

Safety Switches

Objective

To, outline the requirements for the installation of safety switches in domestic residences and commercial premises.

Legislation

For domestic installations:

- for new installations, AS/NZS 3000 requires final sub circuits supplying power socket- outlets, lighting points, and directly connected hand-held electrical equipment to be protected by safety switches
- the Electricity Safety Regulation 2013 requires that safety switches be installed on the power circuits of any domestic residence that is sold after 1 September 2002, or for any leased residential properties.

For commercial premises:

- for new installations, AS/NZS 3000 requires final sub circuits supplying power socket- outlets up to 20A, lighting points up to 20A and directly connected hand-held electrical equipment to be protected by safety switches.
- the Electricity Safety Regulation 2013 requires power socket-outlets for manufacturing work to be protected by fixed safety switches (manufacturing work means the work of assembly, disassembly, fabrication, installation, maintenance, manufacturing, refurbishment or repair).

For both domestic installations and commercial premises AS/NZS 3000 requires additions to existing power sub circuits to be protected by safety switches but does not require additions to existing lighting sub circuits to be protected by safety switches.

Method

When carrying out electrical work, where the power and lighting sub circuits are not protected by safety switches, the following shall apply:

For domestic installations:

You are not permitted to perform any electrical installation work unless:

- the power socket-outlets are protected by safety switches
- the work is or includes the installation of safety switches to protect the power socket-outlets
- the work is urgent and required to prevent an emergency from happening or for safety reasons.

Note: If the electrical work is for home dialysis equipment then this equipment shall be supplied by a dedicated sub circuit and protected by a 10mA safety switch that may be reset by the patient while under treatment.

Note: Department of housing premises shall have RCD protection provided to all final sub-circuits.

- Adding lighting points to an existing sub circuit does not require that sub circuit to be protected by a safety switch (provided the power socket-outlets are already protected by safety switches for leased residential properties).

For commercial premises:

- Adding power socket-outlets to an existing sub circuit requires that sub circuit to be now protected by a safety switch.
- Replacing faulty power socket-outlets and lighting points under maintenance, including replacing a single power-outlet with a multiple socket-outlet assembly, does not require that sub circuit to be protected by a safety switch.

However, in the interests of safety it is to be recommended to the client that all lighting and power outlets be protected by safety switches.