Visqueen TorchOn Tanking Membrane

Features and benefits
- BBA certified - third party accreditation
- Type A Barrier Membrane (Tanking Membrane) - resistant to ground water in accordance with BS 8102:2009
- Flexible - easy to detail and install on site
- Multi functional - also acts as a radon and damp proof membrane
- Heat bonded application - no jointing tapes required
- Heat bonded application - ideal for cold and damp conditions

Product description
Visqueen TorchOn Tanking Membrane is a modified bitumen rubber tanking membrane. It has a sanded finish to the top surface and a heat dispersible film on the underside. The roll is supplied 1m x 8m.

Approvals and standards
- Third party accreditation (BBA 14/5121)
- Suitable for use as a Type A Barrier Membrane (Tanking Membrane) to BS 8102:2009
- Conforms to the specification requirements of BS 8485:2015 + A1:2019
- Conforms to the specification requirements of BR 211:2015
- CE Mark EN 13969:2004
- Environmental Management System ISO 14001:2015

Usage
Visqueen TorchOn Tanking Membrane is a heat bonded product, suitable for use as a Type A Barrier Membrane (Tanking Membrane) for above and below ground applications e.g. basements, retaining walls and lift pits.

The membrane should be applied as a two layer system when used as a tanking system for below ground structures where high levels of hydrostatic (water) pressure exist. The membrane can be used as a single layer system when used as a horizontal damp proofing membrane or in low risk situations.

When applied as a two layer system the product is suitable for waterproofing podium decks.

It is also suitable for use in all types of buildings to prevent the ingress of harmful levels of ground gases e.g. methane, carbon dioxide and radon.

The membrane can be applied to a variety of substrates including concrete, blockwork, brickwork and steelwork, in both vertical and horizontal applications.

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

System components
- Visqueen HP Tanking Primer, 5L
- Visqueen TreadGUARD 1500, 1m x 2m
- Visqueen Protect&Drain
- VisqueenPro Detailing Strip, 300mm x 10m, 500mm x 10m
- Visqueen Pile Cap Sealer, 25kg
- Visqueen VX25 Waterstop, 20mm x 25mm x 5m

Find your local stockist
Visqueen TorchOn Tanking Membrane

Storage and handling
Visqueen TorchOn Tanking Membrane should be stored vertically under cover in its original packaging.

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

Preparation
All surfaces to which Visqueen TorchOn Tanking Membrane are to be applied should be free from cavities or projections, have a smooth finish, be dry and free from dust, loose particles and frost. The surface should then be sealed using Visqueen HP Tanking Primer and allowed to dry thoroughly.

When applying to blockwork or brickwork the joints must be flush pointed. In demanding applications the masonry face must be rendered prior to applying the membrane.

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

Installation
Visqueen TorchOn Tanking Membrane side and end laps to be minimum 150mm. All lap joints should be fully bonded; a bead of bitumen should extrude from the joint.

The membrane must be fully bonded to the prepared substrate using the gas torch-on technique. For horizontal work, an approximate 500mm neck tube and 50mm diameter propane gas burner should be used and for vertical and detailing work, an approximate 200mm neck tube and 35mm diameter propane gas burner is appropriate. During bonding, ensure that a constant flow of bitumen is maintained across the full width of the roll and that a bead of bitumen is extruded from each edge demonstrating that a correct seal has been obtained.

When applying horizontally, unroll and position the membrane. Roll back half way and starting from the middle of the roll, progressively roll forward whilst activating the coating on the underside of the roll. Repeat for the second half of the roll. Subsequent rolls should be set out with staggered end laps.

When applying vertically, cut the membrane to the appropriate length and position at the base of the wall. Progressively torch apply to the substrate working up the wall. Complete the vertical application by torch bonding the remainder of the membrane to the horizontally bonded membrane.

At 90 degree changes of direction a sand cement fillet should be formed prior to the membrane installation.

Watertight seals should be formed around all service entry points. Visqueen Pro Detailing Strip should be used for sealing service entry pipes.

If the membrane is punctured or perforated, a patch of the same material should be lapped at least 150mm beyond the extents of the puncture.

Where membrane protection is required e.g. when used externally on a retaining wall, the membrane should be protected from backfill with Visqueen TreadGUARD 1500 bonded in position with Visqueen Double Sided Jointing Tape. Alternatively, where external drainage is also required the membrane can be protected with Visqueen Protect&Drain.

