

Applications

- Displacing the home's heating load with a single- or multiple-head system or replacing entire heating load with multiple systems. In smaller homes, a single multi-headed system may replace entire load.
- Existing homes where plug-in electric heaters are confirmed as the primary heating system in the home.
- Single-family residential additions where the primary electric or nonelectric system's duct work has not been extended to the addition and/or where the current heating source in the addition is electric zonal.
- Only one ductless heat pump, or DHP, may be claimed per home, regardless of the number of outdoor or indoor units installed and regardless of the home's square footage.



Connect with the local serving utility to confirm pre- and post-condition requirements.

PRE-CONDITION:

Electric forced air furnace or electric resistance zonal heat (baseboards, wall heaters, IR panels, ceiling cable heat) as the primary heating system.

SPECIFICATION CHECKLIST

- HSPF2: Ductless or ducted mini-split must be a split-system heat pump employing an inverter-driven outdoor compressor, with inverter-driven or variable-speed indoor blower, that meets the current federal minimum HSPF2.
- DHP or ducted mini-split must be certified by the Air-Conditioning, Heating, & Refrigeration Institute (AHRI) and a copy of the AHRI certificate is required. For cooler climates, it's highly recommended to search for products on the [Northeast Energy Efficiency Partnership](#) cold climate air source heat pump database.
- DHP must be installed on a dedicated electrical circuit, according to manufacturer's specifications and the [Best Practices for Installing Ductless Heat Pumps Guide](#).

Recommended

May be required by your local utility.

- Systems should be designed, sized and selected to offset at least 30% of the building's heating load at the winter designated temperature for the home's location.
- When installing refrigerant lines, create new flares using appropriate R410A flaring tool and measurement gauge. **DO NOT USE** manufacturer-provided tubing flares and fitting.
- Set the outdoor unit on a stable, level surface and secure to the pad, risers and/or resting surface using bolts.
- Install outdoor unit in clear area that allows optimal airflow through fan.
- Insulation must cover entire line set length to avoid condensation and decreased efficiency, and protect the outdoor line set from insulation damage with rigid line hide and building-code approved line set protection.
- Condensate drains must slope downhill. They can be routed with the line set and run to a suitable termination point, away from crawlspaces and walkways.

AT A GLANCE

DUCTLESS HEAT Pumps

Installation Examples



DISPLACEMENT OF ELECTRIC-RESISTANCE HEAT IS INCENTIVIZED
Courtesy of NW Ductless Heat Pump Project



ONE INCENTIVE PER HOME, REGARDLESS OF THE NUMBER OF INDOOR HEADS
Courtesy of Better Built NW



HSPF2 MEETS THE FEDERAL MINIMUM HSPF2 PER SPECIFICATION
Courtesy of ENERGY STAR, U.S. Environmental Protection Agency



HSPF2 DOES NOT MEET THE FEDERAL MINIMUM HSPF2 SPECIFICATION
Courtesy of ENERGY STAR, U.S. Environmental Protection Agency



ALL LINE SET/REFRIGERANT LINES PROPERLY INSULATED
Courtesy of PTCS



LINE SET/REFRIGERANT LINES NOT COMPLETELY INSULATED
Courtesy of NW Ductless Heat Pump Project



CONDENSATE DRAIN IS CONNECTED TO DOWNSPOUT
Courtesy of NW Ductless Heat Pump Project



CONDENSATE DIRECTLY LEAKS ONTO A WALKWAY

MINIMUM REQUIRED DOCUMENTATION

Contact the serving [utility](#) for specifics on required documentation.

- Manufacturer, model number, type, size and quantity of product installed.
- Invoice showing order or purchase date, cost.

QUALIFIED PRODUCT LIST AND GUIDES

[Best Practices for Installing Ductless Heat Pumps](#)

PAIRS WELL WITH

- Prescriptive Air Sealing.
- Insulation.
- Heat Pump Water Heater.