Information sheet: Electrical safety

March 2014

Electrical current poses a threat to everyone using or visiting your facilities. Many people, particularly children, are at increased risk because they are unaware of the potential electrical hazards and the danger of electrocution.

All congregations are responsible for providing a safe environment for workers, members and visitors. The Work Health and Safety Act 2011 requires workplaces to take all reasonably practicable steps to make their environment free from electrical risk.

The Queensland Government provides extensive information regarding electrical safety obligations on their website, including the Electrical Safety Act 2002 and Electrical Safety Regulation 2002.

There are minimum intervals for the testing of electrical equipment and safety switches. Whilst achieving the Elminimum standards must be a congregation's primary focus, taking additional precautions such as testing safety switches and testing and tagging electrical appliances will afford further protection.

A formal system designed to ensure all electrical equipment is regularly checked will assist in meeting safety requirements. The system should include details about when safety switches need to be checked, when appliances are tested and tagged, and when the electrical wiring is checked by a licensed electrician. Test records and invoices from contractors must be retained in order to demonstrate compliance.

There are a number of steps to ensure that an environment is free from electrical risk.

1. Electrics – Portable Appliance Testing

Portable electrical appliances which are old or which receive constant and harsh usage constitute a fire and safety hazard.

All portable electrical appliances should be tested in accordance with the provisions set out in AS/NZS 3760: 2010.

Electrical testing can be done by a qualified electrician using appropriate testing equipment or a person trained to use a portable appliance tester (PAT).

A PAT is an electronic instrument that automatically tests equipment plugged into it, and the results require no technical interpretation. TAFE-run courses which cover how to check the safety of cords and plugs using a PAT are available to employees and church volunteers.

2. Fixed wiring inspection

Electrical wiring and installations in poor or overloaded condition are notorious for causing fires. They also have the potential to cause injury to those performing maintenance tasks or operating portable electrical equipment. Indications of poor wiring include:

- exposed wiring
- power points, light fittings or fixed appliances that are partially disconnected or unattached
- missing conduits or insulation
- regular blowing of fuses
- wiring or circuits emitting excessive heat.

The fixed wiring system should be inspected by a licensed electrician.

3. Thermographic scanning

Thermographic scanning is a non-intrusive procedure conducted by a licensed electrical contractor which can identify faulty wiring, overloaded systems or short circuits before they fail.

Any 'hot spots' or faults should be attended to immediately.

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Electrical safety

Safety switches

Safety switches or RCDs (Residual Current Devices) play a vital role in protecting users of your facility from the risk of electrocution. An RCD will cut the power to a circuit in the event of an earth leakage.

RCDs need to be tested regularly. This is a simple process that can be undertaken by a member of your property team every six months. RCDs on manses and church-owned homes should be tested every quarter.

To test your safety switch (RCD): Press the Test or 'T' button. This should automatically trip the switch to the 'OFF' position.

Reset by pushing the switch back to 'on'. If it does not trip, contact your electrical contractor immediately.

This test must be carried out on all fixed safety switches every six months by a responsible person. A timed test must be completed every two years by a competent person (electrician).

Results of the tests must be recorded below

Date	Location of safety switch	Pass	Fail	If fail: action taken	Rectification date	Manual test undertaken by:	
						name	signature

Electrical Safety Office

www.electricalsafety.qld.gov.au

Electrical safety and you

Your responsibilities and the law

Even if you think you know what you're doing, electrical work can be extremely dangerous.

Your responsibilities and the law

Unsafe or unlicensed electrical work is risky for whoever does the work as well as for the users or anyone else who comes into contact with it. The risks can include death, serious injury or major property damage caused by an electrical fire.

In the case of property damage, illegal electrical work may result in an insurer refusing to accept a claim.

What is electrical work?

Under the *Electrical Safety Act 2002*, electrical work includes the manufacturing, constructing, installing, testing, maintaining, repairing, altering, removing, or replacing of electrical equipment.

In Queensland, it is illegal for unlicensed people to perform electrical work. **Significant penalties of up to $48,000 can apply to individuals**. Even if you think that you know what you are doing, never attempt to do your own electrical work – it's dangerous, illegal and can be fatal. Always get a licensed electrical contractor to do any electrical work.

