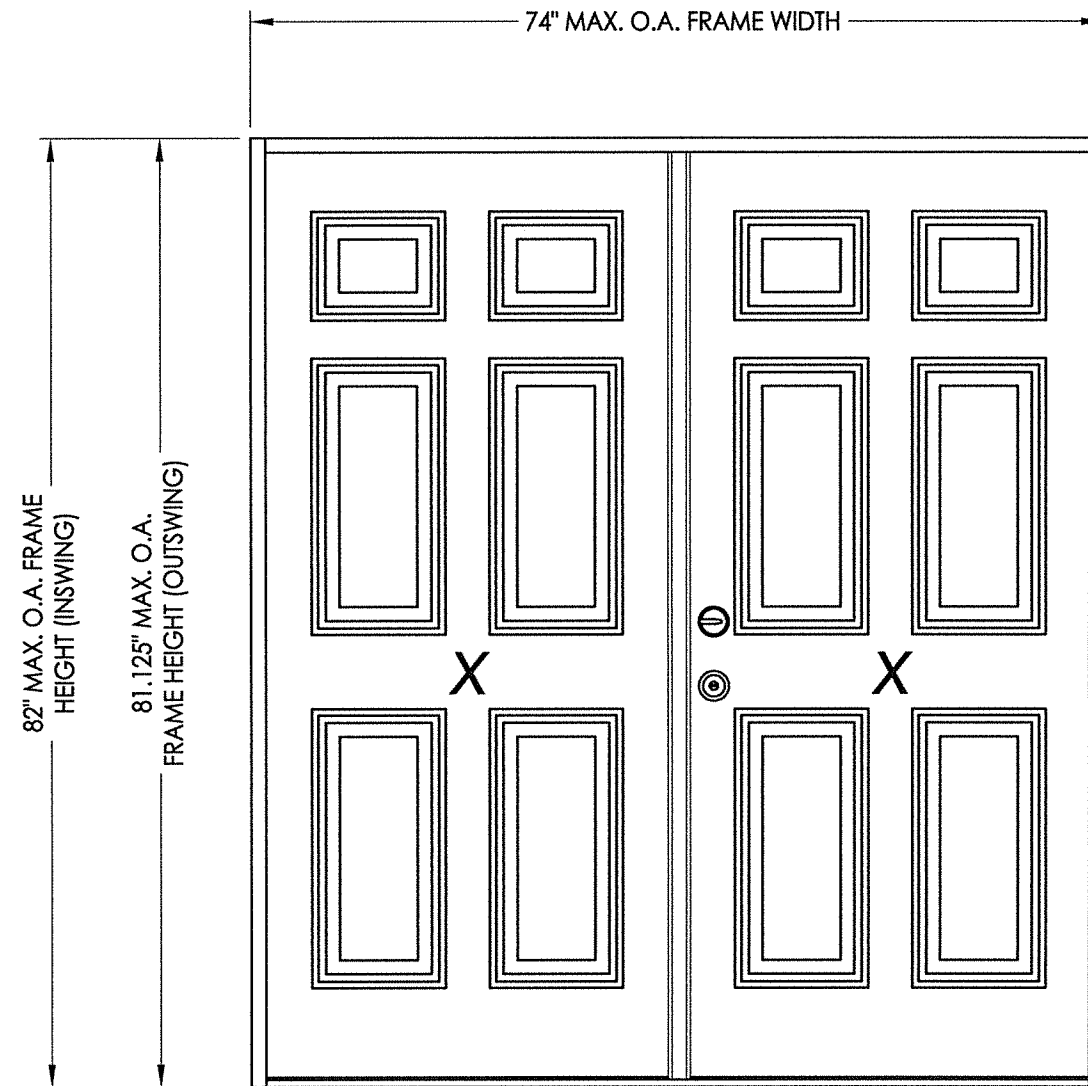




Opaque Fiberglass Door

"NON-IMPACT"
INSWING / OUTSWING



EVALUATED FOR USE IN THE STATE OF TEXAS

TDI DR-851

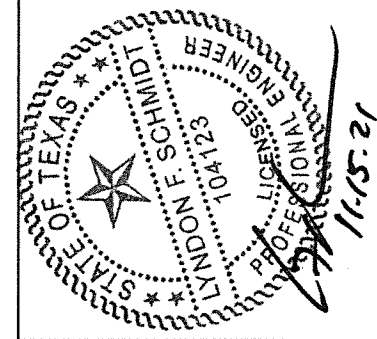
The Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. When used in areas requiring wind-borne debris protection this product is required to be protected with an impact resistant covering that complies with Section R301.2.1.2 of the IRC and Section 1609.1.2 of the IBC.
3. Allowable design pressure requirements must be equal to or less than the design pressure rating shown in the design pressure chart, sheet 1 of this drawing.
4. Conditions not covered by this drawing are subject to further engineering analysis.

TABLE OF CONTENTS

SHEET #	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Astragal details (Ultimate Multipoint)
3	Astragal details (Ultimate Hurricane)
4	Door panel details
5	Horizontal & vertical cross sections
6	Vertical cross sections
7	Frame anchoring

CONFIG.	MODEL	DESIGN PRESSURE (PSF) ULTIMATE HURRICANE ASTRAGAL		DESIGN PRESSURE (PSF) ULTIMATE MULTIPOINT ASTRAGAL	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XX	INSWING	+55.0	-55.0	+55.0	-55.0
XX	OUTSWING	+55.0	-55.0	+55.0	-55.0



Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

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P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197

TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: ENDURA

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

NO.	DATE	REVISIONS
2	11/11/21	UPDATE TO 2018 IBC/IRC CODE
1	10/02/18	UPDATE FOR NEW TESTING

DATE: 11/02/16

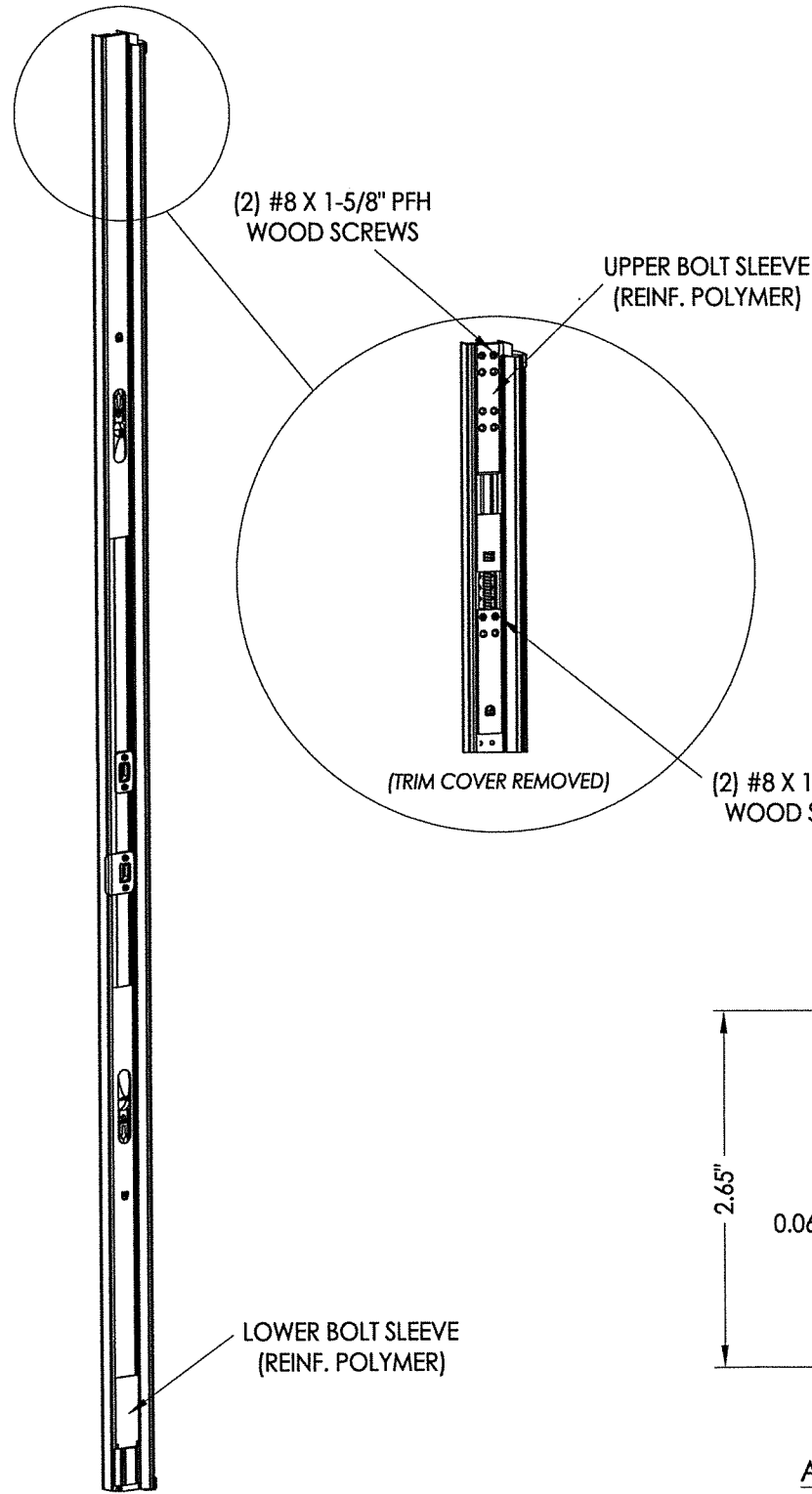
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DWG. BY: JK

