

D-FLEX® BITU

TWO-COMPONENT, POLYURETHANE-BITUMINOUS LIQUID WATERPROOFING MEMBRANE

EASY TO WORK WITH AND APPLY

NO APPLICATION THICKNES LIMIT

FAST-CURING / QUICK DRY



PACKAGING

Component A: 10,0 L (metal containers)
Component B: 10,0 L (metal containers)



CONSUMPTION

1,5 – 2,0 Lt/m², applied in 2-3 layers



SHADES

Black



STORAGE

Store in well-sealed containers without any problems for up to 9 months.

CONDITION OF APPLICATION

It can be applied on extreme weather conditions and intense temperature changes.

TYPES OF SUBSTRATES

Any type of substrate, even without the application of primer.

RECOMMENDED

Urban and industrial use.

DESCRIPTION

D-FLEX® BITU consists of hydrophobic polyurethane resins (component A) and bitumen (component B). The final membrane formed from the mixing and reaction of the two components, has high elasticity and mechanical properties, and has excellent high chemical resistance.

ADVANTAGES / CHARACTERISTICS

- Excellent adhesion to any type of substrate, even without the application of primer.
- Continuous, elastic membrane without seams and joints.
- Application on a non-smooth substrate.
- No application thickness limit.
- Mixing 1:1 by volume.
- Extremely quick drying (polymerization)
- Crack-bridging
- Joints sealant ability
- Maintains its mechanical properties from - 40°C up to 90°C
- High elongation and tensile strength.
- Excellent resistance to chemical attack.
- Water vapor barrier
- Resistant to water, even to seawater.

- In case of membrane damage, it is repaired locally with the same material without removing the existing one, in a few minutes.
- No need of flame (torch) during application.

APPLICATION FIELDS

Recommended for: basements (foundations), garden roofs, non-drinking water tanks, irrigation channels, under tiles (after application of quartz sand in the last layers) in kitchen, bathrooms, balconies, flat roofs, under thermal insulation boards on flat roofs, in technical road construction works for the waterproofing of deck-bridges, in tunnels etc., as well as for application on asbestos sheets, metal sheets, gypsum-boards, cement-boards, and polyurethane foam.

APPLICATION TOOLS

The application is done with a brush, roller or toothed spatula.

CLEANING

Clean with LS-703 solvent. Do not empty washing liquids into the aquifer.

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MIXING

In a clean container, mix equal amounts of component A and component B (1:1). Mix with an electric stirrer very well and slowly (300 rpm), until a homogeneous mixture is created (~3 minutes). The ideal temperature for mixing is 15-20°C. At higher temperatures, the life of the mixture is drastically reduced, while at lower temperatures it lengthens. High levels of moisture work negatively on the end result. It is important that the impeller blades pass through the walls and bottom of the container to achieve optimal results.

APPLICATION

Substrate preparation

The substrate preparation must be dry (humidity content < 4%) and clean, free from dust, oils, salts, rust, old paints and other foreign substances, while corroded parts must be removed. In case of new concrete, it must be at least 28 days old. The substrate must not be washed with water.

- **On concrete surfaces**, discontinuities or cavities must first be filled with repair material, while large cracks must be primed with **DESMOFLEX® EPOXY PRIMER**. Next they are sealed with polyurethane mastic **ELASTO PU** before applying the product. All porous surfaces must be primed before application. In the case of new concrete surfaces, priming is not considered necessary.
- **On smooth, non-absorbent surfaces, as well as on bituminous membranes and old waterproofing layers**, priming with **DESMOFLEX® EPOXY PRIMER** precedes.
- **In case of metal or non-absorbent surfaces**, they must be dry and clean as they must be free of corroded parts and rust. The preparation of the substrate is done by sanding, brushing, water jetting, sandblasting, etc. Before priming with **DESMOFLEX® EPOXY PRIMER**, the consequences of cleaning are removed with a paint brush, brush or air.

WATERPROOFING MEMBRANE

Apply the mixture on the surface by roller, brush or teeth trowel, 6-12 hours after the applications of the primer and no more than 24 hours, and while the surface is still sticky, until the desired surface is fully covered. After 6 to 24 hours, apply the second layer of **D-FLEX® BITU**. For high demanding surfaces, you can apply a third layer.

If the product is going to be covered with tiles, before the application and while the last hand is still wet, fully saturate the surface with quartz sand (0,3-0,8 mm). This will create and adhesion bridge to the tile adhesive.

PRECAUTIONS

About information regarding safe use, storage and disposal of the product, read the information on the label and on the most recent product Material Data Sheet. The product Material Safety Data Sheet is available upon request to professionals.

The skin and eyes must be protected. Protective gloves and goggles must be worn when applying the product. In Case of contact with the eyes, rinse immediately with plenty of water and consult a physician. The product should be kept out of the reach of children.

Leftovers should not be disposed of with household waste. Advice should be sought from the local authority regarding the disposal and collection of waste.

National poison information center tel.: 210 77.93.777.

WARNINGS

Not suitable for surfaces with low consistency.

In case of wall-floor connections, water-pipes, chimneys, pipes etc., they must be reinforced with **THRAKON** fabric by enclosing it inside the **D-FLEX® BITU**.

The workability of the mixture depends in environmental conditions. At higher temperatures, the life of the mixture is drastically reduced, while at lower temperatures, it lengthens. High levels of humidity work negatively on the final results.

The technical information and guidelines in this brochure related to the application and end-use of **THRAKON** products are based on the Company's current expertise and experience on the products and are given in good faith provided they are properly stored, used and applied in accordance with the guidelines given by **THRAKON**. Given that we are unable to directly inspect the conditions that prevail at the worksite as well as the application of the product, the Company shall not provide any guarantee regarding the suitability of its products for any particular purpose and disclaims any legal responsibility that is based on written information in this brochure or on written or oral or otherwise provided recommendations and guidelines. By applying the product on a small surface, the users are advised to test the product's suitability for the intended application and purpose. **THRAKON** reserves the right to amend the properties of its products without prior notice. All orders are accepted only after acceptance of the above and under the Company's respective Trade Policy terms. This version of the technical data sheet automatically cancels any previous version.

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In the case of spray application, the mixture is diluted with a small quantity of LS-703.

Not suitable for contact with water for swimming pools.

Flammable material. Apply and store away from naked flames and spark sources.

The application always should be done with the use of activated carbon masks due to volatile organic compounds.

It is intended for professional use only.

TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUES / CHARACTERISTICS
Chemical composition	Mixtures of polyurethane prepolymer resin and bitumen		
Color			Black
Density	(kg/L)		1,00
Mixing ratio	by volume		1:1
Viscosity (23°C)	(cps)		2500 ± 50
Elongation at break	(%)	ASTM D 412	> 2500
Tensile strength at break	(N/mm²)	ASTM D 412	9,0
Pot life	(minutes)		40' (+23°C)
Resistance to hydrostatic pressure		DIN16726	No leak at 3 bar (30 m water column)
Hydrolysis (5% KOH, 7 days cycle)	No significant elastomeric change		
Final curing time	(days)	Conditions 20°C, 50% RH	7
Workability	(minutes)		30'
Tack free time	(hours)		2-4
Light pedestrian traffic time	(hours)		18-24
Final curing time	(days)		7
Chemical properties	Good resistance against acidic and alkali solutions (5%), detergents, seawater and oils.		

Note: The measurements were taken in laboratory environment under temperature of 23 ±2°C, Relative humidity 50% and without ventilation. They may vary depending on the conditions prevailing at the worksite, such as temperature, humidity, ventilation and absorbability of the substrate.

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