

Ultimate Hurricane Astragal
INSWING / OUTSWING
"NON-IMPACT"

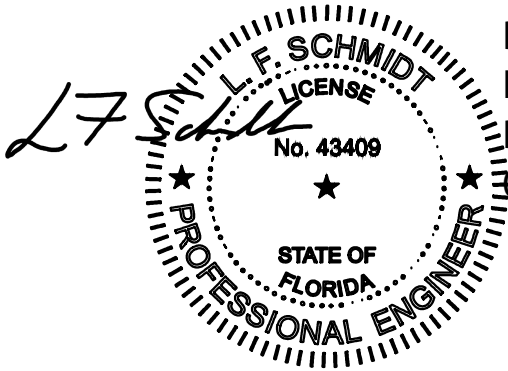
GENERAL NOTES

- 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 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



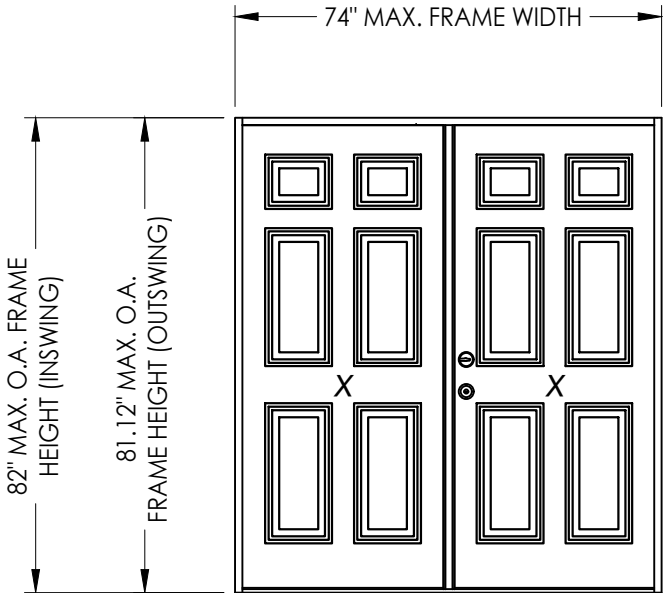
Ultimate Hurricane Astragal



Digitally signed by
Lyndon F Schmidt
Date: 2023.07.20
09:13:34 -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
MASONITE Opaque (FIBERGLASS)	INSWING	74" X 82"	+50.0	-55.0
	OUTSWING	74" X 81.12"	+55.0	-55.0

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

PRODUCT: ENDURA

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

4	7/07/23	UPDATE TO 8TH ED. (2023)	FBC	LFS
3	8/12/20	UPDATE TO 7TH ED. (2020)	FBC	LFS
2	1/30/18	REVISE FOR NEW TESTING		LFS
1	9/18/17	UPDATE TO 6TH ED. (2017)	FBC	LFS
NO.	DATE			BY

REVISIONS

DATE: 5/24/16

SCALE: N.T.S.

