

Electrical fires

STAYING SAFE IN YOUR HOME



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Electrical equipment and appliances are a major cause of house fires. It is important to use them safely so you don't start an electrical fire in your home.

Overloading electrical circuits at home

What is overloading?

Every appliance needs a different amount of power to work. Plugging too many high-power appliances into the same socket or power board can cause it to overload.

This is because each power point in a typical home is designed to handle around 2400 watts (units of power).

Some appliances, like heaters and hair dryers, use a lot of power. If these high-powered appliances are plugged into the same power board or power point, it can cause overheating and lead to fire.

High-power appliances

Heaters and other high wattage appliances should only be plugged directly into a wall outlet. For example, heaters can draw up to 2,400 watts, so they should never be plugged into a power board. The following are other examples to help you understand which appliances can use a lot of power:

- hair dryers
- electric kettles
- microwave ovens
- toasters
- air fryers
- air conditioners
- clothes dryers
- vacuum cleaners.

How to prevent overloading

- Check how many watts your appliances and charging cables need to work.
- Check the total wattage of the appliances you want to plug into one power point or power board and make sure it doesn't add up to more than 2400 watts.
- If the total power needed is more than 2400 watts, remove an appliance or plug it into a separate power point.

Watch for signs of overloading

Signs a circuit might be overloaded include:

- dimming of lights when appliances switch on
- tripping circuit breakers and blowing fuses
- warm power leads or power point
- burning smell.

If you notice any of these signs, unplug everything, check your equipment and make sure you're not overloading the circuit.



Faulty electrical equipment

Short circuiting

If the wires inside an electrical appliance are damaged or worn out, they can short circuit. This means the electricity takes a shortcut and moves through parts of the appliance it shouldn't. This can cause sparks and quickly start a fire.

Overheating

Some appliances, especially if they are designed to heat up, like toasters, hairdryers, or heaters, can overheat if they're faulty. Things nearby can catch fire from the heat.

Electrical sparks

Faulty appliances can produce sparks. These sparks can set furniture, curtains, clothes or other things on fire. A small spark can start a big fire.

How to prevent electrical fires

Don't plug all your appliances into one power point

Try to plug your devices into different power points and circuits in your home. For instance, don't plug all your kitchen appliances into one power point.

We recommend not using double adaptors because they don't usually have overload protection.

Plug high-power appliances directly into a power point

Plug appliances that use a lot of power, like heaters, hair dryers and toasters, directly into a power point, not into a power board with other equipment.

Never plug a power board into another power board

Plugging a power board into another power board can dramatically increase the risk of overloading the circuit.

Don't use faulty or damaged equipment

Regularly check for damage and don't use faulty cords or equipment as they can start a fire.

All electrical equipment should have an Australian Standard or a Regulatory Compliance Mark.  Only use certified electrical trades people to repair electrical appliances, wiring or equipment.

For more information on home fire safety visit www.cfa.vic.gov.au/homefire

Turn off all electrical appliances at the wall

Appliances that are left plugged in could start a fire, especially if they are faulty or if there's a power surge. Turning them off at the wall when they're not being used reduces the risk of electrical fires starting.

Ensure electrical appliances and power leads have good air flow

Making sure there is airflow around your electrical appliances and power leads can help stop them from overheating and catching fire.

Make sure power boards aren't covered by soft furnishings like cushions, curtains or blankets, as they can cause overheating and catch fire.

Don't put electrical devices on soft surfaces

Don't leave or charge electrical appliances like hair straighteners, hairdryers, phones and laptops on soft surfaces. They can overheat and catch fire easily. Soft surfaces include couches, beds, pillows and towels.

Home office set up

Ensure your home office is set up safely.

- Check you're not overloading power boards.
- Ensure cables are uncoiled but neat.
- Ensure monitors, laptops, televisions and other equipment have good air flow around them and are not in confined spaces or covered.
- Turn off your laptop before you put it in a laptop bag.
- Don't leave your devices charging on fabric, sofas or beds.



Televisions draw a lot of power and can get quite hot while operating normally. Ensure they have enough air flow for cooling.