



# STRUCTURAL WATERPROOFING: SOLUTIONS GUIDE



# MAKING THE WORLD A BETTER HOME



At Saint-Gobain, our vision is to be the worldwide leader in light and sustainable construction. We design, manufacture and distribute materials and solutions for the construction, mobility and industrial markets. Within this, **Saint-Gobain Construction Chemicals** brings together specialist brands that support stronger, more durable and lower-carbon construction — from concrete production and performance to waterproofing, repair and protection.



**Chryso** is our concrete technology brand, providing cement additives, concrete admixtures and digital solutions that help enable lower-carbon, higher-performance concrete. Through Verifi and Maturix, we support concrete transport optimisation, quality control and real-time performance monitoring.



**GCP** is our structural waterproofing and gas protection brand, supported by the RIW and Stirling Lloyd ranges. Together, they provide sheet membranes, liquid-applied systems, tanking, damp-proofing and specialist protection solutions for below-ground structures, podium decks, roofs, terraces, basements and other critical waterproofing applications.



**Fosroc** is our concrete repair, protection and waterproofing brand, with a long-established reputation in infrastructure and commercial construction. Its portfolio supports the durability, resilience and service life of concrete structures through repair mortars, grouts, coatings, sealants and protective systems.

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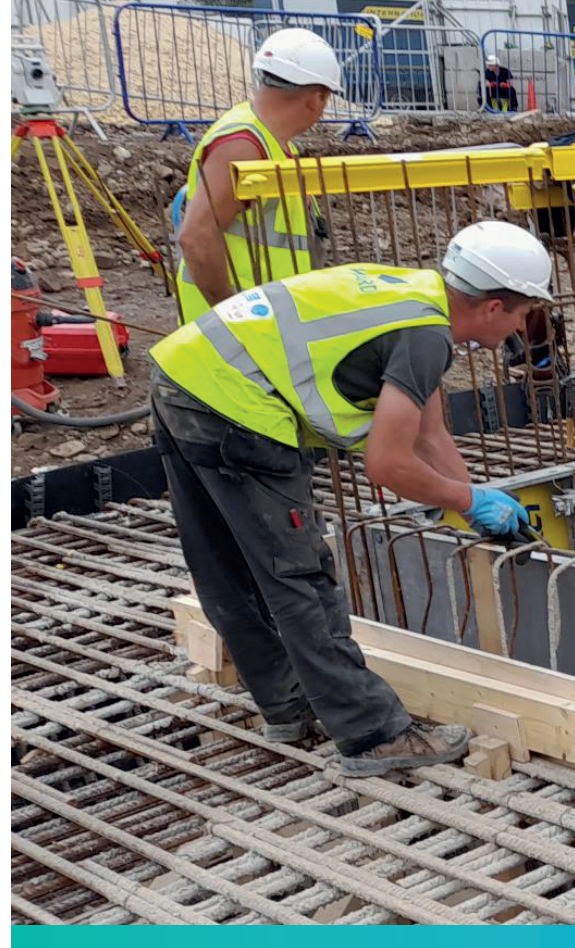
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# FROM CONCEPT TO COMPLETION

## Expert support at every stage

Below-ground waterproofing and ground-gas protection are high-consequence design areas. Getting the strategy, details and responsibilities right from the outset helps reduce risk, avoid delays and support long-term performance.

Our team supports you from early concept and specification through to installation, handover and aftercare — bringing together design support, system selection, detailing, product supply and site support as one coordinated process.



# 1

### Concept & Specification

Set the strategy early

We help project teams assess risk, define requirements and select suitable systems from the outset.

- Guidance on system selection and suitability
- Advice aligned to project-specific challenges and environments
- NBS specifications and BIM-ready information
- £10m professional indemnity backed design service

# 2

### Design Development & Pre-Construction

Refine the detail.  
Reduce the risk.

As designs develop, we help ensure every detail works in practice, not just on paper.

- Technical input and system recommendations
- Compliance checks against relevant standards and certifications
- Coordination with contractors, designers and project stakeholders
- Identification of interface risks before work begins
- Practical detailing to reduce ambiguity and improve buildability

# 3

### On-Site Support & Installation

Keep your project moving

Our practical support helps installation stay aligned with the agreed strategy, details and specification.

- On-site technical guidance and troubleshooting
- Toolbox talks and installation support
- Best-practice advice for installation and application
- Inspections at critical stages to support quality and consistency
- 48-hour site support promise



### Completion & Aftercare

Performance that lasts

Our support does not stop at handover. We help ensure the system is documented, understood and supported for long-term performance.

- Guidance on system performance and maintenance
- Ongoing access to technical expertise
- Support with handover documentation
- Single source warranty across all specified GCP, Fosroc, RIW & Stirling Lloyd solutions

### Accreditations, certifications and technical evidence

Our waterproofing and gas-protection offer is supported by standards, certifications, specification tools and technical documentation, including:

- ISO 9001 / 14001 / 45001 management systems
- PAS 2080
- BBA certification where applicable
- CE / UKCA marking where required
- EPDs where available
- NBS Source specification data
- CAD drawings and BIM models

*Note: certification, approvals and documentation vary by brand/product/system.*

**COMPLIANT.  
CONSTRUCTABLE.  
BACKED BY  
EXPERTISE.**



**ONE PARTNER. EVERY STAGE. TOTAL CONFIDENCE.**

# 360°<sup>©</sup>

## DESIGN ADVANTAGE PLUS

Our 360° Design Advantage Plus provides a fully integrated approach to waterproofing and construction solutions, combining technical expertise, certified systems and end-to-end project support.



1

**COMPLETE WATERPROOFING SOLUTION**

A single-source solution for Type A, B and C waterproofing.

Combining the heritage and innovation of GCP, the global strength of Fosroc, and over 100 years of expertise from RIW.

Supported by in-house manufacturing, testing and global R&D.

6

**TRAINED INSTALLER NETWORK**

Access to a network of trained and approved applicators.

Ensuring systems are installed correctly and perform as designed.

2

**RESPONSIVE TECHNICAL EXPERTISE**

A dedicated technical advisory service providing fast, reliable design guidance and problem solving. One point of contact. Clear answers. When you need them.

5

**END-TO-END PROJECT SUPPORT**

From early-stage design through to installation, with ongoing site support including rapid 48-hour site support.

Supporting every stage of the project lifecycle.

3

**PROFESSIONAL INDEMNITY DESIGN SUPPORT**

£10m Professional Indemnity cover supporting projects of all sizes and complexity.

4

**SIMPLE, COMPLETE SINGLE-SOURCE WARRANTY**

A single warranty across all specified Fosroc, GCP, RIW and Stirling Lloyd products.

# WATERPROOFING FOR A CHANGING WORLD

Across the UK & Ireland, development is becoming denser, taller and increasingly below ground where urban land is constrained.

Basements, podium decks, underground car parks and service infrastructure are common features of modern construction. They place greater demands on waterproofing and, on gas-risk sites, ground-gas protection. Failure can be costly, disruptive and difficult to remediate.

## Climate Pressure & Increasing Risk

The operating environment for below-ground structures is changing. More frequent intense rainfall is increasing surface water, or pluvial, flood risk, recognised in BS 8102:2022.

Combined with groundwater variability, drainage constraints and ground-gas risk, structures must manage water ingress, rainfall, gas resistance, penetrations and interfaces as one coordinated strategy. This requires a shift from minimum compliance towards resilient protection.

## Raising the Standards: BS 8102 & BS 8485

BS 8102 was updated in 2022 to reflect evolving risks and industry learning around below-ground structures. Its expanded scope recognises that projects may be exposed to groundwater, flooding, ground gases and wider environmental factors, requiring early risk assessment and coordinated design.

The standard places greater emphasis on performance grades, defined responsibilities, early specialist involvement, combined protection and risk-based design.

Where ground-gas risk is identified, BS 8485:2015+A1:2019 provides the framework for gas protective measures, including membranes, structural barriers, ventilation and validation. This matters where waterproofing and gas protection meet at laps, joints, penetrations, service entries and changes in level.

Together, BS 8102 and BS 8485 reinforce the need to consider waterproofing and gas resistance at design stage, not as separate downstream installation decisions.

## Delivering Compliance in a More Regulated Environment

The Building Safety Act has increased design and construction scrutiny. Golden Thread and Gateway 2 requirements demand clear, verifiable design intent before work begins.

For below-ground waterproofing and ground-gas protection, project teams must demonstrate:

- A compliant, traceable protection strategy
- Aligned specification, detailing, performance and installation
- Clear accountability, inspection evidence and validation

Technical support, system integration and documentation aligned to BS 8102, BS 8485 and Gateway requirements are critical to keeping projects moving and compliant.

## Competence in Waterproofing Design (CSSW)

The complexity of below-ground waterproofing, combined protection and regulation places greater emphasis on competence. A suitably qualified waterproofing designer, such as a Certified Surveyor in Structural Waterproofing, is critical to a robust, compliant and risk-managed solution.

We provide access to qualified waterproofing experts to help project teams develop coordinated, practical and compliant design outcomes.

# SOLUTIONS FOR BELOW-GROUND WATERPROOFING

## Basements, Foundations & Retaining Structures

Below-ground structures demand systems that can manage hydrostatic pressure, ground gases, structural movement and increasing surface water risk. In line with BS 8102:2022, solutions must be selected based on risk, intended use, and buildability.

Our combined **GCP** and **Fosroc** portfolio enables a Type A, B and C approach, or fully integrated combined protection strategies:

- **Type A (Barrier Protection)**  
Fully bonded and pre/post-applied membrane systems including:  
**GCP PREPRUFE** (pre-applied) and **GCP BITUTHENE** (post-applied)
- **Type B (Structurally Integral Protection)**  
Waterproofing admixtures and watertight concrete solutions including:  
**GCP ADPRUFE®** / **Fosroc Supercast systems** for integrated concrete protection
- **Type C (Drained Protection)**  
**RIW Cavity Drain** systems and water management solutions to control ingress and relieve pressure

These systems can be designed in combination to manage risk in accordance with BS 8102, particularly where Grade 3 environments or high-risk ground conditions are present.

# SOLUTIONS FOR ABOVE-GROUND WATERPROOFING

## Podiums, Balconies, Terraces & Green Roofs

Above-ground structures must accommodate UV exposure, movement, trafficking and complex detailing, while delivering long-term durability.

Our combined **GCP (Stirling Lloyd)** and **Fosroc** technologies provide both waterproofing and protection:

- **Fully bonded waterproofing (GCP Stirling Lloyd)**  
Cold-applied MMA systems for seamless protection:  
**INTEGRITANK®** fully bonded waterproofing for podiums, terraces and structural elements
- **Protective Coatings (Fosroc)**  
Enhancing durability and extending service life:  
**Nitocote** range protects against carbonation, water ingress and environmental exposure

# PROTECTION FROM THE GROUND UP

Saint-Gobain Construction Chemicals offers advanced solutions that safeguard the building envelope from water ingress, ground gases, and environmental exposure. From below-ground waterproofing and gas protection to structural protection and repair, our combined GCP, Fosroc and RIW technologies are engineered to enhance structural integrity, resilience, and long-term durability.

Across the portfolio, solutions such as PREPRUFE and INTEGRITANK (GCP), Proofex and Nitocote systems (Fosroc), and RIW cavity drain and gas protection systems work together to form continuous, resilient protection strategies. These systems manage moisture ingress, control air leakage, and protect against ground gases while accommodating the practical demands of construction.

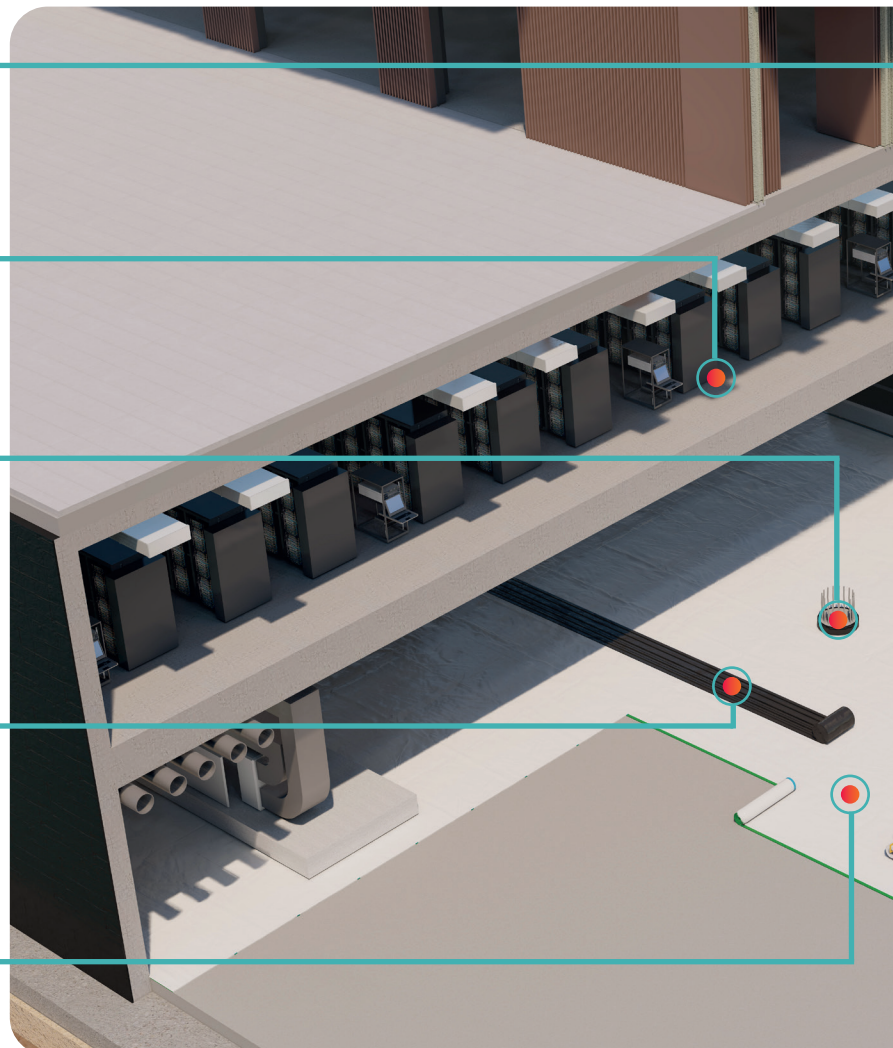
**FOSROC PROOFEX WG**  
Detailing Grout

**RIW TOUGHSEAL ECO**  
Liquid Waterproofing

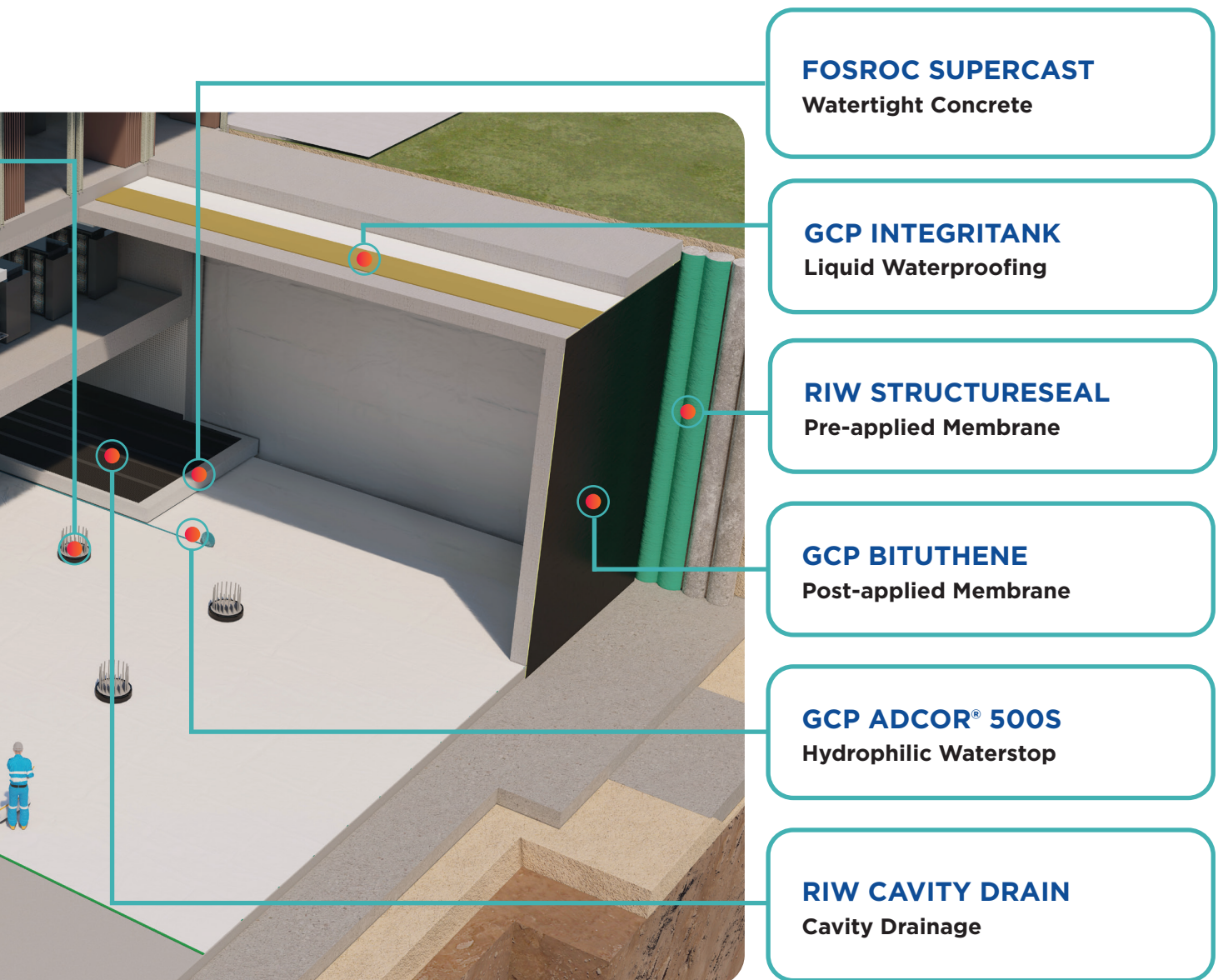
**GCP PREPRUFE DLM**  
Detailing Liquid

**FOSROC SUPERCAST  
REARGUARD & HYDROFOIL**  
PVC Waterstops


**GCP PREPRUFE PLUS**  
Pre-applied Membrane



Designed for compatibility and ease of installation, our integrated approach enables Type A, B and C waterproofing strategies—or combined protection in line with BS 8102:2022—ensuring coordinated performance across all building envelope components, from foundations and basements through to walls and decks.







