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Checking your electrical equipment is safe

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.

At the start of every day, check whether there is any new electrical equipment on site and whether there are any new electrical safety risks to eliminate or minimise.

Check equipment daily

Damaged or faulty equipment may be unsafe. Many electrical risks can be controlled when you carry out these simple checks every day:

Every day

✓ Check that all electrical equipment is RCD-protected.
  RCD = residual current device

✓ Test RCDs using the test button, including RCDs on PSOAs.
  PSOA = portable socket-outlet assembly

✓ Look at the general condition of electrical equipment (including cords and leads) before use.

✓ Check for visible signs of damage or faults.

✓ Make sure that equipment operates the way it’s supposed to (e.g. that the trigger switch on a drill responds to pressure).

✓ Check that suitable personal protective equipment (PPE) is being used, along with other controls.
  PPE = personal protective equipment

✓ Check equipment is protected from weather and other environmental hazards.

✓ Make sure that leads and cords are arranged, used and stored safely.
Immediately disconnect and remove faulty or damaged equipment. This includes equipment that:
- has given someone a shock
- fails testing or inspection
- repeatedly blows a fuse or trips a circuit breaker or RCD.

Clearly label or secure the equipment so that it will not be used. Then replace it or have it repaired by a licensed electrical worker.

Indicators of unsafe equipment include:
- cracked casings
- missing or damaged guards
- outer insulation pulled back at cable entry points so that wires are exposed
- cuts and nicks along cables; tape covering cuts and nicks
- dry and brittle insulation
- burn marks or signs of overheating
- RCDs not tripping when tested.

Repairs

Repairs need to be carried out by a qualified person, such as a licensed electrical worker.

Check that repaired equipment has the tag shown below:

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REPAIR AGENCY ID
Repaired: Complies with AS/NZS 5762:2011
Job No. ______________ Date ______________
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FIGURE 1: Repair tag

Testing and tagging

Testing and tagging is one way to check electrical safety and detect faults that may not be easy to see. But testing and tagging only confirms that equipment is safe at the time of testing. Even if equipment has been tested and tagged, it should still be RCD-protected and checked every day for visible signs of damage or faults.

WorkSafe recommends that you document results when electrical equipment is tested or inspected. Keep the test results on site.

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
- Electricity supply arrangements on a small construction site fact sheet
- Set-up and electrical safety on site fact sheet.