MARBOPOX EP bedding mortar EP - 3D

Application:	Water-permeable, fast hardening epoxy resin bedding mortar for bedding natural stone pavement and cement blocks (old or new paving) as well as slabs used indoors and outdoors Especially also for emergency/urgent repairs in the transport sector (bus stopping bays, rail paving's, traffic islands, roundabouts, etc.) and anywhere that draining, high-strength mortar is required quickly for reasons of process or time. Suitable for the loading classes up to and including BK 3,2 acc. to RSTO 12.
Properties:	• 3-component • For indoors and outdoors • Synthetic resin-modified • Free from solvents • Very good adhesion to the substrate • Draining acc. to DIN 18130-1, table 1 • Hardens without shrinkage • High early and ultimate strength • High resistance to frost/de-icing salt • Resistant to discolouration • Resistant to ageing and volume changes • Resistant to water, seawater and waste water as well as numerous alkalis, dilute acids, salt solutions • Resistant to mineral oils, lubricants and fuels as well as many solvents
Substrate preparation:	Cement-band substrates must be firm and load-bearing, free from cement paste layers, loose and crumbly parts as well as substances with a separating effect such as oil, grease, rubber abrasion, paint residues or the like. Drainage of the top player must be guaranteed and safeguarded against capillary humidity. The top layer must be appropriate for the expected loadings. If necessary, prepare the substrate by blasting. Following that, apply primer. As the primer for EP mortar, apply MARBOPOX GM 3 without adding solvents or bulking agents. In other respects, the DBV leaflet "Application of reaction resins in concrete construction, part 2: substrate" applies.
Mixing/ Processing:	Pour the hardener (component B) into the resin (component A) and make sure that all of the hardener component runs out without any remaining behind. Following that, mix through the entire mixture very thoroughly with a mechanical agitator at maximum 300 rpm. Make certain to mix thoroughly at the base and from the sides so that the hardener is also distributed in a vertical direction. Continue mixing until the mixture is homogeneous (approx. 5 minutes). After mixing, transfer to a clean container, add 75 kg MARBOS Multi Drain Körnung DK and stir carefully again. The temperature of both components should be at least 15 °C when mixed. Apply the bedding mortar manually. MARBOPOX EP bedding mortar 3 D can be applied wet-on-wet as long as the primer is still adhesive. If longer waiting times are unavoidable, fire-dried quartz sand with a grain must be spread over the fresh primer in order to guarantee adequate interlocking of the mortar layer. For dimensionally precise block paving, it is possible to achieve the required coat thickness using a smoothing gauge. MARBOS adjusters can be added for stopping. If laying slab-like stone formats and/or for high loadings, we recommend using MARBOPOX GM 3 on the underside of the blocks in order to act as a bonding agent be-tween the blocks and bedding

MARBOS GmbH & Co. KG ● Sanierungssysteme, Spezialbaustoffe ● Kressenweg 15 ● 44379 Dortmund ● Tel. +49 (0)231 / 9958-100 ● Fax +49 (0)231 / 9958-139 ● info@marbos.de ● www.marbos.de
Ein Unternehmen der Knauf-Gruppe

MARBOPOX EP bedding mortar EP - 3D

Mixing/ Processing:

Expect a settling dimensional of approx. 1 cm.
All the spreading material that is not incorporated must be brushed or vacuumed off after the primer has hardened. Protect the primed surface against impurities.
The substrate temperature must be at least 3 °C above the current dew point temperature.
Made-up mortar be processed within the specified working time.

Cleaning:

After each working procedure, carefully clean the equipment and tools using a suitable cleaning agent.

Material consumption:

- Approx. 16 kg/m²/cm coat thickness

Delivery form/ packaging/ storage:

- 5 kg resin/hardener mixture
- 3 x 25 kg bags MARBOS Multi Drain Körnung DK 0,6 to 3,2 mm
- Can be stored for at least 12 months if unopened, and kept in a cool, dry place
- Immediately use the can after opening

Disposal:

See safety data sheet

Technical data:

Raw material base	Epoxy resin, hardener, quartz sand
Grain size	0,6 bis 3,2 mm
Mixing ratio	3.33 kg resin component A 1.67 kg hardener component B 75 kg (3x25kg bags) MARBOS Multi Drain Körnung DK
Working temperature	10°C bis 30°C
Working time	at 20 °C approx. 60 minutes at 30 °C approx. 45 minutes
Coat thickness	>15 mm for layer thicknesses> 70 mm an intermediate compression is necessary
Compressive strength	after 4 h approx. 10 N/mm² after 24 h approx. 30 N/mm² after 7 d approx. 38 N/mm²
Tensile and flexural strength	after 3 h approx. 4 N/mm² after 4 h approx. 9 N/mm² after 7 d approx. 12 N/mm²
Modulus of elasticity	after 24 h approx. 15.500 N/mm² after 7 d approx. 19.500 N/mm²
Penetration hardening to 100%	after 7 d

Technical values (laboratory values) relate to 20 °C / 50% rel. humidity.
Low temperatures and moisture lead to delayed setting, high temperatures result in faster setting.

Notes:

With regard to processing reaction polymers, not only is the ambient temperature important, but above all the temperature of the substrate.
Low temperatures delay the chemical reactions; as a result, the working and penetration hardening times will be extended, as will the length of time until the surface can be walked upon. At the same time, the consumption will increase because viscosity is significantly higher. High temperatures accelerate the chemical reactions, meaning that the aforementioned times will be correspondingly shorter.

MARBOS GmbH & Co. KG ● Sanierungssysteme, Spezialbaustoffe ● Kressenweg 15 ● 44379 Dortmund ● Tel. +49 (0)231 / 9958-100 ● Fax +49 (0)231 / 9958-139 ● info@marbos.de ● www.marbos.de
Ein Unternehmen der Knauf-Gruppe

MARBOPOX EP bedding mortar EP - 3D

Notes:	For complete hardening of the reaction polymer, the average temperature of the substrate must be above the specified minimum temperature. Keep out of the reach of children. Additional information: see safety data sheet.

MARBOS GmbH & Co. KG ● Sanierungssysteme, Spezialbaustoffe ● Kressenweg 15 ● 44379 Dortmund ● Tel. +49 (0)231 / 9958-100 ● Fax +49 (0)231 / 9958-139 ● info@marbos.de ● www.marbos.de
Ein Unternehmen der Knauf-Gruppe