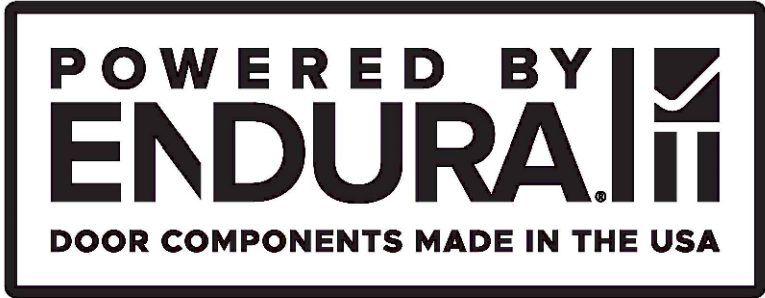


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# Ultimate Multipoint Astragal

## INSWING / OUTSWING

### "NON-IMPACT"

GENERAL NOTES

- 1. This product has been evaluated and is in compliance with the 8th Edition (2023) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
- 2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
- 3. When used in areas requiring wind borne debris protection this product is required to be protected with an impact resistant covering that complies with FBC Sections 1609.1.2 & R301.2.1.2.
- 4. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
- 5. This product has been tested and is approved for use in the door panels as specified in this approval. Substitution into a similar product that possess a comparable current Florida Statewide product approval may be approved for use by the local Authority Having Jurisdiction.
- 6. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.

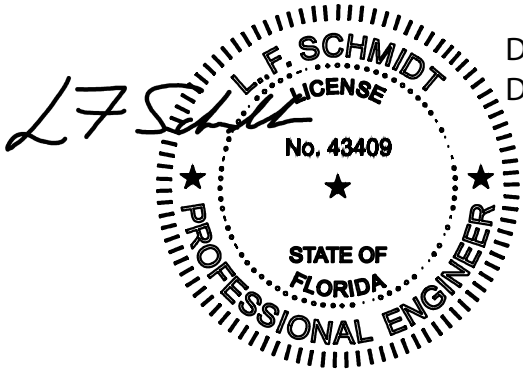
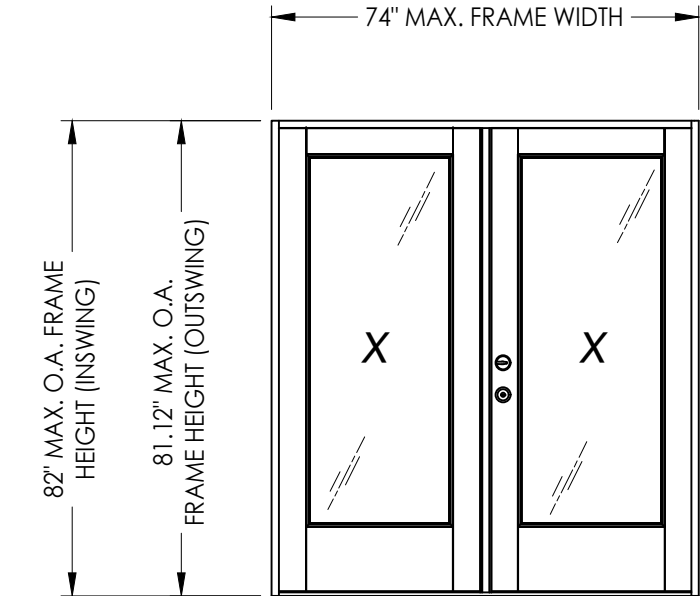
| TABLE OF CONTENTS |                                                        |
|-------------------|--------------------------------------------------------|
| SHEET#            | DESCRIPTION                                            |
| 1                 | Typical elevations, design pressures and general notes |
| 2                 | Astragal details                                       |
| 3                 | Door panel details                                     |
| 4                 | Horizontal and vertical cross sections                 |
| 5                 | Threshold details                                      |
| 6                 | Buck and frame anchoring                               |



Ultimate Multipoint Astragal

| ULTIMATE MULTIPOINT ASTRAGAL by ENDURA   |          |              |                              |          |
|------------------------------------------|----------|--------------|------------------------------|----------|
| MAXIMUM FRAME SIZE                       |          |              | DESIGN PRESSURE RATING (PSF) |          |
|                                          |          |              | POSITIVE                     | NEGATIVE |
| TRINITY<br>Insert Glazed<br>(FIBERGLASS) | INSWING  | 74" X 82"    | +45.0                        | -50.0    |
|                                          | OUTSWING | 74" X 81.12" | +45.0                        | -45.0    |

See Sheet 5 for Threshold Design Pressure Limitations



Digitally signed by Lyndon F Schmidt  
Date: 2023.07.13 15:04:21 -04'00'

This item has been digitally signed and sealed by  
L. F. Schmidt, P.E. on the date adjacent to the seal.  
Printed copies of this document are not  
considered signed and sealed and the signature  
must be verified on any electronic copies.

