



The below are some common terms used when acoustics are under consideration;

A-Weighted Decibel, dB(A)	A single number measurement, weighted to consider the response of the sensitivity of human hearing to sound.
Airborne Sound	Sound transmitted through the air, and not through vibrations of structures.
Average Sound Reduction Index, R_m	An un-weighted average of the sound reduction index for the one third octave frequency bands between 100 – 3150 Hz
C	The spectrum adaptation term for medium to high frequency noise, which assists in determining the resistance of the tested material to relevant sound sources. In ISO 717-1:2013, the C curve is a <i>Pink Noise</i> spectrum.
Ctr	The spectrum adaptation term for medium to low frequency noise, which better indicates the performance of the tested material to relevant sound sources. In ISO 717-1:2013, the Ctr curve is an urban traffic noise spectrum.
Coincidence Dip	A loss in performance at a <i>Critical Frequency</i> , dependent upon the materials stiffness and thickness
Critical Frequency	The frequency at which the coincidence dip occurs, typically at (12,500/thickness) Hz for float glass.
dB, Decibel	A logarithmic unit for the magnitude of sound pressure, power and insulation.
dB(A)	See <i>A-Weighted Decibel</i>
$D_{nT,w}$	See Weighted Standardised Level Difference
Equivalent Continuous Sound Level, $L_{eq,T}$	A single value for sound pressure level, equivalent to the total sound energy, over a period of time.
Flanking Transmission	The transmission of sound through the structure of a building as opposed to other elements, such as glazing.
Frequency	The sound generation rate, which equates to the number of vibrations or waves per second.
Hearing Range	Typically for humans, this falls between 20 Hz and 20,000 Hz, and is most sensitive between 1000 – 5000 Hz. See also <i>A-Weighted Decibel</i>
Hertz, Hz	The unit of frequency, seconds ⁻¹ .
Loudness	The subjective impression of changes in the magnitude of sound levels. Typically, 10 dB equates to a perceived doubling of volume.

$L_{eq,t}$	The equivalent continuous noise level measured over the time period, t.
$LA_{eq,T}$	A-weighting of the Equivalent Continuous Sound Level L_{eq} , to adjust for human hearing sensitivity.
$L_{90,t}$	A noise level exceeded for 90% of the measured time, t. Sometimes referred to as the average minimum noise level, or background noise.
$L_{10,t}$	A noise level exceeded for 10% of the measured time, t. Sometimes referred as the average maximum noise level, and applied to road traffic noise.
L_{max}	The maximum noise level measured during the time period, t. This accounts for sounds that may not otherwise influence the L_{eq} rating but can cause disturbance.
Noise	Defined as unwanted sound, which can disturb, distress or at worst damage hearing. Noise is considered subjective.
Octave Band Center Frequencies	The range of frequencies typically used for noise assessments.
One-Third Octave Band Centre Frequencies	The range of frequencies typically used for the laboratory based measurement of the acoustic performance of materials.
Phon	A unit for the loudness level of a sound at the 1000 Hz frequency. dB(A) is now more commonly used.
Pink Noise	A broadband noise, with no particular dominant frequency range.
Pitch	A subjective measure related to frequency. Higher frequency sounds are considered to have a higher pitch.
R_A	Weighted reduction for pink noise (as $R_{w,C}$)
$R_{A,tr}$	Weighted reduction for traffic noise (as $R_{w,C,tr}$)
R_m	See <i>Average Sound Reduction Index</i> , R_m
R_w	See <i>Weighted Sound Reduction Index</i>
Sound Pressure Level, SPL	The relationship between a sound reference pressure (20 μ Pa) to a given pressure.
Sound Reduction Index, SRI	T value for the reduction of sound by a material or construction as determined by testing in accordance with ISO 10104-2:2010 or ISO 140-3:1995
Weighted Sound Reduction Index, R_w	A single value rating for the acoustic performance of a material, weighted for the response of human hearing. This is calculated in accordance with ISO 717-1:2013 within Europe and elsewhere.
Weighted Standardised Level Difference, $D_{nT,w}$	A single weighted values of the airborne sound transmission, obtained from field (non-laboratory) measurements. As this is a field measurement, it will include flanking transmission effects.