



## 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](http://eastcentralenergy.com).

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