

CLEVERPROOF™ - PU100

ONE COMPONENT, FAST CURING, POLYURETHANE BASED, LIQUID WATERPROOFING MEMBRANE

DESCRIPTION:

CLEVERPROOF™ PU 100 is a one component, fast curing polyurethane based liquid waterproofing membrane. Creates an elastic, thick and durable film layer by curing with the humidity in the air.

TYPICAL APPLICATIONS:

- ✓ Exposed Roofs
- ✓ Irrigation Channels
- ✓ Terraces, verandas and balconies
- ✓ Wet areas under coating (bathroom, kitchen, etc.)
- ✓ Car Parks
- ✓ Gypsum and cement panels
- ✓ Light roofs made of metal or fiber cement
- ✓ Indoor and outdoor application areas
- ✓ Bridge Platforms
- ✓ Stadium stands

FEATURES AND ADVENTAGES:

- ✓ Fast curing (approx. 2 hours).
- ✓ It provides a thick and bubble-free layer.
- ✓ It is suitable for single layer application.
- ✓ Easy to apply (by brush, roller or airless spray).
- ✓ When applied, it forms a single piece membrane that does not cause joint formation or leakage.
- ✓ It is resistant to continuous water contact.
- ✓ It preserves its mechanical properties between -40° C and + 90° C.
- ✓ It is permeable to water vapor. Since it has a breathing structure, it does not cause moisture accumulation under the layer.
- ✓ When the material is damaged, it can be repaired quickly and easily with PU 100.
- ✓ It has excellent UV resistance.
- ✓ It has excellent chemical resistance.
- ✓ Thanks to its white color, it reflects the solar energy to a great extent and prevents the temperature of the building under the floor on which it is applied noticeably from increasing.

APPLICATION REMARKS:

- ✓ For extended service life and strength it shall be overcoated with polyurethane-based waterproofing products CLEVERPROOF™ PU 650 TC-1K Aliphatic flexible top coat material which is applied to areas exposed to open air conditions or pedestrian traffic.
- ✓ Not recommended for loose and unstable surfaces.
- ✓ It is not used for waterproofing of swimming pools with chemically treated water.

CONCRETE SUBSTRATE STANDARTS:

- ✓ Hardness R28: 15 Mpa
- ✓ Humidity: W <10%
- ✓ Temperature: + 5 ° C and + 30 ° C
- ✓ Relative Humidity: <85%

For detailed information, please consult our technical department.

APPLICATION PROCEDURE:

SURFACE PREPERATION:

Before the application, the adherence and adhesion weakening factors such as oil, grease, paraffin waste, cement grout, loose particles, mold release agents, cured old membranes should be removed from the surface. After washing the surface with high pressure water, it should be thoroughly dried. Surface defects should be repaired with suitable products.

PRIMING:

Suitable CLEVERPRIME™ primers shall be used for priming. For absorbent surfaces such as concrete, cement or screed where surface moisture is < 5%; use PU PRIMER 200 or EPOXY PRIMER, for moist surfaces; use PU PRIMER 300-2K or EPOXY PRIMER WB and for non-absorbent surfaces such as metal, ceramic or old coatings use EPOXY PRIMER WB GLOSSY.

APPLICATION:

Before using, the package should be opened and mixed with a low speed mixer for 2-3 minutes. For spray application, add Clever 001 at a maximum rate of 5% - 7%. The products should be applied with a roller or brush until the entire surface is covered, at least in two layers. After the first coat is applied, the second coat should be applied in minimum 6 and maximum 24 hours. If the application of the second layer has not been made within the specified time, before application please consult to the technical office of CLEVER POLYMERS for information and solutions. If needed, in order to increase the acceleration of drying process in cold weather, It is recommended to use ACC CATALYST. Consult our technical department for thinning.

CONSUMPTION:

Single layer consumption: 1,50 kg/m²

CLEANING:

After the application, all tools used should be cleaned with the appropriate Clever 001. Roller brushes are disposable They are only for single use.

PACKAGING AND COLOR:

It is grey color and in 5 kg and 25 kg metal buckets.

STORAGE AND SHELF LIFE

The product can be stored for a maximum of 12 months in its unopened original package at temperatures between + 5°C and +25°C. Opened product should be used as soon as possible.

PRECAUTIONS:

The product should be used in well ventilated environments. The product should not be in contact with open fire. Smoking should not be allowed during application. Protective gloves and masks should be used for hands and eyes during application. If the material comes into contact with eyes, it should be washed immediately with sufficient water. Adequate ventilation is required during application. For more detailed information, ask for Safety Data Sheet (MSDS) from CLEVER POLYMERS technical department.

TECHNICAL DATA:

QUALIFICATION	METHOD	FEATURE
Coating Type	Clever Lab.	One component polyurethane
Density	ASTM D 1475 / EN ISO 2811-1 (+20C)	1,40 (±0,05) gr/cm ³
Viscosity	ASTM D 2196-86 / EN ISO 3219 (+25C)	2000 - 5000 cp
Water Vapor Permeability	ASTM E96	0,8 gr/m ² Hours
Glossy	Clever Lab.	Semi-Gloss
Application Temperature	Clever Lab.	+5 °C to +30 °C
Heat Resistance	Clever Lab.	100 days in +80 °C
Shock Heat Resistance	Clever Lab.	200 °C - Passed
Solid Content	Clever Lab.	%90 (±5)
Hardness	ASTM D2240, DIN 53505, EN ISO R868	70 (Shore A)
Elongation at Break	ASTM D 412 (+23 °C)	> %400
Tensile Strength	ASTM D 412 (+23 °C)	> 6,5 N/mm ²
Adhesion to Concrete	TSE EN 1542 (+23 °C)	> 2 N / mm ²
QUV	ASTM G154	2000 Hours - Passed
Service Temperature	Clever Lab.	-40 °C to +90 °C
Tack Free Time	25 °C / 55% RH	2 to 3 Hours
Recoat Time	Clever Lab.	6 to 24 hours

* Viscosity measured at + 25 ° C according to EN ISO 3219 standards. Viscosity increases inversely with temperature.

NOTE: This document is not a product description statement, all information is given in good intention. This information is out of warranty as the conditions of use are beyond the control of the manufacturer. The final assessment of the suitability of any information, whether implied or not, or the use of the material contemplated, the way of use, and whether there is a breach of patents is the sole responsibility of the user. The manufacturer assumes no liability for coverage / consumption, performance or damage in product use. Consult Clever Polymers for detailed advice / recommendations for applications in special conditions. This technical document is valid until the new one is printed and makes old editions invalid.