

Evaluation Report "MMI-2" Off Ridge Vent Ridge Vent Assembly

Manufacturer:
Millennium Metals, Inc.
10200 Eastport Road
Jacksonville, FL 32218
(877) 358-7663

for

Florida Product Approval

FL 16568.1 R1

Florida Building Code 5th Edition (2014)

Per Rule 61G20-3

Method: 2 - B

Category: Roofing

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

Product: "MMI-2" Off Ridge Vent

Material: Steel

Support: Wood Deck

Prepared by:

James L. Buckner, P.E., SECB
Florida Professional Engineer # 31242
Florida Evaluation ANE ID: 1916
Project Manager: Youry Demosthenes
Report No. 14-104-MM12-StORV-ER_14
Date: 2 / 26 / 15

Secure Electronic Seal for Electronic Submittal



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

Digitally Signed by: James L. Buckner, P.E.

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CBUCK, Inc.

1399 N. Killian Drive, Suite 4, West Palm Beach, Florida 33403
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Manufacturer:	Millennium Metals, Inc.
Product Name:	"MMI-2" Off Ridge Vent
Product Category:	Roofing
Product Sub-Category	Roofing Accessories that are an Integral part of the Roofing System
Compliance Method:	State Product Approval Rule 61G20-3.005 (2) (b)
Product/System Description:	"MMI-2" Off Ridge Vent Steel off ridge vent for shingle roofs mechanically attached to Plywood Deck.
Product Assembly as Evaluated:	Refer to Page 4 of this report for product assembly structural components: <ol style="list-style-type: none">1. Off Ridge Vent2. Fasteners3. Roof Cement
Support:	Type: Wood Deck (Design of support and its attachment to support framing is outside the scope of this evaluation.) Description: <ul style="list-style-type: none">• 15/32 (min.) or greater plywood,• or Wood plank (min. specific gravity of 0.42)
Slope:	2 : 12 or Greater
Performance:	Wind Uplift Resistance * Design Uplift Pressure: - 75 PSF * Allowable design pressure for allowable stress design (ASD) with a margin of safety of 2 to 1.

Performance Standards: The following test protocols were performed to demonstrate compliance with the intent of the code as this product is not addressed specifically in the code.

- **ASTM E330-02** – *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Code Compliance: The product described herein has demonstrated compliance with Florida Building Code 5th Edition (2014), Section 1709.2.

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".
- 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.
- Refer to applicable building code section for ventilation requirements.
- 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 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through **Keystone Certifications, Inc.** (FBC Organization #: QUA 1824).

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

Ridge Vent:

Material Type 1:

Thickness:
Yield Strength:
Corrosion Resistance:

“MMI-2” Off Ridge Vent

Steel

26 gauge (min.)
40 ksi min.
In compliance with FBC Section 1507.4.3:
• ASTM A792 coated, or
• ASTM A653 G90 galvanized steel

Nominal Dimensions:

Width: 24”
Height: 4-1/2”
Lengths: 2’ , 4’ , 6’ , 8’ and 10’

Fastener(s):

Base Fastener:

Purpose:
Type:
Size :
Corrosion Resistance:
Standard:

Attaches Ridge Vent Base Flange to Deck
Annular Ring Shank Roofing Nails
11 gauge x 1-1/2”
Per FBC Section 1506.5
Per ASTM F 1667

Alternate Fastener:

Purpose:
Type:
Size :
Corrosion Resistance:
Standard:

Attaches Ridge Vent Base Flange to Deck
Hex-Head Wood Screw
#10 × 1-1/2” (min.)
Per FBC Section 1506.6 and 1507.4.4
Per ANSI/ASME B18.6.4

Roof Cement:

Type:
Application Size :
Standard:

Asbestos-free asphalt based roof cement w/ SBS rubber
1/4” thick minimum
Per ASTM D 3019 Type III and ASTM D 3409

Installation:

Installation Method:

(Refer to drawings on Pages 6-7 of this report.)

- Prepare deck opening by trimming any shingles & nails that may interfere with ridge vent installation.
- Apply roof cement to the underside, back and side flanges of the ridge vent. Cement should be a 1/4" thick and extend 2" onto roof underlayment. (Install cement in compliance with manufacturer's installation guidelines.)
- Position vent flange beneath loosened shingles and align with deck opening.
- Attach vent top, bottom and side flanges to deck with nails or screws spaced **4" o.c.** and 1-1/2" from each end.
- Minimum fastener penetration thru bottom of support, 3/16".

