

# Ventilation System Operating Instructions

*Controlling moisture reduces the cause of many molds and protects the finishes of your home.*

## **Whole House Ventilation System Using Exhaust Fans<sup>1</sup>**

Your new home has been constructed to use energy efficiently, while maintaining a healthy indoor environment with a good supply of fresh air. To help you achieve these benefits, we recommend that you take a few minutes to read these instructions.

Your home has been constructed to the requirements of the Washington State Energy Code (2003 edition) and the Washington State Ventilation and Indoor Air Quality Code (2003 edition). This means your home and the ductwork of your heating system have been well sealed, which limits uncontrolled exchange of air between the indoors and outdoors. The amount of fresh air provided to your home is under your control. You can increase the ventilation rate of your home by opening windows, or by operating your mechanical ventilation systems. Your home has two types of mechanical ventilation: spot ventilation fans, and a whole house ventilation fan.

### **Spot Fans**

A spot fan has been installed in each bathroom, the utility room and the kitchen. If your home includes an indoor spa, or any other room that may need additional ventilation, a spot fan will be included there as well (see Figure 1 below.)

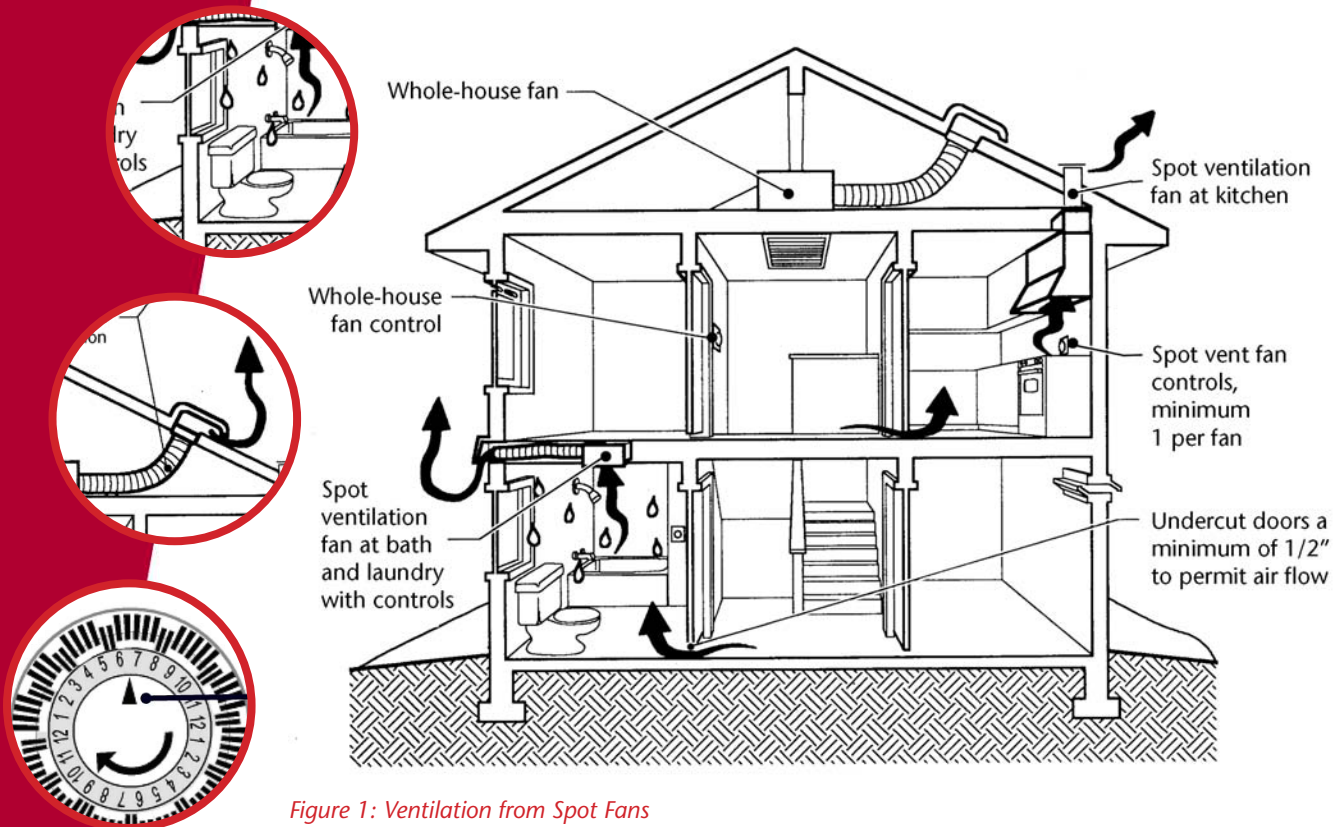


Figure 1: Ventilation from Spot Fans

The purpose of spot ventilation is to control excess moisture, odors, or chemical byproducts at the source. It's far more effective to quickly eliminate moisture and pollutants when they are created than to allow them to dissipate slowly over time. Controlling moisture reduces the cause of many molds and protects the finishes of your home. Controlling odors and chemical byproducts reduces any health hazard that may be associated with them.

It is particularly important to operate your kitchen fan if you have a gas or propane range. As well as removing moisture and odors created by cooking, your kitchen exhaust fan removes the unhealthy byproducts of combustion, including carbon monoxide and nitrogen oxides.

