



Home fire safety fact sheet

Electrical Hazards

Overloaded electrical circuits, faulty equipment and misuse of electrical equipment are common causes of fires in homes.

The South Australian Metropolitan Fire Service (MFS) provides the following fire and life safety tips to minimise the risk of injury or fire.

- Always follow the manufacturer's instructions for the safe and appropriate installation, maintenance and subsequent use of any electrical item.
- Discard malfunctioning electrical appliances or have them repaired by a qualified repairer.
- Never run electrical cords or extension cords under rugs or furniture. Cords may heat up when drawing high electrical load and the heat cannot escape when the cord is covered. The rug may also hide any wear or damage that is occurring.
- Unwind power cords fully before use, including the power cord inside a vacuum cleaner. This will reduce the chances of heat build-up.
- Have a qualified repairer replace any frayed, cracked, scorched or damaged electrical cords or extension cords. The other option is to discard appliances with damaged cords.
- Always use power boards that have overload cut out switches. Do not have multiple power boards plugged into each other or into a single power point.
- When electrical equipment is not in use and does not need a power supply consider turning it off at the power point.
- Consider installing a surge arrestor on your mains power board.
- Install Residual Current Devices (RCD) or sometimes referred to as a Safety Switch to all electrical circuits for additional fire safety protection.
- When replacing fuses, ensure they are the correct load capacity for the circuit. A qualified electrician must carry out all work on the electrical system of a house and may also assist in identifying the cause of fuses that continually blow or circuit breakers that continue to trip.

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- Ensure all new electrical items are compliant with the relevant Australian Standards.
- Never use water to extinguish an electrical fire. Use a dry powder extinguisher with an 'ABE' or 'BE' rating or a carbon dioxide fire extinguisher. For information on extinguishers, refer to the MFS Home Fire & Life Safety Fact Sheet on Fire Extinguishers for Domestic Use.
- Ensure all new household electrical items are compliant with the relevant Australian Standards. Most household electrical items are 'proclaimed' under the Energy Products Act 2000 in South Australia and require mandatory Australian safety approval (i.e. certification) and approval mark prior to sale.
- The Regulatory Compliance Mark (see Figure 1 below) is a recognised Australian safety approval mark.



Figure 1
Regulatory Compliance Mark symbol

- To check if a proclaimed electrical item that bears the Regulatory Compliance Mark is certified, a search on the Electrical Regulatory Authorities Council (ERAC) National Certification Database can be done via the following web link: <https://equipment.erac.gov.au/Public/>.

Check that all the specifications listed within the database align with the product markings.

- Always purchase electrical items from trusted Australian suppliers that are well known and established retailers.

Purchasing electrical items online or from overseas increases the risk of receiving non-compliant or unsafe products.

Combine the above safety tips with the installation of well-maintained, photo-electric [smoke alarms](#) in your home that are less than 10 years old. Consider having all your smoke alarms interconnected.