

The WaterFurnace Story

Midwestern Values and a Commitment to the Environment



WaterFurnace is dedicated to quality products and customer satisfaction. We are North America's leading manufacturer and distributor of geothermal and water source systems for commercial, institutional and residential applications.

As both a pioneer and a leader in the geothermal industry, we are dedicated to heating and cooling products that are environmentally responsible and that provide significant energy savings for our customers. WaterFurnace has invested considerable resources in creating an efficient, state-of-the-art manufacturing facility, backed by the best engineers, technical support and customer support in the geothermal industry.

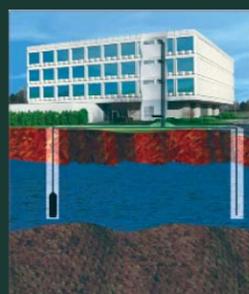
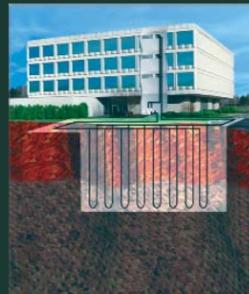
WaterFurnace's corporate headquarters and manufacturing facility is in Fort Wayne, IN, in the heart of the Midwest. Our plant is located on major transportation routes, facilitating timely shipping of our products. A scenic three-acre pond located in front of the building serves as the geothermal heating and cooling source to comfort-condition our 125,000 square feet of manufacturing and office space.

Our product development includes extensive market research. Prototypes are subjected to rigorous laboratory and field testing to ensure reliable performance from start-up. Having our own in-house testing laboratory means you are getting the best-performing, highest-quality products available. Each unit is run-tested before it leaves the factory and each unit carries our exclusive Quality Assurance emblem, signed by the final test technician. In addition to in-house testing, our units undergo a battery of tests by independent laboratories and agencies to ensure the units meet—and typically exceed—industry and government requirements for safety and efficiency.

Closed loop systems can be either horizontal or vertical, depending on available space and soil conditions. Horizontal earth loops are installed with polyethylene pipes placed in trenches four to six feet below the surface. Vertical loops are installed in bore holes 150 to 500 feet deep. When installed properly, earth loops are virtually indestructible.

Pond or lake loop systems can be used as a free source of energy. Coils of pipe are anchored to the bottom, enabling the system to extract heat from or reject it into the water as needed. Pond loops are an excellent and inexpensive choice in cases where a drainage pond is required or built for aesthetic reasons.

Open loop systems use a well to supply entering water, and discharge is piped into a return well or into a suitable surface drainage area. Ground water is discharged with no harmful environmental effect. Open loop ground water systems offer the advantages of high efficiency and low cost.



WaterFurnace
Smarter from the Ground Up™



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WaterFurnace Helps Grow Green Buildings



Each year, owners of a wide range of commercial and institutional buildings discover they can **save thousands of dollars** on their heating and cooling costs with WaterFurnace geothermal or water source technology. They also learn how WaterFurnace can play a significant role in the **design of "green" buildings**—buildings that **enhance the environment** instead of exploiting it. Green building is the most important movement in building design today.

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Breathe Easy With WaterFurnace

Did You Know?

The U.S. Environmental Protection Agency recognizes geothermal and water source systems as the most cost-effective, energy-efficient and environmentally friendly method of conditioning a building available today. WaterFurnace systems don't burn expensive and polluting fossil fuels, instead relying on nature's free, clean and renewable energy to heat and cool buildings.

WaterFurnace is the industry leader in innovative design and state-of-the-art engineering. We specialize in one thing—designing and building the most efficient and reliable geothermal and water source systems available. That's why a WaterFurnace system can play such an important part in your green building. We will work closely with you to create a heating and cooling system whose environmental benefits and cost-effective life-cycle operation are second to none.

Efficient and versatile WaterFurnace systems can help you use your building to your best advantage. Instead of old-fashioned mechanical rooms that take up large amounts of space, you can devote more of your building to usable floor space.

Geo-vantages

Geothermal systems provide architects and designer with optimal flexibility because the roof and landscape are free of large outdoor mechanical equipment. In addition, the size of mechanical rooms can be significantly reduced, providing the most economical use and utilization of building space.

Geothermal systems have a lower life-cycle cost than conventional systems, even in hot and humid regions where the demand for air conditioning is high. Geothermal systems are also recognized as having extended service life periods (20+ years).

The elimination of outdoor mechanical equipment means the geothermal system is not exposed to temperature extremes, dirt, pollution or potential vandalism.

Geothermal systems do not require a flue or chimney. There is less risk of fire, and no chance at all of carbon monoxide spilling back into the building from the heating system, because there is no on-site combustion.

Energy costs with geothermal typically are up to 60% less than other, conventional HVAC systems.

The use of geothermal lowers electricity demand by nearly 1 kW per ton of capacity.



Left to right: EW Hydronic Heat Pump, E Series Vertical, E Series Horizontal

E Series® Efficient, Ecological, Economical

The E Series sets the industry standard for performance, efficiency and quality. State-of-the-art design and extensive testing ensure years of reliability and clean, quiet and economical operation.

E Series units come in sizes 2-6 tons, in horizontal or vertical configurations, making them ideal for use in commercial and institutional buildings. E Series units use the ozone-safe R-410A refrigerant, called the "refrigerant of the future" because it meets the most stringent EPA guidelines. E Series units are available with high-efficiency compressors that deliver EERs up to 25.1 and COPs up to 4.7.

Other features

- ✓ Choice of PSC or soft-start variable speed ECM™ blower motors to deliver precise control of airflow during sequenced operation.
- ✓ Coated air coils for durability and longer life.
- ✓ Heavy-gauge metal cabinet construction with durable poly paint for long-lasting protection.
- ✓ Microprocessor controls that sequence components for quiet startup and maximum efficiency, while on-board diagnostics provide advanced service information.

EW Hydronic Heat Pump System

Designed for commercial applications, the EW Series Hydronic Heat Pump System boasts the industry's highest efficiencies in heating or cooling modes. Advanced microprocessor system controls for precise comfort control and a new, compact cabinet make it ideal for the most demanding installations, with energy consumption significantly lower than with ordinary systems. The EW Series combines the comfort and versatility of a hydronic system with the reliability, low operating costs and environmental friendliness of WaterFurnace geothermal technology. Units are available in four model sizes with high-efficiency Copeland scroll compressors.

Hydronics is the science of heating and cooling with a liquid—and heating with hot water is extremely versatile and comfortable.

EW Series can provide radiant floor heating or radiant panel heating that's ideal for difficult-to-heat spaces, such as a garage where doors are constantly open during cold weather. It also can handle the job, from hot water generation to melting snow and ice.

WaterFurnace Features Become Benefits

WaterFurnace offers a variety of commercial geothermal and water source systems. Here are just a few of their available features:

- ✓ Burn no fossil fuels, eliminating air pollution and offering safer, cleaner, cost-effective operation
- ✓ Highest efficiency ratings in the HVAC industry in both heating and cooling
- ✓ Can be used for conditioning outside air, hydronic process heating, radiant heating, snow melt and water heating
- ✓ Safe, efficient operation in a wide range of liquid temperatures
- ✓ Microprocessor controls sequence components for efficient operation
- ✓ Efficient scroll, rotary and reciprocating compressors available
- ✓ Coaxial heat exchangers designed for maximum heat transfer



E Series 7-10 tons