



THE ULTIMATE WATERPROOFING **AND GAS PROTECTION GUIDE 2024**

































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Waterproofing a Building

WATERPROOFING IS IN OUR HERITAGE

The Wykamol Group has been involved in waterproofing applications for over 40 years and was a founder member of the British Wood Preserving and Damp Proofing Association.

When it comes to waterproofing applications, the Wykamol Group has a huge range of products, from cement-based tanking powders to specialist epoxy coatings. In recent times however and taking into account the guidance laid out in BS8102:2022, cavity drain membranes have become the default waterproofing method, in conjunction with watertight concrete (TT Admix) or barrier type materials (Quadproof Ultra or Hydradry etc), producing a combined system of waterproof protection and the preferred choice for most contractors in the UK.

Easy to use and less problematic than other solutions, these systems can be used in a variety of applications above and below ground.

When specifying waterproofing in today's marketplace care must be taken to look at all implications and issues surrounding the property.

Being able to access systems to repair them if a problem arises is another reason that cavity drain membranes have gained popularity. This use, internally, as a dual system is fast becoming standard practice for professionals within the construction industry.

Cavity drain membranes have also become the number one choice for builders and developers tackling damp issues above ground.

When dealing with salt and damp related issues, allowing the wall to breathe behind a cavity drain membrane has become the approach that most contractors take to such problems today; isolating any dampness issues within the

Issues of dense renders and long drying times have been almost eliminated by the use of cavity drain membranes.

There membranes are also useful in heritage projects. Specifiers may wish to return back to the original structure at a later date. Membranes give the professional that option as well as allowing the walls to breathe in structures where dense renders would cause issues.

We have a team of 12 professional technical experts across the country who can give advice and assess problems of dampness in structures whether that is a basement in a flooding situation or a listed building with dampness issues above the ground. Wykamol is there to give advice and design a repair strategy that satisfies the owners requirements.

This brochure covers Type A, B and C Waterproofing Solutions that we currently sell in the UK and European market places.

Please contact the Wykamol or Triton Technical Teams if you need advice.

For a free inspection and diagnosis of the waterproofing protection you require, please contact us on 01282 473 100.



In construction, a building or structure is waterproofed with the use of membranes and coatings to protect contents, and structural integrity.

In buildings, waterproofing is a fundamental aspect of creating a building envelope, which is a controlled environment. The roof covering materials, siding, foundations, and all of the various penetrations through these surfaces must be waterresistant and sometimes waterproof.

Walls are not subjected to standing water, and the water-resistant membranes used are designed to be porous enough to let moisture escape.

Damp proofing is another aspect of waterproofing. Masonry walls are built with a damp-proof course to prevent rising damp, and the concrete in foundations needs to be dampproofed or waterproofed with a liquid coating, basement waterproofing membrane (even under the concrete slab floor where polyethylene sheeting is commonly used), or an additive to the concrete. Within the waterproofing industry, below-ground waterproofing is generally divided into two areas:

Tanking or barrier protection: This is waterproofing used where the below-ground structure will be sitting in the water table continuously or periodically. This causes hydrostatic pressure on both the membrane

and structure and requires full encapsulation of the basement structure with a tanking membrane, under slab and walls.

Integral protection: The structure is resistant to water bearing against it. This can be watertight reinforced concrete, secant or steel piling.

Cavity drain: A water management system of waterproofing using drainage layers, channels and sumps and pumps to manage water away and prevent impacting on the habitable spaces inside the below ground areas.

Damp proofing: This is waterproofing used where the water table is lower than the structure and there is good free-draining fill. The membrane deals with shedding of water and the ingress of water vapour only, with no hydrostatic pressure. Generally, this incorporates a damp-proof membrane (DPM) to the walls with a polythene DPM under slab. With higher grade DPM, some protection from shortterm Hydrostatic pressure can be gained by transitioning the higher quality wall DPM to the slab polythene under footing, rather than at the footing face.









Waterproofing Regulations

WATERPROOFING **REGULATIONS**

What is BS8102:2022? Well, if you're dealing with a reputable basement waterproofing specialist, it's a name that you're likely to hear often.

It is essentially a document that outlines best practice when planning a basement waterproofing scheme, advising the designer on the various methods of waterproofing available and the correct way to 'specify' them for contractors, ensuring a successful and long-lasting installation.

Contractors are not legally bound by British Standards such as BS8102 but, should there be a failure in the system due to shortcomings in the design, this is the 'code of practice' that would probably be referred to in any litigation proceedings.

The document was updated in 2022 from a previous version written in 2009, to reflect the popularity in residential basement conversions, an increase in deep urban constructions, and numerous advances in basement waterproofing technology. It also takes a more detailed look at the risks involved with below-ground spaces and how best to mitigate them in practice.

The purpose of BS8102:2022

The main goal behind BS8102:2022 is to guide designers in assessing the potential risk of water ingress to a belowground structure and identify the most appropriate and adequate ways to safeguard against it. It identifies three types of protection – A, B and C – aimed at achieving different internal environments, suited to different uses of the underground space (for more information on the three types of protection, download the National House Building Council's guide to basements and waterproofing).

Potential defects

There are two main threats to the effectiveness of a basement waterproofing system, namely poor workmanship and/or defects caused by using materials that are inadequate for the job. BS8102:2022 outlines ways to negate such issues within the design scheme, and incorporate opportunities for simple remedial measures in the unlikely event that a defect still occurs.

Assessing risk

Besides advising designers to carry out an assessment identifying the likely risks of water ingress to an underground structure, BS8102:2022 also recommends that a desk study is undertaken, observing BS5930 and BSEN1997, which covers:

- Geology and hydrogeology, including soil permeability, flood risk, radon, methane and other gases and contaminates present in the ground (e.g. chlorides and acids) – speak to our technical team on the risks of radon in basement conversions.
- Topography of the surrounding land (i.e. its geographical features) in relation to the underground structure.
- The highest likely level of the water table and the potential for a perched water table.
- Any missing ground gas/ground water information, to be ascertained by undertaking a site investigation, observing BS59230 and BSEN1997.
- Analysis of the soil for drainage characteristics, to be determined in accordance with BS8004.



Prepare for the worst

Taking account of the considerations above, the designer will be in a position to specify the most appropriate basement waterproofing system to achieve the required internal environment type. With any below-ground structure, however, there is always an increased risk of water ingress in exceptional circumstances, such as a burst water main or – increasingly often – a flash flood and, therefore, we would recommend that such 'worst case' scenarios are accounted for in any plans.

Other considerations

Besides the advice described above, BS8102:2022 also directs designers to design structures to 'full head' in earth retaining situations where:

- No detailed geological or hydrogeological information is available
- Soil investigations are inconclusive with regards to groundwater
- Ground drainage characteristics are unreliable
- Internal and/or external drainage measures are unreliable, unmaintainable and/or infiltration cannot be controlled

Designers should also remember that, even when comprehensive information is available regarding the site, it is their responsibility to specify measures to protect the structure against other sources besides underlying water tables. In all cases the waterproofing should be continuous and extend to 150mm above external ground level, to meet with DPC and cavity tray.

These can include:

- The inflow of surface water, ranging from rainwater to wastage from burst water mains
- Water pressures acting on the external retaining wall system
- Water pressures below the slab base
- A successful waterproofing design should result in a system that can withstand a pre-determined head of water, or control the water before it reaches the structure.

Summary

The purpose of BS8102:2022 is to direct designers in making decisions that will result in successful basement waterproofing systems, capable of withstanding even the worst circumstances of water pressure and presence in the surrounding area. Should anything go wrong down the line, the system should allow for simple remedial measures that make minimal demands on time and money.

It is a code of practice that holds benefits for designers, specifiers, contractors and homeowners and Wykamol, wholeheartedly recommend that customers deal exclusively with companies that uphold its directions.

BS 8485 Mandatory Requirements For Gas Membrane **Testing And Verification**

In 2015 the British Standard for Good Practice on Gas Membrane Testing and Verification of Protection Systems for Buildings against Hazardous Ground Gases was updated, BS 8485:2015+A1:2019 supersedes all previous guidance.

BS 8485:2015+A1:2019 operating alongside the CIRIA 735 code of practice states Independent Gas Membrane Testing and Verification Programs are as important as the design and installation process.

BS 8485:2015+A1:2019 sets the codes of practice which govern the installation of gas proof membranes. Dependent on the various project risks and criteria Independent Inspection is mandatory.

NHBC Chapter 5.4: Waterproofing of basements and other below ground structures

Chapter 5.4 moves beyond the point where the BS8102:2022 finished and recognised areas where there were still risks of failure. One particular area is their requirement for two systems or of dual or combined protection. BS8102:2022 referred to under section 6.2 Waterproof protection that 'one, or a combination, of the (3) types of waterproofing protection should be selected'.

The BS stops short of responsibility by "consideration should be given to the need for combined protection." NHBC took this important aspect further and determined to lessen risk of failure by requiring two forms of water resistance to deliver a robust design and provide surety to homeowners

NHBC also recognised shortfalls in installation, notably failure of contractors and ground workers to install otherwise good products correctly. Under the new arrangements technicians are required to undertake training and be able to demonstrate competence.

Conclusion

Driving up of standards and improving outcomes in waterproofing will give confidence to consumers and end-users. They need to be assured they are investing in a building with dry basements which will add value to their property. Consumer confidence in the delivery of reliable underground spaces will result in more sales and opportunity for the industry.

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WATERPROOFING **DESIGN PHILOSOPHY**

Best Practice



BS8102:2022

Is the main design document used in the waterproofing industry, it is used by designers, manufacturers and specialist waterproofing contractors. This is the code of practice for protection of below ground structures against water from the ground. It is the design standard in our industry for waterproofing, covering design philosophy, site evaluation, water-resisting design, general construction issues, Types of waterproofing, A, B & C, the grades of waterproofing and remedial measures It is a guide for designers assessing potential risk of water ingress to below ground structures. Advises on how best to mitigate risks involved in below ground, also covers gas membranes and risks. It is not legally binding, but would be referred to in any litigation proceedings.

NHBC Chapter 5.4.

NHBC standards for waterproofing of basements and other below ground structures. It covers regulation and compliance, guidance and good practice and information and support for waterproofing.

BS8485:2015 + A1 2019.

This is the code of practice for the design of protective measures for Methane and Carbon Dioxide ground gases for new buildings. This document includes more detailed recommendations on the interpretation of gas monitoring, data and assignment of the gas screening value.

BRE BR211 Radon 2023.

Guidance on protective measures for new buildings, including supplementary advice for extensions, conversions and refurbishment projects. Also includes, what is Radon, National building regulation guidance, protective measures, and level of protection, technical

approach, detailed protective measures, and information to be provided to the purchaser.

CL:AIRE RB17:2012.

This document is a pragmatic approach to ground gas risk assessment. This bulletin also describes an alternative approach to ground gas risk assessment.

CIRIA 735.

This document covers good practice on the testing and verification of protection systems for buildings against hazardous ground gases. All standards to be familiar with and integrated into design for waterproofing & ground gas, when working with buildings, refurb and new belowground structures. Wykamol were part of the new add on document, for failures and remediation of gas membranes when not installed correctly.

BS EN 1992-1 & Part 3 (BS 8110 & BS 8007)

These standards are the code of practice for the design of concrete including water retaining structures. BS EN 1992-1 & Part 3 play an important role in todays methods of construction.

WHAT IS NEEDED

Waterproofing Protection

One or a combination, of the following types of waterproofing protection should be selected;

- 1. Type A (Tanked Barrier Protection)
- 2. Type B (Structurally Integral Protection)
- 3. Type C (Drained Protection)

TYPE A (BARRIER) PROTECTION

Type A is a form of waterproofing defined within BS8102:2022 (Protection of below ground structures against water from the ground), as a barrier protection. Barrier-specific properties should be evaluated, allowing for any predicted cracking from the structure. The waterproofing barrier should be capable of providing the appropriate protection against water and water vapour without disruption or decay. Although some barrier materials accept local strains and can accommodate a crack opening in the supporting structure, it should be noted that others might be damaged by differential movement or cracking.

The waterproofing barrier should, in most instances, be continuous around the structure. In order to maintain the continuity of the barrier, penetrations through walls or floors that are to be protected (e.g. openings for services, pipes, cables) should be avoided, wherever possible. Where it is essential to provide such openings, special treatment around the penetration should be provided and reference should be made to the manufacturer's instructions and specialist advice. Similarly, where fixings through the barrier are necessary, the manufacturer's instructions should be followed.

Movement joints below ground should not be used unless unavoidable: in such cases these should be waterproofed in accordance with the manufacturer's instructions. Where a waterproofing barrier is required for a structure supported on piled foundations, special consideration should be given to the detailing so that structural continuity is not compromised and reference should be made to the manufacturer's instructions.

Cementitious crystallization barriers are blends of Portland cement, treated quartz sands and active chemicals. They are supplied in powder form and are mixed with water to form a slurry, which is then applied directly to the prepared concrete surface.

The active chemicals combine with free lime and moisture present in the capillary tracts to form insoluble crystalline complexes which prevent water ingress. Cementitious crystallization barriers should be applied to either internal or external surfaces of the concrete structure by brush or spray. They are suitable for use on both new and existing structures. Surfaces should be prepared (in accordance with the manufacturer's instructions) so as to have a capillary open structure prior to the application of the barrier.

Cementitious crystallization barriers can be applied as a single coat slurry to hardened concrete or dry sprinkle and trowel-applied to fresh concrete. They can also be applied to concrete blinding immediately prior to the placing of overlaying concrete. The installation of cementitious multi-coat renders, mortars and coatings should, unless otherwise advised by the manufacturer, be left until as much as practicable of the structure's dead load has been applied.

The substrate should be prepared in accordance with the manufacturer's instructions prior to the application of the system. Details on the application method and rate, mixing, number of layers/coats and curing requirements should be sought from the manufacturer. Existing substrates and structural elements should be assessed for suitability to withstand any increase in applied loads from water pressure.

Wykamol design philosoph

WATERPROOFING **DESIGN PHILOSOPHY**

Best Practice (Continued)



Is considered as the concrete/shell providing the waterproofing in general. Structures will generally be reinforced or pre-stressed concrete. In some instances, additional protection may be used to safeguard the structure from aggressive chemicals through the design of the concrete under british/eurocode standards and or with the use of a waterproofing admixture that enhances the protection of the concrete to protect the reinforcement further. Workmanship is critical in placement, compaction and curing of concrete to ensure that the structure remains defect free. In the event cracking occurs, this needs to be bought to the attention of the designers of the concrete and repaired as soon as possible.

A concrete structure to be constructed as an integral water-resistant shell, should be designed in accordance with the requirements of a waterproofing specialist limiting crack widths up to 0.3mm. Alternatively the use of waterproofing admixtures also comes with additional levels of protection in the form of different technologies. Construction joints are deemed as a critical weakness of the concrete and are inevitable as part of a construction programme, therefore it is important that construction joints are effectively sealed with a waterstop / waterbar or injection hose system. Additional measures can be implemented if necessary.

TYPE C – DRAINED PROTECTION

A 'Type C' System is a below ground, internal waterproofing system, comprising of membranes, drainage and, if required, pumping systems with battery backup and ancillary products. With this design, it is accepted that water could enter the building and an internal cavity is provided to depressurise and manage the water, which is why they are sometimes referred to as 'water management systems.

Once collected, water can be discharged from the property either via gravity to open elevations or removed by mechanical means. Because the waterproofing is not holding back water pressure, it is regarded by most waterproofing professionals as the safest form of waterproofing available. It is also the form of waterproofing that is the most maintainable and repairable.

'Type C' cavity drain waterproofing systems are suitable for use with all types of structure and to both new-build and for the refurbishment of existing structures where the waterproofing has failed.

The only risks to this form of waterproofing are where the drainage cavities become blocked, where too much water is entering the structure for the system to deal with, or where there is no power for the pumping system. (a It is a Wykamol recommendation (based on BS8102:2022 and NHBC guidance) that a dual system is utilised for drier grades, and we would generally only recommend for Grade 3 environments the Type A and Type C or Type B and C combinations, with the use of construction joint accessories.

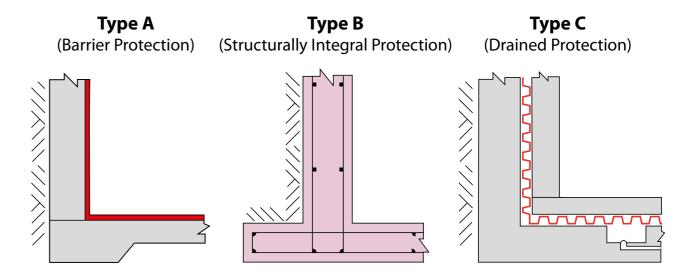
Our reasoning for this is that it is understood that Types A and B are both resisting the hydrostatic pressure and any defect will allow ingress.



When we are designing for habitable space, we will generally require a completely dry internal environment defined as a 'Grade 3' by the BS8102:2022. Whichever combination of waterproofing is chosen to achieve the Grade 3 environment we would always recommend that one of the forms of waterproofing is an internal cavity drain membrane system (Type C).

The choice of the other system is largely dictated by the type of structure. It is widely accepted that a well-designed

Type C system will depressurise any water which enters the structure as a result of a defect and will manage it accordingly hence most application defects will never be subjected to water pressure if a full and well-designed system is used. The Type C system is acknowledged by most in the industry to be the most effective and trouble-free form of waterproofing as a standalone system and the failsafe system in waterproofing designs where completely dry internal environments are required to be guaranteed.



12

CAVITY DRAIN MEMBRANES

TYPE C

Type C construction relies on water being resisted by the structural elements and any that penetrates the external shell of the structure being collected in a cavity formed between the external wall and an internal lining/wall.

There is permanent reliance on this cavity to collect groundwater seepage and direct it to a suitable discharge point, e.g. drains or a sump for removal by gravity drainage or mechanical pumping.

The amount of free water entering the cavity will depend on the volume of external water and its hydrostatic pressure, and on the resistance of the structure itself to water ingress. Designers need to consider any risk associated with a constant supply of possible contaminated water to the structure.

Such systems typically remove water via a mechanical sump pump system, or occasionally by gravity to low ground or drains externally where properties are formed into sloping sites. However, the need to control ground gases, e.g. radon, may not allow the use of gravity drainage. In all cases, consideration should be given to the point at which water discharges, understanding that the effectiveness of the system is reliant on removal of water, so an appraisal of this factor is required.

Type C pumped systems should be engineered to cope with worst-case water ingress. If drainage capacity is exceeded, this may result in dampness or flooding. Type C systems are designed to control and manage leakage and seepage into a structure where water ingress is unacceptably high, the water resistance of the structure should be improved by remedial measures prior to the installation of the type C system.

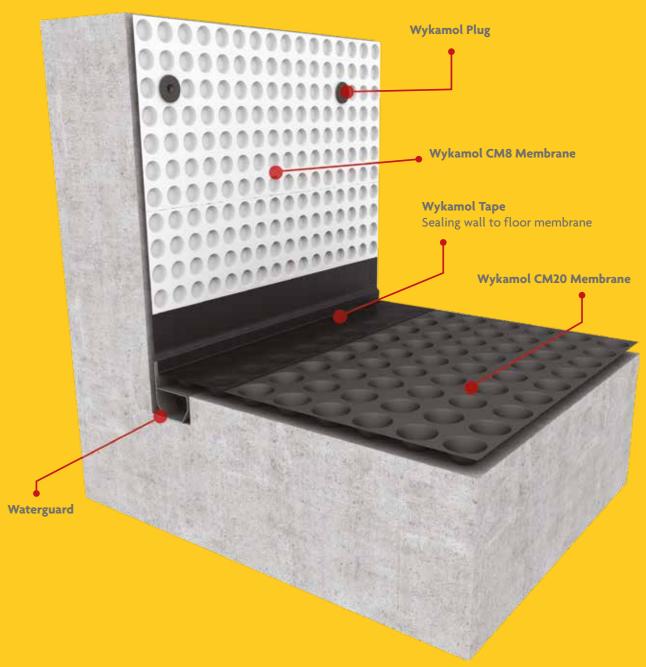
Back-up pumps and power supply plus water level alarms should be included, particularly where the consequences of failure are great. It should also be noted that:

- Type C systems require a maintenance schedule, as failure of mechanical pumps could result in flooding;
- Blockage of the cavity by silt or lime or other contaminants could result in flooding. (The design of the system should allow for clearing of silt should blockages occur in the system including discharging drains.)

Maintenance should be undertaken by a specialist, making assessment of the requirement to upgrade and replace pumps as necessary.

When combining systems in order to minimise the risks or negate the need for remedial measures, consideration should be given to the compatibility of the two systems.







CM8

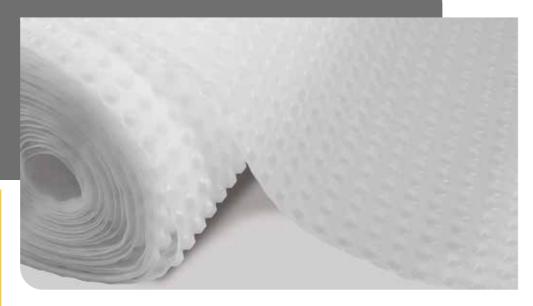
Cavity Drain Membrane

The Wykamol range of cavity drain membranes are high quality, structural waterproofing materials, with a choice of stud height for different drainage capacities and applications.









CM8 Cavity Drain Membrane is an 8 mm studded membrane, suitable for Type C waterproofing and delivering a grade 3 environment to BS8102:2022 and NHBC Chapter 5.4. CM8 is available in both 500g or 700g densities. We recommend using the CM8 HD700 when a heavier, denser membrane is deemed necessary by the Wykamol Technical Department or when a Radon barrier needs to be incorporated. Please always take advice from our Technical Experts when making product selections.

Advantages

- Creates a dry, habitable living space in areas previously suffering from damp/ wet conditions.
- Waterproof, salt inhibiting, root and contaminate resistant.
- Quick to install minimal preparation needed to wall surfaces.
- Easily cut down using a sharp blade.
- No drying out process redecoration can occur immediately.
- Little or no damage to the existing structure.
- Low and high temperature tolerance.
- Part of a type c cavity drain membrane system in line with BS8102:2022.
- Clear for easy application and fixing of wykamol plugs.

Uses

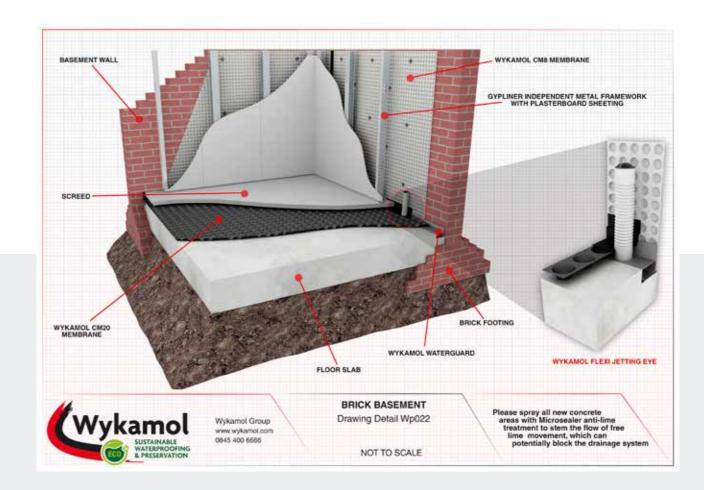
Walls, Floors, Vaults, Tunnels Above and below ground level Waterproofing applications Damp-proofing applications

Available Sizes





Technical Data	Result	Test Standards
Material	HDPE	N/A
Unit Weight	0.5 Kg/m²	N/A
Sheet Thickness	0.45 mm	EN 149-2
Stud Height	7 mm	N/A
Colour	Clear	N/A
Water tightness 60 kPa; 24h	Pass	EN 1928
Working Temperature	-50°C to +80°C	N/A
Softening Temperature	126°C	N/A
Tensile Strength MD	416 N	BS 12311-2
Tensile Strength CD	488 N	BS 12311-2
Resistance to Static Loading	>20 Kg	BS 12730
Compressive Strength 1	180 kN	BS EN ISO 25619-2
Reaction to Fire	Class F	BS EN 13501-1
Type of Application	Туре V	N/A
Life Expectancy	L	ifetime of Structure



HD700 Cavity Drain Membrane

The Wykamol range of cavity drain membranes are high quality, structural waterproofing materials, with a choice of stud height for different drainage capacities and applications.