THIS PRODUCT APPROVAL IS VALID  
ONLY FOR THE STATE OF FLORIDA

Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

PRODUCT: ENDURA

7 7/06/23 UPDATE TO 8TH ED. (2023) FBC

6 8/03/20 UPDATE TO 7TH ED. (2020) FBC

5 9/05/17 UPDATE TO 6TH ED. (2017) FBC

4 6/13/16 ADD THRESHOLD DETAILS

3 4/19/16 ADD ALUMINUM ARTICULATING SILL

NO. DATE

REVISIONS

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

DATE: 8/30/11

SCALE: N.T.S.

DWG. BY: JK

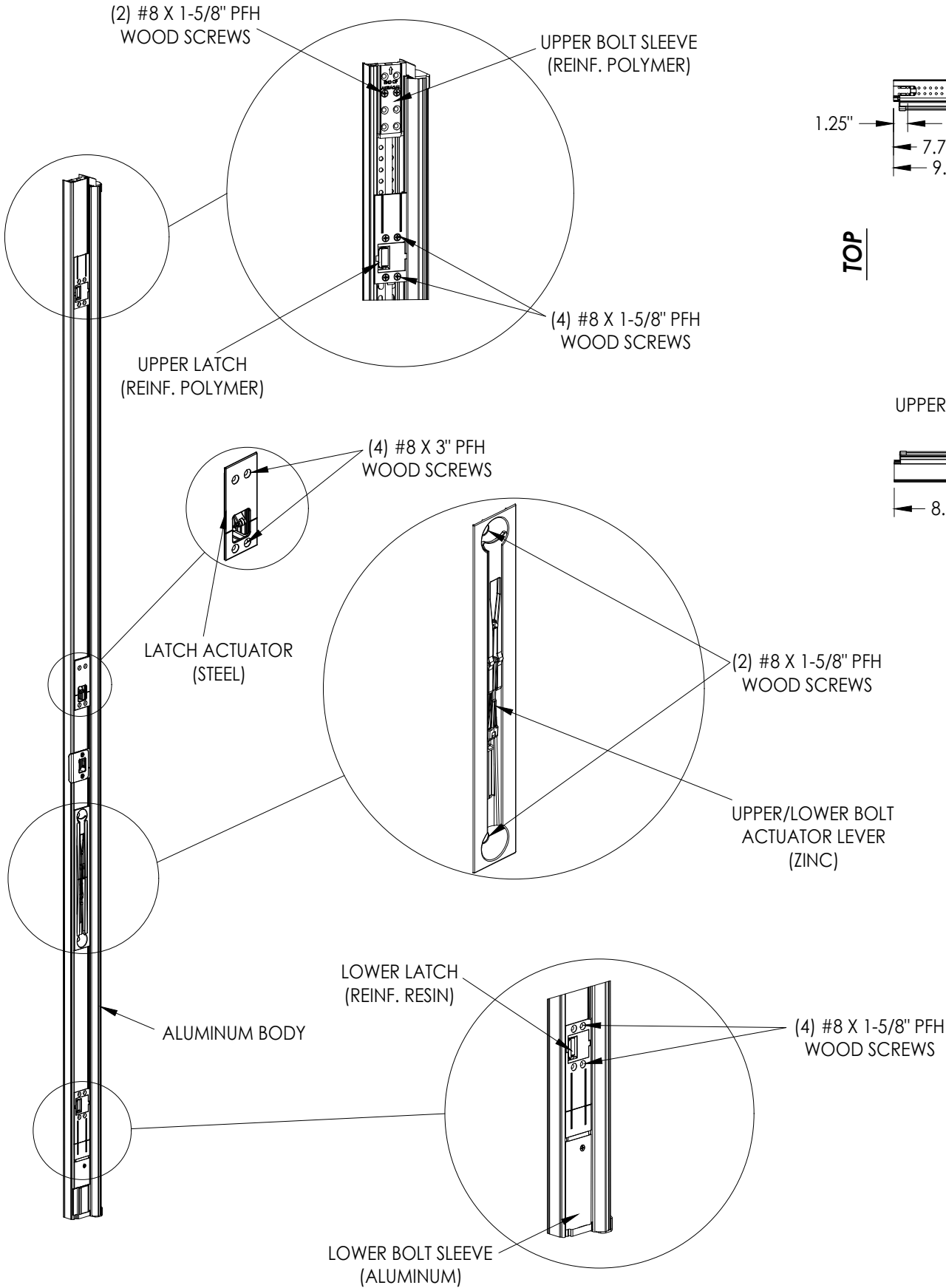
CHK. BY: LFS

DRAWING NO.: FL-14818.9

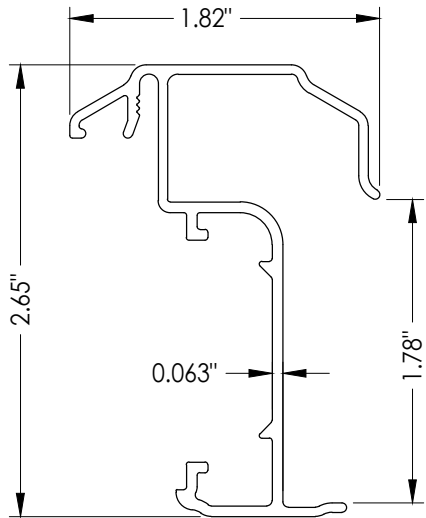
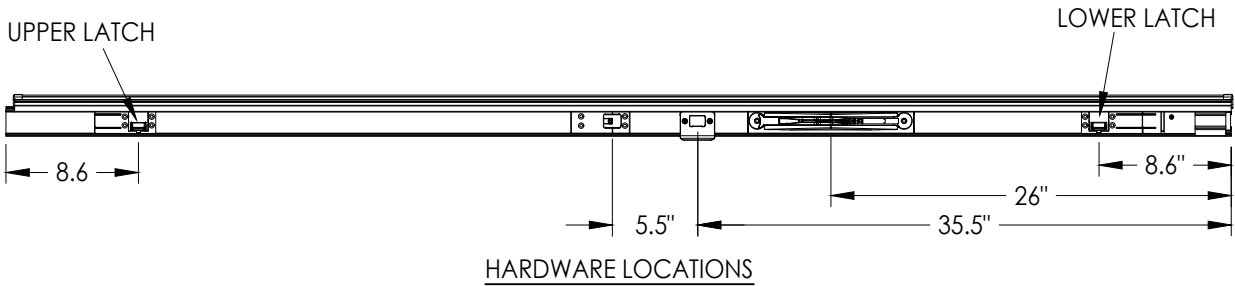
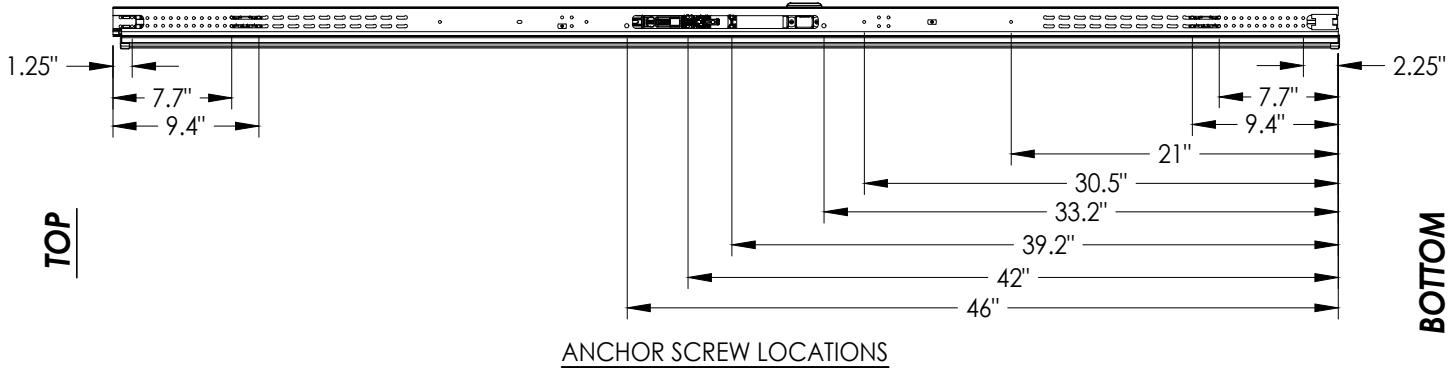
SHEET 1 OF 6

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P.O. Box 230, Vairico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

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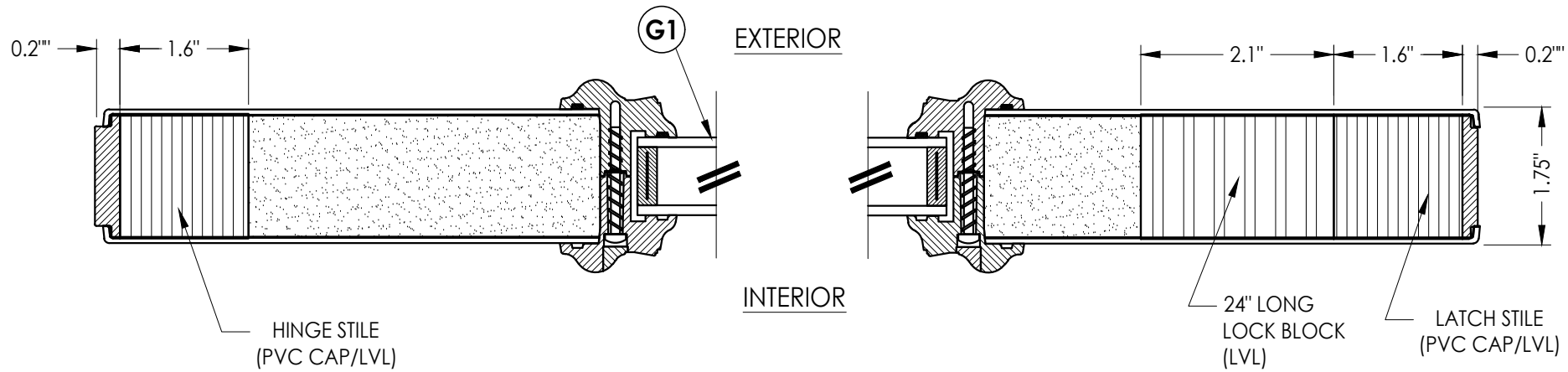


