Technical Datasheet

Visqueen Axiom UniSeal

Features & benefits

- Agrement certifed - third party accreditation
- Type A Barrier Membrane (Tanking Membrane) - resistant to ground water in accordance with BS 8102:2022

Product description

Visqueen Axiom UniSeal is a two component system both supplied in the same tin with an overall product weight of 15.6kg.
The first component (Part A) is a bitumen-extended polyurethane fluid (15kg).
The second component (Part B) is an accelerator hardener (0.6kg).

Approvals and standards

- Third party accreditation (BDA certificate BAB-18-077-S-A-UK)
- Suitable for use as a Type A Barrier Membrane (Tanking Membrane) to BS 8102: 2022
- Conforms with the specification requirements of NHBC Chapter 5.4
- Conforms to the specification requirements of BR 211:2023
- Visqueen certified with Quality Management System ISO 9001:2015
- Visqueen certified with Occupational Health and Safety System ISO 45001:2018
- Visqueen certified with Environmental Management System ISO 14001:2015

Usage

Visqueen Axiom UniSeal is specially formulated for waterproofing below ground structures. It is suitable for complex shapes, irregular profiles and angle fillets. It can be used to seal pipe penetrations and steel stanchions and around steel reinforcement. It can also be used on various surfaces including steel, timber, plywood, bitumen membranes, concrete and masonry.

Visqueen Axiom UniSeal is a high performance liquid waterproofing membrane which meets the requirements of BS8102:2022 for Grades 1, 2 and 3, and is classified as a fully bonded Type A membrane.

The product is not designed for use as a decorative finish and is not suitable for long periods of exposure to sunlight.

System components

- Visqueen TreadGUARD 1500, 1m x 2m

Storage and handling

As from 24 August 2023 REACH restrictions require that workers handling diisocyanates complete adequate training before use. Online training courses are available at https://isopa-aisbl.idloom.events/index/safe-use-of-diisocyanates-training-selection-en

Visqueen Axiom UniSeal should be stored upright, undercover and in its original packaging. Store away from any sources of ignition in a well ventilated space at temperatures between 5ºC and 30ºC.

To avoid the risk of spillage, always store and transport in a secure upright position. The unopened product has a minimum shelf life of 12 months. Once opened the product must be used within one hour.

Care should be taken when handling the product in line with current manual handling regulations. Use in a well ventilated space away from any sources of ignition. Keep the container closed when not in use.

Preparation

Visqueen Axiom UniSeal should be applied to substrates that are smooth, clean, dry and free from frost, dust, laitences or loose material. Any surface contamination e.g. oil, paint, mortar snots, fungal growth, etc must be removed. All substrate cracks or surface irregularities must be repaired and filled prior to product application.

Mix using a variable speed paddle mixer. Do not part mix.
1. Open Part A and take out Part B (small tin)
2. Break seal of Part B and replace lid so it is ready for use
3. Stir Part A for at least 30 seconds, moving the paddle from bottom to top
4. Pour full contents of Part B (small tin) into Part A
5. Stir for further 4 minutes increasing speed as Part B is worked in
6. Once mixed and stirred, use within one hour

During mixing move paddle up and down within the product and in a clockwise and anti-clockwise direction. Scrape any liquids from the sides and continue stirring. Only install when thoroughly mixed.

Prior to installation, a primer is not required.

Once mixed UniSeal must be installed within one hour. The product cannot be resealed for later use.

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Visqueen Axiom UniSeal

Installation

The following tools are suitable for installation; scraper, gauging trowel, steel plasterers trowel and plasterers hawk. Tools can only be cleaned by scraping off the excess material. Using the appropriate tools, apply onto the substrate using the same principle as plastering. Areas that require fillets or complex detailing should be completed using an appropriate width scraper or gauging trowel.

Angle fillet coverage - in fillet applications the material should be at least 20mm thickness in the horizontal and vertical surfaces. Coverage is approximately 78 liner metres per 15.6kg tin.

Render coat coverage - when used as a 2.5mm thick render coat (minimum thickness), coverage is approximately 6.24m².

Once mixed, the product must be applied within one hour. The product cannot be resealed for later use.

Long periods of exposure to ultraviolet light will reduce the effectiveness of the cured membrane. The membrane should be covered by a protective layer immediately after installation to prevent damage from following trades, ultraviolet light, etc. The membrane should be protected from backfilling using Visqueen Protect&Drain or Visqueen TreadGuard 1500.

