

# Can using a space heater really reduce your home heating bills?

BY BRIAN SLOBODA

**Some electric space heater manufacturers claim that the models they sell significantly can cut a home's heating bills.** Does this claim make sense?

Space heaters work best to supplement a furnace or heat pump – not as a primary heating source. Three types of space heaters are available, generally ranging in price from \$30 to \$100.

- A **radiant heater** heats objects and people – not the air – in a room. This choice is best when the person who wants to be warmed is in a direct line of sight of the heater. A radiant heater also is a good choice if you're in a room for a short period of time and need instant heat. On the other hand, a radiant model can pose a burn or fire risk if not properly used, and it should not be placed near furniture, drapery, pets or small children.
- A **convection heater** is designed to heat the air – not the people or objects – in a room. Hot air from the convection heater rises to the ceiling and forces cooler air to the floor, creating a cycle that continues as long as the heater is on. Styles include baseboard heaters or oil- or water-filled radiator-style units. A convection heater generally is warm to the touch and, compared to a radiant heater, has a lower fire and burn risk.
- A **combination heater** combines the features of the radiant and convec-

tion heaters. It often includes an internal fan that aids in distributing heat throughout the room; however, a combination heater typically will not perform as well as either a radiant or convection heater.

### Consider these points before you plug in a space heater

Most space heaters use between 600 and 1,500 watts of electricity and are designed to heat only a small space. You can save a significant amount of money if you use the space heater in one room and turn the thermostat of your central heating system down considerably – as low as 50 degrees. Place the space heater in the room you'll be occupying and close off that room from the rest of the house. This method of *zone heating* will save money, but it's obviously not a very comfortable way to live.

There's another consideration, too, if your electric cooperative offers a special electric rate for a central heating system that's wired to a separate meter. If you decide to plug in a space heater, it will use the main house power that's billed at the regular rate, not the lower-cost power available for the central heating system. So, you'll actually be reducing your energy usage at the lower rate and increasing your energy usage at the higher rate – which means you could be saving energy overall, but still may end up paying more on your monthly power bill than you would pay by not using a space heater.

Even though a space heater may have a place in increasing home comfort, it simply cannot replace an energy-efficient central heating system or offer you the level of reduced power usage you'll experience from making weatherization improvements to your home. As with any appliance, before purchasing a space heater you need to consider how it will be used – and you must understand all facets of the energy-saving claims made by its manufacturer. While it may be technically possible to cut your heating bill by 50 percent using a space heater, it's simply an impractical solution for most people.



Brian Sloboda is a program manager specializing in energy efficiency for the Cooperative Research Network.