



WHEN DOES MUSIC TURN INTO NOISE?

by Matthew Gascoigne, Principal Consultant, Hepworth Acoustics Limited

...When it passes out of the area where it is being enjoyed and affects someone who doesn't want to hear it. One person's leisure can be another person's nightmare if the facilities are not correctly designed and increasing trends in city centre living and mixed-use facilities make correctly designed sound insulation more important.

Although leisure noise impact is an increasingly important subject there are still no nationally agreed criteria governing it and standards differ widely between local authorities. For new build mixed use leisure facilities, generally standards are laid down in contracts but these can vary depending on the consultants involved. Matters are further complicated by the many different parameters for measuring noise and only trained acousticians really understand the significance of changing from one parameter to another.

Some attempts have been made to set down noise assessment criteria and research is ongoing but there is still some way to go before agreement is reached on national standards. In the meantime suitable parameters should be agreed between the parties involved right at the beginning of the design process for any leisure facility. Putting this back to later in the project can lead to costly redesign. Inadequate sound insulation can lead to complaints resulting in action by the landlord or notices served under the Environmental Protection Act.

Generally, music systems are required to have limiting devices and graphic equalisers which are set and sealed to ensure that sound levels are not exceeded by enthusiastic DJs. If there is a complaint, often the only option is to set the limits lower until suitable noise mitigation measures can be added to the building. This can make it impossible to maintain the same trading style and loss of custom may be a consequence.

Sometimes music can turn into noise even for the people who are there to enjoy it. This can happen if the venue and sound system are not designed to provide the correct level of acoustic quality. Changes to geometry and surface treatments can significantly affect the

acoustic feel of a space, so correct design and set-up of the sound system is important to maintain the right atmosphere in each area.

Another reason for music being considered as noise is if it starts to affect the hearing of personnel. New regulations have recently been issued governing noise at work and employers must carry out an assessment and take steps to prevent noise-induced hearing loss. Failure to do this can result in expensive litigation when staff start to make claims for compensation.

Some noise sources may be music to the ears of those who enjoy them but not of those elsewhere in the building. In ten pin bowling the strike and falling of pins can make quite a clatter that is enjoyed by the bowler but not by the viewing audience in the cinema above. By careful design the areas can be acoustically isolated so that the film and bowling experiences can be enjoyed without conflict.

For any type of leisure facility, pubs, clubs, cinemas, casinos, family entertainment centres and many others, acoustic design is an increasingly important matter. Early integration of acoustics into the design can make the process a much more leisurely and stress free experience, giving everyone involved in the project the chance to enjoy their leisure time just as much as the customers.