Endura PRODUCTS, INC.
8811 West Market Street
Colfax, N.C. 27235

Glazed Fiberglass Door

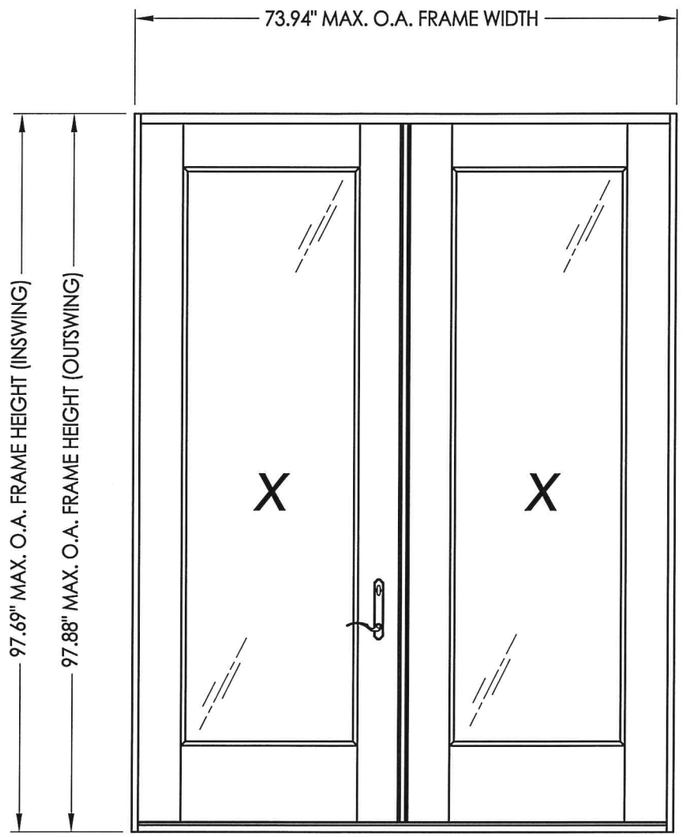
"NON-IMPACT"
INSWING / OUTSWING

EVALUATED FOR USE IN THE STATE OF TEXAS

The Glazed Fiberglass Door system described herein complies with the 2006 International Residential Code (IRC), Sections R301 & R613 and the 2006 International Building Code (IBC), Sections 1405.12, 1609, 1714.5, 2403 and 2404 (including Texas revisions) 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 Trilennium)
3	Door panel details (lip lite insert glazing)
4	Door panel details (flush glazing)
5	Horizontal cross sections
6	Vertical cross sections
7	Frame anchoring



CONFIG.	GLAZING	MODEL	DESIGN PRESSURE (PSF) ULTIMATE ASTRAGAL LITE	
			POSITIVE	NEGATIVE
XX	LIP LITE INSERT	INSWING	+40.0	-45.0
XX	LIP LITE INSERT	OUTSWING	+35.0	-40.0
XX	FLUSH GLAZED	INSWING	+40.0	-40.0
XX	FLUSH GLAZED	OUTSWING	+45.0	-45.0

STATE OF TEXAS · LYNDON F. SCHMIDT · 104123 · LICENSED PROFESSIONAL ENGINEER

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

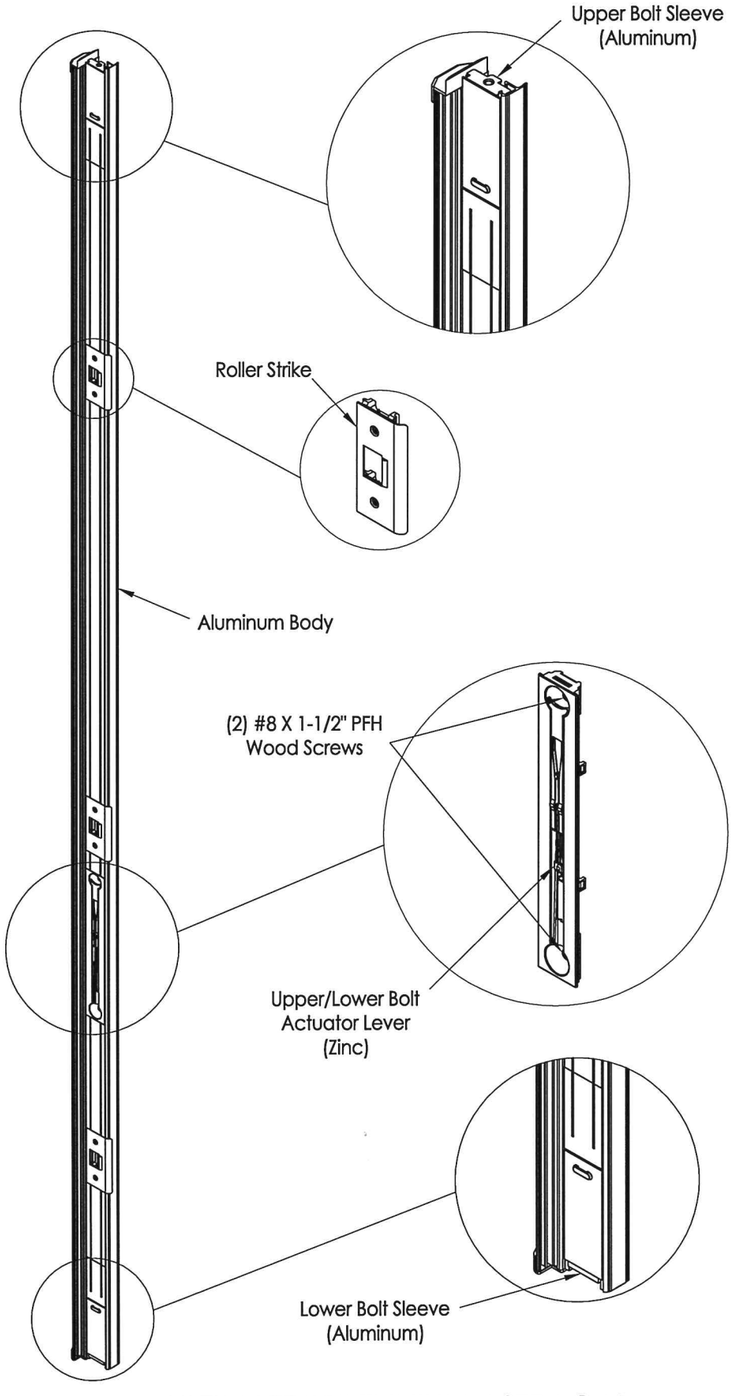
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS	BY
1	5/07/15	ADD NEW ASTRAGAL PIN CAPTURE	LFS