When forming night joints, the upper edge of the membrane should be adequately secured e.g. bonding onto the top of the retaining wall, or if terminated on a vertical face the upper edge should be secured with Visqueen Fixing Strip and Visqueen Fixings Pins for Masonry.

Installation must ensure continuity of the tanking system around obstructions such as stanchions and pile caps and the formation of a minimum of 150mm bonded lap with the damp proofing system above ground level.

Usable temperature range
It is recommended that Visqueen TorchOn Tanking Membrane and all associated system components should not be used below 5°C. However, due to the heat bonded installation method the system is more tolerant in cold weather working.

Additional information
For lift pit detailing see T-04
Where concrete construction joints occur Visqueen VX25 Waterstop system should be incorporated see T-04.
Where wall ties penetrate the membrane, seal with Visqueen Axiom UniSeal see T-41
When waterproof concrete is required, or for additional information, contact Visqueen Technical Services +44 (0) 333 202 6800
# Visqueen TorchOn Tanking Membrane

<table>
<thead>
<tr>
<th>Property</th>
<th>Test method</th>
<th>Units</th>
<th>Compliance criteria</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visible defect</td>
<td>EN 1850 -2</td>
<td>-</td>
<td>Pass/Fail</td>
<td>Pass</td>
</tr>
<tr>
<td>Length</td>
<td>EN 1848-2</td>
<td>m</td>
<td>-5%+/+5%</td>
<td>8</td>
</tr>
<tr>
<td>Width</td>
<td>EN 1848-2</td>
<td>m</td>
<td>-5%+/+5%</td>
<td>1</td>
</tr>
<tr>
<td>Mass</td>
<td>EN 1849-2</td>
<td>kg/m²</td>
<td>+/-10%</td>
<td>4.5</td>
</tr>
<tr>
<td>Straightness</td>
<td>EN 1848-2</td>
<td>-</td>
<td>Pass/Fail</td>
<td>Pass</td>
</tr>
<tr>
<td>Thickness</td>
<td>EN 1849-2</td>
<td>mm</td>
<td>+/-10%</td>
<td>3.5</td>
</tr>
<tr>
<td>Watertightness</td>
<td>EN 1928</td>
<td>kPa</td>
<td>MDV</td>
<td>60</td>
</tr>
<tr>
<td>Durability (artificial ageing)</td>
<td>EN 1296 and EN 1928</td>
<td>-</td>
<td>Pass/Fail</td>
<td>Pass</td>
</tr>
<tr>
<td>Durability (heat ageing)</td>
<td>EN 1296</td>
<td>-</td>
<td>Pass/Fail</td>
<td>Pass</td>
</tr>
<tr>
<td>Water vapour transmission properties</td>
<td>EN 1931</td>
<td>kg/m²/1000m²</td>
<td>+/-20%</td>
<td>5.79 x 10^-6</td>
</tr>
<tr>
<td>Resistance to static loading</td>
<td>EN 12730</td>
<td>kg</td>
<td>MLV</td>
<td>20</td>
</tr>
<tr>
<td>Reaction to fire</td>
<td>EN 13501-1</td>
<td>-</td>
<td>Class</td>
<td>F</td>
</tr>
<tr>
<td>Flexibility at low temperature</td>
<td>EN 12317-1</td>
<td>°C</td>
<td>MDV</td>
<td>-15</td>
</tr>
<tr>
<td>Tensile properties - MD</td>
<td>EN 12311-1</td>
<td>N/50mm</td>
<td>+/-20%</td>
<td>900</td>
</tr>
<tr>
<td>Tensile properties - CD</td>
<td>EN 12311-2</td>
<td>N/50mm</td>
<td>+/-20%</td>
<td>900</td>
</tr>
<tr>
<td>Tensile elongation - MD</td>
<td>EN 12311-1</td>
<td>%</td>
<td>+/-20%</td>
<td>35</td>
</tr>
<tr>
<td>Tensile elongation - CD</td>
<td>EN 12311-2</td>
<td>%</td>
<td>+/-20%</td>
<td>35</td>
</tr>
<tr>
<td>Methane permeability</td>
<td>ISO 15105-1</td>
<td>mls/m²/d/atm</td>
<td>MDV</td>
<td>&lt;40</td>
</tr>
</tbody>
</table>

## Health and safety information

Refer to the Visqueen TorchOn Tanking Membrane material safety datasheet (MSDS)
Visqueen TorchOn Tanking Membrane

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.