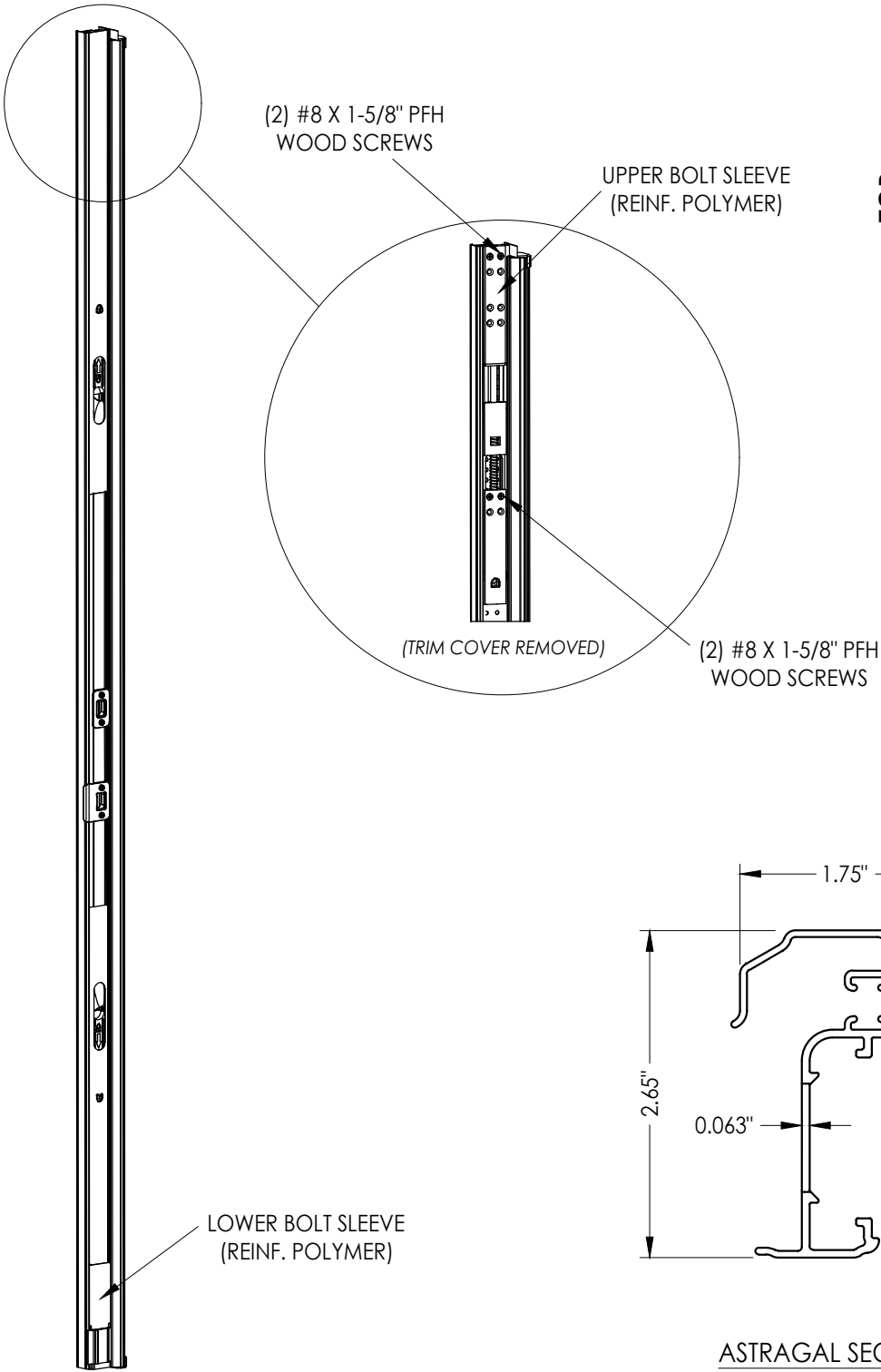
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CHK. BY: LFS

