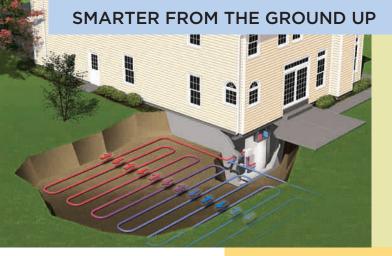
# ALL THE COMFORTS OF HOME

WATERFURNACE RESIDENTIAL PRODUCT LINE







Heat & cool your home the smart way with a WaterFurnace geothermal comfort system using the clean, free, renewable energy found just below the earth's surface. WaterFurnace units don't rely on expensive limited fossil fuels which negatively impact our environment. Thanks to energy efficiency ratings of over 500%, WaterFurnace systems save many homeowners up to 70% in heating and cooling costs while helping to protect the environment. With outstanding energy efficiency, cost effectiveness, and environmental responsibility, it's easy to see why a WaterFurnace geothermal system is "Smarter from the Ground Up".

5 Series units deliver an astounding five dollars of energy for every dollar of electrical energy used while 7 Series units deliver even more.

# **ENERGY EFFICIENT:** WaterFurnace geothermal systems are simply the most efficient units available. They can deliver over five dollars of energy for every dollar of electrical energy used. That translates into an astounding efficiency rating of more than 500 percent, compared to the most efficient gas furnace,



which rates only 98 percent.

**COST EFFECTIVE:** Because of the extraordinary efficiency of a WaterFurnace system, any added costs over an ordinary unit are usually more than offset by your monthly energy savings. In new homes, most homeowners experience an immediate positive return on their investment. In replacement installations, costs are usually recouped within just a few years.

**ENVIRONMENTALLY FRIENDLY:** WaterFurnace systems harness the free renewable energy in your own

backyard to heat and cool your home. Installing a WaterFurnace system is the environmental equivalent of planting 750 trees or removing two cars from the road. Additionally, WaterFurnace systems don't burn fossil fuels or emit harmful greenhouse gases. That's why the Environmental Protection Agency calls it the most environmentally friendly way to condition our homes.

**COMFORTABLE:** Using the stable temperature of the earth, WaterFurnace systems provide consistent comfortable heating and cooling. You can even regulate temperatures in different areas of your home with an optional IntelliZone zone control system.

**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. WaterFurnace units are backed by the best warranties in the industry and will provide many years of dependable operation.

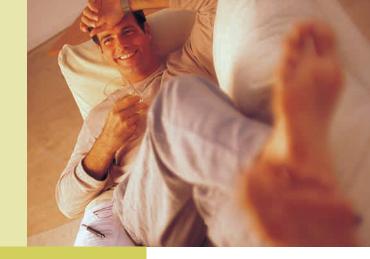
**QUIET:** WaterFurnace systems don't require noisy outdoor units that can disturb your peaceful surroundings or clutter your home's outdoor appearance.

**SAFE:** Because no fossil fuels are required to operate a WaterFurnace unit, there's no combustion, flames or fumes, and no chance of carbon monoxide poisoning.

**FLEXIBLE:** No matter what climate you live in, your WaterFurnace system will deliver. One compact WaterFurnace unit provides heating, central air conditioning and domestic hot water assistance. A variety of configurations and sizes are available to fit any home, including newly constructed and existing homes.

**CLEAN:** High-efficiency air cleaners found in WaterFurnace systems improve your indoor air quality by removing dust and pollen so you can breathe easier. For added protection, ask about our AlpinePure line of premium indoor air quality solutions.

As a leader in the industry, WaterFurnace is dedicated to innovation, quality and customer satisfaction. Every unit built is exposed to a wide range of quality control procedures throughout the assembly process. They are subjected to a rigorous battery of computerized run tests to certify that performance meets or exceeds standards for efficiency, safety, and reliable operation. As further affirmation of our quality standards, each unit carries our exclusive Quality Assurance emblem, signed by the final test technician. By choosing WaterFurnace products, you're investing in the ultimate comfort system and peace of mind for years to come.



#### **FORCED AIR UNITS**

#### **7 SERIES 700A11**

Overall efficiency, performance & features: \*\*\*\* 41.0 EER / 5.3 COP

The 700A11 signifies groundbreaking innovations on multiple fronts—most notably as the first variable capacity geothermal unit in full production and the only unit to surpass both the 41 EER and 5.3 COP efficiency barriers. Our Aurora communicating controls work in unison with the variable capacity compressor, variable speed pumps and variable speed blower motor to offer a level of comfort you have to experience to believe. Best of all, 7 Series units use the stored energy in your yard to provide savings up to 70% on heating, cooling and hot water.