ULTIMATE MULTIPOINT ASTRAGAL

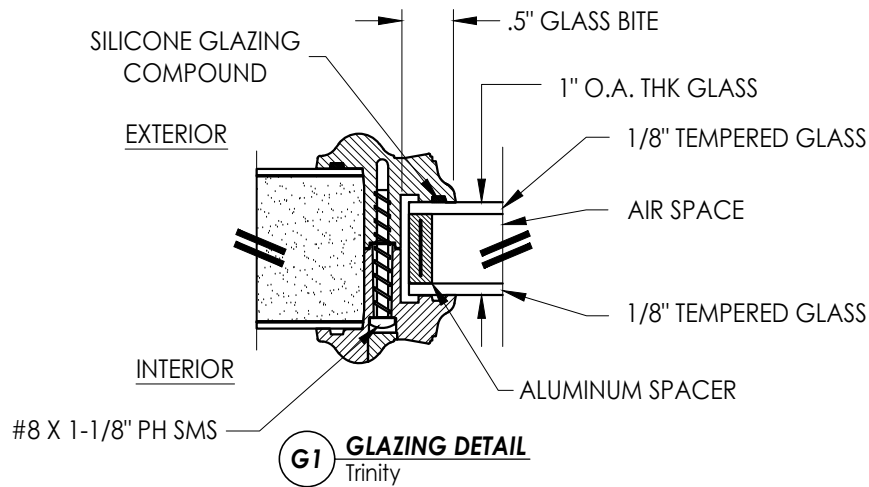
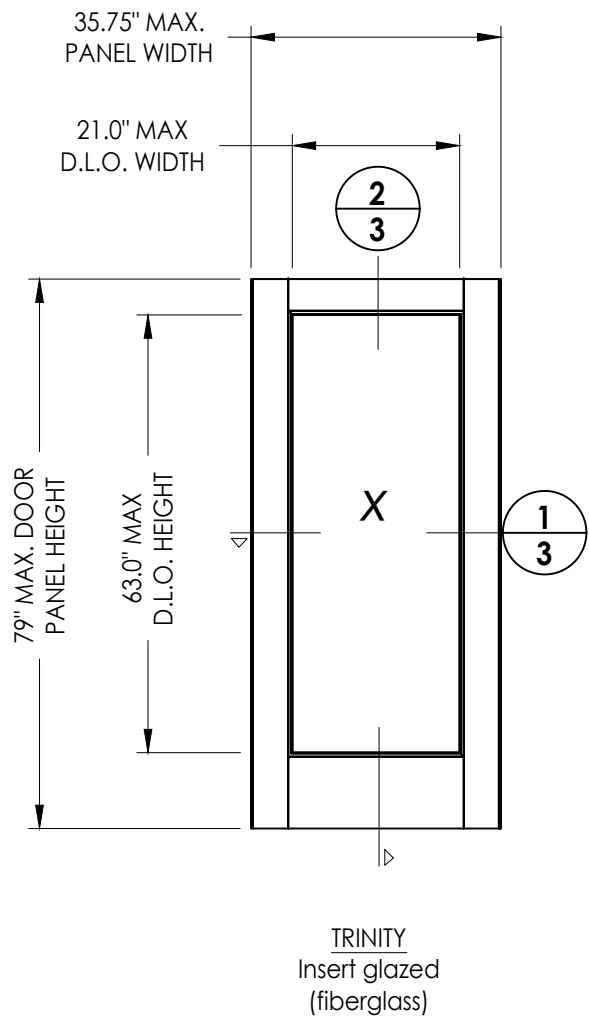


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|---------------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------|-----|
| Documents Prepared By:<br>Lyndon F. Schmidt<br>P.E. No. 43409 |         | BUILDING CONSULTANTS, INC.<br>P.O. Box 230, Valrico, FL 33595<br>Phone No.: 813.659.9197<br>FBPE Registry No. 9813 |     |
|                                                               |         |                                                                                                                    |     |
|                                                               |         |                                                                                                                    |     |
| PRODUCT: ENDURA                                               |         | PART OR ASSEMBLY: ASTRAGAL DETAILS                                                                                 |     |
| 7                                                             | 7/06/23 | UPDATE TO 8TH ED. (2023)                                                                                           | FBC |
| 6                                                             | 8/03/20 | UPDATE TO 7TH ED. (2020)                                                                                           | FBC |
| 5                                                             | 9/05/17 | UPDATE TO 6TH ED. (2017)                                                                                           | FBC |
| 4                                                             | 6/13/16 | ADD THRESHOLD DETAILS                                                                                              | LFS |
| 3                                                             | 4/19/16 | ADD ALUMINUM ARTICULATING SILL                                                                                     | LFS |
| NO.                                                           | DATE    | BY                                                                                                                 |     |
| REVISIONS                                                     |         |                                                                                                                    |     |
| DATE: 8/30/11                                                 |         |                                                                                                                    |     |
| SCALE: N.T.S.                                                 |         |                                                                                                                    |     |
| DWG. BY: JK                                                   |         |                                                                                                                    |     |
| CHK. BY: LFS                                                  |         |                                                                                                                    |     |
| DRAWING NO.: FL-14818.9                                       |         |                                                                                                                    |     |
| SHEET 2 OF 6                                                  |         |                                                                                                                    |     |