CM8 HD is an 8mm studded high density membrane suitable for type C waterproofing and delivering a grade 3 environment to BS8102:2022 and NHBC chapter 5.4. We recommend using the HD version on our insulated spacer and also in commercial areas where a more impact resistant membrane may be needed. CM8 HD is also an excellent Radon barrier and has passed all the relevant tests for resistance to this Gas.

Advantages

- Creates a dry, habitable living space in areas previously suffering from damp/ wet conditions.
- Waterproof, salt inhibiting, root and contaminate resistant.
- Quick to install minimal preparation needed to wall surfaces.
- Easily cut down using a sharp blade.
- No drying out process redecoration can occur immediately.
- Little or no damage to the existing structure.
- Low and high temperature tolerance.
- Part of a type C cavity drain membrane system in line with BS8102:2022.
- Clear for easy application and fixing of wykamol plugs.
- Ideal radon barrier membrane
- Heavier duty impact resistance
- High loadings on floors

Uses

Walls, Floors, Vaults, Tunnels
Above and below ground level
Waterproofing applications
Damp-proofing applications
High density variation of CM8

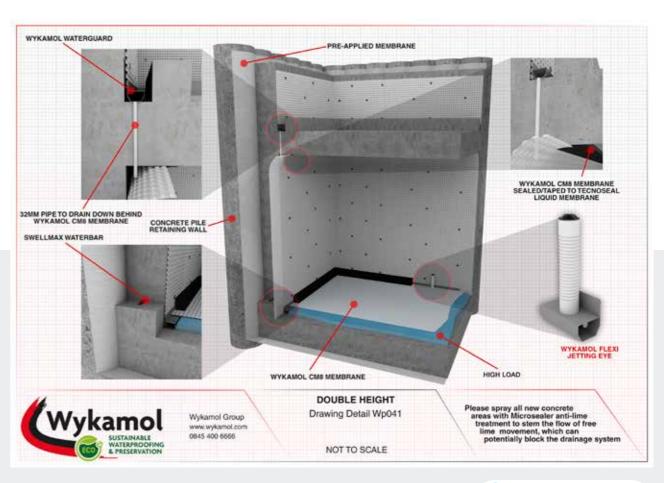
Available Sizes

ack Size: 2m x 20m 2.4m x 20

48r



Technical Data	Result	Test Standards
Material	HDPE	N/A
Unit Weight	0.7 Kg/m²	N/A
Sheet Thickness	0.55 mm	EN 149-2
Stud Height	7 mm	N/A
Colour	Clear	N/A
Water tightness 60 kPa; 24h	Pass	EN 1928
Working Temperature	-50°C to +80°C	N/A
Softening Temperature	126°C	N/A
Tensile Strength MD	416 N	BS 12311-2
Tensile Strength CD	488 N	BS 12311-2
Resistance to Static Loading	>20 Kg	BS 12730
Compressive Strength 1	285kN	BS EN ISO 25619-2
Reaction to Fire	Class F	BS EN 13501-1
Type of Application	Туре V	N/A
Life Expectancy	L	ifetime of Structure





Wykamol Boot Shoe - Steel Corrosion Protection

WYKAMOL WATERPROOFING SOLUTIONS

CONDENSATION STRIPS

for Waterproofing Membranes



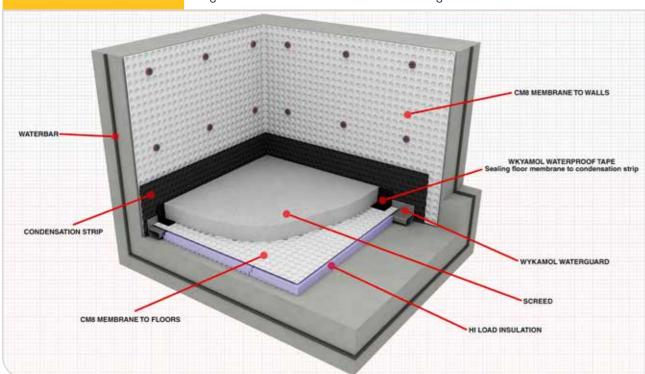
Wykamol Condensation Strip is an optional component to the Cavity drain CM8 System

It is designed to deal with any condensation that may occur on the surface of the waterproofing membrane. This can cause issues with water running down the membrane onto the floor slab and pooling if a moisture profile with the basement structure has not been catered for within the basement rooms, precaution is always an advantage at build stage as this can easily be installed when the waterproofing is being carried out and a potential issue averted at a later stage. **NOTE:** not to be used when a Radon barrier is required.

Using wykamol condensation strips

Ordinarily the Drainage channel is used to collect condensation. However, where the floor build is greater than 65mm, the drainage channel cannot be used to collect condensation from the face of the Wykamol wall membrane. Standard practice has been to cut a strip of wall membrane and fit it between the wall membrane and waterguard channel to create a condensation gap to collect any surface condensation that may occur. The floor membrane is then taped to the strip of wall membrane.

The Wykamol Condensation Strip is a quick and efficient alternative to using a strip of wall membrane to create the condensation gap. At 250mm high and with a diamond stud pattern to prevent the interlocking of studs, this product is ideal for dealing with condensation. It is highly resistant to water, alkalis, saline solutions and organic acids, and is not effected by minerals. It is also resistant to bacteria, fungi and other small organisms. Size is 250mm wide x 20 metres long



WYKAMOL BOOT SHOE

Steel Corrosion Protection



The Wykamol boot shoe is a Polymer engineered High Performance DPC with a unique embossed surface.

The design of the boot shoe is to allow structural steels below ground to be sat into a pocket which protects them from corrosion and can also be linked into the Waterproofing Type C system within the basement structure to stop water running across the face of the steel into the dry side of the room,

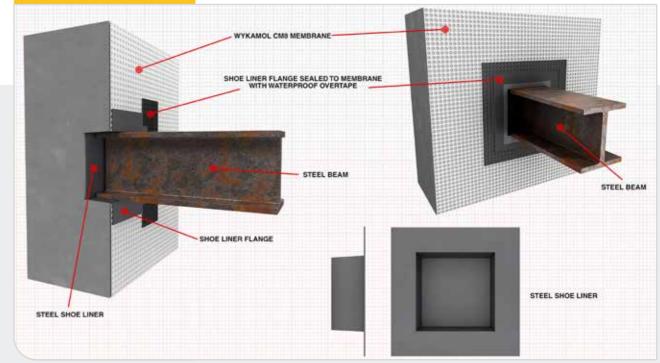
This unique shoe is able to work alongside the wall membrane because of the flange on the outer edge of the face which means specialist tapes and the wall membrane can work seamlessly together to form a watertight area around the steel. Available in a range of sizes to suit most steel profiles these shoes are made to order and take an average of 2 to 3 days to manufacture.

Features and benefits

- Contains no hazardous pitch
- Excels under high compressive loads
- Low permeability to radon and carbon dioxide gases
- Outstanding puncture and tear resistance
- Embossed to increase adhesion and reduce slippage
- Flexible at low temperatures
- Great mortar adhesion
- Available in a range of standard widths

Installation

- Must extend through the full thickness of the wall, including pointing, applied rendering or other facing material.
- Must be laid on a wet, even bed of mortar and perforations in adjacent courses of brickwork must be closed with mortar.
- All lap joints must have minimum 100mm overlap and be completely sealed with a suitable tape.



CM20 YELLOW

Cavity Drain Membrane

The Wykamol range of cavity drain membranes are high quality, structural waterproofing materials, with a choice of stud height for different drainage capacities and applications.









The CM20 High-visibility Yellow Cavity Drain Membrane is a 20mm studded membrane, suitable for Type C waterproofing and delivering a grade 3 environment to BS8102:2022 and NHBC Chapter 5.4. CM20 Yellow is the highest drainage capacity membrane in the Wykamol Waterproofing range.

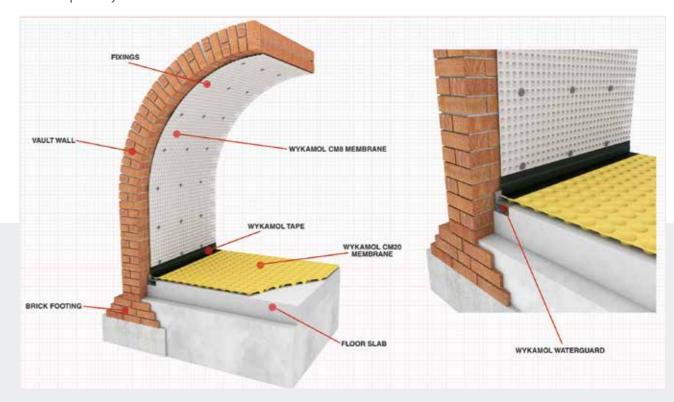
Advantages

- High grade material with good visability for dark basements.
- Easy to see joints avoiding trip hazard.
- Part of a type C cavity drain membrane system in line with BS8102:2022.
- Gives a high water void volume of 14 litres/m².
- Quick to install easy to roll out along floors.
- Creates a dry, habitable living space in areas previously suffering from damp or wet conditions.
- Easily cut down using a sharp blade.
- Waterproof, salt inhibiting, root and contaminate resistant.
- Little or no damage to the existing structure.
- Low and high temperature tolerance.

Uses Radon barrier approved Walls, Floors, Vaults, Tunnels Above and below ground level Waterproofing applications.

Pack Size: 2m x 10m 2m x 20m Coverage: 20 m² 40 m²

Technical Data	Result	Test Standards
Material	HDPE	N/A
Unit Weight	1 Kg/m²	N/A
Sheet Thickness	1 mm	N/A
Stud Height	20 mm	N/A
Colour	Yellow	N/A
Water tightness 60 kPa; 24h	Pass	EN 1928
Working Temperature	-50°C to +80°C	N/A
Softening Temperature	126°C	N/A
Tensile Strength MD	416 N	BS 12311-2
Tensile Strength CD	488 N	BS 12311-2
Resistance to Static Loading	>20 Kg	BS 12730
Compressive Strength	170 kN	BS EN ISO 25619-2
Reaction to Fire	Class F	BS EN 13501-1:2007+A1:2009
Type of Application	Type V	N/A
Life Expectancy		Lifetime of Structure





CM20

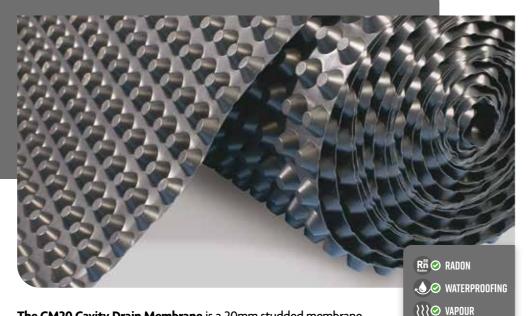
Cavity Drain Membrane

The Wykamol range of cavity drain membranes are high quality, structural waterproofing materials, with a choice of stud height for different drainage capacities & applications.









The CM20 Cavity Drain Membrane is a 20mm studded membrane, suitable for Type C waterproofing and delivering a grade 3 environment to BS8102:2022 and NHBC Chapter 5.4. CM20 is the highest drainage capacity membrane in the Wykamol Waterproofing range.

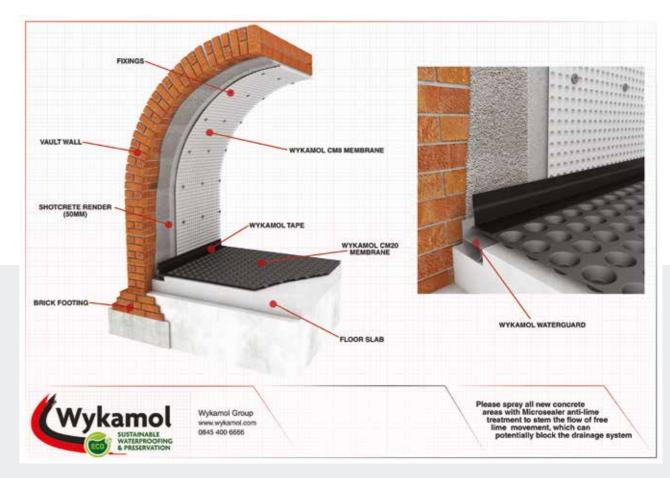
Advantages

- Part of a type C cavity drain membrane system in line with BS8102:2022.
- Gives a high water void volume of 14 litres/m².
- Quick to install easy to roll out along floors.
- Creates a dry, habitable living space in areas previously suffering from damp/ wet conditions.
- Easily cut down using a sharp blade.
- Waterproof, salt inhibiting, root and contaminate resistant.
- Little or no damage to the existing structure.
- Low and high temperature tolerance.
- High grade material.
- Available in rolls of 2m x 20m and 2m x 10m* (*only 20 kg in weight)

Uses Radon barrier approved Walls, Floors, Vaults, Tunnels Above and below ground level Waterproofing applications

Available Sizes BBA BARBOR CE CA

Technical Data	Result	Test Standards
Material	HDPE	N/A
Unit Weight	1 Kg/m²	N/A
Sheet Thickness	1 mm	N/A
Stud Height	20 mm	N/A
Colour	Black	N/A
Water tightness 60 kPa; 24h	Pass	EN 1928
Working Temperature	-50°C to +80°C	N/A
Softening Temperature	126°C	N/A
Tensile Strength MD	416 N	BS 12311-2
Tensile Strength CD	488 N	BS 12311-2
Resistance to Static Loading	>20 Kg	BS 12730
Compressive Strength	170 kN	BS EN ISO 25619-2
Reaction to Fire	Class F	BS EN 13501-1
Type of Application	Type V	N/A
Life Expectancy		Lifetime of Structure





CM8

Geotextile Membrane

The Wykamol CM8
Geotextile membrane
is a twin layered cavity
drain membrane,
designed to manage
water to the land drain,
relieving pressure from
the structure.







The dual layers comprise of the Wykamol 8mm studded HDPE membrane and a non-women geotextile manufactured from UV stabilised, virgin polypropylene fibres that have been mechanically entangled to provide high strength, high extensibility, high loft and excellent abrasion characteristics. The geotextiles are also thermally treated to reduce thickness while maintaining excellent mechanical properties.

Advantages

- Ideal Radon Barrier
- Suitable for use with all construction types.
- Drains off water before reaching the waterproof coating.
- Combined drainage and protection board.
- Easy handling and rapid installation.
- Rugged, durable construction with thermal insulation benefits.
- Filtration layers prevents silting-up.
- High compressive strength and drainage capacity.
- Allows back-filling with excavated earth.
- Withstands stress and movement in the background.

Uses

Isolate and protect external structure from surrounding soil

Helps relieve hydrostatic pressure from the face of the structure

Ideal for retaining walls, podium decks, external tanking and green roof applications.

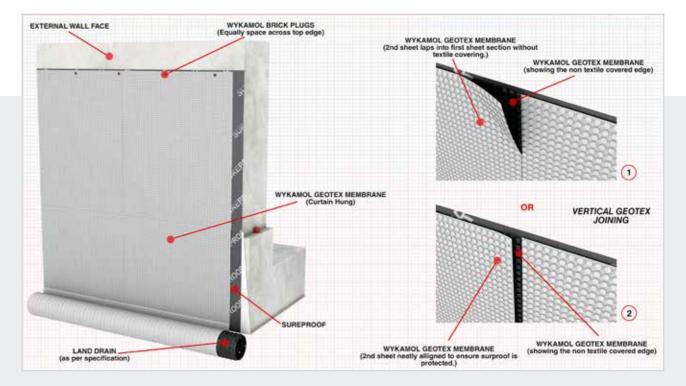
Available Sizes

Pack Size: 2m x 20

Coverage: 40m

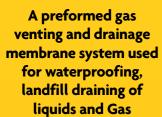


Technical Data	Result	Test Standards
Material Total Unit Weight Total Sheet Thickness Stud Height Colour Water tightness,60 kPa; 24h Working Temperature Softening Temperature Tensile Strength MD Tensile Strength CD Resistance to Static Loading Compressive Strength Reaction to Fire Type of Application	HDPE and Geotextile fabric 0.61 Kg/m² 0.97 7 mm Black Pass -50°C to +80°C 126°C 416 N 488 N >20 Kg 180 kN Class F Type V	N/A N/A EN 149-2 N/A N/A EN 1928 N/A N/A BS 12311-2 BS 12311-2 BS 12730 BS EN ISO 25619-2 BS EN 13501-1 N/A
Life Expectancy	Lifetime of Structure	
Geotextile Mechanical Properties		
CBR Puncture Resistance Tensile Strength (M) Tensile Strength (CMD) Tensile Elongation (MD) Tensile Elongation (CMD) Dynamic Perforation	1.27 kN 8 kN/m 8.5 kN/m 50% 60% 35 mm	EN ISO 12236 EN ISO 10319 EN ISO 10319 EN ISO 10319 EN ISO 10319 EN ISO 13433
Geotextile Hydraulic Properties		
Pore Size (O90) Permeability (H50)	100 µ m 79 l/m²/s	EN ISO 12956 EN ISO 11058
Geotextile Physical Properties		
Mass per unit area Thickness	0.11 Kg/m ² 0.52 mm	EN ISO 9864 EN ISO 9863-1



CM20

Geotextile Membrane









Wykamol geotextile 8 and 20mm membrane is a 2 metre wide pre-formed drainage waterproofing and gas venting solution, providing a sustainable, environmental alternative to traditional filter stone drainage layers.

Geotextile is used extensively for podium decks and part of a waterproofing system and also landfill and contaminated land drainage on slopes and basal areas to remove water, liquids and gas quickly & efficiently.

Advantages

- Waterproofing of foundation walls, podium decks
- Leachate or ground water drainage collection in landfill containments
- Drainage layer between the soil cover and geomembrane of a landfill cap
- Landfill basal and slope drainage
- Hazardous gas venting / methane venting from landfills
- Ground water drainage/collection
- Leakage detection layers within the landfill base lining
- Vertical cut-off trenches
- Embankment drainage & reinforcement
- Slope stabilisation
- Capillary break layer in contaminated land reclamation
- Geomembrane protection

Uses

Wykamol CM20 Geotextile Drainage board is a geo-composite drainage layer ideal for structural drainage applications on walls, roofs and podiums and under concrete slabs or structures requiring vehicular access or high volumes of pedestrian access, including motorised wheelchairs and mobility scooters.

Available Sizes





Technical Data	Result	Test Standards
Material	HDPE and Geotextile fabric	N/A
Total Unit Weight	1 Kg/m²	N/A
Total Sheet Thickness	lmm	EN 149-2
Stud Height	20mm	N/A
Colour	Black	N/A
Water tightness,60 kPa; 24h	Pass	EN 1928
Working Temperature	-50°C to +80°C	N/A
Softening Temperature	126°C	N/A
Tensile Strength MD	416 N	BS 12311-2
Tensile Strength CD	488 N	BS 12311-2
Resistance to Static Loading	>20 Kg	BS 12730
Compressive Strength	180kpa /m²	BS EN ISO 25619-2
Reaction to Fire	Class E	BS EN 13501-1:2007+A1:2009
Type of Application	Type V	N/A
Life Expectancy	Lifetime of Structure	
1 2		
Hydraulic properties	Test standard	Means values
	Test standard	Means values
Hydraulic properties	Test standard BS EN ISO 12958	Means values 7.40 7.25
Hydraulic properties In plane water flow test (soft/soft)		
Hydraulic properties In plane water flow test (soft/soft) 20 kPa L/m/s	BS EN ISO 12958	7.40 7.25
Hydraulic properties In plane water flow test (soft/soft) 20 kPa L/m/s Geotextile Mechanical Properties	BS EN ISO 12958 Results	7.40 7.25 Test Standards
Hydraulic properties In plane water flow test (soft/soft) 20 kPa L/m/s Geotextile Mechanical Properties CBR Puncture Resistance	BS EN ISO 12958 Results 1.27 kN	7.40 7.25 Test Standards EN ISO 12236
Hydraulic properties In plane water flow test (soft/soft) 20 kPa L/m/s Geotextile Mechanical Properties CBR Puncture Resistance Tensile Strength (M)	BS EN ISO 12958 Results 1.27 kN 8 kN/m	7.40 7.25 Test Standards EN ISO 12236 EN ISO 10319
Hydraulic properties In plane water flow test (soft/soft) 20 kPa L/m/s Geotextile Mechanical Properties CBR Puncture Resistance Tensile Strength (M) Tensile Strength (CMD)	BS EN ISO 12958 Results 1.27 kN 8 kN/m 8.5 kN/m	7.40 7.25 Test Standards EN ISO 12236 EN ISO 10319 EN ISO 10319
Hydraulic properties In plane water flow test (soft/soft) 20 kPa L/m/s Geotextile Mechanical Properties CBR Puncture Resistance Tensile Strength (M) Tensile Strength (CMD) Tensile Elongation (MD)	BS EN ISO 12958 Results 1.27 kN 8 kN/m 8.5 kN/m 50%	7.40 7.25 Test Standards EN ISO 12236 EN ISO 10319 EN ISO 10319 EN ISO 10319
Hydraulic properties In plane water flow test (soft/soft) 20 kPa L/m/s Geotextile Mechanical Properties CBR Puncture Resistance Tensile Strength (M) Tensile Strength (CMD) Tensile Elongation (MD) Tensile Elongation (CMD)	BS EN ISO 12958 Results 1.27 kN 8 kN/m 8.5 kN/m 50% 60%	7.40 7.25 Test Standards EN ISO 12236 EN ISO 10319 EN ISO 10319 EN ISO 10319 EN ISO 10319
In plane water flow test (soft/soft) 20 kPa L/m/s Geotextile Mechanical Properties CBR Puncture Resistance Tensile Strength (M) Tensile Strength (CMD) Tensile Elongation (MD) Tensile Elongation (CMD) Dynamic Perforation	BS EN ISO 12958 Results 1.27 kN 8 kN/m 8.5 kN/m 50% 60%	7.40 7.25 Test Standards EN ISO 12236 EN ISO 10319 EN ISO 10319 EN ISO 10319 EN ISO 10319
Hydraulic properties In plane water flow test (soft/soft) 20 kPa L/m/s Geotextile Mechanical Properties CBR Puncture Resistance Tensile Strength (M) Tensile Strength (CMD) Tensile Elongation (MD) Tensile Elongation (CMD) Dynamic Perforation Geotextile Hydraulic Properties	BS EN ISO 12958 Results 1.27 kN 8 kN/m 8.5 kN/m 50% 60% 35 mm	7.40 7.25 Test Standards EN ISO 12236 EN ISO 10319 EN ISO 10319 EN ISO 10319 EN ISO 10319 EN ISO 10319
Hydraulic properties In plane water flow test (soft/soft) 20 kPa L/m/s Geotextile Mechanical Properties CBR Puncture Resistance Tensile Strength (M) Tensile Strength (CMD) Tensile Elongation (MD) Tensile Elongation (CMD) Dynamic Perforation Geotextile Hydraulic Properties Pore Size (O90)	BS EN ISO 12958 Results 1.27 kN 8 kN/m 8.5 kN/m 50% 60% 35 mm	7.40 7.25 Test Standards EN ISO 12236 EN ISO 10319 EN ISO 10319 EN ISO 10319 EN ISO 10319 EN ISO 13433
Hydraulic properties In plane water flow test (soft/soft) 20 kPa L/m/s Geotextile Mechanical Properties CBR Puncture Resistance Tensile Strength (M) Tensile Strength (CMD) Tensile Elongation (MD) Tensile Elongation (CMD) Dynamic Perforation Geotextile Hydraulic Properties Pore Size (O90) Permeability (H50)	BS EN ISO 12958 Results 1.27 kN 8 kN/m 8.5 kN/m 50% 60% 35 mm	7.40 7.25 Test Standards EN ISO 12236 EN ISO 10319 EN ISO 10319 EN ISO 10319 EN ISO 10319 EN ISO 13433









CM8 MESH Cavity Drain Mesh Membrane

The Wykamol range of cavity drain membranes are high quality, structural waterproofing materials, with a choice of stud height for different drainage capacities and applications.









