

Diathonite Evolution

Pre-mixed eco-friendly fiberreinforced and highly breathable mortar (such as **Diathonite Evolution**), formulated with natural raw materials such as cork (grain size 0 – 3 mm / 0 – 0.12 inches), natural hydraulic lime NHL 3.5, clay and diatomaceous earth powders, characterized by antibacterial properties. It is suitable for application on special guides, flat or curved, vertical and horizontal surfaces. The product has good fire reaction characteristics and is recyclable as an inert material at the end of its life. It is indeed a product that merges the ability of cork to insulate from cold and that of stone, which is the insulation from heat. 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 (λ) 0.045 W/mK; Specific heat capacity (c) 1000 J/kgK | 0.239 kcal/kg°C; Thermal diffusivity (a) $0.125 \times 10^{-6} \text{ m}^2/\text{s}$; Vapour permeability Coefficient $\mu=4$; Water absorption by Capillarity 0.40 kg/m²min^{0.5}; Compressive strength 2.95 N/mm² | 427.9 lbf/in² (psi) | 6.161×10^4 psf; Flexural strength 1.5 N/mm² | 217.6 lbf/in² (psi) | 3.13×10^4 psf; Dried mortar porosity 71.64 %; Adhesion onto the support (brick) 0.10 MPa=N/mm² | 14.5 lbf/in²; Adhesion on tuff 0.201 MPa=N/mm² | 29.15 lbf/in²; Marble adhesion onto *Diathonite Evolution* 0.241 MPa=N/mm² | 34.95 lbf/in²; Stone adhesion onto *Diathonite Evolution* 0.241 MPa=N/mm² | 34.95 lbf/in²; Tensile secant modulus 742 N/mm² | 107618 lbf/in²; Reaction to fire – Class A1.

DIASEN srl

Zona Ind. Berbentina, 5 60041 Sassoferrato (AN) - ITALY
Tel. +39 0732 9718 - Fax +39 0732 971899 - diasen@diasen.com - www.diasen.com

PARTITA IVA 01553210426 - R.E.A. Ancona n.150933
Reg.Imp. Ancona 01553210426 - Cap. Soc. €400.000,00 i.v.

