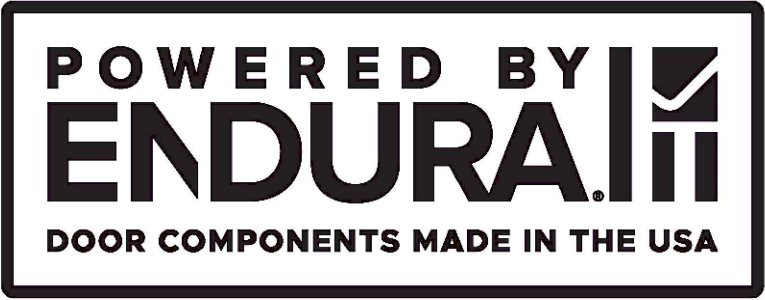


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# Ultimate Hurricane Astragal

## INSWING / OUTSWING

### "NON-IMPACT"

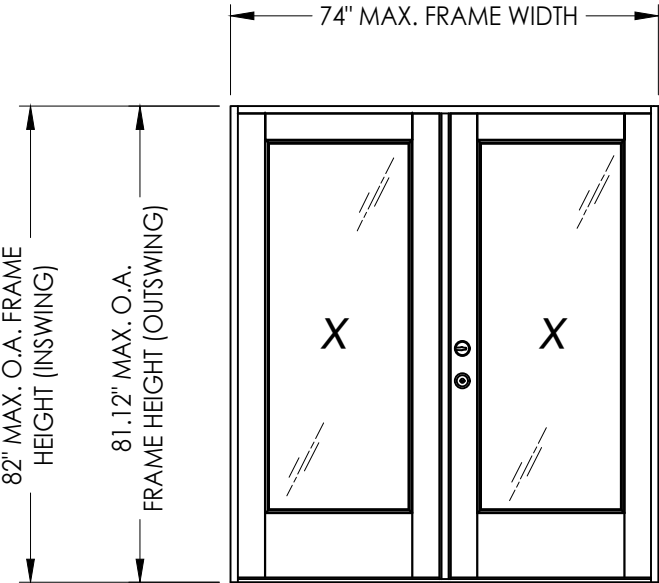
GENERAL NOTES

- 1. This product has been evaluated and is in compliance with the 9th Edition (2026) 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.

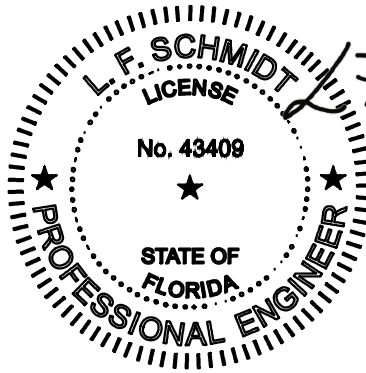
| TABLE OF CONTENTS |                                                        |
|-------------------|--------------------------------------------------------|
| SHEET#            | DESCRIPTION                                            |
| 1                 | Typical elevations, design pressures and general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



Ultimate Hurricane Astragal



| ULTIMATE HURRICANE ASTRAGAL by ENDURA    |          |              |                              |          |
|------------------------------------------|----------|--------------|------------------------------|----------|
| MAXIMUM FRAME SIZE                       |          |              | DESIGN PRESSURE RATING (PSF) |          |
|                                          |          |              | POSITIVE                     | NEGATIVE |
| PLASTPRO<br>Flush Glazed<br>(FIBERGLASS) | INSWING  | 74" X 82"    | +40.0                        | -45.0    |
|                                          | OUTSWING | 74" X 81.12" | +50.0                        | -50.0    |



Digitally signed by Lyndon F Schmidt  
Date: 2026.07.18 10:58:19 -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

ENDURA

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

|     |         |                          |     |     |
|-----|---------|--------------------------|-----|-----|
| 7   | 7/03/26 | UPDATE TO 9TH ED. (2026) | FBC | LFS |
| 6   | 7/07/23 | UPDATE TO 8TH ED. (2023) | FBC | LFS |
| 5   | 8/12/20 | UPDATE TO 7TH ED. (2020) | FBC | LFS |
| NO. | DATE    |                          |     | BY  |

