



PS X2 BFG MEMBRANE

DESCRIPTION

PS X2 BFG Membrane is a high-swelling, sodium bentonite, geotextile material for the sealing of reinforced concrete structures when used as a dual system in conjunction with **PUDLO CWP** which provides protection from both water and ground gas.

USES

For all aspects of waterproofing where a Grade 3 environment is required as part of a dual system recommended in BS8102:2009. **PS BFG Membrane** also provides protection from ground gases including methane, CO₂ and radon and can be used in either pre or post applied application. The membrane can be used in horizontal or vertical application. **PS X2 BFG Membrane** is suitable for basement construction including lift pits, slabs, liner walls, capping beams and service penetrations.

BENEFITS

- **PS X2 BFG Membrane** is a needle-punched GBR-C with a uniform layer of sodium bentonite powder that is encapsulated between a slit-film woven and a staple-fibre nonwoven geotextile.
- Full surface contact between the impregnated cover layer and the **PUDLO** concrete ensures that small cracks and surface imperfections are sealed.
- Forms a mechanical bond to poured concrete when cast in situ, remaining in place if settlement of the substrate occurs.
- Self-healing.
- Quick and easy installation.
- Can be installed in all weather conditions.
- No requirement for priming, joint taping or protection systems.
- BBA Accredited.

TECHNICAL DATA @ 20°C

Tensile strength: 20kN/m /11 kN/m

Puncture force: 2500N

Peel strength: >360N/m

Water permeability: <5x10m/s⁻⁹

Methane Permeability: 5.46 x 10m/s-9

Radon Permeability: 1.3x10-11 m2/s

Thickness: 6.0mm

CERTIFICATION

PS X2 BFG Membrane has been tested in accordance with the appropriate parts of the following standards:-

ASTM D5887, CSN 73 0601, ISO 10913



PRODUCT DATA SHEET

SURFACE PREPARATION

Horizontal Floor Application:

Installation of **PS X2 BFG Membrane** concrete slabs requires the following ground preparation:

- 50mm blinding layer of lean concrete or sand/gravel is placed, compacted and levelled. This blinding layer should be free from dirt and debris and have a smooth surface.
- Standing water should be removed before **PS X2 BFG Membrane** is unrolled on site. Alternatively, **PS X2 BFG Membrane** can be laid on well-compacted hardcore or clay base may be suitable.
- **PS X2 BFG Membrane** should be laid so the nonwoven geotextile side is facing upwards.
- To obtain a watertight seal, the edges must be overlapped a minimum of 300mm in the centre and 300mm at the edges. Please avoid wrinkles, folds and uneven overlaps.
- **PUDLO** modified concrete must be poured following the direction of each overlap of the **PS X2 BFG Membrane** to minimise the chances of a break in the waterproofing membrane. All concrete must be fully compacted as per best concrete practice.
- Where there is a requirement for gas protection all laps are to be completely sealed and taped using **PS X2 BFG Tape**. Where soft washer fixings or puncture marks are present these also must be securely sealed using **PS X2 BFG Tape**.

Vertical Wall Application:

- **PS X2 BFG Membrane** must be secured and fixed to the concrete with the nonwoven geotextile side facing out towards the concrete.
- Floor to wall joints must be overlapped a minimum of 400mm whilst avoiding wrinkles, folds and uneven overlaps.
- Ensure all overlaps are aligned to not allow any **PUDLO** concrete through when poured and level of concrete is rising.
- When fixing **PS X2 BFG Membrane** against secant, contiguous or sheet piling, this is held in place with soft washer fixings nailed into the membrane at 300mm centres.
- When fixing **PS X2 BFG Membrane** to timber formwork, please ensure the laps face downwards and stagger adjacent roll-ends no less than 150mm. The woven geotextile side **MUST** be fixed against the formwork with the nonwoven geotextile side facing outwards for concrete bonding.
- Where a slab 'toe' exists and **PS X2 BFG Membrane** has terminated at the top of the slab, additional **PS X2 BFG Membrane** will be required to ensure continuity and to link the under-slab and edge of slab together. Apply a 50mm x 50mm fillet of **PS Bentonite Powder** (mixed with water) at the internal wall/slab corner and place additional **PS X2 BFG Membrane** over the slab 'toe', lapping 100mm over the edge of the slab.
- Where there is a requirement for gas protection, all laps are to be completely sealed and taped using **PS X2 BFG Tape**. Where soft washer fixings or puncture marks are present these also must be securely sealed using **PS X2 BFG Tape**.

PACKAGING

1.2m x 4.5m roll = 28kg

YIELD

1.2m x 4.5m roll covers 5.4m².

HEALTH & SAFETY

PS X2 BFG Membrane rolls are heavy and may need mechanical lifting.



PRODUCT DATA SHEET

STORAGE & SHELF LIFE

PS X2 BFG Membrane has 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 of the product.

FIRE

PS X2 BFG Membrane is non-flammable

For further information on accessories that are used with **PS X2 BFG Membrane** please contact PUDLO Head Office on 01954 780687 or email sales@pudlo.com.