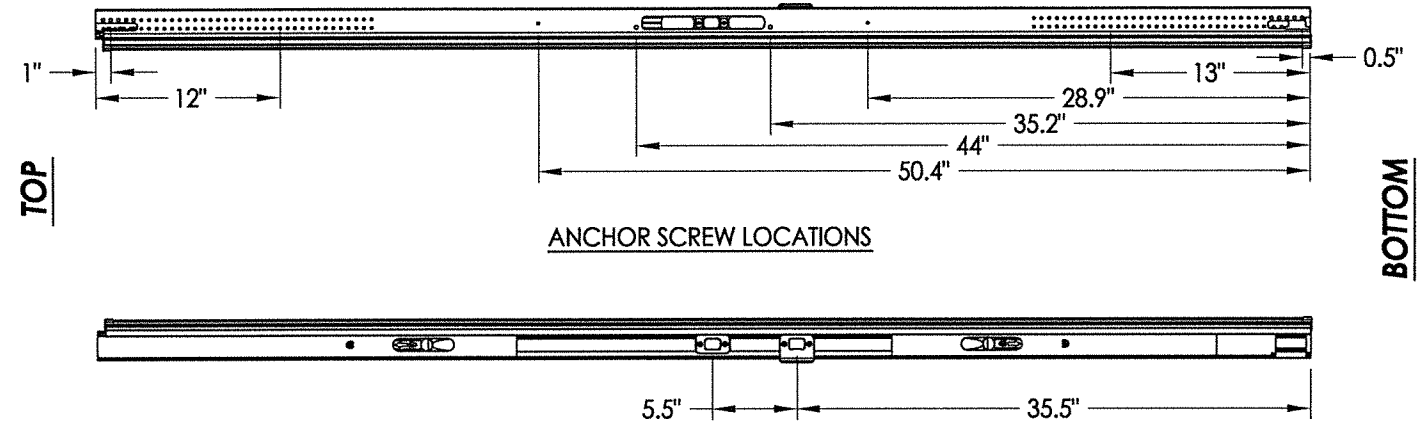
CHK. BY: LFS

DRAWING NO.: TX-4647

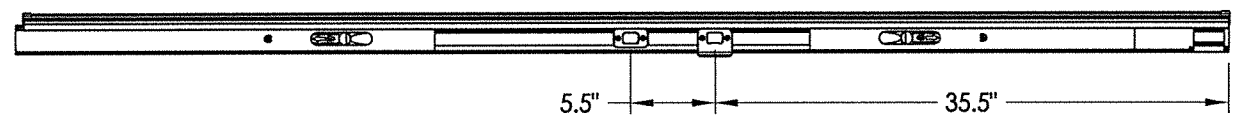
SHEET 1 OF 7



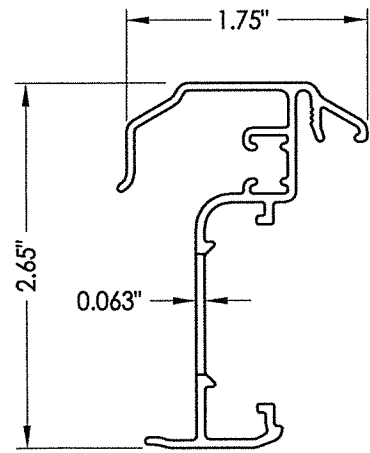
ULTIMATE HURRICANE ASTRAGAL



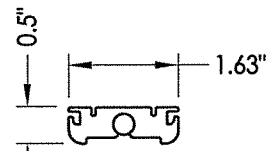
ANCHOR SCREW LOCATIONS



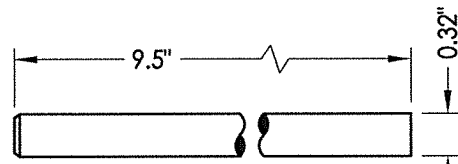
HARDWARE LOCATIONS



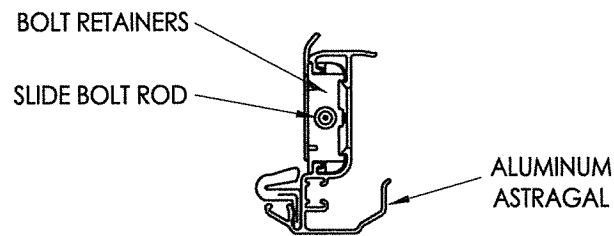
ASTRAGAL SECTION



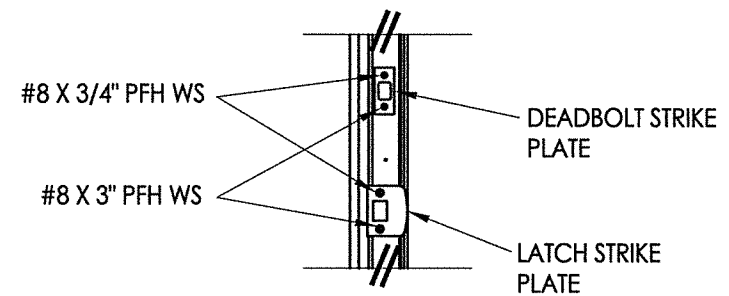
BOLT RETAINER (GF NYLON)



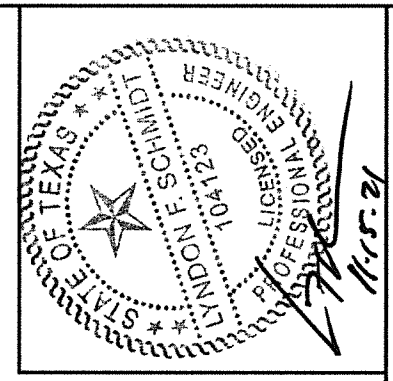
SLIDE BOLT ROD (STEEL)



ALUMINUM ASTRAGAL ASSEMBLY



LATCH & DEADBOLT DETAIL



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TEXAS P.E. #104123

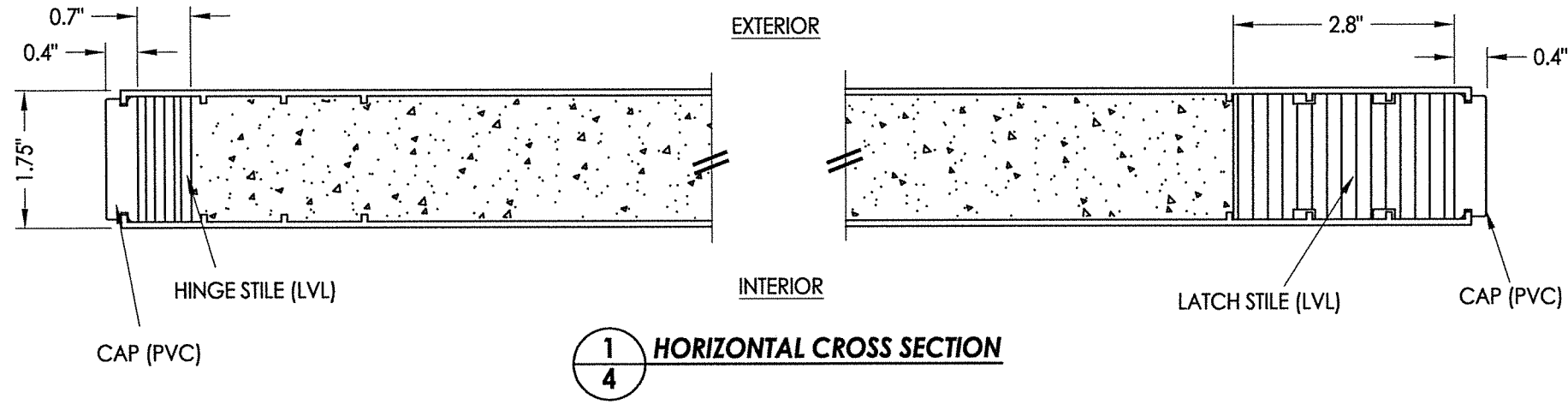
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Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA
PART OR ASSEMBLY:	ASTRAGAL DETAILS

