

Lighting and Rewiring

Lighting and re-wiring tend to go hand-in-hand because there are now so many more opportunities for good lighting than there were a few years ago, and the use of church buildings is changing.

Good lighting enables people not only to see what they are doing but also to hear better. A properly lit speaker is always more audible than a poorly lit one!

There is a growing consciousness of the need to economise, not only on the grounds of saving money, but for sound green reasons. However, economy and good lighting are to some extent in tension with one another. Discharge lamps are economic to run but expensive to dim. The light spectrum of discharge lamps is very different from that of the more familiar tungsten lamp and can be rather flat and cold if used on its own. Don't ask flower arrangers to work under sodium lights!

Lights can be mixed and, since most discharge lamps take time to warm up, some tungsten ones are essential.

In planning new lighting it is vital to list all the uses, and possible uses, to which the building might be put; to consider what is necessary for worship according to the Book of Common Prayer, the Alternative Service Book and All-age Worship; and to remember that you are lighting a church and not a hall, factory or supermarket.

The principles of good lighting:

- 1 Lighting levels for the congregation of at least 150 lux. Elderly people need six times the lighting levels necessary for a teenager to be able to read comfortably.
- 2 Lighting levels should usually increase as one moves from the nave to the choir and chancel and be brightest in the sanctuary, naturally leading the eye in that direction.
- 3 Lighting should not necessarily be symmetrical. Most older schemes are and this is very boring and flat. Shadows bring depth and life to churches. Often all that is needed is one or two extra lamps in the chancel and sanctuary, usually on the south side or slightly stronger bulbs one side than the other.
- 4 The needs of music groups, children's work and drama may call for extra lights that can be used from time to time in the chancel step area.
- 5 Dimmers can be used to good effect and are undoubtedly a great asset for special occasions. tungsten lamps are easy to dim and may be given a long life if normally run below full power. Discharge lamps can be dimmed but are much more expensive to control.
- 6 Pendant lights add to worship even if they only run with 15 to 25 watt bulbs. Some commercial lighting advisers try to light churches like factories or supermarkets solely with floods! If you have good pendants, try and retain them, even if you use floods as well.
- 7 Remember, someone has to change the bulbs! Fittings must be accessible.
- 8 Good light fittings need not be obtrusive and can often be painted to blend in with their surroundings.

- 9 The Congregation sees few light fittings, the ministers most of them. Lights should, where possible, be above a 35-degree angle from the eye-line of those in front of them. Alternatively lights can now be screened or masked to cut out glare.
- 10 Be Careful about lighting the roof or ceiling too brightly. Sometimes all that is needed is a 40-watt bulb or a conceal strip-light above the wall-plates. Up-lighting can be overdone and detract from the focus on the Holy Table.
- 11 Side aisles may need different treatment from the nave. A series of pools of light created by tungsten floods may be both effective and attractive.
- 12 Special lighting may be needed for the area of your fony and for any special features such as statues, memorials, and paintings.
- 13 Think carefully about security for lighting controls and where they need to be for those who need to use them. A single light, or pair of lights, with a two-way switch can be a boon to clergy, vergers, flower arrangers, cleaners and all who need to use the church after dark.
- 14 Floodlighting the exterior may enhance some churches at night. It is expensive to install and expensive to run, needs great care and specialist advice in its design

When thinking about new lighting

- a) Invite your architect to submit ideas.
- b) Ask the Diocesan Advisory Committee, through its Secretary at the Diocesan Office (01353 652727) for a visit from a sub-committee

- c) Invite ideas from a good lighting contractor, or better still, a lighting consultant. Remember that a good electrician is not necessarily a good designer. In view of the cost of many lighting schemes, investment in a fee for a lighting consultant who will produce a properly designed layout of lights and cables may be a wise move. It will help you to budget, too.
- d) Sometimes it may be cheaper to buy some large print books, or to clean existing lampshades!
- e) Be prepared to try out fittings before planning the whole scheme. Borrow a fitting and rig it up temporarily to see the effect, but remember this will not give you the whole picture.
- f) Visit other churches of similar size and proportions. you may be able to learn a lot from both the good and the bad examples that you see.
- g) Prepare a scheme and submit a Faculty application to the Diocesan Advisory Committee. Remember that a new lighting scheme can be done in several stages. the most important thing is to make sure all cables are prepared at the same time. The layout of cables is important and part of the design. they should be inconspicuous and preferably invisible. A layout scheme should show cable routes as well as fittings, otherwise direct and simple routes may be taken which could be unsightly and conspicuous. Extra lights can be added later if cables are already in place.