BEYOND THE BASICS:

Heat Recovery Ventilators (HRVs) & Energy Recovery Ventilators (ERVs)

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What are HRVs & ERVs?

HRVs and ERVs are balanced mechanical ventilation systems that provide a constant supply of fresh air while transferring a significant portion of the energy in the air (heating or cooling) that is being exhausted to the incoming air. In other words, they keep the inside temperature inside, and the outside temperature outside.

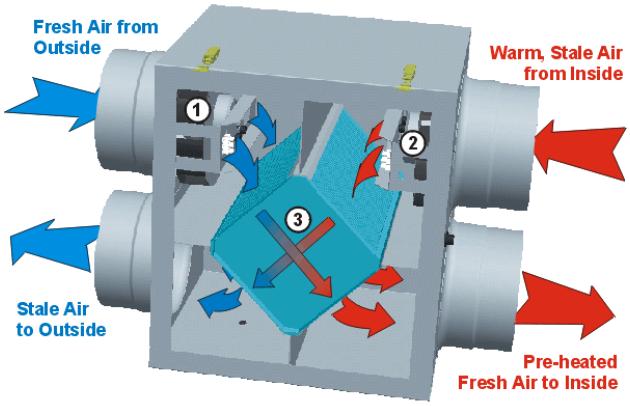
There are two types of recovery ventilators: Heat Recovery Ventilators (HRV) and Energy Recovery Ventilators (EVR). The main difference between a HRV and an ERV is that a HRV conserves both heat and cooling energy, while an ERV conserves both of these and transfers humidity.

History of HRV and ERV

Due to increasing costs, builders have discovered ways to make buildings more energy efficient: installing tighter doors and windows, vapor-barriers, improved insulation, modern siding, and caulking to seal even the smallest of cracks. While these measures improve the energy performance of buildings, they increase other issues such as moisture and pollutants inside the home. In response, mechanical ventilation systems such as HRVs and ERVs are being used to exchange stale indoor air for fresh outdoor air, all while maintaining the energy conservation benefits of building a tightly sealed house.

How do they work?

HRVs and ERVs use two blowers. One moves stale indoor air that includes



moisture, odors, and noxious gases; a second brings fresh outside air in. Blowers move air through a heat exchanger core that transfers energy for exhaust air to fresh air. It is important to note that exhaust air and incoming air do not mix; only the heat is transferred.

How much do they cost?

Heat Recovery Ventilators run from $600 to $900 plus installation, while Energy Recovery Ventilators run from $1200 – $2500 plus installation.

Prices vary based on the efficiency of the unit and the size of unit needed in relation to the volume of the home.

Where can I get them?

Contact your local Heating Ventilation Air Conditioning contractor for installation. Prefer to DIY? Purchase them from your local HVAC supply shop or on the internet.