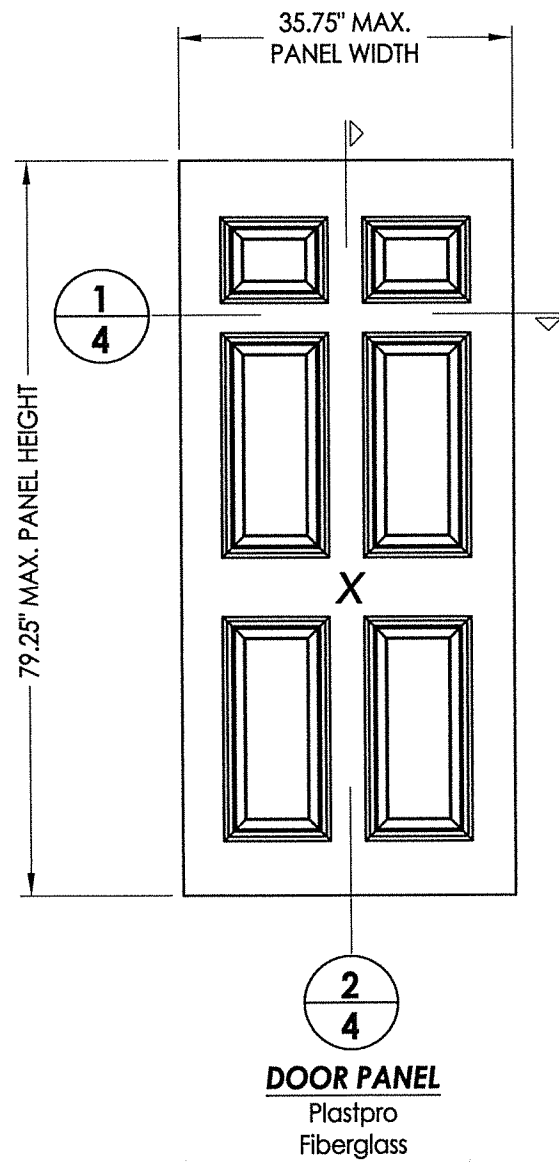
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1	10/02/18	UPDATE FOR NEW TESTING
		LFS
		BY

DATE:	11/02/16
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4647
SHEET	3 OF 7

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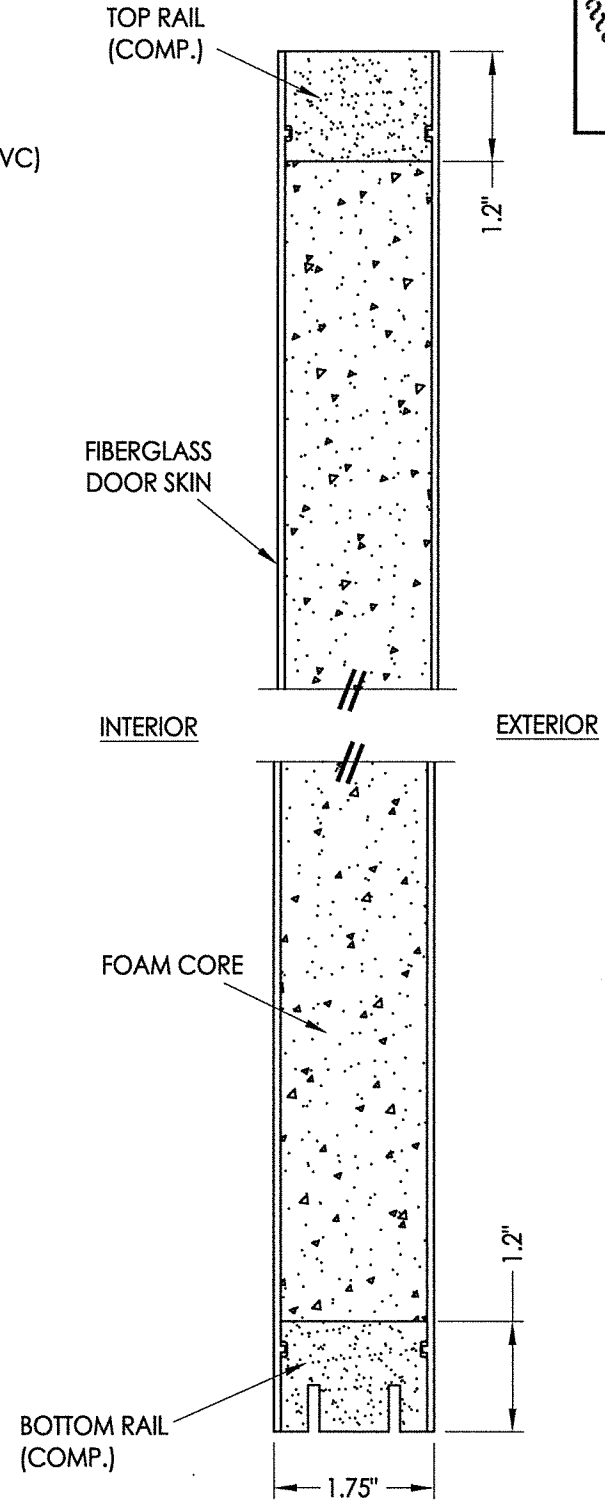


