



# Glazed Fiberglass Door

"NON-IMPACT"  
INSWING / OUTSWING

Z:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-1021 Flush GLZ Plastpro FG door (4910-4915)\C - Drawings\TX-4911,12,14,15.dwg

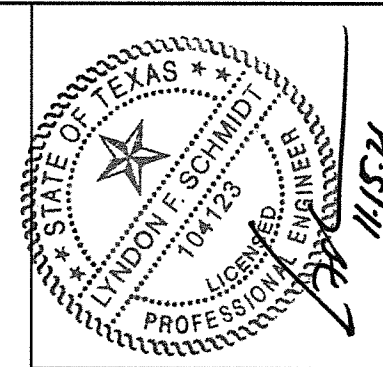
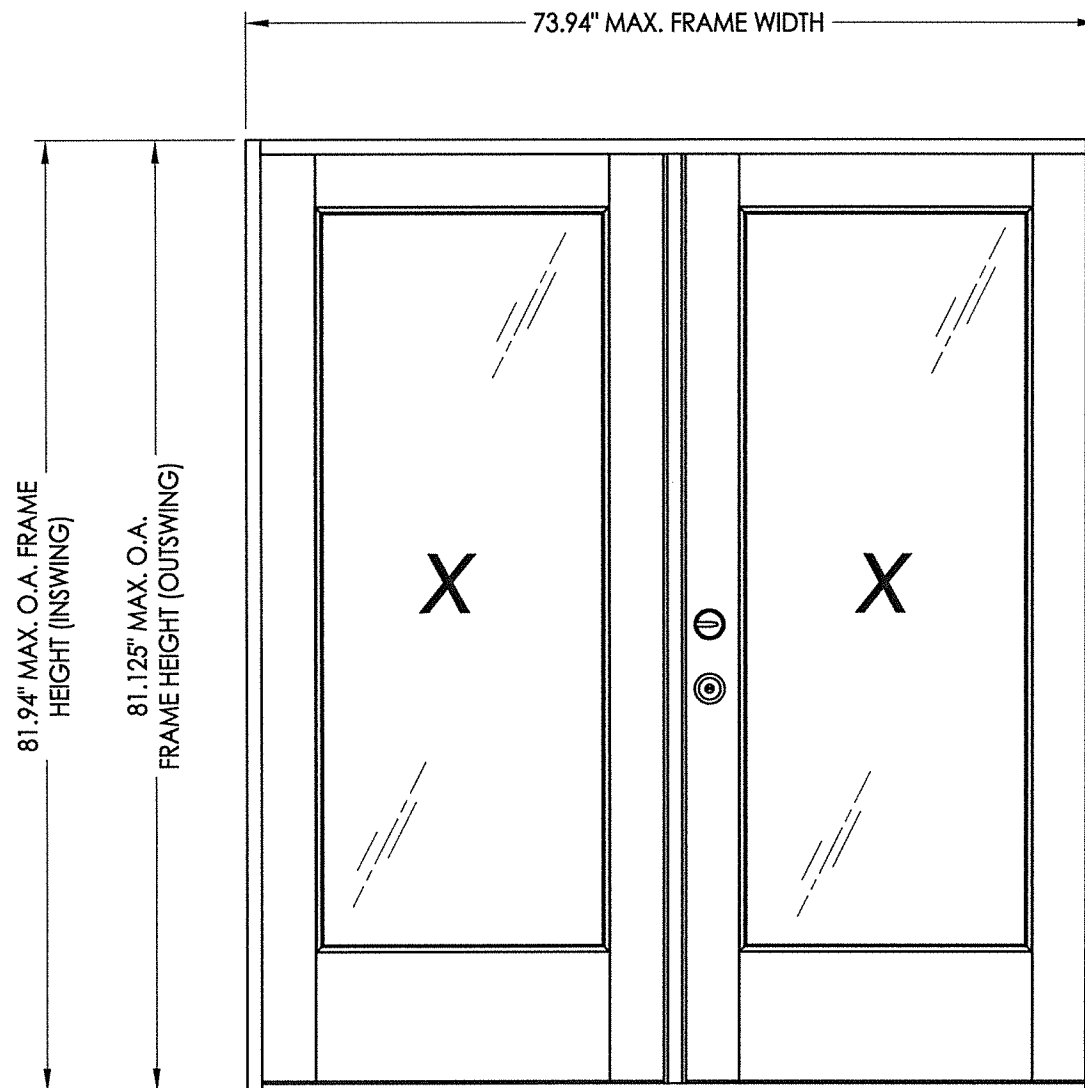
EVALUATED FOR USE IN THE STATE OF TEXAS

## TDI DR-1021

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 Flip Lever)
3	Astragal details (Ultimate Multi-point)
4	Astragal details (Ultimate Hurricane)
5	Door panel details (flush glazing)
6	Horizontal cross sections
7	Vertical cross sections
8	Frame anchoring



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

CONFIG.	GLAZING	MODEL	DESIGN PRESSURE (PSF) ULTIMATE HURRICANE ASTRAGAL		DESIGN PRESSURE (PSF) ULTIMATE MULTIPOINT ASTRAGAL		DESIGN PRESSURE (PSF) ULTIMATE FLIP LEVER ASTRAGAL	
			POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XX	FLUSH GLAZED	INSWING	+50.0	-55.0	+55.0	-55.0	+60.0	-65.0
XX	FLUSH GLAZED	OUTSWING	+50.0	-50.0	+65.0	-65.0	+55.0	-55.0

PRODUCT: ENDURA

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

NO.	DATE	BY	REVISIONS
1	11/10/21	LFS	UPDATE TO 2018 IBC/IRC CODE

DATE: 11/8/18

SCALE: N.T.S.

DWG. BY: MT

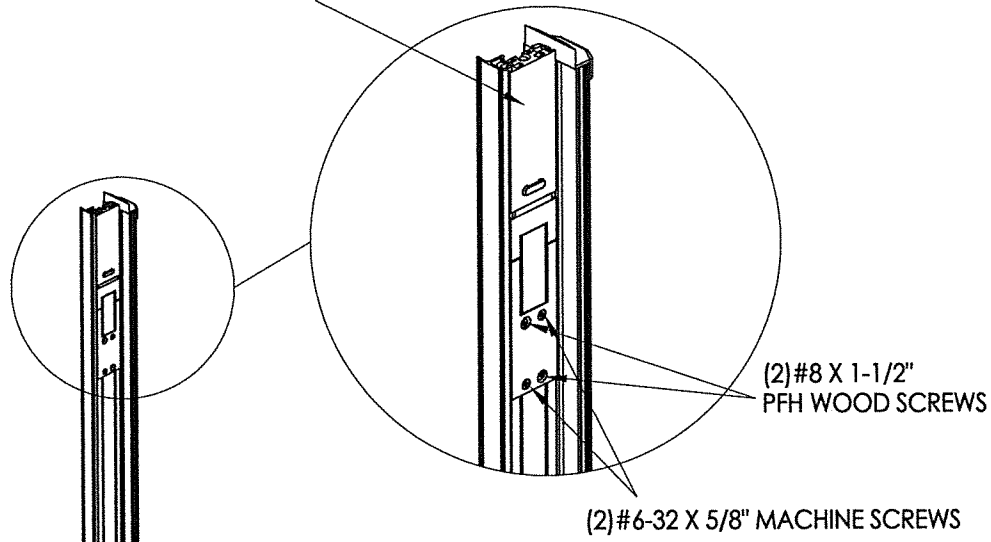
CHK. BY: LFS

DRAWING NO.: TX-4912

SHEET 1 OF 8

Z:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-1021 Flush GLZ Plastpro FG door (4910-4915)\C - Drawings\TX-4911,12,14,15.dwg

