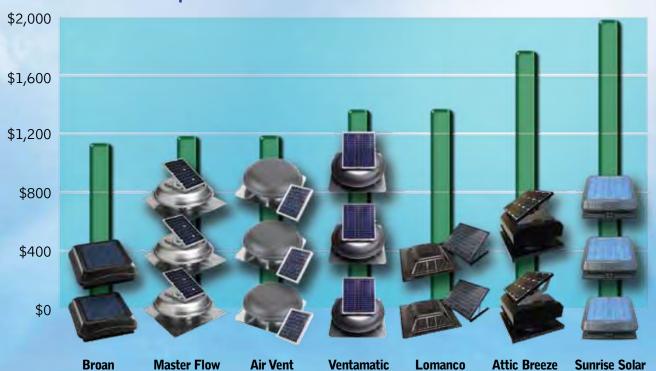
# Better Performance and Better Value add up to Lowest Installed Cost!



# Total Installed Price, Number of Units Needed to Ventilate Average Attic.

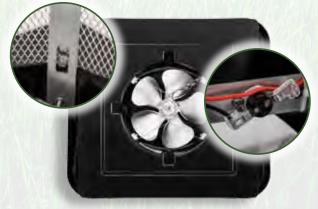
(Average attic size = 1,700 square feet with 6/12 pitch, assumes average retail price plus \$175 per fan installation cost.) Fan performance based on independent lab testing, August, 2012.

# Broan Advantages...

Low profile, integrated solar panel

for a clean appearance on your roof, ranked as most attractive by homeowners.

Housing frame features positive stops which "seat" the dome for fast and easy installation.



**Bottom View** 

easy to install, disables motor below 50° for climates where cold weather condensation isn't a concern. (Model CWT45).

Compact base

means fewer shingles to

cut for easier, faster

footprint

Optional

thermostat



























Make yours a Broan-NuTone home.

**Broan®** is America's leading brand of residential ventilation products including range hoods, ventilation fans, heater/fan/light combination units, Indoor Air Quality (IAQ) Systems, built-in heaters, whole-house

fans, electric and solar-powered attic ventilators and trash compactors.

NuTone® is America's leading brand of residential built-in convenience

products including door chimes, central vacuum systems, intercom systems, ceiling fans, home theater speakers, medicine cabinets,

ironing centers and ventilation fans.



## **Broan.com**

Broan-NuTone LLC, 926 W. State Street Hartford, WI 53027 800-558-1711 In Canada call 877-896-1119

America's Choice For Green Builders.® Proud to be ENERGY STAR® partners.







# Turn sunshine into savings with Broan low profile solar powered attic ventilators.

#### Attic Ventilation 101

The purpose of ventilating your attic is to equalize temperatures inside with those outside the attic to prevent the build-up of heat and moisture. Without adequate ventilation, air inside your attic can reach 150°F or more during the summer, warming your living area, increasing the load on your air conditioner, and adding to your energy bill. In the winter, ice dams can result from poor ventilation, and moist air from inside the home can condense on attic surfaces causing mildew, rotting wood and wet insulation if not properly ventilated. Year round ventilating of your attic minimizes harmful moisture in the winter and lowers the temperature of your home in the summer. Keeping your attic cool and dry can extend the life of your roof, by preventing rot, premature aging, and damaging shingle distortion that can result from excessive heat. A cool attic in summer also saves you money on your energy bill and extends the life of your air conditioner.

#### **Solar Power Savings**

Broan Solar Powered Attic
Ventilators use energy from
the sun to operate and require
no additional electricity, which
means you save up to \$180 per
year that you might pay to operate
an electric powered attic ventilator,
depending on your local electric rates, size of attic,
climate, etc... Plus, you can save even more with
a 30% Federal Tax Credit on both the purchase
price and installation costs of your Solar Powered
Attic Ventilator. \*

#### **Green All Around**

Broan Solar Powered Attic Ventilators operate without fuel, waste, or pollution, and earn points towards Green building. So you can save money on electricity without using any to do it, which is green for the environment, and some extra green for your wallet.

