

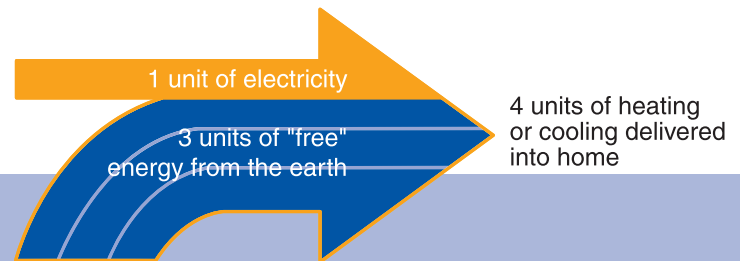
> GEOTHERMAL COMFORT SYSTEMS



GEOSMART
ENERGY

> THE SMARTER CHOICE

Because it burns no fossil fuels, a GeoSmart Energy heating and cooling system is the most cost-effective, energy-efficient and environmentally friendly way to condition your home. With the use of our state-of-the-art products, you can emPower yourself and take control of your fluctuating energy costs, while making your home more comfortable than it's ever been. No matter the weather; you can save up to 60 percent on your monthly utility bills; protect the environment and greatly reduce your energy usage.



> GEOTHERMAL BENEFITS

ENERGY EFFICIENT: GeoSmart Energy systems are rated number one in energy efficiency because they can deliver an astounding four units of energy for every unit of electrical energy used.

COST EFFECTIVE: Because of the extraordinary efficiency of a GeoSmart Energy system, any added investment related to installing a geothermal unit is usually more than offset by your energy savings.

COMFORTABLE: Capturing the relatively stable temperature of the Earth to heat and cool your home, GeoSmart Energy systems provide consistent, comfortable heating and cooling.

RELIABLE: The GeoSmart Energy reputation for reliability has been earned by using only the highest-quality components, design and workmanship. Like your refrigerator, your geothermal unit will provide many years of dependable operation.

QUIET: GeoSmart Energy systems do not require noisy outdoor units that can disturb your peaceful surroundings or create unsightly additions to your homes appearance. All visual components are conveniently located in your mechanical room.

SAFE: Because fossil fuel is not required to operate a GeoSmart Energy unit, there is no combustion, flames or fumes and no chance of carbon-monoxide poisoning.

FLEXIBLE: One compact GeoSmart Energy unit provides heating, air conditioning and partial domestic hot water.

CLEAN: Standard high-efficiency electrostatic air cleaners found in all GeoSmart Energy systems keep your indoor air quality clean, removing dust and pollen so you can breathe easier.

ENVIRONMENTALLY FRIENDLY: GeoSmart Energy systems harness free, renewable energy and provide an environmentally friendly way to heat and cool your home. Installing a GeoSmart Energy system is the environmental equivalent of planting an acre of trees or removing two cars from the road.

> PRODUCT SERIES

ENVIRONMENTALLY FRIENDLY R410-A PRODUCT SERIES

PREMIUM E: The Premium E sets the industry standard for performance, efficiency and quality. Available in packaged and split configurations, GeoSmart Energy's Premium E has several options for new construction or retrofit; large or small homes. Premium E models use the environmentally safe, non-ozone-depleting R410-A refrigerant. This unique blend is the "refrigerant of the future." Premium E units are available with three compressor options: Bristol single-speed reciprocating from 2 to 3 tons; Copeland Scroll from 3.5 to 6 tons; and Bristol Twin Single dual-capacity from 3 to 6 tons. Additional features include soft-start variable-speed ECM or 3-speed PSC blower motors, optional domestic hotwater generators, durable cabinet construction with poly paint for long-lasting protection, microprocessor controls for maximum efficiency, on-board diagnostics, and e-coated air coils. Heating COP's can be up to 4.7.

PREMIUM EW-HYDRONIC HEAT PUMP: Designed for residential hydronic systems, the Premium EW Hydronic Heat Pump system has the industry's highest efficiencies in heating and cooling modes. Advanced controls for precise comfort and a new, compact cabinet make it ideal for the most demanding installations. The Premium EW combines the comfort of a hydronic system with the reliability and low operating costs of a GeoSmart Energy heat pump. The Premium EW has all of the features you have come to expect from GeoSmart Premium E units. It can provide radiant-infloor heating, domestic hot-water generation, pool and spa heating and snow melt.

