

APPENDIX 1

TERMINOLOGY USED IN THE MEASUREMENT AND ASSESSMENT OF SOUND

Certain of the terms used in SANS 10103 are listed hereunder. Their meanings are in certain instances loosely described to facilitate understanding. Formal definitions of these and additional terms are contained in SANS 10103.

Ambient noise

the totally encompassing sound in a given situation at a given time, and is usually composed of sound from many sources, both near and far. It includes the noise from the noise source(s) under investigation.

A-weighted sound pressure level (sound level), L_{pA}

the sound pressure level, in decibels, relative to a reference sound pressure, and incorporating an electrical filter network in the measuring instrument corresponding with the human ear's different sensitivity to sound at different frequencies.

A-weighted sound exposure level, $L_{AE,T}$

The value of the A-weighted sound pressure level of a single sound exposure that, within a reference time interval T , of one second, has the same mean-square sound pressure as a sound under consideration whose sound pressure level varies with time.

Equivalent continuous A-weighted sound pressure level, $L_{Aeq,T}$

A formal definition is contained in SANS 10103. The term "equivalent continuous" may be understood to mean the "average" A-weighted sound level measured continuously, or calculated, over a period of time, T .

Equivalent continuous rating level, $L_{Req,T}$

the equivalent continuous A-weighted sound pressure level, $L_{Aeq,T}$, measured or calculated during a specified time interval T , to which is added adjustments for tonal character, impulsiveness of the sound and the time of day.

An adjustment of 5 dB is added for any tonal character, if present. If the noise is of an impulsive nature a further adjustment of either 5 or 12 dB, or a value derived in accordance with Section 5.1.6.1 of the Standard is added. Where neither is present, the $L_{Req,T}$ is equal to the $L_{Aeq,T}$.

Reference time interval

The time interval to which an equivalent continuous A-weighted sound pressure level, $L_{Aeq,T}$, or rating level of noise, $L_{Req,T}$, is referred. Unless otherwise indicated, the reference time interval is interpreted as follows:

- Day-time : 06:00 to 22:00 $T = 16$ hours
- Night-time: 22:00 to 06:00 $T = 8$ hours

Residual noise

The ambient noise that remains at a given position in a given situation when one or more specific noises (usually those under investigation) are suppressed.