\*Visit broan.com for more information.

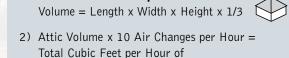
#### **How Much Ventilation Do You Need?**

Effective attic ventilation requires air to exit at or near the peak of the roof and replacement air to be drawn in under the eaves of the house, via soffit venting. The Home Ventilating Institute (HVI) recommends that powered attic ventilators provide at least 10 air changes per hour to equalize attic temperature. Below are instructions on how to determine the recommended ventilation needs for your attic.

1) Calculate the volume of your attic, in cubic feet, depending on the style of your home's roof.

Attic Volume for Gable Roof
Volume = Length x Width x Height x 1/2

Attic Volume for Hip Roof



ventilation recommended.

3) Total Cubic Feet per Hour ÷ 60 Minutes/Hour = Cubic Feet Per Minute (CFM) of Ventilation Recommended.

Example: Average Gable Attic Volume = 58.75' x 29' x 7.25' x ½ = 6,176 Cubic Feet 6,176 Cubic Feet x 10 Air Changes/Hour = 61,760 Cubic Feet/Hour ÷ 60 Min./Hour = 1,029 CFM

4) Replacement air is drawn through vents in your soffit. To determine the minimum soffit vent area required (in square inches) multiply the total CFM of your powered ventilator(s) by 0.48. This number is the total square inches of soffit venting required by your powered ventilator(s).

**Example:** 1,029 CFM x 0.48 = 494 Square Inches of soffit vent area recommended.

# Designed for Superior Performance.

**Solar Panel** Integrated, low profile, 28-watt Solar Panel efficiently captures sunlight from dawn to dusk without the unsightly props or pivoting stands used by some manufacturers. Rugged, tempered glass withstands large hail and resists delaminating.

**Housing** Attractive, low profile, molded design, of UV-stabilized, color-dyed, rugged ABS plastic withstands impact from hail and resists fading. May also be painted to match roof color for installation flexibility.

**Optional Thermostat** Easy to install, this optional accessory disables the motor below 50° for climates where cold-weather condensation isn't a concern and to extend motor life. The thermostat activates the motor at temperatures above 61° to vent air from dawn through dusk.



**Motor** Direct-current, variable voltage motor is dynamically balanced for superior performance and silent operation.

**Fan** 12" Diameter, one-piece aluminum 5-blade fan pitched for maximum air flow.

**Hardware** Stainless steel fasteners secure galvanized steel brackets and aluminum, heavy gauge screen for durability and corrosion resistance. Screen keeps out insects, animals, and birds without impeding airflow.

Ranked Most Attractive Solar Ventilator by home owners more than 2 to 1 over competitive models!

## Surface Mount

For most roofs, our one piece SPAV is the perfect solution. Because our solar cells are highly efficient at capturing the sun's energy, there is no need for unsightly raised panels or tracking systems. Instead, what you see is a low profile ventilator in a contoured design that integrates well with the roof.

Available in Black (345SOBK) and Weathered Wood (345SOWW).





## Curb Mount

Identical in design to the Surface Mount unit but with an added lip for flat, tiled, or unusually steep roof installations. A Curb Mount installation requires the fabrication of a simple curb box frame made from treated 2x4s to create a solid platform and better manage water runoff.

Available in Black (345CSOBK) and Weathered Wood (345CSOWW).





# Remote Mount

In some cases, installing the ventilator in a location that is either less visible, more convenient to reach from the roof-side, or more accessible from the attic-side, is desirable. Remote mount enables the ventilator to be installed independent of the solar panel, up to 50' away (15' of wire included). Locate the remote, flat panel to receive the best sunlight exposure and hide the ventilator from view.

Available in Black (345RSOBK) and Weathered Wood (345RSOWW).



### Gable Mount

If roof mounting is not possible or desired, gable installation provides the benefits of the SPAV with a remote-mounted, flat solar panel positioned to best capture the sun's energy, up to 50' away (15' of wire included). Finish the outside with a Broan model 433 gable shutter.

Available in Black (345GOBK) and Weathered Wood (345GOWW).

