

Farrar Green Home Geothermal Heating & Cooling



What is a Geothermal Heating & Cooling?

You don't need to be living over a volcano to use geothermal heating and cooling for your home or business! Although common in the Midwest and other parts of the world, most Californians have never heard of geothermal systems. The U.S. Environmental Protection Agency (EPA) has called "ground-source heat pumps the most energy-efficient, environmentally clean, and cost-effective space conditioning systems available". They use only third of the power of traditional systems and are completely emission free. And there is currently a 30% federal tax credit to encourage people to install these renewable and sustainable energy systems.

How Does it Work?

A geothermal heat pump works like your refrigerator, except the coils are underground, and the pump can run in two directions, either heating or cooling. In Escondido, the average temperature 6 feet underground is 70°F. Instead of cooling 100 °F summer air with an air conditioner and heating 30 °F winter air with a gas heater to make your home a comfortable 70 °F, a geothermal system quietly transfers the 70°F earth temperature into your home. The Farrar Green Home geothermal system uses a 300ft Kelix Thermacouple™ ground loop which was installed in a 300 ft, 6" wide bore hole drilled into the earth near the home. This Thermacouple™ is filled with water which is pumped through a 4 ton (or 48,000 BTU) ECONAR Heat Pump. The heat pump transfers the heat from the house to the ground in the summer and from the ground to the house in the winter. And like your refrigerator, it does all of this quietly, and cleanly and with little maintenance.

Benefits:

- Uses one third the power of traditional systems
- Powered by PV solar panels
- No gas needed
- No carbon emissions
- Clean
- Quiet
- Virtually no maintenance
- Excess heat to hot water system
- Heats the pool and spa too!
- A path to a Net Zero Energy Home

