Automatic Shut-off on Bathroom Fans

What is an Automatic Shut-off on Bathroom Fans?

An automatic shut-off timer, set by the home occupant, for a bathroom fan will calculate the working time of the fan, and cut off the electricity needed for running the fan when necessary. Installing an automatic shut-off or on bathroom fans ensures that bathroom fans run as efficiently as possible and are not running longer than needed. Usually, people use bathroom fans to eliminate steam and moisture in order to prevent problems like mold and mildew growth. However, people will shut off the fan immediately after using the bathroom before the vapor is totally removed or may run the fan for too long. Proper ventilation is especially important in bathrooms and other humid areas of the home because the build up of moisture can lead to mold problems that reduce indoor air quality. Installing a timer for the fan will help control moisture and save energy.

How to implement an Automatic Shut-off on Bathroom Fans

When selecting a bathroom fan, choose an ENERGY STAR rated fan. ENERGY STAR fans with lighting use 60 percent less energy on average than standard models.\(^1\) An automatic timer switch can be added to any typical wall switch and can be purchased at most home improvement stores. Installation is easy and can be done by a homeowner or licensed electricians. When installing the automatic shut-off, be sure to read manufacturer’s instructions. Once installed, bathroom fans should run for about 10-20 minutes after each shower (or until steam is off the mirror, whichever comes first) to exhaust water vapor from the space. Bathroom fans should be exhausted directly to the outside.\(^2\)

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\(^1\) ENERGY STAR – Fans and Ventilation  
http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=VF

\(^2\) Bath and Laundry - Green Bath Laundry Guide  
Benefits

Installing an automatic shut-off or timer on a bathroom fan:

- Saves energy
- Protects indoor environmental quality by reducing humidity

Costs

The cost of an automatic bathroom fan timer can range from $17 to $40.³ A bathroom fan can cost anywhere from $30 to $100, depending on associated features, such as lighting and heating.⁴

Resources

ENERGY STAR - Fans, Ventilating

http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=VF

US EPA - Indoor Air Quality and the Bathroom Remodel

http://www.epa.gov/iaq/homes/hip-bathroom.html

Green Home Guide

http://greenhomeguide.com/know-how/article/making-your-bathroom-healthy-efficient-and-comfortable

Green Home Guide - Bath and Laundry

http://greenhomeguide.com/know-how/article/making-your-bathroom-healthy-efficient-and-comfortable

³ Based on research collected from several retailers.
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