#### **5 SERIES 500A11**

Overall efficiency, performance & features: \*\*\*\* 30 EER / 4.8 COP

As the upgrade to our highly successful Envision Series, the 5 Series represents some of our best features and efficiencies yet. The 500A11 provides forced air heating, air conditioning, and even generates a portion of your home's hot water—all from a single unit that offers a level of comfort and savings that's far greater than any ordinary system. Available in many sizes and configurations, the 500A11 provides exceptional performance, versatility, and quiet operation. Most 5 Series products utilize environmentally friendly R-410A refrigerant and the best in system components, including the next generation of WaterFurnace controls—Aurora. Aurora controls provide two-way communication between components for the ultimate in performance and troubleshooting capabilities.











### **3 SERIES 300A11**

Overall efficiency, performance & features: \*\*\* 22.3 EER / 4.1 COP

WaterFurnace 3 Series 300A11 units represent the culmination of 30 years of research, engineering, and manufacturing experience—all at a great price point. The 300A11 provides forced air heating and air conditioning, and even generates a portion of your home's hot water. This unit provides efficient performance, quiet operation, and a level of comfort and savings that's greater than any ordinary system. The 3 Series is the first residential unit to feature an all-aluminum air coil, providing years of durability and peace of mind.











#### PRODUCT SELECTION

Your home's comfort is important to you and your family. You want a comfort system that will provide you with peace of mind and low operating costs for many years.

This brochure highlights our extensive residential product line. We've included descriptions of the products, features and applications along with a side by side comparison. Although all WaterFurnace products are designed and built to the highest standards, each group of products is unique in its own way. Therefore, we've included a 5-star rating system for each group to clearly demonstrate a "Best, Better, Good" rating based on overall efficiency, performance, features and application flexibility.



A WaterFurnace unit is the environmental equivalent of

# taking two cars off the road forever.

#### HYDRONIC UNITS

Geothermal systems
have been recognized
by the EPA as the most
environmentally-friendly
heating and cooling
systems available.

## 5 SERIES 502W12 7 ton

Overall efficiency, performance & features: \*\*\* 19.0 EER / 3.5 COP

The 502W12 High Temperature Hydronic Heat Pump is our geothermal solution for boiler replacement. Capable of delivering 150°F leaving hot water, this system is perfect for baseboard radiator systems, underfloor radiant applications, overfloor radiant applications, and fan coils. This system has been designed specifically to meet higher temperature requirements and makes upgrading to a WaterFurnace system easier.









#### 5 Series 504W11 3 to 6 tons

Overall efficiency, performance & features: \*\*\* 16.1 EER / 3.3 COP

The 504W11 high temperature hydronic heat pump with OptiHeat technology is another geothermal solution for boiler replacement. It utilizes an additional heat exchanger to divert excess heat and reinjects it into the system, creating higher exiting water temperatures and optimum compressor operating conditions. Smaller loads are required and result in the ultimate in efficiency.











#### **ENVISION NSW 1.5 to 6 tons**

Overall efficiency, performance & features: \*\*\*\*

17.5 EER / 3.1 COP

NSW Hydronic Heat Pumps provide super-efficient hot water generation for pool/spa heating, radiant floor, snow melt, aquaculture, and process water installations. Its wide range of operating temperatures, compact size, and reversible control box and piping allow the NSW series to be used in a variety of applications. The NSW samples entering water temperature and automatically enables the pumps and compressor for peak performance.











#### **ENVISION NDW** 8 to 15 ton

Overall efficiency, performance & features: \*\*\* 22.5 EER / 3.5 COP

The Envision Series NDW is designed to meet the high-volume water demands of today's larger luxury homes. NDW units provide high capacity heating and cooling performance but still deliver the features homeowners have come to expect from our Envision line. Two high-efficiency single speed scroll compressors keep operating costs low for pool/spa heating, radiant floor, snow melt, aquaculture and process water installations.













# FORCED AIR/HYDRONIC COMBO UNIT

#### SYNERGY3D

Overall efficiency, performance & features: \*\*\* 23.7 EER / 4.5 COP

With the Synergy3D Series, you'll enjoy incredible energy savings on your heating and cooling costs while providing hot water for radiant floor heat—all in a single unit (domestic hot water option also available). The Synergy3D shares many of the premium features used in our other popular lines including the ozone-safe R-410A refrigerant. Components auto-adjust for optimum performance and provide advanced troubleshooting features through status lights and self-diagnostics. Heating priority may be given to forced air zones or radiant floor heat. Efficiency and convenience are key in this all-in-one forced air and hydronic combination unit.











