

Damp Proof & Barrier Membranes

Keyline offers damp proof and barrier membranes from the UK's leading manufacturers. When it comes to protecting buildings from damp, water or gases, quality product is of prime importance.



Damp Proof Membrane - Polythene

Used to provide an effective barrier against the ingress of liquid water and water vapour through base concrete. Installed either as an oversite membrane situated between the hardcore bed and base concrete, or as a sandwich membrane within the base concrete.

When used in conjunction with external wall damp proof course a Polythene Damp Proof Membrane provides a widely accepted and reliable construction vapour barrier.





Visqueen PIFA Quality

- Conforms to PIFA standard 6/83A: 1995
- High puncture resistance
- Proven performance over many years
- Withstands rough site handling
- Comprehensive range to satisfy most site conditions
- Manufactured from the highest quality materials

Visqueen Damp Proof Membranes are tough and reliable and made to resist puncturing on smooth or blinded surfaces, which may be caused from foot or site traffic during installation.

Visqueen PIFA Damp Proof Membranes

Physical Characteristics		Visqueen PIFA 250	Visqueen PIFA 300	Visqueen PIFA 500
Tensile Strength (BS2782: 320A)	(N/25mm) (Mpa)	90(min) 14.4(min)	108(min) 14.4(min)	180(min) 14.4(min)
Elongation at Break % (BS2782: 320A)	unaged aged (56 days @ 80°C)	500(min) 250(min)	500(min) 250(min)	500(min) 250(min)
Tear Resistance (MOAT 27.5.4.1)	(N) (N/mm)	10(min) 40(min)	12(min) 40(min)	20(min) 40(min)
Impact Strength Fold	(f50,g)	250(min)	300(min)	500(min)
Impact Strength Body	(f50,g)	500(min)	600(min)	1000(min)
Water Vapour Transmission g/m/24hr		1.0(max)	0.8(max)	0.5(max)
Nominal Thickness		250mu	300mu	500mu
Gauge		1000	1200	2000
Roll Length		25m	25m	12.5m
Roll Width		4m	4m	4m
Keyline Code		SR120203	SR120203	SR120203

BBA Black Quality

As the name suggests this black film, containing a proportion of recycled polythene, conforms to BBA certificates 94/3009 and 94/3068.

It can be specified and used as a cost effective alternative to the PIFA Quality product.

Jointing

All joints should be overlapped by at least 150mm and bonded using Visqueen double sided jointing tape (50mm x 10m) or Visqueen single sided girth jointing tape (100mm x 30m).



Other Polythene Grades

	Width m	Length m	Thickness micron	Colour Roll	Weight	Keyline Code
BBA BLACK 250	4	25	250	Black	23kg	781654
BBA BLACK 300	4	25	300	Black	27.6kg	781655
TPS**	4	50	Various	Clear	-	SR120316

** Temporary Protective Sheeting. Not for use as Damp Proof Membrane



Visqueen EcoMembrane®

Made from recycled post-use consumer waste, Visqueen EcoMembrane® is the first sustainable Damp Proof Membrane ensuring valuable reusable material is retained in the economy and reducing waste going to landfill.

The system comprises:

- Visqueen Double Sided Tape
- Visqueen Foil Backed Girth Jointing Tape
- Pre-Formed Top Hat Units
- Independently accredited by BRE Certification Ltd, certificate Number 112/04
- High tear resistance helps reduce damage during installation
- Does not compromise on traditional Damp Proof Membrane performance

Technical Data

Thickness	250mu	300mu	500mu
Width	4m	4m	4m
Length	25m	25m	12.5m
Colour	Black	Black	Black
Roll Weight	Varies dependent upon size		



Visqueen Radon Membrane System

Independently accredited by BRE Certification Ltd (Certificate Number 083/01) Visqueen Radon Membrane is an unreinforced polyethylene membrane, suitable for use in complete protection against radon gas. Visqueen Radon Membrane will act as an effective passive radon membrane in most typical applications when installed in accordance with manufacturer instructions and will also act as a damp proof membrane.

