

PRODUCT DATA SHEET

Sikalastic®-520 Cool Coat Fibers IN

Micro fibre reinforced acrylic roof waterproofing and heat reflective coating (Formerly Sika® CoolCoat)

DESCRIPTION

Sikalastic®-520 Cool Coat Fibers IN is a 1-part, acrylic, water based, elastic, cold applied liquid membrane that can be applied directly from the container. It contains addition of cross-linking polymers, special glass micro fibres, pigments and advanced antifungal additive that provides long lasting tough waterproofing membrane. The high solar reflective index of the membrane provides a heat reflective surface, minimises surface temperature of the membrane and reduces heat ingress keeping the interior of the building cooler and thereby increasing thermal efficiency of the building. The Product provides a seamless, smooth waterproof finish which is resistant to UV exposure and has elastic properties.

USES

Sikalastic®-520 Cool Coat Fibers IN is used for:

- Flat and sloping fully exposed roof structures
- New construction and refurbishment projects
- Waterproofing and renovation of old roof tiles
- Waterproofing of external walls and sunshades
- Roofs with numerous details such as penetrations, drains, roof lights and complex geometry
- Exterior coating for PVC water tanks

Sikalastic®-520 Cool Coat Fibers IN is used on the following substrates:

- Concrete and cementitious substrates
- Brick, masonry or renders
- Unglazed clay tiles
- Unglazed ceramic tiles
- Asbestos or lime terraced roofs

PRODUCT INFORMATION

Chemical base	Acrylic polymer dispersion, micro fibres and antifungal additives
Packaging	10 kg container

Shelf life	12 months from date of production
Storage conditions	The product must be stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C.
Appearance / Colour	Thick viscous liquid / White or Grey Other colours on request subject to minimum order quantity. Important: Applied colours selected from colour charts will be approximate. Important: For colour matching, apply colour sample and confirm selected colour under real lighting conditions. Important: When product is exposed to direct sunlight, there may be some discolouration and colour variation, this has no influence on the function and performance of the product finish.
Density	~1.35 kg/L (+30 °C)
Solid content by weight	~66 %

TECHNICAL INFORMATION

Shore A hardness	~45 (28d, +30 °C)	(ASTM D2240)
Tensile strength	~1.5 N/mm ²	(ASTM D412)
Elongation at break	≥ 250 %	(ASTM D412)
Crack bridging ability	Passes up to 3.2 mm	(ASTM C1305)
Tensile adhesion strength	≥ 1.5 N/mm ²	(EN 1542)
Tear strength	15 N/mm	(ASTM D624)
Solar Reflectance Index	112	(ASTM E1980)
Water absorption	< 20 %	(ASTM D570)
Water vapour transmission	~23 g/m ² ·24h	(ASTM E96)
Chloride ion diffusion resistance	Very low	(ASTM C1202)
Microbiological resistance	No growth	(ASTM D5590)
Behaviour after Artificial Weathering	No crack, No blisters, No change of gloss, 500 h	(ASTM D4587)

SYSTEM INFORMATION

System structure	Layer	Product
	Primer	Sikalastic®-10 Primer W
	Base coat	Sikalastic®-520 Cool Coat Fibers IN
	Top coat	Sikalastic®-520 Cool Coat Fibers IN
	(Optional) Clear coat	Sikalastic®-10 Primer W

Important: Do not overcoat Sikalastic®-520 Cool Coat Fibers IN with tile, concrete or others. Sikalastic®-520 Cool Coat Fibers IN is an exposed system.

Important: For larger application areas and high demanding applications, use a glass fabric reinforcement Sika® Fabric-50 between the coats. For normal exposures, usage of Sika® Fabric-50 is optional. Reinforcement (partial or total) must be used over dynamic cracks and joints.

Important: For enhanced dirt pick up resistance and easy cleanability, above build up must be further coated with a thin layer of Sikalastic®-10 Primer W.

Dry film thickness	Unreinforced	~1.0 mm
	Reinforced with Sika® Fabric-50	~1.2 mm

APPLICATION INFORMATION

Consumption	Application	Product	Consumption
	Roof waterproofing	Sikalastic®-520 Cool Coat Fibers IN	0.75 kg/m ² per coat
	Heat reflective coating	Sikalastic®-520 Cool Coat Fibers IN	0.35 kg/m ² per coat
	Wall waterproofing	Sikalastic®-520 Cool Coat Fibers IN	0.35 kg/m ² per coat
	Primer coat	Sikalastic®-10 Primer W	0.2–0.3 kg/m ² per coat
	Seal coat	Sikalastic®-10 Primer W	0.05–0.08 kg/m ² per coat

Note: The consumption will vary depending on application area, substrate type, substrate roughness, surface profile, absorption of the surface and thickness required.

Ambient air temperature	+10 °C min. / +45 °C max.
Relative air humidity	80 % max.
Dew point	Beware of condensation. The substrate and uncured applied roof material must be at least +3 °C above dew point to reduce the risk of condensation on the surface finish.
Substrate temperature	+10 °C min. / +45 °C max.
Substrate moisture content	≤ 6 % parts by weight. The following test methods can be used: Sika®-Tramex meter, CM-measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).

