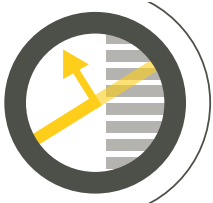
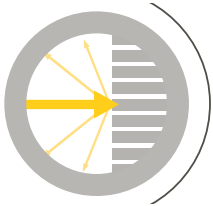


# GLOSSARY OF ACOUSTIC TERMS



## ABSORPTION

In acoustics, absorption refers to the dampening or reduction of sound as it bounces off a given surface. The higher the absorption, the more the sound is reduced. LINEA products to consider for absorption include Grille, Plank, Mixed Grille, Acoustic Kerf T&G and LINEA Ceiling Tiles. Examples of spaces that will benefit from the installation of our products are theatres, classrooms and large gathering spaces.



## DIFFUSION

The efficacy with which sound is evenly distributed over a given environment. A well-diffused acoustic environment results in a balanced, and typically attractive sound response.



## REFLECTION

In acoustics, reflection refers to the perfect transferral of sound as it bounces off a surface. Perfect reflection will result in a zero loss of sound from material contact. Solid, unperforated surfaces will offer the highest acoustic reflection. LINEA products to consider for High Acoustic Reflection include Tongue & Groove, Non-Perforated Ceiling Tiles, Non-Perforated Wall Panels.



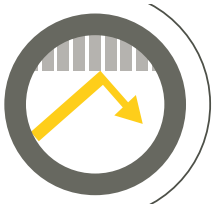
## NRC—Noise Reduction Coefficient

A numeric representation of the level of sound absorption of a given surface. The scale goes from zero—perfect reflection to one—perfect absorption. This scale is used to measure the effectiveness of ceiling tiles, baffles, and other acoustic design materials.



## SAA—Sound Absorption Average

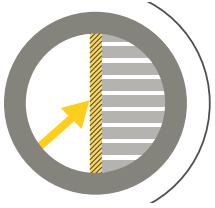
Is similar to NRC, an average of sound absorption across the acoustic spectrum.



## ARTICULATION CLASS

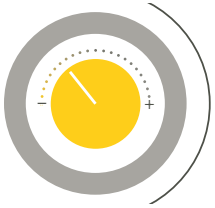
Used to classify dropped ceiling systems according to their ability to provide acoustic privacy within a modulated workspace. It can indicate which ceiling materials best muffle separated workspaces in an open office environment. LINEA products to consider Acoustic Kerf T&G and LINEA Ceiling Tiles.

# GLOSSARY OF ACOUSTIC TERMS



## **BLOCKING**

Refers to stopping the transferral of sound through a partition, surface or material.



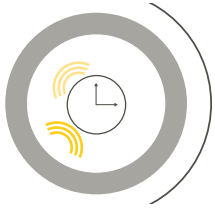
## **DECIBEL**

Most commonly used measurement of sound level.  
The scale starts at one—a mouse and can range upwards of 140—a jet engine.  
The most desirable office environment decibel level hovers around 50.



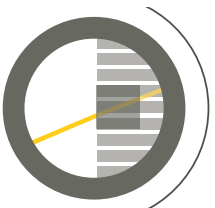
## **REVERBERATION**

The persistence in a sound after that sound is produced. An echo is a form of reverberation and is particularly offensive in an office environment. Solid, unperforated surfaces will offer the highest acoustic reflection. LINEA products to consider for High Acoustic reflection include Tongue and Groove, Non-Perforated Ceiling Tiles, Non-Perforated Wall Panels.



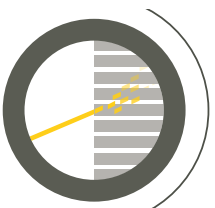
## **REVERBERATION TIME**

The amount of time it takes for reverberation to fade away in a closed space.  
RT60 is the time it takes for the sound pressure level to reduce by 60dB, and is the standard measurement used in most room acoustic calculations.



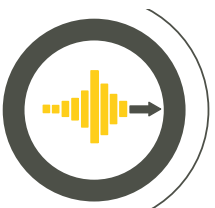
## **SABINS**

A unit of sound absorption.  
One square foot of 100% absorbing material has a value of one Imperial Sabin.  
One square meter of 100% absorbing material has a value of one metric Sabin.



## **SOUND ATTENUATION**

When sound travels through a medium, its intensity diminishes with distance. Natural materials, however, all produce an effect which further weakens the sound. This further weakening results from scattering and absorption. Scattering is the reflection of the sound in directions other than its original direction of propagation. Absorption is the conversion of sound energy to other forms of energy. The combined effect of scattering and absorption is called attenuation.



## **STC—Sound Transmission Class**

A numeric rating system used to measure the airborne attenuation of sound through a building material or partition assembly. For example, an insulated wall will have a higher STC rating than an uninsulated one.