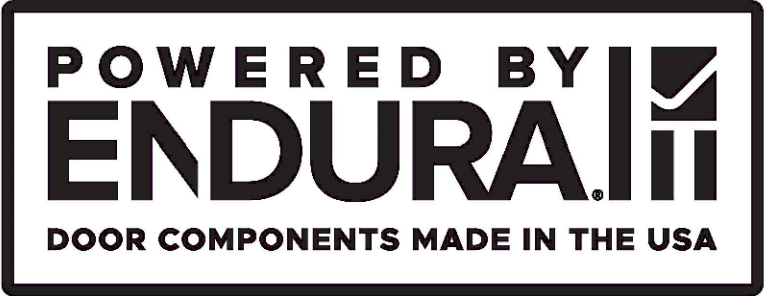


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Ultimate/Ultimate Compatible
Hurricane Astragal
INSWING / OUTSWING
"NON-IMPACT"

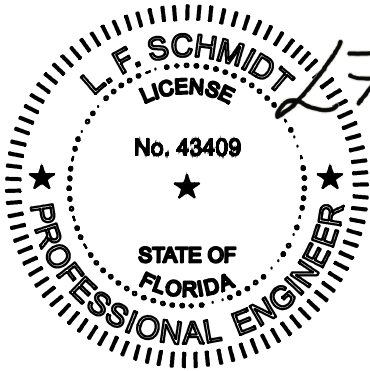
GENERAL NOTES

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



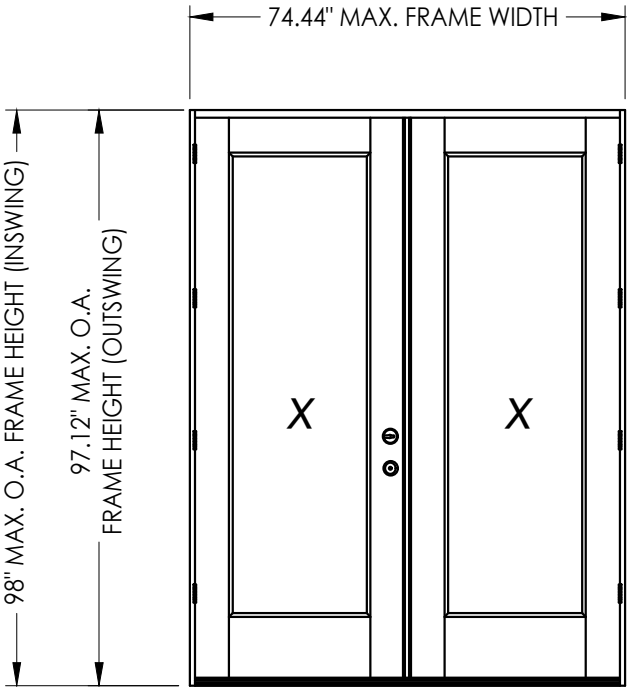
Ultimate/Ultimate Compatible
Hurricane Astragal



Digitally signed by Lyndon F Schmidt
Date: 2026.07.18 11:02:09 -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/ULTIMATE COMPATIBLE HURRICANE ASTRAGAL by ENDURA				
MAXIMUM FRAME SIZE*			DESIGN PRESSURE RATING (PSF)	
			POSITIVE	NEGATIVE
THERMA TRU Insert Glazed (Steel)	INSWING	74.44" X 98"	+35.0	-40.0
	OUTSWING	74.44" X 97.12"	+45.0	-45.0

*NOTE: INCREASE THE MAXIMUM FRAME WIDTH BY 3/16" TO ACCOMODATE THE OPTIONAL
ULTIMATE COMPATIBLE HURRICANE ASTRAGAL WHEN USED.

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

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

PRODUCT: ENDURA

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

8	7/03/26	UPDATE TO 9TH ED. (2026)	FBC	LFS
7	7/07/23	UPDATE TO 8TH ED. (2023)	FBC	LFS
6	6/06/18	UPDATE FOR NEW TESTING		LFS
NO.	DATE			BY
REVISIONS				

DATE: 10/24/13

SCALE: N.T.S.

