



A heat pump saves money and provides peace of mind. A heat pump is the most advanced and efficient heating and cooling system available today. Upgrading your old heating system to a new electric heat pump can save you money on heating and cooling costs. A heat pump is clean, quiet and comfortable.



heat pump

HSPF rating, the greater the efficiency. HSPF ratings range from about 6.8 to greater than 8.

Be sure a professional sizes your heat pump.

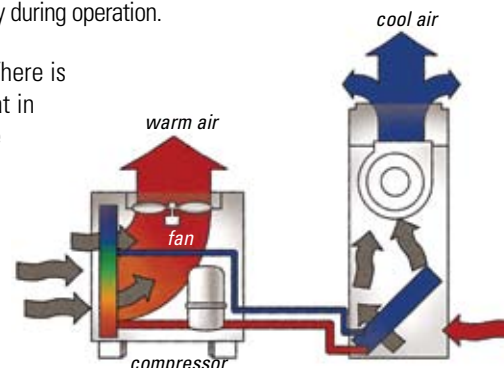
Selecting the right size equipment is very important in buying a new heat pump. A system that is too large will affect humidity levels, comfort levels, running time and efficiency. A heat gain and heat loss load calculation should be performed to determine the correct size heat pump for your specific home. A heat pump that is sized correctly is your best buy because it will remove more humidity as it cools, and use less energy than a larger unit that cycles on and off more frequently than necessary. Properly sized equipment helps keep your home comfortable and helps save you money.

How does a heat pump operate?

Cooling - In the cooling cycle a heat pump operates the same as a conventional air conditioner. Heat is moved from the inside of a home to the outside. It works by transferring heat from the air inside the home to refrigerant that flows to the outside where the heat is expelled using the outdoor unit.

Cooling Cycle - The indoor unit coil becomes a cooling coil, which takes warm, moist indoor air, cools and dehumidifies it to keep your home comfortable. Refrigerant inside the coil extracts heat from the room air as it passes over the coil and the cooled room air is then sent back to the rooms in the house. The refrigerant with its captive heat then goes to the outdoor unit where it releases the heat. The system then converts the refrigerant back to a much colder temperature as it returns to the inside cooling coil, completing the cycle. This cycle is repeated continuously during operation.

Heating - There is always heat in the outside air even in the winter. A heat pump uses this heat to

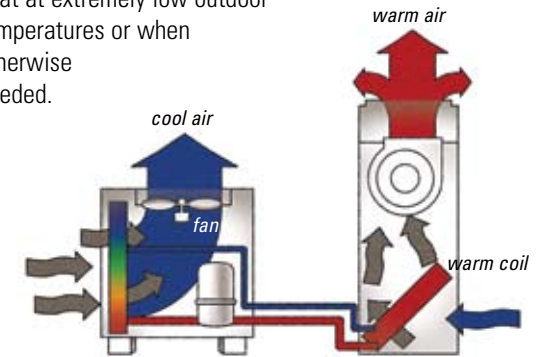


warm your home. It simply reverses the cooling cycle so that the refrigerant absorbs heat from the outside air and releases it indoors.



Heating Cycle - Refrigerant in the outdoor unit coil absorbs heat from the outdoor air. A compressor heats the refrigerant through the act of compression and pumps the hot refrigerant to the indoor unit coil. Air from your home is circulated over the coil, which heats the air and warms your home. The refrigerant then returns to the outdoor unit to absorb heat, thus completing the cycle.

Air source heat pumps are manufactured with supplemental heating elements to provide additional heat at extremely low outdoor temperatures or when otherwise needed.



What is a heat pump?

A heat pump is a cooling and heating system designed to keep your home comfortably warm in the winter and pleasantly cool in the summer. Unlike a furnace, it doesn't burn fuel to make heat – it moves heat from one place to another. In the winter, a heat pump collects heat from the outside air and transfers it into your home. The heat pump is able to collect heat from the outside air even at temperatures well below freezing. In the summer, it takes heat from inside your home and transfers it outdoors, leaving you cool.

Why are efficiency ratings important?

Cooling - Heat pumps are rated by a Seasonal Energy Efficiency Ratio (SEER). The higher the SEER, the greater the efficiency and the less it costs you to cool your home. The rating is much like the MPG rating for an automobile. The minimum SEER rating on equipment manufactured today is 13 SEER. Higher SEER rated equipment is widely available and efficiency ratings will vary according to the BTUH size and brand selection. A unit with a high SEER rating may cost more initially but, because of its low operating cost, it will pay for itself over time.

Heating - Heat pump heating efficiency ratings are expressed as the Heating Seasonal Performance Factor (HSPF). Just like the SEER rating for cooling, the higher the

Dual Fuel Heat Pumps

A dual fuel heat pump system combines a high efficiency heat pump and an existing home furnace to create a system that heats, cools and saves energy and money. A dual fuel heat pump combines a high efficiency electric heat pump with a natural gas, propane or oil furnace. A dual fuel heat pump can be added onto your present system and boost its overall efficiency. In this type of system, the heat pump offers both summer cooling and primary winter heating. The furnace serves as backup during extremely cold weather when a control automatically switches off the heat pump and activates the furnace. When outdoor temperatures begin to rise, the furnace is shut off and the heat pump becomes the primary heating source once again.



Heat Pump Advantages

- Saves you money on heating and cooling costs
- Cools and heats
- Year-round comfort
- Extended equipment life
- Clean
- Quiet
- Efficient
- 100% financing available with approved credit

Call Alabama Power for more information

If you have questions concerning the performance of a heat pump or need a list of State of Alabama certified HVAC contractors in your area call your local Alabama Power office or call 1-800-990-APCO (2726). The heat pump is proven as the most efficient and economical choice for year-round heating and cooling. And when properly maintained, it is designed to provide reliability and comfort and last an average of 20 years here in the Southeast.



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save money and energy

heat pump

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clean, quiet and efficient

a simple guide to the energy-efficient heat pump



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