1
4 HORIZONTAL CROSS SECTION

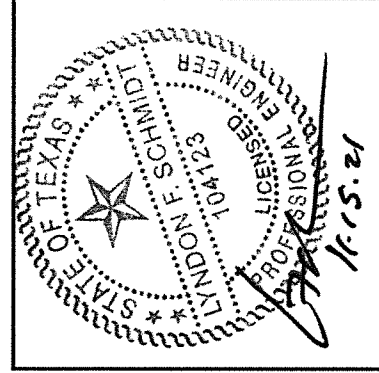


2
4 DOOR PANEL
Plastpro
Fiberglass

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



2
4 VERTICAL CROSS SECTION

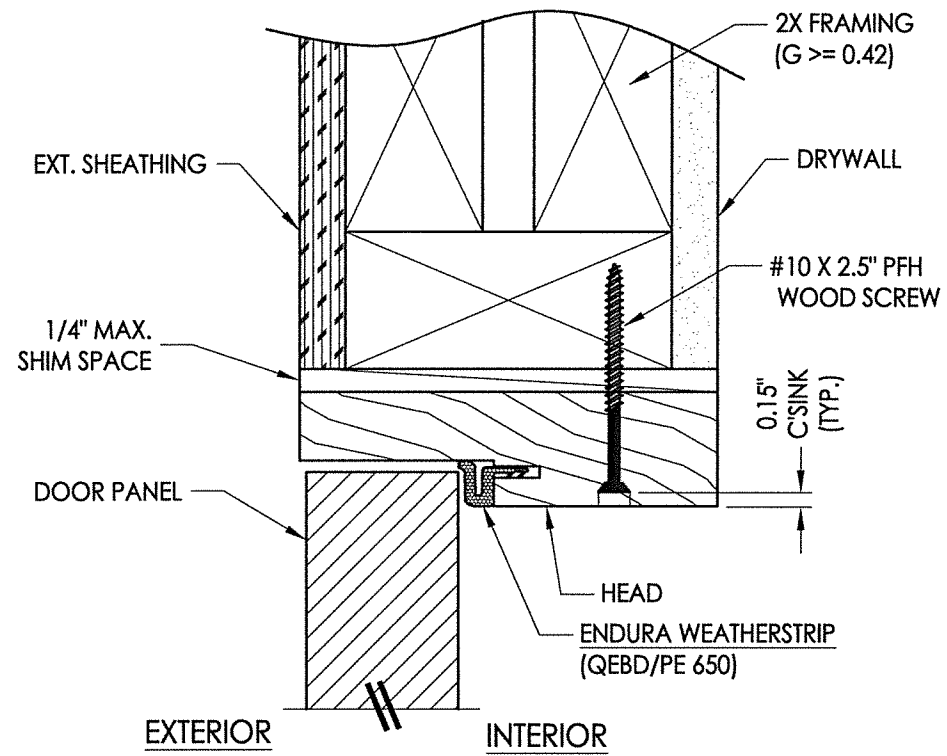
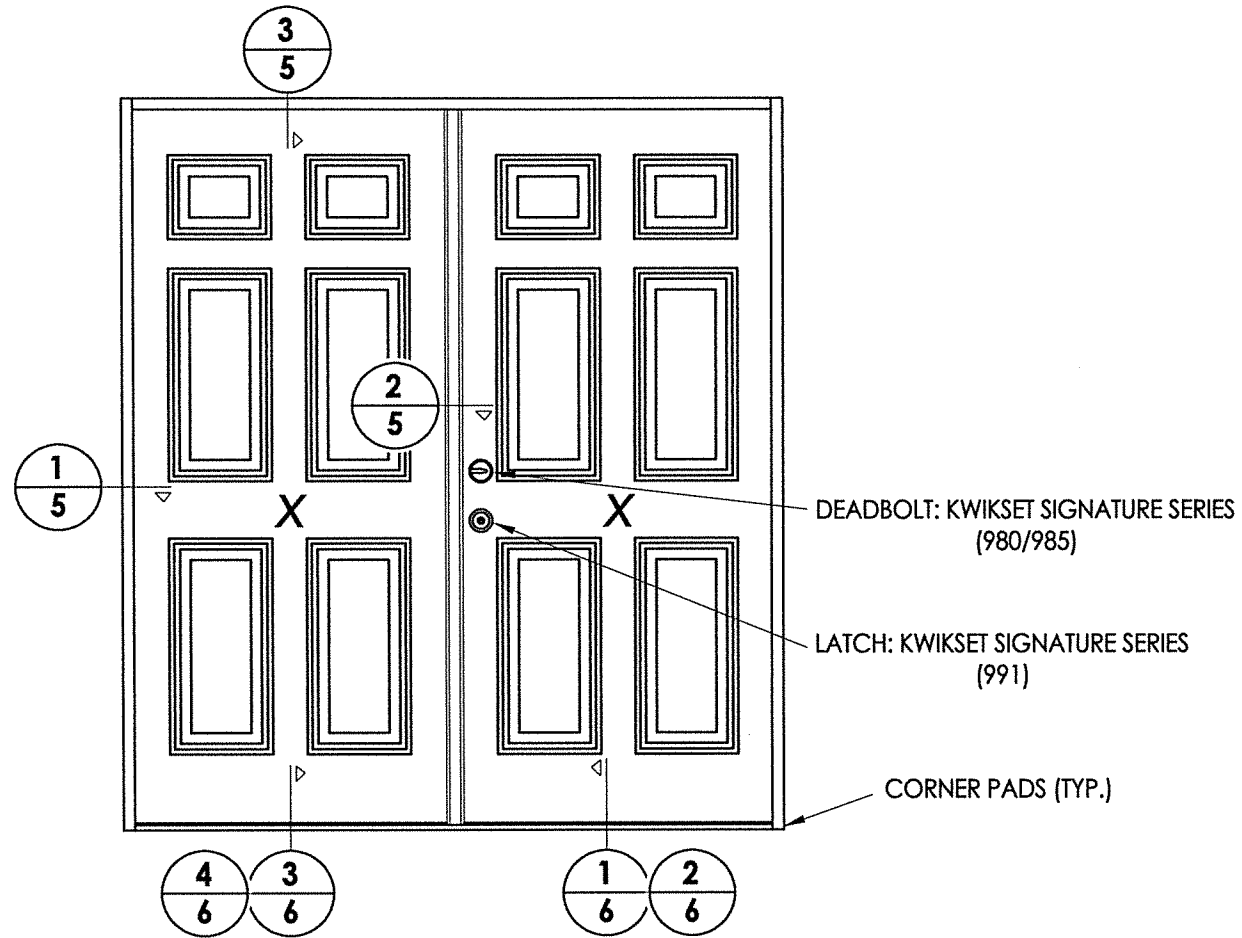


Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

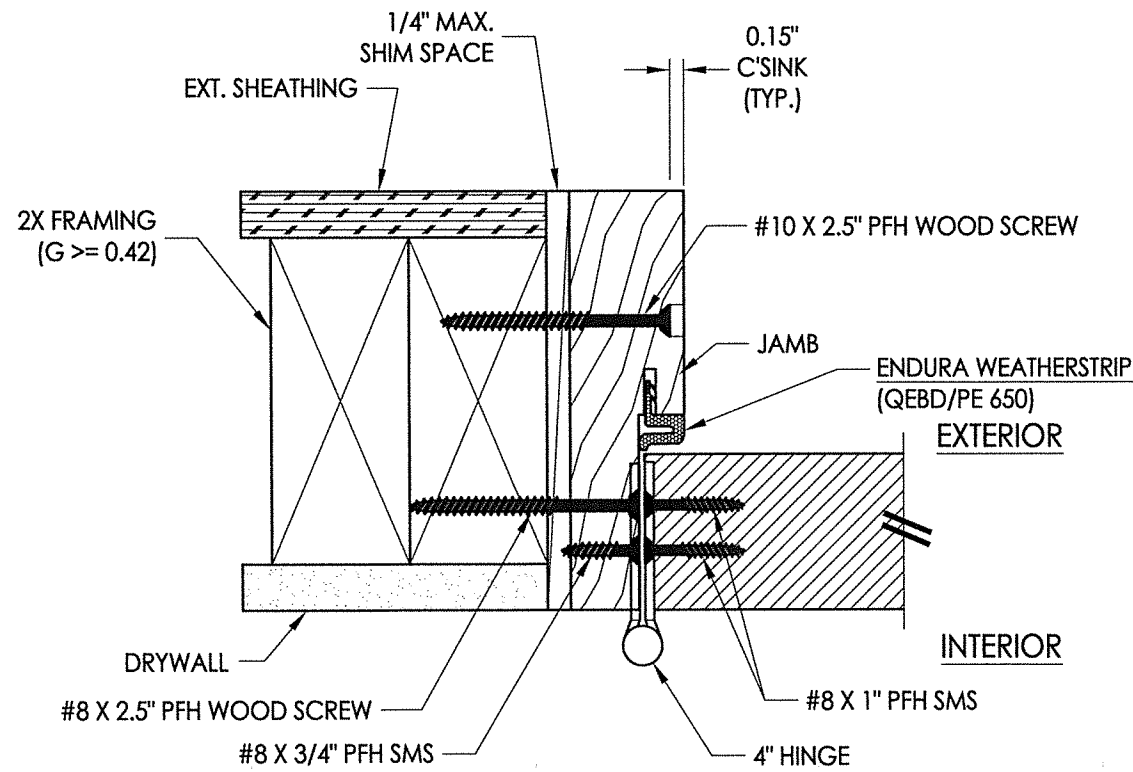
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Vairico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	ENDURA		
PART OR ASSEMBLY:	DOOR PANEL DETAILS & GLAZING DETAIL		
NO.	DATE	TESTING	BY
2	11/11/21	UPDATE TO 2018 IBC/IRC CODE	LFS
1	10/02/18	UPDATE FOR NEW TESTING	LFS
REVISIONS			
DATE: 11/02/16			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4647			
SHEET 4 OF 7			

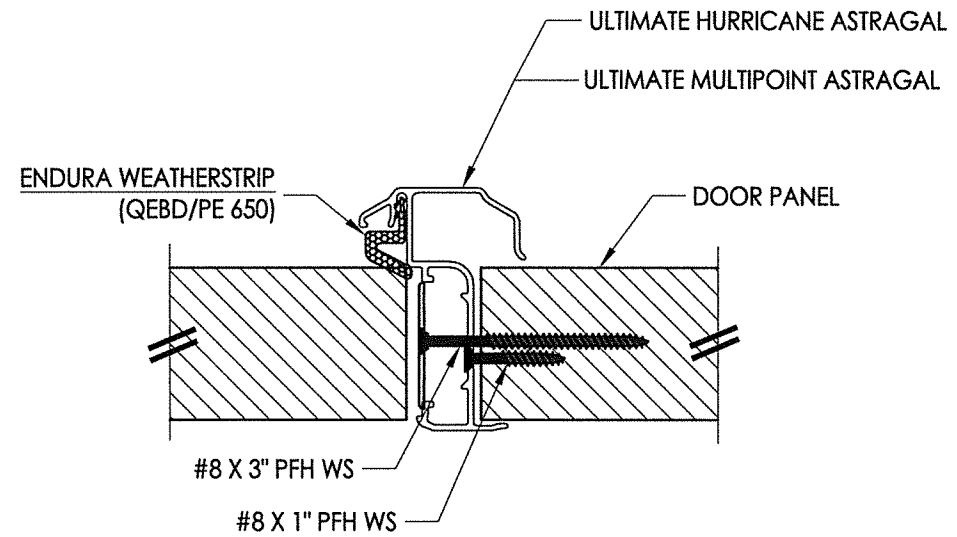
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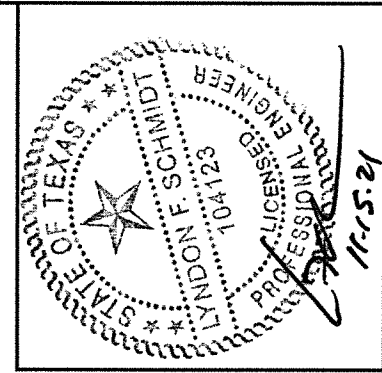
3 VERTICAL CROSS SECTION
5 Outswing shown - inswing also approved



1 HORIZONTAL CROSS SECTION
5 Inswing shown - Outswing also approved



2 HORIZONTAL CROSS SECTION
5



Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123

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

TEXAS BOARD OF PROFESSIONAL ENGINEERS
 CERTIFICATE OF REGISTRATION # F-11852

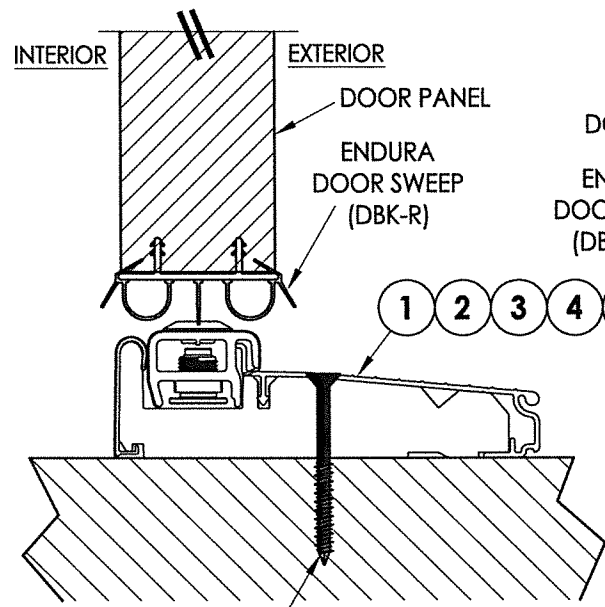
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PART OR ASSEMBLY:	HORIZONTAL & VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS
2	11/11/21	LFS	UPDATE TO 2018 IBC/IRC CODE
1	10/02/18	LFS	UPDATE FOR NEW TESTING

