# Electrical safety tips



To help you stay safe when using electricity, ActewAGL has compiled these electrical safety tips. For natural gas safety tips please see ActewAGL's natural gas safety brochure, available at actewagl.com.au/safety

## **Using electrical appliances**

### Using electrical appliances can be dangerous

- · Always read the manufacturer's instructions.
- If an appliance has a damaged power cord, switch it off immediately at the power point, disconnect the appliance and have the cord repaired.
- Never handle wiring that is damaged or worn.
   Contact a licensed electrician to replace it.
- Never place metal ladders or steps, furniture or bed bases or other heavy objects on power or extension cords as they may cut through the cord's electrical insulation.
- Never touch electrical appliances or switches with wet hands.

### Using electrical appliances outdoors

- Plug appliances and power tools into an earthed power point or extension cord. It's best to use a power point protected by a fixed or portable safety switch.
- Never leave electrical appliances and cords outdoors and exposed to rain.
- Never use electrical appliances and cords near a pool or spa.
- Never use power or wiring for pool pumps and spas to operate gardening power tools.
- Ensure that supply cords to caravans are in good condition, are 3 to 15 metres long and supported off the ground by 2.5 metres. They should be rated at 15 amps and plugged into an earthed, safety switch protected socket outlet installed by a licensed electrician.

- Don't run extension cords through doorways or windows.
- Use approved plugs and extension sockets.

## **Cleaning electrical appliances**

Cleaning your electrical appliances regularly and in accordance with the manufacturer's instructions is a simple but effective way of helping to ensure your appliances work safely and efficiently. Before cleaning, turn off and unplug them.

## **Second-hand appliances**

Examine second-hand appliances for signs of damage. A safe appliance has a secure and undamaged flexible cord and plug, secure and undamaged covers, guards and control knobs and has been tested for performance at the point of sale.

### Work around the home

It's safe to do simple electrical work around your home, such as changing light bulbs and fuses, starters for fluorescent lighting fittings and resetting circuit breakers and safety switches. However, specialist tasks must always be performed by a licensed electrician. This includes work such as rewiring or replacing plugs, switches or power cords, repairing electrical appliances, or installing, repairing or replacing fixed electrical wiring.

If you don't use a licensed electrician you could put you and your family at a serious safety risk, you could be fined and your home insurance policy could be voided.

### **Portable electric heaters**

Portable electric heaters are a fire hazard if used carelessly. When using portable electric heaters it is important to follow these steps.

- Always keep heaters at least 1.5 metres away from flammable materials.
- Don't operate portable heaters in confined places or on damp floors.
- Keep heater grills and vents or reflectors angled upwards from floor coverings and free from dust to improve efficiency and reduce overheating.
- Vacuum your portable heater's intakes and vents before and after each winter.
- Connect portable heaters directly to a power point instead of via a double adaptor or long extension cord.
- Always supervise children near electric heaters.
- Low wattage column heaters are safer for bedrooms.



### Lights

- Be careful when changing replaceable lamps –
  never use a metal ladder or steps. If you touch
  a live conductor while standing on a metal ladder
  or step you may be in electrical contact with the
  ground and could get an electric shock and fall.
- Ensure the electricity supply for all lighting circuits is switched off at the meter box switchboard.
- Never replace fuse wire or plug-in circuit breakers with larger sizes.
- Never replace light bulbs with a bulb that exceeds the socket rating.
- Portable and wall lights radiate heat, so keep them away from children and keep flammable materials such as paper, plastic and drapery 150 millimetres away from exposed lamps.



### When using outdoor lights

- Make sure lights are suitable for outdoor use and have an Australian Standard or approval mark.
- Attach cords and lighting to existing fixtures with appropriate tape, electrical cable ties, clips or clamps.
   Never use nails. Avoid using cords longer than 10 metres. Suspend 240 volt decorative lighting not less than 2.5 metres above the ground or decking.
- Follow the manufacturer's instructions when installing.
- Never install outdoor lights near a pool or spa.
- Ensure all outdoor connections are weatherproof.
- Use a plug board with overload protection if installing high-powered lights such as flood lights and spot lights – multiple use of high-powered lights can overload electrical circuits.

### **Safety switches**

Safety switches are also known as residual current devices. They detect small amounts of faulty electrical current leaking to earth and quickly switch off the electricity, minimising sustained electric shock and reducing the risk of fire. Safety switches can be wired into older power and light circuits.

### There are three types of approved safety switches

- Switchboard safety switches provide protection to lights and power circuits connected to them and wired throughout the house. Appliances and extension cords only become protected when plugged into power points (socket outlets) connected to safety switches.
- 2 Safety switches integral to a power point can replace the first power point in the circuit and protect extension cords and appliances plugged into it. Appliances, electrical wiring and power points downstream from the safety switch on the same circuit are also protected from earth faults.
- Portable safety switches with socket outlets protect portable electrical appliances and extension cords plugged into the protected outlets. These safety switches are essential when using power tools or appliances outdoors that are not protected by a switchboard or power point safety switch.