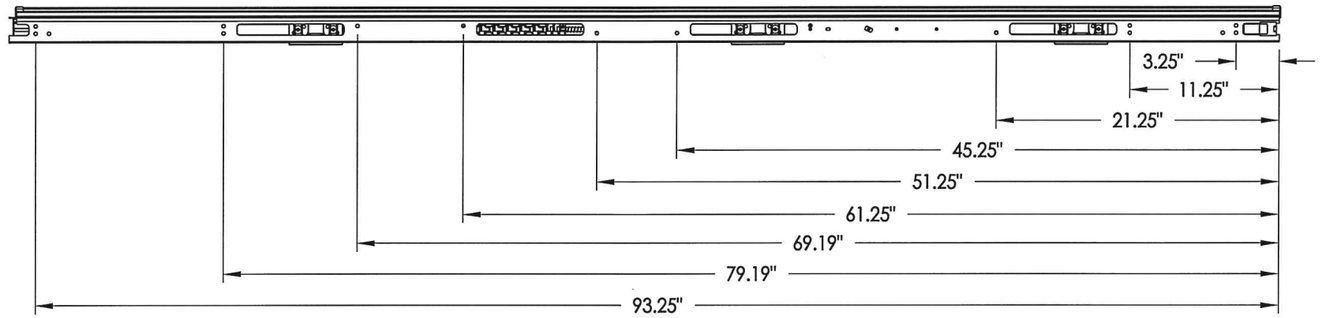
DATE: 1/16/14
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4433
SHEET 1 OF 7

© 2014 R.W. BUILDING CONSULTANTS INC.

R:\Clients\Endura PERMANENT\Texas Dept of Ins\TDI - 705\Drawings\Current\TX-4432-33.dwg, TX-4433



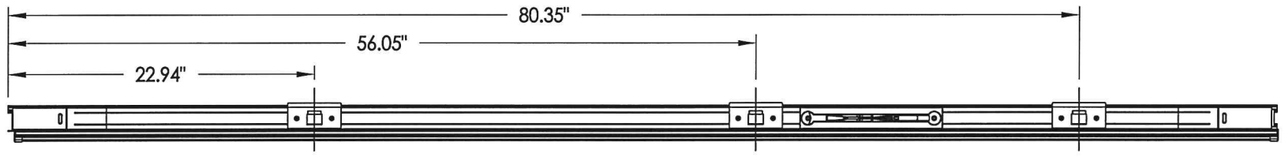
ULTIMATE TRILENNIUM ASTRAGAL



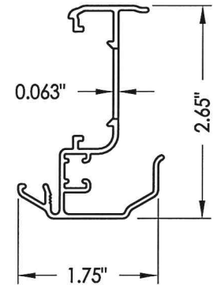
TOP

ANCHOR SCREW LOCATIONS

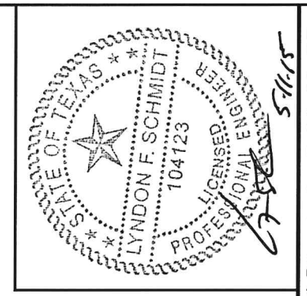
BOTTOM



HARDWARE LOCATIONS



Astragal Section



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

R|W 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

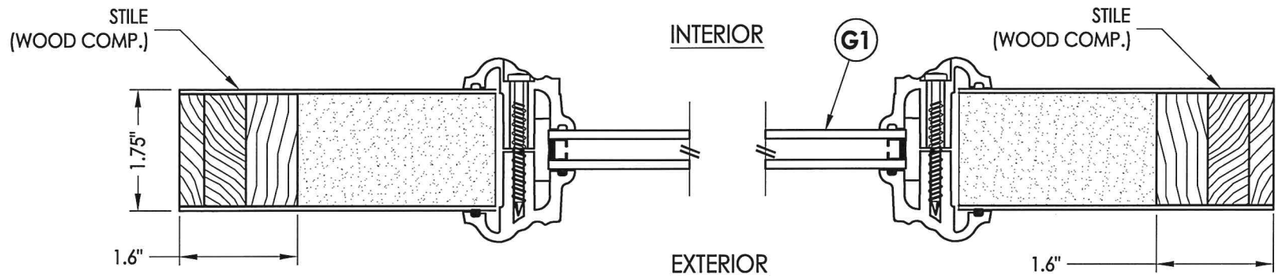
PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE TRILENNIUM)