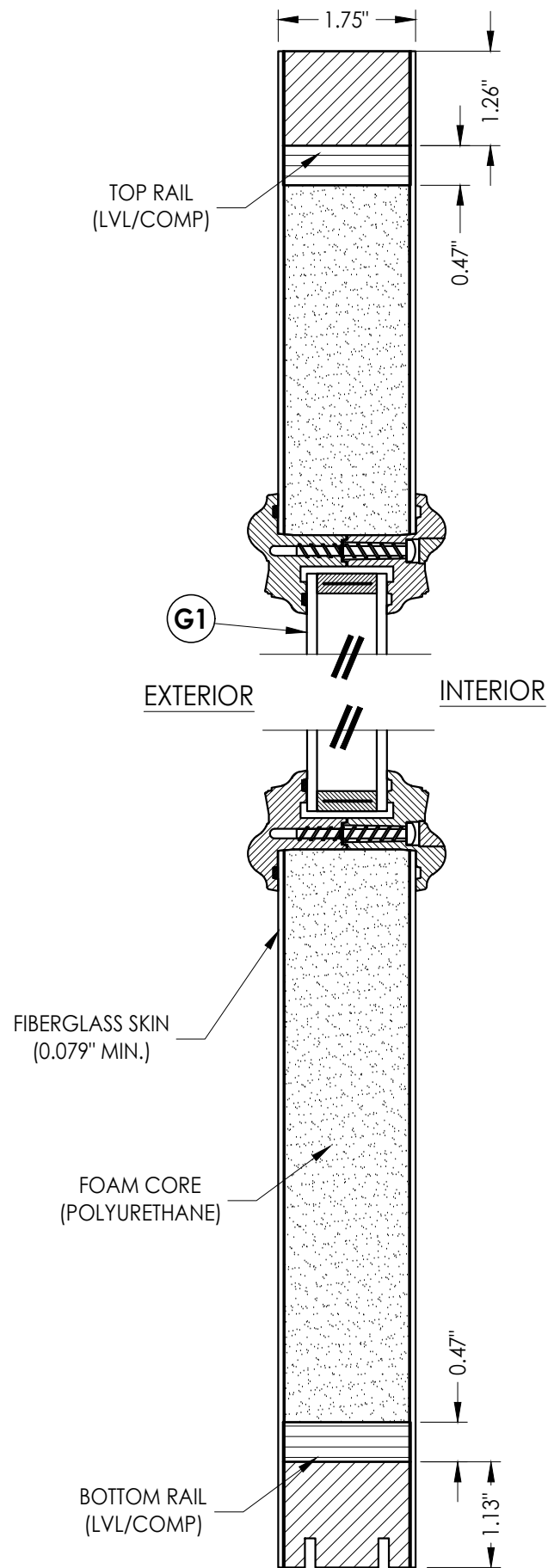
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1  
3 HORIZONTAL CROSS SECTION