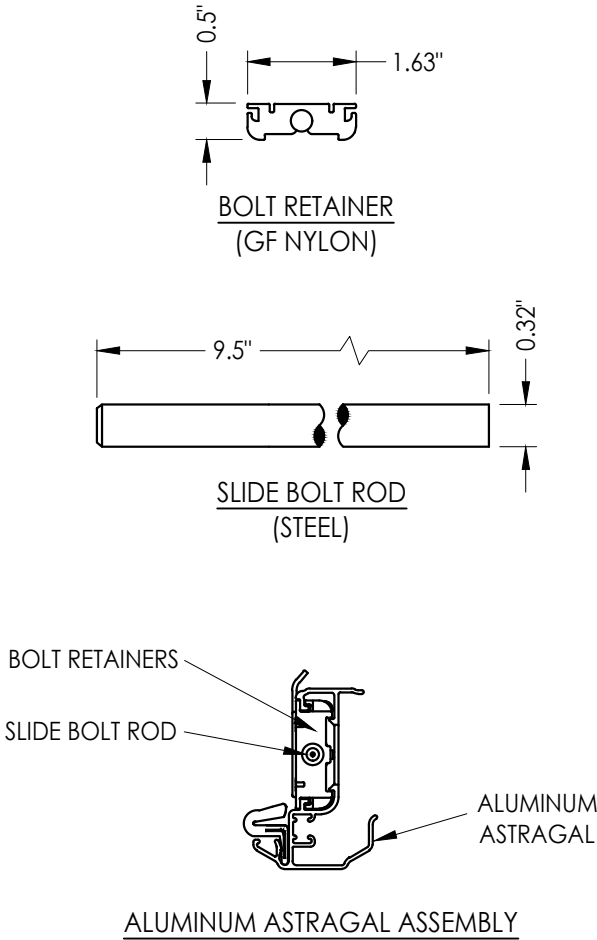
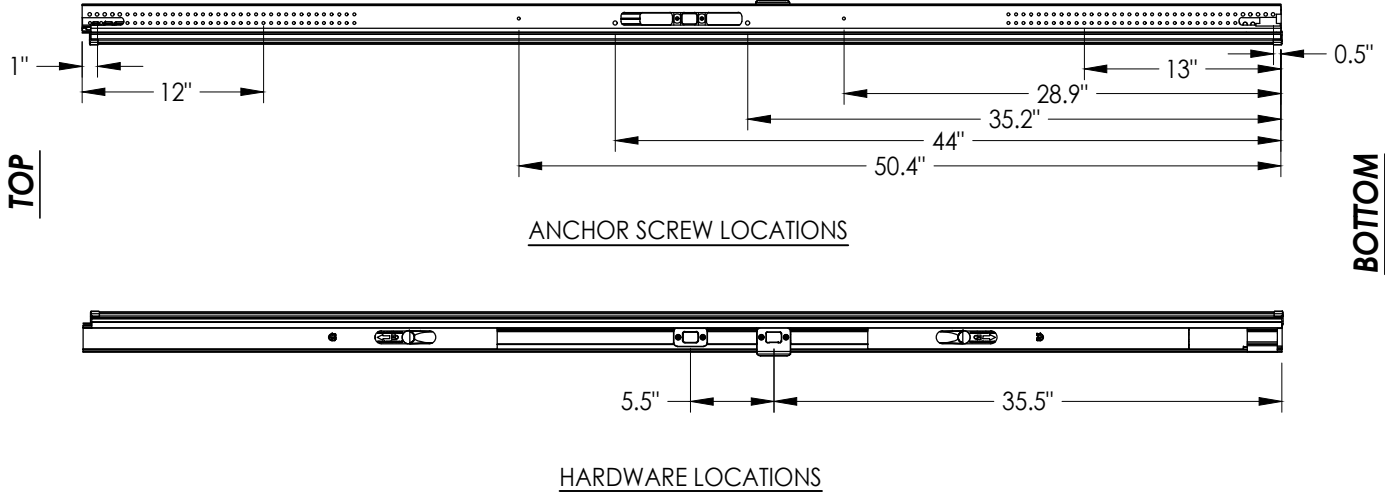
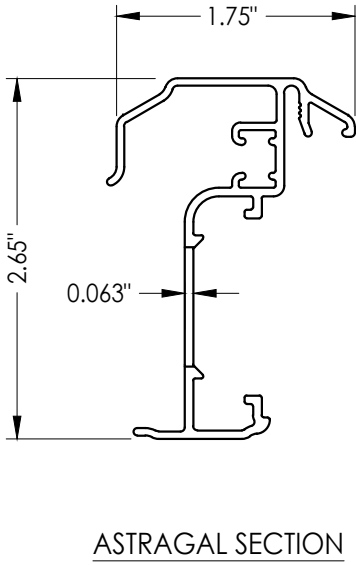
DRAWING NO.: FL-16634.18

SHEET 1 OF 6

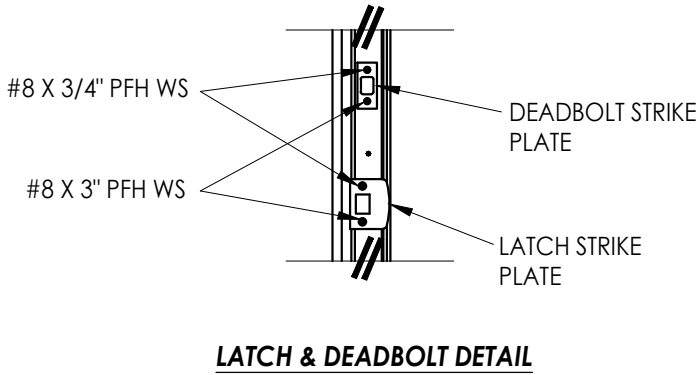
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813



ULTIMATE HURRICANE ASTRAGAL



ALUMINUM ASTRAGAL ASSEMBLY



NO.		DATE	REVISIONS			
4	7/07/23	UPDATE TO 8TH ED. (2023)	FBC	LFS		
3	8/12/20	UPDATE TO 7TH ED. (2020)	FBC	LFS		
2	1/30/18	REVISE FOR NEW TESTING	FBC	LFS		
1	9/18/17	UPDATE TO 6TH ED. (2017)	FBC	LFS		

