

## Evaluation Report "Englert® Series 2000" Metal Roof Assembly

### Manufacturer:

**Englert, Inc.**

1200 Amboy Avenue  
Perth Amboy, NJ 08862  
(732) 826-8614

*for*

### Florida Product Approval

**# FL 11751.10 R9**

### Florida Building Code 8th Edition (2023)

**Method: 1 - D**

**Category: Roofing**

**Sub - Category: Metal Roofing**

**Product: "Series 2000" Roof Panel**

**Material: Aluminum**

**Panel Thickness: 0.032"**

**Panel Width: 18"**

**Panel Seam: Snap-Lock**

**Support: Steel Deck**

This item has been digitally signed and sealed by James L. Buckner, P.E., on this date below. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.

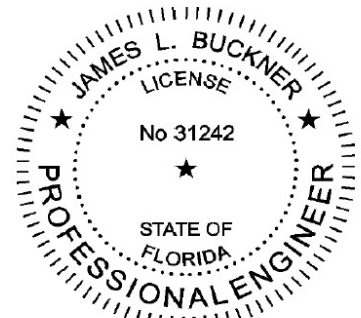
### Prepared by:

James L. Buckner, P.E., SECB  
Florida Professional Engineer # 31242  
Florida Evaluation ANE ID: 1916  
Project Manager: Diana Galloway  
Report No. 25-769-S2000-A3S-HZ-ER (New)  
Date: 9/18/2025

### Contents:

Evaluation Report

Pages 1 – 9



James L. Buckner, P.E.  
FL31242

A handwritten signature in black ink, appearing to read "James L. Buckner".

**CBUCK, Inc. dba CBUCK Engineering**

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|                                   |                                                                                                                                                                                                                                                                                                         |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer:                     | Englert, Inc.<br>1200 Amboy Avenue<br>Perth Amboy, NJ 08862<br>(732) 826-8614<br><a href="http://www.englertinc.com/">http://www.englertinc.com/</a>                                                                                                                                                    |
| Product Name:                     | "Series 2000"                                                                                                                                                                                                                                                                                           |
| Product Category:                 | Roofing                                                                                                                                                                                                                                                                                                 |
| Product Sub-Category              | Metal Roofing                                                                                                                                                                                                                                                                                           |
| Compliance Method:                | State Product Approval Rule 61G20-3.005 (1) (d)                                                                                                                                                                                                                                                         |
| Product/System<br>Description:    | "Series 2000" Roof Panel<br>0.032" Aluminum Snap-Lock roof panel mechanically attached to Steel Deck with fixed panel clips & screws.                                                                                                                                                                   |
| Product Assembly as<br>Evaluated: | Refer to Page 4 of this report for product assembly components/materials & standards:<br><ol style="list-style-type: none"><li>1. Roof Panel</li><li>2. Panel Clip</li><li>3. Bearing Plate</li><li>4. Fasteners</li><li>5. Adhesive</li><li>6. Underlayment</li><li>7. Insulation (Optional)</li></ol> |
| Support:                          | <b>Type:</b><br>Steel Deck<br>(Design of support and its attachment to support framing is outside the scope of this evaluation.)<br><b>Description:</b> <ul style="list-style-type: none"><li>• Thickness: 22 gauge minimum</li><li>• Yield strength: 40 ksi minimum</li></ul>                          |
| Slope:                            | Minimum slope shall be:<br><b>1/2:12 (Non-HVHZ)</b> Per FBC 1507.4.2<br><b>2:12 (HVHZ)</b> Per FBC 1515<br>In compliance with FBC Chapter 15 based on the type of roof covering, applicable code sections and in accordance with manufacturer's recommendations.                                        |
| Performance:                      | Wind Uplift Resistance: <ul style="list-style-type: none"><li>• Design Uplift Pressure:<br/>(Refer to "Table A" attachment details herein)</li></ul> <b>See Table "A"</b>                                                                                                                               |

**Performance  
Standards:**

The product described herein has demonstrated compliance with:

- TAS 125-03 – *Standard Requirements for Metal Roofing Systems*
- TAS 100-95 – *Wind Driven Rain Test*

**Code Compliance:**

The product(s) described herein have demonstrated compliance with the performance standards listed above as referenced in the Florida Building Code 8<sup>th</sup> Edition (2023).

**Evaluation Report  
Scope:**

This building envelope product is evaluated for compliance with the structural requirements of the Florida Building Code, per the scope sections of Florida Product Approval Rule 61G20-3.001.

