

Evaluation Report "Englert® Series 2000" Metal Roof Assembly

Manufacturer:

Englert, Inc.

1200 Amboy Avenue
Perth Amboy, NJ 08862

for

Florida Product Approval

FL 11751.9 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: 0.040"

Panel Width: 18"

Panel Seam: Snap-Lock

Support: Wood Deck

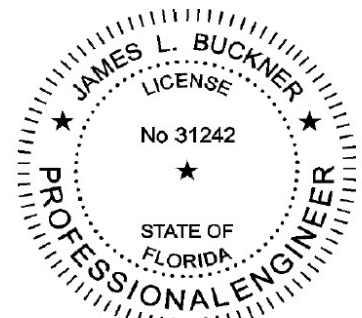
This item has been digitally signed and sealed by James L. Buckner, P.E., on this date below. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.

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-A4W-HZ-ER (New)
Date: 9/18/2025

Contents:

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James L. Buckner, P.E.
FL31242

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

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Manufacturer:	Englert, Inc. 1200 Amboy Avenue Perth Amboy, NJ 08862 (732) 826-8614 http://www.englertinc.com/
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 Description:	"Series 2000" Roof Panel 0.040" Aluminum Snap-Lock roof panel mechanically attached to Wood Deck with fixed panel clips & screws.
Product Assembly as Evaluated:	Refer to Page 4 of this report for product assembly components/materials & standards: 1. Roof Panel 2. Panel Clip 3. Fasteners 4. Underlayment 5. Insulation (Optional)
Support:	Type: Wood Deck (Design of support and its attachment to support framing is outside the scope of this evaluation.) Description: • 19/32" or greater plywood, • or Wood plank (min. specific gravity of 0.42)
Slope:	Minimum slope shall be: 1/2:12 (Non-HVHZ) Per FBC 1507.4.2 2:12 (HVHZ) Per FBC 1515 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: • Design Uplift Pressure: Refer to Table A (Refer to "Table A" attachment details herein)

**Performance
Standards:**

The product described herein has demonstrated compliance with:

- TAS 125-03 – *Standard Requirements for Metal Roofing Systems*
- TAS100-95 – *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 8th Edition (2023).

**Evaluation Report
Scope:**

This product evaluation is limited to compliance with the structural requirements of the Florida Building Code, as related to the scope section to 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 61G20-3.0005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through Keystone Certifications, Inc. (FBC Organization ID# QUA 1824).

**Components/Materials
(by Manufacturer):**

Roof Panel:
Material: Englert Series 2000 Aluminum
Thickness: 0.040" (min.)
Panel Widths: 18" (max.) Coverage
Rib Height: 1-3/4"
Alloy Type: 3105 H14
Corrosion Resistance: Per FBC Section 1507.4.3

Roof Panel Clips:

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

Fastener:

Type: Pancake-Head Wood Screw
Size : #10 x 1"
Corrosion Resistance: Per FBC Section 1506.6 and 1507.4.4
Standard: Per ANSI/ASME B18.6.1

**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.)
- Minimum fastener penetration thru bottom of support, 3/16".
- For panel construction at the end of panels, refer to manufacturer's instructions and any site specific design.

TABLE "A" ALLOWABLE LOADS "Series 2000" (.040" Alum.) Roof Panel attached to Wood Deck								
	Panel Width (max.)	Deck Thickness (min.)	Panel Clip	Clip Spacing (max.)	# of Fasteners per Clip	Seam Adhesive	Panel Seam (min.)	Design Pressure (ASD)
1	18"	19/32"	3-1/2" Fixed	24"	2	NO	SnapLock	- 70 PSF
2	18"	19/32"	3-1/2" Fixed	8"	2	NO	SnapLock	- 150 PSF
Note: Allowable design pressure(s) for allowable stress design (ASD).								

