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## INFOSHEET - ELECTRICAL WORK

This information has been gathered through web searches and consultation with relevant agencies. It was current at December 2013 and does not constitute legal advice.

### Work that needs to be carried out by a licensed electrician

Under section 18 of the [Electrical Safety Act 2002](#) (the Act) electrical work includes “the manufacturing, constructing, installing, testing, maintaining, repairing, altering, removing, or replacing of electrical equipment.”

All electrical wiring work, including the connection and technical maintenance of fixed appliances, like hotplates, ovens, ceiling fans or water heaters, must be carried out by a licensed electrical contractor.

Click here to view the Act - <https://www.legislation.qld.gov.au/LEGISLTN/CURRENT/E/ElectricalSA02.pdf>

Under the Act, forbidden tasks (not to be undertaken without an appropriate electrical licence) include (but are not limited to):

- Installing a new power point. Replacing a light switch.
- Replacing a batten holder with a new light fitting.
- Repairing an appliance such as a heater.
- Altering the location of an existing power point.
- Replacing a light fitting with a ceiling fan.
- Constructing an extension lead.
- Replacing a plug on the end of a lead.

### What is not defined as electrical work?

The following are not defined as electrical work under the Act (Section 18) —

- (a) Installing or removing electrical equipment by connecting it to electricity, or disconnecting it from electricity, by a plug and socket outlet;
- (b) Repairing or replacing non-electrical components of electrical equipment;

Examples for paragraph (b)—

- repairing hydraulic components attached to an electric motor
- replacing a drive belt on a washing machine

- (c) Replacing a component forming part of electrical equipment if the electrical equipment has been designed so that the component is readily and safely able to be replaced by a person without electrical knowledge or skill;

Examples for paragraph (c)—

- replacing a fuse
- replacing the bulb in a light fitting

- (d) Assembling, making, modifying or repairing electrical equipment in a workplace under the Workplace Health and Safety Act 1995 that is prescribed under a regulation for this paragraph, if that is the principal

manufacturing process at the workplace, and arrangements are in place, and are detailed in written form, for ensuring that—

- (i) the work is done safely and competently; and
  - (ii) the equipment is tested to ensure compliance with relevant standards;
- (e) Building, under the supervision of an electricity entity, an overhead electric line on structures that do not already carry an energised overhead electric line;
- (f) Building or repairing ducts, conduits or troughs (channels) where electrical wiring will be or is installed, if—
- i. the channels are not intended to be earthed; and
  - ii. wiring installed in the channels is not energised; and
  - iii. the work is done under the supervision of a person licensed to perform electrical installation work.
- (g) Laying, cutting or sealing underground cables that are part of the works of an electricity entity before the initial connection of the cables to an electricity source;
- (h) Recovering underground cables that are part of the works of an electricity entity after disconnection from an electricity source;
- (i) Altering, repairing, maintaining or recovering an overhead electric line that is part of the works of an electricity entity, if the work is performed under the entity's supervision and—
- i. if the line is not on supports supporting another electric line—the line has been isolated from an electricity source so that the closure of a switch cannot energise the section of the line where work is being done; or
  - ii. if the line is on supports supporting another electric line—both lines have been isolated from an electricity source so that the closure of a switch cannot energise the section of the line where the work is being done or an adjacent section of the other line;
- (j) Erecting structures for the support of electrical equipment;  
Examples of structures— electric poles and towers
- (k) locating, mounting or fixing in place electrical equipment, other than—
- i. making or terminating electrical connections to the equipment; or
  - ii. installing supply conductors that will connect the equipment to a supply of electricity;
- (l) Assisting a licensed electrical worker to perform work on electrical equipment under the direct supervision of the electrical worker, if performing the work does not involve the person directly contacting live electrical equipment;
- (m) Maintaining the structural parts of the electrical traction system on a railway, other than overhead electric lines, that forms part of the works of an electrical entity, if the work is structural work performed under a safe system of work;

- (n) Work performed by a person on electrical equipment if—
- i. the electrical equipment is not energised; and
  - ii. the work is prescribed under a regulation for this paragraph; and
  - iii. it is necessary for the person to perform the work to meet the eligibility requirements for an electrical work licence.

**Work that can be carried out with a restricted electrical licence**

There are six units of competence with further subdivisions for two of the units (units 3 & 4) covered under the restricted electrical licence. These units of competence may be grouped in various ways to match the skills needed by workers who are required to perform restricted electrical work. Restricted electrical licences are issued based on the units of competence achieved.

Unit of Competency	Task
<b>Unit of competency 1</b> , occupational health and safety procedures is a compulsory unit common to all work area categories and must be completed before on-the-job training starts.	
<b>2.</b> Fixed wired equipment which is connected to a supply of up to 650 volts is disconnected and reconnected.	Disconnect and reconnect fixed wired equipment
<b>3.</b> Faults are located and rectified in equipment which is connected to single phase 250 volt supply.	Locate and rectify faults in 250V equipment (motors) Locate and rectify faults in 250V equipment (water heaters) Locate and rectify faults in 250V equipment (appliances)
<b>4.</b> Faults are located and rectified in equipment which is connected to a supply of up to 1000 volts.	Locate and rectify faults in 1000V equipment (motors) Locate and rectify faults in 1000V equipment (water heaters)
<b>5.</b> Flexible cord and plug is attached to equipment which is connected to a single phase 250 volt supply.	Attach flexible cord and plug to 250V equipment
<b>6.</b> Flexible cable and plug is attached to equipment which is connected to a supply of up to 1000 volts.	Attach flexible cord and plug to 1000V equipment
Eligibility for units of competence 2, 4 and 6 requires the applicant to hold a formal qualification	

**Limit of work permitted with restricted electrical licence**

The type of work covered by the restricted electrical licence is limited to equipment in work area categories as detailed in the work area categories operating at voltages up to 250 volts or 650 volts AC. The work includes:

- Replacement of flexible cord and or plugs on a like-for-like basis
- Testing for the safe isolation and restoration of equipment to be disconnected and reconnected

- Disconnection and reconnection of electrical wiring at equipment to the extent of allowing non-electrical work to be carried out
- Replacement of electrically operated equipment on a like-for-like basis.

The restricted electrical licence does not permit installation of or alteration to any part of the fixed electrical wiring system as this is electrical installation work.

Endorsements on a restricted licence can include:

1. Composite equipment
2. High voltage electrical propulsion
3. Plumbing/Gas
4. Electronics
5. Pre-assembled signs
6. Electric motor
7. Refrigeration/Air conditioning
8. Instrumentation/Process control

To apply for a restricted electrical licence the applicant will need to demonstrate a regular need to carry out electrical work attached to their primary work function.

A large, stylized graphic of a water drop in shades of blue and cyan. Inside the drop, the text "qld water" is written in a white, lowercase, sans-serif font.