

Expanproof* Bitu PU

Single Component, Polyurethane-Bitumen Modified, Liquid Waterproofing Membrane

Uses

Expanproof* Bitu PU is a liquid-applied, highly permanent elastic, cold applied and cold curing, bitumen extended, Single component polyurethane membrane used for long lasting waterproofing.

To act as a damp-proof membrane and vapour seal for concrete and masonry. It can also be used as a protective coating for concrete below ground.

- Foundation Wall
- Basements
- Wet Areas
- On concrete, stone, fiber-cement sheets
- Metal surfaces

Advantages

- Excellent Adhesion to various substrates such as Concrete, Cement Screed, Steel Surfaces.
- Provides a seamless, Waterproof and protective coat
- Cost Efficiency.
- Reduce chance of pinholes from concrete.
- Applies on green concrete.
- Applicable even to irregular substrates.
- Crack-bridging ability.
- Can be applied horizontally and vertically.

Standard compliance

Expanproof* Bitu PU meets the requirements of ASTM C836-84.

Description

Expanproof* Bitu PU is a polyurethane-based and bitumen modified, single component, ready to use liquid waterproofing membrane.

Chemical properties

Expanproof* Bitu PU is unaffected by a range of mild acids, alkalis and water borne salts and is resistant to bio-deterioration.

Properties

Tack free time @ 25°C : 15 hours

Time to full cure @ 25°C : 48 hours

Typical cured membrane properties (at 28 days)

Elongation

(ASTM D412) : 620 % ± 20%

Tensile strength

(ASTM D412) : 1.5 N/mm²

Tear resistance

(ASTM D1004) : 15 N/mm²

Specific Gravity

: 1.2 ± 0.02

Water vapour transmission

(ASTM E96) : 10.0 g/m²/24 hrs.

Shore A hardness

(ASTM D2240) : 25

Bacteria Resistance : No Attack
(ASTM D4299)

Algae Resistance : No Attack
(ASTM G 29)

Chemical Resistance : Sodium No Effect
 Alkalis No Effect
 HCL 05% No Effect

Extensibility after heat aging (min. requirement - extended to 6.4mm without cracking)

: No cracking or tearing

Service temperature (continuous ambient)

: -20°C to 50°C

Cracks

All shrinkage and non-moving structural cracks should be pretreated with not less than a 1.00 mm coating of Expanproof* Bitu PU extending 75mm either side of the crack. Allow to cure overnight before general application.



CONSTRUCTION CHEMISTRY

Instructions for use

Preparation

All surfaces to be waterproofed should be sound, clean and dry.

Concrete surfaces should have a light steel-trowel followed by a fine hair-broom or equivalent finish which is dry and free of dust, oil and other contaminants. All high spots should be removed.

All metal surfaces should be made clean of paint, oils, rust and other contaminants. Abrade to expose bright metal then wipe clean with Expanchem Solvent* 102.

Cracks

All shrinkage and non-moving structural cracks should be pretreated with not less than a 1.00 mm coating of Expanproof*Bitu PU extending 75mm either side of the crack. Allow to cure overnight before general application.

Application

Expanproof* Bitu PU can be applied with a brush, roller, squeegee or airless spray. A minimum of two coats should be applied should be applied. The first coat should be allowed to dry completely before Second coat is applied. The two coats should applied at right angles to one another.

The minimum application life (after opening the pack) is up to 48 hours if stored in closed containers.

Curing and protection

Expanproof* Bitu PU membrane must be cured for a minimum of 24 hours @ 25°C before placing protection. Where damage to the membrane is possible (by traffic, backfilling, etc) it should be protected by a cementitious screed or protection boards. A dust coat of cement should be used to prevent adhesion of the membrane to the boards. Where a bond with the topping is not required, a separator sheet should be used.

To prevent damage to the membrane it is recommended that Expanproof* Bitu PU is laid in strips of 1 metre width to permit the application of a screed or Protection Board from the uncoated area.

Cleaning

Tools and equipment should be cleaned with Expanchem Solvent* 102 immediately after use. Do not use the solvent for thinning except where a sealing coat is required.

Storage

Shelf life

Expanproof* Bitu PU has a shelf life of 12 months if kept below 25°C in the original, unopened packs.

Estimating

Supply

Expanproof* Bitu PU : 15 Kg Bucket

Expanchem Solvent* 102 : 5 liters can

Coverage

Expanproof* Bitu PU : 1.6 kg/m² @ 800 microns DFT
in 2 coats

Precautions

Health and safety

Some people are sensitive to resin systems. Gloves and a barrier cream such as Kerodex Antisolvent, Rozalex Antipaint or Debba-Wet-Work should be used when handling these products. If contact with the resin occurs it must be removed before it hardens with a resin removing cream such as kero cleanse Standard grade Skin cleanser or Rozaklens Industrial Skin cleanser. Follow by washing with soap and water. Do not use solvent. The use of goggles is recommended but should accidental eye contamination occur, wash thoroughly with plenty of water and seek medical advice. Ensure adequate ventilation when using resin and solvent containing materials.

Fire

Expanproof* Bitu PU, Expanchem Solvent* 102 contain flammable solvents. Do not use near an open flame or smoke during use.

Flash points

Expanproof*Bitu PU : 55°C

Expanchem Solvent* 102 : 33°C

For further information, refer to the Product Material Safety Data Sheet.



CONSTRUCTION CHEMISTRY

Technical support

Expanchem Fospak offers a comprehensive range of high performance, high quality repair, maintenance and construction products. In addition, Expanchem Fospak offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance in locations all over the world.

* Denotes the trademark registered.

REGIONAL SALES OFFICES IN PAKISTAN:

Fospak (Pvt) Ltd.

Head Office

702, Business Avenue,
Block-6, PECHS., Shahr-e-Faisal,
Karachi, Pakistan.

Tel # +92-21-34528477, 34529859

Fax # +92-21-34522436

Email : info.khi@fospak.com.pk

Lahore Sales Office

2nd Floor Sarwar Shaheed Plaza,
Cavalry Ground,
Main Boulevard, Lahore Cantt,
Lahore, Pakistan.

Tel # +92-42-36675773

Fax # +92-42-36675838

Email : info.lhr@fospak.com.pk

Rawalpindi Sales Office

1st Floor,
Al-Harmin Plaza,
Main Murree Road,
Rawalpindi, Pakistan.

Tel # +92-51-9290592

Fax # +92-51-9290590

Email : info.isb@fospak.com.pk

Important note

Expanchem Fospak products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Expanchem Fospak endeavours to ensure that the technical information on this data sheet is correct at the time of printing, it is the customer's responsibility to satisfy himself, by checking with the company that this information is still current at the time of use, that the product is suitable for the intended application, and that the actual conditions of use are in accordance with those recommended. Because Expanchem Fospak has no control over the conditions of use of its products, all recommendations or suggestions regarding the use of these products are made without guarantee.