lateral thinking volume '

Studio B Architects

Welcome to Studio B's newsletter designed to address a specific subject of interest to many of our clients each month. This follows the practice launch event at St Alfred's Church in August attended by about 80 people.

Auditoria for Church

There are vast range of spaces where Christians gather to corporately worship God. These range from Orthodox Church spaces where symbolism is significant to the worshippers to the large auditorium, similar to a conference centre. Between these lie all major cathedrals, warehouse churches, traditional village churches and multipurpose church complexes. Common to all is a room for gathering to participate together in an important event.

So what makes a successful worship auditorium? I suggest that there are a number of elements which are better determined at the design stage of a new or alteration project. Here are a few:

Size: the room should be sized to see the expected number of participants. If it is less than 40% full the meeting will appear to be undersubscribed or unpopular. If it is greater than 80% full, newcomers may feel that everyone has a place and that they are intruding. Balconies can extend this range.

Interior volume and height: The proportion and shape of the space is vital to people's feeling of comfort and well-being. If not well-proportioned the ceiling height can feel too low or too lofty, as if the building was really designed for some other purpose.

Focus, shape and proximity to platform: To what extent does the room provide for seating "in-the-round"? It is normally considered better to see fellow worshippers across a space rather than backs of heads in rows like a cinema. Every person needs to be able to see the platform and engage with the activity.

Acoustics: Unlike a theatre, people in a church auditorium need to hear the people around them participating in worship. Some sound reflective surfaces can be positioned to provide this. A traditional, choral music style will benefit from hard surfaces and a longer "reverberation time". Contemporary, amplified music and speech needs a



St Aldates in Oxford is a heritage church that has been reconfigured for multi-purpose use including as a worship auditorium.



Saddleback Church in California has a multi-purpose auditorium. Whilst it serves this mid-week conference as well as Sunday, they say that they would do some things differently if they were building again.

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shorter reverberation time with sound absorption carefully located. Acoustic performance should be predicted and designed in from the outset.

Seating: Will the room be reconfigured for other events or is it a dedicated auditorium? This is fundamental to the design of the space. Fixed seating can be on a sloping floor. Movable seating on a level floor can be set out in different ways or used around tables for events with food. There are many criteria for good church seating including comfort, robustness, efficiency of stacking and aesthetics **Lighting**: The usefulness and character of the space is dependent upon what we see. Artificial lighting focuses our attention, reveals the features of the room and allows us to read. If the room is multipurpose, alternative lighting configurations may be needed. We also need to design so that we can change lamps safely. Recent amendments to the Building Code require only low energy fittings to be used.

Audiovisual: In most cases screens and sound amplification will be required. In a

heritage auditorium these need to be provided as discreetly as possible. In all cases it will be important to ensure that screens do not have interference from daylight or artificial lighting.

Environmental comfort:

Current approaches to providing comfort temperature involve very low energy sustainable solutions. Heritage churches have heating challenges, due to their thermal mass. As part of a commitment to sustainability, modern churches are adopting a range acceptable temperatures rather than air conditioning set at 22°C.

Visual connection to nature: Some churches have adopted the warehouse approach with no visual connection to the outside world. In most cases this is in order to fully control daylight interference. However daylighting can be controlled whilst providing a limited visual link to the outside world.



Mariner's Church in Los Angeles provides clear connection to the platform and allows daylight in. Blinds can close off the daylight when required. Being able to use daylight is more sustainable.

These are just a few of the many issues around designing a worship auditorium. We have carried out research in USA, UK and Australia. See also: <u>http://studiob.net.au/</u> work/projects/auditoria

Next month: Heritage in Context.

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Southwark Cathedral in London, like many other cathedrals, has selected a contemporary veneered stacking chair to allow flexible use of the space