

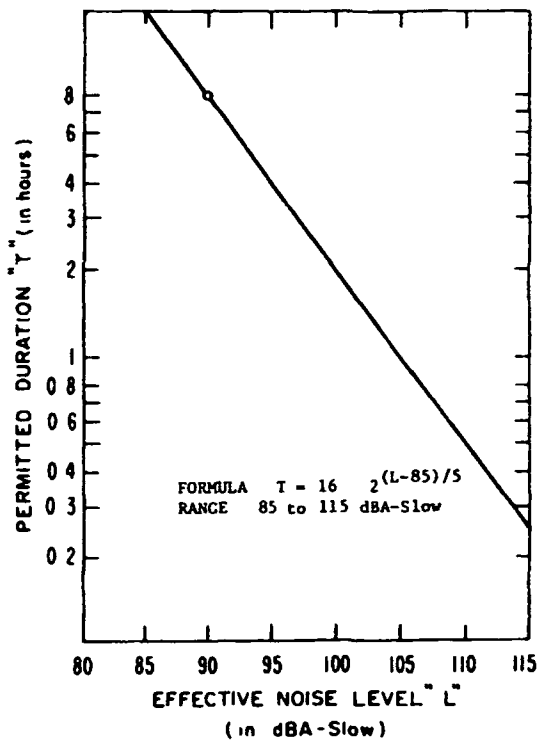


Figure 1910.95-1 Permitted duration vs noise level

ards Institute, 1430 Broadway, New York, NY 10018

(iv) ANS Z24.22—American National Standards Method for the Measurement of the Real-Ear Attenuation of Ear Protectors at Threshold, Z24.22-1957, American National Standards Institute, 1430 Broadway, New York, NY 10018

(v) American Industrial Hygiene Association Journal, 27 303-306, (May-June, 1966) Reprints are available from the American Industrial Hygiene Association, 66 S Miller Road, Akron, Ohio 44313

(vi) Council for Accreditation of Occupational Hearing Technicians, 1721 Pine Street, Philadelphia, Pa 19103

(vii) ISO R389—International Organization for Standardization Recommendation R389-1964, Standard Reference Zero for the Calibration of Pure Tone Audiometers, including Addendum 1-1970

(b) Occupational noise exposure limits.

(1) *Steady-state noise—single level* Exposures to continuous or interrupted steady state noise at a single level may not exceed a time amount "T" computed by the formula

$$T = \frac{16}{2^{(L-85)/5}}$$

where "L" is the effective noise level measured in dBA on the slow scale of a standard sound-level meter

A plot of T vs L is provided in Figure 1910.95-1

(2) *Steady-state noise—two or more levels* Exposures to continuous or interrupted steady-state noise at two or more levels may not exceed a daily noise dose "D" of unity where "D" is computed by the formula

$$D = \frac{C_1}{T_1} + \frac{C_2}{T_2} + \frac{C_n}{T_n}$$

where C is the actual duration of exposure at a given steady-state noise level, and

T is the noise exposure limit for the level present during the time C, computed by the formula in (1) of this paragraph

(3) *Maximum steady-state noise level* Exposures to continuous or interrupted steady-state noise may not exceed levels of 115 dBA, regardless of any value computed in (1) or (2) of this paragraph

(4) *Impulse or impact noise* Exposures to impulse or impact noise may not exceed an effective level of 140 dB peak sound pressure

(c) Measurements

(1) Unit of measurement

(i) The unit of measurement for continuous or interrupted steady-state sound shall be dBA

(ii) The unit of measurement for impact or impulsive sound shall be dB peak sound pressure level, reference 0.0002 microbar (0.2×10^{-5} newtons per square meter)

(2) Instrumentation

(i) Measurements of steady-state noise exposures shall be done with a sound-level meter conforming as a minimum to the requirements of ANS S1.4 Type 2, and set to use an A-weighted slow response, or with a NIOSH certified audiodosimeter,