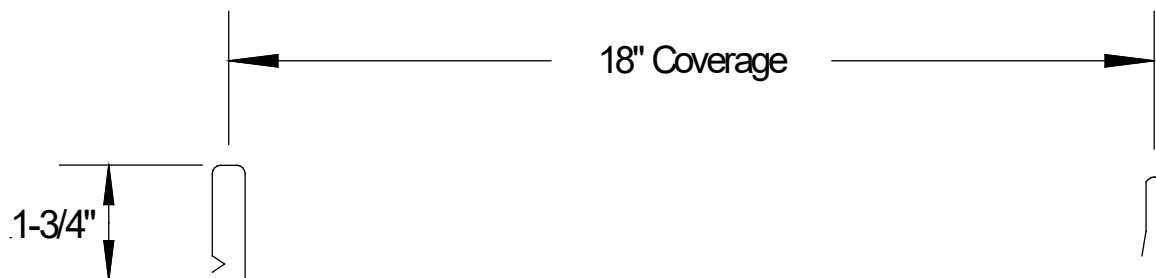
Install the "Series 2000" roof panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 8th Edition (2023). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation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

Referenced Data:

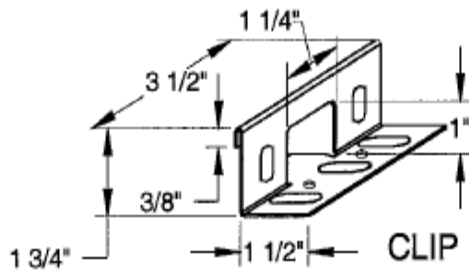
1. TAS 125 Uplift Test
By Architectural Testing, Inc. (FBC Organization ID# TST 1558)
Report No. 01-46070.02, Specimen #1-3, Date: 10/23/03 (#1)
2. TAS 125 Uplift Test
By Intertek/Architectural Testing, Inc. (FBC Organization ID# TST 1558)
Report No. E6210.01-109-18-r1, Spec #1, Date: 6/29/15 (#2)
3. TAS 100-95 Wind Driven Rain Test
By Architectural Testing, Inc.
Report No. 01-32796.01, Report Date: 11/03/1998
4. Keystone Certifications, Inc. (FBC Organization ID# QUA 1824)
Englert, Inc. Licensee #420
5. Equivalency of Test Standard Certification
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)
6. Engineering Analysis
By CBUCK Engineering
7. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)

Installation Method
Englert, Inc.
"Series 2000" (0.040" Aluminum) Roof Panel attached to Wood Deck

