

# E SERIES

GEOTHERMAL COMFORT SYSTEM  
EZ SERIES INDOOR SPLIT UNITS



**WaterFurnace**  
Smarter from the Ground Up™

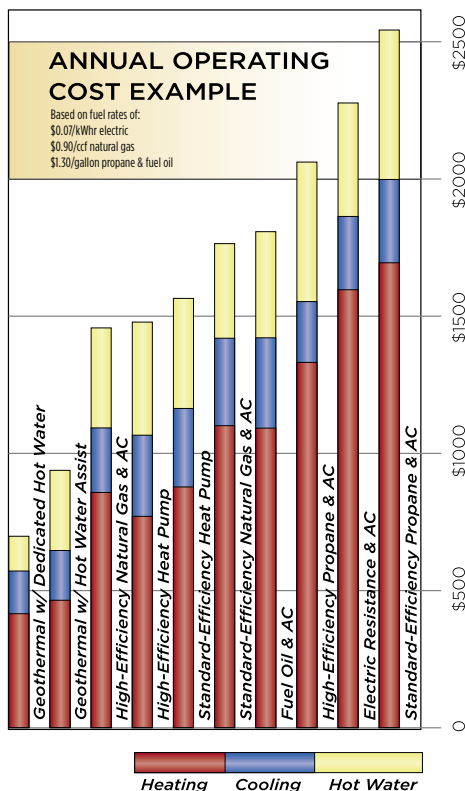


## SMARTER FROM THE GROUND UP

WaterFurnace systems use the Earth's ability to store heat energy as a perfect source for high efficiency heating and cooling. Using advanced technology, WaterFurnace systems tap into that stored energy to provide comfort for your home year round. Heat energy from the ground is collected and transferred through an earth loop—an underground piping system. With a WaterFurnace system, you'll not only save money, but you'll experience enhanced comfort and safe, quiet operation with a system that's environmentally friendly. That's why it's **"Smarter from the Ground Up"**.

### COMPARE THE PERFORMANCE

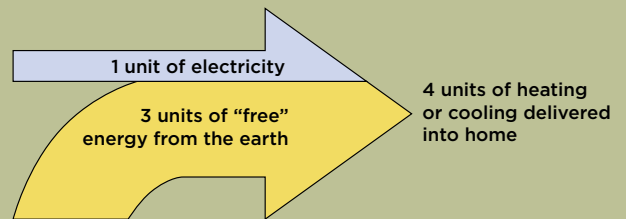
WaterFurnace geothermal systems can dramatically reduce your annual costs for heating, cooling and hot water—by as much as 60 percent per year. Smart homeowners who purchase WaterFurnace EZ Series units will experience significant energy savings without sacrificing comfort. Ordinary heating and cooling systems operate at a fraction of the efficiency of geothermal systems. And with skyrocketing costs of natural gas, propane and fuel oil, future savings using geothermal technology could be even greater.



### GEOHERMAL BENEFITS

#### ENERGY EFFICIENT:

WaterFurnace 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. Compare that to even the best ordinary system that delivers less than one unit of energy for every unit it consumes. That translates into an efficiency rating of 400 percent, compared to the most efficient gas furnace, which rates only 94 percent.



#### COST EFFECTIVE:

Because of the extraordinary efficiency of a WaterFurnace system, any added investment related to installing a geothermal unit is usually more than offset by your energy savings. In new homes, most homeowners will experience an immediate positive return on their investment when the system cost is added to the mortgage. In replacement installations, homeowners find that any added investment over the cost of an ordinary system is generally recovered in energy savings within a few years.

#### COMFORTABLE:

Capturing the relatively stable temperature of the Earth to heat and cool your home, WaterFurnace systems provide consistent, comfortable heating and cooling. You can even regulate temperatures in different areas of your home. With the optional IntelliZone, you can control up to four zones independently.

#### RELIABLE:

The WaterFurnace reputation for reliability has been earned by using only the highest quality components, design, and workmanship. Computer run-testing after assembly ensures that your unit performs flawlessly at start-up. And in the unlikely event of a malfunction, WaterFurnace units are backed by the best warranties in the industry. Like your refrigerator, your geothermal unit will provide many years of worry free operation.

#### QUIET:

WaterFurnace systems don't require noisy outdoor units that can disturb your peaceful surroundings or create unsightly additions to your home's appearance.

#### FLEXIBLE:

The compact WaterFurnace EZ unit provides heating, central air conditioning and supplemental hot water. EZ split units are available in several sizes, and can be used in a variety of applications, including installations with either a standard air handler or a fossil fuel furnace for a "dual fuel" set-up.

#### CLEAN:

High-efficiency air cleaners used with WaterFurnace systems keep your indoor air quality clean, removing dust and pollen so you can breathe easier.

#### ENVIRONMENTALLY FRIENDLY:

Installing a geothermal comfort system is the environmental equivalent of planting 750 trees or removing two cars from the road. In addition, electric utilities have found that the wide-spread use of geothermal comfort systems (like the WaterFurnace EZ), reduces the need to build more power generating plants, which helps keep our energy costs in check and conserves our precious resources.

## THE EZ SERIES BENEFITS

WaterFurnace geothermal systems feature advanced technology and innovative components to provide a safe, clean way to heat and cool your home. EZ Series units provide installation flexibility with the capability to be installed with a remote air handler. The EZ can be used to provide comfort for the entire home, or individual zones like the second story on a large home. Using EZ units in conjunction with a fossil fuel furnace “turbocharges” the system for increased efficiency.

