

# Sika® MonoTop®-610

## Polymer Modified Bonding Slurry and Reinforcement Protection

<b>Product Description</b>	<b>Sika® MonoTop®-610</b> is a 1-component, cementitious, silica fume containing, polymer modified, coating material used as a bonding slurry and corrosion protection for reinforcement. Suitable for use in tropical and hot climatic conditions.
<b>Uses</b>	<ul style="list-style-type: none"><li>■ Corrosion protection for reinforcement in concrete repair</li><li>■ Bonding slurry onto concrete and mortar as part of the Sika MonoTop Repair System</li></ul>
<b>Advantages</b>	<ul style="list-style-type: none"><li>■ Easy to use; mix with water only</li><li>■ User-friendly application</li><li>■ Excellent adhesion to concrete and steel</li><li>■ Good resistance to water and chloride penetration</li><li>■ Moisture insensitive</li><li>■ Good mechanical strengths</li><li>■ Sprayable as with the wet spray method</li></ul>
<b>Test Report</b>	EMPA, Federal Material Testing Laboratory (Dübendorf, Switzerland). LPM, Laboratory for Preparation and Methodology (Switzerland). WRc, Water Byelaws Scheme (UK). Frost deicing salt resistance according SIA 162/1, Test Method No. 9
<b>Product Data</b>	
<b>Type</b>	Cementitious, polymer composition
<b>Form</b>	Grey- Pinkish Powder
<b>Packaging</b>	25 kg bag
<b>Storage Condition</b>	Store in a dry area between 5°C and 35°C. Protect from direct sunlight
<b>Shelf life</b>	12 months minimum from production date if stored properly in original unopened packaging
<b>Technical Data</b>	
<b>Mixing ratio</b>	<b>For brush application</b> Add 21% clean water to the dry powder or 5.25 liters water per 25 kg bag <b>For spray application</b> Add 20% clean water to the dry powder or 5.0 liters water per 25 kg bag
<b>Pot life (30°C)</b>	40 - 60 minutes
<b>Density</b>	Fresh mortar – approximately 2.00 kg/lt



<b>Mechanical Strengths (28 days) (ASTM C109)</b>	Compressive strength (25°C) = 45 - 55 N/mm <sup>2</sup> Flexural strength = 5.5 - 7.5 N/mm <sup>2</sup> Adhesion (Pull-off) > 2.0 N/mm <sup>2</sup> (concrete failure)
<b>Modulus of elasticity</b>	Approximately 20'000 N/mm <sup>2</sup> (static)
<b>Coefficient of thermal expansion</b>	Approximately 15x10 <sup>-6</sup> m/m per °C
<b>Index of Vapor diffusion</b>	Approximately μ H <sub>2</sub> O = 80
<b>Index of CO<sub>2</sub> diffusion</b>	Approximately μ CO <sub>2</sub> = 200
<b>Yield</b>	Approximately 15 Liters per 25 kg bag
<b>Consumption</b>	<b>Bonding slurry</b> Apply in a thickness of approximately 1 mm (2.0 kg/m <sup>2</sup> ) <b>Anti corrosion coating</b> Apply in a thickness of approximately 1 mm per coat (approx. 2.0 kg/m <sup>2</sup> ). 2 coats are normally required
<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. Large spalled areas, cracks and pot holes should be raked out and cleaned. Use <b>Sika® MonoTop-612</b> for substrate repairs, which can be applied in thicknesses from 5-30 mm per layer. <b>Pre-wet substrate to a 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 low speed electric mixers (max. 500 rpm) for 3 minutes and until a uniform consistency is achieved. Avoid entrapping air. By adding the powder slowly in portions, the desired application consistency can be obtained. <b>Sika® MonoTop®-610</b> must be mixed to a brushable, slightly dripping consistency.
<b>Application</b>	<b>Bonding slurry</b> Apply by brush, roller or suitable spraying equipment to the prepared (pre-wetted) substrate. To achieve a good bond <b>Sika® MonoTop®-610</b> must be rubbed well into the substrate, fill all unevenness. Following repair mortars have to be applied wet on wet to the bonding slurry. <b>Reinforcement protection</b> Apply first layer of approximately 1 mm thickness, using a medium hard brush, roller or spray to the cleaned reinforcement. Apply the second layer at an identical thickness after a waiting time of 2 - 3 hours (at 30°C). Following repair mortars can be applied after a similar waiting time.
<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.

**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.



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