



StrataShield Rapide Primer

Fast curing, flexible polyurea primer

Product overview

StrataShield Rapide Primer is a fast curing, cold-applied two component pure polyurea based primer. It has been specially formulated for use on flexible substrates.

Features & benefits

- Ideal for use on a range of substrates
- Fast-curing formulation
- Two-component product

Technical characteristics: pre-application

| Properties | Unit / Description | |
|--------------------------------|--|--------------------------------|
| | Component A | Component B |
| Chemical description | One component polyurethane | Polyamine |
| Physical state | Liquid | Liquid |
| Packaging (pre-dosed kit) | Metal container: 4 kg / 20 kg | Metal container: 0.4 kg / 2 kg |
| Non-volatile content | 60% in weight | 100% in weight |
| Flash point (ASTM D 93) | 36°C | 81°C |
| Colour | Light yellow | Light yellow |
| Density (25°C) | 1.0 g/cm ³ | 0.9 g/cm ³ |
| Viscosity (10°C) | 800 mPa.s | <20 mPa.s |
| Viscosity (25°C) | 350 mPa.s | <20 mPa.s |
| Viscosity (35°C) | 270 mPa.s | <20 mPa.s |
| VOC content | 30% | 0 |
| A/B mixing ratio | A=100 / B=10 by weight A=100 / B=11 by volume | |
| Mixture properties | Density: 0.95 - 1.00 g/cm ³ Viscosity: 240 mPa.s Colour: Slightly yellow | |
| Pot life (100 g, 25°C, 40% RH) | 60 mins In contact with air, the product can form a surface skin in the packaging. If formed, remove the skin and continue the application. High temperatures and humidities reduce working time. | |
| Storage | Keep at a temperature between 10°C and 30°C, protected from humidity. | |
| Use before | Up to 12 months from date of manufacture in original, unopened container. | |

Technical characteristics: final product

| Properties | Unit / Description |
|--------------------------|--|
| Final state | Flexible, solid membrane |
| Colour | Colourless, slightly yellow |
| Shore hardness (ISO 868) | 75A |
| Max elongation | 540% |
| Tensile strength | 19 MPa |
| Adhesion (EN 13892-8) | Concrete: >5 N/mm ² |
| UV resistance | StrataShield Rapide Primer is an aromatic product which will turn yellow upon UV exposure, but this does not affect the product's mechanical properties. |
| Thermal resistance | Stable up to 80°C |

Substrate and environmental conditions

In order to achieve a good penetration, the supporting substrate must be clean and dry, free from oil stains, grease, cured product, and any substance that could interfere with adhesion. The surface must be completely free of water or water vapour and the substrate must have a moisture content of less than 4%. If you suspect the presence of moisture in the substrate, use an appropriate primer - please consult Strata Technical Services for further details of suitable primers.

In addition, the substrate must exhibit a minimum cohesion of 1.5 MPa with a minimum compressive strength of 25 MPa.

The substrate temperature should be between 10°C and 25°C, and ambient air temperature should be between 10°C and 30°C. On concrete or fresh mortar, wait at least 21 days before applying this system so that the support is allowed to fully dry out.

Mixing and application

Open the container of component A. Shake the product mechanically at low speed to avoid excessive intake of air. Homogenization of component A should take approximately 2 minutes. Then pour component B into the container of component A and mix in the same way for 2 minutes. Pour the mixture into a larger container and verify that no material remains unmixed. Apply the mixed product at an approximate consumption rate of 200 to 400 g/m².

Curing time

Curing time will be dependent on environmental conditions. The higher the temperature the faster the curing rate will be. The following table gives the approximate curing time for a range of environmental conditions.

| Environmental conditions | Dry to touch |
|-----------------------------------|--------------|
| 25°C, 40% RH, 200g/m ² | 35 minutes |
| 10°C, 50% RH, 200g/m ² | 60 minutes |
| 25°C, 50% RH, 500g/m ² | 40 minutes |

Pot life is long enough to be able to apply the resin on top (when the consumption is higher). Theoretically you can throw the aggregate over it, as long as the humidity is not higher than 80%.

Tool cleaning

Components A and B can be cleaned from tools using StrataShield PU Solvent. Cured product can only be removed with special paint stripper - please contact Strata Technical Services for further guidance.

Health and safety

StrataShield Rapide Primer contains isocyanates and polyamines. Always follow instruction provided in the material safety data sheet. As a general rule, suitable ventilation must be ensured and any skin contact avoided. This product is intended to be used only in the manner outlined on this datasheet, and should only be installed competent professional users.

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. Waste containers with small amounts (less than 5 litres) of uncured product can be allowed to dry before sending to treatment.

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.