DATE:	11/02/16
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4647
SHEET	5 OF 7

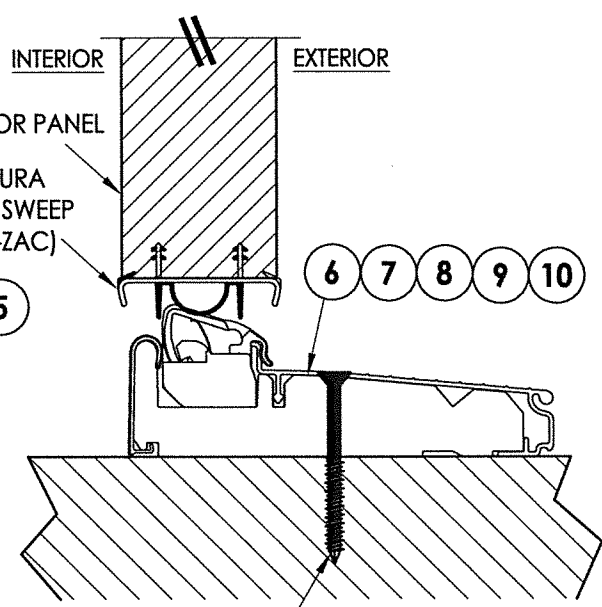
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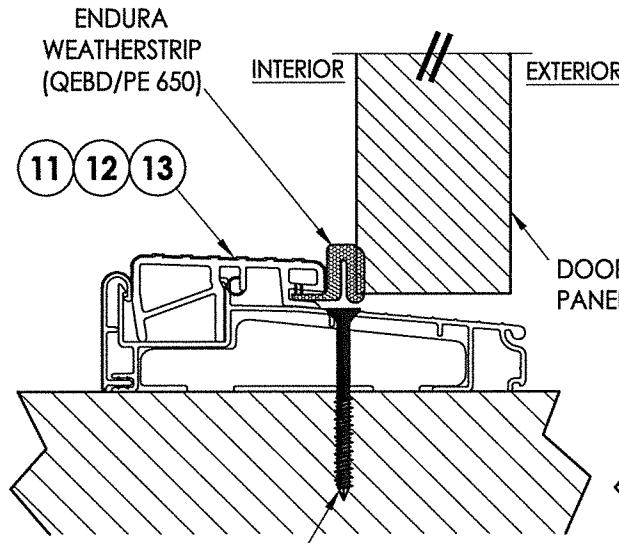
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1 VERTICAL CROSS SECTION
6 Inswing Adjustable Threshold



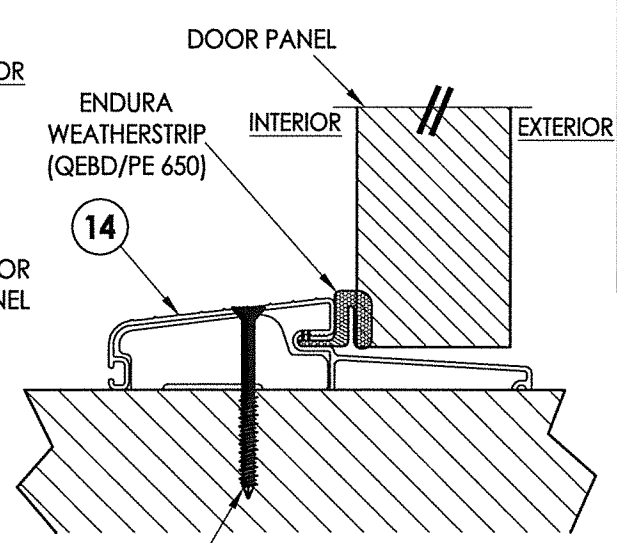
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2 VERTICAL CROSS SECTION
6 Inswing Articulating Threshold w/ Pin Capture



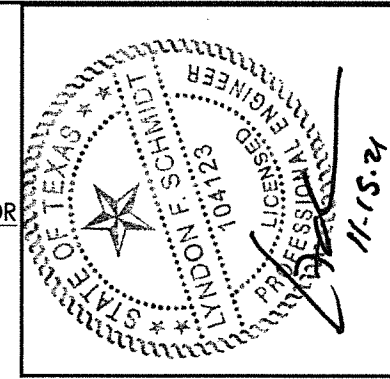
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3 VERTICAL CROSS SECTION
6 Outswing Bump Threshold



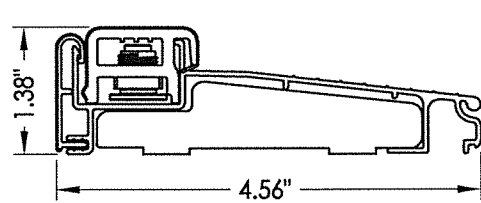
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4 VERTICAL CROSS SECTION
6 Outswing Bump Threshold

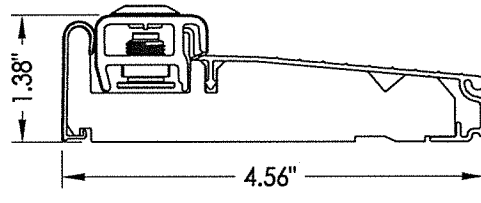


Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

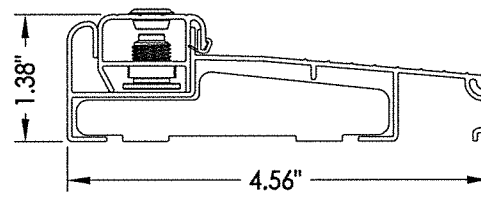
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852