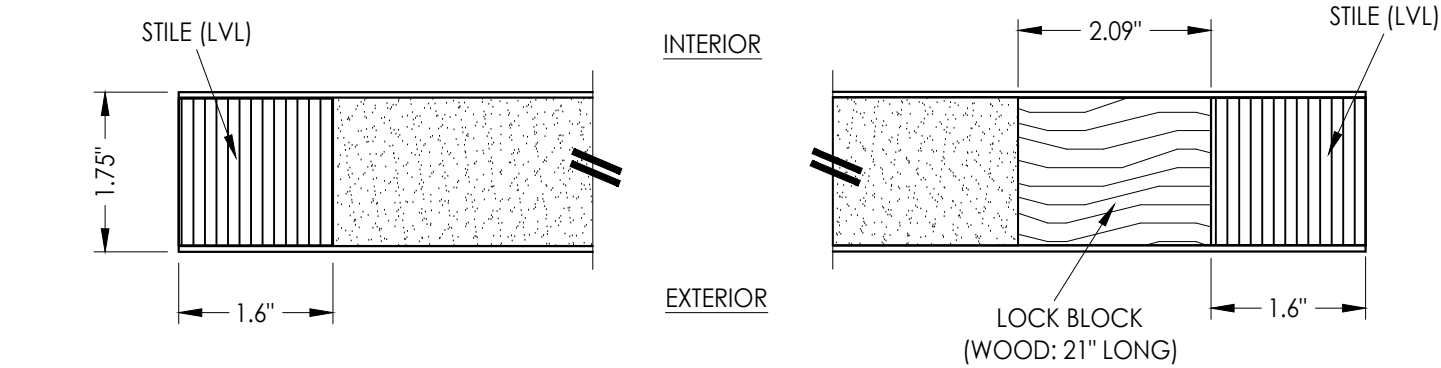
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SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-16634.18
SHEET	2 OF 6

PRODUCT:	ENDURA
PART OR ASSEMBLY:	ASTRAGAL DETAILS (ULTIMATE HURRICANE)

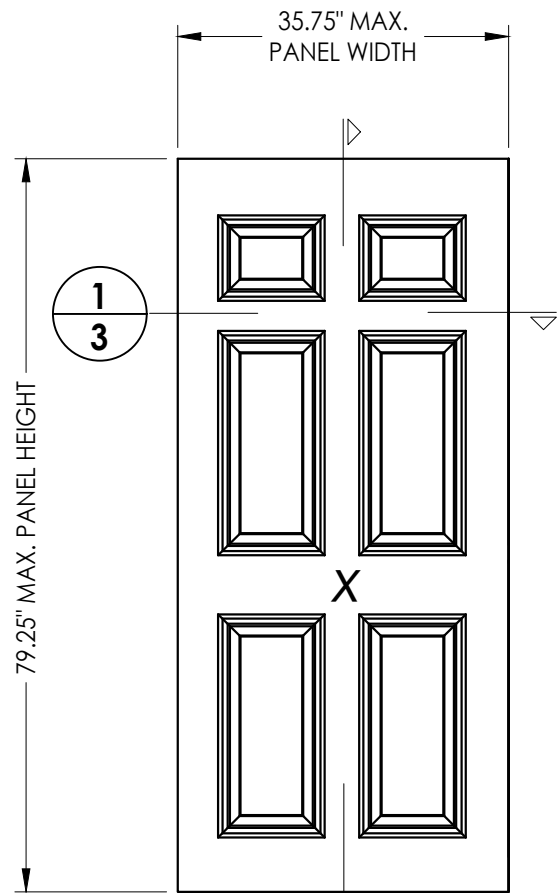
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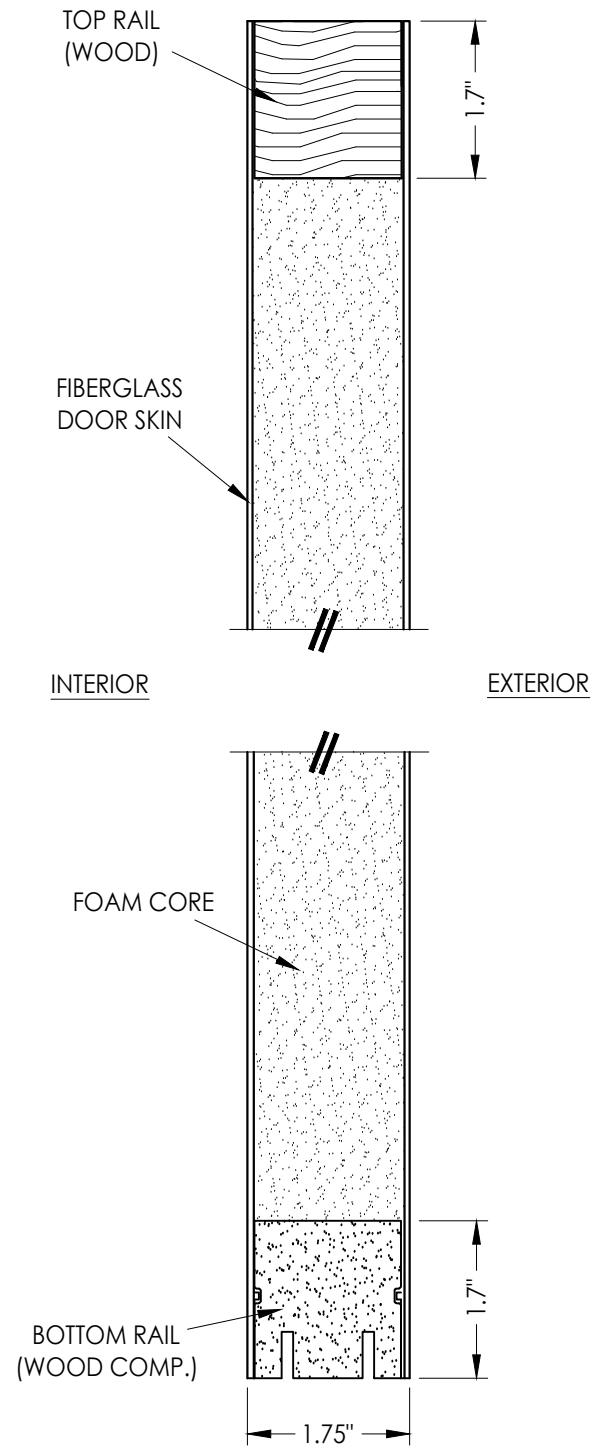


