



3 Green Lane, Wixams, Bedford, MK42 6DA

www.Electrician-bedford.co.uk | info@electrician-bedford.co.uk | 01234 964912

What is equipotential bonding?

Bonding, while generally unnoticed, is a vital safety feature of your electrical installation. Your gas and water pipes are 'bonded' using a bonding conductor.

One end is connected to your water pipe with a clamp and the other end is connected to your fuse board.

Bonding connects all earthed equipment in the electrical installation i.e. a metal Cooker to the metal water pipes so they are at the same 'potential'.

Example: If you have a metal hob that has an electrical fault, the metal casing could become live. If you touch the live casing and a metal pipe that has not been bonded, you're likely to receive a severe electric shock due to the potential difference'.

What is potential difference?

Potential difference is the difference in voltage between 2 parts of an electrical installation. Going back to the metal cooker Example, the cooker will be connected by the earth in the cable which is connected to the fuse board.

If a fault occurs and the hob becomes live, you could have 100 volts running down the earth. If the cooker is at 100 volts and the metal water pipes are at 0 volts, then there is potential difference. Gas and water pipes are the 2 most common things that need to be bonded in domestic premises.