REVISIONS

DATE: 10/24/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

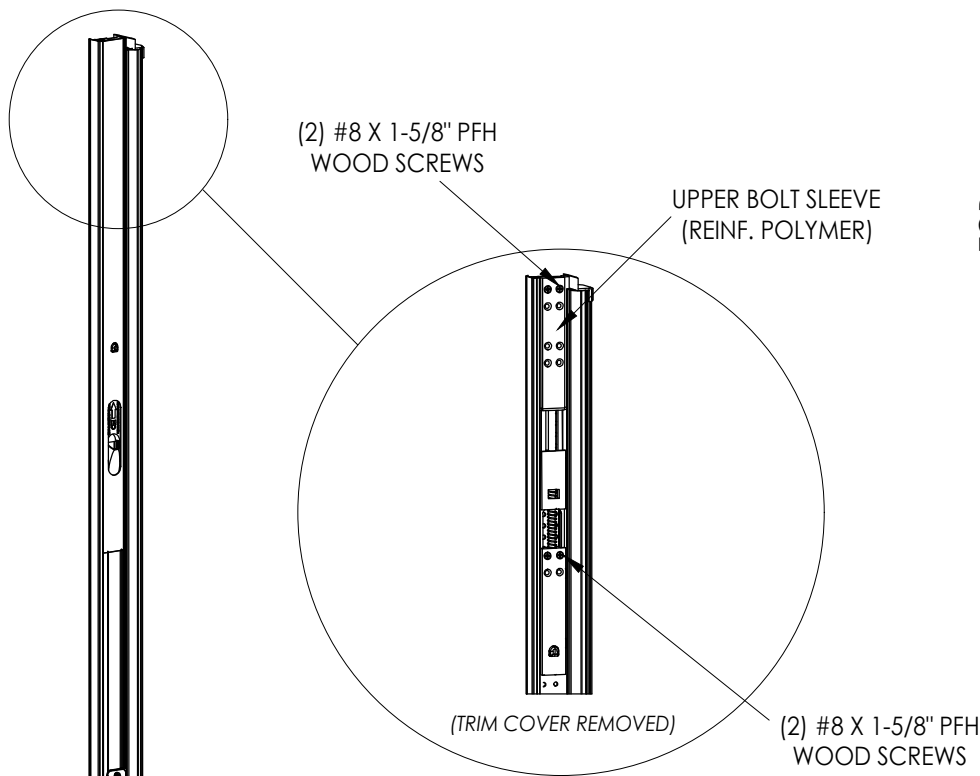
DRAWING NO.: FL-16634.1

SHEET 1 OF 6

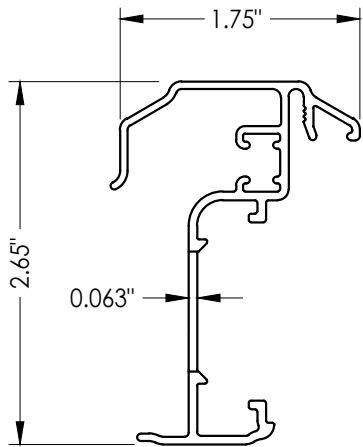
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Phone No.: 813.659.9197  
FBPE Registry No. 9813

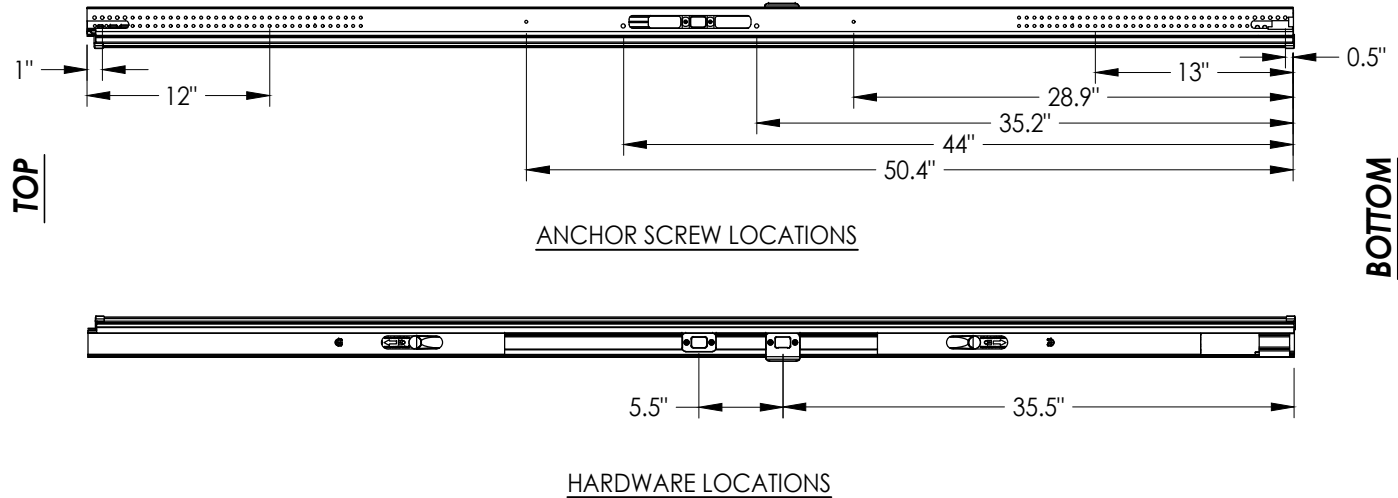
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LOWER BOLT SLEEVE  
(REINF. POLYMER)

