

Sika Seal® -109

Multi-Purpose Water Proofing Slurry

Product Description	A cement base, polymer modified, 2 component, acrylic based, multi-purpose water proofing slurry. Sika Seal® -109 combines the crystallization action (pore block) and the water proofing capability of polymer. It Consists of special fillers, cement and properly graded aggregates.
Uses	Sika Seal® -109 is used as an economical and easy to apply water proofing slurry, for both external and internal waterproofing, crack sealing applications in generally wet areas. Sika Seal® -109 is suitable for the following applications: <ul style="list-style-type: none"> ■ Water/sewage works, sewage treatment plants (such as tanks, digestors, clarifiers, etc...). ■ Basements/lift pits. ■ Retaining walls/bridge structures. ■ Sea walls/irrigation channels. ■ Swimming pools.
Advantages	Sika Seal® -109 is part of a complete Sika® System for the economical waterproofing of water containment structures. Sika Seal® -109 offers the following advantages: <ul style="list-style-type: none"> ■ Pre-batched components (no water added). ■ Multi-purpose water proofing, crystallization and polymer modified cementitious slurry. ■ Non toxic ■ Slightly flexible. ■ Impermeable ■ Brush or trowel applied and it can be spray applied. ■ Good adhesion to sound surfaces.
Approvals / Tests	For direct contact with drinking and sewage waters, Issued by The Egyptian National Organisation for Water and Sewage. Sika Seal® -109 has been tested as per SCAQMD Rule 1168. Result: VOC Content < 5 g/L
Product Data	
Form	Comp. (A): Liquid Comp. (B): Powder
Colour of Mix	Grey White colour available upon request.
Packaging	25 kg units (Comp. (A) (liquid) 5.0 kg. + Comp. (B) (powder) 20 kg.).
Storage Conditions	Store in dry conditions, protected from moisture and frost.
Shelf Life	12 months from date of production if stored properly in undamaged and unopened original sealed packing.
Technical Data	
Density	Comp. (A+B) = 2.0 – 2.1kg/l (mixed)
Compressive Strength	After 28 days: 30 -35 N/mm ² (ASTM-C-942) Note: compressive strength based on mortar consistency 1:5.56 by weight.
Bond Strength	After 28 days: : > 2.0 N/mm ² (ASTM-C882)



Application Details

Mixing Ratio	Slurry (Comp. (A) : Comp. (B)) = 1 : 4 by weight. Mortar (Comp. (A) : Comp. (B)) = 1 : 4.5 by weight.
Coverage	Approx. 2 to 2.5 kg/m ² for two coats application depending on the surface and consistency required. Minimum two coats recommended on application.
Surface Preparation	Concrete surfaces must be mechanically cleaned, free from oil grease and loosely adhering particles. On "new" or smooth faced concrete, surfaces should be sand blasted to provide an "Open Pore Surface" to enhance the effectiveness of the crystallization process. Non-sand blasted surfaces will affect the performance of the crystallization process and the bond of the cementitious slurry. All surfaces must be as true and flat as possible. Saturate absorbent concrete surfaces thoroughly with water to achieve a surface saturated dry (SSD) condition.
Application Mixing	Place three quarters (3/4) of component (A) (liquid) in a suitable mixing container. Add component (B) (powder) to the liquid while mixing. Mechanical mixer must be used to ensure proper dispersion of component (B). After the entire component (B) has been added mix for an additional three minutes. The remaining one quarter (1/4) of component (A) is added during the addition of the component (B) to achieve the desired consistency.
Application	While the substrate is still in a SSD condition, apply the first coat and leave to harden (4-6 hours). Apply the second coat as soon as possible, after hardening of the first coat, to ensure proper adhesion between layers. For slurry consistency apply with a hard-bristle brush or broom. For the trowelable mortar use a notched trowel. After application of the second coat, finish Sika Seal® -109 by rubbing down with a soft dry sponge.
Cleaning	Clean all tools and equipment with clean water immediately after use. Hardened material can only be removed mechanically.
Pot Life (at 20 °C)	30 minutes
Important Considerations	Sika Seal® -109 will not bridge cracks or existing joints and has no added flexibility to overcome micro-cracking in the concrete.
Curing	To ensure the optimal impact of the dual water proofing capability of the Sika Seal® -109, it should be moist cured for a minimum of 24 hours to initiate the crystallization process (pore block) and then mist cured for an additional 24 hours. When moist curing is not possible the water proofing capability of the Sika Seal® -109 is provided by the polymer modified cementitious slurry.
Safety Instructions	Wear gloves and goggles.
Safety Precautions	In contact with eyes or skin, product may cause irritation.
Ecology	Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.
Toxicity	Non-Toxic under relevant health and safety codes.
Transport	Non-hazardous

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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