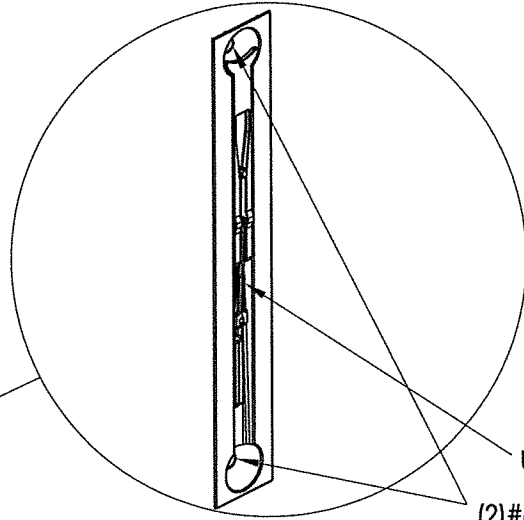
Upper Bolt Sleeve - Aluminum



(2) #6-32 X 5/8" MACHINE SCREWS

(2) #8 X 1-1/2" PFH WOOD SCREWS

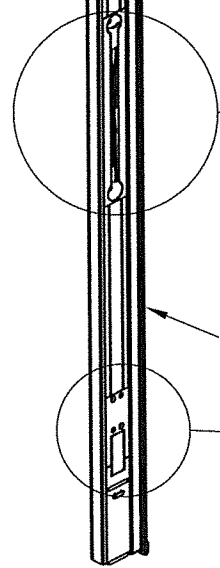
Upper/Lower Bolt Actuator Lever - Zinc



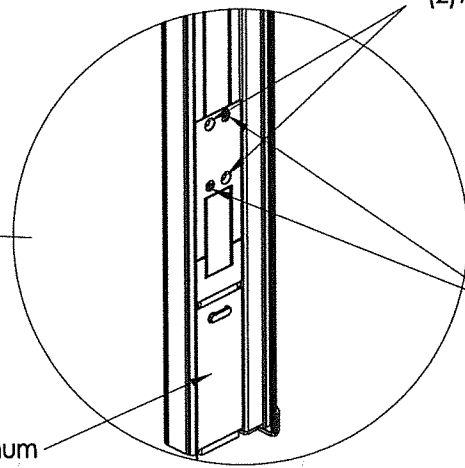
(2) #8 X 1-1/2" PFH WOOD SCREWS

(2) #8 X 1-1/2" PFH WOOD SCREWS

Aluminum Body



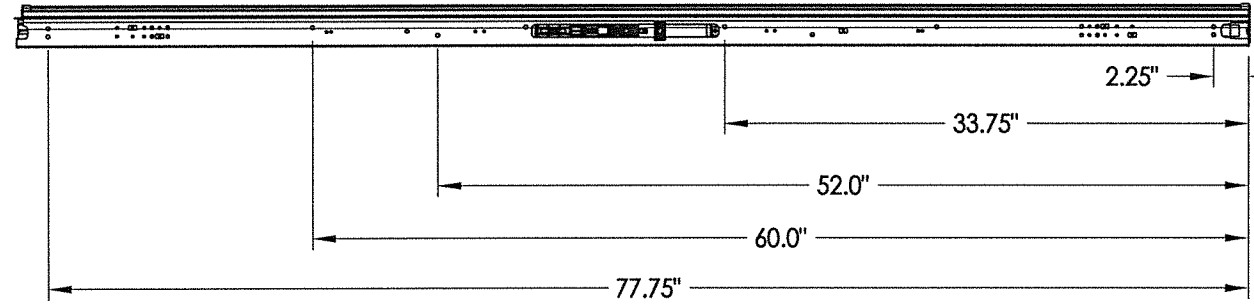
Lower Bolt Sleeve - Aluminum



(2) #6-32 X 5/8" MACHINE SCREWS

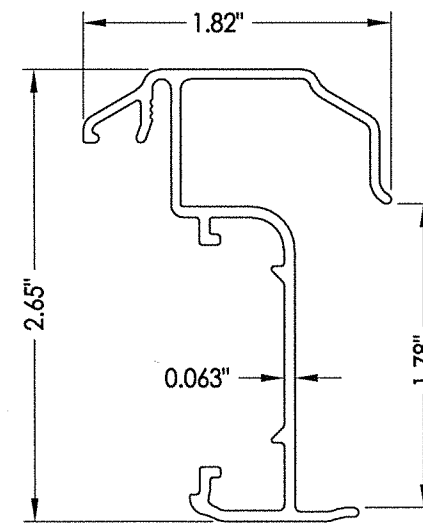
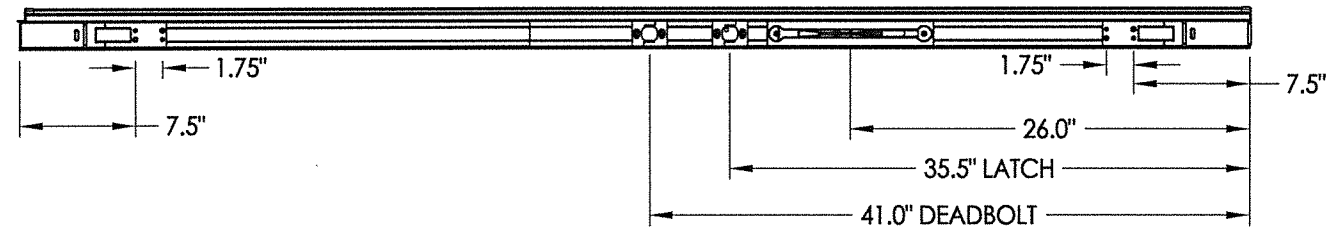
**ULTIMATE FLIP LEVER ASTRAGAL**

**TOP**

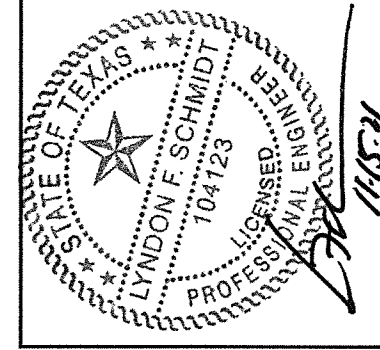


ANCHOR SCREW LOCATIONS

**BOTTOM**



Astragal Section



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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

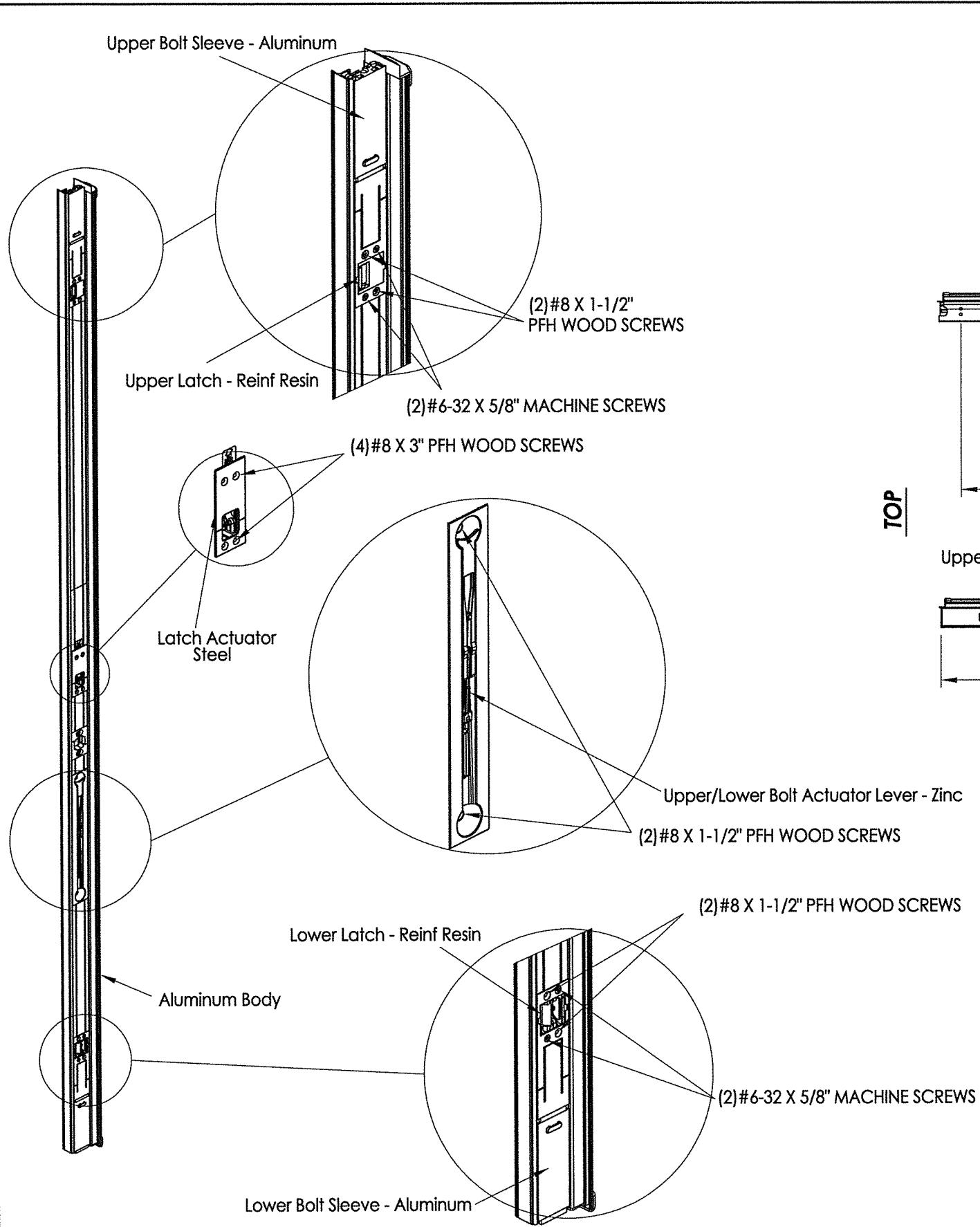
PART OR ASSEMBLY:  
ASTRAGAL DETAILS  
(ULTIMATE FLIP LEVER)

