

A NOTE ON LOW ENERGY LIGHTING



What does the Building Regulations Part F1 – Conservation of Fuel and Power require on Fixed Internal Lighting?

Point 2.34;

Fixed energy efficient light fittings shall be installed in the most frequented areas in a dwelling, and there shall be not less than;

- (a) One per 25 m² of dwelling floor area (excluding garages) or part thereof; or
- (b) One per four light fittings, whichever is the greater.

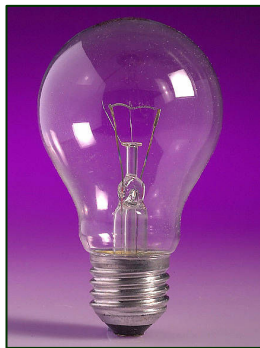
This is straightforward, but what is the definition of a Low Energy “Fitting”?

Point 2.36;

For the purposes of paragraph 2.34 an energy efficient light fitting (including the lamp, control gear and an appropriate housing, reflector, shade or other device for controlling the light output) is a light fitting that can only be fitted with lamps **having a luminous efficacy greater than 40 lumens per circuit-Watt.**

[Fluorescent and dedicated compact fluorescent light fittings would meet this requirement, but those accommodating GLS tungsten lamps and compact fluorescent lamps (CFLs) with a bayonet cap or Edison screw base, or tungsten halogen lamps would not.]

So.....



No more of these type of GLS Tungsten bulbs shall be accepted by Building Control and also simply because a CFL (Compact fluorescent lamp) Fitting States “Low Energy” does not mean it should be accepted on face value as being Building Regulation Compliant. There is a subtle difference. (As seen below)

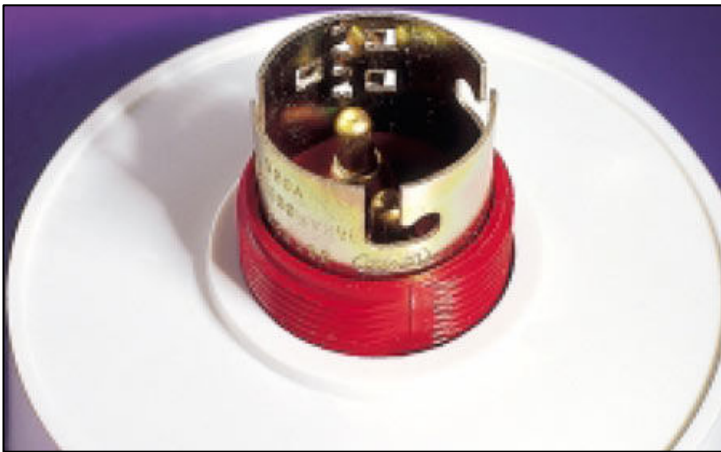


The Regulation actually calls for the whole fitting to be low Energy. This means incorporating the new BC3 Fitting

Notice those three prongs are irregularly spaced. A normal bayonet bulb won't fit in a BC3 fitting, and a BC3 bulb won't fit in a normal bayonet fitting.

The idea is that since 'normal' bayonet fittings can take normal tungsten incandescent filament bulbs as well as normal CFLs there is the possibility that householders might replace any pre-installed CFLs with filament bulbs, for whatever reason (the usual reasons are the colour of the light, the aesthetic appearance of the bulbs, and the warm-up time). To prevent this possibility, a new type of light fitting and associated CFL cap design were required which were uniquely compatible, so that anyone with this kind of fitting would have to fit bulbs with the new cap design, which would only be available on CFLs.

In Summary we would advise that when the SAP report suggests "Low Energy Light Fittings" that a 3 pin Bulb and Fitting be used. This is also at the discretion of your local Building Control Body.



By Gareth Chambers