



ENS Acoustics
consulting

ACOUSTIC CONSULTING

Environmental Noise Solutions (ENS) is an independent acoustic consultancy specialising in noise in the built environment.

We undertake projects that encompass small, local development projects and new school developments through to major developments including large residential developments and hotels.

Our consultants all have a broad range of experience, both in the public and private sector, and who all work to our high standards of delivering the best possible service to our clients in a proactive and responsive manner required by the modern, commercial environment we all work in.



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Residential Care Home

DELIVERING THE SOLUTIONS YOU NEED

With an ever ageing population, the development of new care homes and extra-care communal living centres are key to the long term quality of life of some of our more vulnerable, elderly citizens. Many of the future occupants of such developments will have come from single occupancy homes where the level of noise amenity (quietness) will have been high. It is very reasonable that through only the necessities of age that their lives should be lived out in reasonable peace and quiet.

flexible solutions for extra care developments

Part E – Resistance to the Passage of Sound

We are regularly commissioned to address the sound insulation requirements for new build and converted care homes for the elderly and infirm. In the case of the new build developments we are often requested to achieve sound insulation that is +5dB and +8dB above Building Regulations for a Code for Sustainable Homes Assessment.

The obvious constraint on some care homes for the elderly is that residents' room doors can be quite close together (similar to hotel bedrooms) which can constrain the amount of practical sound insulation that can be provided between rooms. However, there is no reason why a typical minimum of 43dB should not be achieved between such rooms (a standard that is generally required by Building Regulations).

For new build developments, many Robust Standard Details (RSD) are now available that do achieve a high level of sound insulation (+5dB better than the minimum set by Building Regulations) and we would recommend some of the 'higher numbered' RSDs for all new build developments. For conversions, the limitations of original building can and do restrict the options for sound insulation but in most cases a +5dB improvement over Building Regulations is always possible.



THE ON GOING PROJECT

One of the current extra care facilities we are consulting on combined the challenges of achieving +5dB above Building Regulations whilst having ample sound protection from an attached community hall that would be used both for church services and community discos. Through robust design of separating walls and floors a high level of sound insulation is being achieved that will provide excellent noise amenity for both those residents who want to take an early night and those who stay 'forever young' and still like to party the night away!

We also took time to explain to our clients the differences between the various acoustic parameters such as R_w , D_{ntw} , R_w+C_{tr} , $D_{ntw}+C_{tr}$, all of which, if incorrectly applied to any design, can lead to acoustically poor performing partition walls and floors being constructed. This understanding is key to ensuring that when proprietary floor and wall systems are procured that all suppliers have a clear, contractual obligation to as to what specification is required and what needs to be achieved for Building Regulations.

For further details about how ENS Acoustics can help you with sound insulation and acoustics for any new or converted care home that need to satisfy the stringent requirements of Part E of the Building Regulations, please contact:

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