



RESIDENTIAL PRODUCT CATALOG



Welcome to the Family

Enertech Headquarters Greenville, IL

You've built your business by understanding what your customers need and want. You've set yourself apart with high quality, professional service.

You want to offer your customers products that meet their needs; innovative products that offers them more and saves them money. Many products do one or the other, but it is rare that one can do both.

GeoComfort dealers have access to an innovative and high quality product line. You join a network of experienced

professional HVAC dealers and become part of the GeoComfort family. Best of all, we listen, because we recognize that nobody understands your business like you do. Your input is as critical to our success as it is to yours.

Whether you are looking to add a geothermal product to your product portfolio or are considering replacing an existing geothermal product line, the GeoComfort brand of geothermal, heating, cooling and domestic water heating systems is the right choice.

Building the Best

Every GeoComfort geothermal heat pump is handcrafted with pride by our dedicated employees in Mitchell, South Dakota.



Enertech Manufacturing Facility - Mitchell, SD



Enertech Global, LLC

Enertech Global manufactures GeoComfort, Hydron Module, and TETCO geothermal brands. Our corporate headquarters is located in Greenville, Illinois. Our units are made exclusively in the United States, with production facilities located in Mitchell, South Dakota.

Enertech was founded in 1996 as a geothermal heat pump distributor. Since then, we've delivered award-winning product innovations and experienced phenomenal growth. Our focus remains on designing outstanding products and setting a new standard in the geothermal industry.

We believe that our success is built on strong relationships, which is why our distributors, dealers and end users of our products are so important.

Our commitment to customer care, product excellence, and quality craftsmanship guides the decisions we make.

Our four core values are:

1. To supply products that are of high quality and reliability
2. To produce products in a lead-time that meets our customers' expectations
3. To manufacture value-added products with the features and benefits that fit the needs of our customers
4. To offer products at a price point that is competitive in the marketplace that meet the first three objectives

By achieving these goals, Enertech Global is in a distinctive position to meet the needs of your customers and enhance the profitability of your business.



Steve Smith - Enertech President & CEO



Enertech is proud to be a part of NIBE Industrier AB, an 8,000 employee strong European company and the largest geothermal heat pump manufacturer in the world.

Our Philosophy

Enertech is a company with family values and beliefs. As such, we are committed to the following:

- **Partnerships:** We believe you don't have to be related to be family
- **Excellence:** We believe our employees are our most valuable asset
- **Loyalty:** We believe in earning the trust and allegiance of those who sell our products. We believe that they deserve our best quality and service, which puts us in a distinctive position to enhance the profitability of our customers' businesses
- **Certainty:** We believe home and business owners deserve assurance of reliability, comfort, and savings. They should be our strongest advocates and an indicator of our company's success
- **Obligation:** We believe we are responsible for contributing to the well-being of the communities, cities and countries where we do business
- **Conscience:** We believe in improving the global atmosphere through environmental consciousness, a culture of care and enduring optimism





Why Geothermal?

Residential geothermal awareness has never been higher. In today's chaotic economy, consumers have a social desire for green solutions, but they want something affordable. Environmentally and budget conscious homeowners are attracted to geothermal technology by its high efficiency and low operational and lifespan costs. In recent years, geothermal sales have increased in part due to a better understanding that geothermal systems are a viable and affordable option for existing homes as well as new construction applications.

Incentives for geothermal systems have also elevated the technology to top of mind. Consumers are seeking high zero net energy. In fact, the United States and Canadian governments are now promoting and encouraging the use of geothermal heat pump technology.

Now is the time to add GeoComfort geothermal heating and cooling systems to your product offerings.

Financial Incentives

In addition to the extensive benefits offered by a geothermal heat pump, there are also numerous financial incentives being offered across North America.



There is a **30% federal tax credit for residential geothermal systems** and a **10% federal tax credit for commercial geothermal systems**, and many local municipalities, state entities, and utilities

offer further rebates or other financial incentives to home and building owners installing a geothermal heat pump. In the US, the online Database of State Incentives for Renewables and Efficiency is a helpful resource. Visit www.dsireusa.org or contact your local utility or electric cooperative to find out more about programs in your area.

Some Canadian provinces also offer rebate incentives for Canadian residents installing a geothermal system. Since these offerings vary by Province, interested parties should check their Province's rebates/incentives at www.nrcan.gc.ca.

Why GeoComfort?



Quality

Enertech Global's commitment to quality control is one of GeoComfort's greatest assets. Each unit coming off the assembly line is tested thoroughly. In fact, GeoComfort equipment testing is the most robust in the industry with a computerized run test station, featuring helium leak detection and waterside decay testing.

In the run test, each unit is tested in all heating and cooling modes, because we want every unit that leaves our factory to live up to the high standards we've come to be known for.

To further demonstrate our commitment to customers, Enertech has been certified to ISO 9001 and ISO 14001 quality and environmental management standards.



Warranty

All products are supported by the best factory warranty options the industry has to offer.

- The GeoComfort standard 10/10/5 warranty covers:
 - Entire unit for ten years
 - Select accessories for ten years
 - Labor allowance for five years
- Labor allowance becomes an industry leading 10-years with warranty registration
- Optional Limited Lifetime Microchannel Air Coil and Compressor warranty (consult price book for complete warranty details)
- Some of our multi-use water-to-water units (Variable-Speed Water-to-Water and High-Performance Water-to-Water) units have differing standard warranties. Please see these specific units for more detail.



Comprehensive Product Offering

The GeoComfort brand offers a broad model and application product assortment to fit most any installation. The GeoComfort model lineup includes:

- Award-winning Element Series Compact Horizontal Packaged System featuring:
 - Smaller footprint for easier installation in 24" OC truss framed buildings
 - All-aluminum microchannel air coil and brazed plate heat exchanger
 - Field convertible for side or end discharge
- Navigator Series Multi-Positional Vertical Packaged System featuring:
 - Multi-positional cabinet design – field convertible to left or right return air
 - Foam insulated, enhanced surface coaxial heat exchanger
 - Elastomeric compressor isolation pads
 - UL GREENGUARD Gold Certified high density, closed cell foam insulation
- Award-winning Element Series Compact Vertical Packaged System featuring:
 - Small footprint allows for installation in restricted spaces and reduces transportation costs
 - Elastomeric compressor isolation pads
 - A hinged control box that easily tilts up and out of the way for access to internal components
- Award-winning Compass™ Series Multi-Positional Vertical Packaged System
- AHRI matched air handlers and "A" coils matched and tested for use with our complete line of split compressor sections
- The GeoComfort Variable-Speed Water-to-Water system is powered by inverter-driven technology to provide efficient radiant heating and cooling, forced air heating and cooling, and 100 percent of the domestic hot water.
- Variable-speed and two-stage water-to-water units meet or exceed ENERGY STAR GLHP requirements
- Multi-positional combination units with micro-channel air coils for forced air heating and cooling plus radiant heat all in one
- Award-winning indoor and outdoor split models
- Full line of Commercial Series models available (see commercial catalog)
- Accessories, flow centers, geothermal loop pipe, zoning and more

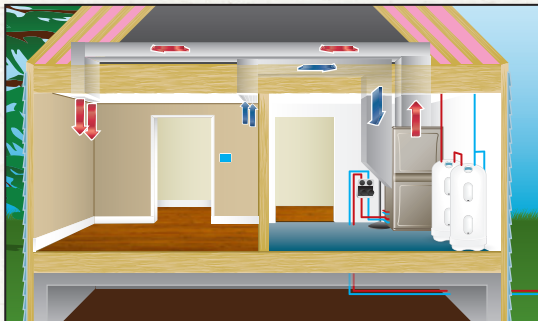


Geothermal Applications

Example Installations

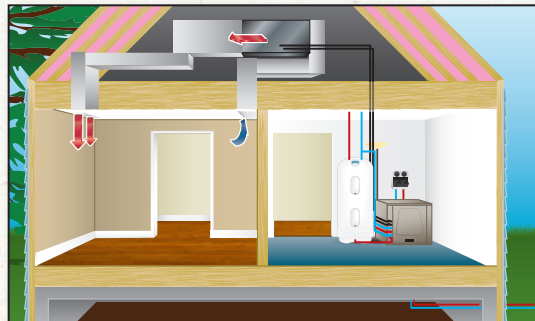
When it comes to geothermal system applications, there are many different installation options and product configurations. GeoComfort has a full line of products to fit any residential application. The following illustrations highlight several common installation scenarios.

Forced Air



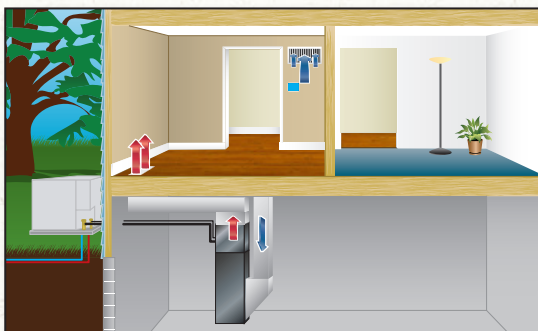
A Vertical or Horizontal Packaged System provides ducted heating and cooling. It also can provide a portion of domestic hot water.

Indoor Split



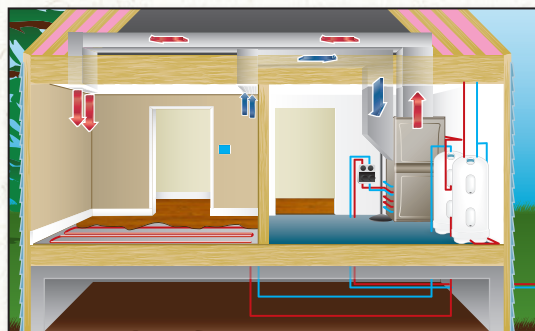
A Split System provides ducted heating and cooling using remote air handler or gas/propane system. It also can provide a portion of domestic hot water.

Outdoor Split



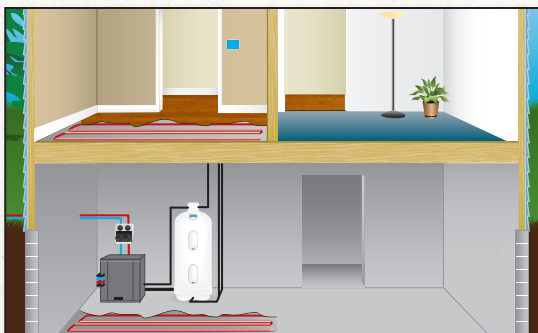
A Split System provides ducted heating and cooling using a remote air handler or gas/propane system. It also can provide a portion of domestic hot water. The geothermal unit is installed outdoors, making it ideal for retrofit applications.

Combination



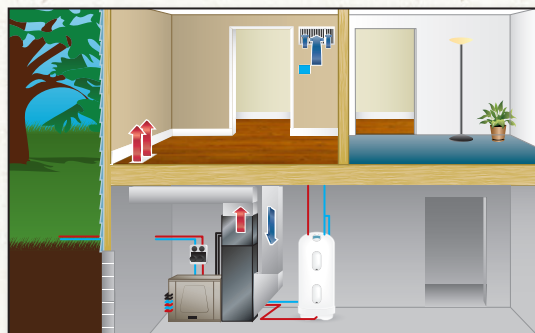
Combination Systems provide ducted heating and cooling like a traditional Packaged System, and can also provide radiant heat using a storage or buffer tank. It also can provide a portion of domestic hot water.

Single, Two-Stage or Variable-Speed Water-to-Water



Water-to-Water Systems can provide radiant heat and domestic hot water using a storage or buffer tank. If you choose the variable-speed water-to-water system, it can provide radiant heating & cooling, ducted heating and cooling and up to 100% of your domestic hot water needs.

Dual-Fuel



A Split System can be used with an existing gas, electric or propane furnace and/or air handler to create a hybrid system. The Split System provides ducted heating and cooling and is ideal for rural and retrofit applications.

