

Electrical safety at home

We use electrical equipment every day. Whether it's a powerboard, hairdryer or air conditioner, over time they will start to wear out and may pose a serious risk to users. Increasingly, more homes are also fitted with electrical equipment such as rooftop solar PV systems and battery storage units.

In Queensland each year there are a number of electrical incidents due to faulty electrical equipment including:

- A man was hospitalised after receiving a serious electric shock from using a cracked powerboard.
- A family of three was hospitalised after a poorly maintained electric hot water system made the plumbing in their house electrically dangerous.
- A home owner suffered a fatal electric shock attempting to repair a vacuum cleaner.

Follow these simple steps to help reduce the risk of electric shock in your home.

Check it out before you plug it in

Take a moment to do some quick visual checks of your electrical equipment before you plug it in. Things to look for include:

- broken enclosures or cracked plastic covers
- discolouration caused by overheating or moisture
- water in and around the appliance
- frayed cords or damaged plugs
- full or dirty filters.

Any of these could cause a fire or electric shock.

Pay extra attention to equipment that has been exposed to the weather such as air conditioners, solar panel installations and hot water systems. Rain, sun, wind and dirt can cause casings and connectors to decay.



Dispose of or repair damaged equipment

Damaged equipment should not be used. If you find a damaged equipment, disconnect it immediately and either dispose of it or have it repaired and tested by a professional.

Never perform your own electrical work – contact the authorised service agent or have a licensed electrician examine and repair your faulty equipment.



Safe use

Only use equipment for its intended use and always follow the manufacturer's safe operation instructions. Don't use electrical equipment in wet or outdoor environments unless it is designed for it. Don't use or touch any electrical equipment with wet hands. Remember, water and electricity don't mix!

Maintain your equipment

Everyday electrical equipment requires regular maintenance and inspections. This includes equipment that is hard-wired into a building. Air conditioners, bathroom fan heater lights, solar panels and electric hot water systems all require regular inspections and maintenance for continued safety.

Extend the safe use lifetime of your equipment by following the manufacturer's maintenance and servicing guidelines.

Don't forget to turn off and unplug your equipment before performing cleaning and maintenance. Remember to turn the power off even before you do simple tasks such as changing a blown light bulb.

Safety switches



Have an electrician install safety switches on every circuit in your home. Don't mistake circuit breakers for safety switches. Circuit breakers are designed to protect circuit wiring and equipment, while safety switches protect people. A safety switch can be identified by its test button. If you can't see any test buttons, call your electrician. Remember to test your safety switches using this button at least every three months.

Lost power on a circuit

If a safety switch or circuit breaker trips regularly, it can often be a sign of faulty electrical equipment or improper use. If you cannot safely identify the cause of tripping call your electrician.

Intermittent appliance operation

Equipment that becomes unreliable or intermittently stops without warning may have an internal fault. Don't keep using it. Have it repaired or dispose of it.

Tingles or shocks

If you feel a tingle or shock from electrical equipment, a tap, or other metal fittings in your home, don't ignore it - it is a sign of a serious electrical safety issue. If you get the shock from using or touching electrical equipment, stop using it immediately. You can call an electrician to check out the equipment or discard it all together. If you get a shock from a tap, pipe or other metal fitting call Energex or Ergon immediately and ask them to check your property.

Solar PV systems

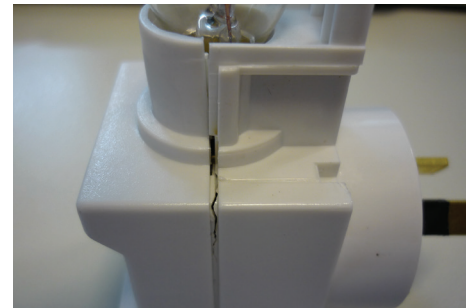
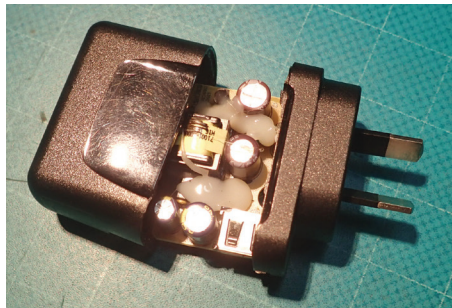
Rooftop Solar PV and battery storage systems are a great way to reduce powers bill. To maximise the potential of your system and ensure it continues to be safe, have it regularly inspected and maintained. Maintenance should ensure:

- cooling vents are clear of debris
- panels are clean, secure and free of defects.
- switches are free of defects
- no parts, including the wiring's insulation, have deteriorated, corroded or been damaged.

Get your solar checked by an accredited solar installer or licensed electrician annually.

Here are some examples of common faults in electrical appliances

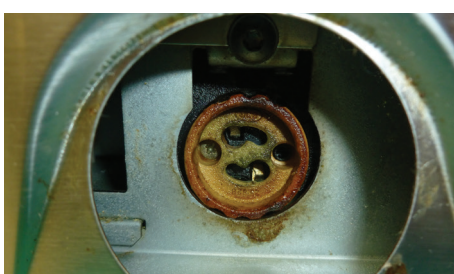
Damaged insulation:



Damaged or broken cords:



Full or dirty filters:



For more information contact the Electrical Safety Office.

1300 362 128

electricalsafety.qld.gov.au

or via our Facebook social media page