#### **SPLIT UNITS**

#### **5 SERIES 500R11 INDOOR SPLIT**

Overall efficiency, performance & features: \*\*\* 25.3 EER / 4.4 COP

5 Series Indoor Splits are designed for indoor use where all-in-one systems would be difficult to install, like attics or crawl spaces. When connected to our NAH Air Handler (pictured right) the unit can efficiently heat and cool your entire home. When combined with a fossil fuel furnace, the system automatically selects the most efficient fuel source for your home regardless of outside temperatures. Because there is no outdoor fan like ordinary air conditioners or heat pumps, the unit is extremely quiet. All 5 Series units utilize ozone-safe R-410A refrigerant. Easily accessible controls and connections make this unit simple to install in a wide variety of applications. The 5 Series Indoor Split provides the amazing efficiency of geothermal with the









# 5 SERIES 500RO11 OUTDOOR SPLIT

Overall efficiency, performance & features: ★★★

5 Series Outdoor Splits are designed for outdoor use where indoor systems would be difficult to install. 5 Series Outdoor Splits are engineered to be connected to our NAH Air Handler or a fossil fuel furnace. Like the indoor split, the outdoor unit automatically switches to the most economical heating source for improved energy conservation when used with a fossil fuel furnace. All 5 Series units utilize ozone-safe R-410A refrigerant. Easily accessible controls and connections make this unit simple to install in a wide variety of applications. The 5 Series Outdoor Split will provide exceptional performance and comfort for many years.











#### GEOTHERMAL LOOPS

The ground serves as a giant solar collector, storing heat energy. Just a few feet below the surface, earth temperatures remain relatively constant and moderate all year. A geothermal system uses the earth as a free heat source during heating and a heat sink when cooling.

Where space is limited, vertical loops are used. Horizontal loops are generally preferred where more space is available. A nearby pond could also be utilized for a geothermal loop. Where well water is plentiful and low in minerals, an open loop system may be ideal. WaterFurnace dealers and loop installers are trained to design the best loop system for a particular home to ensure optimum performance.









#### **FORCED AIR UNITS** FORCED AIR/HYDRONIC **COMBO** 100 \*\*\* **7 Series 700A11 5 Series 500A11 3 Series 300A11** Synergy3D The ultimate in luxury. Upscale comfort. A smart choice. Premium Forced Air + Radiant Variable capacity forced air Dual or single capacity forced air A smart value utilizing dual 3-in-1 system. Forced air heating heating and cooling with heating and cooling with capacity efficiency. & cooling with capability of hot water assist. hot water assist. radiant floor heat. 3 to 5 ton variable capacity 1 to 6 ton single speed 2 thru 6 ton dual capacity 3 to 6 ton dual capacity (9 sizes) (5 sizes) (4 sizes) 2 to 6 ton dual capacity 5.1 - 5.3 COP 4.1 - 4.8 COP 3.7 - 4.1 COP 3.9 - 4.5 COP Part Load 36.0 - 41.0 EER 23.4 - 30.0 EER 20.6 - 22.3 EER 20.2 - 23.7 EER 3.5 - 3.6 COP 3.7 - 4.3 COP 3.4 - 3.8 COP 3.5 - 4.0 COP **Full Load** 19.4 - 22.0 EER 17.0 - 21.0 EER 15.5 - 16.5 EER 15.0 - 18.5 EER High-efficiency High-efficiency scroll High-efficiency scroll High-efficiency scroll (single speed & dual capacity) (variable capacity) (dual capacity) (dual capacity) Variable speed ECM Premium variable speed ECM or Premium variable speed ECM 5-speed ECM Oversized ECM (036 model only) 5-Speed ECM Optional PSC in single speed units Vertical top, bottom, **Cabinet Configurations** Vertical top, bottom, Vertical top flow Vertical top flow or rear flow or rear flow All left or right return Horizontal side Horizontal end or side Horizontal end or side or end discharge discharge discharge All left or right return All left or right return All left or right return Variable 3 heat\*, 2 cool 3 heat\*, 2 cool 3 heat\*, 2 cool Aurora Variable Speed Controller Aurora Base Controller Aurora Base Controller Microprocessor with energy and refrigeration Optional Aurora Advanced Fault & status lights Aurora Interface monitoring standard Controller with energy monitoring Diagnostic (AID) Tool Onboard diagnostics Optional performance monitoring Optional performance monitoring Fault retry Aurora Interface Diagnostic Optional refrigeration monitoring (AID) Tool Aurora Interface Diagnostic Onboard diagnostics (AID) Tool Onboard diagnostics Coated Coated All-aluminum Coated Optional Optional Optional Optional Internal mount pump Internal mount pump Internal mount pump External mount pump Optional Optional Optional Internal mount on vertical Internal mount on vertical Internal mount on vertical Internal mount on vertical IntelliZone2 (up to 6 zones) IntelliZone2 (up to 4 zones) IntelliZone (up to 4 zones) IntelliZone (up to 4 zones)

All ECM models

and most PSC models

All sizes

All sizes

**Applications** 

**Sizes** 

Efficiency

AHRI 13256-1 (GLHP) Closed loop

Refrigerant

Compressor

**Blower** 

Control

Air Coil

points)

Desuperheater

**Auxiliary Heat** 

**Zone Control Option** 

**ENERGY STAR Rated** 

(Closed earth loop rating

All sizes

Stages (\* with aux.)

