



# Electrical

**Electrical work is any work where there is a risk of directly or indirectly coming into contact with electricity.**

**This may be through:**

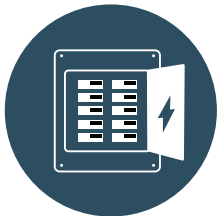
**Electrical work** means connecting electricity supply wiring to electrical equipment or disconnecting electricity supply wiring from electrical equipment or; installing, removing, adding, testing, replacing, repairing, altering or maintaining electrical equipment or an electrical installation (e.g., work completed by a licensed electrician).

**Non-electrical work** is:

- General work conducted within an energised environment; or
- Work requiring the use of electric powered tools, leads and equipment.

This procedure applies to LV electrical work, fixtures and equipment above 50V AC or 120V DC.

## Primary risks that may be encountered:



**Contact with electricity - electrical work**



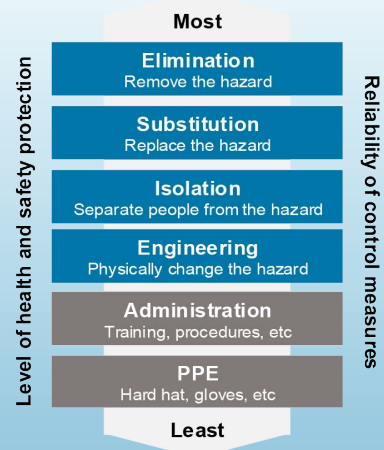
**Contact with electricity - non-electrical work**

Additional hazards may be involved with electrical works, this could include live services, excavation etc. These additional hazards and risks must be identified and controlled during planning as per FPA's HSE Management System.

## Planning

Prior to commencing electrical work, the following must be completed:

- Determine whether all electrical work can be conducted prior to energising the site
- Determine whether the task can be completed with battery operated tools
- Confirm emergency response procedures are applicable to the risks
- Review and accept SWMS for the task
- Issue a permit to work for all electrical isolations where inadvertent contact may be made with live electricity



## Control

The following control measures must be implemented when there is the potential of the risk being encountered. Additional controls must be documented in the SWMS.



### Contact with electricity - electrical work

- Electrical work conducted only by licensed electricians
- No live electrical work conducted, except for commissioning, testing, and fault finding
- Isolation permits issued for energised sites:
  - ◆ for work on electrical cables and fixtures, or
  - ◆ where there is a risk of inadvertent contact with an electrical cable or fixture
- All isolations “locked out, tagged out,” including consideration of solar generation systems
- A minimum 3m exclusion zone established for all electrical work
- Tests for dead completed:
  - ◆ before commencing or recommencing work
  - ◆ after any break from work
  - ◆ following any change in conditions
- Certificates of compliance issued upon completion of work
- Energisation Checklist completed and accepted by site management before the first site energisation
- Electrical work inspections conducted in line with Monitoring Requirements



### Contact with electricity - non-electrical work

- Electrical cabling or installations handled by a licensed electrician or specialist electrical contractor
- Ensure people cannot make inadvertent contact with electrical wiring and fixtures (i.e. not protected by insulation, cover or barrier)
- Energised construction sites clearly signed to indicate the electrical status at the switchboard and site entry
- Electrical leads:
  - ◆ tested and tagged as per Monitoring Requirements
  - ◆ inspected for damage or defects before use
  - ◆ not exceeding 30m in length
  - ◆ utilised with lead stands or insulated hangers, or, if not possible, protected by ramps and safeguarded from sharp edges
  - ◆ not connected to domestic power boards, piggyback plugs, or double adaptors
  - ◆ fitted heavy-duty sheathing and not including the colour green
  - ◆ protected by Residual Current Devices (RCDs)

## Monitoring

Requirement	Inspection	Frequency
Construction wiring including switchboards and wiring within transportable structures	Initial test and certification	Before initial introduction to service
	Re-test and inspect	6 monthly intervals
Electrical plant and equipment including leads in a hostile environment	Initial test and inspect (tagged)	Before first use
	Re-test and inspect (tagged)	3 monthly
Fixed RCDs in a hostile environment	Push button	Every month
	Operating time	Every month
Portable RCDs in a hostile environment	Push button	After connecting socket / before connecting equipment
	Operating time	Every month
Electrical plant and equipment including leads not in a hostile environment	Initial inspect (tagged) e.g. New To Service tags	Before first use
	Re-test and inspect (tagged) e.g. kitchen	Annually
	Re-test and inspect (tagged) e.g. computer monitors, photocopy equipment	3 yearly