CM8 Cavity Drain Mesh Membrane is a 8 mm studded membrane incorporating a tough HDPE mesh lathing welded to the front face, allowing the direct application of various plaster finishes, adhesive 'dabs' and plasterboards and delivering a grade 3 environment to BS8102:2022 and NHBC Chapter 5.4

Advantages

- High performance bonded mesh Part of a type C cavity drain membrane system in line with BS8102:2022
- Waterproof, salt inhibiting, root and contaminate resistant. creates a dry, habitable living space in areas previously suffering from damp/wet conditions.
- Easily cut down using a sharp blade.
- Easy to fold around windows and doors.
- Quick to install minimal preparation needed to wall surfaces.
- No drying out process redecoration can occur immediately.
- Little or no damage to the existing structure.
- Can take a direct plaster or dot and dab

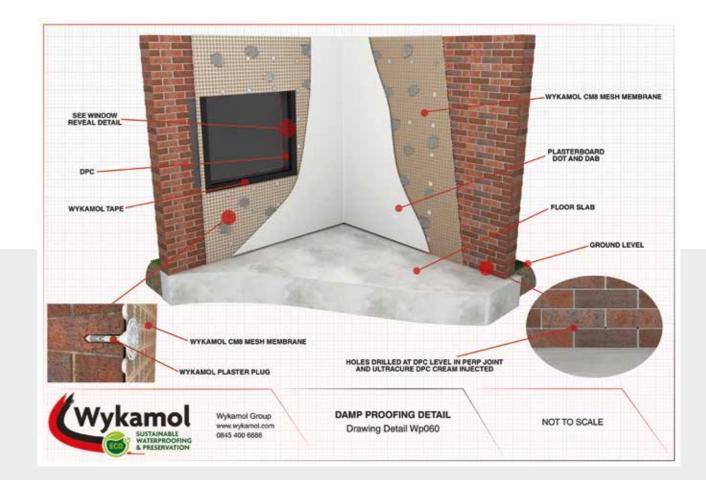
Available Sizes Uses

Above and below ground level Waterproofing applications Damp-proofing applications

This product can take a direct render or dot and dab application



Technical Data	Result	Test Standards
Material	HDPE	N/A
Unit Weight	0.505 Kg/m²	N/A
Sheet Thickness	0.6 mm	EN 149-2
Stud Height	7mm	N/A
Colour	Clear	N/A
Water tightness 60 kPa; 24h	Pass	EN 1928
Working Temperature	-50°C to +80°C	N/A
Softening Temperature	126°C	N/A
Tensile Strength MD	416 N	BS 12311-2
Tensile Strength CD	488 N	BS 12311-2
Resistance to Static Loading	>20 Kg	BS 12730
Compressive Strength	180 kN BS	EN ISO 25619-2
Reaction to Fire	Class F	BS EN 13501-1
Type of Application	Туре V	N/A
Life Expectancy		Lifetime of Structu



Cavity Drain Mesh Membrane

The Wykamol range of cavity drain mesh membranes are high quality, structural waterproofing materials, with a choice of stud height for different drainage capacities and applications.









CM3 Cavity Drain Membrane is an 3mm studded membrane, suitable for Type C waterproofing or damp-proofing, and delivering a grade 3 environment to BS8102:2022 and NHBC Chapter 5.4.

Advantages

- Part of a type C cavity drain membrane system in line with BS8102:2022.
- Quick to install minimal preparation needed to wall and floor surfaces.
- Easy to fold around windows and doors.
- Easily cut down using a sharp blade.
- No drying out process redecoration can occur immediately.
- Little or no damage to the existing structure.
- Low and high temperature tolerance.
- Creates a dry, habitable living space in areas previously suffering from damp/ wet conditions.
- Waterproof, salt inhibiting, root and contaminate resistant.
- Thinner diameter stud detail only 3mm
- Now with a 1.2metre version to eliminate salt band issues
- Easy to plaster direct onto membrane or dot and dab

Uses

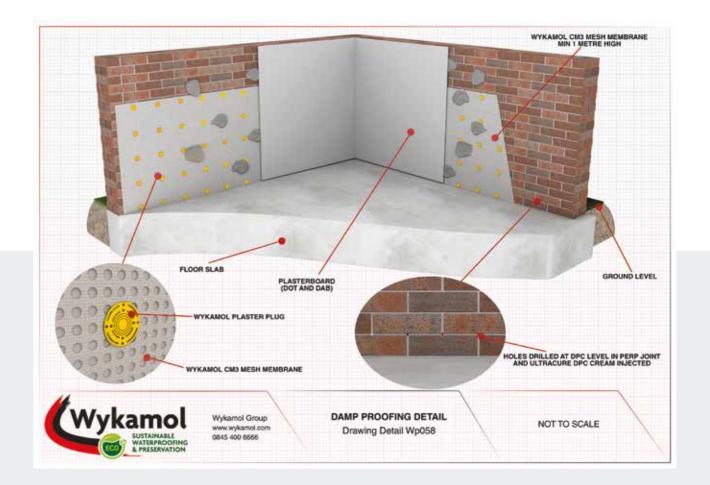
Walls, Floors, Vaults, Tunnels Above and below ground level Waterproofing applications Damp-proofing applications

Available Sizes





Technical Data	Result	Test Standards
Material	HDPE	N/A
Unit Weight	0.505 Kg/m²	N/A
Sheet Thickness	0.6 mm	N/A
Stud Height	3 mm	N/A
Colour	Clear	N/A
Water tightness 60 kPa; 24h	Pass	EN 1928
Working Temperature	-50°C to	+80°C N/A
Softening Temperature	126°C	N/A
Tensile Strength MD	416 N	BS 12311-2
Tensile Strength CD	488 N	BS 12311-2
Resistance to Static Loading	>20 Kg	BS 12730
Compressive Strength	250 kN	BS EN ISO 25619-2
Reaction to Fire	Class F	BS EN 13501-1
Type of Application	Type V	N/A
Life Expectancy		Lifetime of Structure



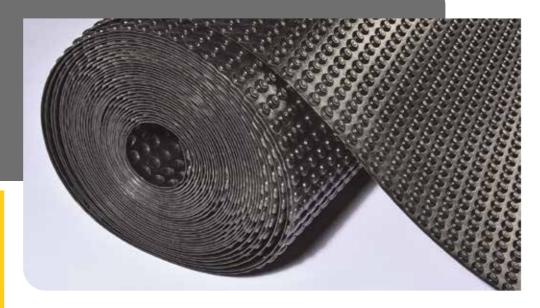
Cavity Drain Membrane

The Wykamol range of cavity drain membranes are high quality, structural waterproofing materials, with a choice of stud height for different drainage capacities and applications.









CM3 Cavity Drain Membrane is a 3mm studded membrane, suitable for Type C waterproofing or damp-proofing, and delivering a grade 3 environment to BS8102:2022 and NHBC Chapter 5.4.

Advantages

- Fast track flooring applications (damp barrier)
- Part of a type C cavity drain membrane system in line with BS8102:2022.
- Quick to install minimal preparation needed to wall and floor surfaces.
- Easy to fold around windows and doors.
- Easily cut down using a sharp blade.
- No drying out process redecoration can occur immediately.
- Little or no damage to the existing structure.
- Low and high temperature tolerance.
- Creates a dry, habitable living space in areas previously suffering from damp/
- Waterproof, salt inhibiting, root and contaminate resistant.

Uses

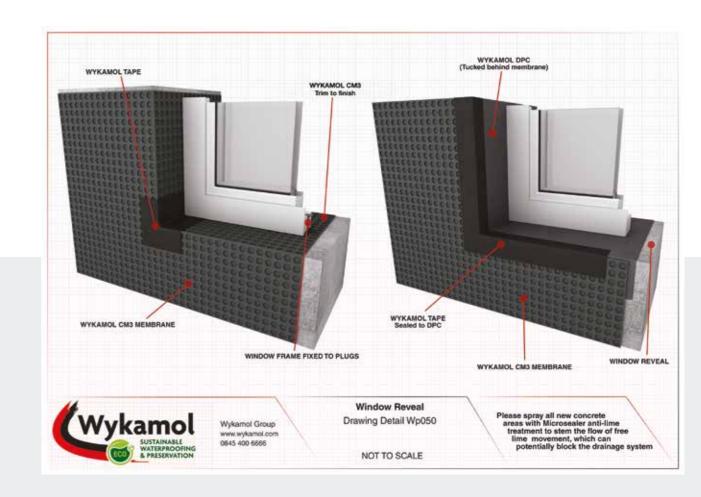
Walls, Floors, Vaults, Tunnels Above and below ground level Waterproofing applications Damp-proofing applications

Available Sizes





Technical Data	Result	Test Standards
Material	HDPE	N/A
Unit Weight	0.5 Kg/m ²	N/A
Sheet Thickness	0.6 mm	N/A
Stud Height	3 mm	N/A
Colour	Black	N/A
Water tightness,60 kPa; 24 h	Pass	EN 1928
Working Temperature	-50°C to +80°C	N/A
Softening Temperature	126°C	N/A
Tensile Strength MD	416 N	BS 12311-2
Tensile Strength CD	488 N	BS 12311-2
Resistance to Static Loading	>20 Kg	BS 12730
Compressive Strength	250 kN	BS EN ISO 25619-2
Reaction to Fire	Class F	BS EN 13501-1
Type of Application	Type V	N/A
Life Expectancy	Lifetin	ne of Structure



PLUGS

Membrane Sealing Ancillaries

The Wykamol
Membrane Plugs are
fixings to apply cavity
drain membranes to the
walls of both above
and below ground
structures, ensuring a
water tight application
of the membrane
systems.







Wykamol **CM Plaster Plugs** and **CM Brick plugs** are of a high quality and can be used in a range of applications and on multiple substrate types. The tailor made Thermoplastic Elastomer seal ensures application of the membrane is water tight, if a normal fixing cannot be made then our **COB plugs** are ideal.

Advantages

- A reinforced head to prevent damage when knocking in the plug. 60 mm in length suitable for both single skin and cavity walls.
- Provides a waterproof seal when used with seals provided (available with or without seals).
- Available with or without seals to cater for multiple application types.
- Large 35mm (brick plugs) or 50mm (Plaster plugs) head provides optimum surface area for finishes.
- Works in conjunction with the wykamol waterproofing solutions CM membrane system
- Serrated head for improved adhesion of finishes.
- Tailor made seal specific to plug.

Uses

CM Brick Plugs can be used:

For cavity drainage membranes such as CM3, CM8 and CM20. On brick, stone, concrete in both damp and waterproofing applications.

Plaster Plugs can be used:

For mesh membrane systems such as CM3 Mesh and CM8 Mesh. Where a plaster application is necessary. Where a dot and dab plaster board application is necessary to secure membranes to walls on systems where a free standing frame is to be used.

Available Sizes

Brick plugs 60mm in length Bags of 100 without seals Bags of 100 with seals

Plaster plugs 60mm in length Bags of 100 without seals Bags of 100 with seals

Cob plugs Box quantity 200 60mm long

90mm long 110mm long

CM Plaster Plugs with seals

These Plaster Plugs can be used with our mesh membrane systems. They are available in 60mm lengths and have the advantage of a seal already attached. They have a serrated head which can take plaster or dot and dab. They can also be used to secure membranes to walls in systems where a free standing frame is to be used.



CM Plaster Plugs without seals

These Plaster Plugs can be used with our mesh membrane systems. They are available in 60mm lengths. They have a serrated head which can take plaster or dot and dab. They can also be used to secure membranes to walls in systems where a free standing frame is to be used.



CM Brick Plugs with seals

Wykamol Brick plugs are 10mm fixings to use with membrane systems, with the advantage of a rubber seal already attached. They have a reinforced head for easy use and take a size 10 screw into the head of the plug, for battens or metal framing systems. At 60mm long, these plugs will fit into all substrates.



CM Brick Plugs without seals

Wykamol Brick are 10mm fixings to use with membrane systems. They have a reinforced head for easy use and take a size 10 screw into the head of the plug, for battens or metal framing systems. At 60mm long, these plugs will fit into all substrates.



COB Plugs

These plugs are ideal to use where substrates will not take a normal fixing. They are ideal for cob construction as well as all other masonry types. They have a pin which is driven down the head of the plug to give a secure anchor for membrane systems. Available sizes are 60, 90, 110 and 130mm long.



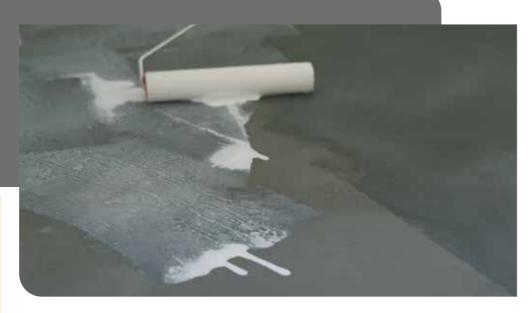
Accessory

Wykamol Anti-Lime sealer is applied to concrete and cures to form a water repellent surface which is resistant to lime efflorescence.









Wykamol Anti-Lime Sealer is a highly penetrative solution specially formulated to react with hydrated cement both at the surface and to a depth of up to 15 mm. The Silicate active ingredients form monolithic structures within the concrete which are long-lasting and durable and will improve surface wear characteristics.

Additionally, a silicone resin component cures to form water repellent properties in the concrete thereby improving even further the resistance to surface water absorption and/or lime efflorescence.

New concrete floors may be treated after a period of curing (approx. 14 days). However, power-floated floors are not suitable for treatment. Please note that Anti-Lime Sealer will not prevent excessive laitance from delaminating. Surface preparation to remove excessively weak material by mechanical abrasion is essential. It is also advised that surface weakness in floors with a deficiency in cement content may not be successfully treated by chemical hardening nor is Anti-Lime Sealer suitable as a surface preparation prior to painting

Uses

For concrete walls and floors to inhibit lime build up within the waterproofing system

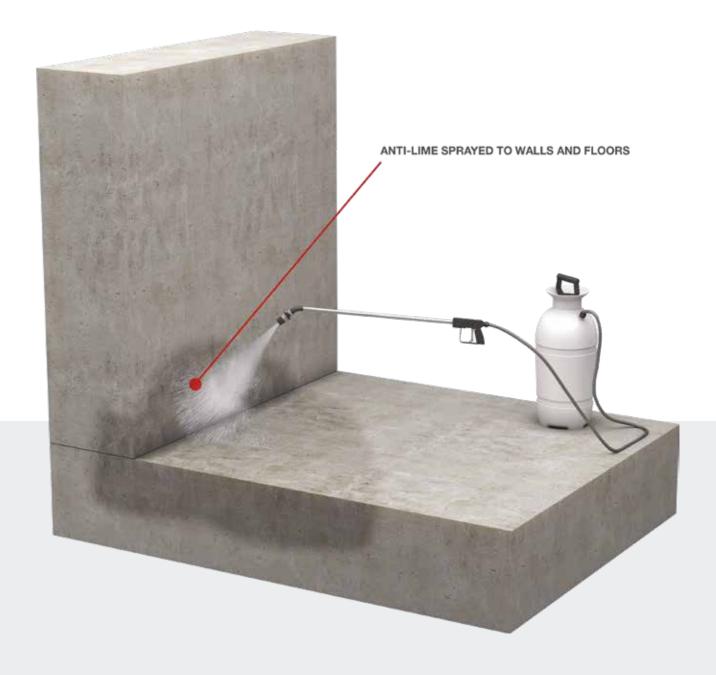
Available Sizes

Typical Coverage:

Special Properties

- Odourless solution
- Reduces dusting of old and new concrete
- Improves surface wear characteristics extending the life of
- Reduces penetration of water and oil

- Prevents lime efflorescence which blocks drainage channels in a Type C waterproofing application
- Easy to apply
- Long lasting active ingredient
- Highly penetrating



Thermal Spacer

Wykamol HIGH LOAD Thermal spacer has been specifically developed to assist in the installation of internal waterproofing systems for basement structures.









This high compressive strength material 500 KPa has a very impressive longterm compressive creep property of 225KN/m², meaning that even after 50 years the material will only compress by 2% if it is loaded at 225KN/m².

Advantages

- The high load spacer can also be used as a protection board for Wykamol external type A waterproofing systems. Applied externally, the board offers protection, insulation and drainage.
- The Wykamol high load thermal insulation boards have been developed to be installed above the concrete basement floor slab and under the floor screed. The boards are 50mm thick so can be installed to create an insulated drainage layer that finishes flush with the internal perimeter drainage gulley.
- The boards are grooved on one surface, 6mm x 6mm at 25mm spacing, to assist with drainage.
- The edges of the boards have a shiplap profile to minimise the risk of screed passing through any gaps between the boards that may exist following installation.

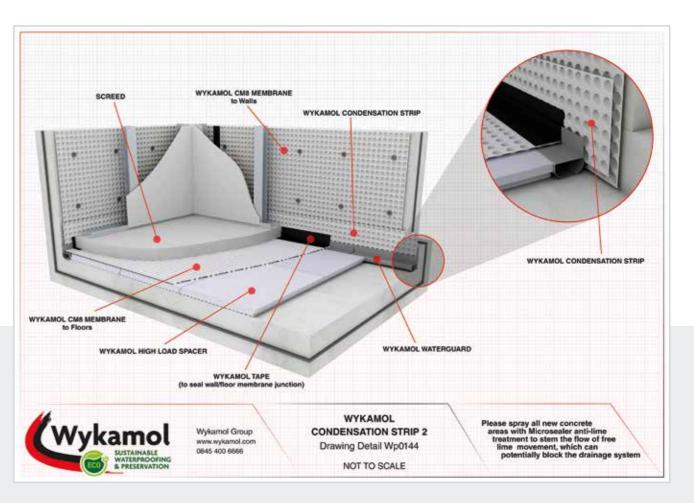
Unique Benefits

Does not absorb water, Breathable, High compression resistance, Lasting performance, Quick and simple installation, 100% Recyclable.

Available Sizes

Thick	ness (mm)	Nominal Area (mm)	Effective Area (mm)	Edge Treatment
50		1200 x 600	1185 x 585	15mm Shiplap Edge

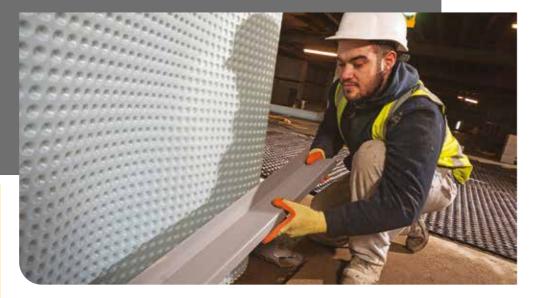
Property	Standard	Unit	Value
Compressive Stress at 10% deformation	EN826	KN/M ²	500
Compressive creep (50 years @ 2% deformation)	EN12087	KN/M ²	225
Design Thermal Conductivity	EN10456	W/mK	0.034
Long term Water absorption by total immersion	EN12091	%VOL	< 1
Coefficient of Thermal Expansion	-	mm/mK	0.07
Maximum Working Temperature	-	°C	75
Reaction to Fire	EN 13501-1	Euroclass	E



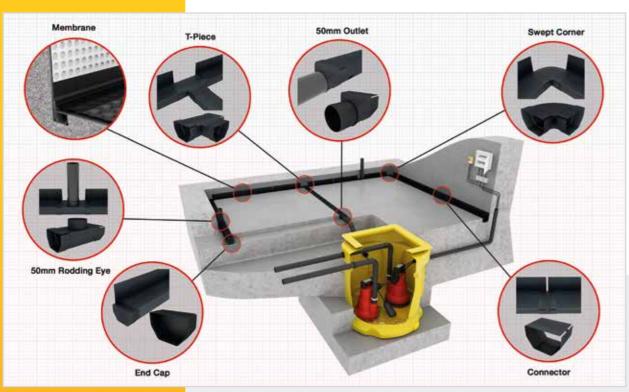
DRAIN SYSTEM

Channelling

As part of the Wykamol cavity drain membrane system, channels are a crucial part of the overall system, and are laid at wall floor junctions to remove any water entering the structure.



These channels are designed with pre-determined water entry points into the rear of the channel. They either come with a flange upstand system or flangeless depending on the type of foundation that you will be working with. Channels come with various accessories to aid the system, some of which are covered in the following pages.



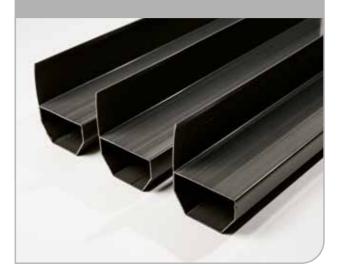






Waterguard

Wykamol Waterguard is a PVC drainage conduit designed for the control of water ingress in below ground situations. Wykamol Waterguard is fitted around the perimeter of the floor at the vulnerable wall/floor junction.



Floor Drain

Wykamol floor drain is a PVC conduit designed for the control of water ingress in below ground situations. Wykamol floor drain can be fitted around the perimeter and also as cross floor drainage as part of a managed water removal system.



Universal Channel Outlet

Newly designed channel outlet to remove water from the channel to the sump. This has the benefit of a 100mm outlet for high water movement or for easier installation into the sump chamber. It also comes with a jetting eye which can be cut down to suit floor finishes. Can be used with floor drain and waterguard channels.



50mm Outlet

Wykamol 50mm outlet is a multi purpose outlet to take water from the waterguard or floor drain systems into a sump chamber or through a wall on a sloping site to a gully. New snap in solution is easy to install with all channel systems .



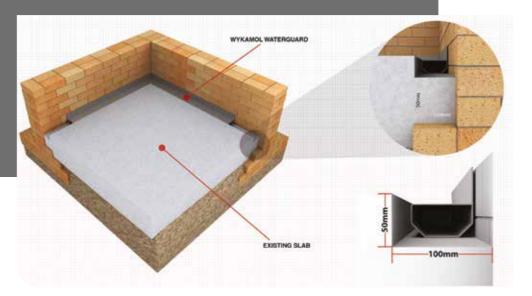
DRAIN SYSTEM

Channelling

As part of the Wykamol cavity drain membrane system, channels are a crucial part of the overall system, and are laid at wall floor junctions to remove any water entering the structure.



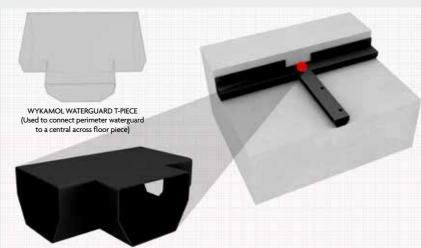




T-Piece

The new Wykamol t-piece has been designed to connect Waterguard and floor drain sections together. This can be used in cross floor drainage or as a connector to take water into a sump chamber via a floor drain section. Easy unique push fit interlock application to enable a speedy installation. No lips in the t-piece to inhibit lime build up.





Flexi Jetting Eye

The flexible jetting eye has been designed to allow the cleaning of the channel system and also as an inspection chamber. The unique flexible upstand jetting point can be easily bent to allow the channel to be used in a wall port system. It also has the benefit of allowing slabs to be laid whilst still being easily accessible afterwards.



Extended Jetting Eye

The extended jetting eye has been designed to allow cleaning and inspection of the channel system waterguard or floor drain via a push fit interlock Having a unique 50mm connector allows for pipework to be added to the jetting eye to access the channel system for cleaning and inspecting. It is recommended 1 jetting eye is installed every 10 to 12 metres of channels.



Swept Corner

This corner piece allows a unique push fit to the Wykamol channels to create a 90 degree corner section which allows for easier cleaning and jetting of the system.

No sharp edges also allows for a seamless flow of water and also helps inhibit lime build up within the system itself.



Jointing Section

This push fit joint section allows all channel sections to connect together to form a seamless passage for water to flow and also helps inhibit lime build up. This also helps reduce movement at jointing sections.



These jointing systems are synthetic rubber based specialist pre formed strip sealants









Good adhesion to a wide range of substrates. Good UV resistance, the softer composition makes this product highly conformable. Easy and accurate to use with little waste & no mess. High tack, remains flexible throughout its service life.

