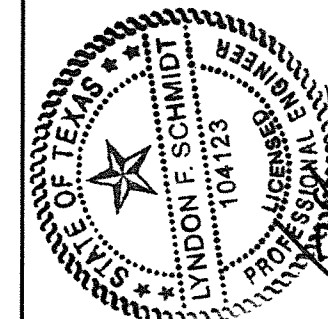
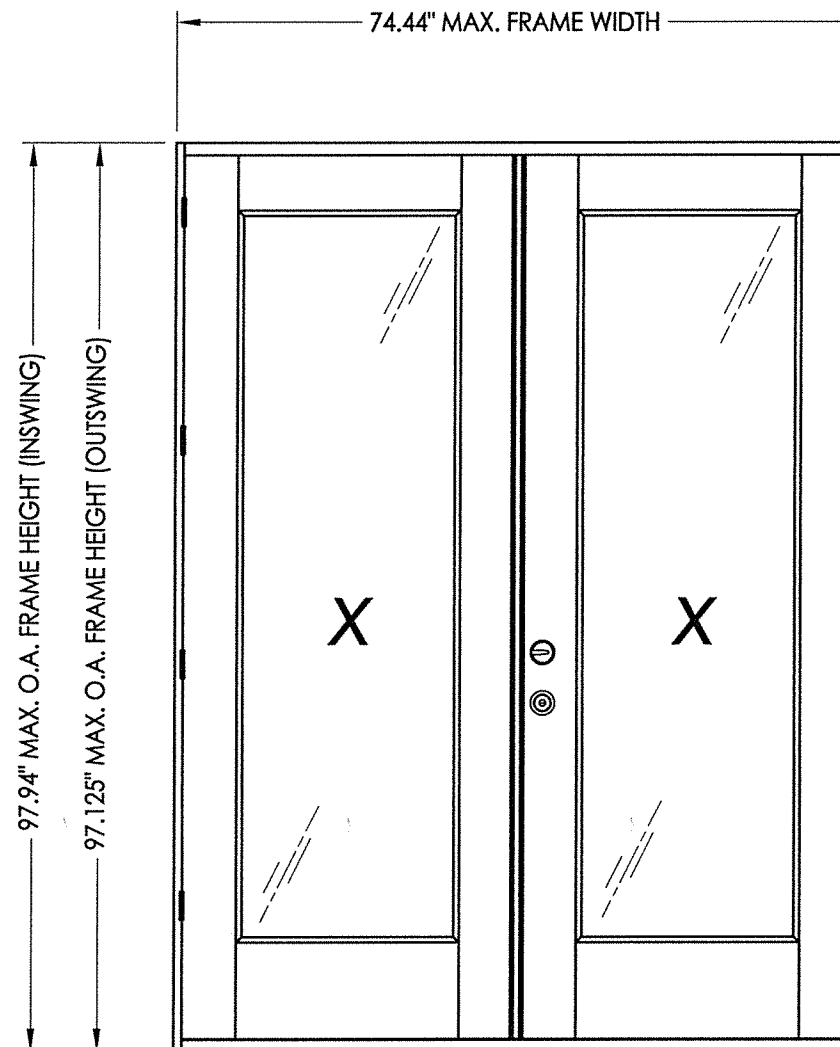


Glazed Steel Door

"NON-IMPACT"
IN SWING / OUT SWING



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

EVALUATED FOR USE IN THE STATE OF TEXAS

The Glazed Steel 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 1609.2 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 Multi-point)
3	Astragal details (Ultimate Hurricane)
4	Door panel details (lip lite insert glazing)
5	Horizontal & vertical cross sections
6	Vertical cross sections
7	Frame anchoring

CONFIG.	FRAME TYPE	MODEL	DESIGN PRESSURE (PSF) ULTIMATE HURRICANE ASTRAGAL		DESIGN PRESSURE (PSF) ULTIMATE MULTIPOINT ASTRAGAL	
			POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XX	PINE	IN SWING	+35.0	-40.0	+40.0	-45.0
XX		OUT SWING	+60.0	-60.0	+40.0	-40.0
XX	"FusionFrame"	IN SWING	+35.0	-40.0	+40.0	-45.0
XX		OUT SWING	+50.0	-50.0	+40.0	-40.0

PRODUCT: ENDURA

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

NO.	DATE	BY	REVISIONS
4	12/19/19	LFS	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
3	9/05/18	LFS	ADD ADDITIONAL THRESHOLDS
2	5/5/15	LFS	ADD NEW ASTRAGAL PIN CAPTURE
1	1/06/14	LFS	ADDED ARTICULATING SILL

DATE: 8/08/12

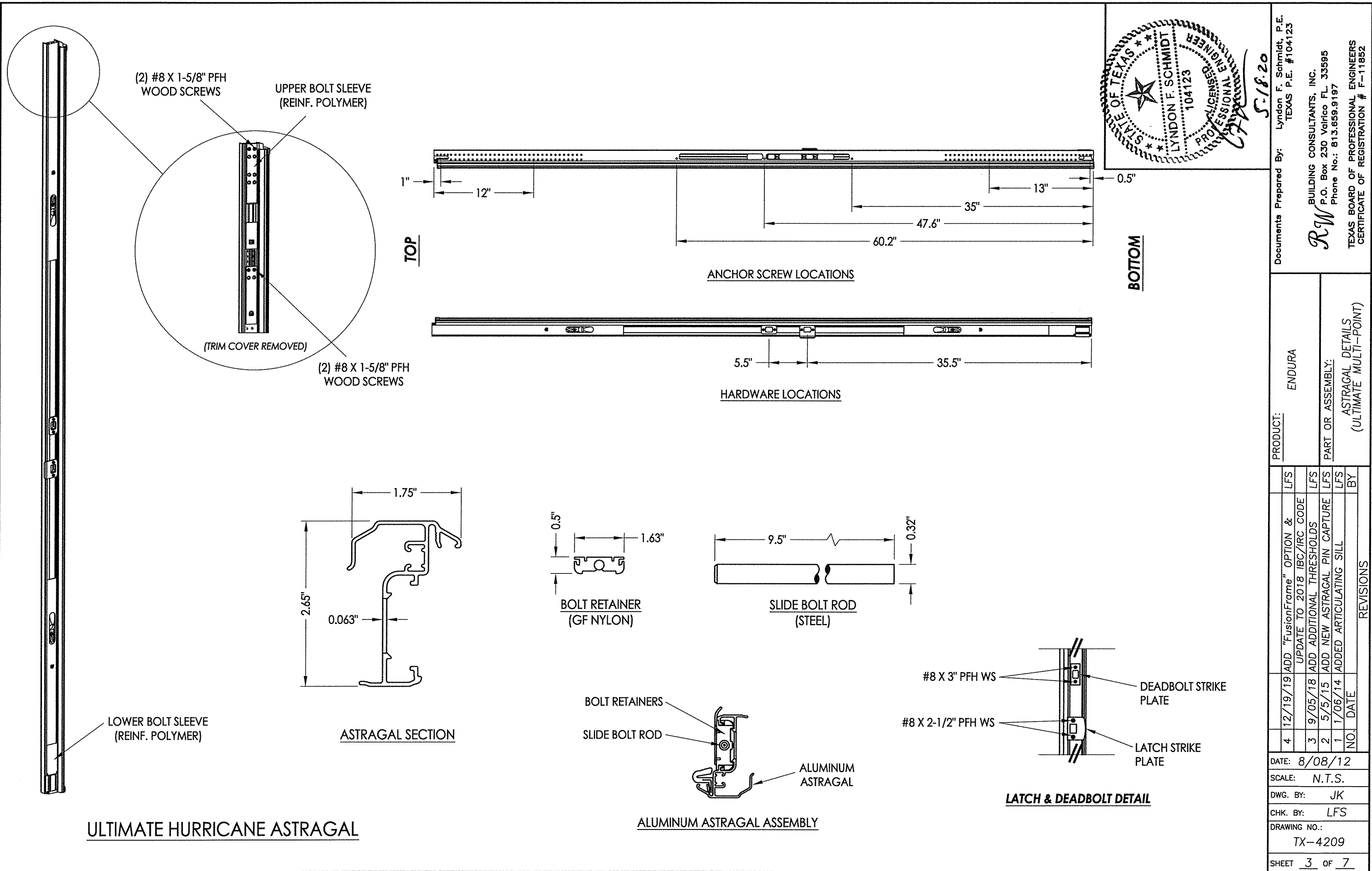
SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4209

