

# ELECTRICITY – SOURCE: WWW.ESKOM.CO.ZA

## Safety Around the Home

### **Safety Around the Home**

Electricity surrounds us - shaping the universe in which we live and driving modern society of which we are a part. It permeates the physical world completely. Thus, to know more about it and to understand it further is important. The first and most critical aspect to learn about electricity is safety. Playing around with electricity can be dangerous. Make sure that you and your family know how to work with electricity safely.

### **A. Conducting important Routine Safety Inspections**

Appliances needing repairs or replacement should be attended to immediately. Not doing so could result in an accident. In your home, breakages and excessive wear and tear on electrical equipment can occur frequently so you need to make regular inspections and take precautions to ensure your safety.

- Here are some general points to look for when making an inspection:
- Breakages
- Wear/deterioration
- Signs of overheating
- Missing parts (screws, covers, switches)
- Faulty appliance controls
- Doors and covers not closed smoothly or adequately.
- Correct labelling when needed (eg. Electricity requirements)
- Loose Fixtures or fittings

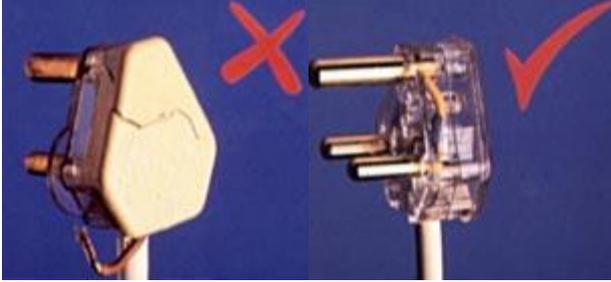
It is also important to test your equipment regularly - switch it on and off and look for possible problems or faulty connections. Taking time to make sure you are using your equipment safely could save your life later on.

### **Plugs and Electric Sockets**

In this day and age, plugs are an essential part of our lives as we depend on electricity for almost everything we do. Therefore, it is important for people of all ages to know how to use plugs safely. The following tips are for you to use when buying and using plugs.

1. Look for the SABS sign and only use SABS approved plugs.
2. Do not overload plugs - rather use an adaptor.
3. Do not pull a plug by the cord.
4. Switch the switch off at the wall socket, before pulling the plug out.
5. Do not connect electrical appliances to light sockets.
6. Ensure that all wall sockets have their switches in the "off" mode, when not in use.

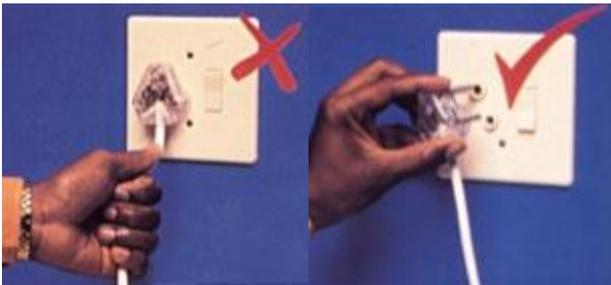
7. Never put bare wires into sockets.
8. Do not stick fingers into sockets.
9. If there are babies in the house, ensure that wall sockets are covered with a safety cap, keeping the area safe for babies to play in.



## B. Cords

Cords, like plugs, are an essential part of our environment. Cords also represent a safety hazard and as such, the tips that follow should be used to minimise any potential dangers that cords can cause.

1. Do not use frayed cords - replace worn and frayed cords on appliances immediately. (See how easy it is to do this under the "Wire a Plug" section.)
2. Keep cords well away from hot stoves and other hot surfaces.
3. Do not run electric cords under carpets and rugs.
4. Do not join cords with tape.
5. Do not run cords through hinges.
6. Do not run cords where people can easily trip over them.
7. Use SABS approved electrical wires or cords.



## C. Water

Since water is an excellent electricity conductor, it can cause electric shocks or short circuits very easily. The general rule is thus to keep water in and around the home, away from any electrical appliances and any wall sockets.

1. Do not use electrical appliances in the bathroom.
2. Never touch electrical appliances with wet hands.
3. Never fill a kettle when it is plugged in.
4. Never mow wet grass with an electric lawnmower.

5. Never hold an electric appliance in one hand while touching metal objects such as taps, fridges or stoves with the other. This is because our bodies are made up of 70% of water and they thus become very good electricity conductors.
6. Never use water to put out an electrical fire if the mains are not switched off. Use a dry chemical fire extinguisher instead.

