

400 BT-1K RAPID

Single Component, Fast Curing,
Bitumen Polyurethane Based,
Liquid Waterproofing Membrane

DESCRIPTION

400 BT-1K RAPID is a single component, fast curing, bitumen modified polyurethane based, liquid waterproofing membrane. It creates a highly elastic and durable film layer by providing strong adhesion to the applied surface.

TYPICAL APPLICATION

- Foundations, basements and floors,
- Roofs, terraces and balconies,
- Wet areas,
- Undertile applications,
- Asphalt membranes,
- Gypsum and cement panels.

FEATURES AND ADVANTAGES

- It has a cost advantage and high performance.
- Cures fast even at low temperature and humidity.
- Easy to apply.
- When applied it forms a one-piece layer that does not cause joint formation or leakage.
- Heat resistance performance is from -40°C to $+80^{\circ}\text{C}$.
- It is resistant to cold and maintains its elasticity up to -40°C .
- It is permeable to water vapor.
- Having a breathable structure it does not cause accumulation in the substrate.
- Excellent chemical resistance.

CONCRETE SUBSTRATE STANDARDS

- Hardness: $R28 = 15 \text{ Mpa}$
 - Humidity: $W < 10\%$
 - Temperature: $+5^{\circ}\text{C}$ and $+35^{\circ}\text{C}$
 - Relative Humidity: $< 85\%$
- For detailed information, please consult our technical department.

APPLICATION PROCEDURE

• SURFACE PREPARATION

In order to ensure a good adhesion oil, grease, paraffin waste, cement grout, loose particles, mold release agents, cured old membranes should be removed from the surface before the application. The surface should be thoroughly dried after washing with high pressure water and should be free from damp. Surface defects and cracks should be repaired with suitable products.

• PRIMING

For absorbent surfaces such as concrete, cement or screed, PU PRIMER 200 or EPOXY PRIMER should be used. AQUA PU PRIMER 2K or EPOXY PRIMER WB should be preferred on damp surfaces. TILE PRIMER should also be used on non-absorbent surfaces such as metal, ceramic or old coatings. Please examine primer table for detailed information.

• APPLICATION

Open the package of the product and mix it with a low speed mixer for 2-3 minutes. The material should be applied on the primed surface in minimum at 2 coats by a roller or brush until the entire surface is covered. After the first layer is applied, the second layer should be applied minimum 6 and maximum 24 hours later.

APPLICATION REMARKS

- After applying 400 BT-1K RAPID, it should be covered.
- Not recommended for unstable surfaces.

CONSUMPTION

- First Layer (min.): $0,90 - 1,00 \text{ Kg/m}^2$
- Second Layer (min.): $0,90 - 1,00 \text{ Kg/m}^2$
- Total Consumption (min.): $1,80 - 2,00 \text{ Kg/m}^2$

CLEANING

After the application, all tools should be cleaned with CLEVER 001. Rollers and brushes should be disposed of.

PACKAGING AND COLOR

It is black and in 25 kg metal buckets.

STORAGE AND SHELF LIFE

The product can be stored for a maximum of 12 months in unopened original pail at temperatures between $+5^{\circ}\text{C}$ and $+25^{\circ}\text{C}$. Opened product should be used at the soonest.

PRECAUTIONS

The product should be used in well ventilated environments. The product should not be in contact with open fires. 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. For more detailed information, ask for the Safety Data Sheet (MSDS) from CLEVER POLYMERS technical department.



TECHNICAL DATA		
QUALIFICATION	METHOD	FEATURE
Coating Type	Clever Lab.	Single Component Bitumen Polyurethane
Density	ASTM D 1475 / EN ISO 2811-1 (+20°C)	1,30 gr/cm ³ (±0,05)
Viscosity	ASTM D4287 (+25°C)	3.000 - 6.000 cp
Flash Point	ASTM D93	30 °C
Gloss	Clever Lab.	Semi Gloss
Application Temperature	Clever Lab.	+5°C to +35°C
Heat Resistance	Clever Lab.	200 days at +80°C
Shock Heat Resistance	Clever Lab.	150 °C
Solid Content	Clever Lab.	%85 (±0,05)
Hardness	ASTM D2240, DIN 53505, EN ISO R868	35 (Shore A)
Elongation at Break	ASTM D 412 (+23°C)	> %800
Tensile Strength	ASTM D 412 (+23°C)	> 2 N/mm ²
Adhesion to Concrete	TSE EN 1542 (+23°C)	> 2 N/mm ²
Thermal Resistance (200 days at 80 °C)	EOTA TR011	Passed
Service Temperature	Clever Lab.	-40°C to +80°C
Tack Free Time	25°C / 55% RH	1 - 2 Hours
Recoat Time	Clever Lab.	6 to 24 Hours
H ₂ O Absorption (10 Days)	Clever Lab.	< %1

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

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