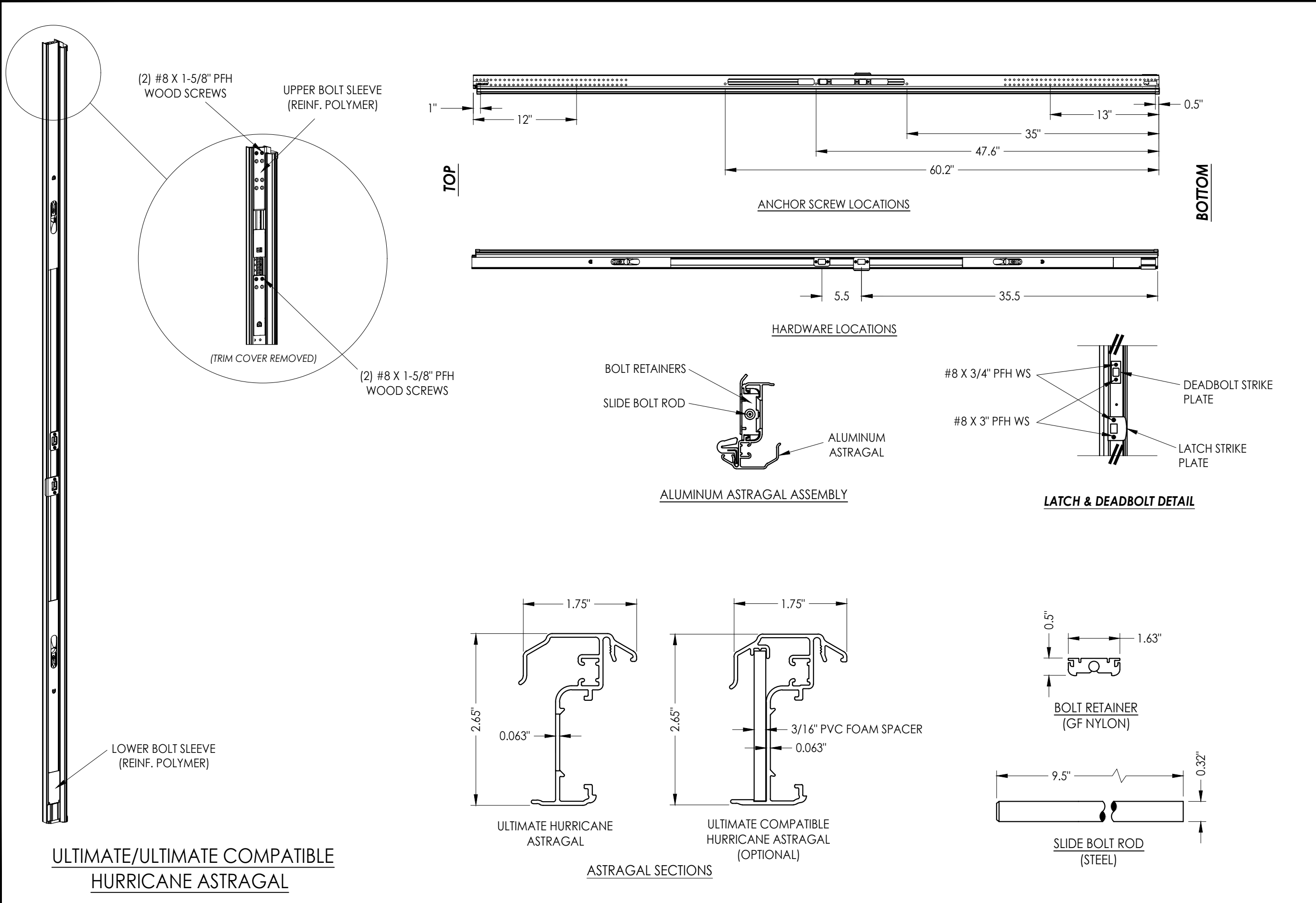
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-16634.14

