Portable Space Heater Guidelines

SafetyNet #: 516

A. Summary

Electric space heaters do not have an open flame; however, according to the National Fire Protection Agency (NFPA), space heaters, whether portable or stationary, account for one-third (30%) of home heating fires and three-fourths (73%) of home heating fire deaths.

Injury and damage is caused by the heating elements used in some types of electric heaters, which are hot enough to ignite nearby combustibles such as draperies, paper, clothing, furniture, and flammable liquids. In order to help the campus community avoid fire damage and injury associated with electric space heaters, UC Davis Fire Prevention has compiled a list of safety tips related to their operation.

B. Safety Tips

Following these safety tips will help keep you warm, but not too warm!

1. Look for a heater that is listed with a nationally-recognized testing laboratory, such as Underwriters Laboratories (UL). These heaters are tested to meet specific safety standards, and manufacturers are required to provide important use and care information to the consumer. Unlisted heaters are not permitted, because consumers have less assurance that safety features and operating instructions are adequate.

2. Coordinate with Facilities Management on the UC Davis Campus (530-752-1655). This is essential to ensure the electrical circuit is capable of powering the heater(s).

3. Portable electric heaters that heat by circulating oil or water are preferred.

4. Wall-mounted convective heaters are approved for use.

5. Older style heaters with exposed radiant wires are not permitted.

6. UC Davis Fire Prevention requires that all portable space heaters be equipped with tip-over protection. Tip-over protection will turn off the heater automatically when the heater is tipped over and not in the full upright position.

7. Before using any heater, read all Installation, Safety, and Operational Instructions.

8. Never run the heater’s cord (or any cord) under rugs, carpeting, or furniture.

9. Plug portable heaters directly into a wall outlet. Do not plug a space heater into a surge...
protector, multi-outlet box, or extension cord. The high current flow can cause components to deteriorate, leading to a breakdown of solder joints which will cause eventual failure of the multi-box outlet, and excessive heating that can cause fire.

10. Do not leave the heater operating unattended or operating while sleeping. Portable electric air heaters are designed for use only as temporary supplemental heating and only while attended.

11. To prevent electrical shocks and electrocutions, always keep portable electric heaters away from water. Never touch an electric heater if you are wet.

12. Do not use an electric heater as a dryer by placing clothing over it.

13. Keep the heater in a safe working condition in accordance with the manufacturer’s instructions. Replace missing guards, controls, or frayed wiring at once. Never operate a defective heater.

14. Do not place the heater where children might play near it or where people might trip over or bump into it.

15. Place the heater on a level surface for stability.

16. Periodically check surrounding objects to see if they feel hot.

17. Portable electric space heaters shall not be operated within 3 feet of any combustible material.

18. Portable electric space heaters shall be operated only in locations for which they are listed.

19. In order to avoid overheating, do not cover the heater.

The Life Safety Code, NFPA 101, section 19.7.8 prohibits the use of portable space heaters in health care occupancies but provides the following exception: Portable space heating devices shall be permitted to be used in non-sleeping staff and employee areas where the heating elements of such devices do not exceed 212 degrees F. This requirement applies to all hospitals and medical office buildings.

**Contact**

**Fire Prevention Services**
fireprevention@ucdavis.edu 530-752-1493

**More information**