# TYPE A - BARRIER PROTECTION

## PRE-APPLIED & DETAILING LIQUIDS

- GCP PREPRUFE 300R / 160R PLUS
- GCP BITUTHENE LM (E) / PREPRUFE DLM
- FOSROC PROOFEX WG
- RIW STRUCTURESEAL
- FOSROC PROOFEX ENGAGE

## POST-APPLIED, PRIMERS & PROTECTION

- FOSROC PROOFEX ALKORPLAN 35041
- GCP BITUTHENE GP, 4000, 8000
- GCP PREPRUFE 800 PA
- GCP PRIMERS
- GCP PROTECTION BOARD 03

## LIQUID-APPLIED

- GCP INTEGRITANK

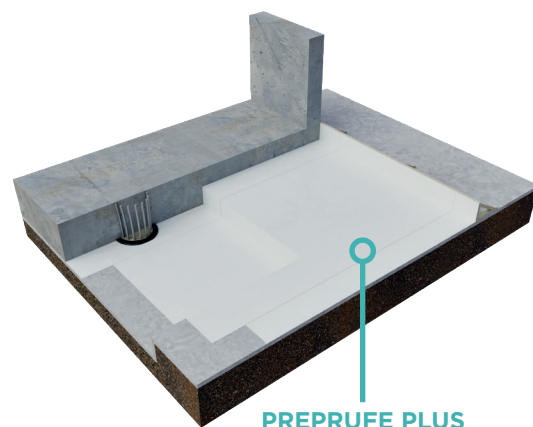
# Pre-applied Membrane: **PREPRUFE® 300R / 160R PLUS**

## Description

### Pre-Applied Waterproofing Membrane

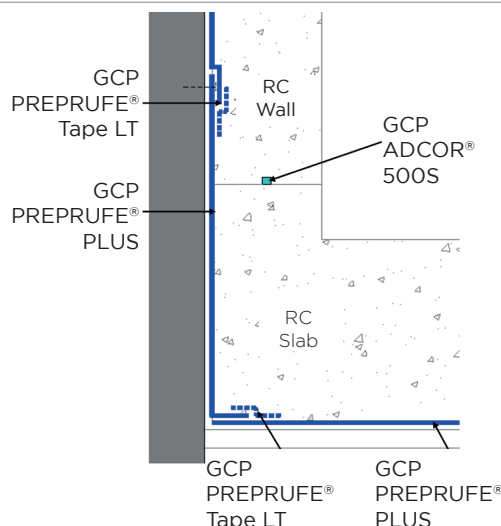
PREPRUFE Plus is a high-performance, pre-applied waterproofing system engineered to protect critical below-ground structures from water ingress. Designed with GCP's patented Advanced Bond Technology™, it forms a continuous, integral seal to poured concrete, preventing lateral water migration and ensuring long-term durability.

Ideal for use in demanding environments, PREPRUFE Plus delivers robust protection even under high hydrostatic pressure, making it the trusted choice for basements, tunnels, and other subterranean structures.



## Product Benefits

- **Fast & Simple Installation:** Quick to apply with a two-person crew, no primers or special tools needed.
- **Advanced Bond Technology:** Forms a continuous adhesive bond to concrete, preventing water migration.
- **Reliable Sealing:** ZipLap® dual adhesive laps ensure watertight seals, even in harsh weather.
- **Gas Resistance:** Protects against methane, CO<sub>2</sub>, and radon, meeting BS 8485 standards.
- **Flexible & Durable:** Tough HDPE membrane resists chemicals, UV, and conforms to complex details.
- **Extended Exposure:** UV barrier allows up to 56 days exposure before concreting.
- **Lightweight & Safe:** Easier handling and reduced storage needs compared to bulkier systems.
- **Integrated System:** Compatible with GCP waterstops and post-applied waterproofing for complete protection.



## Certifications / Approvals



## Link to Datasheet



## Packaging

- **PREPRUFE 300R PLUS/LT** 1.18m x 31.1m roll (36m<sup>2</sup>) Thickness: 1.2 mm
- **PREPRUFE 160R PLUS/LT** 1.18m x 36.5m roll (42m<sup>2</sup>) Thickness: 0.8 mm

## NBS Source

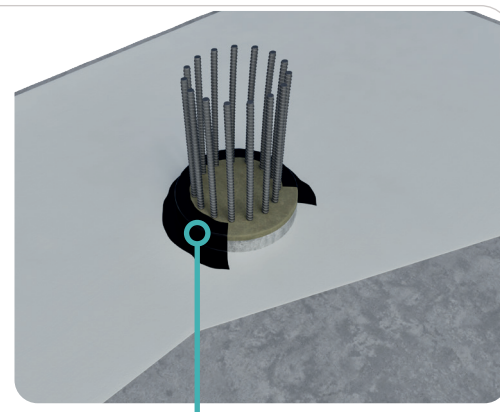


# Detailing Liquid: **BITUTHENE<sup>®</sup> LM (E) / PREPRUFE<sup>®</sup> DLM**

## Description

**BITUTHENE LM (E):** Two-component elastomeric liquid applied detailing compound for use with GCP waterproof membranes

**PREPRUFE DLM:** Mono-component environmentally and EHS friendly detailing liquid membrane for use with GCP waterproof membranes.



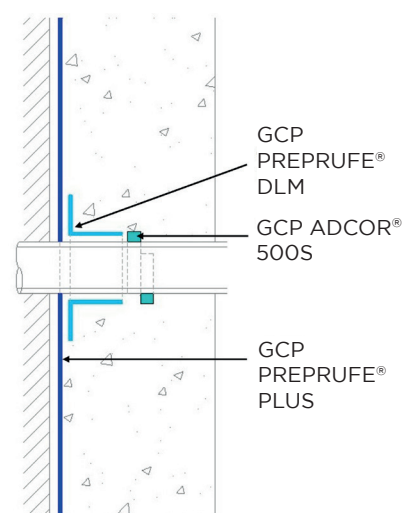
BITUTHENE LM (E) /  
PREPRUFE DLM

## Product Benefits - BITUTHENE LM (E)

- **Liquid applied:** conforms to irregular profiles
- **Waterproof:** resistant to water vapour and water pressure
- **Tough rubber-like:** flexible and damage resistant
- **Seamless:** joint free membrane
- **Cold applied:** no hazardous flame required
- PREPRUFE and BITUTHENE membrane compatible

## Product Benefits - PREPRUFE DLM

- **Liquid-applied & Seamless:** Conforms to irregular surfaces and forms a joint-free membrane.
- **Waterproof:** Withstands water pressure and vapour ingress.
- **Mono-Component:** No mixing on site
- **Damp Concrete Tolerant**
- **Odourless:** improved workability in indoor environments
- **High Performance:** Resists up to 70m hydrostatic head at 2.5mm thickness.
- **No hazard pictograms**
- PREPRUFE and BITUTHENE membrane compatible



[Link to Datasheet](#)



 NBS Source



## Packaging

- |                           |                        |   |
|---------------------------|------------------------|---|
| • <b>BITUTHENE LM (E)</b> | 5.7l pack (Part A & B) | Coverage: 7.6 linear metre (2.28m/unit)   |
| • <b>PREPRUFE DLM</b>     | 600ml sausage          | Coverage: 0.8 linear metre per 600ml unit |

# Detailing Grout:

## PROOFEX® WG



### Description

#### Epoxy Waterproof Grout

PROOFEX WG is a high-performance, three-component epoxy waterproof grout used for detailing within waterproofing and ground-gas protection systems. Used in conjunction with membrane, it helps maintain system continuity at pile caps, box outs and other complex details where sheet membrane application is not suited. Suitable for application thicknesses from 20-100 mm, Proofex WG is pour-applied to prepared substrates using containment formwork.

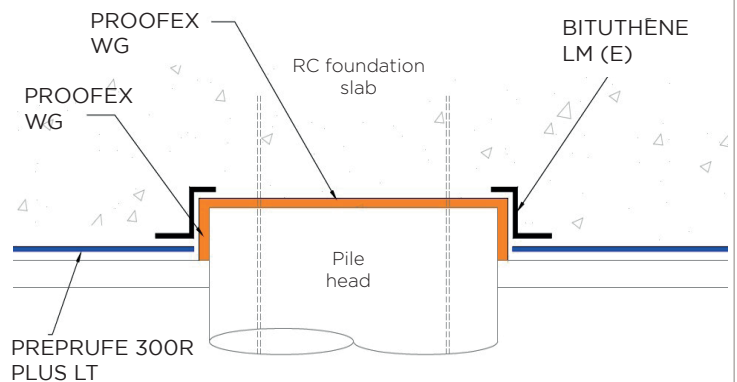
When used as part of a ground-gas protection solution, the system should be designed and constructed in line with BS 8485:2015 + A1:2019.



FOSROC PROOFEX WG

### Product Benefits

- **Waterproof & gas resistant:** Supports continuity of protection against water ingress and ground gases.
- **Detailing continuity:** Ideal for pile caps, box outs and complex penetrations where sheet membrane detailing is difficult.
- **Non-shrink:** Ensures complete surface contact and effective bond to prepared substrates.
- **High strength:** Delivers high compressive, tensile and flexural performance.
- **Fast, pourable installation:** Free-flowing epoxy grout enables practical placement into formed details.
- **Rapid strength gain:** Supports programme efficiency where early strength development is required.
- **Chemical resistance:** Resistant to oils, grease, fats, mild acids and alkalis, fresh water and sea water.
- **Areas where membrane continuity must be maintained** but sheet membrane use is impractical



#### Certifications / Approvals



#### Link to Datasheet



#### NBS Source



### Packaging

- **Proofex Engage WG** 15 litre pack  
(three-component system: base resin, liquid hardener & graded inert fillers)

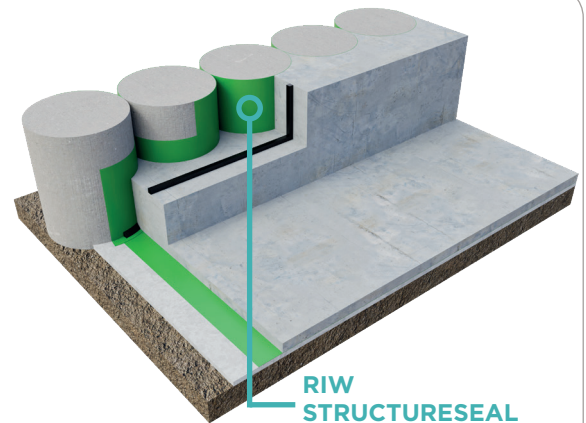
# Pre-applied Membrane: RIW STRUCTURESEAL



## Description

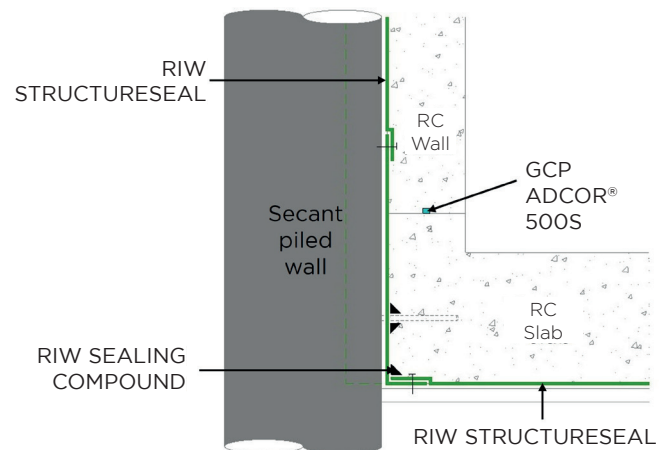
### Bentonite Waterproofing System

RIW Structureseal is a high-performance, pre-applied waterproofing membrane designed for below-ground structures. It features a composite of high-swelling sodium bentonite encapsulated between durable non-woven and woven geotextiles, forming a robust barrier against water ingress. Using a unique needle-punch process, the geotextiles are interlocked to maintain consistent bentonite coverage and resist damage during installation. Upon contact with moisture, the bentonite swells to form a dense, monolithic seal that self-heals minor cracks and imperfections in concrete.



## Product Benefits

- **Self-sealing Technology:** Swells up to 15 times its dry volume to seal cracks and gaps automatically
- **Durable:** Forms a dense, monolithic, and impervious barrier when confined under pressure.
- **No VOCs:** Environmentally friendly with zero volatile organic compounds.
- **Weather-resistant:** Can be installed in wet or cold conditions.
- **No primers or adhesives required:** Simplifies installation and reduces preparation time.
- **Strong mechanical bond:** Geotextile fibres create a secure mechanical bond with poured concrete.



## Certifications / Approvals



EN 13491 / EN 15382

## Link to Datasheet



## Packaging

- |                               |                                     |                   |
|-------------------------------|-------------------------------------|-------------------|
| • <b>RIW STRUCTURESEAL</b>    | 1.1m x 5m roll (5.5m <sup>2</sup> ) | Thickness: 6.4 mm |
| • <b>RIW GRANULES</b>         | 20kg bags                           |                   |
| • <b>RIW SEALING COMPOUND</b> | 15g tubs                            |                   |

## NBS Source



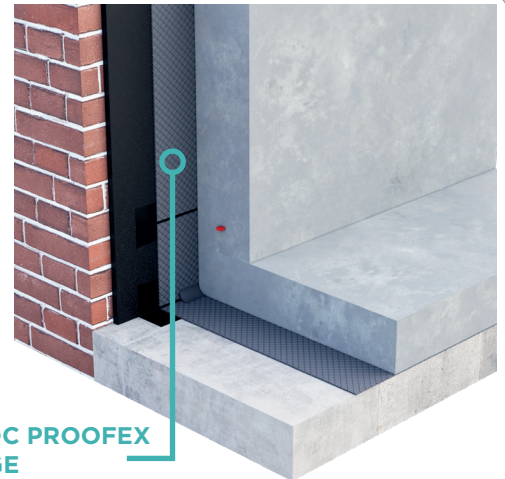
# Pre-applied Membrane: **PROOFEX ENGAGE**



## Description

### Durable Pre-Applied Waterproofing Membrane for Concrete Structures

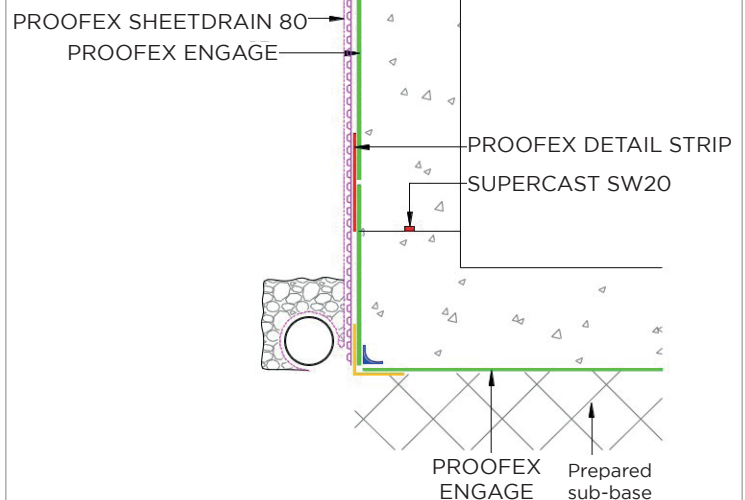
Proofex Engage is a robust, pre-applied, fully bonded waterproofing membrane designed to deliver long-lasting protection for below-ground concrete structures. Its unique patented system incorporates a cell-mesh layer bonded to a blended polyethylene/polypropylene membrane, allowing freshly poured concrete to mechanically interlock with the membrane and form a tenacious, permanent bond. This mechanical engagement prevents water migration—even in the event of ground settlement—ensuring superior resistance against water ingress.