1
3 HORIZONTAL CROSS SECTION



2
3 DOOR PANEL
Masonite
Fiberglass

DOOR SKIN: FIBERGLASS (0.075" MIN. THICKNESS)
CORE MATERIAL: POLYURETHANE FOAM (1.9 PCF MIN.)



2
3 VERTICAL CROSS SECTION

NO.	DATE	REVISIONS
4	7/07/23	UPDATE TO 8TH ED. (2023) FBC LFS
3	8/12/20	UPDATE TO 7TH ED. (2020) FBC LFS
2	1/30/18	REVISE FOR NEW TESTING LFS
1	9/18/17	UPDATE TO 6TH ED. (2017) FBC LFS
NO.	DATE	BY

DATE: 5/24/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-16634.18

SHEET 3 OF 6

Documents Prepared By:
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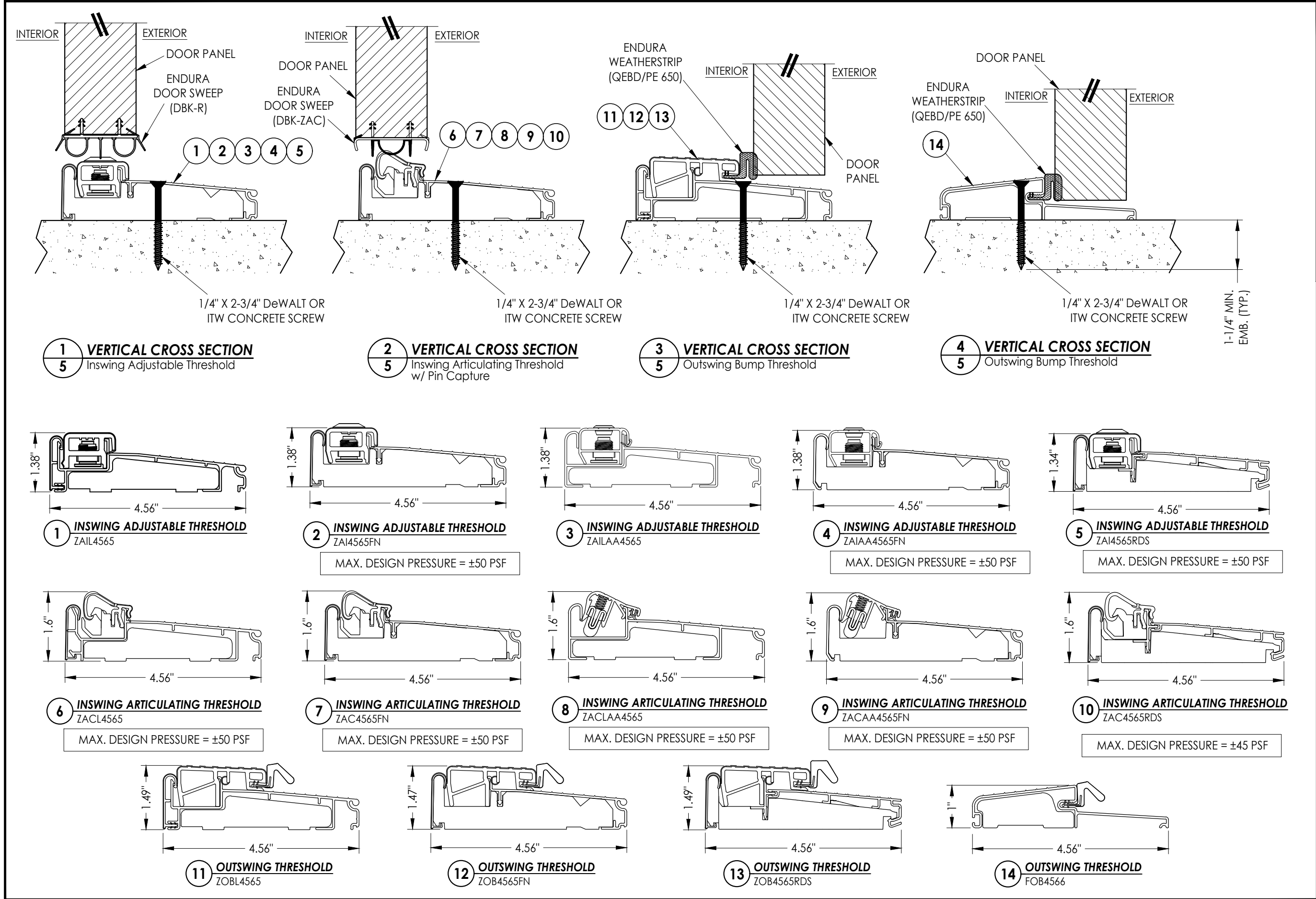
PRODUCT: ENDURA

