

PRODUCT DATA SHEET

Sika® Galvashield® Embedding Mortar

Controlled Resistivity Mortar for use with Sika® Galvashield® Anodes

PRODUCT DESCRIPTION

Sika® Galvashield® Embedding Mortar is a controlled resistivity mortar for use with Sika® Galvashield® discrete corrosion protection anodes. The mortar is designed to provide a low resistance environment around the anode and improved performance.

USES

Sika® Galvashield® Embedding Mortar may only be used by experienced professionals.

- Used in conjunction with Sika® Galvashield® galvanic corrosion protection anodes to protect steel elements in a structure from corrosion.
- The mortar is used to embed Sika® Galvashield® anodes in vertical and horizontal situations.
- Used to fill grooves that house the anode lead wires.
- Provides an electrolytic bridge between the anode and the original concrete substrate.

CHARACTERISTICS / ADVANTAGES

- Easy to use, just add water.
- Controlled resistivity mortar.
- Portland cement based.
- High pH mortar with reservoir of alkali to resist acid generation at the anode.
- High bulk density.
- Free of carbonaceous or other oxidisable materials.
- Proven technology.

PRODUCT INFORMATION

Chemical Base	Portland cement, selected aggregates and additives
Packaging	20 kg bag
Shelf Life	12 months
Storage Conditions	Store properly in original unopened, sealed and undamaged packaging in dry and cool conditions.
Appearance / Colour	Grey powder

TECHNICAL INFORMATION

Compressive Strength	~28 MPa
Tensile Strength	~1.5 MPa
Electrical Resistivity	~5.0 (kΩ·cm)

APPLICATION INFORMATION

Mixing Ratio	3.2 to 4.0 litres of water per 20 kg bag
Consumption	A 20 kg bag will be sufficient for 40 to 80 anodes, depending on anode size and mortar thickness.
Ambient Air Temperature	+5°C minimum / +30°C maximum
Substrate Temperature	+5°C minimum / +30°C maximum
Pot Life	~20 to 30 minutes (at +23°C)
Initial set time	~165 minutes
Final set time	~345 minutes

VALUE BASE

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.

USES

- Avoid application in direct sun and / or strong wind and / or rain.
- Do not add water over recommended dosage.
- Protect freshly applied material from freezing.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

MIXING

Sika® Galvashield® Embedding Mortar should be mixed with a slow speed drill (400/500 rpm) and paddle. Suggested mixing: add 3.2 of water for each 20 kg bag of Sika® Galvashield® Embedding Mortar. Additional water (up to a maximum of to 4.0 litres) can be added to achieve the required consistency for placement. Mix for three minutes until fully homogeneous. Mix only as much product as can be installed in 20 to 30 minutes.

Sika® Galvashield® Embedding Mortar may exhibit satisfactory handling characteristics, even though inadequately mixed. This will result in a significantly lower level of performance, or possible failure. It is therefore essential the mixing instructions are strictly adhered

to, with particular emphasis on the quantity of water used and the time of the mixing operation.

APPLICATION

For Type 2 anode installations (e.g. Sika® Galvashield® CC, Sika® Galvashield® Fusion® T2)

Standing water should be blown from drilled holes using compressed air. Sika® Galvashield® Embedding Mortar is injected by hand pump to the rear of the hole to avoid air entrapment. Ensure sufficient grout is placed in the bottom of the hole to completely embed the entire active length of the Sika® Galvashield® discrete anode. The thixotropic nature of the Sika® Galvashield® Embedding Mortar will prevent significant flow from vertical and overhead holes. Place Sika® Galvashield® Embedding Mortar within 30 minutes of mixing to gain benefit of the expansion system and allow to cure for a minimum of 24 hours, without physical disturbance.

For Sika Galvashield® SM-DAS and Sika Galvashield® SM-DAS-X

Use Sika® Galvashield® Embedding Mortar to fill the area between the anode and the surface of the concrete. Mix the mortar as directed. If the concrete surface contains large voids or depressions, fill them with mortar to ensure no air gaps are left behind the anode. Use a V-notched trowel to spread the mortar completely along the entire length of the anode, leaving a ridged profile of the mortar to ensure proper bonding of the anode to the concrete. Place Sika® Galvashield® Embedding Mortar within 30 minutes of mixing to gain benefit of the expansion system and allow to cure for a minimum of 24 hours, without physical disturbance.

NOTE: Sika® Galvashield® Embedding Mortar is a cement-based mortar and therefore it must be cured immediately after finishing in accordance with good concrete practice.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened / cured 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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Product Data Sheet
Sika® Galvashield® Embedding Mortar
January 2024, Version 02.01
020303090030000001

SikaGalvashieldEmbeddingMortar-en-GB-(01-2024)-2-1.pdf