

CLEVERPROOF™ 400 BT 2K

TWO COMPONENT, BITUMEN-POLYURETHANE BASED, LIQUID WATERPROOFING MEMBRANE

DESCRIPTION:

CLEVERPROOF™ 400 BT 2K is a two-component, bitumen-polyurethane-based, cold-applied liquid waterproofing membrane with 2000% elasticity by perfectly adhering to almost every surface it is applied to having root resistance.

TYPICAL APPLICATIONS:

- ✓ Green roofs and botanical garden terraces,
- ✓ Water tanks (except drinking water tanks),
- ✓ Foundations,
- ✓ Floors,
- ✓ Irrigation channels,
- ✓ Bridge platforms,
- ✓ Cut and Cover tunnels,
- ✓ Bathroom, veranda, terrace and roofs (under tiles),
- ✓ Gypsum and cement panels,
- ✓ Asphalt membranes,
- ✓ Light roofs made of metal and fiber cement

FEATURES AND ADVANTAGES:

- ✓ Easy to apply.
- ✓ When applied, it provides a one-piece film layer that does not cause joint or leakage.
- ✓ Plant root resistance test certificate.
- ✓ It is resistant to still water and frost.
- ✓ It has water vapor permeability.
- ✓ It preserves its mechanical properties between -40°C and +80°C.
- ✓ It is resistant to cold. It keeps its elasticity up to -40°C.
- ✓ Provides effective resistance against chemicals.
- ✓ It can also be used as joint material.
- ✓ It has an elastomeric hydrophobic structure.
- ✓ It has excellent mechanical properties. It has elongation, tensile, tear and abrasion 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, 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 cleaning 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:

The products must first be opened separately and mixed with a low speed mixer for 2-3 minutes. Then components A and B are combined and mixed with a low-speed mixer for a minimum of 3-4 minutes, and made ready to use. The pot life of the prepared mixture is between 30 and 45 minutes at +20°C. The pot life time may be shortened or increased depending on the change in the air temperature. Clever 400 BT 1K or Clever 400BT 2K should be applied for crack bridging on cracks wider than 1mm before the main coat is applied. The prepared component material should be applied to the previously primed surface 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 6 and maximum 24 hours later. 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. Depending on the need, it can be applied in a single layer. In this case, it should be applied as a minimum of 1.5 to 2.0 Lt./m².

APPLICATION REMARKS:

- ✓ After applying Clever BT 400 2K, it should be covered.
- ✓ Not recommended for unstable surfaces.
- ✓ It is not used for waterproofing of swimming pools with chemically treated water.

CONSUMPTION:

- ✓ First Layer (min.) : 0,75 - 1,00 Lt/m²
- ✓ Second Layer (min.) : 0,75 - 1,00 Lt/m²
- ✓ Total Consumption (min.) : 1,50 - 2,00 Lt/m²

CLEANING:

After the application, all tools used should be cleaned with a suitable solvent. The rolls are for single use only. They are only for single use.

PACKAGING AND COLOR:

20 Lt. (Component A) + 20 Lt. (Component B) is black color in metal bucket.

7,5 Lt. (Component A) + 7,5 Lt. (Component B) is black color in metal bucket.

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.	Two-component Polyurethane Bitumen
Density	ASTM D 1475 / EN ISO 2811-1 (+20C)	1,00 ± 0,05 gr / cm ³
Viscosity	ASTM D 2196-86 / EN ISO 3219 (+25C)	3.500 - 4.500 cp
Mixing ratio	Clever Lab.	1/1 by volume
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.	200 ° C - Passed
Solid Content	Clever Lab.	85% (+/- 5)
Hardness	ASTM D2240, DIN 53505, EN ISO R868	35 (Shore A)
Elongation at Break	ASTM D 412 (+23 ° C)	> 2000%
Tensile Strength	ASTM D 412 (+23 ° C)	> 2 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 to + 80 ° C
Recoat Time	Clever Lab.	6 to 24 Hours
Tack Free Time	25 ° C / 55% RH	2-3 hours

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

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