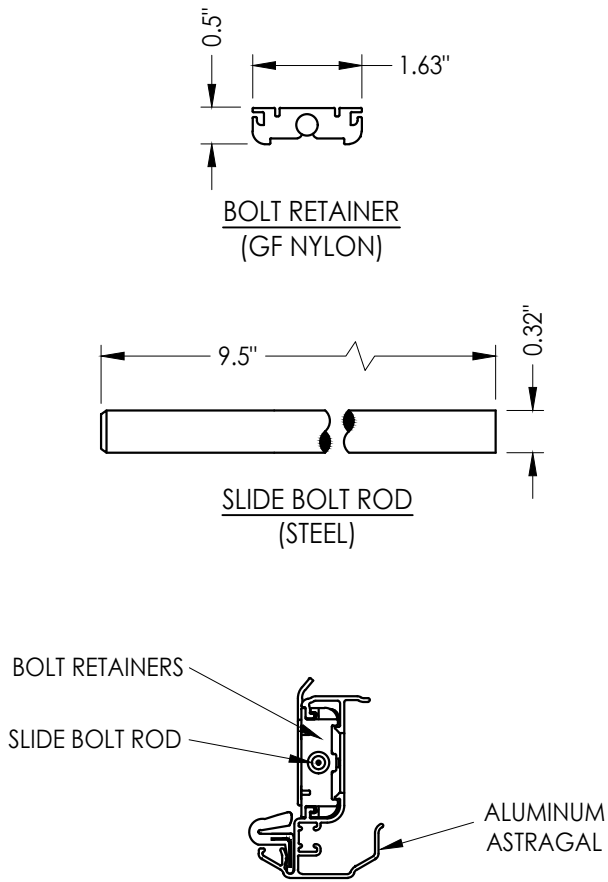


ASTRAGAL SECTION

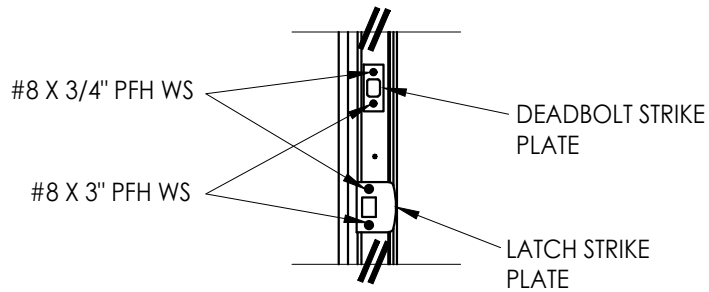


ANCHOR SCREW LOCATIONS

HARDWARE LOCATIONS



ALUMINUM ASTRAGAL ASSEMBLY



LATCH & DEADBOLT DETAIL

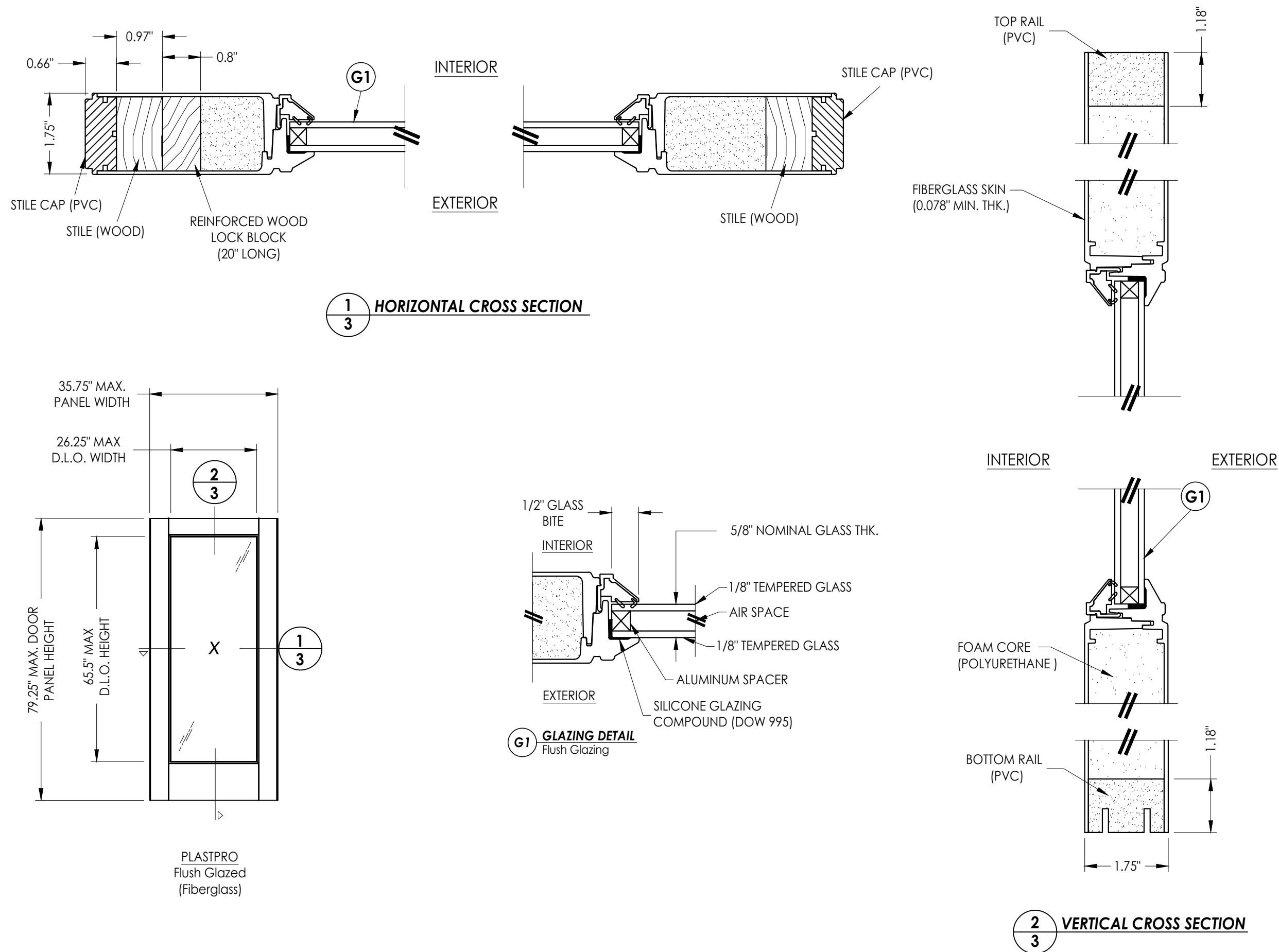
ULTIMATE HURRICANE ASTRAGAL

| PRODUCT:          |         | ENDURA                                   |         |
|-------------------|---------|------------------------------------------|---------|
| PART OR ASSEMBLY: |         | ASTRAGAL DETAILS<br>(ULTIMATE HURRICANE) |         |
| NO.               | DATE    | REVISIONS                                |         |
|                   |         |                                          | BY      |
