

EV/ES SERIES

ENVIRONMENTAL MISTR



HEATING AND AIR

CONDITIONING EQUIPMENT



The Industry Leader



FHP Manufacturing is dedicated to building quality heating and cooling products designed specifically with your home in mind. Our commitment to deliver the highest quality water source and geothermal systems is the primary focus of our entire management and engineering staff. For nearly three decades Florida Heat Pump has manufactured quality heating and cooling equipment for both residential and commercial applications and continues to be the industry leader.

Florida Heat Pump (FHP) is one of the only heating and air conditioning manufacturers dedicated solely to water source and geothermal technology. This dedication shows in each individual unit that is produced in our nearly 100,000 ft² facility in Fort Lauderdale, Florida. FHP delivers equipment to all corners of the world and continues to be the model of reliability while maintaining the best "quick ship" production facility in the industry.

FHP has the same management team since our origin in 1969. This provides our company the stability in the marketplace that no other manufacturer can match. For your piece of mind, all of our products are safety listed by Underwriters Laboratories Inc. (UL) and performance certified by the Air-Conditioning & Refrigeration Institute (ARI). FHP offers a wide range of equipment sizes, cabinet configurations, and factory installed options that provide the versatility to meet your needs. We offer vertical, horizontal, counter-flow, and split system forced air models as well as water to water hydronic equipment. You can relax in year round comfort and enjoy energy savings with Florida Heat Pump products.

FHP understands that your purchase of a water source or geothermal heating and air conditioning system is a major expense and before you make any major purchasing decision you should do your homework. We encourage you to visit the following web sites for extensive information about this technology and how it can help you.

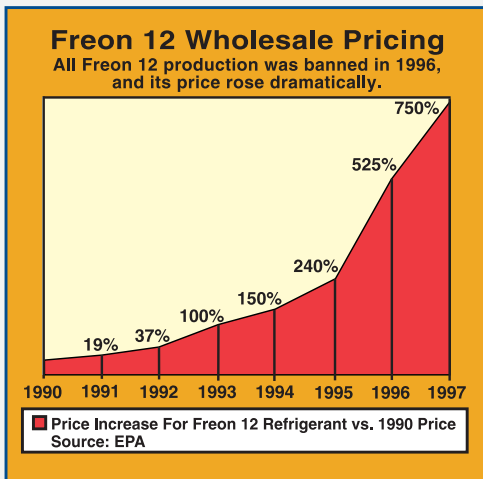
www.fhp-mfg.com
www.geoexchange.org
www.igshpa.okstate.edu
www.epa.gov/appdstar/hvac/geothermal.html
www.eren.doe.gov/geothermal

FHP Manufacturing Company (Florida Heat Pump)
Geothermal Heat Pump Consortium
International Ground Source Heat Pump Association
U.S. Environmental Protection Agency
U.S. Department of Energy

Comfort With The Future In Mind

Florida Heat Pump designed the EV Series Enviromiser product with the future of our environment as well as your economic future in mind. The Enviromiser product has been designed with an environmentally friendly refrigerant that contains no CFC's or HCFC's.

Due to environmental issues involving the earth's ozone, many governments worldwide have chosen to eliminate R-22 refrigerant used in most of today's residential heating and cooling products. As R-22 refrigerant is replaced over the next 10 years it's cost will dramatically increase as has R-12 which was phased out beginning in 1990 (see graph). This increase in wholesale prices will naturally be passed along to the consumer and translates into much higher maintenance costs for equipment with R-22 refrigerant. The Florida Heat Pump EV Series is your protection from this potentially expensive maintenance liability.



