



SWITCH THINKING

consumer information

Every circuit, every home. Eight states and territories. 30 million safety switches. Installed by 2016.

Every year, 15 people are killed in Australian homes in electrical accidents that could have been prevented if safety switches had been installed.

As many as 20 times that number are hospitalised with serious injuries and burns.

The cause of these incidents may be as simple as a child removing toast from a toaster with a knife, a home handyman drilling a hole in a wall to hang a picture or storm water penetration in to light fittings and powerpoints.

Mothers, fathers, children – gone in an instant.

The greatest tragedy is that these deaths could have been easily prevented – with the flick of a switch.

Independent research, commissioned by Master Electricians Australia, indicates 80 per cent of home owners believe they are well protected by safety switches, when in fact only 60 per cent are partially protected. Which means there is over 40 per cent of people who are not protected at all.

A safety switch is designed to cut the power to an electrical circuit in as little as 300 m/second in the event of an electrical shock. The technology is widely available, relatively cheap and has been commonplace in Australian homes for around 20 years in which time it has contributed to a significant reduction in electrical fatalities.

Would you risk the chance of losing a loved one for the sake of a few hundred dollars? Please take the time to call your local licensed electrician and talk about safety switches in your home or rental property.

Why do I need safety switches?

Every year, people die from electrocution. A safety switch is intended to operate at a speed which will turn the electricity off before electrocution occurs. The speed is less than one heart beat.

How many safety switches do I need?

The law states that for new homes the circuit supplying power to lights and power points must be protected by a safety switch. For existing installations, built after 1991, only power points were required to be protected, and before that, nothing required protection. We therefore recommend that ALL circuits in ALL homes be retrofitted with safety switches. The circuits include, power points, lights, stove, hot water system, pool, air conditioner, etc. It is important to note that all three fatalities under the recent Home Insulation Program would have survived if there was a safety switch installed on every circuit.



Safety Switch



Circuit Breaker



Surge Protector

What is the difference between safety switches, circuit breakers and surge protectors?

Safety switches protect people from electrocution. Circuit breakers protect electrical cables and fittings from becoming overloading and ending up as electrical fires. Circuit breakers rarely protect people from electrocution or electric shock. Surge protectors are used to safeguard appliances against a spike in electrical current caused by a lightning strike or other external event.

How reliable are safety switches?

In Australia, under each state Electricity Act, a safety switch is a declared article. This means that a manufacturer must submit a formal test report on the operational characteristics of the safety switch. This report is then compared to the Australian standard for compliance. Once satisfied, an approval is then issued. This approval must be marked on the product and is then able to be sold. To meet this need for testing is quite onerous and therefore the need to ensure quality and reliability is highly desirable by the manufacturers.

Are safety switches expensive?

A licensed electrician will need to install your safety switches to ensure your house is protected correctly. Generally, you would be looking at paying a standard electrician's service fee for the service which is ordinarily in the vicinity of a few hundred dollars. Some homes, dependant on the quality and size of their switchboards may require upgrades which would increase that cost. Contact your local licensed electrician for a definitive quote.

Do I have to 'test' safety switches?

Safety switches need to be tested regularly to ensure the mechanism works freely. Testing should be done every three months. As a guide, you should test them when you receive your electricity account. To test the safety switch it is really easy, simply push the button marked 'T' or 'test'. The safety switch should trip and reset by closing, job done. Be aware that some appliances will need to be reset after this test, such clock radios.

What happens if I cannot reset the safety switch?

This may mean that there is an inherent fault on the circuit and will therefore need the expertise of an electrician to inspect and repair this situation.

How long will a safety switch last?

Under the current Australian standard, a safety switch is manufactured to last for a minimum of 4,000 operational tests. We encourage home owners to test their switches every three months which indicates that unless there is a significant problem with a device, they should last a lifetime.



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