| 7                 | 7/03/26 | UPDATE TO 9TH ED. (2026)                 | FBC LFS |
| 6                 | 7/07/23 | UPDATE TO 8TH ED. (2023)                 | FBC LFS |
| 5                 | 8/12/20 | UPDATE TO 7TH ED. (2020)                 | FBC LFS |

|              |            |
|--------------|------------|
| DATE:        | 10/24/13   |
| SCALE:       | N.T.S.     |
| DWG. BY:     | JK         |
| CHK. BY:     | LFS        |
| DRAWING NO.: | FL-16634.1 |
| SHEET        | 2 OF 6     |

Documents Prepared By:  
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P.E. No. 43409

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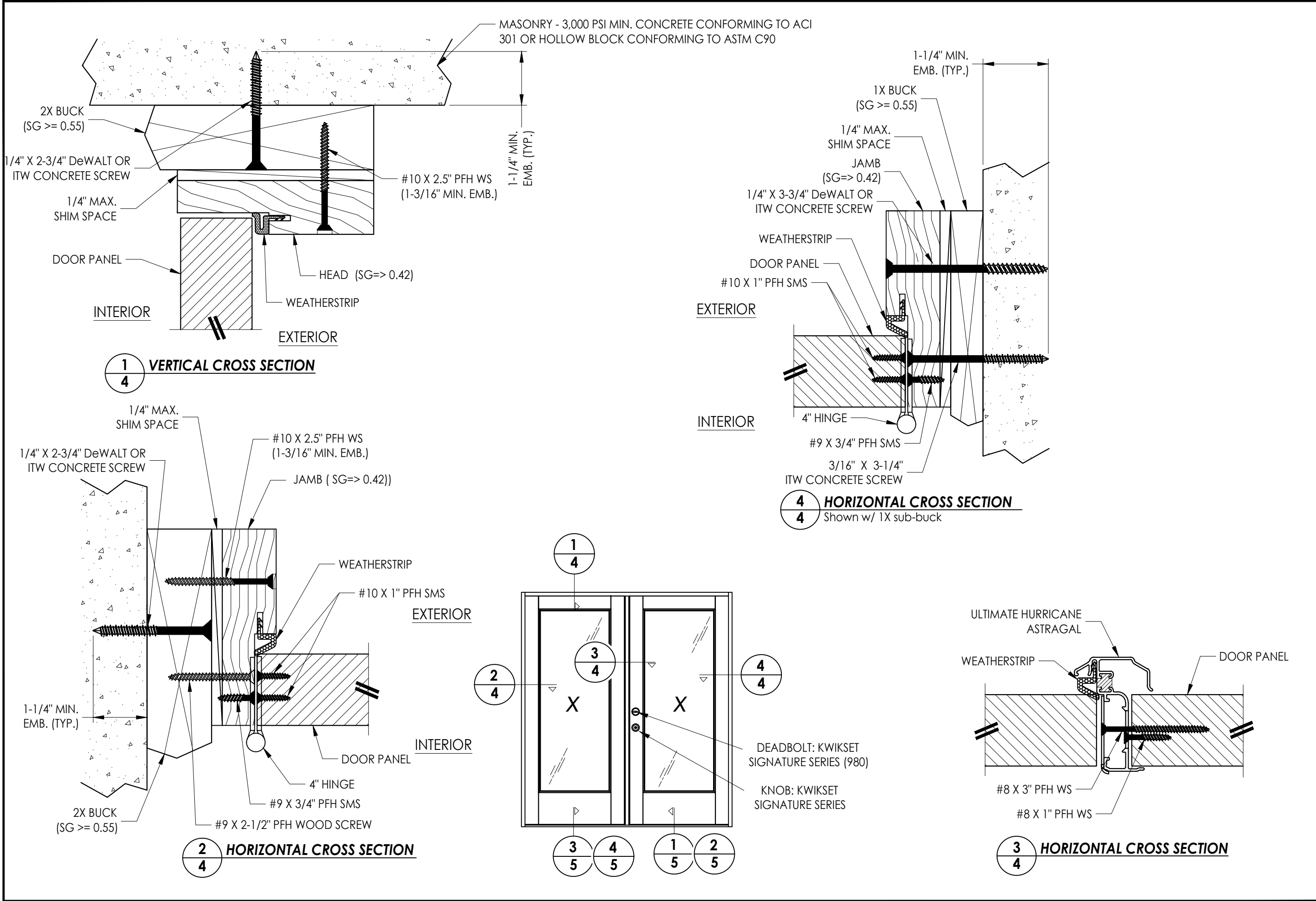
[illegible]

