



# Sika MonoTop® 610

## Cementitious Based Steel Reinforcement Primer and Bonding Bridge

### Technical Data Sheet

#### DESCRIPTION

**Sika MonoTop 610** is a one component cementitious, polymer modified primer for reinforcement protection and also a bonding bridge for **MonoTop** concrete repair mortars.

#### USES

**Sika MonoTop 610** may be used to bond **MonoTop** concrete repair mortars to existing cementitious or steel substrates and provide additional corrosion protection to reinforcement in **MonoTop** concrete repair mortars especially in areas of low concrete cover and in the presence of chlorides.

#### ADVANTAGES

- \* Only requires mixing with water.
- \* Easy, user friendly application.
- \* Active corrosion inhibitors for added protection.
- \* Excellent adhesion to concrete and steel.
- \* Good resistance to water and chloride penetration.
- \* Meets ZTV-SIB requirements for corrosion protection.
- \* Good mechanical properties.
- \* Sprayable by wet spray method.
- \* Adjustable consistency.
- \* Low wastage.
- \* Disposable packaging.
- \* Suitable for drinking water contact.

#### Technical Data (typical)

<b>Mixed colour:</b>	Light Grey
<b>Mixed density:</b>	2.0 kg/litre
<b>Volume solids:</b>	100%
<b>Mix ratio</b>	
Water:Powder	1:4.13 by volume
For brush application	1:4.75 by weight (5.25 litres of water per 25kg bag)
For spray application	1:5 parts by weight 1:4.35 by volume (5 litres of water per 25kg bag)
<b>COATING SYSTEM:</b>	
<b>Steel reinforcement primer:</b>	2 x 1.0 mm <b>Sika MonoTop 610</b>
<b>Bonding bridge:</b>	1 x 1.0 mm <b>Sika MonoTop 610</b>
<b>Bond strengths:</b>	Concrete 1.0 - 2.5 N/mm <sup>2</sup> Steel 1.0 - 2.0 N/mm <sup>2</sup>
<b>Application temperatures:</b>	+5°C minimum and rising +30°C maximum (Substrate and ambient)
<b>Pot life:</b>	Approx 90 - 120 minutes Subject to temperature
<b>Waiting time between coats:</b>	4 - 5 hours
Allow similar times before bonding bridge application.	
Approved for potable water contact. Details available on request.	
All above values are approximate.	

## CONCRETE SUBSTRATE PREPARATION

Breakout and remove all concrete designated as being defective, loose and unsound, using suitable mechanical equipment.

Ensure sufficient concrete is removed from around reinforcement to allow priming and compaction of the repair material.

At the repair locations, feather edging should be avoided.

The edges should be square cut to at least the recommended minimum application thickness of the repair material. Where a saw cut is employed, the substrate should be roughened mechanically to provide a 'key' between the repair mortar and substrate.

## STEEL REINFORCEMENT

All exposed reinforcement should be thoroughly prepared to clean, bright metal, using abrasive blast cleaning or other approved means.

## MIXING

Pour water in the correct ratio into the mixing vessel. Add powder while mixing continuously. To avoid entraining too much air use low speed mixer (max 500 rpm) for minimum 3 minutes. By gradually adding the powder in portions, the desired application consistency can be obtained.

## APPLICATION

Apply by brush to steel/concrete.

### Steel reinforcement primer:

Within 4 hours of preparation of the steel, apply one coat of **Sika MonoTop 610** to a minimum thickness of 1mm. After the first coat has reached initial set, apply a second coat of **Sika MonoTop 610** onto the previously coated steel.

If the second coat of **Sika MonoTop 610** is allowed to dry prior to repair mortar application, then a fresh coat must be applied.

### Bonding bridge:

Before applying the **Sika MonoTop 610** as a bonding bridge, all surfaces must be thoroughly prewetted to a saturated surface dry condition. The **Sika MonoTop 610** is then applied by brush to the concrete substrate.

## IMPORTANT CONSIDERATIONS

- \* Care should be taken to ensure continuous application behind the bar
- \* Do no part mix components.
- \* Always apply two coats to the steel reinforcement.
- \* The bonding bridge application also forms the second coat for the reinforcement primer.
- \* When used as a bonding bridge, the "grab" properties of the **Sika MonoTop 610** will reduce if it dries out before **Sika MonoTop** mortar application. Repeat application if necessary.

## CLEANING EQUIPMENT

Use clean water. Hardened material may only be removed mechanically.

## PACKAGING

Refer to latest price list.

## CONSUMPTION

1 litre of fresh mortar: approx 1.65kg dry powder.

Steel reinforcement primer: Approx 2.0 kg/m<sup>2</sup> per coat.

Bonding bridge: Approx 1.5 - 2.0 kg/m<sup>2</sup> dry

Excluding allowances for loss wastage, surface profile and porosity.

## STORAGE AND SHELF LIFE

Minimum 1 year in sealed containers stored in dry warehouse conditions (+10°C - +25°C).

### Handling Precautions

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

### Important Note

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 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

Please consult our Technical Sales Department for further information

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