

Home Maintenance: HRVs & ERVs

Introduction

An HRV is an Heat Recovery Ventilator. An ERV is an Energy Recovery Ventilator. These two mechanical units are almost exactly the same. The job of these systems is to ventilate your home without large losses of heat or cool.

History

Older homes never needed HRVs & ERVs. They would leak air through window frames, doors, improperly insulated walls, basements, crawlspaces, and roofs. This is actually a good thing. Air needs to move for your health and wellbeing.

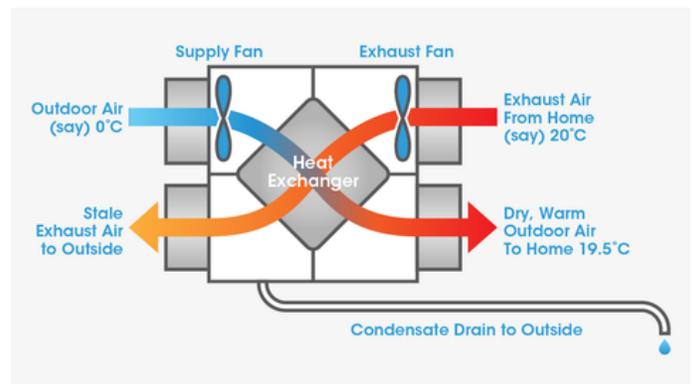
As building technology has improved, air flowing through unintended gaps in the building exterior has lessened. This is both a good thing and a bad thing. It is good thing because as costs rise you are wasting less money on heating or cooling air that is just going to escape your home. However, it is a bad thing because air exchange is required to have a healthy home.

Not having enough air exchange can lead to carbon monoxide poisoning.

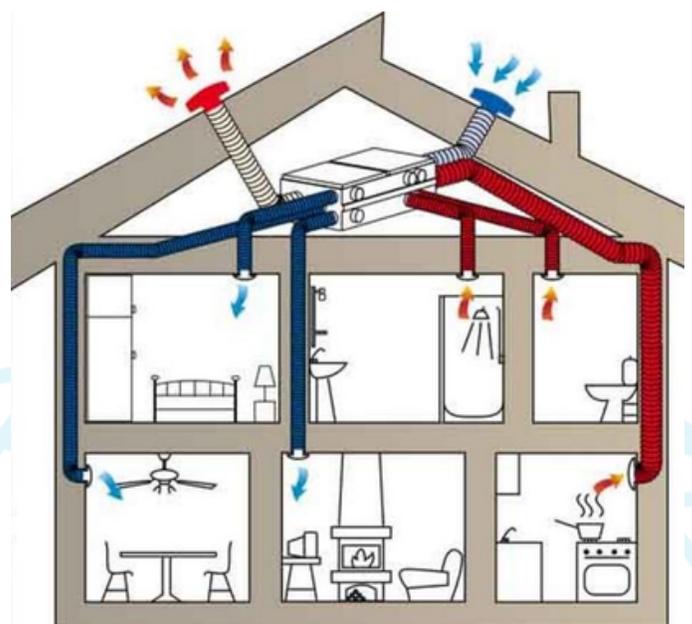
Indoor Air Quality

Indoor Air Quality (IAQ) is an important part of you health in your home. Many things can contribute to poor indoor air quality. Cooking, showering, pet hair, cleaning, smoking, and dust are all indoor air pollutants that an HRV or ERV can help with.

Some people are more likely to get sick due to being exposed to these air pollutants. The elderly, children and people with breathing disorders are the most likely to get sick when you're home is not properly ventilated.



HRV/ERV system diagram



HRV/ERV air flow diagram

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HRV & ERV Maintenance

In order to keep your home healthy, maintaining your HRV/ERV is important. This includes, but is not limited to, cleaning/exchanging to cleaning/exchanging filters, checking outdoor air intake, exhaust vents, and condensation drain, and calling a certified HVAC technician to inspect the unit.

Cleaning /exchanging filters should be completed once every 3 months. Checking the air intake and exhaust vents should be done at the same time as the filters. All mechanical equipment should be inspected by a certified technician once a year to ensure it is in proper working order.

Prior to doing any maintenance on a HRV/ ERV it is recommended to turn the unit off. Remember to turn it back on after you have finished.

Summary

Air exchange is a necessary part of living in a healthy home. HRV/ERV help to complete this task in a more efficient manner. They do this by transferring heat/cool from the indoor air to the outdoor air prior to it going into the house.

Keeping your HRV/ERV in good working order can save you money and keep your home healthier.

If you need assistance maintaining your HRV/ERV, contact a professional specializing in furnaces, water heaters, and ventilation systems. They may need the manufacturer's details and can provide in-home service or instructional videos.

Homeowners are encouraged to reach out to qualified contractors for maintenance and repairs. The maintenance and housing departments are available to provide recommendations if needed



HRV/ERV interior



A HRV/ERV filter that needs replaced or cleaned