

Evaluation Report

"EP-550"

Metal Roof Assembly

Manufacturer:

Eastpoint Roofing & Metal Sales, Inc.

60 Otterslide Road

Eastpoint, FL 32328

for

Florida Product Approval

FL 42491.1

Florida Building Code 8th Edition (2023)

Method: 1 - D

Category: Roofing

Sub - Category: Metal Roofing

Product: "EP-550"

Material: Steel

Support: Wood Deck

Prepared by:

James L. Buckner, P.E., S.E.C.B.

Florida Professional Engineer # 31242

Florida Evaluation ANE ID: 1916

Project Manager: Diana Galloway

Report No. 23-622-EP550-S4W-ER *(New)*

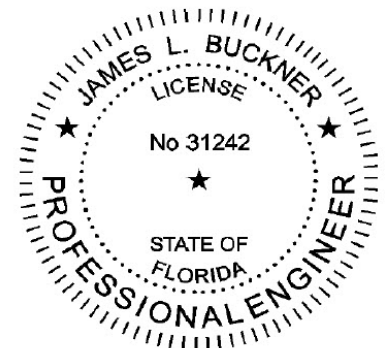
Date: 10/06/23

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Evaluation Report

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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.



James L. Buckner, P.E.

FL31242

Date: 2023.10.06
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CBUCK, Inc. dba CBUCK Engineering

Phone: (561) 491-9927 · Email: cbuck@cbuckinc.net · Website: www.cbuckinc.net

Business: 1374 Community Dr., Jupiter, FL 33458

Manufacturer:	Eastpoint Roofing & Metal Sales, Inc. 60 Otterslide Road PO Box 1111 Eastpoint, FL 32328 850-899-3715
Product Name:	"EP-550"
Product Category:	Roofing
Product Sub-Category	Metal Roofing
Compliance Method:	State Product Approval Rule 61G20-3.005 (1) (d)
Product/System Description:	"EP-550" 24 gauge Steel roof panel mechanically attached to Plywood Deck with clips and screws.
Product Assembly as Evaluated:	Refer to Page 4 of this report for product assembly components/materials & standards: 1. Roof Panel 2. Roof Panel Clips 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: • 15/32 (min.) or 19/32" or greater plywood, • or Wood plank (min. specific gravity of 0.42)
Slope:	In compliance with FBC Chapter 15 Section 1507.4.2, applicable code sections and in accordance with manufacturer's recommendations.
Performance:	Wind Uplift Resistance: • Design Uplift Pressure: (Refer to "Table A" attachment details herein)

Refer To Table "A"

**Performance
Standards:**

The product described herein has demonstrated compliance with:

- UL580-06 – *Test for Uplift Resistance of Roof Assemblies*
- UL 1897-15 – *Uplift test for roof covering systems*

**Standards
Equivalency:**

The UL 1897-12 standard version used to test the evaluated product assembly is equivalent with the prescribed standards in UL 1897-15 adopted by the Florida Building Code 8th Edition (2023).

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”.
- This report is a building code product evaluation per FLPE rule (FAC) 61G15-36 to comply with Florida product approval rule (FAC) 61G20-3. This evaluation report is part of the Florida Building Commission approval for the listed code related criteria. This report by James Buckner, P.E. and CBUCK Engineering is not a design certification of code compliance construction submittal documentation, per FBC section 107, for any individual structure, site specific or permit design.
- All metal components and fasteners shall be corrosion resistant in accordance with applicable sections of FBC, including but limited to Sections 1504.3.2, 1506.5, 1506.6 and 1507.4.4.
- Design of support system is outside the scope of this report. 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.
- This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone 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:	"EP-550"
Material:	Steel
Thickness:	24 gauge (min.)
Panel Width(s):	2" - 15" (max.) Coverage
Rib Height:	1-1/2"
Yield Strength:	40 ksi min.
Corrosion Resistance:	In compliance with FBC Section 1507.4.3: • ASTM A792 coated, or • ASTM A653 G90 galvanized steel

Roof Panel Clips:

Manufactured By:	Logan Stampings, Inc.
Part #:	SGU-196-20 or SSUL-196-20
Type:	One-piece, fixed clip
Material:	Galvanized Steel
Thickness:	20 gauge
Yield Strength:	40 ksi min.
Dimensions:	1-9/16" (tall) x 4" (long) x 1-1/4" (horizontal leg) Per
Corrosion Resistance:	FBC Section 1506.7

Fastener:

Type:	Pancake-Head Wood Screw
Size :	#10 - 12 x 1"
Corrosion Resistance:	Per FBC Section 1506.6 and 1507.4.4
Standard:	Per ANSI/ASME B18.6.1

Underlayment:
Material and application shall be in compliance with FBC Section 1507.1.1 and in accordance with applicable code sections and manufacturer's recommendations.

Components/Materials (by Others):

Insulation (Optional):	
Type:	Rigid Insulation Board
Thickness:	3" (max.)
Properties:	
Density:	2.25 pcf (lbs/ft ³) min.
Or Compressive Strength:	20 psi min.

Insulation Notes:

- Rigid Insulation shall meet minimum density OR compressive strength.
- Insulation shall comply with FBC Section 1508. When insulation is incorporated, fastener length shall conform to penetrate through bottom of support a minimum of 3/16".

Installation:

Installation Method:

(Refer to drawings at the end of this report.)

- Clip spacing: **Refer to Table "A" Below**
(along the length of the panel)
- Rib Interlock: Snap Lock
(Panel ribs shall be fully engaged to form an integral interlock.)
- 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"		
EP-550 24 ga. Steel Attached to Wood Deck		
ALLOWABLE LOADS		
	METHOD 1:	METHOD 2:
Design Pressure:	- 94.4 PSF	- 84 PSF
Panel Width:	2" - 15" max.	2" - 15" max.
Clip Spacing:	6"	12"
# Fasteners per Clip:	2	3
Notes:		
• Allowable design pressure(s) for allowable stress design (ASD).		

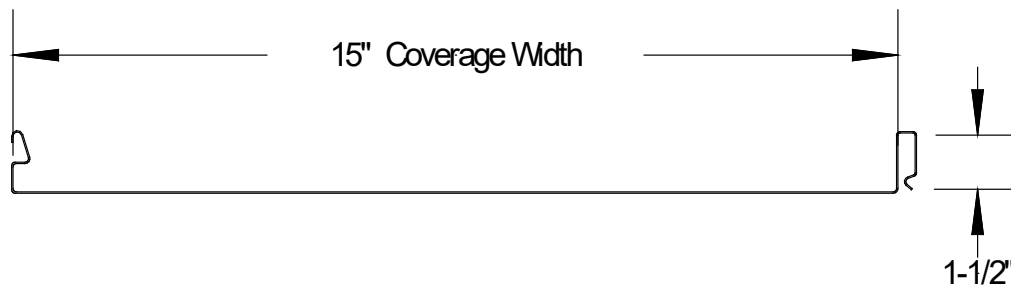
Install the "EP-550" roof panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 8th Edition (2023). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

Referenced Data:

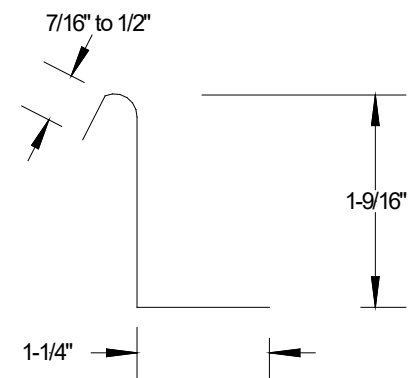
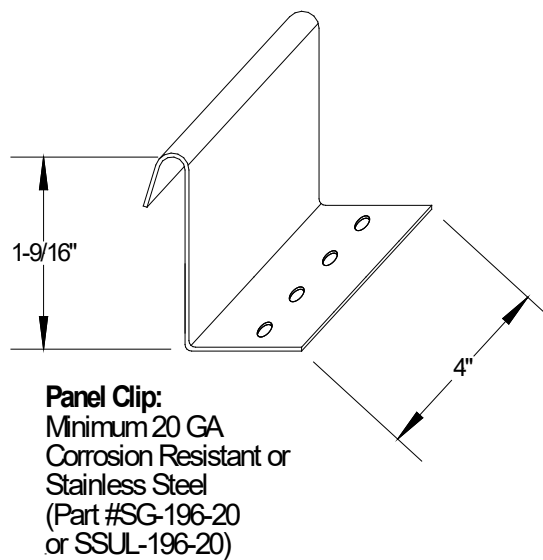
1. UL580-06 (09) & UL 1897-12 Uplift Test
By Farabaugh Engineering & Testing Inc.
Report T365-20, Date 12/31/20
2. Quality Assurance
Keystone Certifications, Inc. (FBC Organization ID# QUA 1824)
Licensee #4720
3. Equivalency of Test Standard Certification
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)
4. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)