SHEET 1 OF 7



LYNDON F. SCHMIDT
 104123
 PROFESSIONAL ENGINEER
 STATE OF TEXAS
 5-18-20

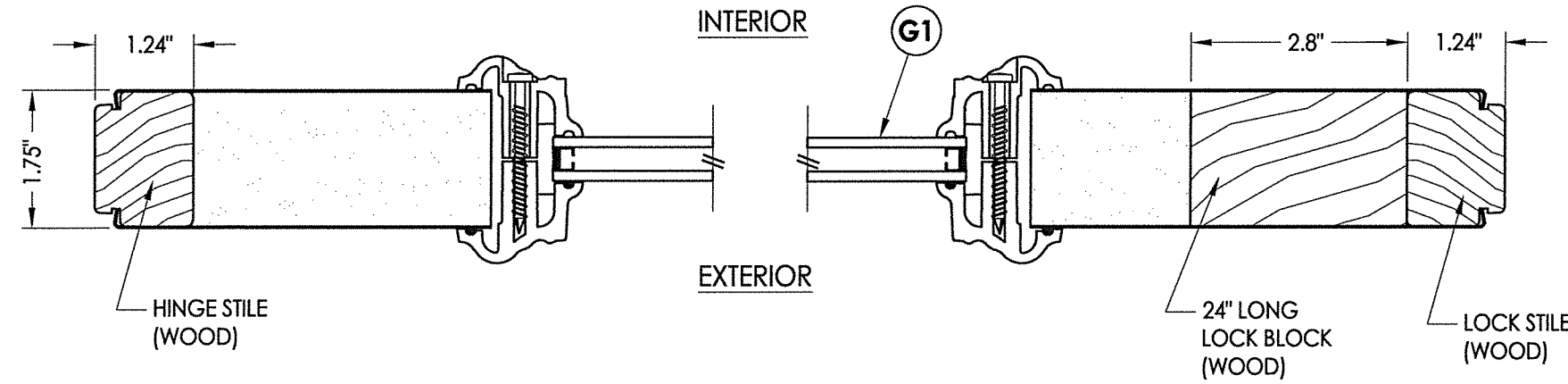
Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123

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

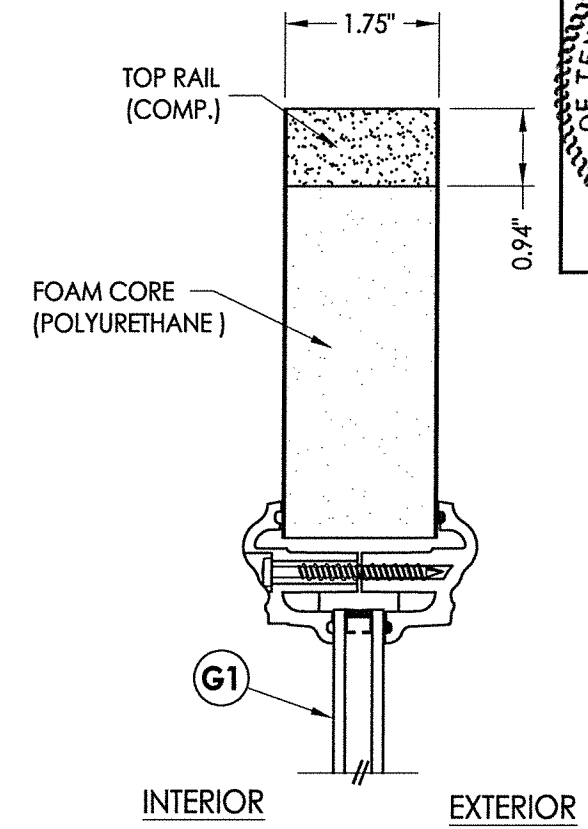
PRODUCT: ENDURA
 PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE MULTI-POINT)

NO.	DATE	REVISIONS
4	12/19/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
3	9/05/18	ADD ADDITIONAL THRESHOLDS
2	5/5/15	ADD NEW ASTRAGAL PIN CAPTURE
1	1/06/14	ADDED ARTICULATING SILL

