

Preprufe® Plus

 Advanced
Bond Technology™

Ultimate Waterproofing Protection For Below Ground Structures



gcp applied technologies

PREPRUFE® Plus Waterproofing System with Advanced Bond Technology™

GCP Applied Technologies' PREPRUFE® Plus waterproofing system with Advanced Bond Technology™ is engineered to protect structures below ground from water ingress, corrosive soil, gas and moisture. Composed of durable and flexible HDPE geomembrane, it aggressively adheres directly to poured concrete and easily conforms to complex details to create an impermeable protective seal. The patented non-absorbent membrane surface coating resists dirt and contaminants and withstands up to eight weeks of UV exposure onsite. The membrane is immediately trafficable without protection layers allowing contractors to install rebar the same day.

The PREPRUFE® Plus waterproofing system is fast and easy to install by only two operators and does not require primer, heat, power or special equipment. The system is a proven solution for the most challenging site conditions as well as straightforward projects in climates worldwide.

The PREPRUFE® Plus waterproofing system forms a protective barrier for the life of the structure and is recognized as one of the most advanced and unique waterproofing solutions available for below ground structures.

Unique Benefits

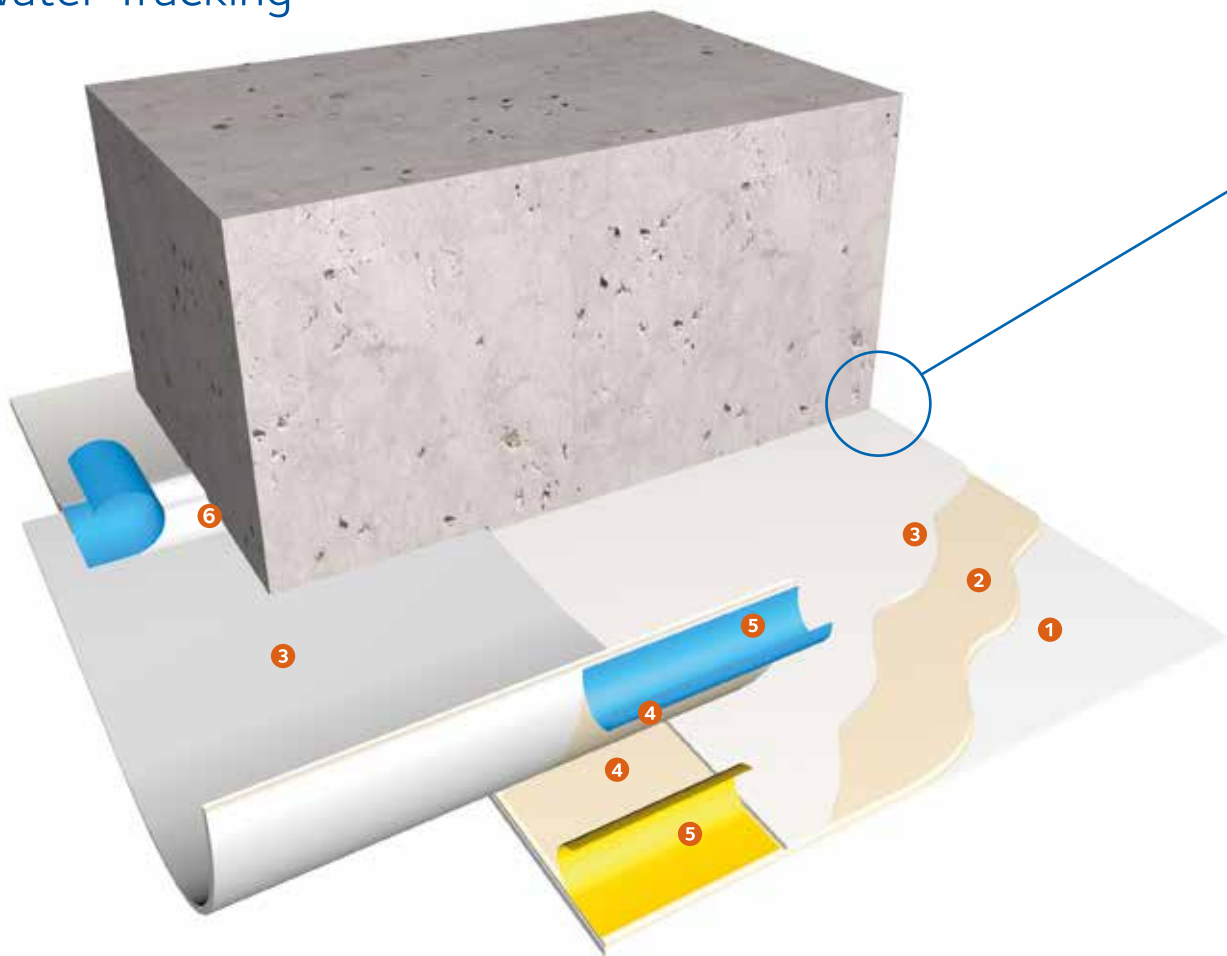
- Water migration and seepage is eliminated with direct and intimate bonding to the structure unlike systems that rely on a fleece or mesh interface between the membrane and structure
- Complex details are simplified and tightly sealed with the durable and conforming waterproofing membrane, PREPRUFE® Tape and BITUTHENE® LM
- High resistance to chemicals, gas and moisture is achieved by the HDPE geomembrane and the integral continuous waterproofing seal
- Materials management and site supervision are minimized without the need for heat or flame, special equipment or tools, or numerous ancillary products
- Damage, dirt and contamination are limited with the patented non-absorbent and smooth surface coating that allows up to 6 weeks of UV exposure
- Project delays are avoided with the immediately trafficable membrane and same day rebar installation