Instructions

Surface preparation: All surfaces should be clean, dry and free from frost, grease and loose materials. When cleaning contaminated substrates, Wykamol recommend that propan-2-ol (IPA) is used and allowed to dry prior to the application of the sealant strip.

Application: Apply direct from the reel onto one surface and press sufficiently along its whole length to achieve good initial adhesion. Remove backing paper and offer other surface to the sealant and push firmly to seal across the joint.

Wykamol Tape

Wykamol Tape is a high quality, butyl, double sided tape, used to attach 2 sheets of membrane together on walls or floors. The high grade HP600 bitumen makes this a long term solution for all membrane applications.



Uses

For use as a water seal for compression joints and seams. For joining polyethylene sheeting in building and construction.

Available Sizes

Rope

A 10mm bead of butyl rope. This rope is used to either wrap around the head of plugs in membrane installation, or to form a jointing waterproof seal on walls and floor membrane systems. This is a high quality rope and is covered by our BBA Certificate.



Corner

Our biggest selling tape, this 150mm wide tape has many uses, but is mostly used to seal membrane from walls to floors and the channel system. Tacky on one side only, this can also be used to overtape external joints and can also be used on floor oversealing and is covered by our **BBA Certificate**.



Overseal

This is a 75mm oversea! tape used to overseal membrane systems, it can be used on walls and floors and forms an overseal detail to form a vapour barrier and waterproof seal on external taped joints. Covered by our BBA Certificate.



Fibre Tape

Wykamol Fibre Tape is used to join plaster membranes together. The unique fibre backing allows for direct plaster or dot-and-dab situations. The fibre also stops any cracking of plaster on these joints. Covered by our BBA Certificate.



Wykamol Gas Tape

This 50mm x 40m wide tape is used to joint our Wykamol Quadproof Ultra and other gas barrier membranes to form waterproof and gas-tight seals at overlap and detailing joints.



Sureseal Tape

150mm single sided foil laminated tape used at wall to floor junctions, membrane joints and wherever a tough, stretch and Radon resistant seal is required.



ALARMS AND BATTERY BACKUP SYSTEMS

The Wykamol Alarms and Battery Back-up Systems alert homeowners of high water levels in any ground water pump system and gives power in case of a mains failure.







Battery Back up systems

In case of mains power failure Wykamol can offer various Battery back up options to keep continual flow of power to the pump stations.

These systems are varied and can even work with telemetric options to notify your client a mains failure has occurred or even when the pump needs servicing

Our technical team can advise on the best option for your basement and client needs, rest assured whatever the basement project we can help with keeping the pump stations operable 24/7.

Alarms

Wykamol offer a range of Battery and mains powered alarm systems such as the UPS2000 or 3000, PowerFlo kit or the Aquasafe alarm.

These alarms notify the clients when a service is needed on the pumps and if a high level of water is noted within the sump chamber.

Knowledge is crucial and at wykamol we can provide all the solutions for your basement system.



AquaSafe Alarm

The AquaSafe Alarm is a warning system which alerts the end user when there is:

- A power failure to the AquaSafe Alarm
- A high level situation in the chamber/sump
- A high level situation recorded
- A service due

There is a battery incorporated within the panel to power itself in case of mains power failure. The system is designed to activate via a mini or sump float switch, which is located inside the chamber/sump, it is set to activate higher than the activation point of the primary pump.



UPS 2000

The Wykamol UPS 2000 uninterruptible power supply offers the highest levels of resilience and protection as a battery back-up to your pump system. The unit will provide power to one submersible pump in case of a loss of mains power.

- Alerts the end user if there is a mains power failure.
- Keeps the pump system powered in the event of power failure, allowing continued pump operation.
- Added to new or retrofitted to existing installations.



UPS 3000

The wykamol UPS 3000 is a floor mounted and is an on-line double conversion Uninterruptible Power Supply (UPS) offering the highest levels of resilience and protection. This provides power to one submersible pump in case of a loss of mains power allowing for continued pump operation.

The system can last continiously for 30mins (303 pump) or 60mins (301 pump), based on a 3.5m head.



PowerFlo

The battery back-up system is designed especially for where the possibility of primary pump failure through either a pump fault or loss of mains power would be catastrophic. The system comprises of a control panel, 24V back-up pump, 3 no. float switches and a non-return valve .and is wall mounted the advantage of the system is the system is only powering a 24 volt pump and not a mains pump, thus needing less power and an increased capability in terms of pumping capacity



SUMP FLO

Sumps & Pumps

The SumpFlo™is
specially designed for
the removal of
groundwater from
basement cavity
drainage membrane
systems.









The system comprises of a polyethylene tank, locking access cover (pedestrian duty, not suitable for roadways) and powerful submersible pump. The system is very versatile, enabling the installer to locate inlets to their specifications. The system comes complete with a High Level Alarm (9V), which acts as a warning system to alert the end user if the water rises above the normal operating level.

Advantages

- New and improved tank design which allows greater versatility for connection to the unit. The addition of a six sided flat panel neck also allows the ability to discharge at any angle for ease of installation.
- Increased tank capacity to allow for a 3-pump installation (dual primary pumps complete with battery back-up pump).
- Stainless steel float bracket to be supplied as standard for ease of installation of float switches for PowerFlo™ and High level alarms.
- Odour tight locking access cover.
- Total volume capacity of 100 litres.
- Integral Non-Return Valve preventing back flow.
- Durable polyethylene tank (6mm thick).
- Pre-moulded flotation points preventing movement below ground.
- Integral step for dual pump set up.

Uses

The SumpFlo" is specially designed for the removal of groundwater from basement cavity drainage membrane systems.

Available Sizes

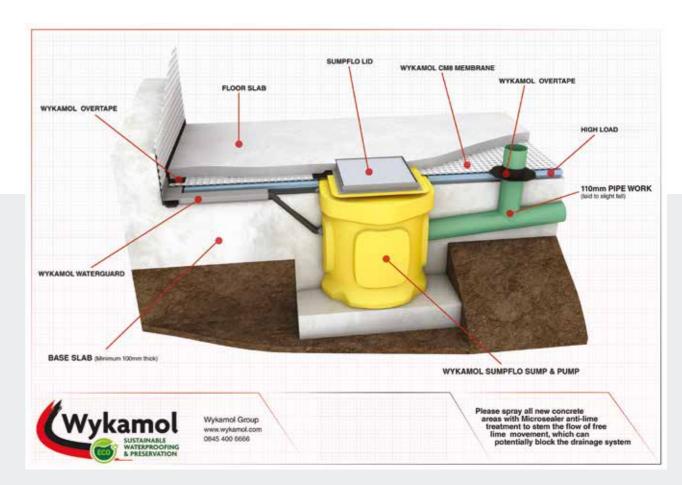
Size: 600mm x 600mm

Key Features

- Easy to install
- Odour tight locking access cover
- Variable inlet positions
- Integral non-return valve preventing back flow
- Durable polyethylene tank

- Pre-moulded flotation points preventing movement below ground
- Integral step for dual pump setup
- Powerful submersible pump

MODEL	301	303
Power Supply	230V AC	230V AC
Rated Current	1.9A	4.9A
Motor Rating	180W	500W
Frequency	50Hz	50Hz
Revs Per Minute	2720rpm	2800rpm
Max. Vert. Output	7m	12m
Max. Horiz. Output	50m	100m
Max. Flow Rate	168l/m	240l/m
Max. Liquid Temp.	<40°C	<40°C
Discharge Size	32mm	32mm
Cable Length	5m	5m
Weight	14kg	14.5kg
Colour	Yellow	Yellow



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Sumps & Pumps

The SumpFlo™is specially designed for the removal of groundwater from basement cavity

drainage membrane

systems.









The system comprises of a polyethylene tank, locking access cover (pedestrian duty, not suitable for roadways) and powerful submersible pump. The system is very versatile, enabling the installer to locate inlets to their specifications. The system comes complete with a High Level Alarm (9V), which acts as a warning system to alert the end user if the water rises above the normal operating level.

Advantages

- New and improved tank design which allows greater versatility for connection to the unit. The addition of a six sided flat panel neck also allows the ability to discharge at any angle for ease of installation.
- Increased tank capacity to allow for a 3-pump installation (dual primary pumps complete with battery back-up pump).
- Stainless steel float bracket to be supplied as standard for ease of installation of float switches for PowerFlo™and High level alarms.
- Odour tight locking access cover.
- Total volume capacity of 100 litres.
- Integral Non-Return Valve preventing back flow.
- Durable polyethylene tank (6mm thick).
- Pre-moulded flotation points preventing movement below ground.
- Integral step for dual pump set up.

Uses

The SumpFlo™ is specially designed for the removal of groundwater from basement cavity drainage membrane

Available Sizes

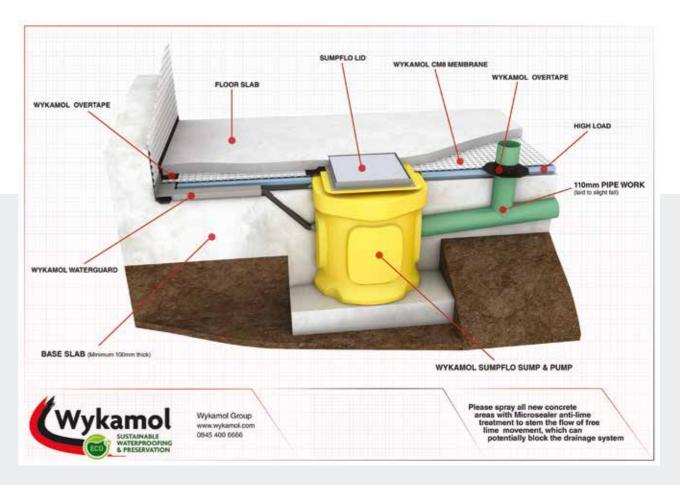
Size: 600mm x 600mm

Key Features

- Easy to install
- Odour tight locking access cover
- Variable inlet positions
- Integral non-return valve preventing back flow
- Durable polyethylene tank

- Pre-moulded flotation points preventing movement below ground
- Integral step for dual pump setup
- Powerful submersible pump

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Max. Liquid Temp.	<40°C	<40°C
Discharge Size	32mm	32mm
Cable Length	5m	5m
Weight	14kg	14.5kg
Colour	Yellow	Yellow



Pro Sump Single - Sumps

WYKAMOL





The Wykamol PROSUMP is a range of fully automatic waste water pump stations, suitable for pumping ground water from a cavity membrane systems and or surface water from light wells to a higher level.

cavity drainage membrane systems and surface water. The system comprises a polyethylene chamber, stainless steel float bracket, 1¼" PVC internal pipework and a powerful 240V submersible pump. It is very versatile, enabling the installer to locate inlets to their specifications. It comes with a choice of solid top or recessed access covers.

We recommend that a high level alarm is installed to alert the end user if the water within the chamber rises above the normal operating level. High level alarm kits can be purchased to installer specifications.

A battery backup system is also highly recommended for all groundwater applications, where inflow cannot be controlled.

> 303 230V AC

> > 50Hz

16kg

Green

Key Features

- Easy to install
- Odour tight locking access cover
- Variable inlet positions

TECHNICAL DATA

• Integral non-return valve preventing back flow

230V AC

- Durable polyethylene tank
- Pre-moulded anchoring points prevent movement and flotation
- Integral step for dual pump setup
- Powerful submersible pump

PUMP CURVE	
12	
HEAD (METRES)	
	303
1 2	301
FLOW (LITRES F	
DIMENSIONS	
MODEL Height / Diameter (mm)	PROSUMP 650–900 / 600
Clear opening (mm)	450 Ø



POSITION	QTY	PART DESCRIPTION	QTY IN KIT B	PART CODE
1	1	PVC 1 ¼" Male Threaded Adaptor	1	8023
2	1	PVC 1 1/4" Elbow PL/PL (90degree)	1	8022
3	1	PVC 1 1/4" Socket Union PL/PL	1	8027
4	1	PVC 1 1/4" Class E Pressure Pipe 0.5mtr	1	8024L
5	1	PVC 1 1/4" Tank Connector	1	8028
6	1	PVC 1 ¼" Coupling Female TH/TH	1	8030
7	1	32mm Male Iron	1	9010

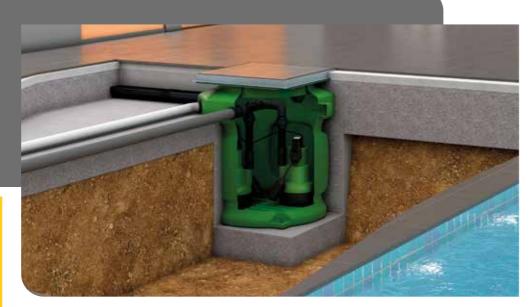
SIDE VIEW

PLAN VIEW

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Sump Twin - Sumps and Pumps Pro

The Wykamol PROSUMP is a range of fully automatic waste water pump stations, suitable for pumping ground water from a cavity membrane systems and or surface water from light wells to a higher level.



The ProSumpTwin™ is specially designed to remove groundwater from basement cavity drainage membrane systems and surface water. The system comprises a polyethylene chamber, stainless steel float bracket, 1¼" PVC internal pipework and two powerful submersible pumps. It is very versatile, enabling the installer to locate inlets to their specifications. It comes with a choice of solid top or recessed access covers. We recommend that a high level alarm is installed to alert the end user if the water within the chamber rises above the normal operating level. High level alarm kits can be purchased to installer specifications.

A battery backup system is also highly recommended for all groundwater applications, where inflow cannot be controlled. Battery backup systems can be purchased to installer specifications. The system is also available in twin discharge configuration (Pipework kits A+C).

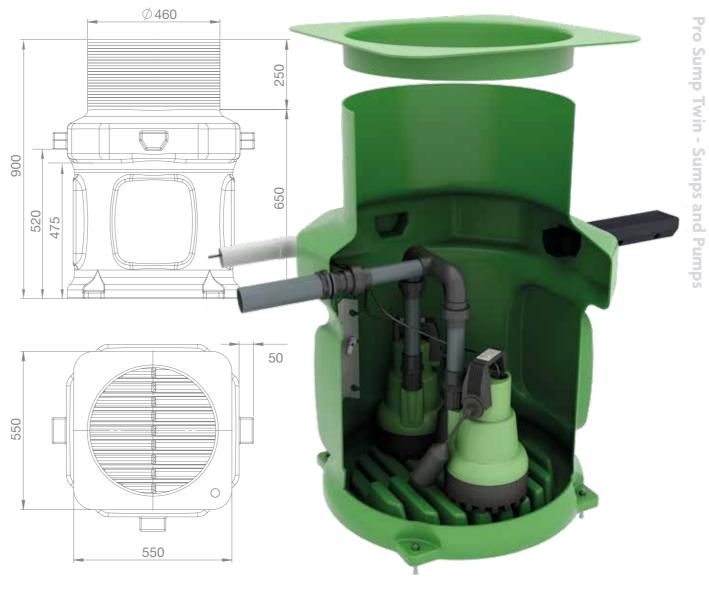
Key Features

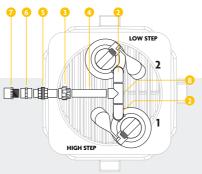
- Easy to install
- Odour tight locking access cover
- Variable inlet positions
- Integral non-return valve preventing back flow
- Durable polyethylene tank
- Pre-moulded anchoring points prevent movement and flotation
- Integral step for dual pump setup
- Powerful submersible pumps

TECHNICAL DATA					
MODEL	301	303			
Power Supply	230V AC	230V AC			
Rated Current	1.9A	4.9A			
Motor Rating	180W	500W			
Frequency	50Hz	50Hz			
Revs Per Minute	2720rpm	2800rpm			
Max. Vert. Output	6.7m	12.5m			
Max. Horiz. Output	50m	100m			
Max. Flow Rate	2.9l/s	3.9l/s			
Max. Liquid Temp.	<40°C	<40°C			
Discharge Size	1¼"/32mm	1¼"/32mm			
Cable Length	10m	5m			
Weight	20kg	23kg			
Colour	Green	Green			

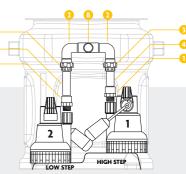
PUMP CURVE	
12 10 HEAD (METRES) 4	363
1 2 FLOW (LITRES I) DIMENSIONS MODEL	3 4 5 PER SECOND) PROSUMP
Height / Diameter (mm) Clear opening (mm)	650–900 / 600 450 Ø







PLAN VIEW



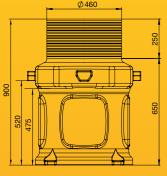
	FRONT VII

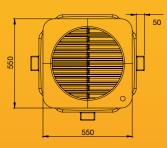
POSITION	QTY	PART DESCRIPTION	QTY IN KIT B	PART CODE
1	2	PVC 11/4" Male Threaded Adaptor	1	8023
2	2	PVC 11/4" Elbow PL/PL (90degree)	1	8022
3	3	PVC 1 ¼" Socket Union PL/PL	2	8027
4	2	PVC 11/4" Class E Pressure Pipe 0.5mtr	1	8024L
5	1	PVC 11/4" Tank Connector	0	8028
6	1	PVC 1 ¼" Coupling Female TH/TH	0	8030
7	1	32mm Male Iron	0	9010
8	1	PVC 1 ¼" Tee Piece	1	8032

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Our range of foul water systems are specially designed for the collection and removal of foul water where conventional gravity drainage to the main sewer is not possible and/or economical to install.









Our range comes in both single and twin pump configurations and in a variety of tank sizes. There is also a wide range of pumps/control options available to suit your precise requirements. With the SumpFlo and DrainFlo ranges, Wykamol can assist you with all your basement pumped drainage requirements.

A typical foul pump station consists of a tank with an inlet, an outlet and one or more pumps inside that use electricity. When sewage enters the pump station and reaches a certain level, a float switch activates the pump. The pump then propels the wastewater to next point of call such as a sewer or a treatment plant.

The DrainFlo™ Eco is a fully automatic packaged pumping station suitable for pumping foul water from an extension, outbuilding, basement or similar. The pump's vortex impellor provides reliable and effective pumping of foul water, whilst the compact chamber offers ease of installation for sites with limited space. The system consists of a polyethylene chamber, a sealed, locking inlay access cover, internal pipework and fittings, and a230 V automatic submersible pump.

The DrainFlo™ Eco is easy to install as inlets can be positioned to your requirements. This product should not be used to accept water from a cavity membrane groundwater systems.

Uses

Ideal for basement applications to remove foul water when gravity drainage is not possible Ideal also for wet rooms in basements and stops issues with head height problems that saniflo systems cannot resolve

Available Sizes

Drainflo 200 650 x 1000mm

DRAINFLO 360 TWIN



The **DrainFlo 360 Twin** is a fully automatic packaged pumping station specifically designed for pumping foul water to high level when gravity drainage is not possible to install.

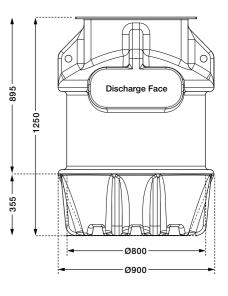
The system comprises of a polyethylene tank, locking access cover (pedestrian duty, not suitable for roadways), two powerful submersible pumps and control panel. The system is very versatile, enabling the installer to locate inlets to their specifications.

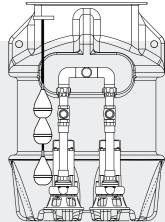
The control panel features a high level alarm to alert the end user if the water within the chamber rises above the normal operating level.

Battery backup systems can be purchased to installer specifications.









Contact our technical team to talk to us about a bespoke package for the basement you are working on, and we can help design a suitable system for your project.

GAS PROTECTION AND WATERPROOFING COMBINED

TYPE A

Gas and waterproofing combined: a new generation of specialist membranes to cover gas and contaminants in the ground as well as waterproofing the structure

Our products have been designed for designers, developers and contractors to protect new and existing structures against gases and contaminants in the ground. They are designed to comply with the requirements of BS8485-2015+A1-2019. Those with waterproofing properties can also contribute to a BS8102:2022 compliant design.

We offer sustainable and durable barrier systems designed to protect the structure for its intended lifetime.

For developers of brownfield sites, the family of products in the Quadproof range are designed to represent a major step forward in safeguarding projects against gaseous and chemical combinations, alongside our other products which are also

able to work within gas situations. The gas membranes were developed in response to a change in government guidance regarding ground gases and an increasing awareness of the detrimental effects to human health from hazardous chemicals residing in the ground beneath developments.

These include Radon, Methane, Carbon Dioxide and Organic Compounds (VOC's). Organic compounds and hydrocarbons are dangerous to human health with potential for long term effects.

Wykamol have embarked on extensive testing of our products to ensure that whatever issues are in the ground we are able to protect the structure for the lifetime of the









Pre-applied membrane

A pre-applied fully bonded waterproofing gas barrier membrane combined with a heavyduty virgin polypropylene geotextile providing a fully concrete bonded system in basement and below ground structures.









APPLICATION

- Designed to Integrate with the subsequently placed fresh concrete to give strong mechanical bond effect without adhesive, primers, heat or open flames
- Applied prior to fixing steel reinforcement
- Applied in a vertical and/or horizontal to blindside or under slab applications
- Used to create an integral seal between the concrete and the waterproofing
- Specifically developed for use on construction sites contaminated by Volatile Organic Compounds, Hydrocarbons, and other ground gases such as Methane,

PRODUCT FEATURE & BENEFITS

- Ensures a fully bonded waterproofing barrier
- Membrane bond is continuous
- Supplied single-wound to achieve a lay flat surface
- Exceptionally high resistance to ground gas and VOC's
- Used for gas/waterproofing and tanking of underground structures
- Impedes lateral migration of water between the membrane and concrete structure
- Waterproofing barrier Type A
- Easily folded on site
- CE marked for water proofing to harmonised standard EN 13967:2012+A1:2017
- Conforms to BS8102:2022
- Conforms with BS8485:2015+A1:2019 (Table 7)
- Incorporates guidance outlined in CIRIA C748
- Conforms to the specification required of NHBC Amber 1 & 2 applications.
- Suitable for all Characteristic Gas Situations (CS) ground gas regimes
- Excellent welding characteristics
- Two layers of Ethylene Vinyl Alcohol Co-Polymer (EVOH)
- Advanced 14-layer membrane barrier
- Preformed accessories available
- Taped system for easy cold applied installation





- Material PE/EVOH membrane & Non-woven polypropylene geotextile fleece
- Colour Purple/Grey

• Thickness - 1.9mm

• Roll sizes - 1.65m x 30mtr

Area: 49.5m²

Material Properties		Test Method	Value
Thickness	Overall	Nominal	1.9mm
Thickness	Membrane	DIN EN 1849-2	0.4mm
Material	Membrane	Polyethylene / Ethylene Vinyl Alcohol	PE/EVOH
Thickness	Castavilla	EN ISO 9863/1	1.70mm +-20%
Material	Geotextile	Non-woven polypropylene geotextile fleece	PP

TECHNICAL BACKGROUND

The Quadproof ultra pre-applied fully bonded waterproofing gas barrier membrane incorporates a sealing layer of the Evolution BS8485 compliant gas membrane that is a hydrostatic resistant waterproofing layer combined with a bonding mechanism layer made up of a heavy-duty virgin polypropylene geotextile providing a fully concrete bonded system.

The membrane is 14 layers and contains 2 layers of gas barrier polymer (EVOH) to offer exceptional performance and prevent the ingress of dangerous gases and water into buildings. It is manufactured using the latest high specification co-extrusion, multi-layer technology and cannot delaminate. Specifically developed for use as building protection on construction sites contaminated by ground gases such as Methane, Radon and CO², Volatile Organic Compounds and Hydrocarbons. The product is CE compliant to act as a damp-proof membrane (DPM).



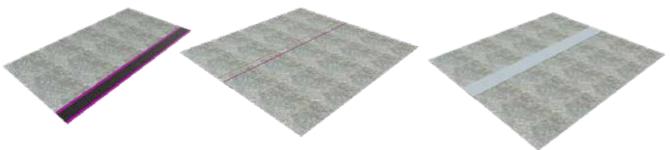
Pre-applied waterproofing membranes are applied prior to the concrete pour. The product can be applied in a vertical or horizontal fashion, also known as blindside or underslab application.