Drawings



Typical Panel Profile

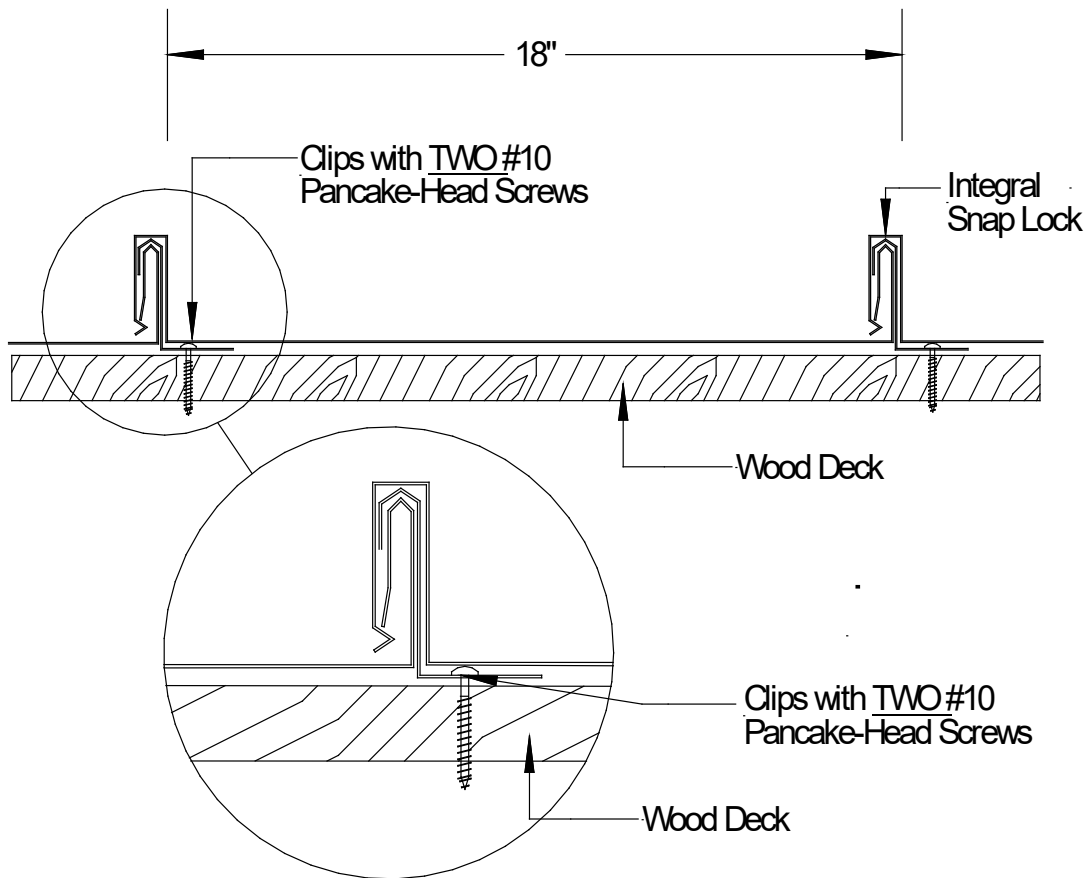


Panel Clip Profile
Englert "Series 2000 Clip"
(Part # 05076B – Galvanized Steel) or
(Part # 05076D – Stainless Steel)

Installation Method

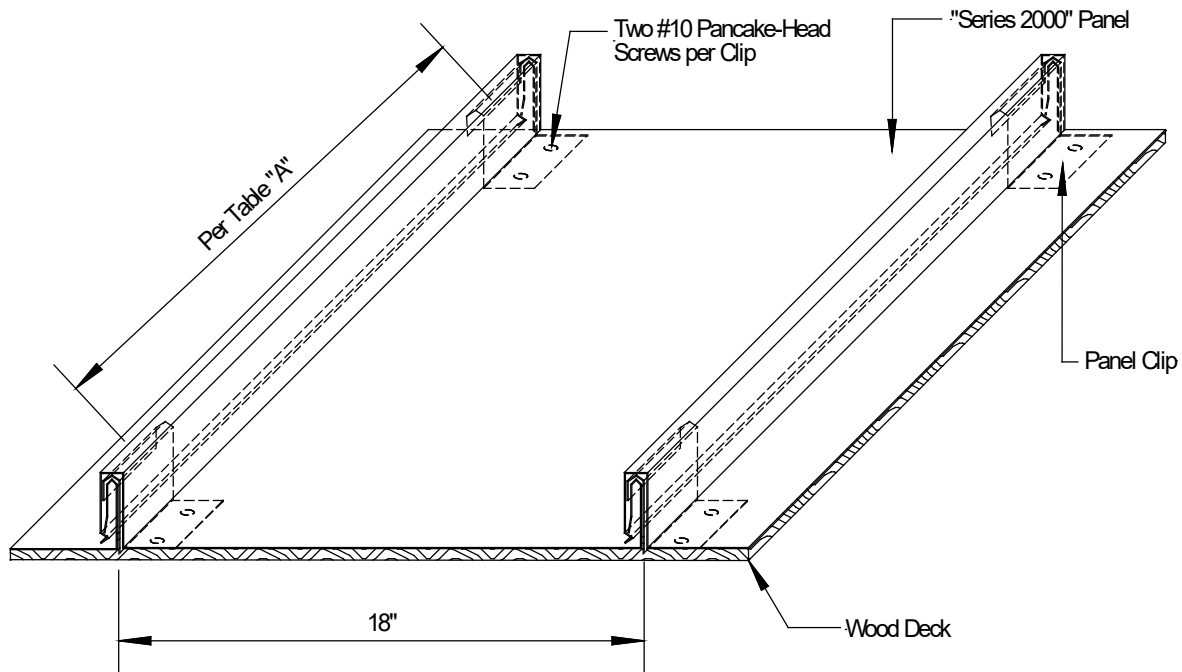
Englert, Inc.

"Series 2000" (0.040" Aluminum) Roof Panel attached to Wood Deck



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

“Series 2000” (0.040” Aluminum) Roof Panel attached to Wood Deck



Typical Roof Assembly Isometric View

(Optional) Rigid Insulation Board per Page 4 of this report

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Note: Allowable design pressure(s) for allowable stress design (ASD).