

**Product Data Sheet**  
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 Sika MonoTop® 610

# Sika® MonoTop® 610

## Bonding Slurry and Reinforcement Corrosion Protection

**Description** Sika MonoTop 610 is a one component, cementitious, polymer modified mortar containing silica fume and corrosion inhibitors.

**Uses** As a treatment for preventing continued corrosion of reinforcement in concrete and as a bonding bridge for concrete repair using the Sika MonoTop concrete repair system comprising:

- Sika MonoTop 610 Bonding Slurry and Reinforcement Corrosion Protection
- Sika MonoTop 615 HB High Build Polymer Modified Repair Mortar
- Sika MonoTop R High Performance Polymer Modified Repair Mortar

**Advantages**

- One component system requiring only the addition of clean water
- Easy application with brush, roller or spray
- Excellent bonding to steel and concrete
- High impermeability to water and chlorides
- Moisture insensitive
- High mechanical strength
- Non- toxic
- Alkaline passivation of reinforcement steel
- Sprayable using wet spray method
- Containing corrosion inhibitors

**Product Data**

**Form/Colour** Powder / Grey

**Packaging** 25 kg bag

**Storage** Dry, cool, shaded place

**Shelf life** Min. 6 months if stored properly in unopened, original packaging



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## Technical Data

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<b>Density</b>	~ 1.15 kg/ltr (bulk density of powder) ~ 2.15 kg/ltr (density of fresh mortar)
<b>Mixing ratio</b>	Water : Sika Monotop 610 powder = 1 : 4.55 – 5.00 (parts by weight) Water : Sika Monotop 610 powder = 1 : 3.95 – 4.35 (parts by volume) 5.00 - 5.50 litres of clean water per 25 kg bag
<b>Consumption</b>	Bonding agent: 1,5 - 2.0 kg/m <sup>2</sup> (depending on the surface structure of the substrate). Reinforcement protection: approximately 2.0 kg/m <sup>2</sup> /coat of 1 mm thick (2 coats are required).
<b>Pot life</b>	~ 30 minutes (at 27°C / 65 % r.h)
<b>Compressive strength</b>	~ 50 N/mm <sup>2</sup> (28 days) ASTM C-349
<b>Flexural strength</b>	~ 7 N/mm <sup>2</sup> (28 days) ASTM C-348
<b>Bond strength</b>	~ 1.5 N/mm <sup>2</sup> (on prepared concrete surface)
<b>Application temperature</b>	Minimum 6°C Maximum 40°C

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## Application

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***Precise and efficient surface preparation is essential to achieve the high adhesive qualities of Sika MonoTop 610.***

*Concrete:*

All concrete and mortar substrate must be sound, clean and free from oil, grease and surface contaminants. All loose materials and surface laitance must be removed. For large areas, grit or grit-water blasting or scabbling is recommended. For small areas and for "spot" repairs, needle gunning or jack-hammering is effective. The concrete or mortar substrate must have a minimum compressive strength of 20 MPa. If in doubt test with a Concrete Test Hammer.

Special care must be taken to ensure that the substrate does not contain any coating, such as a curing membrane, that will prevent the Sika Monotop 610 from penetrating the surface.

*Steel:*

Reinforcement must be suitably wire-brushed or water/ grit-blasted to provide a surface free of rust, oil, grease or any other contaminants.

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**Mixing**

Sika Monotop 610 should be mechanically mixed in a clean container using a low-speed electric mixers (max. 500 rpm). For small quantity or small repair area application, Sika Monotop 610 shall be hand-mixed, this is to ensure “wet on wet” application of subsequent patch repair mortars (either Sika Monotop R or 615 HB) and thus minimizing wastage.

Fill sufficient clean water into a small clean container. Add Sika Monotop 610 to the water and mix thoroughly until you obtain a thick “slurry” consistency. Always ensure that there are no lumps in the mix.

If a mix has thickened due to delayed application, DO NOT dilute further with water. This should be discarded.

**Application**

*As a bonding slurry:*

Apply by brush, roller or suitable spraying equipment to the prepared (pre-wetted) substrate.

To achieve a good bond Sika Monotop 610 must be rubbed well into substrate, fill all unevenness.

Any following repair mortars have to be applied wet on wet to the bonding slurry.

*As a reinforcement protection:*

Apply first layer of approx. 1 mm thickness, using medium hard brush, roller or spray to the cleaned reinforcement. Apply the second layer at identical thickness as soon as the first layer is hardened enough to receive following layer application (waiting time is min. 4 hours at 27 °C).

Care should be taken to ensure that the back of the reinforcement is also coated.

Following repair mortars can be applied after a similar waiting time.

**Cleaning**

Remove non-hardened Sika Monotop products from tools and equipment with water. Hardened material can only be removed mechanically.

**Health and Safety information**

**Ecology** Do not dispose into water or soil.

**Transportation Class** Non hazardous

**Waste disposal** According to local law

**Important notes**

Sika Monotop 610 contains cement and is therefore alkaline. Suitable precautions should be taken to minimize direct contact with the skin. Should the material enter the eyes, rinse immediately with clean water and seek medical attention.

**Disclaimer**

*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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