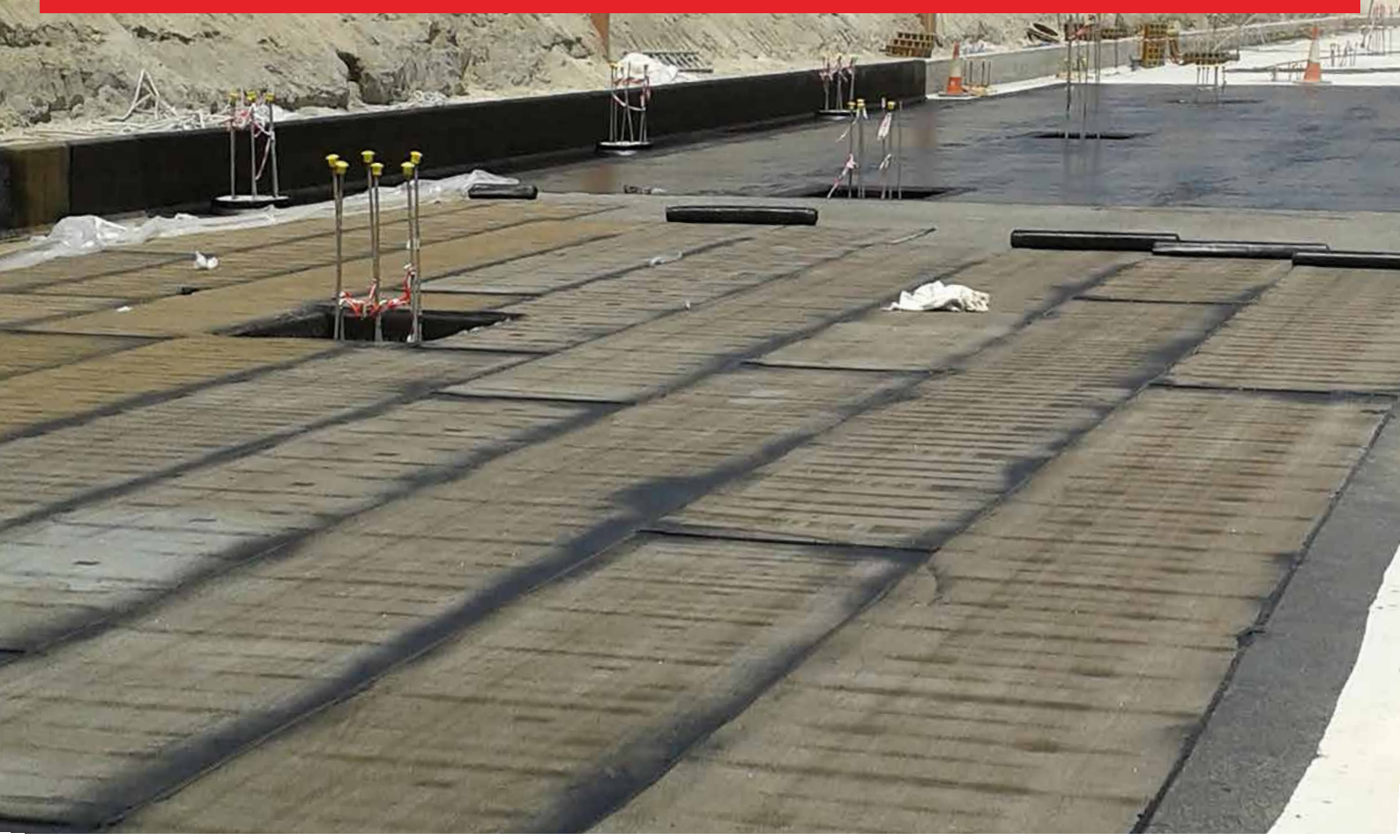
FLEXOBIT

WATER PROOFING SYSTEM

for foundations, basements, terraces, roofs, underground or multi storey carparks.



BITUFA Waterproofing B.V.

FLEXOBIT, UNREINFORCED SBS MODIFIED BITUMINOUS MEMBRANE

Flexobit is a waterproofing system for foundations, basements, terraces, roofs, underground or multi storey carparks. Flexobit can easily be applied on the concrete substrate by torching the overlap or fully bonded. The composition of the product provides a durable adhesion, even on uneven ground. The product is unique in its kind because **it has no reinforcement**, so it automatically configures to the subsurface. Therefore, it is very suitable for making expansion joints, recesses and corners, such as pile- heads. The application is much less time-consuming than products which contain a carrier.

