



DUCTLESS HEATING & COOLING

How does it work?

In the summer, a heat pump uses a refrigeration cycle to move heat from your home to the outside just like an air conditioner. In the winter, with the refrigeration cycle run in reverse, a heat pump moves heat from outdoors into your home.

- Indoor unit is an air handler, circulating room air across refrigerant coils.
- Outdoor unit is a compressor responsible for keeping coils hot or cold.



The advantages of ENERGY STAR® Certified Ductless Heat pumps

Used for decades in Europe and Asia, ductless mini-split heat pumps differ from traditional home heating and cooling systems because they:

- **Provide both heating and cooling through a single device—a heat pump**
Heat pumps have been used for decades, mainly in Southern climates.
- **Avoid ductwork**
Instead of difficult-to-install, leaky and bulky ductwork, ductless mini-split heat pumps use an *indoor unit* connected to an *outdoor unit* via *refrigerant lines* (which only need a three-inch hole in an outdoor wall for installation). Up to eight indoor units can be attached to one outdoor unit.
- **Allow for different climates in each room**
Each indoor unit can provide customized heating and cooling—using wall consoles, remote controls and smart phone apps—in each conditioned space.
- **Cut heating costs in half compared to conventional electric heating systems**
Because they transfer instead of generate heat, ENERGY STAR certified ductless mini-split heat pumps use 60% less energy than standard home electric resistance-based heating systems.
- **Cut cooling costs by 30% compared to conventional room air conditioners**
ENERGY STAR certified ductless mini-split heat pumps use sophisticated compressors and fans that can adjust speeds to save energy.

Ductless mini-split heat pump models that have earned the ENERGY STAR are identified by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI).

Common Applications of Ductless Heat pumps

Ductless mini-split heat pumps are increasingly being used in these situations:

- Older homes with electric heating systems like baseboard, furnace, wall heaters, or electric radiant.
- Homes with no ductwork (radiators or baseboard heat) and no central air previously.
- Low system efficiency.
- New construction of homes in areas with high fuel costs.
- Additions or outbuildings where extending ductwork or cooling/heating capacity is not feasible.
- Rooms that are not regularly occupied; an indoor unit can be turned off to save money.
- Spaces adjacent to areas where ductwork would be exposed to harsher temperatures, like a guest room above a garage.
- Older commercial buildings with no existing ductwork for air conditioning or expansions.



REBATES AVAILABLE

ENERGY STAR certified ductless heating and cooling systems are eligible for rebates from ECE.

CONTACT US

To save energy and money, call your ECE energy expert at 1.800.254.7944 or visit eastcentralenergy.com.

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