

YAS MODEL | 25.3 EER & 4.4 COP

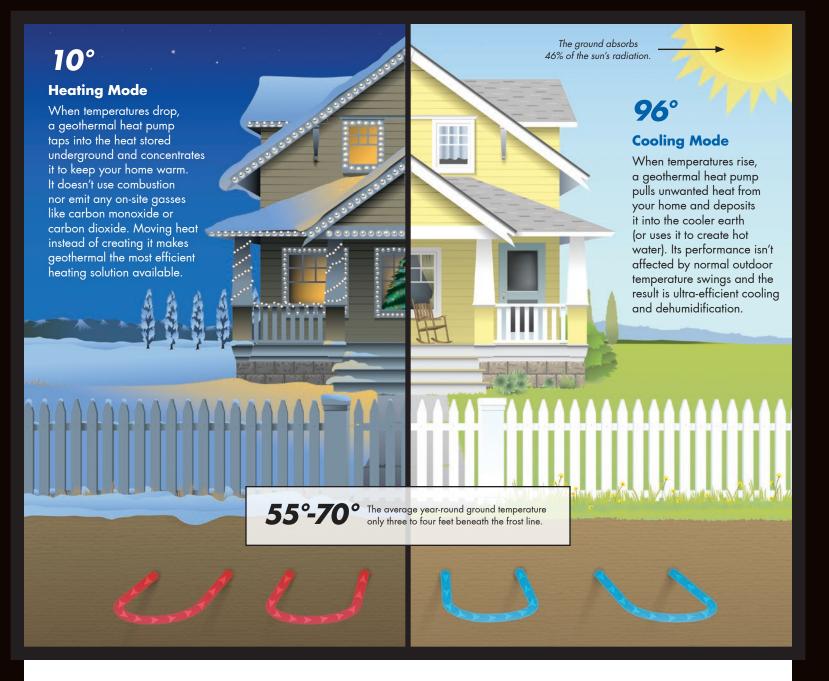
AFFINITY \* SERIES

# **GEOTHERMAL HEAT PUMPS**

OUTDOOR SPLIT







## **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 1/4 to 3/4 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











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.

Features of the Affinity™ Series

**Dual Capacity Compressor:** 

YAS 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

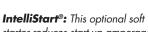
control and more even temperatures

**Aurora Controls:** Aurora provides

throughout the home.

bills, quieter operation, better humidity

**Loop Pumps:** The flow center is conveniently mounted within the cabinet, eliminating the need for any indoor loop piping. The loop pipes enter the unit through an opening in the bottom panel.



starter reduces start-up amperage by 60% of normal draw to reduce noise, eliminate light flicker, and increase compressor life.

**Split Configuration:** Pair the outdoor split with a second floor air handler or an existing fossil fuel furnace for flexible installation options.

**Coated Coaxial Heat Exchanger:** Our proprietary coating protects against condensation at temperatures below 50°F and extends

the life of the coaxial heat exchanger.

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



# **YAH Air Handler**

The YAH 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 crawlspace and comes standard with a variable speed ECM blower motor for maximum savings.



## **Versatility**

The YAS is designed to be installed outdoors and is perfect for homes that are lacking space. By connecting to a YAH 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.



## **Efficiency**

Geothermal heat pumps are much more efficient than traditional heating and cooling systems. The York® Affinity™ YAS is rated with an efficient 25.3 EER and 4.4 COP, which makes it a great option for your home.



#### 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.



### 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.



# Affordable peace of mind

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



# 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.



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™ YAS MODEL					
MODEL & SIZE		CLOSED LOOP		OPEN LOOP	
		COOLING (EER)	HEATING (COP)	COOLING (EER)	HEATING (COP)
026	Part Load	17.0	3.9	21.8	4.6
	Full Load	24.5	4.4	28.4	4.8
038	Part Load	17.1	3.8	20.4	4.5
	Full Load	25.3	4.2	27.0	4.4
049	Part Load	16.1	3.8	20.2	4.4
	Full Load	22.9	4.3	25.8	4.7
064	Part Load	15.5	3.6	19.2	4.3
	Full Load	22.2	3.9	24.9	4.3
072	Part Load	15.0	3.4	17.8	3.9
	Full Load	20.0	3.8	22.8	4.0

For additional product details, such as weight and dimensions, visit www.york-geothermal.com or ask your York® Contractor.



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