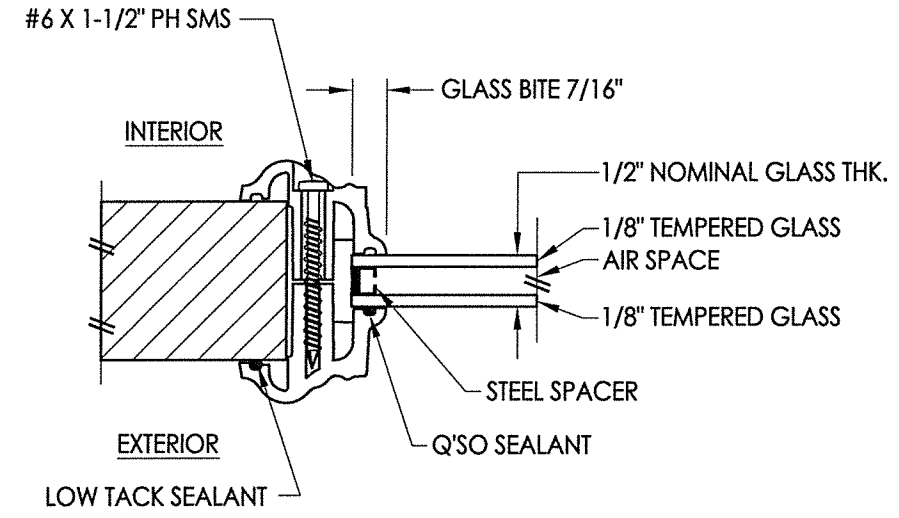
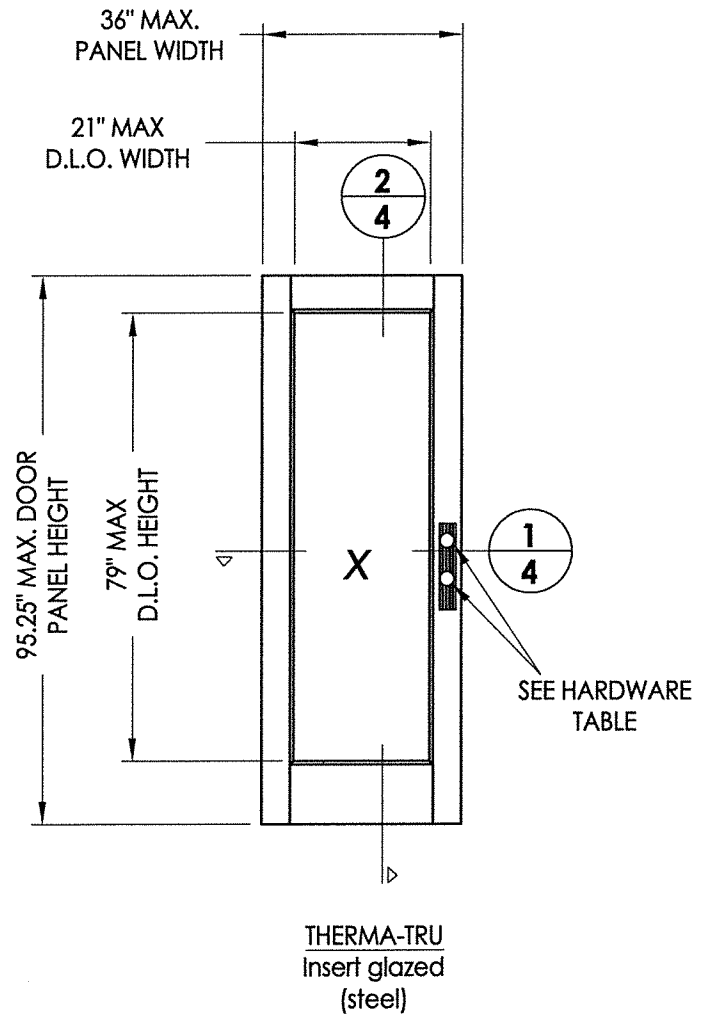
DATE: 8/08/12
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4209
 SHEET 3 OF 7



1
4 HORIZONTAL CROSS SECTION

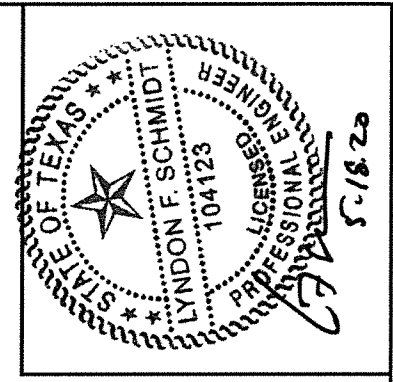


2
4 VERTICAL CROSS SECTION



G1 GLAZING DETAIL
Lip Lite Insert Glazing

HARDWARE TABLE	
MANUFACTURER	MODEL
KWIKSET	LATCH: SIGNATURE SERIES (991) DEADBOLT: SIGNATURE SERIES (980/985)



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: DOOR PANEL DETAILS (LIP LITE INSERT GLAZING)

NO.	DATE	REVISIONS
4	12/19/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
3	9/05/18	ADD ADDITIONAL THRESHOLDS
2	5/5/15	ADD NEW ASTRAGAL PIN CAPTURE
1	1/06/14	ADDED ARTICULATING SILL
		BY

DATE: 8/08/12

SCALE: N.T.S.

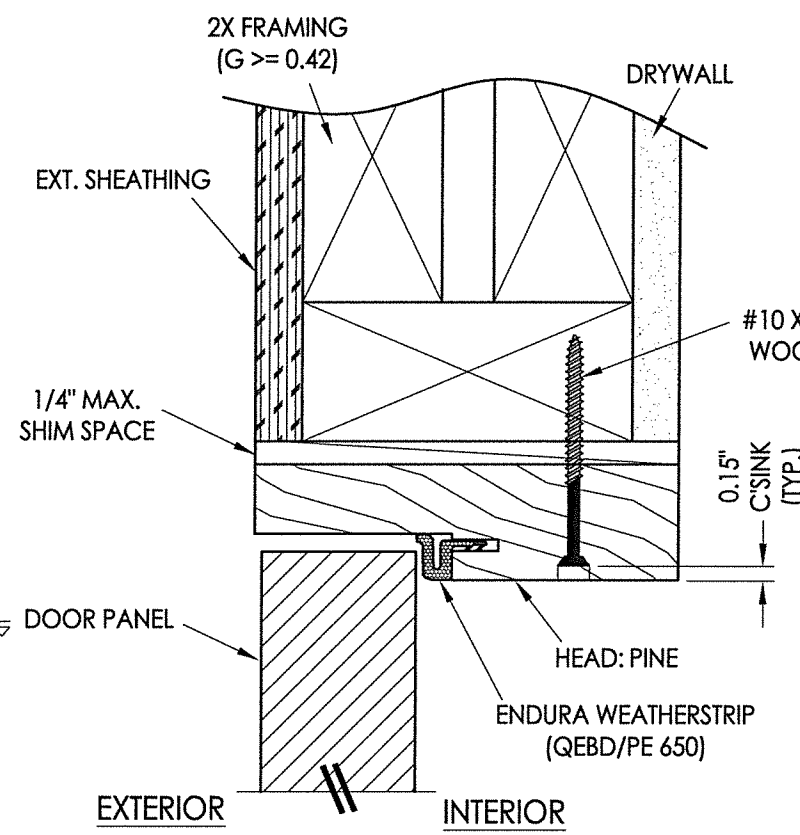
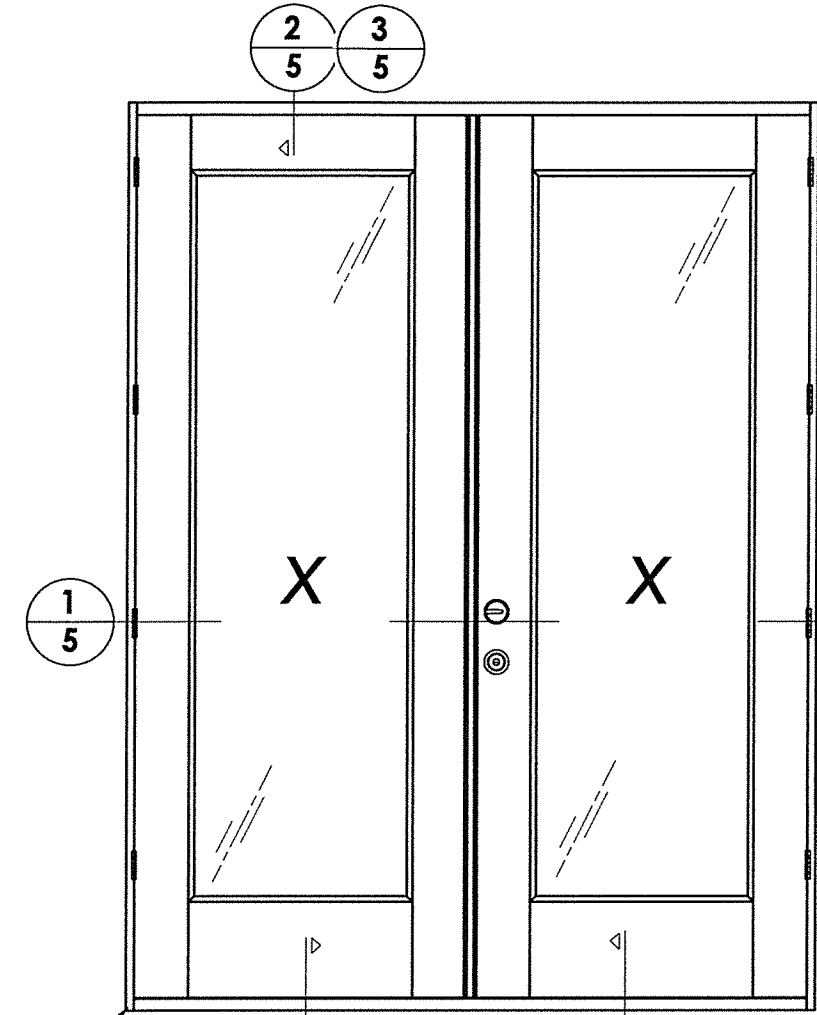
DWG. BY: JK

