

Heat Recovery Ventilator — Like a Breath of Fresh Air



According to the United States Environmental Protection Agency, indoor air quality is one of the five top environmental issues today. If your home is tightly sealed for energy efficiency, materials like household chemicals, gases from carpet, building materials, dust, smoke and pollen may cause problems for you.

For your family's health and comfort, your home should have one complete fresh air exchange every three hours. In drafty old homes, this process occurs naturally, as stale air is drawn in, but if your home is tightly weatherized, it can take as long as 10 hours for one air exchange! You can get plenty of fresh air without letting money pour out open windows with Heat Recovery Ventilator (HRV).

SAVE ENERGY AND MONEY

The heart of the HRV system is a heat transfer core that transfers heating or cooling energy from outgoing to incoming airstreams. It retains most of the energy used to heat or cool your home – saving you money on utility bills. The HRV can help control the drying out process in a new home, while diluting and expelling noxious gases and fumes from new carpeting, adhesives and stains.

Inside your home, The HRV system can be connected with your heating and cooling system, or it can stand alone as a separate system. This depends on your home and individual needs. You can choose to exhaust stale air from the bathrooms, utility rooms or kitchen, eliminating the need for noisy fans), while directing fresh air to the living rooms and bedrooms. In the wintertime, the energy from the indoor air that is being exhausted, will warm the fresh outside air. In the summertime, the cool stale indoor air will cool the fresh warm air.

Your family receives all the benefits of having the windows open with out the discomfort of the temperature difference and de-creased security of the open windows. The unit is typically installed in basements utility rooms or closets.

HRV can also be a wise choice for new and existing homes. Your contractor will work with you to incorporate a heat recovery ventilator into your new or existing structure to help you maintain your comfort level.

How It Works



Illustration shows heat transfer in HRV from outgoing to incoming air in winter. Energy transfers between incoming fresh air and outgoing stale air as the two air streams pass by opposite sides of multiple layers of a special membrane.