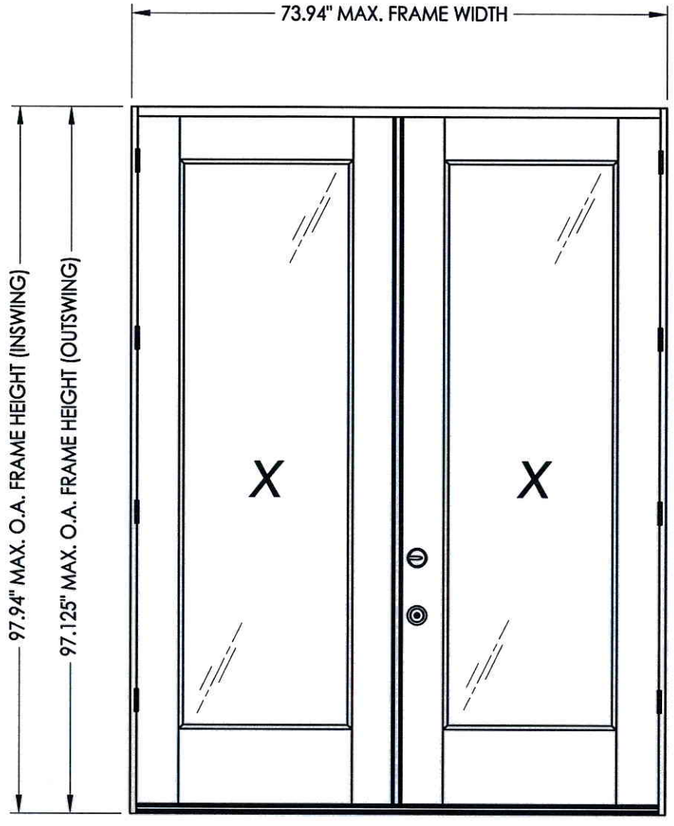
Endura PRODUCTS, INC.

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.

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| 3 | Astragal details (Ultimate Multi-point) |
| 4 | Astragal details (Ultimate Hurricane) |
| 5 | Door panel details (flush glazing) |
| 6 | Door panel details (lip lite insert glazing) |
| 7 | Horizontal cross sections |
| 8 | Vertical cross sections |
| 9 | Frame anchoring |

| 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 | LIP LITE INSERT | INSWING | +40.0 | -45.0 | +35.0 | -35.0 | +40.0 | -40.0 |
| XX | LIP LITE INSERT | OUTSWING | +45.0 | -45.0 | +35.0 | -35.0 | +40.0 | -40.0 |
| XX | FLUSH GLAZED | INSWING | +40.0 | -40.0 | +40.0 | -40.0 | +30.0 | -35.0 |
| XX | FLUSH GLAZED | OUTSWING | +40.0 | -40.0 | +40.0 | -40.0 | +30.0 | -30.0 |

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED PROFESSIONAL ENGINEER
10-1-12

Documents Prepared By: Lyndon F. Schmidt, P.E.
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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: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

REVISIONS

| NO. | DATE | BY |
|---|---|---|

DATE: 8/09/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4213
SHEET 1 OF 9

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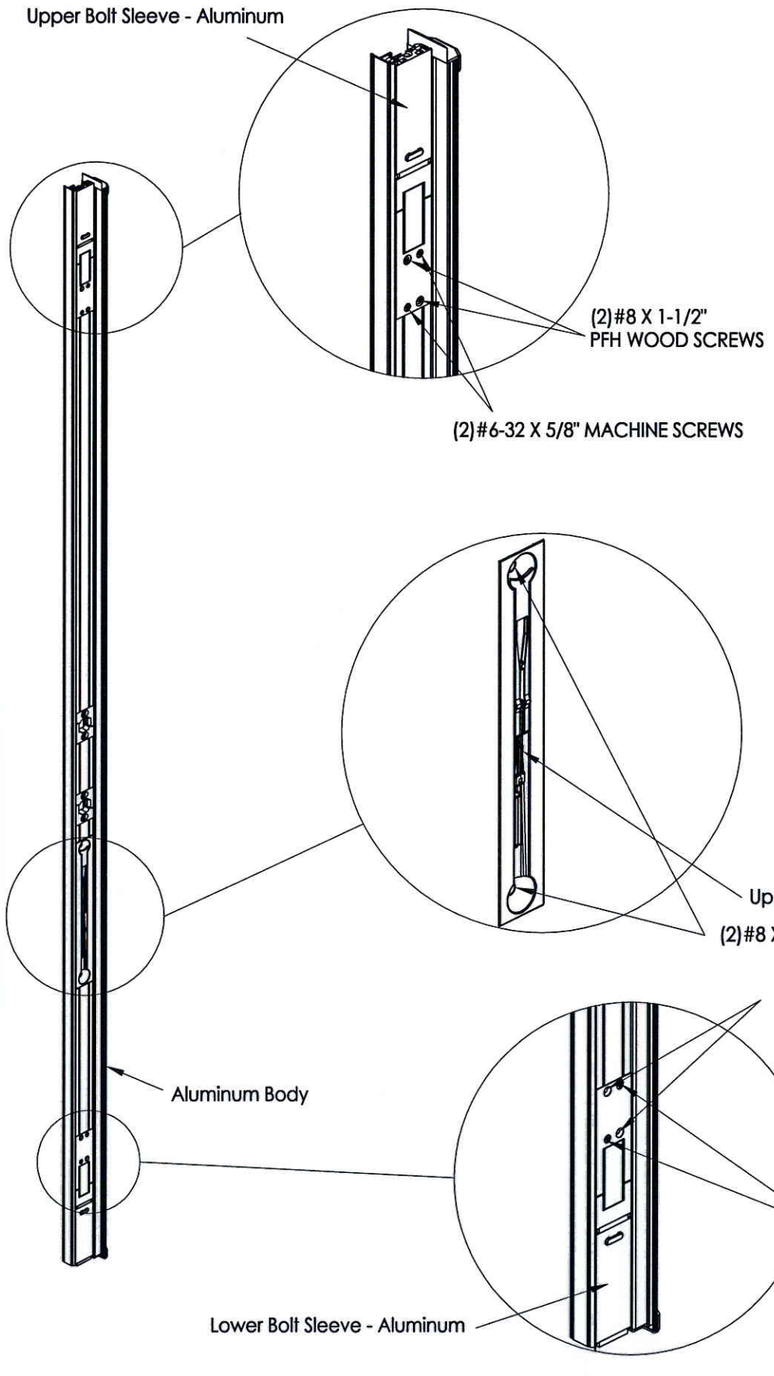
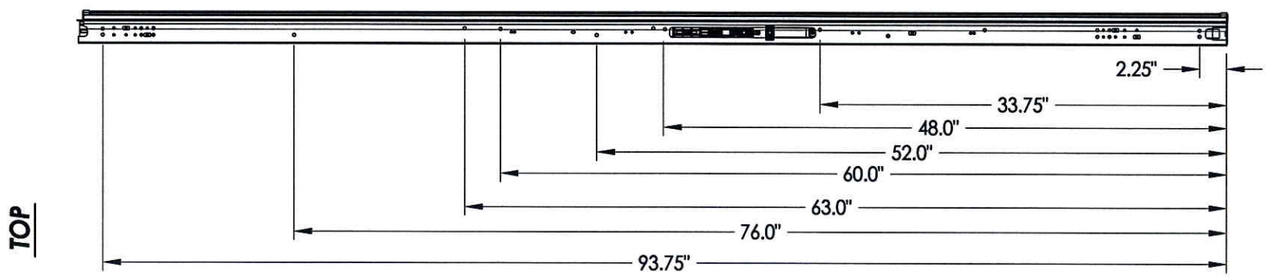
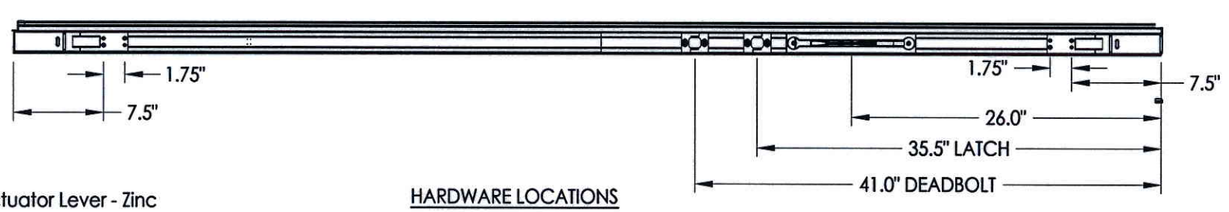


