



# Fosroc Solutions for General Buildings

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



*constructive solutions*

# ABOUT FOSROC INTERNATIONAL

Since the company's beginnings over 80 years ago, Fosroc has developed into an International leader in delivering Constructive Solutions for projects across a broad range of market segments including transport, utilities, industrial and general buildings.

Fosroc's commitment to customer service and technical support is second to none. We work closely with architects, structural engineers, contractors and owners to best understand their requirements. Together we can develop a bespoke solution for a construction project, adding value and becoming more than just a materials supplier, but a solution provider.

Fosroc has an extensive network of offices and manufacturing locations across Europe, the Middle East, India, North, South and East Asia, and is further represented in other regions across the world by distributor and licensee partners.

Selecting from the full portfolio of Fosroc products and services and integrating expert technical support, world class customer service and innovation, Fosroc goes beyond just product selling to ensure that we partner with our customers to deliver complete constructive solutions.

- > Admixtures
- > Adhesives
- > Protective Coatings
- > Concrete Repairs
- > Industrial Flooring
- > Grouts & Anchors
- > Joint Sealants
- > Surface Treatments
- > Grinding Aids
- > Waterproofing



## FOSROC DELIVER SOLUTIONS NOT JUST PRODUCTS

### CAD Details

A library of standard CAD details are available, bespoke CAD details can be created for your specific project

### Project Specifications

Dedicated specification managers on hand to assist with correct system choices and tailored solutions

### Site Support

Expert product and application support made available from our specialist teams.

### Seminar & Training

Comprehensive programme of seminars and training courses designed to expand and reinforce your knowledge.

Leader in delivering  
Constructive Solutions  
**Worldwide!**

# BUILDING EXPERTISE

FOSROC's vast experience in providing constructive solutions to many famous building structures around the world has been built on a broad portfolio of products. These include waterproof membranes, waterstops, joint sealants, concrete repair mortars, resin flooring, protective coatings, structural strengthening, grouts and concrete admixtures manufactured to the highest quality standards backed by independent test certificates.

At Fosroc we recommend the best technology for each project rather than being driven by one particular response. We liaise and evaluate with our customers the most appropriate solution for what they are trying to achieve. We just want to deliver what is best to the customer providing peer to peer based solutions for engineering problems to ultimately find a number of ways to create value.

The scale of the projects being entrusted with Fosroc are epitomised by a \$2.5 billion hotel resort and enormous casino being built in Macau, which required extensive waterproofing covering the complete buildings, the basement area covering the size of >25 football pitches.

Proofex Engage, a pre-applied water/gas proofing membrane was selected. The project was built on reclaimed land where soil settlement was expected. The Proofex Engage system will mechanically bond to the basement floor slab ensuring water/gas proof integrity even if settlement occurs. Polyurea WCS, a fast setting polyurea compound, was used in sealing the Proofex Engage end joints and around pile heads allowing the Proofex Engage system to be installed during the wet weather season.



## FOSROC SOLUTIONS FOR GENERAL BUILDINGS



Belowground  
Waterproofing



Above-ground  
Waterproofing



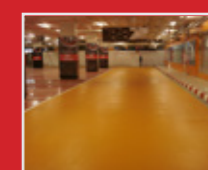
Wet Areas  
Waterproofing



Joint  
Sealants



Concrete  
Technology



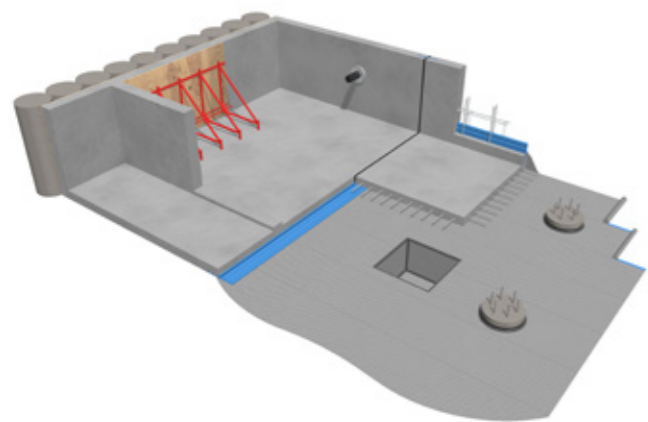
Flooring &  
Car Park Decks



Concrete Repair  
& Coatings



## BELOWGROUND WATERPROOFING



Below-ground structures that leak due to inadequate waterproofing, cracking or joint failure will result in a deterioration of the concrete and ultimately cause great damage to the building's structural integrity.