### Recommended spot fan operation

- Turn on the spot fan whenever moisture, odors, household chemicals, or combustion byproducts are present in the room, such as during showering, washing clothes, or cooking.
- Since moisture vapor, odors, and combustion byproducts tend to linger, run the spot fan for up to 60 minutes beyond the activity that produced them.

### Whole house fan

Your house has been equipped with a whole house exhaust fan. It is similar to a common bath exhaust fan, but is required to meet more stringent requirements for air flow and sound control. It may be located in the bathroom, a laundry area, or in the hallway (see Figure 2.)

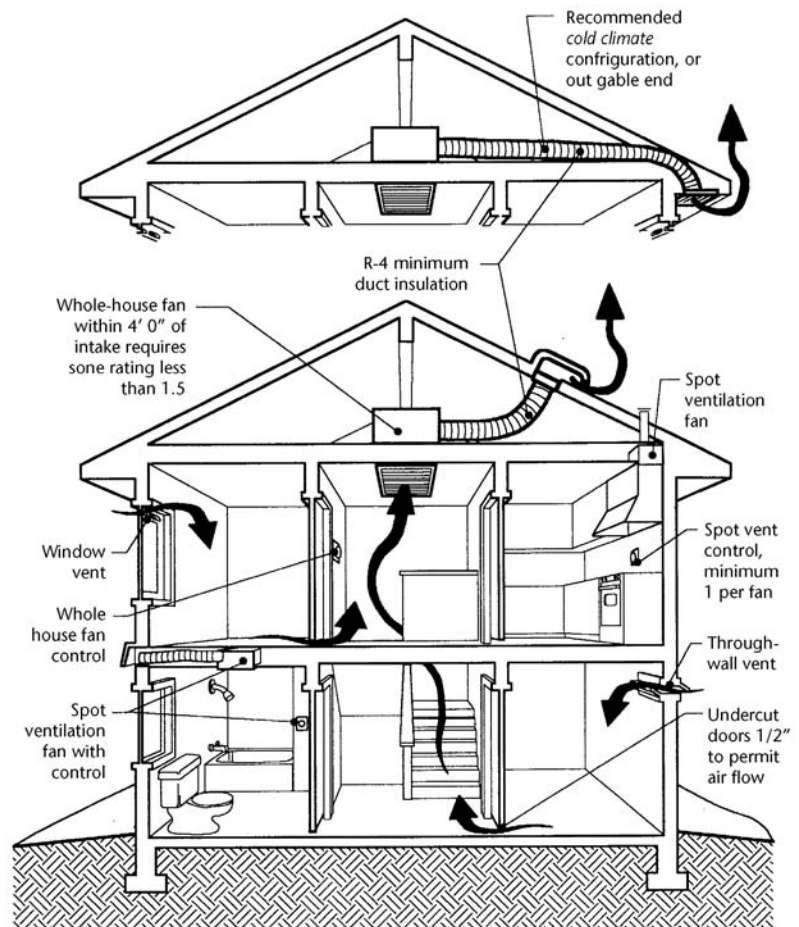


Figure 2: Whole House Fan

This fan is controlled by a 24 hour timer (see Figure 3.) To change the ventilation rate in your home, adjust the timer to increase or decrease the amount of time the exhaust fan operates.

When the ventilation timer calls for ventilation, the whole house exhaust fan turns on, pulling air out of

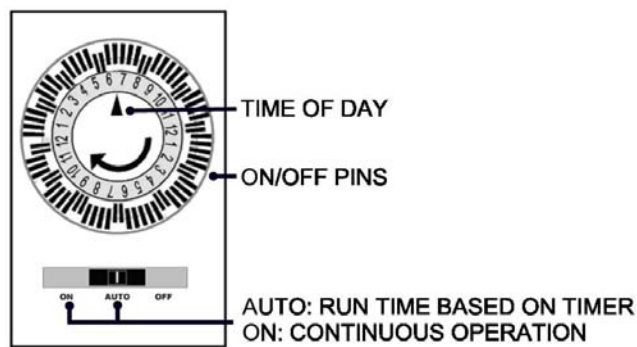


Figure 3: Typical Whole House Ventilation Timer

your home and drawing fresh air in from outside. If your home is equipped with fresh air inlets it is IMPORTANT that you leave these inlets open.

At the end of the cycle, the timer will turn the fan off.

### Selecting a Whole House Ventilation Schedule

Your contractor has set the timer on your ventilation system to provide a minimum of eight hours of ventilation per day. To get the maximum benefits of the ventilation system, you'll want to adjust the timer to suit your own schedule.

- Run the system more when you expect to be home, or when more people are expected to be in the home.
- Set the timer to cycle the system on and off for short periods. For example, 10 minutes on, 20 minutes off.

*To get the maximum benefits of the ventilation system, you'll want to adjust the timer to suit your own schedule.*

- Use the manual control to turn the system on when large groups gather in your home.
- On very cold or very windy days, it may not be necessary to run your whole house ventilation system that day.

### Additional Information:

For more information on the Washington State Energy Code, or the Washington State Ventilation and Indoor Air Quality Code, visit: [www.energy.wsu.edu/buildings](http://www.energy.wsu.edu/buildings)

### Endnote

<sup>1</sup> "Prescriptive Requirements for Intermittent Whole House Ventilation Using Exhaust Fans," Chapter 3, Section 303.4.1, Washington State Ventilation and Indoor Air Quality Code (2000 edition) [effective July 1, 2001], Washington State Building Code Council.

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Funded by:



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