GeoComfort Product Matrix



Product Features	GYT Models	GVS/VT Models	GXT Models	GZS/ZT Models	GCT Models	GBS/BT Models	GRT Models	GWV Models	GWT Models	GWS Models	GWD Models	GHP Models
Function	Forced Air	Forced Air	Forced Air	Forced Air	Combo	Split System	Split System	Hydronic	Hydronic	Hydronic	Hydronic	Hydronic
Cabinet Configuration	Multi-Positional Vertical	Compact Vertical	Multi-Positional Vertical	Compact Horizontal	Multi-Positional Vertical	Indoor Split	Outdoor Split	Water-to-Water	Water-to-Water	Water-to-Water	Water-to-Water	Water-to-Water
Compressor Stages	2	1 / 2	2	1 / 2	2	1 / 2	2	Variable	2	1	1 / 2	1
Sizes	2 - 6 Tons	.5 - 6 Tons	2 - 6 Tons	.5 - 6 Tons	2 - 6 Tons	1.5 - 6 Tons	2 - 5 Tons	1.5 min - 5 max	3 - 10 Tons	3 - 10 Tons	10 Ton	2 Ton
Refrigerant	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a
Heating Efficiency (COP) †	5.8 - 3.8	5.4 - 3.3	5.4 - 3.6	4.4-3.2	5.1 - 3.6	5.0 - 3.4	4.4 - 3.4	3.0-3.9	3.8 - 2.8	4.1 - 2.8	3.6 - 2.8	3.1
Cooling Efficiency (EER) †	37.4 - 18.0	33.0 - 15.1	35.0 - 17.1	29.8 - 16.2	29.4 - 16.2	35.6 - 16.4	25.4 - 15.9	18.4-24.4	24.5 - 14.6	24.0 - 14.5	22.0 - 14.5	N/A
Copper HX	✓	✓	✓	Brze Plate***	✓	✓	✓	Brze Plate	✓	Brze Plate	Brze Plate	✓
Cupronickel HX	Optional	Optional	Optional	Future	Optional	Optional	Optional	N/A	Optional	Tube-in-Shell	Tube-in-Shell	Optional
HX Insulation	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Tape	Foam Tape	Foam Tape	Foam Enclosed
Air Coil	Aluminum Micro-Channel	Aluminum Micro-Channel	Aluminum Micro-Channel	Aluminum Micro-Channel	Aluminum Micro-Channel	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*
Desuperheater	Standard	Standard ¹	Standard	Standard ²	Standard	Standard	Option	Indirect Hot Water	Standard	Standard	Standard	Vented Coax ³
Auxiliary Electric Heat	One-Piece Internal	One-Piece Internal ³	One-Piece Internal	External Duct Heater ⁴	One-Piece Internal	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**
Blower	Variable Speed ECM	PSC Standard, ECM Option ⁵	Variable Speed ECM	PSC Standard, ECM Option ⁶	Variable Speed ECM	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**
Selectable CFM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Freeze Protection	Digital	Digital	Flow Switch	Digital & Flow Switch	Flow Switch	Flow Switch	Flow Switch	Digital & Flow Switch	Flow Switch	Digital	Digital	Digital
Controls	Digital	Digital	Digital	Digital	Digital	Digital	Digital	Advanced Digital	Digital	Digital	Digital	Digital
Water Fittings	Double O-ring	Double O-ring	Double O-ring	3/4" - 1" FPT ⁷	Double O-ring	Double O-ring	Double O-ring	Double O-ring	Double O-ring	1" MPT	1.25 - 2" MPT	Double O-ring/3/4" - 1" FPT
Air Handler Match	N/A	N/A	N/A	N/A	N/A	✓	✓	✓▲	✓▲	✓▲	✓▲	✓▲
"A" Coil Match	N/A	N/A	N/A	N/A	N/A	✓	✓	✓▲	✓▲	✓▲	✓▲	✓▲
Warranty (Parts/Labor)	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	5/1
Lifetime Compressor & Lifetime MCHX	Optional	Optional	Optional	Optional	Optional	Optional	Optional	-	Optional	Optional	Optional	-

Notes:

- * Matched Air Handler & "A" Coil
- ** Air Handler Only
- *** ZS006-012 Coax
- † Part load/ full load range
- ▲ Optimized
- 1 Desuperheater not offered for VS006-015
- 2 Not offered for ZS006-012
- 3 Aux. Heat not offered on VS006-018
- 4 Aux. heat not offered on ZS006-017
- 5 ECM Motor not offered on VS006-012
- 6 ECM Motor not offered on ZS006-012
- 7 ZS006-017 - 3/4" FPT, ZSZT018-072 - 1" FPT
- 8 Vented Version Only





Multi-Positional Two-Stage Vertical Packaged Unit

GYT Model



The New Direction of Comfort

The GeoComfort Navigator Series is advanced geothermal to meet your changing needs. Each unit is built to the high standards of quality you expect from GeoComfort. This premier system is the ultimate solution for increased efficiency, exceptional reliability and unsurpassed comfort. We've transformed the concept of geothermal using state-of-the-art technology to bring you a heating and cooling system that points to perfection.

Navigator Series Vertical Packaged systems provide forced air heating and cooling like most conventional systems – but the similarities end there. GeoComfort has utilized the most advanced geothermal technology, resulting in a heat pump that is built tough to perform season after season and so quiet that you may not even realize it's running.

Unit Features:

- 5 sizes: 024, 036, 048, 060, 072
- Copeland UltraTech® 2-stage scroll compressor
- Multi-position cabinet (left or right return)
- All-aluminum microchannel air coil
- Sound and vibration absorbing elastomeric compressor isolation pads
- ECM blower motor
- Side or back air discharge factory option
- Foam enclosed, enhanced surface coaxial heat exchanger
- UL GREENGUARD Gold certified foam cabinet insulation
- Digital controls with enhanced unit protection
- Top or side mount, eye level controls
- R-410a zero-ozone depletion refrigerant
- Heavy gauge, painted steel cabinet and door panels
- Factory installed desuperheater
- Optional cupronickel coax
- Standard 10/10/5 warranty + free warranty upgrade*
- Optional limited lifetime microchannel air coil and compressor warranty*

**see page 29 for details*

Single & Two-Stage Compact Vertical Packaged Unit

GVS/GVT Model



Don't Sweat the Small Stuff

The Element Series VS/VT models showcase the quality, innovation, and attention to detail that go into every GeoComfort product. The Compact Vertical Packaged model combines many of the best features found throughout the GeoComfort product line with a smaller cabinet, making it perfect for installations where space is limited.

These systems deliver forced air heating and cooling like most conventional systems, but the list of benefits keeps going. GeoComfort has incorporated advanced features to create a heat pump that is remarkably efficient and whisper quiet. You'll marvel at how a small system produces such amazing comfort.



Unit Features:

- 17 sizes: 006, 009, 012, 015, 018, 024, 030, 036, 042, 048, 060, 072 (single stage); 024, 036, 048, 060, 072 (2-stage)
- Copeland single-stage or UltraTech® 2-stage scroll compressor
- All-aluminum microchannel air coil
- Sound and vibration absorbing elastomeric compressor isolation pads
- Standard PSC or optional ECM blower motor (single-stage). ECM blower standard on 2-stage
- Foam enclosed, enhanced surface coaxial heat exchanger
- UL GREENGUARD Gold certified foam cabinet insulation
- Digital controls with enhanced unit protection
- Hinged control box lifts up for easy internal service
- R-410a zero-ozone depletion refrigerant
- Heavy gauge, painted steel cabinet and door panels
- Optional desuperheater
- Optional cupronickel coax
- Standard 10/10/5 warranty + free warranty upgrade*
- Optional limited lifetime microchannel air coil and compressor warranty*

*see page 29 for details



Multi-Positional Two-Stage Vertical Packaged Unit

GXT Model

High Technology Meets High Style

The Compass® Series vertical packaged model took the industry by storm winning multiple awards such as The NEWS 2010 Dealer Design Awards. The innovative multi-positional cabinet that is field convertible to upflow/downflow with right or left return makes life easier for both dealers and distributors to install and stock.

However, our innovation didn't stop there. GeoComfort, in its continual drive to be an industry leader, has solved another age-old issue: Formicary corrosion. In 2011, our XT models began production using an all-aluminum microchannel air coil.



Unit Features:

- 5 sizes: 024, 036, 048, 060, 072
- Multi-position cabinet (left return, right return, upflow, downflow convertible)
- Copeland UltraTech® 2-stage scroll compressor
- Factory supplied 1" thick filter rack and MERV 8 pleated air filter
- R-410a zero-ozone depletion refrigerant
- All-aluminum microchannel air coil
- Composite, antimicrobial drain pan
- Rugged steel cabinet
- Remote mounted controls
- ECM blower motor
- Desuperheater with internal pump
- Double O-ring fittings (source side)
- Optional cupronickel coax
- Standard 10/10/5 warranty + free warranty upgrade*
- Optional limited lifetime microchannel air coil and compressor warranty*

*see page 29 for details

Single & Two-Stage Compact Horizontal Packaged Unit

GZS/GZT Model



New Found Flexibility

Meet the next generation horizontal geothermal system. The Element Series Compact Horizontal has an all new design that takes advantage of the best technologies. Its small cabinet is the most striking feature. ZS/ZT models are perfectly sized for tight spaces or suspending above a ceiling.

Internally, state-of-the-art components work together to reduce noise and vibration, resulting in ultra-quiet operation, while achieving high efficiencies. Ease of installation and service are features of every GeoComfort model, and the ZS/ZT horizontal is no exception. Its lightweight cabinet, removable panels, and hinged control box make this unit an HVAC technician's best friend.



Unit Features:

- 18 sizes: 006, 009, 012, 015, 017, 018, 024, 030, 036, 042, 048, 060, 072 (single-stage); 024, 036, 048, 060, 072 (2-stage)
- Copeland single-stage or UltraTech® 2-stage scroll compressor
- All-aluminum microchannel air coil with foam enclosed braze plate heat exchanger
- Sound and vibration absorbing elastomeric compressor isolation pads
- Field convertible for side or end discharge with left or right return
- Airtight blower section
- Standard PSC or optional ECM blower motor (single-stage). ECM blower standard on 2-stage.
- UL GREENGUARD Gold certified foam cabinet insulation
- Digital controls with enhanced unit protection
- Hinged control box lifts up or out for easy internal service
- R-410a zero-ozone depletion refrigerant
- Heavy gauge, steel cabinet and door panels
- Optional desuperheater
- Optional cupronickel coax
- Standard 10/10/5 warranty + free warranty upgrade*
- Optional limited lifetime microchannel air coil and compressor warranty*

*see page 29 for details



Multi-Positional Hydronic Two-Stage Vertical Combination Packaged Unit

GCT Model



All The Comfort. All The Flexibility.

Our combination systems merge a forced air heating and cooling system with the indulgence of whisper-quiet radiant heating in a single unit. This system allows families to enjoy the comfort of floor-warming, hydronic heat in specific parts of their home while also delivering efficient forced air heating in other areas. As with all GeoComfort geothermal systems, air conditioning is also supplied by this single unit.

Enertech's continual drive of industry leadership and innovation has made a great unit even better. We've also solved another age-old issue: Formicary Corrosion. All Combo models are built with a standard all-aluminum microchannel air coil.

Unit Features:

- 5 sizes: 024, 036, 048, 060, 072
- Multi-position cabinet (left return, right return, upflow, downflow convertible)
- Copeland UltraTech® 2-stage scroll compressor
- Hydronic heating function
- Factory supplied 1" thick filter rack and MERV 8 pleated air filter
- R-410a zero-ozone depletion refrigerant
- All-aluminum microchannel air coil
- Composite, antimicrobial drain pan
- Rugged steel cabinet
- Remote mounted controls
- ECM blower motor
- Desuperheater with internal pump
- Double O-ring fittings (source side)
- Optional cupronickel coax
- Standard 10/10/5 warranty + free warranty upgrade*
- Optional limited lifetime microchannel air coil and compressor warranty*

**see page 29 for details*

Single and Two-Stage Indoor Split Unit

GBS/GBT Model



Home Comfort, Made Better.

GeoComfort's next generation is built on a legacy of innovation and improvement. Our new award winning split unit was redesigned from the ground up incorporating the best elements from our newest models into a compact, efficient and ultra-quiet system.

The new split system is incredibly versatile making it well suited for replacement and new construction applications. The space-saving footprint of this unit makes it an excellent choice for homes with minimal space for mechanical equipment. When matched with an air handler, the split can provide ducted heating and cooling as well as domestic hot water. The split can also be paired with a conventional furnace to create an ultra-efficient dual-fuel hybrid system.



Unit Features:

- 6 sizes: 018 (single-stage); 024, 036, 048, 060, 072 (2-stage)
- Optional matched multi-position air handler
- Industry standard line set sizes
- Whisper quiet design. Only from Enertech
- Digital, diagnostic controls
- Copper coaxial water heat exchanger with optional cupronickel
- Copeland UltraTech® 2-stage scroll compressor
- Standard hot water generator/desuperheater
- Standard 10/10/5 warranty + free warranty upgrade*
- Optional limited lifetime compressor warranty*

**see page 29 for details*



Two-Stage Outdoor Split Unit

GRT Model



Easiest. Installation. Ever.

As retrofit installations become an ever-growing part of the marketplace, the need for simple and quick installation solutions grows as well. In most cases, homeowners don't want to wait for their new system to be installed, or are in a situation where a quick replacement is necessary.

This is where GeoComfort has yet again set an all-new direction in the industry with the Compass Series Outdoor Split.

Designed around years of geothermal installation expertise and feedback from customers, the RT has some of the most advanced features available. These features allow the installer to place the unit exactly where it needs to go as quickly and easily as possible.



The innovative design of the unit is centered on ease of installation. Shown below, the loop can easily be brought to the unit from almost any angle. Additionally, the unit could be rotated 90° counterclockwise if needed.

