SikaTop® Seal-107
Flexible Protective and Waterproofing Slurry

Product Description
A cement base, 2 component polymer modified waterproofing slurry. It is applied to concrete and mortar structures to prevent water infiltration.

Uses
- SikaTop® Seal-107 is used for external and internal waterproofing, crack sealing, repair work and protection from frost and detrimental effects of de-icing agents in the following structures:
  - Sewage treatment facilities including concrete tanks, digestors, clarifiers etc...
  - Water treatment facilities.
  - Waterproofing basement and cellars.
  - Terraces and balconies.
  - Bridges & Sea walls.
  - Retaining walls & for sealing "hairline" cracks in concrete structures not subject to movement surfaces.
  - Swimming pools and waterproofing of drinking water tanks and reservoirs.

Advantages
- SikaTop® Seal-107 provides the following beneficial properties:
  - Pre-batched components.
  - Mixed and applied easily & it can be spry applied
  - Slurry or trowelable consistency.
  - Good adhesion to sound substrates.
  - Impermeable and protection against concrete carbonation (80 microns SikaTop® Seal-107 is equivalent to 6 inches of concrete).
  - Increased frost and salt resistance.
  - Non-toxic and slightly flexible.
  - Non-corrosive to steel or iron & over-paintable.

Certificates of Approval
- The Egyptian National Organization for Water and Sewage.
- SikaTop® Seal-107 has been tested as per SCAQMD Rule 1168.
  - Result: VOC Content < 5 g/L

Product Data
Form
- Colour: Grey, White, Beige and light blue
- Packaging: 25 kg (A+B)
- Storage Conditions: Free from frost and moisture.
- Shelf Life: 12 months when unopened.

Technical Data
- Chemical Base:
  - Part A: liquid (Styrene acrylic) polymer and additive
  - Part B: Portland cement selected aggregate and admixtures
- Density: Comp (A+B) = 2.0 kg/l (mixed)
- Compressive Strength: 30 - 40 N/mm² at 20°C after 28 days (mortar consistency) (ASTM-C-942-94)
  - I.S.O. Quality assurance laboratory Results.
- Flexural Strength: 10 - 12 N/mm² at 20°C after 28 days (mortar consistency) (ASTM-C-580-94)
Bond Strength

Approx. 2 - 3 N/mm² after 28 days (sand blasted). (ASTM-C1042/85)

Application Details

Mixing Ratio

Slurry: 1:4 by weight
Mortar: 1:4.5 by weight

Coverage

Depending on type of application, two (2) coats always required. Three (3) coats may be required in areas of extremely high infiltration.

1st coat consumption 1-1.5 kg/m² on damp surface.
2nd coat consumption 0.8 - 1 kg/m² approx.

Surface Preparation

Concrete, mortar and masonry surfaces must be clean, free from grease, oil and loosely adhering particles. All surfaces must be as true and flat as possible. Saturate absorbent surfaces thoroughly with water before application.

Application Details

Mixing

The consistency of the mix can be altered by reducing the amount of component (A) (liquid) to be used. Under normal circumstances, when the full quantities of both components are mixed together, a slurry consistency will result. For a trowelable consistency use only 90% of component (A) (approx. 4.5 kg) Mix in a clean container by slowly adding the powder component to the liquid component and stirring with slow speed mixer.

Application

While the surface is still damp (no standing water) apply the first coat and leave to harden (2-6 hours). For slurry consistency, apply with a hard-plastic bristled brush or broom. For trowelable mortars, use a notched trowel. After the second coat has been applied, finish by rubbing down with a soft dry sponge.

After application of the second coat, finish SikaTop® Seal-107 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.

As Balcony Waterproofing Layer

Substrate must be SSD with no standing water at time of application. Apply a thick layer of SikaTop® Seal-107 over the entire balcony. While the material is still wet apply a non-alkaline, woven fiberglass mesh to reinforce the 107 layer along static hairline cracks, wall to slab transitions and patched areas. Using trowels remove any wrinkles in the mesh by forcing down into the SikaTop® Seal-107. Ensure the mesh is completely embedded and covered with SikaTop® Seal-107. If any areas are not covered apply additional SikaTop® Seal-107 over top of mesh to cover. Trowel to a smooth uniform finish. Allow curing so that surface can take light foot traffic without harming the coating.

In case of needed plaster layer over SikaTop® Seal-107, broadcasting is recommended to apply a bonding agent.

Cleaning

Do not leave material to harden before cleaning tools and equipment with water. Hardened material can only be removed mechanically.

Waiting Time / Over-coating

Waiting time between coats:

<table>
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<tr>
<th>Temperature</th>
<th>Time (hours)</th>
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<tbody>
<tr>
<td>+10°C</td>
<td>~ 12 hours</td>
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<tr>
<td>+20°C</td>
<td>~ 6 hours</td>
</tr>
<tr>
<td>+30°C</td>
<td>~ 3 hours</td>
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</tbody>
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If waiting time period exceeds 24 hours, lightly blast clean the surface.

SikaTop® Seal-107 can be over-painted using solvent based primers or coatings. SikaTop® Seal-107 must cure for a minimum of 7 days before over-coating.

Pot Life

35 minutes at 20°C, at higher temperature consult Sika Technical Services.

Important Recommendations

Minimum ambient and substrate temperature +8 °C. Never apply more than 4 kg/m² for one layer.

Avoid application in direct sun and/or strong wind. Do not add water in any circumstances. Apply only to sound, prepared substrates. Do not exceed maximum layer thickness.

For waterproofing or damp proofing applications, always use at least 2 coats to give a total thickness of between 1.5 to 2.0 mm. In areas of severe water penetration, three coats might be required.

Allow 2 days of air curing before subjecting SikaTop® Seal-107 to submersion.

Protect freshly applied material from freezing conditions and rain etc……

SikaTop® Seal-107 does not provide a trafficable finish. Use Sika®-1 Finishing Mortar for traffic surface or protect with a SikaTop®-77 or Sika Latex® bonded screed.
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 SikaTop® Seal-107 is recommended. For water tanks and swimming pools, it is essential to cure SikaTop® Seal-107 immediately after application for a minimum of 3 to 5 days to ensure full cement hydration and to minimize cracking. Use polythene sheeting or similar approved methods.

Safety Instructions
Ecology
Do not dispose of into water or soil, but according to local regulations.

Transport
Non-hazardous.

Safety Precautions
Wear gloves and goggles. In contact with eyes or skin product, may cause irritation.

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.