PART OR ASSEMBLY:
DOOR PANEL DETAILS
& GLAZING DETAIL

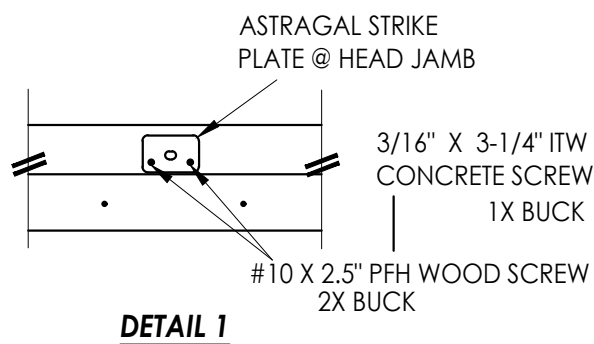
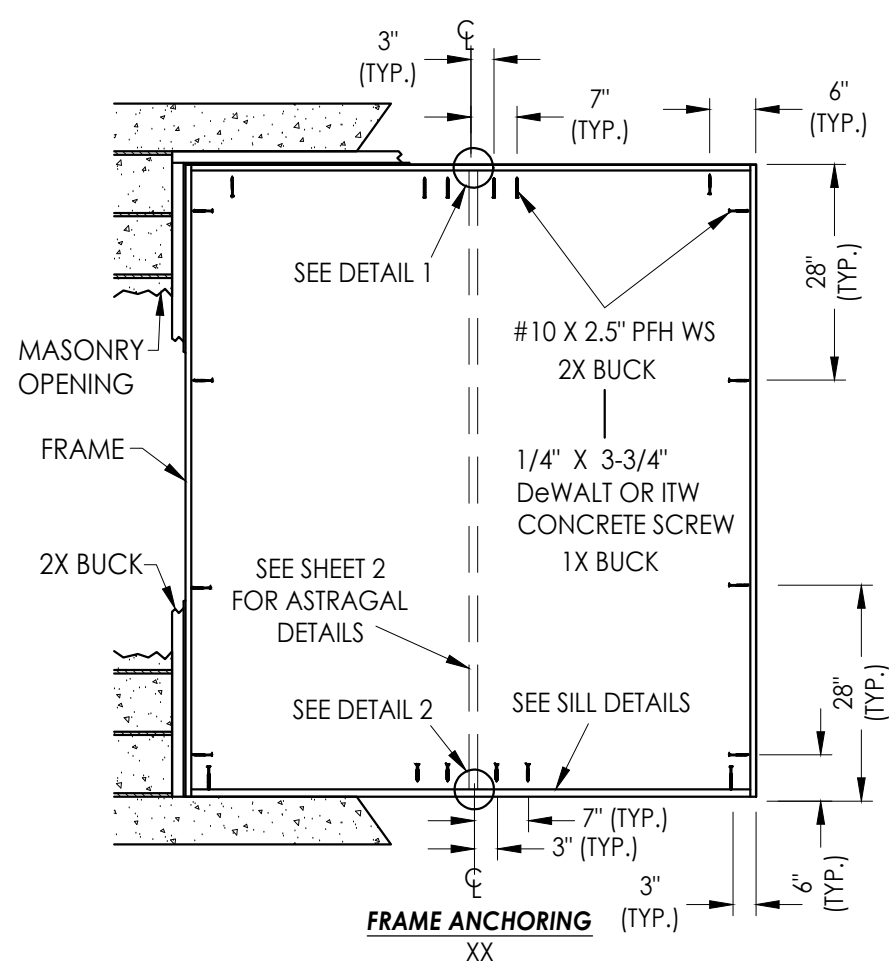
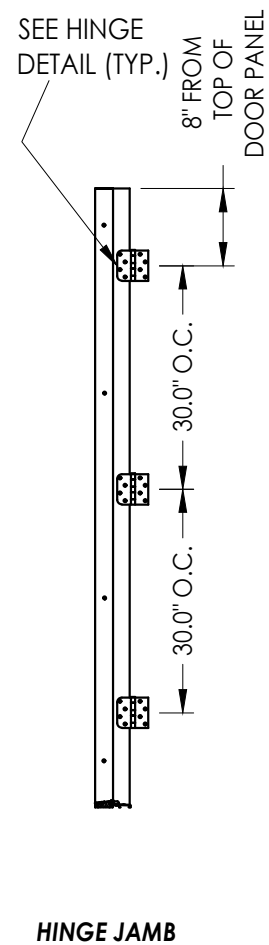