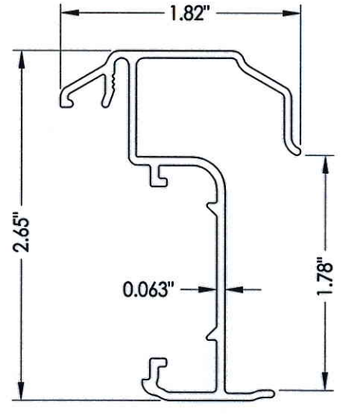

## ULTIMATE FLIP LEVER ASTRAGAL




ANCHOR SCREW LOCATIONS




HARDWARE LOCATIONS




Astragal Section

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

10-1-12

PRODUCT: ENDURA

PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE FLIP LEVER)

| NO. | DATE | REVISIONS | BY |
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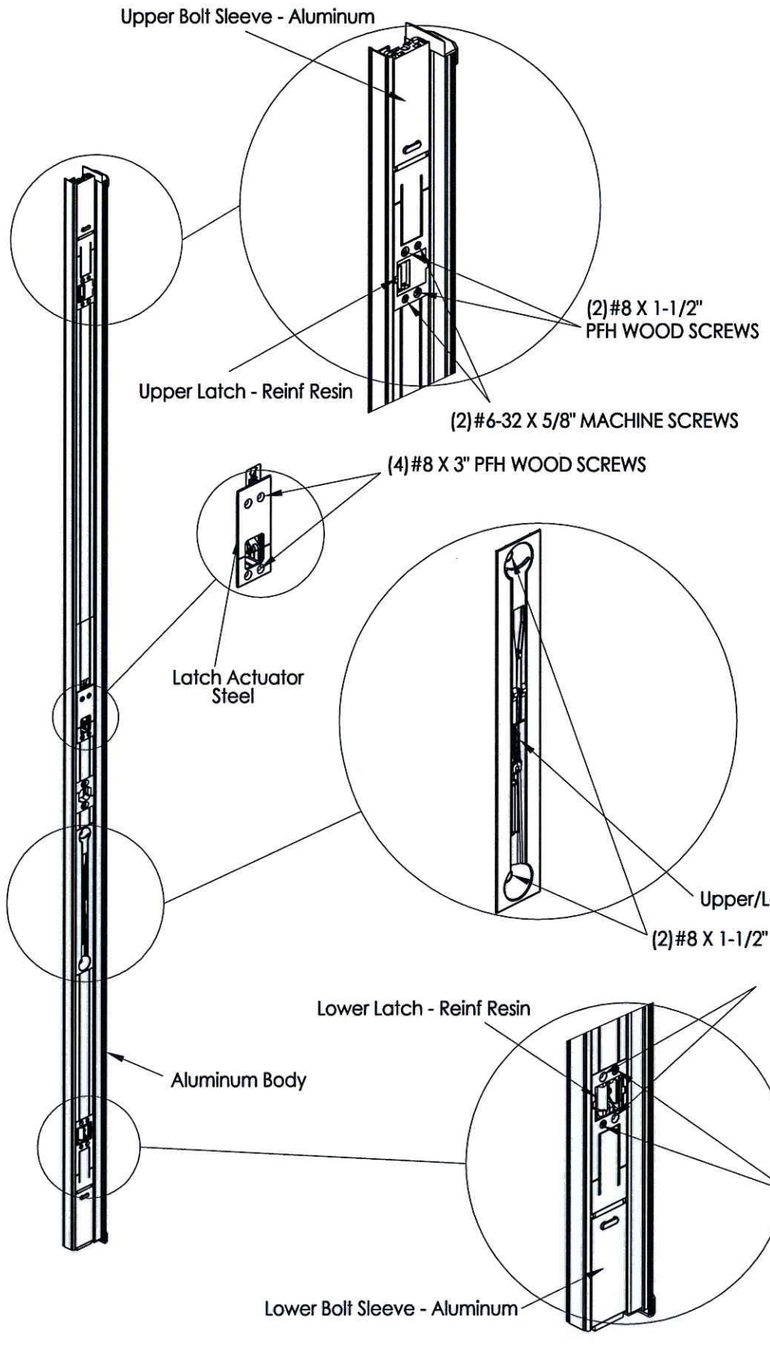
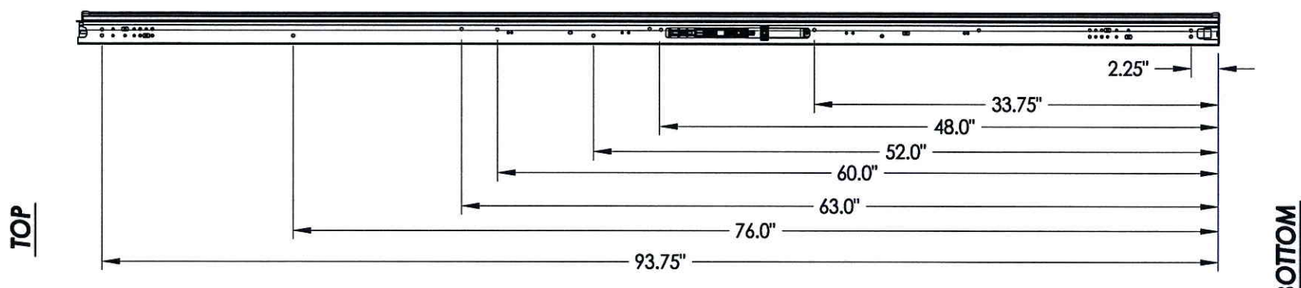



