

# DUCTLESS HEAT PUMPS

## ADDING TO AN EXISTING DUCTED SYSTEM OR REPLACING A DUCTED SYSTEM

When upgrading to a ductless heat pump consider these two factors while working with a licensed HVAC contractor:

If you are keeping the existing system and supplementing a part of the home with a ductless heat pump, make sure to seal the existing ductwork at all joints, seams and connections with mastic to prevent conditioned air from leaking into attics or crawl spaces. Also, work with your contractor to ensure that the thermostat location is optimized for the new system.

If you are replacing the existing heat pump with ductless heat pumps, completely remove the old system and plug any holes and missing insulation.



Ductless heat pumps, or mini-splits, are a proven technology that can offer long-term energy and financial savings. These heat pumps function the same way as traditional heat pumps, by absorbing energy in the form of heat from one location and moving it to another, but they distribute indoor air without the need for ducts. The technology continues to grow in popularity as U.S. homeowners seek more energy efficient products. Specifically, a ductless heating and cooling system can be a great option for homeowners who wish to heat or cool individual rooms.

## DUCTLESS HEAT PUMP BENEFITS

### MORE EFFICIENT



Save up to 36% in annual heating and cooling costs\*



No ducts and no duct leakage



Long, quiet run times

### BETTER COMFORT



Keep rooms at individual temperatures



Integrated air filtration



Efficient fans vary speed to keep a consistent temperature



Many brands offer models that can connect a single outdoor unit to more than one indoor unit.

## BENEFITS

## CONSIDERATIONS

- ▶ Increased room comfort: Temperatures are more consistent and can be controlled in each zone.
- ▶ Monthly savings: Ductless systems have excellent Seasonal Energy Efficiency Ratios (SEER) of 16 or more, and Heating Seasonal Performance Factors (HSPF) of 8.5 or more, which is 8 to 36 percent more efficient than traditional ducted electric air source heat pumps.
- ▶ Heating and cooling in one: Ductless heating and cooling systems are a convenient solution for homes that previously used electric baseboard heat in the winter and window air conditioners in the summer, as one example of the many retrofit possibilities.
- ▶ Lower cost: No ducts make for an easier and more affordable installation process, and can save energy.

- ▶ Ductless heat pumps should be on your radar if you are looking to replace or supplement an existing heating and cooling system, putting an addition on your home or building a new one. Bonus rooms over garages, basements and sunrooms are common locations for ductless heat pumps.
- ▶ The more open the floor plan, the better the indoor air circulation.
- ▶ Ask for pricing from three different contractors to weigh your options. Be sure to contact several of each contractor's references to make sure that customers were satisfied.
- ▶ Contact your electric cooperative to inquire about relevant incentives or rebates.
- ▶ Ductless heat pumps look different and need wall or ceiling space to be mounted throughout a home. As with any new technology, it can take time to adjust to the appearance. However, the increased control, comfort and energy savings can be well worth it.

## COMMON MANUFACTURERS

• Daikin • Fujitsu • LG • Toshiba • Lennox • Panasonic • Mitsubishi Electric Trane HVAC US

## ESTIMATED ANNUAL HEATING AND COOLING ENERGY SAVINGS FROM REPLACEMENT\*

### Existing Heat Pump

### Replacement Heat Pump Efficiency Rating

Efficiency Rating	20 SEER, 10 HSPF	16 SEER, 8.5 HSPF
10 SEER, 7.0 HSPF	36%	30%
12 SEER, 7.5 HSPF	30%	17%
13 SEER, 7.7 HSPF	27%	13%
14 SEER, 8.2 HSPF	22%	8%

\*Savings estimated with the ENERGY STAR® Savings Calculator found at [www.sba.gov](http://www.sba.gov).