

Evaluation Report MMI Off Ridge Vent or MMI Off Ridge Vent with Permanent Baffle Attached to OSB Deck

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

FL 47021.2

Florida Building Code 8th Edition (2023)

Per Rule 61G20-3

Method: 2 - B

Category: Roofing

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

Product: **MMI Off Ridge Vent**
Or MMI Off Ridge Vent with Permanent Baffle
Material: **Steel or Aluminum**
Support: **OSB (Oriented Strand Board) 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.

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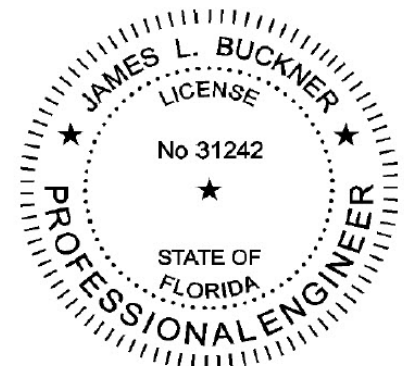
Prepared by:

James L. Buckner, P.E., SECB
Florida Professional Engineer # 31242
Florida Evaluation ANE ID: 1916
Report No. 02N-23-573--OSB-ORV-PB-ER8
Date: 8 / 29 / 2024

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Evaluation Report

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James L. Buckner, P.E.
FL31242

Manufacturer:	Millennium Metals, Inc.
Product Name:	MMI Off Ridge Vent Or MMI Off Ridge Ventwith with Permanent Baffle
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 Off Ridge Vent or Off Ridge Vent with Permanent Baffle Steel or aluminum attached to OSB roof deck.
Product Assembly as Evaluated:	Refer to Page 4 of this report for product assembly structural components: 1. Off Ridge Vent 2. Fasteners 3. Roof Cement
Support:	Type: Wood Deck (Design of support and its attachment to support framing is outside the scope of this evaluation.) Description: • 7/16" (min) or greater Oriented Strand Board (OSB)
Slope:	2 : 12 or Greater
Performance:	Wind Uplift Structural Resistance * Design Uplift Pressure: Method 1: - 52.5 PSF Max fasten spacing 6" OC long direction Max fasten spacing 6" OC short direction Method 2: 95 PSF Max fasten spacing 3" OC long direction Max fasten spacing 3" OC short direction * 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** – Modified *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 the Florida Building Code 8th Edition (2023), Section 1708.2.

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

Ridge Vent:

MMI Off Ridge Vent

Material Type 1:

Steel

Thickness: 26 gauge (min.)

Yield Strength: 40 ksi min.

Corrosion Resistance: Aluminum Zinc Coated Steel per ASTM A792 AZ 50, or
Galvanized Steel per ASTM A653 G-90, or
Pre-painted Steel per ASTM A755 or
Per FBC Section 1507.4.3

Material Type 2:

Aluminum

Thickness: 0.025" (min.)

Alloy Type: 3105-H14

Corrosion Resistance: In compliance with FBC Section 1507.4.3:
• ASTM B209

Nominal Dimensions:

Width: 24"

Height: 4-1/2"

Lengths: 2', 4', 6', 8' and 10'

Baffle

Permanent Baffle Model - option

Material Type 1:

Steel

Thickness: 26 gauge (min.)

Yield Strength: 40 ksi min.

Corrosion Resistance: Aluminum Zinc Coated Steel per ASTM A792 AZ 50, or
Galvanized Steel per ASTM A653 G-90, or
Pre-painted Steel per ASTM A755 or
Per FBC Section 1507.4.3

Material Type 2:

Aluminum

Thickness: 0.025" (min.)

Alloy Type: 3105-H14

Corrosion Resistance: In compliance with FBC Section 1507.4.3:
• ASTM B209

Fastener(s):Base Fastener:

Purpose:	Attaches Ridge Vent Base Flange to Deck
Type:	Annular Ring Shank Roofing Nails
Size:	11 gauge (× length to meet min. penetration through deck)
Penetration Through:	3/16" min. through wood deck
Corrosion Resistance:	Per FBC Section 1506.5
Standard:	Per ASTM F1667

Alternate Fastener:

Purpose:	Attaches Ridge Vent Base Flange to Deck
Type:	Hex-Head Wood Screw
Size:	#10 (× length to meet min. penetration through deck)
Penetration Through:	3/16" min. through wood deck
Corrosion Resistance:	Per FBC Section 1506.6 and 1507.4.4
Standard:	Per ANSI/ASME B18.6.4

Roof Cement:

Type:	Asbestos-free asphalt based roof cement w/ SBS rubber
Application Size:	1/4" thick minimum
Standard:	Per ASTM D3019 Type III and ASTM D3409

Installation:**Structural Installation Method:**

(Refer to drawings on the following Pages of this report.)