For effective protection the Visqueen Radon Membrane system should be used. The system comprises:

- Visqueen Radon Membrane
- Visqueen Double Sided Jointing Tape
- Visqueen Girth Jointing Tape
- Visqueen Top Hat Units
- Visqueen Radon Sump Units

Technical Data

Thickness	300mu
Width	4m
Length	25m
Colour	Red
Roll Weight	27.6kg
Technical Performance	
Elongation at Break (BS 2782: Part 3: 320A)	550%
Tear Resistance (MOAT 27 :1983 5.4.1)	119N
Moisture Vapour Transmission Rate (BS 3177)	0.33 g/m ² /24hr
Radon Permeability (k) 10-12 m ² /s	8
Radon Transmittance (P) 10-9 m/s	26

Radon Jointing Procedures

After the Visqueen Radon Membrane has been unrolled, Visqueen Double Sided Tape should be applied approximately 50mm from the edge. The next width of Visqueen Radon Membrane should then be overlapped. For an effective radonproof system all laps must be a minimum of 150mm and the joint should be secured with Visqueen Girth Jointing Tape, a single sided tape which provides added security against any potential leakage path. Ensure that the membrane is clean, dust free and dry at the time of jointing.



Service Pipe Penetrations/Top Hat Units

Visqueen Top Hat Units should be used to form airtight seals around service entry points. The base of the top hat unit must be sealed to Visqueen Radon Membrane using Visqueen Double Sided Tape and Visqueen Girth Jointing Tape. The unit must be fastened to the service pipe using a combination of the Visqueen Jointing Tape system and a jubilee clip to provide fastness.



Radon Sumps for Use in Full Protection Areas

Where sub-floor depressurisation is required, a Visqueen Radon Sump should be used. This is a prefabricated plastic sump, which should be located as close to the centre of the building as possible. All pipe-work connecting to the sump should be fully sealed using the Visqueen Radon Membrane Jointing System. A venting pipe should be connected to the sump, which allows air to leave the building.



Keyline Code

504013

CO2 Barrier

Visqueen CO2 gas membrane offers a safe solution for the protection of buildings and occupiers against carbon dioxide ingress. Typically these are sites previously used as coal fields, landfill or are contaminated industrial sites.

- High quality robust Co-Polymer Thermoplastic Membrane
- High resistance to puncture
- Low permeability to Carbon Dioxide
- The barrier is flexible and easy to install and is suitable for use as a Damp Proof Membrane



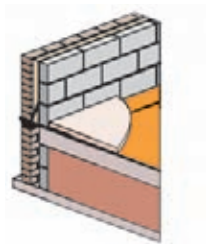
Technical Data

Thickness	300mu
Width	4m
Length	25m
Colour	Yellow
Roll Weight	27.6kg
Keyline Code	994377

Ruberoid Gastite Loose Laid Gas Resistant Membrane

Ruberoid Gastite Loose Laid is a damp proof membrane for the protection of building structures against damp and common ground gases e.g. methane, CO₂, radon, etc.

Ruberoid Gastite membrane allows contractors to meet government guidelines for gas protection. With more and more brownfield sites being developed, a DPC that is effective against the disruptive effect of gases through masonry is an essential component of your system.



Technical Data

Composition	Multilayer reinforced polyethylene membrane with an integral aluminium foil
Material Thickness – Aluminium foil	20 microns
Roll Length	30m
Roll Width	1.6m
Weight per unit area	350 g/m ²
Tensile strength (BS 2782: Part 3:320A)	43.7N/mm ²
Tear Strength (BS 2782:360B)	216N/mm
Methane Permeability	Less than 0.001ml/m ² /24hr
Water Vapour Permeability (BS 3177)	0.03g/m ² /24hr
Associated Ancillary Products:	
Gastite Double Sided Jointing Tape	
Gastite Foil Backed Girth Jointing Tape	
Gastite Gas Resistant DPC	
Gastite Gas Resistant Self Adhesive DPM	



Visqueen Gas Barrier

Protection against CO₂, Methane and Radon.