Usable temperature range

Visqueen Axiom UniSeal should be installed above 5°C. The surface temperature should also be above 5°C.

Additional information

Once opened and mixed the liquid cannot be resealed and used at a later time. The product must be used within an hour of opening. Use Visqueen Axiom UniSeal in well ventilated areas.

The information in this datasheet was correct at the time of publication. It is the user's responsibility to obtain the latest version of the datasheet as it is updated on a regular basis. The information contained in the latest datasheet supersedes all previously published editions.

Property	Method	Unit	Value
Approximate coverage:			
@ 2.5mm render coat (minimum thickness)	-	m²	6.24
@ 20mm angle fillet	-	m	78
Watertightness @ 200kPa for 72 hours	BS EN 1928	-	Pass
Water vapour diffusion resistance factor	BS EN 1931	u	9000
Equivalent air layer thickness Sd	BS EN 1931	m	22.5 to 45
Water vapour diffusion resistance, calculated range	BS EN 1931	MNs/g	112.5 to 225
Radon permeability (t= 20 mm layer thickness)	SP. Method 3873	m²/s	9.8×10^{-12}
Tensile strength at break (23°C)	BS EN ISO 527	N/mm²	4
Elongation at break (23°C)	BS EN ISO 527	%	>500
Tack free time (25°C & 55% RH)		h	0.5 to 1
Service temperature		°C	-40 to 80
Hardness	BS EN ISO 8689	Shore A	25

Health and safety information

Please refer to Visqueen Axiom UniSeal part A and B safety datasheet (SDS).

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About Visqueen

Visqueen is a leading provider of construction membrane technologies and design-based solutions for ground gas, structural waterproofing, damp proofing and fire protection.

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Visqueen Axiom UniSeal

We offer complete support at every stage of the specification, including the supply chain process. As the UK's principal technical authority, we are best placed to ensure that the principal designer and contractor specify the most technically suited, durable, and competitive solution to guarantee their project is protected for the lifetime of the building.

Visqueen is at the forefront of advanced membrane technology and innovation in the construction industry, earning the trust and loyalty of specifiers throughout the UK and Europe.

For more information, visit visqueen.com or contact our sales office at +44 (0) 333 202 6800 or enquiries@visqueen.com

Complete Range, Complete Solution



Passive Fire Protection | Gas Protection | Damp Proof Membrane | Air and Vapor Control | Stormwater | Damp Proof Course | Temporary Protection

Visqueen Technical Support

Visqueen offer a comprehensive full nationwide technical support. Our team of CSSW qualified technical support managers provide on site design-based solutions for specifiers, contractors and builders merchants, and will ensure that from design stage to installation the project is fully risk assessed and the specification is approved by all stakeholders.

Our Technical Office, can design, prepare and manage CAD detailing, together with assisting in quantity take offs, while offering advice on technical installations and product selection.

Competency & Design

Visqueen promotes competency in building design by ensuring that its technical team possesses the necessary skills, knowledge, experience, and ethical practices. The company adopts the "golden thread of information," ensuring all project data is digitally secure and accessible throughout a building's lifecycle. This approach aligns with the Building Safety Act and aims to foster accountability and compliance with evolving regulations, providing clients with confidence in the safety and reliability of their projects.

Visqueen CPD Seminars

Visqueen's CPD Seminars offer insights into Building Regulations, Standards, and industry guidance related to damp proofing, hazardous ground gas protection, and structural waterproofing. These one-hour seminars are tailored for construction design professionals and delivered by our Technical Support Managers. Visit our website to book a free CPD.

Visqueen Contract Design Services

Visqueen Contract Design Services offers a bespoke design service led by our team of Certified Surveyors in Structural Waterproofing (CSSW), providing experienced and specialised waterproofing design expertise for complex projects. We provide comprehensive support throughout the entire project, ensuring that all work meets the requirements of warranty providers and adheres to the highest standards of quality, reliability and current legislation.

Visqueen Training Academy

Based at our Derbyshire facility, the Visqueen Training Academy offers a variety of training programs across the UK. These include one-day product awareness sessions for distributors and builders' merchants, and intensive two-day courses for hands-on product installation training. Contact us for more information.

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