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PRESBYTERY OF ILLAWARRA

ABN: 74 041 246 188

*Focused on God’s Mission – Providing Leadership – Growing Discipleship*

# INFORMATION - ELECTRICAL TESTING AND TAGGING

(from NSW Work Health and Safety Guidelines)

**Competency requirements for those carrying out inspection and testing of electrical equipment**

Inspection and testing of electrical equipment must be carried out by a competent person.

For the purposes of the testing described in WHS Regulation clause 150, a competent person includes a person who is licensed or registered to perform electrical work under a law relating to electrical safety or occupational licensing.

The person carrying out any testing of electrical equipment should also be competent to interpret the test results of any equipment they use.

A person carrying out testing under AS/NZS 3760:2010: In-service safety inspection and testing of electrical equipment is required to be:

* a licensed or registered electrician (whichever applies), or
* a licensed electrical inspector, or
* a person who has successfully completed a structured training course and been deemed competent in the use of a pass–fail type portable appliance tester and the visual inspection of electrical equipment.

If in doubt over who is qualified to inspect or test equipment, advice should be obtained from a person qualified and experienced in electrical equipment testing, for example an electrician, electrical contractor, electrical inspector, specialist testing provider or relevant regulator.

**Recording results of testing**

You must ensure that a record of testing carried out on electrical equipment is kept until the electrical equipment is next tested, permanently removed from the workplace, or disposed of. A record of testing must specify the following:

* + the name of the person who carried out the testing
  + the date of the testing
  + the outcome of the testing, and
  + the date on which the next testing must be carried out.

The record may be in the form of a tag attached to the electrical equipment tested.

**Logbook or other similar form of record**

The record of testing may take the form of a logbook, database, register or a similar kind of record, or a tag. Logbooks and similar records have the advantage of:

* + ensuring there is a permanent record of inspection and testing (for example, as a backup if tags are damaged or removed)
  + facilitating internal audits, and
  + allowing more detailed information to be recorded.

Tag

If the record of testing is a tag, it should be durable, water resistant, non-metallic, self- adhesive or well secured, incapable of re-use, and have a bright, distinctive surface.

The tag may also be colour coded to identify the month in which the testing was carried out.

A tag may not include all of the required information. In that case, the rest of the required information must be recorded elsewhere and kept for the relevant period of time.

If a tag is not used, you should ensure that tested electrical equipment is marked or labelled so that records of testing can clearly identify the relevant equipment.

Tags can be purchased and come in colours indicating the quarter in which the test took place.

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Tags and Testing Logs

The record suggested below allows for a record of test spanning the life of the equipment. Each piece is entered on a separate card and maintained in a folder for quick referral.

A copy for congregations to use is included in the document *Template – Test & Tag - 2022*



# INFORMATION - RESIDUAL CURRENT DEVICES

Electric shock often results from people making contact with unprotected energised parts of electrical equipment and earth. Contact with energised parts may occur by touching:

* + bare conductors
  + internal parts of electrical equipment
  + external parts of electrical equipment that have become energised because of an internal fault
  + metallic or other conductive equipment that has inadvertently become live.  
    Contact with earth occurs through normal body contact with the ground or earthed metal parts.

Serious injuries and fatalities may be prevented by the use of properly installed and maintained residual current devices (RCDs), commonly referred to as ‘safety switches’. An RCD is an electrical safety device designed to immediately switch off the supply of electricity when electricity ‘leaking’ to earth is detected at harmful levels. RCDs offer high levels of personal protection from electric shock.

RCDs work by continuously comparing the current flow in both the active (supply) and neutral (return) conductors of an electrical circuit. If the current flow becomes sufficiently unbalanced, some of the current in the active conductor is not returning through the neutral conductor and is leaking to earth. RCDs are designed to quickly disconnect the electricity supply when they sense harmful leakage, typically when it reaches 30 milliamps or a lesser amount.

This ensures an electrical leak is detected and the electricity supply is disconnected before it can cause serious injury or damage.

While RCDs significantly reduce the risk of electric shock, they do not provide protection in all circumstances. For example, an RCD will not trigger the switching off of electricity supply if a person contacts both active and neutral conductors while handling faulty plugs or electrical equipment and electricity flows through the person’s body, unless there is also a current flow to earth.