CHK. BY: LFS

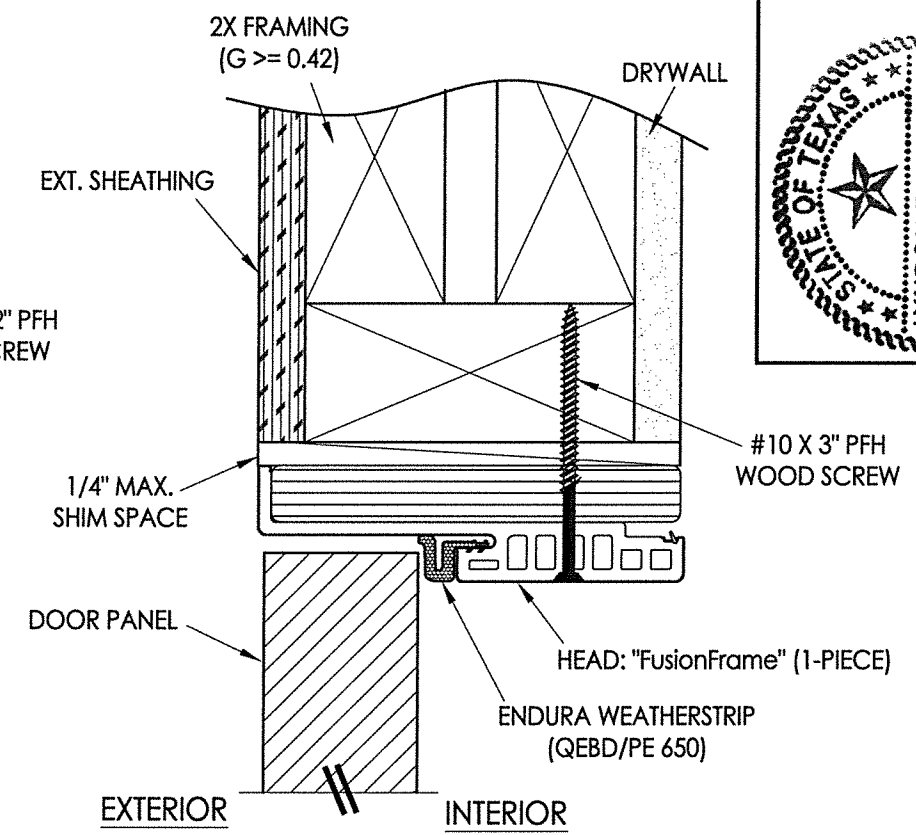
DRAWING NO.: TX-4209

SHEET 4 OF 7

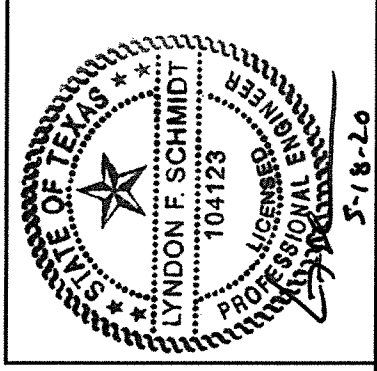
R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDL - DR-586 Therma-Tru Steel\Drawings\REV 2018 IBC\TX-4208-09.dwg, 5-2



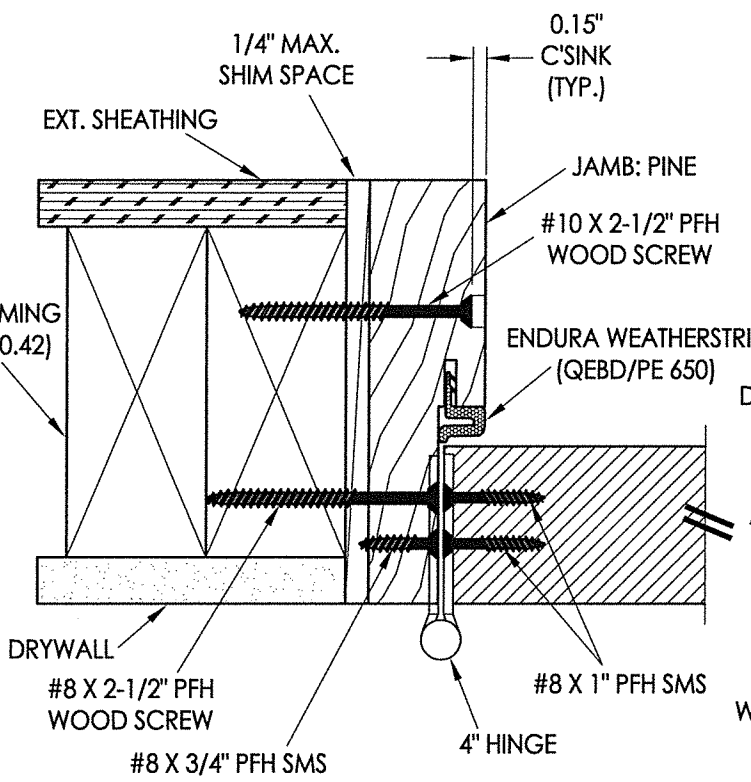
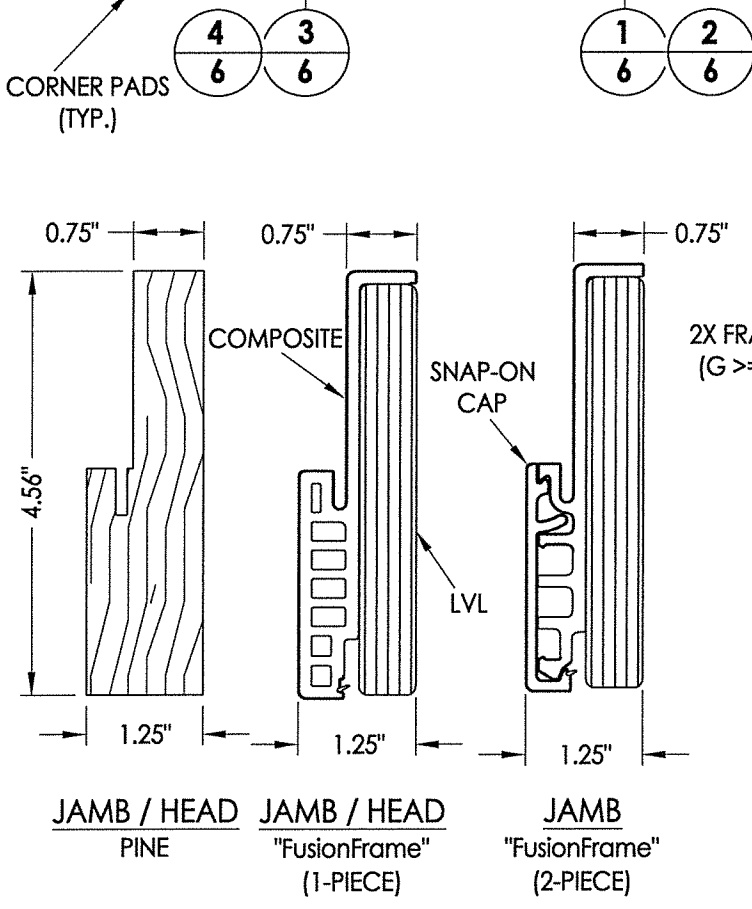
2 VERTICAL CROSS SECTION
 5 Outswing shown - inswing also approved



