HEAT PUMP FAQs

What are the different types of heat pumps?

The most common type of heat pump In Newfoundland and Labrador is an air-source heat pump. Air-source heat pumps pull heat from the outside air and move it inside. They come in two main types: **ductless** and **ducted** systems.

Ductless Mini-Split or Multi-Split Heat Pumps

A ductless heat pump has an outdoor unit connected to one or more indoor heads. Each head heats or cools its own zone and is typically controlled by a remote or optional third-party wall thermostat such as those offered by Mysa. The ductless system typically comes in two varieties: mini-split or multi-split.

Mini-split: one outdoor unit connected to one indoor head. Ideal for open-concept.
Multi-split: one outdoor unit connected to multiple indoor heads. Best for multi-room layouts.

Ductless heat pumps are the most common and cost-effective option for existing homes, especially those with existing electric baseboards because they do not require any ductwork.

Ducted Central Heat Pumps

A ducted heat pump (also known as a central heat pump) has an outdoor unit connected to one large indoor unit and uses ducts to move warm or cool air throughout the entire home. Temperature is controlled via a single central thermostat. This option is more expensive than ductless heat pumps. Since this system requires duct work, it's a good option to replace an existing oil or electric furnace or for those building a new home.

How efficient are heat pumps compared to baseboard heaters?

Baseboard heaters are 100% efficient, converting all electricity into heat. Heat pumps can be two to three times more efficient because they move heat rather than create it, providing the same comfort using much less energy. For example, to get 3,000 watts of heat from baseboard heaters would require 3,000 watts of energy. With a heat pump, you can get 3,000 watts of heat and only use 1,500 or 1,000 watts of energy. Actual efficiency depends on the heat pump type, its specifications, outdoor temperature, and proper sizing and installation — which is why using a qualified installer is important.

What savings can I expect from a heat pump?

Savings depend mainly on the size of the area to be heated/conditioned with the heat pumps, but also on the heat pump's efficiency and your home's insulation, outdoor temperatures, your set temperature, and the quality of the installation. Use our Heat Pump Calculator to estimate potential savings with a mini-split or multi-split system.

Why does a heat pump need to meet a certain HSPF (Heating Seasonal Performance Factor)?

A higher Heating Seasonal Performance Factor (HSPF) means better heating efficiency. To ensure heat pumps perform well in Newfoundland and Labrador's cold climate, they must meet minimum standards for HSPF. We recommend an HSPF of **10 or higher** for mini-splits and **9 or higher** for multi-splits.

How long can I expect a heat pump to last?

A heat pump usually lasts 10-15 years, so calculate how much you need to save to make it worth the investment. Talk to your installer about the total cost of the unit, including installation and warranty, and any maintenance costs that should be expected.

How do I calculate the size of the heat pump I need for my home?

A heat loss/gain calculation is the best method to determine the correct size heat pump needed for a home. A qualified installer should visit your home, measure the space, windows, and doors, and use those details within a computer program to calculate the heat loss of the home and determine the heating and cooling requirements. Typical sizes for ductless heat pumps are 9,000 BTUs, 12,000 BTUs, 18,000 BTUs and 24,000 BTUs.

Do I need a backup heating source?

Ductless Mini-Split or Multi-Split Heat Pumps

A ductless mini-split heat pump requires a backup heating source. Mini-splits are designed to heat specific zones, not the entire home, so they do not meet the requirements of a whole-home heating system on their own. They also do not include built-in electric backup heat. During very cold weather, defrost cycles, or times when their heating output is reduced, a secondary heat source (such as baseboard heat) ensures the entire home stays comfortable and prevents temperature drops.

Ducted Central Heat Pumps

Central ducted heat pumps already have built-in electric resistance backup heat, which activates when outdoor temperatures drop too low for the heat pump to operate efficiently. This backup ensures reliable heating across your whole home. A central heat pump uses the duct work throughout your entire home and therefore does not require an additional backup heating source.

Who is qualified to install a heat pump?

A heat pump should only be installed by a certified refrigeration and air conditioning mechanic and a certified electrician. Heat pumps are not do-it-yourself systems, and improper installation can void the warranty, reduce efficiency, shorten the unit's lifespan, and create safety risks. A qualified installer will assess your home's size, layout, insulation, and air tightness, and perform a heat load analysis to ensure the unit is properly sized. You should only hire reputable contractors who provide written contracts.

Here is a list of residential installers who have been verified by the Department of Advanced Education and Skills as certified Journeyperson Refrigeration and Air Conditioning Mechanics.

Is there a rebate for heat pumps?

TakeCharge does not offer a rebate on heat pumps. However, Newfoundland Power and Newfoundland and Labrador Hydro customers can apply for financing to help cover the cost of purchasing and installing electric home heating systems, including heat pumps. After getting a quote, you can complete the loan application with your utility. Newfoundland Power customers can call 1-800-663-2802 or visit Newfoundland Power's Financing Webpage. Newfoundland and Labrador Hydro's customers can visit Newfoundland and Labrador Hydro's Financing Webpage.

For oil heated customers, there is an Oil to Electric Incentive program administered by TakeCharge and funded by the Government of Canada and Government of Newfoundland and Labrador. This incentive program includes heat pumps for customers that are fully switching from Oil to Electric heat. Visit OiltoElectric – TakeCharge for details and eligibility.

Should I set back the temperature of my heat pump at night?

For ductless mini-splits, you can lower the temperature a degree or two at night or when away for long periods i.e. at work. Just make sure your backup heat (baseboards or oil) is set lower so they do not turn on when the temperature setting on your heat pump is reduced. If the system takes too long to reheat the space, setting it back may not be worthwhile.

For ducted central heat pumps, keep the temperature at a steady, comfortable setting. Changing the temperature can trigger the built-in backup electric resistance heating system, which is less efficient.

How do I clean and maintain my heat pump?

Regular cleaning will help your heat pump run efficiently year-round.

Indoor unit: Clean the air filters every 30 to 60 days. Dirty filters reduce airflow, lower performance, and can damage the compressor. Turn off the unit, remove the mesh filters, rinse with cool water, let them fully dry, and reinstall.

Outdoor unit: Turn off the power before cleaning. Remove leaves and debris by hand or with a vacuum and rinse gently with a garden hose (never a pressure washer). In winter, melt any ice buildup at the bottom of the unit's drain holes with warm water—never use sharp tools.

For more tips, watch our Heat Pump Maintenance Video and visit our Heat Pumps Winter 101. Always refer to your user manual and contact a certified heat pump installer for service or repairs.