

StrataShield Sealer Coat Trans

Liquid elastic polyurethane membrane

Product overview

StrataShield Sealer Coat Trans is an aliphatic, single component liquid sealing product which, after polymerisation provides an elastomeric, polyurethane membrane. It is cold applied and cures to provide totally adhered, elastomeric finish. The product offers exceptional water tightness and withstands building movements.

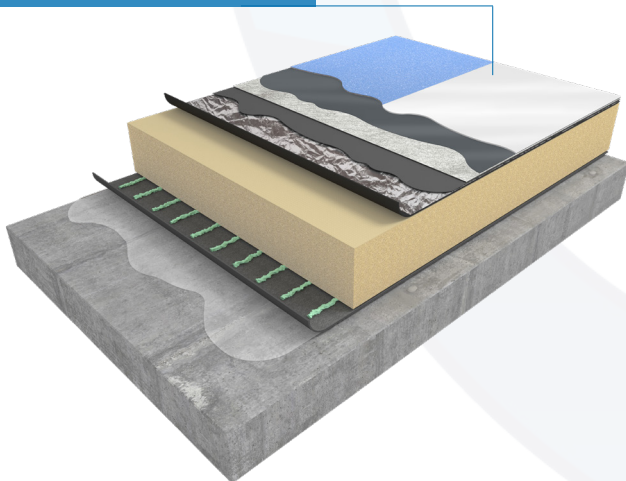
Typical use

The polyurethane composition of StrataShield Sealer Coat Trans provides UV stability and is ideal for use over aromatic polyurethane waterproofing membranes such as the StrataShield ProFlex System.

Features & benefits

- Clear, glossy top coat finish
- UV stable and waterproof
- Excellent adhesion
- Crack-bridging capability
- Withstands permanent contact with water
- Good chemical resistance

StrataShield Sealer Coat Trans



Substrate requirements

In order to achieve a good penetration and bonding, the substrate must be clean and dry, free of dust, loose particles, oils, organic residues or laitance. The surface must be flat and levelled, and any cracks or fissures must be repaired prior to application. A pull-off load test must also be performed showing a minimum resistance of 1.4 N/mm².

Recommended environmental conditions

The substrate temperature should be between 0°C and 40°. At higher temperatures, specific precautionary measures must be taken. Please consult Strata Technical Services for further advice. High moisture conditions can lead to bubble formation under the membrane surface. In cold weather, or when curing time has to be shorter, accelerators can be used. More information is available upon request. On non-porous substrates, do not dilute first coat as subsequent coats may damage the first one if it is too thin.

Technical characteristics: pre-application

| Properties | Unit / Description |
|------------------------------------|--|
| Chemical description | Solvent borne single-component aromatic polyurethane |
| Physical state | Liquid |
| Packaging | Metal containers: 4 / 9 / 20 kg |
| Non-volatile content | 60% |
| Flash point (ASTM D 93) | 36°C |
| Colour | Colourless or slightly yellow |
| Density (20°C) | 0.96 g/cm ³ |
| Viscosity (approximate Brookfield) | 150 mPa.s |
| VOC content (g/L i %) | 450 g/l |
| VOC class as per 2004/42/EC | Product subclass: i II Solvent based single-component performance products Limit from 01/01/2010: 500 g/l |
| Pot life (1 kg, 20°C, 50% hr) | 6 hours |
| Storage | Keep at a temperature below 30°C, away from ignition sources and moisture |
| Use before | Can be used up to 12 months after manufacture in its sealed original container |

Technical characteristics: final product

| Properties | Unit / Description |
|--------------------------|---|
| Final state | Solid elastomeric membrane |
| Colour | Colourless (other colours are available upon request) |
| Shore hardness (ISO 868) | 65-70A |
| Max elongation | 276% |
| Max tensile stress | 10.4 MPa |
| Thermal resistance | Stable up to 100°C |

Chemical resistance

| Chemical | Result (0=worst, 5=best) |
|--|--------------------------|
| Water (24 hours, 25°C) | 5 |
| Salt water (24 hours, 25°C) | 5 |
| Hydrochloric acid solutions (200g/l, 24 hours, 25°C) | 1 |
| Sodium hydroxide solutions (40g/l, 24 hours, 25°C) | 5 |
| Acetone (24 hours, 25°C) | 1 |
| Ethyle acetate (24 hours, 25°C) | 3 |
| Xylene (24 hours, 25°C) | 5 |
| Engine oil (24 hours, 25°C) | 5 |
| Brake fluid (24 hours, 25°C) | 2 |

Application guidelines

Stir gently before use with a low-speed stirrer. If necessary, dilute with up to 10% StrataShield PU Solvent for viscosity adjustment. Note: on non-porous substrates, do not dilute the first coat. Subsequent coats may damage the first one if too thin.

Apply by roller, brush or airless spraying equipment. Although not strictly necessary, it is strongly recommended that the entire contents of the container is used during application (subject to normal coverage rates). However, if some product remains in the packaging, ensure that it is completely sealed after use.

Please also note that the solvent used in this product might damage certain roller materials. If in doubt, please test before use.

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 500 microns coat.

| Environmental conditions | Dry to touch |
|--------------------------|--------------|
| 35°C, 20% RH | 6 hours |
| 20°C, 40% RH | 15 hours |
| 15°C, 10% RH | 70 hours |
| 5°C, 20% RH | >80 hours |

Return to service

At usual conditions (25°C, 50% RH) the membrane achieves up to 90% of its final properties in 3 days. For light traffic, wait a minimum of 24 hours.

Cleaning and maintenance

Liquid StrataShield Sealer Coat Trans can be cleaned from tools etc using any solvent approved by the manufacturer, along with acetone and alcohols. Once hardened, the product cannot be dissolved.

It may be necessary to reapply StrataShield Sealer Coat Trans layers if they are worn out due to traffic, weather, corrosion, etc.

For stain removal, a surface treatment using an approved solvent or isopropyl alcohol may be attempted. Strong acids are not recommended, and some solvents may damage the membrane. If this happens, the affected area must be cut out and repaired with a new application of StrataShield Sealer Coat Trans.

Health and safety

StrataShield Sealer Coat Trans 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.

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 authorized waste manager. If any residual product remains in the containers, do not mix it with other substances without checking for possible dangerous reactions.

Trouble shooting

| Problem | Observation / Solution |
|---|--|
| Product is not curing as expected | Has a suitable solvent been used? Some thinning solvents are not suitable Apply a second coat using a recommended solvent as a dilutant |
| | Has the product been over-diluted? Too much solvent can slow down the curing rate Ensure that less dilutant is used in the product |
| | Is the ambient temperature low? Below 15°C the use of accelerators is recommended |
| Surface of product appears to be bubbling | Is the substrate porous? If so, high temperatures may cause bubbling Wait until temperature drops and apply a first coat, diluted at less than 500 g/m² |

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.