## ULTIMATE MULTI-POINT ASTRAGAL

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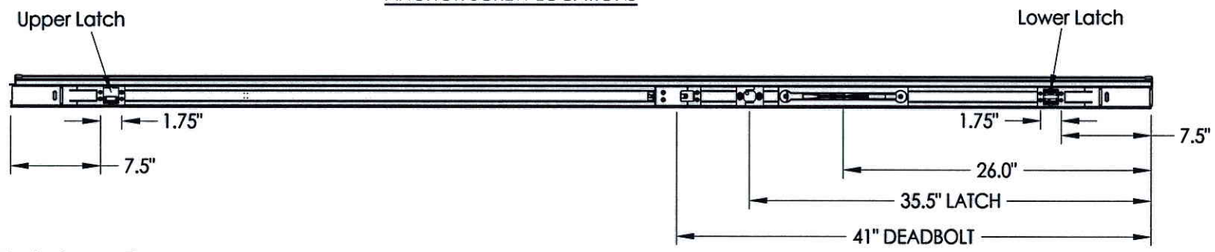
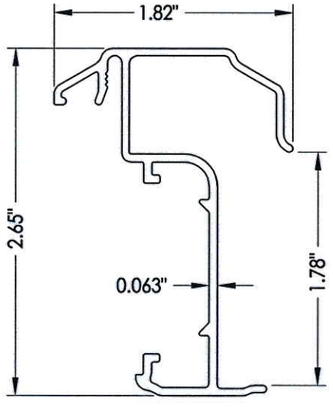



HARDWARE LOCATIONS




Astragal Section

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PRODUCT: ENDURA

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

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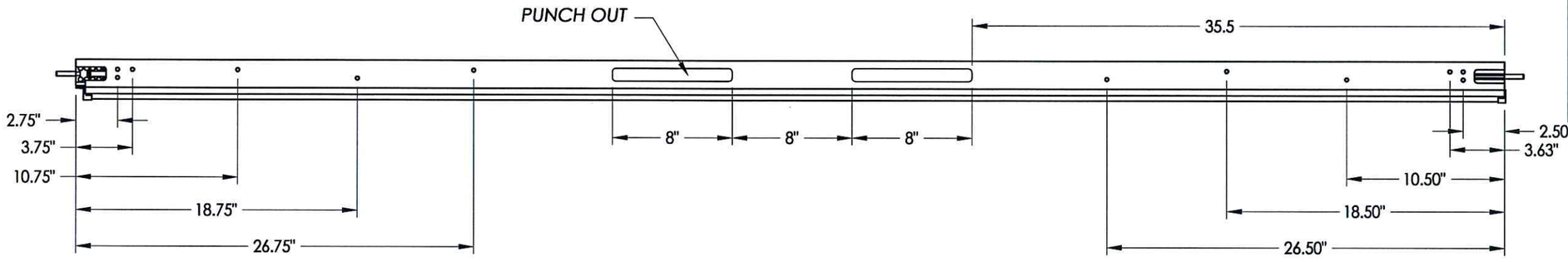
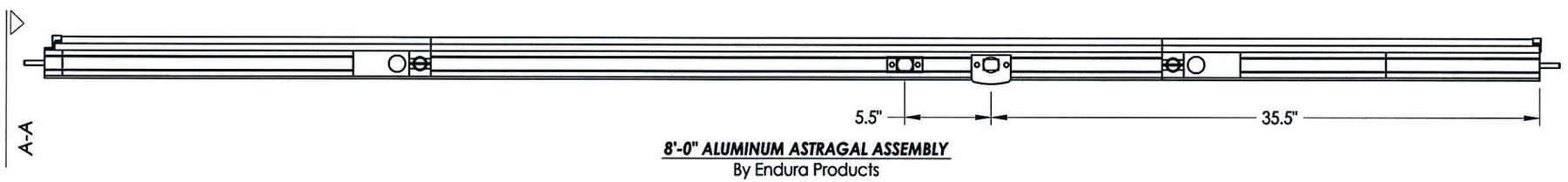
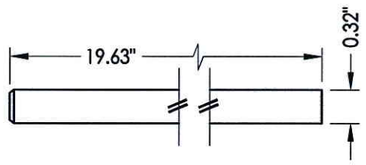


