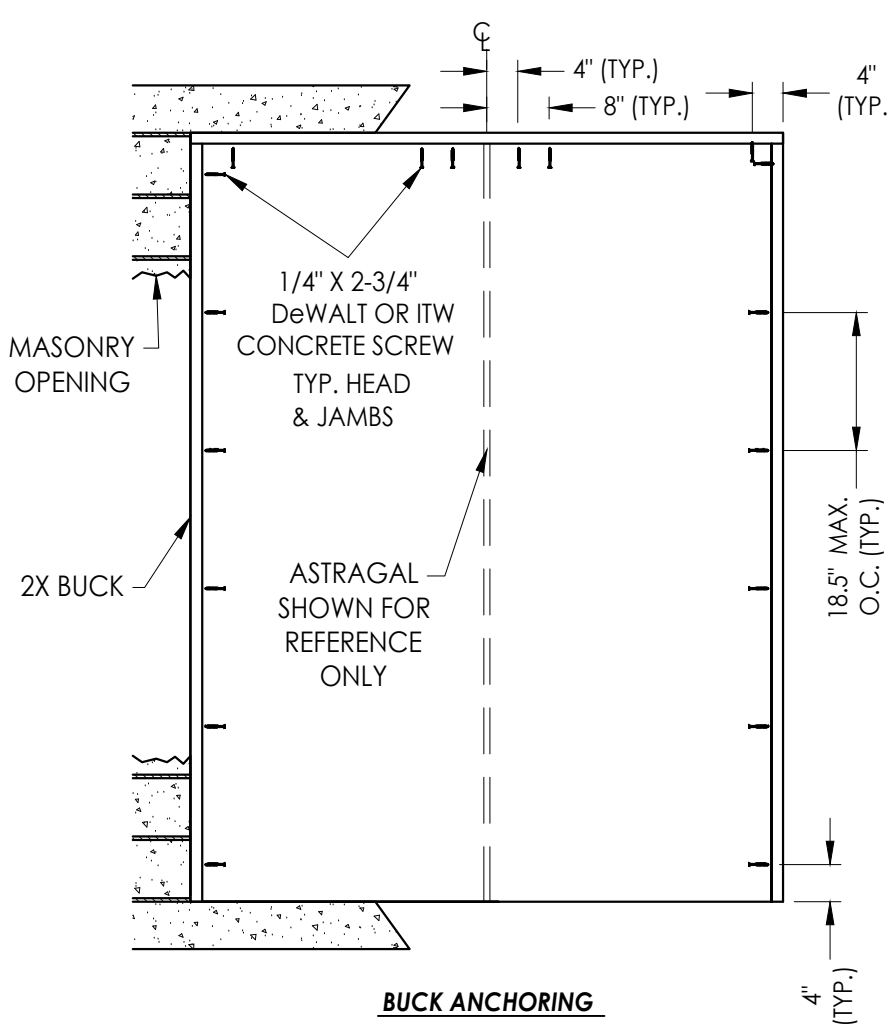
13 OUTSWING THRESHOLD



14 **OUTSWING THRESHOLD**
FOB4566

DATE: 5/24/16		SCALE: N.T.S.		DWG. BY: JK		CHK. BY: LFS		DRAWING NO.: FL-16634.11	
SHEET 5 OF 6		NO.		DATE		REVISIONS			
7	7/03/26	UPDATE TO 9TH ED. (2026)	FBC	LFS					
6	7/07/23	UPDATE TO 8TH ED. (2023)	FBC	LFS					
5	8/12/20	UPDATE TO 7TH ED. (2020)	FBC	LFS					
				NO.	DATE				
PRODUCT: ENDURA		PART OR ASSEMBLY: THRESHOLD DETAILS							
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									

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CORROSION RESISTANCE - SALTWATER ENVIRONMENT
Fasteners & connectors in areas within 3000 ft (914 m) of a saltwater coastline shall comply with FBC Sections 1711.1 or R332.1.

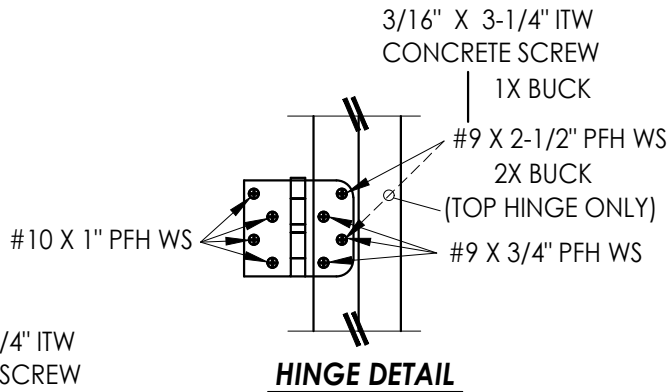
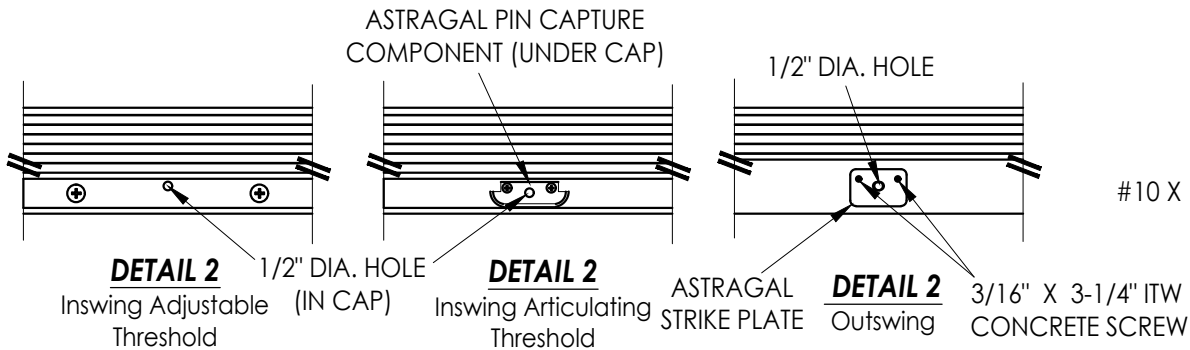
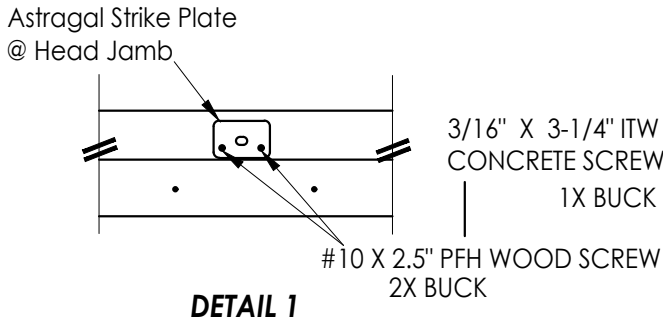
CONCRETE ANCHOR NOTES:

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

PRODUCT:
ENDURA

PART OR ASSEMBLY:
BUCK & FRAME ANCHORING

NO.	DATE	REVISIONS
7	7/03/26	UPDATE TO 9TH ED. (2026) FBC LFS
6	7/07/23	UPDATE TO 8TH ED. (2023) FBC LFS
5	8/12/20	UPDATE TO 7TH ED. (2020) FBC LFS

DATE: 10/24/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-16634.11

SHEET 6 OF 6