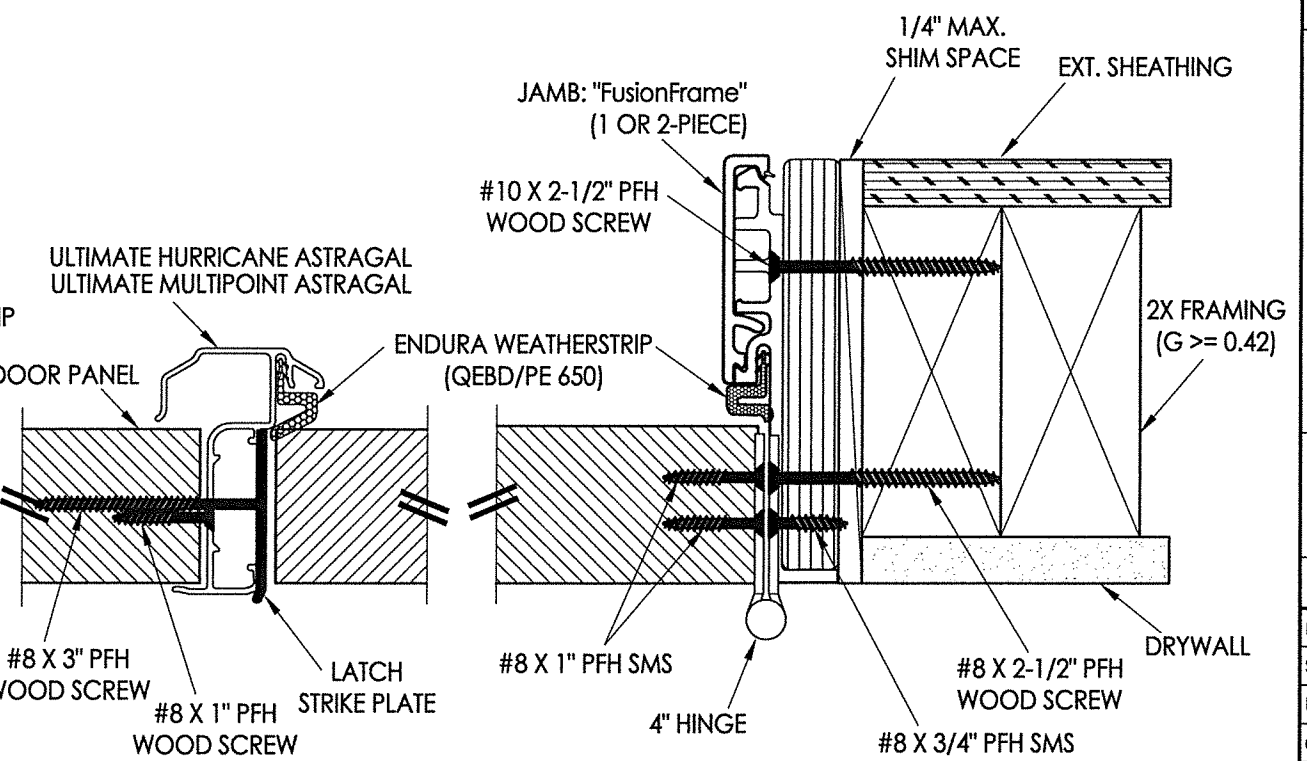
3 VERTICAL CROSS SECTION
 5 Outswing shown - inswing also approved



Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123
 5-18-20
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



1 HORIZONTAL CROSS SECTION
 5 Inswing shown - Outswing also approved

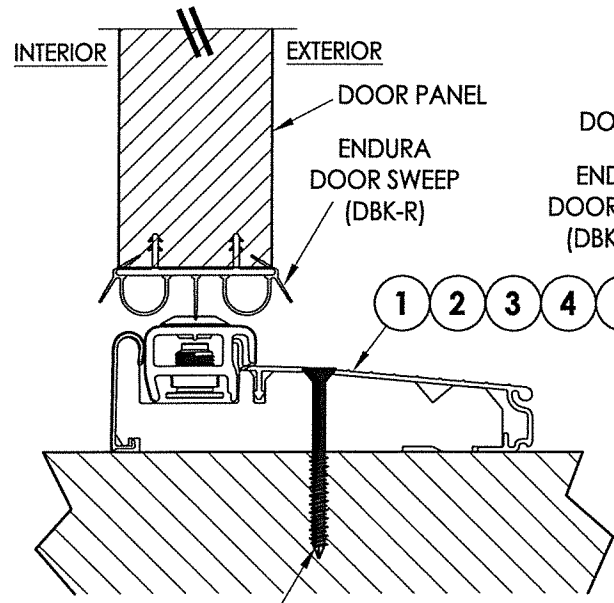


PRODUCT: ENDURA
 PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY
4	12/19/19	ADD \"FusionFrame\" OPTION & UPDATE TO 2018 IBC/IRC CODE	LFS
3	9/05/18	ADD ADDITIONAL THRESHOLDS	LFS
2	5/5/15	ADD NEW ASTRAGAL PIN CAPTURE	LFS
1	1/06/14	ADDED ARTICULATING SILL	LFS

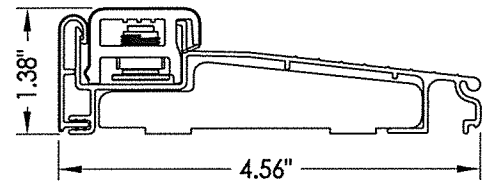
DATE: 8/08/12
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4209
 SHEET 5 OF 7

R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\TDI - DR-586 Therna-Tru Steel\Drawings\REV 2018 IBC\TX-4208-09.dwg, 6-2