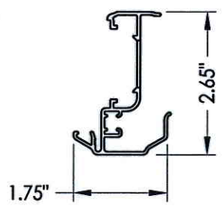

ANCHOR SCREW LOCATIONS



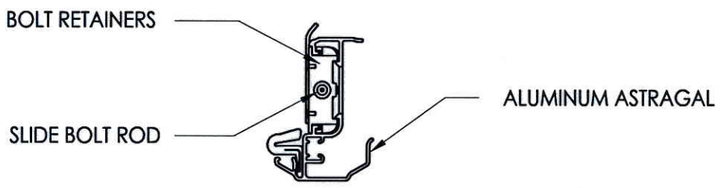

**8'-0" ALUMINUM ASTRAGAL ASSEMBLY**
By Endura Products



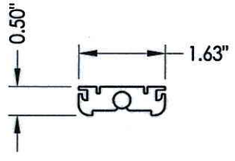

SLIDE BOLT ROD
MATL: Steel



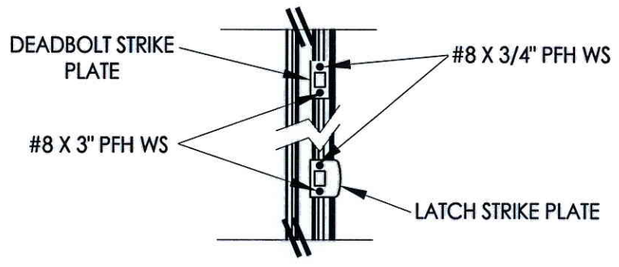

ULTIMATE HURRICANE ASTRAGAL



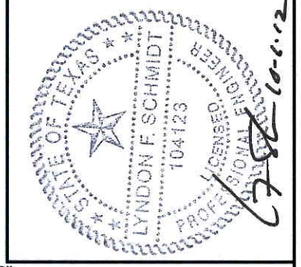

***VIEW A-A***
Aluminum Astragal Assembly




BOLT RETAINER
MATL: 9-3/4" Aluminum




LATCH AND DEADBOLT DETAIL




10-10-12

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

PRODUCT: ENDURA

PART OR ASSEMBLY: ASTRAGAL DETAILS (ULTIMATE HURRICANE)

| NO. | DATE | BY | REVISIONS |
|---|---|---|---|

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SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
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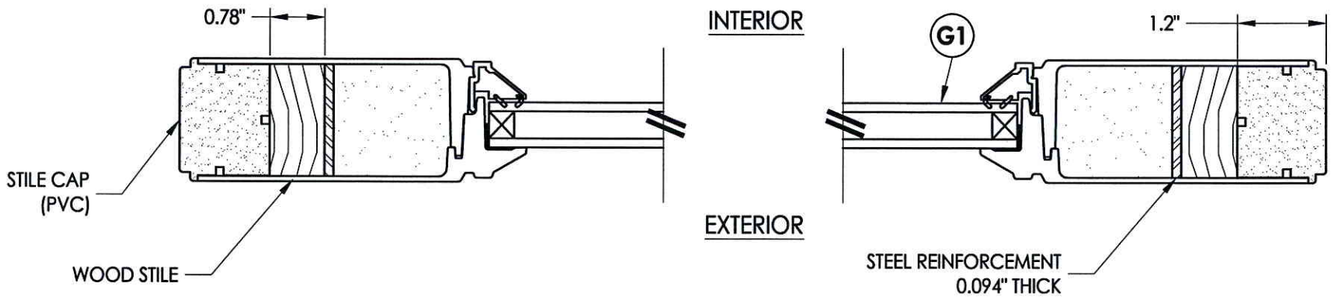
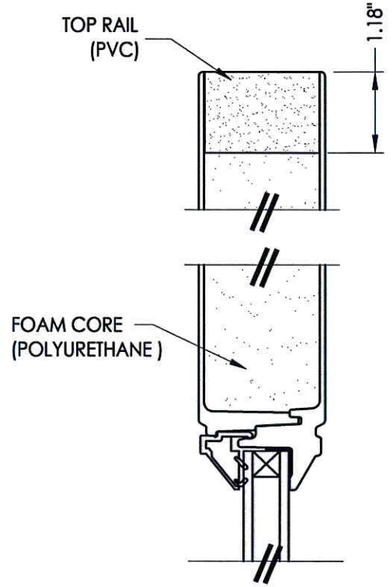
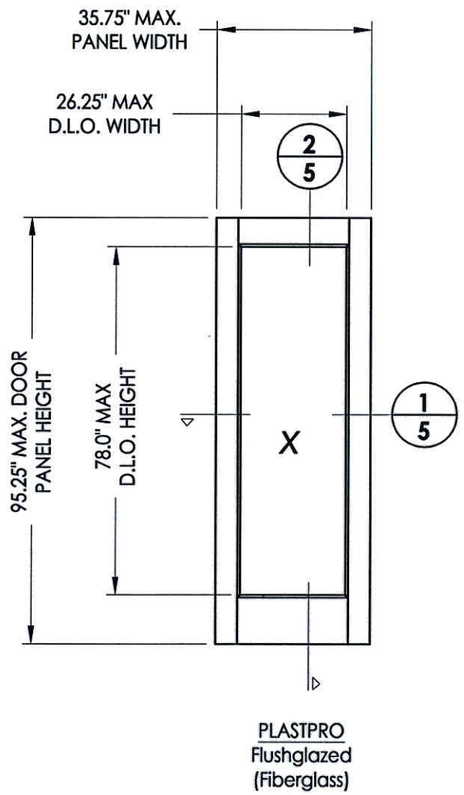
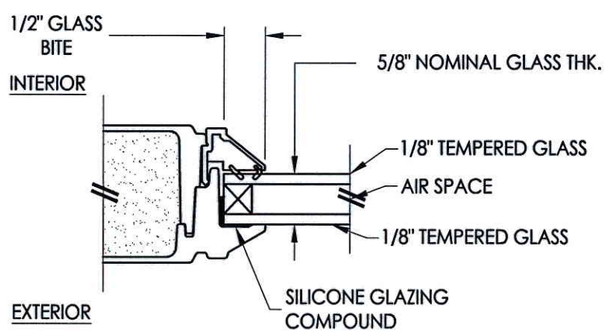


