



# **PERFECT SOLUTIONS**

WATERFURNACE COMMERCIAL PRODUCTS

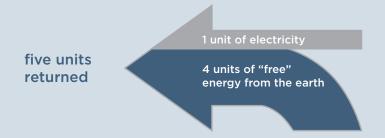
Water Source/Geothermal Heat Pumps





### THE BENEFITS

ENERGY EFFICIENT: WaterFurnace geothermal systems are simply the most efficient units available. They can deliver up to five dollars of energy for every dollar of electrical energy used. That translates into an astounding efficiency rating of 500 percent, compared to the most efficient gas furnace, which rates only 97 percent.



**COST EFFECTIVE:** Because of the extraordinary efficiency of a WaterFurnace system, any added costs over ordinary equipment are usually more than offset by your annual energy savings. In fact, most building owners experience an immediate positive return on their investment. In replacement and retrofit installations, costs are usually recouped within just a few years.

**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 equipment performs flawlessly at start-up.

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.

FLEXIBLE: Regardless of climate, WaterFurnace systems deliver. A variety of configurations and sizes are available to fit any applicationheating, cooling, supplemental domestic hot water, hot gas bypass and hot gas reheat.

### EARTH LOOPS

The type of loop selected is based on available land space and installation costs for specific areas.



#### VERTICAL LOOP

BOILER/TOWER

The ideal choice when limited land surface is available. Well-drilling equipment is used to bore the 75 ft. to 300 ft. deep, small-diameter holes that will accommodate the loop.

Where large ground-source systems are not

viable, existing boiler/tower installations are often

retrofitted. Hybrid systems use a ground-source

loop coupled with down-sized conventional heat

ejection or boiler/tower equipment.



#### OPEN LOOP

These loop systems utilize ground water as a direct energy source. In ideal conditions an open loop application can be the most economical type of ground-source system.



adequate body of water is available, because excavation costs are virtually eliminated. Coils of pipe are simply placed on the bottom of the nearby pond or lake.

### LEED CERTIFICATION

The LEED system is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. The USGBC (United States Green Building Council), promotes buildings that are environmentally responsible, profitable and healthy places to work with these ratings. WaterFurnace water source and geothermal systems can contribute in several sections of LEED, including energy efficiency and IAQ, to help you achieve points and the ultimate status in green building.



## COMMERCIAL PRODUCTS



The Versatec Base provides a true value product line to the commercial water source heat pump industry. This product is engineered to offer high efficiency operation while maintaining a small cabinet footprint and an impressive list of value-added features. With its compact design and ability to perform optimally in both water loop and geothermal applications, the Versatec Base is an ideal solution for both retrofit and new construction applications.

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Ask About Our Certified Products	Inter

Designed to adhere to the footprint of lower efficiency legacy equipment while operating at the high efficiencies of today's technology. The Versatec Ultra is available in a wide selection of capacities (009-070 kBtuh output), cabinet sizes, and an array of factory installed options to offer unmatched application flexibility









LEADING THE GEOTHERMAL 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. EQUIPMENT IS SUBJECTED TO A RIGOROUS BATTERY OF COMPUTERIZED RUN TESTS TO CERTIFY THAT PERFORMANCE MEETS OR EXCEEDS STANDARDS FOR EFFICIENCY, SAFETY, AND RELIABLE OPERATION. BY CHOOSING WATERFURNACE PRODUCTS, YOU'RE INVESTING IN THE ULTIMATE COMFORT SYSTEM AND PEACE OF MIND FOR YEARS TO COME.

## VERSATEC BASE - 0.5 to 6 ton

#### Overall efficiency, performance & features: **\*\*\*** 17.0 EER / 3.5 COP



### VERSATEC ULTRA - 0.75 to 6 ton

#### Overall efficiency, performance & features: $\star \star \star 1/2$ 18.5 EER / 3.8 COP



### ENVISION<sup>2</sup> COMPACT - 0.75 to 6 ton

Overall efficiency, performance & features: **\*\*\*\* 30.0** EER / **4.8** COP

Industry-leading efficiencies in a much smaller cabinet perfect for retrofit and boiler/tower applications. Featuring the Aurora generation of controls, the Envision<sup>2</sup> Compact units are more than twice as efficient as the ASHRAE 90.1 standard and utilize environmentally friendly R410A refrigerant. Options include a factory-installed 24V motorized on/off water valve option for VFD pumping with automatic internal water flow control; hot gas bypass and reheat; and high-efficiency PSC, 5-Speed ECM, or variable speed ECM motors to fit your efficiency and comfort needs.