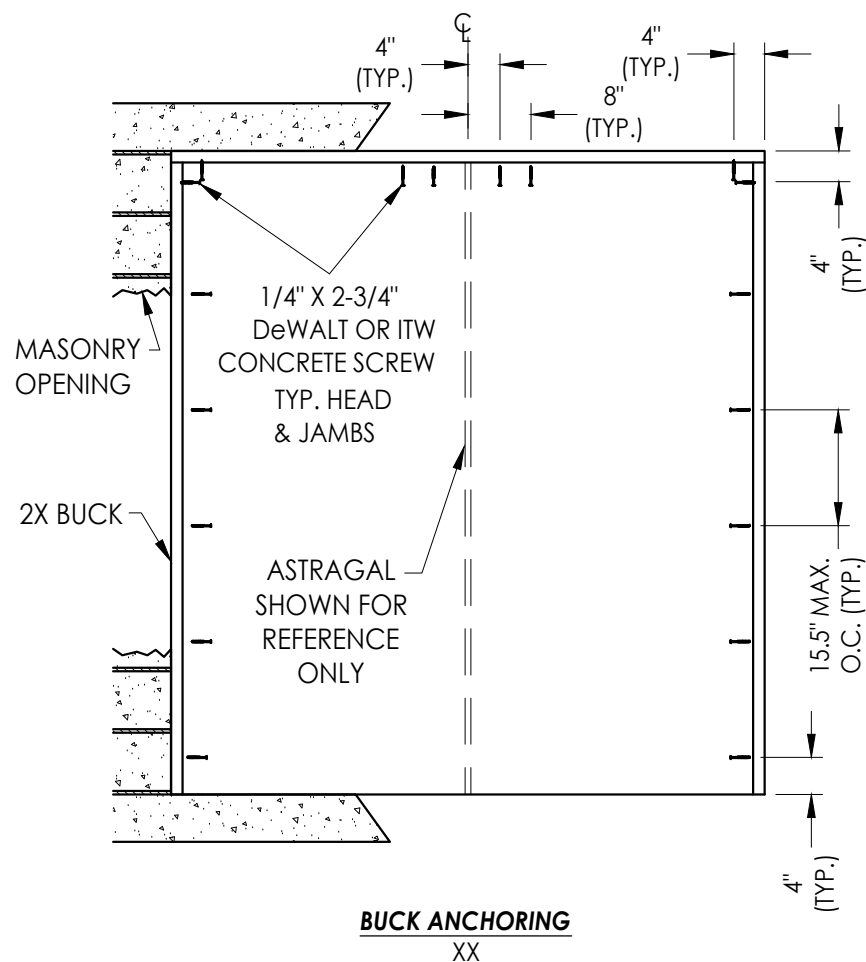
DATE: 5/24/16						
SCALE: N.T.S.						
DWG. BY: JK						
CHK. BY: LFS						
DRAWING NO.: FL-16634.18						
SHEET	4	OF	6			

