

PRODUCT DATA SHEET

Sika MonoTop-412 SG

STRUCTURAL REPAIR MORTAR WITH CORROSION INHIBITOR

DESCRIPTION

Single-component, fiber-reinforced, cement-based, low-shrink, corrosion-reinforced structural repair mortar ready for use in high-thickness applications without the need for formwork.

USES

- For repair and spalls, gaps or deterioration in simple or reinforced concrete elements.
- Suitable for works of preservation or restoration of passivity in reinforcing steel by increasing the thickness of the coating and replacement of carbonated concrete and / or contamination.

CHARACTERISTICS / ADVANTAGES

- Excellent workability, even at high ambient temperatures
- Suitable to apply by hand
- It can be applied in layer thicknesses of up to 30 mm
- For structural repairs
- Due to its low contraction and fiber reinforcement, it has a reduced tendency to crack
- Good adhesion, even without additional primers as a bonding bridge

PRODUCT INFORMATION

Chemical Base	Powder Product
Packaging	25 Kg per bag
Shelf Life	12 months
Storage Conditions	If stored in its original sealed packaging, in a dry place, indoors, at temperatures between 5 ° C and 30 ° C
Appearance / Colour	Grey

APPLICATION INFORMATION

Mixing Ratio	3.5L - 4L per 25 Kg powder
Consumption	1 Bag yields approximately 13.5 liters of mortar
Ambient Air Temperature	min +5 °C / max +35 °C
Substrate Temperature	min +5 °C / max +35 °C

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.

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 Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete

The concrete shall be free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. Delaminated, 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.

Bonding primer

On a well prepared and roughened substrate a bonding primer is generally not required. When a bonding primer is not required pre-wet the substrate to saturated-surface-dry condition. The surface shall not be allowed to dry before application of the concrete repair mortar. The surface shall achieve a dark matt appearance without glistening and surface pores and pits shall not contain water.

When a bonding primer is necessary apply SikaTop® Armatec®-110 EpoCem® (refer to the relevant Product Data Sheet) or other equivalent product from Sika. The bonding primer shall be applied well into the concrete substrate with a stiff brush.

MIXING

Sika MonoTop-412 SG can be mixed with a low speed manual drill or with a mixer suitable for mortars (< 500 rpm) or, for application with a casting machine, using a special mixer for 2 or 3 bags. Pour water into the container, add the powder to the water while mixing at the same time. Mix thoroughly for at least 3 minutes, until the required consistency is achieved. If deemed necessary, depending on the type of application and mixing method, add water to the mixture without exceeding the maximum suggested ratio.

APPLICATION

Sika MonoTop-412 SG can be applied either manually using traditional techniques or mechanically using wet spray equipment.

When an adhesion bridge is needed, make sure that it is still fresh when the repair mortar is applied ("fresh on fresh" technique). When applied manually, press the mortar firmly against the substrate and fill in layers using a trowel or spoon.

Finishing for both methods will be done with trowel before the material has started to harden.

CURING TREATMENT

Protect the newly applied mortar from early dehydration, using the appropriate curing methods, with special care in conditions of direct sunlight and strong winds. Between layers of the product, if necessary, cure only with water.

CLEANING OF TOOLS

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

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.

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.

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