

# SikaTop® 123 Plus

## Polymer-Modified, Cementitious, Non-Sag Mortar, PLUS Migrating Corrosion Inhibitor

<b>Description</b>	SikaTop® 123 Plus is a polymer-modified, PLUS migrating corrosion inhibitor, cementitious, two-component, fast-setting mortar. Formulated for trowel application, it is designed especially for repair of overhead and vertical surfaces.
<b>Where to Use</b>	<ul style="list-style-type: none"> <li>■ Use on grade, above, and below grade on concrete and mortar.</li> <li>■ Structural repair material for parking structures, industrial plants, walkways, bridges, tunnels, ramps, and dams.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>■ Superior abrasion resistance over conventional cement mortar.</li> <li>■ Bond strength ensures superior adhesion.</li> <li>■ Not a vapour barrier</li> <li>■ Compatible with coefficient of thermal expansion of concrete.</li> <li>■ Increased resistance to de-icing salts.</li> <li>■ Good freeze/thaw resistance</li> <li>■ High early strength</li> <li>■ Easy-to-use, fast-setting, labour-saving system.</li> <li>■ High compressive and flexural strengths.</li> <li>■ Not flammable</li> <li>■ Meets MTO MI-67 specification for patching materials.</li> <li>■ Meets ATU B391 specification for patching materials.</li> <li>■ Canadian Food Inspection Agency acceptance.</li> <li>■ Ministry of Transport Québec acceptance.</li> </ul>

### Technical Data

<b>Packaging</b>	20.5 kg (45 lb) unit
<b>Colour</b>	Concrete Grey when mixed
<b>Yield</b>	Approx. 10 L (0.353 ft³)
<b>Shelf Life</b>	1 year in original, unopened packaging. Store dry at 5° - 32°C (41° - 89°F). Condition product to 15° - 24°C (59° - 75°F) before using. Protect component A from freezing. If frozen, discard.
<b>Mixing Ratio</b>	A:B = 1:4.8 by weight depending on consistency required
<b>Application Time [23°C (73°F)]</b>	Approx. 15 min after mixing the mortar
<b>Finishing Time [23°C (73°F)]</b>	Approx. 30-60 min after placing the mortar

### Properties at 23°C (73°F) and 50% R.H.

<b>Density ASTM C 185</b>	2000 kg/m³ (125 lb/ft³)
<b>Compressive Strength ASTM C 109</b>	
24 hrs	20 MPa (2900 psi)
7 days	37 MPa (5366 psi)
28 days	50 MPa (7250 psi)
<b>Modulus of Elasticity ASTM C 469</b>	
7 days	17 GPa (2.4 x 10 <sup>6</sup> psi)
28 days	26 GPa (3.7 x 10 <sup>6</sup> psi)
<b>Tensile Splitting Strength ASTM C 496</b>	
21 days	5 MPa (725 psi)
<b>Bond Strength ASTM C 882</b>	
24 hrs	7 MPa (1015 psi)
28 days	17 MPa (2465 psi)
<b>Bond Strength CAN A23.2-6B</b>	
28 days	Greater than concrete
<b>Rapid Chloride Permeability AASHTO T277</b>	
14 days	270 Coulombs



<b>How to Use</b>	
<b>Surface Preparation</b>	Remove all deteriorated concrete, dirt, oil, grease, other bond inhibiting materials from surface. Be sure patch area is no less than 3 mm (1/8 in) minimum depth. Preparation work should be done by chipping, high-pressure waterblasting, or other appropriate mechanical means. Obtain substrate fracture with a minimum surface profile of $\pm 1.5$ mm (1/16 in) (CSP 5-9). Dampen surface to be repaired with clean water. Substrate should be saturated surface dry (SSD) with no standing water during application.
<b>Mixing</b>	Mix mechanically using a heavy duty, low-speed drill (300-450 rpm) with a mixing paddle (ex.: Mud Mixer Type). Shake component A before using, then pour approx. 4/5 component A into mixing container. Add component B while continuing to mix. Mix to a uniform consistency for a minimum of 3 min. Add additional component A to mix if a wetter consistency is required. Should you need smaller quantities, be sure that components are dosed in correct ratio and thoroughly premix component B before dosing. Ratio is A:B = 1:4.8 by weight.
<b>Application</b>	At time of application, surfaces should be damp (saturated surface dry) with no glistening water. Mortar must be scrubbed into substrate filling all pores and voids. Alternatively, SikaTop® Armatec 110 EpoCem® can be used as a bonding agent. Apply mortar before bond coat dries, then screed. Force product against edge of repair, working toward center. Allow mortar to reach initial set [30-60 min after placing at 23°C (73°F)], then finish with wood or sponge float for a smooth surface. For extra smooth finish, wipe steel trowel with component A during finishing. If repair requires several lifts, each lift must be applied as soon as the previous lift will support it and all surfaces but the last must be left rough. Unfinished work from previous day must be roughened and any polymer film removed to ensure bond.
<b>Curing</b>	As per ACI 308 recommendations for cement concrete, curing is required. To achieve performance consistent with technical data sheet results, curing must be provided by recognized curing methods, such as, mist spray of water/damp burlap, white polyethylene film or approved water-based curing compound, such as Sika's Florseal® WB. Curing must commence immediately after placing and finishing. Moist curing must be maintained for the first 24 hours. Protect freshly applied mortar from direct sunlight, wind rain and frost.
<b>Clean Up</b>	Remove SikaTop® 123 Plus from tools and mixing equipment with water. Cured product can only be removed mechanically.
<b>Limitations</b>	<ul style="list-style-type: none"> <li>■ Minimum application thickness: 3 mm (1/8 in).</li> <li>■ Maximum lift thickness: 38 mm (1 1/2 in). Maximum total applied thickness should not exceed 76 mm (3 in) without additional reinforcing support. For additional information consult Sika Technical Service.</li> <li>■ Minimum ambient and surface temperature: 7°C (44°F) and rising at time of application.</li> </ul>
<b>Caution</b>	Contains cement, silica sand and a polymer which may in certain cases, cause skin irritation. Avoid breathing dust. Use only with adequate ventilation. In confined areas, use of a NIOSH/MSHA approved respirator is recommended. In case of skin contact, wash thoroughly with water. Consult product label for additional information.
<b>First Aid</b>	In case of skin contact, wash with soap and water. For eye contact flush immediately with plenty of water for at least 15 min. Contact a physician. For respiratory problems, transport victim to fresh air. Remove contaminated clothing and wash before re-use.

For more information, consult Sika Material Safety Data Sheet.

KEEP OUT OF REACH OF CHILDREN  
FOR INDUSTRIAL USE ONLY

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, within their shelf life. 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 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 or can be accessed in the Internet under [www.sika.ca](http://www.sika.ca).



Sika Canada Inc.  
601 Delmar Avenue  
Pointe-Claire, QC H9R 4A9  
Tel.: (514) 697-2610  
Fax: (514) 697-3087

Ontario  
6915 Davand Drive  
Mississauga, ON L5T 1L5  
Tel.: (905) 795-3177  
Fax: (905) 795-3192

Alberta  
18131-114th Avenue N.W.  
Edmonton, AB T5S 1T8  
Tel.: (780) 486-6111  
Fax: (780) 483-1580

1-800-933-SIKA  
[www.sika.ca](http://www.sika.ca)

An ISO 9001:2000 certified company  
Pointe-Claire : ISO 14001:2004 certified EMS