Air Source Heat Pumps

Efficient heating and cooling you can trust.

Heating and cooling might be complete opposites, but having an air source heat pump can provide you with both. By using the dependable, efficient electric power many people have come to trust, you can choose an air source heat pump with confidence. Unlike natural gas and propane prices, electric rates have remained relatively stable over the years.

Cool Comfort, Toasty Warmth

During the summer months, air source heat pumps operate a lot like air conditioners. They reject the heat outside by using a refrigerant to transfer heat from inside your home to a compressor outside where there are a set of coils that remove heat from the refrigerant and return it to the house to cool the air. During the winter months, the air source heat pump finds heat in the outdoor air and pumps it into your home. The advantage is that it takes less electrical energy to pump heat than it does to convert electrical energy into heat. In a nut shell, an air source heat pump reverses the air conditioning process by using the same refrigerant to bring heat indoors. In very cold weather additional heat is provided by resistance coils.

Safe, Clean and Efficient Air

Heat pumps do not produce any harmful gases such as carbon monoxide; therefore, they do not need to be vented. Your heat pump will provide you with safe, clean, and efficient air. In addition to that, a properly sized and installed heat pump can reduce heating costs by up to fifty percent compared to electric furnaces. In fact, you can get three times as much heat out of each watt of electricity than you can get from an electric furnace.

Advanced Technology

Today's high efficiency air source heat pumps can provide families with consistent comfort in their homes. Over the years, many improvements have been made to the coil and motor design with variable speed blowers and sophisticated thermostatic expansion valves. Not only can air source heat pumps provide you heating and cooling, they may also provide functions of air-cooling, air-circulation, air-cleaning, dehumidifying, or humidifying.



Ground Source Heat Pumps

Digging into the Earth to heat and cool your home.

Did you know that underneath your yard is a reliable source of cool comfort for the hottest summer days and toasty warmth for the coldest winter days? A ground source heat pump gives you a resourceful, durable way to tap into that source. Best of all, there is no need for separate furnace and air conditioning equipment.

Capturing the Heat

Just a few feet below the ground surface, the temperature stays a steady 55 degrees year round. Ground source systems have underground pipes and environmentally friendly liquid to transfer the heat from the ground to your home. Ground source systems capture a steady supply of heat energy and move it from the earth and through a home or building. They use less energy than conventional heating and cooling systems, save money each month, and reduce the amount of pollution produced by fossil fuel systems.

Cool Comfort, Toasty Warmth

Believe it or not, even when there is snow on the ground, the underground temperatures stay toasty. The ground source system brings those toasty temperatures into your home. Once the heat is transferred inside your home, an electric air handler distributes it throughout your ductwork. In the summer months, the ground source system reverses into a cooling mode. The system transfers the heat from inside your home into the ground, where it dissolves easily.

Efficient and Cost Effective

Ground Source Heat Pumps are more efficient than the conventional electric heating and cooling systems. They can use considerably less electricity than standard heating and cooling systems. Because they are more efficient, ground source heat pumps usually pay for themselves in five to ten years through energy savings.

Safe and Reliable

With no combustion ground source systems do not produce any dangerous gases. It is a safe and clean heating and cooling system that you and your family can trust. Not only is it safe, but the maintenance on these systems is minimal. Most systems only need their filters changed and an occasional vacuuming of the heat exchanger coils.

Economical Hot Water

Some ground source systems use excess heat from the compressor to warm your hot water tank. When a desuperheater is installed, energy from the ground source heat pump can be transferred to the hot water tank. As a result, some homes can receive very low cost hot water in the summer and can cut water heating costs in half during the winter months.

