PermaSEAL 20

Cavity Drain Membrane

Description

PermaSEAL 20 is a high-density polyethylene (HDPE) membrane for damp proofing and waterproofing walls, floors and vaulted ceilings that require a large air gap for a high-drainage volume in new or existing buildings. The system is approved for use in Type C (drained protection) constructions in accordance with BS 8102:2022.

PermaSEAL 20 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 20 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.

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

- 20mm stud depth providing 9 litres of drainage volume per m²
- High compressive load bearing strength 180kN/m²
- Waterproof, salt-resistant, root-resistant, contaminant-resistant
- Easy to cut with scissors
- Low & high temperature tolerances
- Resistant to bacteria, fungi, and other small organisms

Technical Details

PermaSEAL 20	Technical Details
Membrane	HDPE approx.1000g/m²
Composition	100% Virgin HDPE
Stud height	Approx. 20mm
Total weight	Approx. 1000g/m²
Number of studs	400/m²
Compressive strength	Approx. 180kN/m²
Colour	Black
Water drainage capacity	Approx. 9 l/s m
Roll length	10m, 20m
Roll width	2m
Air volume between studs	Approx.14 l/m²
Temperature resistance	–30 ° C to +80 ° C
Chemical properties	Chemical resistant
Physical properties	Safe for drinking water
Fire resistance	Class E.

Accreditations

The product is CE marked to the relevant standard.

Installation

Please refer to the Installation Guide.

Finishing

PermaSEAL 20 should always be protected by suitable surface finishes.

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

+44 (0)117 982 3282
sales@permagard.co.uk

Wall / Ceiling finishes

When fixed to walls and vaulted ceilings with the PermaSEAL Quick Plug or PermaSEAL Brick Plug the membrane can be finished with the following systems:

- Independent stud wall, timber frame or metal track
- Independent masonry wall

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 20 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.

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

+44 (0)117 982 3282
sales@permagard.co.uk