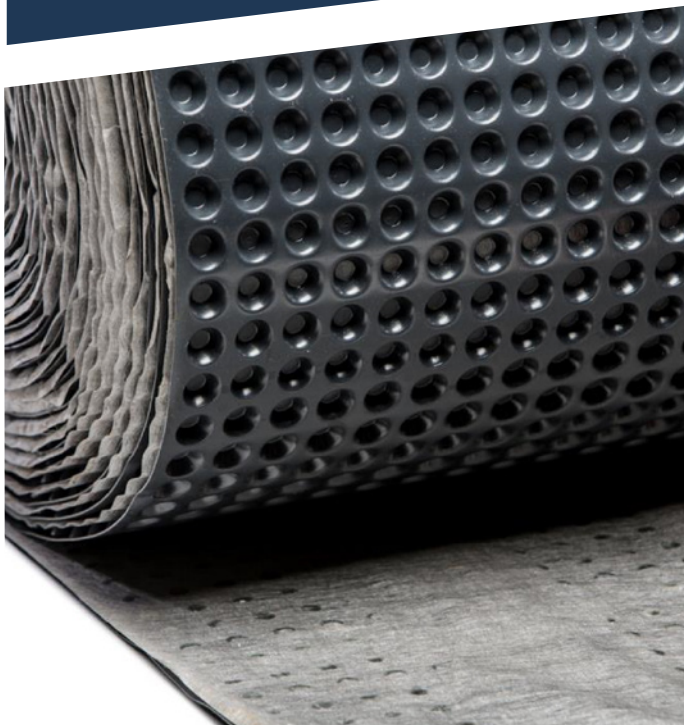


PermaSEAL^{PRO} 8 Green Roof

Drainage Membrane



PermaSEAL PRO 8 Green Roof is a high quality HDPE drainage membrane suitable for use in extensive soft landscaping, Green Roof applications along with various hard landscaping.

The recycled membrane incorporates a bonded geotextile filter layer to provide an 8mm cavity that is protected against soil obstruction, enabling water to drain away freely and quickly. With a high compressive strength **PermaSEAL[®] PRO 8** Green Roof is perfect for heavy loading in areas where a combination of Green Roof and trafficable surfaces are required.

PermaSEAL[®] PRO 8 Green Roof is used as a protection and drainage layer in conjunction with a primary waterproofing layer above decks and flat roofs. It is not suitable for inverted warm roof application (please contact our technical department for options).

It's guaranteed against deterioration for 30 years and has a life expectancy equal to the design life of the structure (DIN 9001:2000). **PermaSEAL[®] PRO 8** Green Roof is an inert product and is highly resistant to water, alkalis, saline solutions and organic acids and is not affected by minerals. It is also resistant to bacteria, fungi, and other small organisms.

ACCREDITATIONS

PermaSEAL[®] PRO 8 Green Roof Drainage Membrane is tested and CE marked to the relevant standard.

FEATURES

- **Fully bonded, high quality** geotextile **prevents slip** and **compression** into storage cups
- **Geotextile filter layer** prevents siltation of the studs
- **High drainage** capacity
- **Tough** and **durable** membrane
- **Easy to install** – simply unroll
- **High compressive strength** - 250kN /m²
- Bonded geotextile filter layer **saves time on installation** compared with loose laid geotextile

PERMASEAL[®] PRO 8 GREEN ROOF

PRODUCT TECHNICAL DETAILS

Membrane	HDPE approx. 550g/m ²
Composition	Virgin HDPE
Geotextile	PP approx. 100g/m ²
Stud height	Approx. 8mm
Total weight	Approx. 650g/m ²
Number of studs	1710/m ²
Compressive strength	Approx. 250kN/m ²
Colour	Black
Water drainage capacity	Approx. 2.24 l/s m
Roll length	10m & 20m
Roll width	2m
Air volume between studs	Approx. 5.5 l/m ²
Temperature resistance	-30°C to +80°C
Chemical properties	Chemical resistant
Physical properties	Safe for drinking water
Characteristic opening width	Approx. 170 µm
Water permeability EN ISO 11058	Approx. 100 · 10 ⁻³ m/s
Fire resistance	Class E

Geotextile Filter Layer

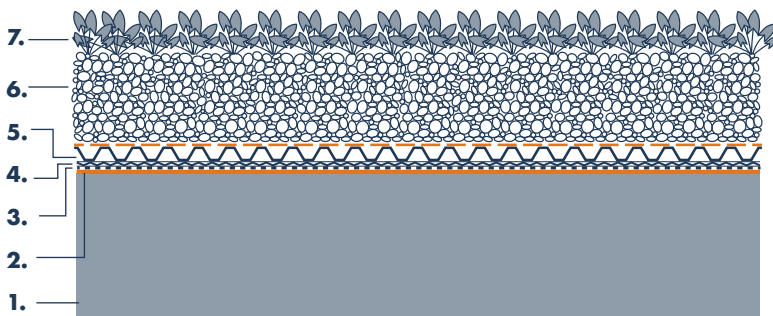


INSTALLATION

The application surface should have a gradient of at least 2%. Once the horizontal waterproofing and ancillary membranes are in place, rollout the **PermaSEAL® PRO 8 Green Roof** on the sealed surface with the geotextile facing upwards.

Ensure that every roll of membrane overlaps the next roll by approximately 100mm, this joint can be sealed with PM Power fix or PermaSEAL® Jointing Tape taking care to lift the geotextile, over lapping onto the next section of membrane. The dimpled sheet can be cut to the required length, being careful not to damage the waterproofing or any other layers. Once installed, the membrane is immediately ready to receive the extensive substrate or paving build up.

TYPICAL GREEN ROOF BUILD-UP



KEY

1. Deck
2. Waterproofing layer
3. PermaSEAL® PRO Root Barrier
4. PermaSEAL® PRO Protection Fleece
5. PermaSEAL® PRO 8 Membrane
6. Extensive Substrate
7. Sedum Blanket

FINISHING

PermaSEAL® PRO 8 Green Roof is designed to receive a number of build-ups including extensive Green Roof or hard landscaping designs.

DRIVABLE ROOF

- A sub base course and a bedding course will be installed between **PermaSEAL® PRO 8 Green Roof** and the drivable pavement.

EXTENSIVE GREEN ROOF

- Roofs with low vegetation like grass, moss, flowers
- Thin substrate layer, 8-10 cm high
- Small weight up to 100 kg/m²
- Nearly no maintenance
- No additional water necessarily

WALKABLE ROOF

- A bedding course of sand, gravel or chippings will be installed between **PermaSEAL® PRO 8 Green Roof** and the pavement.

All Permagard products are of a high quality and subject to rigid quality control. The company, however, cannot govern the conditions of the usage and application of its products and any warranty, written or implied covers material only. The information contained in this leaflet is given in good faith but no liability can be assumed by the Company for any damage, loss, injury or patent infringement arising from its use.

Permagard Products Ltd
Units B2-B5, Worthy Road
Chittinging Industrial Estate
Avonmouth
Bristol, BS11 0YB