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Technical Advisory Bulletin

To: GAF Residential Sales, GAF Contractors, Field Services, AIS, CARE
From: Technical Services Department
No: TAB-R-174

Power Attic Vents & the Importance of Proper Attic Intake Ventilation

Master Flow® Power Attic Vents

GAF Master Flow® Power Attic Vents, available in both roof and gable mount options, are excellent solutions for exhausting a large volume of heat and moisture from the attic space, which in turn can help protect the roof system and promote energy efficiency.

Installing or Replacing a Power Attic Vent...

Master Flow® Power Attic Vents may be more powerful in terms of CFM (Cubic Feet per Minute) airflow than some other competitive power attic vent models. While more power and airflow help to exhaust heat and moisture at a faster rate, the more powerful the vent, the more intake ventilation required.

For example, a commercially available power attic vent with 800 CFM Airflow requires a minimum of 384 sq. inches of attic intake ventilation, while the Master Flow® Power Attic Vent - ERV5 model with 1,250 CFM airflow requires a minimum of 600 sq. inches of attic intake ventilation. That's **56%** more intake required.

Proper Intake Ventilation is Critical!

Whether new or retrofit installation, when installing power attic vents it is critical to ensure the proper amount of attic intake ventilation has been installed at or near the soffit area of the roof.

Below are some potential issues that can arise with insufficient intake ventilation:

- Motor burn-out or reduction in overall lifespan
- Increased vibration/noise during vent operation
- Decreased effectiveness and efficiency of the vent
- Instead of pulling in cooler/dry air from the properly installed intake vents, the vent may pull in outside weather from other areas of the ventilation system, e.g. the ridge vent
- Insufficient intake ventilation is NOT a manufacturing defect in the vent. Related issues that could arise may not be covered under the limited warranty.

Balancing Your Attic Ventilation System...

It is always important to have a balanced attic ventilation system. The amount of exhaust ventilation should **NEVER** exceed the amount of intake ventilation. Use **Table 1: Intake Ventilation** on the [next page](#) to ensure you have the minimum required intake ventilation at or near the soffits for each Master Flow® Power Attic Vent or GreenMachine™ Solar Series model.

Table 1: Intake Ventilation

How Much Intake Ventilation is Needed?

GAF Master Flow® Power Attic Vents	CFM Airflow	Minimum Intake Ventilation Required for Each Vent (Net Free Area in Sq. In.)
<i>Electric Roof Mount Series:</i>		
ERV4	1,000	480
ERV5	1,250	600
ERV6	1,500	720
<i>Electric Gable Mount Series:</i>		
EGV5	1,450	696
EGV6	1,600	768
<i>GreenMachine™ Solar Series:</i>		
ERVSOLAR1, PGSOLAR1, ERVHYBRID1	500	240
PRSOLAR2, PRHYBRID2	750	360
Visit www.gaf.com/ventcalculator for more information		

Effects on Warranty Coverage...

While many factors can affect how long your power attic vent (“Fan”) will last, the **Master Flow® Powered Ventilation Products Limited Warranty** covers your Fan in the unlikely event that it contains a **manufacturing defect**. Even if your Fan was not properly installed according to GAF’s published application instructions, this limited warranty remains in effect if your Fan fails to perform as a result of a manufacturing defect. However, GAF will **NOT** compensate you for damage from anything other than an inherent **manufacturing defect** in your Fan, such as improper installation of your Fan or insufficient intake ventilation.

Note: See *Master Flow® Powered Ventilation Products Limited Warranty* for complete coverage and restrictions. This limited warranty does not cover other GAF Products on your roof.

Questions?

GAF Technical Services Can Assist You... with these and other questions you may have regarding your new roof installation. Technical Support Services can be contacted at 800-766-3411 or Master Flow® Technical Services 1-800-211-9612. The GAF website is a great resource for just about any question you may have or for additional information you may require. Please visit www.gaf.com to find the latest information on our products and their installation.

Important: This document supersedes any prior GAF Technical Advisory Bulletins on this topic. Please always check www.gaf.com to make sure you have the most up to date information.