

# Space Heater Safety

## Tips to Stay Safe and Warm During Cold Weather



Electric heaters may not be the answer to staying warm during the winter months. In fact, when an electric space heater is used in addition to a central heating system, it often cranks up energy bills.

### Why to Avoid Using Electric Space Heaters

When an electric space heater is used in addition to a central heating system, it often cranks up energy bills. They are commonly used to provide comfort heat, which could be provided in more efficient ways.

In fact, the Department of Energy (DOE) estimates that the cost of running a gas furnace is 43 percent of the cost of running electric space heaters to heat a whole home or business. In addition, the U.S. Consumer Product Safety Commission estimates that space heaters cause 22,000 home fires annually, leading to 300 deaths and thousands of burns.



### Electric Space Heater Alternatives

- Weather strip doors using kits from a home improvement or hardware store
- Weatherize windows with plastic film insulation using kits from a home improvement or hardware store
- Dress in layers
- Wear wool
- Wear thicker socks or slippers
- Eat soup and other warm meals
- Drink warm beverages
- Open curtains and blinds during the day to let the sun in
- Close curtains and blinds at night to keep out the cold
- Pile extra blankets on your bed
- Switch to flannel sheets and a down comforter
- Snuggle up in a blanket whenever you're sitting down
- Do something active (clean the house, exercise, etc.)
- Wear a hat to prevent heat loss
- Put on clothes as soon as they come out of the dryer
- Use rugs on bare floors
- Block drafts with weather stripping, rolled up towels or homemade draft stoppers
- Keep your fireplace flue closed when you don't have a fire to prevent unnecessary heat loss
- Make sure heat vents, registers and radiators are free of obstructions. If they're covered with furniture, the warm air won't reach you – even though you've paid for it



### Do-It-Yourself Draft Stopper

Block drafts under doors by making your own DIY draft stopper. It's inexpensive and easy!



#### What You Need:

2-3 old socks  
Stuffing  
Popcorn kernels  
Needle and thread

**Step 1:** Fill each sock, alternating between popcorn kernels and stuffing. The kernels weigh down the stopper and the stuffing gives it shape.

**Step 2:** Once all the socks are filled, overlap the opening of one sock over the bottom of the other (like putting a sock on your sock).

**Step 3:** Use a needle and thread to hand stitch the socks together and close any openings.

**Step 4:** Lay the draft stopper in front of any outside facing doors to stop cold air from sneaking into your home.



## Use and Safety of Electric Space Heaters

If an electric space heater is necessary choice for your circumstances, consider the following:

Sometimes small electric space heaters are used when only one room needs supplemental heat, or when central heating is too expensive to install. In some cases, they can be less expensive if only one room needs to be warmer than others, rather than overheating the entire home. This is common when an elderly person or children needs extra heat. It is also important to purchase an energy efficient portable heater, and to turn down your thermostat if you plan to use one.

**Due to the high power draw of electric space heaters, it is very important to follow these safety guidelines before making a selection:**

- Only purchase models that are Underwriter’s Laboratory (UL) labeled
- Select a thermostatically controlled heater, because they do not waste energy due to overheating a room
- Be sure to select a heater that is the proper size for the room, which can be done using the sizing table on the box or online. Oversized heaters will waste energy.
- Be sure to locate the heater on a level surface away from foot traffic, especially pets and children due to the potential for burns
- Select a unit that turns off if it is tipped over; this is called a tip-over safety switch
- Keep the heater at least three feet away from anything that can burn i.e. papers, clothing, upholstery and curtains
- Plug the heater directly into the wall rather than an extension cord to prevent a fire

- 1 Space heaters can be costly. It’s estimated that the cost of running a gas furnace is 43 percent of the cost of running electric space heaters to heat a whole home or business.
- 2 There are several, less costly alternatives to using a space heater.
- 3 Energy efficient portable space heaters are available.

## Space Heater Cost Calculator

$$\text{Heater's Wattage} \div 1,000^* \times \text{Hours Used Per Month} \times \text{HBPW's KWh Rate} = \text{Monthly Cost}$$

Most space heaters are 1,500 watts. If you are operating a space heater 8 hours per day and your electricity rate is .12 per kWh, then 1,500 watts /1,000 =1.5kw x 240 hours per month = 360 kWh x \$0.12/kWh = \$43.20 per month. \*Dividing by 1,000 converts watts to kilowatts