

## MONNELI BITUFLEX

*Elastomeric SBS Modified Liquid Applied Waterproofing*

### Product Description

An SBS modified bituminous liquid membrane composed of elastomers, bitumen, resins and additives dissolve in solvent. It is a thixotropic paste easily applicable horizontally and vertically. Once dried it forms an elastic, continuous, waterproofing membrane resistant against thermal changes, UV rays and acid rains.

### Uses

BITUFLEX adhere perfectly to several supports as bituminous sheaths, concrete, asbestos, plaster, wood, metallic surfaces, etc.

It is used for waterproofing of variety of supports such as :

- Eaves
- Underground foundations
- Restoration of old bituminous waterproofing
- Chimneys sealing
- Water proofing of shower stalls before the ceramic tiles laying, corrosion protection, etc.

Its particular composition makes it suitable for applications on humid supports and during winter.

### Advantages

- Can be applied vertically and horizontally
- Outstanding waterproof properties to ensure great protection against corrosion
- Easy to use, single component
- Elastomeric and solvent based
- High elasticity with permanent flexible membrane
- Excellent water resistance after complete hardening
- Excellent adhesion to most building substrates
- Excellent resistance against Chloride and Sulphate ions

- Resistant to underground soil ground water aggressive effect
- Membrane can be easily repaired by spot application

### Instructions for Use

#### Surface Preparation

The surface of the concrete shall be sound, clean and uncontaminated.

This preparation shall be such as to leave a sound exposed concrete surface free from dust, loose particles and any deleterious matter. If the concrete surface is defective or has laitance, it must be cut back to a sound base.

Oil, grease, varnishes, rust, dust and mould on metal surfaces shall be removed by wire or stiff brushing and grit blasting then wiped with SOLVENTE prior to priming.

Moss and lichen must be removed physically followed by treatment with fungicidal wash. After treatment, it must be washed down thoroughly with clean water and allow to dry.

#### Priming

Highly porous concrete or concrete containing micro-silica will require priming with a coat of BITUFLEX diluted with 10% of solvent.

The primer shall be applied at a rate of 5-6 m<sup>2</sup>/L and left to achieve a tack-free condition to dry before applying the top coat. A second coat of primer may be required if the substrate is excessively porous.

#### Application

Two coats of BITUFLEX shall be applied by brush or squeegee at a rate of 0.87 m<sup>2</sup>/liter giving a total dry film thickness of 2.0mm thick membrane. For large structural areas, variable mechanical loads, and moving cracks, fibre mesh shall be fixed between the coats.

The two coats must be applied at right angles to one another. Each coat must be completely dry before the next coat is applied.

A third coat can be applied blinded with clean sand as a protection against foot traffic and/or to provide a good key for top screed.

Do not apply subsequent applications if the membrane is punctured or damaged.

In areas where BITUFLEX is to receive a render or plaster finish, a keyed surface should be formed by gritting the second coat with clean dry sharp sand as soon as it's applied. The excess sand should not be brushed off when the coating has dried. Allow a minimum period of 48 hours before plastering, rendering or applying floor screed.

### Cleaning

BITUFLEX should be removed from tools, equipment and mixers with clean water prior to the initial set. However, once it has dried, it can only be removed with SOLVENTE 10.

### Recommendations

- Do not apply the product at a temperature less than +3°C and with humidity more than 90%.
- Do not apply subsequent applications if the membrane is punctured or damaged.
- Protect BITUFLEX from rain or from traffic till it completely cures. Damaged areas of BITUFLEX can be repaired by over coating the damaged area. As protective finishing coat it is possible to apply ELASTOGUM or MANTOFLEX.

### Applicable Standards

- ASTM C 309 – 96
- BS 6949:1991

### Consumption

1.1 kg/m<sup>2</sup> per mm of thickness

### Packaging

BITUFLEX is supplied in metallic containers of 20 liter and 200 liter drums.

### Storage

Keep in covered area away from direct sunlight and in tightly sealed containers. In these conditions BITUFLEX maintains its characteristics for 12 months.

## Technical Data

Properties	Results
Appearance	Black dense liquid
Density at 25°C	1.1 kg / L
Dry residual	70%
Temperature of application	+5°C to +35°C
Superficial film formation at +25°C	10 hours
Extension of break up	> 1000%
Complete hardening	4-6 days (2 mm thickness)
Tensile resistance (ASTM D412)	0.5 N / mm <sup>2</sup>
pH value	10
Recovery for 300% elongation (ASTM D412)	100%
Curing time (25°C)	48 hours
Shore A hardness	30
Vapour permeability	0.18 gr. m <sup>2</sup> / 24 hour
Service temperature	-5°C to +80°C
Aging resistance	Excellent
Water resistance after complete hardening	Excellent
Crack bridging	Up to 2 mm

All values are subject to 5-10% tolerance

## Health & Safety

BITUFLEX is a solvent based flammable product. Keep away from fire sources during application. Protect eyes during application by using goggles. Splashes to eyes should be washed immediately with abundant water and seek medical treatment.

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**BITUFLEX**  
Technical Data Sheet  
Edition: January 2020  
Revision: 02

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