

Visqueen V20 Floor Membrane

Features and benefits

- Prime HDPE - robust studded floor membrane
- Multi-use - suitable for new, existing and retrofit build projects
- Large roll formats with fanged edges for jointing - quick and easy to install
- BBA certified - third party certification
- Type C membrane (drained protection) - part of a cavity drainage system in accordance with BS 8102:2009

Product description

Visqueen V20 Floor Membrane is a 1.0mm thick high density polyethylene (HDPE) profiled sheet with approximate 20 mm high studs . The membrane is supplied in large roll formats: 2m x 20m

Approvals and standards

- BBA Certificate No. 15/5202
- CE Mark EN 13967
- Quality Management System ISO 9001

Usage

The membrane can be used as a horizontal or vertical membrane as part of a Visqueen Cavity Drain System. 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.

In accordance with Type C systems as classified in BS8102:2009. When applied and installed correctly the Visqueen Cavity Drain System is capable of providing one form of protection when designing structural water proofing for Grades 1,2 and 3.

Examples are:

Grade 1 with car parks

Grade 2 - plant rooms and

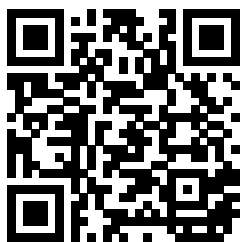
Grade 3 - with living areas such as residential and offices.

The product can also be used in conjunction with Visqueen Type A structural water proofing membranes or Type B.

System components

- Visqueen Cavity Drain System Components

Find your local stockist



Visqueen V20 Floor Membrane

Storage and handling

Store upright in warm, dry and clean environment in its current packaging.

Preparation

All surfaces should be firm, and free from obstructions, which would hamper free drainage. Defects that might result in unacceptable leaks should be repaired 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 be smooth and free from sharp protrusions, ensure the surface and working area is not water logged and has been 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

Horizontal Floor Applications

Begin at one side of the room and unroll the Visqueen V20 Floor Membrane against the wall membrane with the studs facing down onto the floor and cut the membrane to the desired length or width of the floor, just like laying a carpet. Repeat this exercise till all the lengths/widths required to cover the floor area have been cut allowing for a two-stud membrane overlap.

Overlaps

Membrane from rolls should be overlapped by two studs and sealed using Visqueen V8 Double Sided Jointing Tape placed between the 2 rows of studs. Lift the next sheet of V20 membrane over the two interlocking studs and press the overlapping membrane down onto the sealing rope. Foot pressure can be applied by sliding the sole of the foot over the membrane joint, to ensure that the membranes are fully bonded.

Service Entry Seals

Where there are services such as pipes, ducting or steel stanchion that protrude through walls or floors, the membrane should be carefully cut and trimmed around the obstacle and sealed using butyl rope and Visqueen CD Corner Strip material.

Vertical Wall Installation

Installation of the Visqueen V20 Cavity Drain Membrane when used vertically, is ideally commenced at the top of the construction with studs against the wall. Fixings are made through the membrane into 10mm holes drilled through the studs to a minimum depth of 75mm (using a 10mm dia. masonry drill bit). 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 (use punch where necessary). The Visqueen Sealing Rope forms a sealing gasket between the plug and membrane. 5 fixings per square metre are required, and should be staggered. Fixings are also required immediately either side of the laps. Flanged edges should always be positioned in front of, and overlapping, the previously installed membrane width.

Wall/floor junctions:

If linking the Visqueen 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° 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.

Water management: A drainage system of suitable capacity should be provided to collect and dispose of the infiltrating water. The system must be maintainable and inspected at regular intervals. Please contact Visqueen for further information.

Usable temperature range

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

Additional information

Ensure Visqueen V8 Cavity Drain is installed plumb therefore aiding the installation of the internal lining.

The Basement Information Centre has produced an excellent general guidance document for BS8102:2009 Basement Waterproofing. Slab levels within tolerance allowing adequate flow for drainage e.g. no back falls incoming services need for proprietary system (externally) frequency and spacing.

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Property	Test method	Units	Compliance criteria	Value or statement
Dimensions		m		2 x 20
Stud height		mm		20
Mass	EN 1849-2	kg/m ²	-10%/10%	0.95
Resistance to static loading	EN 12730	Kg	20kg	Pass
Drainage capacity (approx.)		l/m ²		13
Max compressive strength		kN/ ²		200
Resistance to deformation under load (max) @ 50kN/m2		%		20
Watertightness	EN 1928	-	60kPa	Pass
Durability after artificial ageing	EN 1847	-	Pass/Fail	Pass
Durability against chemicals	EN 1847	-	Pass/Fail	Pass
Resistance to tearing (min.)	EN 12310-1	N	>	350
Resistance to tearing (nail shank) CD	EN 12310-1	N	>	
Water vapour transmission properties	EN 1931	Sd	-25%/25%	550
Resistance to static loading	EN 12730	Kg	20kg	Pass
Resistance to Impact method A	EN 12691	m	MDV	0.85
Reaction to fire	EN 13501-1		Class	F
Joint Resistance	EN 12317-1	N	>	35
Tensile properties - MD	EN 12311-2	N/50 mm	>	530
Tensile properties - CD	EN 12311-2	N/50 mm	>	500
Bitumen compatability (Degredation max)		%		15

Health and safety information

Please refer to 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.