### Installing and using safety switches

- Use an ACT licensed electrician for installation.
- Make sure you know which circuits are protected by safety switches. Switchboard circuits are marked under fuses, circuit breakers and safety switches.
- It is mandatory to install safety switches to all new power and lighting circuits in new homes, building extensions, home alterations and commercial buildings.
- If a safety switch has tripped and shut down the electricity supply, the fault may have been temporary, or due to lightning or the last appliance plugged in. Resetting the safety switch should restore the electricity supply. If you cannot get the safety switch to reset after turning off your large appliances, contact a licensed electrician to find and repair the fault.
- Check each safety switch every month by turning off all plug-in appliances before pressing its test button.

Safety switches are not fail-safe and may fail to operate in some circumstances. You must still exercise normal care and caution around electricity and electrical appliances even if a safety switch has been installed.

# **Regular checks**

It is recommended that a licensed electrical contractor checks your home's electrical wiring installations every 10 years.

### Power points and power boards

Running too many appliances off one power point by piggy-backing double adaptors, or connecting power boards together, can overload the circuit and lead to overheating, damage to equipment, or even cause a fire in your home.

# Follow these safety tips when using power points and power boards

- Ensure individual power points are not overloaded.
- For more than two cord plugs use a suitable adaptor board instead of a double adaptor.
- Keep all electrical connections out of areas that may become wet.
- Do not under any circumstances use an extension cord that has a three-pin or piggy-back plug at each end.



# Renovating or landscaping

Always consider the location of electrical cables when planning to renovate or landscape. Before you plan a job call Dial Before You Dig on 1100 or visit www.1100.com.au to find out what electricity, gas or water services are in your area.

### Storm and bushfire season

Summer brings an increased risk of storms and fires. You can help reduce the chance of interruptions to the electricity supply by keeping trees and other vegetation clear of powerlines, as required by law, by staying away from electricity lines when cleaning gutters and not using phones during thunderstorms.

Storms and fires can also bring down powerlines and damage other parts of ActewAGL's electricity network. Always keep well clear of fallen powerlines and anything that is in contact with them and report them immediately by calling ActewAGL's 24-hour emergencies and faults number on 13 10 93.

### **Substations and mini pillars**

- Keep plants, shrubs and other obstructions clear of network infrastructure, which includes substations, mini pillars and electricity meters. In most cases, the minimum clearance is 1.5 metres.
- If plants, shrubs and other obstructions are too close to, or interfere with, network infrastructure, ActewAGL inspectors will issue notices.

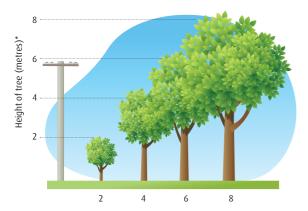
For more information refer to ActewAGL's *Substations, Mini pillars and Safety* brochure, available at actewagl.com.au/safety



# Trees growing near powerlines

Trees and vegetation growing too close to powerlines can cause blackouts, create safety hazards such as grass fires and bushfires, and increase the risk of electrocution.

- Only ActewAGL-accredited tree surgeons are authorised to work in close proximity to powerlines.
- In most cases, trees must be kept at least 1.5 metres from powerlines. For higher voltage powerlines the minimum clearances increase. If you are not sure of the voltage of powerlines, call ActewAGL's technical enquiries number on 6248 3555.
- When trimming trees you should allow for a threeyear regrowth. To keep the costs of repeat trimming down you should trim trees to at least 2.5 metres from powerlines. The space vertically above the powerlines should also be kept clear of trees at all times.
- In bushfire-prone areas the minimum distance should be increased by at least 0.5 metres.
- If there is an electricity outage, planned or otherwise, overhead powerlines should continue to be treated as live and considered unsafe for tree trimming or any other purpose.



The minimum distance is 1.5 metres. This diagram shows the recommended distance of trees from powerlines.

For more information refer to the *Trees, Powerlines and Safety* brochure, available at actewagl.com.au/safety

### **Damaged infrastructure**

Damage to electricity infrastructure such as substations, mini pillars, powerlines, poles, wires and meters can create dangerous safety hazards and disrupt the electricity supply.



Substations contain high-voltage electrical wires. Electricity can arc or jump and you could get an electric shock, even if you're not in direct contact with wires.

If you see damage, report it immediately by calling ActewAGL's 24-hour emergencies and faults number on 13 10 93.

## Tingles or electric shocks

Tingles and electric shocks can be an indication that there is an underlying electrical fault and if left unchecked could put you and your family at risk. Watch out for a tingling feeling when touching metal in your home, such as taps, sinks and appliances.

If you receive a tingle or shock call ActewAGL's 24-hour emergencies and faults number on 13 10 93.

<sup>\*</sup>Height of poles may vary

### More information

For more information about natural gas or electrical safety visit **actewagl.com.au/safety** 

### **Customer enquiries**

13 14 93 - electricity, water, sewerage13 18 86 - natural gas

# Emergencies and faults – 24 hours

13 10 93 - electricity and electric shock reports

13 19 09 - natural gas

13 11 93 - water, sewerage and stormwater

### Language assistance

13 14 50 - 24 hours

如果您需要幫助,請打電話給下面的號碼。

¿Necesita un intérprete? Llame al número indicado abajo.

هل تحتاج إلى مترجم؟ اتصل بالرقم أدناه.

Trebate li pomoć tumača? Nazovite niže navedeni broj.

Nếu quí vị cần sự giúp đỡ, vui lòng gọi số bên dưới.

Se vi serve un interprete, telefonate al seguente numero.

Αν χρειάζεστε διερμηνέα, τηλεφωνείτε στον αριθμό παρακάτω.