FOSROC PROOFEX ENGAGE

## Product Benefits

- **Permanently bonds to concrete** via a unique cell mesh system, staying in place even if ground settlement occurs.
- **Prevents water tracking between membrane and concrete** through its anti tracking design.
- **Provides strong protection against water, water vapour, and ground gases** including methane, CO<sub>2</sub>, and radon.
- **Resists aggressive ground salts, chemicals, and hydrocarbons**, ideal for contaminated soil conditions.
- **Easy, primer free installation** with no protection film to remove and no blinding concrete required in many cases.
- **Durable and tough**, offering excellent flexibility for detailing and high resistance to site trafficking.
- **Certified for performance**, including BBA certification and compliance with BS EN 13967 and BS 8102.



## Certifications / Approvals



## Link to Datasheet



## NBS Source



## Packaging

- |                                      |   |                             |                   |
|--------------------------------------|---|-----------------------------|-------------------|
| • <b>Proofex Engage</b>              | 1.27m x 30m roll (38.1 m <sup>2</sup> ) | • <b>Proofex Top Hat</b>    | 110mm & 160mm     |
| • <b>Proofex L Section</b>           | 125mm x 125mm x 10 m roll               | • <b>Proofex Total Tape</b> | 30mm x 30m x 1.5m |
| • <b>Proofex Engage Detail Strip</b> | 125mm x 125mm x 10 m roll               | • <b>Proofex WG</b>         | 15 litres         |
| • <b>Proofex LM Mesh</b>             | 100mm x 50m (nominal)                   |                             |                   |

# Post-applied Membrane: **PROOFEX ALKORPLAN 35041**



## Description

### Flexible PVC Waterproofing Membrane for Tunnels and Basements

Proofex Alkorplan is a flexible, loose-laid PVC waterproofing membrane designed for durable protection of tunnels, basements, and below-ground structures. Its high-performance PVC formulation offers excellent puncture resistance, rapid cold-applied installation, and reliable flexibility in low temperatures.

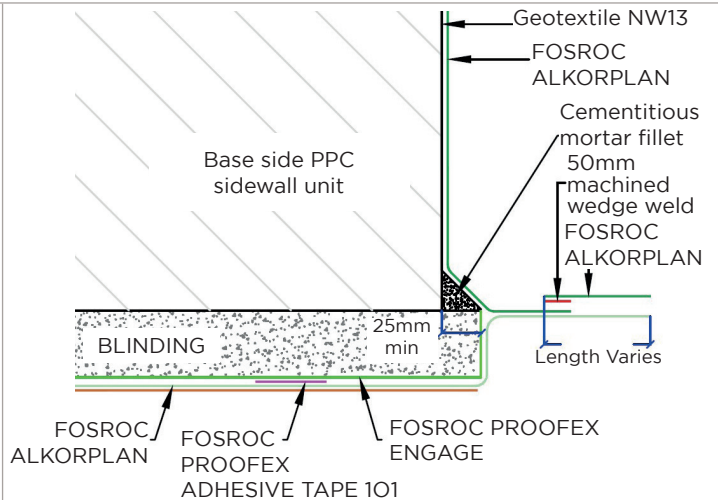
Featuring hot-air welded joints for maximum watertightness and an optional grey signal layer to highlight installation damage, Proofex Alkorplan provides a robust, continuous barrier ideal for challenging civil engineering and underground environments.



ALKORPLAN 35041

## Product Benefits

- **Flexible PVC membrane** provides strong, adaptable waterproofing for tunnels and basements.
- **Loose-laid system** allows fast and efficient installation over large areas.
- **Cold-applied application** enhances safety and simplifies on-site handling.
- **High puncture resistance** ensures durability under demanding construction conditions
- **Hot-air welded joints** deliver maximum watertightness and long-term reliability
- **Excellent low-temperature flexibility**, maintaining performance in cold environments
- **Optional grey signal layer** helps identify installation damage quickly, supporting quality control.



[Link to Datasheet](#)



## Packaging

- |   |                          |                |
|---|--------------------------|----------------|
| • <b>Proofex Alkorplan</b>              | 2m x 20m, 2m x 10m       | Weight: 140 kg |
| • <b>Proofex Alkorplan Green</b>        | 2.15m x 25m, 2.15m x 35m | Weight: 200 kg |
| • <b>Proofex Alkorplan Signal Layer</b> | 2.15m x 20m              | Weight: 168 kg |

# Post-applied Membrane: **BITUTHENE® GP, 4000, 8000**

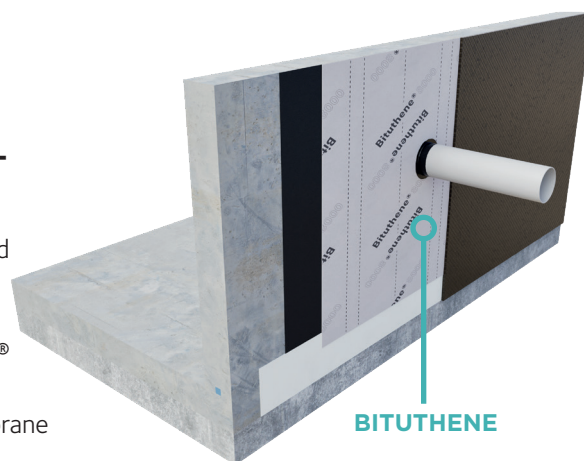
## Description

**BITUTHENE** is an advanced, self-adhesive membrane with unique HDPE composite film that provides superior physical properties for water, vapor and gas proof application in sub-structures.

**Bituthene 8000/8000S:** Premium performance for substructures and buried concrete roofs, with a unique, grey coloured carrier film to provide superior performance and easier installation.

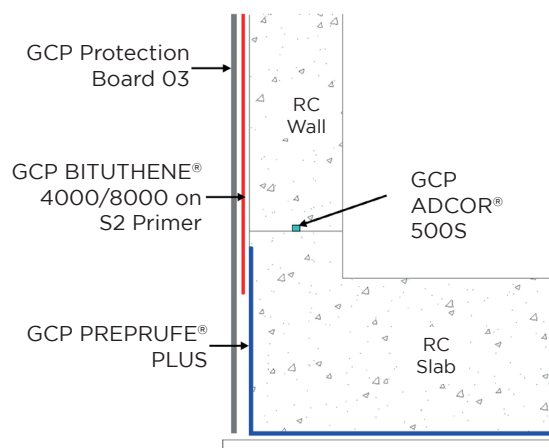
**Bituthene 4000/4000S:** For substructures and part of the Servirufe® system for decks (1.5 mm thickness).

**Bituthene GP** - Self-adhesive rubber bitumen/HDPE waterproof membrane for low risk applications



## Product Benefits

- **Superior Water Protection:** Engineered with a durable film and specially formulated adhesive to deliver exceptional resistance against water ingress.
- **Quick & Easy Installation:** Features self-adhesive overlaps that prevent leaks—no need for specialist tools or training.
- **No Hot Works Required:** Cold-applied membrane ensures a safer, flame-free application process.
- **Versatile Options Available:** Offered in a range of grades to meet the specific demands of your project.



## Certifications / Approvals



EN 13967



## Link to Datasheet



## Packaging

- |                               |                                   |                    |
|-------------------------------|-----------------------------------|--------------------|
| • <b>BITUTHENE 8000/8000S</b> | 1m x 20m roll (20m <sup>2</sup> ) | Thickness: 1.52 mm |
| • <b>BITUTHENE 4000/4000S</b> | 1m x 20m roll (20m <sup>2</sup> ) | Thickness: 1.52 mm |
| • <b>BITUTHENE GP</b>         | 1m x 25m roll (25m <sup>2</sup> ) | Thickness: 1.12 mm |

## NBS Source



# Post-applied Membrane: **PREPRUFE® 800PA**

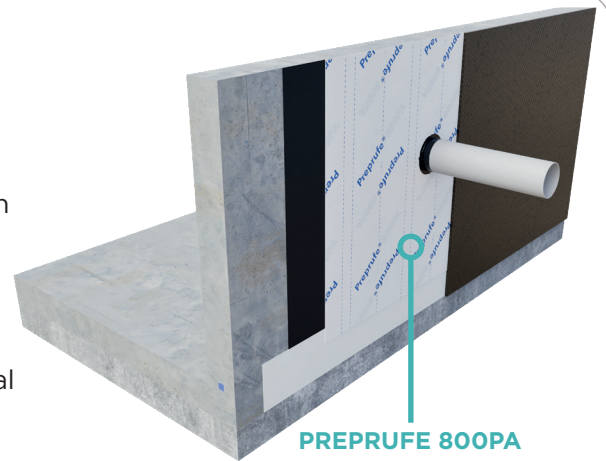


## Description

### High-Performance Self-Adhesive Waterproofing Membrane

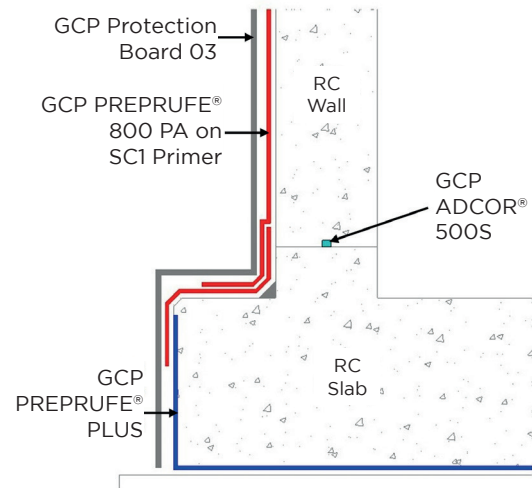
PREPRUFE 800PA is a cold-applied, self-adhesive waterproofing membrane designed to protect below-ground structures from water, damp, and gas ingress. Engineered with GCP's Advanced Bond Technology™, it forms a continuous, fully bonded barrier to concrete, eliminating water migration and ensuring long-term structural integrity.

Constructed from a cross-laminated HDPE film and a synthetic, non-bituminous adhesive, PREPRUFE 800PA is ideal for both new builds and remedial waterproofing applications.



## Product Benefits

- **Non-bituminous innovation:** based on advanced PREPRUFE technology.
- **Reliable adhesion in all conditions:** Delivers excellent concrete adhesion across a wide range of temperatures, ensuring consistent performance year-round.
- **Fully bonded protection:** forms a continuous bond to concrete, eliminating water migration and preventing tracking between the membrane and substrate.
- **Elastomeric flexibility:** accommodates structural movement and bridges shrinkage cracks for long-term durability.
- **Superior mechanical performance:** high tensile strength, elongation, and tear resistance provide robust protection in demanding environments.
- **Comprehensive barrier:** acts as a water and vapour barrier—ideal for basements and below-grade structures requiring leak-free performance.
- **Gas resistance certified:** contributes to protection against methane, carbon dioxide, and radon.



## Certifications / Approvals



## Link to Datasheet



## Packaging

- **PREPRUFE 800PA/800PA LT** 1.2m x 35m roll (42m<sup>2</sup>) Thickness: 0.8mm

## NBS Source



# Post-applied Membrane:

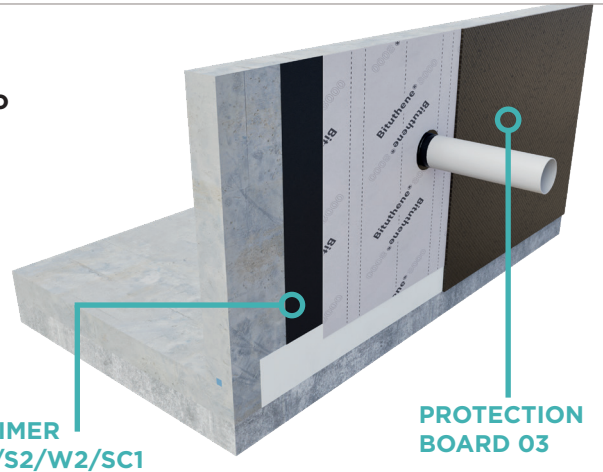


# PRIMERS / PROTECTION BOARD 03

## Description

GCP offers a wide range of primers & protection boards to complement their below ground waterproofing range:

- BITUTHENE Primer B1
- BITUTHENE Primer S2
- BITUTHENE Primer W2
- PREPRUFE SC1 Primer
- PROTECTION BOARD 03



PRIMER  
B1/S2/W2/SC1

PROTECTION  
BOARD 03

## Product Benefits

### BITUTHENE Primer B1

- Quick drying all temperature primer to enable same hour application of BITUTHENE membranes. Ideal for cold weather use (usable from +5°C).

### BITUTHENE Primer S2

- Rubber-based primer in solvent, specially formulated to provide good initial adhesion with BITUTHENE membranes.
- For use in colder climates, offering fast drying and strong adhesion to concrete and masonry.

### BITUTHENE Primer W2

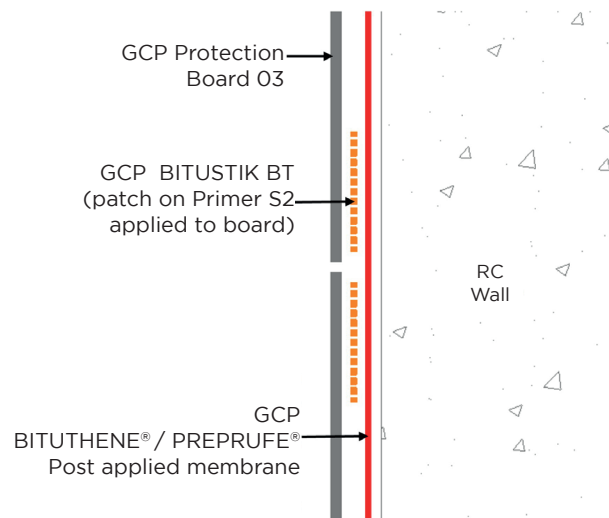
- Water-based surface conditioner specifically formulated to prepare concrete, masonry and wood surfaces. Low VOC content, eco-friendliness, and ease of use in enclosed or sensitive environments.