NO.	DATE	REVISIONS	BY
1	5/07/15	ADD NEW ASTRAGAL PIN CAPTURE	LFS

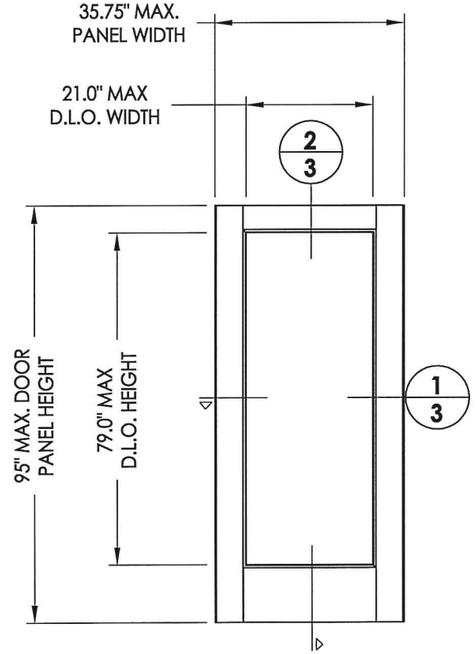
DATE: 1/16/14
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4433
SHEET 2 OF 7

© 2014 R.W. BUILDING CONSULTANTS INC.

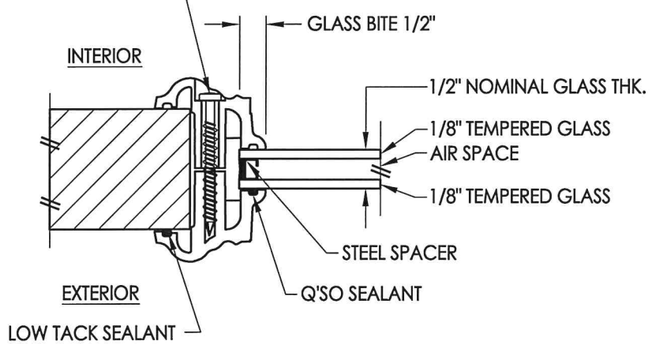
R:\Clients\Endura PERMANENT\Texas Dept of Ins\TDI - 705\Drawings\Current\TX-4432-33.dwg, 2.2



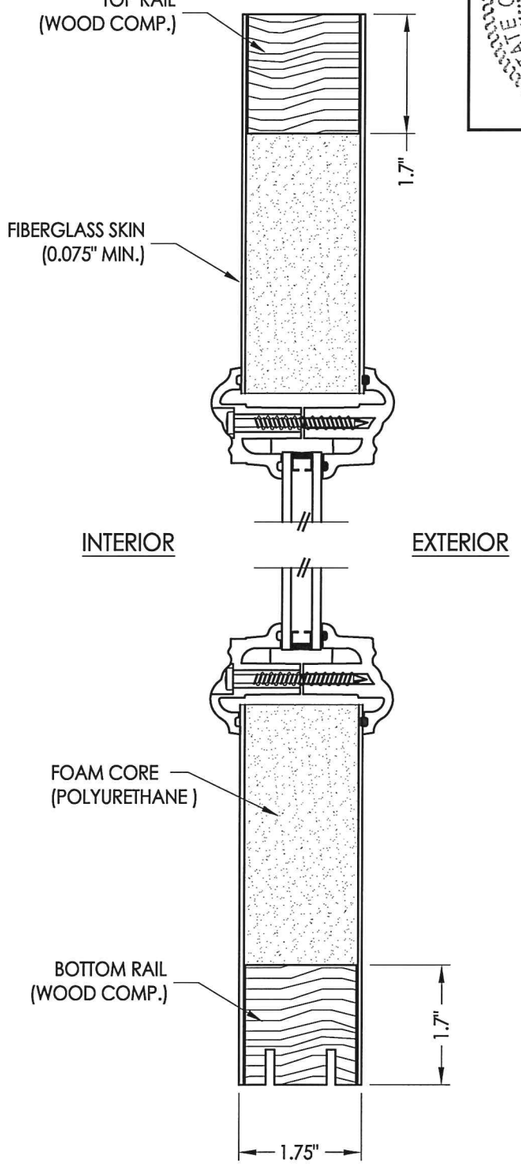
1/3 HORIZONTAL CROSS SECTION



MASONITE
Insert glazed
(fiberglass)



G1 GLAZING DETAIL
Lip Lite Insert Glazing



2/3 VERTICAL CROSS SECTION

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED
PROFESSIONAL ENGINEER

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

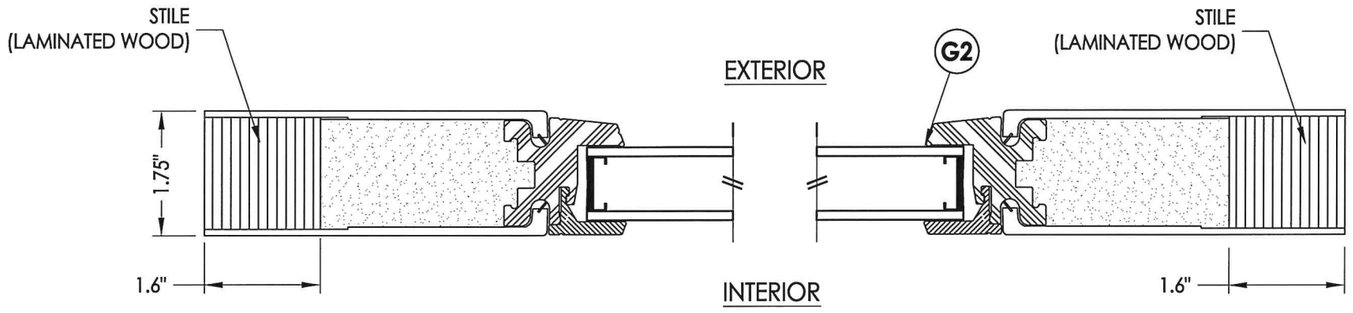
PART OR ASSEMBLY: DOOR PANEL DETAILS (LIP LITE INSERT GLAZING)

