



by John Michel President Haller Enterprises, Inc.

with a GEOTHERMAL HEAT PUMP

oday, homeowners have a wide range of options when it comes to heating and cooling their homes, but with its many benefits, including up to 70% savings on your heating and cooling costs, a new geothermal heat pump system may be right for you.

How does Geothermal work?

A geothermal heat pump works much like a standard heat pump you would use to heat and cool your home. However, instead of using the outside air as a starting point, geothermal takes advantage of the ground

temperature. The ground remains a constant temperature throughout the year, with an average temperature of 50°F. Geothermal utilizes the ground's temperature to take advantage of this renewable energy

What are the benefits of **Geothermal?**

The design of a geothermal heat pump allows for a more efficient operation than a standard heat pump. which means it also has lower opercausing the system to work less than a standard air conditioner to create the same comfortable living space. In both cases the geothermal system uses less energy and therefore saves more money.

source to heat and cool the home.

ating costs. For instance, in the winter a standard heat pump would pull in outside air that is 30°F and warm it to the desired room temperature, say 68°F. The geothermal system starts at approximately 50°F (the ground's temperature), and uses less energy to warm the air to the same 68°F. In the summer, the geothermal system starts at a lower temperature than the outside air



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888.625.1500 HallerEnterprises.com Serving the Central and Southeastern PA region, Haller Enterprises provides a full range of plumbing, heating, cooling, electrical, water conditioning, and home automation services for residential, commercial and remodeling projects. Haller's commitment to fast, reliable service over the past 30+ years has contributed to the company's growth and high levels of customer satisfaction. Haller provides a wide range of products and services to keep your family comfortable and safe. From your annual system checkup to installation of high efficiency equipment, indoor air quality products, water treatment solutions and 24/7 emergency service, Haller's highly trained technicians handle comfort, safety and energy efficiency issues in homes and businesses every day.

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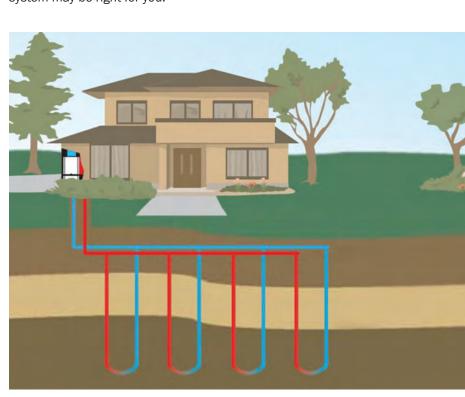
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Geothermal heat pumps are also environmentally friendly, with most systems being ENERGY STAR certified. In fact, the U.S. Environmental Protection Agency (EPA) considers

"There is currently a federal tax credit that reimburses 30% of the cost to install a geothermal heat pump system. The credit is set to expire on **December 31, 2016.**"

geothermal systems to be the most energy-efficient, environmentally clean, and cost-effective heating and cooling systems available.

In addition to saving money on your energy bills and being environmentally friendly, geothermal systems typically last up to 20 years while a typical heat pump lasts 10 to 12 years. Other conveniences include no outdoor units and quiet operation. With no combustion in the unit there is also no chance of carbon-monoxide poisoning. High indoor air quality can also be created with high efficiency air filters.





Common Cooling Problems

My unit is iced over! If your unit is frozen (air conditioner or heat pump), you could have either a clogged air filter or the unit may be low on refrigerant. Check and clean the unit's filter, and if this does not solve the problem, call Haller Enterprises to schedule a service call. Our certified technicians will check the refrigerant level and refill as needed.

I have no cooling! Is the unit running? If not, have you reset the breakers? Sometimes a storm will cause them to shut down and resetting the breakers is all that needs to be done. If the unit still does not start, call Haller Enterprises to schedule a service call.

My air conditioner is running but there is no air coming out! Have you changed the filter recently? Clogged filters will restrict airflow and sometimes even cause an air conditioner to stop running. If the filters are clean and you still have no air coming from your system, call Haller Enterprises to schedule a service call.

My air conditioner is turned off but the unit in the basement is still running! Have you checked the thermostat? Is the fan switch in the on position or auto? If it is in the on position the fan will continue to run. If you switch it to auto when the air conditioning is off, the fan should stop running. The auto position brings on the fan only when your thermostat calls for air conditioning.

Why should I look into a Geothermal system now?

While geothermal systems generally have a higher initial investment than a standard heat pump, the energy savings will make up the difference faster than other heating and cooling systems. In fact, many systems pay for themselves within 7 to 10 years, depending on your current system and fluctuating fuel costs. Plus there is currently a federal tax credit that reimburses 30% of the cost to install a geothermal heat pump system. The credit is set to expire on December 31, 2016.

If you are ready to replace your home's heating and cooling system, or are looking to install a system that will save you money and is environmentally friendly, make sure to schedule a Haller Comfort Consultant for a free evaluation.

For more information on geothermal heat pumps and to find out how to schedule a consultation, visit Hallerent. com.

R&A



