

## TECHNICAL DATA SHEET

# KEMATERM 235

Special adhesive and levelling compound of heat insulating panels



### PRODUCT DESCRIPTION

Cement-based mixture, with predefined grain sizes of quartz sands and special additives.

#### Field of use

It is used as an adhesion of heat-insulating coverings (EPS, XPS) onto brick or concrete substrates, sufficiently cured rendered surfaces and as a mortar for installation of fibreglass net onto heat-insulating panels (reinforcement) and for final processing (levelling) prior to applying the decorative plaster.

#### Product properties

- Tested in accordance with ETAG 004
- Good adhesion strength
- Vapour permeable
- Easy to work with

### PRODUCT DATA

#### Basic information

Appearance	Grey powder
Packing	25 kg in bag (plasticated) / 1350 kg (54 x 25 kg) on pallet
Storage and expiration date	12 months from date of production if stored properly in undamaged original sealed packaging in dry and cool conditions. Date of production is printed on packaging.

#### Technical data

Type of product	Cementitious polymer modified adhesive mortar
Bulk density of powder	1,4 kg/m <sup>3</sup>
Largest grain	0,6 mm
Coeffi. of vapour diffusion resistance $\mu$ :	approx. 50
sd value	0.15 m (with a layer thickness of 3 mm)
Coefficient of thermal conductivity $\lambda$	approx. 0.8 W/mK

### INSTRUCTIONS FOR USE

#### Consumption

approx. 4 kg/m<sup>2</sup> for adhesion of heat-insulating panels  
approx. 4 kg/m<sup>2</sup> for reinforced plasters (layer thickness approx. 3 mm)

#### Base

Surface has to be sufficient evens, carrying and without cracks. It has to be clean, solid, dry, free of all oil, grease, wax, latex compounds, curing compounds, dust and all foreign matter. The surface has to fulfil the requirements of norm ONORMEN B 2259, B 3346 and B 6410.

#### Base preparation

The base surface shall be examined according to standards. The base surface must satisfy the following requirements: clean, dry, free of frost, free of dust, not water-repellent, free of efflorescence, supporting and free of loose parts.

#### Mix ratio

6-7 l of water per 25 kg of dry mixture

#### Mix time

In dry mixture add the clean water and mix, so that homogenous mass of medium plastic consistency without clods is obtained. Leave it to rest for 5 minutes to intumesce and then stir again thoroughly just before using it. If necessary, add some water. Water must not be added to the mortar that is already in the binding phase.

#### Mix tool

Mix mortar with electrical mixer with a suitable accessory for mixing in a clean container.

#### Installation

#### FIXING POLYSTYRENE BOARDS

When adhering to even bases, apply a layer of mortar with a toothed trowel with 7 to 10 mm-sized teeth on the whole surface of the rear side of the board. When adhering to uneven bases, a frame of mortar is made on the edges of the board on its rear side with a trowel and another 3 points are made in the middle of the rear side of the board. After adhesion, the cement must cover at least 40% of the board's surface. Irregularities up to 10 mm can be compensated in

the adhesive bed.

## MAKING A REINFORCED LAYER WITH EMBEDDED REINFORCING FABRIC

To make the levelling layer, apply the mortar using a toothed trowel with 7 to 10 mm-sized teeth. Embed the fibreglass levelling mesh in the fresh cement in even bands which overlap each other by at least 10 cm. Smooth out with a toothed trowel the matter which comes out through the mesh. The levelling mesh must lie approximately in the middle of the levelling layer – the thickness of the layer is approx. 3 mm. Protect the layer from drying out too quickly, do not expose to frost.

Cleaning of tool

Clean tools immediately after use before mortar hardens. Hardened material on tools can only be removed mechanically.

Usage time

approx. 1.5 hour

### LIMITATIONS

Base temperature

+5°C min./ +30°C max.

Air temperature

+5°C min./ +30°C max.

Material temperature

+5°C min./ +30°C max.

Warnings

- Do not add another materials.
- Protect facade against high air humidity and low temperatures.
- Before applying an additional coat, observe a waiting period of no less than 7 days.
- Times specified in the technical sheet were measured at the temperature of 23°C and relative air humidity of 50%. Higher temperatures reduce, while lower temperatures prolong those times.
- Used only recommended amount of water and mix from undamaged packaging. Not to cross the recommended thickness of layer.
- Protect freshly installed material from freezing, rain and other bad weather conditions. The material should not be used at (surface, air, material) temperatures lower than 5°C.

**Recommendation:** Remains of unhardened/unset material had to be removed in accordance with the legislation.

**Data source:** All technical data in this technical sheet was obtained by laboratory research. Actual data may differ due to different working conditions.

**Local restrictions:** Due to specific local regulations the installed product can differ from country to country. For exact instructions for use a country specific technical sheet should be obtained.

### PROOFS

Norms/Standards

In accordance with ETAG 004

### SAFETY DATA

Irritating. Contains cement. Irritating to eyes, skin and respiratory tract. Contact with skin may cause hypersensitivity. In case of eye contact wash thoroughly with water at once and consult a doctor. In case of skin contact flood with a lot of water. Keep away from the reach of children. More data on storage, handling and use of mixture can be found in the safety sheet which contains safety, toxicological and ecological data. Warnings on the original packaging should also be considered.

### LEGAL BASE

Information and recommendations related to use of KEMA products are presented in good faith and believed to be correct. The later is based on our knowledge and experience with the products. Information is supplied upon the condition that products are stored and used according to the recommendations and the persons receiving the same will make their own determination as to its suitability for their purposes prior to use. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to Information or the product to which information refers. In no event will KEMA be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information or the product to which Information refers. Nothing contained herein is to be construed as a recommendation to the use any product, process, equipment or formulation in conflict with any patent, and KEMA makes no representation or warranty, expressed or implied that the use thereof will not infringe any patent. All orders fall under current sales and supply conditions. The user should always check the latest technical sheet available upon demand.