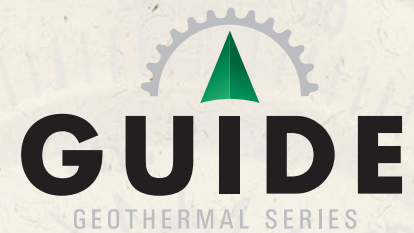
Unit Features:

- 4 sizes: 024, 036, 048, 060
- UV protected outdoor cabinet
- Copeland UltraTech® 2-stage scroll compressor
- R-410a zero-ozone depletion refrigerant
- Factory installed freeze protection
- Side-mount flow center connection
- Uses standard flow center with installer-selected configuration
- Standard size back-seated service valves
- Included outdoor installation kit (flow center sold separately, see unit accessories)
 - Flow center cover
 - Aluminum pipe shield
 - Pump wiring harness
 - Hose kit
 - 90° PE street elbows
- Optional factory installed connections for external desuperheater
- Standard 10/10/5 warranty + free warranty upgrade*
- Optional limited lifetime compressor warranty*

*see page 29 for details

Variable-Speed, Variable Capacity Water-to-Water Unit

GWV Model



Revolutionary Comfort and Efficiency: The First of Its Kind

Enertech engineers, dealers, and technicians worked together to create a hypothetical design so innovative that it would revolutionize home comfort; and that system is here! Introducing the future of geothermal water-to-water heat pumps: our variable-speed water-to-water.

Our new GeoComfort variable-speed, variable-capacity heating and cooling system adjusts the BTUH output to match the load profile for desired comfort settings. With the help of an outdoor temperature sensor, the modulating compressor adjusts to deliver the perfect water temperatures for a radiant or hydronic system application. This is vital because the efficiency of a water-to-water geothermal unit increases significantly with lower water temperatures.



Unit Features:

- Size: 060 (variable speed compressor)
- Radiant, in-floor heating and cooling, forced air heating and cooling, and 100% of the domestic hot water in one compact unit
- High temperature performance, leaving water temperature up to 135° F
- Large easy-to-read high-mounted LCD control center
- Time saving, easy to commission start-up wizard
- Direct readout of running conditions on the LCD control screen
- Electronic expansion valve
- Double o-ring connections
- Integrated variable-speed load pump
- Heavy gauge, painted, galvanized steel cabinets
- Hydronic options, cased / uncased coils / airhandlers
- Standard 10/10/5 warranty + free warranty upgrade*

**see page 29 for details*



Single-Stage High Performance - High Temperature Water-to- Water Unit

GHP Model



High Temperature Hot Water, Efficiently Delivered!

The GeoComfort High-Performance Water-to-Water geothermal system is the ultimate solution for heating only applications where standard 120 degrees Fahrenheit leaving water temperature is not sufficient. Its enhanced design increases water temperature output by 20 degrees.

A vented coax option can provide 100% of the home's domestic hot water supply, substantially reducing water heating costs without requiring a significant amount of space or installation time. Additionally, the non-vented coax option is ideal for radiant heating and pool heating applications.

Unit Features:

- Size: 024
- Vented and unvented options
- High density closed cell foam insulation
- Hinged control box swings out / removes for easy access
- Top and all side panels remove for service
- Triple mounted compressor isolation
- Foam insulated, enhanced surface coaxial heat exchanger
- Single-stage reliable reciprocating compressor
- Thermistor freeze-protection
- Side-mount water and refrigerant connections
- Standard 3/4-inch fittings on vented coax model.
- Unvented coax option features 1-inch fittings.
- Double o-ring fittings
- Meets ENERGY STAR® requirements for efficiency
- Standard 5/5/1 warranty

**see page 29 for details*

Two-Stage Water-to-Water Unit

GWT Model



The Best in Hydronic Comfort.

GeoComfort® Compass® Series geothermal systems are expertly designed to be technologically advanced and exceptionally efficient. The result is a heating and cooling system as beautiful as it is functional.

GeoComfort hydronic (water-to-water) units offer a unique set of system benefits, the most remarkable of which is radiant heating. This extremely comfortable heating solution warms your home from the floor up, allowing for constant and uniform heat distribution without hot and cold spots. Radiant heating is ductless heating. By eliminating the sound of forced air the total system noise is reduced. Compass Series water-to-water units are also reversible and capable of providing chilled water for air conditioning.



Unit Features:

- 5 sizes: 036, 048, 060, 092, 120 (models 092-120 have two compressors)
- Optional hydronic air handler and "A" coils
- Digital controls
- Copper or cupronickel coaxial water heat exchanger
- High efficiency Copeland UltraTech® scroll compressor (036 - 092(2); 2 single speed scrolls on 120 & 144)
- Desuperheater standard
- Rugged steel cabinet
- Source side double O-ring fittings (sizes 026-060)
- Radiant floor ready
- Standard 10/10/5 warranty + free warranty upgrade*
- Optional limited lifetime compressor warranty*

*see page 29 for details



Single-Stage Water-to-Water Unit

GWS/GWD Model



Maximum Comfort Plus Maximum Efficiency – Now in a Smaller Box.

Although the GeoComfort single-stage hydronic models are small in size, they're big in efficiency! The WS/WD models boast an overall smaller footprint and lighter weight than it's WT model siblings.

What's more, GeoComfort single-stage water-to-water models utilize stainless steel brazed plate heat exchangers, a time-proven technology that makes them incredibly efficient. The units are designed to supply heated or chilled water for use in a wide range of heating and cooling applications such as radiant heating or places where zones temperature or humidity controls are needed.

The WD 120 model features dual compressors for 2-stage operation.

Unit Features:

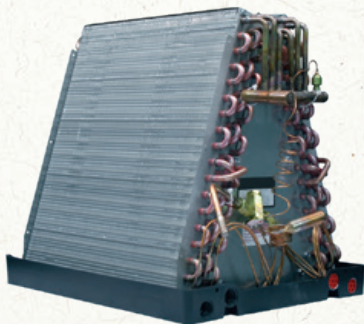
- 6 sizes: 036, 048, 060, 072, 084, 120
- Copeland single-stage scroll compressor
- Front, top & rear access
- Electronic controls with safety lock out
- Stainless brazed plate heat exchangers (BPHX)
- Thermostatic expansion valve
- High and low access ports
- R-410a zero-ozone depletion refrigerant
- Desuperheater with internal pump
- Optional tube-in-shell cupronickel heat exchanger (source only)
- Standard 10/10/5 warranty + free warranty upgrade*
- Optional limited lifetime compressor warranty*

**see page 29 for details*

MP Series Multi-Position DX Air Handlers

Unit Features:

- AHRI match for GeoComfort split systems
- Multi-position air pattern ships in upflow configuration
- Field convertible to downflow and horizontal configuration (downflow kit required for downflow operation)
- Variable-speed ECM fan motor
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Oversized copper tube/aluminum fin “A” coil for maximum efficiency
- Sweat refrigerant line set connections
- Factory-installed R-410a TXV
- Narrow width (25” maximum) for small closet installations
- Slide-out blower assembly
- Optional downflow kit
- Optional field-installed internal electric heat with circuit breakers
- Optional filter rack with standard size 1” filters
- Consult warranty page for coverage details



AC Series DX “A” Coils

Unit Features:

- AHRI match for GeoComfort split systems
- Uncased design for maximum flexibility, especially on retrofit applications
- Factory-installed R-410a TXV
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Oversized copper tube/aluminum fin “A” coil for maximum efficiency
- Sweat refrigerant line set connections
- Consult warranty page for coverage details



MC Series DX Cased Coils

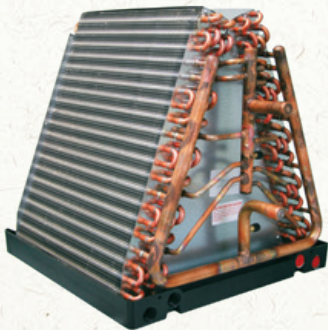
Unit Features

- Same features as the AC DX “A” Coil, but enclosed in a rigid cabinet for easy installation, especially on retrofit applications.

MP Series Multi-Position Hydronic Air Handlers

Unit Features:

- Optimized for use with GeoComfort water-to-water heat pumps
- Multi-position air pattern ships in upflow configuration
- Field convertible to downflow and horizontal configuration (downflow kit required for downflow operation)
- Variable-speed ECM fan motor
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Oversized copper tube/aluminum fin “A” coil for maximum efficiency
- Sweat refrigerant line set connections
- Factory-installed R-410a TXV
- Narrow width (25” maximum) for small closet installations
- Slide-out blower assembly
- Optional downflow kit
- Optional field-installed internal electric heat with circuit breakers
- Optional filter rack with standard size 1” filters
- Consult warranty page for coverage details



AC Series Hydronic “A” Coils

Unit Features:

- Single coil for both chilled water and hot water
- Designed for 100°F to 120°F water in heating operation
- Optimized for use with GeoComfort water-to-water heat pumps
- Copper sweat water connections
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Consult warranty page for coverage details



AC Series Hydronic Cased Coils

Unit Features

- Same features as the AC Hydronic “A” Coil, but enclosed in a rigid cabinet for easy installation, especially on retrofit and dual-fuel applications.

Unit Accessories

Loop Piping and Fittings



Loop Pipe

- Pre-assembled U-bend coils
- Straight pipe
- Coiled pipe



Fittings

- Headers
- Elbows
- Unions
- Couplings
- Tees
- Bushings

Flow Centers & Replacement Pumps

Composite/Brass Valve Double O-Ring Fittings

- Double o-ring fittings or 1" NPT connections
- Front flush ports
- Foam insulated cabinet stops condensation
- High impact polystyrene cabinet will not rust
- Fully assembled and leak tested



Non-Pressurized

- Double O-ring fittings or 1" NPT connections
- Foam insulated cabinet stops condensation
- Fully assembled and leak tested
- Variable-speed available



Variable-Speed

- Magna GEO pumps
- ECM motor technology
- 1" brass flush valves
- Built-in control
- Graphic display



Hose Kits & Loop Add-ons

- GeoPrime reservoir tanks
- Geo Booster
- Pressure batteries



GeoComfort Thermostats



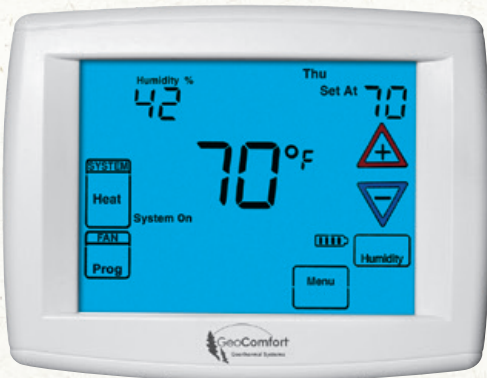
Sensi Wi-Fi

- Extreme temperature notification
- 7 day programmable
- Remote access and contractor contact info with smartphone app
- 4 Heat / 2 Cool stages
- Keypad lockout
- Multi thermostat control



Sensi Touch Wi-Fi

- HD color touchscreen
- Can change temperature setting based on GPS location
- Smart home compatible
- Easy-click, no screwdriver terminals



Touch Screen

- Single-stage / multi-stage
- Programmable (7-day, 5/1/1 day) or non-programmable
- Hard wired or battery powered with power stealing assist
- Remote sensing indoor or outdoor and at the thermostat
- Programmable fan with comfort circulator fan option
- Enhanced dehumidification control
- Automatic daylight savings option
- Flow-through humidifier water-saving feature — up to 50%
- Large, 12 square inch display with 10-second backlight
- Exclusive energy saving feature during peak A/C demand periods
- Dual-fuel heat pump logic program requires no outdoor sensor



Non-Programmable

- Large easy to read screen with a bright backlit display
- Adjustable temperature set point min. /max. limits
- Auto changeover
- Dual-fuel control
- Keypad lockout
- 4 Heat / 2 Cool stages

Unit Accessories

EWC Zoning Dampers & Panels

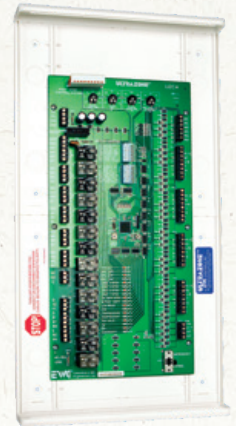
URD

- Nylon blade shaft notched to indicate blade position
- Male crimped end to ease installation process
- Open and closed LEDs indicate blade position
- Nylon shaft provides thermal barrier to eliminate condensation
- Integrated seal eliminates loose gasket material
- Integrated door seal provides 97% shut off to 1" W.C.
- Min/max adjustable closed set points



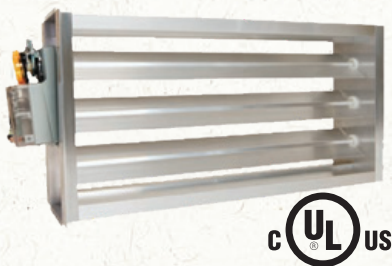
UZC : Compatible with all HVAC systems up to 4 stages of heat and 2 stages of cool

