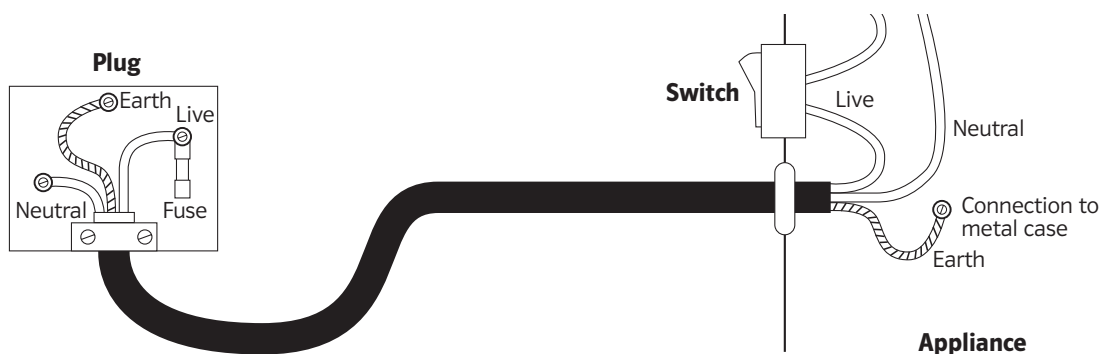




Safe as houses

We use electricity for many different things in our homes, so it has to be safe. Here are two common safety measures.



A **fuse** is a thin piece of wire. If a too large current tries to pass through it, it will melt, and then break, and electricity can no longer pass through it.

Fuses are used in two ways in your home. You will find a fuse in every plug. The wire is contained in a small glass or ceramic cylinder with a metal cap on each end. Fuses come in different ratings. These tend to be in amps - 3A, 5A, or 13A. The rating tells you how much electrical current can pass through the fuse before it blows.

Different appliances need different fuses. A table lamp might need a 3A fuse, but an electric fire might need a 13A fuse. You need to check the plug to find out what fuse an appliance needs. If you use a fuse that is too low, your appliance might not work as it will not allow enough current through. If you use a fuse that is too high, the current can overload it and it could cause a fire.

Fuses are also used in the consumer unit or 'fuse box'. This distributes the electricity that comes into your home to different circuits, some for lighting and some for power. Each circuit has its own fuse, which works in the same way as the fuse in a plug.

Residual Current Devices (RCDs) can also be found in consumer units. RCDs detect if there is a difference between the current flowing in and out of a circuit. If it is working properly, there should be no difference. If there is a difference, it means that some electricity is escaping or leaking through a fault. The RCD switches the circuit off immediately, even faster than a fuse can melt. This can prevent you getting a shock if there is a fault.

Remember: the fuse is a safety device. If it breaks, there is a fault!