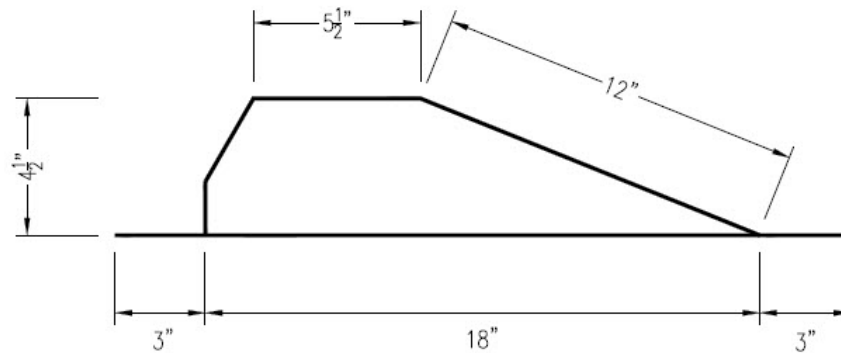
- Insert baffle flange beneath the vent front flange.
Simultaneously attach vent flange and baffle flange to deck with nails or screws.
Refer to following installation drawings for fastener locations by Method.
- Minimum fastener penetration thru bottom of support, 3/16".
- Refer to manufacturer's installation instructions as a supplemental guide for attachment.

Referenced Data:

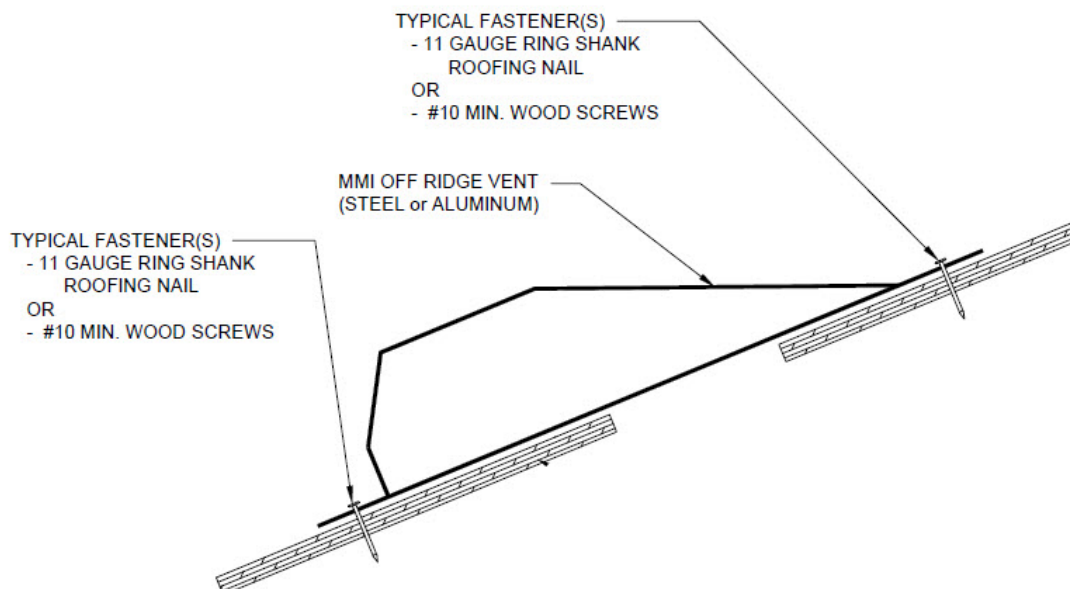
1. ASTM E330 Modified Uniform Static Pressure Test
American Test Lab of South Florida (FBC Organization #TST ID: 3782)
Project No.: 0311.01-24, Report Date: 3 / 22 / 24
2. Quality Assurance
By Keystone Certifications, Inc. (QUA ID: 1824)
Millennium Metals Licensee # 423
3. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)