**Limitations and  
Conditions of Use:**

- Scope of "Limitations and Conditions of Use" for this evaluation:  
This evaluation report for "Optional Statewide Approval" contains technical documentation, specifications and installation method(s) which include "Limitations and Conditions of Use" throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under "Optional Statewide Approval".
- All metal components and fasteners shall be corrosion resistant in accordance with applicable sections of FBC, including but not limited to Sections 1504.3.2, 1506.6 and 1507.4.4. For HVHZ areas, all roofing accessories shall comply with FBC Sections 1517.5 and 1517.6.
- All insulation fasteners, membrane fasteners and stress plates shall comply with FBC Section 1520.4 as applicable.
- The design pressures listed herein is applicable to all roof pressure zones. Rational analysis or extrapolation to enhance pressure is not permitted in HVHZ zones.
- Maximum panel lengths, valleys & panel accessories shall comply with Roofing Application Standard RAS 133 as applicable in HVHZ areas.
- Deck shall be in compliance with applicable building code.
- Fire Classification is outside the scope of Rule 61G20-3 and is therefore not included in this evaluation.
- All panels shall be permanently labeled with the manufacturer's name and/or logo.
- This evaluation report approves the product assembly as described in this report for use in the High Velocity Hurricane Zone (HVHZ) code section. (Dade & Broward Counties)
- Option for application outside "Limitations and Conditions of Use"  
Rule 61G20-3.005(1)(e) allows engineering analysis for "project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code". Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others

**Quality Assurance:**

The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through Keystone Certifications, Inc. (FBC Organization ID# QUA 1824).

|                                                    |                               |                                                                           |
|----------------------------------------------------|-------------------------------|---------------------------------------------------------------------------|
| <b>Components/Materials<br/>(by Manufacturer):</b> | <b>Roof Panel:</b>            | Englert Series 2000                                                       |
|                                                    | Material:                     | Aluminum                                                                  |
|                                                    | Thickness:                    | 0.032" (min.)                                                             |
|                                                    | Panel Widths:                 | 18" (max.) Coverage                                                       |
|                                                    | Rib Height:                   | 1-3/4"                                                                    |
|                                                    | Alloy Type:                   | 3105 H14                                                                  |
|                                                    | Corrosion Resistance:         | Per FBC Section 1507.4.3                                                  |
|                                                    | <b>Roof Panel Clips:</b>      |                                                                           |
|                                                    | Product Name:                 | Englert "Series 2000 Clip"                                                |
|                                                    | Englert Part #:               | 05076B (Galv. Steel) or 05076D (Stainless Steel)                          |
|                                                    | Type:                         | One-piece, fixed clip                                                     |
|                                                    | Material:                     | Galvanized Steel or Stainless Steel                                       |
|                                                    | Thickness:                    | 18 gauge                                                                  |
|                                                    | Yield Strength:               | 40 ksi min.                                                               |
|                                                    | Dimensions:                   | 1-3/4" (tall) x 3-1/2" (long) x 2-1/2" (wide)                             |
|                                                    | Corrosion Resistance:         | Per FBC Section 1506.7                                                    |
|                                                    | <b>Bearing Plate:</b>         |                                                                           |
|                                                    | Material:                     | Galvanized Steel or Stainless Steel                                       |
|                                                    | Thickness:                    | 18 gauge                                                                  |
|                                                    | Yield Strength:               | 40 ksi min.                                                               |
|                                                    | <b>Fastener:</b>              |                                                                           |
|                                                    | Type:                         | Pancake-Head Self Drilling Screw                                          |
|                                                    | Size :                        | 1/4" x 8"                                                                 |
|                                                    | Corrosion Resistance:         | Per FBC Section 1506.6 and 1507.4.4                                       |
|                                                    | Standard:                     | Per SAE J78-1979                                                          |
|                                                    | <b>Seam Adhesive/Sealant:</b> |                                                                           |
|                                                    | Product Name:                 | Bostik 70-05A                                                             |
|                                                    | Type:                         | One component, polyurethane adhesive                                      |
|                                                    | Application Size:             | (1)1/4" - 1/2" bead                                                       |
|                                                    | Application Location:         | along female flange the full length of panel<br>(Refer to drawing Page 8) |

**Components &  
Materials:  
(by Others)**

**Underlayment:**

**Non-HVHZ:**

One of the following per FBC 8th Edition (2023), Section 1507.1.1.

