

Product Data Sheet
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SikaTop®-Armatec 110 EpoCem®

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Bonding slurry and anti – corrosive rebar coating

Product Description

SikaTop®-Armatec 110 EpoCem® is cement-based epoxy-modified three-component anti corrosive coating and bonding slurry.

Uses

SikaTop®-Armatec 110 EpoCem® is anti-corrosion coating for reinforcement steel:

- For repairs to reinforced concrete where there is corrosion of the underlying reinforcement steel
- For the preventive protection of reinforcement steel in thin reinforced concrete sections

As bonding slurry for use on concrete, mortar or steel:

- For repairs to concrete using SikaTop® patching and repair mortars
- For bonding of new and old concrete

Characteristics / Advantages

- Excellent adhesion to steel and concrete
- Acts as an effective barrier against penetration of water and chlorides
- Contains corrosion inhibitors
- Provides an excellent bonding coat for subsequent application of repair mortars cement and epoxy based
- Pre measured, ready-to-use packs
- May be spray-applied
- Frost- and de-icing salt resistant
- Non-flammable

Tests

Approval / Standards

LPM, Laboratory for Preparation and Methodology, Beinwil am See, Switzerland
Ibac Aachen A 3119/3

Product Data

Form

Appearance /Colours

Part A: white liquid
Part B: translucent yellowish liquid
Part C: cement grey powder
Mixed product: grey

Packaging

Pre-dosed packs (A+B) 6.75 kg sets.
Part A:0.50 kg plastic container
Part B:1.25 kg bag
Part C:5.00 kg bag

Storage

Construction



Storage Conditions/ Shelf-Life	Store at temperatures between +5 °C and +40 °C. Comp. C must be protected from humidity. 6 months from date of production if stored properly in unopened original packing.
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Technical Data

Chemical Base	Epoxy modified cementitious coating		
Density	Comp. A	1.08 kg/l at 27 °C	
	Comp. B	1.008 kg/l at 27 °C	
	Comp. (A+B+C)	1.90 kg/l (density of slurry when mixed) at 27 °C	
Bond Strength (+23 °C)	On concrete (sandblasted):	1-2 N/mm ²	(ISO 4624)
	On steel:	1-3 N/mm ²	

System Information

Application Details

Mix ratio	Parts by weight : A : B : C = 1 : 2.5 : 10 (by weight)
Pot life (8 kg)	1 hour (at 30°C)
Limitations	Min. application temperature (ambient and substrate) : +10 °C
	Max. substrate temperature : +35 °C
	The recommended dosage must be strictly adhered to On no account should water be added to the mix.
Coverage	As an anti- corrosion coating : ~2kg/m ² for 2 coats, depending on method of application.
	As a bonding slurry :
	Depending on substrate conditions, not less than 1.2 – 1.5 kg/m ² .
Surface Preparation	Concrete, Motar, Stone :
	Substrate must be clean, sound and free from all traces of loose material, laitance, grease and oil.
	Min. substrate roughness 2mm.
	Steel :
	Surface must be clean and free from all traces of grease and oil, rust and mill scale. Degree of cleaning SA2.
Mixing	Shake component A and B vigorously before opening. Pour both liquids into a suitable mixing pan and mix for 30 seconds. Add component C slowly while continuing to stir. Mix mechanically for 3 minutes, using a slow-speed electric stirrer (250 RPM) in order to entrain as little air as possible. Rest for 5- 10 minutes, until the mixture exhibits a brushable low- dripping consistency.

Application	<p>When used as anti corrosion coating:</p> <p>Apply a coating of approx. 0.5- 1mm thick to the cleaned and derusted reinforcement, using a stiff paintbrush, roller or spray gun. Leave to dry for 2-3 hours (at an ambient temperature of +20 °C), than apply a second coat to similar thickness. Leave to dry for a similar period of time before applying patching mortar. It is inevitable that the anti-corrosion coating is applied as well on the surrounding concrete; this is by no means a disadvantage.</p> <p>When used as a binding agent for repair mortar or concrete:</p> <p>Wet down a prepared substrate (concrete) to saturated surface dry condition. Then apply a bonding coat not less than 0.5 mm thick, using a paint brush, roller or suitable spay gun. For best results, work the bonding slurry well into the substrate to ensure complete coverage of all surface irregularities. Apply the freshly mixed patching mortar wet on wet to the bonding slurry.</p> <p>The application of slurry coat or patching mortar may be applied wet on wet or up to a maximum waiting time of</p> <table border="1"> <thead> <tr> <th>Substrate Temperature</th> <th>Waiting Time</th> </tr> </thead> <tbody> <tr> <td>+25 °C</td> <td>1hour(min)& 1 day(max)</td> </tr> </tbody> </table> <p>Freshly applied SikaTop®-Armatec 110 EpoCem® should be protected from rain until next coat is applied.</p>	Substrate Temperature	Waiting Time	+25 °C	1hour(min)& 1 day(max)
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+25 °C	1hour(min)& 1 day(max)				
Cleaning	Use water to remove uncured material from tools and mixing equipment. Once cured, SikaTop®-Armatec 110 EpoCem can only be removed mechanically.				
Important Notes	When SikaTop®-Armatec 110 EpoCem® is used as bonding coat between old and new concrete, it is necessary to install connecting reinforcement for shear strength transfer as per relevant guide lines.				
Value Base	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.				
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.				
Transportation Class	Users shall refer to the most recent Material Safety Data Sheet.				
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.				

