CHAPTER 3 - ACOUSTIC COMFORT

400

403.01 ACOUSTICAL CONTROL

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INTENT

To ensure comfortable acoustic performance through effective acoustic design in the buildings.

REQUIREMENT

For all new buildings, the acoustic performance relating to internal noise criteria from external noise sources, internal noise criteria from mechanical services noise, internal airborne sound insulation guidance values and internal impact sound pressure levels, must meet the control requirements set out in Table 403.01 (1).

Table 403.01(1): Acoustical Control Requirements

Building Type	Document Reference
Villas / Residential* Buildings	Building Regulations Approved Document E (latest version) (UK)
Healthcare Facilities	Health Technical Memorandum 08-01 (UK)
Educational Facilities**	Building Bulletin 93: Acoustic Design of Schools – A design Guide (UK)
Commercial Buildings	Latest BS8233 standard "Sound insulation and noise reduction for buildings – code of practice" (UK)
Industrial Buildings	Latest BS8233 standard "Sound insulation and noise reduction for buildings – code of practice" (UK)
Public Buildings	Latest BS8233 standard "Sound insulation and noise reduction for buildings – code of practice" (UK)

* Residential buildings include Villas, Apartments, Labour Accommodations and Student Accommodations.

** Educational Facilities include Nursery Schools, Primary Schools, Secondary Schools, Colleges and Universities.

SIGNIFICANCE

Noise is an important factor controlling the indoor comfort. Noise affects the comfort, well-being and productivity of building users. High levels of noise can lead to stress, absenteeism, loss of concentration and difficulty in performing cognitive tasks.

This regulation details the acoustical performance required from building elements for specific building types and uses. A good acoustical design helps in controlling the noise from outside the building, noise from plant and services within it and ensures the noise levels in room are moderated.