SOLID Electrical

HELP GUIDE - No. 2

Consumer Unit / Fuse Board

Are they the same? What do they do?

Solid Electrical are here to clarify:

Shown above: older fuse board systems being replaced with new consumer units.

The function of a Consumer Unit and Fuse Board

Both have become synonymous as the term used for two items of equipment which carry out a similar function. Both divide the electrical installation into circuits, and each provides protection to the circuits within a property.

They both have a main switch to turn off all the circuits, together with protective devices to safeguard the circuits.

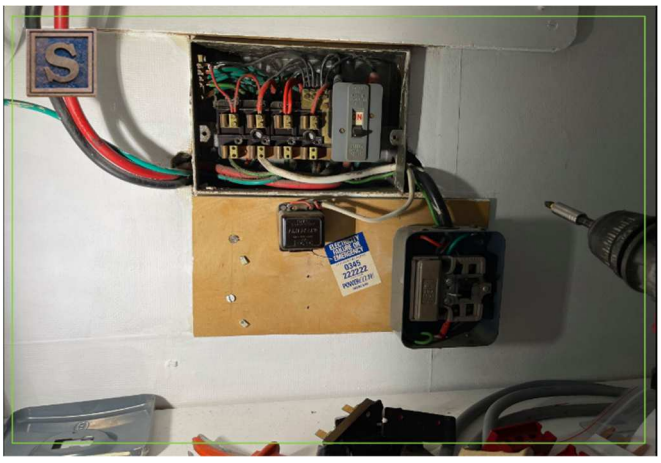
Within a fuse board, the protective devices are fuses, and within a consumer unit the protective device is a miniature circuit breaker (MCB).

What do they do?

Here is an overview…

The fuse board/consumer unit has the function of distributing the electricity around your property, while at the same time preventing overload, or a surge of electrical current, which protects human life, as well as all your expensive appliances.

(Shown right: vintage fuse board)



It is therefore the most important electrical safety device in the home or workplace

Having an up-to-date unit is essential to ensuring your home is safe, efficient, and within regulations.

In 2008 the electrical wiring regulations were updated to require almost all circuits to use a Residual Current Device (RCD).

Modern consumer units, like our photo on the left, contain RCDs, and Mini Circuit Breakers (MCBs) rather than fuses.
They are more sensitive to changes in current, therefore significantly reducing the risk of electric shock or fire.

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The latest version of the regulations includes for the provision of surge protection, which improves safety and also protects electronic equipment from damage due to surges.

These have indicators to show when they have expired, which is normally after they have prevented a significant surge from entering your property.

(Shown right: new consumer unit in place of customers old fuse board)

Different types of circuits will have different levels of protection. For example, a socket circuit will typically have 20amp or 32amp protection, and lighting circuits will have 6amp or 10amp protection. Other circuits will have varying levels of protection.

Residual Current Devices monitor the circuits for leakage of current to outside of the circuit, which could be through your body. These devices are typically set at 30mA, which is over a thousand times less than the circuit breakers that will protect you on a socket circuit. A circuit breaker can be combined with a Residual Current Device, which is known as a Residual Current Circuit Breaker with Overload Protection (RCBO).

So there you have it, whilst consumer units may not be the most exciting addition to your home, they certainly need to be checked or replaced as a minimum.

With all the electronic appliances we are now using, household items, home office, children's toys charging, smart home devices, even electric vehicle charging, it is a small price to pay for peace of mind, and safety.

Should you have an older style fuse board that looks similar to any of the old units shown in our pictures, call Solid Electrical for a no obligation quote to have it replaced with a modern, safe consumer unit like our picture above

Call us for a no obligation quote should you now have any concerns with your electrical installation

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