Documents Prepared By:  
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P.E. No. 43409

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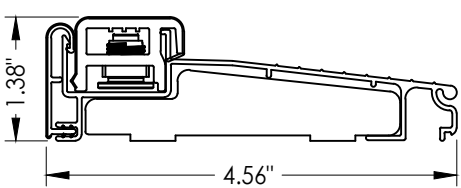
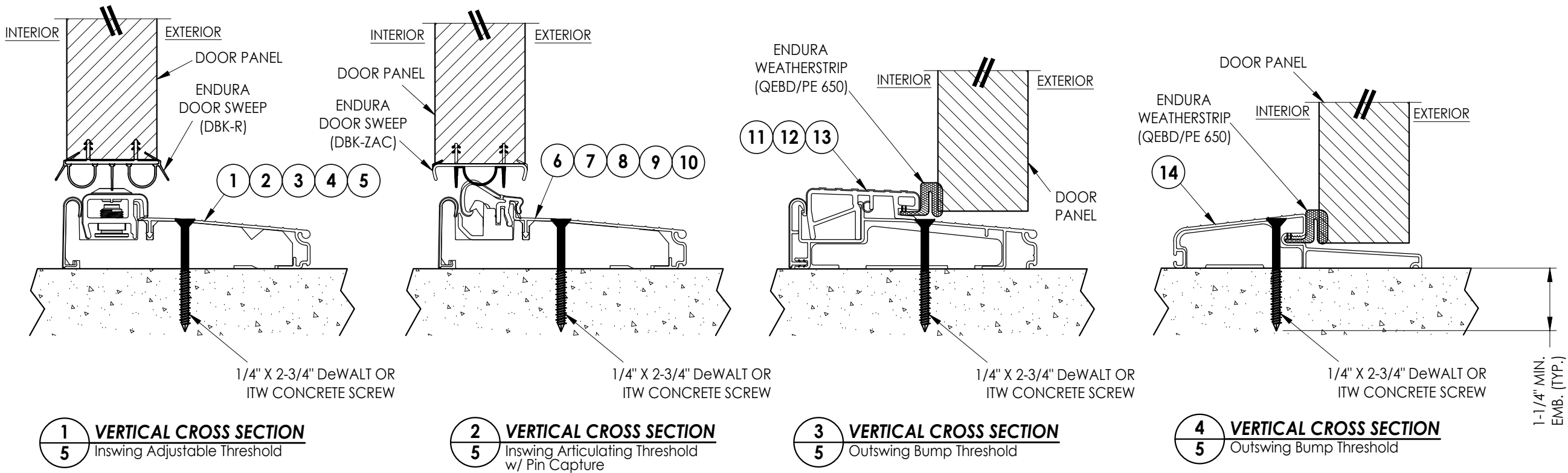
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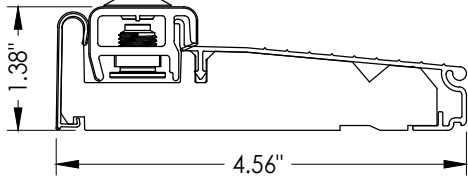


|                                                               |                                                                |                                                                                                                    |         |
|---------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------|
| 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>ENDURA                                            | PART OR ASSEMBLY:<br>HORIZONTAL AND VERTICAL<br>CROSS SECTIONS | REVISIONS                                                                                                          |         |
|                                                               |                                                                | NO.                                                                                                                | DATE    |
|                                                               |                                                                | 7                                                                                                                  | 7/03/26 |
|                                                               |                                                                | 6                                                                                                                  | 7/07/23 |
|                                                               |                                                                | 5                                                                                                                  | 8/12/20 |
|                                                               |                                                                | 4                                                                                                                  |         |
|                                                               |                                                                | 3                                                                                                                  |         |
|                                                               |                                                                | 2                                                                                                                  |         |
|                                                               |                                                                | 1                                                                                                                  |         |
| DATE: 10/24/13                                                |                                                                | SCALE: N.T.S.                                                                                                      |         |
| DWG. BY: JK                                                   |                                                                | CHK. BY: LFS                                                                                                       |         |
| DRAWING NO.: FL-16634.1                                       |                                                                | SHEET 4 OF 6                                                                                                       |         |