High quality multi-layer reinforced LDPE polyethylene membrane with aluminium core. The advanced multi-layer lamination process creates an impenetrable and lasting protection whilst retaining flexibility for easy installation.

Visqueen Gas Barrier provides high resistance to puncture, tear and impact and also acts as a damp proof membrane.

The Building Regulations (Approved Document C) require that proper precautions be taken to prevent danger to health and safety when building on contaminated land. Visqueen Gas Barrier offers a safe solution for the protection of buildings against methane, radon and carbon dioxide, when installed in accordance with the BRE report: Construction of Buildings on Gas Contaminated Land.

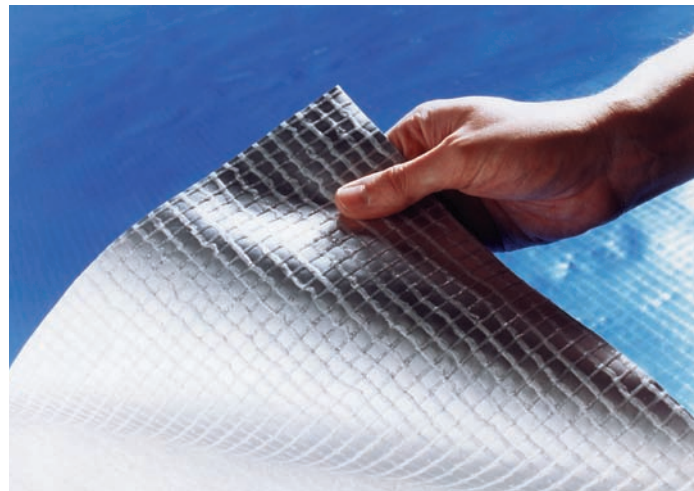
System Components

Product	Description	Size	Keyline Code
Visqueen Double Sided Tape	Butyl based tape for joins and laps		504010
Visqueen Foil Backed Girth Jointing Tape	Single sided tape for security laps and joints		504012
Visqueen Gas Resistant DPC	Flexible polythene DPC with integral aluminium foil designed to prevent the transmission of radon and methane gases	500mm x 30m 600mm x 30m	556791 620747
Pre-formed Top Hat Units	Effective sealing around service pipe penetrations	110mm 160mm	504105 615177
Visqueen Gas Resistant Self Adhesive Membrane	Tanking applications		620745

Visqueen Gas Barrier

Technical Data

Thickness	300mu
Width	1.6m
Length	30/60m
Square Metres per roll	48m ² , 96m ²
Weight per m ²	350gsm ²
Colour	Blue/Silver
Thickness Aluminium Foil	2mm
Technical Performance	
Weight per Unit Area	350g/m ²
Tensile Strength (BS 2782: Part 3:320A)	43.7N/mm ²
Tear Strength (BS 2782: 360B)	216N/mm ²
Methane Permeability	Less than 0.01mls/m ² /24hr
Water Vapour Permeability (BS 3177)	0.03g/m ² /24hr
Keyline Code	30m 894294 / 60m 894295



Visqueen GX Geomembrane

Visqueen GX Geomembrane is a high quality single layer HDPE membrane and is suitable for use as a barrier membrane on brownfield sites that require protection from dangerous contaminants such as hydrocarbons and methane, together with excellent damp proofing characteristics.