Installation Method Attached to OSB Deck

Millennium Metals, Inc.
MMI STEEL or ALUMINUM Off Ridge Vent -



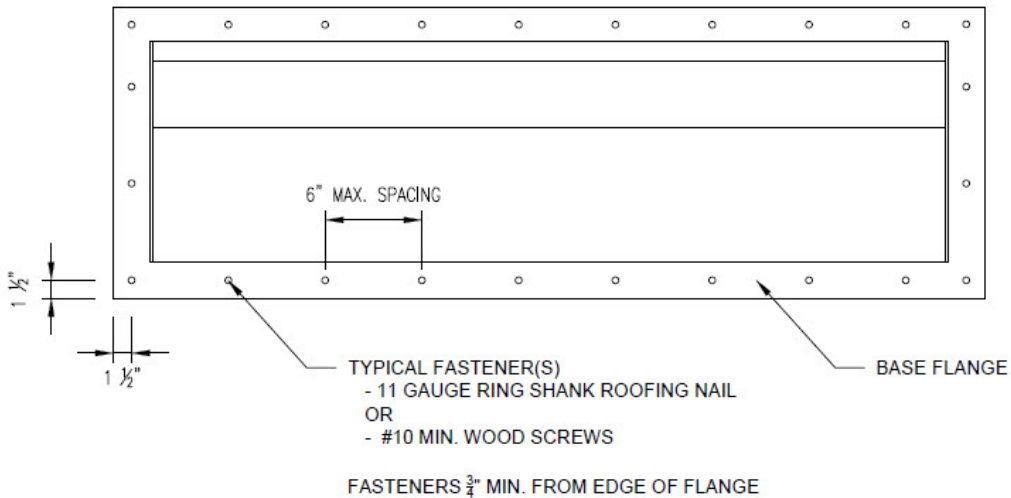
VENT SIDE VIEW
(Not to Scale)



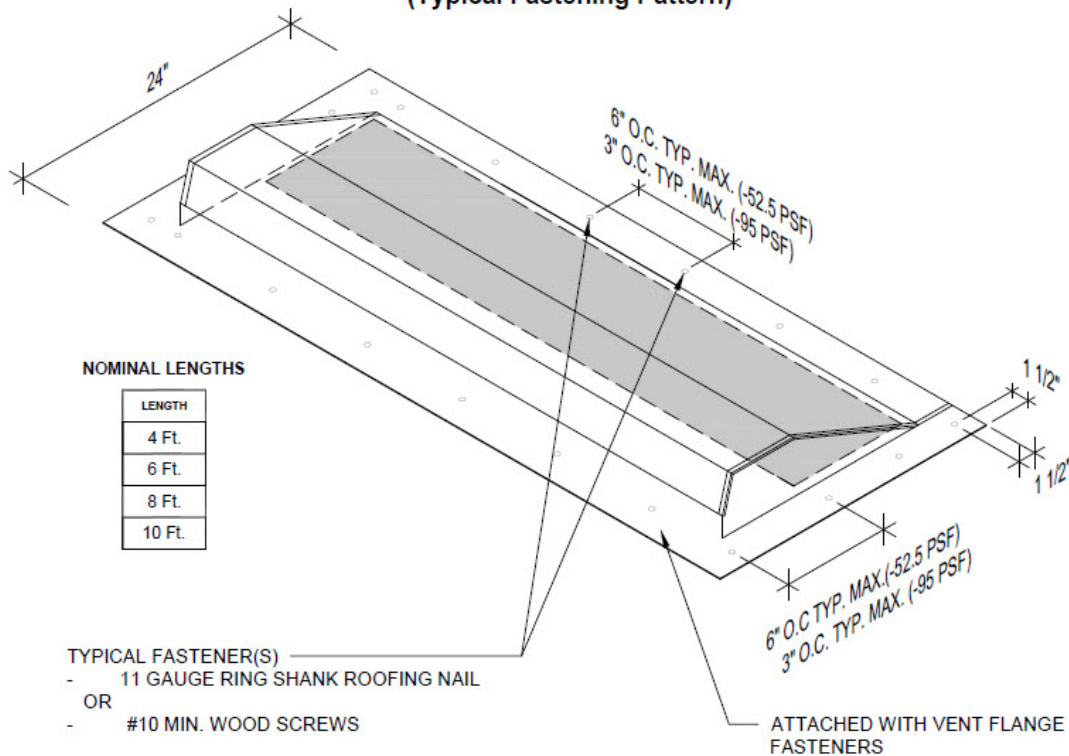
TYPICAL CROSS SECTION VIEW
(Not to Scale)