Bonded systems are distinguished according to their timeline of installation into pre- and post-applied systems. Pre-applied bonded systems are installed before the concrete works on substrate, formwork and later form a bond with the subsequently placed fresh concrete.



INSTALLATION GUIDE

- sharpe and protruding objects to reduce risk of damage, for some applications soft sand blinding may be required.
- The product to be rolled out with the grey textile fleece surface laid to receive the concrete when poured.
- Prior to installation the application surface needs to be cleaned from All lap joints to be completed as works proceed using selvedge on roll or by forming lap edges with additional edge strip.
 - Apply double sided tape to selvedge and then overlap membrane to



• Additional over taping required to joint, applied over geotextile surface with reinforced fleece tape.



- Vertical and horizontal edges can easily be formed by folding the pre applied membrane or by using additional edge strip.
- Junctions and service penetrations can be formed with accessories, including corners, top hats, and pile collars.

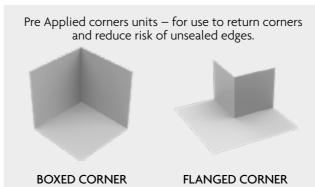
PRODUCT RANGE ACCESSORIES

Our Technical Department is available to advise on individual projects and to prepare or assist in the preparation of schedules and issue drawings.

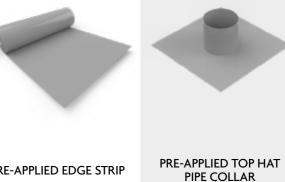


Description	Roll width	Length	Thickness	M²/roll
Pre-Applied fully bonded gas barrier	1.65m	30m	1.9mm	49.5
Pre-Applied edge strip	412mm	20m	0.4mm	8.24
Pre-Applied reinforced fleece tape	100mm	10m		
LT Jointstrip double sided tape	50mm	40m		
Pre-Applied top hat pipe collar 110mm				
Pre-Applied top hat pipe collar 135mm				
Pre-Applied top hat pipe collar 160mm				
Pre-Applied flanged corner 90 degree - 200/200				
Pre-Applied boxed corner 90 degree - 200/200				
Pre-Applied pile head collars - various sizes Ø				
Pre-Applied joist liners, 100mm flange x various sizes LxWxD				

PRODUCT RANGE ACCESSORIES









PRE-APPLIED PILE HEAD **COLLARS - VARIOUS** SIZES Ø



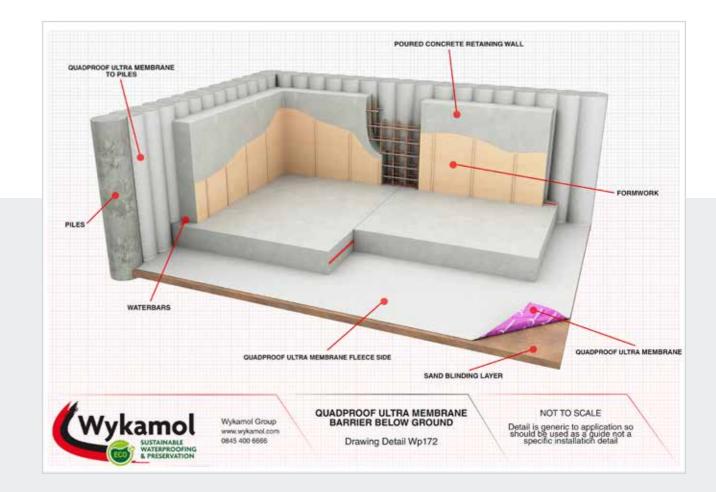
PRE-APPLIED JOIST LINERS, 100MM FLANGE X VARIOUS SIZES LXWXD



LT JOINSTRIP DOUBLE SIDED TAPE - FOR **SEALING LAPPED JOINTS**



PRE-APPLIED REINFORCED FLEECE TAPE - OVERLAP TAPE TO PROTECT FLEECED JOINT SEAL

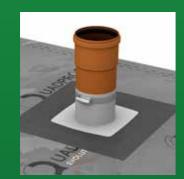


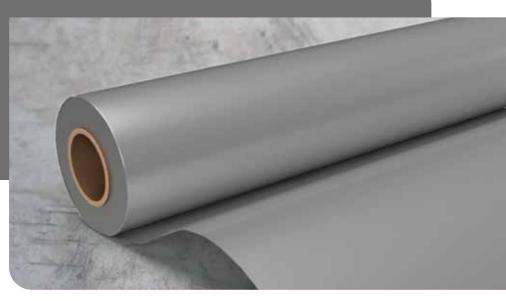


Total Ground Gas Control

High specification co-extruded multi-layer barrier specifically developed for use on construction sites.







Quadproof Evolution is a high specification co-extruded multi-layer barrier specifically developed for use on construction sites contaminated by Volatile Organic Compounds, Hydrocarbons and other ground gases such as Methane, Radon and CO2.

The product is 14 layers and contains 2 layers of gas barrier polymer (EVOH) to offer exceptional performance and prevent the ingress of dangerous gases into buildings.

It is manufactured using the latest co-extrusion technology and cannot delaminate. The product will also act as a damp-proof membrane. The membrane is manufactured using High Performance engineering Polymers to give exceptional strength and does not require reinforcement. It can be installed by the use of sealing tapes or can easily be welded.

A new generation of gas barrier

- Advanced Fourteen-Layer Barrier
- Two layers of Ethylene Vinyl Alcohol Co-Polymer (EVOH)
- Outstanding Gas Resistance
- Conforms with BS8485:2015+A1:2019 (Table7)
- Conforms to the specification requirements of NHBC Amber 1 & 2 applications
- Suitable for all characteristic Gas Situation (CS) ground gas regimes
- Excellent Welding Characteristics

Uses

High performance gas barrier
DPM protecting against moisture,
water vapour, Radon,
Methane, CO2 and VOC's.

Available Sizes

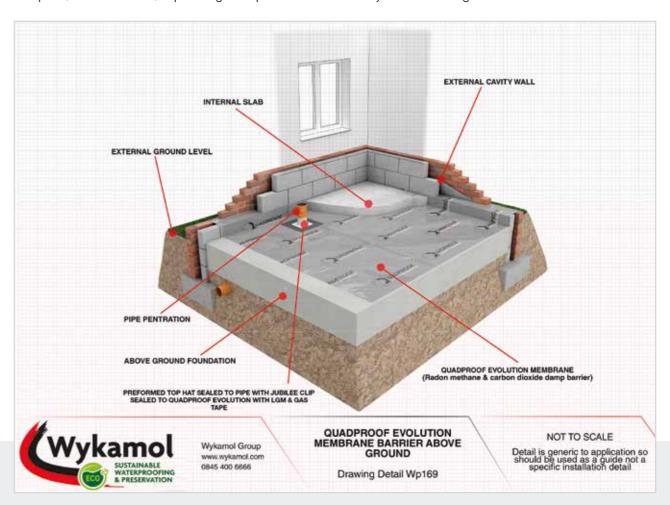
WIDTH: 1.65M LENGTH: 61M AREA: 100M²



BS8485:2015+A1:2019

Meets all the following criteria:

- Sufficiently impervious to the gases with a methane gas transmission rate <40.0 ml/day/m2/atm (average) for sheet and joints (tested in accordance with BS ISO 15105-1 manometric method)
- Sufficiently durable to remain serviceable for the anticipated life of the building and duration of gas emissions
- Sufficiently strong to withstand in-service stresses (e.g settlement if placed below floor slab)
- Sufficiently strong to withstand the installation process and following trades until covered (e.g penetration from steel fibres in fibres reinforced concrete, penetration of reinforcement ties, tearing due to working above it, dropping tools, etc)
- Capable, after installation, of providing a complete barrier to the entry of the relevant gas



INTENDED USE:

High performance gas barrier DPM protecting against moisture, water vapour, Radon, Methane,CO2 and VOC's.

Waterproofing membrane tested in accordance with EN 13967:2012+A1:2017 Flexible sheets for waterproofing - Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet - Definitions and characteristics.

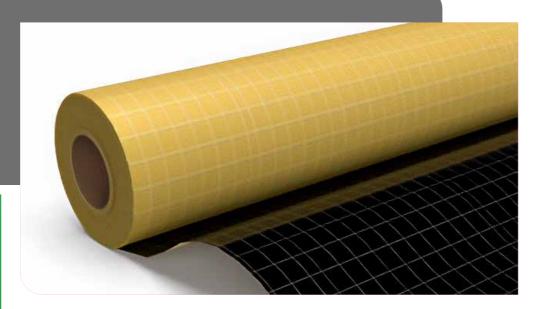
Testing elements from European Assessment Document EAD 030378-00-0605 Fully bonded, pre-applied flexible sheet for waterproofing.

Testing Notified Body: 0761 - Material prüfanstalt für das Bauwesen (MPA BS)

WYKAMOL

Virgin polymer, reinforced. multi laminate membrane with aluminum core





Wykamol Gas Barrier is a high quality, virgin polymer, reinforced multilayered gas membrane manufactured with an aluminum core.

Wykamol Gas Barrier is designed to resist Radon, CO2, and Methane. Wykamol Gas Barrier also acts as a DPM. Wykamol Gas Barrier will prevent these harmful ground gases from entering the structure when fully sealed.

Benefits

- Designed to resist Radon, CO2, Methane
- · Prevents build up moisture entering the building. Acts as a DPM
- Complies with CS2 and above in accordance with BS8485:2015+A1:2019.
- Achieves 2 points for the ground gas membrane in accordance with CIRIA 735 when independently verified.
- Loose-laid membrane that is quick and easy to install.

Limitations

 Must not be used in waterproofing applications or in the presence of hydrostatic pressure. In the event waterproofing and gas protection are required, please refer to Wykamol Quadproof Ultra Membrane PDS

Ancillary Products

- Wykamol GR Foil is a Self-Adhesive Ground Gas Membrane with aluminum core for sealing internal/external corners, pipe penetrations and site specific
- Wykamol Gas Tape for sealing inside joints between sheets of Wykamol Gas
- Wykamol GR Foil Tape for sealing overlaps in joints between sheets of Wykamol Gas Barrier.

Technical Data

Confirms to BRE211 (2023), NHBC Technical Guidance and BS8485:2015+A1:2019

Installation

Prior to installation, ensure the substrate is smooth and free from sharp materials in the ground that may puncture the membrane. Suitable substrates include, smooth compressed earth, 50mm sand blinding, 50mm concrete blinding with a smooth float finish, clean suspended block and beam floor, concrete raft slab or floor insulation.

Wykamol Gas Barrier can be taped or hot welded:

- Taped Joints to be sealed with **Wykamol Gas Tape** (50mm x 10M Rolls) inside the joint and Wykamol GR **Foil Tape** on the overlap(s). Ensure that all gas tapes form a continuous tight seal between each piece of tape to prevent any gas permeating the system.
- For heat welding, Wykamol Gas Barrier can be welded using a Leister Triac or similar heat gun appliance. Ensure minimum 100mm overlap in between the sheets of membrane prior to heat welding.

Note: Installation and hot welding should be carried out as per NVQ Level 2 Ground Gas Membrane Installation.

When installing **Wykamol Gas Barrier** membrane where Pipe Penetrations, Internal/External Corner, Door Thresholds, Window Bays, and Steel Stanchions are present, these must be reinforced and sealed using Wykamol GR Foil as per the requirements of NVQ Level 2 Ground Gas Membrane Installation.

During the installation and post completion, ensure the membrane is protected from damage. This can be in the form of preventing access to the area of the installation, covering with insulation or screed before allowing foot traffic into the area. If in the event the membrane does become damaged, it must be removed and replaced.

Installation should be carried out to meet the requirements of CIRIA 735. If a planning condition attached to your project requires a ground gas protection system installed, ensure Independent Verification is carried out as per CIRIA 735. Wykamol Group can provide contact details for independent validators if necessary.

Physical Properties

Product 2m wide single wound membrane to ensure there are no folds within the membrane.

Dimensions 2m x 50m (100m2)			
Thickness	0.4mm		
Colour	Black and yellow (Install Black side facing up)		

Health and Safety

Please refer to Wykamol Gas Barrier MSDS for further information on health and safety.

For technical support please contact our technical team at info@wykamol.com or info@tritonsystems.co.uk.

Alternatively, please contact your local technical sales representative.

SPECIFICATION

TEST NAME	TEST METHOD	PARAMETER	VALUE	UNIT
Composition	ISO 2286-2	Coex Foil	138	gr/m²
		PE	15	gr/m²
		PP Frabric	13	gr/m²
		PE	25	gr/m²
		Aluminimum 20µm	55	gr/m²
		Coex Foil	138	gr/m²
		PE	15	gr/m²
		PE	25	gr/m²
		Total Weight	424	gr/m²

WYKAMOL GR FOIL

High performance self-adhesive bituminous waterproofing membrane that prevents Radon, Methane, Carbon Dioxide, and vapour entering the structure



Wykamol GR Foil high performance self-adhesive bituminous waterproofing membrane that prevents Radon, Methane, Carbon Dioxide, and vapour entering the structure. The polyester reinforced aluminum layer provides a robust gas protection system.

Wykamol GR Foil can you be used in below ground waterproofing applications and is classed as a Type A post-applied barrier system in accordance with BS8102:2022.

Uses

- Where protection from Radon, Methane or Carbon Dioxide is required, above or below ground.
- Sealing of internal/external corners, pipe penetrations, door thresholds, window bays, and steel stanchions.
- Can be used in conjunction with **Wykamol Gas Barrier** for site specific detailing.
- Below Ground Waterproofing membrane to retaining walls, basements, lift pits, and foundations.

Physical Properties

- 1m wide rolls with no folds.
- Dimensions: 25m x 1m (25m²) Thickness: 1.2mm
- Product Colour: Silver/Black

Installation

Prior to installation of **Wykamol GR Foil**, ensure the substrate is dry and clear of dust, debris, dirt and other impurities. When installing directly onto a concrete, concrete block or brick (both with flush finished pointing), apply **Wykamol Gas Primer** to the surface and allow the product to turn tacky before installing **Wykamol GR Foil**. Subject to weather conditions, **Wykamol Gas Primer** can take 30 minutes to 2 hours to become tacky / sticky.

Wykamol GR Foil should be installed by laying the rolls from the highest point of the building and working your way downwards, whilst being careful not to create counter-gradient overlaps. Ensure the release paper on the back of the membrane is removed, exposing the bituminous adhesive backing before applying the Wykamol GR Foil. Install black side down.

Wykamol GR Foil must be overlapped at the edges by at least 100mm (minimum). A primer is not required to stick down membrane overlaps but the membrane must be clean and dry.

Note: Post installation, ensure the membrane overlaps are pressed down firmly, whilst being very careful to ensure all air bubbles and creases are removed as pressure is placed on top of the system.

Wykamol GR Foil must be protected before being backfilled, using Wykamol Sheet Drain, Wykamol CM8 or CM20 Geotextile, Insulation, or other protection board(s). In the event Wykamol GR Foil becomes damaged the membrane must be replaced or suitably patch repaired.

Wykamol GR Foil can also be cut down to seal internal/ external corners, pipe penetrations, site specific detailing in accordance with NVQ Level2 Ground Gas Membrane Installation. In accordance with NVQ Level 2 Ground Gas Membrane Installation, extra heat can be applied to improve the bonding of **Wykamol GR Foil**.

Ancillary Products

- Wykamol Gas Primer To prepare concrete, block, brick, steel or other non-membrane materials.
- Wykamol Gas Barrier Sealing site specific detailing, such as corners, pipe penetrations and steel stanchions when used in accordance with NVQ Level 2 Ground Gas Membrane Installation.

Storage

Wykamol GR Foil must be stored in the original unopened package, in a dry / well-ventilated space at temperatures between +5 Degrees and 40 Degrees. Storage over 50 Degrees may lead to difficulty in removing the release protective lining of the self-adhesive material.

Wykamol GR Foil has a minimum shelf life of 12 months from the date of production.

Health and Safety

Please refer to **Wykamol GR Foil** MSDS for further information on health and safety.

For technical support please contact our technical team at info@wykamol.com or info@tritonsystems.co.uk.

Alternatively, please contact your local technical sales representative.



Wykamol Radon Barrie

WYKAMOL WATERPROOFING SOLUTIONS

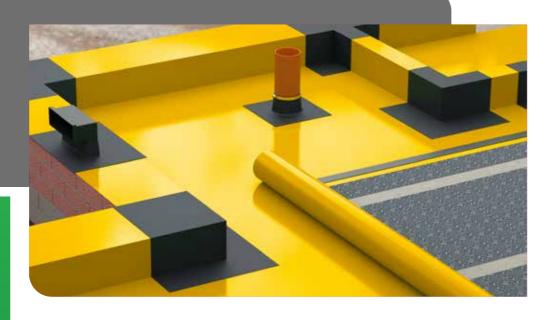
WYKAMOL RADON BARRIER

Loose laid Radon barrier which prevents the passage of radon through the structure.









Wykamol Radon Barrier is a loose laid Radon Barrier to be used in new builds or refurbishments.

When installed within the building fabric **Wykamol Radon Barrier** prevents Radon from passing through the structure and entering your building. **Wykamol Radon Barrier** is manufactured from virgin polymers to protect from Radon and can also be used as a DPM.

Uses

- For areas requiring 'Basic Radon Protection' the fully sealed membrane is required.
- For areas requiring 'Full Radon Protection', the sealed membrane should be installed in conjunction with a Radon Sump Chamber, or ventilation, in accordance with BRE211 (2023).



- Supplied center folded to ensure maximum coverage per roll
- Dimensions: 4m x 20m (80m2)
- Thickness: 400 microns
- Product Colour: Yellow

Typical Uses

Domestic and commercial buildings where a Radon DPM is required, on top of suspended floor, or beneath or on top of ground bearing slabs

Installation

Prior to installation, ensure substrate is smooth and free of sharps that could puncture the membrane. Joints are sealed with **Wykamol Gas Tape**, 50mm x 10M rolls.

Pipe penetrations, internal/external corners details, and door thresholds can be reinforced and sealed using **Sureproof Ultra** or **GR Foil** where required.

Alternatively, Preformed Top Hats can be used as demonstrated in the images to the right.

Wykamol Radon Barrier is a loose laid membrane. It should not be used for Waterproofing below ground structures subject to Hydrostatic Pressure. For below ground basements, subject to hydropstatic pressure, please refer to **Wykamol Quadproof Ultra.**

Wykamol Radon Barrier can also be used as a DPM.

Limitations

- Product must not be used for waterproofing below ground structures.
- Must not be used where hydrostatic pressure is present on-site

Please refer to **Quadproof Ultra** PDS where combined waterproofing and gas protection is required.

Ancillary Products

- Wykamol Sureproof Ultra or GR Foil Self Adhesive Membrane for sealing internal/external corner details, pipe penetrations and site specific detailing.
- Wykamol Preformed Top Hats for sealing Pipe Penetrations.
- **Wykamol Gas Tape -** to be used for sealing joints within the membrane.







Technical Data

Conforms to BRE211 (2023) - 6.2.1 Barriers, NHBC Technical Guidance and is CE marked to harmonized standard EN 13967:2012+A1:2017.

-75

WYKAMOL WATERPROOFING SOLUTIONS

SUREPROOF ULTRA

Waterproofing & Gas Control

SUREPROOF ULTRA is a
Waterproofing and gas
control self adhesive
membrane, self protected
by a cross laminated
HDPE film. Consisting of a
very adhesive bituminous
compound, effective even
at low temperatures.







The high-density polyethylene film gives to the membrane characteristics of dimensional stability and ensures a uniform reaction to elongation stresses in a longitudinal and transversal direction.

This membrane has been designed and developed for the specific waterproofing of retaining walls, foundations, basements, and podium decks-laid to a fall.

Advantages

- Waterproof, Self-adhesive and Self-sealing;
- Tough and Extensible;
- Radon and Methane Gas barrier;
- Resistant to the contact of chemical agents;
- Resistant to tearing and perforation;
- Controlled thickness;
- Compatible with steel and metals in general.

Uses

Waterproofing of foundations, retaining walls of concrete, masonry or ICF and underground structures in general.

Available Sizes

Standard Length: 20 m Thickness: 1.5 mm Standard Width: 1000 mm



Substrate Preparation

All surfaces on which Sureproof Ultra Waterproofing membranes have to be installed must be dry, clean, smooth and free of impurities. If the surface is porous, apply a coat of Sureprime at a rate of 75-150ml per square metre.

The use of Primer is in any case advisable, and the manufacturers instructions must be followed. A wrong use of Primer can influence the membrane efficiency.

Dimensions and Packaging

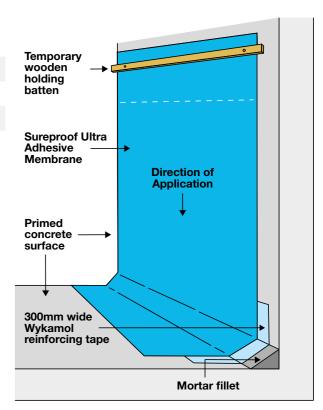
Standard Length:	20 m
Thickness:	1.5 mm
Standard Width:	1000 mm

Other lengths and thicknesses are available on request. The rolls are packed individually in cardboard boxes and placed on pallets.

Application

Always start by laying the rolls from the highest point and work downwards, being careful not to create countergradient overlaps.

The membrane must be overlapped at the edge by at least 5-8 cm and on the top by at least 15 cm. After installation, press the membrane well, being very careful about details such as corners, edges, connections and overlaps.





LGM

Liquid Gas Membrane

Styrene butadiene latex based formulated liquid applied membrane.
Offers a simple method for waterproofing, gas proofing, damp proofing and vapour proofing applications.









damp, water, Radon and Methane gas. Advantages

- Single pack system
- Water based compounds that can be applied even to damp backgrounds

liquid rubber membrane, specifically designed for a range of vertical

flexible material acting as an effective barrier to the passage of vapour,

and horizontal construction surfaces. LGM cures to form a tough,

- Non-toxic, non-hazardous, solvent and plasticiser free
- Quick drying. Typically touch dry in 1 hour
- Good bond to many substrates
- Toughness, high flexibility, extensibility and good crack bridging properties
- Low water vapour permeability
- Alkali resistant. Can be applied to alkaline surfaces
- Resistant to silage acids
- Non staining and stain blocking
- Available colour, Green

Properties

Wykamol Liquid Gas Membrane can be used to protect most building surfaces form the effect of liquid and water vapour.

Acts as an anti-carbonation coating and as a gas barrier to prevent the migration of Methane and Radon. Can be used as a DPM on floors and walls

Coverage

A minimum dry coating thickness of 1.0mm is needed to provide a gas barrier. 2kg per sqm provides 1.0mm dry film.



WATERPROOFING

}}}⊗ VAPOUR

Application

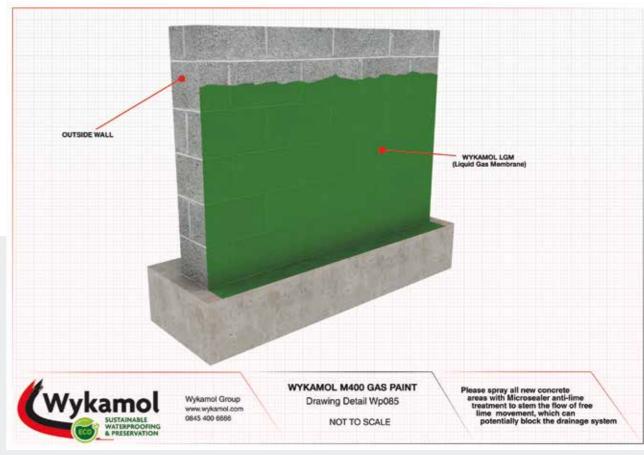
The background surface should be smooth or have a light even texture. Any masonry should be flush pointed and defects in existing surfaces made good.

The surface needs to be clean, sound and free from dust, loose material or free surface water. The membrane should not be applied in wet conditions or where these conditions are likely to occur before the membrane has dried. The membrane should not be applied when the temperature of the background, or the air temperature, is below 7°C.

