Visqueen Pre Applied Membrane

Features and benefits
- Type A Barrier Membrane (Tanking Membrane) - resistant to ground water in accordance with BS 8102:2009
- High resistance to puncture - greatly reduces risk of barrier becoming damage during the build process
- Multi functional - also acts as a radon and damp proof membrane
- Dual jointing methods - lap joints can be taped or heat welded

Product description
Visqueen Pre Applied Membrane is a 1mm thick, robust co-extruded waterproofing membrane. It is coloured grey on the upper surface and black on the reverse. The grey surface is textured to aid adhesion to cast concrete. The membrane is supplied in single would rolls (not folded), 2.44m x 41m.

Approvals and standards
- Suitable for use as a Type A Barrier Membrane (Tanking Membrane) to BS 8102:2009
- Conforms to the specification requirements of BR 211:2015
- CE Mark EN 13967:2017

Usage
Visqueen Pre Applied Membrane is a pre-applied fully bonded Type A Barrier Membrane (Tanking Membrane) for use with below ground reinforced concrete structures e.g. basements, retaining walls, lift pits and car parks.

The pre-applied membrane can be used to achieve waterproofing to Grades 1, 2 and 3 as defined in BS 8102:2009.

System components
- Visqueen Ultimate Double Sided Jointing Tape, 100mm x 15m
- Visqueen Ultimate GR Lap Tape, 150mm x 10m
- Visqueen Ultimate Retaining Discs, 50mm long x 35mm head diameter x 500 per box
- Visqueen Preformed Top Hat Units
- Visqueen Preformed Units
- VisqueenPro Detailing Strip, 300mm x 10m, 500mm x 10m
- Visqueen VX25 Waterstop, 20mm x 25mm x 5m

Find your local stockist

Technical support: +44 (0) 333 202 6800
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Visqueen Pre Applied Membrane

Storage and handling
Visqueen Pre Applied Membrane should be stored horizontally, under cover in its original packaging.

Care should be taken when handling the product in line with current manual handling regulations.

Preparation
Visqueen Pre Applied Membrane should be installed on a smooth continuous surface e.g. compacted blinding layer, smooth concrete blinding or well consolidated MOT Type 1. The substrate should be free from irregularities such as voids or protrusions.

Where protection against hydrostatic water pressure is required, the membrane should be applied with welded joints.

The membrane can be cut with a sharp retractable safety knife or robust scissors.

Installation
Visqueen Pre Applied Membrane should be loose laid on horizontal substrates and pre-applied to vertical substrate with the grey textured side facing towards the wet cast concrete so that a key to the concrete can be achieved.

The membrane has been designed to exhibit superior welding properties using hot edge, hot air or extrusion welding, therefore onsite welding of all lap joints is recommended for all applications, and should be employed when hydrostatic water pressure is present.

Alternatively, when the membrane is used for damp proofing, radon protection and sites where hydrostatic water pressure is of low risk, lap joints can be bonded with Visqueen Ultimate Double Sided Jointing Tape and then sealed with Visqueen Ultimate GR Lap Tape. When using tapes to secure laps, the overlap should be minimum 150mm and the membrane surfaces to be jointed should be dry and free from contamination such as dust or sand. Once the tapes are applied, the lap should be well rolled with a seam roller to ensure full adhesion and continuity.

The membrane should not be taken through any masonry wall. The relevant Visqueen damp proof or gas proof course should be taken through and extended beyond the wall by a minimum of 250mm where it can be jointed to the membrane with the above tapes.

When installed vertically, the membrane should be pre-applied to temporary formwork or the adjoining structure. Visqueen Retaining Discs are available to provide a means for securing the leading edge of the membrane to the temporary formwork. The membrane should be installed with the smooth black surface facing the formwork. Using oval nails, Visqueen Retaining Discs should be mechanically fixed at maximum 400mm centres to the internal face of the shuttering. Using a suitable power tool and 6mm drill bit to create a pilot hole in the membrane, it should be secured over the protruding section of the retaining disc. The top edge of the membrane should be trimmed to approximately 10mm below the top edge of the slab. Once the concrete has set, the oval nails should be removed by pulling through from the external face of the shuttering. When the temporary formwork is removed the Visqueen Retaining Discs should be visible on the external (smooth black) face of the membrane. Continuity of the membrane system with the damp or gas proof course is maintained using Visqueen Self Adhesive Membrane.

Visqueen Preformed Top Hat Units should be used for sealing service entry pipes. The base of the top hat and the upstand should be bonded using Visqueen Ultimate Double Sided Jointing Tape and sealed with Visqueen Ultimate GR Lap Tape. The upstand should be secured with the supplied jubilee clip.

Forming an effective barrier to damp may give rise to complex three-dimensional detailing where, it is recommended that welded membrane or Visqueen Preformed Units are used e.g. corners. Alternatively Visqueen Pro Detailing Strip can be used to seal awkward junctions.

If the membrane is punctured or perforated a patch of the same material should be lapped at least 150mm beyond the limits of the puncture and, depending on the specified jointing method, either welded in position or bonded with Visqueen Ultimate Double Sided Jointing Tape and sealed with Visqueen Ultimate GR Lap Tape. Alternatively a patch can be formed using Visqueen Pro Detailing Strip and lapped at least 150mm beyond the perimeter of the puncture.

Due to the robust nature of the product, the membrane can withstand normal on-site foot traffic and the activities associated with the laying of a reinforced concrete slab without the need for additional membrane protection. However, care should still be taken to ensure that the membrane is not punctured, stretched or displaced when applying the reinforced concrete.

In high temperatures conditions the membrane should be covered immediately after installation.