However, long term durability through waterproofing and concrete protection can be achieved by carefully selecting the correct waterproofing system and ensuring that high quality site practice and workmanship is carried out.

Fosroc offers one of the most comprehensive ranges of below-ground waterproofing product systems, manufactured to the highest quality standards backed by independent test certificates.

These systems which include Proofex Engage pre-applied membrane, Proofex PGP PVC membrane, Supercast SW swellable and Supercast PVC waterstops, Proofex Sheet Drain drainage membranes and Nitoproof liquid-applied membranes have been providing waterproofing solutions for clients around the world for a long number of years.

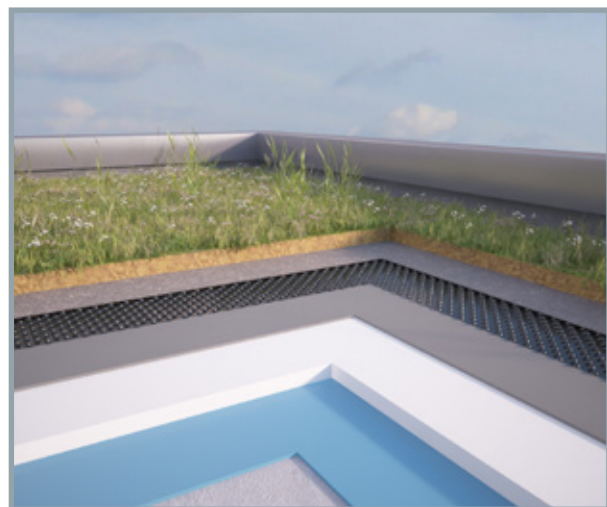
Many famous structures, such as the Burj Al Arab in Dubai, have Fosroc waterproofing protecting their basements. A recent example of Fosroc below-ground waterproofing is the Wynn Palace project in Macau where the site was built

on re-claimed contaminated land and the waterproofing system was required to be both water and gas proof. A full below-ground water/gas proof system based on Proofex Engage was chosen which also included waterstops and drainage membranes, and when combined with Fosroc's onsite support and technical guidance, resulted in a successful project.

- Cost-effective project specific solutions
- Extensive product portfolio choice
- Easily applied systems
- Proven technologies ensuring long term durability
- CAD / BIM detailing support and specification assistance
- Expert technical advice and customer service



## ABOVE-GROUND WATERPROOFING



In today's ever changing world there is added importance being placed on waterproofing of above-ground structures with social, environmental and economic benefits being gained through use of Green Roofs and Cool Roofs.

This ever-increasing trend coupled with traditional flat/sloping roofs and podium decks allows Fosroc to promote its full range of spray/liquid-applied membranes, TPO membranes and drainage membranes to best effect servicing the needs of clients and designers.

Cool roofs, as the name implies, are roofs that heat up very little, thanks to their high capacity to reflect solar radiation and, at the same time, to emit infrared heat energy. They can be an effective solution to the problem of overheating that afflicts individual buildings and urban areas in the summer, mitigating the heat island effect. Proofex OGP white, a TPO/FPA synthetic membrane, reduces the roof's surface temperature thanks to its reflectance and remittance. The same effect can be achieved with Nitoproof 800/UVR Topcoat liquid-applied seamless coating.

Green roofs are growing rapidly in popularity and can transform an underused and functional area into an attractive feature, such as a garden or open space that can be visited and enjoyed by building occupants. Fosroc's

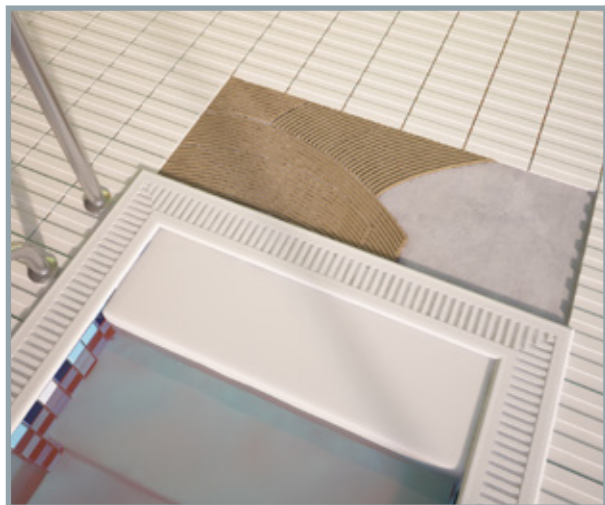
root resistant waterproofing systems include Proofex PGP PVC membrane, Nitoproof 800 liquid-applied membrane, Polyurea WPE spray-applied membrane and Proofex OGP TPO/FPA membrane.