It is sometimes advantageous to pre-wet concrete or masonry backgrounds, so that these are damp but free from any water glistening on the surface, to aid wetting out of the background.

Because of the wide variety of background types and site conditions it is always advisable to **check adhesion to the background by testing on a sample area before starting any job.** The membrane may be applied by brush, roller or airless spray.







BARRIER PROTECTION

TYPE A

'Tanking' or Barrier waterproof protection will often be used where the structure does not provide any inherent resistance to water.

Such structures may be built from concrete blockwork, ICF, stone, brick, other forms of modular construction or regular concrete with little or no reinforcement.

BS8102:2022 considers modular built structures to be high risk which will lead the designer to assess the need for land drains,

combined forms of waterproofing and to take into account the expected usage and dryness grade required by the end user.

Type A 'Tanked' or Barrier protection can be in the form of pre-applied fully bonded membranes, post-applied selfadhesive sheet membranes or fully

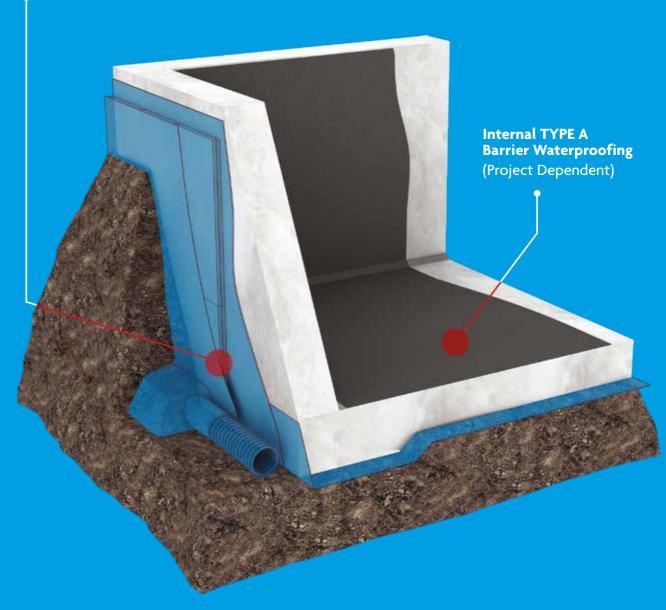
bonded cementitious or polymerbased coatings. Some of these materials will also have gas barrier properties and selection will depend on a consideration of both waterproofing and gas proofing requirements for the below ground structure.





External Type A Barrier Waterproofing

(Project Dependent)





WYKAMOL BENTONITE

TYPE A BARRIER

A high performance sodium bentonite geotextile









Wykamol Bentonite is a high performance sodium bentonite system.

Our high swelling, low permeability sodium bentonite is fully encapsulated between a non-woven and woven geotextile providing a robust and secure method of waterproofing.

Applications

Wykamol Bentonite complies to BS8102 grades. Applications range from:

Basements

Tunnels (cut and cover)

Lift pits

- Tanks
- Swimming pools

• Spray applied concrete

For other application types please contact your local technical sales representative or our technical department for more information.



Ancillaries

Wykamol Bentonite Granules
Wykamol Seal

Wykamol Bentonite Fixings

Available Sizes



Benefits

- BBA accredited system
- Fleece backed membrane which fully bonds to fresh concrete.
- Self healing and easily repaired if damaged.
- Easy to install
- Post installed prior to backfilling (please consult with Wykamol prior to application).
- Can be installed in all weather conditions.
- Wykamol Bentonite can swell up to 15 times it's dry volume.

Limitations

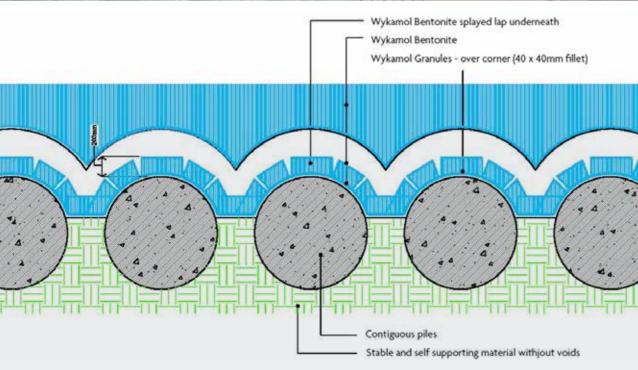
- Wykamol Bentonite must be fully confined and covered to stop product from free swelling and degrading.
 Maximum performance is achieved when fully compressed by the structure and/or backfill.
- Must not be installed on live (running), standing water (ponding water) or ice.
- Where ground water contains strong acids, alkalies, salt or contamination, consult out technical department for advice
- Must not be used in movement joints. For movement joints please contact Wykamol for more information.



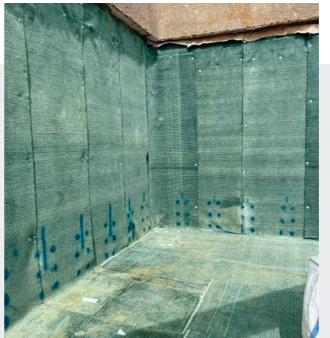
Technical Data

Material Properties	Test Method	Nominal Value
Bentonite		
Bentonite Free Swell	ASTM D 5890	≥24ml/2g
Bentonite Fluid Loss	ASTM D 5891	18ml max
Bentonite mass/unit area	EN 14196	4.8kg/m²
Membrane Composite		
Hydrostatic Pressure Resistance	ASTM D 5385 (mod)	70m
Peel Adhesion to Concrete	ASTM D 903 (mod)	2.6kN/m min
Hydraulic Conductivity	ASTM D 5084	1.0 x 10 ⁻⁹ am/s
Tensile Strength (MD/CD)	EN ISO 10319	8.0kN/m/8.0kN/m
Thickness @ 2 kPa	EN ISO 9863-1	7.0mm (typical)
Puncture Resistance	EN ISO 12236	1.5kN
Low Temperature Flexibility	ASTM D 1970	unaffected @-32°C











SURE PROOF

Waterproofing Membrane & Primer

SureProof is a high performance, cold applied, flexible, waterproof membrane incorporating a crosslaminated HDPE carrier film with a strong adhesive polymer modified bitumen compound.









The adhesive surface is protected by a disposable paper interleaving wider than the membrane for easy release during application. To ensure correct sealing at overlaps there is a double-sided adhesive strip along the edges covered by a separate interleaving strip.

SureProof should be laid in accordance with the provisions of BS8102:2022. Where **SureProof** is being used as a floor DPM there should be continuity with the wall DPC's and other DPM's used in the structure. If methane presence is suspected, a comprehensive site survey needs to be carried out and Wykamol's technical department contacted to advise on the use of alternative materials such as **Sureproof Ultra** or **Wykamol GR Foil** membranes.

Advantages

- Resistant to ground water, soluble sulphates and chlorides
- Suitable for waterproofing basements grades 2 & 3 as defined in BS8102:2022, 'protection Of Structures Against Water From The Ground'
- Cross-laminated HDPE film for protection against damage
- Dimensionally stable
- Tough and flexible, ideal for detailing around corners
- $\bullet\,$ Self-adhesive layer system makes installation easy, quick and reliable.
- BBA Certificated

Uses

Isolate and protect external structure from surrounding soil

Helps relieve hydrostatic pressure from the face of the structure

Ideal for retaining walls, podium decks, external tanking and green roof applications.

Available Sizes

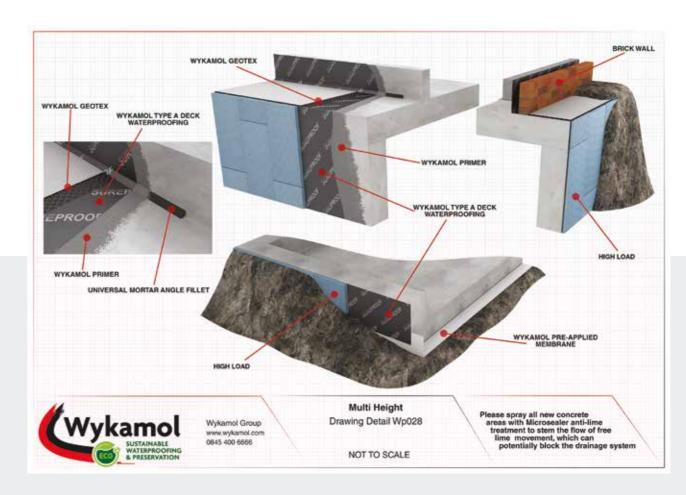
Sureproof 1m x 20m (20m2)

Sureproof primer 5 litre (20m2)



Properties

Property & Test method	Units	Result
Water tightness to liquid water (EN 1928, Method A, 60 KPa)	-	Pass
Resistance to Static Load (EN 12730)	Kg	≥ 20
Tensile properties, Maximum Tensile Stress CD (EN 12311-2)	N/mm	2 ≥ 2.5
Tensile properties, Maximum Tensile Stress MD (EN 12311-2)	N/mm	2 ≥ 2.5
Tensile properties, Elongation at break MD (EN 12311-2)	%	≥ 130
Tensile properties, Elongation at break CD (EN 12311-2)	%	≥ 130
Durability of Water tightness against ageing (EN 1847, Method A, 60 KPa)	-	Pass
Durability of Water tightness against chemicals (EN 1847, Method A, 60 KPa)	-	Pass
Resistance to Impact (EN 12691)	mm	≥ 500
Resistance to tear (Nail Shank) CD (EN 12310-1)	Ν	≥ 100
Resistance to tear (Nail Shank) MD (EN 12310-1)	Ν	≥ 100
Reaction to Fire (EN 13501)	Euro Class	Class F
Joint strength (EN 12317-2)	Ν	≥ 30
Water Vapour Transmission (Density Flow rate) (EN 1931)	g/(day/m2)	0.09
Water Vapour Transmission (Resistance factor, μ) (EN 1931)	μ	220000



HYDRA FLEX

Flexible Tanking Membrane

Premium elastomeric waterproof membrane for brickwork, concrete and stone









HydraFlex is a two-component flexible coating made of a cementitious powder and a high concentration liquid polymer.

It can be applied to mineral substrates, such as concrete and masonry, to provide a protective waterproof barrier which can bridge cracks in the substrate so the coating remains water-tight. With superior crack-bridging ability down to -5°C, as well as thixotropic application properties, HydraFlex is a suitable solution for areas at risk of movement in both internal and external environments.

Advantages

- Permanent waterproofing for concrete and masonry.
- Superior crack-bridging capability, even at sub-zero temperatures, making it ideal for high-risk areas.
- Resists both positive and negative water pressure.
- Recommended for both internal and external use.
- Bag and bottle system ensures accurate and simple mixing.
- Versatile product which can be used in a variety of areas.
- Excellent adhesion to well-prepared mineral substrates, even when damp.
- Exceptional workability, with easy application on vertical and overhead surfaces.

Uses

Waterproofing of areas subject to vibration or minor substrate movement that are constructed of concrete, brickwork, or stone.

- Basements, cellars, foundations, lift pits.
- Water tank
- Constructions joints, wall-floor iunctions, etc.
- Podium decks, balconies/ terraces, flat roofs.

Available Sizes

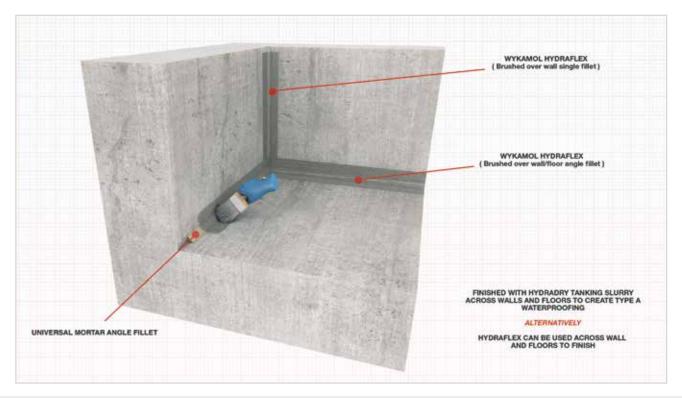
20 kg HYDRAFLEX20 up to 6m

Supplied as Powder & Polymer coverage at 2mm thickness



Properties

Properties	Result
Pot life (mins)	45
Resistant to rain (hours)	6
Resistant to foot traffic (hours)	24
Crack bridging ability @ 20°C (mm)	1.5
Crack bridging ability @ -5°C (mm)	1.5
Adhesion strength – Ambient (N/mm2)	0.8
Adhesion strength – Immersed (N/mm2)	0.6
Water resistance pressure (Bar)	7
Reaction to Fire	NPD



HydraFlex is a minimum 2 coat application System. Once mixed, HydraFlex has a 30 minute pot life at 20°C. The product can be brush applied or sprayed application for spray application please consult wykamol technical department

HydraFlex is suitable for overcoating once a certain level of curing has been achieved. Plastering should take place using Wykamol's Renovation Plaster, at least 48-72 hours after the final coat of HydraFlex has been applied. Refer to relevant data sheet for application instructions, which is available upon request or can be downloaded from our website.

If HydraFlex has been applied as part of a DPC, breathable paint must be used on top of any finish. If redecoration is to

occur 12 months after the DPC installation, non-breathable finishes may be considered.

However, the moisture content of the plaster and background must be in line with the recommendations of the supplier of the chosen finish.

Note: HydraFlex must not be punctured by wall fixings, e.g. dry lining work etc.



HYDRA DRY

Tanking Slurry

Hydradry Tanking Slurry is a cementitious waterproof coating system which reacts with concrete substrates to form insoluble crystalline mineral chemicals, enhancing water resistance and creating a monolithic bond.









When mixed with clean water and applied correctly, this forms a permanent waterproof coating to the concrete and masonry and is easily applied by brush, roller or spray.

HydraDry Tanking Slurry waterproofs against positive and negative hydrostatic heads of water and is suitable for use, internally, externally, above and below ground. HydraDry Tanking slurry is also ideal for use for in damp-proofing applications.

Advantages

- Permanent waterproofing for concrete and masonry.
- Resists positive and negative water pressure.
- Superior bond strength.
- Resists salt contamination in masonry.
- Suitable for use above and below ground level.
- Suitable for internal and external use.
- $\bullet\,$ Safe to use in contact with potable water.
- Easy to use, brush, roller or spray applied.



Uses

Waterproofing of: basements, cellars, foundations, swimming pools, concrete, renders, brickwork, block work structures and lining water tanks, pools and planters etc.

Internal and external, above and below ground application.

Available Sizes

Pack Size: 20 K

Coverage: 7m² per 20kg







Application

HydraDry Tanking Slurry is a minimum 2 coat application System. Once mixed, HydraDry Tanking Slurry has a 30 minute pot life at 20°C.

The product can be brush applied or sprayed application for spray application please consult wykamol technical department

Brush applied slurry: HydraDry Tanking Slurry in even layers using a stiff bristled brush or broom on vertical surfaces and a rubber squeegee or stiff bristled brush /broom for horizontal surfaces.

It is essential the first coat is brushed well into the surface to ensure a good bond with the substrate. Allow the first coat to set firm (2-16 hours). Apply a second coat of HydraDry Tanking Slurry as soon as the first coat has hardened. Apply the second coat at 90° angle to the first coat.

Floors: Special precautions may be necessary to ensure a continuous waterproof barrier at the wall to floor joints and corner joints to avoid sharp changes of angle in the tanking membrane. The joints should be thoroughly raked out, cleaned and wetted prior to application of Wykamol's Universal Mortar.

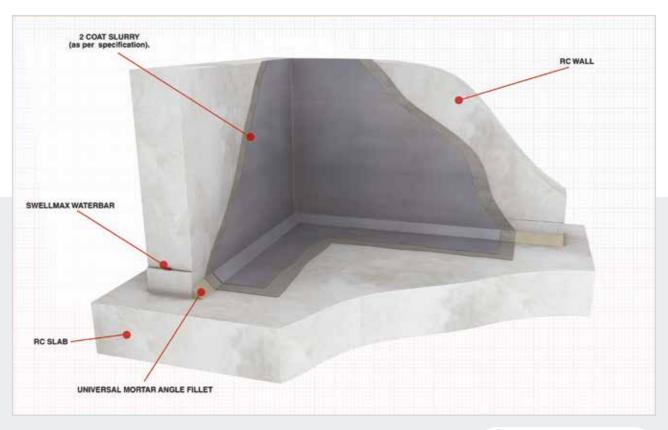
Ground level: Where basement walls finished above the external ground level, the tanking should link up with an effective damp proof course. If basement ceilings are below ground level, the ceiling should also be coated with HydraDry Tanking Slurry.

Conditions and Limitations

Do not apply HydraDry Tanking Slurry to substrates with temperatures below 5°C or if the ambient temperature is below 5°C or expected to fall below 5°C within 24 hrs.

When applying to environments that will contain aquatic life, such as ponds, always finish with Wykamol Technoseal, avoid application in direct sunlight.

Hydradry Reaction to fire classification: A1/A1FL





HYDRA DEK

Seamless waterproofing membrane

Premium elastomeric waterproof membrane for terrace decks, balconies and podiums.









HYDRADEK PU is a highly elastomeric waterproofing liquid membrane, that is the perfect solution for complicated and flat roofs, as well as walkways and balconies.

HYDRADEK system comprises of a single pack polyurethane polymer coating, a reinforcing textile mat and an optional Topcoat for high traffic zones or where UV resistance is required. This system forms a seamless, continuous waterproof membrane with no joints or adhesive sealing tapes.

Advantages

- NHBC (National House Building Council) approval, and green roof endorsed.
- BBA approved, with an efficacy period in excess of 25 years.
- Totally seamless, without any laps or joints and suitable for areas of high traffic.
- Cold, brush or roller applied, no need for heat or other accelerators.
- The homogenous system of two coats of PU interleaved with mesh results in a totally waterproofed surface.
- Can be applied to most surfaces, and is ideal for both new and older flat roofs, balconies, terraces or podiums..
- Suitable for use all year round.
- For the waterproofing of most roofs/balconies/podiums/foot traffic areas, on both metal and asbestos roofs.

Uses

- Roofs, terraces, balconies, and overhangs (walkable) (ETE 10/0121 y BBA 16/5340)
- Structural concrete slabs, and concrete walls and foundations
- Metal and asbestos roofs
- Swimming pools, artificial lakes and ponds
- Green roof and walls (ETE 10/0121 y BBA 16/5340.

Available Sizes

METAL TINS 25 KC



SYSTEM COMPONENTS

- Hydradek PU
- Hydradek Primer
- Hydradek Top Coat
- Hydradek Thickener
- Hydradek Fleece

HYDRADEK PU is a single component liquid made up from pure polyurethane, which once catalysed forms a continuous elastic membrane, without any joints/overlapping, and on smaller roofs without any integrated HYDRADEK FLEECE required.

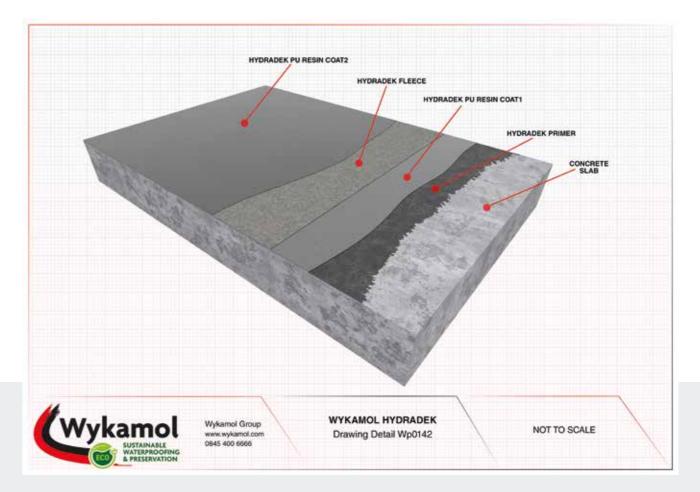
HYDRADEK PRIMER has been specifically designed to increase bonding and improve the surface levelling of

substrates such as concrete, mortar, or plywood prior to the application of the HYDRADEK PU

HYDRADEK TOPCOAT is a two component polyurethane resin that provides a hard and durable surface for high traffic zones, as well as offering UV radiation protection on exposed (non covered/shielded) surfaces.

HYDRADEK THICKENER has been specially developed as a liquid additive for the HYDRADEK PU, to use on vertical or sloped surfaces, giving increased thixotropic anti slump properties during the drying/curing process.

HYDRADEK FLEECE is a spun glass fibre, for use with HYDRADEK PU in large roofing/flat surface applications where it is necessary to achieve an homogeneous bond/seal.









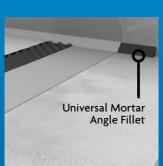


Mortar and Fillet seal

Universal Mortar is a single component. thixotropic, fibre reinforced, polymer modified cementitious mortar.









The product cures to produce a high performance, Universal Mortar, Multipurpose, fibre reinforced, fair faced levelling coat, render and profiling mortar, with enhanced waterproofing properties.

Advantages

- Ideal for use with specialist waterproofing systems such as tanking slurry.
- Fibre re-inforced to give improved tensile and impact strength.
- High bond strength which ensures monolithic performance.
- Suitable for horizontal, vertical and overhead applications.
- Wide range of applications from a single product.
- Economic mortar which generally requires no substrate inter-layer priming.
- Dense matrix provides excellent protection from moisture and chlorides.
- Factory batched mortar which provides consistant quality.
- Easy to use, brush, roller or spray applied.

Waterproofing and protection

Drinking water structures when

Slurry. High build repair mortar

Mortar for waterpoofing, levelling and re-profiling Fillet at wall/floor/ceiling junctions. Foundations, slabs,

retaining walls etc.

Uses

Available Sizes

Application

Universal Mortar is best applied by a gloved hand, trowel or suitable spray equipment. When spraying use traditional wet mortar processes.

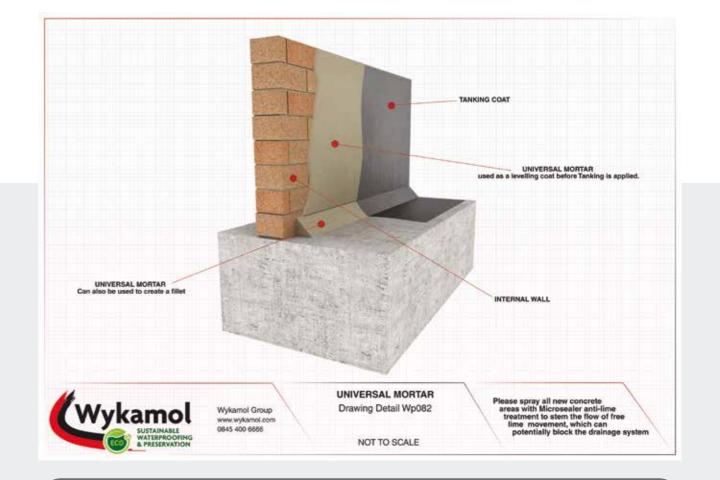
Vertical Surfaces: Universal Mortar is to be applied at a minimum of 5 mm up to a maximum of 15 mm layer thickness in one working operation. Apply the product by trowel using a standard rendering technique or spray technique ensuring to remove any trapped air. If more than one coat is required to obtain the desired build, ensure that previous layers are well keyed and stable but not fully set prior to application of the subsequent layers. This is achieved between 3 and 12 hours, when mortar feels hard to the touch. Final profiling to a high quality can be achieved using a steel float after allowing the surface to stabilise. Wooden or plastic floats and damp sponges may also be used to achieve the desired surface texture.

Overhead Applications including soffits: When using Universal Mortar as a levelling coat, apply at a minimum of 5 mm up to a maximum of 10 mm layer thickness in one working operation. Apply the product by trowel using

standard rendering technique or spray technique ensuring to remove any trapped air. If more than one coat is required to obtain the desired build, ensure that previous layers are well keyed and stable but not fully set prior to application of subsequent layers. This is achieved between 3 and 12 hours, when mortar feels hard to the touch. If sagging occurs during application, Universal Mortar should be completely removed and reapplied at a reduced thickness onto a correctly prepared substrate.