Fast and Easy Application

- 1 2 trained operatives typically apply 600m² a day using lightweight 36m² rolls
- 2 Wet surfaces do not delay application
- 3 No primer is needed
- 4 Self-adhesive Ziplap™ watertight laps do not require heat, power or equipment
- 5 Protective surface coating is smooth, non-absorbent, highly resistant to contaminants and dirt, and is easy to clean if necessary
- 6 Membrane is immediately trafficable upon application
- 7 Rebar can be installed the same day, quickly providing a work platform



Performance: PREPRUFE® Plus Waterproofing System Adhesively Seals to Poured Concrete to Prevent Water Tracking



1 Durable and flexible HDPE geomembrane

- Protects concrete for the life of the structure
- Conforms easily to complex details forming a watertight seal

2 Continuous layer of waterproofing adhesive

- Flows together with liquid concrete to create a seamless seal and eliminate tracking
- Adhesive remains flexible for crack bridging as the concrete hardens

3 Patented non-absorbent surface coating

- Smooth, non-clogging coating resists dirt and contaminants
- Withstands up to 6 weeks of UV exposure onsite

4 5 Ziplap™ adhesive layers and liners

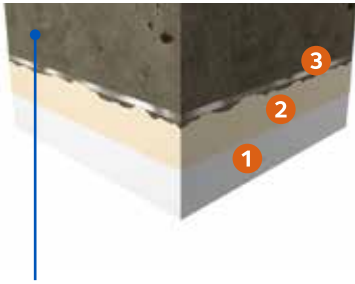
- Resistant to more than 70m water pressure*
- Liners protect the interface from dirt and water until the moment the lap is sealed
- Avoids cleaning and drying of laps for ultra fast lap sealing

6 PREPRUFE® Tape for detailing

- Single layer of reinforced pressure sensitive adhesive tape protects corners and details
- No back taping or priming

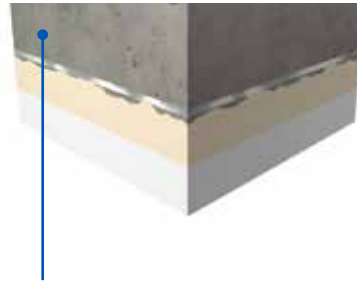
* ASTM D5385-modified test

Premium Advanced Bond Technology™



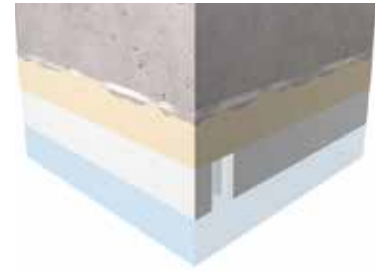
Fresh Concrete

As the concrete is poured, it passes through the surface layer and bonds to the pressure sensitive adhesive



As the Concrete Cures

As the concrete hardens, it forms an integral and continuous seal between the adhesive layers of the membrane and the structure



Impenetrable Barrier

Even in the event of a break in the membrane an impenetrable barrier isolates the structure from water, corrosive soil, gas and moisture

A Complete Waterproofing Membrane System

GCP's below ground waterproofing system offers an extensive range of compatible waterproofing products providing continuity and performance reliability.

