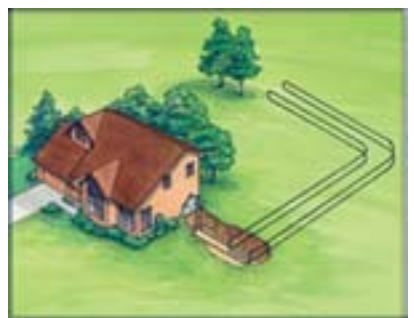


Geothermal Heating Cycle

During the heating cycle, the fluid circulates through the loop extracting heat from the ground. The heat energy is transferred to the geothermal unit. The unit compresses the extracted heat to a high temperature and delivers it to your home through a normal duct system or a radiant heat system.

Horizontal Loop



HOW GEOTHERMAL WORKS
 Your own backyard has the potential to be an energy source for heating and cooling comfort. Outdoor air temperatures fluctuate throughout the year with the changing seasons. In contrast, ground temperatures about four to six feet below the Earth's surface remain relatively moderate and constant all year. That's because the Earth absorbs 47% of all the heat energy that reaches its surface from the sun. A geothermal system circulates a water based solution through a buried loop system to take advantage of these constant temperatures. A single piece of equipment has the ability to heat and cool your home, while providing some or all of your home's hot water as well. Geothermal systems save you 30% to 70% on your monthly utility bills.



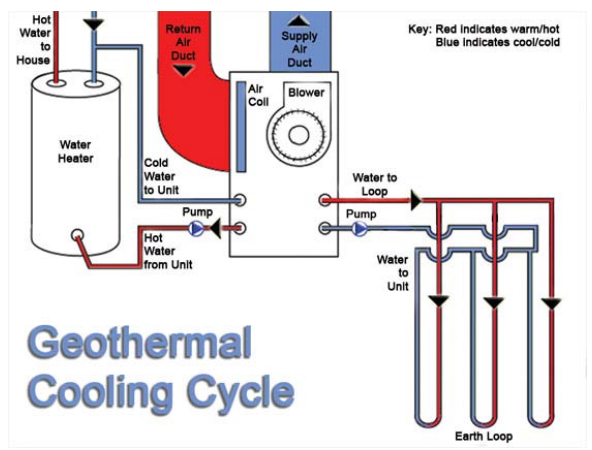
**The Heart of the System:
 Geothermal Loops**

Pond



Loop

Vertical Loop



Geothermal Cooling Cycle

For cooling, the process is simply reversed. Because the earth is much cooler than the air temperature on a hot day, the geothermal system removes heat from the home and deposits it into the ground. The fluid is cooled by the ground temperatures and returned to the unit for cooling your home.