NO.	DATE	REVISIONS	BY
1	5/07/15	ADD NEW ASTRAGAL PIN CAPTURE	LFS

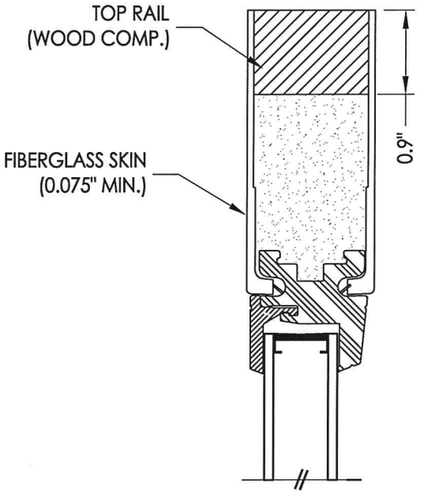
DATE: 1/16/14
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4433
SHEET 3 OF 7

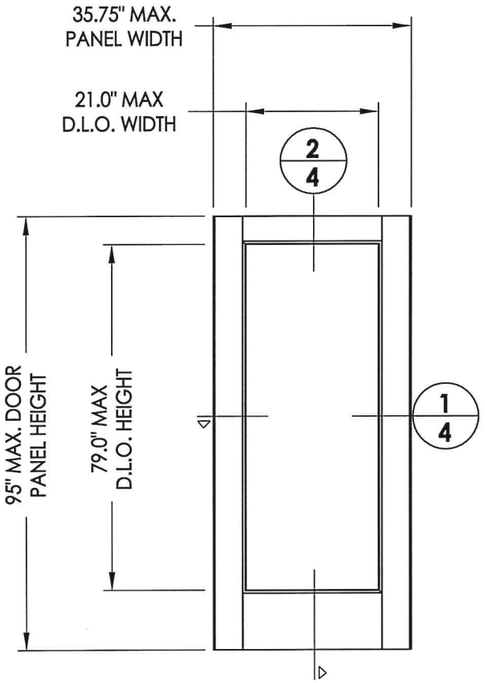
© 2014 R.W. BUILDING CONSULTANTS INC.

R:\Clients\Endura PERMANENT\Texas Dept of Ins\TDI - 705\Drawings\Current\TX-4432-33.dwg, 3.2

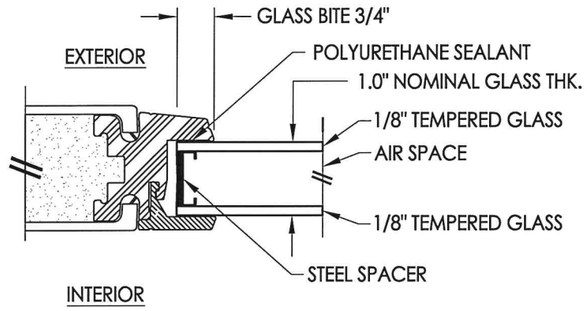


1/4 **HORIZONTAL CROSS SECTION**

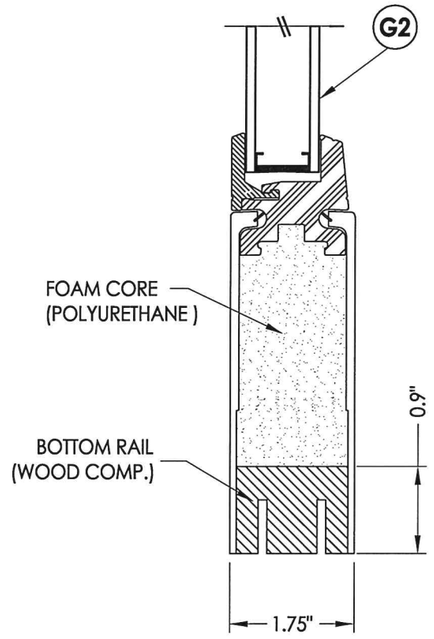




MASONITE
Flush glazed
(fiberglass)



