Many churches are now considering under-floor heating. Contrary to what is frequently claimed, there is no best method of heating a church: each heating method has its advantages and disadvantages. Churches need to consider carefully the technical, practical, aesthetic and economic issues and take professional advice.

Under-floor heating

A new floor with under-floor heating alters a church’s architectural and historic character, and therefore the necessity for this work will have to be shown as part of the faculty process, with reasons given why methods with less intervention had been ruled out.

Benefits

• Can help produce good comfort in continuously heated buildings without stratification.
• Continuous heating in the building can be beneficial for the fabric.
• Fewer visible heat emitters provide for a pleasing aesthetic.
• Low temperatures create no burn hazards, nor is there a hazard for physical injuries due to trips and falls.
• Can be suitable for use with new technology such as heat pumps.

**Drawbacks**

• Under-floor heating may not reduce costs when compared to other similarly fuelled systems. Running costs need careful consideration with professional advice. Experience from other churches in similar situations is valuable.

• Unlikely to be appropriate for intermittent heating: under-floor heating is used in continuously heated buildings. Parishes should ensure that they can justify continuous heating; if not the installation will not be worthwhile.

• Floor temperatures need to be kept down to avoid swollen feet, therefore supplementary heat likely to be necessary. This may call into question the initial need for an under-floor system.

• Usually involves the construction of a new floor and therefore irreversible changes to a building.

Historical and archaeological issues need careful consideration.
• Maintenance may be difficult and leaks hard to find and repair.

• Finishes in wood or carpet can impede thermal transfer and therefore the effectiveness of the system. Wood finishes have been known to buckle.

• Effect of under-floor heating on organs and other artefacts needs individual consideration.

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*Brancepth, St Brandon, rebuilt following a fire. The floor incorporates under-floor heating powered by a condensing boiler plant*