

# heating

## Comparing Systems

You can number-crunch comparisons among gas, oil, or electric furnaces, or even wood stoves, but when thinking about your home's heating system, don't forget to factor in basic, practical considerations. Switching to gas could mean that you'll have to pay to run a supply line into the house. Sticking with oil could mean replacing a rusting storage tank. Electric heat would cost more every month but save thousands on installation costs of alternative systems.

Ask heating contractors for installation estimates and fuel suppliers for approximate operating costs. Because all heat output is measured in British thermal units (Btu), you'll have a common denominator to make comparisons.

If you're thinking about replacing or upgrading an existing system, it's important to find out how efficient the new system will be compared to the old one. For a well-maintained existing system, you could subtract half the unit's age from the original efficiency rating—for example, rate a 20-year-old oil-burning furnace that was 65% efficient at 55%. Of course, if you pay a contractor to make combustion efficiency tests, you'll get a more accurate rating. Once you know the increase in efficiency with a new system, you can estimate how much less fuel you'll use every year, how much money this will save each year, and how many years of savings it will take to recover your investment in new equipment.

## Fuel Supply

### Gas-Fired

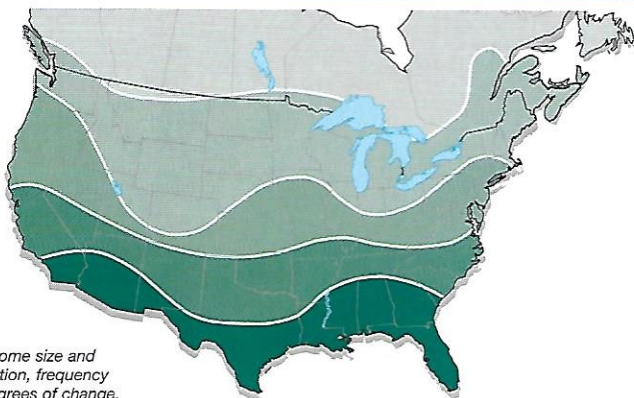
Gas-fired furnaces burn natural gas or liquefied petroleum (LP) gas to heat either air that is blown through a system of ducts or water that is circulated to radiators or baseboard convectors through pipes. Older gas-fired appliances have pilot lights that are burning all the time. Improved modern systems have electronic igniters to light the flame as the gas starts to flow. Gas furnaces burn cleanly and convert up to 95% of the fuel into usable heat.

## Heat Savings

### HEATING SAVINGS

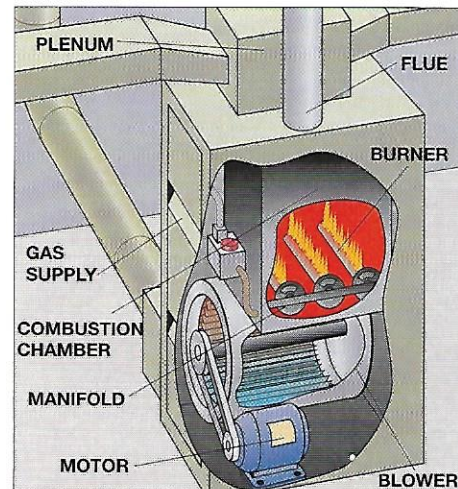
SAVINGS FOR ONE EIGHT-HOUR DECREASE OF 10°F (5°C) PER DAY

- 6–8%
- 9–11%
- 12–13%
- 14–15%
- 16–18%



*Savings on your energy bill depend on home size and actual heat loss or gain, geographic location, frequency of temperature changes and range in degrees of change.*

Source: Honeywell Inc.



## Hot-Air Systems

**H**ot-air systems use a blower to force heated air through a large supply plenum and into a system of ducts. The ducts lead to registers in the floor and walls of your living spaces. Cold-air registers and return ducts take cooled air back to the furnace for reheating. These systems require dust filters. Because they provide dry, hot air, a furnace-mounted humidifier often is needed to maintain indoor comfort.

