

What's the Risk?

Potential Dangers When Using Heat Lamps in a House or Barn

Introduction

Heat lamps provide a simple (but sometimes dangerous) method to warm an area using radiant heat generated by a large wattage bulb inside a metal or plastic housing used to direct the heat at a specific area. The photos show two commonly used heat lamps. Both create a potential fire hazard if the bulb in the lamp contacts flammable material.



What's the Risk?

The possibility of a fire increases whenever a heat lamp is used in a barn or a house. If used correctly a heat lamp is a relatively safe method to provide short term heat to an area. The thermal image shows an upper temperature of at least 84° C (183° F). The temperature on the surface of the bulb can be many times higher than that shown at the base of the bulb. If the bulb contacts flammable material it may ignite it and lead to a fire.



Two examples of claims show what can happen. In one instance a heat lamp was used in a barn to keep a water room warm. Nylon rope used to suspend the light stretched due to the heat at the base of the lamp and the bulb eventually contacted some straw causing a loss of nearly \$500,000. In the second instance a heat lamp was used to warm a lizard terrarium in a child's bedroom in a house. The lamp was not securely attached and eventually fell over and ignited nearby combustible material causing a loss of nearly \$170,000.

What can be done?

The following guidelines apply wherever a heat lamp is used.

- Heat lamps should only be used for short term heating; they are not a long-term heating solution.
- If a heat lamp is used it must be securely fastened with a metal chain to prevent the lamp from contacting flammable material.
- The power cord should be short enough to disconnect from the receptacle before the bulb hits the ground if the lamp were to fall.
- Install heat lamps in accordance with manufacturers instructions.
- The bulb must never exceed the maximum rating set by the manufacturer.
- Heat lamps should have a proper safety guard on the front of the diffuser, so if the lamp does fall, the guard will force the lamp to land on its side with the bulb pointing up, possibly keeping it away from combustible material.