G1 GLAZING DETAIL  
Trinity



2  
3 VERTICAL CROSS SECTION

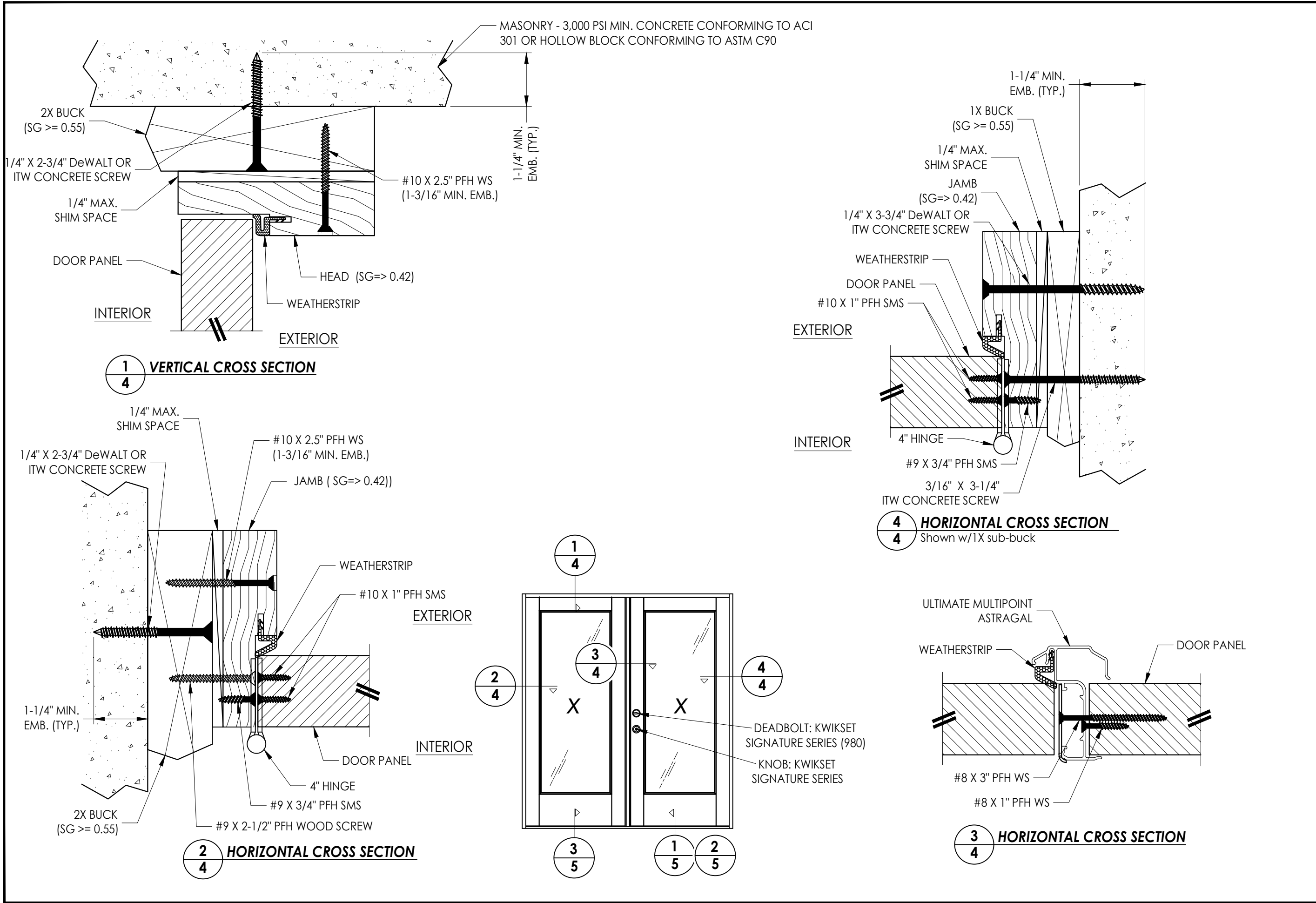
| NO. | DATE    | REVISIONS                 |     |      |              |
|-----|---------|---------------------------|-----|------|--------------|
|     |         | BY                        | LFS | SILL | ARTICULATING |
| 7   | 7/06/23 | UPDATE TO 8TH ED. (2023)  | FBC |      |              |
| 6   | 8/03/20 | UPDATE TO 7TH ED. (2020)  | FBC |      |              |
| 5   | 9/05/17 | UPDATE TO 6TH ED. (2017)  | FBC |      |              |
| 4   | 6/13/16 | ADD THRESHOLD DETAILS     | LFS |      |              |
| 3   | 4/19/16 | ADD ALUMINUM ARTICULATING | LFS |      |              |

DATE: 8/30/11  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: FL-14818.9  
SHEET 3 OF 6

|          |                                        |
|----------|----------------------------------------|
| PRODUCT: | ENDURA                                 |
|          | DOOR PANEL DETAILS<br>& GLAZING DETAIL |

