

CLEVERPROOF™ 400 BT 1K

ONE COMPONENT, BITUMEN-POLYURETHANE BASED, LIQUID WATERPROOFING MEMBRANE

DESCRIPTION:

CLEVERPROOF™ 400 BT 1K is one component, bitumen polyurethane based, liquid waterproofing membrane. It is thixotropic. It creates a highly elastic and durable film layer by providing a strong adhesion to the applied surface. It is suitable for both vertical and horizontal application.

TYPICAL APPLICATIONS:

- ✓ Floors
- ✓ Wet areas
- ✓ Asphalt membranes
- ✓ Areas exposed to UV
- ✓ Foundations and curtains
- ✓ Gypsum and cement panels
- ✓ Roof, terrace and balconies

FEATURES AND ADVENTAGES:

- ✓ It is thixotropic.
- ✓ Cures fast.
- ✓ Easy to apply.
- ✓ When applied, it provides a one-piece film layer that does not cause joint or leakage.
- ✓ It has an elastomeric hydrophobic structure.
- ✓ It is resistant to cold and maintains its elasticity down to -40°C.
- ✓ It has effective permeability against water vapor. Its breathing structure, does not cause moisture accumulation under the layer.
- ✓ Even if 400 BT 1K is damaged in any way, the damaged part is easily repaired in a short time.
- ✓ Provides effective resistance against chemicals.
- ✓ Ideal for vertical applications. It does not flow or sag.

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 adhesion and cohesion factors such as oil, grease, paraffin waste, cement grout, loose particles, mold release agents, cured old membranes should be removed from the surface. After cleaning 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:

Open the package of the product and mix it with a low speed mixer for 2-3 minutes. The material should be applied to the previously primed surface in minimum 2 coats by pouring it with the help of a roller or brush until the entire surface is covered. After the first layer is applied, the second layer should be applied minimum 4 hours and maximum 24 hours.

APPLICATION REMARKS:

- ✓ It should be covered with PU 650 TC-1K Aliphatic flexible top coat material in order to extend the strength and service life of polyurethane-based waterproofing products which are 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.): 0,75 - 0,85 Kg/m²
- ✓ Second Layer (min.): 0,75 - 0,85 Kg /m²
- ✓ Total Consumption (min.): 1,50 - 1,70 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 black color and in 20 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 Bitumen
Density	ASTM D 1475 / EN ISO 2811-1 (+20C)	1,07 (±0,02) gr/cm ³
Viscosity	ASTM D 2196-86 / EN ISO 3219 (+25C)	20.000 - 30.000 cp
Glossy	Clever Lab.	Semi Gloss
Application Temperature	Clever Lab.	+5° C to +30° C
Heat Resistance	Clever Lab.	200 days at +80° C
Shock Heat Resistance	Clever Lab.	150° C - Passed
Solid Mater	Clever Lab.	85% (±5)
Hardness	ASTM D2240, DIN 53505, EN ISO R868	35 (Shore A)
Elongation at Break	ASTM D 412 (+23° C)	> 600%
Tensile Strength	ASTM D 412 (+23° C)	5 N / mm ²
Adhesion to Concrete	TSE EN 1542 (+23° C)	> 2 N / mm ²
QUV	ASTM G154	1000 hours - Passed
Service Temperature	Clever Lab.	-40° C to +80° C
Recoat Time	Clever Lab.	3 to 24 Hours
Tack Free Time	25° C / 55% RH	1,5 to 2,5 Hours

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

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