### PREPRUFE SC1 Primer

- Non-bituminous, quick drying, damp and green concrete tolerant, solvent based primer for use with PREPRUFE 800PA

### PROTECTION BOARD 03

- Robust preformed asphaltic protective board specially engineered for the protection of GCP self-adhesive membranes



## Links to Datasheets

BITUTHENE  
Primers  
B1, S2, W2



BITUTHENE  
Primer SC1



PROTECTION  
BOARD 03



## Packaging

- BITUTHENE PRIMER B1 5 & 25 litre can
- BITUTHENE PRIMER S2 5 & 25 litre can
- BITUTHENE PRIMER W2 5 litre can
- PREPRUFE SC1 PRIMER 5 & 20 litre can
- PROTECTION BOARD 03 3mm x 2.03m x 0.90m

## NBS Source



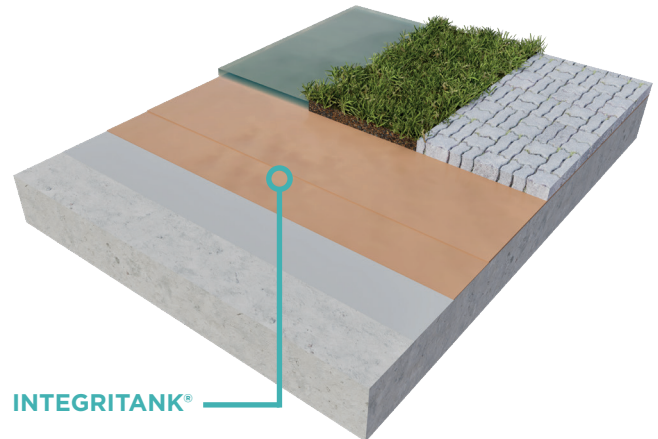
# Liquid Applied: INTEGRITANK®



## Description

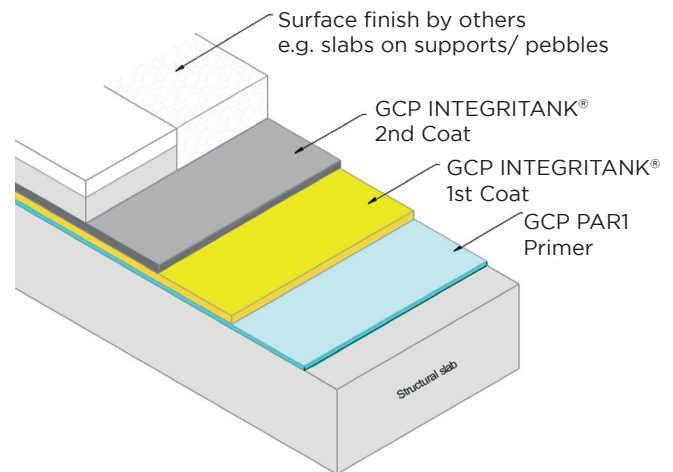
### Advanced Liquid-Applied Waterproofing for Critical Infrastructure

INTEGRITANK is a high-performance, fully bonded, liquid-applied waterproofing membrane developed using GCP's proprietary ESSELAC® advanced resin technology. Designed for the long-term protection of concrete and steel structures, it delivers a seamless, flexible, and highly durable barrier against water, chemicals, and environmental stressors.



## Product Benefits

- **Seamless & Fully Bonded:** Prevents water tracking and eliminates joints or overlaps.
- **Rapid Cure:** Fast application and curing—even in low temperatures—minimises downtime.
- **Exceptional Durability:** Resistant to abrasion, impact, UV, and aggressive chemicals.
- **Versatile Application:** Suitable for podium decks, tunnels, green roofs, basements, silos, and more.
- **Traffic-Ready:** Can carry load or foot traffic within one hour of application.
- **Crack Bridging:** Maintains integrity even over substrate movement.
- **Certified Performance:** CE marked and BBA approved for zero-pitched roofs.



## Certifications / Approvals



**CE**  
2797  
EN 1504-2

## Link to Datasheet



## Packaging

- **INTEGRITANK Spray Grade:** 48 kg & 400 kg kits, includes BPO powder
- **INTEGRITANK Hand Grade:** 20 kg, resin only
- **BPO Liquid Catalyst pack:** 5 kg & 20 kg (use with Hand Grade)

## NBS Source







## TYPE B - STRUCTURALLY INTEGRAL PROTECTION

### PORE BLOCKER

- GCP ADPRUFE 100
- FOSROC SUPERCASST WCP

### CRYSTALLINE

- FOSROC SUPERCASST CWA

### PVC WATERSTOPS - EXTERNALLY PLACED & CENTRALLY PLACED

- FOSROC SUPERCASST REARGUARD (S150/ S200/ S250)
- FOSROC SUPERCASST HYDROFOIL (150/ 200/ 250)

### HYDROPHILIC WATERSTOPS

- GCP ADCOR 500S / 500T

### INJECTABLE HOSE

- GCP ADCOR 550 MI / 550 T-MI

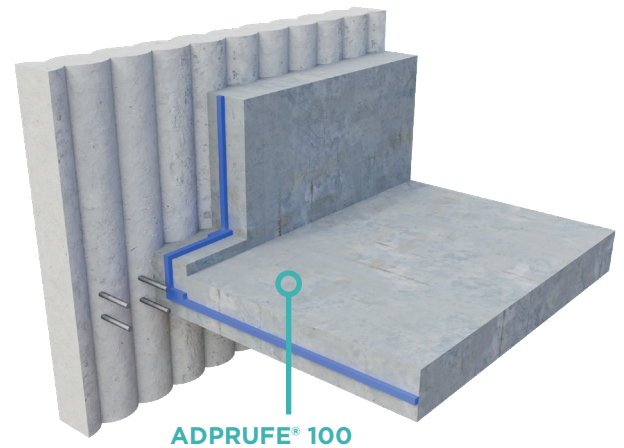
# Water-Resisting Admixtures: **ADPRUFE® 100**



## Description

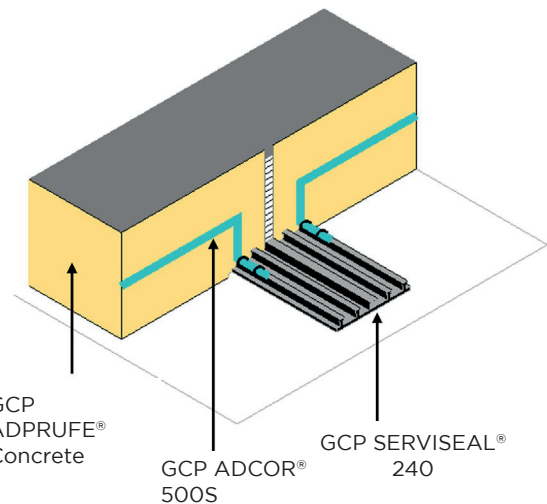
### Advanced Integral Waterproofing Admixture for Concrete

ADPRUFE 100 is a liquid pore-blocking admixture designed to create integrally water-resistant concrete for below-ground and water-retaining structures. It significantly reduces both permeability and drying shrinkage, helping to minimise cracking and enhance durability. When combined with Chryso® superplasticisers, it delivers a high-consistency, low water/cement ratio mix that is easy to place and compact.



## Product Benefits

- **Integral Waterproofing:** Provides Type B waterproofing in accordance with BS 8102:2022, suitable for basement Grades 1-3.
- **Reduced Shrinkage & Cracking:** Minimises drying shrinkage, resulting in fewer and finer cracks.
- **Enhanced Durability:** Lowers water absorption and penetration, improving long-term performance.
- **Improved Workability:** Produces a high-consistency mix for easier placement and compaction.
- **Design Flexibility:** Can be combined with GCP membranes or cavity drain systems for enhanced protection.
- **Efficient Dosage:** Concentrated liquid formulation—easier to disperse and more economical than powders.
- **Compliant & Certified:** Meets EN 934-2 standards and supports NHBC Chapter 5.4 compliance when used as part of a combined system.



## Certifications / Approvals



EN 934-2 T9

## Link to Datasheet



## Packaging

- **ADPRUFE 100** 15, 205, 1000 litres Addition rate: 2.5l/m<sup>3</sup>

## NBS Source



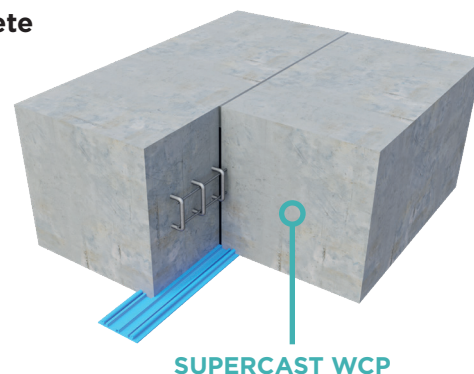
# Water-Resisting Admixtures: **SUPERCAST WCP**



## Description

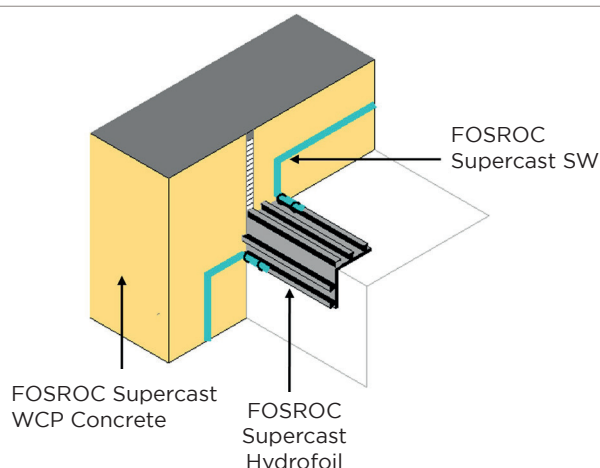
### Hydrophobic Pore-Blocking Admixture for Durable Watertight Concrete

Supercast WCP is a hydrophobic, pore-blocking concrete admixture designed to produce Type B integral watertight concrete in accordance with BS 8102:2022. Supplied as a white, chloride-free, pre-bagged powder, it disperses easily into the concrete mix to reduce porosity, permeability and diffusion, while enhancing water and corrosion resistance for structures exposed to water pressure or aggressive environments. Its BBA accreditation (22/5995) further assures reliable performance in liquid-retaining or liquid-excluding applications.



## Product Benefits

- **Reduces porosity**, helping to create a denser, more water-resistant concrete structure.
- **Lowers permeability**, preventing water ingress through the concrete matrix.
- **Reduces diffusion coefficient**, improving defence against aggressive agents in harsh exposure conditions.
- **Enhances water and corrosion resistance**, making it ideal for structures with embedded steel reinforcement.
- **Chloride-free formulation**, ensuring compatibility with reinforced concrete without increasing corrosion risk.
- **Pre-bagged powder** for easy dispensing, simplifying batching and ensuring consistent dosage.
- **Easily disperses throughout the concrete mix**, ensuring uniform hydrophobic performance.
- **BBA accredited** (Certificate 22/5995), providing third-party performance validation.
- **Compatible with the full Fosroc waterproofing system**, allowing integration with membranes and drained cavity systems.



## Certifications / Approvals



EN 934-2 T9

## Link to Datasheet



## Packaging

- **SUPERCAST WCP**      Tubs containing 6 x 4.1 kg units

## NBS Source



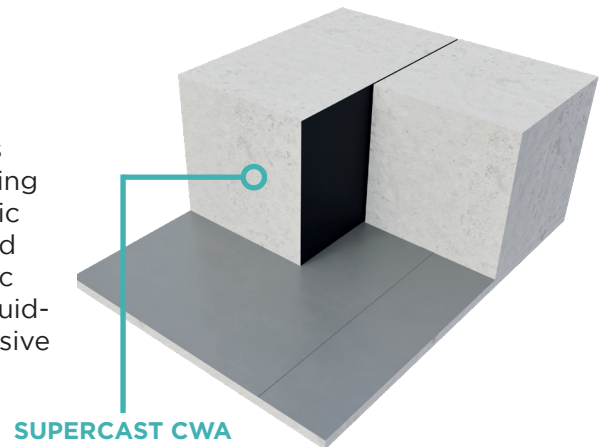
# Water-Resisting Admixtures: **SUPERCAST CWA**



## Description

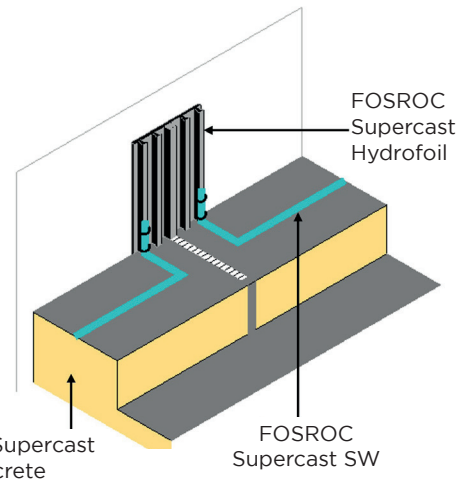
### Integral Crystalline Protection for Watertight, Self-Healing Concrete

Supercast CWA is a crystalline watertight additive that turns concrete into a Type B integral waterproofing system, reducing porosity and permeability while enabling self-healing of static cracks up to 0.4 mm. Supplied as a chloride-free, pre-bagged powder for easy dosing, it enhances resistance to hydrostatic pressure, water ingress, and corrosion, making it ideal for liquid-retaining structures, below-ground construction, and aggressive exposure environments.



## Product Benefits

- **Reduces porosity and permeability**, improving overall watertight performance of concrete.
- **Self-heals static cracks** up to 0.4 mm, maintaining long-term water resistance
- **Performs under sustained hydrostatic pressure**, suitable for high-risk water-retaining or water-excluding structures
- **Enhances water and corrosion resistance**, protecting embedded steel reinforcement.
- **Chloride-free formulation**, ideal for reinforced concrete without risk of steel corrosion.
- **Pre-bagged and easy to dispense**, ensuring simple and consistent dosing.
- **Evenly disperses throughout concrete**, enabling uniform integral waterproofing.
- **BBA accredited (Certificate 21/5849)**, providing third-party assurance of performance.
- **Compatible with the full Fosroc waterproofing range**, enabling complete system solutions.



## Certifications / Approvals



## Link to Datasheet



## Packaging

- **SUPERCAST CWA**      Tubs containing 6 x 4.1 kg units.

## NBS Source



# PVC Waterstops:

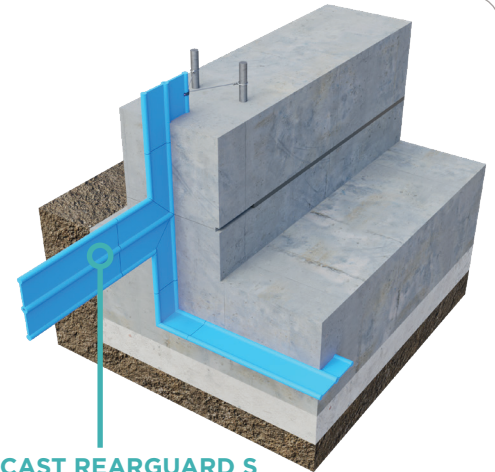
## SUPERCAST REARGUARD (S150 / S200 / S250)



### Description

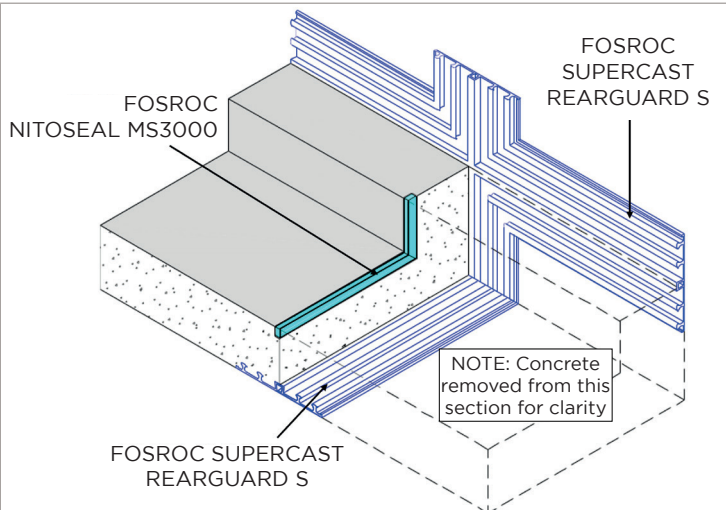
#### Externally Placed PVC Waterstop for Water Retaining & Water Excluding Structures

Supercast Rearguard is an externally placed PVC waterstop featuring reinforced nailing flanges and a flat-top centre box to accommodate movement in expansion, contraction, and construction joints. Designed for basements, foundations, slabs, and retaining structures where resistance to water ingress is essential.



### Product Benefits

- **Reinforced nailing flanges** for secure fixing and tear resistance.
- **Flat-top centre box** supports joint fillers and accommodates joint movement.
- **Suitable for water retaining & excluding structures**, including basements and slabs.
- **Withstands hydrostatic pressure** from supported faces.
- **Factory-welded intersection pieces** available for complete system continuity.
- **Approved for use with potable water systems** (WRc approved).



