Electricity supply arrangements on a small construction 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.

Electricity supply on a small construction site

Electricity can be supplied to a small construction site through a temporary or permanent connection.

- A builder’s temporary (see Figure 1) provides an electricity supply at a worksite where there is no existing connection. Only a licensed electrical worker can install, connect, modify or move a builder’s temporary.
- An electrician can install a permanent connection to a mains supply at the beginning of the project.
- Electrical work on properties being renovated typically feeds off the existing permanent switchboard, rather than a builder’s temporary.

What is a ‘builder’s temporary’?

A builder’s temporary is also called a temporary supply switchboard. A builder’s temporary:

- gives builders and other tradespeople an electricity supply on a worksite where there is no existing connection to an electricity network
- functions as a main switchboard and has one or more RCD-protected outlets
- must comply with AS/NZS 3012 to be deemed electrically safe.

FIGURE 1: One style of builder’s temporary
What certificates and inspections are needed?

Before you can use a builder’s temporary, an electrician must give you:
- a Certificate of Compliance (CoC)
- a Record of Inspection (RoI)
- an Electrical Safety Certificate (ESC).

These documents guarantee that the builder’s temporary meets New Zealand’s electrical safety standards.

The builder’s temporary must then have a periodic assessment at least every six months. A qualified electrical worker must check the switchboard and issue a Certificate of Verification (CoV) confirming that the switchboard complies with AS/NZS 3000 and AS/NZS 3012.

Where should a builder’s temporary be located?

Put the builder’s temporary in a suitable location close to where electrical work will be carried out.

The most suitable location may not be the easiest place to set it up. But if a builder’s temporary is not close to where electrical work is being carried out you may need extension leads – and extension leads are a potential electrical hazard. You can manage this risk by carefully planning where the builder’s temporary should go. Consider where most of the electrical work on site will be done and how connections can be made without using too many extension leads.

How is electricity supplied to properties being renovated?

Electrical work on properties being renovated typically feeds off the existing switchboard, rather than a builder’s temporary. For domestic builds, the switchboard for the completed installation may be used for the supply.

This may:
- be connected to one or more Portable Socket-Outlet Assemblies (PSOAs) or
- have enough fixed wired socket-outlets to provide power to all users on site through an auxiliary socket-outlet panel.

Work with other PCBUs to manage electrical safety risks

You and other PCBUs (eg contractors) working on the same site must, so far as is reasonably practicable, work together (consult, cooperate and coordinate activities) to manage electrical safety risks where you have the same health and safety duty.

- Talk with other PCBUs about how electricity will be supplied and used in areas where your health and safety duties overlap. This will help to prevent any gaps in managing health and safety risks.
- All contractors who use the electrical supply at the site must make sure their equipment is safe to use and without risks to others.
- All electrical equipment should be RCD-protected. (RCD stands for Residual Current Device).

Hiring companies must not hire out equipment that is electrically unsafe. They are responsible for testing and tagging hire equipment before you hire it.

For more information

For more information, visit our website: worksafe.govt.nz

See the 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
- Set-up and electrical safety on site fact sheet.

PUBLISHED: MARCH 2018