

BETONPROTEKT K2

Steel reinforcement protection and bonding bridge

- ▶ Red colour for bonding bridge coverage control
- ▶ Excellent adhesion to metal and mineral surfaces
- ▶ Increases the adherence of fresh concretes and mortars to old surfaces
- ▶ For subsequent application of a levelling mortar layer



PRODUCT DESCRIPTION	Two component steel reinforcement protection and bonding bridge which comprise industrially dry mixture (component A) and polymer water dispersion (component B), adequately pre-packaged according to the proper mixing ratio.
FIELD OF USE	It will be used for protection of the steel reinforcement by damaged concrete and as a bonding bridge (bond old-new) when placing bonded screed, subsequent application of a levelling mortar layer (e.g. BETONPROTEKT RT, BETONPROTEKT RP, LINEA 820 M, LINEA 840 M,...) and other over coating of old concrete surfaces, onto the prepared and stable old concrete surface. Special caution is recommended as the bond must be implemented as »fresh-to-fresh«.
PRODUCT PROPERTIES	<ul style="list-style-type: none"> • Red colour for bonding bridge coverage control • Excellent adhesion to metal and mineral surfaces • Increases the adherence of fresh concretes and mortars to old surfaces • For subsequent application of a levelling mortar layer

PRODUCT DATA		
BASIC INFORMATION	Appearance	Red powder (component A) and white liquid (component B)
	Packing	25+8=33 kg (Part A: bag with 25 kg of dry mixture; Part B: plastic can with 8 kg of elastic dispersion) 6,25+2=8,25 kg in plastic can (Part A: 2 x PE bag with 3,125 kg of dry mixture; Part B: 2 x plastic can with 1 kg of elastic dispersion)
	Storage and expiration date	12 months from date of production if stored properly in undamaged original sealed packaging in dry and cool conditions over 0°C. Date of production is printed on packaging.
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TECHNICAL DATA	Type of product comp. A	Cement dry mixture
	Bulk density comp A	1,72 g/cm ³
	Type of product comp. B	Polymer dispersion
	Density of comp. B	1,016-1,020 g/cm ³
	pH (+23°C)	approx. 12
	Max. grain size	D _{max} : 0,4 mm
	Mix ratio (A:B)	3:1
	Density	-fresh mortar: 1,96 g/cm ³
		-hardened mortar: 1,91 g/cm ³
	Compressive strength	
	-after 7 days	25,6 N/mm ²
	-after 28 days	35,6 N/mm ²
	Flexural strength	
	-after 7 days	10,0 N/mm ²
	-after 28 days	11,9 N/mm ²
	Tensile-adhesion strength	1,6 N/mm ²
	Air content in fresh mass	3,5 %

SYSTEM DATA

SYSTEM COMPOSITION

BETONPROTEKT K2	Steel reinforcement protection and bonding bridge
KEMACRYL, KEMALATEX, KEMAGRUND A	Polymer dispersion for the bonding bridge (bond old-new)
BETONPROTEKT RT	One-component, micro-reinforced, thixotropic and sulphate-resistant PCC repair mortar for vertical and ceiling concrete surfaces
BETONPROTEKT RP	One-component, micro-reinforced, super plasticized, sulphate-resistant PCC repair mortar for horizontal and panelled surfaces
BETONPROTEKT F	One-component, micro-reinforced, sulphate-resistant PCC repair mortar for fine levelling compound for corrosion protection of concrete surfaces

Data for usage and consumption of products for concrete restoration and protection are given in technical data sheets.

INSTRUCTIONS FOR USE

CONSUMPTION approx. 2,0 kg/m² for a single application

BASE Mineral surface has to be compact and clean, free of any kind of dirt, greasy spots and free particles. In the case of very unclean and smooth surfaces, recommended sandblasting, grinding, etc.

BASE PREPARATION Rusty reinforcing rods should be cleaned with sandblasting or using wire brush to the shine grade St2. In a case of severe damage to the reinforcing rods, they should be removed and replaced with new ones by welding. Rust in powder form has to be removed from the concrete surface.

MIX RATIO Mix components A and B in ratio 3 : 1

MIX TIME In clean container add part b, than part a and mix, so that homogenous mass of medium plastic consistency without clods is obtained.

MIX TOOL In order to achieve best possible results, the mixture is to be stirred with an electrical drill with suitable accessories for mixing mortar.

INSTALLATION BETONPROTEKT K2 is applied on to the surface of reinforcing rods in two coatings. Second coating shouldn't be applied earlier then 1 hour after first one. As a bonding bridge, BETONPROTEKT K2 is applied on the "matt" moistened clear concrete surface and applied "fresh to fresh" repair mortar BETONPROTEKT.

TOOL BETONPROTEKT K2 is applied with a brush or wide-brush or machine by wet process.

CLEANING OF TOOL Clean the tools immediately after use.

USAGE TIME approx. 30 minutes

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**
- Ideal working temperature is between +15°C and +20°C. In case of high air and surface temperatures, the surface must be fully moistened.
 - 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.
 - 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.
 - Avoid application in direct sun and/or strong wind and/or rain. Do not add water over recommended dosage. Apply only to sound, prepared substrates. Do not add additional water during the surface finishing as this will cause discoloration and cracking. Protect freshly applied material from freezing.

Recommendation: Remains of the unhardened/unset material must be disposed in accordance to the local 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 a country specific technical sheet should be obtained.

SAFETY DATA

COMPONENT A: 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.

COMPONENT B: is not a hazardous substance in accordance to the Chemicals Act. In the case of contact with eyes, wash with copious water. If irritation does not stop, consult a physician. 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 latter 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 of 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.