

PRODUCT DATA SHEET

SikaTop[®]-121

FIBER REINFORCED POLYMER MODIFIED REPAIR MORTAR

DESCRIPTION

SikaTop[®]-121 is a two-component cement based, polymer modified, trowelable adhesive and filling compound for the protection and repair of concrete surfaces.

USES

- Thin layer render
- Levelling of surfaces
- Protective coating for bridges parapets, retaining walls, etc.
- Filling compound to level off irregularities and to fill blowholes and fine honeycombing
- Rendering for reservoirs, ponds. etc

CHARACTERISTICS / ADVANTAGES

- Pre-batched product
- User friendly
- Good mechanical strengths
- Excellent adhesion
- High resistance to chloride salts

PRODUCT INFORMATION

Chemical Base	Cement, selected aggregates and additives
Packaging	25 kg set (A+B)
Appearance / Colour	Component A: White liquid Component B: Grey powder
Shelf Life	12 months
Storage Conditions	Store in a dry area in original sealed packaging. Protect from direct sunlight.
Density	Fresh density of mortar ~ 2.0 kg/l at +25 °C

TECHNICAL INFORMATION

Compressive Strength	~ 25–30 MPa after 28 days
Tensile Strength in Flexure	~ 5–7 MPa after 28 days
Tensile Adhesion Strength	> 2 MPa after 28 days

SYSTEM INFORMATION

System Structure

Repair Mortar

SikaTop®-122

Concrete Repair Mortar

Pore sealer and levelling mortar

SikaTop®-121

Normal Use

APPLICATION INFORMATION

Mixing Ratio	Parts by weight A : B = 1 : 4–5, depending on required consistency
Consumption	This depends on the substrate roughness and thickness of layer applied. As a guide, ~ 20 kg of fresh mortar per cm thick per m ²
Yield	25 kg set yields approximately 12.5 litres of mortar
Layer Thickness	Minimum 2 mm/ maximum 5 mm
Ambient Air Temperature	+5 °C minimum; +35 °C maximum
Substrate Temperature	+5 °C minimum; +35 °C maximum
Pot Life	~ 45 minutes at 30 °C

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete:

The concrete shall be thoroughly clean, free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. De-laminated, weak, damaged, and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.

Steel reinforcement:

Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed. Surfaces shall be prepared using abrasive blast cleaning techniques or high pressure water-blasting to Sa 2 (ISO 8501-1).

MIXING

SikaTop®-121 can be mixed with a low speed (< 250 rpm) hand drill mixer.

Shake Component A (liquid) and pour it into a suitable mixing vessel. While mixing add Component B (powder) into the mix. Mix the two components together for a minimum 3 minutes.

DO NOT ADD WATER.

APPLICATION

SikaTop®-121 can be applied manually using traditional techniques. Thoroughly pre-wet the prepared substrate a recommended 2 hours before application. Keep the surface wet and do not allow to dry. Before application remove excess water e.g. with a clean sponge. The surface shall appear a dark matt appearance without glistening and surface pores and pits shall not contain water.

Apply first a scratch coat by firmly scrapping the repair mortar over the substrate surface to form a thin layer and fill any pores or pits in the surface. Ensure the whole surface to be repaired is covered by the scratch coat. Build up layers from bottom to top by pressing mortar well into the repair area.

The surface can be finished according to the requirements using a float while wet or with a relevant rough-cast tool as soon as the mortar has started to stiffen.

CURING TREATMENT

Protect the fresh mortar immediately from premature drying using an appropriate curing method e.g. curing compound, moist geotextile membrane, polythene sheet, etc.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

LIMITATIONS

- DO NOT ADD WATER
- Avoid application in direct sun and / or strong wind and/ or rain.
- Protect freshly applied material from freezing and rain.
- Apply only to sound, prepared substrate.
- Do not add additional water during the surface finishing as this will cause discolouration and cracking.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet (MSDS) containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.



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