- Auto-changeover and fan control from any zone
- Computer watchdog circuitry prevents lock-ups from power failures and power interruptions
- Controls up to 20 zones
- LED display for complete diagnostic system readout
- Adjustable heating and cooling limits to protect equipment



ND

- Nylon blade shaft notched to indicate blade position
- Heavy gauge extruded aluminum frame
- Nylon blade bushings allow for smooth, quiet operation
- Open and closed LEDs indicate blade position
- Nylon shaft provides thermal barrier to eliminate condensation
- Overlapping blades provides 97% shut off up to 1" W.C.
- Custom and odd sizes available



BMPlus : Compatible with all HVAC systems up to 3 stages of heat and 2 stages of cool

- Dual-fuel kits not required
- One zone mode
- Automatic changeover from any zone
- Computer watchdog circuit to ensure operation
- Supply air sensor included
- Optional outdoor air sensor



SID [Slip-In-Damper]

- Allows for up to 20 SID's on one EWC control panel
- More sizes available than any other component
- Optional end switch for additional interface



NCM : Single-stage, dual-fuel and heat pump compatible up to 3 zones

- Computer watchdog circuit
- Auto-changeover from any zone
- LED display for complete system read out
- Supply air sensor to protect equipment
- Adjustable purge time

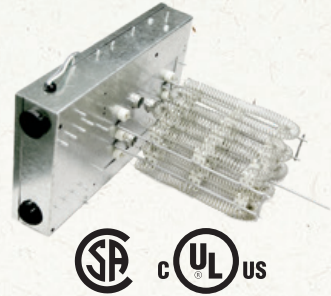


Unit Accessories

Auxiliary Heaters

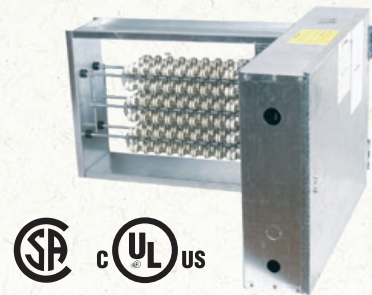
Internal Auxiliary Electric Heater Features:

- Single piece design (no separately mounted control box)
- Heater staging (YT, XT & CT Series)
- Low voltage harness for direct connection to relay board
- Automatic high limit and auxiliary limit switches for over temperature protection
- Internal circuit breakers



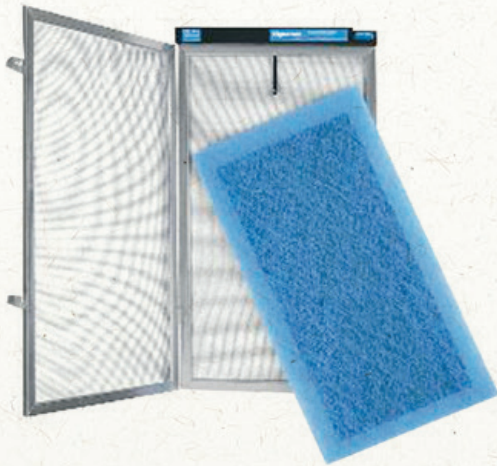
External Duct Heater Features:

- Used for horizontal units
- Left hand offset control box
- Automatic limit switch for primary over temperature protection
- Energized magnetic control contractor per stage
- Manual reset limit switch for secondary over temperature protection
- Removable hinged access door with latch
- Internal fusing where required by NEC and UL



Unit Accessories

Filters



Electronic Dynamic® Filter

- High efficiency electronic air cleaners
- MERV equivalency rating of 13
- Disposable low static polarized media
- Media contains activated charcoal

Sizes: 16"x 20"x 1" up to 28"x 34"x 1"

(see price book for actual sizes and compatibility)



Electrostatic Filters

- Self charging media
- 3 filtration layers
- Washable filter
- Lifetime warranty

Sizes: 16"x 20"x 1" up to 38"x 36"x 1"

(see price book for actual sizes and compatibility)

Unit Performance Data

Model	Type	Cooling with PSC Blower		Heating with PSC Blower		Cooling with ECM Blower Option		Heating with ECM Blower Option		Dimensional Data			Height with Control Box	Unit Weight (lbs)
		BTU	EER	BTU	COP	BTU	EER	BTU	COP	Height	Width	Depth		
Single-Stage Compact Vertical Packaged (PLEASE NOTE PSC AND ECM BLOWER LISTINGS) 1, 3, 4, 5, 6, 7, 8, 14														
VS006	Ground Water	7,800	25.8	7,000	4.6	—	—	—	—	30"	21.5"	21.5"	—	167
	Ground Loop	7,200	18.6	5,600	3.7	—	—	—	—					
VS009	Ground Water	11,900	22.1	10,600	4.4	—	—	—	—	30"	21.5"	21.5"	—	234
	Ground Loop	10,900	17.4	8,500	3.6	—	—	—	—					
VS012	Ground Water	13,400	24.1	12,100	4.3	—	—	—	—	30"	21.5"	21.5"	—	234
	Ground Loop	11,900	18.1	9,400	3.6	—	—	—	—					
VS015	Ground Water	17,500	28.8	14,600	5.1	17,400	31.6	14,400	5.4	37.3"	22.5"	22.5"	—	234
	Ground Loop	16,000	19.8	11,600	4.1	16,000	22.3	11,500	4.3					
VS018	Ground Water	23,200	27.5	20,100	5.0	23,200	30.5	19,600	5.3	37.3"	22.5"	22.5"	—	260
	Ground Loop	21,400	20.0	16,300	3.9	21,700	22.2	15,700	4.1					
VS024	Ground Water	28,100	26.0	24,200	4.9	29,400	29.5	24,000	5.1	37.3"	22.5"	22.5"	—	265
	Ground Loop	26,000	19.7	19,400	4.0	27,000	21.6	19,300	4.2					
VS030	Ground Water	31,000	23.4	28,700	4.7	34,000	27.5	29,200	5.1	37.3"	22.5"	22.5"	—	285
	Ground Loop	30,100	18.5	22,300	3.9	31,400	20.4	23,200	4.2					
VS036	Ground Water	40,500	23.5	37,600	4.6	41,600	25.5	36,900	4.8	37.3"	22.5"	22.5"	—	310
	Ground Loop	37,800	18.0	30,200	3.9	38,800	19.2	29,600	3.9					
VS042	Ground Water	46,700	24.4	39,200	4.7	47,700	28.4	38,300	5.0	41.0"	25.0"	27.9"	—	357
	Ground Loop	43,600	18.6	32,000	3.8	44,400	21.2	31,100	4.1					
VS048	Ground Water	54,500	22.6	48,100	4.4	54,900	26.4	47,500	4.8	41.0"	25.0"	27.9"	—	360
	Ground Loop	50,500	17.6	39,600	3.6	51,600	20.1	38,700	3.9					
VS060	Ground Water	63,300	21.3	58,700	4.3	65,500	22.8	58,100	4.6	41.0"	25.0"	27.9"	—	375
	Ground Loop	60,000	16.9	46,900	3.6	61,500	18.2	46,300	3.8					
VS072	Ground Water	74,600	19.1	66,500	4.0	75,600	19.7	66,200	4.1	41.0"	25.0"	27.9"	—	367
	Ground Loop	70,100	15.1	53,200	3.3	70,900	15.7	52,900	3.4					

Model	Type	Cooling BTU				Heating BTU				Dimensional Data			Height with Control Box	Unit Weight (lbs)
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth		
Two-Stage Compact Vertical Packaged 1, 3, 4, 5, 6, 7, 8														
VT024	Ground Water	27,600	23.8	19,900	28.4	23,900	4.6	16,800	4.2	37.3"	22.5"	22.5"	—	248
	Ground Loop	25,800	18.6	19,300	24.2	19,400	4.0	14,800	3.8					
VT036	Ground Water	40,000	22.8	29,500	29.8	36,900	4.6	25,700	4.7	37.3"	22.5"	22.5"	—	271
	Ground Loop	37,400	17.7	28,500	25.2	29,500	3.9	22,900	4.2					
VT048	Ground Water	54,700	24.5	40,600	33.0	46,900	4.6	33,600	4.9	41.0"	25.0"	27.9"	—	361
	Ground Loop	51,300	18.9	39,200	27.2	38,300	3.9	30,200	4.3					
VT060	Ground Water	64,200	22.0	48,300	28.2	57,500	4.5	41,300	4.7	41.0"	25.0"	27.9"	—	373
	Ground Loop	61,300	17.6	46,500	23.6	46,300	3.8	36,600	4.2					
VT072	Ground Water	72,800	19.7	56,900	24.5	64,700	4.1	49,600	4.3	41.0"	25.0"	27.9"	—	375
	Ground Loop	68,900	15.8	55,300	21.1	51,800	3.4	44,000	3.9					

Vertical Packaged 1, 3, 4, 5, 6, 7														
YT024	Ground Water	29,200	25.7	22,200	33.6	23,400	5.3	17,500	5.5	46.0"	23.0"	26.5"	53.25"	310
	Ground Loop	27,100	19.9	21,400	28.2	19,000	4.3	15,800	4.8					
YT036	Ground Water	44,300	27.0	32,700	37.4	37,500	5.5	26,600	5.8	54.0"	25.4"	30.5"	61.25"	405
	Ground Loop	41,200	20.9	31,500	31.3	29,100	4.5	23,300	5.1					
YT048	Ground Water	57,100	26.2	44,100	35.3	49,500	5.2	35,900	5.5	54.0"	25.4"	30.5"	61.25"	450
	Ground Loop	53,300	20.2	42,600	29.6	39,900	4.3	32,000	4.9					
YT060	Ground Water	68,700	24.8	51,900	33.4	61,700	4.9	42,900	5.2	58.4"	25.4"	30.5"	65.65"	475
	Ground Loop	64,300	19.3	50,000	28.0	49,200	4.1	37,700	4.6					
YT072	Ground Water	77,600	23.2	60,800	29.5	71,100	4.6	52,100	4.8	58.4"	25.4"	30.5"	65.65"	480
	Ground Loop	71,900	18.0	58,500	24.8	56,200	3.8	45,800	4.4					

Vertical Packaged 1, 3, 4, 5, 6, 7, 8														
XT024	Ground Water	29,600	26.9	22,400	35.0	24,700	5.2	18,500	5.4	56.1"	28"	32.2"	62.5"	415
	Ground Loop	27,200	20.3	21,400	29.1	19,800	4.3	16,600	4.8					
XT036	Ground Water	42,200	24.0	31,100	32.6	37,000	5.1	26,000	5.2	56.1"	28"	32.2"	62.5"	420
	Ground Loop	38,900	18.3	29,900	27.0	29,200	4.2	23,200	4.6					
XT048	Ground Water	53,100	22.1	39,400	29.4	47,400	4.6	33,700	4.9	56.1"	28"	32.2"	62.5"	433
	Ground Loop	49,000	17.1	37,400	24.1	38,200	3.9	29,700	4.3					
XT060	Ground Water	67,700	22.4	50,800	29.8	60,000	4.5	43,300	4.8	60.1"	28"	32.2"	66.5"	466
	Ground Loop	63,000	17.8	49,000	24.9	47,700	3.7	38,600	4.3					
XT072	Ground Water	75,600	21.1	59,200	26.9	70,300	4.3	52,800	4.6	60.1"	28"	32.2"	66.5"	479
	Ground Loop	71,100	17.1	57,500	23.0	55,900	3.6	46,700	4.1					

