

TECHNICAL DATA SHEET

KEMABOND 120

Ceramic tile adhesive



C1T

PRODUCT DESCRIPTION

Cement-based polymer-enriched adhesive for ceramic tiles, layer thickness 3 mm.

Field of use

For outdoor and indoor laying of ceramic tiles, mosaics, natural stone and other types of tiles, on floor and wall surfaces.

Product properties

- Long open time
- Reduced slip
- Easy workability
- Waterproof and frost-resistant
- Good adhesion strengths
- Effectiveness

PRODUCT DATA

Basic information

| | |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance | Gray powder |
| Packing | 5 kg in bags / 30 kg (6x5 kg) in cardboard box / 900 kg (30x30 kg) on pallet 25 kg in bag (plasticated) / 1200 kg (48 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 | |
| Bulk density of powder | 1,29 kg/l (at +20°C) | EN 12190:2000 |
| Weight of fresh mortar | 1,64 kg/l (at +20°C) | |
| Grain size | D _{max} : 0,355 mm | EN 12192-1:2002 |
| Layer thickness | approx. 3 mm | |
| Initial tensile adhesion strength | >= 0,5 MPa | EN 1348:2007 |
| Tensile adhesion strength after water immersion | >= 0,5 MPa | EN 1348:2007 |
| Tensile adhesion strength after heat ageing | >= 0,5 MPa | EN 1348:2007 |
| Tensile adhesion strength after freeze-thaw cycles | >= 0,5 MPa | EN 1348:2007 |
| Slip | < 0,5 mm | EN 1308:2007 |
| Open time after 20 min | >= 0,5 MPa | EN 1346:2007 |
| Open time after 30 min | >= 0,5 MPa | EN 1346:2007 |
| pH (at +20°C) | 11-13,5 | |

SYSTEM DATA

System composition

With addition of KEMALASTIC to ADHEZIV characteristics of adhesive can be improved.

KEMABOND 120

KEMABOND 120 + KEMALASTIC

Class C1T as per EN 12004:2007

Class C2TE S2 as per EN 12004:2007

Information about use and consumption of elastic dispersion KEMALASTIC you can find in valid technical data sheet of KEMALASTIC.

INSTRUCTIONS FOR USE

Consumption

2-4 kg/m² depending on the substrate, floor covering size and application method

Base

The substrate has to be equally absorptive, dry, homogenous, solid, supporting, stabile, not frozen (over +5°C), clean and free of dust, oil, grease remains, wax, falling of colour, or dirt. Coatings have to be air dry and the reinforced cement floor base has to be at least 28 days old.

Base preparation

Before applying the adhesive, anhydride cement floor base (mechanically ground), light concrete, gas concrete and gypsum coatings have to be impregnated with the polymer dispersion KEMACRYL (KEMAGRUND S) diluted with water in the ratio 1:1, for impregnation of compact surfaces is KEMAGRUND A, diluted with water in the ratio at least 1:1, recommended.

Surface has to be sufficiently flat to enable setting of ceramic in app. 3 mm thick layer of adhesive. Bigger floor unevenness (0,5-3 cm) should be levelled by applying LINEA 20 mass to the connective KEMACRYL coating. After the tiles have been laid the base shape can change only slightly. On bases which contract and extend lining should be laid, lining has to be laid as late as possible. As a guideline for constructed concrete and brick walls app. 6 months period should be allowed before laying. This period of time can be shorter, if the surface has already taken its final form.

Mix ratio

7-8 of water per 25 kg of dry mixture

Mix time

Mix dry mixture with clean water into a homogenous mass of medium plastic consistency without clods. Leave it to rest for 10 minutes to intumesce and remix it again just before the use. If necessary, add some water. Water must not be added to the adhesive that is already in the binding phase.

Mix tool

Mix adhesive in a clean container using suitable electrical mixer. Free fall mixer should not be used.

Installation

Apply a thin adhesive layer on a cleaned surface using a trowel. Apply the next layer to a fresh contact layer using a notched finishing trowel.

Ceramic tiles should be pressed into a fresh glue before a film forms on the adhesive.

Adhesives in joints should be removed before it dries. By removing the adhesive from the joints the grouting compound can be applied and possible stains on the joints are prevented.

If setting tiles on more demanding surfaces (outdoor, pools) and in other areas that require perfect adherence of ceramic tiles, the use of combined procedure is recommended. At the combined procedure the thin-layer adhesive is applied on both surfaces; on the surface to be lined as well as on the back side of the ceramics.

Tool

Choose a notched finishing trowel with teeth depth of 4 to 6 mm, which assures 2 to 3 mm thick adhesive layer.

Cleaning of tool

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

Usage time

approx. 4 hours

Open time

approx. 20 minutes

Coagulation

Product appropriate for (+20°C):
 Grouting of wall surfaces after min. 12 hours
 Grouting of floor surfaces after min. 24 hours
 Ready for foot traffic after min. 24 hours
 Full load after min. 14 days

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

- Times specified in the technical sheet were measured at the temperature of +23°C and relative air humidity of 50%. With higher temperatures prescribed time can be shortened while prolonged at lower temperatures.
- Use only recommended amount of water. Use only mixture from undamaged packaging. Do not overdo the layer thickness.
- Gypsum board panels should be at least 10 mm thickness, with maximum moistness of 5%.
- To achieve later water-resistance under the tiles a layer of Hidrostop Elastik is recommended.
- Protect freshly installed material from freezing, rain and other weather conditions. The material should not be used at (surface, air, material) temperatures lower than +5°C.
- It is not necessary to wet the lining before application. When setting natural stone, there is a danger of stone being coloured, so prior test setting is recommended.
- Due to different working conditions presence of a film on the adhesive should be checked with a finger.
- Application of adhesive in direkt sun and draught is not allowed.

Recommendation: Remains of the unhardened/unset material have 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 European standards EN 12004:2007

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.