

Visqueen Cavity Drain System Components

Features and benefits

- Complete cavity drainage system - in accordance with BS 8102:2009
- Compatible - with BBA approved Visqueen V8 and V20 membranes
- Total solution - provides effective mechanical drainage solutions for all below ground structures

Product description

The system comprises of :

MEMBRANE FIXINGS AND SEALS

Visqueen V20 Sealing Rope - a double-sided butyl rubber tape (10mm x 5m) - 2 per box

Visqueen V8 Double Sided Sealing Tape - a double-sided butyl rubber tape (25mm x 20m)

Visqueen CD Corner Strip - a single sided butyl rubber self adhesive tape (150mm x 10m) 2 per box

Visqueen Masonry Plugs - are made from Polyoxymethylene (10mm diameter and 75mm in length) 100 per box

POLYETHYLENE SUMPS AND PUMPS

Water Pump Pro (single mains powered pump) including 9v Battery Alarm

Water Pump Pro Plus (twin mains powered pumps)

Water Pump Pro Plus Battery Back-up System

CONTROL PANELS AND ALARMS

Dual Assist Control Panel including floats - high level water alarm

Telemetric Dialler Alarms - sends a pre-recorded message of the system fault to end user

WATER CHANNEL ACCESSORIES - for full descriptions and usage see installation section

Water Channel - a PVC moulded drainage conduit, 2m lengths, 80mm wide, 50mm deep

Universal Channel Outlet/ Drain - a PVC moulded connector piece with 110mm bottom outlet

Water Channel End Outlet - a PVC moulded end outlet to waste pipe

Water Rodding Eye - a PVC moulded unit used to provide cleaning, inspection, and maintenance access to the water channel system

Water Channel Corner Piece - A PVC moulded corner piece that also allows inspection cameras to safely change direction

Water Channel Connector - a PVC moulded piece to hold the 2m lengths of the water channel

Water In-line T Piece - a PVC moulded in-line connector piece allowing for changes to the main water channel runs

Approvals and standards

- BBA Certificate No. 15/5202
- Suitable for use as a Type C Barrier Membrane System (Cavity drainage) to BS 8102:2009
- Quality Management System ISO 9001

Usage

The system is typically used for internally tanking basements, sub structures and retaining walls within new, existing and retrofit build projects. The system can also be used for heritage buildings, conservation projects, vaulted ceiling, basements and tunnels. The products can also be used in conjunction with Type A or B protection where additional combined protection is required. In accordance with Type C structures as classified in BS8102:2009. When applied and installed correctly the Visqueen Cavity Drain System is capable of providing the levels of protection required for: Grades 1, 2 and 3 basements.

Examples are:

Grade 1 including car parks

Grade 2 - plant rooms; and

Grade 3 - are living areas such as residential and offices.

System components

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Storage and handling

Store in warm, dry and clean environment in its current packaging. The tape should not be exposed to long periods of ultraviolet light.

Preparation

All surfaces should be firm, and free from obstructions, which would hamper drainage. Defects that might result in unacceptable leaks should be remedied before the system is installed.

All surfaces should be pre-treated with Visqueen Anti-Lime Coating to reduce the risk of leaching of free lime or mineral salts and to avoid the obstruction of the drainage system. Lime based and Gypsum based plasters need to be fully removed, defective mortar joints raked out and made good with suitable mortar mix for the conditions/location. Timber frames and lintels to be removed to avoid the potential for dry or wet rot to spread to the brickwork, seek guidance or check from the project structural engineer before removing.

Surfaces should now be smooth and free from sharp protrusions, ensure the surface and working area is not water logged and be pre-treated with Visqueen Anti-Lime Coating to reduce the risk of leaching of free lime or mineral salts and to avoid the obstruction of the drainage system.

Installation

MEMBRANE FIXINGS & SEALS

V20 Sealing Rope - Individual sheets of Visqueen V20 are joined together with Visqueen Sealing Rope. The sealing rope is positioned between the two stud formations along the edge of the membrane to be overlapped and remove the release paper. Lift the next sheet of V20 membrane over the two interlocking studs and press the overlapping membrane down onto the sealing rope.