Podium decks, especially found over underground car parks, can be waterproofed using many of Fosroc's waterproofing systems. Each project can be looked at and the best technical assistance given from one of our specification managers.

Flat/sloping roofs can be waterproofed by using either a spray or liquid-applied membrane to give seamless protection. TPO/FPA membranes are widely used.



## WET AREAS WATERPROOFING



Areas within a building that are supplied with water from its water supply system are vulnerable to potential leakages and subsequent damaged to its structure and interior finishes.

These critical applications can be dealt with by using a wide variety of waterproofing products supplied by Fosroc, ensuring piece of mind for long term durability and comfort.

Fosroc offers a full range of wet area waterproofing product systems, manufactured to the highest quality standards backed by independent test certificates.

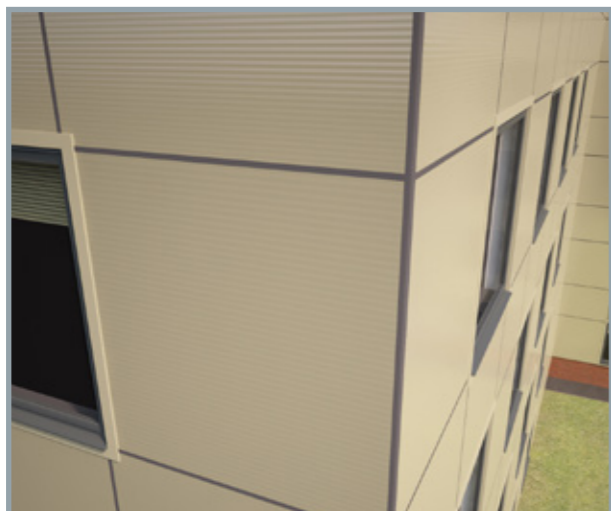
These systems which include Brushbond cementitious coatings, Polyurea WPE spray-applied membrane, Supercast SW swellable and Supercast PVC waterstops, Nitoproof 600PF liquid-applied membrane and Nitoseal MS sealants

can be easily and quickly applied to give rapid return-to-service times.

The Fosroc Nitotile products are a range of polymer modified one-component high performance waterproof tile adhesives which are suitable for fixing many different types of ceramic, porcelain and quarry tiles. Nitotile UW grade is used as an adhesive for the permanent fixing of tiles in damp and totally submerged conditions such as fountains, swimming pools,



## JOINT SEALANTS



Joint sealants are used in most types of building structures from housing, offices, stadia to industrial buildings. They enable the relative movement of the structure's components and prevent the ingress of water, wind or chemicals and also fire transmission. With such a wide range of applications many factors have to be taken into consideration when selecting a joint sealant to provide an effective and durable solution.

Fosroc's extensive range of joint sealants, manufactured to the highest quality standards backed by independent test certificates have long been respected by clients, designers and contractors providing long term durability to building structures around the world, including many iconic buildings such as the Grand Mosque in Mecca. Fosroc worked alongside the project team to provide a bespoke solution for this project which included a special colour for the joints to the highly expensive detailed marble panels.

Fosroc can offer you the best solution for your application, designed to meet current standards, such as EN ISO11600. This world-wide standard classifies building construction sealants according to their performance characteristics such as movement accommodation, elasticity and modulus and is supported by:

- BS 6093:2006 Code of practice for designing of joints and jointing in building construction

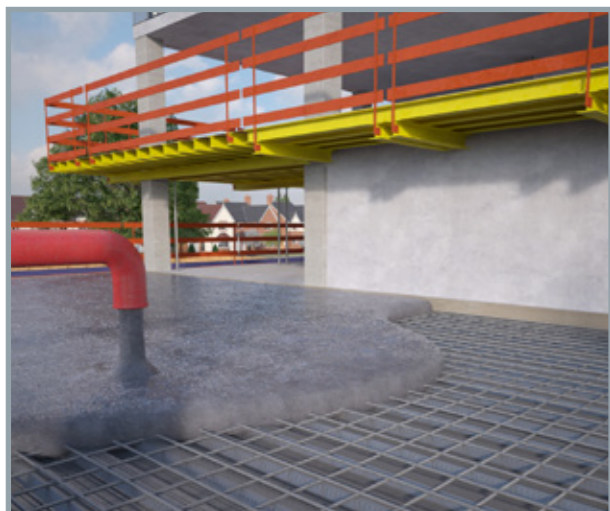
- BS 6213:2000 Comprehensive advice on the selection of a sealant for a specific application.