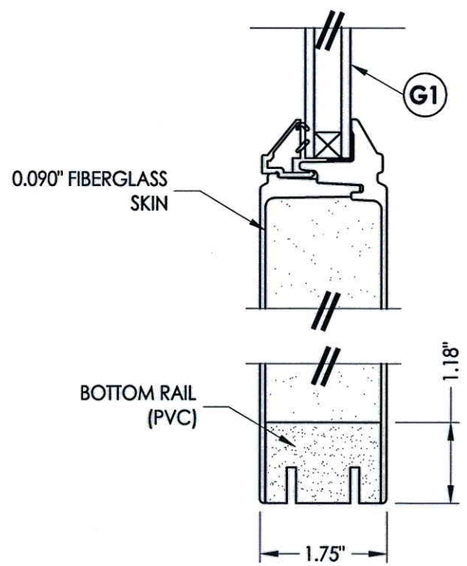

1/5 **HORIZONTAL CROSS SECTION**




G1 **GLAZING DETAIL**
Flush Glazing




2/5 **VERTICAL CROSS SECTION**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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852


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

PRODUCT: *ENDURA*

PART OR ASSEMBLY: *DOOR PANEL DETAILS (FLUSH GLAZING)*

| NO. | DATE | REVISIONS | BY |
|---|---|---|---|

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DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4213
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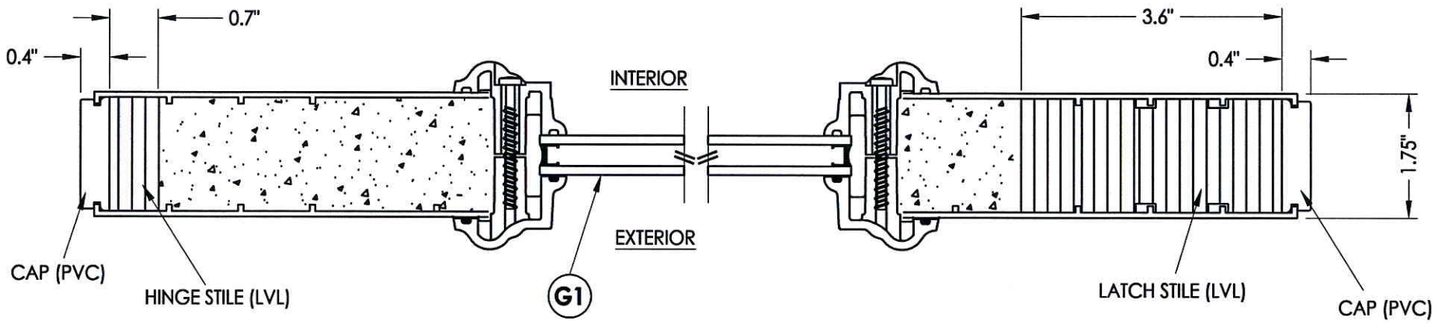
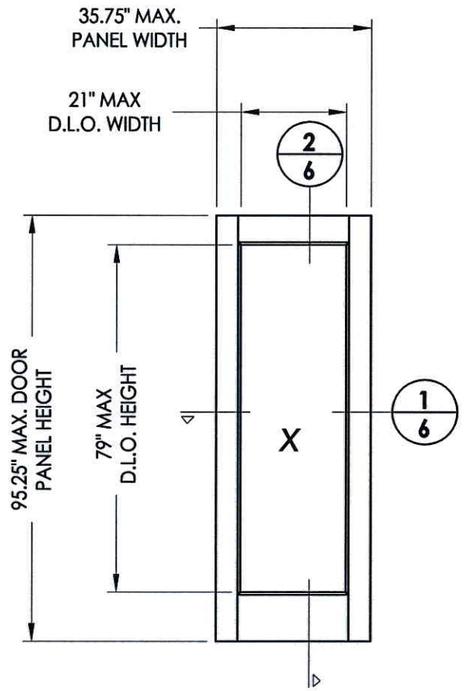
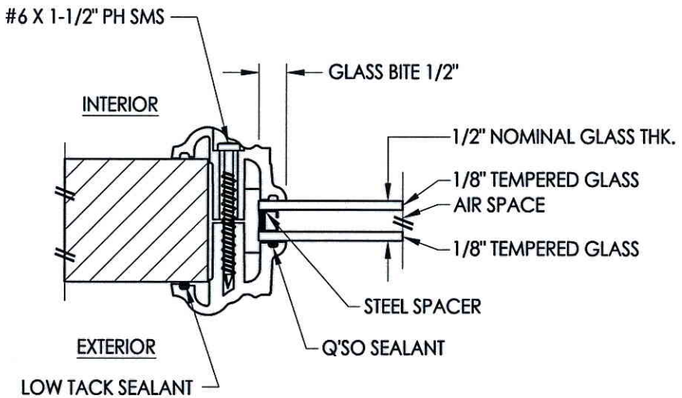