### R-410A REFRIGERANT & DUAL CAPACITY COMPRESSORS

EZ units utilize R-410A, an environmentally safe, performance-enhancing refrigerant that does not harm the Earth’s ozone layer. Some sizes of EZ Series units feature dual capacity compressors. During mild temperatures, the compressor runs in first stage. Compressor operation automatically shifts to second stage (full capacity) on the coldest and hottest days. You benefit by having better dehumidification in the summer, more even and consistent temperatures throughout the home, and increased energy savings.



## THE EZ SERIES DESIGN:

WaterFurnace EZ Series products are designed to provide you with ultimate performance and flexibility.

- ① **HOT WATER ASSIST:** During heating and cooling, the EZ Series preheats your water and delivers it to your water heater. The longer the unit operates, the greater the amount of hot water generated. In the heating mode the hot water is generated at the efficiency of the unit. In cooling, waste heat is recovered and hot water is free!
- ② **REFRIGERANT LINE CONNECTIONS:** External connections and a precise factory charge of refrigerant make the EZ easy to attach to the air handler or condenser coil in a fossil fuel furnace.
- ③ **CONTROLS:** Sophisticated microprocessor control sequences components to provide ultimate performance. On-board diagnostics allow for easy service.
- ④ **LED STATUS LIGHTS:** Externally mounted status lights indicate normal operation or display faults and assist the technician in troubleshooting.
- ⑤ **COMPRESSOR:** Quiet, efficient and very reliable. Some sizes contain single speed Scroll compressors; others utilize dual-capacity compressors which increase comfort and energy savings.
- ⑥ **CABINET:** The cabinet is made of heavy-gauge sheet metal finished with durable powder coat paint for long-lasting beauty and protection. Fully insulated for quiet operation.



**FACTORY QUALITY:** WaterFurnace systems are the result of state-of-the-art research and development. Dozens of quality checks are performed throughout the assembly process, and computer-run testing is done on every unit, ensuring flawless start-up and long-term reliability.

**SPLIT CONFIGURATION:** EZ Series provide installation flexibility with its capability to be installed as a remote condenser system. Mating to a 2nd floor air handler can provide a quiet and worry free installation for upper floors. Mating to a remote coil on a fossil furnace provides an excellent geothermal add-on heat pump system.

**R-410A:** EZ series units utilize environmentally friendly, non-ozone depleting refrigerant that enhances efficiency and savings.

**ARI CERTIFIED/ETL LISTED/ENERGY STAR RATED:** WaterFurnace systems are performance certified by the *Air Conditioning and Refrigeration Institute*, safety listed by ETL and exceed performance standards for the ENERGY STAR rating.

EZ Unit	First Stage		Second Stage	
	EER	COP	EER	COP
Dual Capacity Units	22.2 - 24.3	4.2 - 4.7	14.1 - 17.0	3.5 - 3.9
Single Speed Units	16.1 - 19.2	3.4 - 3.8		

EER (Cooling Efficiency Rating) COP (Heating Efficiency Rating) Based upon Certified ARI/ISO 13256-1 Ground Loop Performance

## GEOTHERMAL LOOP TYPES

WaterFurnace dealers 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.



### VERTICAL LOOP

Vertical loops are used when space is limited. Holes are bored using a drilling rig, and a pair of pipes with special u-bend fittings is inserted into the holes. A typical home requires three to five bores with about a 15-foot separation between the holes.



### HORIZONTAL LOOP

Used where adequate land is available, horizontal loops involve one or more trenches that are dug using a backhoe or chain trencher. Polyethylene pipes are inserted, and the trenches are backfilled. A typical home requires 1/4 to 3/4 of an acre for the trenches.



### POND LOOP

If an adequately sized body of water is close to your home, a pond loop can be installed. A series of closed loops can be coiled and sunk to the bottom. A 1/2-acre, 8-foot-deep pond is usually sufficient for the average home.



### OPEN LOOP

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 WaterFurnace unit. EZ units require 3 - 10 GPM, depending on size.

## ACCESSORIES

WaterFurnace offers several innovative options and accessories to get even more out of your system. These features can increase your system's value, simplify its operation and improve its efficiency.



### INTELLIZONE™

With IntelliZone technology, you can control the temperature setting in up to four zones throughout your home and provide even more comfort. IntelliZone provides precise distribution of conditioned air to each room.



### THERMOSTATS

A variety of digital and programmable thermostats are available to ensure accurate control of your system's operation, maintaining precise comfort levels throughout your home.



### DEDICATED WATER HEATING

For applications with large demands for hot water, a dedicated unit can be added to your EZ Series system to provide 100 percent of the domestic hot water requirements. These units operate at three to four times the efficiency of an ordinary water heater.



### AIR CLEANER

Adding an electronic air cleaner to the air handler connected to your EZ unit will remove harmful airborne pollutants, such as smoke, odors, bacteria, allergens, molds and pollen.

## WATERFURNACE— THE SMART DECISION

WaterFurnace is dedicated to providing you with safe, reliable and energy-efficient heating and cooling systems that save you money while helping protect our environment. Our engineers and technicians work to create and build quality geothermal products that are extensively tested to ensure the highest quality. An industry leader and an innovator in geothermal technology—WaterFurnace. **Smarter from the Ground Up.**



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waterfurnace.com | (800) GEO-SAVE

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