Unit Performance Data

Model	Type	Cooling				Heating				Dimensional Data			Src. In Src. Out	Load In Load Out	Unit Weight (lbs)
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth			
Water-to-Water ^{2, 12}													1 1/4"	3/4"	248
HP024	Ground Loop	—	—	—	—	23,000	3.1	—	—	21"	27.25"	24.5	1 1/4"	3/4"	248
Water-to-Water ^{2, 5}													1"	1"	320
WV060	Ground Loop	43,000	18.4	21,600	25.4	54,600	3.0	27,000	3.9	37.2"	25.1"	25.1"	1"	1"	320
Water-to-Water ^{2, 11, 12, 13}													1"	1"	280
WT036	Ground Water	44,300	20.6	34,600	24.5	44,900	3.6	33,300	3.5	24"	26"	34"	1"	1"	280
	Ground Loop	42,000	16.0	33,300	20.6	36,400	3.0	29,200	3.1				1"	1"	
WT048	Ground Water	54,300	19.8	40,800	23.0	55,100	3.6	40,500	3.4	24"	26"	34"	1"	1"	300
	Ground Loop	49,400	15.1	38,800	19.2	44,100	3.0	35,700	3.1				1"	1"	
WT060	Ground Water	62,700	19.0	47,800	21.4	66,200	3.6	49,500	3.5	24"	26"	36"	1"	1"	350
	Ground Loop	57,800	14.6	46,100	18.1	53,200	3.0	44,400	3.1	24"	32"	36"	1"	1"	
WT092	Ground Water	107,100	19.8	78,500	22.2	117,000	3.8	82,300	3.5	24"	30"	48"	1"	1 1/4"	550
	Ground Loop	100,200	15.2	75,700	18.6	92,400	3.1	72,200	3.1				1"	1 1/4"	
WT120	Ground Water	124,400	20.1	—	—	124,900	3.5	—	—	24"	30"	48"	1"	1 1/2"	670
	Ground Loop	114,800	15.4	—	—	97,400	2.8	—	—				1"	1 1/2"	
Water-to-Water ^{2, 11}													1 1/4"	1 1/4"	210
WS036	Ground Water	36,600	23.5	—	—	34,500	3.7	—	—	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	210
	Ground Loop	34,700	18.2	—	—	26,600	3.1	—	—				1 1/4"	1 1/4"	
WS048	Ground Water	56,300	23.3	—	—	54,200	3.9	—	—	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	260
	Ground Loop	52,800	17.7	—	—	42,100	3.1	—	—				1 1/4"	1 1/4"	
WS060	Ground Water	64,900	22.5	—	—	63,300	3.9	—	—	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	300
	Ground Loop	60,000	17.1	—	—	53,000	3.1	—	—				1 1/4"	1 1/4"	
WS072	Ground Water	76,900	21.1	—	—	78,600	4.1	—	—	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	286
	Ground Loop	73,300	17.7	—	—	63,100	3.4	—	—				1 1/4"	1 1/4"	
WS084	Ground Water	88,700	20.8	—	—	80,600	3.5	—	—	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	415
	Ground Loop	83,600	16.1	—	—	74,200	3.1	—	—				1 1/4"	1 1/4"	
WD120	Ground Water	109,100	18.1	65,800	22.0	111,900	3.4	59,000	3.6	27.5"	27"	26.1"	1 1/4"	1 1/4"	465
	Ground Loop	104,600	14.5	63,500	19.8	100,100	2.8	57,500	3.4				1 1/4"	1 1/4"	
Single-Stage Indoor Split ^{1, 3, 4}													3/8"	5/8"	190
BS018	Ground Water	22,000	25.3	—	—	18,500	4.5	—	—	21"	26"	26"	3/8"	5/8"	190
	Ground Loop	20,400	18.9	—	—	14,600	3.6	—	—				3/8"	5/8"	
Two-Stage Indoor Split ^{1, 3, 4}													3/8"	5/8"	190
BT024	Ground Water	26,800	22.7	21,000	25.8	23,000	4.2	17,900	4.4	21"	26"	26"	3/8"	5/8"	190
	Ground Loop	24,900	17.3	20,300	22.2	18,200	3.4	15,400	3.9				3/8"	5/8"	
BT036	Ground Water	35,400	21.0	27,700	30.4	36,200	4.5	25,900	4.8	21"	26"	26"	3/8"	5/8"	201
	Ground Loop	35,200	17.1	27,600	26.0	28,700	3.8	22,900	4.3				3/8"	5/8"	
BT048	Ground Water	55,700	26.2	42,100	35.6	45,700	4.6	34,200	5.0	21"	26"	26"	3/8"	3/4"	226
	Ground Loop	51,500	19.9	40,500	28.8	37,300	3.9	30,900	4.4				3/8"	3/4"	
BT060	Ground Water	66,200	22.7	50,900	30.1	57,000	4.2	42,300	4.5	21"	26"	26"	3/8"	7/8"	229
	Ground Loop	62,300	17.6	49,200	25.5	45,900	3.7	37,800	4.1				3/8"	7/8"	
BT072	Ground Water	73,900	20.8	58,800	27.5	64,800	4.0	49,300	4.2	21"	26"	26"	3/8"	7/8"	244
	Ground Loop	69,900	16.4	56,700	23.2	52,000	3.4	43,800	3.8				3/8"	7/8"	
Outdoor Split ^{1, 3, 4, 5, 6}													3/8"	7/8"	180
RT024	Ground Water	—	—	—	—	—	—	—	—	23.4"	32"	28.8"	3/8"	7/8"	180
	Ground Loop	24,600	15.9	19,600	23.7	17,800	3.4	14,700	3.9				3/8"	7/8"	
RT036	Ground Water	—	—	—	—	—	—	—	—	23.4"	32"	28.8"	3/8"	7/8"	225
	Ground Loop	36,000	16.7	27,800	25.3	27,200	3.8	21,700	4.2				3/8"	7/8"	
RT048	Ground Water	—	—	—	—	—	—	—	—	23.4"	32"	28.8"	3/8"	7/8"	270
	Ground Loop	50,800	18.0	39,000	25.4	36,400	3.9	29,800	4.4				3/8"	7/8"	
RT060	Ground Water	—	—	—	—	—	—	—	—	23.4"	32"	28.8"	1/2"	1 1/8"	270
	Ground Loop	61,500	17.2	47,900	24.1	45,600	3.5	37,000	4.1				1/2"	1 1/8"	

Notes:

- Rated in accordance with AHRI/ISO standard 13256-1, which includes pump penalties
- Rated in accordance with ISO Standard 13256-2, which includes pump penalties
- Heating capacities based on 68.0°F DB, 59.0°F WB entering air temperature
- Cooling capacities based on 80.6°F DB, 66.2°F WB entering air temperature
- Ground Loop entering water temp., Full Load: 32F heating/77F cooling.
Ground Loop entering water temp., Part Load: 41F heating/68F cooling
- Ground Water entering water temp., Full Load: 50F heating/59F cooling
Ground Water entering water temp., Part Load: 50F heating/59F cooling
- All Desuperheater connections are 3/4" FPT
- Width excludes filter rack (width with rack is 30.3")
- ST072 with ACD060C is not ENERGY STAR rated for Open Loop Applications
- For the source water fittings, WS open loop only, ZS07018-072 models use 1" FPT fittings,
ZS006-017 models use 3/4" FPT fittings.
- Heating capacities based on 32°F EST & 104°F ELT
Cooling capacities based on 77°F EST & 53.6°F ELT
Entering load temperature over 120°F heating and under 45°F cooling is not permissible
Floor heating is most gernaly designed for 85°F entering load temperature
There are two IN connections, but only one OUT connection
Model 120 does not meet ENERGY STAR Tier 3 ratings
- Source water loop has 1" double O-ring fittings
- WT060 is the only model available with Side Water Connection option
- VS060 with PSC blower, VS072 with PSC or ECM are not ENERGY STAR qualified models
- Water Loop entering water temp., Full Load: 68F heating/86F cooling
Water Loop entering water temp., Part Load: 68F heating/86F cooling

Model	Type	Cooling with PSC Blower		Heating with PSC Blower		Cooling with ECM Blower Option		Heating with ECM Blower Option		Dimensional Data			Unit Weight (lbs)	
		BTU	EER	BTU	COP	BTU	EER	BTU	COP	Height	Width	Depth		
Single Stage Compact Horizontal Packaged (PLEASE NOTE PSC AND ECM BLOWER LISTINGS) 1, 3, 4, 5, 6, 7, 10, 15														
ZS006 208/230V ONLY	Water Loop	6,500	14.6	7,800	5.2	—	—	—	—	12.0"	20.0"	40.0"	Add 2.4" to width w/ filter rack	140
	Ground Water	7,600	23.2	6,400	4.3	—	—	—	—					
	Ground Loop	6,900	17.1	5,200	3.5	—	—	—	—					
ZS006 265/115V ONLY	Water Loop	6,200	13.9	7,400	4.9	—	—	—	—	12.0"	20.0"	40.0"	Add 2.4" to width w/ filter rack	140
	Ground Water	7,200	22	6,100	4.1	—	—	—	—					
	Ground Loop	6,500	16.2	5,000	3.3	—	—	—	—					
ZS009 208/230V ONLY	Water Loop	9,200	14.3	11,700	4.9	—	—	—	—	12.0"	20.0"	40.0"	Add 2.4" to width w/ filter rack	140
	Ground Water	10,500	22.9	9,500	4.2	—	—	—	—					
	Ground Loop	9,600	16.7	7,500	3.5	—	—	—	—					
ZS009 265/115V ONLY	Water Loop	8,700	13.6	11,100	4.7	—	—	—	—	12.0"	20.0"	40.0"	Add 2.4" to width w/ filter rack	140
	Ground Water	10,000	21.7	9,000	4.0	—	—	—	—					
	Ground Loop	9,200	15.9	7,100	3.3	—	—	—	—					
ZS012	Water Loop	11,000	12.5	13,600	4.3	—	—	—	—	12.0"	20.0"	40.0"	Add 2.4" to width w/ filter rack	140
	Ground Water	12,400	18.7	11,700	3.7	—	—	—	—					
	Ground Loop	11,300	14.1	9,500	3.2	—	—	—	—					
ZS015 BPHE	Water Loop	14,600	16.3	17,100	5.4	14,600	17.3	16,700	5.5	17.0"	21.0"	40.0"	Add 2.4" to width w/ filter rack	173
	Ground Water	—	—	—	—	—	—	—	—					
	Ground Loop	15,300	19.2	11,100	3.8	15,200	20.3	10,900	3.9					
ZS015 COAX	Water Loop	14,000	14.7	17,700	5.6	13,500	14.7	17,800	5.7	17.0"	21.0"	40.0"	Add 2.4" to width w/ filter rack	173
	Ground Water	16,100	24.4	14,300	4.7	15,600	24.9	14,300	4.8					
	Ground Loop	14,500	17.1	11,300	3.9	14,200	17.6	11,200	3.9					
ZS017 BPHE	Water Loop	17,000	15.8	21,000	5.3	17,300	17.4	20,400	5.6	17.0"	21.0"	40.0"	Add 2.4" to width w/ filter rack	173
	Ground Water	—	—	—	—	—	—	—	—					
	Ground Loop	18,300	18.6	13,400	3.7	18,100	20.5	13,000	3.8					
ZS017 COAX	Water Loop	16,900	14.7	20,900	5.3	16,900	15.6	20,600	5.5	17.0"	21.0"	40.0"	Add 2.4" to width w/ filter rack	173
	Ground Water	19,200	22.5	16,900	4.5	19,400	24.9	16,700	4.7					
	Ground Loop	17,900	17.1	13,700	3.7	17,800	18.2	13,500	3.9					
ZS018 BPHE	Water Loop	19,400	15.3	23,000	5.0	19,900	17.3	22,600	5.4	19.2"	21.7"	52"	Add 2.4" to width w/ filter rack	230
	Ground Water	—	—	—	—	—	—	—	—					
	Ground Loop	20,500	18.2	14,400	3.6	20,800	20.5	14,200	3.8					
ZS018 COAX	Water Loop	18,500	13.2	23,400	4.8	19,100	15.4	21,900	5.5	19.2"	21.7"	52"	Add 2.4" to width w/ filter rack	230
	Ground Water	20,900	20.7	18,600	4.2	21,400	26.0	17,500	4.7					
	Ground Loop	19,400	15.5	14,800	3.5	20,100	18.7	14,100	3.7					
ZS024 BPHE	Water Loop	24,100	15.8	29,700	5.0	25,000	17.9	29,300	5.6	19.2"	21.7"	52"	Add 2.4" to width w/ filter rack	236
	Ground Water	—	—	—	—	—	—	—	—					
	Ground Loop	25,200	18.7	18,600	3.7	26,100	21.5	18,600	3.9					
ZS024 COAX	Water Loop	24,600	14.9	29,300	4.9	25,300	16.9	28,500	5.5	19.2"	21.7"	52"	Add 2.4" to width w/ filter rack	236
	Ground Water	27,400	22.9	23,700	4.3	27,900	26.3	22,900	4.8					
	Ground Loop	25,700	17.4	18,500	3.6	26,200	19.6	18,000	3.9					
ZS030 BPHE	Water Loop	29,000	16.2	33,300	5.3	29,500	17.5	33,000	5.7	19.2"	21.7"	52"	Add 2.4" to width w/ filter rack	245
	Ground Water	—	—	—	—	—	—	—	—					
	Ground Loop	30,300	19.1	21,900	3.7	30,700	20.7	21,500	4.0					
ZS030 COAX	Water Loop	28,400	15.3	33,500	5.3	27,800	16.2	32,200	5.5	19.2"	21.7"	52"	Add 2.4" to width w/ filter rack	245
	Ground Water	31,800	23.4	27,900	4.5	30,900	24.6	26,300	4.7					
	Ground Loop	29,700	17.7	22,900	3.6	29,000	18.8	21,700	3.8					
ZS036 BPHE	Water Loop	35,900	15.6	43,400	4.9	36,800	16.8	43,300	5.3	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	263
	Ground Water	—	—	—	—	—	—	—	—					
	Ground Loop	37,600	18.1	27,800	3.7	38,400	19.5	27,600	4.0					
ZS036 COAX	Water Loop	35,100	15.4	43,800	4.9	35,300	16.0	42,600	5.1	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	263
	Ground Water	39,500	24.1	34,800	4.4	39,500	24.7	33,600	4.6					
	Ground Loop	36,600	17.9	28,300	3.7	37,200	18.8	27,500	3.9					
ZS042 BPHE	Water Loop	41,700	16.9	50,400	5.4	42,500	17.7	49,600	5.4	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	290
	Ground Water	—	—	—	—	—	—	—	—					
	Ground Loop	43,400	19.8	32,800	3.9	44,100	21.1	32,200	4.1					
ZS042 COAX	Water Loop	39,500	15.4	47,900	5.2	39,100	16.4	46,300	5.0	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	290
	Ground Water	44,200	23.7	38,900	4.5	43,700	25.6	37,500	4.5					
	Ground Loop	41,100	17.9	31,700	3.7	40,700	19.2	30,200	3.8					