### Certifications / Approvals



### Link to Datasheet



### Packaging

- **SUPERCAST REARGUARD S** 250mm x 12m roll
- **SUPERCAST REARGUARD S** 200mm x 12m roll
- **SUPERCAST REARGUARD S** 150mm x 12m roll

Weight: 33.4 kg  
Weight: 24 kg  
Weight: 19.6 kg

### NBS Source



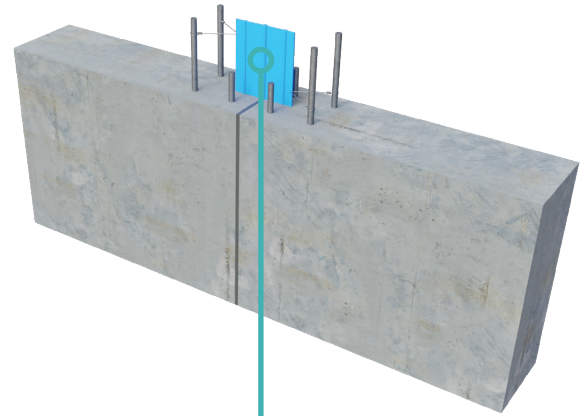
# PVC Waterstops: SUPERCAST HYDROFOIL (150 / 200 / 250)



## Description

### Centrally Placed PVC Hydrofoil Waterstop for Movement & Construction Joints

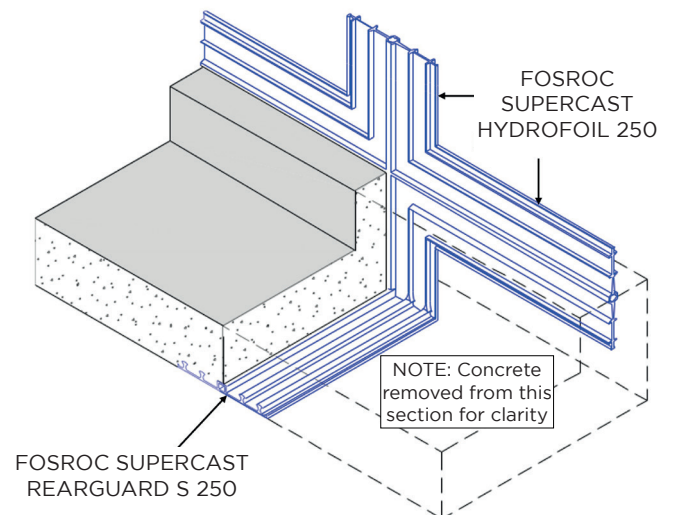
Supercast Hydrofoil is a centrally placed PVC waterstop with a hexagonal centre bulb designed to accommodate expansion, contraction, and construction joint movement. Ideal for water retaining structures such as reservoirs, tanks, dams, and swimming pools where bi-directional water pressure resistance is required.



SUPERCAST HYDROFOIL

## Product Benefits

- **Centre bulb design** allows structural movement while maintaining a watertight seal.
- **Hexagonal profile** provides a flat surface for snug shuttering and joint filler placement.
- **Resists water pressure from both sides**, ideal for tanks and submerged structures.
- **Simple on-site jointing** with heat welding equipment for strong fusion joints.
- **Available in multiple profile sizes** to suit varying concrete thicknesses.
- **Certified safe for potable water applications** (WRc approval).



## Certifications / Approvals



## Link to Datasheet



## Packaging

- |                              |                  |                 |
|------------------------------|------------------|-----------------|
| • <b>SUPERCAST HYDROFOIL</b> | 250mm x 12m roll | Weight: 27.1 kg |
| • <b>SUPERCAST HYDROFOIL</b> | 200mm x 15m roll | Weight: 27.3 kg |
| • <b>SUPERCAST HYDROFOIL</b> | 150mm x 15m roll | Weight: 21.3 kg |

## NBS Source



# Hydrophilic Waterstops:

## ADCOR® 500S / 500T

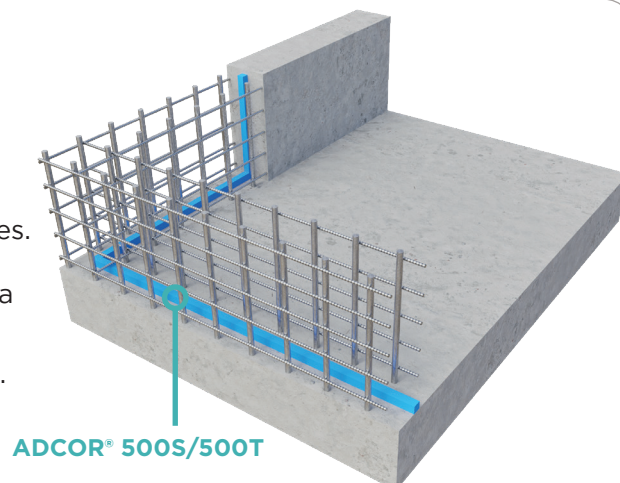
### Description

#### Advanced Hydrophilic Sealing Solutions for Concrete Structures

ADCOR 500S and ADCOR 500T are high-performance, conformable waterstop strips engineered to prevent water ingress through construction joints in concrete sub-structures. Made from a swellable polymer/butyl rubber compound, these waterstops expand upon contact with water, forming a durable, pressure-resistant seal against concrete surfaces.

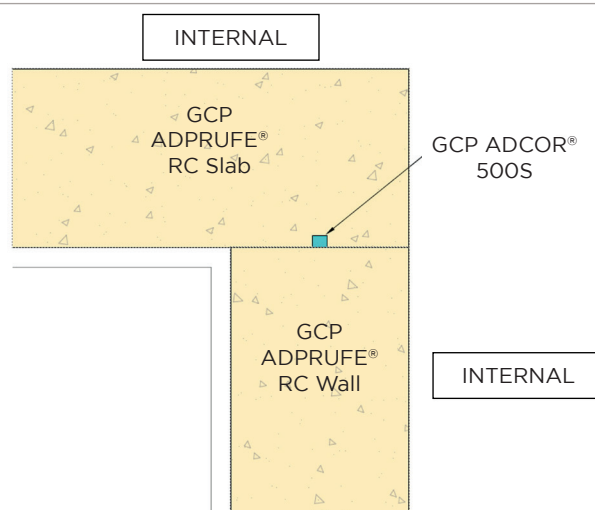
**ADCOR 500S:** Designed for use in freshwater environments.

**ADCOR 500T:** Specially formulated for saline and brackish water conditions



### Product Benefits

- **Hydro-expansive Technology:** Expands up to 100% in volume to seal joints and resist hydrostatic pressure.
- **Superior Adhesion:** Bonds effectively to a variety of substrates using ADCOR adhesives or mastic.
- **Flexible & Conformable:** Easily adapts to irregular profiles and complex joint geometries.
- **Durable Performance:** Maintains cohesive strength after expansion and through wet-dry cycles.
- **Easy Installation:** Simple overlap jointing and compatibility with standard fixings.



### Certifications / Approvals



### Link to Datasheet



### Packaging

- **ADCOR 500S/ 500T** 6x5m (30m) rolls/carton  
Profile size: 25mm x 20mm

### NBS Source



# Injectable Hose:

## ADCOR® 550 MI / 550 T-MI



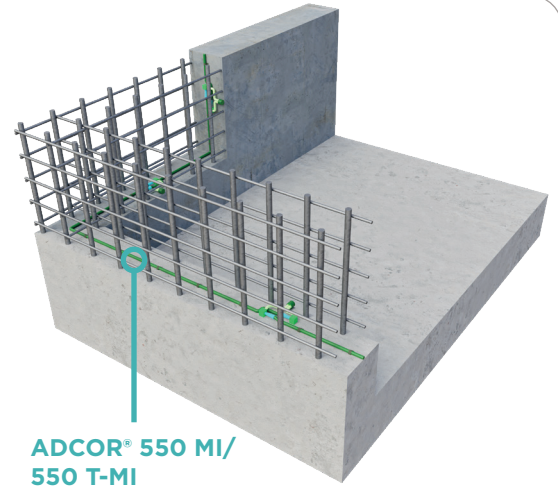
### Description

#### Dual-Action Hydrophilic Waterstop Systems for Concrete Construction Joints

ADCOR 550 MI and ADCOR 550 T-MI are advanced, dual-function waterstop systems engineered to provide active and passive protection against water ingress in concrete construction joints. These systems combine a hydrophilic swelling barrier with a reinforced injection tube, that ensures long-term sealing performance—even under high hydrostatic pressure.

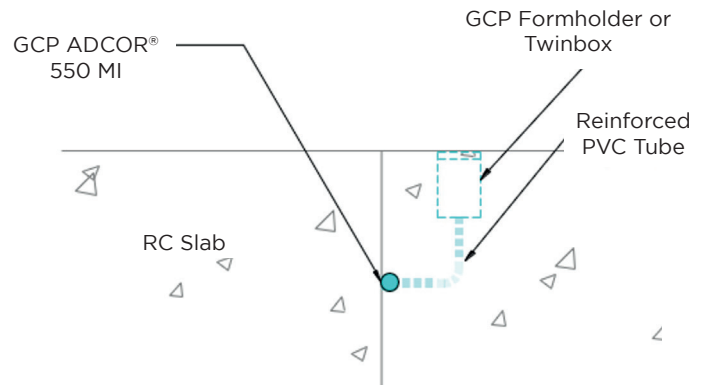
**ADCOR 550 MI:** Designed for use in freshwater environments.

**ADCOR 550 T-MI:** Specially formulated for saline and brackish water conditions



### Product Benefits

- **Dual Protection System:** Combines hydrophilic swelling action with a built-in injection tube for post-installation sealing—ensuring long-term reliability.
- **Active Sealing Technology:** expands upon contact with water to form a tight, pressure-resistant seal, even in complex joint geometries.
- **Post-Construction Flexibility:** Integrated injection capability allows for remedial resin injection if needed—without excavation or structural disruption.
- **High Pressure Resistance:** Withstands hydrostatic pressures up to 5 bar (50 metres), making it suitable for deep or high-risk structures.
- **Environmentally Safe:** non-toxic and non-polluting—safe for use in groundwater-sensitive areas.
- **Versatile Application:** Suitable for a wide range of concrete construction joints, including vertical and horizontal surfaces, pile caps, and retaining walls.



### Certifications / Approvals



### Link to Datasheet



### Packaging

- **ADCOR 550 MI/ 550 T-MI** 8x5m (40m) rolls/carton  
Profile size: 25mm x 20mm

### NBS Source

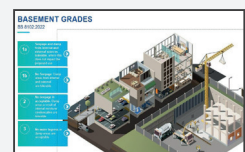


# CPD SEMINAR: DEVELOPING ROBUST BELOW GROUND WATERPROOFING STRATEGIES COMPLIANT WITH BS 8102:2022

The following topics will be discussed in the seminar:

Duration: up to 45 minutes

- **About Saint-Gobain Construction Chemicals**
- **Industry Standards & Best Practice**
  - BS 8102:2022
  - NHBC - Chapter 5.4
  - BS 8485:2015+A1:2019
  - Property Care Association
  - Institution of Civil Engineers (ICE)
  - CIRIA Report 139
- **Waterproofing Strategy**
  - Waterproofing Specialist & Design Team
  - Design Flow Chart
  - Client Requirements
  - Site Evaluation Desk Study
  - Site Evaluation Risk Assessment
  - Water Table Classification
  - Potential Water Ingress
  - Consequences of Failure
- **Waterproofing System Selection**
  - BS 8102:2022 Basement Grades
  - BS 8102:2022 Protection Types
  - GCP Solutions - Type A, B, C
  - Combined Protection Systems
  - GCP Waterproofing Portfolio
- **Key Considerations**
- **GCP Service & Support**
  - Performance Data, Certifications & Approvals
  - Product Documentation & Standard Details
  - On-site support, Training, Bespoke Project Details
  - GCP track record
- **Q&A**





# TYPE C - DRAINED PROTECTION

## CAVITY DRAIN

- RIW CAVITY DRAIN R20 / R7
- RIW CAVITY DRAIN ANCILLARIES

# Internal Cavity Drain: RIW CAVITY DRAIN R20 / R7

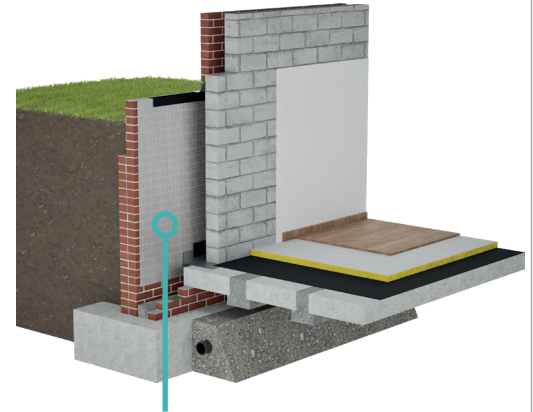
## Description

### Internal Cavity Drainage Systems for Basements and substructure applications

RIW Cavity Drain R20 and R7 are high-performance, internal cavity drainage membranes designed to manage water ingress in below-ground structures. These systems form part of a Type C (drained protection) waterproofing solution, as defined in BS 8102:2022, and are ideal where traditional tanking methods are impractical due to site or structural constraints.

**RIW CAVITY DRAIN R20:** 20mm stud height, ideal for floors and high-capacity drainage

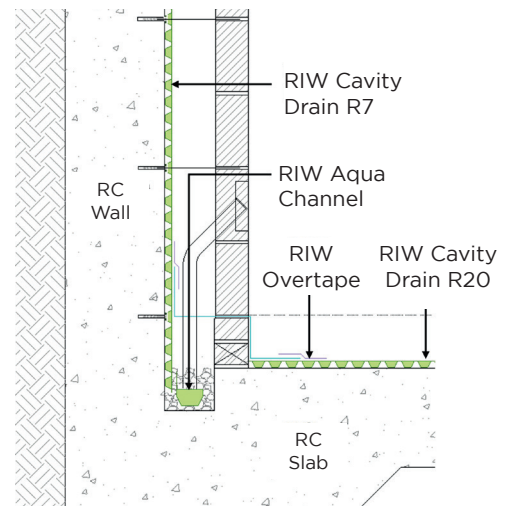
**RIW CAVITY DRAIN R7:** 8mm stud height, ideal for vertical wall applications



RIW CAVITY DRAIN

## Product Benefits

- **High Drainage Capacity:** R20: Up to 13 litres/sec/m. R7: Suitable for vertical applications with lower drainage requirements
- **Robust & Durable:** Manufactured from high-density polyethylene (HDPE) with excellent compressive strength (up to 150kN/m<sup>2</sup>)
- **Flexible Installation:** Can be applied to concrete, masonry, or piled walls, even on damp substrates
- **Chemically Resistant:** Withstands aggressive ground conditions and contaminants
- **BBA Certified:** Independently approved for use above and below ground (Certificate No. 18/5603)
- **Long-Term Protection:** Provides an effective barrier to water and water vapour for the life of the structure



## Certifications / Approvals



EN 13967 / EN 13984

## Links to Datasheets

RIW CAVITY DRAIN R7



RIW CAVITY DRAIN R20



## Packaging

- **RIW R20 CAVITY DRAIN** 2m x 20m, 2m x 10m
- **RIW R7 CAVITY DRAIN** 2m x 20m

Weight: 40 kg  
Weight: 21 kg

## NBS Source



# Internal Cavity Drain:

## RIW CAVITY DRAIN ANCILLARIES



### Description

RIW cavity drain ancillaries are critical to the performance of the system, ensuring secure fixing, continuous sealing and effective water management throughout the structure.

They support the correct installation of cavity drain membranes, maintaining integrity at fixings, overlaps, joints and penetrations – areas where failures most commonly occur.

Working together with the drainage channel, these components control and manage water ingress, directing it safely to a suitable discharge point. This enables a robust and maintainable Type C (drained) waterproofing solution in line with BS 8102.