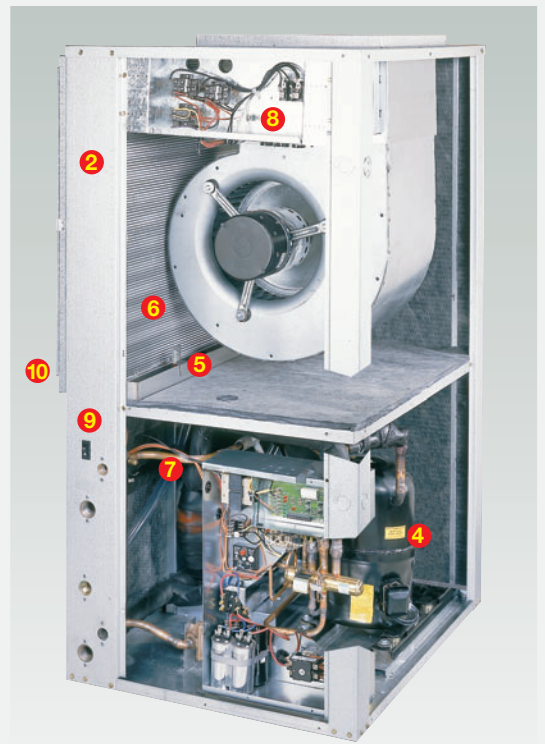
The money saving efficiency of the Enviromiser makes it the perfect choice for your home comfort needs. The chlorine free R-410A refrigerant is not only environmentally friendly, but it also has unique heat transfer characteristics that make it extremely efficient when integrated into our durable equipment design. The Enviromiser gives you protection from potentially skyrocketing future maintenance costs, enhanced efficiency and you will be doing your part to protect the earth's fragile ozone layer.

Our Enviromiser product provides quiet operation with a high-efficiency scroll compressor, liquid line filter drier protection from potential moisture, pre-painted powder coated cabinet finish and heavy-duty construction.

At Florida Heat Pump, we work hard to bring you reliable, efficient, environmentally responsible products that give you year round comfort and piece of mind at a price you can afford.

EV/ES Series Features

- 1) Contains no CFC's or HCFC's. Utilizes environmentally friendly R-410A refrigerant.
- 2) Heavy gauge Galvalume® plus finish cabinet with corrosion resistant aluminum-zinc alloy and a clear acrylic coating for additional protection.
- 3) Liquid line filter drier to eliminate potential moisture. (Not visible in photo)
- 4) Whisper quiet high efficiency scroll compressors in all models.
- 5) Stainless steel drain pans for corrosion protection.
- 6) Air coils are oversized, rifled copper tube/lanced aluminum fin for high efficiency and are epoxy coated for enhanced corrosion protection.
- 7) Insulated water heat exchanger prevents condensation at low temperature operation.
- 8) Optional factory installed and wired emergency electric heater.
- 9) Optional factory installed internal heat recovery system that can provide virtually free domestic hot water.
- 10) Four sided filter rack for tight seal and easy filter access. Vertical and counterflow models only.



ES Series Unique Feature

ECM (Electronically Commutated Motor) Fan Motor - The field proven-efficiency and reliability of the GE ECM technology now makes it possible to bring increased energy savings and precision speed control to your ES heat pump.

Ultra-High Efficiency - The ECM motor is 20% to 30% more efficient than a standard motor.

Constant Airflow - Constant airflow is critical to providing the greatest level of performance and comfort. Because of the unique design of the ECM motor, the desired airflow can be maintained under a wide range of operating conditions.

Ultra-Quiet Operation - The soft start feature allows the motor to ramp up to speed eliminating the abrupt change in sound when the unit cycles on or off.



Geothermal Advantages

Safe, Clean Operation

No flues, no flame, no dangerous carbon monoxide and a factory-sealed refrigerant circuit make Geothermal technology an attractive alternative for safe, clean and environmentally friendly comfort for your home.

Energy Efficiency

Geothermal units operate more efficiently than ordinary heating and cooling systems, saving you up to 60% in most cases, and providing virtually free hot water.

Durable Design

Geothermal heat pumps last longer because they are housed indoors and protected from harsh weather conditions. No defrost cycles are needed, which means less stress on critical components and no loss of operating efficiency.

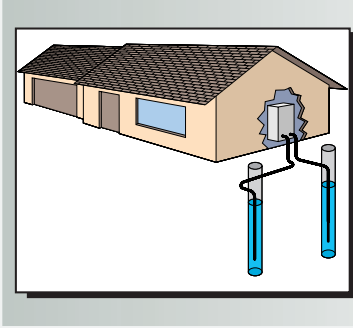
Better Comfort

Constant, even temperature and humidity control. Gone are the uneven temperatures experienced with ordinary furnaces and poor dehumidification you get from standard central air units.

