

Heat and Cool with Air Source Heat Pumps

Air source heat pumps use electricity to heat and cool.

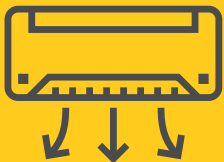
- They work like air conditioners to cool, and work in reverse to move warmth from outside air into your home to heat.
- They heat homes up to three times more efficiently than forced air and electric resistance heating systems.

Two Setups: Ductless or Central

WHICH IS THE BEST FIT FOR YOUR MINNESOTA HOME?



OUTDOOR UNIT
above snow depth



INDOOR UNIT
mounted on wall

DUCTLESS / MINI-SPLITS

Ductless air source heat pumps don't require ductwork. There is at least one outdoor condenser connected to one or more indoor air distribution units. Indoor units are typically mounted on the wall, floor, or ceiling. Individually-controlled indoor units allow for zoned conditioning — maximizing savings and comfort.

INSTALLED COST: \$3,000–18,000, depending on number of indoor/outdoor units

GOOD FIT WHEN:

- Already heating with radiators, in-floor, or electric baseboard.
- Getting rid of window A/C units.
- Adding heating/cooling to unconditioned areas of your home.

CENTRAL / DUCTED

Central heat pumps can use the existing furnace fan and ductwork to move heated and cooled air throughout your home. Unlike central A/C units, central heat pumps provide heating and cooling from a single system.

INSTALLED COST: \$4,500–15,000

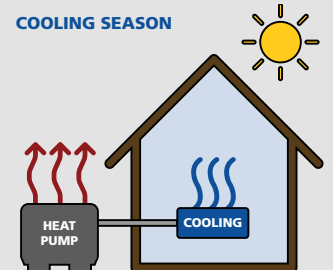
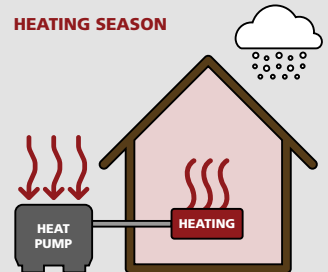
GOOD FIT WHEN:

- Already heating with forced air (with ductwork in place).
- Replacing central A/C or adding it for the first time.



OUTDOOR UNIT
above snow depth

HOW IT WORKS



Efficiently heat and cool with air source heat pumps

WHAT KIND OF HEAT PUMP DO YOU NEED IN MINNESOTA?

Air source heat pumps offer **the same cooling benefit as an air conditioner**, often at a higher efficiency.

If you want a heat pump to be your primary heating system, you'll need a "cold-climate air source heat pump" and a secondary heating system.

- **What makes a heat pump fit for our cold climate?**

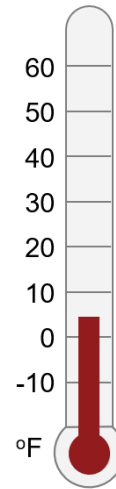
It heats efficiently down to 5°F and even lower in many cases.

- **What is a secondary heating system?**

It supports the heat pump on the few weeks a year when it gets very cold. Often, you can simply keep your existing heating system in working order.

If your home is currently **heated with electricity**, with a cold-climate air source heat pump, you could see **55% bill savings**. For **propane**, **30% bill savings or more**.

If your home is currently **heated with natural gas**, efficient natural gas furnaces have been an affordable way to heat Minnesota homes. A cold-climate air source heat pump or one of the many other heat pump options can provide efficient cooling and economically offset your furnace operation in the in the spring and fall for heating.



DID YOU KNOW?

Heat pumps **move** heat and that takes **far less energy** than conventional heating systems which **create** heat.

You can even extract heat from extremely cold outside air!

TIP: To maximize your savings, get a home energy assessment to find out if your home's insulation and air sealing could be improved — and much more!

Learn more: cleanenergyresourceteams.org/assessment

NEXT STEPS

- 1 **Contact your electric utility provider**

Learn about your electric utility's rebates, rate options, and requirements around participating or qualified contractors.

- 2 **Get 2-3 bids from skilled contractors**

If your utility doesn't have contractor requirements, visit MN ASHP Collaborative Preferred Contractor Network: mnashp.org/preferred-contractor-network-homeowners

- 3 **Ask contractors the right questions**

Beyond checking whether they are insured and licensed, ask them to calculate your home's heating and cooling load. Other questions to ask will vary depending on what you want out of your heat pump (cooling, heating, both). Visit our website for more questions to consider.

FIND MORE RESOURCES

CleanEnergyResourceTeams.org/ASHP