

## PRODUCT DATA SHEET

# SikaTop<sup>®</sup>-588 Seal

(formerly MSeal 588)

An elastomeric, cement based waterproof coating for concrete and masonry

### DESCRIPTION

SikaTop<sup>®</sup>-588 Seal is a two-component, crack-bridging, cementitious mortar, with special additives for waterproofing and protection of concrete.

Component A is a powder blend of Portland cements, selected silica sands and modifying agents. When mixed to a slurry consistency with Component B, liquid, an acrylic polymer emulsion, it can be easily applied by brush or roller. It cures to give an elastomeric flexible membrane.

Suitable for use in hot and tropical climatic conditions.

### FEATURES

- Retains flexibility when submerged
- Good chemical resistance against soft water, domestic waste water, manure or other liquids moderately aggressive to mineral substrates
- Freeze-thaw resistant
- Water vapour permeable
- CO<sub>2</sub> barrier
- Quick and easy brush or roller application

### USES

- Suitable for waterproofing of water-retaining structures which may be subject to movement.
- Suitable for concrete protection from water, carbonation and deicing salts.
- Suitable for use in terraces, balconies and wet area waterproofing where tiles are to be installed directly on top of the membrane using a proprietary tile adhesive.
- Suitable for application on damp substrates.
- Suitable for waterproofing of swimming pools.

### PRODUCT INFORMATION

<b>Composition</b>	Blend of Portland cements, selected silica sands and modifying agents.	
<b>Packaging</b>	Supplied in 35 kg unit:	
	Comp. A - Powder	25 kg
	Comp. B - Liquid	10 kg
<b>Shelf life</b>	12 months from date of production if stored properly in undamaged and original sealed packaging.	
<b>Storage conditions</b>	Store in original unopened packaging in a cool and dry condition between +5 °C and +35 °C. Protect from direct sunlight, heat and moisture. Avoid excessive compaction. Do not stack pallets.	

<b>Appearance and colour</b>	Available in Grey and White.	
<b>Maximum grain size</b>	~300 µm	(ASTM E 2651-10)
<b>Density</b>	~ 1.66 kg/l (fresh mortar at +25°C)	

## TECHNICAL INFORMATION

<b>Tensile strength</b>	Air cured 28 days	~ 0.7 N/mm <sup>2</sup>	(ASTM D412)
	Water cured 28 days	~ 0.5 N/mm <sup>2</sup>	
<b>Crack bridging ability</b>	Static crack bridging	> 1.5 mm	(EN 14891, A.8.2)
	Dynamic crack bridging ability	> 1 mm @ 20,000 cycles	(BS EN 1062-7:2004)
<b>Tensile adhesion strength</b>	~0.8 N/mm <sup>2</sup> (on concrete surface, at 28 days)		(EN 1542)
<b>Elongation at break</b>	Air cured 28 days	~37 %	(ASTM D412)
	Water cured 28 days	~30 %	
<b>Water absorption</b>	~1.5 %		(ASTM C642-15)
<b>Watertightness</b>	7 bar		(DIN 1048)
<b>Water permeability</b>	Class W3		(BS EN 1062-3:2008)
<b>Permeability to carbon dioxide</b>	Class C1		(BS EN 1062-1)
<b>Freeze thaw resistance</b>	No failure		(ISO DIN 4846.2 / EN 13687-1)

## APPLICATION INFORMATION

<b>Consumption</b>	~1 L / m <sup>2</sup> / mm per layer (min. 2 layers recommended) An additional 0.5 kg/m <sup>2</sup> is required when embedding approved mesh.		
<b>Yield</b>	~21 L / 35 kg unit		
<b>Layer thickness</b>	1 mm with constant thickness for each layer, minimum 2 layers recommended		
<b>Pot Life</b>	~ 60 min (at 25°C)		
<b>Waiting time</b>	~360 min (at 25°C)		

## BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## IMPORTANT CONSIDERATIONS

- Where subsequent tiling works are to be carried out on vertical surfaces, contact the local Sika representative for advice.
- Special precautions should be taken during application in direct sun and/or strong wind.
- Do not add water in any circumstances.
- Do not mix partially, mix only full kits.
- Protect freshly applied material from freezing conditions and rain, etc.

## 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

## SUBSTRATE PREPARATION

The surface to be coated must be clean and sound. Remove all traces of formwork, release agents, previous coatings, laitance, organic growth and any other contaminants that may affect the bond adversely. Suitable cleaning methods include ultra high-pressure water jetting, grit blasting and grinding. Aggressive percussive methods such as scabbling or scarifying are not recommended unless followed by grit blasting, wire brushing or high-pressure water jetting. After the above treatment, surfaces must be thoroughly rinsed with clean potable water to remove all dust and loose particles.

Crack bolt holes and large surface defects must be cut out and filled solid with SikaEmaco® range of repair material.

Small blowholes in the concrete should be filled with a thixotropic mix of SikaTop®-588 Seal Powder with reduced liquid content.

## MIXING

SikaTop®-588 Seal is supplied in premeasured units and should be mixed on site utilising clean containers. Slowly add the powder to the liquid and mix, using a slow speed drill fitted with a suitable paddle. MIX AND USE. Do not mix more material than can be used in one hour.

Do not allow the mixed material to exceed 32°C.

## APPLICATION

Apply SikaTop®-588 Seal in two coats at minimum 1 mm thickness per coat. Apply subsequent coats once the initial coat has dried.

SikaTop®-588 Seal must be reinforced with mesh across all construction joints and cracks. The reinforcing mesh may be either 100 % polypropylene or an alkali resistant glass-fibre mesh, depending on which particular enhanced tensile properties are required. Please consult your local Sika® Technical Service Representative for further advice on the correct selection of mesh.

## CURING TREATMENT

Under hot or excessive drying conditions adequate protective shielding should be foreseen.

In cold, humid or unventilated areas it may be necessary to leave the application for a longer curing period. SikaTop®-588 Seal needs to cure under dry-air conditions. Additional heating and/or ventilation can assist proper curing. Do not use dehumidifiers during curing periods.

## CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

## 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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ISO 9001, 14001, 45001 – SGS  
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- Sika MB Construction Chemicals LLC  
- Sika Saudi Arabia Limited  
- Sika Kuwait Cons. Mat. & Paints Co WLL  
- Sika Construction Chemicals for Manufacturing LLC  
- Master Builders Solutions LLC

All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.



### Product Data Sheet

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September 2024, Version 03.01

02070100000002040