BITUTHENE® 8000HC, a solar reflective self-adhesive waterproofing membrane, is composed of an aggressive rubberized asphalt adhesive and a full-width grey HDPE film, designed for below ground open excavation walls in temperatures up to +55 °C and is especially resistant to aggressive Middle East ground conditions, radon & methane gases. Twin seal laps (adhesive and film sealing) are pre-marked ensuring the quality of the overlap. BITUTHENE® 8000HC has been certified by BBA for watertightness, durability and gas resistance since 1997.



What Makes PREPRUFE® Plus Waterproofing Membrane with Advanced Bond Technology™ the right choice?

Advantages	Benefits	Other Systems
Membrane adheres directly to poured concrete	Forms an impermeable seal against water penetration and is fast and easy to install	Attach mechanically to concrete via a fleece or interface mesh and risk water migration and capillary action
Membrane is composed of durable HDPE	Protects concrete for the life of the structure Highly resistant to punctures and is easy to fold into corners	Often composed of a less durable roofing type membrane such as polyolefin co polymers, FPO, PVC, SBS or EPDM that are more susceptible to damage
Membrane surface is smooth and protected with a patented non-absorbent coating	Resists dirt and contaminates, is easy to clean after rebar installation, allows up to 6 weeks of UV exposure, and is immediately trafficable	Compromise performance due to absorption, dirt, damage and UV exposure after only 2-3 weeks on site
Double Adhesive ZipLaps™ form watertight laps easily in the most difficult conditions	Aggressive adhesion protects difficult details Clean and dry liners speed installation	Often requires multiple layers of tapes and sealants or heat welded joints
Simplified installation without primers or special equipment, power, heat or ancillary products	Safe, fast, easy and less expensive to install using only two trained operators	Are complex often requiring primers, heat, power, special equipment and numerous and costly ancillary products



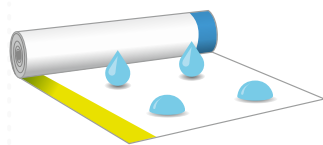
GCP developed the first fully-bonded, pre-applied below ground waterproofing technology



PREPRUFE® Plus waterproofing system is proven to prevent **water migration***



Only two operators are required for installation



Patented surface is smooth, non-absorbent, resists dirt and contamination and withstands **up to 6 weeks of UV exposure onsite**



Advanced Bond Technology™
Engineered to adhere directly to poured concrete to provide an integral and permanent protective seal



PREPRUFE® water-proofing membrane has been supplied to **more than 75 countries**



Ziplap™ technology allows **fast installation**



No equipment or primers are required for installation

* ASTM D5385-modified test

PREPRUFE® Waterproofing Membrane

60+ Million Square Metres Applied Globally

Proven Worldwide in All Climates and Site Conditions

- Hotels
- Museums
- Hospitals
- Shopping Malls
- Below Ground Transportation Systems
- Airports
- Stadiums
- Nuclear and Industrial Plants
- Government Buildings
- Residential Buildings

GCP Technical Experts Are Available to Assist Project Teams from the Planning Stage through Project Completion

GCP's global team of technical experts are committed to ensuring your project runs smoothly from start to finish. GCP brings global relationships, manufacturing infrastructure, knowledge of best practices and extensive experience with the complexities of construction to large and small projects.



Muscat Opera House, Oman



Haramain Railway, Kingdom of Saudi Arabia



Museum of Islamic Arts, Qatar



Cleveland Clinic, United Arab Emirates



Qatar Convention Centre, Qatar



Masdar Institute, United Arab Emirates

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