NO.	DATE	REVISIONS
1	11/10/21	UPDATE TO 2018 IBC/IRC CODE
LFS		
BY		

DATE: 11/8/18  
SCALE: N.T.S.  
DWG. BY: MT  
CHK. BY: LFS  
DRAWING NO.: TX-4912  
SHEET 2 OF 8

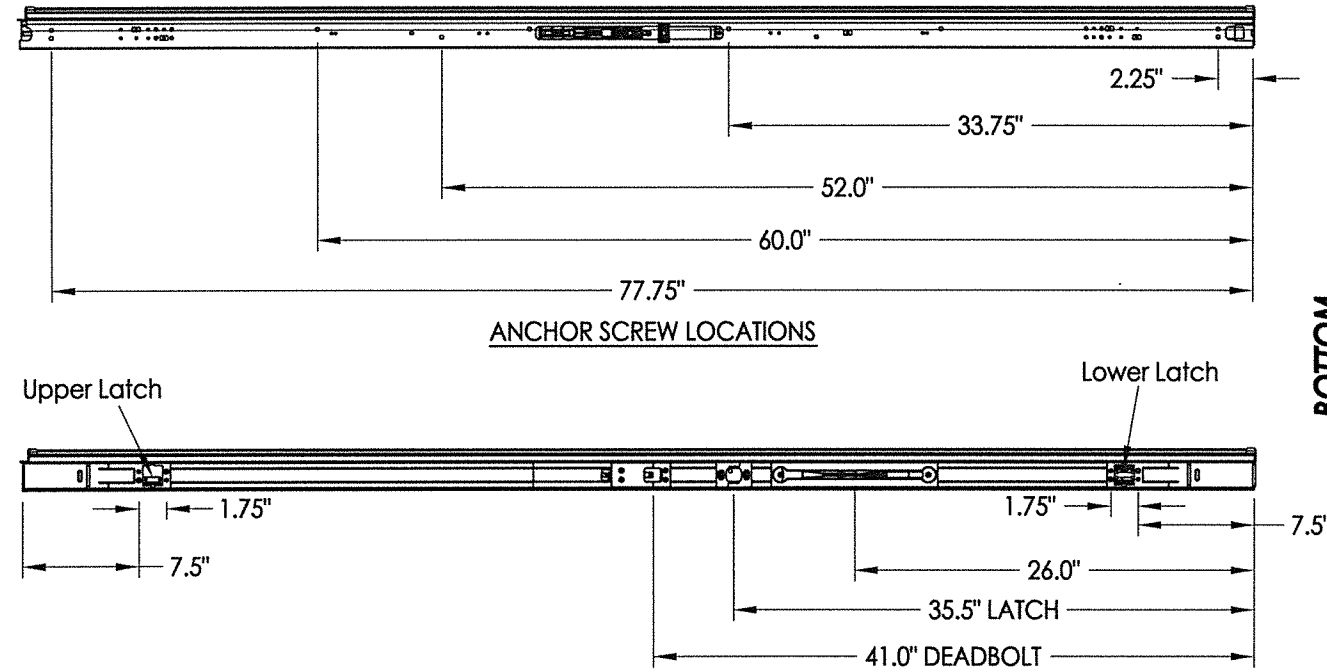
© 2018 R.W. BUILDING CONSULTANTS INC.

Z:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-1021 Flush GLZ Plastpro FG door (4910-4915)\C - Drawings\TX-4911,12,14,15.dwg

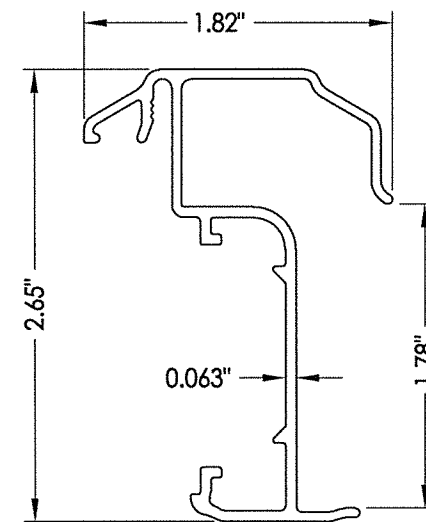


**ULTIMATE MULTI-POINT ASTRAGAL**

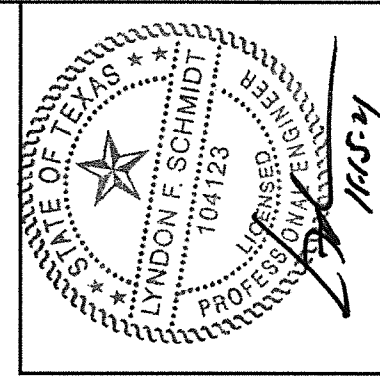
**TOP**



**BOTTOM**



**Astragal Section**



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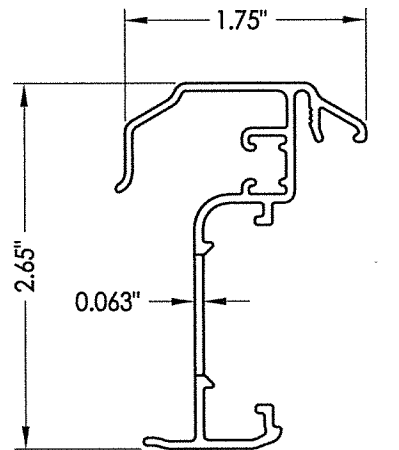
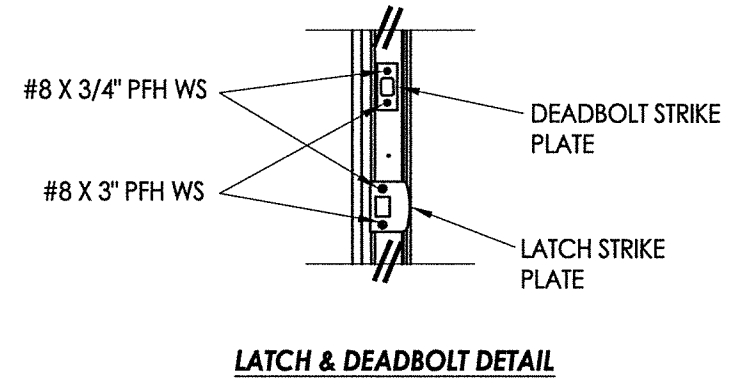
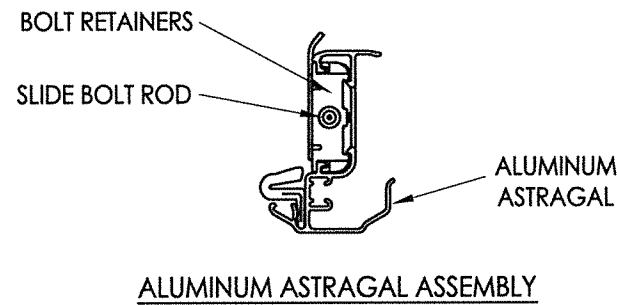
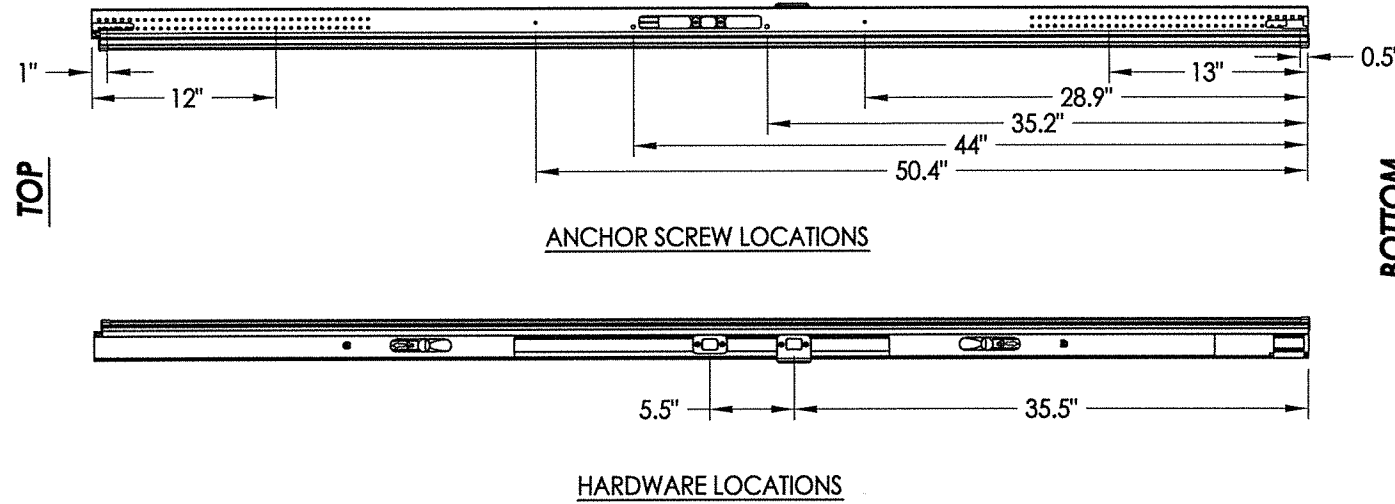
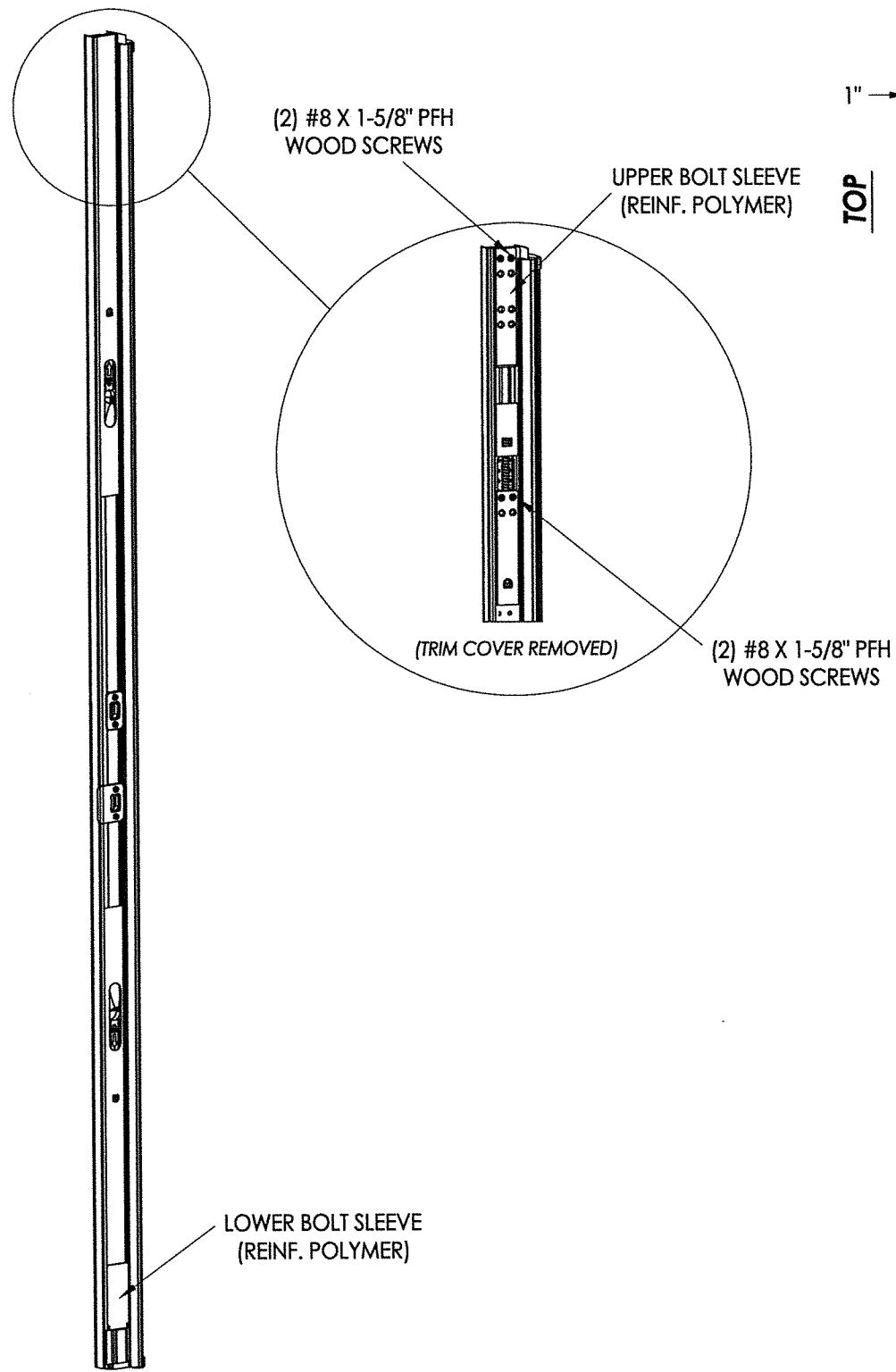
PRODUCT: ENDURA  
PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE MULTI-POINT)

