Construction

SikaQuick®-2500

Very rapid setting, repair mortar

Product Description	SikaQuick® -2500 is a single component, very rapid setting, early strength gaining, cementitious, patching material for concrete.
Uses	■ Highway overlays and repairs ■ Industrial floors where down time is critical ■ Structural repairs for concrete roadways, parking structures, bridges, dams and ramps
Characteristics / Advantages	■ Very rapid hardening as defined by ASTM C-928 ■ Freeze/thaw resistant ■ One component, easy to use ■ High early strength ■ Fast setting ■ Open to foot traffic in 45 minutes, to vehicle traffic in 1 hour (at 25°C) ■ Not a vapour barrier
Tests	
Approval / Standards	

Product Data

Form		
Appearance / Colour	Powder	Grey
Packaging	25kg bags.	
Storage		
Storage Conditions / Shelf-Life	6 months in original, unopened packaging. Store in a dry area between +5ºC and +30ºC. Protect from direct sunlight and moisture.	

Technical Data

Chemical Base	Cement, Crystalline free Silica	
Density	~ 2,3 kg/litre fresh mortar	
Layer Thickness	Min. 6mm - Max. 25mm	
Mechanical Properties		
Compressive Strength	**(28 days, 25°C/50% RH)**	18 N/mm^2 @ 1 hour 40 N/mm^2 @ 2 hours 50 N/mm^2 @ 1 Day

System Information

System Structure	***Steel Primer**:* Sika® Monotop® -610 SikaTop ArmaTec® 110 EpoCem® ***Repair Mortar**:* SikaQuick® -2500 (5 – 25 mm layer thickness)
Application Details	
Consumption / Dosage	Volume Yield ±12.5 litres per 25kg bag. When extended with 12 to 14kg of 10mm aggregate, yield is approximately 17 to 18Litre.
Substrate Quality	The concrete substrate must be sound and of sufficient compressive strength (min. 20 N/mm² (Mpa) with a minimum pull off strength of 1.5 N/mm² (Mpa)). The surface must be dry and free of all contaminants such as oils, grease, coatings and surface treatments etc. The substrate must be prepared mechanically to remove cement laitance and achieve a profile open textured surface. Weak concrete should be removed and surface defects such as honeycombed areas, blowholes and voids must be fully exposed. Repairs to substrate, filling of blowholes/voids and surface levelling should be carried out using the appropriate product from the Sikafloor®, Sikadur® and Sikagard® range of materials.
Substrate Preparation / Priming	Precise and efficient surface preparation is essential to achieve the high adhesive qualities of SikaQuick® -2500. The concrete substrate must be sound, clean and free from oils, grease or surface contaminants. All loose materials and surface laitance must be removed by high-pressure sand or water jet blasting or similar mechanical means so as to achieve a surface profile of at least 2mm. The prepared substrate should be thoroughly soaked with clean water until uniformly saturated, leaving no standing water. Take care to remove any cement, slurry or dust produced during surface preparation; the use of a 'fan' shaped water jet is ideal. Apply SikaQuick® -2500 as a scrub coat prior to placement of the mortar as a bonding bridge. Steel reinforcement should be gritblasted to a bright steel condition to remove all traces of rust and contamination. It is advisable to apply Sika® MonoTop® -610 or SikaTop ArmaTec® 110 EpoCem® corrosion protection prior to placing of the repair mortar.

Application Conditions / Limitations

Substrate Temperature	Min. 5°C max.30°C.
Ambient Temperature	Min. 5°C max. 35°C.
Substrate Humidity	< 10 %

Application Instructions

Mixing (Ratio/Dosage)	2,6 – 2,87 litres water per 25kg SikaQuick® -2500, depending on the amount of aggregate added. Pour clean water in the correct proportion into a clean mixing vessel. Add the SikaQuick® -2500 slowly while mixing continuously. To avoid entraining too much air use a slow speed mixer (max. 500 rpm) for minimum of 3 minutes. By gradually adding the powder in portions, the desired application consistency can be obtained.
Application Method / Tools	Apply SikaQuick® -2500 by hand or with a trowel or spatula onto the prepared substrate. It is recommended that, SikaQuick® -2500 is mixed, placed and finished off within 15 minutes. As soon as the material has reached initial set, the surface should be given an open texture by rubbing with a wooden or plastic float prior to application of the next layer. Use SikaQuick® -2500 as a bonding bridge for day joints and between layers if they are left to cure for more than 4 hours. If a finer surface finish is required or a protective coating is to be applied, SikaQuick® -2500 can be overcoated with Sika® MonoTop® -620 surface leveling compound as required.
Cleaning of Tools	Application and mixing tools should be cleaned with water immediately after use. Hardened material must be removed mechanically.
Waiting Time / Overcoatability	SikaQuick® -2500 must be kept moist while curing and protected from wind, heat and extremes of temperature. Standard concrete curing practice is recommended. Can be over coated with epoxies after 4hrs.
Notes on Application / Limits	Once SikaQuick® -2500 has started to set, it should be discarded. Do not add more water to improve workability. ■ Do not feather edge ■ Use only potable water ■ Variations in aggregate may produce differences in strengths from the typical values stated in the Product Data Sheet. ■ Do not use SikaTop Armatec® 110 EpoCem® as a bonding agent with SikaQuick® -2500 ■ Do not exceed 175mm slump when extended with aggregate

Curing Details

Curing Treatment	Standard concrete curing practices should be adhered to. When curing with polythene sheets, ensure all edges are fastened down and that air movement/circulation over the surface of the fresh mortar cannot occur.

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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.

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.

Health and Safety Information

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 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.

Sika South Africa (Pty) Ltd
9 Hocking Place,
Westmead, 3608
South Africa

E-mail: headoffice@za.sika.com
Phone +27 31 792 6500
Telefax +27 31 700 1760
www.sika.co.za