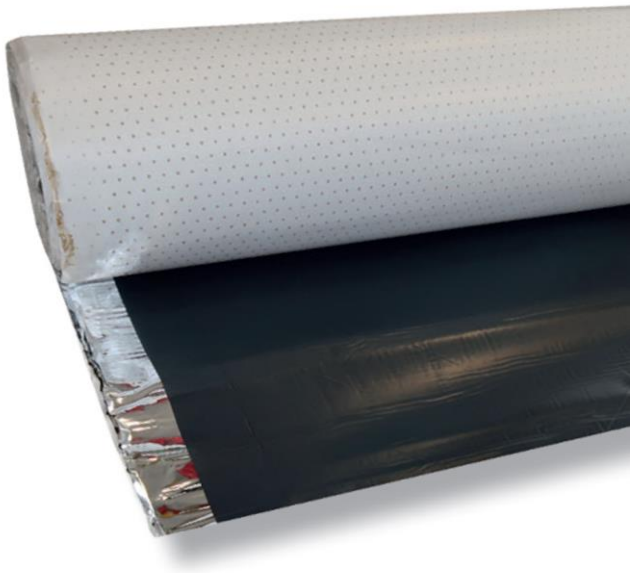
PermaSEAL Self-Adhesive Gas Membrane



Description

PermaSEAL Self-Adhesive Gas Membrane protects below-ground structures from water ingress and harmful gases. The high performance, puncture and tear resistant cross-laminated HDPE film bonded to a high tack bitumen adhesive provides excellent dimensional stability and trusted and reliable protection for below ground structures.

The system is highly flexible, crack bridging and tear resistant, making it the ideal choice for external applications of new build and existing structures. Once the two stages of priming and application of the membrane are complete, subsequent insulation and PermaSEAL 8 Geodrain drainage membrane layers can be installed immediately and the site can be backfilled. This ensures an extremely fast overall installation time compared with liquid applied gas and waterproofing systems, that rely on curing times.

NB: PermaSEAL Self-Adhesive Gas Membrane is designed for use in positive side waterproofing situations, for example, on the outside of basement walls (where positive pressure will be exerted against it). In no instance should this product be used internally as a tanking membrane.

Advantages

- Quick and easy installation
- Suitable for application to a range of substrates including ICF (water-based primer only), preformed concrete and other prepared mineral surfaces
- Puncture & tear-resistant
- Highly flexible and crack-bridging
- 1.5mm thick membrane
- Cold applied system
- Conforms to BS 8102:2022 – Code of practice for protection of below ground structures against water ingress in the form of a Type A (Barrier) System
- Conforms to the specification requirements of BS 8485:215 + A1:2019
- Radon and methane protection
- Compatible with steel and metals in most cases

Preparation

All contact surfaces must be clean and sound. Remove all loose material, nibs, laitance, dust and any previous coatings back to clean brickwork, masonry or concrete.

Please note: surfaces must be smooth and void free, in the instance of concrete blocks, surfaces with air entrapped in them or random stone walls we suggest 3:1 sand/cement levelling coat with the addition of Permagard SBR should be applied to provide a sound, even base before the application of PermaSEAL Self-Adhesive Gas Membrane.

Priming

PermaSEAL Self-Adhesive Gas Membrane should only be applied in dry conditions to a dry substrate in temperatures between 5°C and rising or 25°C and falling.

Prime all mineral substrates with a bituminous primer. ICF should be primed with a water-based primer. The primer produces a slightly tacky surface that is ideal for waterproofing with cold applied self-adhesive sheets. Substrates should be as dry as possible so that the primer can partially penetrate into them. Wet substrates should be sealed with PermaSEAL Tanking Slurry a few days before the primer is applied, making sure the slurry is brushed smooth. Cover the entire surface with primer and allow it to dry. ***The drying time should be no less than 1.5 hours and no more than 24 hrs.***

Before application, the primer should be checked for condensation that may have formed on the surface. If this occurs application must wait until the surface is dry.

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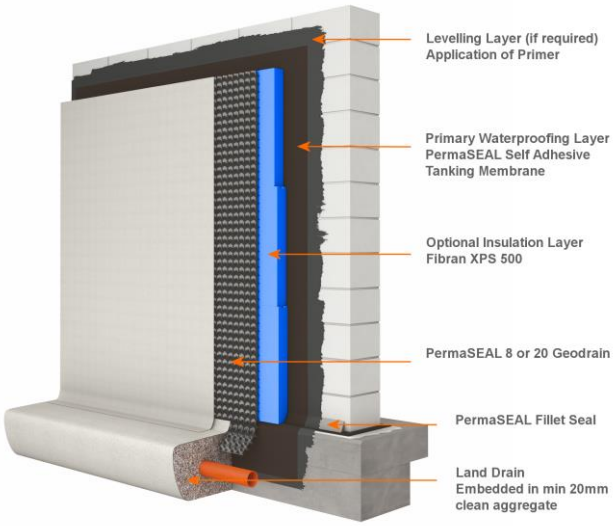
Primed surfaces should be waterproofed within 2 - 6 hours (on the same day) as the primer will otherwise lose its adhesion-friendliness because dirt and dust will settle on it again.

Application

Please see separate installation instructions for full guidance on how to install this system.



Application Notes

PermaSEAL Self-Adhesive Gas Membrane should not be applied to damp, frost filled surfaces or when the temperature is 5°C and falling or 25°C and rising.

Curing

As soon as PermaSEAL Self-Adhesive Gas Membrane is fully adhered to the surface and detailed correctly it is waterproof and gas tight.

Application of XPS Insulation and/or PermaSEAL Geodrain can be performed as soon as installation is complete. No drying time is required.

Coverage

A single roll of PermaSEAL Self-Adhesive Gas Membrane will cover up to 20m². However, jointing requires a 50mm - 100mm overlap, detailing and reinforcement strips will also be cut from the same material, all of which should be considered.

Technical Data

Material	Cross-laminated HDPE film coated on the underside with a polymer-modified bitumen compound
Size	1.00m x 20.00m (20m²)
Thickness (EN 1859-1)	1.5 mm
Weight (EN 1859-1)	1.75kg/m²
Watertightness (EN 1928, procedure B)	≥ 6 bar in 24 hours
Tensile strength (EN 12311-1)	Long. 215 / Trans. 220 [N/50mm]
Elongation (EN 12311-1)	Long. 310% / Trans. 240 %
Impact Resistance (EN 12691)	Met. A 500 mm / Met. B 1000 mm
Shear resistance of the joining seams (EN 12317-1)	Long. 350 / Trans 350 N/50mm
Tear resistance (EN 12310-1)	Long. 135 N / Trans. 135 N
Peel Resistance of joints (ASTM D 1000)	100 N/50mm
Resistance to static load (EN 123730)	Met. A 10 Kg / Met B. 15Kg
Cold bending behaviour	- 30°C
Vapour transfer rate (EN 1931)	90000µ
Straightness (EN 1848-1)	3 mm / 10 m
Fire class (EN 13501-1)	E
Radon permeability	5.7 x 10-12 m2/s
Methane permeability	<5 cc/m2 x 24h x atm

Packaging

Single roll dimensions 1.00m x 20.00m packaged in a protective cardboard box.

Storage and Shelf Life

PermaSEAL Self-Adhesive Gas Membrane should be stored up right in its original box to ensure the membrane does not become deformed. It should be stored in cool dry conditions away from direct sunlight at a temperature of 5°C to 25°C.

Health and Safety

Refer to latest health and safety data sheet.

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