

# Sika® MonoTop®-614

## Fibre Reinforced, Polymer Modified Repair Mortar

**Product Description** Sika® MonoTop®-614 is a cementitious, silica fume containing, fibre reinforced, polymer modified, one-component repair mortar for application at a higher thickness. This product is suitable for use in tropical and hot climatic conditions.

**Uses** Sika® MonoTop®-614 is used for structural concrete repairs, especially for overhead and vertical applications, and is suitable for application by the wet-spray method.

**Advantages** Sika® MonoTop®-614 is easy to use requiring to be mixed with water only

- Excellent workability
- Adjustable consistency
- Especially suitable for overhead and vertical applications
- Good mechanical strengths
- Excellent frost resistance
- Excellent thixotropic behavior
- Applicable in layers up to 60 mm in thickness
- Non corrosive, non toxic
- Suitable for wet spray application
- Sulphate resistant

**Test Report** LPM;Laboratory for Preparation and Methodology (Beinwil am See, Switzerland)

### Product Data

**Type** Cementitious, 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 14% water to the dry mix (3.5 litres of water per 25 kg bag)

**Pot life (30°C)** 30 - 40 minutes



<b>Density</b>	Approximately = 2.15 kg/lt. (Fresh mortar)		
<b>Mechanical Strengths (28 days) (ASTM C109)</b>	Compressive strength (25°C)	= 30 - 35 N/mm <sup>2</sup>	
	Flexural strength	= 8 - 10 N/mm <sup>2</sup>	
	Adhesion (Pull-off)	> 1.5 N/mm <sup>2</sup> (concrete failure)	
<b>Modulus of elasticity</b>	Approximately 24'000 N/mm <sup>2</sup> (static)		
<b>Coefficient of thermal expansion</b>	Approximately 10.10 <sup>-6</sup> m/m per °C		
<b>Index of Vapor diffusion</b>	μ H <sub>2</sub> O = approximately 300		
<b>Index of CO<sub>2</sub> diffusion</b>	μ CO <sub>2</sub> = approximately 2500		
<b>Yield</b>	Approximately 13 litres per 25 kg bag		
<b>Layer Thickness</b>		<b>Horizontal</b>	<b>Vertical</b>
	Minimum	15 mm	15 mm
	Maximum	60 mm	40-50 mm
			<b>Overhead</b> 15 mm 30-40 mm
<b>Application Details</b>			
<b>Substrate preparation</b>	Substrate must be clean, 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 saturated surface dry condition prior to application.</b> Avoid puddles and standing water.		
<b>Mixing</b>	Pour water in the given quantity into a clean mixing container. Add powder while mixing continuously. Use a low speed electric mixer (max. 500 rpm) for at least 3 minutes, avoiding entrapping of air. By adding the powder slowly 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>Sika® MonoTop®-614</b> while the bonding agent is still wet. <b>Sika® MonoTop®-614</b> can be applied by wet-spray equipment such as Putzmeister, Melomat, Vario-Jet etc. The mortar can also be applied by spatula or trowel. For thickness greater than 60 mm, <b>Sika® MonoTop®-614</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>Sika® MonoTop®-614</b> .		
<b>Curing</b>	Where ambient conditions may lead to rapid surface drying, the use of light water fogging for 48 hours or 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 immediately after use with water while the material is still fresh. Hardened material can only be removed mechanically.		
<b>Remarks</b>	<b>Sika® MonoTop®-614</b> should not be used at temperatures below 5°C. At ambient temperatures above 35°C, the material should be stored in the shade and chilled water should be used for mixing. <b>Sika® MonoTop®-614</b> may be over coated with Sikagard ElastoColor W, Sikagard-680 S, Sikagard-550 W Elastic and all Sika Rep and MonoTop products.		

## Notes

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.

## Safety

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>