G2 **GLAZING DETAIL**
Flush Glazing



2/4 **VERTICAL CROSS SECTION**

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED PROFESSIONAL ENGINEER

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

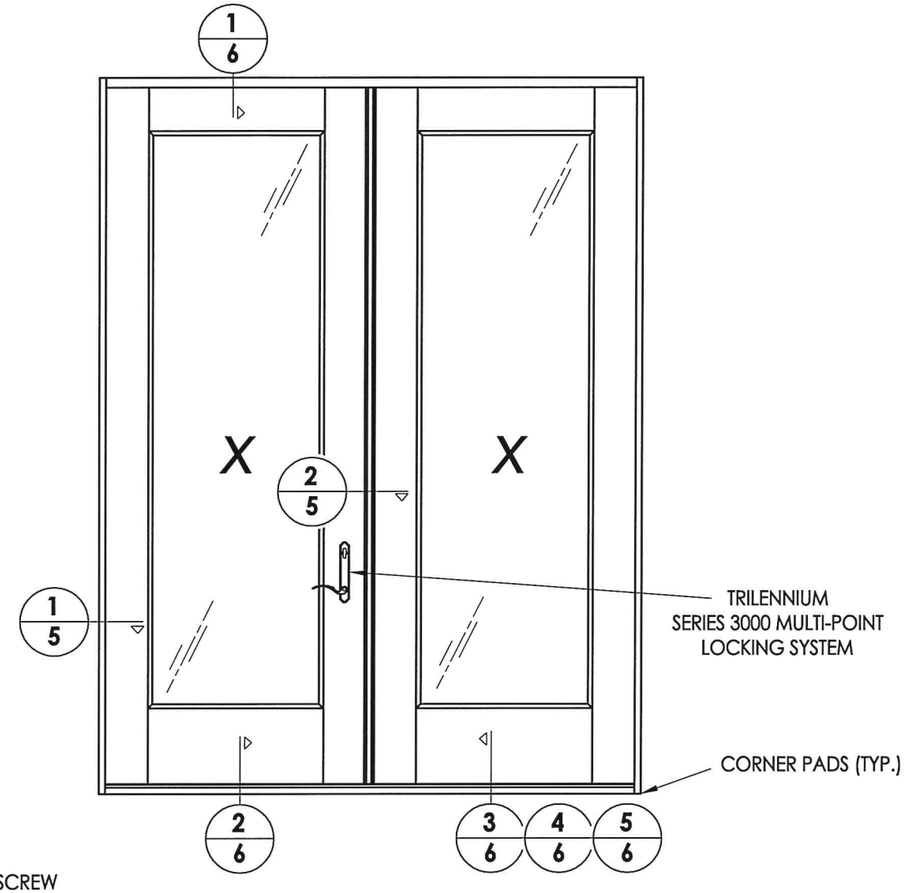
PART OR ASSEMBLY: DOOR PANEL DETAILS (FLUSH GLAZING)

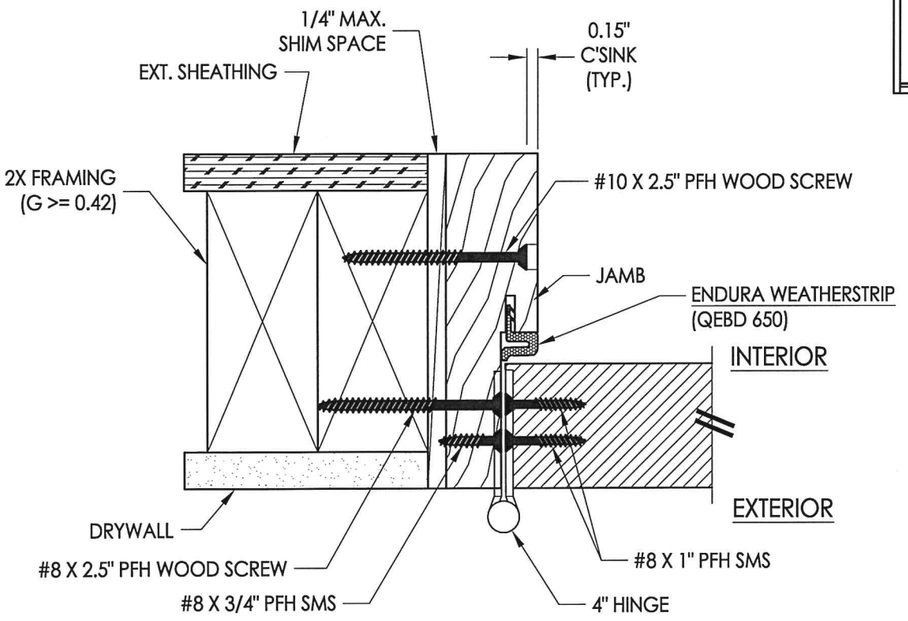
NO.	DATE	REVISIONS	BY
1	5/07/15	ADD NEW ASTRAGAL PIN CAPTURE	LFS

DATE: 1/16/14
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4433
SHEET 4 OF 7

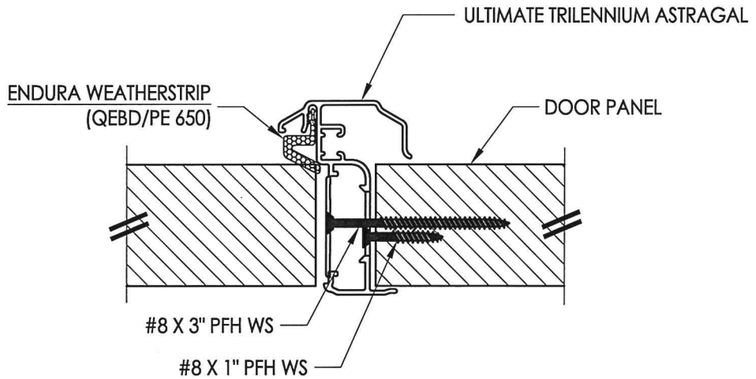
© 2014 R.W. BUILDING CONSULTANTS INC.

