

Electrical – **Construction**

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Safety inspection & testing of electrical equipment on construction sites >

The purpose of this information bulletin is to clarify the minimum requirements to comply with [Workplace Health and Safety Regulation 64](#) **Electrical installations on construction sites**

Legislation

Regulation 64 of the Workplace Health and Safety Regulations require electrical installations at a construction site to comply to Australian Standard [AS 3012](#) - Electrical installations - Construction and demolition sites. [AS 3760](#) - In service safety inspection and testing of electrical equipment, gives requirements for inspection and testing.

Electrical equipment

All electrical equipment fixed or portable should be visually checked before each use. If electrical equipment is found to be defected it must be removed from service until it has been repaired by a competent person.

Construction wiring

Construction wiring (including switchboards) shall be visually inspected at intervals not exceeding six months.

Portable equipment

All mains operated portable appliances connected to flexible cords, cord extensions sets and electrical portable outlet devices shall be inspected, tested and tagged prior to use in accordance with AS 3012 and AS 3760.

The electrical equipment must be re-inspected and tagged by a competent person at intervals not exceeding three months.

Examples of portable appliances are as follows:

- ♦ portable electrical drills;
- ♦ hand-held electrical tools;
- ♦ extension leads;
- ♦ hand lamps;
- ♦ concrete screeders;
- ♦ vacuum cleaners;
- ♦ industrial floor polishers;
- ♦ portable welding equipment.
- ♦ portable brick saws;
- ♦ portable concrete mixers;
- ♦ items of hire equipment;

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Portable Residual Current Devices (RCDs)

Also known as safety switches and electrical portable outlet devices incorporating RCDs are required to be checked by the operation of the built in test button;

- immediately after connection to a socket outlet; and
- every day they are in use.

Prior to putting into service and at three monthly intervals portable RCDs have to be subjected to an imbalance of current test in accordance to that specified in [AS 3190](#) - Approval and test specification - Residual current devices. After a satisfactory test the RCD shall be tagged in accordance AS 3760.

Non - portable RCDs

Required for the protection of final sub-circuits shall be:

- operated monthly by the inbuilt test button;
- subjected to an imbalance of current test in accordance of AS 3190 before being put into service and at least once every calendar year.

Fixed equipment

Fixed electrical equipment used for construction purposes shall be tested in accordance with AS 3012 and AS 3760 at intervals not exceeding six months.

Inspection tagging and recording tests

The inspection, testing and tagging of electrical equipment used on a construction site must be carried out by a competent person.

Any equipment inspected and tested that is found not to comply must be removed from service immediately and fitted with a notice warning against further use.

Construction wiring and non-portable RCD's

The inspection results for construction wiring and non-portable RCDs as required by AS 3012 must be recorded and kept available for audit.

Information to be recorded includes;

- the name of the person or company who performs the test;
- the test date;
- expiry date; and
- identification of faulty equipment and action taken to repair or the removal of the faulty equipment from site.

Tagging of portable equipment, portable RCD's and fixed equipment

Portable equipment, portable RCDs and fixed equipment when tested as required by AS 3012 shall be fitted with a durable, non-metallic tag.

The tag shall include the following information;

- the name of the person or company who performs the test;
- the test date; and
- expiry date.

Where electrical equipment is used on a construction site that has been originally tagged for use in a workshop that expiry date changes to three months from the date of original inspection e.g. tested January 2000 with the expiry date of January 2001, once on site expiry becomes March 2000.

Colour

Flexible cord sheaths shall not contain the colour green.

References

[AS 3012](#) 2003 - Electrical installations - Construction and demolition sites

[AS 3760](#) 2003 - In-service safety inspection and testing of electrical equipment

[AS 3190](#) 2002 - Approval and test specifications - Residual Current Devices (current-operated earth-leakage devices)

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