

Lighting in the home

We all need some form of artificial lighting around our homes, but what type and where?

Lighting can be separated into three basic groups:

- General lighting - the lamps which give the ambient light in an area, often a replacement for natural sunlight.
- Task lighting - used to illuminate an area for a particular task - cooking, reading etc. When not required for the task, the lamp is normally switched off.
- Accent lighting - the lighting for decorative purposes - to display a particular feature or item - ceiling beams or a picture on the wall.

General Lighting

General lighting is often provided by traditional pendant types, downlights, chandeliers, or ceiling mounted fixtures etc. The decor and aspect of the room will affect the amount of general lighting required.

Task Lighting

Task lighting is often provided by portable standard lamps, wall mounted spot lights, desk mounted lamps, standard lamps, or above worktops fixed lights.

Accent Lighting

Accent lighting is often provided by wall or ceiling mounted spot lights, or wall mounted coving lights.

Colour temperature

Different bulbs appear to give different types of light, this is usually referred to as the colour temperature of the lighting. Variations tend to occur with fluorescent lamps, warm white or daylight fluorescents have a colour temperature of about 3000K (close to incandescent lamps) and are suitable for living areas. Cool white fluorescent tubes are about 5000K and are more suited to workshops and garages.

Different sorts of bulbs

Incandescent

The oldest of the bulb technologies, incandescent lamps work by heating a thin wire element within a glass bulb. They are cheap to buy, but expensive to use and don't last as long as other types.

Avoid using plain glass bulbs, they tend to produce glare.

Incandescent spotlight bulbs have a built in reflector to concentrate the light in one direction.

Halogen

Halogen bulbs are a form of incandescent bulb containing halogen gases, these increase the life of the bulb but they are more expensive to buy than ordinary incandescent bulbs.

Low voltage halogen bulbs are available, these tend to be more efficient than the 240 volt type, but this is often more than off set by the inefficiencies of the transformer. Low voltage bulbs do have the advantage that they run cooler.

Fluorescent

Fluorescent lamps are the most efficient bulb in common use, they do cost more than incandescent bulbs but they use a lot less electricity when used for long periods and last up to 10 times longer. They do take a lot of current when first switched on and take some minutes to warm up, they are not very efficient when used in places where the light is only switched on for short periods of time.

Most fluorescent lamps are not suitable for use with dimmers, however special lamps and dimmers are available if required.

Fluorescent lamps have come a long way since the 4 foot plus tube, these days they are available as direct replacements for incandescent bulbs - Compact Fluorescent Lamps (CFLs). One problem is choosing a CFL is that the wattage quoted is not the same as for incandescent lamps, as a rough guide:

CFL	is roughly	Incandescent
Wattage	equivalent	lamps
	to:	wattage
9		40
13		60
18		75
25		100

This is a very rough guide, the packaging of CFLs normally show the incandescent equivalent wattage.