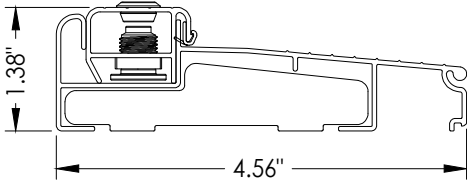
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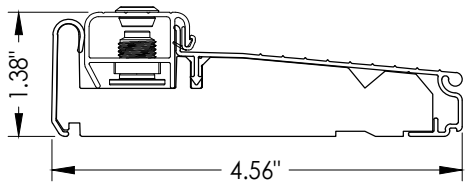
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ZAIL4565



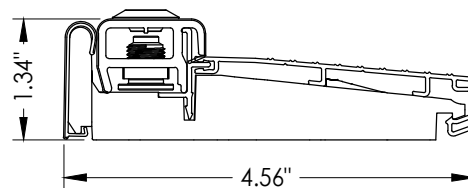
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ZAI4565FN



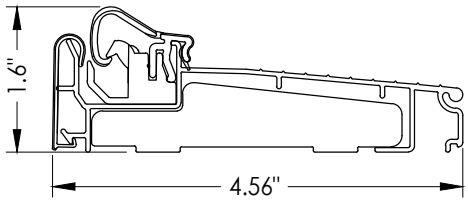
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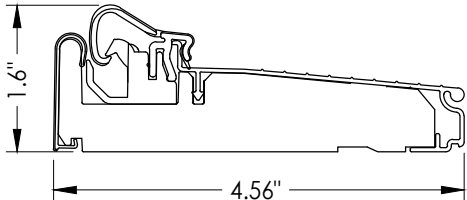
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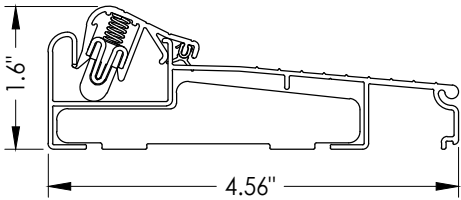
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ZAI4565RDS



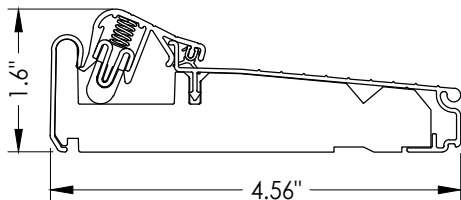
6 INSWING ARTICULATING THRESHOLD  
ZACL4565



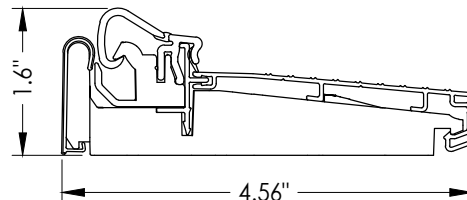
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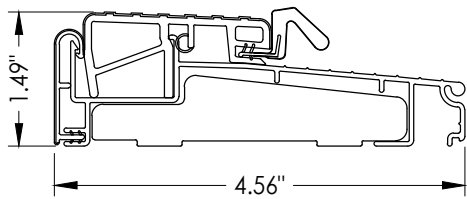
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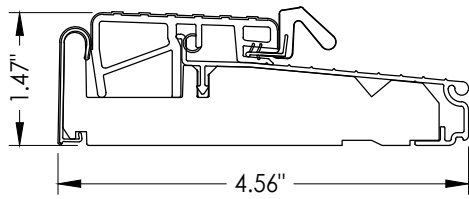
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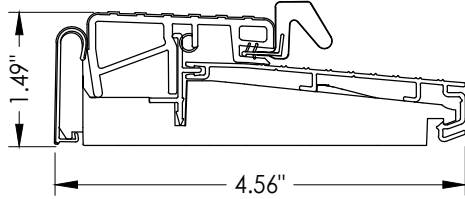
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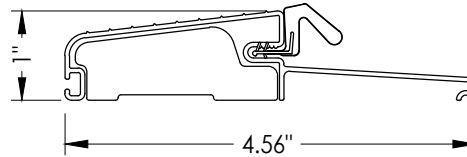
11 OUTSWING THRESHOLD  
ZOBL4565



12 OUTSWING THRESHOLD  
ZOB4565FN



13 OUTSWING THRESHOLD  
ZOB4565RDS



14 OUTSWING THRESHOLD  
FOB4566

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

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT: ENDURA

PART OR ASSEMBLY:  
THRESHOLD  
DETAILS

| NO. | DATE    | REVISIONS                    | BY  |
|-----|---------|------------------------------|-----|
| 7   | 7/03/26 | UPDATE TO 9TH ED. (2026) FBC | LFS |
| 6   | 7/07/23 | UPDATE TO 8TH ED. (2023) FBC | LFS |
| 5   | 8/12/20 | UPDATE TO 7TH ED. (2020) FBC | LFS |

DATE: 10/24/13

SCALE: N.T.S.

