

Sika Seal® -105BR

A Protective and Waterproofing Cementitious Coating

Product Description	A cementitious polymer modified, 2 components protective and waterproofing coating, combining pore block crystallization action and polymers to enhance resistance to air born chlorides and gases. It acts as a thin layer coating material for concrete and renders with excellent waterproofing properties.	
Uses	<p>Sika Seal® -105BR is an economical protective and waterproofing coating for external and internal application of civil structures: above & below ground. It is used as well for sealing hair line cracks in concrete not subject to movement, in marine areas, to protect concrete in :</p> <ul style="list-style-type: none"> ■ Bridges ■ Sea walls ■ Facades ■ Balconies ■ Walkways ■ Concrete exposed to chloride or sulphate environments. <p>Sika Seal® - 105BR is also used for waterproofing of water containment structures such as: water & sewage treatment facilities, water tanks, swimming pools, irrigation channels etc....</p>	
Advantages	<p>Sika Seal® - 105BR offers the following advantages:</p> <ul style="list-style-type: none"> ■ Pre-batch components (No added water). ■ Brush, roller applied or sprayable. ■ High adhesion to prepared substrates. ■ Low consumption per M². ■ Slightly Flexible. ■ Crystallization pore blocking action. ■ Good abrasion resistance. ■ Improves concrete/masonry appearance. ■ Non-toxic, vapor permeable, allowing substrate concrete to breath. ■ May be applied to green concrete. 	
Certificate of approval	For direct contact with sewage and drinking water. Under testing by the Egyptian National Organization for potable water and sanitary drainage.	
Product Data		
Form	Comp. (A) liquid Comp. (B) powder	
Colour of mix	Grey and light Grey (other colors available upon request).	
Packaging	30 kg (Comp (A+B))	
Storage conditions	Store dry in pallets, off the ground, in the shade.	
Shelf life	12 months when un-opened and stored as recommended.	
Technical Data		
Density	Comp. (A + B) = 2 kg/l	
Compressive Strength	30 – 35 N/mm ² (after 28 days)	(ASTM-C-942-94)
Flexural Strength	10 – 14 N/mm ² (after 28 days)	
Bond Strength in Shear	7 – 8 N/mm ² (after 28 days)	



Application Details

Mixing ratio	Comp (A) : Comp (B) = 1:2 by weight
Coverage	A minimum of 2 coats always required. Approximate 1.2 to 1.7 kg/m ² . Subject to concrete porosity and conditions. Site samples are always recommended to fix actual consumption per m ² .
Surface Preparation	Concrete, Mortar & Masonry surfaces must be clean, sound, level and uncontaminated by oil or grease, remove cement laitance, form work traces and loosely adhering particles by sand blasting or high pressure water jet. Small areas may be prepared via wire brush or surface grinding. Make good honeycombing and other imperfections using Sika Rep repair mortar, for small bug holes & surface unevenness, use Sika Seal [®] -105BR in paste form. (Mixing ratio 1 : 4.5 or 1 : 5). Concrete surfaces are to be pre-saturated with water to S.S.D. condition.
Application	Place ¾ of comp. (A) (liquid) into a suitable mixing container, add comp. (B) (powders) to the liquid while mixing. Mechanical mixing must be used to ensure complete dispersion of the powder component, add the remaining liquid and mix for an additional three minutes, during this process, you may adjust the consistency by adding gradually the final additional liquid.
Mixing	
Application	<ul style="list-style-type: none"> ■ Sika Seal[®] - 105BR can be applied by trowel, stiff bristle or spray equipment. ■ While the concrete substrate is still in a S.S.D. condition, apply the first coat and leave to harden (4 to 6 hours). Apply the second coat as soon as possible, after hardening. ■ Additional coatings may be applied subject to estimated severity of the local conditions. ■ After application of the final coating, smooth down the surface of Sika Seal[®] - 105BR with a soft dry sponge.
Cleaning	Clean all tools with water immediately after use. Hardened material can only be removed by mechanical means.
Open Working Time	30 minutes at 20 - 23°C.
Important considerations	<ul style="list-style-type: none"> ■ Sika Seal[®] - 105BR has a high flexural behavior. Careful inspection of the existing concrete surface is advised, repairing concrete defects and obvious crack areas. ■ To increase crack bridge capabilities, selected mesh weaves may be incorporated in the protection system. ■ Contact our Technical Service Division for details.
Curing	To ensure optimal performance of Sika Seal [®] - 105BR: Mist water cure for a 48 hours period to initiate the pore blocking crystallization process is recommended. If this is not possible resistance will be provided by the liquid polymer contained in the Sika Seal [®] - 105BR coating.
Safety instruction	
Ecology	Do not dispose into water or soil but according to local regulations.
Transport	Non hazardous.
Safety precautions	Wear gloves & goggles, in case of contact with eyes or mucous membrane, wash with clean waters. Seek medical attention.
Toxicity	Non-toxic under relevant health and safety codes.

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.