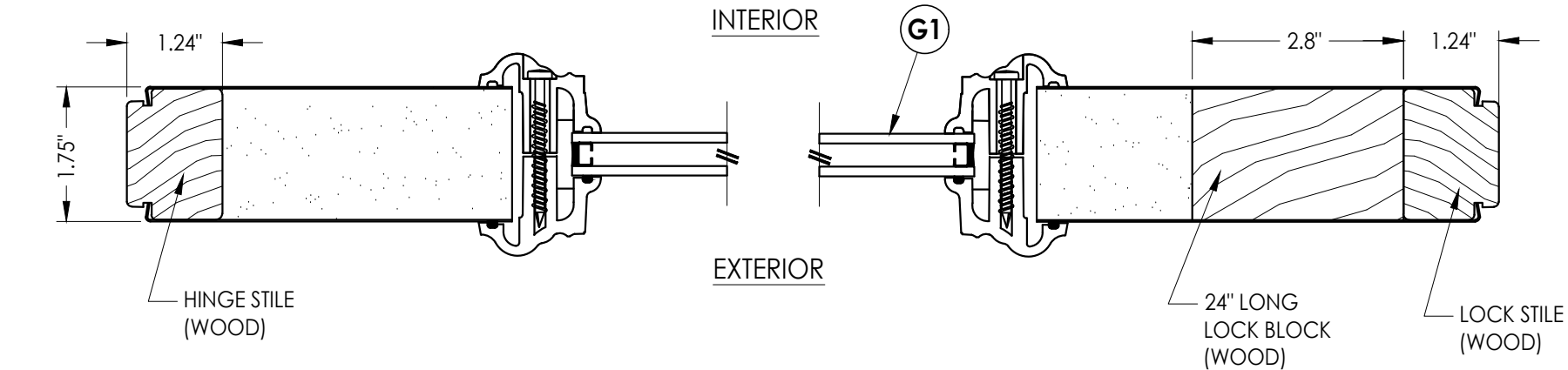
SHEET 1 OF 6

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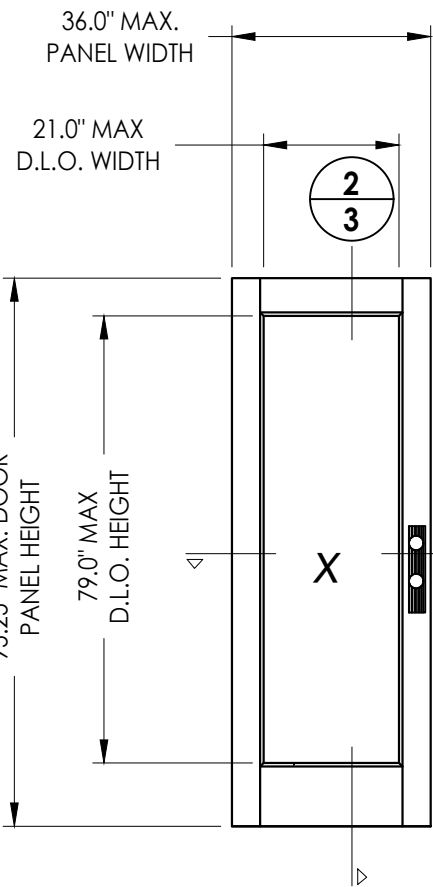


Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	
PRODUCT: ENDURA		PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE HURRICANE)	
		LFS	BY
		FBC	
8	7/03/26	UPDATE TO 9TH ED. (2026)	
7	7/07/23	UPDATE TO 8TH ED. (2023)	
6	6/06/18	UPDATE FOR NEW TESTING	
NO.	DATE	REVISIONS	
DATE: 10/24/13			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-16634.14			
SHEET 2 OF 6			

