

Maintenance

- Periodically check the screened outdoor air inlet for debris blockage.
- Maintain a clean furnace filter to extend the life of your furnace, save on heating and cooling costs, and provide better air quality in your home.

Helpful tips

- The ventilation system can be utilized at night during hot weather to circulate cool outside air throughout your home if your fresh air inlet is on an exterior wall.
- Programmable thermostats for the heating system may sometimes be used for the ventilation timer. Check your thermostat operation manual.



Clark County Energy Efficiency Services

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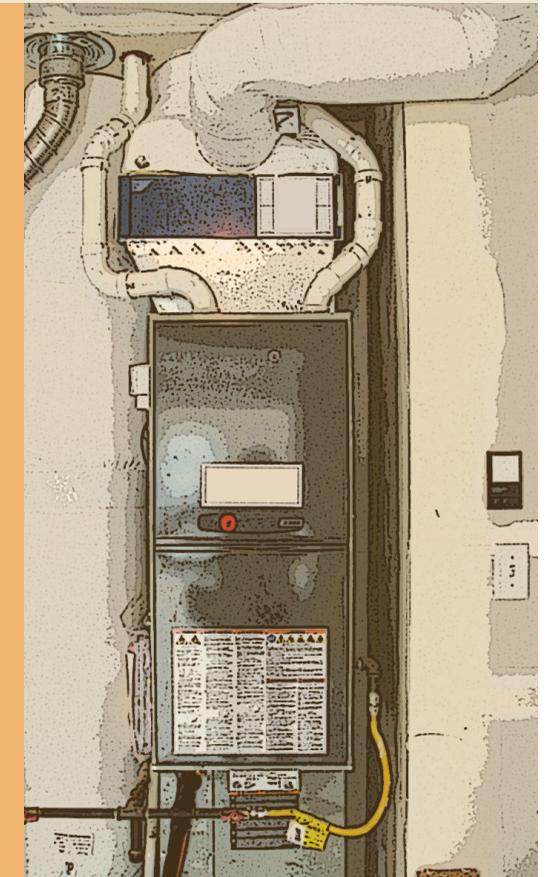
Energy Efficiency Services is supported by a
Department of Energy American Recovery and
Reinvestment Block Grant.



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Ventilation System Operating Guidelines

for forced air heating systems
in homes built after 1990



In July 1991, the Washington State Energy Code mandated air sealing requirements for new homes to conserve energy. Air sealing is done before the interior wall board is installed. Any space where air can enter the home is sealed to limit uncontrolled exchange of air between outdoors and indoors.

The amount of outside air entering your home is under your control. You can increase ventilation by opening windows, or by operating your mechanical ventilation systems. Your home has two types of mechanical ventilation: exhaust fans and a whole house ventilation system integrated with your forced air heating system.

Exhaust fans control excess moisture, odors, and chemical byproducts at the source. It is far more effective to quickly eliminate moisture and pollutants when they are created than allowing them to dissipate slowly inside your home.

The forced air heating system in this diagram is equipped with a ventilation system. This system includes an outside air intake duct connected to the return air duct. The return air duct delivers air to the furnace. A damper controls the amount of air entering the system and a timer controls when the system operates. To change the amount of ventilation, adjust the timer to increase or decrease the time the system is on.

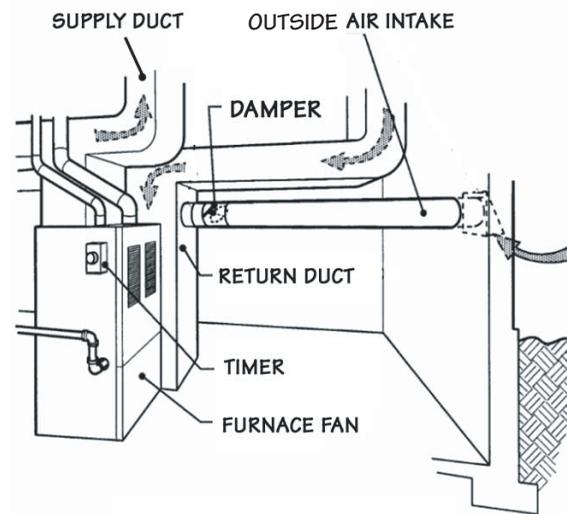
The system works this way

When the timer calls for ventilation, the furnace fan motor turns on. If the ventilation system is equipped with a motorized damper, it will open.

The furnace fan pulls outside air in through the intake duct into the return air duct.

Outside air is then distributed to the home through the supply air ducts of the heating system.

When the ventilation timer shuts off, the furnace fan motor turns off. If the system has a motorized damper, the damper will close.



Dampers

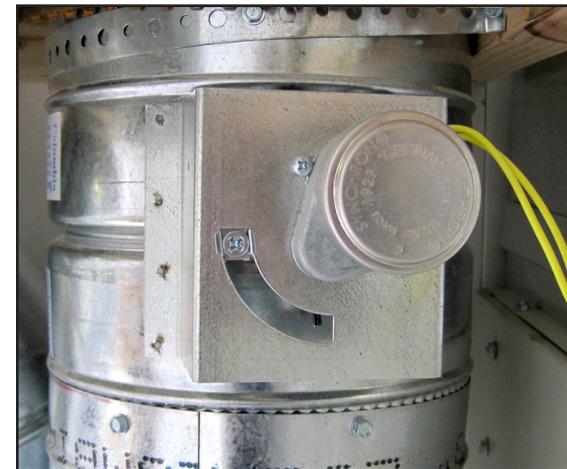
There are two types of dampers.

The first is a manual damper. A lever is used to open and close the damper allowing or stopping airflow.



Manual damper

The second is a motorized damper. It is controlled by a timer that opens and closes the damper at set intervals.



Motorized damper

Did you know

- Unfiltered outside ventilation air may be distributed throughout your home if the furnace filters are in the return air grills inside your home.
- Outside air will be pulled in while heating or cooling your home if your system has a manual damper that is open. You may feel cold drafts from heating registers when the furnace is off.
- A roof ridge vent used for outside air intake will negatively affect air conditioning.
- On many systems the timer and/or damper may not have been installed. The timer is typically located on the furnace or in a closet. Your programmable thermostat may also be used. To find your damper, locate a duct connected to the return that ends at an exterior wall or roof vent. Within four feet of the furnace you should see a metal arm or a metal box with a wire connected to it. See photos.

For further information, repair, or modification of your whole house ventilation system, please contact a Washington State licensed heating and cooling contractor.