

Heat your home with the help of Mother Nature

(NC)—If you are considering heating and cooling options for your home or are looking for ways to reduce your energy bills, you could consider a heat pump. Despite its name, heat pumps are unique equipment that can provide both heating in the winter and cooling in the summer. Heat pumps are not new; the first unit came off the production line more than three decades ago.

In size and appearance, a heat pump looks like a central air conditioner. A heat pump takes the place of both furnace (with a supplementary heating system) and central air conditioning equipment with a single heating-cooling system. This appliance can pump heat into the home in the winter and pump heat out in the summer. Heat pumps are typically operated electrically; however, a limited number of gas-fired heat pumps are available in Canada. Some types can also provide supplementary hot water heating. Heat pumps transfer heat from natural heat sources in the surroundings, such as the air, ground or water to the home. In cooling, a heat pump transfers heat in the opposite direction, from the home to the surrounding air, ground or water.

There are two main types of heat pumps: air-source and ground-source (also referred to as an earth-energy system). The only difference between the two types is the place or "source" to where heat is either taken from or moved to (air or ground) in the heat pump operation.

It is most important that the heat pump for your home is the proper size to provide enough heat on the coldest winter night and enough cooling on the hottest summer day. Because the performance of some types of heat pumps decreases during the coldest portion of Canadian winters (less natural heat from the heat pump to source), most heat pump installations have a supplementary or auxiliary heating system in the form of a gas or oil furnace or an electric heater. To determine your home's

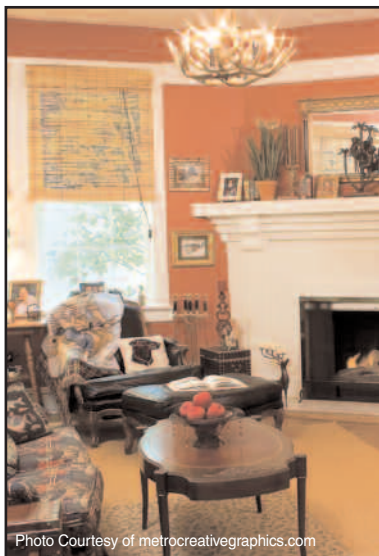


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proper sizing, your installing contractor should perform a "heat loss/heat gain" calculation. To locate a qualified heating, ventilation and air conditioning (HVAC) contractor consult members of the Heating, Refrigeration and Conditioning Contractors of Canada (HRAC) who carry relevant trade, fuel safety and municipal licences. You can locate a residential heat pump specialist in your area online at www.hrac.ca or toll-free at 1-877-411-HRAC (4722).

Heat pumps benefit the environment by using the heat in the surrounding air, water and ground to warm your home. The sun continually replenishes these heat sources; therefore, the extracted heat is renewable energy as compared to heat that must be produced from fuels or electricity.

Employ what Mother Nature has to offer to heat and cool your home comfortably, efficiently and economically.

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Is your home too air tight?

(NC)—In attempting to conserve energy and reduce our heating costs, we can sometimes make our homes too air tight. In fact, for a house to be healthy, it needs to "breathe". It needs to expel moisture and other gases from inside and take in a constant supply of fresh air from outside.

How can you tell if your home is too air tight?

- Generally the air inside your home is stuffy and stale.
- Excessive condensation dripping down your windows. (This could also mean your humidifier is set too high so check that first.)
- The pilot light on your gas appliance keeps going out.
- A gas flame burns yellow instead of blue (except in the case of a natural gas fireplace).

• The smell of exhaust gases are present in your home. Although you can't smell carbon monoxide, other exhaust gases do have an odour.

If your home is too air tight, exhaust gases, including carbon monoxide, can build up. If you see these signs, contact a qualified heating contractor or a residential ventilation expert to check your home out and correct the problem. You can locate a qualified contractor who specializes in mechanical ventilation online at www.hrac.ca or toll-free at 1-877-411-HRAC (4722).

Mechanical ventilation involves a device that exhausts contaminated indoor air from your home and delivers a fixed quantity of outdoor air back in. A system referred to as a Heat Recovery Ventilator (HRV) is an all-season

solution that transfers heat from the exhaust air to the intake air in the winter. In the summer, the heat transfer is reversed to save on cooling costs.

Investing in the installation of a mechanical ventilation system (HRV) will not only boost the health and comfort your family, it might even increase the market value of your home by indicating to the buyer that the home's structural concerns have been well taken care of. Either way, as a homeowner, you can then breathe a little easier.

-News Canada
Word Count 334

What's hot in home heating?

(NC)—Renovations and home improvements are a growing trend among Canadian homeowners. One project that may not be on the top of your list, but is definitely worth considering, is installing hydronic (water) radiant floor heating.

Radiant floor heating is a method of heating your home by applying heat underneath or within the floor. Comparable to warming yourself in the sun, this type of heating warms objects as opposed to raising the temperature of the air.

A typical radiant floor heating system consists of a series of tubes set in a bed of lightweight concrete or other similar material, then covered by any standard floor covering. Hot water is circulated through the tubing, which warms the bedding material and radiates heat up from the floor to warm the entire house.

The cost of an installing a hydronic radiant floor heating system will be depend on your specific heating and energy efficiency requirements and in

addition to the heating system, a mechanical ventilation system is required in the house. Homeowners should consult with a qualified heating contractor who will explain your options. You can locate a qualified contractor specializing in hydronic heating online at www.hrac.ca or toll-free at 1-877-411-HRAC (4722).

There are a lot of advantages to radiant floor heating besides the warmth under your feet.

There are no heat registers in the floor or heaters in the wall to restrict the placement of furniture and window coverings. Since there is no airflow forcing the heat into the rooms, there are no drafts or unpleasant air currents, and wall and ceiling surfaces stay cleaner. Radiant floor heat is silent, and there are no filters to clean.

On the down side, this is a heat-only system - if you want central air conditioning you'll still have to install a duct system. And since room air does not circulate through the system as it does with a forced air system, you can't add

optional, whole-house accessories such as an electronic air cleaner or a humidifier.

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