

## Glossary

**Acoustics:** The science of Sound. Its production, transmission and effects. The branch of physics that treats the phenomena and laws of sounds as it effects people.

**Architectural acoustics:** The control of noise in a building space to adequately support the communications function within the space and its effect on the occupants. The qualities of the building materials used determine its character with respect to distinct hearing.

**Ambient noise/sound:** Noise level in a space from all sources such as HVAC or extraneous sounds from outside the space. Masking sound or low-level background music can contribute to ambient level of sound or noise.

**DECIBEL (dB):** Sound level in decibels as a logarithmic ratio. Sound intensity described in decibels. i.e.:

Breathing – 5 dB

Office Activity – 50 dB

Jet Aircraft During Takeoff at 300' Distance – 130 dBs

**Impact sound:** The sound produced by the collision of two solid objects. Typical sources are footsteps, dropped objects, etc., on an interior surface (wall, floor, or ceiling) of a building.

**Noise reduction (NR):** The amount of noise that is reduced through the introduction of sound absorbing materials. The level (in decibels) of sound reduced on a logarithmic basis.

**Reverberation:** The time taken for sound to decay 60 dB to 1/1,000,000 of its original sound level after the sound source has stopped. Sound after it has ended will continue to reflect off surfaces until the wave loses enough energy by absorption to eventually die out. Reverberation time is the basic acoustical property of a room which depends only on its dimensions and the absorptive properties of its surfaces and contents. Reverberation has an important impact on speech intelligibility.

**Reverberation time:** Sound after it is ended at the source will continue to reflect off surfaces until the sound wave loses energy by absorption to eventually die out.