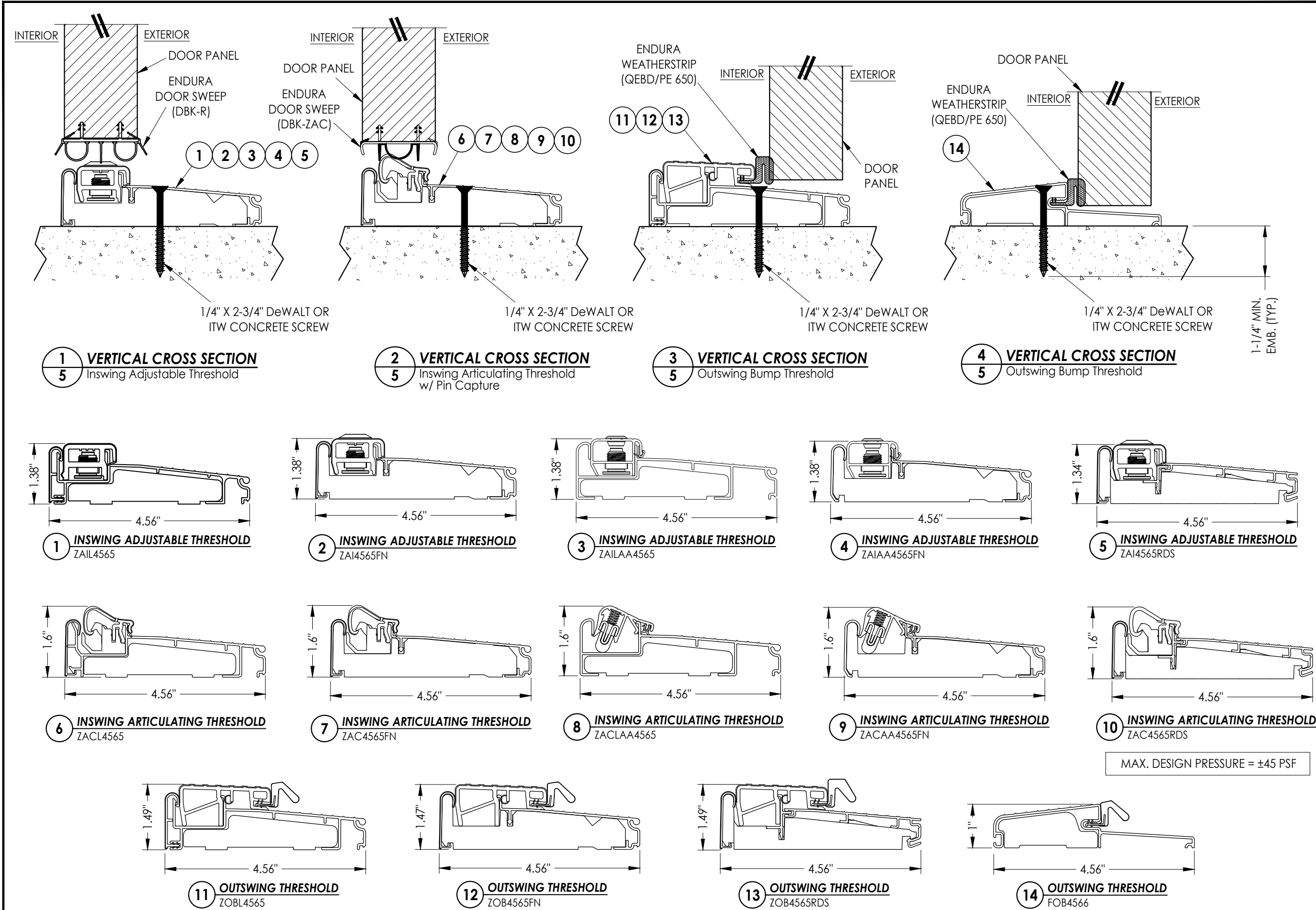
Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409  
  
BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
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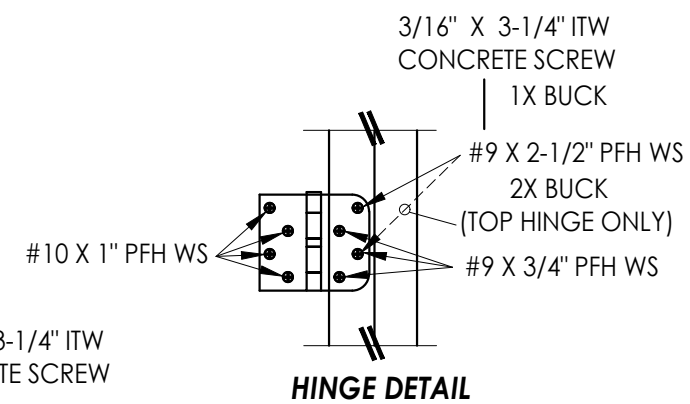
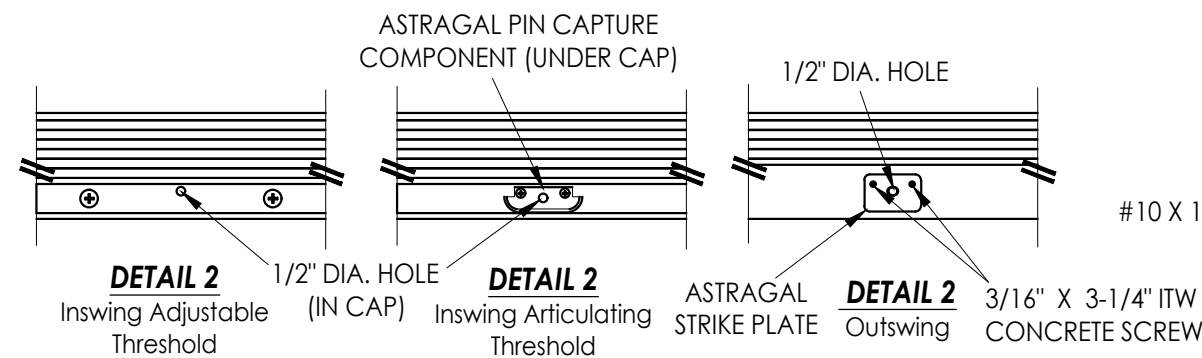


