HEAT PUMPS: YEAR-ROUND COMFORT FOR CANADIAN HOMES

RELIABLE. EFFICIENT. ALL-SEASON COMFORT.

EVEN IN CANADIAN WINTERS





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DID YOU KNOW?

HEAT PUMPS ARE USED IN 60% OF HOMES IN NORWAY – AND THEY WORK IN CANADIAN WINTERS TOO!

WHY HEAT PUMPS?

Heat pumps are the future of home heating and cooling

- The most sustainable way to heat a home and reduce greenhouse gas emissions
- ✓ Use the same trusted technology that keeps food safe in your freezer
- ✓ Effective in cold climates: in Norway, 60% of homes use a heat pump for heating
- Can make your home **safer** no risk of gas leaks or carbon monoxide

There are different types of heat pumps

- Air-source heat pumps: Work by exchanging heat with outside air
- Cold climate air-source heat pumps: Optimized to perform at low temperatures
- Ground-source heat pumps: Draw heat from the earth or water



Matching Heat Pumps to Your Home

Current system:	Recommended heat pump:
Centrally ducted	Most heat pumps
Radiators or boilers	Air- or ground-to-water systems
Baseboard heating	Mini-split or multi-split systems

Will I Need a Backup Heat Source?

All-electric heat pumps can operate efficiently throughout the winter for most Canadians. Many models include a built-in backup heater for extra insurance on the coldest days.

You can pair a heat pump with a furnace, boiler or other system that takes over heating below a certain temperature.

This may be a good option when:

- You own a newer furnace or boiler
- Your existing ductwork is undersized
- An all-electric heat pump option is outside your budget



WHY HEAT PUMPS ARE A SMART UPGRADE

- Cozy, even heat makes your home more comfortable
- One system that heats in winter and cools in summer
- The most energy efficient way to heat and cool your home
- · Can lower bills in homes with baseboard, propane or oil heating
- Safer for your family no risk of carbon monoxide
- Helps Canada cut climate pollution, one home at a time
- A smart, one-time upgrade with a big, lasting impact



How Does Heating with a Heat Pump Compare to a Furnace?



Delivers steady, even warmth instead of bursts of hot air



 Works best when kept at a consistent temperature – no need to lower the thermostat at night



Provides both heating and cooling in one system



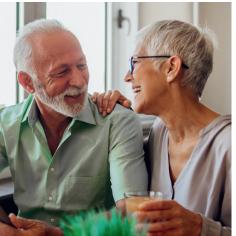
 Both heat pumps and furnaces require electricity to operate – neither will run during a power outage*



Lower gas bills help offset added electricity costs

*A hybrid system with a furnace backup can more readily be powered by a generator during an outage.







WHAT QUESTIONS SHOULD I ASK MY CONTRACTOR?

To make sure you get the right heat pump for your home, choose a contractor who takes the time

to understand your needs and can confidently answer questions like these:

Have your installers received manufacturer training to install these units?

Are you an HRAI registered Heat Pump Champion Advocate?

Do you use heating load calculations to size the system?

Will you assess my ductwork and air flow to size the system?

Will my home need electrical or other upgrades?

Where will the equipment be installed?

What is the total installed cost, and will I be eligible for any incentives?

For hybrid heat pumps, at what temperature will the system switch to backup heat?

Will you show me how to maintain the system and program the thermostat?

Tell me about your warranties, qualifications, experience and references.



Look for an HRAI Heat Pump Champion Advocate - contractors with certified training and proven experience to help you choose and install the right system.

Visit the HRAI Contractor Locator website to check.



Learn More

Canada's Home Electrification Toolkit can help you electrify all aspects of your home, and avoid an electrical panel upgrade.

Tip: It's a good idea to compare quotes from a few qualified installers to find the best fit for your home.

Presented by:

The Building Decarbonization Alliance is a non-partisan and cross-sector coalition working towards a future where electrified buildings are part of an affordable and resilient energy system that contributes to a prosperous, sustainable, and decarbonized Canada. <u>buildingdecarbonization.ca</u>

Plumbing+HVAC Magazine is Canada's largest and most qualified circulation to the mechanical trades with more than 25,000 readers. plumbingandhvac.ca

Founded in 1968, the **Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI)** is a non-profit national trade association that represents more than 1,150 member companies in the heating, ventilation, air conditioning and refrigeration (HVACR) industry.





