

Part of the **DBGroup** 

# REVOLUTIONARY WATERPROOFING SOLUTIONS SPECIALLY DEVELOPED DOWN TO THE LAST DROP







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# THE PUDLO STORY

PUDLO has been at the forefront of structural waterproofing for over 140 years, with projects including the Royal Albert Hall and Dubai Fountains. It all began with our world famous PUDLO concrete additive but our waterproofing range has since broadened into a comprehensive choice of solutions, including waterproof and ground gas protection and cavity drain systems, covering Types A, B & C.

Our range of products is supported by our industry leading service offering, from design, site assistance, through to our sought after and unique range of warranties. All of which is facilitated by our waterproofing and ground gas protection specialists.

PUDLO is part of DB Group, a pioneer in the construction industry. DB Group manufactures and installs sustainable and innovative products with expertise, professionalism and complete reassurance. Working with our partner brands, including Cemfree, an ultra-low carbon alternative for cement and MPS Concrete Solutions, we provide a range of specialist solutions that meet your toughest challenges based on decades of experience



# THE PUDLO TEAM

By working with PUDLO you are provided access to our teams of specialists, each working with you and your project team through the life of your project from design through to completion.

Before your project has even started, our teams are on-hand to help support, design and develop your waterproofing and/ or ground gas protection strategies no matter the size or complexities of the project.

Our technical team have years of experience within the construction industry, working on some of the most prestigious and complex projects, so you can relax in the knowledge that you're in safe hands.

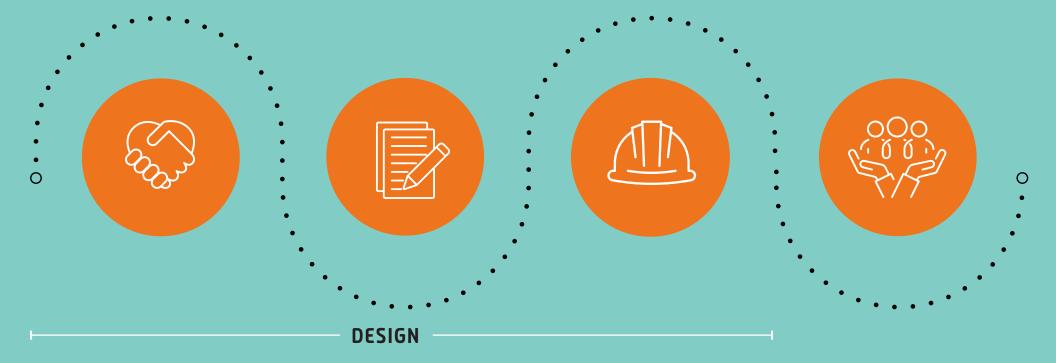
Our renowned site support team ensure the waterproofing and/or ground gas protection designs on your project are successfully realised with a robust QA system. Our team attend in person to PUDLO waterproof concrete pours and

offer guidance wherever it's needed, leading to an industry-leading performance warranty at the end of your project.

Our teams are also TechICT and CSSW accredited in addition to their own unique construction related professional qualifications.



# THE PUDLO PROCESS



# APPOINTMENT OF PUDLO + DRAWING & DESIGN

Work with us as your specialist waterproofing and/or ground gas protection designers, as part of your design team. Upon appointing us you will have access to technical, site, and commercial teams, ensuring continuity from design through to completion. Our technical team providing the necessary design inputs required for a successful project.

#### **WORK WITH CONTRACTORS**

We work closely with the main contractor to help coordinate and facilitate the transition from design through to implementation on site. Be it to continue to develop designs or provide access to PUDLO approved contractors, we insist on helping deliver a successful project. This includes our on-site QA.

### ON-SITE QA

Our renowned site team will provide support on-site for each pour, offering invaluable advice and guidance. They will oversee each stage from pre-start meetings to the end of the project.

**DELIVERY** 

# PROJECT HANDOVER & WARRANTY

Once the full extent of the waterproofing is complete, we will conduct a final review of our QA and carry out a final inspection. This ensures we are adopting a watertight structure under the performance warranty before we issue the warranty to the customer.



## THE PUDLO RANGE



# TYPE A: BARRIER PROTECTION SYSTEMS

Commonly referred to as membranes (sheet, liquid, etc.). If you need to provide a barrier to supplement your masonry and concrete's resistance to water ingress, then you are going to need Type A Waterproofing.