Unit Performance Data

ZS048 BPHE	Water Loop	46,800	15.4	59,300	4.6	48,100	16.3	58,100	4.9	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	293
	Ground Water	—	—	—	—	—	—	—	—					
	Ground Loop	48,500	17.8	38,500	3.6	50,400	19.1	37,800	3.8					
ZS048 COAX	Water Loop	46,600	14.7	57,100	4.7	47,300	15.1	56,300	4.9	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	293
	Ground Water	52,100	22.4	46,800	4.2	52,900	22.6	45,600	4.3					
	Ground Loop	48,600	17.0	37,800	3.5	49,300	17.4	36,200	3.6					
ZS060 BPHE	Water Loop	58,400	15.4	75,700	4.9	59,300	17.0	74,700	5.3	21.2"	24"	61"	Add 2.4" to width w/ filter rack	303
	Ground Water	—	—	—	—	—	—	—	—					
	Ground Loop	60,500	17.8	49,200	3.8	60,700	19.5	48,200	4.0					
ZS060 COAX	Water Loop	56,400	14.5	72,800	4.7	53,500	15.0	71,000	4.9	21.2"	24"	61"	Add 2.4" to width w/ filter rack	303
	Ground Water	62,000	21.0	59,600	4.2	60,500	22.3	58,600	4.3					
	Ground Loop	57,000	16.1	48,400	3.5	57,000	17.5	46,200	3.6					
ZS072 BPHE	Water Loop	68,600	15.1	88,400	4.6	69,700	15.5	88,400	4.7	21.2"	24"	61"	Add 2.4" to width w/ filter rack	312
	Ground Water	—	—	—	—	—	—	—	—					
	Ground Loop	70,600	17.2	57,400	3.5	72,100	17.7	56,600	3.7					
ZS072 COAX	Water Loop	66,600	13.4	85,300	4.3	68,500	13.7	84,200	4.3	21.2"	24"	61"	Add 2.4" to width w/ filter rack	312
	Ground Water	74,200	19.1	69,000	3.8	75,600	19.8	68,900	3.9					
	Ground Loop	70,200	15.3	56,200	3.2	71,200	15.7	56,200	3.3					

Model	Type	Cooling BTU				Heating BTU				Dimensional Data			Unit Weight (lbs)	
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth		
Two Stage Compact Horizontal Packaged 1, 3, 4, 5, 6, 7, 10														
ZT024 BPHE	Water Loop	25,600	17.0	18,700	19.3	30,000	5.5	21,300	6.0	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	236
	Ground Water	—	—	—	—	—	—	—						
	Ground Loop	26,800	19.8	20,700	28.8	18,100	4.0	14,900	4.3					
ZT024 COAX	Water Loop	25,300	15.9	18,200	17.4	28,800	5.2	21,000	5.6	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	236
	Ground Water	28,200	23.7	20,800	29.7	22,900	4.6	16,600	4.6					
	Ground Loop	26,400	18.3	20,000	25.0	18,300	3.9	14,500	4.1					
ZT030 BPHE	Water Loop	30,600	15.4	22,800	17.4	36,000	5.0	26,100	5.3	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	245
	Ground Water	—	—	—	—	—	—	—						
	Ground Loop	32,000	18.0	24,800	24.9	22,600	3.7	18,700	4.0					
ZT030 COAX	Water Loop	30,200	15.1	22,000	16.2	34,800	5.1	26,200	5.3	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	245
	Ground Water	32,600	21.6	24,700	26.5	28,800	4.5	21,400	4.5					
	Ground Loop	31,500	17.5	23,900	22.7	23,300	3.7	19,300	4.0					
ZT036 BPHE	Water Loop	36,500	17.0	26,100	19.5	43,300	5.3	30,800	6.0	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	263
	Ground Water	—	—	—	—	—	—	—						
	Ground Loop	38,200	19.9	28,900	29.8	27,600	4.1	21,200	4.4					
ZT036 COAX	Water Loop	35,100	15.5	25,700	18.0	42,300	5.0	31,000	5.7	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	263
	Ground Water	39,400	23.6	29,100	31.8	34,000	4.6	24,400	4.8					
	Ground Loop	36,700	17.9	28,100	26.6	27,100	3.8	22,000	4.3					
ZT042 BPHE	Water Loop	41,000	16.5	30,400	17.5	48,400	4.6	35,200	5.0	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	280
	Ground Water	—	—	—	—	—	—	—						
	Ground Loop	42,600	19.1	33,100	26.2	31,500	3.7	25,800	4.0					
ZT042 COAX	Water Loop	41,200	15.5	30,500	16.9	49,500	4.7	35,800	5.2	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	280
	Ground Water	46,000	23.4	34,800	30.5	40,100	4.3	28,900	4.5					
	Ground Loop	43,000	18.0	33,500	25.3	32,900	3.6	26,400	4.1					
ZT048 BPHE	Water Loop	47,600	15.8	36,200	17.8	58,300	4.9	42,000	5.5	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	293
	Ground Water	—	—	—	—	—	—	—						
	Ground Loop	49,800	18.3	39,700	26.6	37,900	3.9	29,600	4.3					
ZT048 COAX	Water Loop	46,500	15.1	34,600	16.6	55,300	4.8	40,400	5.5	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	293
	Ground Water	52,200	22.1	39,600	29.4	45,900	4.3	32,800	4.6					
	Ground Loop	48,700	17.3	38,000	24.4	36,900	3.6	29,300	4.1					
ZT060 BPHE	Water Loop	59,400	16.3	42,900	18.3	74,600	5.1	51,400	5.8	21.2"	24"	61"	Add 2.4" to width w/filter rack	303
	Ground Water	—	—	—	—	—	—	—						
	Ground Loop	61,200	18.7	47,300	26.9	48,100	3.9	34,200	4.1					
ZT060 COAX	Water Loop	55,100	14.6	42,000	16.5	70,700	4.7	50,900	5.4	21.2"	24"	61"	Add 2.4" to width w/filter rack	303
	Ground Water	62,000	21.2	47,300	27.9	58,500	4.2	41,300	4.5					
	Ground Loop	59,000	16.9	45,800	23.7	46,800	3.6	36,400	4.0					
ZT072 BPHE	Water Loop	68,100	15.7	53,400	17.8	88,400	4.8	66,600	5.6	21.2"	24"	61"	Add 2.4" to width w/filter rack	312
	Ground Water	—	—	—	—	—	—	—						
	Ground Loop	70,400	18.0	57,100	25.2	57,900	3.8	47,600	4.2					
ZT072 COAX	Water Loop	66,600	13.7	50,700	15.2	83,200	4.5	62,700	5.1	21.2"	24"	61"	Add 2.4" to width w/filter rack	312
	Ground Water	73,500	19.2	58,100	24.8	67,500	4.0	49,200	4.2					
	Ground Loop	69,500	15.6	56,000	21.3	55,500	3.4	44,400	3.8					

Model	Type	Cooling BTU				Heating BTU				Dimensional Data				Unit Weight (lbs)
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth		
Combination Series 1, 3, 4, 5, 6, 7, 8													Height with Control Box	
CT024	Ground Water	28,900	26.0	22,100	32.7	24,300	5.1	17,700	5.0	56.1"	28"	32.2"	62.5"	415
	Ground Loop	26,500	20.0	20,900	27.3	19,700	4.2	15,700	4.5					
CT036	Ground Water	41,700	23.5	30,400	31.9	36,700	5.0	25,600	5.2	56.1"	28"	32.2"	62.5"	420
	Ground Loop	38,600	18.3	29,100	26.8	28,600	4.1	22,400	4.6					
CT048	Ground Water	53,100	21.8	39,400	29.4	46,700	4.6	33,700	4.9	56.1"	28"	32.2"	62.5"	435
	Ground Loop	49,000	17.1	37,400	24.1	38,000	3.9	29,700	4.3					
CT060	Ground Water	65,600	21.7	49,800	29.0	58,500	4.4	41,500	4.7	60.1"	28"	32.2"	66.5"	535
	Ground Loop	61,300	17.4	48,000	24.4	46,500	3.7	36,400	4.1					
CT072	Ground Water	75,100	20.2	59,100	25.5	70,300	4.2	52,600	4.5	60.1"	28"	32.2"	66.5"	550
	Ground Loop	70,500	16.2	57,000	22.0	55,900	3.6	46,500	4.0					

Notes:

- Rated in accordance with AHRI/ISO standard 13256-1, which includes pump penalties
- Rated in accordance with ISO Standard 13256-2, which includes pump penalties
- Heating capacities based on 68.0°F DB, 59.0°F WB entering air temperature
- Cooling capacities based on 80.6°F DB, 66.2°F WB entering air temperature
- Ground Loop entering water temp., Full Load: 32F heating/77F cooling.
Ground Loop entering water temp., Part Load: 41F heating/68F cooling
- Ground Water entering water temp., Full Load: 50F heating/59F cooling
Ground Water entering water temp., Part Load: 50F heating/59F cooling
- All Desuperheater connections are 3/4" FPT
- Width excludes filter rack (width with rack is 30.3")
- ST072 with ACD060C is not ENERGY STAR rated for Open Loop Applications
- For the source water fittings, WS open loop only, ZSZT018-072 models use 1" FPT fittings, ZS006-017 models use 3/4" FPT fittings.
- Heating capacities based on 32°F EST & 104°F ELT
Cooling capacities based on 77°F EST & 53.6°F ELT
Entering load temperature over 120°F heating and under 45°F cooling is not permissible
Floor heating is most generally designed for 85°F entering load temperature
There are two IN connections, but only one OUT connection
Model 120 does not meet ENERGY STAR Tier 3 ratings
- Source water loop has 1" double O-ring fittings
- WT060 is the only model available with Side Water Connection option
- VS060 with PSC blower, VS072 with PSC or ECM are not ENERGY STAR qualified models
- Water Loop entering water temp., Full Load: 68F heating/86F cooling
Water Loop entering water temp., Part Load: 68F heating/86F cooling

Model	Size (tons)	Dimensional Data					Unit Weight (lbs)
		Height	Width	Depth			
MP Series Multi-Position DX Air Handlers					Return Air Opening		
					Width	Depth	
MPD024	2	43"	17.625"	21"	15.5"	19.75"	130
MPD036	3	48"	21.125"	21"	19.75"	19.75"	150
MPD060	4 - 5	58.875"	24.625"	21.75"	23.5"	20.75"	200
MPD072	6	58.875"	24.625"	21.75"	23.5"	20.75"	205
MP Series Multi-Position Hydron Air Handlers					Return Air Opening		
					Width	Depth	
MPH024	2	43"	17.625"	21"	15.5"	20.25"	135
MPH036	3	48.25"	21.125"	21"	19"	20.25"	165
MPH048	4	58.75"	25"	22"	22.25"	20.5"	210
MPH060	5	58.75"	25"	22"	22.25"	20.5"	215

Model	Size (tons)	Dimensional Data					Unit Weight (lbs)
		Height	Width	Depth			
AC Series DX "A" Coils					Liquid	Suction	
ACD024	2	14.5"	16.625"	19"	3/8"	3/4"	27
ACD036	3	18.5"	19.625"	19"	3/8"	3/4"	34
ACD060	4 - 5	27.875"	23.75"	20.5"	3/8"	7/8"	52
AC Series Hydronic "A" Coils					Water Connection Size (Sweat "L" Copper)		
ACH024	2	18.5"	16.63"	19"	3/4"	3/4"	36
ACH036	3	21"	19.63"	19"	3/4"	3/4"	43
ACH060	4 - 5	28"	23.92"	20.5"	3/4"	3/4"	64
AC Series DX Cased "A" Coils					Liquid	Suction	
MCD024	2	20"	17.5"	21"	3/8"	3/4"	47
MCD036	3	24"	21"	21"	3/8"	3/4"	58
MCD060	4 - 5	34"	24.5"	21.5"	3/8"	3/4"	89
AC Series Hydronic Cased "A" Coils					Water Connection Size (Sweat "L" Copper)		
MCH024	2	20"	17.5"	21"	3/4"	3/4"	56
MCH036	3	24"	21"	21"	3/4"	3/4"	68
MCH060	4 - 5	34"	24.5"	21.5"	3/4"	3/4"	101

One of the Best Warranties in the Industry!

