



HAZARD ALERT

RCD (Safety Switch) Electrical Protection

REFERENCES:

WHS Act 2012 (SA) Sections 19, 20, 21 & 27
WHS Regulations 2012 (SA) – Regulations 34 – 38, 147 – 151, 164, & 165
AS/NZS: 3000 (2018) – Electrical Installations (known as the Australian / New Zealand Wiring Rules)
CSH&W SA Document No. (9) V5.1 – Electrical Procedure

OBJECTIVE:

To communicate a safety issue recently identified regarding lighting electrical circuits not protected by Residual Current Devices (RCDs) (safety switches) and provide sites with recommendations to ensure hazards are identified, risks assessed, and effective control measures are developed and implemented.

BACKGROUND:

Recently an incident occurred where two primary school children were consciously throwing water over a light switch located in a toilet block with the intention of receiving a shock. They subsequently reported being zapped (their words). The investigation identified that the electrical lighting circuits were not protected by RCDs.

An RCD is a device that quickly switches off the power if an electrical fault is detected, to minimise the risk of electricity-related fires, electric shock, injury, and death. These devices are a well proven and effective control.

By law, safety switches protecting power points and lighting circuits must be installed in all new buildings and in existing buildings where electrical circuits are altered or added. This law was introduced in 1991.

You may have some older buildings where RCDs are not in place, particularly on lighting circuits. Given the recent incident, it is recommended that you have RCDs on all electrical circuits and is considered reasonably practicable to do so. These devices are an appropriate and effective control and should be in place for all electrical circuits.

PREVENTATIVE ACTIONS:

- Identify whether your site has any electrical circuits not protected by RCDs. Note: engagement of a licensed electrician may be required to assist you with this.
- Where identified that electrical circuits are not protected by RCDs, engage a licensed electrician to install RCDs to ensure that all electrical circuits are protected by these devices.
- Ensure that where any upgrades / replacements occur that your electrician provides you with a Certificate of Compliance (COC) for the work performed.
- Ensure that any new RCDs installed are included in future testing schedules e.g., 6 monthly push button tests and annual operating time tests.

**For enquiries or further information please contact your WHS Consultant
at CSH&W SA or ring the Office on 8215 6850**

10th March 2023