R:\Clients\Endura PERMANENT\Texas Dept of Ins\TDI - 705\Drawings\Current\TX-4432-33.dwg, 4.2

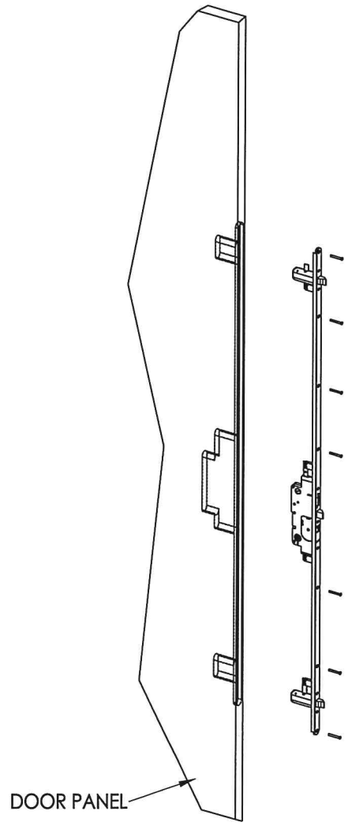




1/5 HORIZONTAL CROSS SECTION
Inswing shown - Outswing also approved



2/5 HORIZONTAL CROSS SECTION



TRILENNIUM
SERIES 3000 MULTI-POINT
LOCKING SYSTEM

STATE OF TEXAS
LICENSED PROFESSIONAL ENGINEER
LYNDON F. SCHMIDT
104123

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

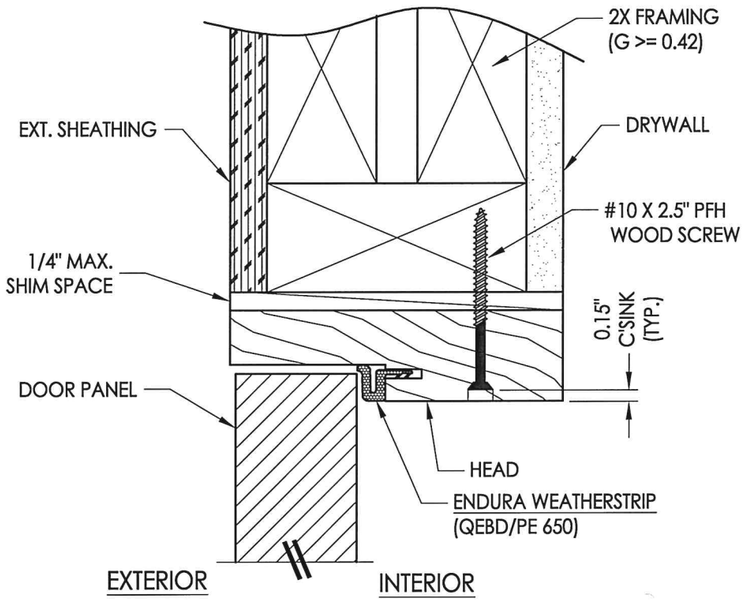
PART OR ASSEMBLY:
HORIZONTAL
CROSS SECTIONS

NO.	DATE	REVISIONS	BY
1	5/07/15	ADD NEW ASTRAGAL PIN CAPTURE	LFS

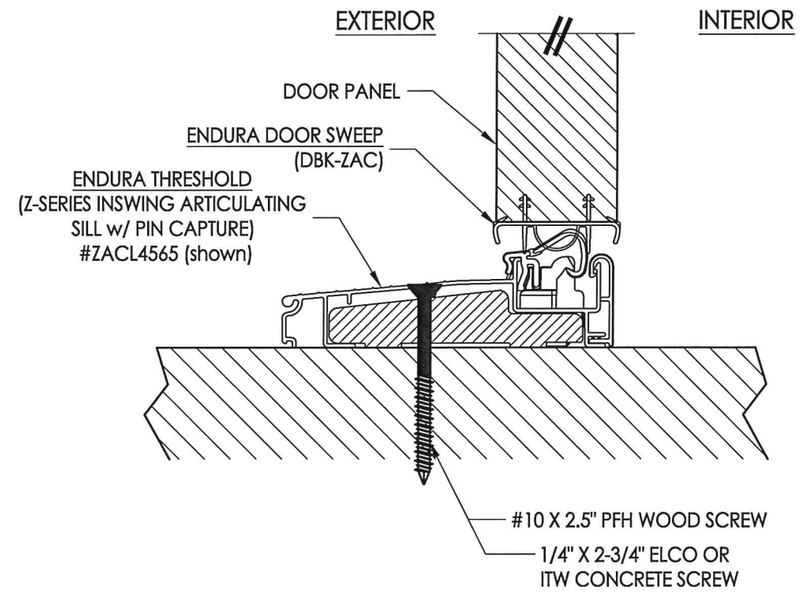
DATE: 1/16/14
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4433
SHEET 5 OF 7

© 2014 R.W. BUILDING CONSULTANTS INC.

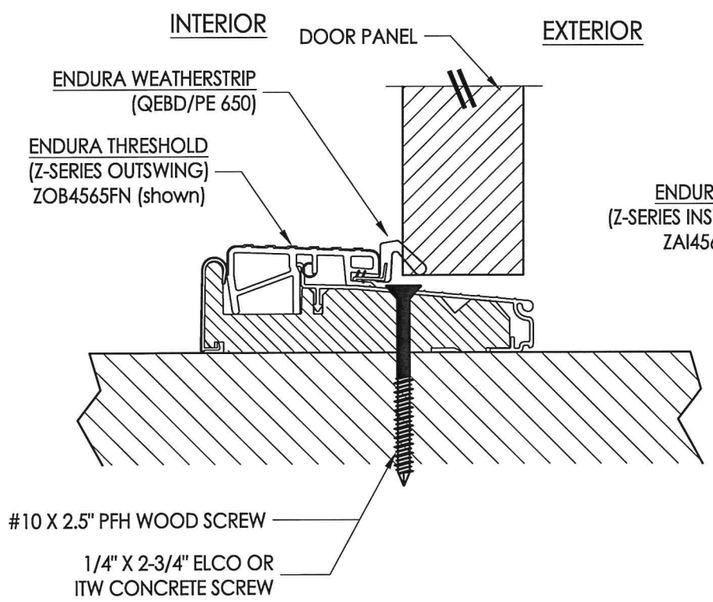
R:\Clients\Endura PERMANENT\Texas Dept of Ins\TDI - 705\Drawings\Current\TX-4432-33.dwg, 5.2



