

ENERGYWISE

Air-Source Heat Pumps

DUCTLESS / MINI-SPLIT

A ductless, or mini-split, air-source heat pump does not require ductwork in your home. There is one outdoor condenser connected to one or more indoor air distribution units. Indoor units are typically mounted on the wall, floor or ceiling. The individually-controlled indoor units allow for zoned heating and cooling, which maximize comfort and energy savings.

A good fit when:

- Already heating with radiators, in-floor, or electric baseboard heat
- Getting rid of window air conditioners or adding home cooling

Installed cost:

- \$2,500 – \$8,500

CENTRAL / DUCTED

A central air-source heat pump uses existing ductwork to distribute heated and cooled air throughout your home. The outdoor condenser is connected to the indoor furnace fan. Unlike a central air conditioner, a central air-source heat pump provides both heating and cooling in a single system. **A registered HVAC contractor must apply and submit this rebate information to Dakota Electric.**

A good fit when:

- Already heating with forced air (with ductwork in place)
- Replacing a central air conditioner or adding one for the first time

Installed cost:

- \$4,000 – \$8,000

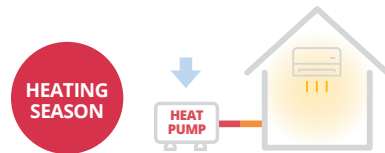
CONTACT THE ENERGY EXPERTS®

Before investing in a new heating system, get a home energy audit. Contact our Energy Experts at 651-463-6243.

An air-source heat pump (ASHP) uses electricity to heat and cool. It works like an air conditioner to cool, and works in reverse to move warmth from outside air into your home to heat. It heats a home up to three times more efficiently than forced-air and electric-resistance heating systems.

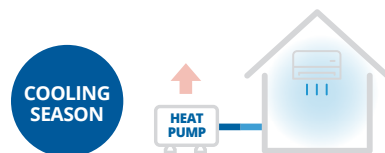
HEATING WITH AN ASHP

If you want an ASHP to be your primary heating system, you'll need a cold climate ASHP (ccASHP) and a back-up heating system. While ccASHPs are more expensive upfront than ASHPs, there is a potential for heating-fuel cost savings if you already heat with electricity or propane. An ASHP's heating performance is noted with its HSPF (heating season performance factor).



COOLING WITH AN ASHP

ASHPs and ccASHPs offer the same cooling benefit as an air conditioner (A/C). An ASHP's cooling performance is noted with its SEER (seasonal energy efficiency ratio), same as you would see for A/C units. Look for SEER 15 or higher for improved energy efficiency.



NEXT STEPS

1. Determine whether a ductless or central ASHP will work best with your existing heating system.

2. Check with Dakota Electric on rebates and off-peak programs. Rebates of up to \$630 and a low, off-peak rate will save you even more.
3. Find a few certified registered contractors.* You must use a registered contractor to qualify for Dakota Electric's rebates.
4. Ask contractors the right questions:

- Does the company have a state license for HVAC?
- Are they insured?
- How long have they been in business?
- Can they send a NATE-certified or other technician with education credits or experience on ASHPs to my home?
- Tell the contractor your needs (cooling, heating, both). If heating through the winter, ask for a "cold climate ASHP."

STANDARD PERFORMANCE AIR SOURCE HEAT PUMP

Highly efficient down to 32° F
Look for HSPF 8.5 or higher

PREMIUM PERFORMANCE COLD CLIMATE AIR SOURCE HEAT PUMP

Highly efficient down to 5° F
Look for HSPF 9 for central or HSPF 10 for ductless

*A registered HVAC contractor is someone who is currently registered through www.hvacredu.net. These registered contractors have agreed to the terms of the program and passed a test demonstrating their knowledge of quality installation practices. To find a registered contractor, visit www.hvacree.net/gre/public_search.cfm.