Other work such as replacing a drive belt in a washing machine, cutting openings for air-conditioning units or fitting, but not connecting, an electric wall oven in a kitchen cabinet are not regarded as electrical work under the legislation.

However, electrical risks such as damage to, or contact with, wiring contained within wall cavities need to be considered and controlled particularly when cutting holes or driving screws or nails into walls.

What is electrical equipment?

Electrical equipment is more than just appliances. There are two main types found in homes or small businesses. These are electrical accessories and fixed-wired electrical appliances.

The following lists give an indication of the types of products that could be found in each category.

Department of Justice and Attorney-General

Queensland Government

JAG 12/5099

Electrical accessories

- junction boxes
- plugs
- light switches
- extension cords
- light fittings without a cord
- power boards
- power points

Fixed wired electrical appliances

- ceiling fans
- split system air conditioners
- some light fittings
- stoves and ovens

What should I do?

It is not against the law to purchase electrical accessories or appliances that need to be hard wired, but they must be installed by a licensed electrical contractor.

Contact details for electricians can be found in the Yellow Pages, White Pages, your local newspaper or by contacting an electrical industry association.

When choosing a licensed electrical contractor, always look for their electrical contractor licence number in any advertisement, and confirm that they have a current licence before agreeing to any work. You can do this by checking their electrical contractor licence or via the online licensing database at **www.electricalsafety.qld.gov.au**

Making sure it works

To make sure you are getting maximum protection from your safety switch, you should regularly test the switch according to the manufacture's directions. A good rule of thumb is to test safety switches every three months. To do this you only need to press the 'test' or 'T' button. If the switch turns off the power, then it is working correctly.

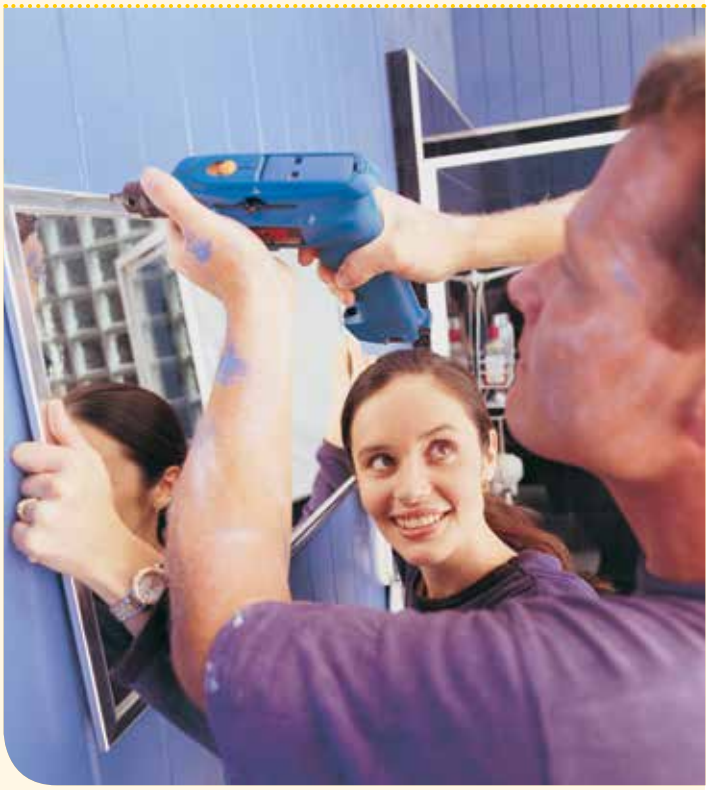
Safety switches save lives

A safety switch can help guard against an electrical tragedy in your home. Safety switches are designed to cut the supply of electricity in a fraction of a second when a harmful level of electricity is detected leaking to earth.

Safety switches are available as permanently installed or portable units, which provide protection where permanent safety switch protection is not available.

A portable safety switch is ideal for use with portable electrical equipment such as power tools, and should be plugged into a power point ahead of the electrical equipment to be protected (including any extension leads).

Safety switches can be easily identified—they are the ones with a 'test' or 'T' button. Although safety switches are proven to prevent many serious electric shocks, they are not a substitute for proper electrical maintenance and safe practices.



For more information visit www.electricalsafety.qld.gov.au or telephone 1300 650 662.