CBUCK Engineering

Specialty Structural Engineering

CBUCK, Inc. Certificate of Authorization #8064

Evaluation Report

"ClickLock"

Metal Roof Assembly

Manufacturer:

Classic Metal Roofing Systems

(A division of Isaiah Industries) 8510 Industry Park Drive Piqua, OH 45356 (800) 543-8938

for

Florida Product Approval

FL 10687.4 R5

Florida Building Code 7th Edition (2020)

Method: 1 - D

Category: Roofing

Metal Roofing Sub - Category:

> Product: "ClickLock" Material: Aluminum Support: Wood Deck

Prepared by:

James L. Buckner, P.E., SECB Florida Professional Engineer # 31242 Florida Evaluation ANE ID: 1916 Project Manager: Diana Galloway Report No. 20-240-CL-A3W-ER (Revises 17-130-CL-A3W-ER, FL10687.4 R4)

Date: 10 / 01 / 20

Contents:

Evaluation Report Pages 1-8 This item has been electronically signed and sealed by James L. Buckner, P.E., on this date using a Digital Signature. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any

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Report No.: 20-240-CL-A3W-ER

Page 2 of 88

Specialty Structural Engineering

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Manufacturer: Classic Metal Roofing Systems

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8510 Industry Park Drive

Piqua, OH 45356 (800) 543-8938

https://www.classicmetalroofingsystems.com/

Product Name: ClickLock

Product Category: Roofing

Product Sub-Category Metal Roofing

Compliance Method: State Product Approval Rule 61G20-3.005 (1) (d)

Product/System

"ClickLock"

Description:

Aluminum Snap-lock roof panel, mechanically attached to Wood Deck with

panel clips.

Product Assembly as

Evaluated:

Refer to Page 4 of this report for product assembly components/materials &

standards:

- Roof Panel
- 2. Panel Clips
- 3. Fasteners
- 4. Underlayment

Support: Type:

Wood Deck

(Design of support and its attachment to support framing is outside the scope of

this evaluation.)

Description:

• 15/32" or greater plywood,

• or Wood plank (min. specific gravity of 0.42)

Slope: Minimum slope shall be 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:
 82.5 PSF

(Refer to "Table A" attachment details herein)



Report No.: 20-240-CL-A3W-ER

Page 3 of 88

Specialty Structural Engineering

CBUCK, Inc. Certificate of Authorization #8064

Performance Standards:

The product described herein has demonstrated compliance with:

- UL 580-06 Test for Uplift Resistance of Roof Assemblies
- UL 1897-12 Uplift test for roof covering systems

Standards Equivalency:

The UL 580-94 & UL 1897-98 standard version used to test the evaluated product assembly is equivalent with the prescribed standards in UL 580-06 & UL 1897-12 adopted by the Florida Building Code 7th Edition (2020).

Code Compliance:

The product(s) described herein have demonstrated compliance with the performance standards listed above as referenced in the Florida Building Code 7th Edition (2020).

Evaluation Report Scope:

This building envelope product is evaluated for compliance with the structural wind load 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".
- 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.
- 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.
- 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)

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 **Farabaugh Testing & Engineering** (FBC Organization ID# QUA 7733).



Report No.: 20-240-CL-A3W-ER

Page 4 of 88

Specialty Structural Engineering

CBUCK, Inc. Certificate of Authorization #8064

Components & Materials: (by Manufacturer)

Roof Panel:ClickLockMaterial:AluminumThickness:0.032" (min.)Panel Width:12" (max.) Coverage

Panel Rib Height: 1-3/4" Alloy Type: 3105-H24

Corrosion Resistance: Per FBC Section 1507.4.3

Roof Panel Nail Clips:

Material: Galvanized or Stainless Steel 304

Thickness: 18 gauge Yield Strength: 35 ksi min.

Dimensions: 1.75" (tall) x 2.25" (long) x 1.24" (base)

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

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.

Report No.: 20-240-CL-A3W-ER

Page 5 of 88

Specialty Structural Engineering

CBUCK, Inc. Certificate of Authorization #8064

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)
- Rib Interlock: Refer to "TABLE A" Below (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		
Design Pressure:	- 82.5 PSF	
Clip Spacing:	12"	
# Fasteners per Clip:	2	
Notes: • Allowable design pressure(s) for allowable stress design (ASD).		