Waiting time / Overcoating	Base layer	Overcoating layer	Waiting time
	Sikalastic-10 Primer W	Sikalastic®-520 Cool Coat Fibers IN	~30 min
	Sikalastic®-520 Cool Coat Fibers IN	Sikalastic®-520 Cool Coat Fibers IN	~6–8 h

Note: Above values are at +30 °C and 50 % relative humidity. Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

Applied product ready for use	Light traffic	~24 h
<p>IMPORTANT Applied Sikalastic®-520 Cool Coat Fibers IN must not be subjected to ponding before 7 days. Contact Sika Technical Services and refer to ASTM D5957 for more information.</p>		

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.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and con-

tains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

EQUIPMENT

Substrate Preparation Equipment

- Abrasive blast cleaning / planing / scarifying or grinding equipment
- Manual or mechanical wire brushes
- High pressure power washer

Mixing Equipment

- Electric single paddle mixer (300–400 rpm)

Application Equipment

- Brush: Soft bristle
- Roller: Solvent resistant, “non-fuzzy”

SUBSTRATE QUALITY / PRE-TREATMENT

General

- All dust, loose and friable material must be completely removed from all surfaces before application of the product and associated system products, preferably by industrial vacuuming equipment.
- To confirm adequate surface preparation and Sikalastic®-520 Cool Coat Fibers IN adhesion, carry out a small trial before full application together with adhesion tests as required.

Cementitious substrates

- Substrate must be sound with a minimum tensile adhesion strength of 1.5 N/mm², clean, dry and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.
- New concrete must be cured for at least 28 days and have a tensile strength >1.5 N/mm².
- Substrates must be prepared mechanically using suitable substrate preparation equipment to remove cement laitance and achieve an open textured gripping surface profile suitable for the product thickness.
- High spots can be removed by grinding.
- Weak cementitious substrates must be removed and surface defects such as blow holes and voids must be fully exposed.
- Repairs to the substrate, filling of joints, blowholes/voids and surface levelling must be carried out using appropriate products from the Sika-floor®, Sikadur® and Sikagard® range of materials. Products must be cured before applying Sikalastic®-520 Cool Coat Fibers IN.

Brick and stone

- Mortar joints must be sound and preferably flush pointed.
- Use localised Sika® reinforcement over joints.

Ceramic, roof tiles

- Ensure all tiles are securely fixed.
- Replace any broken, loose or missing sections.
- Remove the glaze by grinding.
- Power wash the surface.

Metal

- Metals must be in a sound surface condition.
- Abrade exposed surfaces to a bright metal finish.
- Use localised Sika® reinforcement over joints and fixings.
- Use Sikalastic®-10 Primer EP or Sikalastic® Metal Primer to ensure proper adhesion and protect metal from corrosion.

Wood

- Wood and wood-based panel roof decks must be in good structural condition, firmly adhered or mechanically fixed.

Paints/Coatings

- The existing material must be sound and firmly adhered to the substrate.

- Remove any oxidized or loose layers.
- To confirm compatibility with Sikalastic®-520 Cool Coat Fibers IN, carry out a small trial before full application.
- For existing Sikalastic®-520 Cool Coat Fibers IN coating, power wash to clean the surface.

MIXING

Important: Avoid over-mixing to minimise air entrainment.

Note: Use an electric single or double paddle mixer (300–400 rpm) with spiral paddle for mixing.

- Product is supplied ready for use.
- Before application, mix for at least 1 minute or until the liquid and all the coloured pigment has achieved a uniform colour.

APPLICATION

Important: Protect the coating from damp, condensation and direct water contact for at least 24 hours.

Important: If applied on porous substrates during rising temperatures pin holes may occur from rising air. Apply during falling temperatures.

Important: Do not apply on roofs with improper slopes leading to long ponding.

Important: Do not allow temporary ponding to remain between coats on any horizontal surfaces or until the final coating has totally cured. Brush or mop surface water away during this time.

PRIMER

1. Pour the mixed primer onto the prepared substrate.
2. Apply the product evenly over the surface with a brush or fleece roller. Ensure a continuous pore free coat covers the substrate.
3. Back roll the surface in two directions at right angles with a fleece roller.

ROOF WATERPROOFING

Important: Apply 2 coats at the same consumption.

1. Pour the mixed product onto the prepared substrate (for brush or roller application).
2. Apply the product evenly over the surface with a short pile roller, a brush or airless spray. Note: The consumption is specified in Application Information.
3. (Optional) Wherever coating is to be reinforced with glass fabric, lay Sika® Fabric-50 into the freshly applied base coat and embed firmly into the wet coat with brush. Reinforcement overlaps must be a minimum of 50 mm.
4. After the inter-coat waiting time apply a second coat over the surface with a short pile roller, a brush or airless spray.
5. (Optional) Apply one thin coat of Sikalastic®-10 Primer W for enhanced dirt resistance and cleanability.

CLEANING OF TOOLS

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

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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.

Sika India Pvt. Ltd.

620, Diamond Harbour Road
Commercial Complex II
Kolkata - 700 034
West Bengal, India

Contact:

Phone: +91 33 2447 2448
Fax: +91 33 2397 8688
info.india@in.sika.com
www.sika.in



Product Data Sheet
Sikalastic®-520 Cool Coat Fibers IN
April 2023, Version 01.01
020915108010000026

Sikalastic-520CoolCoatFibersIN-en-IN-(04-2023)-1-1.pdf