

Article 2

The terms used in these Standards are defined as follows:

- I. Control zone: Refers to Class 1-4 noise control zones as specified in the Noise Control Zone Delineation Operating Standards.
- II. Noise level: Use of decibels adjusted (dB (A)) means the A-weighted value of the noise level.
- III. Background noise level: Refers to the noise level apart from the noise source to be measured.
- IV. Peripheral boundary: Refers to the boundary lines managed or used by premises or facilities. When a premise or facility is isolated by an obvious surrounding wall, the wall shall serve as the boundary; when there is no physical separation, the property scope or scope within which the members of the public do not commonly enter shall be the boundary.
- V. Time Periods
 - A. Daytime: Refers to from 7:00 a.m. to 7:00 p.m. in all control zones regardless of the Class.
 - B. Evening: Refers to from 7:00 p.m. to 10:00 p.m. in Class 1 and 2 control zones, and from 7:00 p.m. to 11:00 p.m. in Class 3 and 4 control zones.
 - C. Nighttime: Refers to from 10:00 p.m. to 7:00 a.m. on the following day in Class 1 and 2 control zones, and from 11:00 p.m. to 7:00 a.m. on the following day in Class 3 and 4 control zones.
- VI. Equivalent noise level: Refers to the average energy value of the measured noise level during a specific time period. Equivalent noise level of from 20 Hz up to 20 kHz is expressed as L_{eq} , and from 20 Hz up to 200 Hz is expressed as $L_{eq,LF}$; the following calculation formula is used:
 - A.
$$L_{eq} = 10 \log \frac{1}{T} \int_0^T \left(\frac{P_t}{P_0} \right)^2 dt$$
 - A. T : Measurement time, expressed in seconds.
 - B. P_t : Measured sound pressure, in units of Pascals (Pa) .
 - C. P_0 : Baseline sound pressure of 20 μ Pa .
 - B.
$$L_{eq,LF} = 10 \times \log \sum_{n=20 \text{ Hz}}^{200 \text{ Hz}} 10^{0.1 \times L_{eq,n}}$$
 - A. $L_{eq,n}$: 1/3 octave band filters are used to measure the equivalent noise level of each 1/3 octave band.
 - B. n : Center frequency of the 1/3 octave band from 20 Hz up to 200 Hz.
- VII. Maximum noise level (L_{max}): The maximum noise level value measured during the measurement period.
- VIII. The combined noise level: Means the noise level of a measured location in which the noise level is created and by two or more facilities.
- IX. Periodical Variation: Means the cycle of producing noise is roughly the same.

- X. Intermittent Variation: Means the cycle of producing noise is irregular.
- XI. Percentage Noise level (L_x): Shows that the time scale percentage x% during the measurement period, where its noise is bigger or equals to that level.
- XII. Factory plants or sites: Refers to locations that manufacture, process or repair products by using manpower or machines.
- XIII. Entertainment and business premises: Refers to commercial, leisure, food and drink or consumption locations with business activities.
- XIV. Construction projects: Refers to the activities performed above or underneath the ground for building, augmenting, altering, repairing, or dismantling structures and their respective auxiliary equipment/facilities, or reforming natural environment.
- XV. Public address facilities: Refers to devices that receive sound (with functions of attaching external microphone and sound receiver) and equipments or facilities that amplify the noise level.
- XVI. Overall Noise Level: Refers to the sum of the noise level of the noise source being measured and the background noise level.