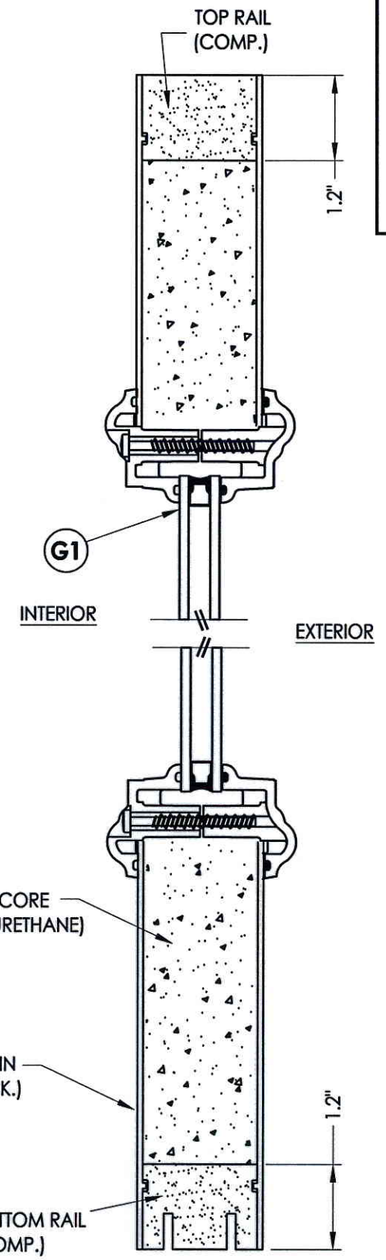

1/6 **HORIZONTAL CROSS SECTION**




PLASTPRO
Insert Glazed
(fiberglass)




G1 **GLAZING DETAIL**
Lip Lite Insert Glazing

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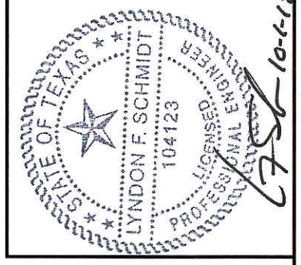


10-1-12

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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 | BY | REVISIONS |
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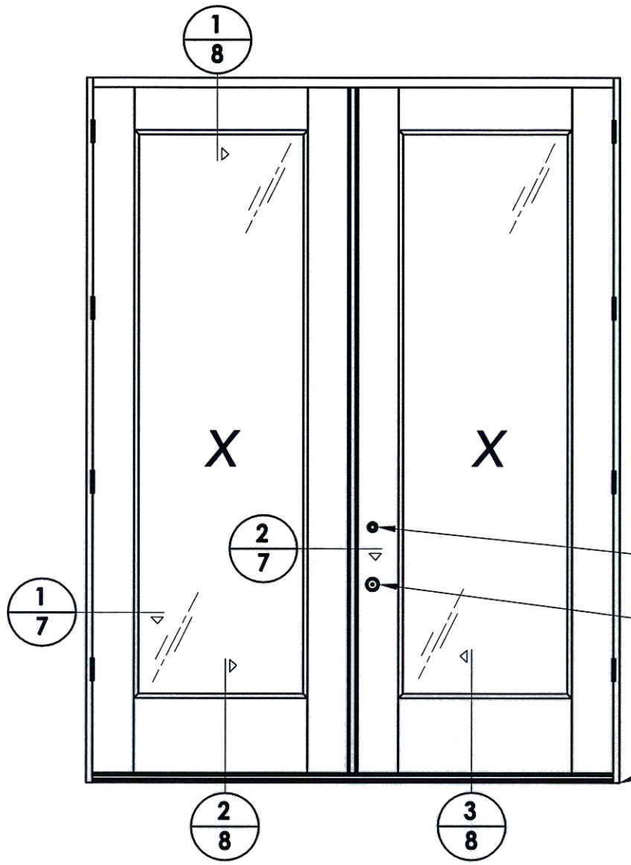
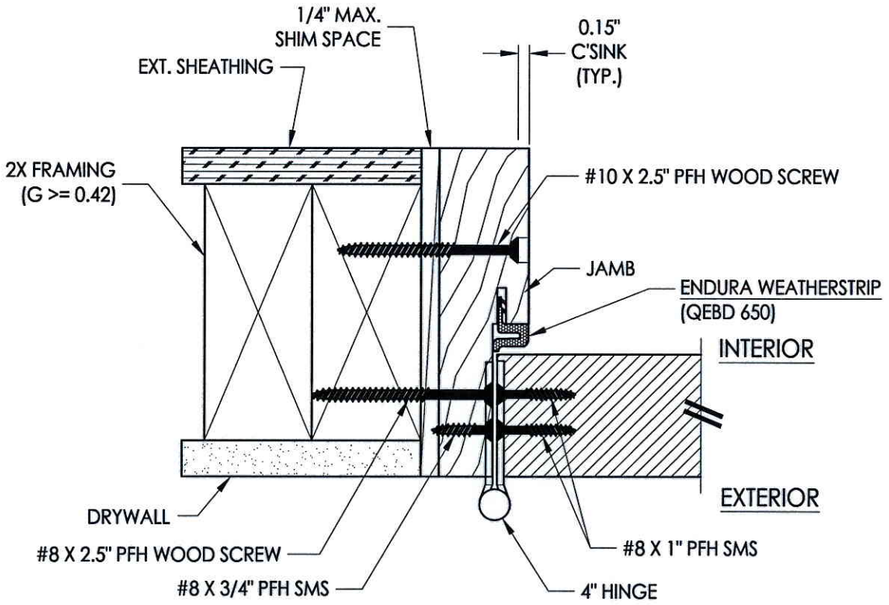
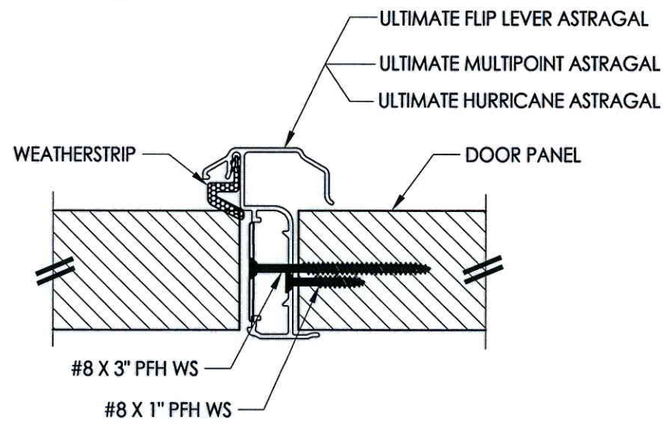



