

Gas Protection System Components

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Visqueen Gas Protection

Visqueen Building Products is recognised as the leader in the development, production and supply of high quality construction related ground gas protection membranes. The following components are used within the Visqueen Gas Barrier, Low Permeability Gas Membrane, CO₂, and Radon gas protection systems to ensure effective jointing, continuity and protection. Separate datasheets relating to each membrane system are available.

System Components

Visqueen Double Sided Jointing Tape

Description

A blue, double sided butyl mastic tape, supplied in 50mm x 10m rolls.

Application

Tape for bonding gas membranes at overlaps and for bonding gas membranes to gas proof courses at junctions with internal and external walls.

Installation

Ensure surfaces are clean and dry. Apply tape to the lap area of the laid sheet starting approx 50mm from the membrane edge. Overlap adjoining membrane by minimum 150mm and remove tape release paper. Apply pressure to the jointed area to ensure adhesion. When the weather is cold, store tape in a warm, dry place until required. Installation is not recommended below 5C.

Visqueen GR Lap Tape

Description

A white surfaced, single sided tape, supplied in 150mm x 10m rolls.

Application

High performance, high bond tape for sealing membranes at overlaps and for sealing membranes to gas proof courses at junctions with internal and external walls.

Installation

Ensure surfaces are clean and dry. Apply tape equidistant over the bonded membrane lap. Apply pressure to the tape to ensure adhesion. When the weather is cold, store tape in a warm, dry place until required. Installation is not recommended below 5C.

Visqueen Foil Jointing Tape

Description

A silver finished, single sided laminated foil tape, supplied in 75mm x 50m rolls.

Application

Tape for sealing gas membranes at overlaps and for sealing gas membranes to gas proof

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courses at junctions with internal and external walls.

Installation

Ensure surfaces are clean and dry. Apply tape equidistant over the bonded membrane lap. Apply pressure to the tape to ensure adhesion. When the weather is cold, store tape in a warm, dry place until required. Installation is not recommended below 5C.

Visqueen Rigid Preformed Pipe Sleeve (Top Hat) Unit

Description

A black, rigid polyethylene preformed pipe sleeve unit, available for either 110mm or 135mm external diameter pipes.

Application

Pipe sleeve for effective gas protection around service pipe penetrations.

Installation

Ensure surfaces are clean and dry. Cut a circular hole in the membrane as close as possible to the pipe. Apply Visqueen Double Sided Jointing Tape to the underside of the unit flange. Remove tape release paper, slide the unit over the pipe and bond to the membrane. Apply pressure to the jointed area to ensure adhesion. Apply Visqueen GR Lap Tape or Foil Jointing Tape equidistant over the unit flange/membrane lap. Apply pressure to the tape to ensure adhesion. Apply Visqueen GR Lap Tape or Foil Jointing Tape equidistant over the unit upstand/pipe lap. Apply pressure to the tape to ensure adhesion.

Visqueen Flexible Preformed Pipe Sleeve (Top Hat) Unit

Description

A black, flexible polyethylene preformed pipe sleeve unit, supplied to suit pipe external diameter as required.

Application

Pipe sleeve for effective gas protection around service pipe penetrations. Easy to trim on site. Ideal for pipes positioned close to each other or pipes tight against internal walls.

Installation

Ensure surfaces are clean and dry. Cut a circular hole in the membrane as close as possible to the pipe. Apply Visqueen Double Sided Jointing Tape to the underside of the unit flange and the circumference of the pipe. Remove tape release paper, slide the unit over the pipe and bond to the membrane and pipe. Apply pressure to the jointed area to ensure adhesion. Apply Visqueen GR Lap Tape or Foil Jointing Tape equidistant over the unit flange/membrane lap. Apply pressure to the tape to ensure adhesion. Apply Visqueen GR Lap Tape or Foil Jointing Tape equidistant over the unit upstand/pipe lap. Apply pressure to the tape to ensure adhesion and secure with a mechanical fastening clip.

Visqueen Radon Sump

Description

A tough prefabricated polyethylene box sump, dimensions 430mm x 430mm x 220mm high.

Application

Visqueen Radon Sumps are used as part of a full radon protection system. Installed beneath solid concrete ground floor slabs, the sump acts as an area of depressurisation and when commissioned (if necessary) allows radon to be expelled to outside air via additional pipework. Depending on foundation walls allowing



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continuity, Visqueen Radon Sumps are generally installed at one unit per dwelling. Alternatively each unit can potentially provide protection over a 15m radius.