High quality products should have a warranty that reflects confidence in design and construction. The GeoComfort brand not only has excellent warranty coverage on its geothermal heat pumps, but also extends coverage to accessories for a comprehensive package. **Ten-year coverage on the entire unit and select accessories**, and a five-year labor allowance provide homeowners with peace of mind. Plus, GeoComfort now offers an **additional five years of labor allowance free of charge** when the unit warranty registration is submitted!

At Enertech, quality assurance is one of the guiding principles in the way we do business. We realize that successful business relationships are earned by providing superior products backed by the highest quality technical and customer support.



Standard Residential Warranty

10-year coverage on all unit components including (where applicable)

- Compressor
- Water-to-refrigerant heat exchanger
- Air-to-refrigerant heat exchanger (not applicable on water-to-water units)
- All internal refrigerant circuit parts
- All internal water circuit parts
- All internal controls/electrical parts, including fan motor
- Internal electric heater
- Desuperheater pump

10-year coverage on select accessory items

- GeoComfort thermostat (one time replacement)
- Flow center (cabinet and pump motors) purchased through Enertech
- EWC Zoning (panel and dampers) purchased through Enertech

5-year labor allowance on all of the above listed items including accessories

Additional Warranty Options

Free 5-Year Labor Allowance

Warranty registration provides an additional no charge 5-year Service Labor Allowance on the unit and accessories (years 6-10). **Unit must be registered online or via mail-in form within 60 days of installation.**

Lifetime Limited Microchannel Air Coil & Compressor Warranty

Covers the all-aluminum microchannel air coil heat exchanger and compressor for the life of the unit. Warranty covers parts only (one time replacement) to the original homeowner and is non-transferrable. See Price List for complete details.

Warranty Reductions

5/5/5 or ENERGY STAR minimums. Not available in combination with other warranty options. See Price List for complete details.

* HP Unit: 5 Year all unit parts, 5 Year select accessories, 1 Year labor allowance.





Geothermal University® curriculum is developed from Enertech's history and reputation as a leader in the geothermal heating and cooling industry. Stemming from the grass roots of geothermal technology, backed by manufacturing expertise, and supported by field experience, courses are designed to provide the knowledge and confidence of designing, selling, installing and servicing Enertech made geothermal systems.



Geothermal University offers training for the complete geothermal industry. IGSHPA certification and NATE continued education hours are incorporated into our curriculum along with specific design and sales courses for Enertech manufactured equipment.

All training sessions are geared towards technicians, designers, or sales personnel specific to the HVAC industry. Training will be coordinated through Enertech's corporate office and our distributing partners.



Available courses include:

Product Installation

Fusion Training

Basic Geothermal Troubleshooting

Advanced Geothermal Troubleshooting

Ground Loop & Flow Center Application & Installation

Geothermal Hydronic Systems

Variable Speed Hydronic Systems

Design, Sizing & Software

Sales & Marketing

Product Introduction/Update

IGSHPA/NATE Certified Installer Workshop

Right-Suite® Universal

Training Provider



Our Guarantee



We guarantee 100% student satisfaction for every course led by an Enertech trainer.

Online Resources



Geothermal University has a growing library of videos and workbooks that can be found online. They're great for geothermal installers who are eager to stay ahead of the curve!

www.geothermaluniversity.com

No other software has as many

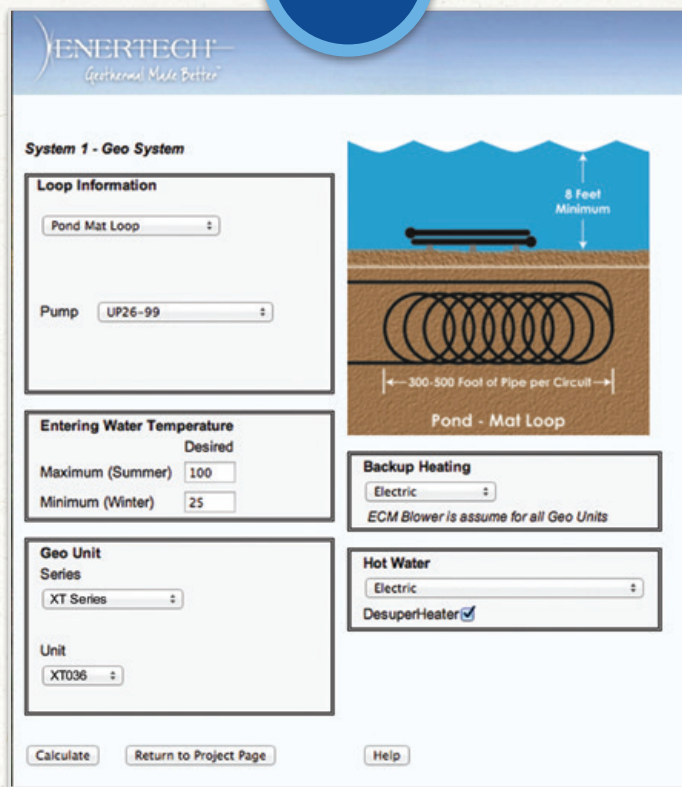
features. Even more important, the loop sizing portion uses “pure” IGSHPA algorithms, not manufacturer-adjusted loop sizing formulas. The ease of use and configuration ability provides users with an accurate system analysis at a low annual maintenance fee, which includes free updates.

GeoAnalyst is continually updated with new features. 98% furnaces were recently added, as were 21 SEER air conditioners. Changes in equipment, enhanced features, and other usable upgrades are instantly available in the new online version. There is no longer a need to update the software.

Features

- » Ability to compare up to 5 other conventional systems
- » Allows the user to save multiple utility files
- » I.P. or S.I. utility cost choices (e.g. \$/gallon or \$/liter)
- » 14 pre-configured ground loop choices, plus user-defined horizontal loop and open loop (well water)
- » “Auto Size” option for sizing loops based upon minimum/maximum entering water temperature
- » Economic analysis with simple payback, cashflow analysis, and financing options. Has the ability to include rebates/credits and print graphs
- » Choice of HDPE, PEX or user-defined pipe
- » Choice of ASHRAE, EPRI or user-defined soil types
- » Includes calculations for water-to-water heat pumps and combination units (water-to-water/water-to-air) for applications like radiant floor heating
- » Bin data report and balance point calculation
- » Includes the latest conventional equipment for comparisons (up to 21 SEER air conditioners/heat pumps and 98% efficiency furnaces)
- » Comprehensive system reports for geothermal and conventional selections
- » Pressure drop calculation module for sizing flow center pumps (central pumps or pump(s) for each unit)
- » Calculates loop flushing requirements, antifreeze requirements, and Reynolds number
- » Sales proposal module for creating a consumer-friendly sales proposal to explain the benefits of geothermal vs. the other compared systems
- » All new bill of material generator simplifies the quoting and ordering process
- » Allows reports to be customized with your company logo and contact information
- » Dual-fuel system comparisons for geothermal and air-to-air heat pumps
- » “Save as Default” option to use saved local conditions for a new project

Analysis



System 1 - Geo System

Loop Information

Loop: Pond Mat Loop

Pump: UP26-99

Entering Water Temperature

Desired

Maximum (Summer): 100

Minimum (Winter): 25

Geo Unit

Series: XT Series

Unit: XT036

Backup Heating

Electric

ECM Blower is assume for all Geo Units

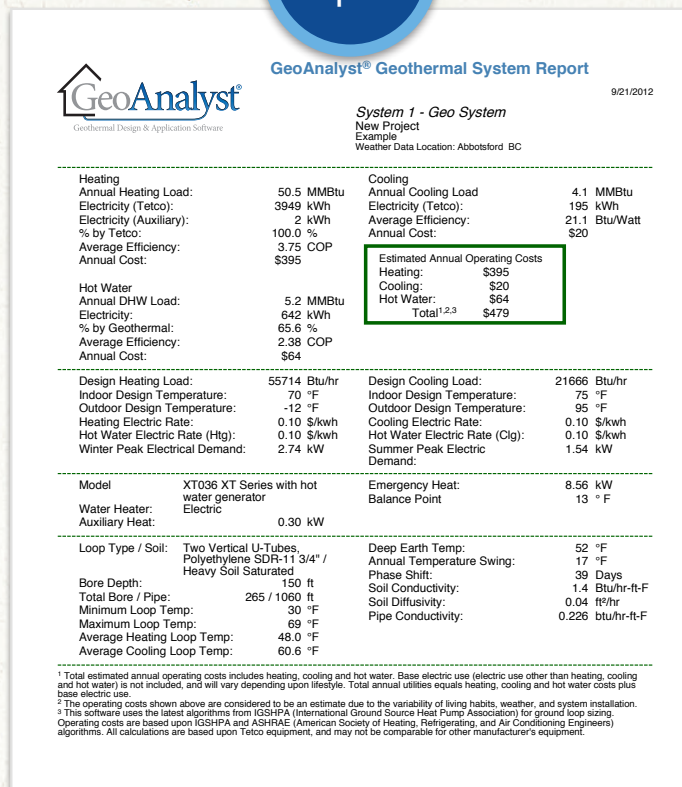
Hot Water

Electric

Desuperheater

Calculate Return to Project Page Help

Sample Report



GeoAnalyst® Geothermal System Report

9/21/2012

System 1 - Geo System

New Project

Example

Weather Data Location: Abbotsford BC

Heating		Cooling	
Annual Heating Load:	50.5 MMBtu	Annual Cooling Load	4.1 MMBtu
Electricity (Tetco):	3949 kWh	Electricity (Tetco):	195 kWh
Electricity (Auxiliary):	2 kWh	Average Efficiency:	21.1 Btu/Watt
% by Tetco:	100.0 %	Annual Cost:	\$20
Average Efficiency:	3.75 COP		
Annual Cost:	\$395		
Hot Water		Estimated Annual Operating Costs	
Annual DHW Load:	5.2 MMBtu	Heating:	\$395
Electricity:	642 kWh	Cooling:	\$20
% by Geothermal:	65.6 %	Hot Water:	\$64
Average Efficiency:	2.38 COP	Total ^{1,2,3}	\$479
Annual Cost:	\$64		
Design Heating Load: 55714 Btu/hr		Design Cooling Load: 21666 Btu/hr	
Indoor Design Temperature:	70 °F	Indoor Design Temperature:	75 °F
Outdoor Design Temperature:	-12 °F	Outdoor Design Temperature:	95 °F
Heating Electric Rate:	0.10 \$/kwh	Cooling Electric Rate:	0.10 \$/kwh
Hot Water Electric Rate (Htg):	0.10 \$/kwh	Hot Water Electric Rate (Cig):	0.10 \$/kwh
Winter Peak Electrical Demand:	2.74 kW	Summer Peak Electric Demand:	1.54 kW
Model:	XT036 XT Series with hot water generator	Emergency Heat:	8.56 kW
Water Heater:	Electric	Balance Point:	13 °F
Auxiliary Heat:	0.30 kW		
Loop Type / Soil: Two Vertical U-Tubes, Polyethylene SDR-11 3/4" / Heavy Soil Saturated		Deep Earth Temp: 52 °F	
Bore Depth:	150 ft	Annual Temperature Swing:	17 °F
Total Bore / Pipe:	265 / 1060 ft	Phase Shift:	39 Days
Minimum Loop Temp:	30 °F	Soil Conductivity:	1.4 Btu/hr-ft-F
Maximum Loop Temp:	69 °F	Soil Diffusivity:	0.04 ft ² /hr
Average Heating Loop Temp:	48.0 °F	Pipe Conductivity:	0.226 Btu/hr-ft-F
Average Cooling Loop Temp:	60.6 °F		

¹ Total estimated annual operating costs includes heating, cooling and hot water. Base electric use (electric use other than heating, cooling and hot water) is not included, and will vary depending upon lifestyle. Total annual utilities equals heating, cooling and hot water costs plus base electric use.

² The operating costs shown above are considered to be an estimate due to the variability of living habits, weather, and system installation.

³ This software uses the latest algorithms from IGSHPA (International Ground Source Heat Pump Association) for ground loop sizing. Operating costs are based upon IGSHPA and ASHRAE (American Society of Heating, Refrigerating, and Air Conditioning Engineers) algorithms. All calculations are based upon Tetco equipment, and may not be comparable for other manufacturer's equipment.

Ground Loop Sizing and Operating Cost Analysis

GeoAnalyst ground loop sizing and operating cost analysis is very intuitive with drop-down menus, and pop-up windows. All pre-configured loops have a picture of the cut-away section to help the designer understand the correct inputs. The "Auto Size" option sizes loops based upon the minimum and maximum entering water temperature selected. The designer may also key in the loop length, and allow the software to calculate the minimum and maximum loop temperatures.

Access Online

The web-based GeoAnalyst combines all the great features you've come to expect with the flexibility of accessing the software from a computer or mobile device anywhere, whether in your office, home or on the jobsite! Plus geoanalyst.net offers unlimited users for one low annual license fee. Visit www.geoanalyst.net to try out the demo software for free or register for a full license. Questions? Call 618-664-5860.

Visit www.geoanalyst.net to try the demo or to register - or call 618-664-5860 to learn more!

