

BENTOFIX BFG 5000

Description

Bentofix 5000 is designed for installations of vertical or horizontal structures below ground level where there is a need to prevent the ingress of both water and hydrocarbons.

Bentofix is a needle-punched GBR-C comprised of a uniform layer of powder sodium bentonite that is encapsulated between a slit-film woven and a staple-fibre nonwoven geotextile. The woven geotextile side is in general not placed against the concrete structure.

Uses include: Waterproofing protection to grades 1, 2, 3a & 3b of BS8102:2011
Provides protection in either post-applied or pre-applied situations.
Either horizontal or vertical application.

Advantages

- Unique impermeable lap joints derived from surface bentonite impregnation of the non-woven geotextile layer during manufacture
- Full surface contact between the Bentonite impregnated cover layer and the concrete ensures that small cracks and surface imperfections are sealed
- Quick and easy installation in almost all weather conditions
- Forms a tenacious mechanical bond to poured concrete when cast in situ, remaining in place if settlement of the substrate occurs
- No requirement for priming systems, joint taping or protection systems
- BBA Accredited, certificate no. 05/4256

Specification Outline

Waterproofing shall be carried out using Bentofix 5000 as manufactured by Parex Ltd. The product must be stored, handled and used strictly in accordance with the manufacturer's instructions.



Typical Properties @ 20 °C

Tensile Strength	20kN/m / 11kN/m
Water Permeability	<5 x10 ⁻⁹ m/s
Puncture Force	2500N
Peel Strength	>360N/m
Thickness	6.0mm

Installation Instructions

Horizontal Floor Slab Application

For installation of horizontal concrete slabs following the required groundwork preparation, a 50mm blinding layer of lean concrete or sand/gravel is placed, compacted and levelled. This layer should be free from debris and have a smooth surface. All standing water shall be removed before the Bentofix membrane is unrolled on site.

Roll out the Bentofix membrane so that the woven face is upper most and trim the edges to fit the formwork. To obtain a watertight seal the membrane edges must be overlapped a minimum of 100mm in the centre and 150mm at edges. Avoid wrinkles, folds and uneven overlaps.

The concrete must be poured following the direction of overlaps to minimise the chances of a break in the waterproofing. In all applications it is essential that the vibrating poker used to compact any immediate concrete **does not** come into contact with the Bentofix membrane.

BENTOFIX 5000

Installation Instructions

Vertical Casting Application

In most cases the Bentofix membrane shall be secured in vertical wall applications to the concrete with the bentonite impregnated nonwoven geotextile side facing towards the concrete.

As for horizontal application to obtain a watertight seal the membrane edges must be overlapped a minimum of 100mm in the centre and 150mm at edges. Floor to wall joints must be overlapped a minimum of 400mm. Avoid wrinkles, folds and uneven overlaps. Ensure all overlaps are aligned not to let concrete through when poured and level is rising.

Post Applied Application

When post applied to the concrete the Bentofix membrane shall be secured to the concrete using Parex FX-N-06K040 fixings and Parex POK-41-ALZN washers at 300mm centres along the 20mm outside edges, and at 500mm centres within the area of the membrane if required to hold it in place. If required the membrane may be secured to shuttering with light nails or staples and concrete cast against it.

Standards

Bentofix has been tested in accordance with the appropriate parts of the following standards:
ASTM D5887, CSN 73 0601, ISO 10913.

Precautions

Health and Safety

Bentofix rolls are heavy and may need mechanical lifting to be moved.

Full health and safety data are given in Product Safety Data Sheet.

Quality Assurance

Parex Ltd is a firm of Assessed Capability. The Company's quality system conforms to BS EN ISO 9001:2008 and is assessed by UK CARES LTD.

Fire

Bentofix BFG 5000 is non-flammable.

Storage and Shelf Life

Bentofix will have a shelf life of 12 months when kept in dry conditions at a temperature of 5°C to 45°C. Storage at higher temperatures and high humidity may reduce the shelf life.

Packaging and Ordering

Bentofix 5000 is available in 2 roll sizes:

Mini liner	2.50m wide x 15m long
Mini liner	1.20m wide x 4.5m long

For further information and sales please contact your local Parex office as listed below.

Parex Ltd products are guaranteed against defective materials and manufacture. Products are sold subject to the Parex Ltd Terms and Conditions of Sale, copies of which are forwarded on invoice and are available on request. Parex Ltd endeavours to ensure that the above data and any further advice is correct, however, it cannot accept any direct or indirect liability for the use of its products as such usage is beyond its control.