

Electrical Safety Procedure Test and Tag

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Document URL	http://policies.griffith.edu.au/pdf/Electrical Safety Procedure Test and Tag.pdf
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Description	This Procedure provides a practical summary of the test and tag requirements outlined in the Griffith University Electrical Safety Policy and Electrical Safety Procedure.

Related documents

[Construction Work Policy](#)

[Electrical Safety Policy](#)

[Electrical Safety Procedure](#)

[GSafe](#)

[Reporting and recording procedures for incidents, injuries, illness, hazards or near misses](#)

External documents

[Australian Standard/New Zealand Standard 3200.1.0:1998 Medical electrical equipment - general requirements for safety - Parent Standard](#)

[Codes of Practice for Electrical Work](#)

[Electrical Safety Act 2002](#)

[Electrical Safety Regulation 2013](#)

[\[Introduction\]](#) [\[Scope\]](#) [\[Application\]](#) [\[Delegated Authorities\]](#) [\[Appendix 1\]](#)

1. INTRODUCTION

This Procedure provides a practical summary of the test and tag requirements outlined in the Griffith University Electrical Safety Policy and Electrical Safety Procedure. For more detailed information please refer to the relevant Australian Standard.

2. SCOPE

This Procedure applies to all staff, students, visitors and contractors and to all University workplaces.

3. APPLICATION

3.1 General Obligations

Elements are responsible for general and electrical safety in their own areas. This includes the testing and tagging of electrical equipment and provision and testing of portable safety switches where required.

- All electrical equipment should be in good working order with no frayed or defective cords or leads or plugs.
- Damaged/defective cords or electrical items must be immediately removed from service, and be labelled with a 'Do Not Use' tag in accordance with Electrical Safety Legislation or Australian Standard.
- Electrical cords/leads and plugs must be protected from damage, including damage by liquids.
- Double adaptors & piggy back plugs must not be used at any time.
- All staff are responsible for reporting electrical hazards, incidents or damaged electrical equipment to the Maintenance Hotline Ext 88888.

3.2 Testing and Tagging

3.2.1 Specified Electrical Equipment

Certain electrical equipment (specified electrical equipment) must be tested and tagged at prescribed intervals by a competent person. (Table 1)

Specified electrical equipment is:

- An extension cord/lead or power board
- In teaching/research or office areas, an electrical appliance which connects by a flexible cord into a normal general power outlet and which is moved about while it is operating e.g. vacuum cleaner, hairdryer, power tools, overhead projector on a trolley, electric kettle etc.

In the case of these example items which may suffer damage through frequent movement from one area to another, the risk of electrical damage should be assessed in deciding whether to test and tag. This includes such items as laptops and chargers, common use student printers, electric hole-punches, electric staplers etc. in public library spaces. This equipment will be tested and tagged at a minimum of every 12 months.

Table 1. Specified Electrical Equipment - Inspection and Testing Intervals	
New specified electrical equipment must be tagged with the date of purchase/date of first use to identify when testing and tagging is required as below.	
Teaching/Research/Accommodation areas (<i>Service work</i>)	Test & tag every 12 months by a competent person
Office areas (<i>Office work</i>)	Test & tag every 5 years by a competent person
laptops and chargers, common use student printers, electric hole-punches, electric staplers etc. in public library spaces	Test & tag every 12 months by a competent person

Note: Equipment which is not moved while operating e.g. .desktop computers, printers, photocopiers, faxes, fridges, microwaves etc. do NOT constitute specified electrical equipment and do not require testing or tagging.

- Although certain parts of the University are protected by Safety Switches or Residual Current Devices, the University requires testing and tagging of specified electrical equipment in all cases. This is due to the difficulty of identifying exactly which parts of buildings are electrically protected, and preventing or tracking the movement of specified electrical equipment from a protected to a non-protected area.
- Electrical work performed in some learning and teaching activities e.g. fabrication in workshops may be classed as Manufacturing Work and thus require not only testing and tagging (every 12 months for double insulated specified electrical equipment and every 6 months for equipment that is not double insulated) but also connected to a fixed Type 1 or Type 2 Safety Switch.

- Some research activities e.g. field work involving agriculture or animals, may be classed as Rural Industry Work. This work requires the identification of 'stated risk factors' and implementation of appropriate control measures into an Element's risk register. Specified electrical equipment must be connected to a safety switch and be inspected and tested by a competent person at least annually.
- All defective equipment must be removed from service immediately, and be labelled with a 'Do Not Use' tag in accordance with Electrical Safety legislation or Australian Standard.

3.2.2 Safety Switches or Residual Current Devices (RCDs)

Fixed or portable safety switches must also be tested by a competent person according to the table below.

Teaching/Research or Office Areas - Inspection and Testing Intervals (AS/NZS 3760:2010 Table 4)	
Type 1 or 2 Safety Switch – Fixed	<ul style="list-style-type: none"> • Inbuilt test button – every 6 months • By a competent person at least every 2 years
Type 1 or 2 Safety Switch – Portable	<ul style="list-style-type: none"> • Inbuilt test button – every 3 months • By a competent person at least every 2 years

3.2.3 Lending/Hire of Equipment

University electrical equipment which is loaned/hired to staff/students will be regarded as Hire Equipment and must be inspected, and where required tested and tagged by a competent person:

- before each hiring, and or
- a minimum of every 6 months.