Suitable for use on hydrocarbon contaminated sites:

- High puncture & tear resistance
- Excellent chemical resistance
- Excellent welding properties
- Low permeability to hydrocarbon gases



Visqueen GX Geomembrane System

Technical Data

	1mm	1.5mm
Density (ASTM D1505)	941kg/m ³ +/- 1%	941kg/m ³ +/- 1%
Thickness (BS2782-630A)	+/- 5%	+/- 5%
Melt Flow Index (ASTM D1238)	<0.5gm/10mins	<0.5gm/10mins
Unaged Tensile Strength (MPa)	31.2	29.3
Unaged Elongation (%)	860	845
Unaged Instrument Impact (N)	2220.11	3357.5
Tear Strength (N/mm)	156.8/145.6	149.1/156.5
Petrol Permeability (g/m ² /hr)	7	3.8
Diesel Permeability (g/m ² /hr)	14.8	1.7
Methane Permeability (cc/m ² /hr)	3.2	1.95

Components

GX Geomembrane	1mm x 2.95m x 30m (88.50m ²) Standard Roll
GX Geomembrane	1.5mm x 2.95m x 25m (73.75m ²) Standard Roll
GX Jointing System	Two part jointing system
GX Geocomposite Venting System	12 & 25mm void formers
Pre-Formed Top Hat Units	For sealing around service pipe penetrations
GX DPC	645mm / 970mm x 30m Roll A flexible reinforced Elvaloy DPC designed to prevent the transmission of hydrocarbon gases through the cavity
Pre-formed DPC Internal & External	To form an effective seal at corners
Corner Units	
GX Double Sided Tape	A butyl based tape for joins and laps

Fosroc Waterproof Membranes

Proofex Engage

Pre-applied waterproofing membrane which mechanically bonds to poured concrete, remaining in place if settlement of substrate occurs.

- No primers, protection, or blinding required
- Basement waterproofing protection to grades 2, 3 and 4 as defined in BS8102:1990
- Methane, radon and CO₂ protection as defined in BRE Report 212



Technical Data

Size	1.27m x 30m x 5mm roll
Peel Adhesion to Concrete: BS4254 mod	74N per 50mm ²
Shear Strength of Joints: MOAT 27:5.2.2 Selvege	377N
Proofex Engage Detail Strip	506N
Puncture Resistance: ASTM E154	600N
Methane Permeability: BS903 Part A30:1996	1.33E-17m ² /sec/Pa
CO ₂ Permeability: Rilem Report 12	<5.12E-13m ² /sec/Pa
Supplier Code	51902
Keyline Code	943913

Proofex 3000

High performance waterproofing membrane for basements and structures.

- Cross-laminated HDPE film for protection against damage resistance and dimensional stability
- Combines toughness with flexibility for detailing around corners
- Peel-off selvages enable clean dry jointing of bitumen to bitumen edge laps



Technical Data

Size	1m x 20m x 1.5mm roll	
Puncture Resistance (ASTM E154)	215N	
Tear Resistance (DIN 53363)	Longitudinal	75N
	Transverse	90N
Water Vapour Permeability (ASTM E96)	0.23g/m ² /hr	
Hydrostatic Test (MOAT 24:5.1.4)	6m head	
Supplier Code	51670	
Keyline Code	994804	

Fosroc Liquid Membranes

Proofex LM

Two component bituminous liquid membrane for waterproofing of underground structures and intricate details in conjunction with Proofex waterproofing systems.

- For the waterproofing of intricate details, e.g. pipe entries, covings, etc
- For external waterproofing of underground structures
- Can be used as an adhesive for Proofex drainage sheets and protection boards

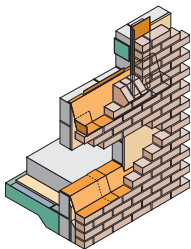
Technical Data

Certification	Materialprüfanstalt Nordrhein - Westfalen; tested in accordance with DIN 18195, parts 4 to 6. General test certificate No. P-22 1356 8 96-1, MPA Dortmund
Mixing Ratio	3 parts liquid : 1 part powder
Consistency	Paste-like (mixture)
Density	Approximately 1.2g/cm ³ (mixture) while fresh
Pot Life	Approximately 90 minutes at +20°C
Application Temperature	Approximately: minimum +5°C up to +35°C ambient temperature
Primer	Mixed material diluted with water 1:10
Resistance	To numerous salt solutions, weak acids and aggressive substances normally existing in soil
Keyline Code	943914

Damp Proof Courses

Keyline offers complete damp proof course solutions to satisfy your cost and design requirements while complying with all relevant codes of practice.

