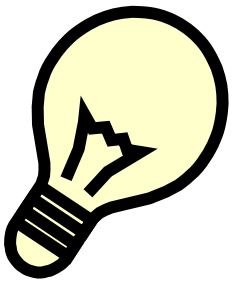
General Information on Lighting Levels for Churches



The Chartered Institution of Building Services Engineers (CIBSE) has produced a "Code for Internal Lighting".

The values below are abstracted from this code to indicate the level of lighting intensity to be provided in various areas of the Church:

Body of Church (Nave etc)	**100 – 200 lux**
Pulpit/Lectern	**300 lux**
Choir Stalls	**200 lux**
Religiously significant areas (eg Altars etc)	**300 lux**
Chancel, Sanctuary, Platform	**200 lux**
Vestries	**150 lux**
Organ (Music reading facility)	**300 lux**

In the ordinary layman's terms these would represent the acceptable level of lighting at "hymn book level". They are expressed in "lux" which is the recognised unit of intensity of illumination. The "lumen" is the unit of quantity emitted from light sources. The light fittings are now referred to as "luminaires".

The Diocesan Advisory Committee regards these values as appropriate for Churches in the Diocese. They also apply some general rules for recommending Faculty Applications to the chancellor of the Diocese. Registered members of the NICEIC (the National Inspection Council for Electrical Installation Contractors) should carry out all the electrical works in Churches. If the work is to be carried out by others approval should be obtained from the Church's insurers.

All electrical work of any kind must conform to the standards laid down in the current edition of "The Regulations for Electrical Installations" issued by The Institution of Electrical Engineers.

Cable sizes are recommended for lighting circuits but the DAC prefers the use of 1.5mm cable as a minimum for this wiring.

Final connections to hot fittings, such as luminaires, must be made in heat-resisting cable, whatever other cable is used for general circuitry. MICC cables are preferred if they can be afforded, and these cables are almost fireproof. Other proprietary heat-resisting cables are available such as BICC "Flamsil" but there are others, with silica insulation, available from suppliers.

Unprotected flat twin and earth cables are not generally accepted unless they are in areas where they are unlikely to suffer mechanical damage, vandalism etc. Single PVC conductors must be in ducts or conduits. All cables are to be adequately supported with minimum damage to the

fabric of the Church. Work in "Listed" buildings should be undertaken with extreme care, with the use of non-invasive supports where possible. Electrical circuitry should be camouflaged as far as possible to reduce the impact on the character of the Church.

Details of luminaires to be used should be provided with Faculty applications, along with a suitable sketch or drawing indicating cable runs, lighting points etc and showing mounting heights where applicable. The more specification details available the quicker the scheme can be dealt with.

Schemes intending to use "uplighters" should have regard to the "inverse square law". Which means if you double the distance the light has to travel you need four times the amount of light output! There are many other details which apply differently to individual schemes, these can only be assessed by reference to the specific scheme.

Modern low power lamps (bulbs) will probably save on the electric bill even though they cost more. They should eventually pay for themselves by the savings achieved.

Be aware of the 'working at height' regulations when considering lighting. Changing lamps at high level can prove expensive in terms of equipment necessary to comply.

The above information is intended as a guide rather than an exhaustive schedule of requirements and is correct as at 2007.