Portland General Electric

Tips for Cooling, Ventilation & Fans

Air conditioning

Choose ENERGY STAR®. When your central air conditioning unit reaches the end of its life, replace it with an ENERGY STAR qualified model and you could cut cooling costs by 30 percent.* ENERGY STAR models are 15 percent more energy-efficient than standard models.

Consider a high-efficiency heat pump. A heat pump combines the benefits of efficient central air conditioning in the summer with energy-efficient heating in winter.

Choose ENERGY STAR for room air conditioners, too. They use at least 10 percent less energy than conventional models.

Make sure your room air conditioner is properly sized. Too large and it wastes energy while leaving your room feeling humid. Measure the square footage of your room and compare that to sizing recommendations on the packaging.

Choose an energy-efficient setting and let it run. To keep a room air conditioner running most efficiently, don't switch on and off frequently; they work best when left to run for long periods. Also, don't keep it running at the coldest setting. Set the thermostat as high as is comfortable; 75 to 78 degrees is an energy-efficient range. You can raise the temperature at bedtime to save more energy.

Keep lamps or TVs away from the air conditioner thermostat. Heat from these devices may make the air conditioner run longer and harder than necessary.

Check and clean the heat coil in your air conditioning unit. It may also help to call your service technician. This will help ensure efficient operation.

Try fans instead. If the day is just warm and not sweltering, you might try turning the air conditioning completely off and using fans only. You'll use less energy. Operate fans only in occupied rooms because fans cool people, not rooms.

Attic ventilation is important in all seasons

In summer, good attic ventilation helps hot air escape, keeping your house cooler and prolonging the life of your roof.

In winter, attic vents keep moisture from building up (wet insulation is ineffective) and prevent damaging ice dams on your roof.

- **Vents should be positioned low and high.** Air flows in from soffit vents along the edge of the roof and travels up and out of ridge vents and/or gable wall vents.
- **Keep soffit vents clear.** Make sure they are not blocked by insulation.

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Ceiling fans & portable fans

Use fans to cool people, not rooms. They work by creating a breeze that pulls perspiration away from your body to help you feel cooler. Save energy by turning off a fan when you leave the room.

Ceiling fans provide effective cooling. Operate fans only in occupied rooms. When buying a ceiling fan, look for a good quality motor and blade design that efficiently maximizes airflow. Reverse the blade direction in winter to move warm air down from the ceiling.

Choose ENERGY STAR. Ceiling fan/light combination units that have earned the ENERGY STAR are about 50 percent more efficient than conventional fan/light units. This can save you more than $15 per year on utility bills.*

Use box fans in windows to expel hot air or draw in cool air. Place one on the north side or shady side of your house (upstairs if you have a multi-level home) to draw in cool air. Place the other fan on the opposite side of the house to expel hot air.

Use fans in combination with your air conditioning. You can turn your thermostat about 10 degrees higher and still feel comfortable while using less energy.

Attic fans

An attic fan can help your house feel a little cooler in warm summer months by ridding your attic of super-heated air. Even if your house has insulation and attic vents, the attic temperature can soar to 150 degrees, which in turn can make your living area feel hotter.

Attic fans provide powered ventilation through your attic that does not rely on wind or passive venting. It's normally mounted on the roof of your home and should be automatically controlled with a thermostat.

In our climate, if you have a well-insulated home you may find adding an attic fan helps keep your home comfortable enough that you can get by without air conditioning. Note: If you already have air conditioning, an attic fan isn't necessary and may even reduce the energy efficiency of your AC system.

If you decide to install an attic fan, choose electric or solar-powered models. A solar-powered attic fan won't add to your electric bill.

While an attic fan ventilates your attic, keeping it cooler, it does not provide whole-house cooling. Before selecting an attic fan, be sure to consider the benefits of whole-house cooling options such as a high-efficiency heat pump.

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Whole-house fans

A whole-house fan is different than an attic fan. It is typically installed in the ceiling area of a central hallway and ventilates your entire house. It draws in a high volume of cool air through open windows and flushes out hot air.

Whole-house fans are an energy-efficient alternative to central air conditioning. They use about 25 percent of the electricity. They're more common in other parts of the country. But since we enjoy a moderate climate even in the summer, they're a viable cooling choice.

Follow the rules for safe, efficient operation. Before turning on a whole-house fan, turn off heating and air-conditioning, open windows and make sure there are isn't a fire in the fireplace.

*Source: ENERGY STAR