NO.	DATE	DESCRIPTION	BY
1	11/10/21	UPDATE TO 2018 IBC/IRC CODE	LFS

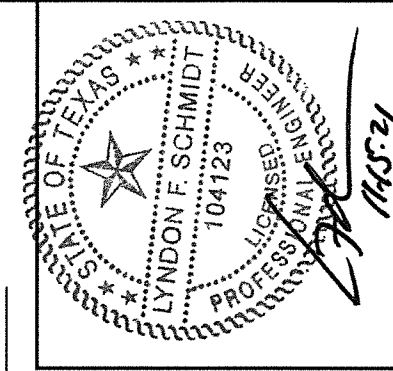
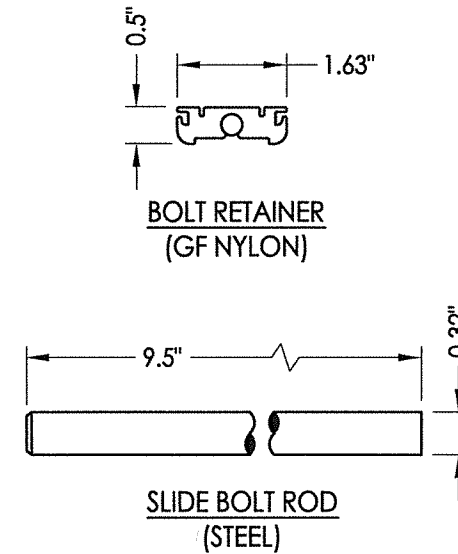
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SCALE: N.T.S.  
DWG. BY: MT  
CHK. BY: LFS  
DRAWING NO.: TX-4912  
SHEET 3 OF 8

Z:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-1021 Flush GLZ Plastpro FG door (4910-4915)\C - Drawings\TX-4911,12,14,15.dwg

**ULTIMATE HURRICANE ASTRAGAL**



ULTIMATE HURRICANE ASTRAGAL



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

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

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

PRODUCT: ENDURA

PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE HURRICANE)

NO.	DATE	DESCRIPTION	BY
1	11/10/21	UPDATE TO 2018 IBC/IRC CODE	LFS

REVISIONS

DATE: 11/8/18

SCALE: N.T.S.

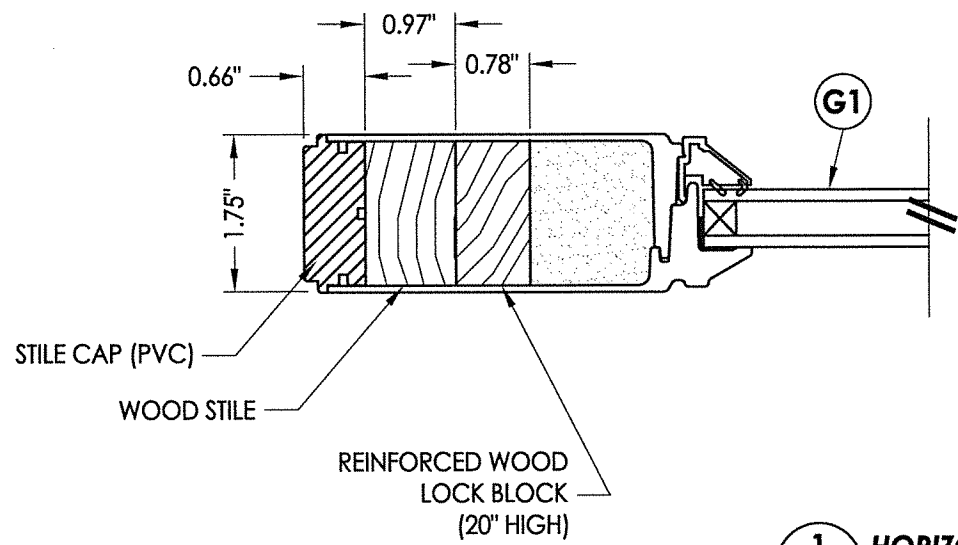
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CHK. BY: LFS

DRAWING NO.: TX-4912

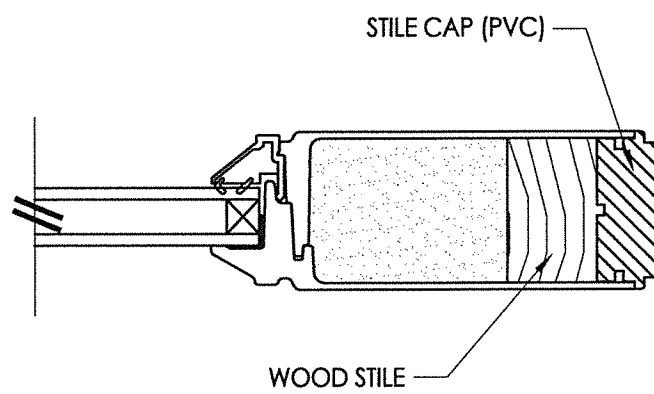
SHEET 4 OF 8

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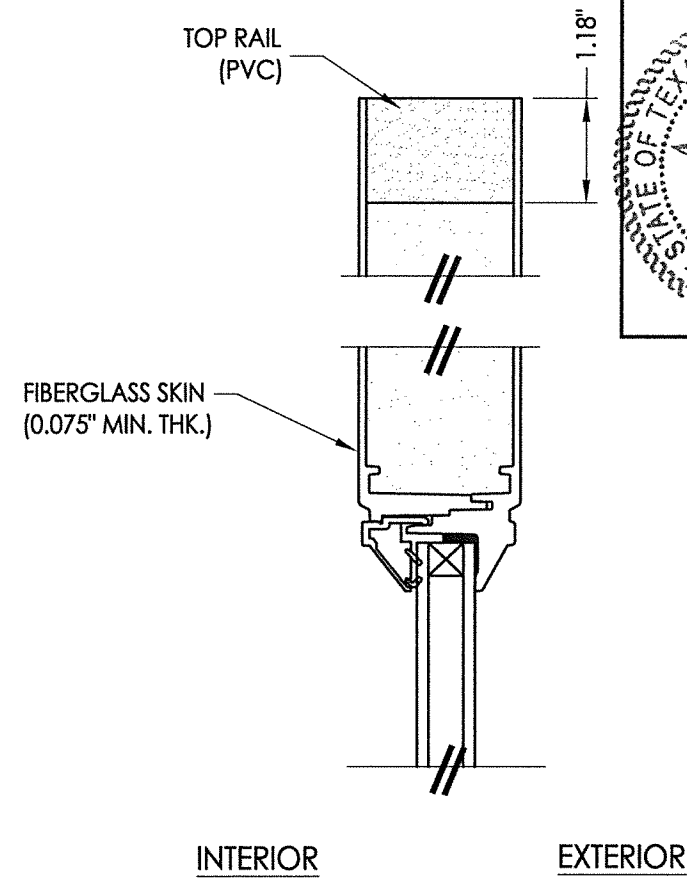


