

TECHNICAL DATA SHEET

KEMATERM 228

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 adhesive for adhesion of heat-insulating coverings (MINERAL WOOL) 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
- Vapour permeable
- Good workability
- High yield
- Easy to work with

PRODUCT DATA

Basic information

Appearance	Grey powder
Packing	25 kg in bag (plastificated) / 1200 kg (48 x 25 kg) on pallet
Storage and expiration date	12 months from the day of manufacture when stored properly in dry place and in the original, sealed and undamaged packaging. Manufacture date is stamped on the packaging.

Technical data

Type of product	Cementitious polymer modified adhesive mortar	
Grain size	D _{max} : 0,3 mm	EN 1015-1:1999
Bulk density of powder	1,43 kg/l	
Thermal conductivity λ _n	approx. 0.8 W/mK	
μ value	approx. 18	
Flexural strength		EN 1015-11:1999
-after 7 days	3,4 MPa	
-after 28 days	5,9 MPa	
Compressive strength		EN 1015-11:1999
-after 7 days	8,4 MPa	
-after 28 days	16,4 MPa	
Bonding strength after air curing	0,1 MPa	EOTA ETAG 004
Bonding strength after air and water curing	0,11 MPa	EOTA ETAG 004

INSTRUCTIONS FOR USE	
Consumption	approximately 4 kg/m ² for setting thermal-insulation boards approximately 4 kg/m ² for marking of reinforced plaster (approximately 3 mm thick layer)
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	5,25-6,5 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 10 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	<p>FIXING BOARDS</p> <p>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.</p> <p>MAKING A REINFORCED LAYER WITH EMBEDDED REINFORCING FABRIC</p> <p>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.</p>
Tool	Trowel.
Cleaning of tool	Clean tools immediately after use before mortar hardens. Hardened material on tools can only be removed mechanically.
Usage time	approx. 4 hours
Coagulation	<p>Drying time:</p> <ul style="list-style-type: none"> • adhesive layer: cca. 2 days • reinforced plaster: 1 day for every mm of thickness
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	<ul style="list-style-type: none"> • 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. <p>Recommendation: Remains of unhardened/unset material had to be removed in accordance with the legislation.</p> <p>Data source: All technical data in this technical sheet was obtained by laboratory research. Actual data may differ due to different working conditions.</p> <p>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.</p>
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	
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