

Appendix 12A

GLOSSARY OF TERMS

Glossary of Terms for Noise Chapter

| Terminology | Description |
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| Acoustic Barrier | The presence of a solid barrier (natural landform or manmade) between a source of sound and a receiver that interrupts the direct line of sight between the two, thus reducing the sound level at the receiver compared to that in the absence of the barrier. |
| Acoustic Character | One or more distinctive features of a sound (e.g. tones, whines, whistles, impulses) that set it apart from the background noise against which it is being judged, possibly leading to a greater subjective effect than the level of the sound alone might suggest Brüel & Kjær Type 2250 Light SLM |
| Ambient Noise | Encompassing sound, at a given place. Usually, a composite of sounds from many sources near and far. Brüel & Kjær Type 2250 Light SLM |
| Annoyance | A feeling of displeasure in this case evoked by noise |
| Attenuation | The reduction in level of a sound between the source and a receiver due to any combination of effects including: distance, atmospheric absorption, acoustic screening, the presence of a building façade, etc. Brüel & Kjær Type 2250 Light SLM |
| Audio Frequency | Any frequency of a sound wave that lies within the frequency limits of audibility of a healthy human ear, generally accepted as being from 20 Hz to 20,000 Hz |
| A-weighting | Frequency weighting scale to account for non-linear response of the human ear. Used so that the measured noise corresponds roughly to the overall level of noise that is discerned by the average human. Denoted by suffix A in parameters such as LAeq, LAF10, etc. |
| Background Noise | A-weighted noise level of exceeded for 90% of the measurement time. Denoted LAF90. Often classed according to day time, evening or night time periods. |
| dB | Abbreviation for 'decibel' |
| dB(A) | Abbreviation for the decibel level of a sound that has been A-weighted |
| Decibel | The unit normally employed to measure the magnitude of sound |
| Directivity | The property of a sound source that causes more sound to be radiated in one direction than another |
| LAeq, T | Equivalent continuous A-weighted sound pressure level. The value of the 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 |
| LAF | The RMS (root mean square) of the instantaneous sound pressure over a given period of time (T). T is usually Fast (0.125sec) or Slow (1sec) |
| LAF10 | The noise level just exceeded for 10% of the measurement period, A-weighted and calculated by Statistical Analysis. |
| LAF90 | The noise level exceeded for 90% of the measurement period, A-weighted and calculated by Statistical Analysis. |
| LAr,T | The Rated noise level. The A-weighted, Leq, Sound Pressure Level of an industrial noise during a specified time period, adjusted for Tonal, Impulsiveness and other characteristics. |
| External Noise | The noise level, in decibels, measured outside a building |

| Terminology | Description |
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| Filter | A device for separating components of an acoustic signal on the basis of their frequencies |
| Frequency | The number of acoustic pressure fluctuations per second occurring about the atmospheric mean pressure (also known as the 'pitch' of |
| Frequency Analysis | The analysis of a sound into its frequency components |
| Ground Effects | The modification of sound at a receiver location due to the interaction of the sound wave with the ground along its propagation path from source to receiver |
| Hertz | The unit normally employed to measure the frequency of a sound, equal to cycles per second of acoustic pressure fluctuations about the atmospheric mean pressure |
| Impulsive Sound | A sound having all its energy concentrated in a very short time period |
| Internal Noise | The noise level, in decibels, measured inside a building |