INTERIOR

EXTERIOR



**1**  
**5** HORIZONTAL CROSS SECTION



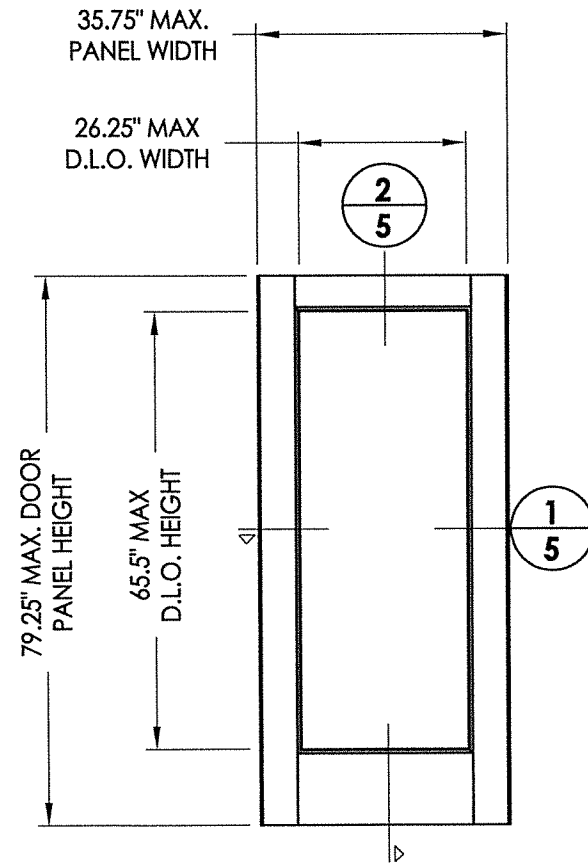
INTERIOR

EXTERIOR

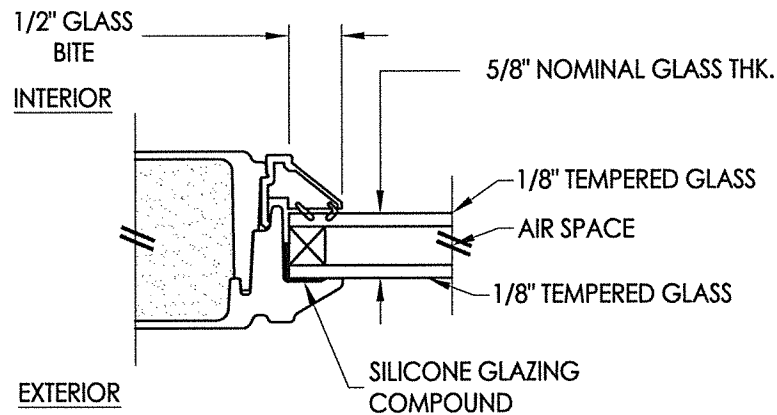
FOAM CORE  
(POLYURETHANE)

BOTTOM RAIL  
(PVC)

**2**  
**5** VERTICAL CROSS SECTION



PLASTPRO  
Flushglazed  
(Fiberglass)

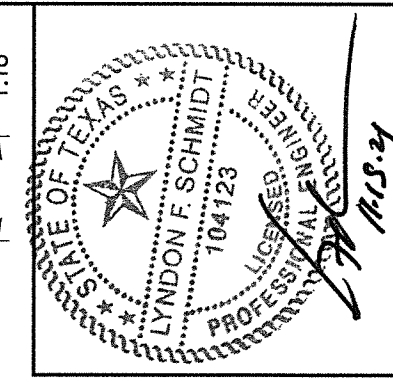


1/2" GLASS  
BITE

EXTERIOR

INTERIOR

**G1** GLAZING DETAIL  
Flush Glazing



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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

PRODUCT: ENDURA

PART OR ASSEMBLY:  
DOOR PANEL DETAILS  
(FLUSH GLAZING)

NO.	DATE	REVISIONS
1	11/10/21	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY

DATE: 11/8/18

SCALE: N.T.S.

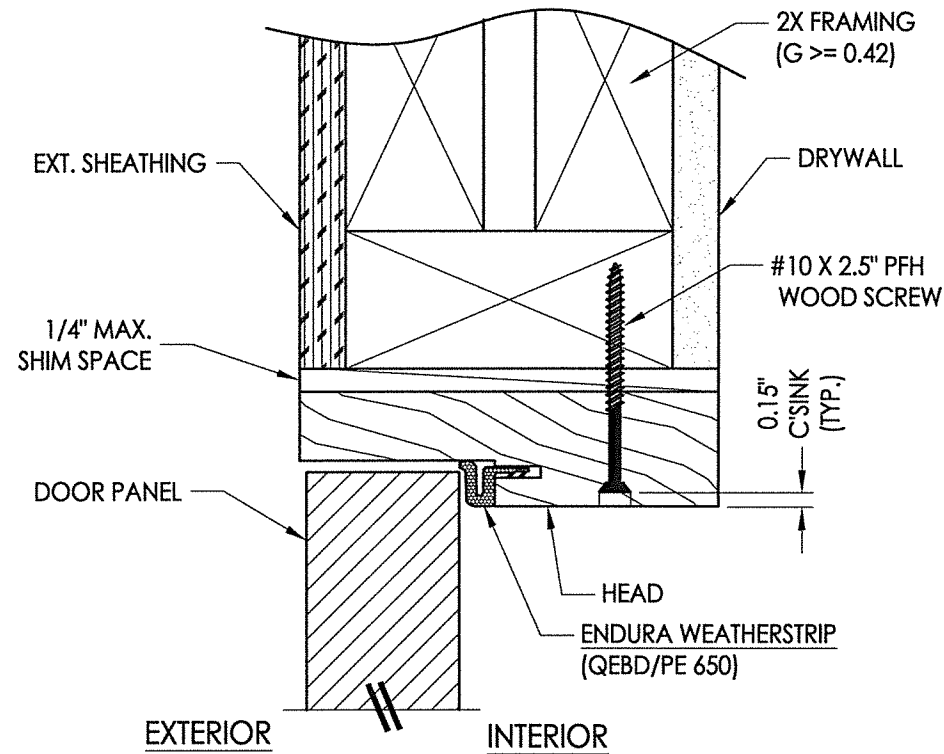
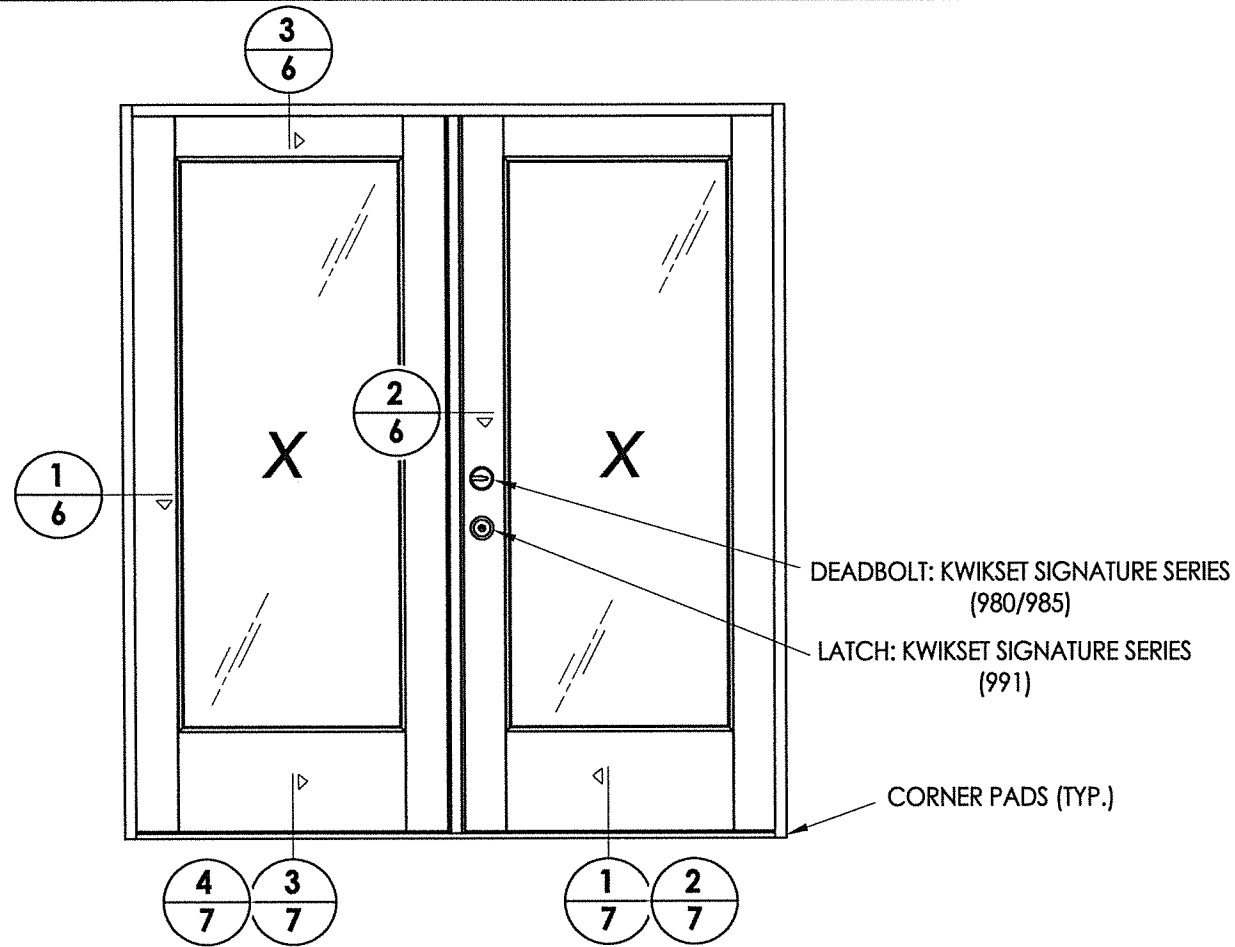
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CHK. BY: LFS