Install the "ClickLock" roof panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 7th Edition (2020). 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:

UL 580 & UL 1897 Uplift Test By Farabaugh Engineering and Testing, Inc. (FBC Organization #TST ID: 1654) Report #: T157-05, Report Date: 05/25/05

- Equivalency of Test Standard Certification
 By James L. Buckner, P.E. @ CBUCK Engineering
 (FBC Organization # ANE 1916)
- 3. Quality Assurance
 By Farabaugh Testing & Engineering (FBC Organization ID# QUA 7733)
- Certification of Independence
 By James L. Buckner, P.E. @ CBUCK Engineering
 (FBC Organization # ANE 1916)

Installation Method



Report No.: 20-240-CL-A3W-ER

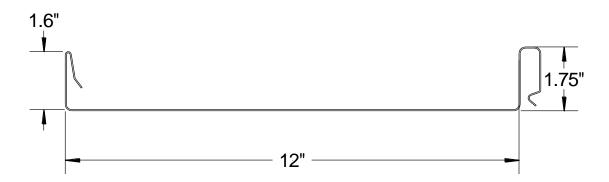
Page 6 of 88

Specialty Structural Engineering

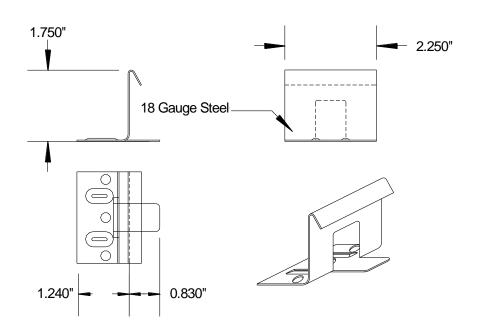
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Classic Metal Roofing Systems "ClickLock" (0.032" Aluminum) Roof Panel attached to Wood Deck

Drawings



Typical Panel Profile



Panel Clip Profile

Installation Method

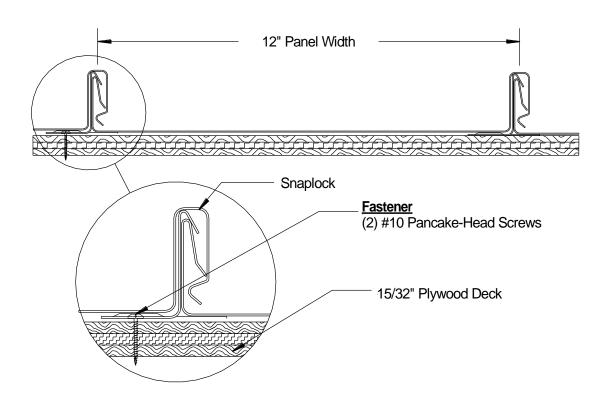
Report No.: 20-240-CL-A3W-ER

Page 7 of 88

Specialty Structural Engineering

CBUCK, Inc. Certificate of Authorization #8064

Classic Metal Roofing Systems "ClickLock" (0.032" Aluminum) Roof Panel attached to Wood Deck



Typical Assembly Profile View (Typical Fastening Pattern Across Width)



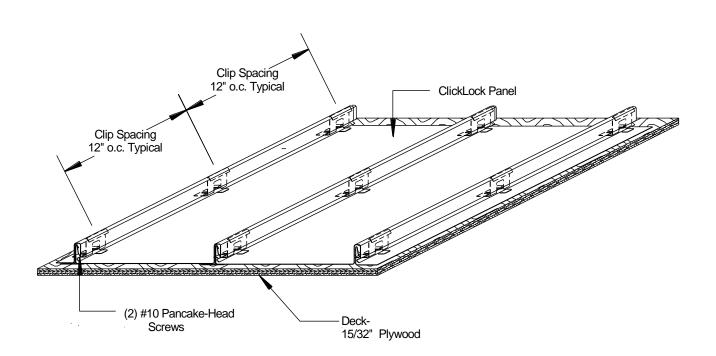
Report No.: 20-240-CL-A3W-ER

Page 8 of 88

Specialty Structural Engineering

CBUCK, Inc. Certificate of Authorization #8064

Classic Metal Roofing Systems "ClickLock" (0.032" Aluminum) Roof Panel attached to Wood Deck



Typical Roof Assembly Isometric View

TABLE "A"	
Design Pressure:	- 82.5 PSF
Clip Spacing:	12"
# Fasteners per Clip:	2