# TYPE B: STRUCTURAL INTEGRAL WATERPROOFING

Typically referred to as admixtures, or additives. When incorporating waterproofing into the earliest stages of your design, look for a Type B system. Here, the structure provides its own integral water-resistant protection.



# TYPE C: DRAINED PROTECTION

Type C systems manage water coming into the structure. Water entering the structure is channelled, collected and exits via a specially designed cavity drain system.



# GROUND GAS PROTECTION

Vital to your project's success is protection from ground gases. There are several types of hazardous gases and ways in which we can protect your structures from them.

# TYPE A: BARRIER PROTECTION SYSTEMS

Commonly referred to as membranes, Type A systems provide a barrier to supplement masonry and concrete's resistance to water ingress.

Protecting your structure from water ingress, especially in areas with a high or variable water table, calls for the right barrier and the right expertise.

This form of waterproofing excels in various applications, including:

- New build basements
- Renovated/existing basements
- Cellars and vaults
- Underground car parks
- Swimming pools
- Storage, utility and plant rooms
- Lift pits
- Tunnels
- Reservoirs
- Waste transfer stations



# THE PATERSON BUILDING, MANCHESTER

Two lines of waterproofing defence were used to protect the 2025m² basement including 2000m³ of PUDLO CWP 2.5 and 6500m² of PUDLO BW

Membrane.





- PUDLO Render Seal 2C
- PUDLO Liquid Tank
- PUDLO PremDeck



- PUDLO GP Ultra+
- PUDLO Liquid GB
- PUDLO GP Ultra Seal
- PUDLO GB Self Seal



#### SHEET **APPLIED**

- PUDLO GP Ultra +
- PUDLO Membrane BW
- PUDLO TF

- PUDLO Self Seal
- PUDLO GB Self Seal



- PUDLO GB Reinforced
- PUDLO Ultra Tank

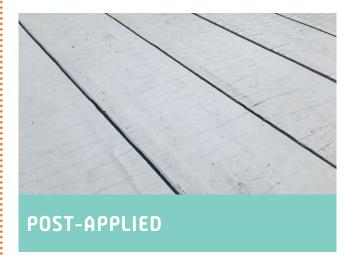


#### PRE-APPLIED

- PUDLO Membrane BW
- PUDLO GP Ultra +

• PUDLO TF

• PUDLO Rawmat



- PUDLO Self Seal
- PUDLO GP Ultra Seal
- PUDLO GB Self Seal
- PUDLO Render Seal 2C

#### **VISIT OUR WEBSITE FOR THE FULL RANGE OF PUDLO TYPE A PRODUCTS**

# THE TRIPLETS, KINGS CROSS

PUDLO was involved from the design stages and remained on-site throughout, providing guidance for the podium deck, basement car park and lift pits, all poured using a total of 4754 m<sup>3</sup>.

# TYPE B: STRUCTURAL INTEGRAL WATERPROOFING

Typically referred to as watertight admixtures or additives. When incorporating waterproofing into the earliest stages of your design, look for a Type B system. Here, the structure provides its own integral water-resistant protection.

That means it's vital to work with the right waterproofing experts to secure your project with the optimum barrier against water ingress.



These systems comply with the British Standards Institute (BSI) code BS 8102:2022, ensuring a successful project with at least Grade 2 waterproofing. The result is a secure, compliant build for any concrete structure expected to resist water under pressure, including:

- Below ground structures
- Podium decks and green roofs
- Car parks
- Retaining walls
- Swimming pools including suspended pools
- Lift pits
- Tunnels
- Waste transfer stations
- Vaults







PUDLO CWP 2.5 is a hydrophobic, pore-blocking admixture. A dual-purpose, multi-component powdered admixture comprising a powerful single dosage pack providing outstanding long-term durability and waterproofing properties to all concrete mixes.

#### **BENEFITS**

- Can be used as a single system waterproofing system
- Suitable for use with all CEM1 mixes (100% OPC) and cement replacement mix designs using GGBS, PFA and Microsilica as well as Cemfree mixes
- Provides permanent significant reduction in permeability, reduction in carbonation of concrete, increases long-term durability
- Suitable for use with all structural concrete mixes including ready-mix, precast and spray applied application
- Increases ultimate compressive and tensile strengths without increasing the cement's content
- Reduces bleed, segregation, efflorescence and staining



Concrete is batched by a ready-mix supplier (must be QSRMC / BSI accredited) and delivered to site in standard ready-mix lorries to the Designer's criteria as specified within BS EN 8500. A concrete pump is used to transfer the concrete via a hose or pipeline to the work area. Concrete is then discharged through a nozzle at the end of the line as high-pressure air is then introduced at this point to propel the concrete into position.