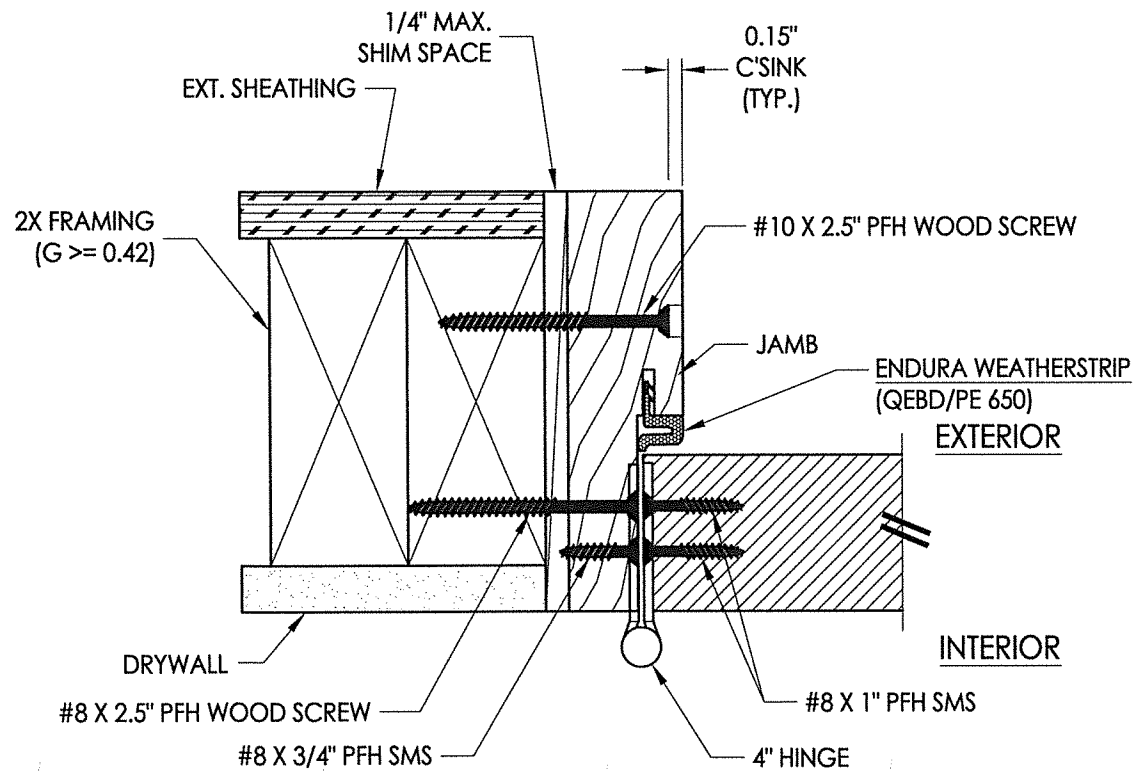
DRAWING NO.: TX-4912

SHEET 5 OF 8

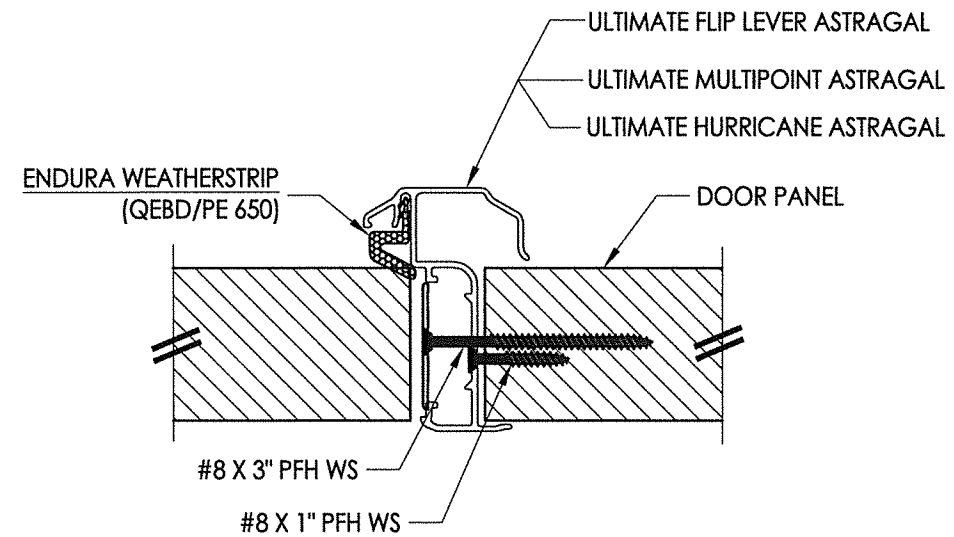
Z:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-1021 Flush GLZ Plastpro FG door (4910-4915)\C - Drawings\TX-4911,12,14,15.dwg



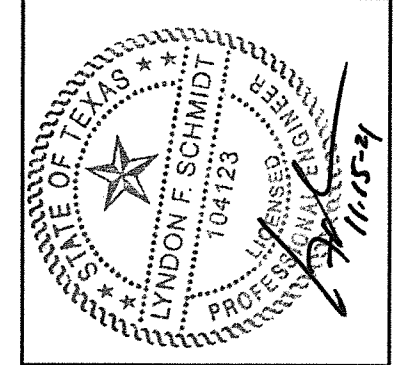
**3**  
**6** **VERTICAL CROSS SECTION**  
Outswing shown - inswing also approved



**1**  
**6** **HORIZONTAL CROSS SECTION**  
Inswing shown - Outswing also approved



**2**  
**6** **HORIZONTAL CROSS SECTION**



Documents Prepared By: Lyndon F. Schmidt, P.E.  
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: HORIZONTAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS
1	11/10/21	LFS	UPDATE TO 2018 IBC/IRC CODE

DATE: 11/8/18

SCALE: N.T.S.

DWG. BY: MT

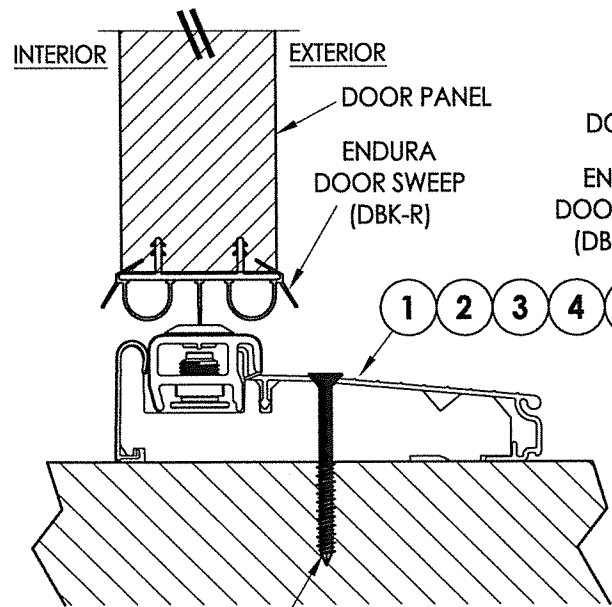
CHK. BY: LFS

DRAWING NO.:

TX-4912

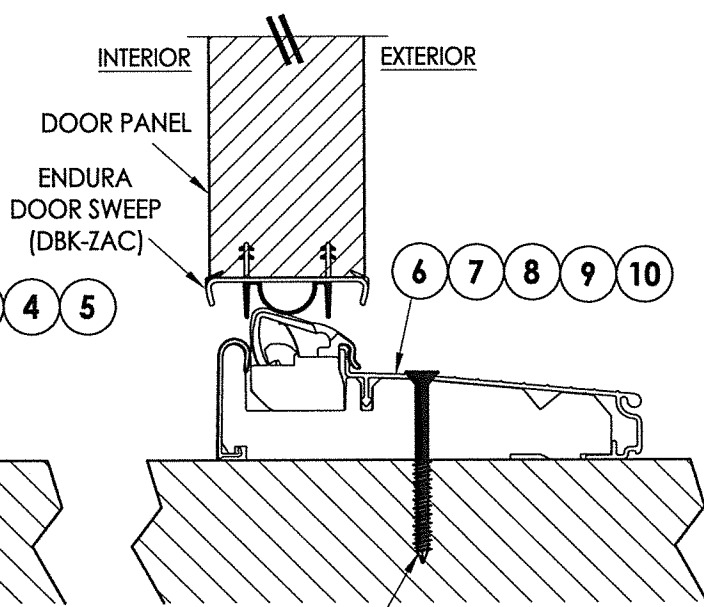
SHEET 6 OF 8

Z:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-1021 Flush GLZ Plastpro FG door (4910-4915)\C - Drawings\TX-4911,12,14,15.dwg



