

TechnoFlex® CoolCoat 500

High Performance, Highly Elastomeric Micro Fibre Reinforced Acrylic Based Solar Reflective Coating System.

Description:

TechnoFlex®CoolCoat 500 is a high performance , highly elastomeric, liquid applied, single component, UV and weather resistant, acrylic based membrane reducing the heat loading into a buildings for all types of exposed roof slabs (new and old), terraces (sloped and flat), etc.

TechnoFlex®CoolCoat 500 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.

Typical applications include

TechnoFlex®CoolCoat 500 is suitable for application to almost any surface including:

- Roofs & Terrace, Basements, Asbestos roofs, Aluminum Sheet Roofs, Warehouses, Corrosion under Insulation (CUI)
- Commercial Buildings Sheds, Weather resistant membrane, Refrigerated Cold storage Facilities.
- Walking decks & balconies Stair ways & pool area , Green Buildings Exterior coating for PVC water tanks exposed to direct sunlight to keep the inside water temperature relatively cooler

Features and Benefits

- Fully bonded system-water cannot track beneath the membrane
- Creates a seamless, tough & flexible elastomeric membrane when fully cured.
- Excellent chemical resistance
- Resistant to standing water
- Excellent adhesion to various substrates with suitable primer
- Excellent resistance to water and carbon dioxide permeability
- High water vapour permeability
- Free of pitch or bitumen modification
- Ready to use – no measuring and mixing required
- Excellent workability
- Reaches sufficient cure generally in 24 hours allowing for toppings or coverings to be placed
- Easy to repair

Method of Application

Surface 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 Sterling Technotrade 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 TechnoSeal®C.S. Primer 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 TechnoFlex®CoolCoat 500 System.

Priming

As a part of the system it is necessary to prime the substrate with TechnoSeal® CoolCoat Primer before application of TechnoFlex® CoolCoat 500 over the prepared surface.

Coating Application

Within 2-4 hours of priming, apply 1st coat of TechnoFlex®CoolCoat 500 by brush or roller. Do not spoil the dry surface while walking on it for application. Place TechnoFix® GFM Super over the first coat when it is in tacky condition Apply the 2nd coat of TechnoFlex®CoolCoat 500 following the same above procedure at suitable time interval of 6-8 hours between the coats. Finally apply a thin layer of TechnoSeal® 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.

Indicative Characteristics

Appearance of dry film	White, Grey. Other colour may be available on request
Chemical Base	Acrylic polymer dispersion
Tack Free Time @ 30° C	12 hours
Final Curing time at 30°C	2 days at 1.2mm thickness
Density @ 25°C	~ 1.35 kg/l
Solid content, % (W/W)	>62
Drying time at 30°C, RH 65%	12 hours
% Elongation at 14 days, ASTM D 412	>250
Tensile strength at 14 days, MPa ASTM D 412	2 and 5(with fibre mesh reinforcement)
Adhesion to concrete	Excellent
Hardness Shore A, ASTM D 2240	>40
Crack Bridging Capacity, EN 1062	2mm (No pinhole, no crack)
Fungi Resistance, ASTM D3273/3274	Passes test
Full Cure, at 30°C, 60% RH	14 days
Solar Reflectance Index ASTM E1980	102

Packing

- TechnoFlex®CoolCoat 500: 20 Kg x 1, 10kgx 2, 5kgx 4
- TechnoSeal® CoolCoat Primer: 20 Kg x 1, 10kgx 2, 5kgx4
- TechnoFix® GFM Super: Roll size of 50mx 1m (it is the reinforcement of the Coating System to be bought separately)

Storage

TechnoFlex®CoolCoat 500 system has a shelf life of 12months if unopened containers stored in cool dry place.

Cleanup Information

Clean tools and equipment with water immediately after use. Dried material can only be removed with industrial type solvents or mechanically.

Cautions / Limitations

- It may be harmful with skin contact.
- Do not apply in freezing conditions or during precipitation.
- Protect applied materials from rain, freezing, foot traffic and continuous high humidity until completely dry.

Do not use when air and surface temperatures are below +5°C and above +40°C.

Additional information

Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd -The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

*Separate datasheet are available on these products.

DISCLAIMER: The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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Please note that this datasheet supersedes all previous versions.

Dry film thickness	~ 1.0 mm without TechnoFix® GFM Super ~ 1.2 mm with TechnoFix® GFM Super	
Application Temperature	ambient	Air +10 °C min/ +45 °C max
Substrate Temperature	+10 °C min/ +45 °C max	
Waiting Time / Over coating	~ 6-8 hours @ +30 °C	
All values are subject to 5-10 % tolerance		

System Structure

For Roof without TechnoFix® GFM Super		
Coat	Product	Consumption
Primer Coat	TechnoSeal® CoolCoat Primer	0.2-0.3 kg/m ²
First Coat	TechnoFlex®CoolCoat 500	0.75 kg/m ²
Second Coat	TechnoFlex®CoolCoat 500	0.75 kg/m ²
Top Coat	TechnoSeal® CoolCoat Primer	0.05-0.08 kg/m ²
For Roof with TechnoFix® GFM Super		
Coat	Product	Consumption
Primer Coat	TechnoSeal® CoolCoat Primer	0.2-0.3 kg/m ²
First Coat	TechnoFlex®CoolCoat 500	0.75 kg/m ²
Fabric Reinforcement	Fabric Reinforcement	1 m ² /m ²
Second Coat	TechnoFlex®CoolCoat 500	0.75 kg/m ²
Top Coat	TechnoSeal® CoolCoat Primer	
For Walls		
Coat	Product	Consumption
Primer Coat	TechnoSeal® CoolCoat Primer	0.2- 0.3 kg/m ²
First Coat	TechnoFlex®CoolCoat 500	0.3- 0.4 kg/m ²
Second Coat	TechnoFlex®CoolCoat 500	0.3- 0.4 kg/m ²

Health and Safety instructions

Cause eye and skin irritation. If eye or skin contact, get immediate medical attention. If swallowed, do not induce vomiting. Call a physician or poison control center. Never give anything by mouth to an unconscious person. Wash hands thoroughly after handling. Wear protective clothing, gloves & eye and face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Dispose of unused, contents, container and other contaminated wastes in accordance with local, state, federal and provincial regulations. Keep container closed when not in use. Keep out of the reach of children.

Please contact with Sterling Technotrade's technical service department for further information and support.

Product only for professional use.

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