R22 PRODUCT SERIES

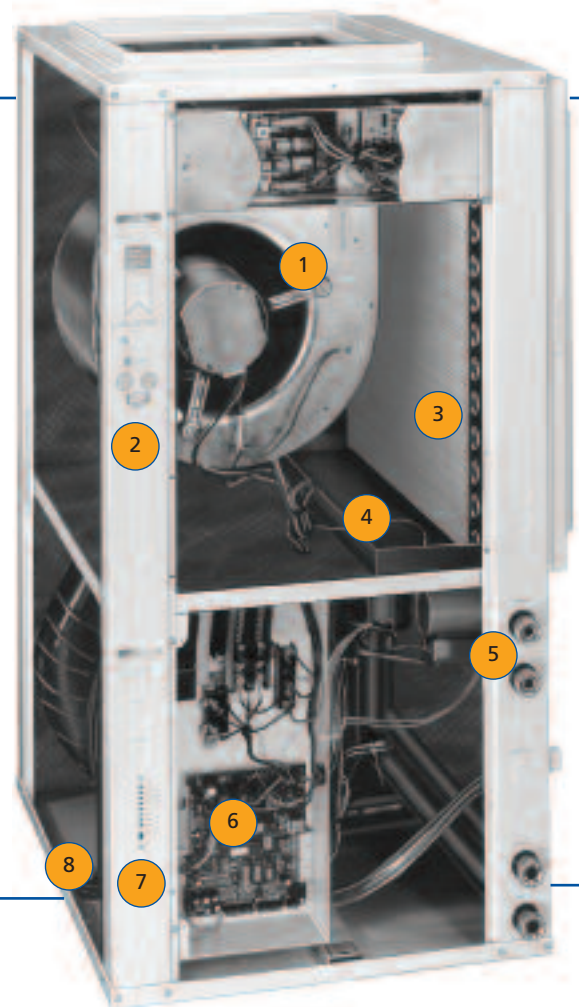
PREMIUM: Similar to our Premium E line of equipment, except with R-22 refrigerant, our Premium units will provide energy savings with years of outstanding comfort and reliability. Premium units offer several options for any application whether it's new construction or retrofit. Available in packaged forced-air and split configurations with heating COP's as high as 3.8.

PREMIUM 3: Superior comfort and performance are the hallmarks of the Premium 3 system. Integrating the comfort of a radiant-floor heating system with the advantages of geothermal forced air technology is what distinguishes the Premium 3 from ordinary furnaces or boilers. The unit provides forced-air heating and cooling, while also providing hot water to radiant-infloor zones. It's like a boiler, furnace and air conditioner working together as one to provide the ultimate in home comfort. Available in unit sizes from 4 to 6 tons with heating COP's as high as 3.4.

VXW HYDRONIC: Similar to our Premium EW hydronic line of equipment, except with R-22 refrigerant, our VXW hydronic units will provide energy savings with years of outstanding comfort and reliability. Designed for hydronic systems, the VXW Hydronic system boasts high efficiencies in heating and cooling modes, and combines the comfort of a hydronic system with the reliability and low operating costs of a GeoSmart Energy heat pump. VXW units can provide radiant-infloor heating, pool and spa heating and snow melt.

