

# **Temporary Heating Solutions**

Summary: Heating may be needed at short notice and for a limited period when a boiler fails. A range of electric options are available: Heated seat cushions, heated floor mats, freestanding infrared heaters, freestanding panel heaters, fan heaters, and temporary boilers. NB avoid using Liquid Propane Gas (LPG) in cylinders inside a church as dangerous and harmful.

# **Planning for Boiler Failure**

Churches who experience a sudden and unexpected failure in their existing boiler will have an understandable need for a rapid solution to provide thermal comfort, so that they can continue using their building for services and other events.

The ideal situation is for churches to plan ahead for a boiler failure so that the event is not entirely unexpected and there is a contingency / continuity plan in place. All churches with a boiler that is over 15 years old should expect that boiler to fail within the next few years, and all churches with a boiler that is over 20 years old should expect that boiler to fail imminently.

Suitable planning may involve:

- Installing a small section of under pew electric heating (perhaps to the choir stalls or a front block of nave pews) that can be used for the majority of services
- Installing increased electrical supply capacity to be able to power new heating solutions and more significant temporary heating solutions
- Installing some electrical distribution circuits early, so that there are sufficient electrical circuits and sockets into which to plug temporary electrical units
- Having an energy efficiency and decarbonisation audit conducted so that the PCC is aware of the solutions available
- Knowing what temporary heating solutions are available and where these can be obtained at short notice.

Churches should note that as the like-for-like replacement of fossil fuel boilers now requires a full faculty, planning to replace an oil or gas boiler with a new oil or gas boiler when it fails is not likely to be possible without significant time delays. All heating solutions must now align with (and have 'due regard' for) the net zero carbon target of 2030 for the Church of England.

# **Before Committing to a Temporary Heating Solution:**

- Consider solutions which heat the people, rather than the building, in order to keep running costs and energy use down.
- 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.
- Speak to your insurance company about your plans.

# **Types of Temporary Heating Solutions**

There are a number of suitable temporary heating solutions available. It should be noted that the use of LPG (Liquid Propane Gas) in cylinders inside the church must be avoided. These represent a major fire risk, have seriously adverse impacts on the air quality and health of occupants inside the building, and can cause very rapid detrimental impacts on the fabric of the building due to the high amounts of water vapour that they emit into the space.

Solutions that can provide temporary thermal comfort are:

# Heated Seat Cushions (a guidance note on these can be found with the collection here)

A range of heated seat cushions are available to purchase and can be used to heat chairs or pews. There are both battery powered options and mains powered options that plug into wall sockets, if available and acceptable (avoiding trailing leads). These work in a similar way to heated seats in a car and provide personal warmth. Heated blankets and padded cushions are also available. These would have to be purchased outright.

Example Suppliers:

Sit and Heat	<u>Stoov</u>	<u>Ororo</u>
Kovo Schmidt	PR Havener	

Thaw – available at many outdoor activity stores including Cotswold Outdoor



#### **Heated Floor Mats**

Heated floor mats are available, which normally have to be plugged into a wall socket, but can provide a good solution to overcoming discomfort from cold floors. They can also be useful behind lecterns and the like. These would have to be purchased outright.

Example Suppliers:



#### **Tripod Mounted and Free Standing Infrared heaters**

A range of infrared heaters are available that are mounted on free-standing tripods. These need to be plugged into a standard wall socket and can be positioned to provide overhead heating to a group of people. Care needs to be taken with the positioning, so that these are not knocked over by people walking around the church. These are often marketed as floor standing patio heaters. Take care to select the electric (not the gas) versions.

Lower-level units are also available which are often used on construction sites to assist in, for example, paint drying. These range from small domestic versions to larger industrial versions.



These are available to purchase or to hire.

#### **Freestanding Panel Heaters**

There are a vast range of freestanding electric heaters which range from oil-filled radiators to panel heaters that can be wall mounted, but also have freestanding feet attachments. These can be useful in areas alongside pews, under table altars, etc. If the long term heating solution is likely to include some wall panel heaters, these can be purchased early with the feet attachments and used as a temporary heater before having the feet removed and being fixed to the wall as part of the permanent solution.

