

atal Naue BENTOFIX BFG 5000

Certified as Bentofix BFG 5000 waterproofing system Cert No. 05/4256

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 and 3 of BS8102:2009
- Provides protection in either post-applied or pre-applied situations.
- Either horizontal or vertical application.
- RC and masonry walls
- Service reservoirs

ADVANTAGES

- Unique impermeable lap joints derived from surface bentonite impregnation of the nonwoven 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
- Self-healing bentonite properties
- 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

TYPICAL PROPERTIES @ 20°C

- Tensile Strength 20 kN/m /11 kN/m
- Puncture Force 2500N
- Peel Strength >360N/m
- Water Permeability <5 x10m/s-9
- Thickness 6.0mm

SPECIFICATION OUTLINE

Waterproofing shall be carried out using Bentofix 5000 sodium bentonite membrane as supplied by atal uk. The product must be stored, handled and used strictly in accordance with the datasheets.

STANDARDS

Bentofix 5000 has been tested in accordance with the appropriate parts of the following standards:
ASTM D5887, CSN 73 0601, ISO 10913.

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. Alternatively, well compacted hardcore or clay base may be suitable, please contact atal uk for more information. Roll out the Bentofix membrane so that the nonwoven geotextile 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.

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. 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.

PRE APPLIED APPLICATION

Apply the Bentofix to timber formwork, 'tacking' by nail or staple either horizontally or vertically, following general application guidelines for lapping all adjacent edges 100mm, and staggering adjacent roll ends no less than 150mm, ensuring that laps face downwards. The woven geotextile side should be against the formwork, and the nonwoven/spun geotextile side should face the concrete to be waterproofed. Extend Bentofix the full depth of the formwork, so that the Bentofix laps 400mm over the Bentofix already cast into the slab edge and wall kicker, and allow no less than 300mm at the top of the formwork, to provide ground slab continuity later, if required. Position formwork and penetrate the Bentofix with tiebolts, as necessary. Usual concrete practice is applied in terms of striking times for formwork, but due

care should be taken to ensure that the Bentofix remains bonded to green concrete. Where a slab 'toe' exists, and underslab Bentofix has terminated at the top edge of slab, additional Bentofix may be required to ensure continuity and to link underslab/edge of slab Bentofix with the vertical Bentofix. Apply a 40x40mm fillet of Bentonite Paste (powder & water) at the internal wall/slab corner, and place additional Bentofix over the slab 'toe' lapping 100mm over the edge of slab Bentofix, and continue over the 'toe' terminating under the unbonded wall Bentofix 'flap' at the back of the kicker.

POST APPLIED APPLICATION

When post applied to the concrete the Bentofix membrane shall be secured to the concrete using proprietary soft washer pins (30mm length min.) at 300mm centres along the 20mm outside edges, and at 300mm centres within the area of the membrane if required to hold it in place.

PRECAUTIONS

HEALTH AND SAFETY:

Bentofix rolls are heavy and may need mechanical lifting to be moved. Full health and safety data are given in the Product Safety Data Sheet.

FIRE

Bentofix BFG is non-flammable.

STORAGE AND SHELF LIFE

Bentofix BFG 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 BFG 5000 is available in 4.5m x 1.2m rolls.

For further information and sales please contact your atal uk office as listed below. atal uk cyf products are guaranteed against defective materials and manufacture. Products are sold subject to the atal uk cyf Terms and Conditions of Sale, copies of which are forwarded on invoice and are available on request. atal uk cyf 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.