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**Lighting a church building is challenging and requires the input of specialist advice to achieve a successful scheme.**

**We can help you make sure your lights have a positive impact on people's experience of your building.**

Download our Guidance

- [Lighting](#)
- [Floodlighting](#)



**Why is a lighting scheme important?**

A good lighting scheme will help people:

- See and move around freely
- Read service sheets and see projected images
- Appreciate what is special about your building
- And enjoy special events

The quality and direction of the light is as important as its intensity. And a well designed lighting scheme will take all of these things into consideration.

## Hire a consultant

It's helpful to bring in a specialist lighting consultant at the earliest possible stages of the consultation. You can also ask your architect or surveyor for help.

They will usually provide advice based on a wide range of products rather than a lighting company, and will go through a tender process with you to appoint the appropriate contractor.

Although there is a cost involved, the total cost of the project is likely to be lower.

To engage meaningfully with your specialist consultant:

### Think about what you need

It's vital for you to be clear about your needs and what it is you hope to achieve.

If the existing lighting in a church is unsatisfactory, it's useful to consider the reasons why.

- Do the fittings no longer provide enough light?
- Is the installation unsuitable for the current pattern of worship and other uses of the building?

Describe what you need in a new lighting scheme using a statement of needs.

And don't forget to test your electrical system as part of this process (if it has not been tested in the last 5 years).

### Write a design brief

To prepare a written brief for the consultant, include information on:

- The uses of the building (e.g. regular services, special services, midweek activities, etc.)
- Routes in and out of the building
- Areas with more specific functions (vestry, kitchen etc)
- The opportunity for increasing energy efficiency and reducing environmental impact
- Areas where lighting is particularly crucial for health and safety (steps, tower, crypt etc)
- Changes in natural light throughout the day and the year
- The capacity for controlling the lighting effects
- The scale and character of the fittings and how they might relate to the building itself
- The capacity for replacing light fittings and drivers (they should be easily accessible)
- The wiring and power supplies

**Include the special features you want to highlight (e.g. wall paintings).**

**But take care that the scheme does not have a negative impact on those features (e.g UV or heat).**

**Talk to your DAC for advice first.**

## **Recommended light levels**

**The lighting consultant should give you an indication of your scheme's light levels.**

**The Chartered Institute of Building Services Engineers (CIBSE) recommends:**

- **Ambient light: 150-200 lux**
- **Directional lighting: 300-400 lux**
- **Main body of the church: 100 – 200 lux**
- **Pulpit or lectern: 300 lux**
- **Choir stalls: 200 lux**
- **Religiously significant areas (e.g. altars, etc.): 300 lux**
- **Chancel, sanctuary and platform: 200 lux**
- **Vestries: 150 lux**
- **Organ (for reading music): 300 lux**

**Find out more about lighting places of worship**

## **Trial your lighting scheme**

**It's vital to perform proper trials of your lighting scheme with your consultant.**

**You cannot predict what is going to happen with lights until you see them in action and you cannot rely on computer generated views.**

**Initial tests should look at:**

- **Colour temperature**
- **Power**
- **Position, etc.**

**A second round of tests should look at the light fixtures and wiring.**

**Ideally, you should test accessibility for maintenance as part of the trial.**

**Important:**

**This is a crucial time to notice any problems and fix them.**

**The cost of trialling your lighting scheme is going to be a lot less than the cost of not trialling it.**

## **Aesthetic considerations**

**How will you minimise the impact of the scheme on the historic fabric of your church?**

#### Do not fix cables to historic fabric

**Specify in writing that there should be no fixing to historic stonework or brickwork or altering of cable runs without prior consultation with the church architect or consultant.**

#### Have quality light fittings

**There are many different types of fittings. And each performs differently.**

**The key considerations are their functionality and their visual impact on the interior of the church.**

**But remember, their function is to provide a source of light. Not to be looked at. So the fittings and cables should be:**

- **Unobtrusive**
- **Selected or painted to blend in the background**

**If well designed and crafted, your fittings could be considered as objects of beauty themselves.**

**And wherever possible, retain and adapt fine historic fittings into your new scheme.**

#### Emergency lighting

**Don't forget to introduce emergency lights if you plan to host concerts and performances.**

**You'll want to know what bulkhead fittings are proposed. Some can be ugly, but discrete LEDs are available and are preferable to illuminated signs.**

#### Cabling is just as important as the light fittings

**We advise you to:**

- **Fix cables into joints**
- **Reuse good or acceptable routes and fixings**
- **Find alternative routes to badly positioned cable runs**
- **Make the cables unobtrusive**
- **Ask your DAC or your consultant if mineral insulated cable is the best option for you**

Find out more about electrical wiring

#### Switches and control plates

**What colour is proposed for the switched sockets and control plates?**

**Is this appropriate for their position?**

## **Control systems**

**It's important to make sure that your lighting system is easy to operate.**

**Most modern lighting systems have a computerised control system. This will be pre-set by the lighting designer to meet your needs.**

**The control system allows the lights to be adjusted for different:**

- **Parts of the church**
- **Events**
- **And times of year**

**Make sure that at least two people know how to use it. And keep a set of written instructions nearby.**

## **Energy-saving LED lighting**

**Light-emitting diode (LED) lighting has established itself as the most efficient form of modern lighting. Installing it in churches, schools and associated buildings bring benefits such as:**

- **reduced electricity consumption**
- **reduced cost**
- **reduced carbon footprint**
- **improved colour temperature**
- **improved safety.**

**Depending on what you have now, you either need to make simple like-for-like swaps of the bulbs or you may need to change fittings and controls.**

**Good lighting controls can help you programme the lights for different uses, and also reduce energy use, for example with movement sensors which turn the lights on when needed and daylight sensors which automatically dim the lights.**

**LED lights are also suitable for path lights and floodlights.**

**LED Technology is discussed on page three of our [lighting guidance](#), as does our [webinar on the effective management of church lighting towards net-zero](#).**

## **Testing and maintenance**

**The electric system should be tested every five years by a qualified electrician. And light fittings should always be kept clean to ensure ultimate performance.**

**You will also need to make sure that they are safely accessible for maintenance purposes.**

**Contact your lighting consultant for advice on specific maintenance measures.**

## **External lighting**

**Floodlighting is an effective way of drawing attention to your church building.**

**But you need to consider issues such as:**

- **Light pollution**
- **The effect on your neighbours**
- **The use of the building when the floodlights are on**

Find out more about floodlighting

## **Bats**

**Some bat species are highly susceptible to light.**

**If your church has bats, you must formally assess the likely impact of the scheme on the bats.**

Find out more about bats

## **Also of interest**

### **[External lighting for historic buildings](#)**

**[Get advice from Historic England](#)**

### **[Make changes to your building](#)**

**[Let us help you plan your project](#)**

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