

Waterproofing Systems / Bitumen + Polyurethane Based**BITUMFIX® PU 2K**

Bitumen and Polyurethane Based Double Component Waterproofing Material

DESCRIPTION

Bitumen – polyurethane based, double component, protective, superelastic waterproofing material. Thanks to the polyurethane in its content, it bonds strongly to the surface and generates a layer that is more resistant to water and moisture.

APPLICATION AREAS

- Outdoor
- Horizontal and vertical surfaces
- On surfaces of materials such as concrete, stone, roofing material made of cement and metal
- Waterproofing the foundation and shear walls of reinforced concrete structures against ground moisture and seepage water.
- Bridges, canals, flumes and rain creeks (excluding PVC based rain gutters)
- Waterproofing of retaining walls and isolation of water tanks from outside
- Underneath the coatings in waterproofing of balconies, terraces and green roofs.

TECHNICAL PROPERTIES

Appearance	Component A: Black colored emulsion Component B: Transparent viscous liquid
Density	Component A: 1.15 kg/L Component B: 1.0 kg/L
Application Temperature	Between +5°C and +35°C
Bonding to Concrete	1 N/mm ²
Tensile Strength	6 N/mm ²
Elongation at Break	1200 % (20°C)
Water Vapor Permeability	2.55 g/(m ² .d) (TS EN ISO 7783:2011)
Hardness (Shore A)	40
Dry Time Between Layers	~ 60 minutes
Pot Life	30 – 45 minutes (20°C)
Drying Time	4 – 6 hours (ASTM C 679-03)
Walking Time	~ 48 hours
Service Temperature	-36°C / +86°C

ADVANTAGES

- Packaging ratios makes mixing easy.
- Does not swell even when applied thick
- Cures fast
- Covers cracks. Very elastic and has high elongation ability
- Resistant to weather conditions
- Bonds to many surfaces, adheres well on the surface.
- Has high tensile, tear, impact and abrasion resistance and has excellent mechanical properties.
- Highly resistant to many chemicals
- Forms a protective layer on the surface as a water vapor barrier, protects for many years
- Provides seamless and jointless waterproofing
- Resistant to plant roots

CONSUMPTION

1 - 1.5 kg/m² on each layer (Recommended to apply at least two layers. Consumption varies depending on the absorption and roughness of the surface)

PACKAGING

Component A: 9 kg metal buckets
Component B: 9 kg metal buckets

APPLICATION**PREPARATION OF THE SURFACE**

- The surface must be cured.
- The surface must be clear of materials which prevent bonding, such as dust, oil, tar, bitumen, paint, silicone, curing agents, detergents and mold release oils.
- The surface should never be wet or damp. Make sure that the surface is completely dry. Otherwise the product will foam and swell. The moisture content of the surface should be maximum 5%.
- Repair the weak parts of the concrete, remove the plasters that are not adhered well, make the surface smooth and sound, repair the static cracks on the building with a plaster containing **AQUALATEX** or **REPAIRGROUT EXPAN High Strength Shrinkage Compensated Repair Mortar**. Repair the dynamic (moving) cracks with one of FIXA's appropriate MS, hybrid or polyurethane based sealants. Fill the holes with water outflow with **AQUASTOP**.
- If cement based mortar is used in the repair or if application is to be made on fresh concrete floors, wait to cure for at least 28 days and check by measuring that there is no moisture on the floor.
- Bevel the corners properly.
- Apply one layer of **BITUMFIX WP BASIC Bitumen Based Membrane Primer** to increase the adherence of BITUMFIX PU 2K to the surface. Wait for the primer to dry before the application.

PREPARATION OF THE MORTAR

- Before mixing component A and B, stir 9 kg of component A for 2 - 3 minutes to homogenize. Then slowly add 9 kg of component B to component A and mix again with a low speed mixer preferably at 400 - 600 rpm until it is homogenous. When the mixing process is completed, start the application immediately without resting.
- Consume the mixture in the container within approximately 30 minutes and this period should not be exceeded.

APPLICATION

- Apply BITÜMFIX PU 2K Bitumen and Polyurethane Based Double Component Waterproofing Material to the surface at least two layers perpendicular to each other. Check drying between layers by hand. If it leaves no traces on the hand, apply the second layer. This time is approximately 1 hour.
- Apply to the surface immediately with a bitumen brush, roller, trowel or squeegee.
- Since the product cures fast, complete the application quickly. Do not exceed the pot life.
- Final curing takes approximately 5 days depending on weather conditions.
- Use **IMPERMO Waterproofing Mesh** between the layers to increase the load bearing capacity.
- Protect against impacts until it is covered.
- Do not apply in rainy weathers and in temperatures below +5°C.

CAUTION

- Avoid application below +5°C and above +35°C.

- Avoid application on frozen areas, on areas under risk of freezing in 24 hours or on areas open to direct sunlight or wind.
- Clean tools and equipment with industrial solvents immediately after application.
- It is not suitable for isolation of potable water tanks and swimming pools.
- Consume the entire opened package.
- Consume the mixture in 30 minutes and do not exceed this duration.
- Since it contains flammable material, do not smoke or light a fire during application. Do not use tools and machines that may cause sparks.

SHELF LIFE

Expires in 9 months. Store unopened packages between +5°C and +25°C. Stir well before use and protect it against frost.

HEALTH AND SAFETY

As with all chemical products, contact with food, skin, eyes and mouth should be avoided during usage and storage. During the application, work wears, protective gloves, goggles and mask should be used according to the work place health regulations. If swallowed by accident, consult a doctor. In case of contact with skin, rinse with water. Keep out of reach of children.

The application instructions and technical values given for the products have been obtained in our tests in accordance with international standards and our experience, at 23 ± 2°C temperature and 50 ± 5% relative humidity. These values may vary depending on ambient conditions. High temperatures shorten the durations, low temperatures extend them. Before starting the application, whether the product is suitable for the application and purpose should be tested by the user. FIXA Construction Chemicals is not responsible for application errors that may occur if the product is used outside of its intended purpose or if the application conditions and recommendations mentioned above are not followed. This Technical Data Sheet is valid until the next revision is published. FIXA reserves the right to change the values specified in this Technical Data Sheet, provided that a new version is published. It is the user's responsibility to check the currency of the document. For more information, please contact our sales department.