



ELECTRIC FORCED-AIR HEATING CAN BE ENERGY EFFICIENT

AN ELECTRIC FORCED-AIR HEATING SYSTEM IS A SAFE AND CONVENIENT WAY TO HEAT YOUR HOME. NOW YOU CAN MAKE IT ENERGY EFFICIENT, TOO.

A typical electric forced-air heating system is made up of a metal furnace cabinet that contains a blower, an air filter (which helps to keep your home clean and allergen-free) and a simple electric heating element. The furnace is controlled by a thermostat: when a home drops below a set temperature, the thermostat calls for heat and the blower and the element come on at the same time; they then shut off together when the home is warmer.

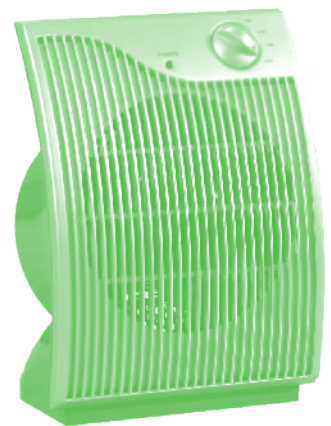
PROS

Compared to a natural gas or oil furnace, an electric forced-air furnace has some distinct advantages:

- it's compact, fast, reliable and quiet
- it does not produce any emissions and does not require a flue or chimney, and
- it requires very little maintenance beyond regular servicing.

In addition:

- you can buy one with a cooling coil already installed, so it can be used for cooling as well as heating (you won't need a separate air conditioner), and
- you do not have to worry about carbon monoxide poisoning or gas leaking into your home.



CONS

An electric forced-air furnace also has some disadvantages.

Like both gas and oil furnaces, an electric forced-air furnace heats the whole house, rather than individual rooms or zones, and that can lead to heat wasted on empty rooms. Plus, an electric furnace may be more expensive to operate than a natural gas or oil furnace.

There are, however, a number of ways you can make an electric forced-air heating system more energy efficient, and save money on your electricity bills. For example:

USE A PROGRAMMABLE THERMOSTAT

Install a programmable thermostat and set it properly.

Many heating systems have manual thermostats, where you have to physically re-set the thermostat every time you want to change the temperature. It's easy to forget to change the thermostat—and to leave your system cranking out heat even when you're not home. A programmable thermostat will make it easier to control your heating system and your energy bills.

To learn more about programmable thermostats, see our tip sheet, *Some Thermostats Are Smarter Than Others*.

BUY THE RIGHT FURNACE, AND HAVE IT PROPERLY INSTALLED

An electric furnace that's too small will leave you cold in the winter, while one that's too big will cost more to install (with larger ductwork required) and to operate, since it will be forced to cycle on and off more often—adding to your electricity bill.

Make sure you choose a furnace that's the right size for your home, and that the ductwork is installed properly. Badly installed ductwork can lead to some rooms being too hot, while others are too cold.

Hire a contractor accredited by the Thermal Environmental Comfort Association (TECA) to design and install your heating system.

FIGHT RISING COSTS WITH LOWER TEMPERATURES

Heating costs rise about five per cent for every degree above 20°C (68°F) that you set your thermostat.

Most people are comfortable:

- sitting reading or watching TV at 21°C (70°F)
- working around the house at 20°C (68°F), and
- sleeping at 16°C (61°F).

Depending on where you live, simply turning the heat down from 21°C (70°F) to 16°C (61°F) at night can save you as much as 10 per cent on your energy bills.

Setting your thermostats to 16°C when you are at work or away on vacation will ensure that your plumbing won't freeze in the winter and provide you with even more energy savings.

WANT TO FIND OUT MORE ABOUT MAKING YOUR HOME POWER SMART?

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