



YAFV MODEL | 41 EER & 5.3 COP

AFFINITY™ SERIES  
**GEOHERMAL HEAT PUMPS**



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°

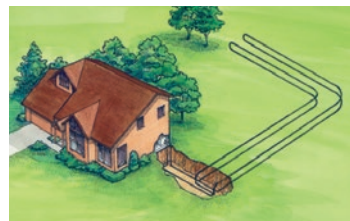
### Cooling Mode

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.



### Efficiency

Geothermal heat pumps are much more efficient than traditional heating and cooling systems. The York® Affinity™ YAFV is rated with an amazing 41 EER and 5.3 COP, which is twice as efficient as any normal air conditioner or heat pump and a third higher than the most efficient dual stage geothermal heat pump. Efficiency translates into savings.



### 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.



### 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.



### All-in-One

One York® geothermal heat pump will provide heating, cooling, and supplemental hot water for your home. A variety of sizes and configurations are available, so no matter your home or climate, a geothermal heat pump will work for you.



Environmentally Friendly

### 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.



UP TO 10 YEAR Limited Parts Warranty

### Affordable peace of mind

York® Affinity™ YAFV units come with warranties up to 10 years for parts and labor allowances. Other options are available, so see your York® Contractor for details.



### Features of the Affinity™ Series

**Variable Capacity Compressor:** The Affinity™ YAFV is one of the only units on the market to incorporate variable capacity operation. While most HVAC systems run at only one or two speeds, the Affinity™ YAFV can adjust its output to precisely match the heating or cooling needs of your home. Gently ramping up and down among many speeds makes this unit amazingly quiet, remarkably comfortable and the most efficient unit you can buy.

**Controls:** Sophisticated Aurora controls provide easy-to-use but extensive troubleshooting capabilities as well as advanced two-way communication between components. Expanded capabilities include true energy monitoring, extended hot water generation, and more.

**Blower Motor:** An ECM variable speed blower motor operates at only the speed needed for the greatest in efficiency and savings. The active dehumidification feature monitors blower motor performance for maximum moisture removal.

**Aurora Interface Diagnostic Port:** Technicians can diagnose and service your system without even opening the unit by utilizing the external communication port and interface tool.

**Coated Coaxial Heat Exchanger:** Coaxial heat exchanger life is extended by our proprietary coating that protects against condensation at temperatures below 50°F.

**Advanced Hot Water Generation:** The optional hot water assist option preheats water and delivers it to your water heater or buffer tank. The system monitors heat pump conditions to optimize hot water generation.

**Coated Air Coil:** Equipment life is extended by utilizing a corrosion resistant air coil that is large enough to improve efficiency while providing better dehumidification during cooling.

**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.

**Filter and Filter Rack:** A high performance MERV 11 pleated filter comes standard while an optional MERV 13 pleated filter is available. The filter rack can be easily converted for use with 1" or 2" filters.

**R-410A:** All York® geothermal units utilize R-410A refrigerant, which is friendly to the environment.



## 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 Performance Ratings (13256-1)

AFFINITY™ YAFV MODEL					
MODEL & SIZE		CLOSED LOOP		OPEN LOOP	
		COOLING (EER)	HEATING (COP)	COOLING (EER)	HEATING (COP)
036	Full Load	22.0	3.5	31.5	4.6
	Part Load	37.0	5.3	47.2	5.9
048	Full Load	21.7	3.6	31.7	4.3
	Part Load	41.0	5.3	53.2	5.9
060	Full Load	19.4	3.5	28.6	4.3
	Part Load	36.0	5.1	45.8	6.0

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



The York brand of Johnson Controls, Inc. ©2024 Johnson Controls, Inc. ©2024 WFI  
5005 York Drive, Norman, OK 73069  
Subject to change without notice. All rights reserved.



02/24  
BR2700AK6 WE ENCOURAGE NATE CERTIFICATION

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