

Sika® CemCrete

Acrylic based waterproof coating system for concrete and masonry

Product Description

Sika® CemCrete when used in combination with cement improves the shortcoming of plain cement. Sika® CemCrete acrylic polymer enhances the properties of cement slurry/ mortar/concrete making them excellent choice for use in new construction as well as renovation work.

Uses

Sika® CemCrete is a composite waterproof coating system when used in combination with cement, glass fibre, silica sand, etc.

Suitable for waterproofing of :

- Roof terraces, roof slabs, balconies
- Basements
- Water tanks
- Sunshades
- Sunken toilets
- Swimming pools
- Other wet areas.

Also suitable for repair and renovation works for use as :

- Bonding agent
- Making polymer modified mortar

Standard coating system can be further reinforced by placing Sika® Fab 1 fabric layer in between 1st and the 2nd coat.

Characteristics / Advantages

- Durable and hard wearing surface on application
- Easy to apply by brush, slurry consistency
- Excellent bonding with most of the substrates.
- Protects against water penetration, salt & carbonation
- Non-corrosive to steel & iron
- Vapour permeable
- Can be used for treatment of leaching and saltpetre action
- Moderate crack bridging properties
- UV ray resistant
- Suitable for contact with potable water when protected with a screed

Product Data

Form

Appearance / Colour Milky white liquid

Packaging 1kg, 5kg, 20kg, 50kg and 200kg

Storage

Storage Conditions / Shelf Life 12 months from date of production if stored in undamaged and unopened, original sealed packaging, in dry conditions and protected from direct sunlight. Protect from frost.

Technical Data

Chemical Base Acrylic copolymer and special additives

Density 1.02±0.002 kg/l

Distribution



pH	6-8																					
Substrate Temperature	+10°C min. / +40°C max.																					
Ambient Temperature	+10°C min. / +40°C max.																					
System Information																						
Application Details																						
Consumption	<p>Sika® CemCrete when used as slurry coating</p> <p>Mixing Ratio: 2parts cement (OPC): 1 part Sika® CemCrete Polymer by weight (i.e. 2kg ordinary portland cement will require 1 kg Sika® CemCrete Polymer to obtain a slurry consistency. In case finer cement is used, the recommended ratio is 3parts of cement: 1 part of Sika® CemCrete Polymer by weight.</p> <p><u>As Slurry Coating</u></p> <table border="0"> <tr> <td>Mixing Ratio (By Weight)</td> <td>Consumption for 2 coats on concrete (k/m²)</td> </tr> <tr> <td>Cement (2parts)</td> <td>0.800- 1.00</td> </tr> <tr> <td>Sika® CemCrete Polymer (1 part)</td> <td>0.400-0.500</td> </tr> </table> <p>Sika® CemCrete when used as brush topping (using silica sand)</p> <p>Mixing Ratio: 1part Sika® CemCrete Polymer: 2 part cement (OPC): 2 part (silica sand) by weight.</p> <p>In case, finer cement is used, 1part Sika® CemCrete Polymer: 3 part cement (PPC): 2 part (silica sand) by weight.</p> <p><u>As Brush Topping</u></p> <table border="0"> <thead> <tr> <th>Mixing Ratio (By Weight)</th> <th>kg for one cubic meter</th> <th>kg for 1 sq.m. of 1.5 thickness</th> </tr> </thead> <tbody> <tr> <td>Sika® CemCrete Polymer (1 part)</td> <td>430</td> <td>0.65</td> </tr> <tr> <td>Cement(2 parts)</td> <td>860</td> <td>1.30</td> </tr> <tr> <td>Fine Silica Sand(2 parts)</td> <td>860</td> <td>1.30</td> </tr> <tr> <td>Total Weight in kg</td> <td>2150</td> <td>3.25</td> </tr> </tbody> </table> <p>Standard coating system can be further reinforced by placing Sika® Fab 1 fabric layer in between 1st and the 2nd coat.</p>	Mixing Ratio (By Weight)	Consumption for 2 coats on concrete (k/m ²)	Cement (2parts)	0.800- 1.00	Sika® CemCrete Polymer (1 part)	0.400-0.500	Mixing Ratio (By Weight)	kg for one cubic meter	kg for 1 sq.m. of 1.5 thickness	Sika® CemCrete Polymer (1 part)	430	0.65	Cement(2 parts)	860	1.30	Fine Silica Sand(2 parts)	860	1.30	Total Weight in kg	2150	3.25
Mixing Ratio (By Weight)	Consumption for 2 coats on concrete (k/m ²)																					
Cement (2parts)	0.800- 1.00																					
Sika® CemCrete Polymer (1 part)	0.400-0.500																					
Mixing Ratio (By Weight)	kg for one cubic meter	kg for 1 sq.m. of 1.5 thickness																				
Sika® CemCrete Polymer (1 part)	430	0.65																				
Cement(2 parts)	860	1.30																				
Fine Silica Sand(2 parts)	860	1.30																				
Total Weight in kg	2150	3.25																				
Substrate Quality	Clean and dry, homogeneous, free from oils and grease, dust and loose or friable particles, paint, cement laitance, old coatings and any other contaminants.																					
Substrate Preparation	Cementitious substrates should be pre-saturated surface dry with clean water.																					
Mixing	Refer to the table above for all applications																					
Cleaning of Tools	Clean all tools and application equipment with clean water immediately after use. Hardened / cured material can only be removed mechanically.																					
Application Method / Tools	<p>Mechanically clean the surface area by wire brush, scarifying, sand blasting, grinding, etc.</p> <p>Repair existing crack and damages with Sika® Cracksil / Sika® Quick Mortar.</p> <p>Saturate the surface with water (SSD condition) prior to application of coating.</p> <p>In case of minor depressions, surface to be levelled using mortar in the proportion 1kg cement : 1.5kg silica sand : 0.5kg Sika® CemCrete.</p> <p>Sika® CemCrete polymer is mixed with neat fresh cement in the ratio 2 parts of OPC: 1part Sika® CemCrete polymer by weight. The mix is to be stirred thoroughly using mechanical stirrer till homogeneous slurry is obtained. No air bubbles or lumps should be visible.</p> <p>Two or more coats are recommended with a re-coating interval of 5 - 6 hours. A</p>																					

glass fibre mesh of Sika[®] Fab 1 can be laid between the 1st and the 2nd coat to improve the tensile properties of the coating system.

Moist curing should be done for a period of 24 hours by spraying / sprinkling of potable water after about 6 hours from the time of application of the final coat.

After moist curing the coating shall be allowed to dry before submersion in water. A protection screed using Plastocrete[®] Plus/Sikacim[®] is recommended for covering the coating for greater durability.

Important**Recommendation**

Sika[®] CemCrete should not be used without addition of cement.

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.

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.

