# **Safety Alert**

# **Electrical Safety on Construction Sites**

Issue Date: 23 August 2018

#### Provision of RCDs to final sub-circuits

Every final sub-circuit shall be protected by an RCD with a rated tripping current not greater than 30 mA. This includes lighting, socket outlets, and relocatable structures.

## Inspection and testing of RCD Pushbutton test

All portable RCD must be tested by operating the test button after connection to a socket or before connecting equipment and at least daily when in use.

All fixed RCD must be tested every month by operating the test button. Details of the test and the date must be recorded.

### **Flexible Extension Cord**

Flexible extension cords must have heavy duty sheathing. The sheathing must not contain the colour green.

The maximum length of an extension cord depends on the amperage rating, minimum cross section and resulting conductor resistance. Where extension cords are joined by portable socket-outlet assemblies (PSOA) or other means, the maximum length is the total length of all extension cords as well as the length of the supply cord of the final PSOA from which power is supplied.

Table 1 Maximum flexible extension cord lengths			
Plug and socket rating (A)	Conductor area (mm²)	Maximum length of single phase flexible extension cords (m)	
		General use eg handheld power tools	Circuits where the safety of personnel utilising the equipment depends on the reliable starting of motors (eg trailing cables from suspended scaffold or swing stages).
10	1.5	35	20
15	1.5	25	15

Refer to AS/NZ 3012 for any variation from above figures.

Portable electrical equipment and flexible extension cords must be test quarterly, equipment that pass testing must be tagged as tested and safe to use and test results recorded and kept on site or made available as required.

Flexible extension cords must be raised off the floor using insulated hangers or stands to provide a safe route through the work area and clearance for personnel and vehicles. Where cords cannot be raised off the floor, another means of protection against mechanical damage, damage by liquids or high temperature must be provided

Where flexible extension cords pass through scaffolding or other metal structures, they should be run on hangers covered with non-conducting material to prevent mechanical damage.

### **Unused electrical wiring**

Unused permanent and construction wiring must be appropriately terminated by a licensed electrician or removed

#### **Portable Lighting**

Except for emergency lighting used for safe access and egress all portable lighting is to be turned off and unplugged at night.

For Further Information: WorkSafe Victoria - Electric Installations on Construction Sites