- BBA or BS approval
- High tensile strength
- Flexible at low temperature
- Superior mortar adhesion
- Quick and easy installation
- Exceptional performance under load
- Products accept complex geometry
- Long term durability



For over 40 years, Ruberoid Hyload has been the UK's leading high performance DPC and cavity tray system. Like all products in the Ruberoid portfolio, it is a product that is not only tried and tested, but trusted.

The Hyload structural waterproofing range includes DPCs, accessories and also a below ground tanking range.

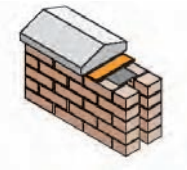
Ruberoid Hyload Original is now being specified by more and more contractors throughout the building industry.

When considering an appropriate damp proof course, technical advice should always be sought.

Ruberoid Permabit

Ruberoid Permabit has long been the choice of many brickwork contractors offering excellent performance in the areas of tensile, elongation and tear strength. Ruberoid Permabit provides horizontal, vertical or stepped DPCs including cavity trays in either solid or cavity walls of brick, block, stone or concrete. It is a mixture of bitumen, synthetic polymers, synthetic fibres and other additives.

- Excellent mortar adhesion properties
- Over 20 years proven reliability
- Excellent performance under both high and low compressive loads
- Durable with excellent flexibility
- BBA Certification



Technical Data

Surface Finish	Smooth black
Roll Length	20m
Roll Widths	100-1000mm
Material Thickness	1.25mm
Certification	BBA 88/1966
Low temperature/flexibility t –30C to BS 747	Pass
Tensile strength at break to BS 2782, 320A at 100 mm/minute N/mm ²	5.1
Associated Ancillary Products:	
Hyload Preformed Cloaks	
Hyload DPC Fixing Strip & Pins	
Hyload DPC Mastic	
Hyload Insulated DPC (Ruberclose)	
Hyload DPC Jointing Tape and Jointing System	

Ruberoid Hyload Original

Ruberoid Hyload Original is the UK's leading high performance DPC and cavity tray system, having established its trusted position over 40 years of continuous use. A high performance polymeric DPC, Ruberoid Hyload Original is suitable for providing damp proofing and cavity trays in all applications, including brick, block, stonework and concrete in both solid and cavity wall construction. Use where DPC colour is not critical. Ruberoid Hyload Original is resistant to compression even under the heaviest of wall loadings and will not extrude when under load.

- Over 40 years proven reliability
- Excellent performance under high compressive loads
- Good flexibility at low temperatures
- Market leading mortar adhesion
- Tough and durable
- BBA Certification



Technical Data

Surface Finish	Smooth black
Roll Length	20m
Roll Widths	100-1000mm
Material Thickness	1.27mm
Certification	BBA 95/3133
Low temperature/flexibility t –30C to BS 747, Appendix C4	Pass
Tensile strength at break to BS 2782, 320A at 100 mm/minute N/mm ²	8.8
Associated Ancillary Products:	
Hyload Preformed Cloaks	
Hyload DPC Fixing Strip & Pins	
Hyload DPC Mastic	
Hyload Insulated DPC (Ruberclose)	
Hyload DPC Jointing Tape and Jointing System	

Ruberoid Hyload HouseBuilder

Ruberoid Hyload HouseBuilder is a domestic grade polymeric DPC specially formulated for the housing contractor and is suitable for use up to and including 3 storeys. Ideal for damp proofing walls in brick, block, stonework or concrete in both solid or cavity wall constructions (but not unsupported across the cavity).