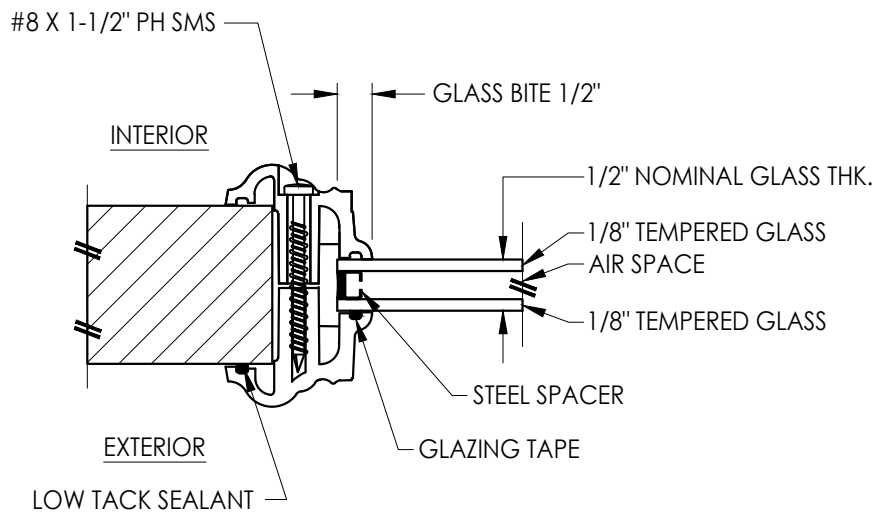
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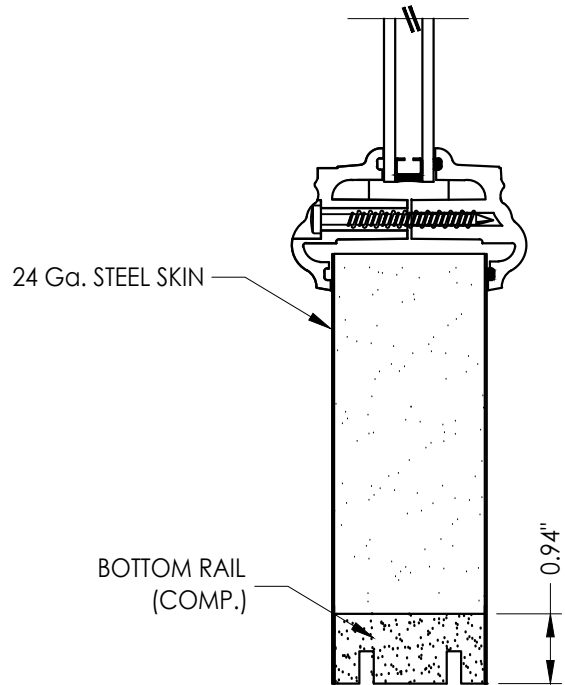
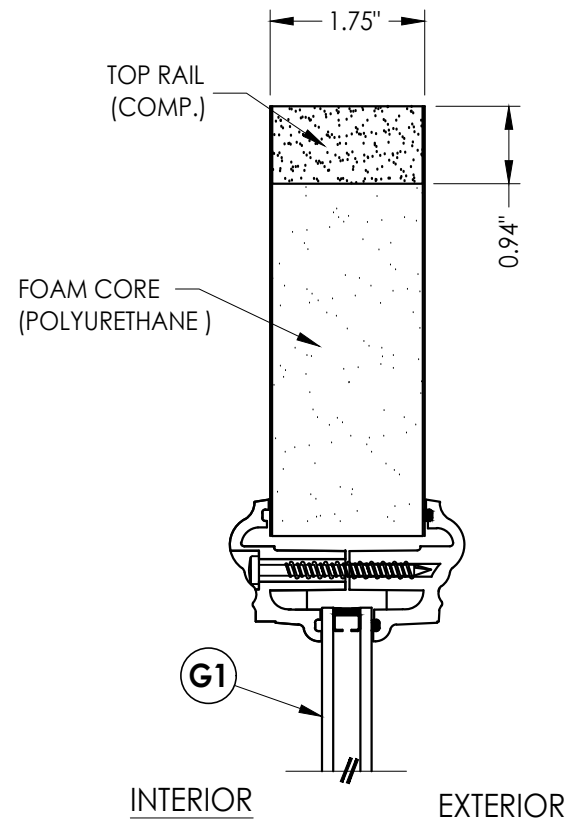
1
3 **HORIZONTAL CROSS SECTION**



THERMA-TRU
Insert glazed
(steel)