#### **D. Electricity and Children**

When babies start to crawl or walk, extra care has to be taken that they do not harm themselves. Children are naturally interested in cords and plugs and their curiosity could lead to serious accidents. Here is some advice on how to make sure that your children are safe.

1. Children love playing with loose hanging wires. Make sure that the cords of your iron and kettle are not left hanging where a child can pull them, thereby causing a hot iron or kettle to fall down and burn the child.
2. If you have turned a heater on, watch your child carefully so that he / she does not stick their fingers through the grill and touch the hot bars of the heater.
3. Do not let children play with electrical cords - they can chew on a live wire.
4. Teach children not to play with electrical sockets. Keep all unused plugs in the house covered with a safety plug. Babies love to stick their fingers into the plug holes.
5. Teach your children not to fly kites near power lines.
6. Do not allow children to release metallic balloons outside.
7. Never allow children to climb electric poles.
8. DO not play with children on or near an electrical installation.



#### **E. Outside the Home**

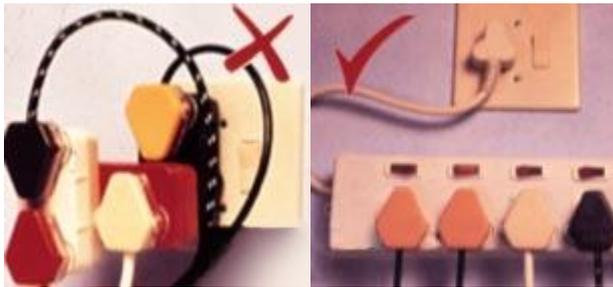
There are a few situations outside the home that could be dangerous:

1. When working with any electrical appliance, like power drills, make sure that they are connected properly. Never use them in damp or wet areas.
2. Do not enter electrical sub-stations - the voltage is extremely high and very dangerous.
3. Do not touch any electrical power lines. Under no circumstances should you ever go near them. All power lines are very dangerous.
4. Do not make a fire underneath power lines.
5. Never climb onto electric pylons.

6. Do not play or build houses under power lines.
7. Do not throw stones at insulators.
8. Do not cut down trees next to power lines.
9. Do not touch power lines that have fallen to the ground.
10. Do not carry long objects under power lines.

#### F. Plugging in safely and correctly

- Overloading a plug can cause a fire. A multi-plug adaptor will allow you to use as many appliances as needed without the risk of overheating.
- Pulling a plug out by the cord can expose bare wires. Pull it out by gripping the plug itself and make sure the power is switched off.
- Broken plugs or loose wires are dangerous. Always use SABS approved plugs and make sure there are no loose wires.
- Putting electrical wires directly into a socket can cause accidents.
- It is dangerous to plug electrical appliances into light sockets. They should only be plugged into wall sockets.



#### G. Senior citizens home safety tips

- If you are using an extension cord, never let it run under carpets or rugs - place it in a "no-trip" zone.
- If the plug you are using has a different number of pins to the electrical outlet, use an adapter that will accommodate both the plug and the outlet.
- To avoid an accident, keep heaters and fans a safe distance from your curtains and furniture - at least 3 feet away.
- Using the correct fuse is important. When you replace a blown fuse, make sure of its size as the wrong one could cause a fire.
- Electricity outlets and switches should always be cool to the touch - if they aren't call a technician to fix it for you and NEVER touch it yourself.
- Unplug any of your small appliances when you are not using them, eg. Toasters, irons, hairdryers.
- Do not use electric blankets with loose wires - they could cause a fire or shock. Do not tuck in or squeeze wires as this is also very dangerous.

- Turn your heating pad off before you go to sleep.
- Use the specified watt light bulb as indicated on the light fixture.
- In case of an accident and your clothes catch fire, don't panic - 'DROP' and 'ROLL'.



### **General Safety**

1. Never change a light bulb without first making sure that the current is switched off.
2. Do not use a fork or a knife or anything that is made of metal to remove toast from a toaster when it is plugged in.
3. If you see sparks or smoke from an electrical appliance, it is telling you that something is wrong. Unplug it and call an electrician.
4. Do not work on an electrical appliance unless you know exactly what you are doing and make sure it is not plugged in.