Heating Our Churches 2 - Heat the People

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Purposes of this Webinar

- Differentiate space heating and 'heat the people' approaches
- Link to patterns of building use
- Highlight main technologies
- Give examples of successful installations

Different Approaches to Heating

Heat the Space

- Radiators
- Under-floor
- Air conditioning

Warm the air in the space mainly using **convection**



Different Approaches to Heating

Heat the People

- Infra-Red
- Under-pew (or under-floor?)
- Heated cushions

Warm the people and objects in the space mainly using **radiation** OR using localised convective heating



Getting Heating Right - Patterns of Use and Size of Space

- Heat the space smaller, wellused spaces e.g. community centres and halls – require good insulation
- Heat the people larger, infrequent or low-use spaces – insulation less of an issue



Infra-Red Heating

Advantages

- Produces instant warmth
- Warms people and surfaces (and air to a lesser degree)
- Lower cost install than heat pumps
- Can be zoned



Infra-Red Heating

Disadvantages

- Requires 3-phase electricity
- High running costs
- Can be less comfortable for long periods



Under-pew heating

Advantages

- Heat delivered directly to users
- Instant heat
- For small churches, 1-phase is possible (3- better)
- Zoned



Under-pew heating

Disadvantages

- Convective, lower thermal comfort
- High running costs
- Not possible in many modern churches without pews



Heated cushions

Possible uses:

- Low numbers in attendance
- Lone working
- Vulnerable persons
- Used with blankets?
- Advantages cheap and flexible



How do we know what heating is right for us?

- What do we have now? Does it work?
 What do we want a new heating system to do?
- Have an energy audit possibilities emerge
- Is the situation complex? Think about using a heating consultant for help with scoping and design, then ...
- Approach knowledgeable companies for quotes, ideally ones who have previously worked in church/heritage environments.



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- Sign up to our Environment and NZC Newsletter from website
- Have an Eco Link at your church https://forms.office.com/e/6gBZD8w9dT
- Join our webinars next: Solar PV, 29 October, 1pm

https://www.portsmouth.anglican.org/environment/nzcwebinars/

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