

Evaluation Report
“Tile Hip/Ridge Metal Channel”
Roof Tile Structural Component

Manufacturer:

Millennium Metals, Inc.

10200 Eastport Road

Jacksonville, FL 32218

(877) 358-7663

for

Florida Product Approval

FL 11817.1 R1

Florida Building Code 2010

Per Rule 9N-3

Method: 2 - B

Category: Roofing

**Sub - Category: Roofing Accessories that are an Integral
Part of the Roof System**

Product: “Tile Hip/Ridge Metal Channel”
Product Description: Ridge Member for Roof Tile
Material: Steel

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. 12-117-THRC-ER

Date: 2 / 6 / 12

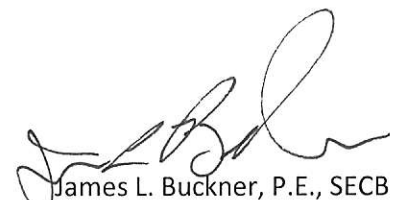
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CBUCK, Inc.

1399 N. Killian Drive, Suite 4, West Palm Beach, Florida 33403

Phone: (561)491-9927 Fax: (561)491-9928 Website: www.cbuckinc.net

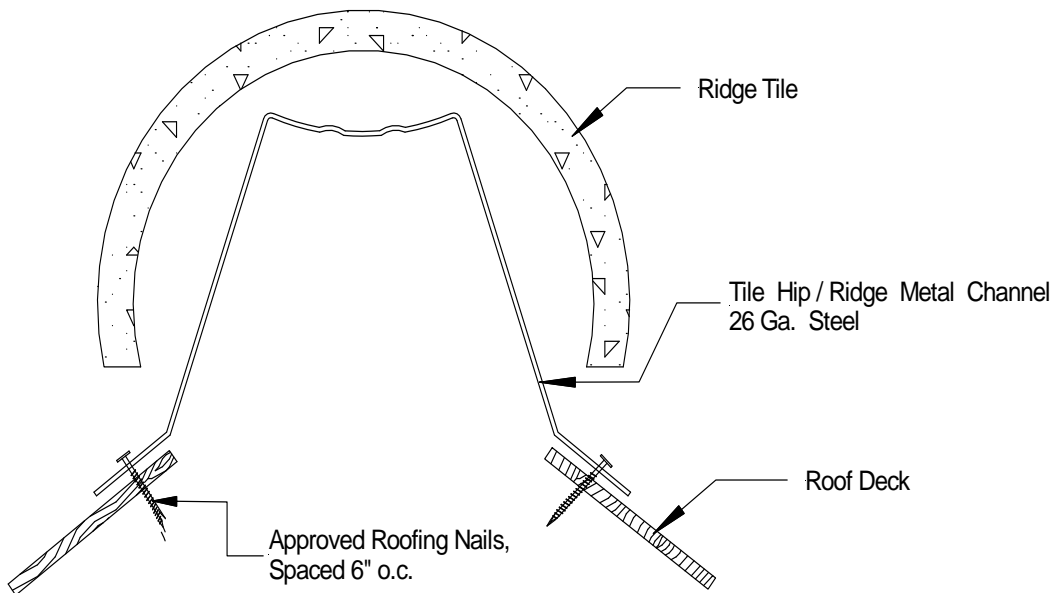
A handwritten signature in black ink, appearing to read 'James L. Buckner'.

James L. Buckner, P.E., SECB
Florida P.E. # 31242
2/23/12

Manufacturer:	Millennium Metals
Product Name:	“Tile Hip/Ridge Metal Channel”
Product Category:	Roofing
Product Sub-Category	Roofing Accessories that are an Integral part of the Roofing System
Compliance Method:	State Product Approval Rule 9N-3.005 (2) (b)
Product/System Description:	“Tile Hip/Ridge Metal Channel” Preformed Metal Channel for use as a ridge tile structural support.
Product Material / Standards:	Material: Steel Thickness: 26 gauge (min.) Yield Strength: 50 ksi min. Corrosion Resistance: In compliance with FBC Section 1507.4.3: <ul style="list-style-type: none">• ASTM A792 coated, or• ASTM A653 G90 galvanized steel
Product Dimensions:	Refer to drawings in the back of this report for profile details. Length: 10’ (120”) Height: Various: 3”, 4”, 5”, 6”, 7”, or 8”
Support:	Type: Wood Deck (Design of support system is outside the scope of this evaluation.)
Installation:	Installation Method: (Refer to drawing on Page 5 of this report.) Outside HVHZ & Inside HVHZ: Attach metal channel with approved fasteners spaced 6” o.c. Seal all fastener penetrations with approved plastic roof cement. Installation shall be in accordance with one of the following: <ul style="list-style-type: none">▪ RAS 118, Section 3.11, C, Referenced Drawing 13, Detail 3▪ RAS 119, Section 3.13, C, Referenced Drawing 12, Detail 3▪ RAS 120, Section 3.10, C, Referenced Drawing 15, Detail 3 Install the “Tile Hip/Ridge Metal Channel” in compliance with the installation method listed in this report and applicable code sections of FBC 2010. 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.

- Compliance Standards:** **Outside HVHZ & Inside HVHZ:**
- RAS 118, Section 3.11, C, Referenced Drawing 13, Detail 3
 - RAS 119, Section 3.13, C, Referenced Drawing 12, Detail 3
 - RAS 120, Section 3.10, C, Referenced Drawing 15, Detail 3
- Code Compliance:** The product described herein is in compliance with Florida Building Code 2010, Section 1507.3.8 and 1518.8.1.
- Evaluation Report Scope:** This product evaluation is limited to compliance with the prescriptive structural requirements of the Florida Building Code, as related to the scope section to Florida Product Approval Rule 9N-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 9N-3.005. Per Rule 9N-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 9N-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.
 - Design of support system is outside the scope of this report.
 - Fire Classification is outside the scope of Rule 9N-3, and is therefore not included in this evaluation.
 - This product is approved for use in the High Velocity Hurricane Zone code section when installed in compliance with RAS 118, RAS 119 or RAS 120. (Dade & Broward Counties)
- Quality Assurance:** The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 9N-3.0005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through **Keystone Certifications, Inc.** (FBC Organization #: QUA 1824).
- Referenced Data:**
1. FBC 2010, Volume: Test Protocols for High Velocity Hurricane Zones, RAS 118, RAS 119 and RAS 120
 2. Quality Assurance
By Keystone Certifications, Inc. (QUA ID: 1824)
Licensee # 423
 3. Certification of Independence
By James L. Buckner, P.E. @CBUG Engineering,
(FBC Organization # ANE 1916)

Installation Method Millennium Metals "Tile Hip/Ridge Metal Channel"



Typical Profile & Assembly View

Installation Method:

Outside HVHZ & Inside HVHZ:

Attach metal channel with approved fasteners spaced **6" o.c.** Seal all fastener penetrations with approved plastic roof cement.

Installation shall be in accordance with one of the following:

- RAS 118, Section 3.11, C, Referenced Drawing 13, Detail 3
- RAS 119, Section 3.13, C, Referenced Drawing 12, Detail 3
- RAS 120, Section 3.10, C, Referenced Drawing 15, Detail 3