

# KAPA 11

Polymer modified fiber-reinforced adhesive and reinforcement coating for thermal insulation panels.

## Description

Polymer modified, fiber-reinforced, cement-based adhesive and reinforcement coating for installation of thermal insulation plates ETICS systems (EPS, XPS, mineral wool etc). KAPA 11 offers unparallel adhesion, high resistance to shear stresses and guaranteed adequate levels of bonding for many decades. It has zero-slipping properties and extended open time for safer and easier application.

## **Examples of applications**

KAPA 11 is suitable for fixing thermal-insulation boards of extruded or expanded polystyrene, mineral wool, polyurethane, cork, 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.

- Plasters and cement renders of all types
- Bricks
- Concrete
- Fibre reinforced concrete boards

Incompatible substrates

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

## **Technical Specifications**

Form: Cementitious dry mortar

Colors: White or grey

Shrinkage: Zero

Pot life: at least 5 hours

Open time: at least 20 min

Minor adjustments: At least 20 min

Application temperature: From +5 °C to +35 °C

Adhesion after 28 days: ≥ 1,6 N/mm<sup>2</sup>

Adhesion after water immersion after 28 days:  $\ge 0.8$  N/mm<sup>2</sup>

Adhesion on concrete: ≥ 1,6 N/mm<sup>2</sup>

Adhesion on EPS: ≥ 0,15 N/mm<sup>2</sup>

Adhesion on masonry: ≥ 0,95 N/mm<sup>2</sup>

Water vapor permeability coefficient (µ): 25

Compression strength: ≥ 14 N/mm<sup>2</sup>

Flexural strength:  $\geq 6 \text{ N/mm}^2$ 

Reaction to fire: Class A1

## Substrate surface 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 to damp the surface slightly before application.

## **Mixture preparation**

Add progressively KAPA 11 in the container with clean water, stirring continuously. A low speed electric mixer 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.

## Instructions for 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 thermoinsulation 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  $35^{\circ}$ C) or rainfall, or in periods when temperature is expected to drop below  $5^{\circ}$ C.

## Classification

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

#### Consumption

As an adhesive:  $2.0-5.0 \text{ Kg/m}^2$ , depending on the trowel's notch size and the nature of the substrate.

As a reinforced mortar: approx. 1.5 Kg/m<sup>2</sup> / mm of reinforcement layer.

## Packaging

Heavy duty paper bags 25kg.

#### Storage

Preferably in sheltered areas, low in moisture and protected against ice, high temperature and direct exposure to sunlight, for at least 12 months from the production date.

#### 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 BAUER 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.

#### Other information

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