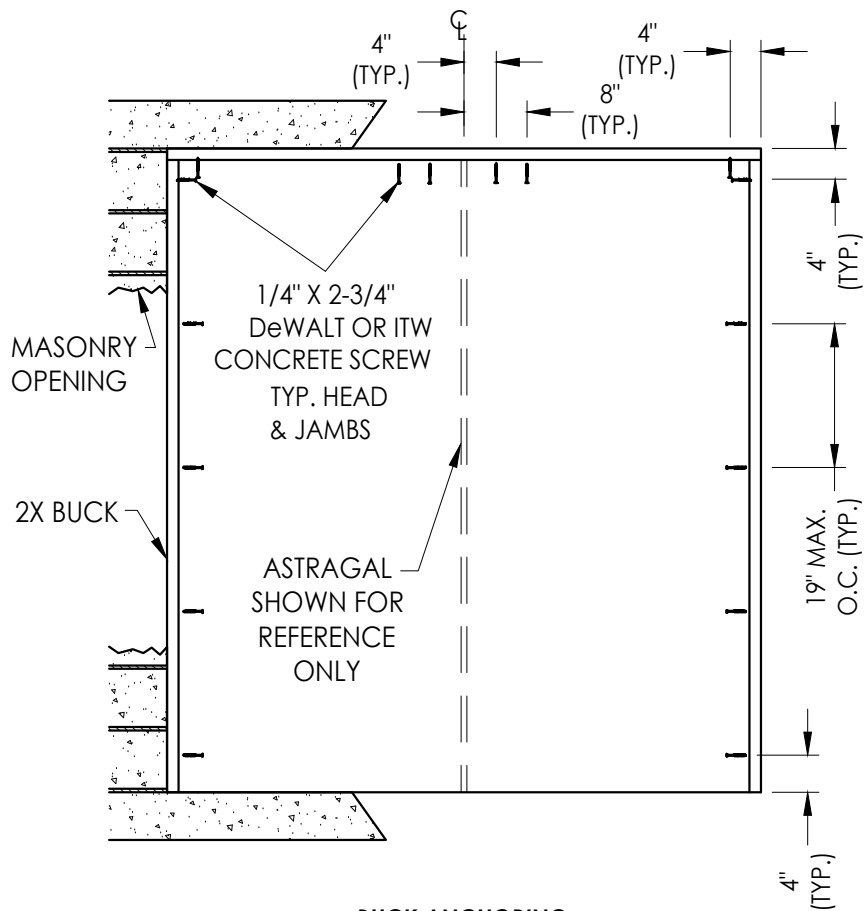
DWG. BY: JK

CHK. BY: LFS

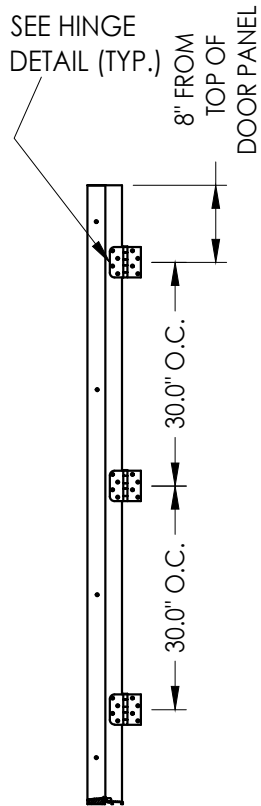
DRAWING NO.:  
FL-16634.1

SHEET 5 OF 6

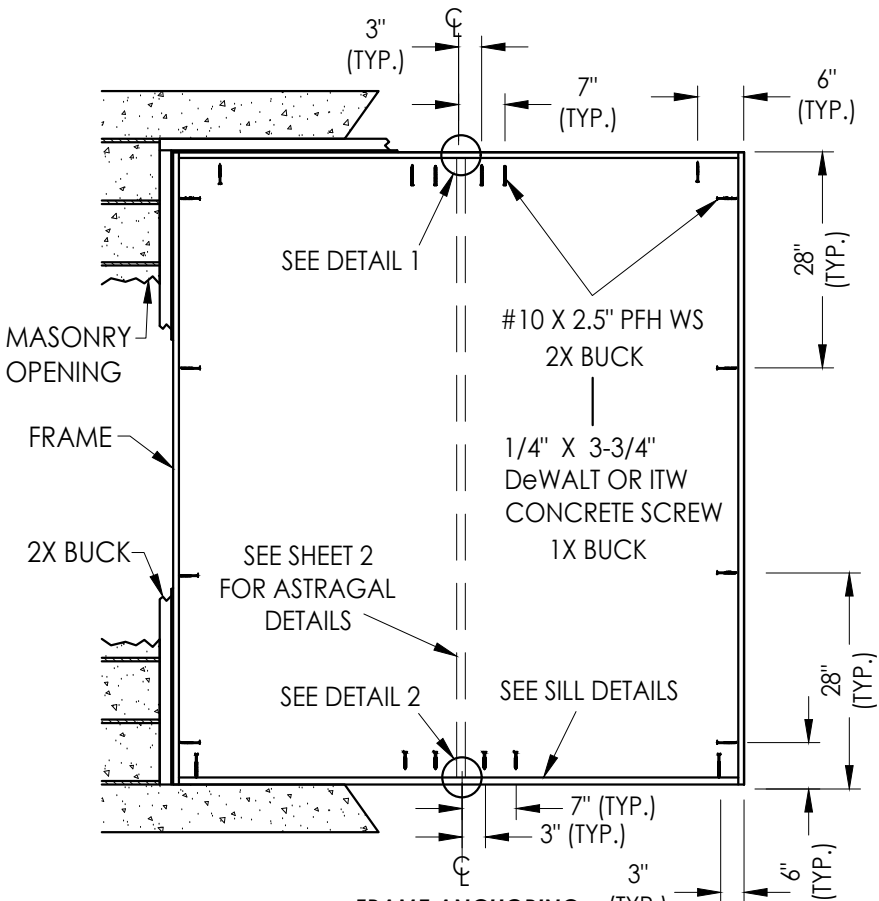
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BUCK ANCHORING  
XX