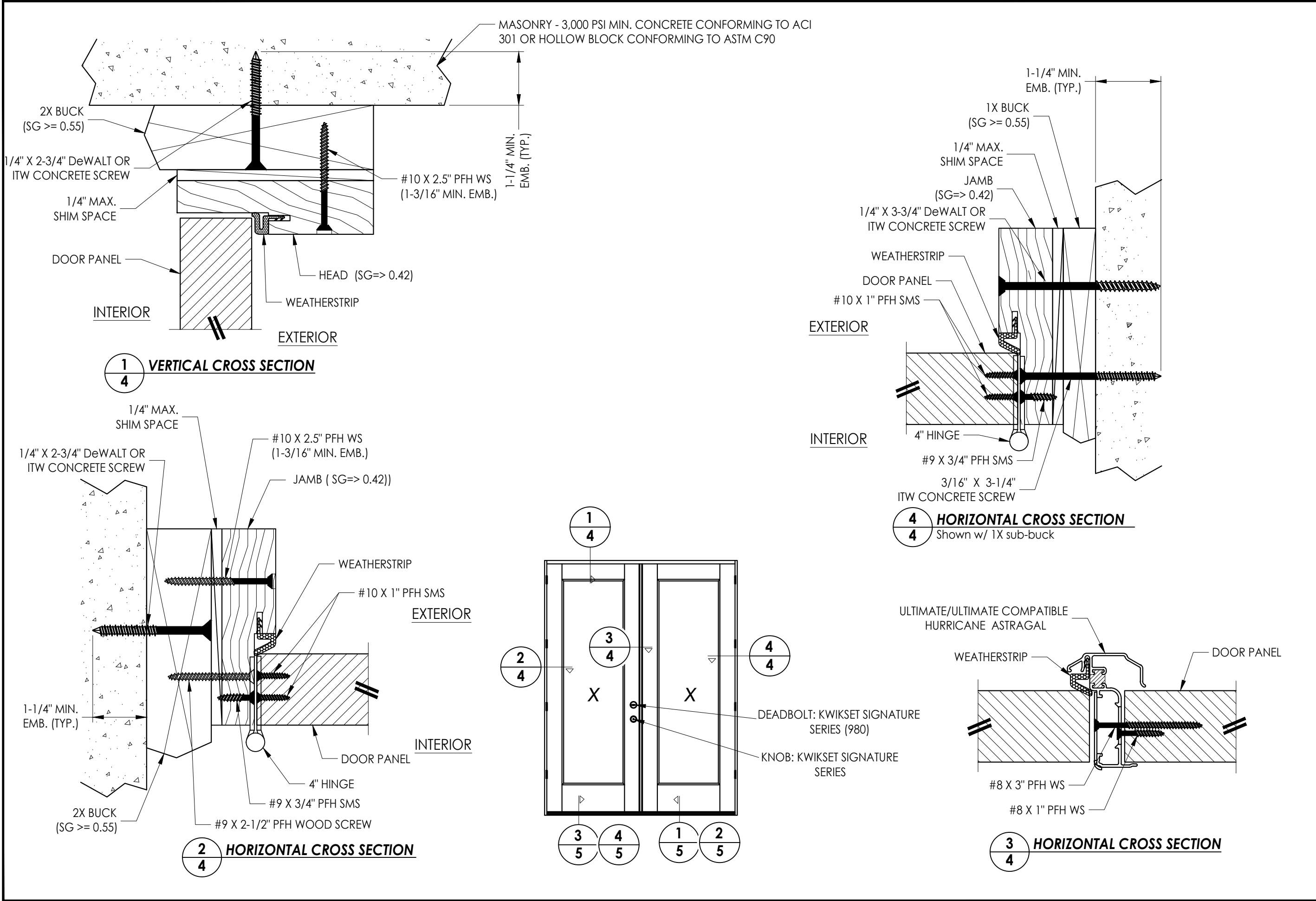
G1 **GLAZING DETAIL**
Lip Lite Insert Glazing