Attached to OSB Deck

Millennium Metals, Inc.
 MMI STEEL or ALUMINUM Off Ridge Vent -



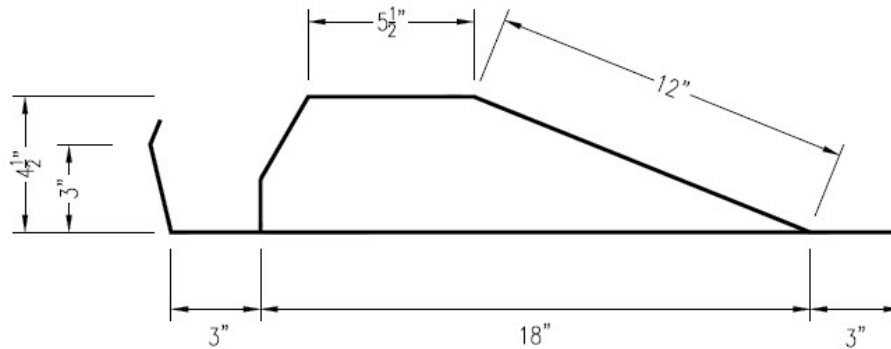
TOP PLAN VIEW (Not to Scale)
 (Typical Fastening Pattern)



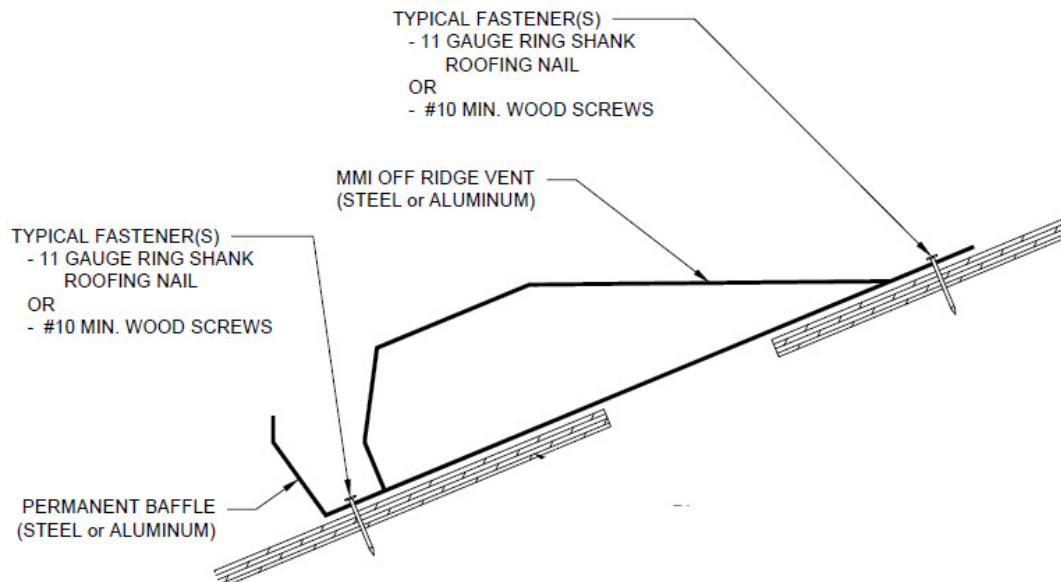
TYPICAL RIDGE VENT ASSEMBLY
 ISOMETRIC VIEW (Not to Scale)

Attached to OSB Deck

Millennium Metals, Inc.
MMI STEEL or ALUMINUM Off Ridge Vent with Permanent Baffle -



VENT SIDE VIEW
 (Not to Scale)



TYPICAL CROSS SECTION VIEW
 (Not to Scale)

Attached to OSB Deck

