

Technical Datasheet

BAU ECO 50

Fibre-reinforced coarse grain adhesive for thermal insulation panels

Description

BAU ECO 50 is a coarse grain cement-based adhesive, enriched with polymers (resins) and fibre-reinforced. It provides high initial and final adhesive strength and resistance to moisture. It is suitable for fixing thermal-insulation boards of extruded or expanded polystyrene, mineral wool, polyurethane, etc. on facades made of concrete, render, or masonry. Moreover, when reinforced with fiberglass mesh and applied on the exterior side of fixed thermal-insulation boards, it constitutes the ideal substrate for the subsequent render layer.

Compatible substrates

Bonds foam insulation materials (extruded/expanded polystyrene) and fibrous insulation materials (rockwool) on surfaces of:

- Floor Screed
- Plaster
- Plywood – OSB (primer BAU AD is recommended)
- Concrete
- Plasterboard
- Cement boards
- Aerated concrete
- Bricks

Incompatible substrates

- Surfaces painted with lime-based coatings
- Surfaces painted with oil-based paints, lacquer, or enamel

Substrate preparation

Ensure that surfaces are sufficiently firm, dry and clean. Remove loose or detached fragments, dirt, oil, dust etc. Remove unstable paint coats from painted surfaces. Surfaces infected with fungi or algae must be thoroughly cleaned. Recently plastered surfaces must be left to cure for approximately 3 – 4 weeks. (Allow approximately 7-10 days for each cm of plaster thickness) prior to material application. For concrete surfaces allow at least 28 days for curing. It is recommended that it is dampened before application.

On smooth substrates it is recommended to use a suitable primer (BAU AD).

Mixture preparation

Add progressively BAU ECO 50 in the container with clean water, stirring continuously. A low speed electric mixer (approx. 300 rpm) is recommended for mixing. After mixing the preparation is ready for use. Using excess water will not improve material workability; on the contrary, it may result in excessive setting shrinkage and reduction of final material performance in terms of surface hardness, adhesion and compressive strength.

Instruction of use

As adhesive:

On smooth substrates the adhesive is spread on the surface and combed using a notched trowel in order to be uniformly applied on the whole of the surface. On uneven substrates the adhesive is applied with a trowel around the perimeter of the thermal-insulation board and in selected spots in the center. Next, the thermo-insulation boards are fixed by pressing them on the desired position.

As reinforced mortar:

Initially the material is applied using a notched trowel or with a smooth trowel in a maximum thickness of 3-4 mm. On the still fresh layer the fiberglass mesh is placed and pressed with the smooth trowel to get fully encased in the adhesive. Finally, the surface is smoothed out and the excess adhesive is removed.

Application is not recommended under extreme solar radiance (temperature greater than 35 °C) or rainfall, or in periods when temperature is expected to drop below 5° C.

Technical Datasheet

BAU ECO 50

Fibre-reinforced coarse grain adhesive for thermal insulation panels

Technical features

Form: Cementitious dry mortar
Colors White or grey
Shrinkage Zero
Pot life: At least 4 hours
Density of dry mortar: 1.400 kg/m ³
Application temperature: +5°C to +35°C
Open application time At least 20 minutes
Adhesive strength to concrete: ≥1.5 N/mm ²
Temperature resistance: -30° C to +90° C
Adhesive strength after 28 days EN 998-1 ≥1.5 N/mm ²
Adhesive strength after water immersion EN 998-1 ≥0,7 N/mm ²
Adhesive strength on brick wall: ≥ 0.90 N/mm ²
Adhesive strength on polystyrene ≥ 0.14 N/mm ²
Water vapour permeability coefficient: μ): 25

. It is classified as a GP CS IV W2 rendering mortar according to EN 998-1


Consumption

As adhesive: 2-5 kg/m², depending on the trowel's notch size and the nature of the substrate.
As reinforced mortar: approximately 1.5 kg/m²/mm.

Technical Datasheet

BAU ECO 50

Fibre-reinforced coarse grain adhesive for thermal insulation panels


2011
EN 998-1
General purpose rendering mortar (GP) for external use

Packages

25 kg heavy duty paper bags. 1500 kg pallets.

Tool cleaning

The tools and the application components must be cleaned with water immediately after the use. Cured and hardened material can be cleaned only with mechanical methods.

Storage

12 months from production date, stored in original, packaging, in places protected from moisture.

The product contributes to USGBC building certification by collecting LEED POINTS.

Precautions and safety

The product contains cement and is classified as an irritant. No special precautions are necessary for product application except for standard precautions applicable to all construction operations, i.e. using gloves and goggles; preventing prolonged skin contact; etc. In case of eye contact, immediately wash with plenty of water and seek medical advice if necessary. Collect empty bags and plastic covers and dispose of in refuse bins designated for this purpose. Consult instructions for safe use indicated on product packaging. For more information please refer to the material safety data sheet of the specific product.

Notes

Technical details, properties, recommendations and information on BAUSKIN products are supplied in good faith. They are based on the company's research and experience, provided that they are stored and applied under normal conditions. As the method of using materials as well as project and environment conditions are beyond the control of the company in each individual application setting, the product user is held solely responsible for the result of application. No responsibility under any legitimate relationship can be substantiated against the company, based on the information set out hereunder. Product users are advised to refer to the latest revision of the technical manuals available.

Technical Datasheet

BAU ECO 50

Fibre-reinforced coarse grain adhesive for thermal insulation panels

Exclusive distribution for Greece:

BAUFOX Ltd

Email: info@baufox.com

www.baufox.com

Exclusive distribution for Cyprus:

ALTO CEMENTOCHEMICA KA Ltd

Email: info@altocy.com

www.altocy.com