

CHURCH
HEATING

10

TEMPORARY
HEATING
OPTIONS



CHURCH HEATING

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This guidance is issued by the Cathedrals Fabric Commission for England pursuant to its powers under section 3(3)(a) of the Care of Cathedrals Measure 2011, and/or by the Church Buildings Council pursuant to its powers under section 55(1)(d) of the Dioceses, Mission and Pastoral Measure 2007. As it is statutory guidance, it must be considered with great care. The standards of good practice set out in the guidance should not be departed from unless the departure is justified by reasons that are spelled out clearly, logically and convincingly.

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10.1 Introduction

When a church's heating system breaks, rushing to replace a broken gas boiler with a new gas boiler may appear to solve the immediate problem, but it is often a missed opportunity to improve the way a building is heated. To ensure low carbon options are at least considered, the updated faculty rules (from July 2022) require an options appraisal and faculty permission for like-for-like boiler replacements. The PCC will need time to think about how the building is used, how it should be heated, and whether there is scope for reducing the **building's carbon emissions.**

During this period, a temporary heating solution may be needed.

Before committing to any temporary solution:

- Speak to your insurance company about your plans.
- Check with your Archdeacon or DAC Secretary to see if permissions are required. In general free-standing, plug-in units do not require permission, but anything attached to the building may do.
- Many churches are large and with high roofs. Think about temporary solutions which heat the people, rather than the building, in order to keep carbon emissions and running costs low.

10.2 Portable space heaters

Portable space heaters are available in various types. They can be purchased, or rented on a short-term basis from high-street tool hire shops.

Electric heaters

- Available as fan heaters, infrared heaters, radiators, quartz halogen heaters.
- Guidance from Ecclesiastical Insurance is that ***“Portable heaters should only be used in a church when there is no alternative. Should your main church heating system fail during the winter months, we recommend that electric convector or fan-assisted heaters with thermostatic cut-outs (that operate in the event of overheating) are used as a temporary measure... Electric radiant heaters should never be used, even as a temporary measure”***. Their full guidance is available [here](#).
- Temporarily installed overhead heaters, or heated chandeliers can be a way of getting heat nearer to members of the congregation.
- Electric heaters should never be plugged into an extension cord.
- Parishes should be aware that the Electricity at Work Regulations 1989 require the inspection of electrical equipment having a lead/cable and a plug and which can be easily moved from place to place.
- Be aware that larger fan heaters can be noisy.

Gas heaters

- Gas should only be considered when the flue can be vented to the outside air.
- LPG (Liquefied Petroleum Gas) heaters should not be used in church buildings. Burning LPG creates oxides of nitrogen and other gasses which are harmful to health.
- LPG heaters give off large amounts of water vapour which can have an adverse effect on the building, and can lead to the onset of rot in woodwork. For every kg of propane burned, approximately 3 kg of carbon dioxide and 1.64 litres of water will be emitted. As this water condenses it soaks into the fabric of the building, especially the cooler parts.
- If a PCC decides LPG is their only option, they should:
 - ◇ Check with fire brigade, who may not attend a fire if gas bottles present.
 - ◇ Keep stocks of LPG bottles and cylinders to a minimum store them in a locked and well-ventilated outbuilding or secure compound.
 - ◇ Change cylinders in the open air in a well-ventilated area away from any source of ignition.

Oil or paraffin heaters

The guidance from Ecclesiastical Insurance is that portable oil or paraffin heaters should never be used in a church building.

Safety considerations for any portable heater

- Portable heaters should be thermostatically controlled and have automatic cut-outs to protect against toppling or being left on accidentally.
- They should be positioned well away from woodwork or other combustible materials to avoid the risk of fire damage.
- If possible, guards should be fitted to prevent the heaters being knocked over or moved accidentally.
- Temporary heaters should not be left unattended or used when the building is unoccupied, and should never be moved once they have been switched on.

Typical cost

3kW heated air blowers can be rental for around £30-40 per week from tool hire shops. Domestic-sized models can be purchased for a similar amount. Consider how long you will need them, the relative build qualities, safety features, and the strength of fans when making your decision. If deciding to buy, plan for where they will be stored or what will happen to them once the new heating system is installed.

10.3 Heated cushions

Heated cushions are emerging as a realistic heating option in many situations either as a temporary or permanent solution. They can also be used to supplement other forms of heating, allowing it to be run at a lower temperature or for less time.

Designs exist for both chairs and pews. Battery-powered versions may last for several hours on a single charge, and crates are available to allow multiple cushions to be conveniently and tidily charged from a single socket.

- Good for warming people, but cold heads/feet may be an issue.
- Available as plug-in or battery-powered.
- Priority can be given to those who feel the cold most.
- Pressure sensors fitted to some models turn them on and off automatically so they only use electricity when somebody is sitting on them.
- Some dioceses are experimenting with holding their own stock of cushions to lend out in emergencies.

A case study, video and technical note is available:

[Marown Church tries a new approach: heated cushions | The Church of England](#)

Typical cost

At time of printing, up to £200 per cushion, depending on the quality and features.

Parish Buying is currently creating a buying guide, which will have more details.

10.4 Other forms of 'people heating'

There are a many ways to keep individual people warm, or at least less cold: hand warmers, heated gilet/jackets, electric heated mats, toe warmers, and of course hot water bottles and blankets. For example, the Diocese of Truro is creating a kit they can lend to churches with four USB hand warmers, one heated gilet with a power pack, one heated cushion, and one heated pew pad.

Typical cost

Low, if for low numbers. For example, at time of printing, USB hand warmers were priced at £14 each, and a heated gilet at £75.

10.5 Temporary boiler hire

Temporary boilers are caravan-sized units which can be delivered for connection to the existing heating system.

- The church needs to have relative good access to a location close to the boiler room where the unit can stand while in use.
- Flexible hoses will connect into the existing system replacing the main flow and return pipes. A plumber will be required to drain down the existing system, create temporary connection points and then refill the system.
- Most are LPG (Liquefied Petroleum Gas) or oil units and have their own tank on the trailer unit which, if **it's there for some time, will need access to refill it.**
- Electric options are also available, although these would normally need a three phase power supply.
- Generally available on a 24- to 48-hour response time.
- Boiler plant is expensive to hire so is probably only suitable in the short term.

Typical cost

Expensive.

10.6 Planning ahead

For parishes

Plan ahead! Create a Heating Resilience Plan to assess what would work for you if your current system fails. Start thinking about your options for lower carbon **heating so you're prepared when your current system** reaches end-of-life.

For dioceses

Consider holding a stock of temporary heaters to be loaned out to parishes. Some dioceses have purchased a stock of heated cushions to either lend to parishes in emergencies, or to allow them to be tested before the PCC commits to a purchase.

Consider asking your Diocesan Chancellor to issue an Additional Matters Order to allow the installation of a temporary heating system to be authorised by the Archdeacon in consultation with the DAC.