

WHAT YOU NEED TO KNOW WHEN INSTALLING A HEAT PUMP

HERE ARE A FEW THINGS YOU SHOULD KNOW BEFORE YOU GET STARTED.

WHAT TO TACKLE FIRST

The first step toward an energy efficient home is a well-insulated and air-tight envelope (walls, roof, windows, and doors).

Hiring a [Certified Energy Advisor](#) to complete an EnerGuide Home Evaluation can be a good start. The evaluation will provide you with an EnerGuide rating along with recommendations on upgrades to maximize energy savings. A [pre-upgrade evaluation](#) costs \$400-\$600 and a [post-upgrade evaluation](#) is \$200-\$300 before rebates.

FIND THE RIGHT CONTRACTOR

Choosing the right contractor will make sure your heat pump works well. CleanBC's list of [Program Registered Contractors](#) have received training on heat pump upgrade best practices. Your heat pump must be installed by a licensed contractor with a valid BC business license for applicable trades to be eligible for rebates.

Get quotes from at least two contractors and check their experience upgrading the heat pump system you need - ductless, central air-to-air or air-to-water.

Not all homes are a good fit for a central heat pump. Design limitations can significantly increase the cost. Your contractor should identify these challenges with a home visit before quoting your upgrade.



ASK FOR THE CALCULATIONS

Once you've selected a contractor, they should complete a heat loss calculation before finalizing equipment selection. For central air-to-air heat pumps you'll also want to verify heating ducts have return air and are sized to deliver enough heat to all the rooms. This is a good time to confirm if you need an electrical service upgrade.

CONFIRM EQUIPMENT SELECTION

On the North Shore, you'll want a cold climate heat pump rated to a minimum of -7°C. If you're concerned about colder days, a variable capacity unit rated to -12°C is a good option.

For central air-to-water systems and combined space and hot water systems, you must select equipment from the [Air to Water and Combination Qualifying Heat Pump List](#) to be eligible for rebates.

Call a CleanBC Energy Coach for free at 1.844.881.9790 to discuss available rebates before your upgrade starts.

PERMITTING REQUIREMENTS

All North Shore municipalities, have similar permitting requirements:

1. An Electrical Permit for all heat pump upgrades.
2. A Gas Permit to decommission or alter your natural gas furnace or boiler.
3. A Plumbing Permit to replace your boiler or hot water tank.
4. A Building Permit for most wall-mounted outdoor units.

You may also require an inspection. Contact your municipality for details.

EQUIPMENT SITING

In siting your outdoor condensing unit, you want the run to be as short as possible to your indoor unit and there should be good airflow around it. When installed, it should be level and on feet 8-12 inches off the ground to protect it from ice build up in winter.

The condensing unit needs to be placed where it won't disturb your neighbours in compliance with noise or appearance bylaws. Again, contact your municipality for details.

INSTALLATION

Depending on the size and complexity of your upgrade, it can take 1-4 days to install your heat pump.

SYSTEM SETTINGS

Auto-fan mode is a good idea, but avoid using "auto-heating" mode. Manually switching from heating to cooling prevents cooling mode from kicking in on a sunny winter day or heating mode starting up on a cool summer night. A calendar event in your phone is a great reminder to make the seasonal switch.

If you have a back-up heating system, make sure the temperature setting is 5°C lower than your heat pump. BC Hydro has a [tip sheet](#) with more details on heat pump maintenance and optimizing energy efficiency.

MAINTENANCE

Regular heat pump maintenance will help it last longer and perform better over time. Follow your manufacturer's guidelines. This usually includes cleaning or replacing the filter on your indoor unit every 3 months.

Cleaning around the outdoor unit and removing anything blocking air flow will help your system run efficiently. Talk to your contractor about any additional maintenance recommendations.