PRODUCT DESCRIPTION

Surface: Sand

Reinforcement: N/A

Compound: Max 20% SBS, 80% Bitumen

Under face: HDPE burning foil

- **1000% elongation**
- **Self healing**
- **Mouldable in three directions (3D)**

Application Method

The product rolling is carried out to have the foil in contact with the concrete when directly unrolled (foil faceexterior of the roll). The over laps are welded with propane gas torch/dry heat air and roll pressed. For tanking application, the longitudinal overlaps are 100mm edge and the end overlaps are 150mm edge. No additional cover strip is necessary. Optionally the membrane can be applied fully bonded. For instance on difficult details and vertical walls.

Surface Treatment

Ensure the substrates are clean and dry. Smooth and free of matter and conditions detrimental to bond and performance of the membrane. For good adhesion to (vertical) substrates, use waterbased bituminous primer.

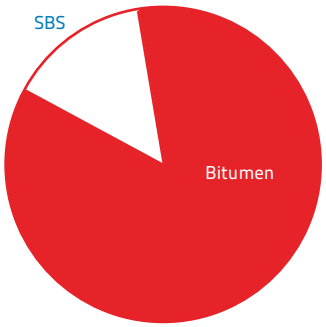
Application Temperature

Temperature: - 5°C to+ 40°C. The membrane must be clean and dry.

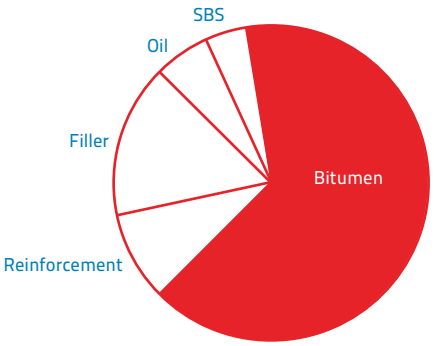
Storage Conditions

The rolls should be protected against moisture and exposure to sunlight and be stored in horizontal position. The rolls shouldn't be stored near a source of heat.

Flexobit non-reinforced membrane



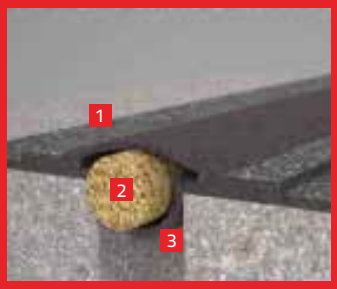
Reinforced membrane



ADVANTAGES

- 5 mm thickness
- 1000 % elongation with full recovery
- No reinforcement inside the membrane
- High penetration resistance
- Self-healing after puncturing
- Easy anchoring and joining to concrete structures
- 3D mouldable, which makes detailing work (corners, piles etc.) safe and fast
- Easy application: once unrolled, the overlap can be immediately sealed by propane torch
- Takes any shape without need for cutting
- No fillers added to the compound
- One layer of 5 mm Flexobit is superior to two or more layers of reinforced membranes

Expansion joints



1. Waterproofing layer / 2. PE profile / **3. Flexobit** expansion joint

Pile head

Detail at pile, using reinforced membrane.

Detail at pile, **Flexobit** homogeneous bituminous membrane.

TECHNICAL DATA

Characteristics	Standard	Value / Tolerance
Length	EN 1848-1	6,0 m ± 5%
Width	EN 1848-1	1,0 m ± 5%
Thickness	EN 1849-1	5,0 ± 10%
Visible defects	EN 1850-1	No visible defects
Mass	EN 1849-1	5,2 ± 0,52 kg/m^2
Filler content		0%
Water tightness	EN 1928	500 KPa[1]
Water tightness after ageing (12 weeks at 80°C)	EN 1296 and EN 1928	500 KPa[1]
Tensile properties		
Elongation at break (length and width direction)	ISO 37	1600 ± 150 %
Tensile strength (length and width direction)	ISO 37	1,2 ± 0,2 N/mm^2
Static loading	EN 12730	20 kg
Impact Resistance: Aluminium EPS 150	EN 12691	500 mm 2000 mm
Low temperature flexibility	EN 1109	≥ -25 °C
Chemical resistance (seaside chemicals)	EN 13969	Resistant to chlorides, nitrates and sulphates
Reaction to fire	EN 13501-1	Class E-d2
Vapour Transmission	EN 1931	Moisture flow rate (g): 1,54 x 10-9 kg m^{-2} s^{-1} Moisture resistance factor(μ): 50400
Vapour Transmission after ageing	EN 1296 and EN 1931	Moisture flow rate (g): 1,01 x 10-9 kg m^{-2} s^{-1} Moisture resistance factor(μ): 78800
Peel resistance of joints	EN 12316-1	Does not Peel[2]
Shear resistance of joints	EN 12317-1	Does not Shear[2]

1. The water tightness is determined at the limited pressure of the test equipment. In practice the water tightness will be higher than 500 KPa
2. The indication does not peel or shear relates to the fact that the samples have been tested until the maximum capacity of the testing equipment without peeling and shearing phenomena. This is a result of the lack of a reinforcement and the homogeneity of the compound and joint.

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