#### VERSATEC VARIABLE SPEED: 3 to 6 ton Overall efficiency, performance & features: \*\*\*\* 36.0 EER / 4.9 COP

Overall efficiency, performance & features: **\*\*\***<sup>1/2</sup> **21.0** EER / **4.2** COP

The WaterFurnace line of commercial variable capacity water source and geothermal systems offers the industry the absolute best in efficiency while maintaining the small cabinet your building needs. Available in nominal 3-6 ton models, the commercial variable capacity product features Aurora Advanced Controls with true energy, refrigeration, and optional performance monitoring as well as the optional Aurora UPC DDC Controls to integrate into building automation systems. With a capacity range of 25-100%, the WaterFurnace variable capacity system will scale its output to what your building actually needs, maximizing occupant comfort levels and minimizing energy consumption.

An exceptional choice for large zones in commercial and institutional applications. These units are available

for both water-source heat pump applications and extended range geothermal applications. Envision units

(Standard FX10 control is included for flexible integration into facilities with building automation systems.)



ENVISION XL - 7 to 25 ton







#### Overall efficiency, performance & features: \*\*\*\* 13.8 EER / 3.4 COP

WaterFurnace Envision 30 Ton Water Source Heat Pumps (WSHP) are an exceptional choice for large zones in commercial and institutional applications. Featuring a take-apart design, the 30 Ton can be moved into a building in two different sections, providing lower weight, smaller footprint, and better maneuverability. The sections can then easily be rejoined when the unit is ready to be installed. A variable frequency drive (VFD) with an LCD display is a new feature and allows for modifying blower speeds without manual pulley adjustments. The 30 Ton also boasts a wide range of factory-installed features like hot gas reheat, internal 2-way valves, waterside economizer, electrical disconnects, and many more.



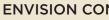


#### ENVISION<sup>2</sup> NXW CHILLER - 10 to 50 ton Overall efficiency, performance & features: **\*\*\*\* 22.2** EER / **3.7** COP

Large in capacity but compact in size, these units will fit through most doors for easy installation. High efficiencies are obtained using two single-speed scroll compressors. Units are controlled using the Johnson Controls FX10 microprocessor which sequences all components and functions to achieve maximum performance, and enables easy connection to a Building Automation System with Open N2, BacNet, or LonWorks protocols. The unit's brazed plate heat exchangers are constructed with 316 stainless steel for







The Envision Console achieves high efficiencies through its single speed LG rotary compressor, high performance 3-speed ECM blower motor, and aluminum air coil that provides impressive efficiencies at low face velocities. The console also features WaterFurnace's AlumiShield coil coating as an option for superior protection and an oversized and convoluted coaxial heat exchanger (optional cupronickel) for maximum heat transfer. Standard control for this equipment is the Aurora Base Control with an optional UPC for building automation system tie-in.





#### Versatec Ultra Single Hydronic - 1.5 to 6 ton Overall efficiency, performance & features: **\*\***\*<sup>1/2</sup> **17.5** EER / **3.1** COP

Versatec Ultra Single 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, reversible control box and piping allow the hydronic series to be used in a variety of applications. Versatec Ultra Single Hydronic samples entering water temperatures and automatically enables the pumps and compressor for peak performance. Aurora communicating controls provide two-way communication for ease in setup and troubleshooting. Versatec Ultra Single Hydronic units can be selected as heating only or heating/cooling models. Scroll compressors, R-410A refrigerant, and oversized heat exchangers combine to provide users with exceptional energy savings.



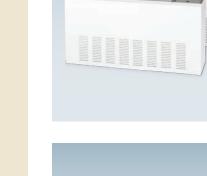
## ENVISION HYDRONIC - NDW: 8 to 15 ton

Overall efficiency, performance & features: \*\*\*\* 22.0 EER / 3.5 COP NDW units provide high capacity heating and cooling performance, but still deliver the features expected 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. An advanced controller comes with each unit to monitor operation and provide an intuitive user interface. Brazed plate heat exchangers provide efficiency and allow for a compact unit.















provide the user with high efficiency, excellent performance, flexibility and reliability.

### ENVISION CONSOLE - 0.75 to 1.5 ton

#### Overall efficiency, performance & features: \*\*\*\* 16.0 EER / 3.5 COP

### LOW SILL CONSOLE - 0.75 to 1.5 ton

#### Overall efficiency, performance & features: \*\*\*\* 14.3 EER / 3.0 COP

The Envision Low Sill Console is perfect for hotels, classrooms, or any room without ductwork. Fitting perfectly beneath windowsills, the Envision Low Sill Console provides cutting edge technology in heating and cooling for any commercial application. Utilizing the latest in component and design technology, the Console is available in a variety of cabinet and piping configurations. A single speed R-410A rotary compressor is the heart of the system while it features the capacity of extreme loop temperature operation. The cabinet footprint is designed to match "legacy" consoles for easy retrofitting.

