

Visqueen EcoMembrane

- Independently accredited by BRE Certification Ltd, Certificate No.112/04.
- Manufactured from 100% post-use polyethylene, diverting more waste from landfill
- High tear resistance helps reduce damage during installation
- Does not compromise on traditional DPM performance
- Available in traditional sizes and thicknesses and installed in the same way.

Description

Visqueen EcoMembrane® DPM is a blown film of extruded low-density polyethylene for use as a Type "A" damp proof membrane as defined by BS EN 13967: 2004.

It is manufactured from 100% post-use waste, is black in colour and available in 250mu, 300mu and 500mu thicknesses.

It has been independently accredited by BRE Certification Ltd (Certificate No. 112/04) copies available on request.

Visqueen EcoMembrane® DPM is classified as non-hazardous when used in accordance with the relevant Code of Practice (CP 102: 1973). The product is chemically inert and is not affected by acids and alkalis that may be present in the sub-soils..

Application

Applications and use

Visqueen EcoMembrane® DPM is suitable for use in concrete floors, in accordance with clause 11 of CP 102: 1973, where there may be capillary rise of moisture but not where it may be subject to hydrostatic pressure. In such a circumstance, Visqueen Self-adhesive DPM should be used. Where there is a risk that the ground may be waterlogged, sub-soil drainage in accordance with CP 102 and BS 8102 should be provided. The effectiveness of EcoMembrane® will be reduced if it is exposed to sunlight either during storage or when in use (see Storage and Handling). Under normal operating conditions, Visqueen EcoMembrane® DPM can be used in conjunction with underfloor heating, although follow the advice of Visqueen's Technical Support Service. As indicated in paragraph 4.8 of Approved Document C, joints in the membrane are sealed using the Visqueen DPM Jointing System and Visqueen Zedex DPCs and cavity trays.

Installation

Preparation for laying

Even though Visqueen EcoMembrane® has a high puncture resistance to normal foot and site traffic, care should be taken to avoid accidental damage on site. Similarly, where the base is uneven, a blinding of soft sand of a thickness that will cover all sharp projections should be used to avoid damage to the membrane when it is being installed, and when the concrete or screed is being laid.

Jointing the EcoMembrane®

Adjacent sheets of the membrane should be overlapped by at least 150mm and sealed using Visqueen Doublesided Jointing Tape. The joint should then be secured using 100mm wide Visqueen Girth Jointing Tape. The membrane should be clean and dry at the time of jointing.

Maintaining continuity

It is essential that the Visqueen EcoMembrane® is continuous with the DPC in the surrounding walls. Where the DPM is not at the same level as the DPC, the DPM should be taken vertically and connected to the DPC so that damp proofing is continuous. The DPM should also be continuous with any DPCs to internal walls.

Special care must be taken to ensure continuity at corners. To help achieve this, special preformed wall/slab corner units are available from Visqueen Building Products. All laps must be sealed using Visqueen Double-sided Jointing Tape and Visqueen Girth Jointing Tape.

Punctures

Any tears or punctures in the membrane should be patched using a piece of the same material sized to overlap at least 150mm beyond the extent of the puncture, the lap being sealed with Visqueen Double-sided Tape and Visqueen Girth Jointing Tape.

Visqueen EcoMembrane

Service pipe penetrations

Any tears or punctures in the membrane should be patched using a piece of the same material sized to overlap at least 150mm beyond the extent of the puncture, the lap being sealed with Visqueen Double-sided Tape and Visqueen Girth Jointing Tape.

Covering

Visqueen EcoMembrane® should be covered by a protective layer (such as a screed) as soon as possible after installation. The membrane should be sufficiently loosely laid against upstands to ensure that the membrane is not stretched or displaced when applying the screed or concrete. A minimum thickness of 50mm screed is recommended. When reinforced concrete is to be laid over the membrane, the wire reinforcements or spacers must be prevented from contacting the membrane. It is recommended that the membrane be covered with Visqueen Protection Board or 50mm screed prior to placing the reinforcements.

When underfloor heating is to be installed, Visqueen recommend that the barrier is positioned between the blinded hardcore and the insulation to protect the installation from moisture and to avoid any risk of overheating the membrane

Visqueen Jointing Tapes

Visqueen Double-sided Jointing Tap

Roll length (m)	10
Roll width (mm)	50

Visqueen Girth Jointing Tape

Roll length (m)	33
Roll width (mm)	100

Nominal Characteristics of Visqueen EcoMembrane®

Roll Dimensions	250mu(4m x 25m) 300mu(4m x 25m) 500mu(4m x 12.5m)
Visible defects BS EN 1850-2	250mu(PASS)/300mu(PASS)/500mu(PASS)
Mass per unit area	250mu(240g/m ²)/300mu(265g/m ²)/500mu(460g/m ²)
Watertightness BS EN 1928 Method A with pressure of 2kPa	250mu(PASS)/300mu(PASS)/500mu(PASS)
Resistance to impact 30mm puncturing tool BS EN 12691	250mu(PASS) 300mu(PASS) 500mu(PASS)
Durability against ageing BS EN 1296, with exposure period of 12 weeks followed by Watertightness after ageing BS EN 1928, Method A with	250mu(PASS) 300mu(PASS) 500mu(PASS)
Durability against chemicals BS EN 1847, with exposure to dilute alkali for 16 weeks Watertightness after exposure BS EN 1928, Method A with pressure of 2kPa	250mu(PASS) 300mu(PASS) 500mu(PASS)
Resistance to tearing (Nail shank) in Machine direction BS EN 12310-1	250mu(165N) 300mu(205N) 500mu(310N)
Resistance to tearing (Nail shank) in Cross direction BS EN 12310-1	250mu(170N) 300mu(215N) 500mu(315N)
Max Tensile stress in Machine direction BS EN 12311-2	250mu(19.4 N/mm ²) 300mu(24.9 N/mm ²) 500mu(18.5 N/mm ²)
Elongation BS EN 12311-2	250mu(370%) 300mu(390%) 500mu(370%)
Max Tensile stress in Cross direction BS EN 12311-2	250mu(23.2 N/mm ²) 300mu(23.7 N/mm ²) 500mu(19.9 N/mm ²)
Elongation BS EN 12311-2	250mu(430%) 300mu(430%) 500mu(380%)
Resistance to static loading BS EN 12730, Method B with 20kg load	250mu(PASS) 300mu(PASS) 500mu(PASS)

Water Vapour Transmission Properties

Density of water vapour flow rate BS EN 1931	250mu(4.20 x 10 ⁻⁹ kg/m ² /s) 300mu(3.71 x 10 ⁻⁹ kg/m ² /s) 500mu(1.91 x 10 ⁻⁹ kg/m ² /s)
Water vapour resistance factor BS EN 1931	250mu(3.14 x 10 ⁵) 300mu(3.29 x 10 ⁵) 500mu(3.92 x 10 ⁵)

Table 1

Minimum Overlaps