ASTM D226, D1970, D4869, D6757, D8257

Installation shall comply with FBC including Sections 1507.1.1.1, 1507.1.1.2 where applicable and in accordance with roof manufacturer's recommendations.

**HVHZ:**

One of the following per FBC 8th Edition (2023), Section 1518.2.

ASTM D226, D1970, D4869, D6757, D8257

Installation shall comply with FBC including Sections 1518.2, 1518.2.1, Table, 1518.2.1, 1518.2.2, 1518.2.3, 1518.2.4 where applicable and in accordance with roof manufacturer's recommendations.

**Barrier Board:**

Any approved barrier with current approval.

(Fire classification is outside the scope of this evaluation. Refer to current fire listings for installation of fire barrier & fire rating of this system.)

**Installation:**

**Installation Method:**

(Refer to "TABLE A" below and drawings at the end of this evaluation report.)

- Clip Spacing: **Refer to "TABLE A" Below**  
(along the length of the panel)
- Two (2) fasteners per Clip
- Rib Interlock: Snap-Lock  
(Panel ribs shall be fully engaged to form an integral snap-lock.)
- Seam Adhesive: Refer to Table "A" & Drawing Page 8.  
(Apply along female flange the full length of the panel.)
- Minimum fastener penetration thru bottom of support, 3/4".
- For panel construction at the end of panels, refer to manufacturer's instructions and any site specific design.

| TABLE "A"<br>ALLOWABLE LOADS                                                                                             |                 |                        |                                      |                    |
|--------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------|--------------------------------------|--------------------|
|                                                                                                                          | Clip<br>Spacing | #Fasteners<br>per Clip | Seam<br>Adhesive                     | Design<br>Pressure |
| METHOD 1                                                                                                                 | 12"             | 2                      | Not Required                         | - 78.75 PSF        |
| METHOD 2                                                                                                                 | 6"              | 2                      | Not Required                         | - 90 PSF           |
| METHOD 3                                                                                                                 | 6"              | 2                      | 1/4 - 1/2" bead<br>Refer to Dwg Pg 8 | -157.5 PSF         |
| Notes: <ul style="list-style-type: none"><li>• Allowable design pressure(s) for allowable stress design (ASD).</li></ul> |                 |                        |                                      |                    |

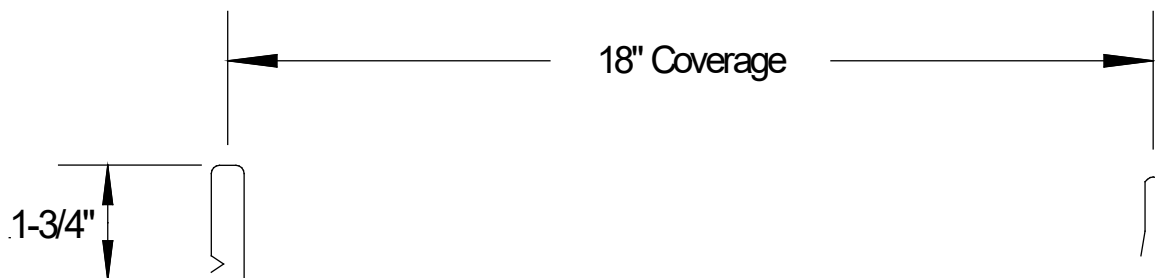
Install the "Series 2000" roof panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 8th Edition (2023). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

**Referenced Data:**

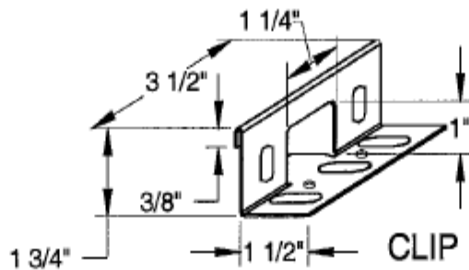
1. TAS 125-03 (UL580/UL1897) Uplift Test  
By Architectural Testing, Inc. (FBC Organization ID# TST 1558)  
Report #: B8193.01-109-18-r1, Dated: 10 / 16 / 12
2. TAS 100-95 Wind Driven Rain Test  
By Architectural Testing, Inc.  
Report No. 01-32796.01, Report Date: 11/03/1998
3. Quality Assurance  
Keystone Certifications, Inc. (FBC Organization ID# QUA 1824)  
Englert, Inc. Licensee #420
4. Equivalency of Test Standard Certification  
By James L. Buckner, P.E. @ CBUCK Engineering  
(FBC Organization # ANE 1916)
5. Engineering Analysis  
By CBUCK Engineering
6. Certification of Independence  
By James L. Buckner, P.E. @ CBUCK Engineering  
(FBC Organization # ANE 1916)