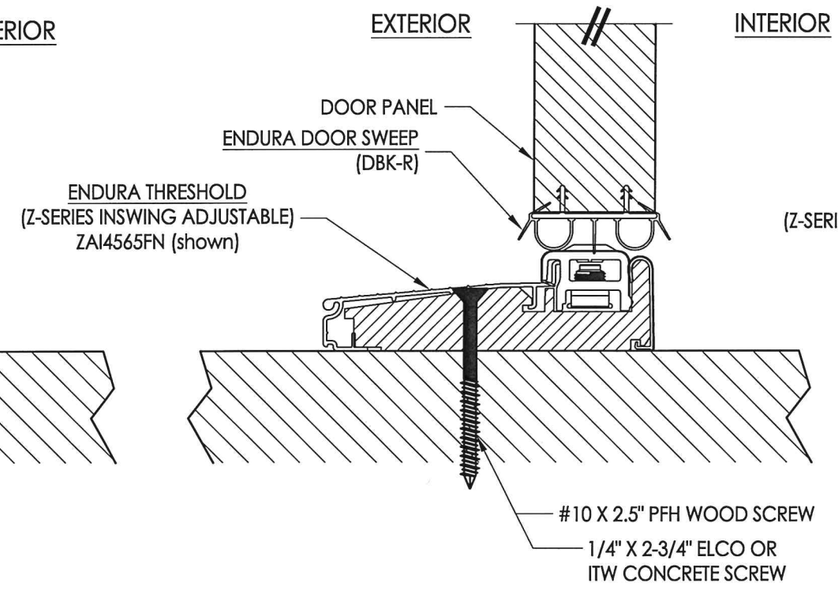
1/6 VERTICAL CROSS SECTION
Outswing shown - inswing also approved



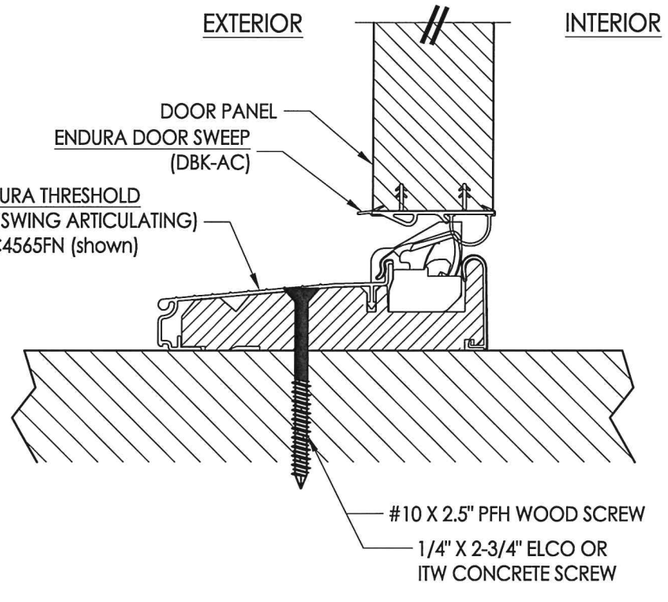
5/6 VERTICAL CROSS SECTION
Inswing configuration



2/6 VERTICAL CROSS SECTION
Outswing shown



3/6 VERTICAL CROSS SECTION
Inswing configuration



4/6 VERTICAL CROSS SECTION
Inswing configuration

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

STATE OF TEXAS · LYNDON F. SCHMIDT · 104123 · LICENSED PROFESSIONAL ENGINEER

PRODUCT: ENDURA

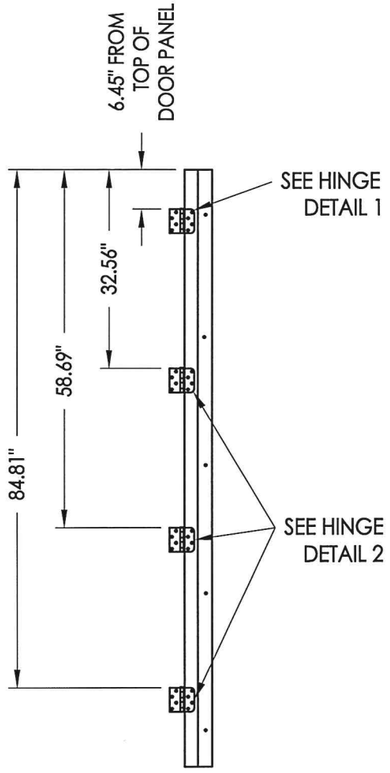
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY
1	5/07/15	ADD NEW ASTRAGAL PIN CAPTURE	LFS