Spray applied concrete is then compacted on its own. All sprayed concrete is then placed in accordance with BS EN 14487. The sprayed Concrete Contractor should be a member of the Sprayed Concrete Association as well as holding the requisite nozzleman certification. Contact us for more information.

Image credit: Gunite and Shotcrete Services Limited

# TYPE C: DRAINED PROTECTION

To manage water coming into your structure, look for a Type C waterproofing system. Water entering the structure is channelled, collected, and exits via a specially designed cavity drain membrane to ensure protection from water damage in line with the British Standards Institute (BSI) code BS 8102:2022.

All cavity drain systems should be easily accessed and maintained. PUDLO can assist with this through our complementary range of cavity drain accessories.

NBS

Often used as a retrofit option, Type C systems typically apply to projects like:

- New basements
- Converted basements and cellars
- Car parks
- Utility rooms
- Garages
- Sloping sites with retaining walls
- Rail arches
- Vaulted cellars
- Listed buildings
- Damp-proofing



#### **CAUITY DRAIN**

- PUDLO CD08
- PUDLO CD20

• PUDLO Geo-Flo



# PROJECT GEORGE, REGENT STREET, LONDON

140m² of our Cavity Drain System was installed each day alongside our PUDLO Render Seal to help protect the store without excavating or losing valuable surface area as well as saving both time and money on the project.

## **GROUND GAS PROTECTION**

#### Just as vital as waterproofing to your project's success is protection from ground gases:

There are several types of hazardous gases and ways in which we can protect your structures from them. When considering the appropriate ground gas protection of a project, always use membranes as a first defence.

Certain gas types require certain membranes and BS 8485:2015 details a comprehensive points system that denotes the level of gas protection required onsite.

There is a choice of PUDLO membranes that can be installed to protect your structure from ground gas, contributing to the BS 8485:2015 points system, allowing PUDLO to provide a complete gas solution for your project.

PUDLO backs up our extensive waterproofing offering with ground gas barrier solutions to ensure a safe, compliant construction project in even the most challenging circumstances.



#### **FULHAM GAS WORKS**

A consultation was carried out by PUDLO on the residential development with a large double basement. A dual gas and waterproofing system was provided including our PUDLO GP Ultra +, GP Ultra Seal and PUDLO CWP 2.5 plus accessories.



- PUDI O GP Ultra +
- PUDLO GP Liquid
- PUDI O GP Ultra Tank
- PUDI O Ultra Seal
- PUDLO GB Reinforced

# WATERPROOFING WARRANTIES

At PUDLO Waterproof Systems we offer a wide range of warranties that provide assurance to the whole project team. Over the last 40 years, we have led the way with waterproof performance warranties for our PUDLO CWP system and are now pleased to expand this across our complete range.



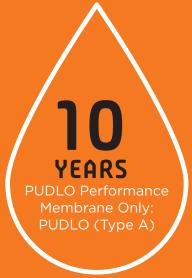
Product(20yrs) On-site QA

Specialist Installer (Type C only)

20 YEARS PUDLO Performance: PUDLO CWP (Type B)

Product (20yrs) On-site QA

Specialist Installer (Type C only)



Performance
Product (20yrs)
On-site QA

Specialist Installer (Type C only)



Performance



Product (20yrs)



On-site QA



Specialist Installer





PUDLO's products are designed and manufactured to last for the life of the structure. An exception to this, due to the mechanical nature of the products, the PUDLO CD Pump and PUDLO CD Pump Pro hold a 12 month product guarantee only. Where pumps are used with a cavity drain system it is PUDLO's recommendation that a suitable maintenance contract is entered into with a 3rd party. PUDLO can provide details of such companies on request. Note: all our products are designed and manufactured to last the design life of the structure. On Membrane Only Performance Warranties, the offering is limited to specific products.



<sup>\*</sup>Applied to selected membranes only. Please consult a member of the PUDLO team for more information.

<sup>\*\*</sup> Installation warranty provided by a specialist installer and Edincare cavity drain maintenance mandatory and taken out by the client. In the event this is not taken up or service cancelled, PUDLO warranty is null and void.





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