

March 2018

## Set-up and electrical safety on site

This fact sheet is for a person conducting a business or undertaking (PCBU) who manages or controls a small construction site. The fact sheet is part of our *Electrical Safety on Small Construction Sites* series.

Setting up safely on site will help to eliminate or minimise the health and safety risks that come with using electricity. Ask workers to share their ideas, experiences or concerns about how the site is set up.

### Training and supervision

You must provide your workers with the training and supervision they need to work safely. Make sure that workers know how to safely operate the electrical equipment used on site.

### General workplace facilities

Your site layout must, so far as is reasonably practicable, allow people to enter, exit and move about without risks to health and safety – under normal working conditions and in an emergency.

### Emergency planning

Your workplace must have an emergency plan. This should include information about how to evacuate the site, and how to notify emergency services. When preparing an emergency plan, you must consider the size and location of the worksite, the number and composition of workers, the nature of the work and its hazards, and workers' views.

### First aid

- You must provide adequate first aid equipment for the site.
- Workers must have access to that first aid equipment, and access to first aid facilities.
- Workers must also have access to an adequate number of trained first aiders, either trained workers on site or other people (eg at a local medical centre or hospital).
- It is good practice to have a CPR-trained person on site.

### Environmental hazards

Electrical equipment can be damaged by harsh environments or working conditions, such as:

- bad weather
- exposure to dust, water, chemicals, steam and UV radiation.

Working with electrical equipment in wet and damp environments increases the risk of electric shocks. Adequate control measures should be used, including – but not limited to – suitable personal protective equipment (PPE). (See Section 4 of WorkSafe's *General Risk and Workplace Management* interpretive guidelines for information about the legal requirements around PPE.) Workers using power tools should be able to work under cover from rain whenever possible.

As well as tools, consider other electrical equipment that workers may use on site. Workers should only use microwaves, kettles and other domestic appliances that are RCD-protected.

## Look at what else is on site or nearby

You should identify any hazards that could cause reasonably foreseeable risks to health and safety.

## Hidden electricity cables and other utilities

Hidden electricity cables and other utilities (eg gas pipes) should be located, shown on plans and marked.

## Overhead lines

If working close to overhead power lines, check whether:

- the electricity supply has been isolated. If isolation is not practicable then another control measure must be put in place, if it is reasonably practicable
- minimum approach distances (MADs) have been identified (see Section 9 of WorkSafe's *New Zealand Electrical Code of Practice for Electrical Safe Distances* [ECP 34]).
- people (such as scaffolders) and plant working near overhead power lines comply with the minimum safe approach distance limits.

You can use visual safety aids or taped markers to indicate where overhead power lines are.

## Relocatable buildings, caravans and other vehicles

Relocatable buildings (such as prefabs), caravans and certain vehicles connect to an electrical supply by plugging into a special socket-outlet. The socket-outlet should be protected by an RCD.

All relocatable buildings, caravans and other vehicles supplied with electricity should have a valid Electrical Warrant of Fitness (EWOFF) issued by an electrical inspector. An EWOFF is valid for four years. A person supplying electricity to a relocatable building, caravan or other vehicle must make sure that it has a valid EWOFF before connecting it to power. It is an offence to connect it to power if its EWOFF has expired.

The supply cord can be included in the EWOFF. The cord does not require testing and tagging if it is RCD-protected. Supply cords must be kept away from sharp edges and treated like extension leads. Permanent supply leads should be raised on insulated supports, or buried inside a conduit in a marked location.

## For more information

For more information, visit our website: [worksafe.govt.nz](https://worksafe.govt.nz)

*General Risk and Workplace Management* interpretive guidelines

Electrical Safety on Small Construction Sites series:

- *Electrical safety on small construction sites* quick guide
- *RCDs, PSOAs, leads, cords, plugs and battery-operated equipment* quick guide
- *Checking your electrical equipment is safe* fact sheet
- *Electricity supply arrangements on a small construction site* fact sheet.

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PUBLISHED: MARCH 2018