

1. Product Description

StenCoat® PUM 301 is a single-component, polyurethane-based, highly elastic, thixotropic, easy to apply, decorative waterproofing and protective coating. It is used for terrace and roof waterproofing. It is applied as a liquid and forms an elastic, breathable, waterproof coating.

It is highly elastic and has crack-bridging ability. Its mechanical properties do not change due to outdoor conditions. **StenCoat® PUM 301** complies with the ASTM C 836 waterproofing membrane standard. It is classified as Type PI-C in accordance with EN 1504-2.

2. Uses

StenCoat® PUM 301 is used in places such as terraces and under-roof areas, bathrooms and similar wet areas, industrial facilities and prefabricated structures. Horizontal, sloped and vertical applications can be carried out on concrete, asphalt, steel or wooden surfaces.

3. Application

3.1. Surface Preparation

Application surfaces must be clean and dry. Loose materials must be removed and areas requiring repair can be repaired with epoxy-based **StenCare® 2EP 310**, **StenAst® 2EP-F** or **StenAst® 2EP** can be used as a primer on clean concrete surfaces.

Depending on the surface roughness, 0.3-0.7 kg/m² primer is applied. The surface is roughened by broadcasting 100-200 g/m² of quartz sand onto the primer. When applying over an existing waterproofing material, what that existing material is matters a great deal. For the right primer and application methods, contact **Stenkim®**.

3.2. Application

It is recommended to condition the materials at 20-30 °C for one day before application. During application, surface and air temperature must be at least 10 °C and the temperature must not drop below 10 °C for 24 hours following the application. **StenCoat® PUM 301** is ready for use and is applied without adding anything.

If thinning is necessary, only **StenSolver PU** can be used. Best results are achieved with two-coat application. In areas with severe conditions, an additional coat can be applied to increase total coating thickness. However, applications exceeding 0.75 mm in a single coat must not be made. If the application environment is humid, the material must be applied in multiple thinner coats so that it is less affected by moisture.

StenCoat® PUM 301 can be reinforced with fiberglass mat or polyester felt. This type of application is particularly recommended on damaged surfaces, on substrates that have not yet settled, at wall-to-floor junctions, and at details such as pipe penetrations and drains. In such applications, complete saturation of the mat or felt with the material is very important. Reinforcement materials that are chemically incompatible or have water on their surface may damage the membranes.

Polyurethane-Based Thixotropic Waterproofing Membrane

Highlights

- Polyurethane-based, elastomeric liquid waterproofing membrane
- Single-component and ready-to-use
- Seamless; provides long-lasting waterproofing
- Bridges cracks thanks to its high elasticity
- Has high chemical resistance; does not undergo hydrolysis and does not separate from the surface
- Resistant to mold growth
- Easy to apply, seamless, and does not require a torch
- Saves application labor and offers an economic advantage through long service life
- Available in catalog colors



Stenkim® offers free consultancy and analysis services for selection of the correct reinforcement materials and approval of the material to be used. **StenCoat® PUM 301** can be applied by roller or trowel. It is applied at 0.45-0.90 kg/m² per coat according to the desired coating thickness; however, the required amount may increase on rough surfaces for the same film thickness.

In applications with a mat, consumption per square meter increases in proportion to the absorbency of the mat. **StenCoat® PUM 301** is an aromatic product and its color will change under continuous UV exposure. This change only affects the appearance of the product; it has no effect on the product's performance.

3.3. Cleaning

Equipment used can be cleaned at the end of the job with **StenSolver PU**.

4. Safety

Applicators and supervisors must read the Safety Data Sheet (SDS) carefully and follow the instructions provided. Emptied packages must be disposed of in compliance with relevant regulations and laws. The application must be carried out by skilled workers under the supervision of experts and the applicators must use all personal protective equipment required for the worksite and the task such as goggles, mask and gloves.

5. Storage

Packages must not be exposed to direct sunlight. It must be stored away from open flames and ignition sources. Storage temperature must be between 5 and 30 °C. Under these conditions, the material will retain its properties in unopened containers for 6 months from the production date. The material is flammable. Low temperatures may cause crystallization of the product; in this case, the product can be used after being warmed to +20 °C and homogenized. After prolonged storage, the product must be stirred thoroughly before use.

6. Disclaimer

This document is provided for general information and is based on **Stenkim®**'s laboratory data and field experience at the time of publication. **Stenkim®** reserves the right to revise this information without prior notice.

Stenkim® warrants that its products conform to the stated specifications on delivery. The buyer is responsible for determining the product's suitability for the intended purpose and for all conditions of transport, storage, application, and use. **Stenkim®** accepts no liability for results obtained under conditions outside its control. **Stenkim®**'s liability under this warranty is limited to replacement of non-conforming product and excludes any consequential or indirect damages.



7. Technical Data

Property	Method	Result
Base Polymer		Single-Component Polyurethane
Volatile Organic Compound (VOC)		233 g/l
Application Thickness (per coat)		450-750 µm
Color		Catalog
Density	EN ISO 2811-2	1.55 ± 0.05 g/cm ³
Hardness	EN ISO 868	A65-75
Elongation at Break	ASTM D 412 Die B	> 500%
Impact Resistance	EN ISO 6272-1	≥ 20 Nm (No Damage)
Peel Strength	ASTM C 794, 7 days in water	200 N/m
Low Temperature Crack Bridging (-10 °C)	EN 1062-7	Pass - Class A5
Flexibility After Thermal Aging	ASTM C 1522	Pass
Tack-free Time		60-120 minutes
Overcoat Time		24 hours
Full Cure Time		72 hours
Adhesion (Pull-Off Test)	EN 1542	>1.5 MPa
Capillary Water Absorption and Water Permeability	EN 1062-3	<0.005 kg/m ² h ^{1/2}
Carbon Dioxide Permeability	EN 1062-6	85m
Water Vapor Permeability	EN ISO 7783-1	95 m Class 3
Shelf Life		6 months
Packaging		23 kg packages

Stenkim® reserves the right to make changes to the values in this table at any time.