HYDRONIC UNITS				SPLIT UNITS	
***	****	****	****	****	****
5 Series 502W12	5 Series 504W11	Envision NSW	Envision NDW	5 Series 500R11	5 Series 500RO11
High temperature hydronic. For boiler replacement and hot water applications.	High temperature hydronic. For boiler replacement and hot water applications.	<b>Hydronic.</b> Add-on unit for hot water applications like radiant floor, spas, pools, fan coils.	Hydronic. Add-on unit for high volume water demands of today's larger luxury homes. Dual compressor operation.	Indoor Split  Versatility. Used with remote air handler (shown above) or gas furnace.	Outdoor Split Outdoor unit. Used with remote air handler or gas furnace.
7 ton dual compressor	3 to 6 ton single speed (3 sizes)	1½ to 6 tons single speed (6 sizes)	8 to 15 tons dual compressor (4 sizes)	2 to 6 ton single speed (7 sizes) 2 to 6 ton dual capacity (5 sizes)	2 to 6 ton dual capacity (5 sizes)
3.5 COP 19.0 EER	N/A - Single speed/full load units only	N/A - Single speed/full load units only	3.3 - 3.5 COP 18.4 - 22.0 EER	3.8 - 4.4 COP 20.0 - 25.3 EER	3.8 - 4.4 COP 20.0 - 25.3 EER
3.1 COP 16.0 EER	3.2 - 3.3 COP 16.1 EER	2.9 - 3.1 COP 14.0 - 17.5 EER	2.7 - 3.0 COP 15.8 - 16.8 EER	3.3 - 4.0 COP 15.0 - 19.9 EER	3.4 - 3.9 COP 15.0 - 17.1 EER
R-134A	R-410A	R-410A	R-410A	R-410A	R-410A
Dual high-efficiency scroll (single speed)	Vapor injection scroll (single speed)	High-efficiency scroll (single speed)	Dual high-efficiency scroll (single speed)	High-efficiency scroll (single speed & dual capacity)	High-efficiency scroll
None	None	None	None	Variable speed ECM when mated to NAH air handler.	Variable speed ECM when mated to NAH air handler.
Compact unit with rear or top mounted water connections Controls are field convertible from front to back	Compact unit with rear water connections Controls are field convertible from front to back	Compact unit	Compact unit with rear or top mounted water connections Controls are field convertible from front to back	Compact cube	Compact outdoor unit
2 heat, 2 cool	1 heat, 1 cool	1 heat, 1 cool	2 heat, 2 cool	3 heat*, 2 cool	3 heat*, 2 cool
FX10 Controls	Aurora Advanced Controls	Microprocessor Mode, status & fault lights Fault retry	Microprocessor Mode, status & fault lights Onboard diagnostics via user interface Fault retry	Aurora	Aurora
N/A	N/A	N/A	N/A	Yes, with NAH air handler	Yes, with NAH air handler
N/A	N/A	Optional 040 to 075 models	N/A	Optional Internal mount pump	N/A
N/A	N/A	N/A	N/A	Yes, with NAH air handler Dual fuel option	Yes, with NAH air handler Dual fuel option
HydroZone	HydroZone	HydroZone	HydroZone	IntelliZone	IntelliZone
Yes ENERGY STAR	Yes ENERGY STAR	Yes 018, 025, 040, 050 and 060 models	Yes 100 and 120 EMERGY STAIR models	Yes—All sizes *With NAH Air handler or WaterFurnace A-Coil	Yes—All sizes *With NAH Air handler or WaterFurnace A-Coil



# **GEOTANK®**

The WaterFurnace GeoTank is simply the best way to capture preheated water from your unit. Engineered specifically for your WaterFurnace geothermal system, the GeoTank includes unique features that make installation and operation easy.



# **SYMPHONY**

Symphony is a Wi-Fi based comfort platform that allows you to change temperature, set a schedule and monitor vacation mode. Connect to the personalized dashboard for remote functionality—all from the comfort of your sofa.



#### INTELLIZONE®2

IntelliZone2 provides you with precise control over your indoor environment, allowing you to adjust the zones to condition only the rooms that need it. Your WaterFurnance system will run more efficiently—saving you money and providing better comfort.

BR1510MW 04/15













visit us at waterfurnace.com