

# 1

## Specification of acoustic performance

**Table 1.2:** Performance standards for airborne sound insulation between spaces - minimum weighted BB93 standardized level difference,  $D_{nT}(T_{mf,max})_w$

Minimum $D_{nT}(T_{mf,max})_w$ (dB)		Activity noise in source room (see Table 1.1)			
		Low	Average	High	Very high
Noise tolerance in receiving room (see Table 1.1)	High	30	35	45	55
	Medium	35	40	50	55
	Low	40	45	55	55
	Very low	45	50	55	60

### NOTES ON TABLE 1.2

**1** Each value in the table is the minimum required to comply with the Building Regulations. A value of 55 dB  $D_{nT}(T_{mf,max})_w$  between two music practice rooms will not mean that the music will be inaudible between the rooms; in many cases, particularly if brass or percussion instruments are played, a higher value is desirable.

**2** Where values greater than 55 dB  $D_{nT}(T_{mf,max})_w$  are required it is advisable to separate the rooms using acoustically less sensitive areas such as corridors and storerooms. Where this is not possible, high performance constructions are likely to be required and specialist advice should be sought.

**3** It is recommended that music rooms should not be placed adjacent to design and technology spaces or art rooms.

**4** These values of  $D_{nT}(T_{mf,max})_w$  include the effect of glazing, doors and other weaknesses in the partition. In general, normal (non-acoustic) doors provide much less sound insulation than the surrounding walls and reduce the overall  $D_{nT}(T_{mf,max})_w$  of the wall considerably, particularly for values above 35 dB  $D_{nT}(T_{mf,max})_w$ . Therefore, doors should not generally be installed in partitions between rooms requiring values above 35 dB  $D_{nT}(T_{mf,max})_w$  unless acoustic doors, door lobbies, or double doors with an airspace are used. This is not normally a problem as rooms are usually accessed via corridors or circulation spaces so that there are at least two doors between noise-sensitive rooms. For more guidance see Section 3.