Ruberoid Hyload HouseBuilder uses the same proven production technology as used on Ruberoid's Hyload Original DPC.

- Specifically designed for housing
- No extrusion under heavy loads
- Usable under concrete floor beams
- BBA Certification



Technical Data

Surface Finish	Smooth black
Roll Length	20m
Roll Widths	100-450mm
Material Thickness	0.9mm
Certification	BBA 97/3403

Associated Ancillary Products:

Hyload Preformed Cloaks

Hyload DPC Fixing Strip & Pins

Hyload DPC Mastic

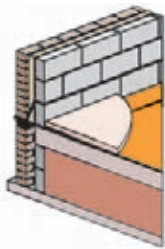
Hyload Insulated DPC (Ruberclose)

Hyload DPC Jointing Tape and Jointing System

Ruberoid Gastite DPC

Ruberoid Gastite DPC is a methane and radon resistant membrane that allows you to meet government guidelines for gas protection. With more and more brownfield sites being developed, a DPC that is effective against the disruptive effect of gases through masonry is an essential component of your system.

Ruberoid Gastite DPC is a rubber modified bitumen membrane with a polyester reinforcement and an aluminium foil core.



Technical Data

Surface Finish	Sand
Roll Length	8m
Roll Widths	100-1000mm
Material Thickness	3.0mm
Material Thickness – Aluminium foil	50 microns
Low temperature/flexibility t –30C to BS 747, Appendix C4	Pass
Tensile strength at break N/mm ²	450

Associated Ancillary Products:

Gastite DPC should be used together with self adhesive Gastite DPM or loose laid GastiteLL for total security

Hyload DPC Fixing Strip & Pins

Hyload DPC Mastic

Hyload DPC Jointing Tape and Jointing System

Visqueen Zedex CPT High Performance

- Visqueen Zedex CPT High Performance out performs all other high performance flexible damp proof courses
- Contains no pitch, bitumen or PVC
- Made of modern Co-Polymer Thermoplastic (CPT), it is safe, clean to handle and inert
- Retains its properties, providing long term stability – contains no volatiles to leach out

Visqueen Zedex CPT High Performance damp proof course provides an effective barrier against the passage of moisture and forms an effective waterproof seal. Accredited by BBA Certificate No. 94/3059.



Visqueen Zedex CPT High Performance can be stretched 50% from its original dimension, is suitable and can be used as a damp proof course in all types of building construction and can be used in vertical, horizontal, stepped and cavity tray applications. The system consists of:

- Visqueen Zedex Pre-Formed Cavity Tray Units – simplifies detailing at corners, stop ends and change of levels
- Visqueen Zedex Jointing Tape – a double sided butyl based tape for lapping and sealing
- Visqueen Zedex DPC Fixing Strip – a 2m linear strip with pre-drilled holes

Visqueen Zedex Lasts

Visqueen Zedex CPT High Performance damp proof course is untroubled by environmental conditions over time. Its anti-ageing and dimensional stability properties, as well as its resistance to rot, damage from damp conditions, mildew and UV light are such that Specifiers and Builders can be assured that Visqueen Zedex CPT High Performance damp proof course will continue to perform at a high level for the lifetime of the building.

Visqueen Zedex CPT High Performance Damp Proof Course

Technical Data

Radon Permeability (k)	$17 \times 10^{-12} \text{ m}^2/\text{s}$	Accelerated Weathering	
Radon Transmittance (P)	$22 \times 10^{-9} \text{ m/s}$	Tensile Strength	18.9N/mm ²
Gas (CO ₂) permeability test in accordance with ISO 2782: 1995		Elongation at Break	462%
Permeability Value	$1.58 \times 10^{-16} \text{ m}^2/\text{sec}/\text{Pa}$	Roll Dimensions	
Gas Trans. Rate	66.9cc/m ² /hr	Nominal Thickness	0.8mm
Tensile Strength	20.5N/mm ²	Nominal Weight	0.75kg/m ²
Elongation at Break	539%	Roll Length	20m
Tear Strength	175N/mm ²	Roll Width	100mm to 1400mm
Water Vapour Permeability	0.21g/m ² /24hr	Keyline Code	SR120106

Fosroc Waterstops

Supercast SW

Swellable waterstops for in-situ concrete.

