

# Sound Absorption: Values & Classes

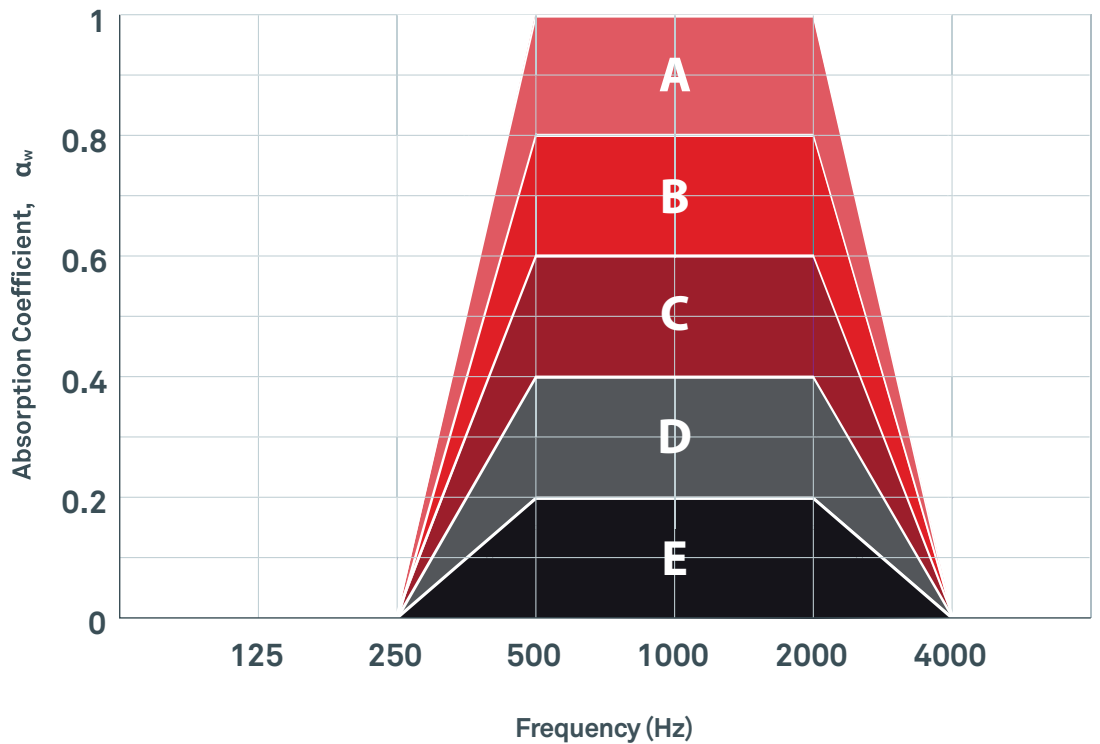
Sound absorption properties are measured by the sound absorption coefficient,  $\alpha$ , (alpha), as a function of the frequency. Alpha ( $\alpha$ ) ranges from 0 to 1.00 (from total reflection to total absorption).

To quickly identify and compare a product's effectiveness in terms of sound absorption, we can class them on a scale from A (being the highest rated, for example Creatif's ReSound acoustic panels) to E (being the lowest rated, for example a sheet of glass).

Materials are first tested in order to obtain absorption coefficient values over a range of standard test frequencies. This is carried out in accordance to BS EN ISO 354.

An 'absorption curve' is then created by plotting the tested frequencies onto a graph. The sound absorption class (A to E) is determined by comparing these values against a 'reference curve'. The end result is in a weighted sound absorption coefficient ( $\alpha_w$ ), calculated in accordance with BS EN ISO 11654.

## Sound absorption table



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