

APPENDIX A – GLOSSARY OF ACOUSTIC TERMINOLOGY

Sound Pressure Level (LP) A logarithmic ratio of a sound pressure measured at distance, relative to the threshold of hearing (20 μ Pa RMS) and expressed in decibels.

Sound Power Level (L_W) A logarithmic ratio of the acoustic power output of a source relative to 10-12 watts and expressed in decibels. Sound power level is calculated from measured sound pressure levels.

dB Decibel – A measurement of sound level expressed as a logarithmic ratio of sound pressure P relative to a reference pressure of $P_r=20 \mu\text{Pa}$
i.e. $\text{dB} = 20 \times \log(P/P_r)$.

dB(A) A measurement of sound level which has its frequency characteristics modified by a filter (A-weighted) so as to more closely approximate the frequency bias of the human ear.

A-weighting The process by which noise levels are corrected to account for the non-linear frequency response of the human ear.
All noise levels are quoted relative to a sound pressure of 2×10^{-5} Pa.

$L_{Aeq}(t)$ The equivalent continuous (time-averaged) A-weighted sound level. This is commonly referred to as the average noise level. The suffix "t" represents the time period to which the noise level relates.

L_{Amax} The A-weighted maximum noise level. The highest noise level which occurs during the measurement period.