Records of test results must be kept for a minimum of five years.

3.2.4 Personal electrical equipment

- Any domestic/other appliances* (e.g. sandwich makers, coffee makers, electric jugs, fans, vacuum cleaners) brought by staff or students into the workplace or Residential Colleges must be tested and tagged before use. The relevant manager is responsible for ensuring that untested personal electrical equipment is not in use.
- If students bring electrical equipment for use in research/projects/artworks etc. the relevant academic supervisor must ensure it is tested and tagged before use.
- Portable bar heaters or fan heaters are not permitted in any University buildings (including Residential Colleges) due to the high fire risk

*This provision does not apply to laptop computers and mobile phones.

3.2.5 Theatrical Equipment

All electrical equipment exceeding 20 amps as used in theatres and cinemas must be tested and tagged by a fully licensed electrician every 6 months.

The use of double adaptors and piggy back plug combinations are not allowed. Other suitable types of electrical distribution equipment must be considered and be verified as electrically safe by a trained and competent electrical worker.

3.2.6 Electrical equipment designed and constructed by Griffith University

- The electrical equipment will be returned to Griffith University Science Workshop every 12 months for retesting.
- If the equipment is interfered with by students staff etc. (removing covers etc.), the electrical equipment that has been interfered with is to be returned to Griffith University Science Workshop for retesting and tagging.

3.2.7 Arrange for testing & tagging

The Griffith Portal (Safety, Security and Emergency) identifies the names of suitable electrical contractors or competent persons who are trained and competent to test and tag.

3.3 Training and Competency

3.3.1 For employees of Griffith University to undertake testing and tagging work at Griffith University, the person must either:

3.3.1.1 Hold a current electrical licence under the Electrical Safety Act 2002, and

3.3.1.2 Be employed by Griffith University specifically to undertake the role as an electrician, or

3.3.1.3 Be registered with Element or Campus Life as a competent person to conduct electrical test and tag.

3.3.2 For businesses contracting for the performance of test and tag work, the business must:

3.3.2.1 Hold an electrical contractor's licence, and

3.3.2.2 Be a registered contractor in the Campus Life system to undertake the test and tag work.

3.4 Calibrated Equipment

3.4.1 All equipment used for the testing and tagging of electrical equipment will be calibrated to meet manufacturers and Australian Standards calibration requirements.

3.4.2 All calibrated equipment will be listed on an Electrical Test Equipment Calibration Register in each Element within Griffith University or on an Electrical Contracting business calibration register.

3.4.3 The Electrical Test Equipment Calibration Register will be kept for a minimum of five years for historical and internal auditing purposes.

3.5 Incident Notification and Reporting

Any minor shocks or "tingles" from electrical equipment or electrical infrastructure (wiring, switches or plugs) or any minor damage caused by electricity (smouldering, fire etc.) must be reported immediately to the Campus Life Maintenance Hotline Ext 8888 on all campuses and entered into GSafe.

All serious electrical incidents and dangerous electrical events must be reported in accordance with the Griffith University *Reporting and Recording Procedure for incidents, injuries, dangerous incidents, hazards and near misses*, outlines responsibilities with respect to reporting requirements.

3.6 Campus Life Requirements to review the level of test and tag compliance

Campus Life will sample the level of compliance to this procedure. The representative sample will consider risk exposure and any historical electrical events that exposed employees and students to electrical risks. In consultation with the Elements, the audit sample will be designed to provide evidence to the Vice President (Corporate Services) and other element stakeholders, of electrical safety compliance across all Griffith University workplaces.

4. DELEGATED AUTHORITIES

Heads of Elements, Directors and Research Centre Directors, Academic Heads of School, Teaching and Research staff and Managers are responsible for electrical testing and tagging in the workplaces of their general and academic staff.

Director Campus Life is responsible for appropriate testing of building and electrical infrastructure.

APPENDIX 1: ELECTRICAL SAFETY REGULATION 2013 - REQUIREMENTS FOR INSPECTION, TESTING & TAGGING

CONSTRUCTION WORK	
(Construction work or work done in conjunction with construction work including work to erect, construct, extend, alter, convert, fit-out, commission, renovate, repair, refurbish, disassemble or decommission a structure, or part of a structure)	
Specific Requirements	
<ul style="list-style-type: none"> ▪ If there is no construction wiring, specified electrical equipment must be connected to a type 1 or 2 safety switch. ▪ All electrical equipment for the performance of work must be in accordance with AS/NZS 3012 Electrical Installations – Construction and Demolition Sites. 	
Portable Electrical Equipment	<ul style="list-style-type: none"> ▪ Test & tag by a competent person every 3 months
Type 1 or Type 2 Safety Switch – Fixed	<ul style="list-style-type: none"> ▪ Test with inbuilt test button monthly ▪ Test & tag by a competent person every 12 months
Type 1 or Type 2 Safety Switch – Portable	<ul style="list-style-type: none"> ▪ Test with inbuilt test button immediately after it is connected and immediately before it is used for the first time each day ▪ Test & tag by a competent person at least every 3 months

