

## Diathonite Acoustix

Fiber-reinforced, ecological, sound absorbing and breathable mortar with improved sound absorption capacity (such as Diathonite Acoustix) formulated with natural raw materials such as cork (grain size 0-3 mm | 0 - 0.12 in), clay, diatomaceous earth powder and hydraulic binder. Recyclable as an inert material at the end of its life, it is ideal for sound-absorbing wall and ceiling coverings in cinemas, auditoriums, conference halls, places of worship, sports facilities and, in general, all large environments where it is necessary to reduce noise. The product is also ideal for the noise reduction of facades and partition walls. Pre-mixed product packaged in bags. The porosity that characterises its structure and the presence of natural hydraulic lime also make the plaster bacteriostatic and anti-mould. Pre-mixed product packaged in bags, which benefits from double CE marking (EN 998-1, EN 998-2) and contributes to LEED® credits. Minimum required characteristics: Thermal Conductivity ( $\lambda$ ) 0.083 W/mK; Vapour permeability Coefficient  $\mu$ =4; Compressive strength 5.3 N/mm<sup>2</sup> 768.7 lbf/in<sup>2</sup> (psi); Flexural strength 1.9 N/mm<sup>2</sup> | 273.6 lbf/in<sup>2</sup> (psi); Adhesion onto the support (brick) 0.258 MPa=N/mm<sup>2</sup> | 435.11 lbf/in<sup>2</sup> (psi) | 62656 psf; Chloride content 0.018 ± 0.003%; Re action to fire – Class A1; Noise Reduction Coefficient (NRC) = 0.60, for a thickness 3 cm / 1.18 in; Sound absorption average (SAA) 0.72, for a thickness 3 cm / 1.18 in; Single value of sound absorption ( $\alpha_w$ ) = 0.65, for a thickness 3 cm / 1.18 in; Sound absorption class – C, for a thickness 3 cm / 1.18 in; Acoustic absorption between 600 and 1500 [Hz] =  $\alpha > 70$ , for a thickness 3 cm / 1.18 in; Increase in the Sound Insulation Rating Index (R<sub>w</sub>) compared to traditional plaster – 3 dB.







