

5 | VENTILATION INFORMATION

EDMONTON'S GREEN HOME GUIDE

The Art of Ventilation: A Breath of Fresh Air

On average, we spend about 90% of our time indoors, so we need an abundance of fresh air in our homes. That's why ventilation is so important. Ventilation helps control moisture, which minimizes mould growth and structural damage.

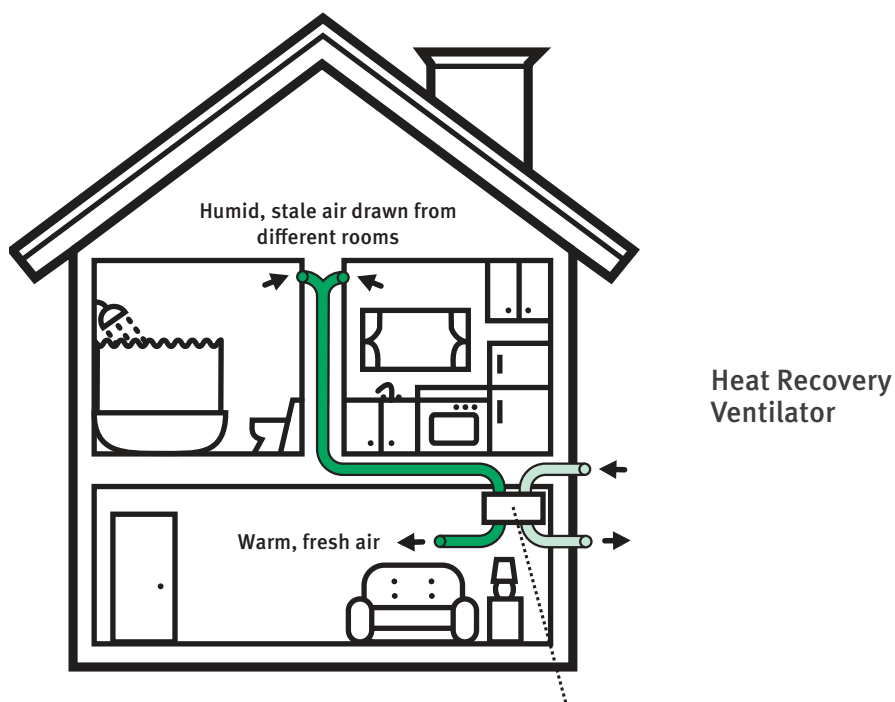
The Characteristics of a Well-Ventilated Home

In naturally ventilated homes, look for windows that are strategically placed to encourage cross-ventilation so that during the times of the year when they're open, they can cool as much of the home as possible. Minimum building code requires exhaust fans in all bathrooms (preferably on timers) and in the kitchen, which should be used to prevent moisture buildup.

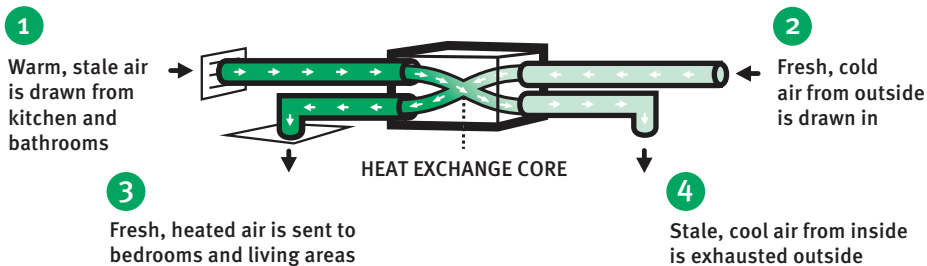
In New Homes, a Heat Recovery Ventilator (HRV) is Important

An HRV is an air exchanger that delivers filtered, fresh outside air to living rooms and bedrooms and extracts stale air from high-moisture areas such as bathrooms, kitchens and laundries. It also saves energy by recovering 60 to 90% of the heat from the air that's being extracted.

In any home, an HRV can provide healthy indoor air quality, with minimal energy consumption. However, you don't want to just ventilate the home—you also want to recover the exiting heat so it can be used to heat the incoming outdoor air. This is efficient and saves you money!



HEAT RECOVERY VENTILATOR: HOW IT WORKS



ALTERNATIVES TO HRVS

The low-technology version of a mechanical ventilator in homes is the bathroom exhaust fan or kitchen exhaust fan. Switches and timers can be installed to turn the bathroom fans on for periods of time to increase ventilation. However, in general, these systems don't have heat recovery, so the energy-saving potential of an HRV isn't utilized.



Improve Your Indoor Air Quality, Reduce Your Heating Costs

An HRV improves your indoor air quality, helps overcome moisture-related health and structural problems and reduces heating costs. An HRV can also reduce household odours, as fresh air is constantly being provided to the home.

HRV Home System Helps People with Respiratory Sensitivity

Did you know that according to the Canadian Lung Association, over 30% of Canadians suffer from some sort of respiratory sensitivity? Homes can be designed with these Canadians in mind. According to Canada Mortgage and Housing Corporation (CMHC), homes equipped with hard-surfaced flooring (no carpets) and HRVs are the best choice. Learn more by reading the CMHC – Research House for the Environmentally Hypersensitive PDF, available at: cmhc-schl.gc.ca/en/inpr/bude/heho/upload/Research-House-for-the-Environmentally-Hypersensitive.pdf

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GREEN FACTS AND TIPS: HEAT RECOVERY VENTILATORS (HRVS)

What Types of Homes Are Best for HRVs?

Heat recovery ventilators (HRVs) can be used in all building types, small and large. In larger condominium complexes, ventilation systems with heat recovery can be centralized for the whole building. HRVs can be retrofitted into existing homes to improve air quality and save energy. It particularly makes sense to install HRVs in homes that have undergone energy efficiency retrofits and obtained an EnerGuide rating of 78 or above.

HRV Maintenance

HRVs require routine maintenance and periodic adjustment. If the home you're interested in has an HRV, ask when it was last serviced or adjusted. Poorly maintained HRVs can cause imbalances where the house can become over-ventilated or under-ventilated. Some HRVs are completely separate of other systems in the house, while others are connected to a forced-air furnace system.

