

Safe at home

Guide to safety switch Electrical Installation Rules

(AS/NZS 3000:2018)



ELECTRIC
DESIGN PROJECTS

Switchboard Projects by Electric Design Projects

Electrical installation rules

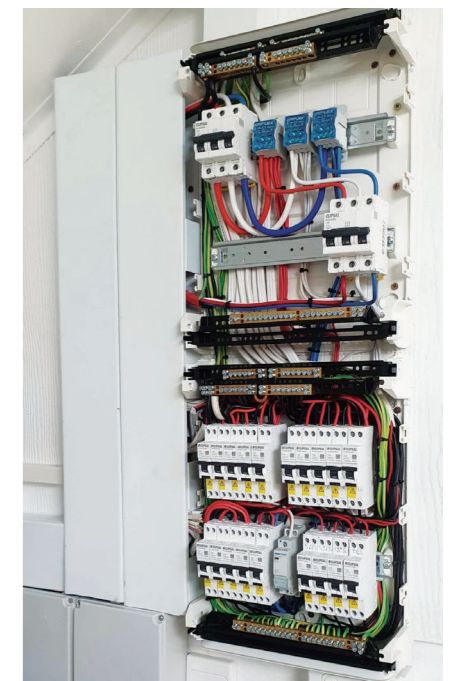
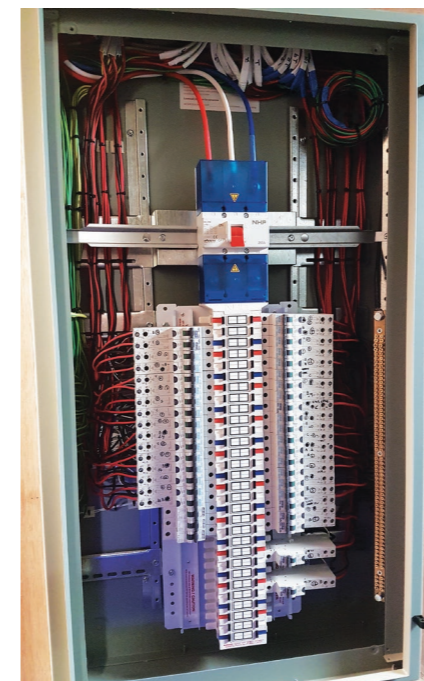
Improved safety

Why is it changing?

The Australian Standard AS/NZS 3000:2018 Wiring Rules governs all electrical work and every electrician in the country must comply with them. **The rules have changed.** An updated version has been published on 26th June 2018. The changes mean electrical contractors will need to complete some work differently. Some jobs will take longer and some will require a different product. In all cases, the safety of your home will be improved.

What's changing?

The rules have changed to improve safety, and reflect new technologies and products. By complying with new standards Electric Design Projects team will be providing the highest standards of electrical safety.



Call a licensed electrician

It is important to engage a licensed electrician when performing any electrical works.

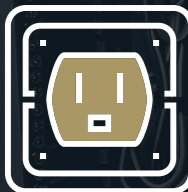
Don't do it yourself. You or a family member could be seriously injured or killed if you undertake specialist tasks such as:



Installing or replacing safety switches



Installing or altering fixed electrical wiring



Replacing or rewiring a plug, switch or powerpoint



Repairing electrical appliances (e.g irons, toasters, washing machines)

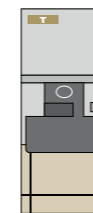
Electric Design Projects recommend that you test each safety switch every 3 months by pushing the test button 'T'. If the device does not trip, it needs to be replaced immediately.

Reducing risk with safety switches

Safety switches are the single most effective measure to prevent electrocutions and serious electrical injuries.

A key change to safety switch requirements was introduced in the AS/NZS 3000:2018 Wiring Rules: **A safety switch is now mandatory on all final sub-circuits in new domestic and residential installations.**

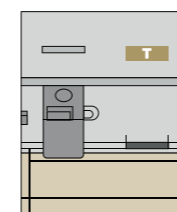
The risk is real: 15 people are killed and about 300 seriously injured each year in avoidable electrical accidents in homes. **Make sure your installation is safe.** If contractors do not comply with the requirements they will be subject to non-compliance implications, including fines. More importantly, non-compliance puts you at risk. This change means jobs may take longer because of the additional work. It also means with better products you and your family will be safer.



RCBOs

PROTECT PEOPLE & AGAINST FIRE

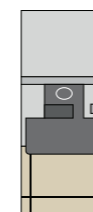
Some products already combine both functionalities in one compact device, like our RCBO (residual current operated circuit breaker with overcurrent protection) safety switch. They protect electrical circuits and, more importantly, protect you from electrocution. Such products not only guarantee optimised safety but also isolate the fault to the only circuit affected, so there is no risk of a complete blackout!



RCDs

PROTECT PEOPLE

RCDs (residual current devices) are safety switches designed to protect life from electrocution. In an event where a human comes in contact with the current, the safety switch will trip the power within milliseconds to save you or a member of your family from a potentially fatal electric shock. They are found in either an external meter box and/or your internal switchboard.