Usable temperature range
It is recommended that Visqueen Pre Applied Membrane and all associated system components should not be used below 5°C.
Visqueen Pre Applied Membrane

Additional information

Where required, Visqueen’s network of preferred installers can install the membrane and offer the client a fully warranted system. When using Visqueen Pre Applied Membrane in an external waterproofing application, hydrostatic pressure can be relieved by using Visqueen Protect & Drain, see T-01.

To assist build sequencing, Visqueen Ultimate DPC is available for gas protection through the wall construction. Visqueen Preformed Top Hat Units should be used at service pipe penetrations, see PAM-51.

For internal and external corners, Visqueen Preformed Corner Units are available, see PFU-553.

To seal around steel columns, use Visqueen Pro Detailing Strip, see PAM-52.

For additional detailing information, contact Visqueen Technical Services +44 (0) 333 202 6800.
## Visqueen Pre Applied Membrane

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Test method</th>
<th>Units</th>
<th>Criteria</th>
<th>Result</th>
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<tr>
<td>Colour</td>
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</table>

CE Marking to EN13967 Type T

- **Tensile Strength - MD**
  - Test Method: EN12311
  - Units: N/mm²
  - Criteria: MDV
  - Result: 23.6

- **Tensile Strength - TD**
  - Test Method: EN12311
  - Units: N/mm²
  - Criteria: MDV
  - Result: 22.4

- **Tensile Elongation - MD**
  - Test Method: EN12311
  - Units: %
  - Criteria: MDV
  - Result: 701

- **Tensile Elongation - TD**
  - Test Method: EN12311
  - Units: %
  - Criteria: MDV
  - Result: 706

- **Joint Strength**
  - Test Method: EN12317-2
  - Units: N
  - Criteria: MDV
  - Result: 598

- **Watertightness to 60 kPa**
  - Test Method: EN 1928
  - Units: -
  - Criteria: Pass/Fail
  - Result: Pass

- **Resistance to impact**
  - Test Method: EN 12691
  - Units: mm
  - Criteria: MDV
  - Result: 750

- **Durability watertightness after heat ageing**
  - Test Method: EN 1296
  - Units: -
  - Criteria: Pass/Fail
  - Result: Pass

- **Durability watertightness against chemicals**
  - Test Method: EN 1847
  - Units: -
  - Criteria: Pass/Fail
  - Result: Pass

- **Resistance to tearing (nail shank) MD**
  - Test Method: EN 12310-1
  - Units: N
  - Criteria: MDV
  - Result: 750

- **Resistance to tearing (nail shank) TD**
  - Test Method: EN 12310-1
  - Units: N
  - Criteria: MDV
  - Result: 720

- **Resistance to static loading**
  - Test Method: EN 12730
  - Units: kg
  - Criteria: >MLV
  - Result: 20

- **Water vapour transmission - resistance**
  - Test Method: EN 1931
  - Units: MNs/g
  - Criteria: MDV
  - Result: 2142

- **Water vapour transmission - permeability**
  - Test Method: EN 1931
  - Units: g/m²/d
  - Criteria: MDV
  - Result: 0.063

- **Radon permeability**
  - Test Method: SP RI.SE
  - Units: m²/s
  - Criteria: MDV
  - Result: 3.0 x 10⁻¹²

## Health and safety information

Refer to the Visqueen Pre Applied Membrane material safety datasheet (MSDS).
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About Visqueen
The Visqueen name has long been recognised as one of the leading manufacturers of high quality advanced membrane technologies and design based solutions by specifiers, distributors, builders merchants and contractors throughout the UK and Europe.

For further guidance on the Visqueen services shown below, please refer to the relevant section of the Visqueen website (www.visqueen.com) or contact Visqueen Technical Services on +44 (0) 333 202 6800 or enquiries@visqueen.com

Complete Range, Complete Solution

- Structural Waterproofing
- Gas Protection
- Damp Proof Membrane
- Tapes
- Damp Proof Course
- Stormwater
- Vapour Control

Visqueen Technical Support
Visqueen combine an extensive product portfolio with industry leading levels of service and support which includes guidance over the phone, bespoke CAD drawings to help with complex detailing, electronic NBS specifications and access to a dedicated team of highly knowledgeable and experienced field based Technical Support Managers.

Visqueen Technical Support is available to all our customers including architects, specifiers, distributors, builders merchants, contractors and end users. All of our technical team have been awarded the industry recognised qualification Certificated Surveyor in Structural Waterproofing (CSSW).

Visqueen CPD Seminars
The Visqueen Continuing Professional Development (CPD) Seminars provide up-to-date information on changes within Building Regulations/Building Standards and nationally recognised industry guidance affecting damp proofing, water vapour control, hazardous ground gas protection and below ground structural waterproofing.

The one hour seminars have been produced for design specialists within the construction sector and are delivered by our team of Technical Support Managers.

Visqueen PI designs and special projects
From initial design to the completed project, Visqueen are with you every step of the way. Whether it be hazardous ground gas protection and/or below ground waterproofing protection employing barrier, structurally integral or drained systems, Visqueen can offer professional indemnity (Pi) insurance for bespoke Visqueen design solutions.

Visqueen Technical Support Managers work with all stakeholders to provide cost effective Visqueen solutions offering complete peace of mind throughout the construction phase and beyond.

Visqueen Training Academy
Based at our manufacturing facility in Derbyshire, the Visqueen Training Academy is available to support Visqueen customers throughout the UK by providing a wide range of both theory and practical skills related training.

Courses include one day product awareness training for our distributors and builders merchants to help them in their day-to-day jobs, through to intensive three day courses giving detailed hands-on training in the practical skills required for safe and robust product installation.