

# Inspection and Testing of Electrical Equipment

Electricity has the potential to cause serious injury or death from damaged or faulty electrical equipment.

If you are a business, employer or any other person conducting a business or undertaking (PCBU), you must make sure that electrical equipment is regularly inspected and tested by a competent person if the electrical equipment is—

- a) supplied with electricity through an electrical socket outlet; and
- b) used in an environment in which the normal use of electrical equipment exposes the equipment to operating conditions that are likely to result in damage to the equipment or a reduction in its expected life span, including conditions that involve exposure to moisture, heat, vibration, mechanical damage, corrosive chemicals or dust.

SafeWork SA regularly checks that electrical testing requirements are being met.

## Who can test electrical equipment?

A *competent* person must carry out the inspection and testing of electrical equipment. A competent person is someone who has acquired through training, qualification or experience the knowledge and skills to carry out the task. This could be an employee of the workplace who has

successfully completed a nationally accredited training course, run by a registered training organisation, on the use of a Portable Appliance Tester for in-service safety inspection and testing of electrical equipment. A licensed electrical worker is deemed to be competent for the purpose of electrical inspection and testing.

## How often do I need to test electrical equipment?

Most workplaces will have different testing frequencies based on their own risk and work health and safety management and planning. The class of work and the risks associated with the use of specified electrical equipment will determine how often equipment is tested. Guidance on general inspecting and testing of electrical equipment is included in AS/NZS 3760:2010 *In-service safety inspection and testing of electrical equipment*, and may also be included in the manufacturer's recommendations.

AS/NZS 3760:2010 sets out indicative inspection and testing intervals for certain electrical equipment, including residual current devices (RCDs), used in a variety of different operating environments. Relevant technical reference on the frequency of inspection and testing is outlined in the table provided overleaf.

Type of environment and/or equipment	Factories, workshops, places of manufacture, assembly, maintenance or fabrication	Environment where the equipment or supply flexible cord is subject to flexing in normal use OR is open to abuse OR is in a hostile environment	Environment where the equipment or supply cord is NOT subject to flexing in normal use and is NOT open to abuse and is NOT in a hostile environment	Residential type areas of: hotels, residential institutions, motels, boarding houses, halls, hostels accommodation houses, and the like	Equipment used for commercial cleaning	Hire equipment : a) Inspection b) Test and Tag	Repaired, serviced and second-hand equipment
Intervals between inspections and tests	6 months	12 months	5 years	2 years	6 months	a) Prior to hire b) 3 months	After each repair or service which could affect electrical safety, or prior to reintroduction to service *

### Do I need to keep any records?

Yes. You must ensure that you keep a record of any testing of electrical equipment until the next test or until the equipment is permanently removed from the workplace or disposed of.

A record must specify:

- the name of the person carrying out the testing;
- the date of the testing;
- the outcome of the testing;
- the date on which the next testing can be carried out.

This record can be in the form of a tag attached to the electrical equipment, however, other methods such as logbooks, a register or computerised database can also be used.

### Can I use electrical equipment that has not been tested?

No. You must not use any electrical equipment that has not been tested. The exception to this is newly-purchased electrical equipment (straight out of the original box). This equipment is deemed to have been tested but needs to indicate the next due date for testing.

### More information

For more information on the requirements for testing of electrical equipment, contact SafeWork SA on 1300 365 255.

SafeWork SA also offers a free workplace advisory service, where an experienced WHS advisor can visit your workplace to help you to identify hazards and risks, and put in place practical safety systems that will suit your specific circumstances.

Our advisors have no inspector powers, so you can feel comfortable inviting them in to help.

Request a visit at [safework.sa.gov.au/freeadvice](https://safework.sa.gov.au/freeadvice) or call the number above.

\* For further information refer to AS/NZS 5762