**1/7 HORIZONTAL CROSS SECTION**
Inswing shown - Outswing also approved




**2/7 HORIZONTAL CROSS SECTION**

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED PROFESSIONAL ENGINEER

10.1.12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PRODUCT: *ENDURA*

PART OR ASSEMBLY: *HORIZONTAL CROSS SECTIONS*

| NO. | DATE | REVISIONS | BY |
|---|---|---|---|

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CHK. BY: LFS
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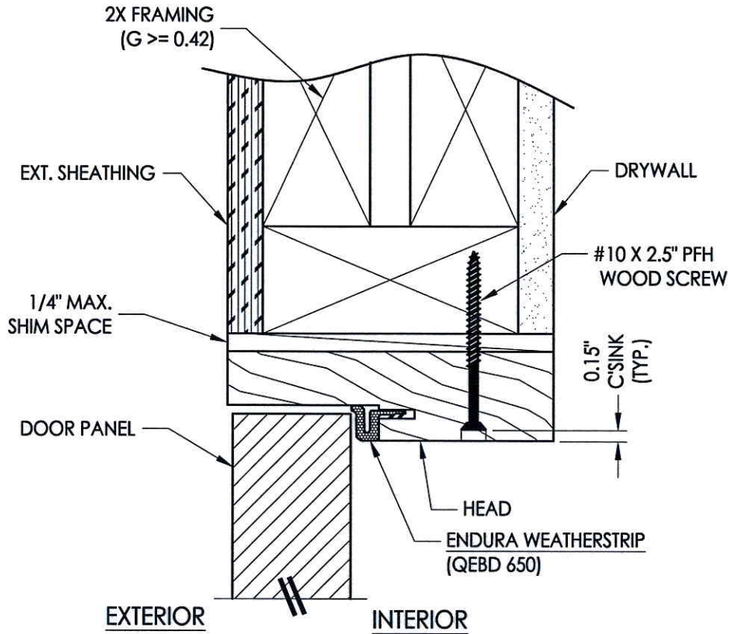
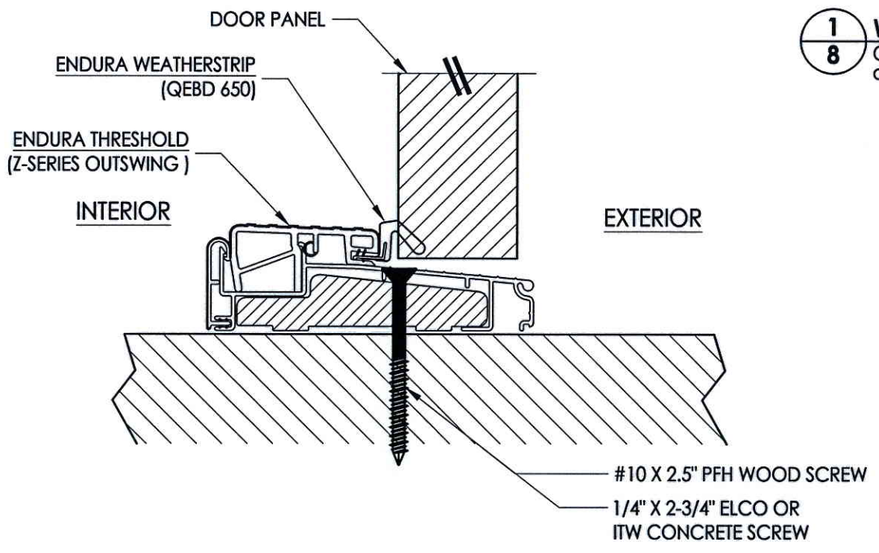
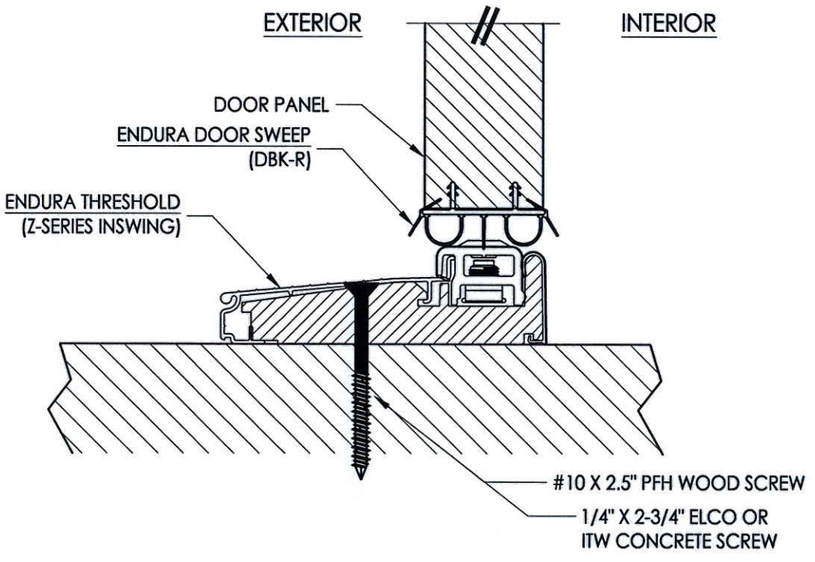



