Electric Heating Options

As well as heat pumps, there are several other electric heating options which may be suitable for churches.

Infrared panels

Infrared panels use infrared radiation to warm people and objects, rather than warming the air. They can be placed on walls or ceilings, but, as they heat people and objects directly, care must be taken to make sure they aren't obstructed. Care should also be taken when placing the panels, to ensure people don't end up with hot heads and cold feet!

As well as wall-mounted panels, chandeliers are available with infrared heaters within them. These can come with or without lights and the inbuilt infrared panels can be zero light, minimising the visual impact of the heating component. These may be particularly suitable for listed buildings.

As pre-heating the space isn't required, they are low cost to run, particularly if combined with solar PV. The panels can also easily be zoned, so different areas can be heated as building usage varies.

Under pew heaters

Similar to infrared panels, these use electricity to heat people from fixed units under pews. They can be zoned and installed with switches at each unit, so people can turn them on and off to suit their comfort level.

They should only be installed if the church is confident they are going to keep their pews, as they are fixed to the pews themselves and cannot be adapted to seats. They can be combined with infrared panels, to heat areas of a church which doesn't have pews.

Electric boilers

They work the same as a gas boiler, heating water for central heating or hot water from taps. Instead of burning gas to do this, an electrical current is used. They are similar, or better, in efficiency than gas boilers but more expensive to run, due to higher unit prices for electricity than gas. For a small, infrequently used church, they may be a good option, particularly if combined with solar PV to offset the increased cost per unit of energy.

All of these options may require an upgrade from single to three phase electricity supply. Discuss this with your Distribution Network Operator (DNO). Find your DNO here.

For buildings of pre-1919 construction, including listed buildings, it is important to consider the need to maintain a low level constant heat to protect the building fabric. Therefore, in this instance electric heating options should be considered as part of a whole building approach, and should be specified as part of a package of appropriate works by a conservation accredited professional. See our Historic Places of Worship and Climate Change page for more advice on getting to Net Zero for listed buildings and those in Conservation Areas.