Installation

To ensure maximum depressurisation, the fill beneath the slab should be free from excessive fines. Excavate a pit for the sump. Wrap the sump with geotextile fleece to prevent fines entering the sump unit and position in the pit. Connect a 110mm diameter pipe and extend the pipe horizontally through an external wall, terminating just above ground level and cap off. Alternatively the pipework can be positioned internally in the building and capped for potential future use. Ensure that all joints and couplings are airtight. Backfill the sump pit with clean permeable material without excessive fines. If radon testing reveals that the sump should be brought into operation, the sump can be made 'active' by the installation of a fan and vertical riser pipework with vent cowl, terminating above roof level. Alternatively, a 'passive' system could be employed using the warm internal air 'stack effect' (internal vertical riser only) or the 'wind effect' where wind passing over the roof generates a negative pressure in the sump system.

Visqueen Detailing Strip

Description

A white surfaced, gas resistant self adhesive strip, supplied in 300mm x 10m rolls.

Application

Self adhesive strip to ensure continuity of gas protection at complex junctions and stanchions. Also suitable for termination of gas protection at perimeter walls in remedial situations.

Installation

Ensure surfaces are smooth, clean and dry. Prime the substrate to which the strip is to be adhered with Visqueen Tanking Primer and allow to dry. Do not apply primer to surface of membrane. Cut the strip to size ensuring overlap of minimum 150mm on to the membrane and the primed substrate. Progressively remove the release paper while pressing the strip firmly on to the surface. Work from the centre of the strip outwards to remove any trapped air. When the weather is cold, store strip in a warm, dry place until required. Installation is not recommended below 5C.

Visqueen Heavy Duty Protection Board

Description

A 3mm thick, flexible, load bearing and rot proof bituminous board, supplied in 1m x 2m sheets.

Application

For protection of membranes against damage from following trades or the process of positioning spacers and reinforcement prior to laying a reinforced concrete slab.

Installation

Boards are loose laid and butt jointed. Where necessary the joints can be over taped with Visqueen Girth Jointing Tape applied equidistant over the junction. Ensure surfaces are clean and dry prior to application of tape. Apply pressure to the tape to ensure adhesion.

Visqueen HP Tanking Primer

Description



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Visqueen High Performance Tanking Primer is a black, elastomeric bituminous priming solution designed to prepare surfaces prior to the application of Visqueen self adhesive and torch applied damp proofing and tanking membranes. The product is manufactured in the UK and supplied in 5L tins.

Uses

Visqueen High Performance Tanking Primer can be used to prepare a variety of substrates including metal, concrete, brickwork, blockwork and stonework. It significantly improves the bond of Visqueen self adhesive and torch applied damp proofing and tanking membranes and helps to ensure a long-term watertight finish. It is suitable for green concrete, damp surfaces or substrate temperatures below 5C.

Installation

Visqueen High Performance Tanking Primer can be applied by brush or roller. Care should be taken to prevent splashes as primer will permanently stain porous surfaces. Surfaces must be smooth, clean, and free from contaminants such as dust, dirt, grease, lichen, frost, etc. Substrate temperature must be greater than -4C. Coverage rates on porous surfaces e.g. concrete is 6–8m²/litre. Visqueen High Performance Tanking Primer will dry in 1–5 hours depending upon temperature, surface porosity and ventilation. Wait until primer is tack free. The primer will be resistant to light rainfall almost immediately after application. Allow to dry fully before application of waterproofing membrane. Avoid pouring the primer directly onto a horizontal surface; use a dip tray. The primer should not be allowed to puddle during application as this will increase drying time. All tools can be cleaned after use with white spirit. Priming should be limited to an area that can be covered with membrane in 24 hours. Areas that accumulate significant amounts of dust or dirt must be re-primed before membrane application. When used on green concrete or damp surfaces, moisture may become trapped under the membrane which may result in blistering, particularly in warm, sunny weather. To reduce this risk, the membrane should be covered as soon as possible after application.

Technical Support

For advice on design, detailing or installation, contact Visqueen Specification Sales Office on tel: 0845 302 4758 or fax: 0845 017 8663.



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Appendix A



Visqueen Building Products

Visqueen is the market leader in the manufacture and supply of structural waterproofing and gas protection systems. Visqueen offers the complete package - a proven, reliable range backed by a technical support service that goes unmatched in the market - everything you would expect from a reputable and ethical company.

System Accessories

To ensure full waterproofing protection please use the following certified system components:

- Visqueen High Performance (HP) Tanking Primer
- Visqueen TreadGUARD1500
- Visqueen Protect&Drain
- Visqueen Top Hat Unit

Downloads Library

- Technical Datasheet
- Declaration of Performance
- Visqueen's Guide to CE Marking

Find your local stockist

Search our directory of Visqueen specification Stocking Centres to locate your nearest Visqueen Partner.

Distributor Support

Our specification Stocking Centres can access a free library of sales support tools, bespoke catalogues and more, [click here](#).

Technical support throughout your project

We are specialists in our field and can help you specify the correct solutions with the necessary performance levels, in accordance with building regulations.

- Nationwide site support team
- Specification advice
- Installation guidance & project sign off
- System design including CAD details