NO.	DATE	REVISIONS				
4	7/07/23	UPDATE TO 8TH ED. (2023)	FBC	LFS		
3	8/12/20	UPDATE TO 7TH ED. (2020)	FBC	LFS		
2	1/30/18	REVISE FOR NEW TESTING		LFS		
1	9/18/17	UPDATE TO 6TH ED. (2017)	FBC	LFS		
NO.	DATE			BY		

PRODUCT:				ENDURA	RW BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813
PART OR ASSEMBLY:					
HORIZONTAL AND VERTICAL CROSS SECTIONS					
DOCUMENTS PREPARED BY: Lyndon F. Schmidt P.E. No. 43409					



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: THRESHOLD DETAILS	
4	7/07/23	UPDATE TO 8TH ED. (2023)	FBC
3	8/12/20	UPDATE TO 7TH ED. (2020)	FBC
2	1/30/18	REVISE FOR NEW TESTING	LFS
1	9/18/17	UPDATE TO 6TH ED. (2017)	FBC
NO	DATE	REVISIONS	
DATE: 5/24/16		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: FL-16634.18		SHEET 5 OF 6	



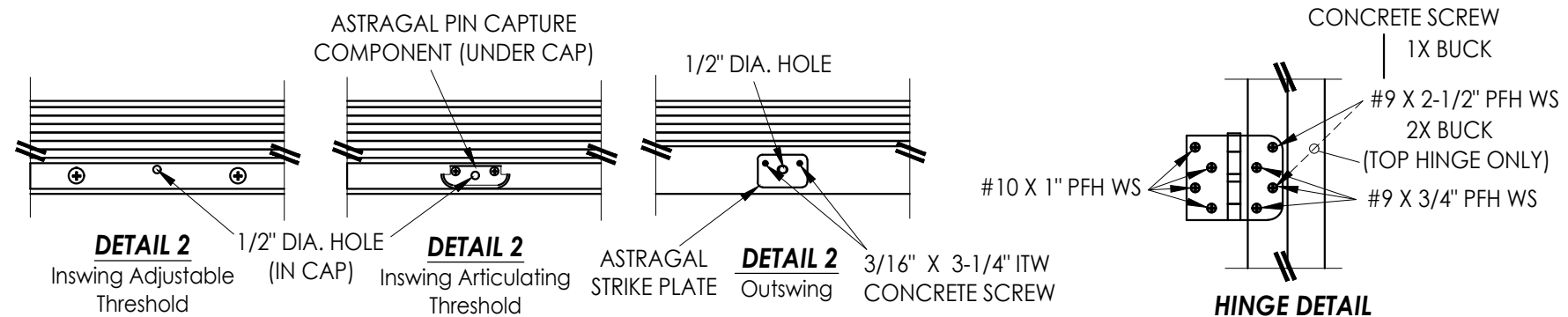
CONCRETE ANCHOR NOTES:

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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PRODUCT: ENDURA

PART OR ASSEMBLY:
BUCK AND FRAME ANCHORING

[illegible]

DATE: 5/24/16

SCALE: *N.T.S.*

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-16634.1