### Product Details

#### 1. RIW Brick Plug

Use: Fixing membranes to soft brick or stone; compatible with sealing rope

#### 2. RIW Sealing Rope

Use: Seals overlaps of membranes and around service entries; acts as a gasket around fixings

#### 3. RIW Sealing Tape

Use: Seals flanged overlaps of Cavity Drain R7

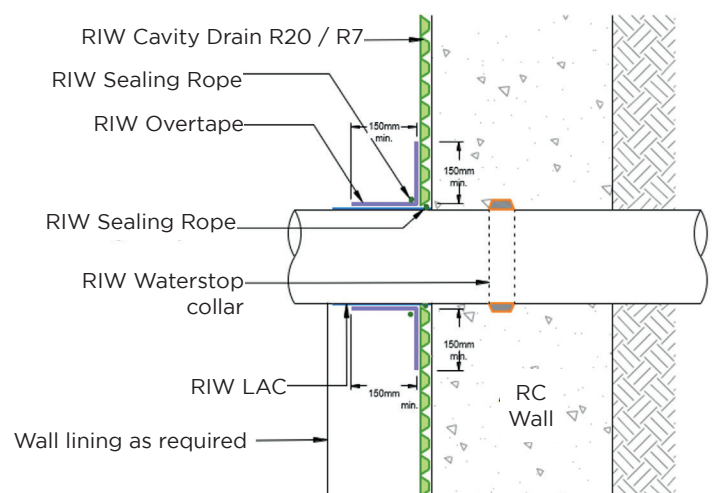
#### 4. RIW Overtape

Use: Seals wall/floor, wall/wall, and soffit junctions; also used around pipe penetrations and non-flanged laps

#### 5. RIW Aqua Channel Components

Includes: Outlet, End Outlet, Cleaning Port, Corner Piece, In-line 'T' Piece, Connector

Use: Facilitates water drainage within the cavity system



[Link to Datasheet](#)



### Packaging

- |                           |                          |                           |                   |
|---------------------------|--------------------------|---------------------------|-------------------|
| • <b>RIW BRICK PLUG</b>   | 100 plugs/ box           | • <b>RIW SEALING TAPE</b> | 30mm x 20m rolls  |
| • <b>RIW SEALING ROPE</b> | 10mm diameter x 5m rolls | • <b>RIW OVERTAPE</b>     | 150mm x 10m rolls |



# GAS RESISTANCE & DAMP PROOFING

## GAS RESISTANCE

- RIW GAS SEAL BLACK
- RIW DPM BLUE
- RIW LAC®

## DAMP PROOFING

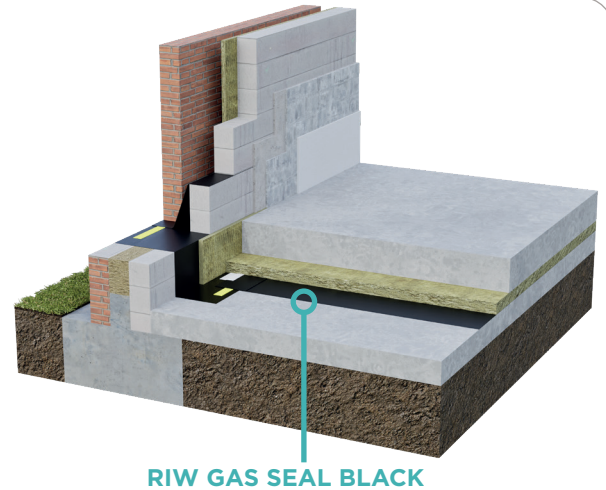
- RIW SHEETSEAL 9000 DPC

# Gas Resistance: RIW GAS SEAL BLACK

## Description

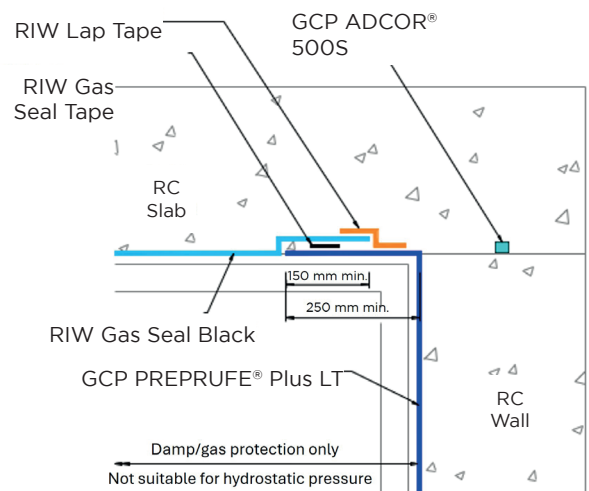
### A High-Performance Gas and Damp Proof Barrier

RIW Gas Seal Black is a four-layer, loose-laid, low-density polyethylene membrane incorporating an integral aluminium foil. It is engineered to provide a robust barrier against ground gases and moisture, including methane, carbon dioxide, radon, hydrocarbon vapours, and water vapour.



## Product Benefits

- **Comprehensive Protection:** Shields structures from harmful ground gases and moisture ingress.
- **No Separate DPM Required:** Functions as both a gas barrier and damp proof membrane.
- **Flexible Installation:** Suitable for use above and below ground on reinforced concrete slabs, suspended beam and block floors, and pre-cast concrete.
- **Robust Jointing System:** Can be seam welded or sealed with RIW Gas Seal Ancillary Tapes for a continuous, monolithic membrane.
- **Quality Control:** Two-colour membrane aids visual inspection during installation.
- **Code Compliant:** Meets the latest standards from CIRIA and BRE.



## Certifications / Approvals

CE  
0799  
EN 13967

## Link to Datasheet



## Packaging

- **RIW GAS SEAL BLACK** 2m x 50m roll (100m<sup>2</sup>) Thickness: 0.6 mm  
Weight: 35 kg

## NBS Source

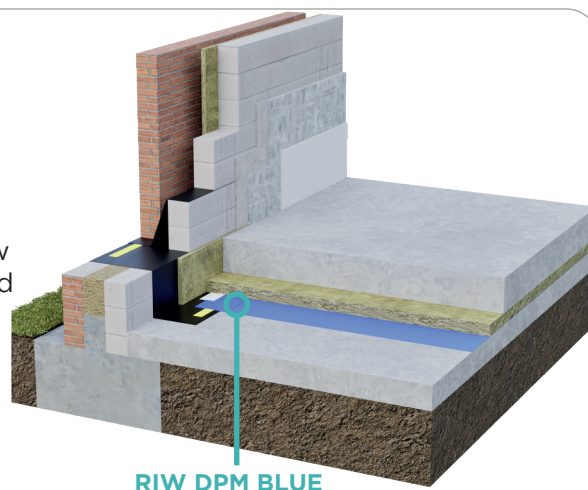


# Gas Resistance: RIW DPM BLUE

## Description

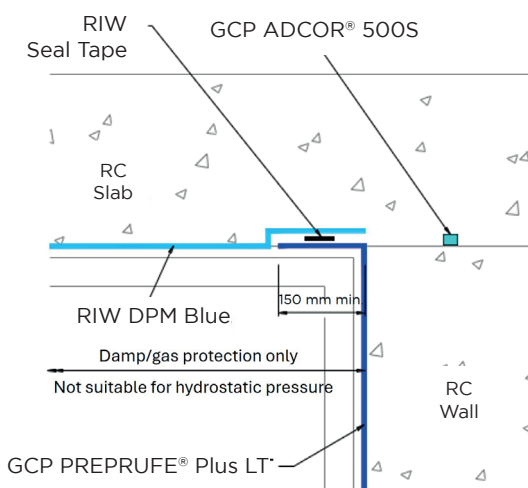
### High-Performance Damp Proof & Radon Barrier Membrane

RIW DPM Blue is a three-layer, low-density polyethylene damp proof membrane reinforced with a polypropylene grid, designed to provide reliable protection against moisture and radon ingress from the ground. Suitable for use above or below ground-bearing reinforced concrete slabs, as well as suspended beam & block floors or precast concrete slabs, this robust membrane offers virgin-material construction, strong jointing capability, weldable seams, and two-colour quality control for assured on-site performance.



## Product Benefits

- **Manufactured from Virgin Material** - produced using only virgin polyethylene for consistent quality and long-term performance.
- **Robust Jointing & Sealing System** - engineered to ensure secure, reliable and durable connections between membrane sheets.
- **Weldable for Strong, Continuous Joints** - allows for welded seams where required, enhancing membrane integrity and resistance.
- **Single-Wound, Crease-Free Membrane** - supplied in single-wound rolls with zero creases, improving handling, installation ease, and finished membrane performance.
- **Two-Colour Membrane for Quality Control** - dual-colour construction provides instant visual confirmation of correct placement and overlap during installation.



## Certifications / Approvals

CE  
0799  
EN 13967

## Link to Datasheet



## Packaging

- **RIW DPM BLUE** 2m x 50m roll Thickness: 0.5 mm Weight: 27.5 kg

## NBS Source



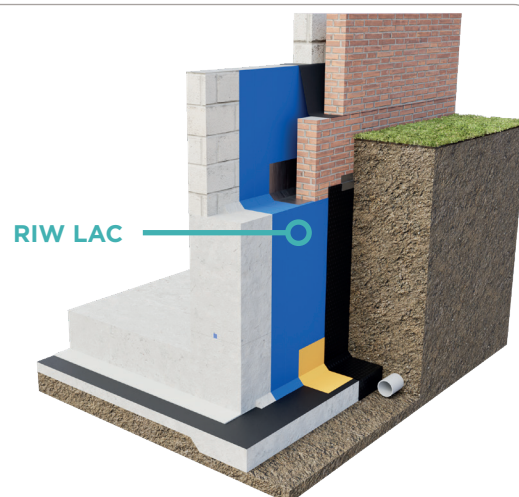
# Gas Resistance: RIW LAC®



## Description

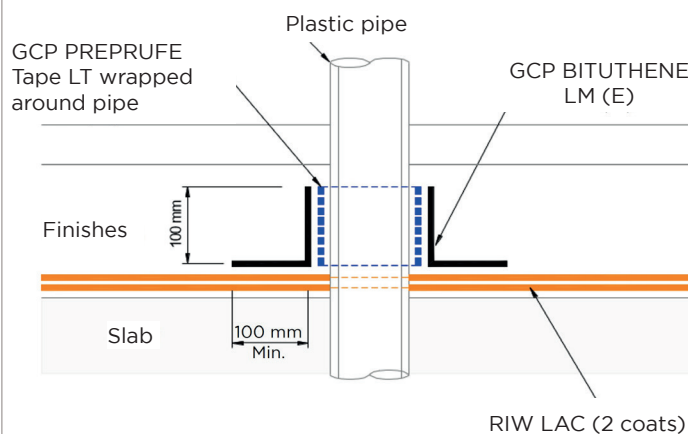
**RIW LAC® (liquid asphaltic composition) is a two-coat, cold-applied bitumen-based waterproofing membrane that dries to a uniform gloss black finish.**

Formulated from natural and petroleum bitumens in white spirit, it provides a durable barrier against water, water vapour, and radon gas, making it ideal for below-ground and damp-proofing applications.



## Product Benefits

- **Dual Protection:** Effective waterproofing and radon gas barrier in one system.
- **Versatile Use:** Suitable for basements, retaining walls, ground floors, and superstructures.
- **Flexible & Elastic:** Adapts to complex details and retains integrity over time.
- **Quick & Easy Application:** Applied by brush, roller, or spray—no hot works required.
- **Sulphate Resistant:** Suitable for aggressive ground conditions.
- **Proven Performance:** Trusted for nearly a century in UK construction.



[Link to Datasheet](#)



[NBS Source](#)



## Packaging

- **RIW LAC** 5 and 25 litre containers Coverage: 1m<sup>2</sup>/litre (2 coats)

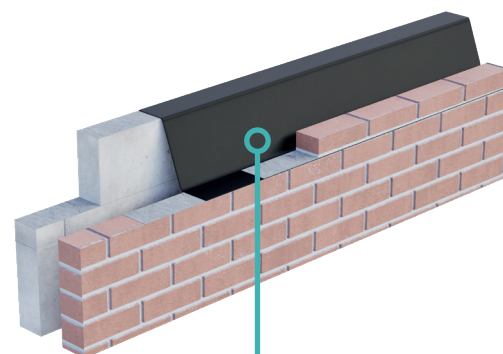
# Damp Proofing:

## RIW SHEETSEAL 9000 DPC

### Description

#### Polymeric Damp Proof Course

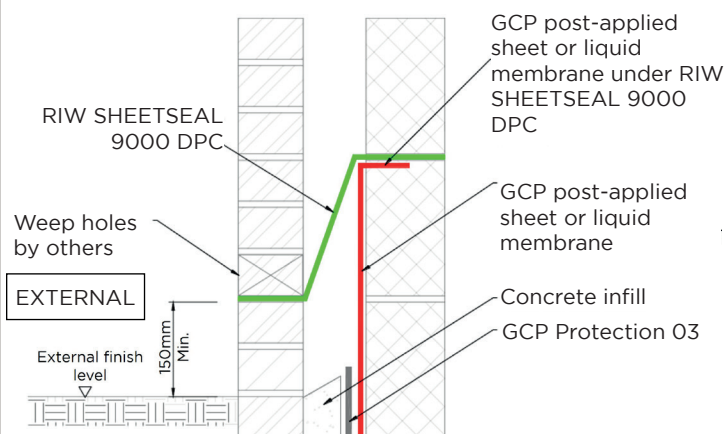
RIW Sheetseal 9000 DPC is a durable, high-performance polymeric damp proof course designed to prevent moisture from rising through masonry structures. Available in widths from 100mm to 1000mm and supplied in 20m rolls, it offers exceptional toughness, flexibility, and resistance to extremes of temperature. Suitable for use within masonry walls and as a cavity tray, Sheetseal 9000 DPC delivers long-lasting protection across a wide range of building applications.



RIW SHEETSEAL 9000 DPC

### Product Benefits

- **Fully recyclable**, supporting sustainable construction practices.
- **Free from pitch, tar, and bitumen**, ensuring a clean, modern, and safe material composition.
- **Tough, durable, and puncture resistant**, ideal for demanding building environments.
- **Flexible and easy to handle**, simplifying installation on site.
- **Excellent mortar bond strength**, ensuring secure integration within masonry.
- **Unaffected by extremes of temperature**, maintaining performance in varying conditions.



### Certifications / Approvals



### Link to Datasheet



### Packaging

- **RIW SHEETSEAL 9000 DPC** 20m long (various widths) Thickness: 0.8 mm

### NBS Source





# CEMENTITIOUS WATERPROOFING

## CEMENTITIOUS WATERPROOFING

- GCP AQUATEK SUPER XA
- FOSROC WATERPROOF RENDER
- RIW CEMENTFILL HB & FC
- RIW CEMENTFLEX / RIW CEMENTSEAL

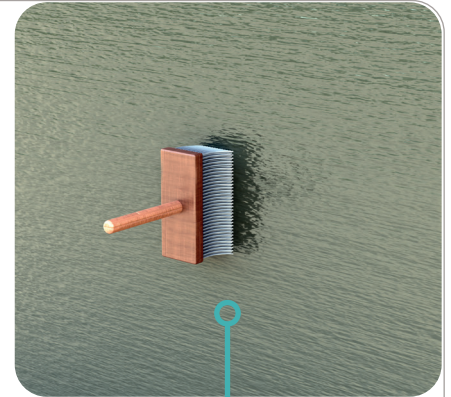
# Cementitious Waterproofing: **AQUATEK SUPER XA**



## Description

### Crystalline Waterproofing Coating for Long-Term Concrete Protection

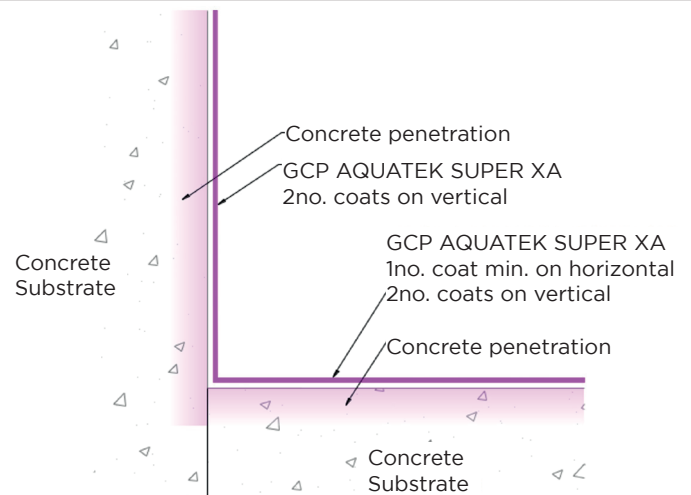
AQUATEK® Super XA is a cement-based crystalline waterproofing coating that penetrates concrete capillaries and forms insoluble crystals to block water pathways. It delivers long-term protection against positive and negative hydrostatic pressure and can be applied manually, by spray, or as a dry-broadcast system on a wide range of concrete structures.



AQUATEK SUPER XA

## Product Benefits

- **High adhesion and waterproofing performance through deep saturation of concrete capillaries**, delivering long-term protection against both negative and positive hydrostatic pressure.
- **Fast-setting formulation**, reducing downtime and enabling rapid application and project progression.
- **Fast, easy and cost-effective application** suitable for manual application, spraying, or dry broadcasting.