2
3 **VERTICAL CROSS SECTION**

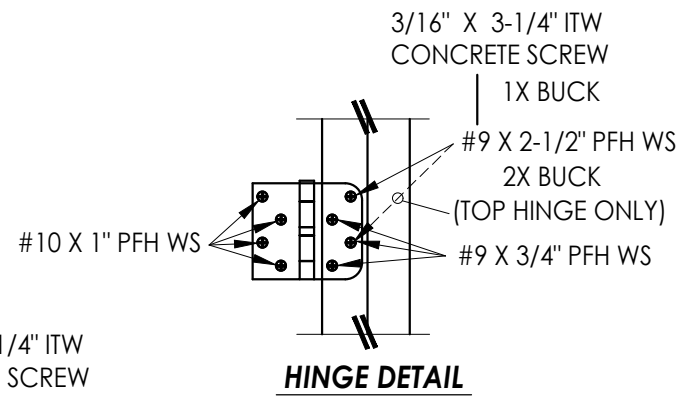
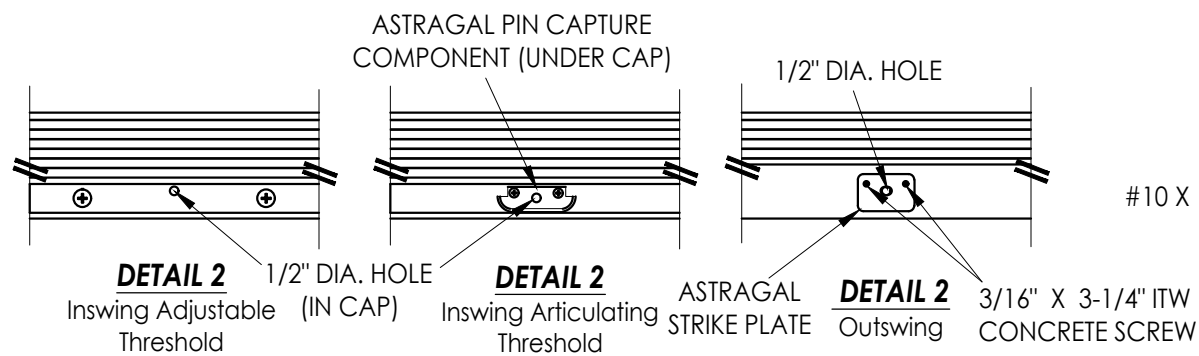
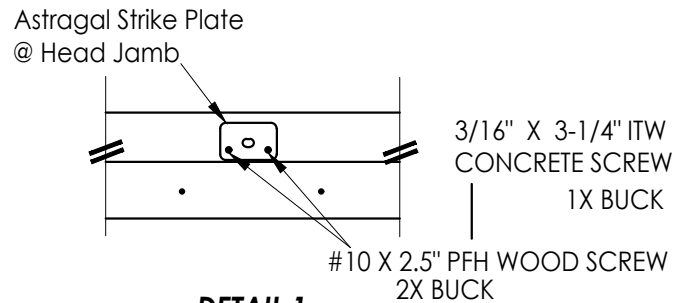
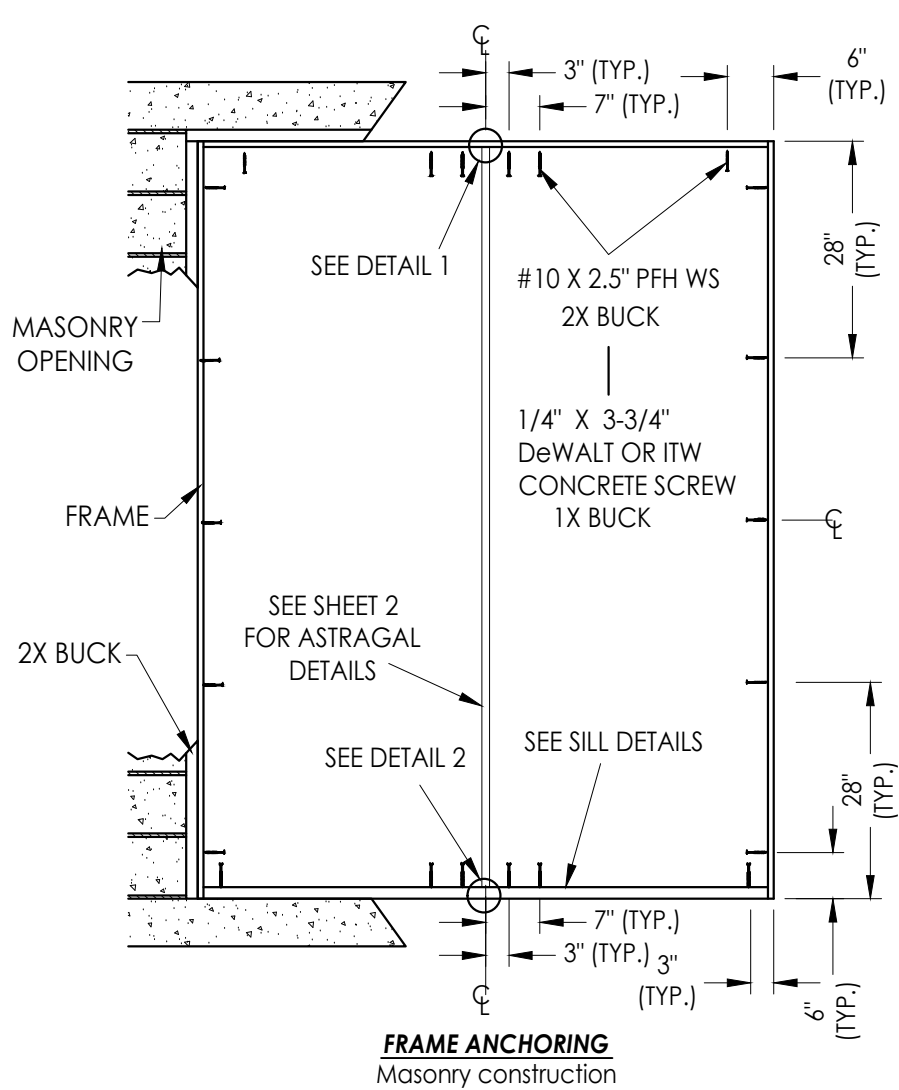
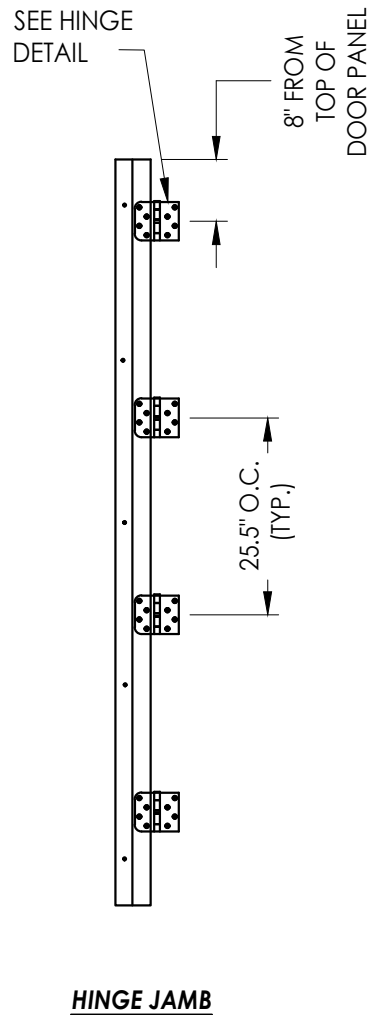
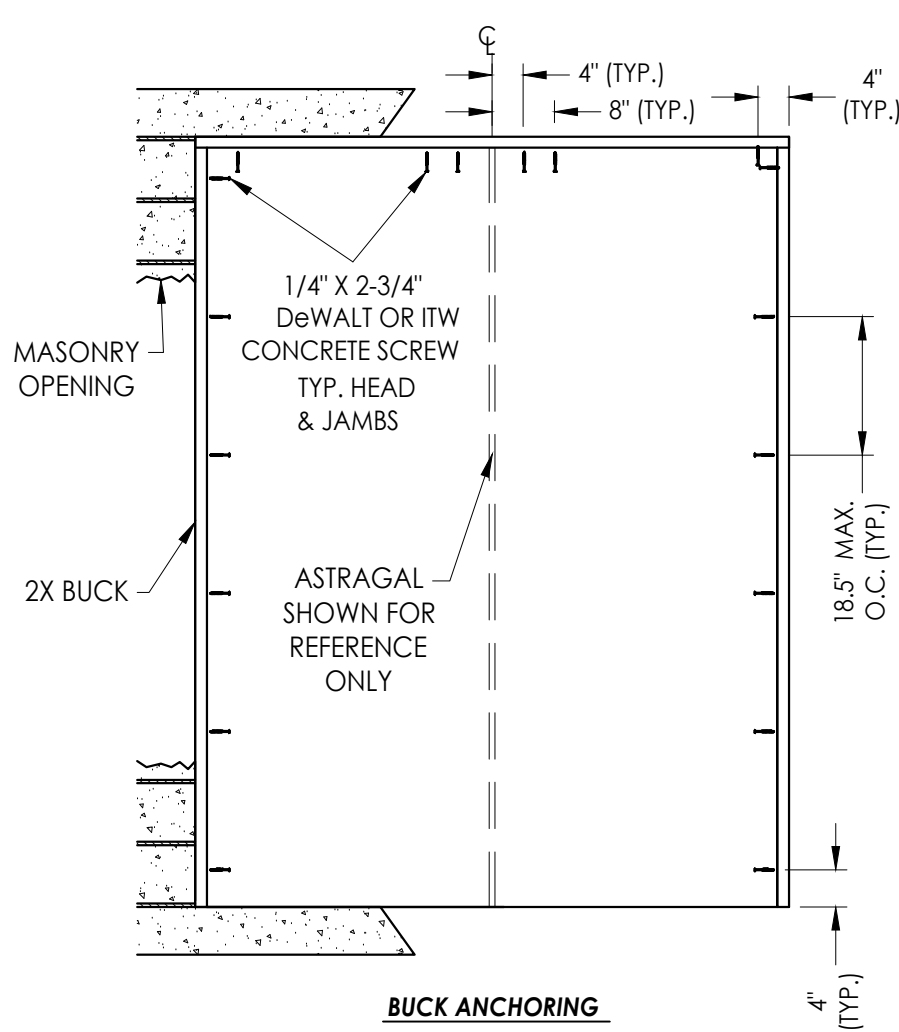
Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409					BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813				
PRODUCT: ENDURA					PART OR ASSEMBLY: DOOR PANEL DETAILS & GLAZING DETAIL				
8	7/03/26	UPDATE TO 9TH ED. (2026)	FBC	LFS					
7	7/07/23	UPDATE TO 8TH ED. (2023)	FBC	LFS					
