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# **Product Evaluation**

#### RV37 | 1019

**Engineering Services Program** 

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** RV-37

Effective Date:October 1, 2019Re-evaluation Date:October 2023

Product Name: Static, Power, and Turbine Roof Ventilators

#### Manufacturer: GAF

1 Campus Drive Parsippany, NJ 07054 (800) 766-3411

Products are trademarked under the name Master Flow®.

#### **Product Description:**

The roof ventilators specified in this product evaluation report consist of static, power, and turbine roof ventilators. The ventilators are available in a variety of sizes and colors. The model and type of ventilators are shown below.

Ventilator Model	Ventilator Type
Master Flow <sup>®</sup> Wind Turbine 12" Galvanized –	Dual Bearing Wind
Externally Braced (GC12EF)	(Externally Braced)
Master Flow® Attic Exhaust Vent – 10' Aluminum	Metal Ridge Vent
Ridge Vent	_

## Master Flow® Wind Turbine 12" Galvanized – Externally Braced (GC12EF)

**Description:** An externally braced roof ventilator made of galvanized steel with an octagonal base 18" in width. The overall height of the ventilator is 20.47". The GC12E consists of a turbine top model GT12E and a galvanized base model SBX12.

### Master Flow® Attic Exhaust Vent – 10' Aluminum Ridge Vent

**Description:** An aluminum ridge vent with a weather baffle to prevent water intrusion. The aluminum ventilator is manufactured of 0.025" thick aluminum. The vent measures 120" in length, 8-1/2" in width, and 1-1/8" in height. Installation requires aluminum straps and flexible rubber plugs at each end.

## Limitations:

## **Design Pressures:**

Ventilator Model	Design Pressure (psf)
Master Flow® Wind Turbine 12" Galvanized -	-200.0
Externally Braced (GC12EF)	
Master Flow® Attic Exhaust Vent – 10' Aluminum	-200.6
Ridge Vent	

### **Roof Slopes:**

**Master Flow® Wind Turbine 12" Galvanized – Externally Braced (GC12EF**): The minimum roof slope shall be 2:12 and the maximum roof slope shall be 12:12.

**Master Flow® Attic Exhaust Vent – 10' Aluminum Ridge Vent**: The minimum roof slope shall be 3:12 and the maximum roof slope shall be 12:12.

## Installation:

## General:

All requirements specified in the IRC and the IBC must be satisfied and the manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

## Master Flow® Wind Turbine 12" Galvanized – Externally Braced (GC12EF)

**Roof Deck:** The roof deck must consist of wood structural panels (plywood or OSB) with a minimum thickness of 7/16".

**Installation:** Install the vent to the roof deck by carefully sliding the upper half of the flashing up the roof beneath the shingles that were previously rolled back until the base is centered over the 12" cutout. Roll back the shingles where necessary to secure the vent to the roof deck.

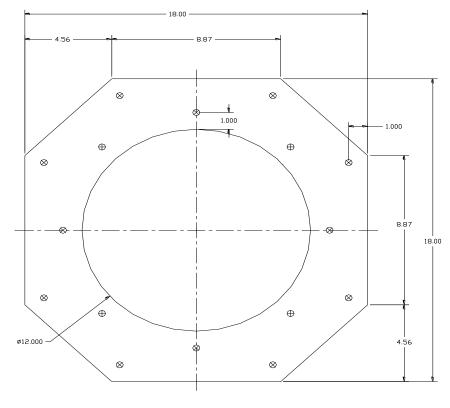
The vents are secured to the roof deck with 16, 11-gauge smooth shank roofing nails (1/8" shank diameter, 3/8" diameter head, and 1-1/4" long). Fastener placement must be in accordance with Figure 1.

### Master Flow® Attic Exhaust Vent – 10' Aluminum Ridge Vent

**Roof Deck:** The roof deck must consist of wood structural panels (plywood or OSB) with a minimum thickness of 7/16".

**Installation:** The vents are to be fastened to the roof deck with minimum 11-gauge smooth shank roofing nails (1/8" shank diameter, 3/8" diameter head, and 1-1/4" long). The fasteners must be long enough to penetrate a minimum 3/4" into or through the roof sheathing. The fasteners are to be placed in the pre-punched fastener holes located on the vent, spaced a maximum of 6" on center along each side, and in each Master Flow® 10' Aluminum Ridge Vent – Joint Connector Strap. These straps are to be installed at the end of each end vent section, at all connections between vent sections, and at the mid-span of each vent section. Each strap has four pre-punched nail holes, two on each side. The Master Flow® 10' Aluminum Ridge Vent – Joint Connector Straps are secured to the roof deck with minimum 11-gauge smooth shank roofing nails (1/8" shank diameter, 3/8" diameter head), two fasteners on both sides of each strap. The fasteners must be long enough to penetrate a minimum 3/4" into or through the roof sheathing. Install a Master Flow® 10' Aluminum Ridge Vent – Seal any exposed fasteners with silicone.

**Note:** Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.



TURBINE BASE NAIL LAYOUT 16 NAILS