[Link to Datasheet](#)



 **NBS Source**



## Packaging

- **AQUATEK SUPER XA**

Bags of 20 kg with plastic liner

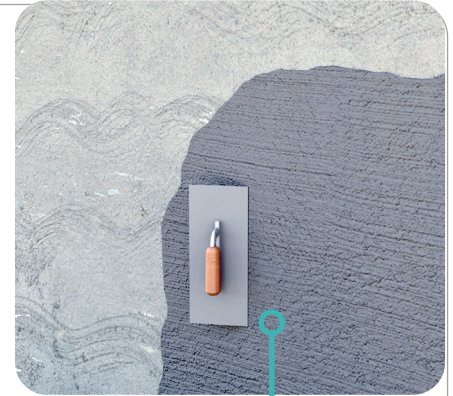
# Cementitious Waterproofing: **PROOFEX WATERPROOF RENDER**



## Description

### High-Performance Polymer-Modified Render for Internal Waterproofing

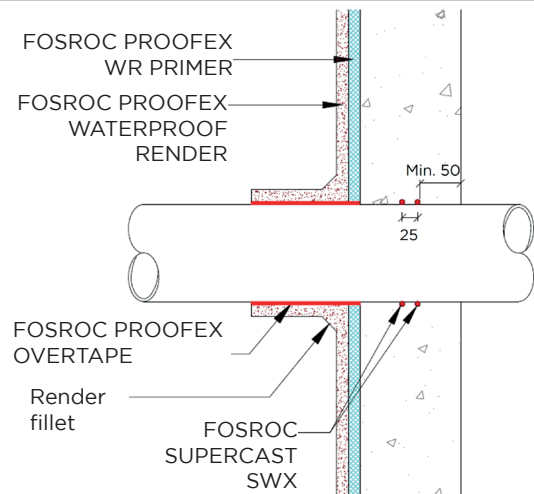
Proofex Waterproof Render is a single-component, polymer-modified cementitious render designed for internal waterproofing of below-ground concrete and masonry structures, including basements, lift pits, cellars, and tunnels. It offers excellent bond strength, very low permeability, and resistance to positive and negative hydrostatic pressure, making it ideal for BS 8102:2022 Type A protection and compatible with the wider Fosroc waterproofing system. Full compatibility with Renderoc mortars and Nitocote/Dekguard coatings.



**PROOFEX WATERPROOF  
RENDER**

## Product Benefits

- **Resists both positive and negative hydrostatic pressure**, ensuring reliable waterproofing performance in demanding below-ground conditions.
- **Extremely low permeability** to water, carbon dioxide, and chlorides due to polymer modification.
- **Excellent bond strength** to concrete and masonry, exceeding EN 1504-2 requirements.
- **Compatible with structural and non-structural concrete** with compressive strength greater than 20 MPa.
- **Single-component, pre-bagged formulation** eliminates site-batched variations, improving consistency.
- **Quick and efficient application**, suitable for fast-paced construction and refurbishment projects.
- **Compatible with Renderoc repair mortars and Nitocote/Dekguard coatings** for integrated waterproofing systems.
- **Provides a durable waterproof layer** with high compressive strength and no water penetration under negative pressure.



[Link to Datasheet](#)



**NBS Source**



## Packaging

- |                                    |                                |
|------------------------------------|--------------------------------|
| • <b>PROOFEX WATERPROOF RENDER</b> | 25 kg bags                     |
| • <b>PROOFEX WR PRIMER</b>         | 29.5 kg kits (powder & liquid) |
| • <b>NITOBOND AR</b>               | 5 & 25 litre drums             |

# Cementitious Waterproofing: RIW CEMENTFILL HB & FC



## Description

### High-Build Waterproof Repair Mortar for Concrete Structures

RIW Cementfill HB is a single-component, polymer-modified, cement-based mortar designed for high-build structural repairs and waterproof profiling of concrete surfaces.

### Fine-Grade Waterproof Repair Mortar for Concrete and Masonry

RIW Cementfill FC is a single-component, thixotropic, polymer-modified cement-based mortar designed for fine surface repairs, smoothing, and waterproofing of concrete and masonry substrates.



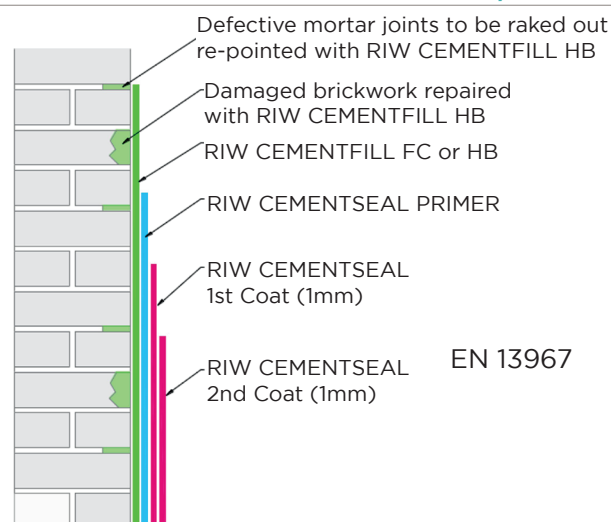
CEMENTFILL  
HB / FC

### Product Benefits - CEMENTFILL HB

- **Waterproof to 10 bar** (equivalent to 100 metres of water pressure)
- **High-build application:** 5 mm to 80 mm in a single layer
- **Thixotropic consistency:** Ideal for vertical and overhead surfaces
- **Rapid setting:** Fast strength gain for quick overcoating or membrane application
- **Excellent adhesion:** Bonds strongly to damp concrete and masonry
- **Low shrinkage:** Minimises cracking and ensures long-term performance

### Product Benefits - CEMENTFILL FC

- **Totally Waterproof:** Resists up to 100 metres of positive and negative water pressure.
- **High Adhesion:** Bonds strongly to concrete and masonry, even on damp surfaces.
- **Versatile Application:** suitable for horizontal, vertical, and overhead surfaces.
- **Feather-Edge Finish:** Ideal for smoothing and levelling without cracking or shrinkage.
- **Environmentally Friendly:** Low VOC formulation, safe for use in sensitive environments.



### Certifications / Approvals



EN 1504-3

### Link to Datasheet



### Packaging

- **RIW CEMENTFILL HB** 20 kg bag in plastic tub
- **RIW CEMENTFILL FC** 20 kg bag in plastic tub

### NBS Source



# Cementitious Waterproofing:

## RIW CEMENTFLEX / RIW CEMENTSEAL



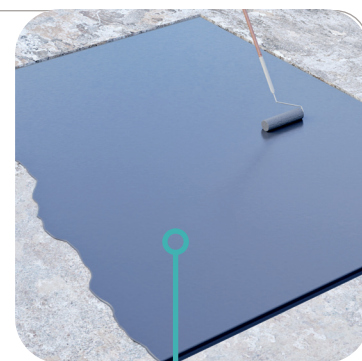
### Description

#### Flexible Cement-Based Waterproof Coating for Concrete and Masonry

**RIW Cementflex** is a flexible, cement-based waterproof coating that forms a seamless, fully bonded barrier, resisting water and carbon dioxide while accommodating structural movement—even under permanent immersion.

#### Durable Cement-Based Waterproof Coating for Concrete and Masonry

**RIW Cementseal** is a two-component, polymer-modified cementitious waterproof coating that forms a tough, seamless barrier, protecting concrete and masonry from water penetration and carbon dioxide diffusion in both new build and refurbishment projects.



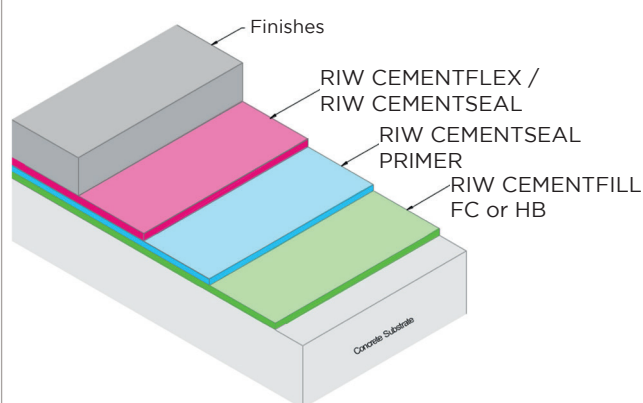
CEMENTFLEX /  
CEMENTSEAL

#### Product Benefits - CEMENTFLEX

- **Exceptional Waterproofing:** Seamless barrier resisting up to 100 m of positive and negative water pressure.
- **Flexible & Crack-Resistant:** Elastomeric formulation accommodates movement and minor cracking.
- **Durable & Long-Lasting:** High resistance to abrasion, impact, and carbonation.
- **Versatile Application:** Suitable for vertical, horizontal, and overhead use by brush or spray.
- **Environmentally Friendly:** Low VOC, suitable for internal and external use.
- **Excellent Adhesion:** Bonds strongly to concrete and masonry substrates, forming a continuous waterproof layer.

#### Product Benefits - CEMENTSEAL

- **Superior Waterproofing:** Seamless barrier resisting up to 100 m of positive and negative water pressure.
- **Fast Installation:** Can be applied to damp surfaces to speed up programmes.
- **Durable Protection:** High resistance to abrasion, impact, and carbonation.
- **Environmentally Conscious:** Low VOC, safe for internal and external use.
- **Strong Adhesion:** Bonds firmly to concrete and masonry for a continuous waterproof layer.



#### Certifications / Approvals



#### Links to Datasheets

RIW  
Cementflex



RIW  
Cementseal



#### Packaging

- **RIW CEMENTFLEX** 1.15 kg in plastic tub
- **RIW CEMENTSEAL** 15 kg (two part) in plastic tub

#### NBS Source







# INTERNAL & EXTERNAL LIQUID COATINGS// BUNDING

## LIQUID WATERPROOFING MEMBRANES

- FOSROC NITOCOTE EP403
- FOSROC NITOCOTE EP405
- RIW TOUGHSEAL ECO
- RIW FLEXISEAL PRO

# Liquid Coatings/ Bunding:

## NITOCOTE EP403



### Description

**Solvent-Free Epoxy Coating for Damp Concrete & Steel Surfaces. Ideal for harsh environments.**

For damp concrete and steel, curing to a smooth, tough, chemical- and abrasion-resistant finish.

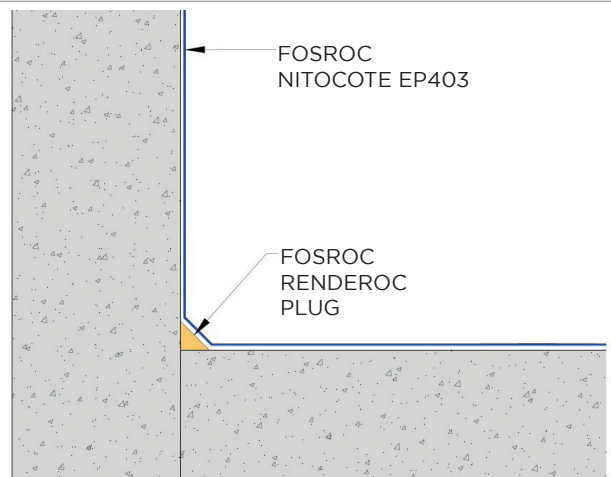
Ideal for harsh environments such as sewage works, marine areas, basements and tunnels.



NITOCOTE EP403

### Product Benefits

- **High build application** provides a durable protective barrier.
- **Solvent free** & suitable for confined spaces for safe, low VOC installation.
- **Excellent corrosion, chemical & abrasion resistance**, ensuring long term protection.
- **Can be applied to damp surfaces**, ideal where drying is impractical.
- **Smooth, glossy, easy to clean** finish improves hygiene and maintenance.
- **Waterproof and resistant to ground gases** such as radon, CO<sub>2</sub>, and methane.



### Certifications / Approvals



0370

EN 1504-2

### Links to Datasheets



### Packaging

- **NITOCOTE EP403** 2.5 kg (1.5 litres)

# Liquid Coatings/ Bunding: NITOCOTE EP405



## Description

### Solvent-Free, Gas-Resistant, Waterproof Coating For Potable Water & Hygienic Environments

A gas-resistant, waterproof coating designed for use on below-ground retaining walls and foundation structures, including construction joints. Compliant with BS 8102:2022 & BS 8485:2015+A1:2019.

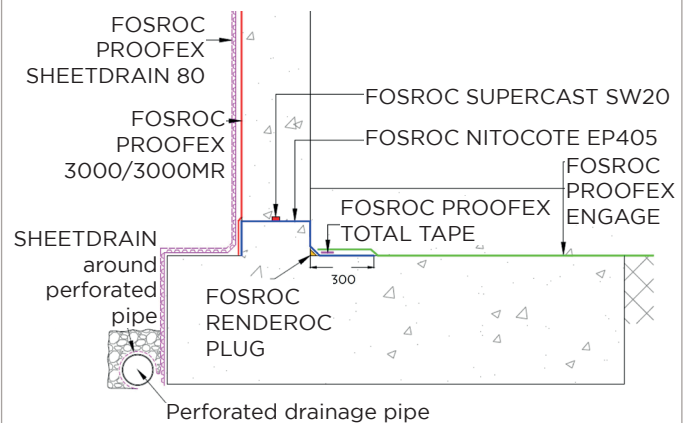
Provides a reliable solution for achieving protection continuity in areas where sheet membranes cannot be easily applied. Fully compatible with the Proofex range of sheet membranes, allowing seamless integration within comprehensive waterproofing and gas protection systems. Designed for potable-water and food-safe applications, providing a smooth, hygienic, durable finish on concrete and steel in facilities like reservoirs, water treatment works, and food-processing plants.



NITOCOTE EP405

## Product Benefits

- **Solvent-free epoxy formulation**, suitable for confined spaces.
- **Corrosion, chemical**, and abrasion resistance for demanding conditions.
- **Waterproof barrier suitable** for potable-water retaining structures.
- **Ground-gas and water-vapour resistance**, compliant with BS 8102:2022 & BS 8485:2015+A1:2019.
- **Can be applied directly to concrete** or mild steel, even when damp.
- **Non-toxic formulation meeting BS 6920** water quality requirements.



## Certifications / Approvals



0370

EN 1504-2



## Links to Datasheets



## Packaging

- **NITOCOTE EP405** 2.5 kg (1.5 litres) (blue & white colours)

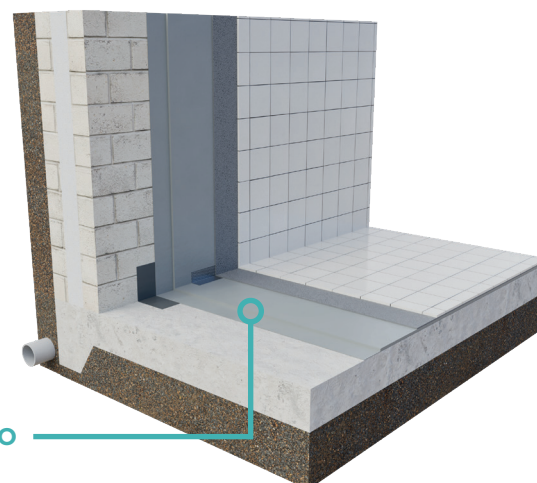
# Liquid Coatings/ Bunding:

## RIW TOUGHSEAL ECO

### Description

#### Heavy-Duty Liquid-Applied Waterproof and Protective Coating

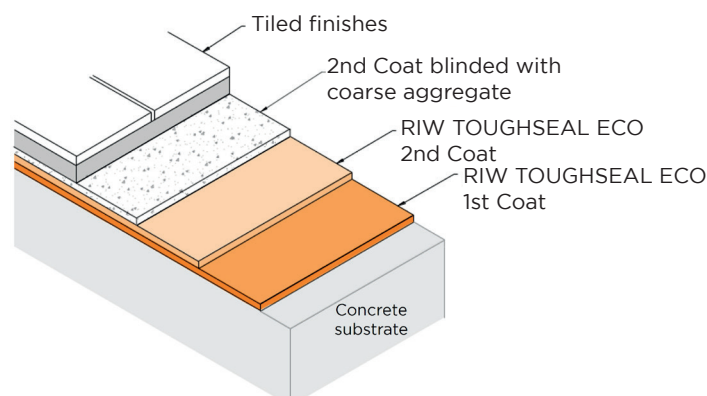
RIW Toughseal ECO is a two-component, solvent free polymer modified epoxide coating. Designed with a focus on the health, comfort, and well-being of building occupants, it is compliant with the LEED v4 indoor environmental quality standard.