Some under pew heaters can also be made freestanding by installing the L-shaped mounting brackets the other way around. These can also be plugged in (rather than wired in), but care would need to be taken to ensure too many are not plugged into the same circuit.

These are normally purchased outright.

Example suppliers:

Warm4Less (wall panels heaters that have optional feet attachments)

Argos (among most other high street hardware and DIY stores) oil filled radiators



#### **Electric Fan Heaters**

There are a huge range of electric fan heaters available. These range from small domestic units that can be plugged in and are useful for heating the organist or the like, to large commercial units which are often used to heat marquees that can blow warm air in to heat the whole church building. These commercial units are likely to need their own dedicated, large power supply and sufficient capacity within the church.

These are available to purchase or hire from most hire shops.



**Example Suppliers:** 

Andrews Sykes (hire) Cross Rental Services National Heater Shops

#### **Temporary Boilers**

Temporary boilers can be hired in and connected, via flexible hoses, to your existing heating system. This can provide a temporary solution where the boiler has failed but will not be a solution if the heating failure is due to a burst pipe. They are available as oil or gas versions and can connect to existing gas supplies or have their own oil tank supplied with them. They are also available as electric boilers (up to around 40kW). They tend to be costly, especially for long hire periods and will require good access to the existing boiler room as they are often on a small trailer or other wheeled unit.

These are only available to hire from a number of nationwide boiler hire service providers. They can be installed at short notice and are typically used for boiler failure in care homes and emergency service buildings.







40kW Electric Boiler

100kW Rapid Response Boiler

Example Suppliers:

<u>Cross Rental Services</u> Nationwide Boiler Hire

Andrews Sykes (hire)

# Solutions for different church situations

If churches know what their permanent decarbonised heating solution is going to be, they can use freestanding versions of their final units as a temporary measure, while permissions and permanent installation are arranged.

For churches with small congregations under around 20 people, heated seat cushions with a few heated floor mats often provide a good temporary solution.

For churches with congregations of up to around 50 people, the use of temporary infrared heaters can prove to be a good solution, so long as people are willing to sit together in the same area.

For large churches, or those with larger congregations, the use of temporary boilers or large electric fan heaters are often needed, but can be limited by available power, wiring, access to the boiler room, and are more costly.

It might also be worth considering whether there is an alternative location in which the church can hold events and services, while a permanent solution is sought. This will need to be checked with the diocese in case of any legal implications.

### Dos and Don'ts

Dos	Don'ts	
Plan ahead where possible.	Panic! – There are solutions for temporary heating, none are likely to be a perfect answer but don't let the good be lost in seeking perfection. Consider options calmly and logically.	
Carefully consider how many people you realistically need to heat for and for how long.		
Focus on making people feel thermally comfortable rather than thinking you need to heat the whole church all the time.	Use propane gas cylinders inside the church building. You may not be insured, they can easily catch fire, may expose your congregation to noxious fumes and will	
Beware of low-cost products on internet marketplaces and check that CE markings and electrical safety features are legitimate.	cause harm to the building fabric very quickly.	
	Overload electrical circuits. Take advice from electricians on the maximum loading that is possible.	
Contact your insurer to advise of the change in heating.	Use multiple sockets on an extension lead because this can easily overload the extension cable as heating units tend to be high power. If using a 1:1 extension lead, ensure it is fully unwound as tight coils of cable can overheat.	

# What permissions are currently needed under the Faculty Jurisdiction Rules?

The installation of temporary heating may require List B or faculty permission, depending on what is proposed. Please contact the Church Buildings Team for advice.

### Contact details of Oxford Environment Team for further support and information

environment@oxford.anglican.org

Church House Oxford, Langford Locks, Kidlington, Oxfordshire, OX5 1GF

This is one of a collection of heating guidance notes available <u>here</u>.