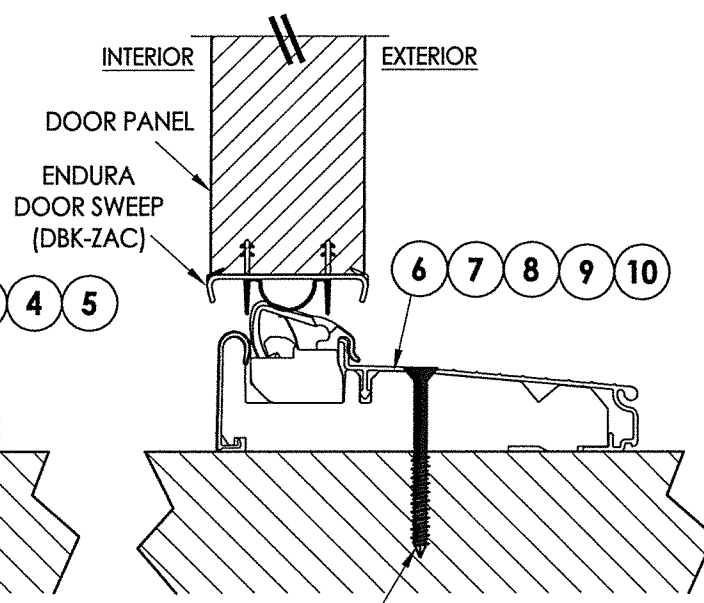


#10 X 2.5\"/>

1 VERTICAL CROSS SECTION
6 Inswing Adjustable Threshold

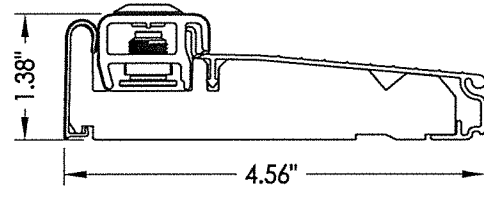


1 INSWING ADJUSTABLE THRESHOLD
ZAIL4565



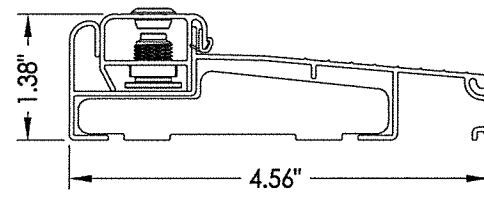
#10 X 2.5\"/>

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

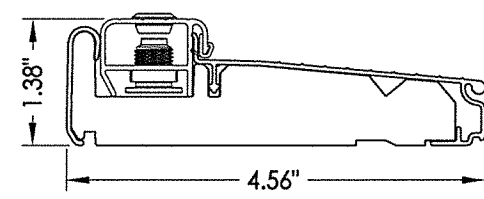


2 INSWING ADJUSTABLE THRESHOLD
ZAI4565FN

MAX. DESIGN PRESSURE = +30/-35 PSF

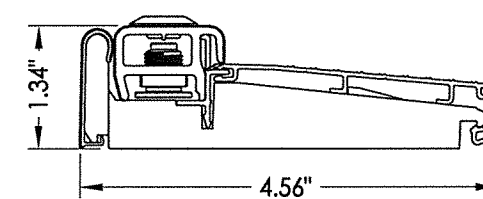


3 INSWING ADJUSTABLE THRESHOLD
ZAILAA4565



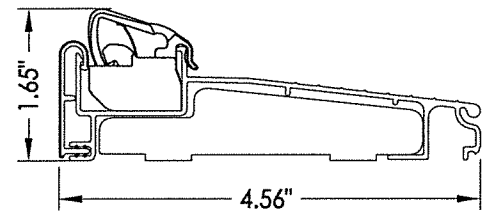
4 INSWING ADJUSTABLE THRESHOLD
ZAI4565FN

MAX. DESIGN PRESSURE = +30/-35 PSF



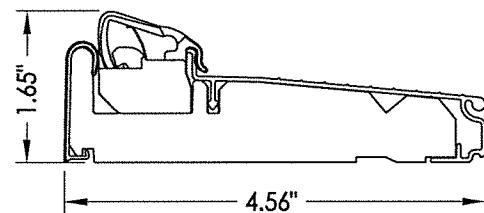
5 INSWING ADJUSTABLE THRESHOLD
ZAI4565RDS

MAX. DESIGN PRESSURE = ±40 PSF



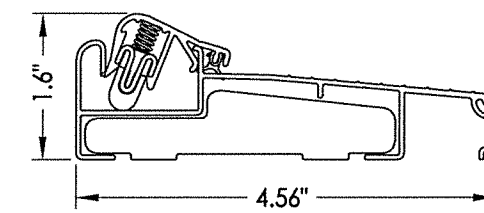
6 INSWING ARTICULATING THRESHOLD
ZACL4565

MAX. DESIGN PRESSURE = ±35 PSF



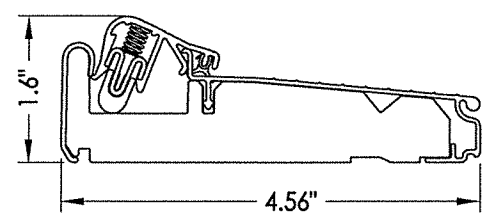
7 INSWING ARTICULATING THRESHOLD
ZAC4565FN

MAX. DESIGN PRESSURE = +30/-35 PSF



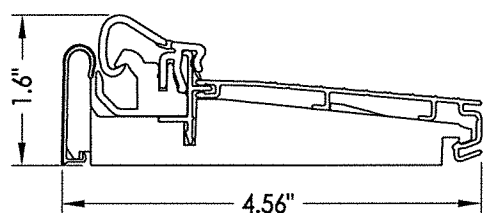
8 INSWING ARTICULATING THRESHOLD
ZACLAA4565

MAX. DESIGN PRESSURE = ±35 PSF



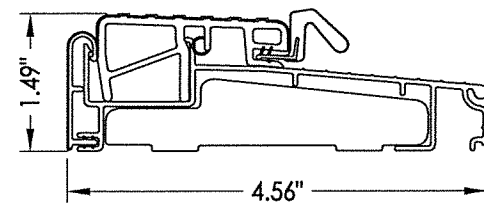
9 INSWING ARTICULATING THRESHOLD
ZACAA4565FN

