# Heating Your Home: The Basics

Out of all the energy spent in and around your home, the central heating system accounts for more than one-third of it. This means you'll be spending a lot of time and money warming your home.

But before you can decide which system is best for your home, you'll need to know the basics.

Home Heating Basics

In general there are two common ways to heat your home using forced air from a centralized location:

* One method is a gas furnace.
* The second method is a heat pump.

A furnace warms your home by using either gas or electricity to generate heat that is then circulated throughout the house via a series of ducts and vents.

A heat pump differs from a furnace in that it doesn't generate heat. Instead it moves warm air from one place to another, usually from the outside of your home to the inside.

"Some of the factors in selecting which method of heating in a forced air system that you would use," Bill Rittlemann, project manager for IBACOS said, "would be to look at your access to utilities. Do you have gas service to your house? Is it inexpensive to bring it into the house? And then look at the cost of the energy itself."

Advantages for Both Heating Systems

Whether you choose a furnace or a heat pump for your heating system is up to you and your builder -- but both have advantages.

* *Gas Furnaces* are extremely durable in all types of climate, and with an average lifespan of 20 years, they're a reliable option when it comes to warming your home.

A common problem to look out for with furnace heating, however, is air leakage. Often aging air ducts will begin to leak, allowing substantial heat loss. Proper sizing, tight installation and equal distribution are vital to the efficiency of how duct work is designed to perform. The need to "maintain" heating ducts is something to keep in mind should you choose to purchase a forced air furnace.

**Note:** A forced-air furnace is one that provides the heating in your house by blowing the air through the duct system. A furnace can be gas fired, electric fired or any other heat generating source.

* *Heat Pumps* are another common way to heat your home. A heat pump is basically an air conditioner that works in reverse, which means instead of blowing cold air inside and warm air outside, it blows cold air outside and warm air inside.

There are two common varieties of heat pump you can purchase:

*Air-Source Heat Pump* -- Warms your home by moving air from one place to another.

*Ground Source (Geothermal) Heat Pump* -- Draws warmth from a different source -- the ground. Piping loops in the ground draw latent heat to the house in winter. A geothermal heat pump has a higher efficiency rating than most furnaces or air-source heat pumps, but it will cost a bit more to install because of the need to bore into the ground.

Which Heating System is Right for Your Home?

You now know the two most common ways to add centralized heat to your home, but which one is right for your home? The answer may depend upon where you live.

Although both heating systems can be used across the country, those in colder climates may want to consider a furnace or a geothermal heat pump. Both work well in sub-freezing temperatures because they draw heat from the relatively constant temperatures in the ground. Geothermal heat pumps are especially recommended for severe cold climates.

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