Room acoustics and technical noise protection

Bilz acoustic elements enable optimized room acoustics and airborne noise insulation in office and industrial buildings, laboratories and test cells.

Our high-quality solutions for absorbing noise energy are distinguished by maximum noise insulation and minimisation of the associated sound pressure levels and the resulting resonance period.
When a sound wave strikes a body it is partially absorbed and partially reflected depending on the hardness and porosity of the material. The ratio between the occurring and absorbed sound energy is therefore the sound absorption coefficient, which usually lies between 0 (complete reflection) and 1 (complete absorption).

The sound absorption $E_A$ therefore indicates the process of reducing sound energy $E_0$ in particular (but not necessarily) by conversion into heat.

The distinction from dissipation $E_D$ is that this exclusively refers to the conversion into energy other than sound, in particular heat.

Source: Binnig and Rohrer Nanotechnology Center (IBM Research, Zurich).

Bilz absorber foam element. Excellent insulation properties due to its distinctive profiling.

Bilz acoustic elements are available in various versions to match individual requirements such as wall elements, ceiling sails, enclosures, etc. Our delivery range also includes impact resistant, non-flammable (material class A2 according to DIN 4102) to suit the particular application.

The material can also be colour dyed or covered with printable fabric on request.

For further information about our products and installation services please call to arrange a personal consultation.