MAX. DESIGN PRESSURE = +30/-35 PSF

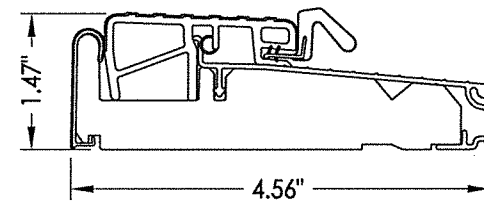


10 INSWING ARTICULATING THRESHOLD
ZAC4565RDS

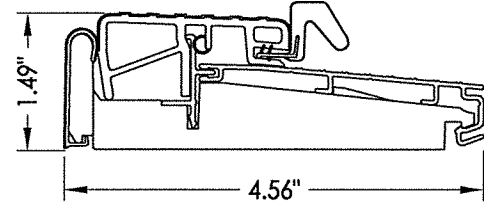
MAX. DESIGN PRESSURE = ±35 PSF



11 OUTSWING THRESHOLD
ZOBL4565

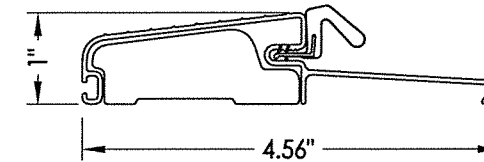


12 OUTSWING THRESHOLD
ZOB4565FN

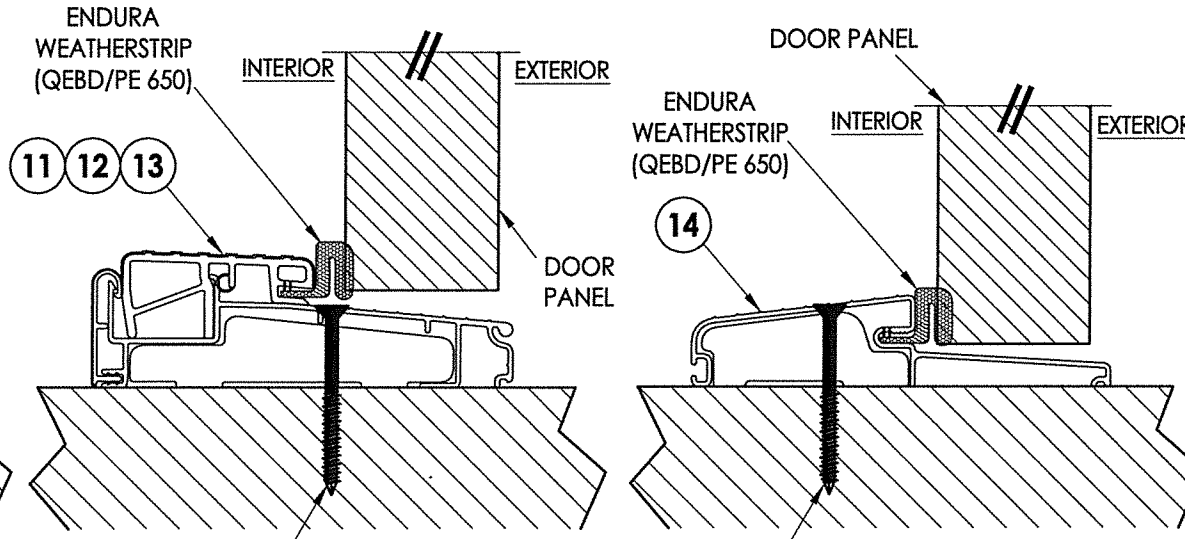


13 OUTSWING THRESHOLD
ZOB4565RDS

MAX. DESIGN PRESSURE = ±55 PSF

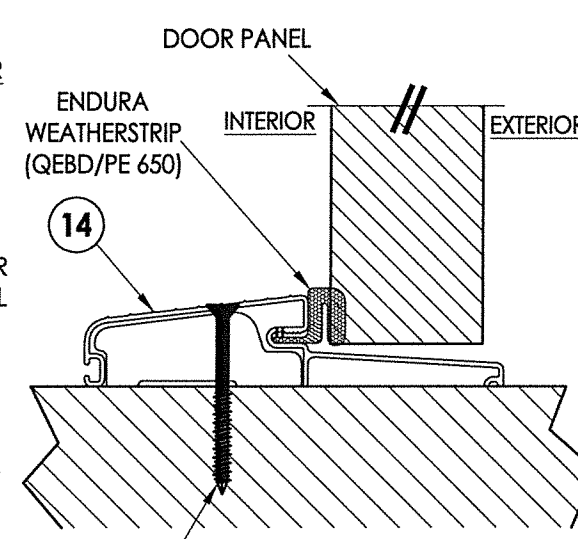


14 OUTSWING THRESHOLD
FOB4566



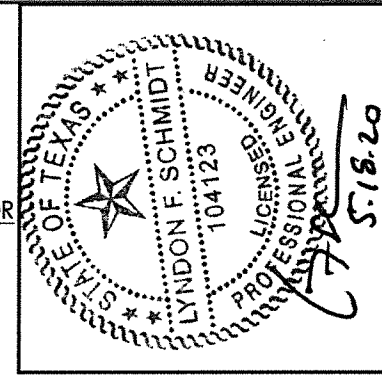
#10 X 2.5\"/>

3 VERTICAL CROSS SECTION
6 Outswing Bump Threshold



#10 X 2.5\"/>

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, 33585
Phone No.: 813.659.9197

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

PRODUCT: ENDURA

LFS

LFS

LFS

LFS

BY

REVISIONS

NO.

DATE

4 12/19/19 ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE

3 9/05/18 ADD ADDITIONAL THRESHOLDS

2 5/5/15 ADD NEW ASTRAGAL PIN CAPTURE

1 1/06/14 ADDED ARTICULATING SILL

DATE: 8/08/12

SCALE: N.T.S.

