

# CLEVERPROOF™ BITUM 2K

## TWO COMPONENT, BITUMEN RUBBER BASED, WATERPROOFING MEMBRANE

### DESCRIPTION:

CLEVERPROOF™ BITUM 2K is a two component, polymer modified, bitumen rubber based liquid waterproofing membrane. It forms a flexible film layer that is resistant to water and moisture and has crackbridging feature by adhering perfectly to the applied surface. It complies with DIN 18195 and TS EN 15814 standards.

### TYPICAL APPLICATIONS:

- ✓ Foundation and retaining wall
- ✓ In flower bed insulations
- ✓ Horizontal and vertical surfaces
- ✓ Basements and cellars
- ✓ Below grade structures
- ✓ Outdoors
- ✓ Settling tanks and retaining walls

### FEATURES AND ADVENTAGES:

- ✓ Easy to apply.
- ✓ Its flexible structure enables crack bridging.
- ✓ It can be applied both vertically and horizontally.
- ✓ It has high freezing and thawing resistance.
- ✓ Solvent free
- ✓ It is environment friendly.
- ✓ It forms a mono-block, waterproof layer.
- ✓ It can be applied on both dry and damp surfaces.
- ✓ Suitable for indoor use.

### 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 surfaces of the buildings that come into contact with water under the ground. After cleaning the surface with high pressure water, it must be dried. Surface defects and active water leaks, if any, should be repaired with suitable products. Chamfer tape should be applied to corners and edges with a minimum radius of 4cm.

### PRIMING:

For priming, 1 kg of CLEVERPROOF™ BITUM 2K liquid component should be taken and mixed with 5 liters of water in a separate container with a 400-600 rpm mixer for 3-4 minutes.

The primer prepared in this way is applied by spreading homogeneously on the surface without causing ponding with a brush. Primer should be allowed to dry before application.

### APPLICATION:

The powder component (component B) in the package should be slowly added into the liquid material and mixed with a mixer at 400-600 rpm until it becomes homogeneous (Lumps should not be allowed). After the prepared mixture is rested for 2-3 minutes, it should be mixed again for 20-30 seconds to make it ready to use. At +23°C air temperature, BITUM 2K should be consumed within 60 minutes after preparation. The main coat should be applied on dried primer surface. The entire application should be made at least in 2 layers. If the application to be made with a brush, the application layers should be applied perpendicular to each other. Both application and surface temperatures should be between +5°C and +30°C. The application should be protected from severe weather conditions for a minimum of 24 hours. BITUM 2K should be applied from the direction the water comes from. After the material is completely dry, the foundation pit should be filled with drainage plates and thermal insulation plates, protecting from impacts during filling.

### APPLICATION REMARKS:

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

### CONSUMPTION:

Usage Area Minimum	Application Thickness (Dry Film)	Minimum Consumption
AREAS EXPOSED TO SOIL MOISTURE (SOIL WATERS WITH NO ACCUMULATION)	2 mm.	3 kg/m <sup>2</sup>
INSULATION AGAINST LOW PRESSURE WATER	3mm. (With Glass Fiber Reinforcement mesh)	4,5 kg/m <sup>2</sup>
INSULATION AGAINST HIGH PRESSURE WATER	4mm. (With Glass Fiber Reinforcement mesh)	6 kg/m <sup>2</sup>

#### 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:

22 Kg. + 8 Kg. It is presented in brown and black colors in plastic bucket (30 KG in one 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 Bitumen Rubber and Special Cement
Density	ASTM D 1475 / EN ISO 2811-1 (+20°C)	1,04 (±0,02) gr/cm <sup>3</sup>
Mixing ratio	Clever Lab.	22/8 by volume
Glossy	Clever Lab.	Mat
Application Temperature	Clever Lab.	+5°C to +30°C
Pot Life	Clever Lab. (+20°C)	60 minutes
Tack Free Time	25°C / 55% RH	6 hours
Temperature resistance	Clever Lab.	+ 70°C
Resistance to Cold	Clever Lab.	0°C (does not crack during bending)
Recoat Time	Clever Lab.	8 to 24 Hours

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

	<b>DOP NO: CLEVER-104</b>  EN 15814:2011+A2:2014  <b>BITUM 2K</b>  <b>POLYMER MODIFIED BITUMINOUS THICK COATINGS FOR WATERPROOFING OF BELOW GRADE STRUCTURES</b>	
	Crack Bridging Ability	CB2
<b>CLEVER POLİMER VE YAPI KİMYASALLARI A.Ş.</b>  Atatürk Mh. Ekinciöğlü Sk. No:2 Ataşehir / İSTANBUL / TURKEY  19	Flexibility at low temperatures	No Cracks
	Resistance to Compression	C2B
	Resistance to Rain	R1
	Resistance to Water	R2
	Decrease of the Thickness When Fully Cured	≤ 50%
	Dimensional Stability at High Temperatures	No Sliding or Spilling
	Water Tightness	W1
	Reaction to Fire	Class E

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