

1. Product Description

StenCoat® PU AIRBLOCK is a single-component, polyurethane-based, highly elastic, thixotropic, easy-to-use, liquid membrane. It is used as a vapor-permeable air and water barrier for all substrates. It is applied as a liquid and forms a vapor-permeable, seamless, mold-resistant and elastic air barrier as well as a waterproof membrane.

It forms a highly elastic membrane with crack-bridging ability. It retains its mechanical durability under outdoor conditions.

StenCoat® PU AIRBLOCK 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. **StenCoat® PU AIRBLOCK** complies with ASTM C 836 and the permeability requirements of ASTM E 2178.

2. Uses

StenCoat® PU AIRBLOCK is used on walls and terraces that require a vapor-permeable air barrier with waterproofing properties. It can be applied to concrete, gypsum boards, natural stone, metal and wooden surfaces.

3. Application

3.1. Surface Preparation

Application surfaces must be sound, dry, clean and free of oil, grease, dirt and excess mortar. Loose materials must be removed, and all voids and unsound areas must be repaired with epoxy-based **StenCare® 2EP 311**. All joints must be sealed with **StenSeal® 2PS 111** or **StenSeal® PU 102** prior to application.

For damp surfaces **StenAst® 2EP MT** must be applied as a primer on clean concrete surfaces. 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® PU AIRBLOCK** is ready for use and is applied without adding anything. If thinning is necessary, only **StenSolver PU** can be used.

StenCoat® PU AIRBLOCK can be applied by roller or heavy-duty spray machine in a dual or triple-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. It is applied at 0.75-1.00 kg/m² per coat according to the desired application thickness. However, these amounts may vary depending on surface roughness. It is recommended to apply at a thickness of 2.50 mm for optimum performance.

3.3. Cleaning

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

Thixotropic Vapor-Permeable Air and Water Barrier

Highlights

- Polyurethane-based, elastomeric coating
- It forms a vapor-permeable air barrier
- Forms a seamless, breathable, long-lasting waterproof membrane
- Ready-to-use
- It is highly elastic and has crack-bridging ability
- Resistant to mold growth
- Available in catalog colors
- Easy to apply



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 Content		280 g/l
Application Thickness (per coat)		400-800 µm
Color		Color Catalog
Density	EN ISO 2811-2	1.5 ± 0.1 g/cm ³
Air Permeability (1.6 mm dry film)	ASTM E 2178	<0.0002 l/s·m ²
Water Vapor Permeability (1.6 mm dry film)	ASTM E 96 - desiccant method	3.6 ng / Pa·s·m ²
Hardness	ASTM D 2240	A65-75
Elongation at Break	ASTM D 412 Die B	800%
Impact Resistance	EN ISO 6272-1	≥ 20 Nm (No Damage)
Peel Strength	ASTM C 794, 7 days in water	Pass
Low Temperature Crack Bridging	ASTM C 1305	Pass
Flexibility After Thermal Aging	ASTM C 1522	Pass
Tack-free Time		60-120 minutes
Overcoat Time		24 hours
Full Cure Time		3 days
Shelf Life		6 months
Packaging		20 kg packages

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