HINGE JAMB



FRAME ANCHORING  
XX

**CORROSION RESISTANCE - SALTWATER ENVIRONMENT**

Fasteners & connectors in areas within 3000 ft (914 m) of a saltwater coastline shall comply with FBC Sections 1711.1 or R332.1.

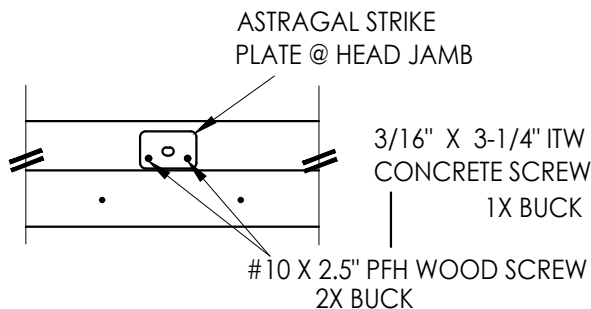
**CONCRETE ANCHOR NOTES:**

- 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:

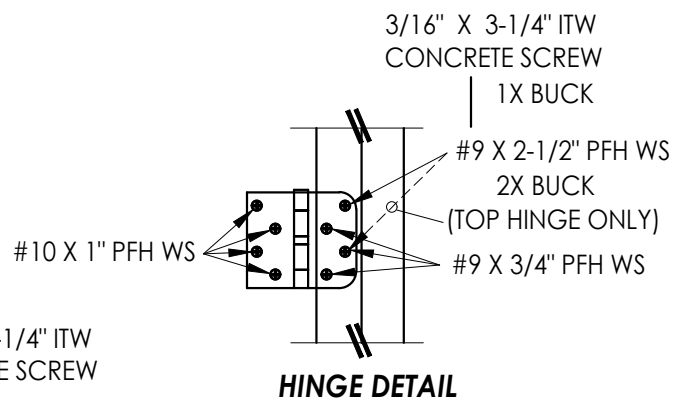
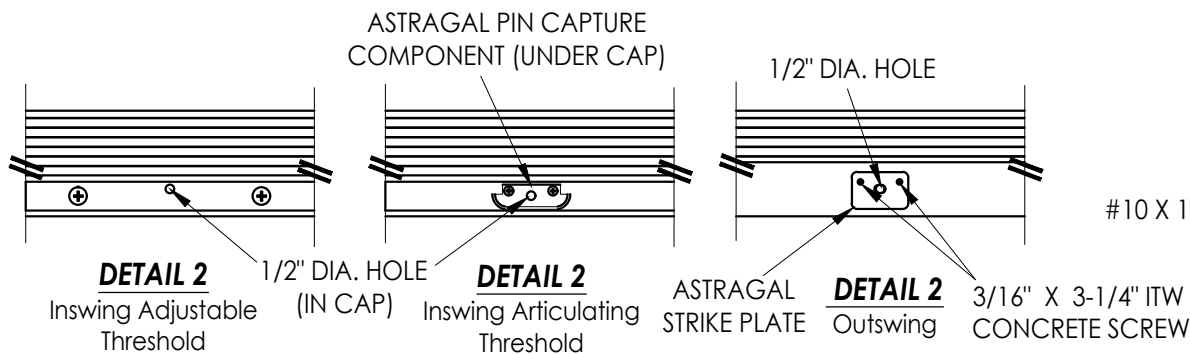
| ANCHOR TYPE      | ANCHOR SIZE | MIN. EMBEDMENT | MIN. CLEARANCE TO MASONRY EDGE | MIN. CLEARANCE TO ADJACENT ANCHOR |
|------------------|-------------|----------------|--------------------------------|-----------------------------------|
| ITW TAPCON®      | 1/4"        | 1-1/4"         | 2"    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

**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.



DETAIL 1



HINGE DETAIL

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

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT: ENDURA

PART OR ASSEMBLY:  
BUCK AND FRAME ANCHORING

| NO. | DATE    | REVISIONS                        |
|-----|---------|----------------------------------|
| 7   | 7/03/26 | UPDATE TO 9TH ED. (2026) FBC LFS |
| 6   | 7/07/23 | UPDATE TO 8TH ED. (2023) FBC LFS |
| 5   | 8/12/20 | UPDATE TO 7TH ED. (2020) FBC LFS |
| NO. | DATE    | BY                               |

DATE: 10/24/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-16634.1

SHEET 6 OF 6