## **PRODUCT SPECIFICATIONS**



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VERTICAL & HORIZONTAL VERTICAL & HORIZONTAL VERTICAL & HORIZONTAL MODELS AVAILABLE MODELS AVAILABLE



1100



VERTICAL & HORIZONTAL MODELS AVAILABLE





	MODELS AVAILABLE	MODELS AVAILABLE	MODELS AVAILABLE		MODELS AVAILABLE			
	Versatec Base	Versatec Ultra	Envision <sup>2</sup> Compact	Versatec Variable Speed	Envision XL	Envision 30 Ton	Envision <sup>2</sup> NXW Chiller	Envision Console
Style	Water to Air	Water to Air	Water to Air	Water to Air	Water to Air	Water to Air	Reversible Chiller	Water to Air
Capacity Range (Tons)	0.5 - 6	0.75 - 6	0.75 - 6	3 - 6	7 - 25	30	10 - 50	0.75 - 1.5
Sizes Available (Tons)	0.5, 0.75, 1, 1.25, 1.5, 2, 2.5, 3, 3.5, 4, 5, 6	0.75, 1, 1.25, 1.5, 2, 2.5, 3, 3.5, 4, 5, 6	0.75, 1, 1.25, 1.5, 2, 2.5, 3, 3.5, 4, 5, 6	3, 4, 5, 6	7, 8, 10, 13, 15, 20, 25	30	10, 15, 20, 30, 50	0.75, 1, 1.25, 1.5
<b>Efficiency</b> Water Loop Heat Pump	13.2 - 14.7 EER 4.5 - 4.9 COP	14.3 - 15.7 EER 4.5 - 5.1 COP	15.0 - 21.6 EER 4.8 - 6.4 COP	16.4 - 36.0 EER 3.4 - 4.9 COP	13.8 - 18.9 EER 4.6 - 5.4 COP	12.1 - 12.7 EER 4.2 - 4.3 COP	15.2 - 17.4 EER 4.3 - 5.1 COP	12.3 - 13.6 EER 4.3 - 4.9 COP
Ground Loop Heat Pump	15.6 - 17.0 EER 3.3 - 3.5 COP	16.1 - 18.5 EER 3.4 - 3.8 COP	17.0 - 30.0 EER 3.7 - 4.8 COP	14.0 - 25.0 EER 4.6 - 7.8 COP	16.2 - 21.0 EER 3.4 - 4.2 COP	13.1 - 13.8 EER 3.2 - 3.4 COP	16.5 - 22.2 EER 3.0 - 3.7 COP	14.2 - 16.0 EER 3.1 - 3.5 COP
Compressor	Rotary or Reciprocating	Rotary or Scroll	Rotary or Scroll	Variable capacity scroll	Dual Scroll	Dual Scroll	Dual Scroll	Rotary
Refrigerant	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
Blower	PSC, 5-Speed ECM, Variable Speed ECM	PSC, 5-Speed ECM, Variable speed ECM, High Static Options	PSC, 5-Speed ECM, Variable speed ECM, High Static Options	Variable Speed ECM	Belt Drive (Low/High Static Options)	VFD	NA	3-Speed ECM
Cabinet Configuration	Vertical upflow Horizontal upflow	Vertical upflow Horizontal upflow	Vertical upflow Horizontal upflow	Vertical Upflow, Horizontal	Vertical Upflow, Side Discharge Horizontal	Vertical Upflow, Side Discharge Modular	Enclosed	Console: Floor Mount, Slope Top, Chassis Only, Extended Slope Top, Flat Top
Control Type	Aurora Base Control (ABC), Aurora UPC DDC, Aurora UPC DDC with Lon	Aurora Base Control (ABC), Aurora UPC DDC, Aurora UPC DDC with Lon	Aurora Base Control (ABC), Aurora UPC DDC, Aurora UPC DDC with Lon	Aurora Advanced Control, Aurora UPC DDC, Aurora UPC DDC with Lon	Aurora Base Control (ABC), Aurora UPC DDC, Aurora UPC DDC with Lon	Aurora Base Control (ABC), Aurora UPC DDC, Aurora UPC DDC with Lon	FX10 with Building Automation Communication capa- bility	Aurora Base Control (ABC), Aurora UPC DDC, Aurora UPC DDC with Lon
Hot Water Generator (Coil Only)	NA	015 - 070 Vertical only	015-070 Vertical only	036 - 072 Vertical only	NA	NA	NA	NA
Available Voltages	208-230/60/1 265/60/1 208-230/60/3 460/60/3 575/60/3	208-230/60/1 265/60/1 208-230/60/3 460/60/3 575/60/3	208-230/60/1 265/60/1 208-230/60/3 460/60/3 575/60/3	208-230/60/1 208-230/60/3 460/60/3	208-230/60/3 460/60/3 575/60/3	208-230/60/3 460/60/3 575/60/3	208-230/60/3 380/60/3 460/60/3 575/60/3	115/60/1 208-230/60/1 265/60/1
Air Coil	All-Aluminum	All-Aluminum	All-Aluminum	All-Aluminum	All-Aluminum	All-Aluminum	NA	All-Aluminum
Options	<ul> <li>Internal 2 way valve</li> <li>Flow regulator</li> <li>MERV 13 2" filter</li> <li>Internal non-fused disconnect</li> <li>Coated Coil</li> <li>Sound Kit</li> <li>Stainless Steel Drain Pan</li> </ul>	<ul> <li>Hot gas reheat</li> <li>Internal 2 way valve</li> <li>Flow regulator</li> <li>Hot gas bypass</li> <li>Stainless steel drain pans</li> <li>MERV 13 2" filter</li> <li>IntelliStart</li> <li>Internal non-fused disconnect</li> <li>Coated Coil</li> </ul>	<ul> <li>Hot gas reheat</li> <li>Hot gas bypass</li> <li>Internal 2 way valve</li> <li>Stainless steel drain pans</li> <li>Internal non-fused disconnect</li> <li>MERV 13 2" filter</li> <li>IntelliStart</li> <li>Right or left return</li> <li>Sound attenuation kit</li> <li>Coated air coil</li> </ul>	<ul> <li>Hot gas bypass</li> <li>Internal 2-way valve</li> <li>Stainless steel drain pans</li> <li>Internal non-fused disconnect</li> <li>MERV 13 2" filter</li> <li>IntelliStart</li> <li>Right or left return</li> <li>Sound attenuation kit</li> <li>Coated air coil</li> </ul>	<ul> <li>Hot gas reheat</li> <li>Hot gas bypass</li> <li>Stainless steel drain pans</li> <li>MERV 13 2" filter</li> <li>Coated Coil</li> <li>Sound Kit</li> </ul>	- Hot gas reheat - Hot gas bypass - Stainless steel drain pans - MERV 13 2" filter - Coated Coil - Sound Kit	<ul> <li>IntelliStart</li> <li>Temp setpoint control software</li> <li>Field-installed piping accessories</li> <li>Factory-installed pressure gauges</li> <li>Fused disconnect</li> <li>Phase guard</li> </ul>	<ul> <li>1-3 kW boilerless electric heat</li> <li>Remote wall thermostat</li> <li>Unit mounted thermostat</li> <li>Coated Coil</li> <li>Sound Kit</li> </ul>







