

# Geothermal Systems



**Advice when you want it.  
Help when you need it.**

## Using the Earth to heat and cool your home.

Looking for affordable heating and cooling? Underneath your yard, there's a reliable source of cool comfort for the hottest summers and warmth for the chilliest winters. A geothermal system gives you an efficient, durable way to tap into that source, with no need for separate furnace and air-conditioning equipment.

### Help from Nature

Just a few feet underground, the temperature stays a steady 55° all year long. Geothermal systems use underground pipes and an environmentally friendly liquid to transfer heat between your home and yard.

### Warm and Comfortable

Even when there's snow on the ground, underground temperatures are toasty. The geothermal system brings that heat into your home, where an electric air handler distributes it throughout your ductwork.

### Cool and Quiet

During the summer, it's cooler underground, so the geothermal system reverses the process and transfers heat from inside your home into the ground, where it dissipates easily, with no effect on plants or animals. There's no noisy outside unit, either!

### Efficient and Environmentally Sound

Geothermal systems are several times more efficient than gas furnaces, and use the limitless resource of the ground's natural temperature. That means you can feel good about choosing geothermal. In addition, because they're more efficient, they usually pay for themselves through energy savings in just five to ten years – and keep saving you money after that!

### Safe and Reliable

Unlike heaters that warm homes through combustion, geothermal systems do not produce dangerous gases such as carbon monoxide. They provide safe, clean heating and cooling for your family. Because there are few moving parts, geothermal systems are more reliable and last longer than furnaces. And, with most geothermal systems, maintenance is limited to changing filters and occasionally vacuuming the heat exchanger coils.

### Free Hot Water

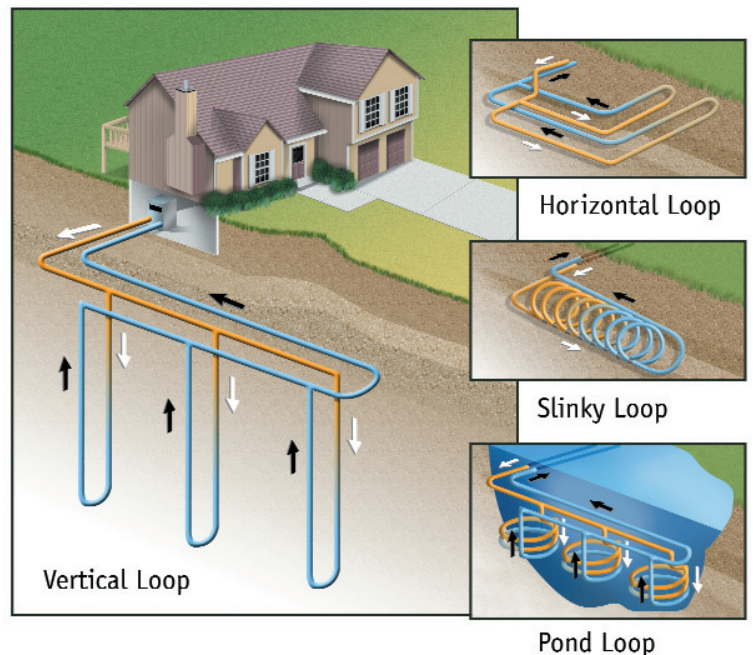
Some geothermal systems use excess heat from the compressor to warm your home's hot water tank. During the summer, they generate enough heat to meet many homes' hot water needs, and can cut wintertime water heating costs by as much as half.

### Added Warmth Available

The geothermal system can handle most of the home's heating needs down to a set temperature. Below that temperature, it is paired with another type of furnace to provide supplemental heat for the coldest days.

### Right for You?

Your Energy Advisor can explain the benefits of geothermal systems and help you determine whether one is the right choice for your home.



A network of pipes filled with an environmentally friendly liquid brings underground heat into your home during winter, and moves the heat from indoors to under the ground in the summer. An electric air handler indoors uses a quiet, efficient blower to distribute the air throughout your home.

