Electrical wiring

All wiring should be in accordance with the current Wiring Regulations issued by the Institution of Electrical Engineers (IEE). It is advisable to use electrical contractors approved by the National Inspection Council for Electrical Installation Contracting (NICEIC).

Above the *worktop*, socket outlets will be needed for the following typical appliances: kettle, blender, food processor. These are likely to be permanently sitting on the worktop. In addition there may be more occasionally used items such as: whisk, juice extractor, coffee mill, tin opener, etc.

At the *cooking area*, sockets may be needed for an electric frying pan and hand-held tools, like a whisk or blender which are used directly into saucepans on the hob.

At the *serving area*, sockets may be needed for: toaster, carving knife, warming hot plate.

All sockets should be twin sockets to save space and to discourage the use of adapters.

Note that an electric kettle can have a rating as high as 3 kW. It is therefore important that the socket outlet likely to be used for this is not on the same ring main as a major appliance.

Spur boxes or unswitched socket outlets for appliances not exceeding 3 kW should be provided behind large appliances and connected to switches above the worktop for: dishwasher, waste disposer, water heater/chiller, extractor fan/cooker hood, refrigerator, freezer, fridge-freezer.

Major cooking appliances will need a separate circuit to cope with the high voltage of electric cookers, ovens and hobs, connected to a consumer unit or switch of appropriate watt rating. Saving energy should be considered when specifying cooking appliances, as their wattage can vary considerably.

Lighting

Good lighting in kitchens is an essential pre-requisite. Inadequate lighting can cause accidents, fatigue and lead to bad hygiene. During daylight hours there may be sufficient light, but this will vary according to the size and orientation of the window, the season and time of day.

Worktop lighting

The main source of artificial light is needed for the worktops. This can best be achieved by mounting light fittings behind battens fixed to the front edge of wall cupboards.

There are several types of *linear* light fittings suitable for use under wall cabinets such as the following:

Small diameter fluorescent tubes with electronic ballast for instant start fitted with 8 W and 13 W warm-white lamps.
This is the most economic option as the tubes have a very long life. They also have the advantage of giving off relatively little heat.

Low voltage fittings with two, three or four 10 or 12 W halogen capsule lamps fitted into linear rectangular section tubes with integral transformers.
These lamps give a bright white light and are reasonably long lasting.

'Architectural' tungsten 35, 60 and 120 watt striplights in three different lengths.
Elegant in appearance with a warm coloured light, but lamps are short lived so are not popular as they are hideously expensive to replace.

Source: Mr Resistor