

StrataShield FC Sealer Coat

Polyaspartic, fast-cure top coat for waterproofing membranes

Product overview

StrataShield FC Sealer Coat is a flexible, pigmented, 2-component polyaspartic coating that can be quickly and easily mixed and applied. It has fast curing properties and offers good resistance to trafficking and chemicals.

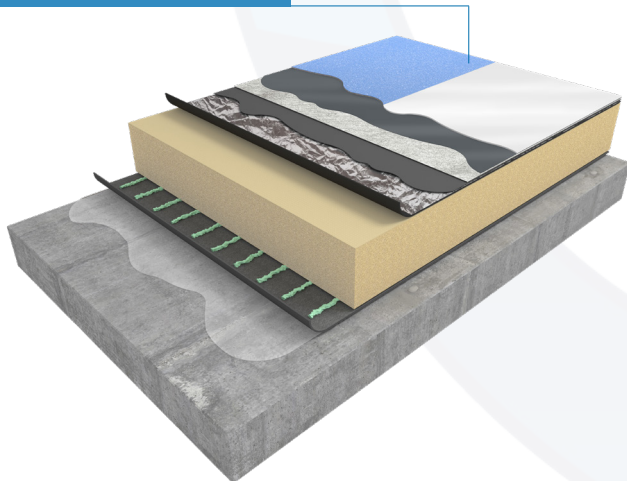
Typical use

StrataShield FC Sealer Coat is designed for use as a protective aliphatic topcoat for balcony and walkway applications, and is available in a wide range of UV-stable pigmented finishes.

Features & benefits

- Hard-wearing top coat finish
- Resistant to motor and pedestrian traffic
- Rapid curing
- Excellent colour retention
- Ideal for use with the StrataShield range of waterproofing systems

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Substrate requirements

The substrate must have enough mechanical strength to support the application and must be free from any vapour or water pressure. The substrate must also be clean, dry and free from any areas of poor adhesion.

Recommended environmental conditions

The recommended air temperature for all applications is between 10°C and 30°, with humidity levels between 40% and 80%. In addition, the substrate temperature should be between 10°C and 25°.

Technical characteristics: pre-application

Properties	Unit / Description	
	Component A	Component B
Chemical description	Polyamines solution	Solvent-less aliphatic polyisocyanate
Physical state	Liquid	Liquid
Packaging (4 kg can)	Metal container: 3.85 kg	Metal container: 1.15 kg
Packaging (15 kg can)	Metal container: 11.6 kg	Metal container: 3.4 kg
Non-volatile content	68%	100%
Flash point (ASTM D 93)	35°C	>100°C
Density (25°C)	1.05 g/cm ³	1.15 g/cm ³
Viscosity (10°C)	50 mPa.s	725 mPa.s
Viscosity (25°C)	35 mPa.s	450 mPa.s
Viscosity (35°C)	20 mPa.s	260 mPa.s
A/B mixing ratio	A=100 / B=29 by weight A=100 / B=27.5 by volume	
Mixture properties (25°C)	Density: 1.05 g/cm ³ Viscosity: 115 mPa.s Non volatile content: 75%	
Pot life (20°C, 40% RH)	30 mins	
Storage	Keep at a temperature between 10°C and 30°C, away from sources of ignition and moisture	
Use before	Up to 12 months after date of manufacture (NB: 9 months for black or white pigmented product)	

Substrate preparation

On recently applied sprayed waterproofing membrane, it is recommended that StrataShield FC Sealer Coat is applied shortly after application of the membrane (30 min) in order to achieve better adhesion. For applications onto older membranes, we recommend gentle sanding and cleaning with an approved cleaner, along with the use of StrataPrime Bonding Agent as required.

Mixing and application guidelines

Open Component A container. Stir using a low-speed stirrer preventing an excessive air bubbling, until dispersion of fillers occurs. Pour component B in it and stir gently for 2 minutes. Transfer the mixture to a bigger container and check there is no unmixed product left.