GeoComfort Marketing

Literature

We offer a complete assortment of GeoComfort consumer, technical and dealer literature to assist with every step of the sales process. Available in both printed and electronic format, materials include general geothermal educational pieces to product-specific technical brochures.

Homeowner Geothermal Guide
Consumer Product Cut Sheets
Technical Product Brochures
Engineering Data & Installation Manuals



Savings Tool

The Savings Tool guides homeowners through a step-by-step process that shows the energy cost comparison of a geothermal system over conventional equipment.

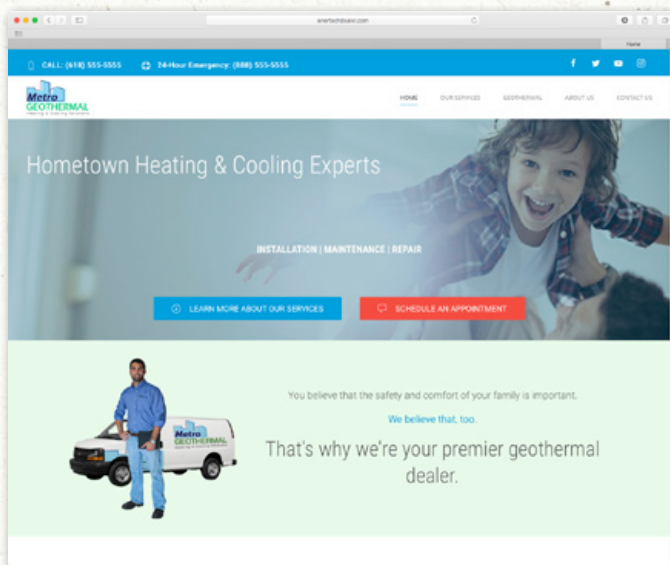
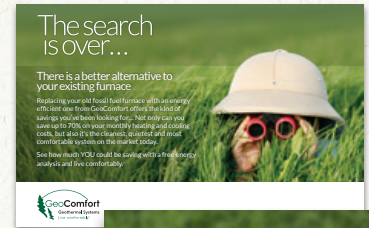


Marketing Materials

To further enhance the efforts of GeoComfort distributors and dealers, we have a wide array of merchandising, point-of-purchase and sales tools available. A dedicated promotional and trade show web store makes brand support easy. We also offer a full range of traditional advertising tools. New materials are in constant development.

Print Advertising
Direct Mail
Banners
Apparel
Trade Show Graphics

Radio Scripts
Online Ads
Fleet/Vehicle Graphics
Giveaways



Dealer Website Program

Putting your best foot forward on the web and increasing brand awareness is easy and convenient with our Dealer Website Program. In fact, a geothermal-focused dealer website can be online and ready for homeowners just by answering a few simple questions. After completing, a team of designers and writers will organize the information into a beautifully impressive website featuring your business.

Lead Generation

GeoComfort has sharpened its lead generation and lead nurturing efforts in recent years, implementing advanced tracking software to ensure each lead gets followed. We're always investigating new avenues to generate strong homeowner leads to provide to GeoComfort dealers.

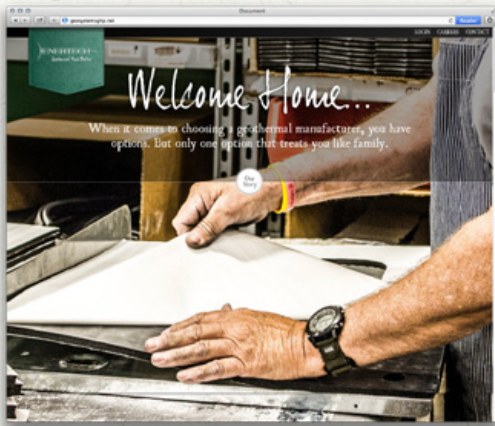
Company Websites
ProudGreenHome.com
Agricultural Fairs
Consumer Magazine Ads
Homeowner Communications

Doug Rye Radio
Home Shows
Green Energy Websites



Communications

At Enertech Global, we believe good communication can turn an ordinary relationship into an extraordinary one. That's why we make it easy for you to stay in touch and receive the information you need to effectively run your business.

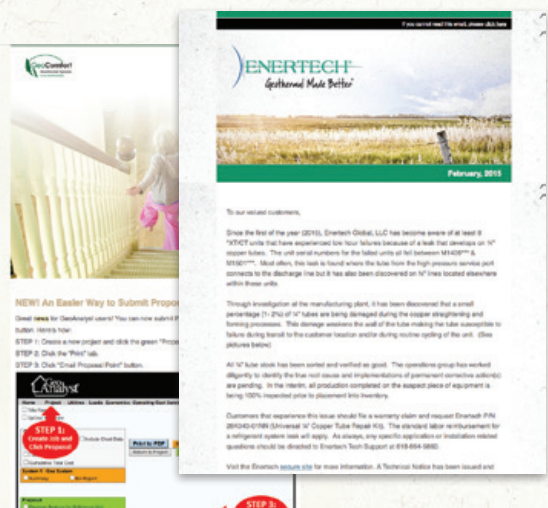


Secure Website

With our secure website all the essentials are right at your fingertips. It features a convenient newsfeed displaying the most recent updates and information, plus you'll find a variety of online sales and marketing tools, including pricing, literature and branding support materials. This site also features a new Service Parts Generator, as well as a search box tool to help you find the information you need quickly.

Email Communications

We send a monthly newsletter called "In the Loop". Our newsletter covers upcoming events, product information, important deadlines, price book updates, and industry highlights.



Social Media

As a people-centric company, we understand the power and importance of social media. For industry news, company updates, and ideas on how to build your business, follow us on Facebook, Instagram, Twitter, LinkedIn, and our blog. Check our social pages regularly and never miss out on important Enertech Global company information.

GeoComfort Video

We know that sometimes seeing is believing. Help your customers learn more about the geothermal process, our family of products and the GeoComfort brand with our growing library of online videos. All of our video content is available for free, easy viewing in the Video Library at geocomfort.com, and can be shared with your customers in a few quick clicks.



Financing



The market place has shifted, if you are not offering financing to all of your clients, you're missing out and so are we. To be successful, here's what Top Retail HVAC Dealers Know!

- By offering retail financing or “bridge” loans, their closing rates increase 25%!
- Average sell price is 20-25% HIGHER!
- Financed jobs typically include higher-efficiency and more accessories

Myth Busters! The Truth about Retail HVAC Financing:

- **Most people pay with Cash: FALSE!**
The AVERAGE American has about \$3800.00 in Savings.
- **Nobody needs financing: FALSE!** Fifty percent of home improvement jobs OVER \$5,000.00 are financed!
- **Nobody Offers Financing: FALSE!**
The top salesmen in our industry sell financing on sixty to seventy percent of their jobs.
- **Nobody Asks Me for Financing: TRUE!** This is often the case, people will accept an offer of financing, but are reluctant to ask for it.
- **People are not looking for long-term loans: TRUE!** (mostly) Most loans are paid in full within 6 or 12 month! Consumers use the short-term loan as a “Bridge” loan until they receive any potential credits, rebates, or investment returns.
- **The program is complicated with lots of paperwork: FALSE!** The consumer application is “paperless” and dealer funding is fast! It allows a portion of the loan to be paid upfront as a down payment to the dealer.

Our Most Popular Loans

- Bridge (or SAME-AS-CASH) Loans
- Reduced Interest Loan. YOU select the rate and term!
- Commercial Lease Program

ground LOOP FIELDS

The Science Behind the Magic

The heat exchanger, also known as the loop system, captures the stored solar energy in the ground and delivers it back to the geothermal system in the house.

The loop system is the heart of geothermal technology. There are four different types of loops.

Installing a geothermal loop system is like getting up to a 70% discount on energy for the life of a home.

Vertical loops are used mainly when land area is limited in retrofit applications of existing homes. A drilling rig is used to bore holes at of depth of 150 to 300 feet per ton. A U-shaped coil of high density pipe is inserted into the bore hole. The holes are then backfilled with a sealing solution.

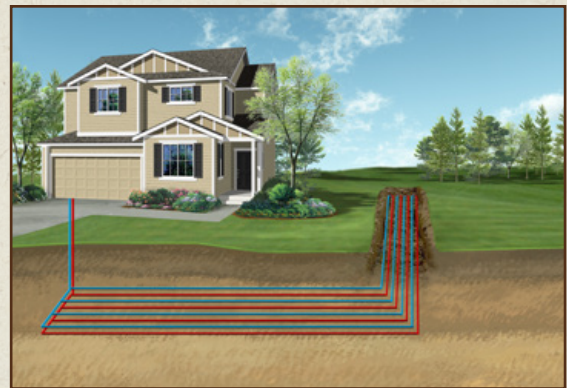
Horizontal loops are commonly used when adequate land area is available. Loop installers use excavation equipment such as chain trenchers, backhoes and track hoes to dig trenches approximately 6 to 8 feet deep. Trench lengths range from 100 to 300 feet per ton, depending on the loop design and application. Directional bore machines can also be used.

Pond loops are an option if a large body of water is available within approximately 200 feet of the home. A ½ acre, 10 to 12 foot deep body of water is usually adequate to support the average home. The system uses coils of pipe typically 300 to 500 feet in length. The coils are placed in and anchored at the bottom of the body of water.

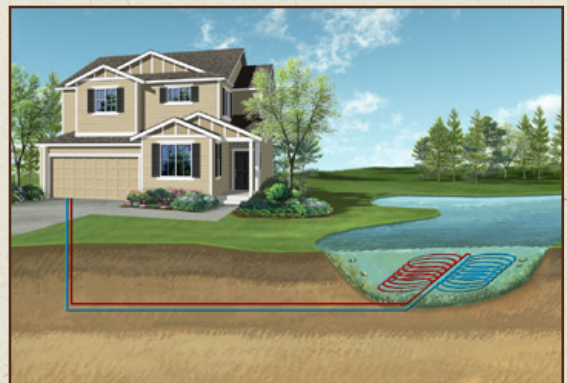
Open loop systems can be installed if an abundant supply of high quality well water is available. A typical home will require a well producing 4 to 8 gallons of water per minute. A proper discharge area such as a river, drainage ditch, stream, pond, or lake must be present. Check for local restrictions before selecting a specific discharge method.



Vertical Loop



Horizontal Loop



Pond Loop



Open Loop



Project Spotlights

GEOTHERMAL INSTALLATION Spotlight



Utah Ski Chalet

Brighton, Utah



This home was built in 2006 and is located in the Wasatch National Forest and Wasatch Mountain Range. When built it was intended to be a vacation home, for vacation rentals, and later a retirement home for the owners. Since the home is built in the forest, law states that for every tree taken down on the property there must be another planted, so homeowners chose to be very environmentally friendly with the home. Also, the rock on the property was used to create the beautiful landscaping seen during the Summer and Fall. Once the rock was moved into place, that cleared the way for the vertical loop field. The homeowner hobbies include snow skiing/snowboarding, snow shoeing, hiking, and slow evenings after playing hard all day.

Since the home is nestled in the mountains and near the ski slopes, cooling is actually not needed at all in the home so the homeowners chose to use radiant heating in the home only. This really saves humidity in the home as the mountains in UT are actually in the desert. The radiant tubing is run throughout

the home using a light concrete material called "gyp-crete" or in the concrete slabs themselves (basement, garage, and driveway landing trough).

The home is insulated extremely well with closed cell spray foam in all the wall and running to the roof deck.

With the crazy amounts of 500" plus average snow fall per year, the temperature can get to subzero degrees frequently. A generator is needed in case the homeowner would get snowed in and be without power. Propane is used to fuel the generator and the three fireplaces in the home. Then the variable speed geothermal unit can also be powered by the generator.

The mechanical space of the home is uniquely fit into the home's lower level switch back staircase for a clean, tight, and space saving approach.

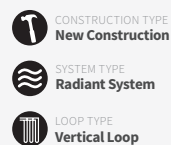
Project Spotlight © Pkg. 11/2018 ©2017 GeoComfort, LLC

Utah Ski Chalet



Project Details

Building Size:	4,000 sq. ft. finished space
Geothermal Equipment:	GeoComfort WW Water-to-Water
Loop Type:	Vertical loop
Installation Date:	June, 2016
Installation Details:	Also installed are HBX Controls and Wifi thermostats, TurboMax Indirect Hot Water Heater
Other Features:	Insulated envelope with closed cell foam
Geothermal Contractor:	Central Valley Mechanical, Nephi, UT • 435-623-4121



We feature our dealers' installations on our website as Project Spotlights. This provides free advertising for dealers, and it's collateral to use in the sales process.



Greenville, IL - Mitchell, SD

info@enertechgeo.com
www.geocomfort.com

Industrial, institutional and commercial buildings often have unique heating and cooling needs. GeoComfort has a complete line of commercial models to fit most any project. Visit commercial.geocomfort.com to learn more!

**COMMERCIAL
SERIES**



Proudly built in Mitchell, SD by



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