

Hazards in the home



We have listed some of the potential hazards that may be encountered in any home, along with ways of rectifying them to make your home a safer place.

Condition of flexible leads

A flexible cable with damaged insulation produces a risk of the cable overheating and catching fire. There is also a risk of a person receiving an electric shock from touching any live conductors that may be exposed. If the cable is damaged, have it replaced.

An undamaged, correctly-rated electrical cable ensures safety.

Fixing items to walls or partitions

Sometimes it is necessary to drill holes or fix nails into a wall or partition. This can be dangerous if there are concealed electrical cables or gas or water pipes. Penetrating a live cable with a drill or nail is extremely dangerous and could cause an electric shock, fire or burns. Do not drill holes or fix nails in walls or partitions unless you know that there are no cables or pipes located at that position.

The use of a cable and pipe detector may help identify the presence of concealed cables and metal pipes in a wall or partition.

Isolating electrical equipment

Simple maintenance on electrical equipment (such as changing a belt on the vacuum cleaner), which is not isolated (unplugged) from the electricity supply may create a risk of injury from electric shock, burns or rotating parts.

When the equipment is unplugged, there is no risk from electric shock, or moving parts. If parts have become hot while running, let them cool before you touch them. Maintenance of electrical equipment needs to be carried out by a competent person. Always follow the manufacturer's instructions.

Electrical equipment in the bathroom

Portable electrical equipment such as mains voltage radios, heaters or hairdryers are a very real danger in the bathroom and could result in injury or death through electrocution.

Electrical shavers plugged into shaver socket-outlets manufactured for use in bathrooms, which comply with the relevant British Standards, may be safely used in the bathroom. However, electric shavers plugged into a shaver socket-outlet should never be used when taking a bath, as when water and electricity mix there is always a risk of danger.

Adaptors

Misuse of adaptors can result in an overload, which can cause the electrical circuit to overheat or trip out, the adaptor can become hot. In extreme cases a fire can result. Never use adaptors plugged into other adaptors and check that the adaptor complies with an appropriate standard and is used in compliance with the user instructions.

Ensure the adaptor is in good condition, does not get hot and has no burn marks on it. If it is damaged, replace it with a suitable adaptor complying with an appropriate standard. Having a separate socket-outlet for each item of equipment provides the safest solution. Extra socket-outlets can be installed by a registered installer.

Light fittings overheating

Do not exceed the bulb wattage specified by the manufacturer. A bulb with a higher wattage than its light fitting can produce the risk of the light fitting overheating e.g. 100 Watt bulb in 60 Watt lighting fitting. This may result in the lamp scorching the shade, the lampholder breaking apart when touched and, in exceptional circumstances, catching fire.

By installing the correctly rated bulb in the fitting, the risk of damage from overheating will be stopped and the electricity bill could be lower. If you need more light or wish to save electricity, fit a low energy compact fluorescent lamp, which may last around eight times longer than a normal tungsten lamp.

If the lampholder or cables are damaged, have a registered installer replace the damaged parts.

Damaged electrical equipment

Damaged electrical equipment such as a socket-outlet, can create a risk of injury from electric shock, burns or fire. Check for burn marks, sounds of arcing (buzzing or crackling), fuses blowing, circuit breakers tripping or excessive heat.

Have a registered installer deal with this before it gets worse. Repair electrical equipment such as a socket-outlet, will help ensure safety.

Flexible lead trip hazard

Poorly positioned flexible cables can trip people up. Also, the cable may get damaged, which can create a risk of someone getting an electric shock or cause a fire to start.

Move the appliance so there is no trip hazard, or get a registered installer to fit an additional socket-outlet so the trip hazard is eliminated.

Coiled extension leads

Extension leads that are coiled up on a drum can overheat causing damage to the lead and a risk of fire.

Always remember to uncoil the lead - uncoiled and correctly-rated extension leads do not normally overheat.

Ventilation holes in electrical equipment

Electrical equipment is often provided with ventilation slots to prevent equipment overheating. If these slots get covered up, the equipment may over-heat and could even catch fire. Do not dry clothes by placing them over the ventilation slots of an electric heater. Electric convector heaters when covered may overheat and cause fire. Wet clothes dripping onto live parts creates electric shock and fire hazards. The ventilation slots on the back of computer monitors should never be covered.

Keeping ventilation slots clear on electrical equipment prevents it overheating. Keeping water away from electrical equipment is essential for safety. An electric convector heater with unobstructed ventilation slots lets the heat out safely.

Pulling the plug out of a socket

Pulling out a plug by the cable may damage the cable, put strain on the cable terminations in the plug, and may damage the contact between the plug and the socket-outlet. This may result in the plug overheating, wires becoming loose in the plug, or an electric shock (if the green and yellow earth wire becomes dislodged from the plug terminations).

Press the socket switch 'off' (where provided). Firmly grip either side of the plug and pull it out (making sure you do not touch the plug's pins).