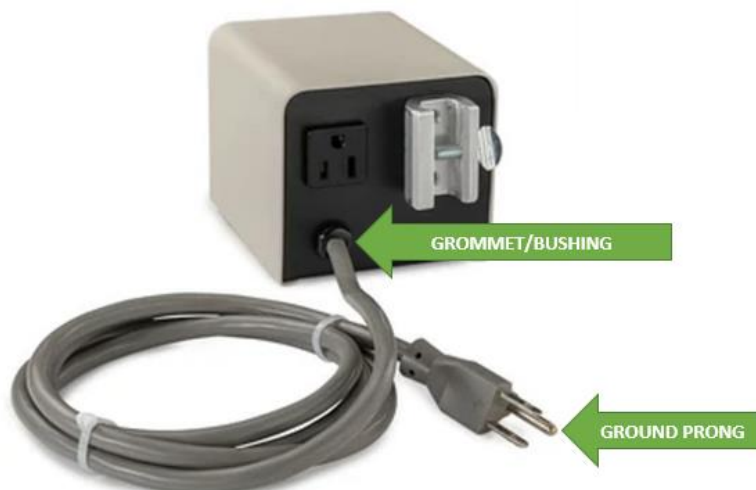


LABORATORY HEATING DEVICES

Laboratory heating devices such as hot plates, heating mantles and tapes may potentially overheat and catch fire if not properly maintained, properly used and left unattended. Heating devices without feedback controls or over-temperature limiting can spontaneously heat beyond the setpoint temperature. The unit may still heat even when switched to “off” in the event of a malfunction since the switch does NOT disconnect the electrical source. In addition, heating devices may present an electrical shock hazard if not properly selected and used. Here are some guidelines to avoid overheating and shock incidents.

Safety Tips

- Select devices that are nationally-recognized testing laboratory (NRTL) listed or labeled.
- Use grounded (three-wire) devices, whenever practical.
- Ensure all conductive surfaces are properly protected, insulated and/or grounded.
- Verify the devices maximum heating capacity does not exceed the outlet receptacle capacity (amperage).
- Replace damaged, malfunctioning, and unreliable equipment.
- Maintain equipment through regular inspection, careful handling and proper storage.
 - Inspect the power cord for any damage to the insulation.
 - Ensure the ground prong is not missing.
 - Ensure the cord grommet/bushing is not missing.
 - Avoid pulling on the cord.
 - Ensure controls/switches are clearly labeled.
- Monitor the temperature until it reaches the desired temperature and stabilizes.
- Avoid leaving heating equipment unattended.
- Consider unplugging equipment when not in use and alternative equipment with safety controls.



Questions?

Contact ehs@yale.edu or 203-785-3550.