**Installation Method**  
**Englert, Inc.**  
**"Series 2000" (0.032" Aluminum) Roof Panel attached to Steel Deck**

**Drawings**

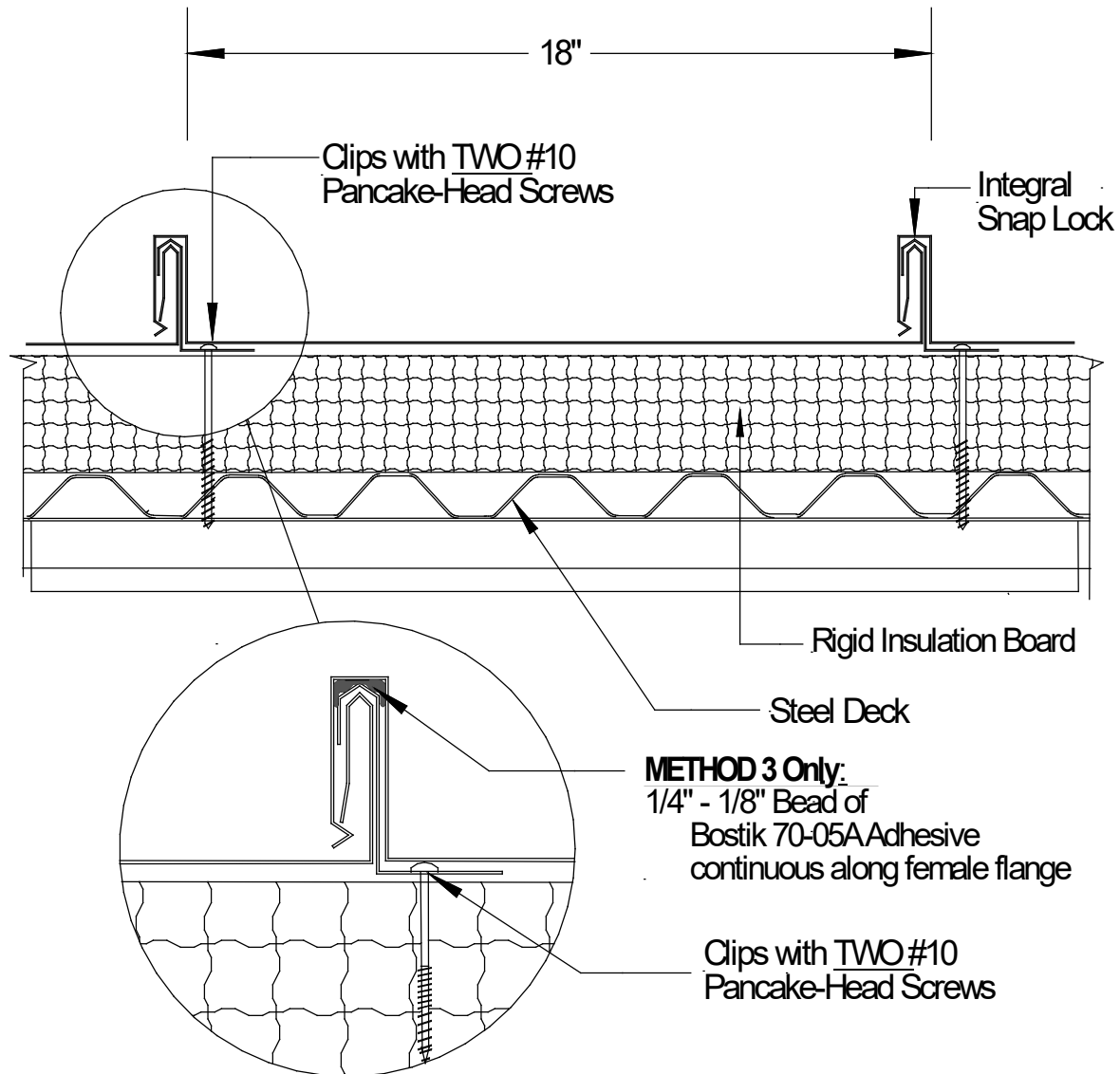


**Typical Panel Profile**



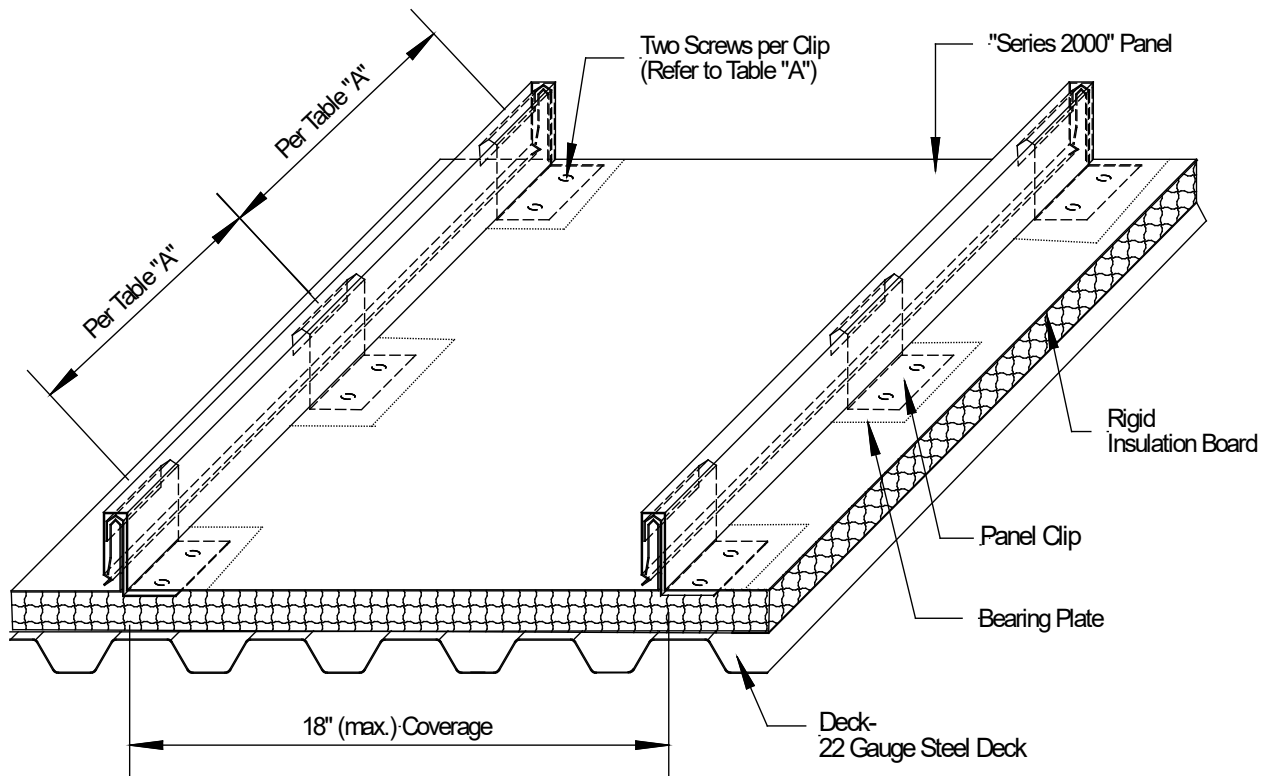
**Panel Clip Profile**  
**Englert "Series 2000 Clip"**  
(Part # 05076B – Galvanized Steel) or  
(Part # 05076D – Stainless Steel)

**Installation Method**  
**Englert, Inc.**  
**"Series 2000" (0.032" Aluminum) Roof Panel attached to Steel Deck**



**Typical Assembly Profile View**  
**(Typical Fastening Pattern Across Width)**

## Installation Method Englert, Inc. "Series 2000" (0.032" Aluminum) Roof Panel attached to Steel Deck



### Typical Roof Assembly Isometric View

| TABLE "A" |              |                     |                                      |                 |
|-----------|--------------|---------------------|--------------------------------------|-----------------|
|           | Clip Spacing | #Fasteners per Clip | Seam Adhesive                        | Design Pressure |
| METHOD 1  | 12"          | 2                   | Not Required                         | - 78.75 PSF     |
| METHOD 2  | 6"           | 2                   | Not Required                         | - 90 PSF        |
| METHOD 3  | 6"           | 2                   | 1/4 - 1/2" bead<br>Refer to Dwg Pg 8 | -157.5 PSF      |