

Sika Seal® -105

Multi-Purpose Water Proofing Slurry

Product Description	<p>A cement base, polymer modified, 2 component, multi-purpose water proofing slurry. Sika Seal -105 combines the crystallization action (pore block) and the water proofing capability of polymer.</p> <p>It Consists of special fillers, cement and properly graded aggregates.</p>
Uses	<p>Sika Seal® -105 is used as an economical and easy to apply water proofing slurry, for both external and internal applications in generally wet areas.</p> <p>Sika Seal®-105 is suitable for the following applications:</p> <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. ▪ Balconies, kitchens and bathrooms
Advantages	<p>Sika Seal® -105 is part of a complete Sika® System for the economical waterproofing of water containment structures.</p> <p>Sika Seal® -105 offers the following advantages:</p> <ul style="list-style-type: none"> ▪ Pre-batched components (no water added). ▪ Multi-purpose water proofing, crystallization and polymer modified cementitious slurry. ▪ Impermeable ▪ Brush or trowel applied. ▪ Good adhesion to sound surfaces. ▪ Produced under the exacting standards of Sika®.
Approval / Tests	<p>For direct contact with drinking and sewage waters, Issued by The Egyptian National Organisation for Water and Sewage.</p> <p>Sika Seal® -105 has been tested as per SCAOMD Rule 1168. Result: VOC Content < 5 g/L</p>
Product Data	
Form	<p>Comp. (A): Liquid</p> <p>Comp. (B): Powder</p>
Packaging	25 kg units (A+B)
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	~ 2.0 kg/l	
Chemical Base	Cement, selected graded aggregates and polymer dispersion	
Substrate Temperature	+5°C minimum / +40°C maximum	
Compressive Strength	28 days ~ 30MPa Note: compressive strength based on mortar consistency 1:4.5 by weight.	(ASTM-C-942-94)
Flexural Strength	28 days ~ 8MPa All results based on quality control. Lab condition to I.S.O.	(ASTM-C-580-94)
Tensile Adhesion Strength	> 1MPa	
Bond Strength	28 days: 7-8 MPa	(ASTM-C-1042-85)

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® -105 by rubbing down with a soft dry sponge. In case of a third coat, scratch the surface of the second coat with the edge of the trowel to provide a mechanical key. In case of needed plaster layer over Sika Seal® -105, broadcasting is recommended to apply a bonding agent.
Cleaning	Clean all tools and equipment with clean water immediately after use. Hardened material can only be removed mechanically.



Waiting Time / Over-coating

Waiting time between coats:

+10°C	~12 hours
+20°C	~6 hours
+30°C	~3 hours

If waiting time period exceeds 24 hours, lightly blastclean the surface.

Sika Seal® -105 can be over-painted using solvent based primers or coatings.

Sika Seal® -105 must cure for a minimum of 7 days before over-coating.

Pot Life (at 20°C)

30 minutes

Important Considerations

Sika Seal® -105 will not bridge cracks or existing joints and has no added flexibility to overcome micro-cracking in the concrete.

Curing

As with all cement based products, curing is important. Protect newly applied product against direct sunlight, wind, rain and frost

In severe heat and/or wind, protection of the Sika Seal® -105 is recommended

For water tanks and swimming pools, it is essential to cure Sika Seal® -105 immediately after application for a minimum of 3 to 5 days to ensure full cement hydration and to minimise cracking.

Use polythene sheeting or similar approved methods

Safety Instructions**Safety Precautions**

Wear gloves and goggles.

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 products 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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