



## Energy Recovery Ventilators

An airtight and insulated home does not necessarily mean a well-ventilated home. When a home is well-sealed, it can become a virtual plastic bag, trapping dust, moisture, odors and chemical pollutants inside the home.

Installing an energy recovery ventilator, or an "ERV," will allow the home to maintain air circulation while minimizing energy loss. An ERV constantly exchanges heat from the warmed air going out, with the cooler and healthier air coming in from outside.



There are two types of ERVs: One is independent of, and completely separate from, the home's forced air system, while the other is integrated directly into it.

The best practice for installing an ERV is to hire an HVAC contractor to install the type of ERV that is integrated directly into the home's forced air ductwork. Although this should be done by an HVAC contractor, there are several design considerations you should be aware of when the ERV is installed:

- ▶ The fresh air intake should be located where fresh air circulates, and away from driveways, range hood exhausts, furnace flue and laundry vents.
- ▶ The stale air from the home should come from a wall close to the kitchen, within one foot of the ceiling and 10 feet away from an oven. This is done because vaporized grease can clog the ERV.
- ▶ The fan for the main air handling unit for the house should be on at all times to circulate fresh air around the entire house
- ▶ The ventilated air from the ventilator should be connected to the return duct of the home's forced air system. This is done so that the ventilated air can be circulated easier with your home's ductwork system.
- ▶ The homeowners should still install point source exhaust fans in all bathrooms even with this best practice strategy.

Many homeowners try to ventilate their home by opening their windows and using a powerful ventilation fan, which lets out all the warmth or coolness in your home. The fresh air coming in isn't filtered, so dust, pollen, soot, mold and other undesirables are introduced into your home.

An ERV gives you a way of moving fresh, temperature-controlled air into your house while removing stale, contaminated air.