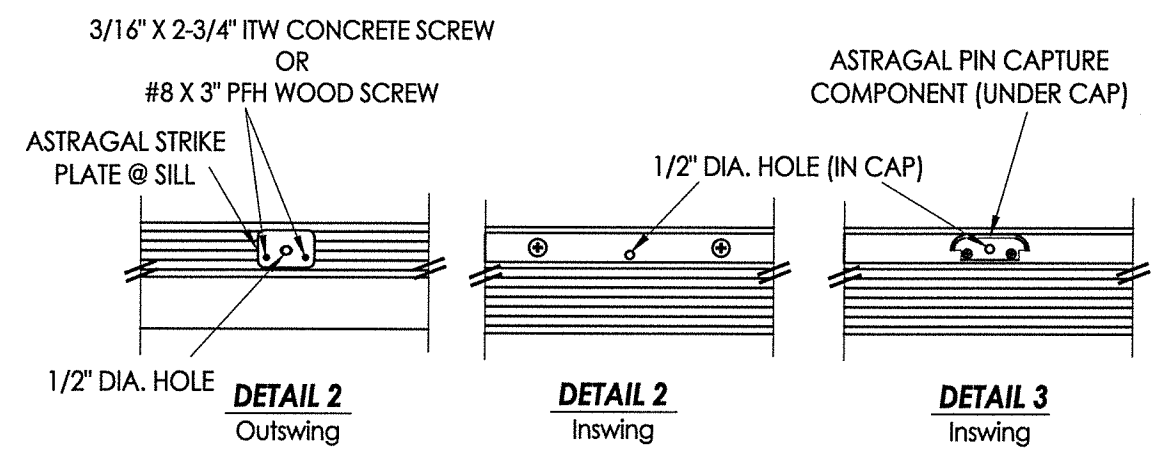
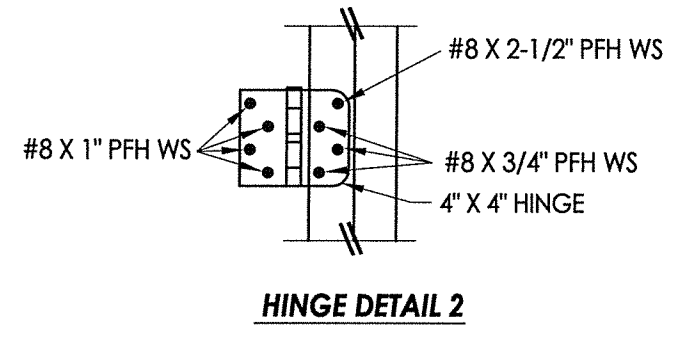
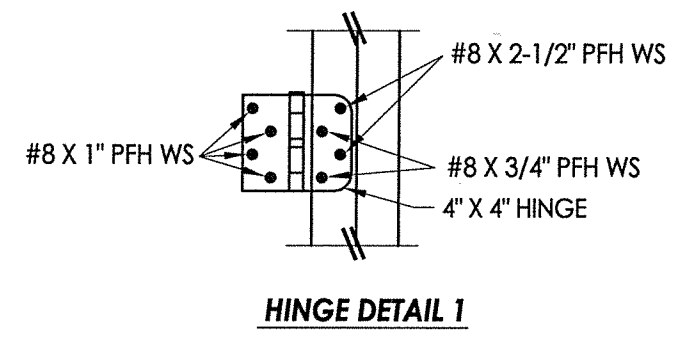
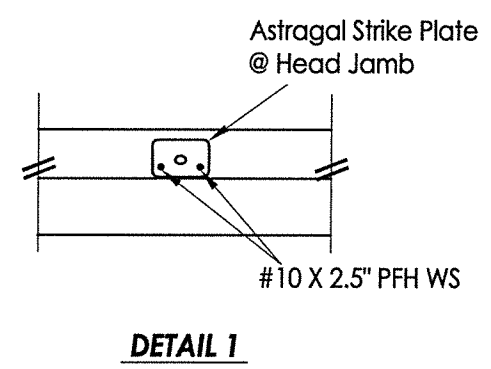
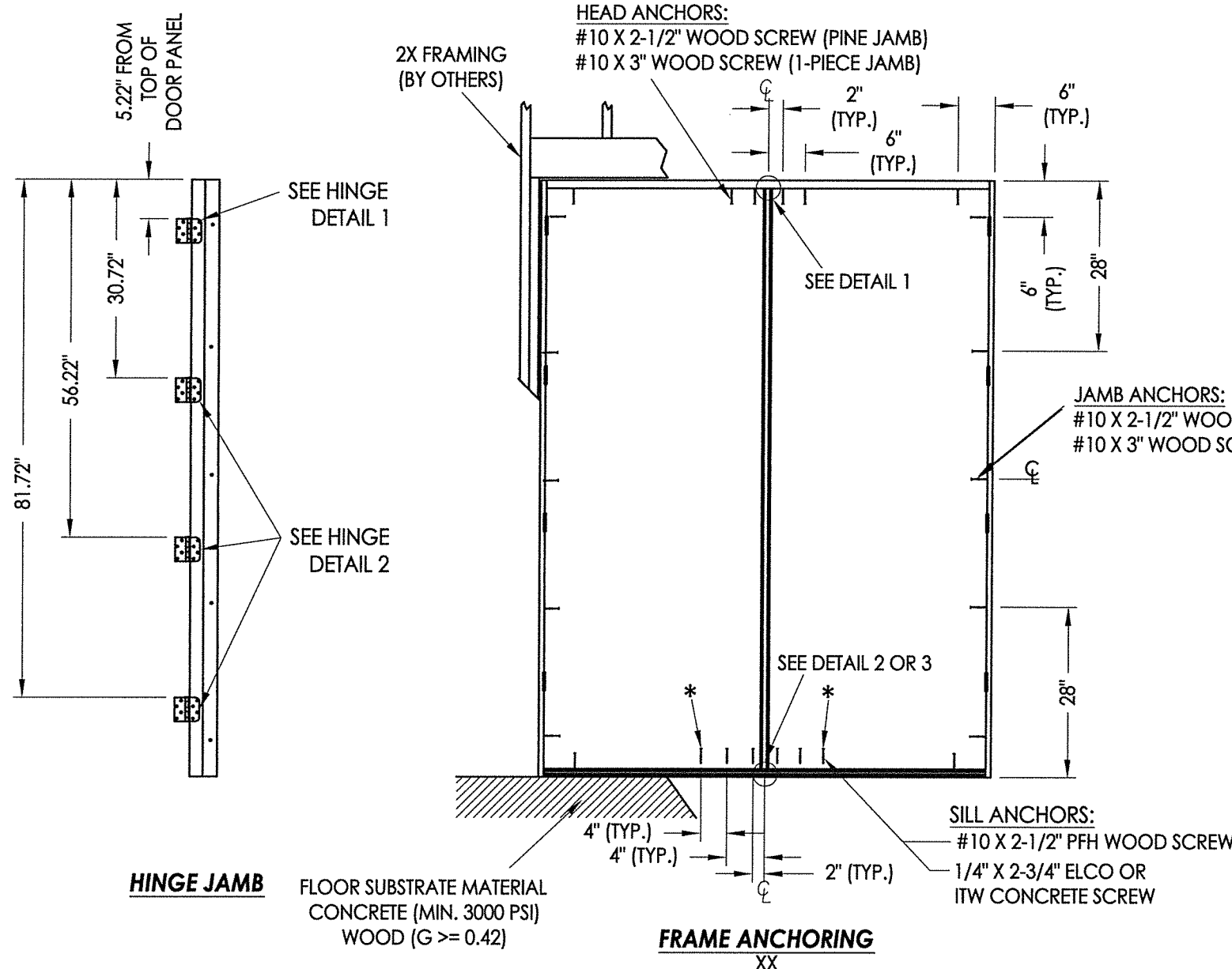
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4209

SHEET 6 of 7

R:\Clients\Endura PERMANENT\B - Texas Dept of Ins\YDI - DR-586 Thermo-Tru Steel\Drawings\REV 2018 IBC\TX-4208-09.dwg, 7-2



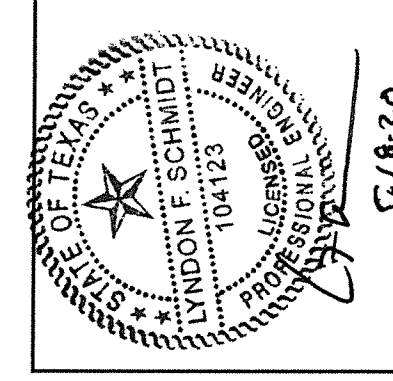
JAMB NOTES:
 THE PINE OR "FusionFrame" 1-PIECE JAMB MAY BE INSTALLED @ THE HEAD OR SIDE JAMB.
 THE FusionFrame" 2-PIECE JAMB MAY BE INSTALLED @ THE SIDE JAMBS ONLY.

- 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"
ITW TAPCON®	1/4"	1-3/4"	1-1/2"	4"
ELCO ULTRACON®	1/4"	1-3/4"	1"	4"

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: 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: FRAME ANCHORING

NO.	DATE	REVISIONS
4	12/19/19	ADD "FusionFrame" OPTION & UPDATE TO 2018 IBC/IRC CODE
3	9/05/18	ADD ADDITIONAL THRESHOLDS
2	5/5/15	ADD NEW ASTRAGAL PIN CAPTURE
1	1/06/14	ADDED ARTICULATING SILL

DATE: 8/08/12
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4209
 SHEET 7 OF 7

© 2012 R.W. BUILDING CONSULTANTS INC.