



Scottish Health Technical Memorandum 2045

(Part 3 of 4)

Validation and verification
and
Operational management

Acoustics

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1. Introduction

- 1.1 Acoustics in healthcare premises requires careful consideration for many reasons. Management have statutory obligations, for example to control noise exposure to workers, along with other responsibilities to provide an environment suitable for the various activities undertaken in hospitals.
- 1.2 Scottish Health Technical Memorandum (SHTM) 2045; *Acoustics*, is published in four separate parts. It is mainly applicable to new sites, but measures have sometimes been given which could also be applied retrospectively to existing premises. It gives comprehensive advice and guidance to healthcare management, design engineers, estates managers and operations managers on the legal requirements, design implications, maintenance and routine measures which should be adopted.
- 1.3 Noise becomes a health hazard when people are exposed to it in large quantities and when it becomes intrusive to an extent that patients and staff are put under stress. Staff work more efficiently and patients may recover more quickly if their noise environment is appropriate.
- 1.4 Noise must be controlled in a number of ways: for example, the interior noise environment must be adequately insulated against local exterior noise sources. Conversely, the site must not significantly affect the exterior noise environment.
- 1.5 Noise from any activity within the premises should not appreciably intrude on other activities. This requires careful positioning of rooms in relation to one another, or provision of sufficient sound insulation for the purpose.
- 1.6 In rooms where communication is important, or low noise levels are essential, additional factors need to be taken into account. For example, proprietary acoustic materials on walls may be required to ensure that speech is intelligible and noise levels created in the room itself do not build up.
- 1.7 In general, the term “noise” also encompasses “vibration”.
- 1.8 This SHTM replaces any acoustic guidance given previously.