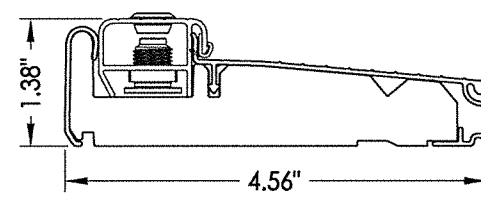
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ZAIL4565



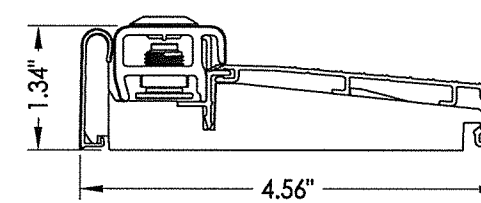
2 INSWING ADJUSTABLE THRESHOLD
ZAI4565FN
MAX. DESIGN PRESSURE = ±50 PSF
(ULTIMATE HURRICANE ASTRAGAL)



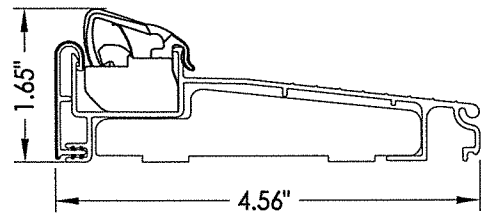
3 INSWING ADJUSTABLE THRESHOLD
ZAILAA4565



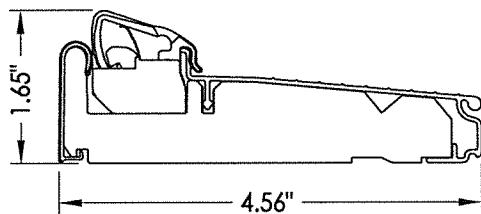
4 INSWING ADJUSTABLE THRESHOLD
ZAIAA4565FN
MAX. DESIGN PRESSURE = ±50 PSF
(ULTIMATE HURRICANE ASTRAGAL)



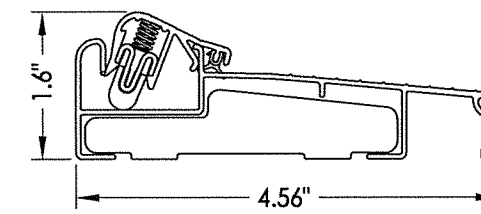
5 INSWING ADJUSTABLE THRESHOLD
ZAI4565RDS
MAX. DESIGN PRESSURE = ±50 PSF



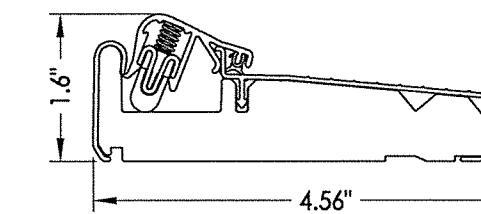
6 INSWING ARTICULATING THRESHOLD
ZACLA565
MAX. DESIGN PRESSURE = ±50 PSF
(ULTIMATE HURRICANE ASTRAGAL)



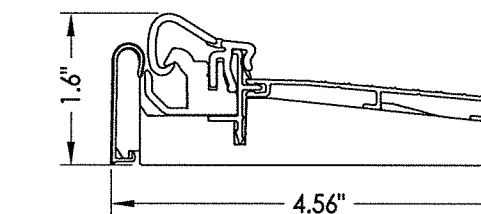
7 INSWING ARTICULATING THRESHOLD
ZAC4565FN
MAX. DESIGN PRESSURE = ±50 PSF



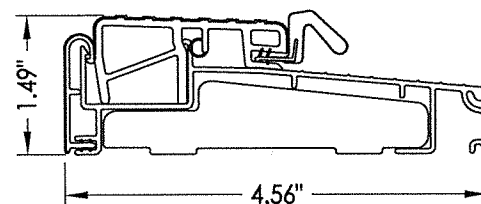
8 INSWING ARTICULATING THRESHOLD
ZACLAA4565
MAX. DESIGN PRESSURE = ±50 PSF
(ULTIMATE HURRICANE ASTRAGAL)



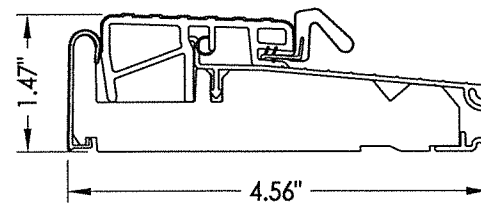
9 INSWING ARTICULATING THRESHOLD
ZACAA4565FN
MAX. DESIGN PRESSURE = ±50 PSF



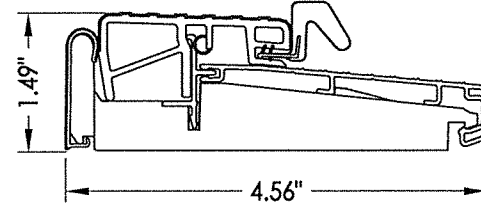
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ZAC4565RDS
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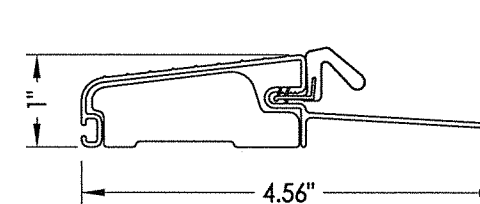
11 OUTSWING THRESHOLD
ZOBL4565



12 OUTSWING THRESHOLD
ZOB4565FN



13 OUTSWING THRESHOLD
ZOB4565RDS



14 OUTSWING THRESHOLD
FOB4566

PRODUCT: ENDURA

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
2	11/11/21	UPDATE TO 2018 IBC/IRC CODE
1	10/02/18	UPDATE FOR NEW TESTING

DATE: 11/02/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4647

SHEET 6 OF 7

