Electrasafe Guideline

Guidelines for the testing and tagging of specified electrical equipment and testing of residual current devices

Test & Tag of Specified Electrical Equipment

The requirements to test and tag Specified Electrical Equipment under the Electrical Safety Regulations 2002 are related to the type of work performed. This section of the document is available as a guide to help determine the correct category for the types of work performed at UQ.

1 Construction Work

Construction work is building work, civil construction work or demolition work.

Testing and tagging of specified Electrical equipment within this work type is to be maintained in accordance with Section 86 & Section 90 of the Electrical Safety Regulation 2002.

2 Manufacturing work

Manufacturing work involves assembly, fabrication, installation, maintenance, manufacturing or repair work. Predominately within the University this would relate to workshop environments and wet laboratories.

The test requirements for specified electrical equipment are:

- tested by a competent person
- tested on an annual basis if it is double insulated
- if NOT double insulated it is tested on a 6 monthly basis
- AND is only operated from an RCD protected circuit

3 Service work

Service work is defined to be cleaning, sales and marketing, providing health services, teaching at an education facility and meal preparation.

The University requires that electrical equipment used in a service work environment be tested and tagged annually.

(Within these situations testing and tagging of equipment connected to RCD protected circuits, while not required by law, is a requirement at the University of Queensland. This is because at present there are many areas within the University that do not have RCD protection, and it is common for equipment to be shifted between laboratories).

4 Office work

In accordance with the section 93 (1)(a)(i), equipment exclusively used in an office situation is required to be tested every five years. (This excludes power boards and extension leads which must be tested annually).
5 Amusement work
This work includes exhibitions and conferences.

The test requirements for specified electrical equipment are:
- tested by a competent person
- each time it is assembled on the site where it is intended to be used
- tested every 6 months
- AND it is only operated from an RCD protected circuit

6 Rural industry work
All specified electrical equipment used in a work location at UQ which may be considered rural work must be connected to a RCD protected circuit and submitted to test & tag annually.

7 Electrical Medical Equipment
There are additional test requirements mandated for electrical equipment commonly used in diagnostics and patient treatment or therapy. The test regime for such equipment is much more rigorous than for other items with additional tests being prescribed.

Details of these additional requirements are set out in:
- AS/NZS 4513 1995 – Medical electrical equipment – Fundamental aspects of safety Standards
- AS/NZS 3551 1996 – Technical management programs for medical devices

Responsibility to Ensure Compliance
Faculty, School, Divisional and Institute managers are responsible for the safety or integrity of specified electrical equipment located in areas under their control.

Testing and tagging may be carried out using external service providers (P&F Division have a list of approved contractors) or by the use of persons who have successfully completed a course in the safety testing of electrical cord assemblies and cord connected equipment training within Institutes, Schools or Departments.

Residual Current Devices (RCD)
RCD testing MUST be maintained in accordance with the prescribed relevant sections of AS 3760:2010

Portable RCDs

Push button testing
In construction, manufacturing and amusement workplaces push button test must be conducted before each use or daily (whichever is the longer).

In service work or office work push button tests must be carried out at 3monthly intervals.

Time/Current testing
Time/Current testing of Portable RCDs carried out by a competent person using an approved testing device shall be carried out as follows:
- Construction, Manufacturing and Amusement workplaces - every 12 months
- Service work (Excluding commercial cleaning) or Office work - every 2 years
- Commercial cleaning – every 6 months

FACULTY, SCHOOL, DIVISIONAL AND INSTITUTE MANAGERS ARE RESPONSIBLE FOR ENSURING THE ABOVE TESTS ARE PERFORMED AND THE RESULTS ARE RECORDED.
Fixed RCDs

Fixed RCD’s must also be functionally tested at prescribed intervals. Property and Facilities Division will establish a program and coordinate resources to ensure compliance with this requirement.

Additional Notes / Requirements

ALL FIXED RCD testing must be carried out by P&F staff or by external service providers endorsed and coordinated by P&F under a contractual arrangement.

The testing of portable RCDs is to be arranged by the person in control of the equipment using inducted external service providers or qualified and competent in house resources.

All electrical equipment must be fit for purpose.

Double adaptors and piggyback plugs must not be used in any of the University of Queensland facilities.

Multiple plug boards are permitted under the following conditions:

- They must not be used to supply high current consumption devices.
- All outlets must be individually switched and the board must have a 10 amp overload circuit breaker incorporated.
- Multiple plug boards must not be daisy chained.
- Plug boards must not be used in hostile environments or exposed to wet or moisture laden atmospheres.

Extension leads may be used under the following conditions:

- Extension leads may be used for temporary applications only.
- They must not be of excessive length for the purpose (avoid coiling cable).
- They must be of adequate current rating.
- They must be positioned such that they are protected against mechanical damage and do not create a trip hazard to persons entering the area.
- They must be regularly inspected and tested & tagged, as specified above.
- They must be fitted with a transparent plug and socket and ideally have a neon indicator incorporated at the socket to indicate that the lead is energized.

Plug boards and extension leads are tested as per requirements of the type of work see AS/NZS 3760:2010.

Definitions

Specified Electrical Equipment

A cord extension or a portable outlet device or electrical equipment, other than a portable RCD that has a current rating of not more than 20amps AND is connected by a flexible cord and plug to low voltage supply (Less than a 1000V)

For office work or service work, the equipment must also be moved during its normal use, for the purpose of its use (refer Section 83C of Electrical Safety Regulation 2002).

Rural Industry work

As described in section 83A of the Electrical Safety Regulation 2002.

Contact for Additional Information

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