BUILDING TRUST

PRODUCT DATA SHEET

SikaTop®-588 Seal

(formerly MSeal 588)

An elastomeric, cement based waterproof coating for concrete and masonry

PRODUCT DESCRIPTION

SikaTop®-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.

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 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.

CHARACTERISTICS / ADVANTAGES

- 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_2 barrier
- Quick and easy brush or roller application

PRODUCT INFORMATION

Chemical Base	Blend of Portland cements, selected silica sands and modifying agents.
Packaging	Supplied in 35 kg unit: Comp. A - Powder 25 kg Comp. B - Liquid 10 kg
Shelf Life	12 months from date of production if stored properly in undamaged and original sealed packaging.
Storage Conditions	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.
Appearance / Colour	Available in Grey and White.

Maximum Grain Size	~300 µm	(ASTM E 2651-10)
Density	~ 1.66 kg/l (fresh mortar at +25°C)	

TECHNICAL INFORMATION

Tensile Strength	Air cured 28 days	~ 0.7 N/mm²	(ASTM D412)
	Water cured 28 days	~ 0.5 N/mm²	
Crack Bridging Ability	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)
Tensile adhesion strength	~0.8 N/mm² (on concrete surface, at 28 days)		(EN 1542)
Elongation at break	Air cured 28 days	~37 %	(ASTM D412)
	Water cured 28 days	~30 %	
Water Absorption	~1.5 %		(ASTM C642-15)
Water Tightness	7 bar		(DIN 1048)
Water permeability	Class W3		(BS EN 1062-3:2008)
Permeability to CO2	Class C1		(BS EN 1062-1)
Freeze thaw resistance	No failure		(ISO DIN 4846.2 / EN 13687-1)

APPLICATION INFORMATION

Consumption	~1 L / m² / mm per layer (min. 2 layers recommended) An additional 0.5 kg/m² is required when embedding approved mesh.
Yield	~21 L / 35 kg unit
Layer Thickness	1 mm with constant thickness for each layer, minimum 2 layers recommended
Pot Life	~ 60 min (at 25°C)
Waiting time	~360 min (at 25°C)

VALUE BASE

- All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
- Internal Reference - Version: MBS_CC-UAE/ SI_588_07_20/v8/09_20/v9/11_20/v10/02_22

LIMITATIONS

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

ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

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 bushing 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 TOOLS

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 the 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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