



Y5S MODELS

AFFINITY™ SERIES  
**GEO THERMAL HEAT PUMPS**  
INDOOR & OUTDOOR SPLITS





10°

## Heating Mode

When temperatures drop, a geothermal heat pump taps into the heat stored underground and concentrates it to keep your home warm. It doesn't use combustion nor emit any on-site gasses like carbon monoxide or carbon dioxide. Moving heat instead of creating it makes geothermal the most efficient heating solution available.

The ground absorbs 46% of the sun's radiation.

96°

## Cooling Mode

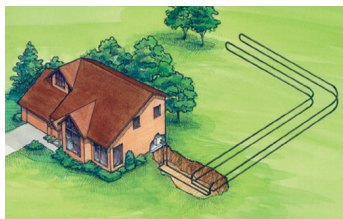
When temperatures rise, a geothermal heat pump pulls unwanted heat from your home and deposits it into the cooler earth (or uses it to create hot water). Its performance isn't affected by normal outdoor temperature swings and the result is ultra-efficient cooling and dehumidification.

55°-70°

The average year-round ground temperature only three to four feet beneath the frost line.

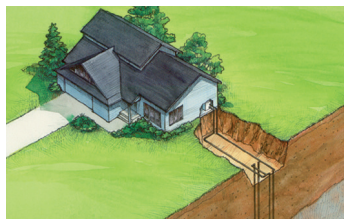
## Geothermal Earth Loops

A geothermal system uses a series of underground pipes called a "loop." A loop is the secret behind a geothermal system's amazing efficiencies and the biggest difference from ordinary heating and cooling technologies.



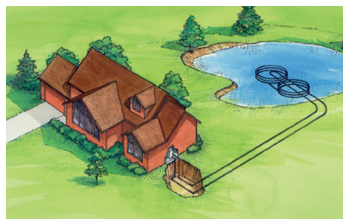
### Horizontal Loop

A typical home needs ¼ to ¾ of an acre to utilize a horizontal loop, and trenches are dug using a backhoe or chain trencher. High density polyethylene pipes are inserted, and the trenches are backfilled.



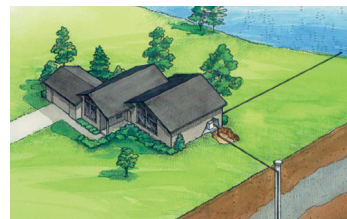
### Vertical Loop

A typical home requires three to five bore holes, dug with a drilling rig. A pair of pipes with special u-bend fittings is inserted into the holes.



### Pond Loop

A ½ acre, 8-foot-deep pond is usually sufficient for the average home. A series of coiled, closed loops are sunk to the bottom of the body of water and are used for heat transfer.



### Open Loop

An open loop utilizes a well that has an adequate capacity to provide water flow for both domestic use and the geothermal unit. Most units require 3-10 GPM, depending on size and model.



## York Geothermal Air Handler

The matching air handler has been engineered to work seamlessly with your York® split system and will provide years of efficient quiet comfort. It fits easily into any attic or crawl space and comes standard with a variable speed ECM blower motor for maximum savings.

## Features of the Affinity™ Split Series

### Dual Capacity Compressor:

York geothermal splits include dual capacity compressors. Dual capacity units operate at two speeds rather than simply turning "on." The low setting is more energy efficient and handles the heating and cooling needs of the house about 80% of the time. Units run in this mode for longer periods, which provides lower utility bills, quieter operation, better humidity control and more even temperatures throughout the home.

**IntelliStart®:** This optional soft starter reduces start-up amperage by 60% of normal draw to reduce noise, eliminate light flicker, and increase compressor life.

**Aurora Controls:** Aurora provides two-way communication between components, advanced operating logic and powerful troubleshooting capabilities. It constantly monitors and optimizes the operation of your unit and provides detailed status information when using our communicating thermostats.

### Aurora Interface Diagnostic (AID) port:

This external port connects to the AID Tool and provides contractors a high degree of set-up and troubleshooting—right from the palm of their hand. Use of the AID Tool saves you and your contractor time and money.

### Coated Coaxial Heat Exchanger:

Our proprietary coating protects against condensation at temperatures below 50°F and extends the life of the coaxial heat exchanger.

**Hot Water Generation:** This option preheats water and delivers it to your water heater. The longer the unit operates, the greater the amount of hot water generated.

**Cabinet:** A professional grade powder-coat finish provides long-lasting beauty and protection. The unit is fully insulated with cleanable foil-backed insulation that ensures quiet operation.