Application should be carried out using a roller. Airless equipment is not recommended due to safety reasons. Reaction rate will increase with the size of the mixtures; therefore it is advised not to mix more amount of product than that can be easily applied in a 15 minutes period. Otherwise, application could be difficult or the final appearance could be affected.

StrataShield FC Sealer Coat can be applied in a wide range of thicknesses. However, it is recommended to apply the product at a dry film thickness between 200 to 500 microns when dry (200 to 600 g/m² wet film).

Only one coat is usually needed.

Curing time

Curing time will be dependent on particular environmental conditions. The curing rate will increase with higher temperatures and higher levels of humidity. The following table gives a rough estimation of the curing time under various conditions for a 200g/m² coat (thicker coats will require longer curing times).

Environmental conditions	Dry to touch
22°C, 40% RH	1.5 hours
8°C, 50% RH	5 hours

Technical characteristics: final product

Properties	Unit / Description
Final appearance	Solid polyaspartic/polyurethane coating
Colour	Depending on the chosen pigmentation
Shore hardness (ISO 868)	55D
Density	1.15 g/cm ³
Max elongation	150%
Max tensile stress	22 MPa
UV resistance	Colour stable under sunlight
Abrasion (Taber, CS-17, 1 kg)	15 mg

Chemical resistance

Chemical (24 hour, room temperature)	Result (0=worst, 5=best)
Water	5
Isopropyl alcohol	3
Xylene	1
Ammonia 3%	5
Sodium hydroxide 50%	5
Acetic acid 10%	5
Acetic acid 20%	4
Sulphuric acid 50%	3
Hydrochloric acid 10%	5
Hydrochloric acid 20%	3
Bleach	5
Sodium hypochlorite 15%	5
Hydrogen peroxide 10%	5
Hydrogen peroxide 33%	0
Petrol	2
Diesel	4

Return to service

At usual conditions (22°C, 40% RH) the membrane can be walked on (light traffic) approximately 2 hours after the product is dry to touch. Normal traffic can then resume the following day.

Cleaning and maintenance

Daily scrubbing with water is allowed but the use of certain solvents can seriously damage the surface - please consult Strata Technical Services for further guidance.

Components A and B can be cleaned from tools etc using any solvent approved by the manufacturer. It is recommended that any staining is cleaned as soon as possible due to the product's fast curing rate.

Health and safety

StrataShield FC Sealer Coat contains isocyanates and flammable solvents. Always follow the instructions provided in the material safety data sheet and take the precautions described there. As a general rule, suitable ventilation must be ensured during application and all ignition sources must be avoided.

This product is intended for professional use only and should only be used in the way described on this datasheet. Spray application is not recommended due to health & safety reasons.

Environmental considerations

Empty containers must be handled taking the same precautions as if they were full. Containers must be considered as hazardous waste, to be transferred to an authorised waste manager.

Additional guidance

Problem	Observation / Solution
Can the product be thinned?	Thinning is not usually needed. If desired, some solvent can be added, but keep in mind that this will result in a longer drying time, and colour could be affected. Solvents must be always polyurethane grade, free from alcohols or water, and free from any substance that can affect the crosslinking reaction. Recommended solvents are xylene or methoxypropyl acetate (PMA).
Is spreading of quartz sand allowed?	Yes. The pot life gives enough time for the application of anti-slip additives (quartz sand, bauxite etc.) between two coats. Please consult Strata Waterproofing for more details.

Further information

The information contained in this datasheet, along with any advice provided (either written or verbal) through testing are based on our experience and do not constitute any product guarantee for the installer.

We recommend that all of the information provided is carefully studied before proceeding with application, and strongly advise that suitable tests are carried out onsite before application in order to determine the suitability and compatibility for the specific project.

The application, use and processing of our products are beyond our control, and therefore under the exclusive responsibility of the installer. As a result, the installer will be solely responsible for any damage derived from the partial or complete disregard of our guidance or the general mis-use of any of our materials.