

# PermaSEAL 1

## Cavity Drain Membrane



### Description

PermaSEAL 1 is a high-density polypropylene (HDPP) membrane for damp proofing floors in new or existing buildings. It can be used above ground, over a contaminated or damp background before flooring systems are installed. The system is approved for use in Type C (drained protection) constructions in accordance with BS 8102:2022

PermaSEAL 1 is guaranteed against deterioration for 30 years and has a life expectancy equal to the design life of the structure (DIN 9001:2000). The membrane must have permanent protection from UV light and physical damage, along with the correct specification and installation in order to achieve the life expectancy.

PermaSEAL 1 is an inert product with high compressive loading stability. It 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.

PermaSEAL 1 should only be used below ground when the survey has ascertained that there is no risk of water entering through the body of the slab. When a below ground waterproofing system is specified it is essential the cavity drain system incorporates the PermaSEAL drainage system including sump and pump system.

### Features

- Can be installed above slabs that are not yet cured, and as soon as the concrete is walkable
- High compression strength over 1000kN/m<sup>2</sup>
- Can be installed as a high load DPC in structural walls
- Quick & easy application to most surfaces
- Easy to form around corners
- Waterproof, vapour resistant, salt resistant, rot resistant, contaminant and chemical resistant
- Minimal effect on floor levels

### Technical Details

<i>PermaSEAL 1</i>	<b>Technical Details</b>
<i>Membrane</i>	HDPE approx. 470g/m <sup>2</sup>
<i>Composition</i>	56-70% Recycled HDPP
<i>Stud height</i>	Approx. 0.5mm
<i>Total weight</i>	Approx. 470g/m <sup>2</sup>
<i>Number of studs</i>	N/A
<i>Compressive strength</i>	Approx. 1000kN/m <sup>2</sup>
<i>Colour</i>	Grey
<i>Water drainage capacity</i>	N/A
<i>Roll length</i>	20m
<i>Roll width</i>	2.08m
<i>Air volume between studs</i>	Nominal
<i>Temperature resistance</i>	-30 ° C to +80 ° C
<i>Chemical properties</i>	Chemical resistant
<i>Physical properties</i>	Safe for drinking water
<i>Fire resistance</i>	Class F.

### Accreditations

PermaSEAL 1 is part of the PermaSEAL Waterproofing System. The product is CE marked to the relevant standard.

All Permagard products are of a high quality and subject to rigid quality control. The company, however, cannot govern the conditions of 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.

## Installation

Please see separate installation guide.

## Finishing

PermaSEAL 1 should always be protected by suitable surface finishes.

### Floor finishes

When laid over a concrete floor the membrane can be finished with the following methods:

- Screed (65mm min)
- Tongue and groove flooring with insulation spacer between membrane and boards
- Timber floor supported by a fixed lattice of timber supports
- Insulation with screed or tongue and groove flooring above
- Underfloor heating tray with screed above

## Storage

Store upright in dry conditions at temperatures between 5°C and 25°C. Do not expose to freezing conditions or direct sunlight. Protect from UV.

## Health & Safety

Please use the product only in accordance with the information given in this datasheet and the installation guide. There is no legal requirement for a Safety Data Sheet for this product.

## Further Information

As part of our complete cavity drain system, PermaSEAL 1 complies with BS 8102:2022 to provide Type C drainage protection capable of creating a Grade 3 environment suitable for domestic and commercial use.

It is essential when complying with BS 8102:2022 creating a grade 3 environment that the cavity drain membranes are used in conjunction with the PermaSEAL range of maintainable drainage channels and pumping systems. Alternatively, gravity drainage is acceptable on a sloping site.

It is imperative that all drainage systems are fully maintained throughout their lifetime.

**Note:** Although this product can be used below ground, we recommend you consult our technical team before specifying this product as it is designed for areas that have been assessed as low risk.