- Easy to install by adhesive bonding, masonry nailing or casting into joint faces
- Supercast SWX enables full integration of Supercast SW and Supercast PVC networks
- Supercast SW Adhesive can be applied to damp substrates



Codes

Product	Size	Supplier Code	Keyline Code
Supercast SWX	300ml	42164	924117
Supercast SW	380ml	42005	532565

WRAS approved use in contact with potable water

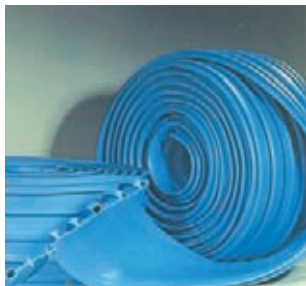
Technical Data

Form	Rectangular Section Elastomeric Strips	
	SW10	SW20
Supercast		
Size	5mm x 20mm x 15m	10mm x 20mm x 5m
Solids content	100%	100%
Colour	Black	Red
Supplier Code	42100	4211
Keyline Code	924167	327440
Unrestrained Volumetric Expansion Ratio	Up to 300%	Up to 300%
Application Temperature Range	-5°C to 50°C	-5°C to 50°C
Service Temperature Range	-30°C to 70°C	-30°C to 70°C
Hydrostatic Pressure Resistance	Up to 50m (refer SW grade)	Up to 50m (refer SW grade)

Supercast PVC

Centrally and externally placed PVC waterstops.

- Range of profiles to suit every need
- Fully continuous 4 bulb network
- Reinforced eyeletted edge flanges for positive fixing
- Wide range of sizes



WRAS approved use in contact with potable water



Technical Data

Form	Extruded Thermoplastic Sections
Colour	Blue
Hydrostatic Head	Up to 10m
Joint Movement	Up to 10mm
Compound Typical Figures	To BS 2782 at 25°C
Tensile Strength	Minimum 14MN/m ²
Elongation at Break	Minimum 300%
Hardness	Shore 'A' 80-90
Keyline Code	318301

Nitocote CM210

A two part elastomeric cementitious waterproofing coating for water retaining structures.

- Approved by Drinking Water Inspectorate (DWI)
- Withstands high positive and negative hydrostatic pressures
- Excellent bond to concrete and masonry
- Cold water use only
- Cures in 7 days at 7°C



Technical Data

Pot Life at 20°C	1 hour
Colour	Grey or White
Roll Weight	23.2kg
Mixed Density	1850kg/m ³
Minimum Application Temperature	5°C
Resistance to Positive Water Pressure (DIN 1048)	7 bar (70m head of water)
Resistance to Negative Water Pressure (DIN 1048)	3 bar (30m head of water)
Static Crack Accommodation	>1mm
Abrasion resistance	Wear Index 1 (ASTM D 4060) equivalent to 40N/mm ² concrete.
Chloride Ion Diffusion Resistance (Taywood method)	No penetration after 12 months continuous testing.
CO2 Diffusion Resistance (Taywood method) after 5000 hours QUV*	>50m
Keyline Code	Grey 913428 White 913406

Delivering Outstanding Service

Keyline is known for its civils and drainage expertise, offering you a total solution to all your requirements. With branches across the country, Keyline will provide the specialist civils products you need directly from stock.

- Branches nationwide
- A huge range and depth of materials always in stock
- Our staff are helpful, friendly and knowledgeable
- We provide a speedy, efficient and accurate service
- We get it right first time

