



KEMAKOL RAPID 193

Fast-setting flexible adhesive for large-sized floor tiles

C2F



- ▶ 100 % contact surface
- ▶ Flexibility
- ▶ For adhesion with layer thickness 3 - 10 mm
- ▶ At minimum layer thickness ready for foot traffic after 4 hours
- ▶ Frost-resistance
- ▶ High adhesion strengths
- ▶ Easy to work with
- ▶ Effectiveness
- ▶ Useful on underfloor heating installations

PRODUCT DESCRIPTION Flexible fast-setting plasticized cement-based adhesive for laying of floor coverings, layer thickness 3 - 10 mm.

FIELD OF USE For adhesion of large-size tiles, heavy ceramic floor tiles, clinker tiles, natural and artificial stone, marble and gres porcelain floor tiles, for adhesion of floor coverings onto underfloor heating, onto cast asphalt (indoors), for outdoor and indoor use, exclusively on floor surfaces.

- PRODUCT PROPERTIES**
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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 9 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

Weight of fresh mortar 1,66 kg/l (at +20°C)

EN 12190:2000

Bulk density of powder 1,31 kg/l (at +20°C)

Grain size D_{max} : 1 mm

EN 12192:2002

Layer thickness from 3 to 10 mm

Initial tensile adhesion strenght ≥ 1 MPa

EN 1348:2007

Tensile adhesion strenght after water immersion ≥ 1 MPa

EN 1348:2007

Tensile adhesion strenght after heat ageing ≥ 1 MPa

EN 1348:2007

Tensile adhesion strenght after freeze-thaw cycles ≥ 1 MPa

EN 1348:2007

Slip $\geq 0,5$ mm

EN 1308:2007

Open time after 20 min $\geq 0,5$ MPa

EN 1346:2007

Open time after 30 min $\geq 0,5$ MPa

EN 1346:2007

pH (at +20°C) 11-13,5

INSTRUCTIONS FOR USE

CONSUMPTION ca. 1,5 kg/m²/mm 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 | <p>Before applying the adhesive, anhydride cement floor base (mechanically ground) and light concrete 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 can be concrete (at least 3 months old), cement floor base, clinker, lightweight concrete or aerated concrete, cast asphalt or tiles. It is also suitable for terraces and for underfloor heating installations. If it is prepared in advance, surface can also be calcium-sulphate floor base. It is not suitable for wood, metal and artificial materials.</p> <p>Surface has to be sufficiently flat to enable setting of ceramic in cca. 3 mm thick layer of adhesive. Bigger unevenness of the floor (0.5-2 cm) is levelled by application of levelling mass LINEA 820M to the connective coating KEMACRYL, diluted with water in the 1:1 ratio. When setting new ceramic tiles to the existing ones, the existing tiles have to be impeccably attached to the surface (must not sound hollow when knocked on). Before setting, they have to be washed with hot water and detergent to remove grease.</p> <p>Before setting of lining, floor bases with underfloor heating have to be heated and cooled in accordance with heating rules, while cast asphalt surface has to be sandblasted.</p> <p>Surface can change its shape only in a limited amount after lining has been applied. On substrate constructions, which are contracting and extending, lining has to be laid as late as possible. A guideline is that lining can be applied cca. 6 months after the construction on a concrete surface. In substrate constructions, where expected effects are finalised, the aforementioned time limit can be shorter.</p> |
| MIX RATIO | Approx.: 6,0 l 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 app. 5 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 with electrical mixer with a suitable accessory for mixing in a clean container. Free fall mixers should not be used. |
| INSTALLATION | <p>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.</p> <p>Ceramic tiles should be pressed into a fresh glue before a film forms on the adhesive.</p> <p>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.</p> <p>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.</p> |
| TOOL | Choose a notched finishing trowel with teeth depth of 8 to 10 mm, which assures approx. 5 mm thick adhesive layer or even more if more thickness of adhesive is to apply (for example trowel with sign M1). |
| CLEANING OF TOOL | Clean tools immediately after the use before adhesive hardens. Hardened material on tools can only be removed mechanically. |
| USAGE TIME | 40 minut |
| OPEN TIME | approx. 30 minut |

COAGULATION Product appropriate for (+20°C):
Grouting of floor surfaces after 4 hours
Grouting of tile on tile after 12 hours
Foot traffic on concrete surfaces after 4 hours
Foot traffic on tile on tile after 12 hours
Full load after 2 to 3 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%. 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.
 - 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 if membrane is formed on the surface of the applied adhesive.
 - Application of adhesive in direkt sun and draught is not allowed.

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 European standards EN 12004:2007

SAFETY DATA

Irritating. Contains cement. Irritating to eyes, skin and respiratory tract. 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.