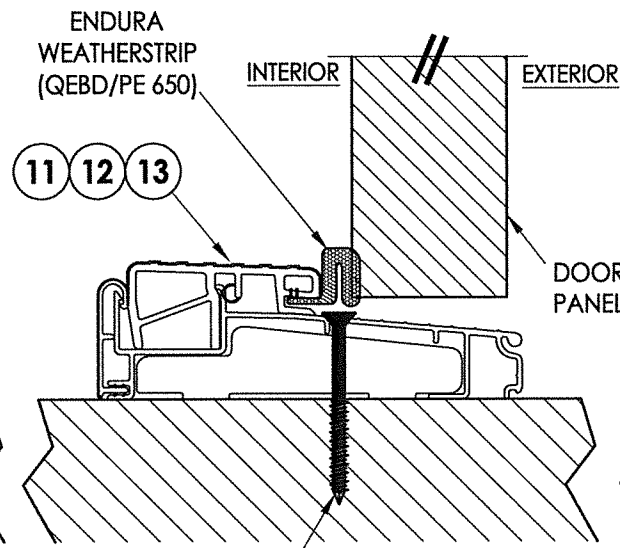
#10 X 2.5\"/>

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



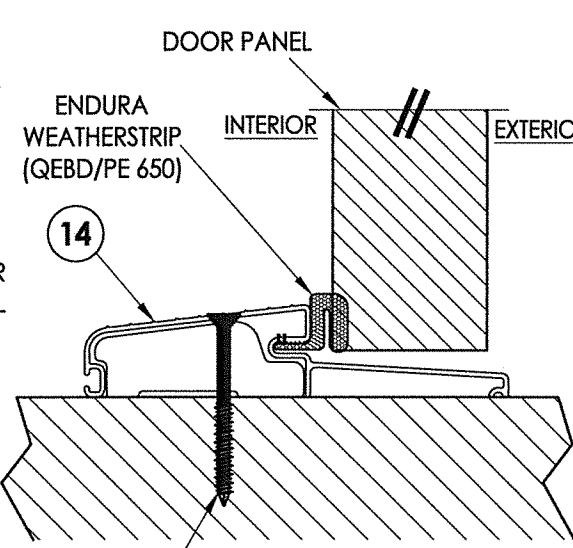
#10 X 2.5\"/>

**2 VERTICAL CROSS SECTION**  
7 Inswing Articulating Threshold w/ Pin Capture



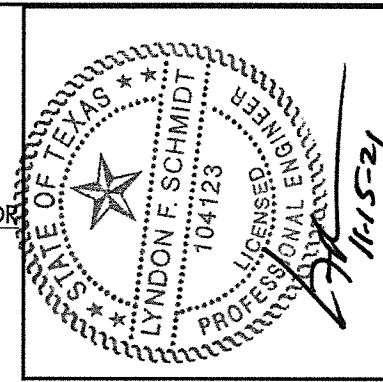
#10 X 2.5\"/>

**3 VERTICAL CROSS SECTION**  
7 Outswing Bump Threshold



#10 X 2.5\"/>

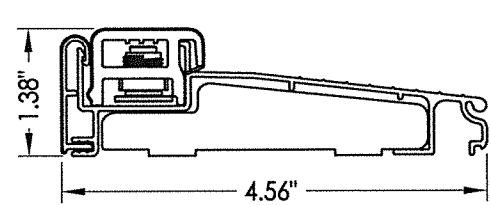
**4 VERTICAL CROSS SECTION**  
7 Outswing Bump Threshold



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TEXAS P.E. #104123

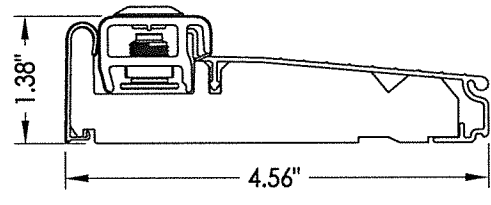
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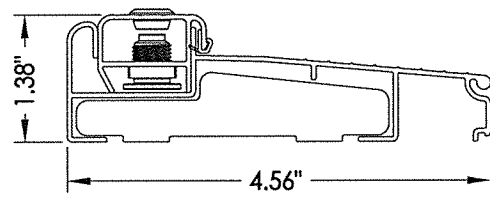
**1 INSWING ADJUSTABLE THRESHOLD**  
ZAIL4565

MAX. DESIGN PRESSURE = +50/-55 PSF



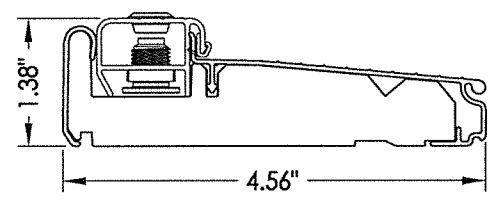
**2 INSWING ADJUSTABLE THRESHOLD**  
ZAI4565FN

MAX. DESIGN PRESSURE = +45/-50 PSF



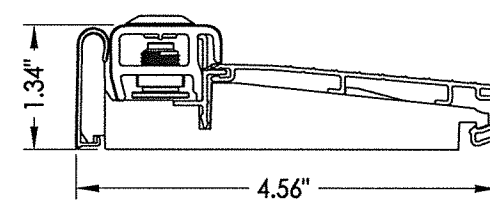
**3 INSWING ADJUSTABLE THRESHOLD**  
ZAILAA4565

MAX. DESIGN PRESSURE = +50/-55 PSF



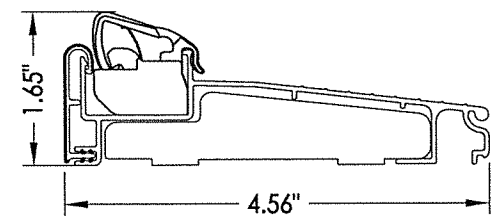
**4 INSWING ADJUSTABLE THRESHOLD**  
ZAIAA4565FN

MAX. DESIGN PRESSURE = +45/-50 PSF

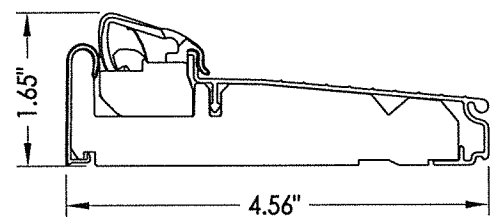


**5 INSWING ADJUSTABLE THRESHOLD**  
ZAI4565RDS

MAX. DESIGN PRESSURE = ±50 PSF

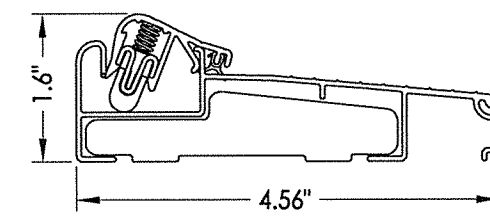


**6 INSWING ARTICULATING THRESHOLD**  
ZACL4565

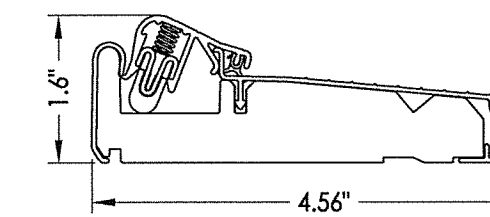


**7 INSWING ARTICULATING THRESHOLD**  
ZAC4565FN

MAX. DESIGN PRESSURE = +45/-50 PSF

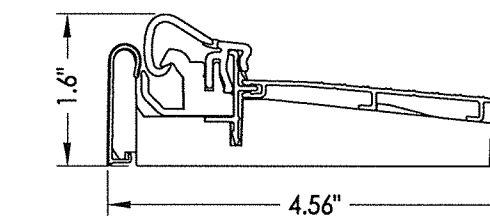


**8 INSWING ARTICULATING THRESHOLD**  
ZACLA4565



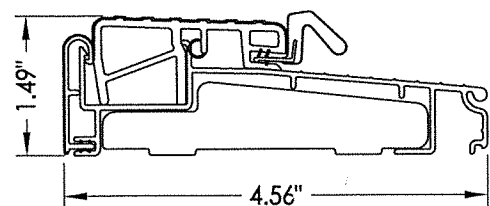
**9 INSWING ARTICULATING THRESHOLD**  
ZACAA4565FN

MAX. DESIGN PRESSURE = +45/-50 PSF

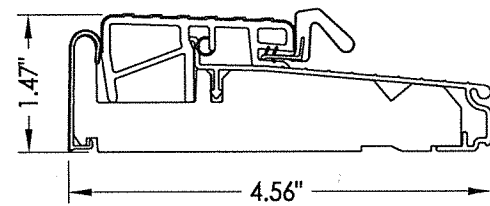


**10 INSWING ARTICULATING THRESHOLD**  
ZAC4565RDS

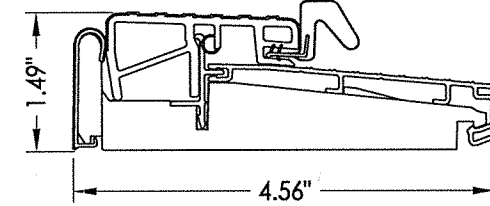
MAX. DESIGN PRESSURE = ±45 PSF



**11 OUTSWING THRESHOLD**  
ZOBL4565

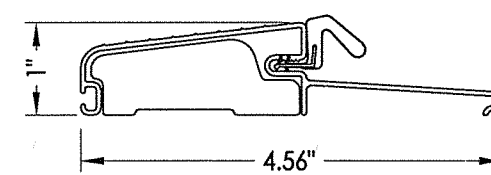


**12 OUTSWING THRESHOLD**  
ZOB4565FN



**13 OUTSWING THRESHOLD**  
ZOB4565RDS

MAX. DESIGN PRESSURE = ±55 PSF



**14 OUTSWING THRESHOLD**  
FOB4566

PRODUCT: ENDURA

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
1	11/10/21	UPDATE TO 2018 IBC/IRC CODE
		LFS BY

DATE: 11/8/18

SCALE: N.T.S.

