

ELECTRICAL TESTING REQUIREMENTS



This alert has been generated to ensure that all sites in Victoria are aware of the compliance requirements when completing electrical work.

To comply with the requirements of AS/NZS 3000 and AS/NZS 3017, all electrical installations and any alterations, additions and repairs to electrical installations shall, prior to being placed in service or use be:

- (a) inspected as far as is practicable;
- (b) tested; and
- (c) reported – recording of the results of inspection and testing (utilise the content listed in the sample test sheet on the following page).

MANDATORY TESTS

The following test shall be carried out on low voltage electrical installations:

- continuity of the earthing system (earth resistance of the main earthing conductor, protective earthing conductors and bonding conductors);
- insulation resistance;
- polarity
- correct circuit connections;
- verification of impedance required for automatic disconnection of supply (earth fault-loop impedance); and
- operation of RCDs.

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Electrical testing inherently involves some degree of hazard. It is the responsibility of the person performing the tests to ensure that safe practices are used in the performance of test procedures.

Whether testing with supply disconnected or connected, the following precautions must be followed in the interest of safety.

Treat equipment, such as cables and terminations as being energized until proven otherwise:

- (1) follow safe working practices as outlined in AS/NZS 4836 see ETU Alert #40;

- (2) understand the correct use of the equipment to be used and its rating; and
- (3) check that the equipment being used, including any test leads, probes or clips;
 - (i) are suitable for the voltage being tested;
 - (ii) are in good working order; and
 - (iii) has not damaged parts with which contact would be dangerous.

It is the recommendation of the ETU that if any of the above steps are not followed, the work **should cease**.

Contact your designated Health & Safety representative, local organiser or your union OH&S officer.

RECORD OF TEST RESULTS										
Switchboard number							Test Date / /			
Location										
Testers Name							Licence #			
Description of inspections performed										
Mains of final sub circuit No.	Protective device rating		Conductor		Earth continuity main or protective	Insulation resistance	Polarity	Correct circuit connections	Earth fault-loop impedance	Remarks Pass/Fail
	Type	Rating	Type ANE	mm ²						