



We had heard about Geothermal heating and air conditioning for many years but we really didn't understand how it works. This is how I now understand geothermal. Take a frying pan and place it in a 500 degree oven for 30 minutes. Take it out and try to cool the frying pan by waving it in the air. It's not real effective. Now take the frying pan out of the oven and try cooling it with water. Geothermal is like cooling the frying pan with water and traditional air conditioning is like waving the frying pan in the air. Our builder, Mike Gilles, told us that geothermal is 28% more efficient than traditional air conditioning systems and 300% more efficient than natural gas heating. I'm not sure how the numbers were calculated but I'm convinced that geothermal is more efficient.

We chose to use two ClimateMaster Tranquility 27 geothermal units. We have nine 200 ft. deep closed loop wells that serve as the heat sinks for the system. ClimateMaster is the world's largest and most progressive leader in clean, green, renewable geothermal technology. ClimateMaster leads the way with its award-winning Tranquility Series geothermal heat pumps. ClimateMaster's products are produced in Oklahoma City, OK at a state-of-the-art facility.

Installing ClimateMaster Contractor for Eco-Tech Home:

[Comfortworks, Inc.](#)

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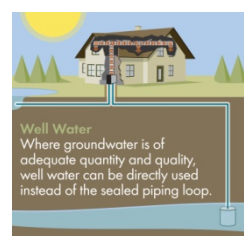
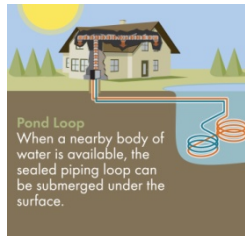
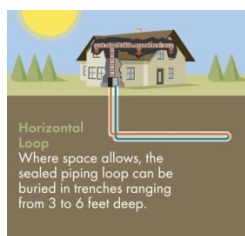
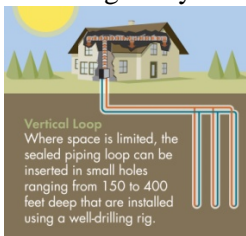
Geothermal Technology

Wherever you live, the temperature beneath your home remains constant regardless of the season. ClimateMaster geothermal heat pump systems harness the stable underground temperature to provide heating, cooling, and hot water at remarkably high efficiencies. So high, in fact, that energy use can be cut by up to 80%.

Nearly half the solar energy our planet receives is absorbed by the ground. As a result, below the surface the earth remains a constant moderate temperature year-round. This provides an ideal source for heating and cooling your home. Geothermal systems use a sealed underground loop piping filled with circulating water and an ultra high-efficiency Tranquility heat pump to exchange heat between your home and the earth.

In the winter, the earth is your source of heat. Water circulating in the loop piping absorbs heat from the earth and carries it to the heat pump, where it is concentrated and sent as warm, comfortable air throughout your home.

In the summer, the earth is your source of cooling. The heat pump absorbs heat from the air in your home and transfers it to water circulating in the loop piping where it is absorbed by the earth. This provides cool, dehumidified and comfortable air throughout your home.



ClimateMaster Equipment

The Tranquility Series provides the highest energy efficiency of any space conditioning system available. Efficiency equals savings, and geothermal heat pump systems substantially reduce operating costs over even the most efficient traditional systems.

The Tranquility's advanced design includes two-stage operation and variable-speed fan. This provides higher efficiency, quiet operation and automatically adapts to provide the optimum comfort no matter what the weather is outside. We expect that our systems will only use the second stage if we are entertaining a large group of people. The variable speed blower motor helps even out hot or cold spots in your home and eliminates the air blasts you feel with traditional systems. The Tranquility assures you of blissful comfort, maximum efficiency and low utility bills.

To reduce noise, the Tranquility Series was designed and tested in our own certified sound lab, an industry exclusive. This series uses a double compressor isolation system that eliminates vibration and an acoustically lined cabinet. Also, unlike traditional systems, geothermal heat pumps have no noisy outdoor fans to disturb you or your neighbors and in most cases there is not outdoor equipment.

The Tranquility Series is designed for a long service life, assuring you of savings for many years to come. Exclusive electronic controls provide worry-free operation. Each unit is backed by a 10-year limited warranty. Underground pipe provided by ClimateMaster carries a 50-year limited warranty.

Over 70% of the total energy used in a typical home is for heating, cooling and water heating. With a geothermal heat pump system, up to 80% of this energy comes free directly from the earth. A federal tax credit saves you 30% on the total cost when you install your geothermal heat pump system. Check with your state and local utilities to find out if other incentives.



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