WYKAMOL

Universal Mortar as Fillet Seal: Using bricklaying or pointing trowel, apply a minimum 25 mm fillet at wall / floor, wall / wall and if necessary wall/ceiling junctions. Ensure Universal Mortar is pressed firmly into the chase at the wall/floor and joints at the wall/wall. Whilst still green form a "bottle" cove and feather for 50 mm - 100 mm along the adjacent surfaces. Achieve a smooth finish to the fillet. Where excessive stress concentrations can be expected at the wall/floor joints it is recommended a dilution of SBR Latex at 1:2 with water used as the gauging solution.



Technoseal DPM - Liquid Damp proofing membrane

WYKAMOL

TECHNOSEAL DPM

Liquid Damp-Proofing Membrane

Technoseal DPM is a ready-to-use, liquid damp-proofing membrane which provides a seamless, waterproof and radon barrier, ideal to use as part of a below ground-level waterproofing system.









Technoseal DPM acts as a barrier against Radon, Methane and Carbon Dioxide gases. It is safe to use in potable water and can be applied to pond lining as a waterproof barrier.

Ideal for areas with constant water contact, such as under tiles in bathrooms, food processing areas and balconies.

Advantages

- Non-toxic, non-hazardous and solvent free
- Ideal in very wet areas floors and walls in wet rooms
- Easy application by brush, roller or high-pressure spray
- · Apply to block work, stone, brick, timber and concrete
- Can be applied to damp walls and floors
- Can be plastered and boarded on top
- For internal use only unless rendered/protected on top
- Two coat application

Uses

Multi purpose waterproofing paint system for foundation walls and floor slabs.

Non hazardous Radon and methane barrier paint or roller applied

Available Sizes

Pack Size: 5kg containe

Coverage: 5m2 per 5kg

Available in White and Black

Application

- Floors: Under/above screeds to provide a damp proof membrane.
- **Basements:** As part of a waterproofing system beneath ground level.
- **Walls:** Can be used under render or plaster as a water barrier or vapour barrier.
- **Ponds:** Can be used for aquatic life in ponds as a waterproof lining.
- **Tiling:** As secondary protection under tiles in wet areas e.g. bathrooms, food processing areas, balconies, etc.
- **Water Storage:** The membranes perform well in our tests even when continuously immersed in water.
- **Silage Storage:** The membrane protects concrete from silage attack.

Storage

In a sealed container between +5 °C and +35 °C and protected from frost and direct sunlight.

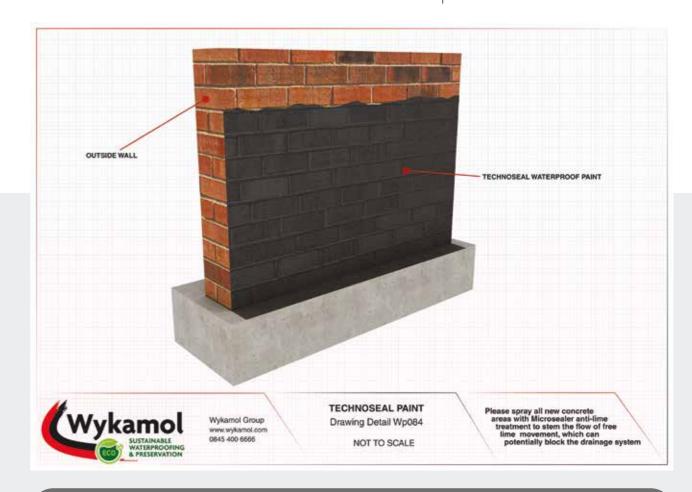
Coverage

A minimum dried coat thickness of 0.6mm is needed to provide a vapour barrier. This should be applied in a minimum of two coats. For the final dried membrane thickness of 0.6mm a coverage rate of 1.20kg/m2 is required (this is the total for all coats). This corresponds to approx 1 litre/m2.

Colour

Available in white or black. The colour of the liquid compound will differ slightly from the colour of the dried membrane. The colour shade may vary batch to batch. The membrane dries to a tough semi-gloss finish.

PRODUCT DESCRIPTION	CODE	PACK SIZE	TYPICAL COVERAGE
Technoseal, Black	TECSEAL	5 Litre	Covers up to 5 m ² in a 2 coat
Technoseal, White	TECHSEWT5	5 Litre	application



EP40

Epoxy floor coating

EP40 Floor Coating
System is a water-based,
easy to apply system
which consists of the EP40
Epoxy Floor Primer and
the EP40 Epoxy Finish
Coat in grey or clear.







Epoxy sealer and surface damp-proofing membrane. **EP40 Finish Coat** is used in conjunction with **EP40 Primer**. **EP40 Floor Primer** penetrates the substrate, fills the pores and capillaries and improves the adhesion and evenness of the Finish Coat.

After the final application of **EP40** Finish Coat, floors become easier to clean and hard-wearing. This is a 2 part system and both the primer and finish coat are required to achieve the desired finish.

Advantages

- Easy to apply.
- Excellent adhesion to concrete.
- Provides attractive, dust-free finish.
- Substantially more resistance to chemicals, fuels and lubricants.
- Can be used internally and externally (if covered).
- Ideal for areas with high foot traffic and vehicles such as forklift trucks.
- Can be applied to green concrete after 7 days.
- Floor becomes easier to clean with impervious finish.

Uses

Over concrete floors in a variety of commercial and industrial environments, such as: Industrial plants, Commercial and retail stores, Warehouses, Hospitals, Showrooms, Garages, Gymnasiums, Industrial food preparation areas

Available Sizes

ack Size: 5kg containe

Coverage: 30-40 m² per 5kg (one coat)

Available in Grey or Clea

Application

Technical	Data Primer	Finish Coat
Colour*	Clear	Grey or Clear
Pot life	45 mins - 1.5 hours	45 mins - 1.5 hours
Recoat time (cure at20°C)**	12 - 26 hours (or when just tack free)	16 - 24 hours (or when just tack free)
Initial cure time (at 20°C) - light traffic**	-	24 - 48 hours after final application
Initial cure time (at 20°C) - medium traffic**	-	72 hours after final application
Full chemical cure (at 20°C)**	7 - 14 days	7 - 14 days

^{*}Colour may vary by batch.

^{**}Tested in stringent laboratory conditions or values determined by BS 8204-6. Conditions on-site will vary and may impact curing times.



PRODUCT DESCRIPTION	CODE	PACK SIZE	TYPICAL COVERAGE
Epoxy Floor Coating, Primer	NMDEPP5	5Kg	Up to 40m², 2 coat application,
Epoxy Floor Coating, Grey	NMDEP40G5	5Kg	depending on substrate porosity and
Epoxy Floor Coating, Clear	NMDEP40C5	5Kg	roughness

Damp Proof Membrane

Liquid applied Damp Proof Membrane and Water Vapour Suppressant









A solvent free, two-part epoxy resin coating primarily for use on screeded or concrete floors subject to rising damp or containing residual construction moisture.

TRISEAL is both a surface damp proof membrane and a water vapour suppressant. Also used under raised access floors, in plant rooms and bunded areas to contain water and mild chemicals.

Properties

- Solvent free
- Low odour
- Waterproof
- Flexible and tough
- · Resistant to osmotic blistering
- Water vapour transmission rate less than 4g/m²/24hr (400 microns film thickness)

Typical Uses

Damp proof membrane	For floors where the original D.P.M has failed or is non-existent.
Water vapour suppressant	For concrete and screeded floors, which need to be covered but still contain construction moisture.
General purpose coating	The product is sufficiently tough and flexible for use on surfaces subject to foot and light wheeled traffic.

NOTE: TRISEAL is not intended for use where water is under pressure, i.e. "Tanking".

Technical Data

COMPOSITION	Part 1: Low viscosity epoxy resin, reactive diluents, flow promotors and oxide red pigment. Part 2: Low viscosity epoxy curing agent and accelerator.	
MIX RATIO	2 parts resin to 1 part hardener by weight.	
	@ 20°C re-coatable in 6-8hrs	
CURING TIME	@ 10°C re-coatable in 14-20hrs	
	Full cure is achieved up to 7 days after application depending on temperature.	
COVERAGE	1st coat 3-4m²/kg @ 200-micron film thickness	
COVERAGE	2nd coat 4-5m²/kg @ 200-micron film thickness	
NOTE: The coverage figures given are based on application to a smooth, dense surface. The coverage obtained will vary according to the		

porosity and texture of the surface to which the TRISEAL is being applied. Moisture vapour suppression is maximised when the total coating thickness is 400 micron or over.

PACK SIZE	5kg and 20kg
COLOUR	Red Oxide

Specification

NBS: Clause J30 10, 130, M12, 10, 110 Liquid Applied Damp Proofing / Tanking.

Preparation

Surfaces to be coated must be sound, firm, clean and free from dust, grease, oil, or other contaminants likely to prevent adhesion. Any self-level screed used must be water resistant.

Liquid water should not be present on the surface, which should look dry – moisture within the substrate is acceptable. If there is a risk of moisture rising to the surface under pressure, another form of damp proofing such as a Wykamol cavity drain membrane should be used.

Fill holes or deep hollows with Universal Mortar. New concrete subfloors or sand cement screeds must be left for a minimum of 7 days to cure before applying the coating.

If necessary, lightly shot blast or scarify the floor to remove curing agents, laitance, or other undesirable contaminants. Vacuum clean afterwards to remove dust and debris.

Mixing

Empty the entire contents of the hardener pack (Part 2) into the resin pack (Part 1) ensuring that the container sides and bottom are scraped thoroughly clean.

Using a spatula or (preferably) a mixing paddle fixed into a slow speed drill, mix the two components together for at least two minutes. Scrape down the sides of the container and mix again for another minute. Use the mixed product immediately.

NOTE: In cold conditions (5-10°C) the viscosity of the two components will increase, to reduce viscosity and cure time store the product in a warm environment for at least 6 hours before use.



WYKAMOL

EP Adhesive Tape

Premium elastomeric waterproof membrane for brickwork, concrete and stone









High performance joint and crack sealing system for joint and crack sealing for construction joints, expansion (movement) joints and connection joints or cracks.

The system allows variable and high levels of movement in one or more directions, whilst maintaining a high-quality watertight seal.

Wykamol EP Proflex Adhesive

EP Proflex Adhesive is an epoxy resin-based solvent-free, thixotropic, structural two-part building adhesive and repair mortar.

Designed to give excellent moisture tolerance and water resistance, EP Proflex Adhesive is designed for use at temperatures of 50C and 300C. Specifically developed with a lower mixed viscosity for easier workability at low temperatures and excellent adhesion to damp surfaces, which is usually common within the building industry.

EP Proflex Adhesive bonds well to most building materials including concrete, stone, brick, wood, glass and metal. Due to its excellent adhesion, it can also be used for adhering building materials, including brick slips, onto glass reinforced plastic (GRP) bases.

Uses

- Walls
- Floor junctions
- Construction joints
- Movement joints
- Expansion joints
- Structural joints
- Connection joints.

Available Sizes

Specifications

Total width / Coating width 120 mm /70 mm (additional widths on request) Total thickness approx. 0,66 mm Material weight approx. 38 g/mt min. / max. - 30°C / + 90°C

Length per roll 50 meters

Chemical Properties

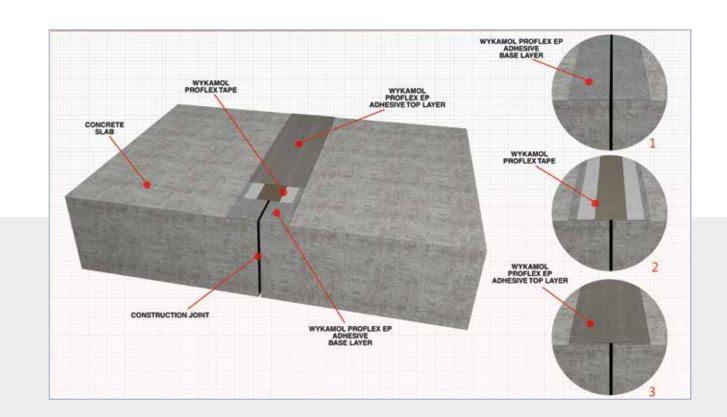
Resistance to temperature

Resistance after storage over 7 days by room + = resistant, 0 = weakened, - = non resistant temperature in following chemicals

Hydrochloric acid 3%	Internal	+
Sulphuric acid 35%	Internal	+
Citric Acid 100g/l	Internal	+
Lactic Acid 5%	Internal	+
Potassium Hydroxide 3%/20%	Internal	+/(
Sodium Hypochlorite 0.3g/l	Internal	+

PHYSICAL PROPERTIES (approx.) DIN Value Burst Pressure: max 3,0 bar Tensile strength longitudinal **DIN EN ISO 527-3** 115 N/20mm **DIN EN ISO 527-3** 46 N/20mm Tensile strength load lateral Tear Resistance Lateral 48 N/mm² EN-ISO 527-2 EN-ISO 527-3 52 N/mm² Tear Resistance Longitudinal Shore ISO 868 70 Shore A Peel Strength DIN 16860 >20 N/10mm Service Temperature SIA V280/3+4 -30°C/+90°C Density 38 gr/mt Maximum elongation longitudinal DIN EN ISO 527-3 %29 **DIN EN ISO 527-3** %139 Maximum elongation lateral Resistance to water pressure DIN EN 1928 (Version B) >1,5 bar DIN EN ISO 4892-2 500 h UV-Resistance: min

ISO 9001 Quality Management ISO 14001 **Environmental Management** ISO 18001 Occupational Health and Safety Management Salt Water 20g/l Sea Water Salt



WATER PROOFING

TYPE B

Structures will generally be reinforced or prestressed concrete.

Type B Waterproofing as defined in BS8102:2022: Type B (structurally integral) protection as defined by BS8102:2022 (Code of practice for Protection of below ground structures against water ingress) where the structure itself is constructed as an integral water resistant shell. Invariably built of reinforced concrete, the basement structure must be designed within certain strict parameters to ensure it is water resistant. When considering and or specifying a Type B integral system, this should only be carried out where there is knowledge and understanding of waterproofing in relation to BS8102:2022: and in the case of concrete structures an understanding and competence in concrete construction. The water tightness of the Type B construction is reliant upon the design and construction of the basement as an integral shell, using a concrete of low permeability, and appropriate joint detailing. Defects can be minimised by correct specification and design and by careful construction.

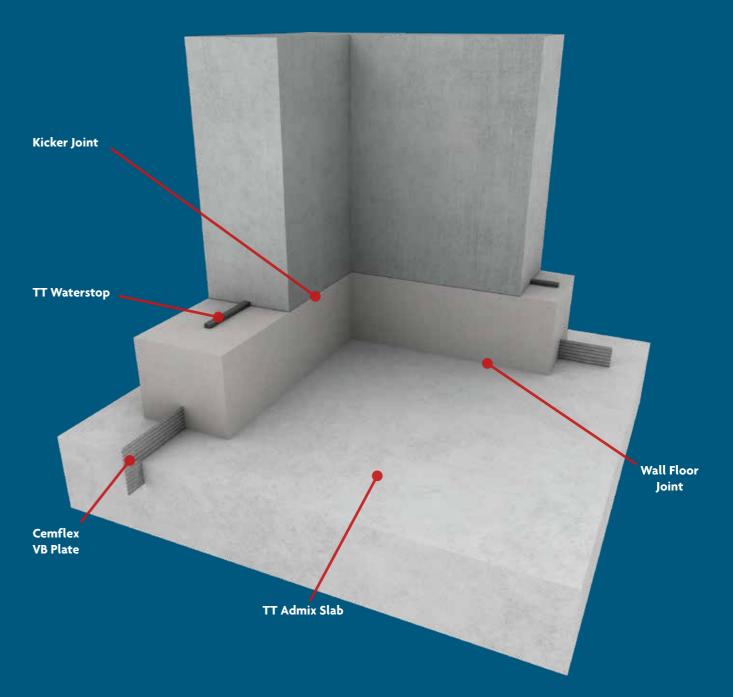
The most common defects are:

- Permeable concrete
- Honeycombing through lack of compaction
- Cracks due to thermal contraction and shrinkage
- Poor and inadequate placement of waterbars, hydrophilic strips and joints.

Construction joints, pour layouts and curing of concrete need particular attention as they are vulnerable areas that are most commonly associated with leaks. While attention needs to be paid to jointing and positioning of water stops, great care is required in the placing and compaction of the concrete. An alternative method of controlling water ingress at construction joints is to use a crystallisation or hydrophilic system which react in the presence of water to seal the joint. The construction

of a 'kicker' after pouring the floor slab should not be encouraged as it is difficult to construct without defects. Therefore kickers should be cast with the slab using appropriate edge formwork but will require careful construction to obtain full compaction. Modern types of formwork and kicker-less construction techniques mean that kickers no longer need be part of the construction process. With a high water table, minor defects in the concrete usually result in only small amounts of water penetrating, and stopping these is usually fairly straightforward. Remedial action may, depending on the form of construction, be carried out from the inside, so avoiding the need for external excavation. Variable water tables present a reduced problem, unless the water table stays high for a long time. In a free-draining site, it is rare for a defect to be so serious that the water comes through by capillary action. Defects are not always identified during construction stage and only become evident after completion. Type B - Structural integral protection - where the structure itself (waterproof reinforced concrete) is the protection.









waterproof
Concrete Admixture

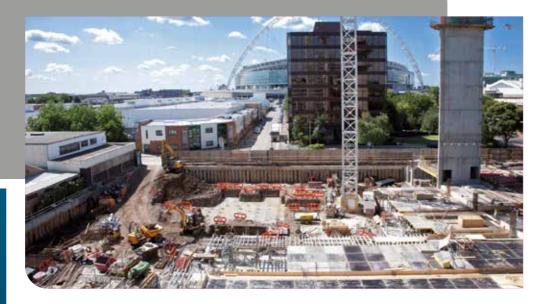


TT Admix is a unique crystaline admixture that reduces the permeability to less than that of standard concrete and improves durability. TT Admix also protects the concrete from aggressive ground conditions.









Packed as a dry powder compound, TT ADMIX consists of Portland cement and various active proprietary chemicals.

The active chemicals react with the moisture in the fresh concrete and the by-products of cement hydration causing a catalytic reaction that generates a non-soluble crystalline formation of dendritic fibres throughout the pores and capillary tracts of the concrete. Thus the concrete itself becomes sealed against the penetration of water or liquid, protecting the concrete from the deterioration effect of harsh environmental conditions.

Features

- BBA accredited
- Withstand extreme hydrostatic pressure (up to 12 bar).
- Reduces permeability of concrete against standard RC concrete.
- Protection of concrete against certain aggressive chemicals including chloride attack to steel reinforcing
- Enhances the protection of concrete and reinforcement against aggressive ground conditions and chemicals such as chloride, sulphates and more.
- Cost effective and adds no delay to building program
- Warranty provided

Directions for use

For waterproofing concrete the recommended addition rate for **TT ADMIX** should be in line with the information given on our BBA certificate. For enhanced chemical resistance or any other requirements, please consult with technical team to determine the addition rate.

TT ADMIX is added to the concrete at the time of batching. The sequence of procedures for addition will vary according to the type of batch plant operation and equipment.

1. Ready Mix Plant - Dry Batch Operation

Add **TT ADMIX** in powder form to the drum of the ready-mix truck. Drive the truck under the batch plant and add 60% - 70% of the required water along with 140kg - 230kg of aggregate. Mix the materials for 2-3 minutes to ensure the **TT ADMIX** is distributed evenly throughout the mix water. Add the balance of materials to the ready-mix truck in accordance with standard batch practices.

2. Ready Mix Plant – Central Mix Operation

Mix **TT ADMIX** with water to form a very thin slurry (e.g. 6kg - 8kg of powder mixed with 10 litres of water). Pour the required amount of material into the drum of the ready-mix truck. The aggregate, cement and water should be batched and mixed in the plant in accordance with standard practices (taking into account the quantity of water that has already been placed in the ready-mix truck). Pour the concrete into the truck and mix for at least 5 minutes to ensure even distribution of the **TT ADMIX** throughout the concrete.

3. Precast Batch Plant - Pan Mixer

Add **TT ADMIX** to the aggregate and sand, then mix thoroughly for 2-3 minutes before adding the cement and water. The total concrete mass should be blended using standard practices. **NOTE**: It is important to obtain a homogeneous mixture of **TT ADMIX** with the concrete. Therefore, do not add dry **TT ADMIX** powder directly to wet concrete as this may cause clumping and thorough dispersion will not occur. For further information regarding the use of **TT ADMIX** for a specific project, consult with a Triton technical representative.

Specification

- Type B Integral Protection in Accordance with BS8102 (2022)
- NBS: Clause J10 120 Cementitious Mortar Tanking / Damp Proofing

Will actively self-heal cracks in concrete within steel reinforcement design codes BS EN 1992-1 and 3. Please consult with a Wykamol technical representative for further information if required.

Curing

Normal practices for placing and curing concrete should be followed as detailed in relevant British Standards and other best practice guidelines.

Technical Services

Technical assistance is available through Wykamol technical department or its field based technical representatives.

Packaging

- TT ADMIX is available in plastic pails each containing 6 x 4.1kg dissolvable bags of product. 1 pallet contains 24 pails (144 x 4.1kg bags).
- Product must be stored dry at a minimum temperature of 7°C.
- Shelf life is one year when stored under proper conditions.

Health & Safety

- TT ADMIX is alkaline.
- Protect hands with rubber gloves.
- Avoid contact with skin and eyes. Should this occur, flush with water. If irritation persists, contact physician.



WATER **Joint Sealing**

TT Waterstop, Swellmax Plus and Swellseal are advanced technology waterbars to seal concrete joints, service penetrations and may more application types in below ground concrete applications.







TT Waterstop (BDA ACCREDITED SYSTEM)

A high performance sodium bentonite and butyl rubber waterstop which is the official waterstop when used in conjunction with TT-Admix Waterproof

TT Waterstop can also be used to seal service penetrations, pre-cast concrete and many of forms of waterproofing. **TT Waterstop** must not be used in movement joint applications.

SWELLMAX PLUS WATERSTOP

A bentonite based water-stop tape which has a unique protection coating that prevents premature swelling of the tape for up to 3 days. SwellMAX Plus Waterstop is designed to prevent water ingress through non-movement joints in reinforced concrete structures.

SWELLSEAL

An extruded rubber compound made from butyl rubber, hydrophilic resin, polyethylene, silicone and special admixtures and used to seal joints on many poured-in-place and below ground pre-cast concrete applications.

SwellSeal produces a water-tight seal when under conditions of confinement as it moulds itself to the surrounding surfaces. On contact with water it is capable of swelling up to 4 times its own volume, even filling gaps which are uneven in size. This means SwellSeal can be used without the need for any highcompression force.

Uses

Suitable for use in both vertical and horizontal joints in pre-cast concrete wall panel systems Shield-driven tunnels such as subways, water supply and sewage systems, tunnels, cable lying etc. Can be used in civil applications as well as residential and commercial buildings for both new and refurbishment projects. Within RC concrete basement construction for slabs, walls and pipe detailing.

Available Sizes

Properties

TT Waterstop Advantages

(used in conjunction with TT Admix)

- Can resist hydrostatic pressure in excess of 6 bar (60m)
- BDA accredited system
- Premature swelling of up to 3 days when open to the elements.
- Non dimensional and swells freely into voids.
- Reproductable swell as after wet / dry cycle.

Swellmax Plus Advantages

- Independently tested for use up to 7 bar water pressure
- Suitable for use in all non-movement construction joints in in-situ reinforced concrete
- Special coating prevents premature swelling for up to 3 days
- Suitable for vertical and horizontal overhead applications • No sticky protection tape to be
- removed prior to use • May be installed using adhesive or a

fixing rail up to 500% swelling capacity

Swellseal Advantages

- Capable of swelling up to four times in volume.
- Can withstand up to 5 bar of hydrostatic pressure.
- Can be used in conjunction with non-expanding rubber.
- Reversible expansion process.
- Easy to install.
- Suitable for vertical and horizontal overhead applications.
- Resistant to animal manure and salt

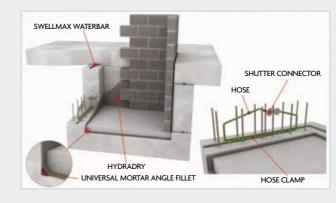


Technical Data	
Colour	Grey
Volume of Swelling	up to 500%
Service Temperature	- 30°C to + 70°C
Resistance	Up to 7 bar water pressure

APPLICATION

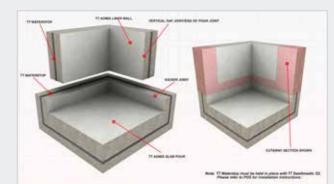
SwellMax Plus and SwellSeal can be installed with either a building adhesive, fitting rails or fitting bars. Note: Only operatives that are fully trained and familiar

with this product should complete it's installation.





