# ENERGY STAR® Certified Mini Split Heat Pumps

## An Ultra Efficient Way to Comfortably Heat and Cool Your Home

Keeping your home at a comfortable temperature can be expensive. A typical household's energy bill is around $1,900 annually, and almost half of that goes to heating and cooling! To cut these costs, an increasingly popular and highly versatile system called a mini split heat pump can be professionally installed to comfortably heat and cool your home. Mini split heat pumps that earn the ENERGY STAR label are independently certified to save energy, save money, and protect the climate.

### Benefits of a Mini Split Heat Pump

- **Cut heating costs in half compared to conventional electric heating systems.** An ENERGY STAR certified heat pump is so efficient it can deliver up to three times more heat energy to a home than the electrical energy it consumes. This is possible because a heat pump moves heat rather than converting it from fuel, as combustion heating systems do.
- **Provide quiet, high efficiency cooling.** ENERGY STAR certified mini splits use more sophisticated compressors and fans that can adjust speeds to save energy and money. They also cool directly from the unit, rather than passing through a network of fabricated ductwork, eliminating energy losses from ductwork which can account for more than 30% of a home's energy use for space conditioning.
- **Reducing greenhouse gas emissions.** A mini split is good for your home and good for the planet. ENERGY STAR certified systems used in a whole house setting avoid more than 17,100 lbs of greenhouse gas emissions, on average, over the course of their lifespan compared to standard systems.
- **Heating and cooling in one device.** Mini split heat pumps offer

### What is a Mini Split Heat Pump?

**Ductless heat pumps, or mini split heat pumps, are an alternative to radiator or baseboard heating, as well as a replacement for window units for cooling. No duct work is needed. Instead, a head unit, or multiple head units, are mounted on an interior wall or ceiling, with an accompanying unit outside (Figure 1). The outside unit extracts heat from the air, even when it's cold. Refrigerant carries the heat directly to the head(s) inside, which then delivers heated air to occupied space. In warmer months, the system works in reverse for quiet, efficient air conditioning.**


Figure 1. Ductless Mini Split Heat Pump Installed

ENERGY STAR® is the simple choice for energy efficiency. For more than 25 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Learn more at energystar.gov/products/ductless_heating_cooling.

highly efficient heating and cooling in one integrated system.

- **Easy, ductwork-free installation.** Mini splits use narrow refrigerant lines positioned outside your home to deliver heating and cooling instead of conventional central heating and cooling which requires bulky, and often expensive ductwork. Only a three-inch hole in an outdoor wall is needed for the refrigeration lines to connect the outdoor unit to the indoor unit.
- **Custom comfort anywhere in your home.** Mini splits can maintain different customized temperatures in each

## Is a Mini Split Heat Pump Right for You?

Mini splits are increasingly being used in the following situations:

- Homes with costly electric heat (e.g., baseboard, furnace, wall heaters, electric radiant) will benefit from cooling.
- Older homes with no existing ductwork (e.g., radiators or baseboard heat) that have never had central air conditioning before.
- Existing homes with high fuel costs.
- Additions or outbuildings (e.g., shed, barn, garage) where extending ductwork is difficult.
- Spaces adjacent to unconditioned spaces where ductwork would be exposed to harsher temperatures (e.g., a guest room above a garage).
- New high-efficiency homes, including ENERGY STAR certified homes.
- Older commercial buildings with no existing ductwork for air conditioning or expansions.
- Where hot or cold spots exist within homes including spaces which serve as home offices.

Mini splits come in a variety of styles to meet the unique heating and cooling applications and customer preferences to provide efficient comfort that traditional systems cannot provide. Styles include wall mounts, floor mounts, ceiling cassettes, and ducted options that can be concealed.

**What if I Live in a Cold Climate?** Many new ENERGY STAR certified mini split models excel at providing space heating even in the coldest of climates, as they use advanced compressors and refrigerants that allow for improved low temperature performance. If you live in a climate where winter temperatures regularly dip below freezing, talk to your contractor to choose an ENERGY STAR certified unit suited to your particular home.

Check out the **Clean Heating and Cooling** section of energystar.gov/homeupgrade to see if a mini split is right for you. Learn the symptoms of aging heating and cooling equipment and find product and rebate information.

## Take Advantage of Incentives

Thanks to the Inflation Reduction Act, there are incentives that can help you reduce the costs of installing an ENERGY STAR certified mini split heat pump - including a **federal tax credit covering 30% of the project cost** up to $2,000, available through December 31, 2032. Additionally, states are launching **rebate programs** for low and moderate-income households. Find all savings near you at www.energystar.gov/homesavings.

Many utilities also offer incentives for installing ENERGY STAR certified mini splits. Check with your local utility for more details, or go to for utility rebates near you: www.energystar.gov/rebatefinder.

### INTRODUCING ENERGY STAR HOME UPGRADE

Mini Split Heat Pumps are one of six high-impact, energy efficiency improvements for your home that are designed to work together to deliver significant energy and cost savings. Count on ENERGY STAR to help you transition from fossil fuels to a cleaner, healthier, and more comfortable home.

**energystar.gov/homeupgrade**