Glossary of Acoustic Terms

A weighting	A filter used which correlates to the perceived loudness for human hearing where the low frequencies and higher frequencies are supressed
Decibel (dB)	A relative unit of measurement widely used in acoustics. The dB is a logarithmic ratio between the measured level and a reference (threshold) level of 0dB (20 micro Pascals)
Sound	Any air pressure variation the human ear can detect ranging from 0dB to 140 dB measured by a sound level meter or other measuring system
Noise	Related to human response and is routinely described as unwanted sound or sound that is considered undesirable
Equivalent continuous A-weighted sound pressure level, $L_{Aeq,T}$	Value of the A-weighted sound pressure level in decibels of continuous steady sound that, within a specified time interval, $T = t_2 - t_1$, has the same mean-squared sound pressure as a sound that varies with time
Fast time weighting	The time-averaging characteristics with the fast 'F' weighting used to measured fluctuating or oscillating quantities every 125 ms
Ambient sound	Totally encompassing sound in a given situation at a given time, usually composed of sound from many sources near and far
Ambient sound level, $L_a = L_{Aeq,T}$	Equivalent continuous A-weighted sound pressure level of the totally encompassing sound in a given situation at a given time, usually from many sources near and far, at the assessment location over a given time interval, T
Residual sound	Ambient sound remaining at the assessment location when the specific sound source is suppressed to such a degree that it does not contribute to the ambient sound
Residual sound level, $L_r = L_{Aeq,T}$	Equivalent continuous A-weighted sound pressure level of the residual sound at the assessment location over a given time interval, T

Background sound level, $L_{A90,T}$	A-weighted sound pressure level that is exceeded by the residual sound at the assessment location for 90% of a given time interval, T, measured using the time weighting 'F' and quoted to the nearest whole number of decibels
Specific sound level, $L_s = L_{Aeq,Tr}$	Equivalent continuous A-weighted sound pressure level produced by the specific sound source at the assessment location over a given reference time interval, T_r
R_w	Laboratory measurement of the weighted sound reduction index of the sound insulating properties of a material or building element
$R_W + C_{tr}$	Weighted sound reduction index with spectrum adaptation term to consider different spectra of noises such as road traffic noise