> PRODUCT DESIGN

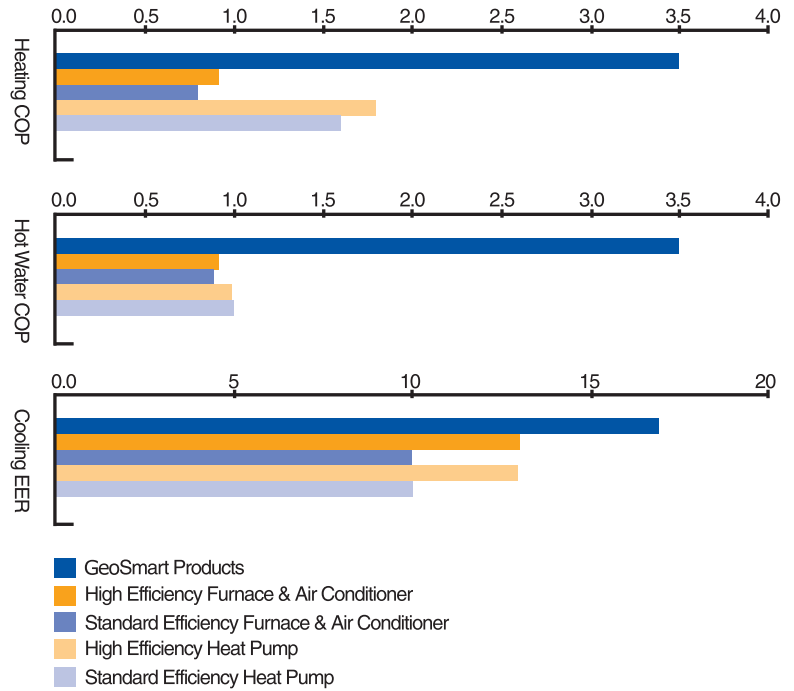
- 1 BLOWER MOTOR:** Quiet, efficient variable-speed ECM blower motor or three-speed PSC motors.
- 2 CABINET:** Fully insulated, heavy-gauge metal with durable powder-coat paint for long.
- 3 COATED AIR COIL:** The oversized e-coated air coil resists corrosion, and improves efficiency.
- 4 DRAIN PAN:** Plastic condensate pan with electronic overflow protection.
- 5 DESUPERHEATER:** During unit operation, the desuperheater preheats your domestic hotwater.
- 6 CONTROLS:** Microprocessor controls provide ultimate performance & onboard diagnostics.
- 7 LED STATUS LIGHTS:** Externally mounted status lights for simplified troubleshooting.
- 8 COMPRESSOR:** Quiet, efficient and very reliable, Copeland Scroll and Bristol compressors.



>COMPARE THE PERFORMANCE

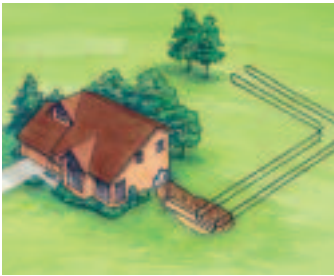
GeoSmart Energy systems can dramatically reduce your annual costs for heating, cooling and hot water by as much as 60 percent per year.

Canadian homeowners who purchase GeoSmart Energy units will experience significant energy savings without sacrificing comfort. Ordinary heating and cooling systems operate at a fraction of the efficiency of geothermal systems. With the skyrocketing costs of natural gas, propane and fuel oil, future savings using geothermal technology could be even greater.



>GEOTHERMAL LOOP TYPES

Our Geothermal Specialists are trained to determine the best type of earth loop to use in any situation. The type of loop used is based on available land space and installation costs for specific areas.



HORIZONTAL LOOPS

Used where adequate land space is available, horizontal loops involve one or more trenches that are dug using a backhoe or excavator. High Density Green Geothermal Pipe is inserted, and the trenches are backfilled. Each trench ranges in length up to 300'.



VERTICAL LOOPS

Vertical loops are used when space is limited. Holes are bored using a drilling rig, and a pair of High Density Green Geothermal Pipes with special u-bend fittings is inserted into the holes. A typical home requires three to five bores with about 10' between each hole. Bore holes can range from 75' to 300'.



POND LOOPS

Gaining popularity in "Cottage Country", Pond or Lake Loops are a great choice if an adequately sized body of water is close to your home. This is an affordable alternative as excavation costs can be virtually eliminated. A series of High Density Green Geothermal closed loops can be extended and sunk to the bottom of the water body. A 1/2-acre, 8-foot-deep pond is usually sufficient for the average home.



OPEN LOOPS

An open loop is used where there is an abundant supply of quality well water. The well must have enough capacity to provide adequate flow for both domestic use and the GeoSmart Energy unit. Discharge water should be sent directly to a second recharge well.

For more information on our systems please visit our website www.geosmartenergy.com

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