Circuit breakers

PROTECT AGAINST FIRE

RCDs must go hand in hand with miniature circuit breakers (Maximum 3 circuit breakers associated with 1 safety switch), which are designed to protect your family and home from the risk of fire. A miniature circuit breaker is an automatic electrical switch designed to cut power from a circuit in case of overloading or a short circuit. A typical risk is when too many appliances are plugged in to a power source, resulting in overheating of cables. Again, if in doubt contact your electrician.

These two circuit protection devices go a long way towards safeguarding homes and lives.

What it means for your new build

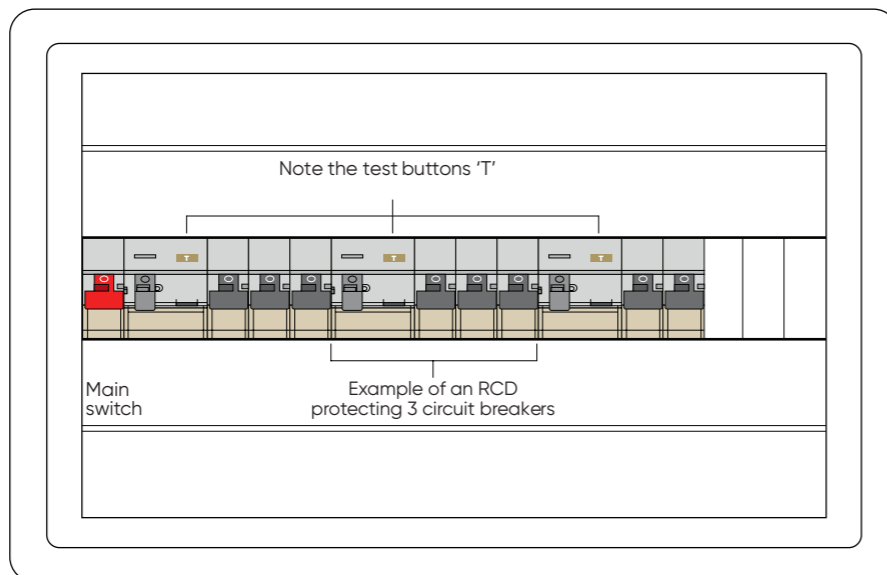
From January 2018, safety switches became mandatory for all circuits without exception.

The average Australian home has a minimum of two powerpoint circuits, two lighting circuits and a number of appliance specific circuits for hot water systems, air-conditioners and so on.

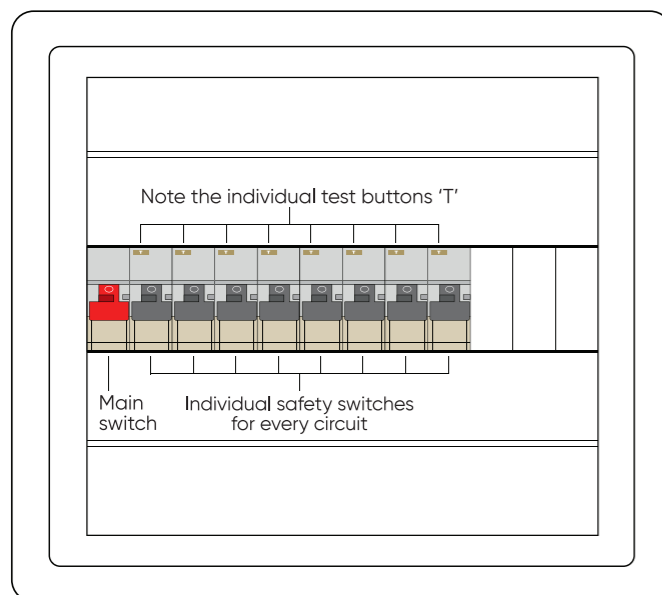
How do I comply?

Ensure your electrician is using an Electric Design Projects product, as all of our products are compliant with the standard.

COMPLIANT



BEST



Protecting all circuits with a safety switch (RCD or RCBO) is mandatory.

Protecting each circuit with its own RCBO is the best option to guarantee optimised safety and also isolates the fault to the only circuit affected, so there is no risk of a complete black-out!

To ensure your installation has the minimum level of safety, check that at least two safety switches are installed in your property.

Safety switches are easily identifiable as they have a test button 'T'.

What it means for your existing home

Safety switches have been mandatory in new or extended homes since 2000, and only for a limited number of circuits. 35% of Australian homes remain completely unprotected by safety switches and 25% have only power circuits protected. Most homes have no safety switch protecting the stove, air con, hot water etc.



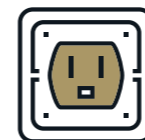
Alterations & additions

The installation of a safety switch is mandatory where any alteration to an existing circuit is undertaken. **Example of an addition:** An exhaust ceiling fan or a ceiling sweep fan or a smoke detector added to an existing circuit not already protected.



Switchboard replacement

Where all the circuit protection devices in a switchboard are replaced, additional protection by using safety switches should be provided for all the final sub-circuits supplied from that switchboard.



Repairs

For existing installations; where a single item of electrical equipment e.g. a powerpoint or a light switch, that is not protected by a safety switch, is replaced with an equivalent item in the same location, a safety switch does not need to be installed. However, to ensure the highest standards, it is preferable to protect the circuit by using a safety switch.

Every householder in NSW has a legal responsibility to keep their home safe, including the way it uses electricity. If you haven't already done so, seriously consider installing an electrical safety switch

FAIR TRADING NSW



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