Installation Method
Eastpoint Roofing & Metal Sales, Inc.
EP-550" Roof Panel Attached to Wood Deck

Profile Drawings

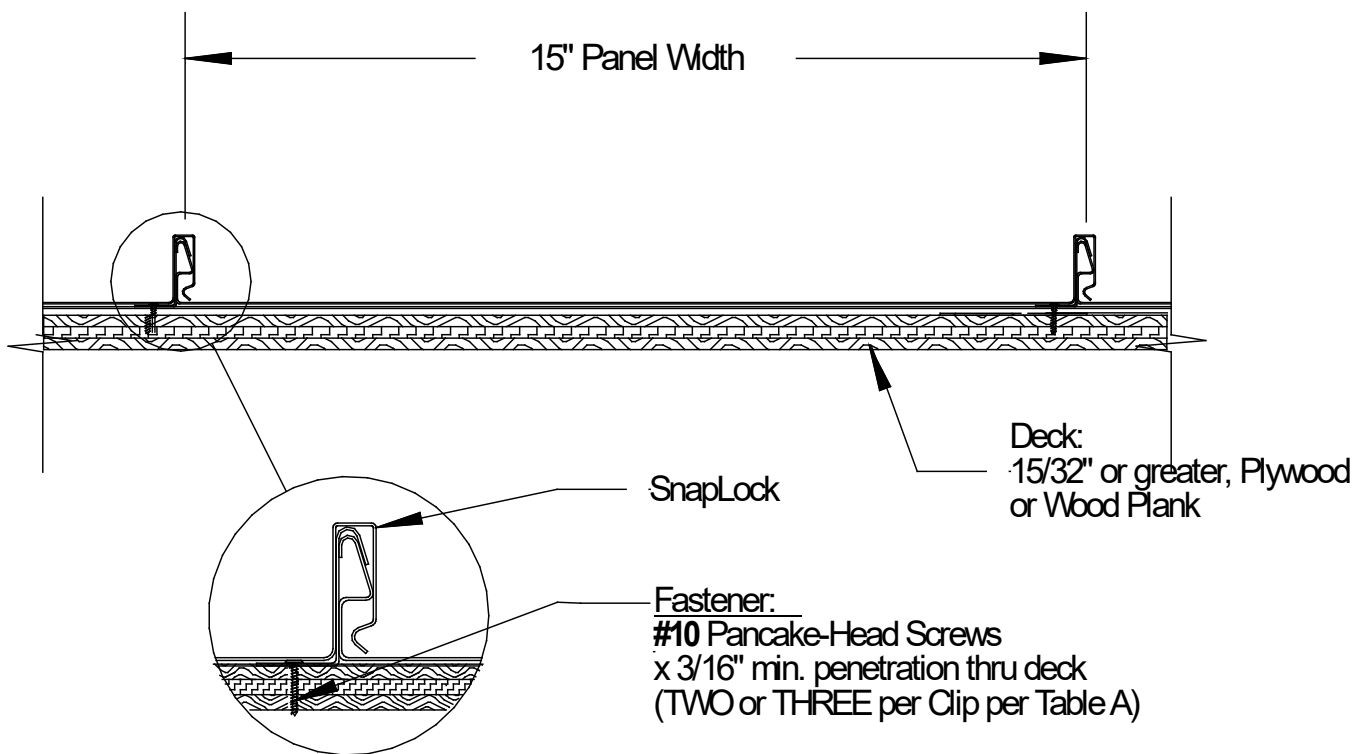


Typical Panel Profile View



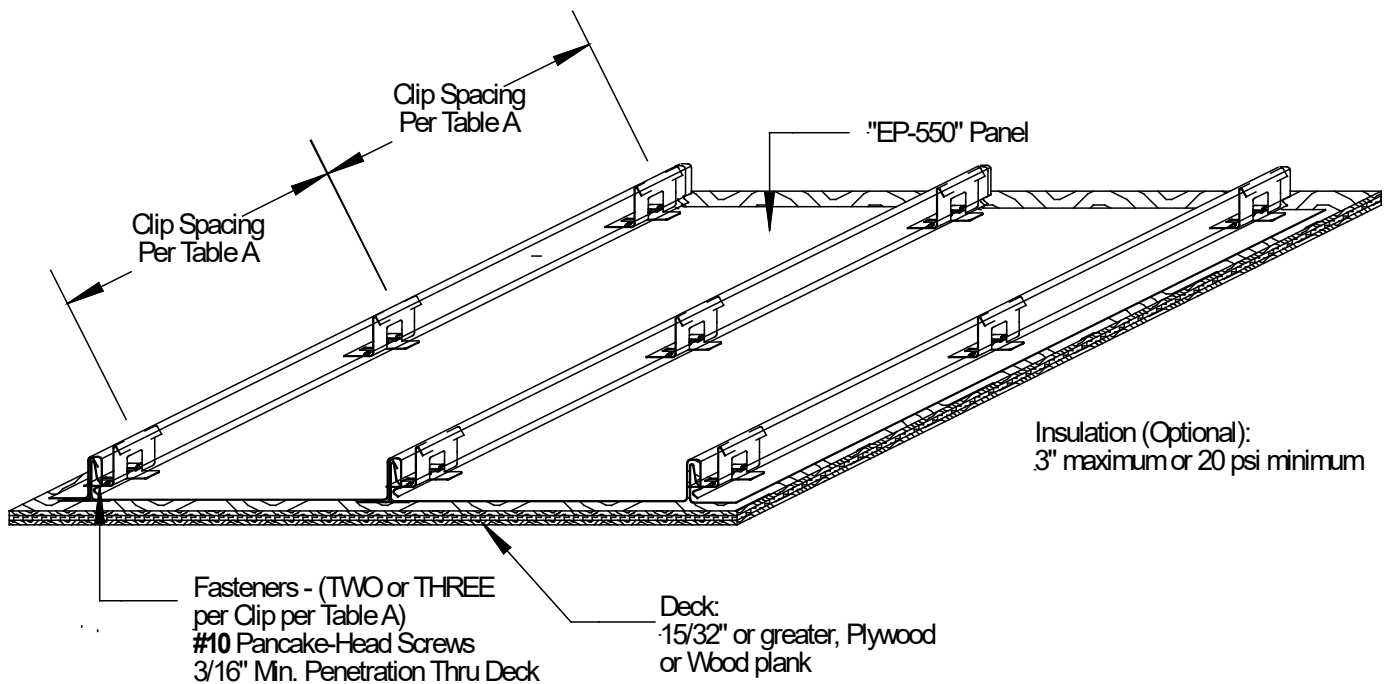
Typical Panel Clip Profile

Installation Method
Eastpoint Roofing & Metal Sales, Inc.
"EP-550" Roof Panel Attached to Wood Deck



Typical Assembly Profile View

Installation Method Eastpoint Roofing & Metal Sales, Inc. "EP-550" Roof Panel Attached to Wood Deck



Typical Assembly Profile View

TABLE "A" EP-550 24 ga. Steel Attached to Wood Deck ALLOWABLE LOADS		
	METHOD 1:	METHOD 2:
Design Pressure:	- 94.4 PSF	- 84 PSF
Panel Width:	2" - 15" max.	2" - 15" max.
Clip Spacing:	6"	12"
# Fasteners per Clip:	2	3
Notes: • Allowable design pressure(s) for allowable stress design (ASD).		