Air-source heat pumps How does it work?

Unlike a furnace, an air-source heat pump doesn't burn fuel to make heat. It simply uses electricity to move heat from one place to another. Think of an air-source heat pump as a heat transporter constantly moving warm air from one place to another, to where it's needed or not needed, depending on the season. Even cold winter air contains some heat. When it's cold



outside, a heat pump extracts this outside heat and transfers it inside. When it's warm outside, it reverses directions and acts like an air conditioner, removing heat from your home.

Benefits

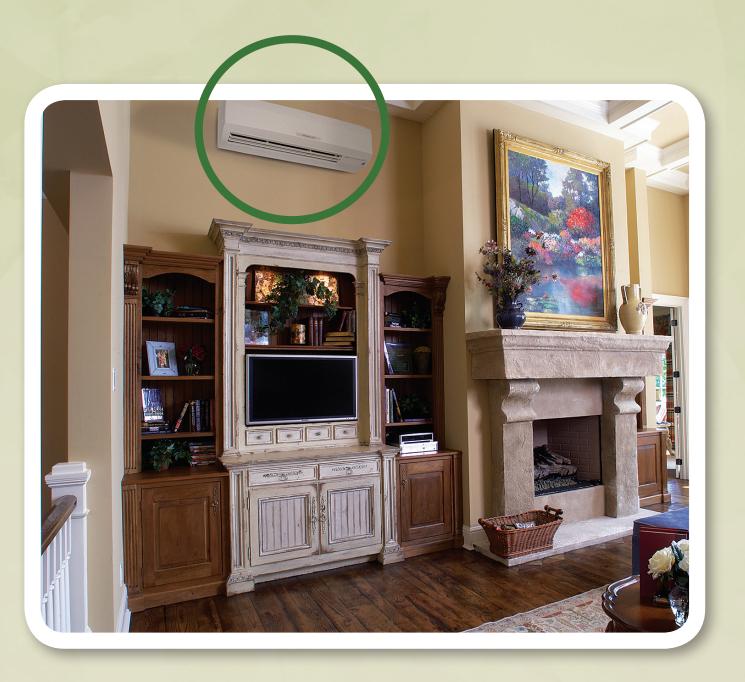
• A single system heats and cools your home for about 9 months of the year.

- Air-source heat pumps are energy-efficient because they move heat instead of generating it. The system delivers up to three times more energy than the electricity it consumes.
- Air-source heat pumps are typically simple to install and require little maintenance.
- Installation costs as low as \$2,500.
- Can be on off-peak meter if you already have off-peak.
- **BIG REBATES** (typical rebate is \$700 for qualifying air-source heat pump)

Applications

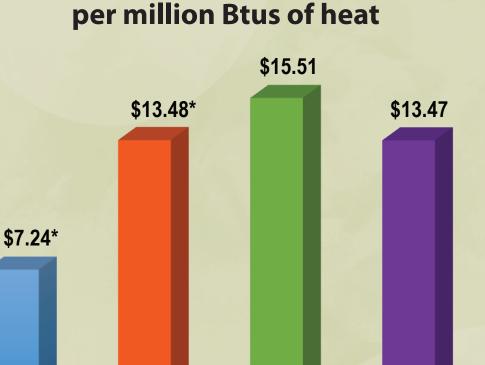
Standard air-source heat pump

A standard air-source heat pump is a self-contained unit that uses existing ductwork to both heat and cool. The system has two main components: an outdoor compressor unit and an indoor air handling unit. The two units are linked with refrigerant tubing and a connected electric supply wire.



Ductless mini-split heat pump

A mini-split heat pump is an economical and efficient option for homes without an existing ducted system or when adding ductwork may be impractical or too expensive. Similar to a standard air-source heat pump, a compressor unit is placed outside your home and is connected to an indoor unit by small cables and a refrigerant line. The indoor unit is typically mounted high on the wall of the room and can be pre-set to run automatically or be adjusted by a remote control.



Price difference in heating fuels

*Note: Outside temperatures fluctuate affecting the heat pump's efficiency. Efficiency and price per million Btus is estimated at 47 degrees F. Need additional heat like plenum heater in winter.

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Mini-split heat pumps are popular for homes without existing ductwork. The indoor units are positioned high on the wall and come in a variety of designs to match your existing decor.

Off-Peak Air-Source Propane 95% Efficient **Heat Pump Air-Source** 9 HSPF \$1.35/Gal. **Heat Pump** 9 HSPF 12.1 cents/kWh 6.5 cents/kWh

Contact Wayne or Kevin at

888-634-2202 for advice.

Natural Gas 95% Efficient \$1.28/Therm