

# Safety for electrical workers

Electrical workers can become victims of electrical accidents by inadvertently working on live equipment or through inadequate safety precautions. Avoiding serious injury or even loss of life is as simple as following basic safety procedures.

## The risk of contacting live parts

Electrical workers often risk contacting live parts when:

- altering or adding to switchboards
- cutting into cables, conduits and other wiring enclosures
- making connections in junction boxes that contain numerous circuits
- touching parts of installations that are not isolated by a main switch eg. consumer mains
- dual supplies are connected to appliances eg. hot water service, emergency lighting
- circuits are not isolated by control switches.

## Basic safety checklist

Keep safe by following the basics:

- Work on equipment that is dead not live.
- Isolate.
- Test to ensure you have isolated the right circuit/equipment.
- Tag where there is a possibility that the circuit/equipment may be re-energised by another person.
- If it is not possible or practical to work dead, then use safety equipment.
- When working live, do not work alone. Have an observer, trained in resuscitation techniques, who can give assistance should an accident occur.

## Safety equipment

Protective clothing should ideally cover arms to the wrists and legs down to the footwear. Clothing provides protection from:

- electric arcing and flash burns
- flying objects
- electric shock.

Safety helmets provide protection from overhead wires or electrical parts and falling objects.

Safety glasses provide protection from electric arcing and flying objects.

Insulating gloves made to Australian Standard AS2225 are designed for live work and provide protection from electric shock.

Safety footwear should be non-conductive and constructed with a covered steel toe cap to provide protection from electric shock and falling objects.

Insulating mats and covers should be used when working on live conductors or where accidental contact is possible. Used in conjunction with insulating gloves, protective clothing and footwear, they provide protection from electric shock.

Insulated tools provide protection against accidental contact and reduce the risk of creating a short-circuit.

Safety switches provide protection against wiring which is faulty or deteriorated as well as protection against faulty equipment. Power tools and extension leads should be supplied from a socket outlet protected by a safety switch. Portable outlet devices with an in-built safety switch can also be used.

**REMEMBER:** The life you save could be your own.