**R-454B:** All York® geothermal units utilize R-454B refrigerant, which is friendly to the environment.



### Versatility

The York geothermal splits are designed for use where other units are difficult to install, like crawl spaces or attics. The outdoor split is a great choice to replace an ordinary air source heat pump. By connecting to a matching York air handler, you can condition your home efficiently and comfortably. In colder climates, pair the split with a fossil fuel furnace. The system automatically selects the most efficient heating method for maximum savings.



### Safe

No combustion or flames are used to operate a geothermal heat pump, making it a safe choice for your home and family. Our systems merely move heat to and from the ground rather than by burning natural gas, propane, or oil.



### Efficiency

Geothermal heat pumps are much more efficient than ordinary heating and cooling systems.



### Cost effective

Geothermal heat pumps are so efficient that any added cost over traditional equipment is usually recovered in just a few years. And because they have a lifespan of 20-25 years, your investment will last longer and your return on investment will grow year by year.



### Environmentally responsible

Since our units don't burn expensive, polluting fossil fuels, they're the most environmentally responsible options available today. Replacing a furnace and/or air conditioner with geothermal can minimize acid rain threats, air pollution, and the greenhouse effect. All York geothermal units utilize R-454B to protect the atmosphere.



### Affordable peace of mind

York® Affinity™ split units have available warranties up to 10 years for parts and labor allowances. Other options are available, so see your York® No Flames Contractor for details.

Learn more at [yorkgeothermal.com](http://yorkgeothermal.com)



## Make a smart choice: York®

Choosing the right contractor is the first step in selecting the best system for your home. Your York® Contractor is trained to give you professional home comfort services, including:



- An evaluation of factors such as your home's size, age, number of rooms, climate characteristics and utility costs
- A system recommendation that fits your family's comfort needs, your home, your lifestyle and your budget
- The assurance of proper installation and customer care, including warranties and maintenance options

## Stay comfortable for years to come.

York® is proud to offer the YorkCare™ Comfort Plan. It's designed to maintain your system as well as your peace of mind. With YorkCare™ you get total protection that ensures your unit is effective and efficient for years to come.

What's more, your York® Contractor offers maintenance agreements that provide upkeep while maximizing the warranty provisions. Ask about the YorkCare™ Comfort Plan. A little extra coverage is always a comforting idea.

## Long story short – our history.

OVER  
**135**  
YEARS  
OF DESIGN AND  
INNOVATION

You've probably enjoyed York® engineering for years without even knowing it. We have, after all, designed and implemented heating and cooling systems in some of the world's most famous structures, including the U.S. Capitol building, the Sydney Opera House, the entire U.S. Navy nuclear submarine fleet, and even venues such as your local mall and corner bank.

There's a reason people trust us with the big jobs. We've been doing this a long time. Over 135 years, in fact. In that time, we developed the first successful room air conditioner and cooled the world's first theater, hotel and office building. We're constantly leading the industry in our design and our technology. And our commitment has earned our products the Good Housekeeping Seal of Approval. No matter what the scale, chances are we've developed an efficient, durable and effective solution for it.



Homeowners who install an ENERGY STAR® rated geothermal system in the U.S. are eligible for a 30% federal tax credit. The 30% credit will last through 2032 and can be claimed on equipment and installation costs with no upper limit. The credit is scheduled to decrease to 26% in 2033 then to 22% in 2034, so act now for the most savings!

## ISO/AHRI/ASHRAE (13256-1) Performance Ratings

AFFINITY™ Y5S MODEL						
MODEL & SIZE		CLOSED LOOP		OPEN LOOP		
		COOLING (EER)	HEATING (COP)	COOLING (EER)	HEATING (COP)	
DUAL CAPACITY	024	Full Load	18.4	3.9	23.8	4.6
		Part Load	25.2	4.3	30.0	5.0
	036	Full Load	19.8	4.2	25.2	5.0
		Part Load	27.8	4.5	33.8	5.1
	048	Full Load	18.2	4.2	24.3	4.8
		Part Load	25.8	4.6	30.9	5.1
	060	Full Load	18.2	3.9	23.7	4.4
		Part Load	25.4	4.2	30.5	4.7
	066	Full Load	16.9	3.7	22.1	4.2
		Part Load	23.5	4.0	28.1	4.4

For additional product details, such as weight and dimensions, visit [www.york-geothermal.com](http://www.york-geothermal.com) or ask your York® Contractor.



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BCW5-0021Y WE ENCOURAGE  
NATE CERTIFICATION



Learn more at [yorkgeothermal.com](http://yorkgeothermal.com)