

CLEVERPROOF - PU110

ONE COMPONENT, EASY TO APPLY, POLYURETHANE BASED LIQUID WATERPROOFING MEMBRANE

DESCRIPTION:

CLEVERPROOF PU 110 is a single component, easily applied, polyurethane based, liquid waterproofing membranes. Creates an elastic and durable film layer by curing with the humidity in the air.

TYPICAL APPLICATIONS:

- ✓ Car parks
- ✓ Irrigation Channels
- ✓ Asphalt Membranes
- ✓ Gypsum and cement panels
- ✓ Exposed roofs
- ✓ Indoor and outdoor applications
- ✓ Terrace, veranda and balcony
- ✓ Wet areas in indoor (bathroom, kitchen and etc.).

FEATURES AND ADVENTAGES:

- ✓ Easy to apply (by brush, roller or spray).
- ✓ When applied, it creates a one-piece film layer that does not cause joint or leakage.
- ✓ Resistant to constant water contact.
- ✓ Preserves its mechanical properties between -40°C and +80°C.
- ✓ It has an effective permeability against 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 easily and quickly with PU110.
- ✓ It has excellent UV resistance.
- ✓ It has excellent chemical resistance.

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 PREPARATION:

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 and cracks 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 use, the package should be opened and mixed with a low speed mixer for 2-3 minutes. For spray application, add Solvent 01 at a maximum rate of 5% - 7%. The previously primed surface should be applied with a roller, squeegee or brush until the entire surface is covered, by pouring the product in minimum 2 layers. After the first layer is applied, the second layer should be applied minimum 4 hours and maximum 24 hours. If the application has not been made within the specified time for the second floor, please consult the technical office of CLEVER POLYMERS for information and solutions before application. In order to increase the acceleration of drying in cold weather, it is recommended to use ACC CATALYST if desired. Consult our technical department for thinning.

APPLICATION REMARKS:

- ✓ or 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.

CONSUMPTION:

- ✓ First layer (min.) : 0,70 - 0,90 kg/m²
- ✓ Second Layer (min.) : 0,70 - 0,90 kg/m²
- ✓ Airless spray (for each layer) : 0,75 - 0,90 kg/m²
- ✓ Total consumption (minimum): 1,40 - 1,80 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 (+20°C)	1,40 (±0,05) gr/cm ³
Viscosity	ASTM D 2196-86 / EN ISO 3219 (+25°C)	3000 - 6000 cp
Water Vapor Permeability	ASTM E96	0,8 gr/m ² hour
Glossy	Clever Lab.	Semi-Gloss
Application Temperature	Clever Lab.	+5°C to +30°C
Heat Resistance	Clever Lab.	100 days at + 80 ° C
Shock Heat Resistance	Clever Lab.	200°C - Passed
Solid Content	Clever Lab.	85% (±5)
Hardness	ASTM D2240, DIN 53505, EN ISO R868	60 (Shore A)
Elongation at Break	ASTM D 412 (+23°C)	> 400%
Tensile Strength	ASTM D 412 (+23°C)	> 7 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 +80°C
Tack Free Time	25°C / 55% RH	4 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.

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