6	6/06/18	UPDATE FOR NEW TESTING	LFS	LFS					
NO.	DATE			BY					
					REVISIONS				
DATE: 10/24/13									
SCALE: N.T.S.									
DWG. BY: JK									
CHK. BY: LFS									
DRAWING NO.: FL-16634.14									
SHEET 3 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: HORIZONTAL AND VERTICAL CROSS SECTIONS	
		LFS	
		FBC	
		(2026)	
		UPDATE TO 9TH ED.	
		7/03/26	
		8	
		FBC	
		(2023)	
		UPDATE TO 8TH ED.	
		7/07/23	
		7	
		LFS	
		UPDATE FOR NEW TESTING	
		6/06/18	
		6	
		NO.	
		DATE	
		REVISIONS	
DATE: 10/24/13			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-16634.14			
SHEET 4 OF 6			

Z:\2023 FBC Drawings\Endura Products\FL-16634 R10\FL-16634.13-16.dwg



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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RW BUILDING CONSULTANTS, INC.
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
8	7/03/26	UPDATE TO 9TH ED. (2026) FBC LFS
7	7/07/23	UPDATE TO 8TH ED. (2023) FBC LFS
6	6/06/18	UPDATE FOR NEW TESTING LFS
NO.	DATE	BY

DATE: 10/24/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-16634.14

SHEET 6 OF 6