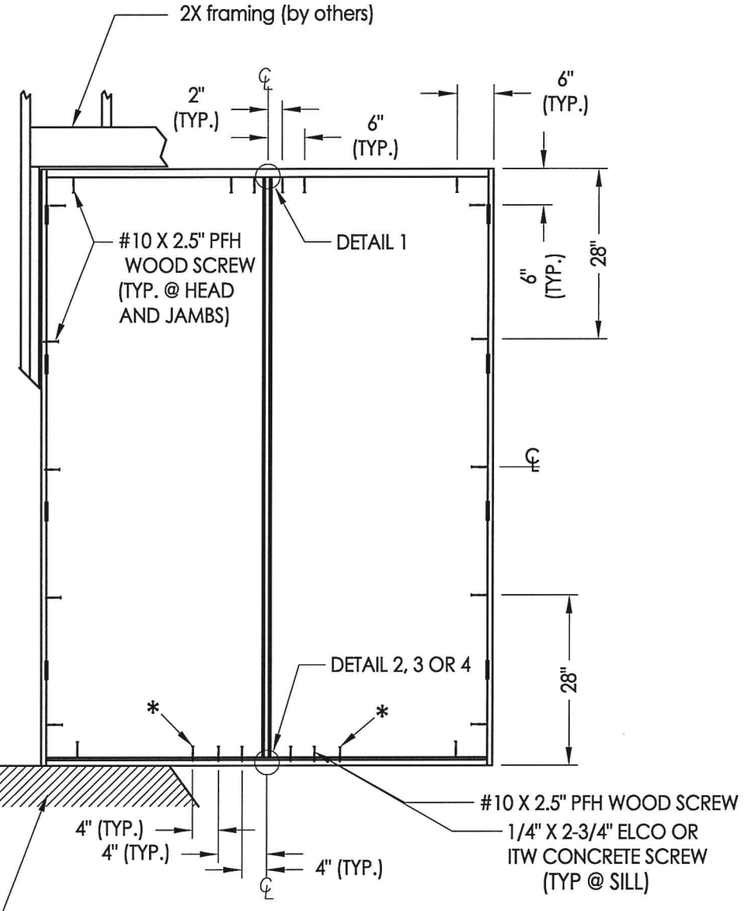
DATE: 1/16/14
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4433
SHEET 6 OF 7

© 2014 R.W. BUILDING CONSULTANTS INC.

R:\Clients\Endura PERMANENT\Texas Dept of Ins\TDI - 705\Drawings\Current\TX-4432-33.dwg, 6.2



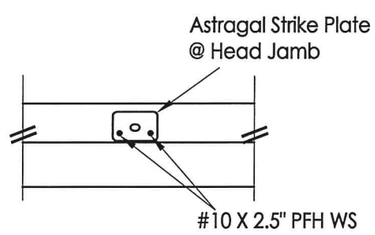
HINGE JAMB



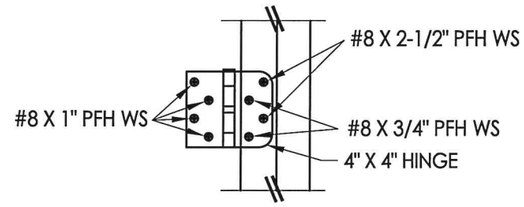
FLOOR SUBSTRATE MATERIAL (TYP.)
CONCRETE (MIN. 3000 PSI)
WOOD (G >= 0.42)

FRAME ANCHORING
XX

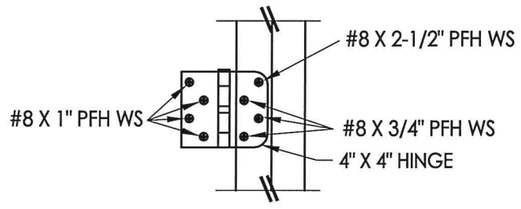
*NOTE: Outside anchors are required for D.P. > 40 PSF.



DETAIL 1



HINGE DETAIL 1

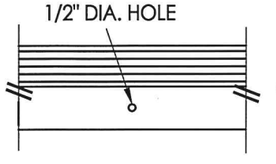


HINGE DETAIL 2

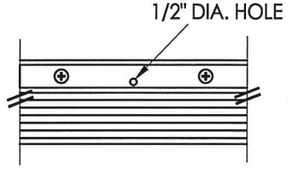
CONCRETE ANCHOR NOTES:

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:*

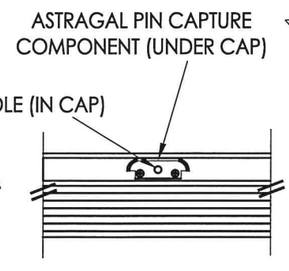
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-3/4"	1-1/2"	4"
ELCO ULTRACON®	1/4"	1-3/4"	1"	4"



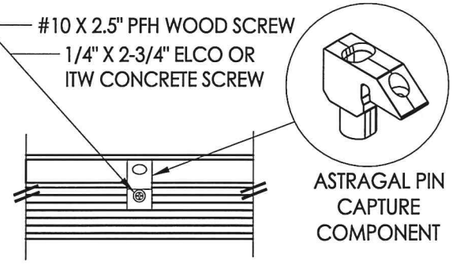
DETAIL 2
Outswing



DETAIL 2
Inswing



DETAIL 3
Inswing



DETAIL 4
Inswing

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

R.W. 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	REVISIONS	BY
1	5/07/15	ADD NEW ASTRAGAL PIN CAPTURE	LFS

DATE: 1/16/14
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4433
SHEET 7 OF 7

© 2014 R.W. BUILDING CONSULTANTS INC.

R:\Clients\Endura PERMANENT\Texas Dept of Ins\TDI - 705\Drawings\Current\TX-4432-33.dwg, 7.2