

Electrical safety: Preliminary Design and Technology

Answers

Activity

Examine the information in relation to the use of electricity on the following web site < http://www.ccohs.ca/oshanswers/safety_haz/electrical.html > and complete the passage below by using the words from the word bank.

disconnect	positively	non-conductive	exposed	hazardous
combustible	fuse	current	cords	guards
aware	access	rated	damage	immediately

Why is it so important to work safely with or near electricity?

The electrical current in regular businesses and homes has enough power to cause death by electrocution. Even changing a light bulb without unplugging the lamp can be hazardous because coming in contact with the live part of the socket could kill a person.

What are some general safety tips for working with or near electricity?

- Inspect tools, power cords, and electrical fittings for damage or wear prior to each use. Repair or replace damaged equipment immediately.
- Always tape cords to walls or floors when necessary. Nails and staples can damage cords causing fire and shock hazards.
- Use cords or equipment that is rated for the level of amperage or wattage that you are using.
- Always use the correct size fuse. Replacing a fuse with one of a larger size can cause excessive currents in the wiring and possibly start a fire.
- Be aware that unusually warm or hot outlets may be a sign that unsafe wiring conditions exist. Unplug any cords to these outlets and do not use until a qualified electrician has checked the wiring.
- Always use ladders made of wood or other non-conductive materials when working with or near electricity or power lines.

- Place halogen lights away from combustible materials such as cloth or curtains. Halogen lamps can become very hot and may be a fire hazard.
- Label all circuit breakers and fuse boxes clearly. Each switch should be positively identified as to which outlet or appliance it is for.
- Do not use outlets or cords that have exposed wiring.
- Do not use power tools with the guards removed.
- Do not block access to circuit breakers or fuse boxes.
- Do not touch a person or electrical apparatus in the event of an electrical accident. Always disconnect the current first.