Technical Data	
Colour	Grey
Shore A	38
Elongation at Break	490/770%
Tensile Strength	1.1 / 2.1 MPa
Specific Weight	$1.25g/cm^3 = 1.25$
Volume of Swelling	Approximately 400%
Service Temperature	- 30°C to + 70°C
Resistance	Up to 5 bar water pressure



Cemflex Steel Waterbar – the fully weatherproof waterbar

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WYKAMOL WATERPROOFING SOLUTIONS

CEMFLEX VB PLATE

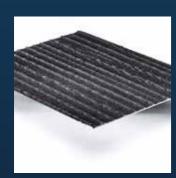
Steel Waterbar



Cemflex VB Plate Steel
Waterbar is a galvanised
steel plate encapsulated
in a special patented
coating that reacts only
with the water within
the concrete to provide
a watertight joint.









Cemflex Steel Waterbar – the fully weatherproof waterbar, suitable for installation in all weather conditions

A key challenge for installers of quality ICF systems, or pre-cast concrete twin wall systems, in below ground basement construction, is forming a good watertight seal between the ICF blocks or twin wall panels and the basement slab. Traditional hydrophilic waterstops have been around for many years and can be used successfully in most applications.

However when the blocks forming the structure are not infilled with concrete for some time and the waterstop is rained on within the open blocks, this will cause it to start swelling prematurely and result in subsequent underperformance in a very critical location.

Attempting to remedy this by the removal of the waterstop is usually impossible due to its location inside the ICF blocks or twin wall panels.

Our solution? Cemflex steel waterbar

Cemflex Steel Waterbar is a galvanised steel plate encapsulated in a special patented coating that reacts only with the water within the concrete to provide a watertight joint. It is designed for use in all non-movement construction joints in reinforced concrete – and is especially suited to ICF or twin wall installations.

Features

- BBA certified (15/5194) to 5 bar water pressure (with a safety factor of 2.5)
- Installed before the concrete is poured by fixing to steel work
- Fully waterproof no need to protect from rain
- Requires only 30mm of concrete cover to function correctly ensures noninterference with the first lower linkage of the ICF block or wall panel
- Suitable for both vertical and horizontal applications
- No sticky protective tape to be removed prior to use
- Quick and easy to install without welding or specialist fitting equipment
- Excellent bond with the concrete
- Crystallisation properties of the patented coating seal cracks adjacent to the waterbar in the concrete

Product Description

CEMflex VB Plate Waterstop consists of a galvanized steel plate encapsulated in a special patented coating which reacts with water to provide a watertight joint, for use in all non-movement construction joints in reinforced concrete. **CEMflexVB Plate Waterstop** is supplied in 2m lengths x 100mm or 150mm wide x 1.25 mm thick.

Note: Please check clearances when using with ICF systems to ensure that there is adequate clearance from the surface of the concrete slab following Cemflex VB Plate embedment, to the top edge of the waterbar in conjunction with the lowest point on the plastic webbing within the ICF block.

- Independently tested for use up to 5 bar water pressure.
- A highly effective water-stop, suitable for use in all non-movement construction joints in in-situ reinforcedconcrete.
- May be installed before the concrete is poured or installed directly into the fresh concrete.
- Requires only 30mm of concrete cover to function correctly.
- Suitable for both Vertical and Horizontal applications.

- No sticky protection tape to be removed from CEMflex VB Plate Waterstop prior to use.
- Offers strength and agility, it is quick and easy to install without welding or special fitting equipment.
- Excellent bond with the concrete.
- The patented coating used on CEMflex VB Plate
 Waterstop has crystallization properties, whichseal any cracks in the concrete.
- May be installed in all weather conditions, it is fully weatherproof.

How does CEMflex VB Plate work:

When fresh concrete is placed around **CEMflex VB Plate Waterstop**, the alkalinity (pHII) of the concrete activates the patented coating producing a chemical reaction, causing the patented coating to soften and expand slightly, improving its osmotic effect. This allows it to penetrate deeply into any cracks in the concrete where it crystallises and seals the concrete.

Once installed, the patented coating on **CEMflex VB Plate Waterstop** has infinite sealing ability. Should water or moisture come into contact with the coating at any time in the future, the coating will re-activate and repeat the sealing process.

Application

CEMflex VB Plate Waterstop is a strong yet pliable element which may be easily shaped for detailing difficult angles. It may be cut to length, using a sharp cutting tool.

CEMflex VB Plate Waterstop should be installed ensuring that at least 30mm if the plate is embedded into the first pour of concrete, allowing the remainder of the plate to be covered by the next pour of concrete. The overlapping of the plate must be a minimum of 150mm and it is held together using **CEMflex Omega Holders.**





CEMflex VB Plate Waterstop

may be installed by fixing it to the reinforcement using the **CEMflex Omega Holders** (as per figures 1 & 2) prior to pouring the concrete or alternatively **CEMflex VB Plate** can be pressed into the wet concrete just after pouring.

CEMFLEX INSTALLED PRIOR TO THE PLACEMENT OF THE CONCRETE

WYKAMOL

TT SWELL MASTIC S2 Hydrophilic **Waterstop**

& Adhesive

Hydrophilic Waterstop and Adhesive, a grey, elastomeric, waterswellable paste which is applied like a sealant.









The hydrophilic properties of TT Swellmastic S2 display good consistency in swell rate during repeated wet/dry cycling. Expansion of the product on contact with water creates a positive pressure against the faces of the concrete joint, thus preventing the passage of water.

Uses

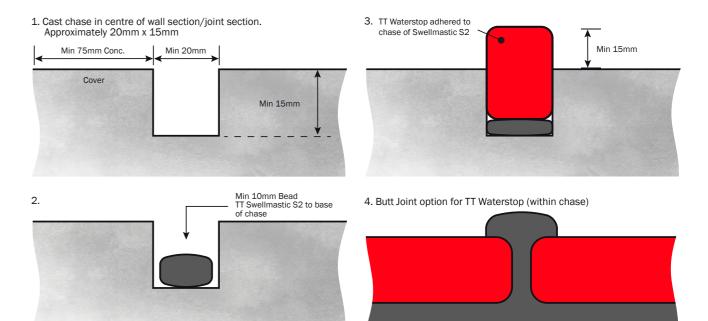
Used as an adhesive for bonding waterbars and **TT Waterstop** or as a problemsolving hydrophilic waterstop in difficult areas including:

- Sealing around joints in precast manhole covers, cable ducts and pipes etc
- Sealing around precast segments
- Sealing between rough surfaces eg slurry walls and concrete slabs
- Sealing around H-beams and other penetrations through concrete structures
- Sealing around conventional rubber and plastic waterstops to provide 'belt and braces' seal prior to concrete pour

Features

- Fast curing: Enables early concete pour and rapid return to service. Allows hand-applied concrete cover within 2 hours on emergency repairs and large-scale concrete pour after 8 hours
- Excellent seal on rough concrete: Gives improved water tightness. Plugs inequalities in rough concrete to produce a tight seal
- Excellent adhesion: Quick and easy to apply to a variety of uneven joint surfaces remaining firmly in place during concrete pour
- Water swellable: Expands by 200% producing a watertight compression seal
- Durable: Excellent wet/dry cycling retaining elastomeric character and swelling performance due to high tolerance of the cementitious environment

Product Data	Component A
Colour	Grey
Packaging	Supplied in boxes of 10 x 600ml sausage packs
Storage Conditions / Shelf-Life	Shelf life of 9 months if kept in a dry store at 10-20°C in original unopened packaging. If stored at high temperatures and/or high humidity, the shelf life may be significantly reduced.
Curing Rate	3mm in 24 hours
Swell Ratio:	200%
Shore A Hardness	10 – 15
Tack-free time:	Approximately 1 hour (at 20°C / 50% RH)
Concrete pour	Allow between $2-8$ hours (see application instructions)
	*



Application

Preparation:

Remove all obvious loose debris and soil, moss and organic growth from the substrate. TT Swellmastic S2 can be applied to damp concrete but always ensure the surface is free from running water and brush away any standing or seeping water. Divert running channels away from the area before application.

Application:

Cut conical tip off cartridge end-thread, screw on nozzle and cut to required size. Place TT Swellmastic S2 into sealant or barrel gun capable of holding a 600mm foil sausage and apply like a conventional sealant. Extrude a bead of not less than 12mm diameter onto the substrate, ensuring there is no break in the bead. Apply a 12-15 mm bead when using as an adhesive.

Return to Service:

After application, allow 30 minutes before re-establishing any running channels. A minimum of 2 hours (depending upon ambient temperature conditions) should be allowed before applying hand-placed concrete and 8 hours is recommended for large concrete pours where there is no guarantee that concrete will not be poured directly onto the seal. TT Swellmastic S2 should be protected from heavy railfall whilst curing to prevent premature expansion.

TT SEALING STRAP **Sealing Solution**

One-step seals for service penetrations and pipe conduits. Water swellable strip seal specially designed to waterproof plastic pipes through concrete constructions.

Avoid the following ineffective installations









The Sealing Strap is designed to offer a more effective, quick and secure sealing solution than mastic or a length of water bar – both of which can be dislodged during the concrete pour.

A key Designed to provide a secure seal around pipes installed through concrete floors or walls, the Sealing Strap should be fixed around the pipes before the steel reinforcements are put in place. Easy to fit and tighten using the mechanical fastener, the straps can be used to seal around all pipes between 110-125mm

Size: To fit pipes between 110mm to 125mm **Supplied:** As single units













tools needed

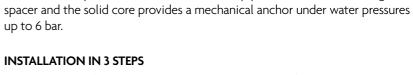


Fast & easy installation

TT SEALING **PLUG Sealing Solution**

Water-swellable plug for a perfect seal of formwork spacers





The Sealing Plug is designed to offer a more effective, quick and secure sealing

solution than mastic or a length of water bar - both of which can be dislodged

The 22mm standard sized plugs are simply hammered in either or both ends of

the formwork spacer. The swellable rubber cap prevents water infiltrating the



during the concrete pour.



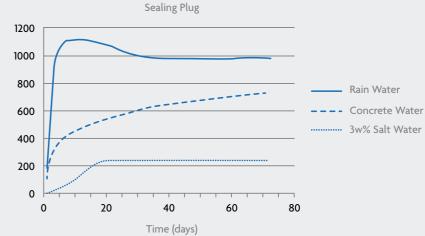


Position the Sealing Plug in the formwork spacer

Hammer the Sealing Plug into the formwork spacer

No additional finishing or after-treatment required





110

A hydrophilic ring made from synthetic, waterswellable rubber that fits securely around the exterior of the formwork spacer and presents water infiltrating through cracks in the surrounding concrete.







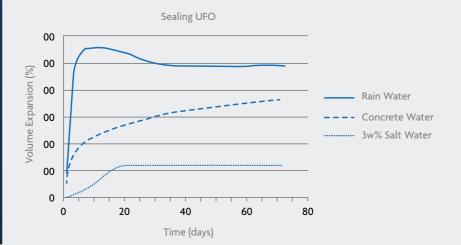


The Sealing UFO is designed to offer a more effective, quick and secure sealing solution than mastic or a length of water bar – both of which can be dislodged during the concrete pour.

A hydrophilic ring made from synthetic, water-swellable rubber that fits securely around the formwork spacer and prevents water infiltrating through cracks in the surrounding concrete.

The water swellable sealing products are based on the unique Active Sealing technology. Our products expand on contact with water. This is how they create an active seal to combat moisture infiltration. The products are self-correcting and thus also sealing the unevenness and imperfections of the concrete.

Size	24mm	Supplied in	Bags of 100





	PRODUCT NAME Ø inner diameter	PRODUCT CODE	COLOR	QUANTITY/BAG	QUANTITY/BOX	QUANTITY/PALET
0	SEALING RING 20x2 mm	T684.A000.ZI01	BLUE	200	5.000	90.000
0	SEALING RING 24 mm	T683.A000.ZI01	BLUE	100	2.500	45.000
0	SEALING UFO 12 mm	T699.A000.ZI01	BLUE	100	1.000	18.000
0	SEALING UFO 17 mm	T695.B000.ZI01	BLUE	100	700	12.600
0	SEALING UFO 24 mm	T695.A000.ZI01	BLUE	100	700	12.600
0	SEALING UFO 31 mm	T720.A000.ZI01	BLUE	50	500	9.000
0	SEALING UFO 39 mm	T720.B000.ZI02	BLUE	50	500	9.000

The Sealing UFO is available in different sizes and can be customized to your specific formwork.

	PRODUCT NAME ∅ inner diameter	PRODUCT CODE	COLOR	QUANTITY/ BAG	QUANTITY/ BOX	QUANTITY/ PALET	Tie-rod connectors in combination with :
	SEALING CONNECTOR 15 mm	T713.A000.ZE01	BLUE	50	500	9.000	SEALING UFO 24 mm
	SEALING CONNECTOR 20 mm	T721.C000.ZE01	BLUE	50	500	9.000	SEALING UFO 31 mm
国 编	SEALING CONNECTOR 23 mm	T721.A000.ZE01	BLUE	50	500	9.000	SEALING UFO 31 mm
套差	SEALING CONNECTOR 26 mm	T721.B000.ZE01	BLUE	50	500	9.000	SEALING UFO 39 mm
1	SEALING CONNECTOR 30 mm	T721.D000.ZE01	BLUE	50	500	9.000	SEALING UFO 39 mm

The Sealing Connector is slid over the tie rod and anchored with the Sealing UFO or the Sealing Ring.

FUNCTIONING SEALING CONNECTOR WITH UFO





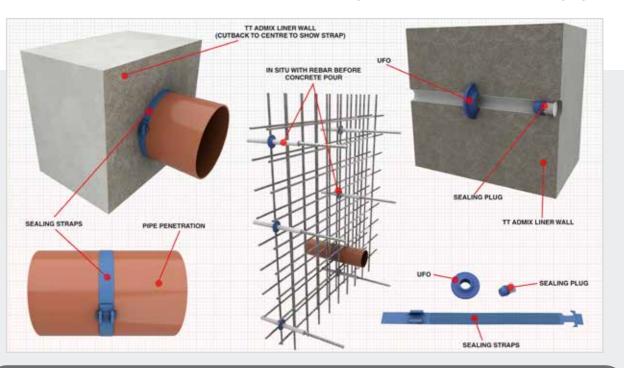








WITH SEALING RING





WATER STOP

Plugging and **Repair Mortar**

Water Stop is a fast setting, expanding water stop plugging and repair mortar.







When mixed with clean water and applied correctly it is formulated for the rapid patching and plugging of active water leaks and seepagage in concrete and masonry.

Water Stop is designed to expand as it sets to ensure a permanent water tight seal is acheived and in a cured form displays similar properties to concrete

Advantages

- Instantly stops leaks in concrete and masonry tanking slurry waterproof system
- Provides a permanent watertight seal
- Fast setting and rapid curing
- Superior bond strength to concrete and masonry resists positive and negative water pressure
- Suitable for internal and external use
- Safe to use in contact with potable water suitable for use above and below
- Resists positive and negative water pressure

Uses

Use to stop active water leaks or seepage under pressure through holes, joints and cracks in concrete or masonry walls, swimming pools, water storage facilities, tunnels, fountains, cisterns, water channels, ponds pipes, basements, foundations

Available Sizes

Pack Size: 5Kg Containing

Application

No priming is required but for dry repair applications, make sure the surface is Surface Saturated Dry (SSD).

To stop surface leaks or seepage not under pressure:

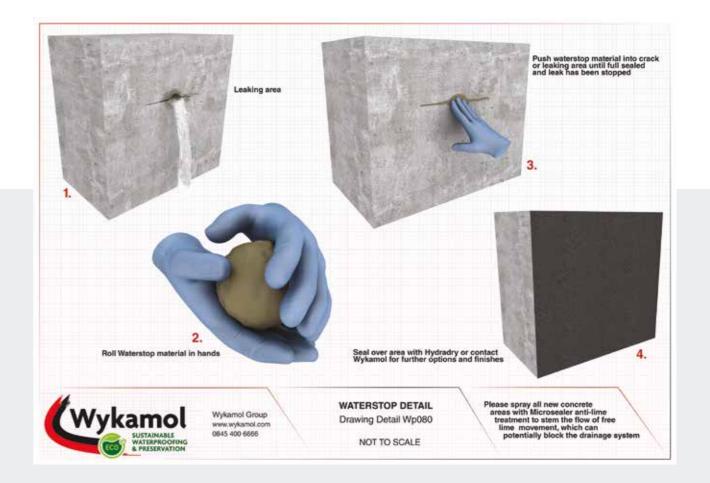
- 1. Starting at the top of the hole or crack, work your way down. Trowel apply or hand kneed the mixed mortar firmly into place, ensuring maximum contact with the substrate before the material sets.
- 2. Remove any excess material to form a uniform surface.

To stop leaks under pressure or under water:

- 1. Starting at the top of the hole or crack, work your way down. Trowel apply or hand kneed the mixed mortar firmly into place, ensuring maximum contact with the substrate before the material sets.
- 2. Maintain constant pressure on the applied material until final set has been acheived.
- 3. Remove any excess material to form a uniform surface.

Conditions & Limitations

- Low temperature working: Water Stop can be used in cold conditions down to 1°C.
- It is advised to use warm water. 20°C to accelerate strength development.
- The material should not be applied when substrate and /or ambient air temperature is less than 1°C.
- Set and cure times will be increased at low temperatures.
- Hot temperature working: When using Water Stop in temperatures above 35 °C, the material should be stored in the shade and it is advised to use cooler water, 20°C.
- Set and cure times will be reduced in hot temperatures.



Wykamol Training CPD Seminars

TRAINING

Our know-how guarantees to meet all your needs, for well over 80 years the Wykamol name has been synonymous as market leader in the field of property renovation and repair.

Our product range has evolved and grown to become the broadest range of property repair and renovation solutions under one umbrella anywhere in the UK.

RIBA Approved waterproofing and ground gas control cpd

This RIBA Approved CPD Seminar covers the grades of waterproofing that are required, the waterproofing systems available and the relevant standards and regulations that must be adhered to when designing a waterproofing system. As we offer a free design service, this CPD is useful for architects, surveyors and developers who need to provide waterproofing solutions that comply with the various regulations, and it is essential to be aware of said regulations.

We offer a choice of arranging the seminar at your own premises or at our offices in Burnley, Lancashire. These CPD seminars can be tailored to your exact needs to ensure we cover, in detail, the areas of most interest to your company.

- Requirements of BS8102:2022
- Cementitious systems
- Cavity drain membranes
- External membranes
- Why systems fail

- Radon and other gases
- Documents and standards
- Case studies
- Waterproof Concrete





Structural Waterproofing Contractor's Training Course

This theory based training course offers an introduction to the Structural Waterproofing Industry, allowing you to begin expanding your knowledge, services and customer base after just one day.

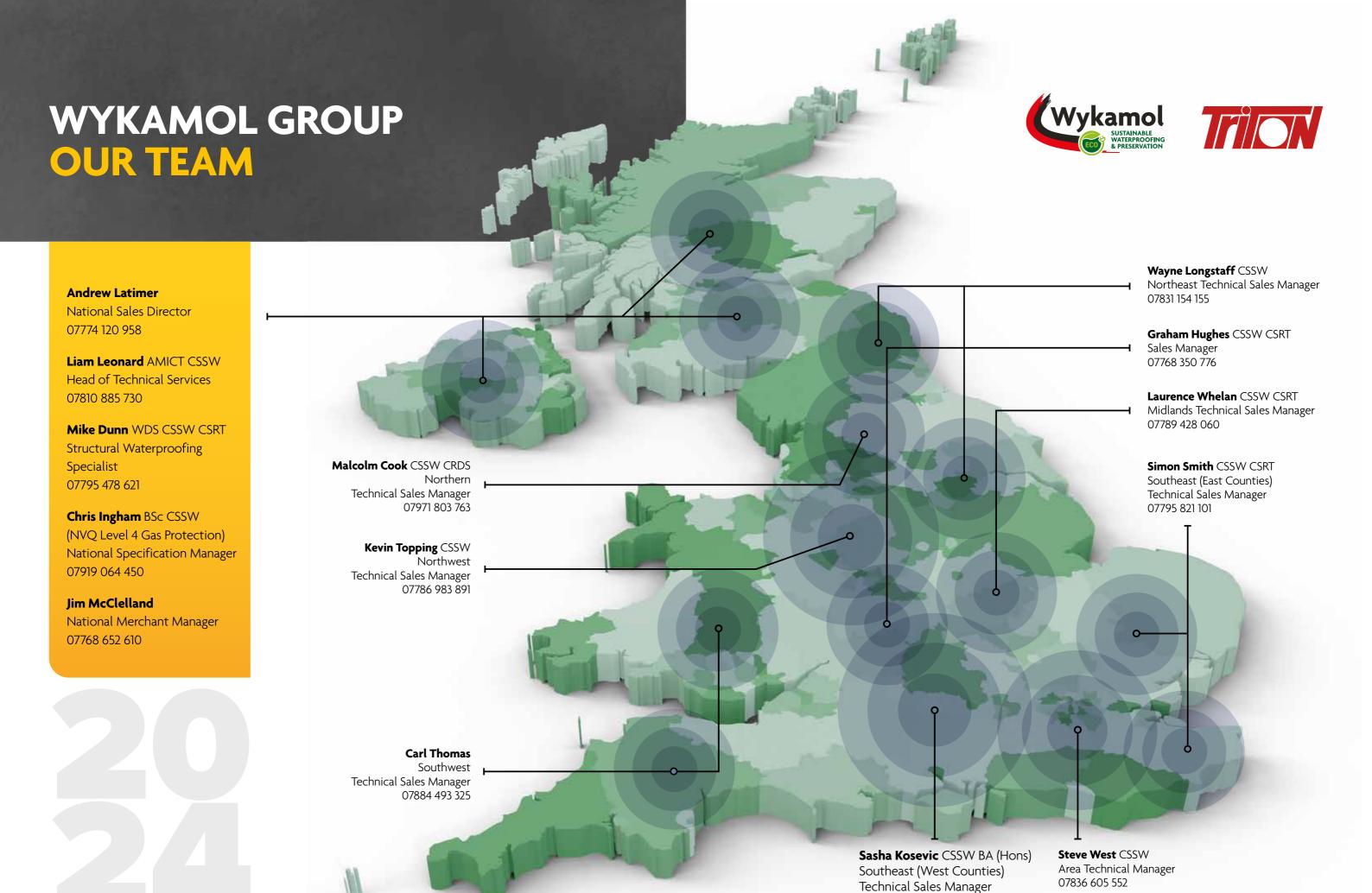
This course is the first step to becoming a Wykamol Structural Waterproofing Registered Installer.

After completing this training your Area Technical Manager will attend site at a mutually convenient time, and conduct any necessary practical demonstrations.

3 completed projects must then be inspected and signed off by your Technical Manager, to ensure the contractor can maintain a consistently high level of installation using our products.

N.B. The Wykamol Group do not guarantee the work of a Registered Installer. Any guarantees issued through the Wykamol Group outline that we take responsibility for the functionality of our products, and any work completed is the sole responsibility of the contractor. For further information please feel free to contact Head Office.

- Make Informed Product Selections for your projects
- Cover a Range of Installation Methods
- British Standard BS8102:2022 and NHBC Chapter 5.4
- Waterproofing Types A, B and C
- An Introduction to Basement Waterproofing Design Skills
- Essential CSSW Preparation
- Become a Member of QANW and Issue Insurance Backed Guarantees
- Gain Unlimited Access to Some of the Best Technical Advice in the Country.



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The Ultimate Waterproofing and Gas Protection Guide

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