Low Sill Console	Versatec Ultra Single Hydronic	Envision Hydronic NDW		
Water to Air	Water to Water	Water to Water		
0.75 - 1.5	1.5 - 6	8 - 15		
0.75, 1, 1.25, 1.5	1.5, 2, 3.5, 4, 5, 6	8, 10, 12, 15		
12.2 EER 4.3 - 4.4 COP	12.3 - 15.5 EER 4.2 - 4.8 COP	13.3 - 15.8 EER 3.9 - 4.6 COP		
13.5 - 14.3 EER 2.8 - 3.0 COP	14.0 - 17.5 EER 2.9 - 3.1 COP	15.8 - 22.0 EER 2.7 - 3.5 COP		
Rotary	Scroll	Dual Scroll		
R-410A	R-410A	R-410A		
PSC (ECM on 15 & 18)	NA	NA		
Console: Floor Mount, Slope Top, Chassis Only, Flat Top	Compact Unit	Compact Unit: Top & Back mounted water connections. Field switchable control box.		
Aurora Base Control (ABC), Aurora UPC DDC, Aurora UPC DDC with Lon	Aurora Base Control (ABC)	FX10 with Building Automation Communication capability		
NA	040 - 075 models only	NA		
115/60/1 208-230/60/1 265/60/1	208-230/60/1 265/60/1 208-230/60/3 460/60/3 575/60/3	208-230/60/1 208-230/60/3 460/60/3 575/60/3		
All-Aluminum	NA	NA		
<ul> <li>Remote wall thermostat</li> <li>Unit mounted thermostat</li> <li>Coated Coil</li> <li>Sound Kit</li> </ul>	- Copper or Cupronickel coaxial heat exchangers - IntelliStart	- IntelliStart		

## WATERFURNACE—THE SMART DECISION

WaterFurnace is dedicated to providing you with safe, reliable and energyefficient 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.



BR1550MW 04/17





Commercial Solutions

visit us at waterfurnace.com

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