**1/8 VERTICAL CROSS SECTION**
Outswing shown - inswing also approved




**2/8 VERTICAL CROSS SECTION**
Outswing configuration




**3/8 VERTICAL CROSS SECTION**
Inswing configuration


Documents Prepared By: Lyndon F. Schmidt, P.E.
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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852


PRODUCT: ENDURA

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

| NO. | DATE | REVISIONS | BY |
|---|---|---|---|

DATE: 8/09/12
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DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4213
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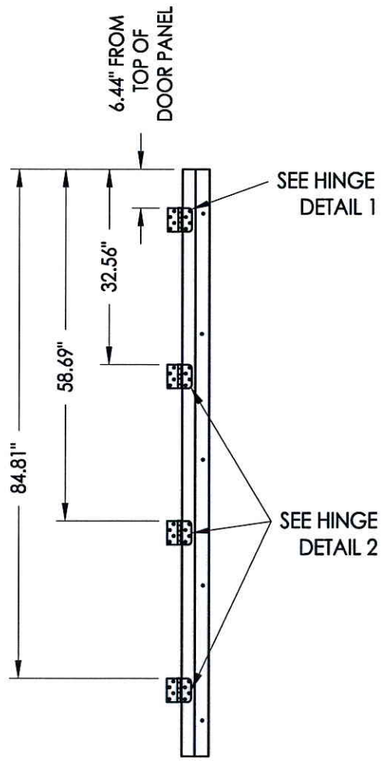
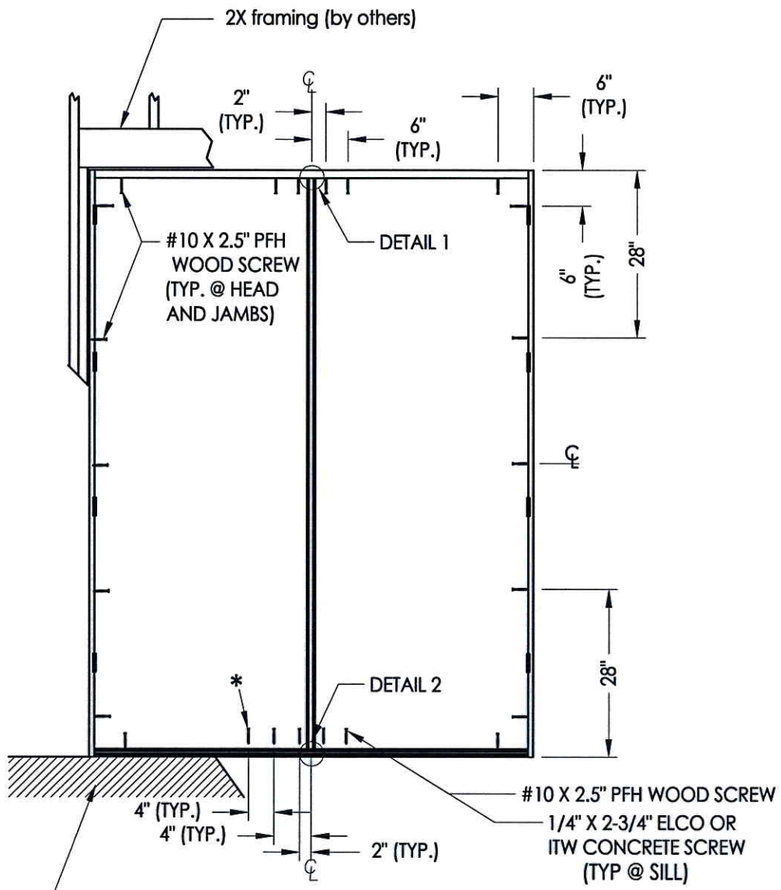
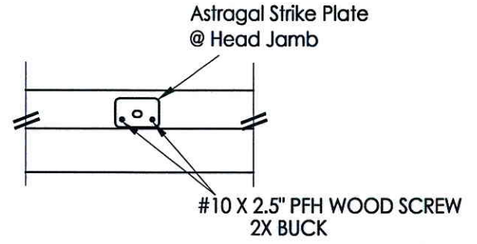



**HINGE JAMB**

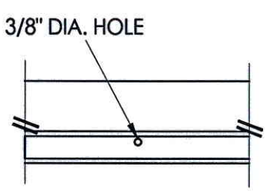



**FRAME ANCHORING**
XX

*NOTE: This anchor required for D.P. > 40 PSF.




**DETAIL 1**

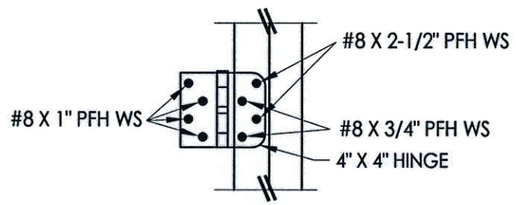



**DETAIL 2**

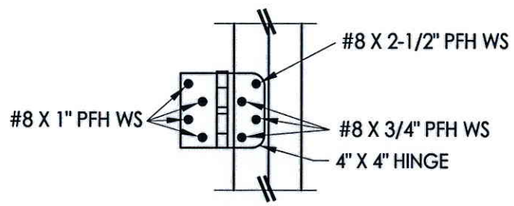
*CONCRETE ANCHOR NOTES:*

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" | 2-1/2" | 3" |
| ELCO ULTRACON® | 1/4" | 1-3/4" | 1" | 3" |




**HINGE DETAIL 1**




**HINGE DETAIL 2**

Documents Prepared By: Lyndon F. Schmidt, P.E.
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PRODUCT: *ENDURA*

PART OR ASSEMBLY: *FRAME ANCHORING*

REVISIONS

| NO. | DATE | BY |
|---|---|---|

DATE: 8/09/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4213
SHEET 9 OF 9

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