EARTHING AND BONDING

Why does my bonding need checking?

Have you decided to have additional electrical work carried out in your home. An extra socket outlet, new lighting point, or a new circuit? If so then you require a registered electrician no matter how small the job.

After completion of the electrical work, it will be inspected, tested and a certificate issued. Part of this process is to verify that the earthing and bonding conductors are correctly sized, installed and terminated.

Earthing and bonding explained

Earthing is used to protect people from the risk of electric shock. If the earthing arrangements within your electrical installation were defective or inadequate, you could receive an electric shock from the equipment or appliance metal casing. The purpose of earthing is to provide a path for electric fault current to flow safely to earth to enable the fuse to blow or circuit breaker to operate.

Earthing and bonding

Bonding is the connection of the incoming metal gas and water pipes to the main earthing terminal and is imperative for your protection from electric shock. In a correctly earthed installation, any appliance or piece of equipment that develops a fault to the metal casing will be quickly disconnected by the fuse blowing or operation of the circuit breaker.

Supplementary bonding explained

Supplementary bonding is often found in bathrooms containing a bath or shower. This is to reduce the risk of electric shock where people may touch two separate metal parts, when an electric fault occurs in the installation.

In these locations supplementary bonding conductors connect the circuit protective conductor (CPC) of an installation eg an electric shower to the hot and cold metal water pipes. This arrangement was common on installations up to June 30th 2008. With the introduction of the new 17th edition IEE wiring regulations BS7671 (2008),after this date the need for supplementary bonding has been reduced as all electrical installations in rooms containing a bath or shower need to have their circuits additionally protected by a 30mA (milli-Amp) Residual Current Device (RCD).

For further advice or a no obligation quotation please contact us

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