

# SikaRep®

## Multi Purpose, Economical, Patching and Repair Mortar

**Product Description** SikaRep® is a cementitious, silica fume and polymer containing, one-component repair mortar. Suitable for use in tropical and hot climatic conditions.

**Uses** For cosmetic or structural repair of deteriorated concrete and mortar. SikaRep® can be used on exterior or interior, horizontal and vertical applications.

**Advantages**

- One component, requires the addition of water only
- Easy to mix, apply and finish
- Excellent adhesion
- Shrinkage compensated
- Compatible with the properties of typical concretes
- Low water absorption, but vapour permeable
- Non corrosive, non toxic
- Excellent chloride and carbonation resistance

**Test Report** Al-Futtaim Tarmac Laboratories, United Arab Emirates

### Product Data

**Type** Cementitious, Silica fume, polymer composition

**Form** Grey Powder

**Packaging** 25 kg bag

**Storage Condition** Store in a dry area between 5°C and 35°C. Protect from direct sunlight

**Shelf life** 12 months minimum from production date if stored properly in original unopened packaging

### Technical Data

**Mixing ratio** Add 16 -18 % water to the dry powder (4.0 – 4.5 litres of water per 25 kg bag)

**Pot life (25°C)** Approximately 45 minutes

**Density** Approximately 2.0 – 2.1 kg/lt (Fresh mortar)

**Mechanical Strengths (28 days) (ASTM C109)**

Compressive strength (25°C)	= 40 N/mm <sup>2</sup>
Flexural strength	= 7-9 N/mm <sup>2</sup>
Adhesion (BS1881 Part 207)	> 2.0 N/mm <sup>2</sup> (concrete failure)

**Water absorption** < 0.01 ml/m<sup>2</sup>/sec (BS 1881, part 208)

**Yield** Approximately 14 Litres per 25 kg bag

**Layer Thickness** Minimum: 5mm, Maximum: 30 mm per application.



<b>Temperature</b>	Minimum 5°C    Maximum 40°C (substrate)
<b>Application Details</b>	
<b>Substrate preparation</b>	Substrate must be sound, free from dust, loose particles, cement laitance, curing compounds, oil, grease or any other contamination. Metal surfaces (steel and iron) should be free from scale, rust, oil and grease. <b>Pre-wet substrate to a saturated surface dry condition (SSD) prior to application.</b> Avoid puddles and standing water.
<b>Mixing</b>	Pour 4.0 - 4.5 lt. of clean, cold water into the mixing container. Add the <b>SikaRep®</b> powder slowly while mixing continuously for at least 3 minutes and until a homogeneous consistency is achieved. Use low speed electric mixers (max. 500 rpm). By adding the powder slowly and in portions, the desired application consistency can be obtained.
<b>Application</b>	A bonding agent, such as Sika MonoTop-610 or SikaTop Armatec 110 EpoCem is highly recommended. Apply <b>SikaRep®</b> while the bonding agent is still wet. The mortar can be applied by spatula or trowel. For any thickness greater than 30 mm, <b>SikaRep®</b> must be applied in several layers. As soon as the mortar has started to set it can be smoothed by wooden or synthetic float, styrofoam block or sponge. For a very fine surface finish, Sika MonoTop 620 / 625 can be applied over the <b>SikaRep®</b> .
<b>Curing</b>	Where ambient conditions may lead to rapid surface drying, the use of light water fogging for 48 hrs or application of a suitable water based curing compound (Sika Antisol E) is recommended. Do not commence fogging until final set has been reached.
<b>Cleaning</b>	Application and mixing tools should be cleaned with water while the material is still fresh. Hardened material can only be removed mechanically.
<b>Remarks</b>	<ul style="list-style-type: none"> <li>■ <b>SikaRep®</b> should not be used at temperatures below 5°C.</li> <li>■ At ambient temperatures above 35°C, the material should be stored in the shade and chilled water should be used for mixing.</li> <li>■ <b>SikaRep®</b> may be overcoated with Sikagard ElastoColor W, Sikagard-680 S, Sikagard-550 W Elastic and all <b>SikaRep®</b> and MonoTop products.</li> </ul>
<b>Notes</b>	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
<b>Safety</b>	For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

## 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.



**Sika Gulf B.S.C (c)**  
Bldg. 925, Road 115, Sitra Area 601  
P.O. Box 15776  
Adliya, Kingdom of Bahrain  
TEL.:+973 17738 188  
Fax:+973 17732 476  
E-mail:sika.gulf@bh.sika.com  
Web: <http://www.sika.com.bh>

