Carrier

GEOTHERMAL COMFORT SYSTEMS

The Smart Choice for Energy Efficiency and Comfort

Models GBA, GCA, GZA, GWA

featuring Puron ADVANCE™

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Designed with Your Comfort in Mind

Geothermal systems offer incredible energy efficiency and long-term cost savings, and they can create a more even, consistent level of comfort in your home. Within our geothermal family of products, Carrier offers a wide variety of units, features and options, ensuring we have a geothermal system your family can depend on. For the homeowner who expects more from their heating and cooling system, our geothermal comfort systems, offers just that.

EFFICIENT

Geothermal systems can save homeowners 33-65% in annual heating and cooling costs compared to traditional HVAC systems.[1]

DEPENDABLE

Geothermal systems are built to last. Made from high-quality materials, their placement inside the home and out of the weather means they can operate for years virtually maintenance-free.

COMFORTABLE

Geothermal systems utilize moderate ground temperatures to ensure you and your family enjoy consistent, comfortable temperatures throughout your home with optimal humidity and zero hot or cold spots.

GREEN

Geothermal systems reduce your carbon footprint today and for future generations. In fact, geothermal systems can reduce CO_2 emissions by 25-65% compared to traditional heat pumps.[1]

COST-EFFECTIVE

Because of the extremely low cost of operating a geothermal system compared to ordinary heating and cooling systems, existing homes could recover the added cost of the system within 5 - 7 years. New home builds could be saving money from day one. You can even use excess heat from system operation to supplement your water heater.

QUIET

Unlike ordinary heating and cooling systems, geothermal systems require no outdoor unit. Our products include heavy-duty sheet metal cabinets, high-density insulation, and a double-insulation mounted compressor for quiet operation.

LIMITED WARRANTY

Ten-year parts and five-year labor limited warranty upon timely registration.[2]

How Geothermal Makes the Most of the Earth's Energy

Geothermal offers an energy-efficient, cost-effective space conditioning system that taps into the earth to capture its renewable energy.

The sun heats the earth, which then stores about 47% of that energy in the ground. Just a few feet below the frost line, the temperature remains between 55 and 70 degrees all year round in many climates.

WINTER

A geothermal system extracts the energy stored in the earth during the winter, concentrates that energy through compression, and then uses it to heat your home. So instead of heating using ice-cold air like an ordinary heat pump, geothermal systems make the most of heat that already exists in the ground.

SUMMER

In the summer, the process is reversed. A geothermal system extracts the heat from your home and transfers that heat to the ground. Unlike ordinary cooling systems that are forced to dispose of excess heat into hot air, the cool ground just a few feet below the surface is ready to accept that heat.

Renewable Energy From the Earth

Geothermal systems can be installed with a variety of loop system configurations. "Closed loops" use recirculated fluid in a series of pipes installed vertically, horizontally, or in a pond. "Open loops" use well water. Your dealer will determine which design works best for your home.

Horizontal Loops:

Used on larger lots. Installed using a backhoe or trencher.

Pond Loops:

Coils of pipe are fabricated and sunk to the bottom of the pond.

Vertical Loops:

Used where land area is limited or soil conditions prohibit horizontal loops. Installed using a drilling rig.

Open Loops:

Well water from an existing well can be used, then discharged into a drainage ditch or pond.

Renewable Energy Tax Credits

Qualified homeowners may be eligible for a tax credit of the installed system cost.
Visit *www.energy.gov/eere/geothermal/tax-credits-incentives-and-technical-assistance-geothermal-heat-pumps* to learn more.

A Range of Comfort

Geothermal comfort systems offer exceptional quality and year-round operation. You can also enjoy optional supplemental hot water generation to save money on monthly water heating with select models. The system's compressor, combined with a multi-speed blower motor, corrosion-resistant coil, microprocessor control and quiet operation makes geothermal a great choice.

TECHNICAL SPECS	Infinity® System Model GCA	Infinity System Model GZA	Performance™ Series Model GWA	Comfort™ Series Model GBA
Application	Package Water-to-Air Heat Pump	Water-to-Air Split System Heat Pump	Water-to-Water Split System Heat Pump	Package Water-to-Air Heat Pump
Configuration	Horizontal / Vertical	Split Condenser	Split Condenser	Horizontal / Vertical
Overall Efficiency	All sizes ENERGY STAR® certified	All sizes ENERGY STAR® certified	All sizes ENERGY STAR® certified	All sizes ENERGY STAR® certified
Cooling Efficiency (Closed Loop)	Up to 27.0 EER	Up to 25.1 EER	Up to 22.6 EER	Up to 24.0 EER
Cooling Efficiency (Open Loop)	Up to 37.0 EER	Up to 29.0 EER	Up to 25.3 EER	Up to 27.0 EER
Heating Efficiency (Closed Loop)	Up to 4.4 COP	Up to 4.6 COP	Up to 3.5 COP	Up to 4.1 COP
Heating Efficiency (Open Loop)	Up to 5.2 COP	Up to 5.0 COP	Up to 4.4 COP	Up to 4.7 COP
Compressor Type	Two-Stage Scroll	Two-Stage Scroll	Two-Stage Scroll	Two-Stage Scroll (2-5 ton) Single-Stage Rotary (1.5 ton model)
Blower Motor Type	ECM Constant Airflow	ECM Constant Airflow	ECM Constant Airflow	ECM Constant Airflow
Installation Location	Indoor	Indoor	Indoor	Indoor
Sound Performance	Quiet	Quiet	Quiet	Quiet
Wall Control (Sold Separately)	Infinity System Control	Infinity System Control	ecobee for Carrier Smart Thermostat	Carrier Smart Thermostat

More Than a Century of Cool

In 1902, a determined engineer answered one of mankind's most nagging questions: How do we make hot, sticky, indoor air go away? In creating the world's first modern air conditioning system, Willis Carrier forever changed indoor life, and, more than a century later, the corporation that bears his name takes inspiration from his example.

Carrier strives to improve on our founder's breakthroughs, introducing new technologies that make life at home even cooler. Today, a nationwide network of experts continues to advance Willis Carrier's lifework. Your expert Carrier dealer is equipped to evaluate your home and create a customized system designed around your lifestyle.

[1] https://www.energy.gov/eere/articles/making-difference-geothermal-heat-pumps
[2] To the original owner, when products used in an owner occupied residence, a 10-year parts limited warranty upon timely registration of your new equipment. Warranty period is five years if not registered within 90 days. Jurisdictions where warranty benefits cannot be conditioned on registration will automatically receive a 10-year parts limited warranty. See warranty certificate for complete details.

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carrier.com 1-800-CARRIER

As an ENERGY STAR® partner, Carrier Corporation has determined that qualifying models meet ENERGY STAR guidelines for energy efficiency. Ask your dealer for details or visit www.energystar.gov.

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