



# FAST FACTS

Office of Compliance - -  
Advancing workplace rights, safety, health, and accessibility in the Legislative Branch

## Space Heaters

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Portable space heaters are devices employed to heat a small, partially enclosed area. The majority of space heaters are powered by electricity and are used when individuals are unsatisfied with the building's heating system. Unfortunately, space heaters are highly inefficient and pose a serious fire hazard in the workplace when not used properly.

### Hazards

Although space heaters appear to be harmless to some, many hazards can still exist no matter where they are used. In 2008, space heaters used in homes caused an estimated 22,400 structural fires and resulted in over a thousand injuries as well as hundreds of deaths. (See "Fast Stats" on Page 3) The most serious hazards associated with space heaters are fire hazards. The majority of space heater fires are caused when combustibles (e.g. paper, clothing, and curtains) are placed too close or come in contact with the heater causing them to catch fire. (See Figure 1)



Figure 1: Space heater surrounded by combustible materials



Figure 2: An example of space heaters not approved by a NRTL

### Appropriate Heaters

When choosing a portable space heater to use in the workplace, there are a few requirements that must be considered:

- Space heaters must be approved by a Nationally Recognized Testing Laboratory (NRTL), such as Underwriters Laboratory, Inc. (UL). Those not approved, should not be used. (See Figure 2 for space heaters that are not approved for safe use)
- Space heaters must have an automatic safety switch (tip-over switch) that turns the unit off if it is tipped over.
- Space heaters must have a thermostatic control which ensures that the unit will turn itself off and prevent overheating or creating an electrical hazard.
- Space heaters may be regulated by your employer. Check with your supervisor before deciding to use one.

## Proper Use of Heaters

Using a portable space heater properly requires careful placement and monitoring:

- Space heaters should be kept away from water and wet environments to avoid electrical shock. (See Figure 3)
- If an electric space heater is used in an area with running water, like a kitchen or bathroom, make sure to plug the device into an outlet with a ground-fault circuit-interrupter (GFCI) to protect against electrical shock. (See Figure 4)
- Space heaters must be kept at least three feet away from any combustible items, such as paper, furniture, draperies, etc.
- Make sure to only plug one space heater into an individual electrical circuit. The use of multiple heaters could overload the electrical circuit and cause injury or property damage.



Figure 3: Space heaters should not be used near a sink, as seen above, or near combustible materials

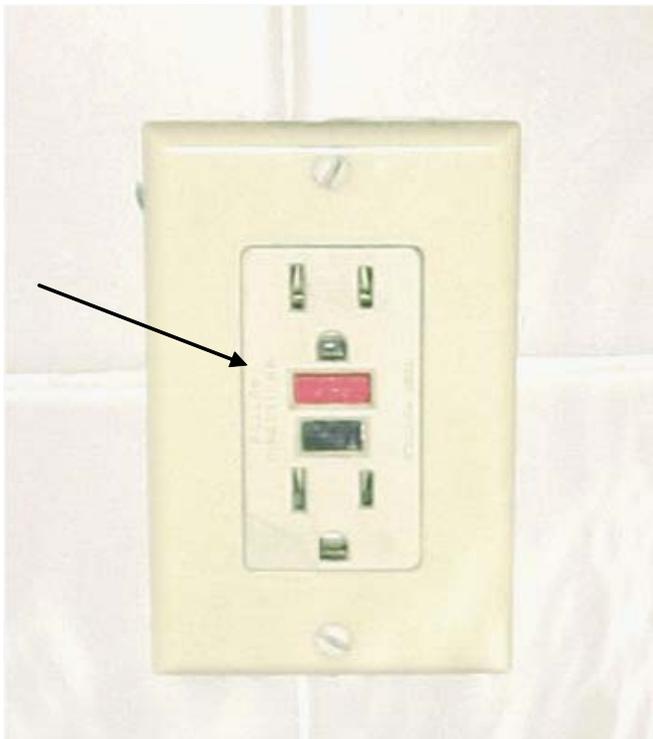


Figure 4: Outlet with GFCI protection

- Space heaters should not be used with an extension cord.
- Space heaters should also not be used if they have missing or broken parts, such as knobs, grills, or stands.
- Inspect the power cord and base of a space heater before using it to make sure the cord is in good, serviceable condition and is not pinched, worn, frayed, or missing the ground prong.
- Always make sure to turn off your space heater every time you leave your workspace; it should never be left on while unattended.

## Examples of Improper Space Heater Use



This heater was placed in a combustible box, turned on, and left unattended. This created a serious fire hazard. Heaters should never be left unattended while running, and they should never be placed near or in any combustible material.



This space heater was not approved by a NRTL and lacked a safety tip-over switch. Significant damage due to overheating is indicated by the browning of the protective screen on the front of the heater.

### Fast Stats

Estimated Damages Caused by Space Heaters (in the home) during 2008:

- 22,400 home structural fires
- 420 civilian deaths
- 1,170 civilian injuries
- \$573 million in direct property damage

\*Source: National Fire Protection Association (NFPA) report, "Home Fires Involving Heating Equipment" by John R. Hall, Jr., September 2010.



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