DWG. BY: MT

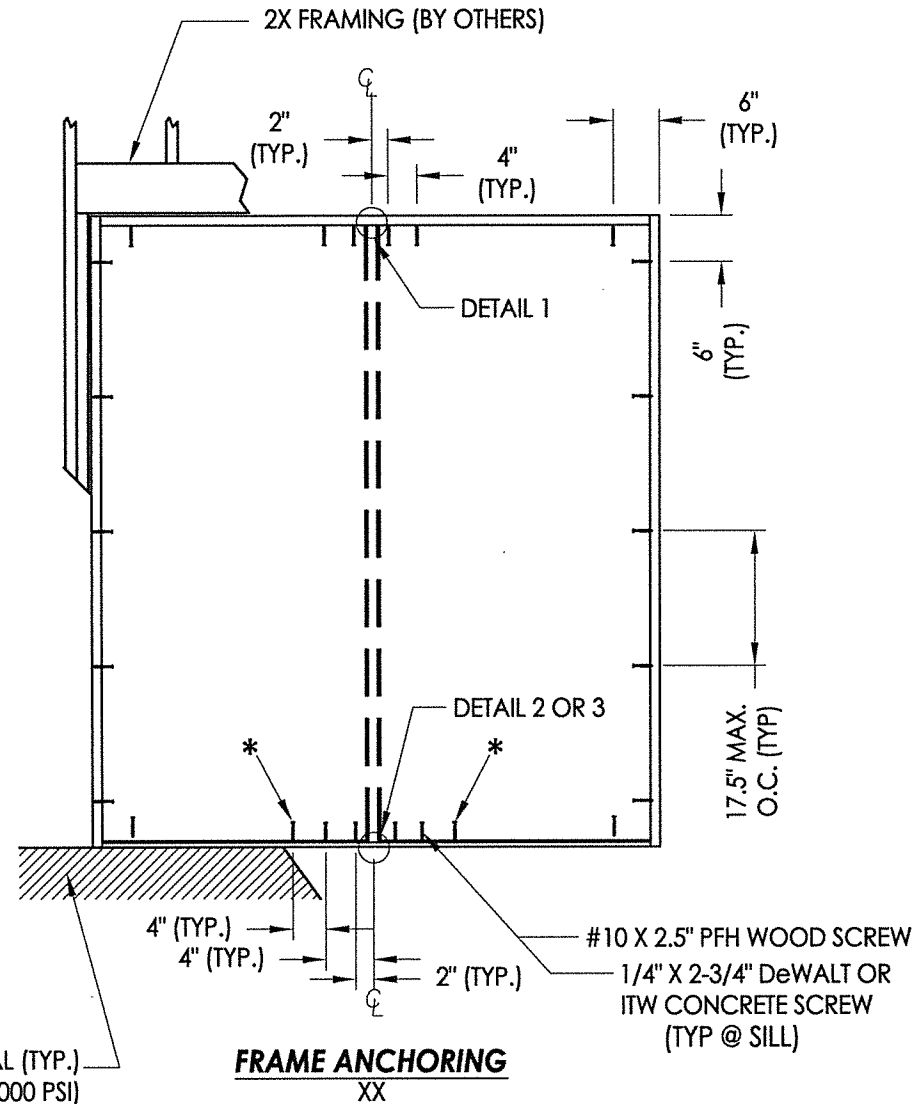
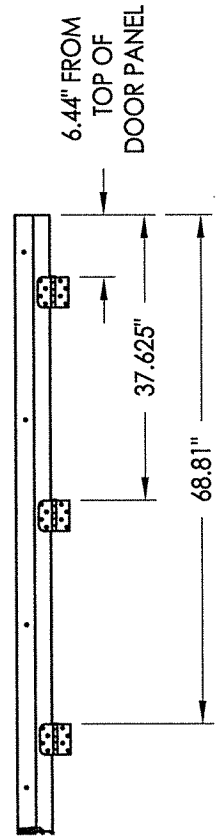
CHK. BY: LFS

DRAWING NO.: TX-4912

SHEET 7 OF 8

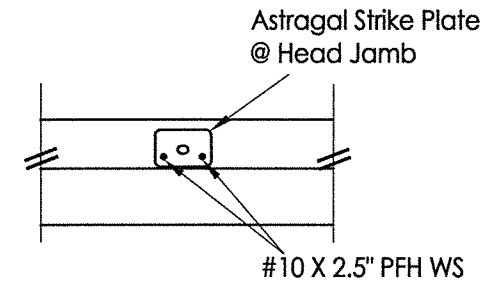


**HINGE JAMB**

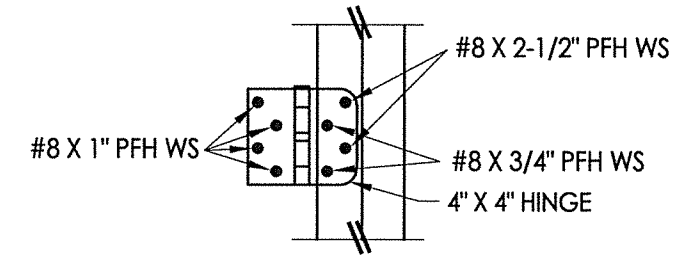


FLOOR SUBSTRATE MATERIAL (TYP.)  
 CONCRETE (MIN. 3000 PSI)  
 WOOD (G >= 0.42)

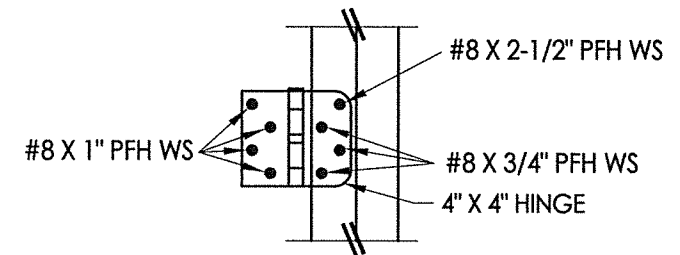
\*NOTE: These anchors required for D.P. > 50 PSF.



**DETAIL 1**



**HINGE DETAIL 1**

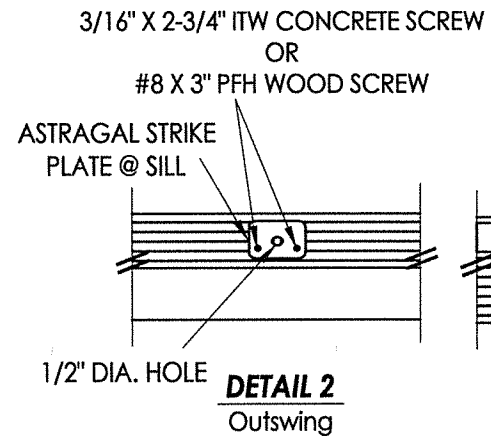


**HINGE DETAIL 2**

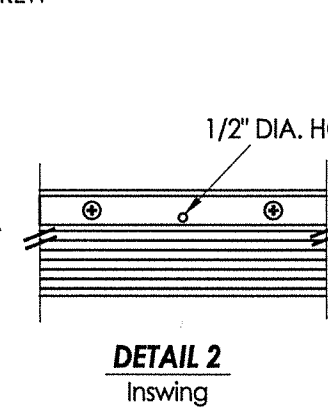
**CONCRETE ANCHOR NOTES:**

- 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:

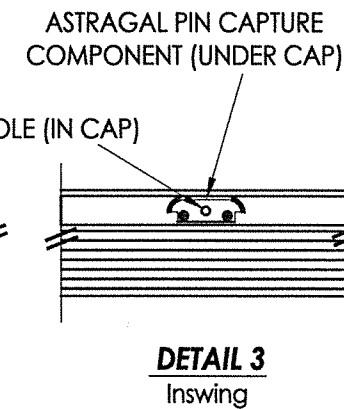
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	3/16"	1-3/4"	3"	1-1/2"
	1/4"	1-3/4"	1-1/2"	4"
DeWALT ULTRACON+®	1/4"	1-3/4"	1"	4"



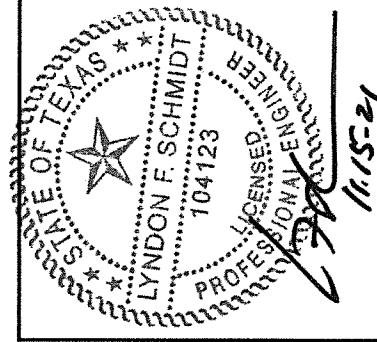
**DETAIL 2**  
Outswing



**DETAIL 2**  
Inswing



**DETAIL 3**  
Inswing



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

PRODUCT:	ENDURA	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	BY
1	11/10/21	LFS
UPDATE TO 2018 IBC/IRC CODE		

DATE: 11/8/18  
 SCALE: N.T.S.  
 DWG. BY: MT  
 CHK. BY: LFS  
 DRAWING NO.: TX-4912  
 SHEET 8 OF 8