Enjoy all these benefits by simply tapping into the energy already present in your backyard

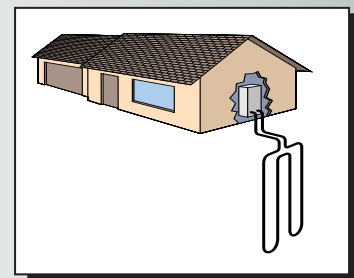
GROUND WATER SYSTEMS

Ground Water Systems (Open Loop) have been utilizing the earth's natural heat source/heat sink ability for over 40 years. Ground Water Systems draw water from an aquifer via a supply well, pass through the Geothermal heat pump's heat exchanger where heat is exchanged with the refrigerant inside your FHP unit, then returned to the aquifer via a return well or simply disposed of per local code. Ground water temperatures remain very constant (usually within a degree) throughout the year despite wide variations in outside air temperature, therefore your FHP Unit will maintain it's super high efficiency no matter how hot or cold it is outside. Ground Water Systems are ideally suited for homes that have existing water wells available or a good potential source for well water. When ground water is available this system usually has the lowest installed cost.



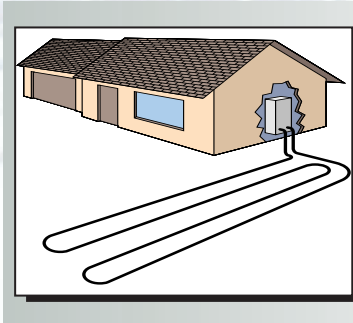
VERTICAL SYSTEMS

Vertical Systems (Closed Loop) utilize the natural thermal properties of the earth in a similar manner to the Ground Water Systems. However, instead of pumping water out of a well then back into the ground, you simply circulate water or an antifreeze solution through a closed loop network of plastic pipe that is inserted into vertical bore holes. These vertical bore holes are typically drilled to a depth of 100 to 300 feet per ton of air conditioning or heating. The Vertical System is ideally suited for applications where available land area is limited. Similar to the Ground Water System, the **FHP Manufacturing** Vertical System avoids wide temperature swings of the outside air to deliver constant high efficiency and comfort no matter where you live.



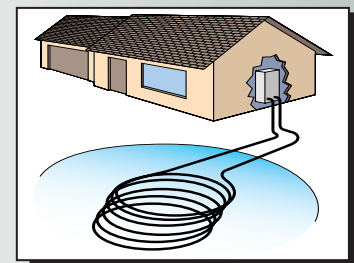
HORIZONTAL SYSTEMS

Horizontal Systems (Closed Loop) also utilize the Earth's plentiful and renewable thermal characteristics. Like the Vertical Systems, Horizontal Systems circulate water or an antifreeze solution through a closed loop network of sealed and pressurized plastic pipe that is buried in the ground. Instead of inserting the plastic pipe into vertical wells the pipe is laid in horizontal trenches at a typical depth of 4 to 6 feet and at a length of 75 to 400 feet per ton of air conditioning or heating. Recent innovations in horizontal pipe configurations have made this system particularly attractive in first cost as well as operating efficiency. Typically a little more land area is required to install a Horizontal System. The same energy saving characteristics are enjoyed with the **FHP Manufacturing** Horizontal System as with the Vertical Systems.



POND / LAKE SYSTEMS

Pond or Lake Systems (Closed Loop) may be the most economical closed loop system to install and has many advantages for producing energy savings. This system utilizes a nearby body of water such as a lake or a pond. As with the Vertical and Horizontal Systems it is a closed loop of sealed and pressurized plastic pipe and water or an antifreeze fluid solution. Instead of inserting the pipe into a vertical well or laying the pipe in a horizontal trench the pipe is submerged into a body of water (pond or lake) where it can utilize the consistent temperature and outstanding heat transfer characteristics of the water. No wells and very little trenching are required cutting installation costs. Once again the **FHP Manufacturing** Pond or Lake System is not subject to the cruel outside air temperatures that all air-to-air heat pumps are subject to year after year.



ISO 9001:2000 Certified

Visit us online at www.fhp-mfg.com

Note: Pictures courtesy of Geothermal/Heat Pump Consortium

Call For More Information



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