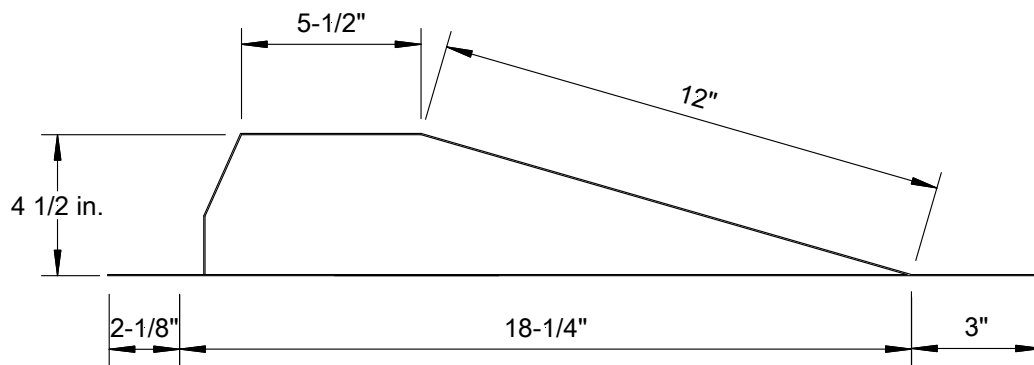
Install the "MMI-2 Off Ridge Vent" assembly in compliance with the installation method listed in this report and applicable code sections of FBC 5th Edition (2014). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

Referenced Data:

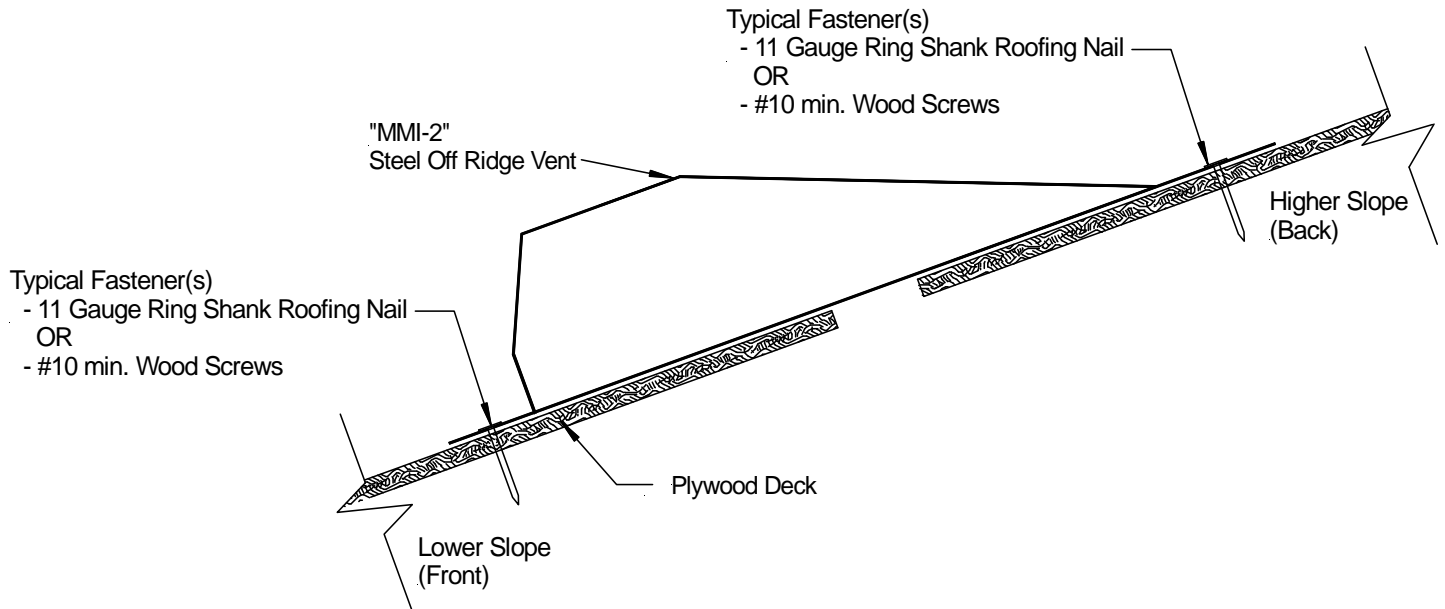
1. ASTM E330-02 Uniform Static Air Pressure Difference Test
Architectural Testing, Inc.(FBC Organization #TST ID: 1527)
Report #: D0249.02-450-18, Report Date: 8 / 29 / 13
2. Quality Assurance
By Keystone Certifications, Inc. (QUA ID: 1824)
Millennium Metals Licensee # 423
3. Certification of Independence
By James L. Buckner, P.E. @ CBUG Engineering
(FBC Organization # ANE 1916)

Installation Method Millennium Metals, Inc. "MMI-2" Steel Off Ridge Vent Attached to Wood Deck

Profile Drawings



Side View (Not To Scale)



Typical Side View (Not To Scale)

Installation Method Millennium Metals, Inc. "MMI-2" Steel Off Ridge Vent Attached to Wood Deck