TOUGHSEAL ECO

### Product Benefits

- **Waterproof** – Provides an effective water and water vapour barrier.
- **Abrasion resistant** – Durable against mechanical wear.
- **Seamless membrane** – Creates a uniform, joint free protective layer
- **High substrate adhesion** – Bonds strongly to concrete, masonry, and steel.
- **Chemical and UV resistant** – Withstands exposure to chemicals, UV light, and atmospheric attack.
- **Low VOC content** – LEED v4 EQ compliant for low emitting materials.
- **Long term durability** – When covered, provides a barrier for the life of the structure.
- **Fire tested and certified** – Achieves Class 1 rating under BS 476 Part 7.
- **Versatile** – Suitable for floors, plant rooms, basements, wet areas, raised access floors, and marine applications.
- **100% solids, solvent free formulation** – No shrinkage and safer to handle.



### Certifications / Approvals



### Link to Datasheet



### Packaging

- **TOUGHSEAL ECO (two part)** 5 and 20 litre packs Coverage: 4m<sup>2</sup> /litre/coat

### NBS Source



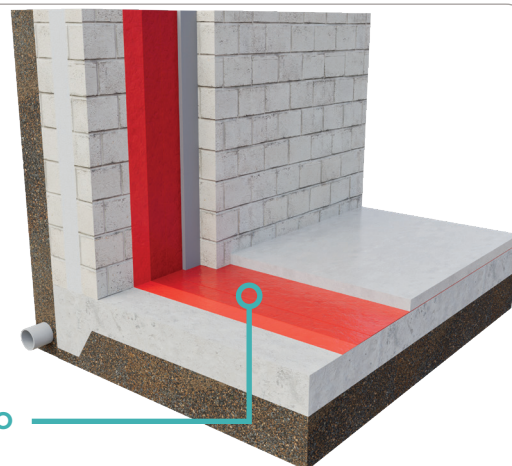
# Liquid Coatings/ Bunding:

## RIW FLEXISEAL PRO

### Description

#### High-Performance, Cold-Applied Liquid Waterproofing System

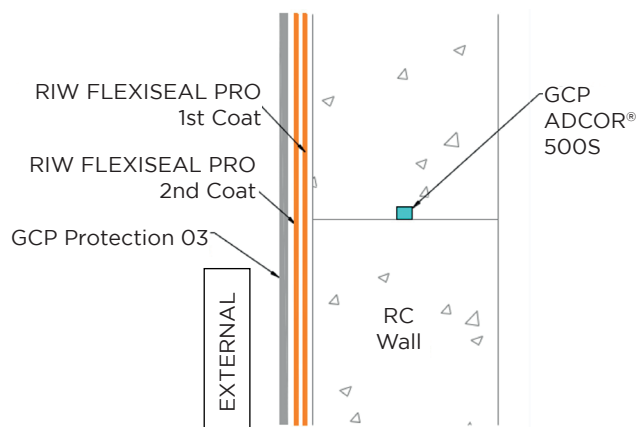
RIW Flexiseal Pro is a two-pack, solvent-free modified epoxide system that cures to form a seamless, fully bonded waterproof coating. Designed for fast-track construction, it offers a durable, flexible barrier to water, water vapour, and gases such as carbon dioxide and methane.



FLEXISEAL PRO

### Product Benefits

- **Seamless & Fully Bonded:** Eliminates joints and overlaps for maximum waterproofing integrity.
- **Fast Application:** Single-coat application on horizontal surfaces and two coats on verticals—ideal for time-sensitive projects.
- **Flexible & Durable:** Accommodates structural movement while resisting wear and tear.
- **Cold-Applied:** No hot works required—applies easily by brush, roller, or spray.
- **High Adhesion:** Bonds strongly to damp concrete, masonry, and steel.
- **Chemical & UV Resistant:** Suitable for exposed and aggressive environments.
- **Colour-Coded Layers:** Built-in quality control during application.
- **Gas Proofing:** Effective barrier to methane and carbon dioxide.



### Certifications / Approvals



### Link to Datasheet



### Packaging

- **FLEXISEAL PRO** (two part)

5 and 20 litre packs  
 Coverage: Horizontal 1 m<sup>2</sup>/kg/coat  
 Vertical 2 m<sup>2</sup>/kg/coat

### NBS Source





# EXTERNAL DRAINAGE

## DRAINAGE

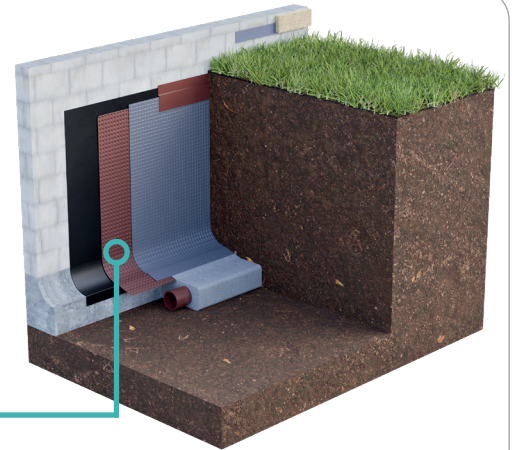
- RIW DOUBLE DRAIN
- GCP HYDRODUCT® 200/220

# External Drainage: RIW DOUBLE DRAIN

## Description

### Advanced Structural Drainage Protection

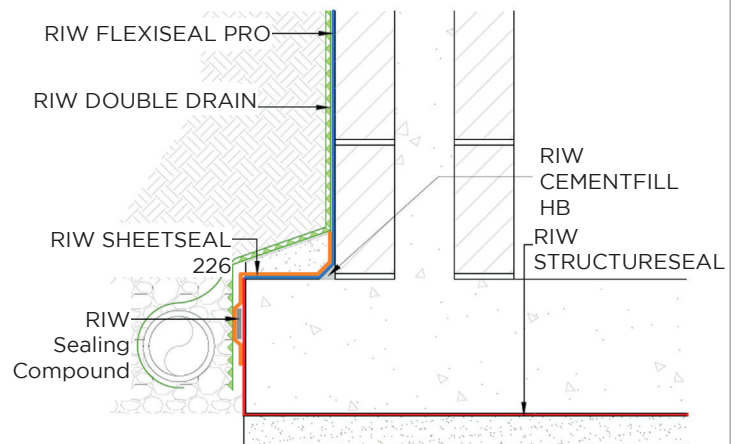
RIW Double Drain is a high-performance, cold-applied structural drainage system designed to protect below-ground structures from water ingress and hydrostatic pressure. It consists of a robust, high-density polyethylene (HDPE) profiled sheet bonded to a permeable geotextile filter fabric, allowing water to flow freely while preventing soil particles from clogging the system.



RIW DOUBLE DRAIN

## Product Benefits

- **Efficient Water Management:** Actively channels groundwater away from structures, reducing hydrostatic pressure and preventing water ingress.
- **Reliable Protection:** Shields waterproofing membranes from physical damage, root intrusion, and long-term wear.
- **Enhanced Structural Performance:** Contributes to thermal insulation and overall durability of below-ground constructions.
- **Fast & Hassle-Free Installation:** Lightweight and easy to handle, saving time and labour on site.
- **No Need for Granular Backfill:** simplifies construction by eliminating the requirement for traditional drainage aggregates.



## Certifications / Approvals



EN 13252

## Link to Datasheet



## Packaging

- **RIW DOUBLE DRAIN** 2m x 20m rolls
- **RIW ADHESIVE TAPE** 150mm x 15m rolls
- **RIW TOP EDGING STRIP** 2m lengths
- **RIW Brick Plugs** 100 per box

## NBS Source



# External Drainage: HYDRODUCT® 200/220



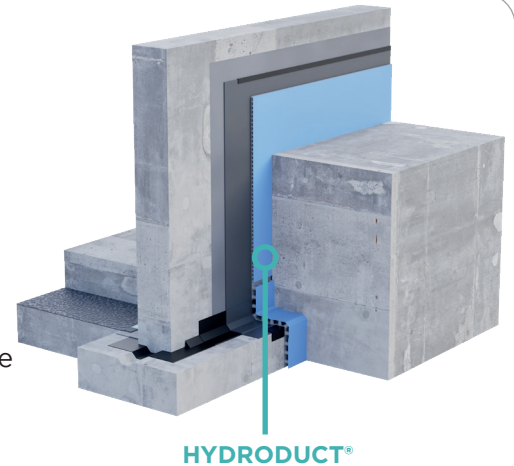
## Description

### High-Efficiency Geocomposite Drainage Systems for Horizontal Roofs, Decks & Vertical Substructure Walls

Pre-fabricated geocomposite systems consisting of studded polystyrene drainage cores faced with geotextile filter fabrics.

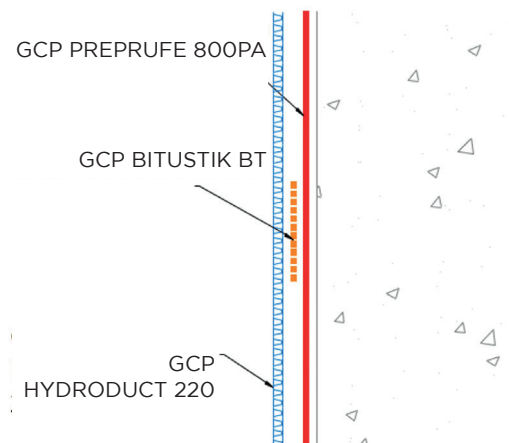
Horizontal sheets deliver reliable drainage and irrigation across roofs and decks, efficiently channeling water to outlets while supporting both hard and soft landscaping.

Vertical sheets provide drainage along basement and retaining walls, reducing hydrostatic pressure and offering a cost-effective alternative to aggregate backfill systems.



## Product Benefits

- High Drainage & Flow Performance**
  - Studded core maintains drainage efficiency under long-term loading (creep-resistant).
  - Ensures rapid water movement toward designated drainage points on both horizontal and vertical surfaces.
- Protects Waterproofing Membranes**
  - Horizontal sheets work seamlessly with GCP waterproofing membranes, improving resistance to water penetration across decks and roofs.
  - Vertical sheets protect membranes against soil pressure and facilitate drainage away from basement walls.
- Durable & Chemical-Resistant**
  - Rot-proof and unaffected by immersion in water or exposure to dilute chemical concentrations.
- Efficient Installation**
  - Lightweight, easy to install, and requires no heavy drainage aggregates—reducing costs and labour.
  - Vertical sheets integrate directly with HYDRODUCT Coil 150 or perforated drains for complete system continuity.



## Certifications / Approvals



EN 13252

## Link to Datasheet



## Packaging

- HYDRODUCT 200/220**
  - 1.25m x 32m rolls
  - 12mm thick (40m<sup>2</sup>)
  - Weight: 40kg (approx)

## NBS Source





## PROJECT PROFILE

www.summitplatforms.co.uk

## Our Cultural Heart Huddersfield, UK



### THE PROJECT

Huddersfield Council needed to refurbish an existing concrete structure with low cover and exposed steel, preparing it for use as an enclosed service yard exposed to high CO<sub>2</sub> and hydrocarbons. As well as a more consistent aesthetic to match newly refurbished concrete elements.



### THE CHALLENGE

The key challenge was protecting the structure against carbonation-induced corrosion in a high-risk environment while ensuring long-term durability. The project required a proven system supported by strong technical expertise, early engagement and a long-term warranty. Consistent appearance and reliable protection across all elements were essential.



### THE SOLUTION

Fosroc supplied a system centred on Renderoc ST05 for uniform protective coating and enhanced carbonation resistance. Additional repairs using Renderoc HB45 and Renderoc LA reinstated defective areas. Early trials, detailed specifications and ongoing technical support ensured correct application, long-term protection and a consistent modern finish, supported by a 10-year warranty.

### KEY STAKEHOLDERS

- Client: Huddersfield Council

### PRODUCTS USED

- Renderoc ST05
- Renderoc HB45
- Renderoc LA

## St Stephens Green Hotel Dublin, Ireland



### THE PROJECT

St Stephens Green Hotel, situated in the centre of Dublin 2, required a complex basement construction as part of a wider urban development project.



### THE CHALLENGE

Difficult ground conditions and a high water table that required a robust waterproofing approach. As the basement was intended to become a habitable space, both water and gas protection were essential. Budget limitations, a confined city-centre layout, strict programme deadlines, and the need to minimise disruption in a busy public area.



### THE SOLUTION

GCP's strong technical expertise and established relationship with both Townlink and Baridek were key factors in the final product selection. PREPRUFE® 120S was chosen for its proven durability, reliability, and suitability for restricted urban sites, offering both waterproofing and gas protection while meeting budgetary and performance expectations. This solution aligned well with the project's technical demands and ensured long-term protection of the basement structure.

### KEY STAKEHOLDERS

- Client: Townlink
- Contractor: Townlink
- Specialist Contractor: Baridek

### PRODUCTS USED

- PREPRUFE® 120S



## Colne Valley Viaduct Uxbridge, UK



### THE PROJECT

The Colne Valley Viaduct on HS2 is the UK's longest rail bridge, spanning 2.1 miles across lakes and sensitive landscapes, built from over 1,000 precast segments and 56 piers for a 120-year design life. SGCC supported both onsite works and the precast facility with a unified package of materials and technologies.



### THE CHALLENGE

The project required concrete mixes with very different performance needs—long workability for piling, self-compacting mixes for dense V-pier reinforcement, and rapid-strength mixes for fast precast cycles. Ensuring programme certainty, meeting strict long-term waterproofing durability, and delivering visually consistent repairs also presented key challenges.



### THE SOLUTION

SGCC provided tailored Chryso admixtures, Maturix digital monitoring for real-time strength data, and GCP's ELIMINATOR® waterproofing system for durable deck protection. Fosroc repair and protection solutions ensured high-quality, colour-matched finishes, supporting consistent construction and long-term durability.

### KEY STAKEHOLDERS

- **Client:** HS2
- **Main Contractor:** Align JV (Bouygues Travaux Publics, VolkerFitzpatrick, Sir Robert McAlpine)
- **Engineer:** Rendel-Ingerop, Jacobs
- **Architect:** Grimshaw
- **Applicator:** VolkerLaser

### PRODUCTS USED

- Chryso RM D, Optima 100, Optima 234, Omega 178R, Xel 650, AB 42, Tera 488, Premia 550.
- Maturix
- ELIMINATOR, Metaset Resifilla, SENTINEL
- Webercem Advanced Precision Grout
- Renderoc Patch, HB 45 & FC, ST 05, Nitofill LV, Patchroc 250, Nitoseal MS60 & Cure B, Conbextra HF

# SAINT-GOBAIN CONSTRUCTION CHEMICALS PORTFOLIO

Saint-Gobain Construction Chemicals brings together a comprehensive portfolio of solutions for concrete performance, durability, waterproofing and digital construction. From admixtures and fibre reinforcement to repair, protection, monitoring and structural waterproofing, these technologies work together to improve build quality, extend service life and support more sustainable construction.



## Sustainable Concrete Solutions

Concrete repair, protection and waterproofing solutions designed to enhance durability, extend service life and reduce environmental impact across structural and infrastructure applications.



## Innovative Concrete & Cement Technologies

Advanced admixtures and cement technologies that improve concrete performance, workability and sustainability across a wide range of construction applications.



## Verifi® In-Transit Concrete Management

Real-time monitoring and automated control of slump, temperature and water in transit—improving consistency, reducing waste and lowering cost.



## Maturix® Smart Concrete Sensors

Wireless sensors providing real-time strength and temperature data to monitor concrete curing, predict formwork striking and improve scheduling.



Construction Fibres

## Adfil Fibers

Macro and micro synthetic fibres that enhance crack control, durability and long-term performance in concrete - supporting safer, more efficient construction.



## Advanced Waterproofing & Injection Systems

Advanced waterproofing and injection systems, integrating RIW and Stirling Lloyd capabilities to protect structures against water ingress, ground gases and aggressive conditions.



**SAINT-GOBAIN CONSTRUCTION  
CHEMICALS**

[sgccenquiry.uk@saint-gobain.com](mailto:sgccenquiry.uk@saint-gobain.com)

Tel.: 01753 944 200

[gcpat.uk](http://gcpat.uk)

[fosroc.com](http://fosroc.com)

[uk.chryso.com](http://uk.chryso.com)