V8 Double Sided Sealing Tape - Flanged edges of the Visqueen V8 Wall Membrane should always be positioned in front of, and overlapping, the previously installed V8 membrane width. Laps with flanged edges are bonded using Visqueen V8 Double Sided Jointing Tape, and laps without flanges are interlocked with the outer edge covered with Visqueen CD Corner Strip.

CD (Cavity Drain) Corner Strip - When linking the V8 wall membrane to the V20 floor membrane, this can be achieved using Visqueen Corner Strip. The vertical and horizontal membranes should be butt jointed at the base of the wall. Visqueen Corner Strip is folded in half along the length of the piece to be used to create the 90 degree angle. Once correctly aligned, carefully pull off the backing paper and press firmly out with the palm of the hand onto the floor and wall membranes.

Masonry Plugs - Fixings are made through the Visqueen V8 Wall Membrane into 10mm holes drilled through the studs to a minimum depth of 75mm (use punch). Visqueen Masonry Plugs, to which Visqueen Sealing Rope has been applied around the rim, are inserted into the holes and tapped flush with the membrane. The fixings are normally required at 1m centres, and should be staggered. Fixings are also required immediately either side of the laps.

CONTROL PANELS AND ALARMS

All Visqueen pumps and alarm systems are versatile which enables installers to locate inlets to suit on-site requirements. Please consult Visqueen technical team on appropriate selection and placement.

WATER CHANNEL ACCESSORIES

Water channel - the water Channel is a 2m length PVC drainage conduit which should be fitted around the periphery of an internal floor at the vulnerable wall/floor junction. Any water entering the building through walls or curved soffits is controlled behind the membrane and enters the channel through the pre-drilled 19mm holes before being diverted to the mechanical (sump and pump) or natural drainage point. Standard Water Channel is supplied with an up-stand that is placed against the wall, however it can be supplied without the up-stand if required.

Universal Channel Outlet/ Drain - a moulded connector piece with 110mm bottom outlet to fit into 'pop-up' pipework running through or under the floor slab, ensuring that water runs as quickly as possible, directly back to a sump. Also functions as an inspection port.

Water Channel End Outlet - Clips on to the end of the water channel run and provides conversion to 50mm solvent weld ABS waste pipe. Used with gravity fed drainage or as one of at least two connections to a sump.

Water Channel Corner Piece - A smooth 90° bend, fully swept corner connector that ensures that water flows easily, and inspection cameras or flushing hoses can negotiate the change of direction without snagging.

Water Rodding Eye - used to provide cleaning, inspection, and maintenance access to the water channel system. Typically installed at 10-12m intervals along runs of channel and adjacent to corners and changes of direction. The large stub opening on the top side of the 170mm channel piece accepts 50mm solvent weld ABS waste pipe which can be configured with commonly available elbows, bends and end caps.

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Water Channel Connector - A small connector piece to link two lengths of Water Channel conduit.

Water In-line T-Piece - an in-line connector piece that allows the main run of water channel to connect at right angles to a secondary 'arm' of cross-floor water channel (without upstand) and drain across the surface of the floor to an offset or centrally placed sump chamber. T Pieces can also provide a connection link between parts of the main water channel run, to create shortcuts especially in awkwardly shaped basements.

Usable temperature range

It is recommended that Visqueen Cavity Drain membranes and system components should be used above 5°C

Additional information

In accordance with BS 8102 (2009), Type C drain protection waterproofing systems should be maintained.

The service period, usually every 6 –12 months, should be agreed at the outset with the installing contractor or a specialist pump servicing company.

Visqueen can provide details of such companies on request.

Visqueen Cavity Drain System Components

System components calculator	Brick plugs (200 per box)	V8 D/sided Sealing Tape	V20 Sealing rope
Visqueen V20 Floor Membrane (40m ²)	n/a	n/a	5 rolls
Visqueen V8 Wall Membrane (40m ²)	5 per m ² (2 boxes)	1 roll	2 rolls

Health and safety information

Please refer to material safety datasheet (MSDS)

Visqueen Cavity Drain System Components

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 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 two day courses giving detailed hands-on training in the practical skills required for safe and robust product installation.