

PRODUCT DATA SHEET

Sika® CoolCoat

SINGLE COMPONENT, ACRYLIC BASED, FLEXIBLE, MICRO FIBRE REINFORCED, WATERPROOFING, HEAT REFLECTING CUM TEMPERATURE REDUCING COATING SYSTEM

DESCRIPTION

Sika® CoolCoat is a flexible, liquid applied, single component, UV and weather resistant, acrylic waterproofing membrane for all types of exposed roof slabs (new and old), terraces (sloped and flat), etc.

Sika® CoolCoat contains cross-linking polymers, special glass micro fibers, pigments and advanced antifungal additive that provides long lasting tough waterproofing membrane.

The high Solar Reflective Index of the membrane serves as a heat reflective surface and reduces heat ingress keeping the interior of the building cooler.

USES

Suitable for all types of :

- Roof slabs (flat and sloped)
- RCC/ asbestos/ lime terraced roofs/ clay tiles etc. after suitable surface preparation and repairs
- Sunshades
- Suitable as a heat reflective coating on bituminous membrane
- Exterior coating for PVC water tanks exposed to direct sunlight to keep the inside water temperature relatively cooler
- External walls and balconies

PRODUCT INFORMATION

Composition	Acrylic polymer dispersion
Packaging	Sika® CoolCoat : 10 kg bucket Sika® CoolCoat Primer : 2 kg bucket Sika® Fab1: Roll size of 50mx 1m (it is the reinforcement of the Coating System to be bought separately)
Colour	White
Shelf life	12 months if stored properly in undamaged and unopened original sealed pack.

CHARACTERISTICS / ADVANTAGES

- Cross linking polymer gives excellent weather resistance and enhances service life
- High solar reflectance index (SRI) indicates high degree of cooling effect
- Crack-bridging
- High resistance to chloride penetration, hence highly suitable for saline environment.
- Algae and fungi resistant
- Highly flexible and Vapour permeable
- Simple and fast application
- Excellent adhesion to concrete, brickwork, corrugated asbestos, bitumen, asbestos cement sheet and metal decks
- Ultra violet rays and weather resistant
- Water based hence eco friendly

APPROVALS / CERTIFICATES

Conforms to: IS101, IS 2645, EN 1542, ASTM D 5589, ASTM D 5590, ASTM C 1202-08, ASTM D 4587, ASTM C 836, ASTM E1980, EN-673, EN-410

Storage conditions	Store in a cool and dry conditions.
Density	~ 1.35 kg/l @ 27°C
Solid content by weight	~ 66%
Volatile organic compound (VOC) content	< 10 g/l
Overall Thickness	~ 1- 1.2 mm (with Sika Fab1)

TECHNICAL INFORMATION

Tensile Strength	1.5 MPa	(ASTM D 412)
Elongation at Break	> 200%	(ASTM D 412)
Adhesion in Peel	> 1.5 MPa (on Concrete substrate)	(EN 1542)
Crack Bridging Ability	Passes upto 3.2 mm width	(ASTM C 1305)
Permeability to Water Vapour	Passes	(IS 2645)
Water Vapour Transmission	~ 23 g/m ² / 24 hr	(ASTM E 96)
Water Absorption	< 10% (by Mass)	(ASTM D 570)
Behaviour after Artificial Weathering	No defect upto 500 hours exposure	(ASTM D 4587)
Microbiological Resistance	No Algae & Fungal Growth	(ASTM D 5590)
Solar Reflectance Index	102	(ASTM E 1980)

SYSTEMS

System Structure

For Roof without Sika® Fab1

Coat	Product	Consumption
Primer Coat	Sika® CoolCoat Primer	0.2- 0.3 kg/m ²
First Coat	Sika® CoolCoat	0.75 kg/m ²
Second Coat	Sika® CoolCoat	0.75 kg/m ²
Top Coat	Sika® CoolCoat Primer	0.05 - 0.08 kg/m ²

For Roof with Sika® Fab1

Coat	Product	Consumption
Primer Coat	Sika® CoolCoat Primer	0.2- 0.3 kg/m ²
First Coat	Sika® CoolCoat	0.75 kg/m ²
Fabric Reinforcement	Sika® Fab1	1 m ² /m ²
Second Coat	Sika® CoolCoat	0.75 kg/m ²
Top Coat	Sika® CoolCoat Primer	0.05 - 0.08 kg/m ²

For Walls

Coat	Product	Consumption
Primer Coat	Sika® CoolCoat Primer	0.2- 0.3 kg/m ²
First Coat	Sika® CoolCoat	0.3- 0.4 kg/m ²
Second Coat	Sika® CoolCoat	0.3 - 0.4 kg/m ²
Top Coat	Sika® CoolCoat Primer	0.05 - 0.08 kg/m ²

* Total consumption will however depend on the substrate quality.

Dry film thickness	~ 1.0 mm without Sika® Fab1 ~ 1.2 mm with Sika® Fab1
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APPLICATION INFORMATION

Ambient Air Temperature	+10°C min/ +45°C max
Substrate Temperature	+10°C min/ +45°C max

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

All dust, loose and friable materials and glaze or varnish of tiles must be completely removed by mechanical means. Existing coatings/ membranes have to be inspected, cleaned and mechanically ground to achieve a sound, gripping substrate. In case of bad adhesion to the substrate, existing coatings have to be removed.

In case of application on clay tiles, roughen the surface by grinding and then apply the system.

All uneven surfaces should be properly treated by suitable Sika® material to get a plain surface.

In case of application on an existing bituminous membrane following procedure has to be followed :
After ensuring that the existing membrane has been cleaned properly, apply the C.S. Primer/ Solvent based or Water based on the surface on which the system is to be applied. Sprinkle a layer of sand on the primed surface immediately and allow it to dry for at least 12 hours. The surface is now ready to take the Sika Cool Coat System.

APPLICATION

Sika® CoolCoat is supplied in a single component pack and is in ready to use form. Stir thoroughly using a conventional paint stirrer prior to application. As a part of the System please prime the substrate with Sika® CoolCoat Primer.

Within 2-4 hours of priming, apply 1st coat of Sika® CoolCoat by brush or roller. Do not spoil the dry surface while walking on it for application.

Place Sika® Fab1 over the first coat when it is in tacky condition.

Apply the 2nd coat of Sika® CoolCoat following the same above procedure at suitable time interval of 6-8 hours between the coats.

Finally apply a thin layer of Sika® CoolCoat Primer. Suitable time interval is 6-8 hours after the second coat dries off.

The above mentioned times may vary depending on temperature, humidity and ventilation at site.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with clean water immediately after use. Hardened / cured material can only be removed mechanically.

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FURTHER INFORMATION

Sika® CoolCoat does not require any special curing but must be protected from rain for at least 12 hours at +30 °C.

BASIS OF PRODUCT DATA

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.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

ECOLOGY, HEALTH AND SAFETY

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.