|                                                               |         |                                |     |     |                                                                                                                    |  |  |  |  |
|---------------------------------------------------------------|---------|--------------------------------|-----|-----|--------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Documents Prepared By:<br>Lyndon F. Schmidt<br>P.E. No. 43409 |         |                                |     |     | BUILDING CONSULTANTS, INC.<br>P.O. Box 230, Valrico, FL 33595<br>Phone No.: 813.659.9197<br>FBPE Registry No. 9813 |  |  |  |  |
| PRODUCT:<br><br>ENDURA                                        |         |                                |     |     | PART OR ASSEMBLY:<br><br>HORIZONTAL AND VERTICAL<br>CROSS SECTIONS                                                 |  |  |  |  |
|                                                               |         |                                |     |     |                                                                                                                    |  |  |  |  |
| 7                                                             | 7/06/23 | UPDATE TO 8TH ED. (2023)       | FBC | LFS |                                                                                                                    |  |  |  |  |
| 6                                                             | 8/03/20 | UPDATE TO 7TH ED. (2020)       | FBC | LFS |                                                                                                                    |  |  |  |  |
| 5                                                             | 9/05/17 | UPDATE TO 6TH ED. (2017)       | FBC | LFS |                                                                                                                    |  |  |  |  |
| 4                                                             | 6/13/16 | ADD THRESHOLD DETAILS          |     | LFS |                                                                                                                    |  |  |  |  |
| 3                                                             | 4/19/16 | ADD ALUMINUM ARTICULATING SILL |     | LFS |                                                                                                                    |  |  |  |  |
| NO.                                                           | DATE    |                                |     | BY  |                                                                                                                    |  |  |  |  |
|                                                               |         |                                |     |     | REVISIONS                                                                                                          |  |  |  |  |
| DATE: 8/30/11                                                 |         |                                |     |     |                                                                                                                    |  |  |  |  |
| SCALE: N.T.S.                                                 |         |                                |     |     |                                                                                                                    |  |  |  |  |
| DWG. BY: JK                                                   |         |                                |     |     |                                                                                                                    |  |  |  |  |
| CHK. BY: LFS                                                  |         |                                |     |     |                                                                                                                    |  |  |  |  |
| DRAWING NO.: FL-14818.9                                       |         |                                |     |     |                                                                                                                    |  |  |  |  |
| SHEET 4 OF 6                                                  |         |                                |     |     |                                                                                                                    |  |  |  |  |

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|                                                               |         |                                     |     |                                                                                                                    |  |  |  |
|---------------------------------------------------------------|---------|-------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------|--|--|--|
| Documents Prepared By:<br>Lyndon F. Schmidt<br>P.E. No. 43409 |         |                                     |     | BUILDING CONSULTANTS, INC.<br>P.O. Box 230, Valrico, FL 33595<br>Phone No.: 813.659.9197<br>FBPE Registry No. 9813 |  |  |  |
| PRODUCT: ENDURA                                               |         | PART OR ASSEMBLY: THRESHOLD DETAILS |     |                                                                                                                    |  |  |  |
| 7                                                             | 7/06/23 | UPDATE TO 8TH ED. (2023)            | FBC | LFS                                                                                                                |  |  |  |
| 6                                                             | 8/03/20 | UPDATE TO 7TH ED. (2020)            | FBC | LFS                                                                                                                |  |  |  |
| 5                                                             | 9/05/17 | UPDATE TO 6TH ED. (2017)            | FBC | LFS                                                                                                                |  |  |  |
| 4                                                             | 6/13/16 | ADD THRESHOLD DETAILS               |     | LFS                                                                                                                |  |  |  |
| 3                                                             | 4/19/16 | ADD ALUMINUM ARTICULATING SILL      |     | LFS                                                                                                                |  |  |  |
|                                                               | NO.     | DATE                                |     | BY                                                                                                                 |  |  |  |
|                                                               |         |                                     |     | REVISIONS                                                                                                          |  |  |  |
| DATE: 8/30/11                                                 |         |                                     |     |                                                                                                                    |  |  |  |
| SCALE: N.T.S.                                                 |         |                                     |     |                                                                                                                    |  |  |  |
| DWG. BY: JK                                                   |         |                                     |     |                                                                                                                    |  |  |  |
| CHK. BY: LFS                                                  |         |                                     |     |                                                                                                                    |  |  |  |
| DRAWING NO.: FL-14818.9                                       |         |                                     |     |                                                                                                                    |  |  |  |
| SHEET 5 OF 6                                                  |         |                                     |     |                                                                                                                    |  |  |  |



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"        | 1-1/4"         | 2"                             | 4"                                |
| DeWALT ULTRACON® | 1/4"        | 1-1/4"         | 1"                             | 4"                                |
| ITW TAPCON®      | 3/16"       | 1-1/4"         | 3"                             | 1-1/2"                            |

1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.

|              |            |
|--------------|------------|
| DATE:        | 8/30/11    |
| SCALE:       | N.T.S.     |
| DWG. BY:     | JK         |
| CHK. BY:     | LFS        |
| DRAWING NO.: | FL-14818.9 |
| SHEET        | 6 OF 6     |