

CASE STUDY

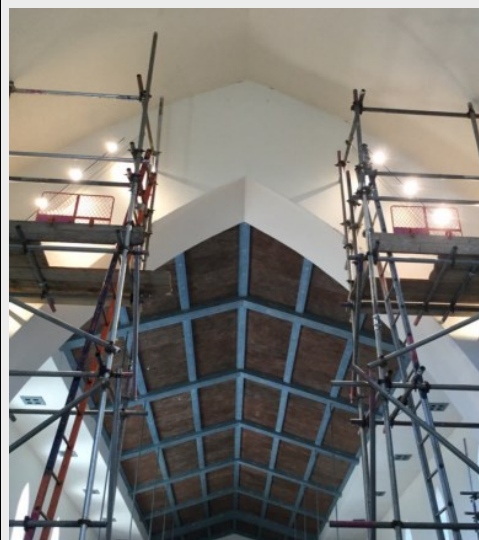
A NEW AND EFFICIENT LIGHTING SCHEME FOR A MODERN CHURCH IN HOVE



N.B. This case study considers only one possible approach, which will not be suitable for every church. Always seek professional advice.

Key Points

- Bishop Hannington Memorial Church in Hove undertook a scheme of installing a range of up-to-date lighting technology in order to improve services and general use.
- As a modern, Grade II-listed building, the church presented a unique set of issues for the work to account for. But, as a result of the project, energy use has been reduced by over 80%.



1 The chancel arch now has a track of lights on each side, with a dimmer setting to control the brightness and enabling flexible use.

2 Lights above the arcade arches have been replaced with more efficient LEDs. The subtle design complements the building's architecture.

3 Hanging pendants designed by the original architect were retained, with just the lamps inside replaced.

The context

The origins of this building lie in a local housing development that was constructed during the 1930s, for which a new church was needed. The church was designed by Sir Edward Maufe, who developed a number of techniques and ideas that were later used in the construction of Guildford Cathedral. It was consecrated in 1941, extended in the early 1980s, and is now Grade II-listed.

The need for change

Lighting in the church had not been upgraded since the church was built, meaning that, compared with the technology available today, it was both ineffective and inefficient. New lighting was needed throughout the church in order to improve functionality and reduce the environmental and financial costs of lighting the building.

What were the options?

- The interior remains much the same as when the church was initially built. With Maufe having taken personal responsibility for much of the interior design, it is characteristic of his work of this period.
- As a result, the interventions needed to be particularly discreet, although some fittings, such as the Maufe-designed hanging pendant fittings in the nave, were deemed more architecturally significant than others, such as the original floodlights in the chancel.

What was done?

- Within the chancel, the 4 existing floodlights were removed and replaced with 3-circuit tracks featuring 5 LED lights on each side of the chancel arch (10 lights in total), with a dimming function added to the existing multi-gang switch.
- Wall lights on the heads of arcade arches on the north and south of the nave were replaced with more efficient Disc Wall LED fittings. These are slightly different in shape to the originals, but their size, colour and simplicity mean they are not intrusive.
- Lamps from Maufe's original hanging lights in the nave were replaced with LEDs.
- New monitors and facilities for livestreaming were also introduced as part of the same overall project.

How well does it work?

Bishop Hannington Memorial Church now has vastly improved brightness in their lighting scheme. Additionally, the inclusion of dimmers for the chancel lighting has given flexibility for different settings as required.

Despite the increased lumen output, the total power requirement has reduced massively. On the chancel arch this has been from a total of 2000 watts to 296, while for the wall lighting in the nave, it has been from 960 to 216.

The project was completed with sympathy for the character of the historic fabric. Although minor changes have been made, the church retains a great deal of Maufe's original design, including the hanging pendant lights.

How much did it cost?

It is unknown exactly how much electricity is being saved, as the church centre is linked to the church building

The total cost of the project, including administrative costs, was a little over £5,000. Of that figure, approximately £3,150 was spent on the new lighting hardware, excluding a small number of LED bulbs which were acquired at a previous time.

The above figures do not include VAT, which was reclaimed by the church through the Listed Places of Worship Scheme. The project was eligible for this cost-saving because it was maintenance work on a listed place of worship.

“The importance of the work is better lighting, flexibility with the dimmers and lower cost. The chancel was particularly poorly lit and the new lighting has very much improved this area of the church. I certainly consider the project a success. In making the changes to the lighting and using low wattage LED lamps we are making a small contribution towards the Church's net zero carbon target”

John Puttock, Trustee and Property Manager for Bishop Hannington Memorial Church