MANUFACTURING WORK	
(Assembly, disassembly, fabrication, installation, maintenance, manufacturing, refurbishment or repair work)	
Specific Requirements	
<ul style="list-style-type: none"> ▪ Specified electrical equipment must be connected to a type 1 or 2 safety switch. 	
Manufacturing Work – Inspection and Testing Intervals	
Specified electrical equipment	<ul style="list-style-type: none"> ▪ Test & tag double insulated equipment by a competent person every 12 months ▪ Test & tag equipment which is not double insulated by a competent person every 6 months ▪ Must be connected to a Type 1 or Type 2 safety switch
Type 1 or Type 2 Switch – Fixed	<ul style="list-style-type: none"> ▪ Test with inbuilt test button every 6 months ▪ Test & tag by a competent person every 12 months
Type 1 or Type 2 Switch – Portable	<ul style="list-style-type: none"> ▪ Test with inbuilt test button daily or before each use ▪ Test & tag by a competent person every 12 months

RURAL INDUSTRY WORK	
(includes work in the cultivation of any agricultural crop or product whether or not grown for food; or in the rearing and management of farm animals, or work that is aquaculture or work at clearing, fencing, trenching, draining or otherwise preparing land for these activities.)	
Specified electrical equipment	<ul style="list-style-type: none"> ▪ Must be visually inspected for electrical safety defects before it is connected to a socket-outlet ▪ If rural industry work is proposed to be performed, the proposed work is assessed to decide whether it involves a stated electrical risk factor ▪ If the proposed work involves a stated electrical risk factor, control measures are implemented to prevent the electrical risk from the stated electrical risk factor; ▪ If specified electrical equipment involves a stated electrical risk factor, the specified electrical equipment must either be connected to a type 1 safety switch or type 2 safety switch; or inspected and tested at least annually by a <u>competent person</u> ▪ Control measures are implemented for the risk of electric shock or burns from electrical welding work performed in the business or undertaking, including the wearing of protective clothing, gloves and footwear.

SERVICE WORK AND OFFICE WORK

Service Work – any work, which is not Amusement Work, Construction Work, Manufacturing Work, Office Work, or Rural Industry Work (e.g. teaching, research, theatre performance, cleaning & catering services, childcare.)

Office Work - Office-related work

Inspection and Testing Intervals

Service work Specified electrical equipment	<ul style="list-style-type: none"> ▪ Test & tag by a competent person every 12 months
Office work Specified electrical equipment	<ul style="list-style-type: none"> ▪ Test & tag by a competent person every 5 years
Service work & Office work Type 1 or Type 2 Switch – Fixed	<ul style="list-style-type: none"> ▪ Test with inbuilt test button immediately after first connection & then every 6 months ▪ Test & tag by a competent person every 2 years
Service work & Office work Type 1 or Type 2 Switch – Portable	<ul style="list-style-type: none"> ▪ Test with inbuilt test button every 3 months ▪ Test & tag by a competent person every 2 years

Note 1: Office equipment which is not moved while operating e.g. desktop computers, printers, photocopiers, faxes and fridges do NOT constitute specified electrical equipment and do not require testing or tagging.

Note 2: Specified electrical equipment means any extension lead or portable outlet device (e.g. power board); any plug-in appliance used for Amusement work, Construction work, Rural Industry work or Manufacturing work; or any plug-in appliance used for Service work or Office work which is moved about while it is operating e.g. vacuum cleaner, hairdryer, power tools, OHP on trolley.

AMUSEMENT WORK

(work to assemble, operate or disassemble an amusement device or amusement ride or a thing used to provide amusement activities, including side show activities, associated with carnivals, fairs or shows or amusement arcades or similar places and a thing used to provide entertainment or advertising activities, in temporary sites, associated with shows, fairs or carnivals)

Amusement Work – Inspection and Testing Intervals

Specified electrical equipment	<ul style="list-style-type: none"> ▪ Test & tag double insulated equipment by a competent person every 12 months ▪ Test & tag equipment which is not double insulated by a competent person every 6 months ▪ Must be connected to a Type 1 or Type 2 safety switch
Type 1 or Type 2 Switch – Fixed	<ul style="list-style-type: none"> ▪ Test with inbuilt test button every 6 months ▪ Test & tag by a competent person every 12 months
Type 1 or Type 2 Switch – Portable	<ul style="list-style-type: none"> ▪ Test with inbuilt test button daily or before each use ▪ Test & tag by a competent person every 12 months

An amusement device or amusement ride must be inspected and tested by a competent person each time it is assembled on the site where it is intended to be used; (and in any event at least once every 6 months); and for a device or ride with a current rating of not more than 20 amps, it must be connected to a type 1 safety switch or type 2 safety switch. Such inspection and testing must include the competent person deciding the safety of earthing, insulation and connections, deciding whether any safety switch complies with AS/NZS 3760 when tested, and making a visual examination to decide the safety of the items of electrical equipment of the device or ride, including cabling, plugs, sockets, light fittings, enclosures and motors.