Our technical staff are on hand to advise you on the appropriate choice of sealant, whatever the situation in line with these current standards, while our Joint Sealant seminars can help you understand all aspects of good joint design.

- Nitoseal MS range of one-component general purpose, facade and floor joint sealants
- Nitoseal PU40 one-component movement joint sealant for precast panels and openings
- Flamex range of fire-rated joint sealants
- Thioflex 600 two-component world renowned multi-purpose joint sealant
- Hydrocell XL closed-cell Polyethylene joint filler board



## CONCRETE TECHNOLOGY



Fosroc has developed a range of technically superior, innovative products to assist concrete manufacturers achieve their goals in the production of high quality and highly durable concrete elements. From ready-mix and precast concrete to dam and underground construction, used in the most challenging requirements and aggressive environments, customers turn to Fosroc admixtures to add value to their concrete and provide solutions to their problems.

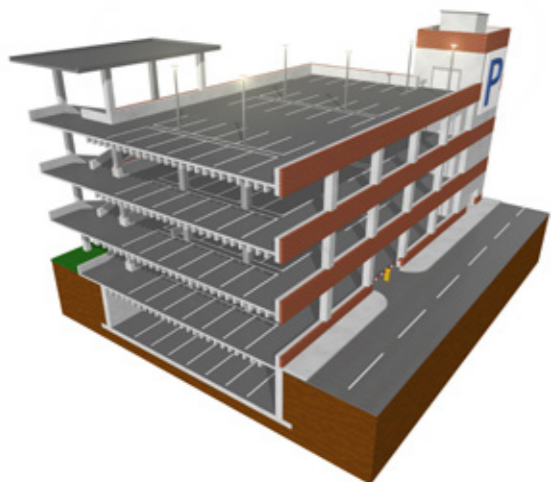
Leading the field in admixture technology, Fosroc provides concrete quality and solutions that are as dependable as they are lasting. Fosroc's technical service support to its customers is unrivalled. For concrete companies and specifiers alike, such back-up is a direct route to supplier confidence. Fosroc products and technical support foster peace of mind for all users of concrete and mortar.

Fosroc total concrete technology solutions cover:

- Auracem, Auracast and Structuro range of polycarboxylate-ether based products are high performance concrete admixtures which give excellent performance at low dosage either in the production of low water to cement ratio, high strength mixes or high performance flowing concretes.
- Conplast SP and Conplast RP range are superplasticiser and plasticiser concrete admixtures which provide exceptional workability and water reduction properties giving any concrete mix an excellent finish while still achieving effective cost reductions.
- Conplast R range is a high performance concrete retarder admixture for roller-compacted concrete placement and delaying the set time of concrete.
- Other Conplast range of concrete admixture products are available covering needs for concrete waterproofing, air entrainment, fast setting and the like.



## FLOORING & CAR PARK DECKS



Multi-story car parks have become important features in metropolitan commercial projects like shopping malls, theatres and multiplex as well as infrastructure projects such as airports and rail stations.

Uninterrupted service life and safe usage with minimum maintenance are of key importance, along with protection to withstand severe traffic movements and aggressive corrosive environments.

Fosroc with its world-class extensive product portfolio can assist in the successful protection of a car park structure achieving the optimum designed performance.

Fosroc offers well-proven car park deck solutions that are primarily designed for optimum performance balancing both durability and down time against cost in both new construction and maintenance works.

Fosroc total protection solutions for car park decks cover:

- Fosroc Polyurea FLM - a spray-applied system using latest generation Polyurea technology. Its exceptionally fast cure rates result in return to service times of less than one hour whilst delivering highly durable trafficable surfaces.
- Fosroc Nitodek system - a high build multi-layered PU decking system.
- Fosroc Nitoflor systems - epoxy system and Cementitious floor hardener systems.
- Dekguard - anti carbonation and anti-chloride protective coatings.



## CONCRETE REPAIR & COATINGS



Fosroc offers a comprehensive range of concrete repair and remediation solutions, meeting and exceeding industry standards; including our internationally proven Renderoc repair mortar products.

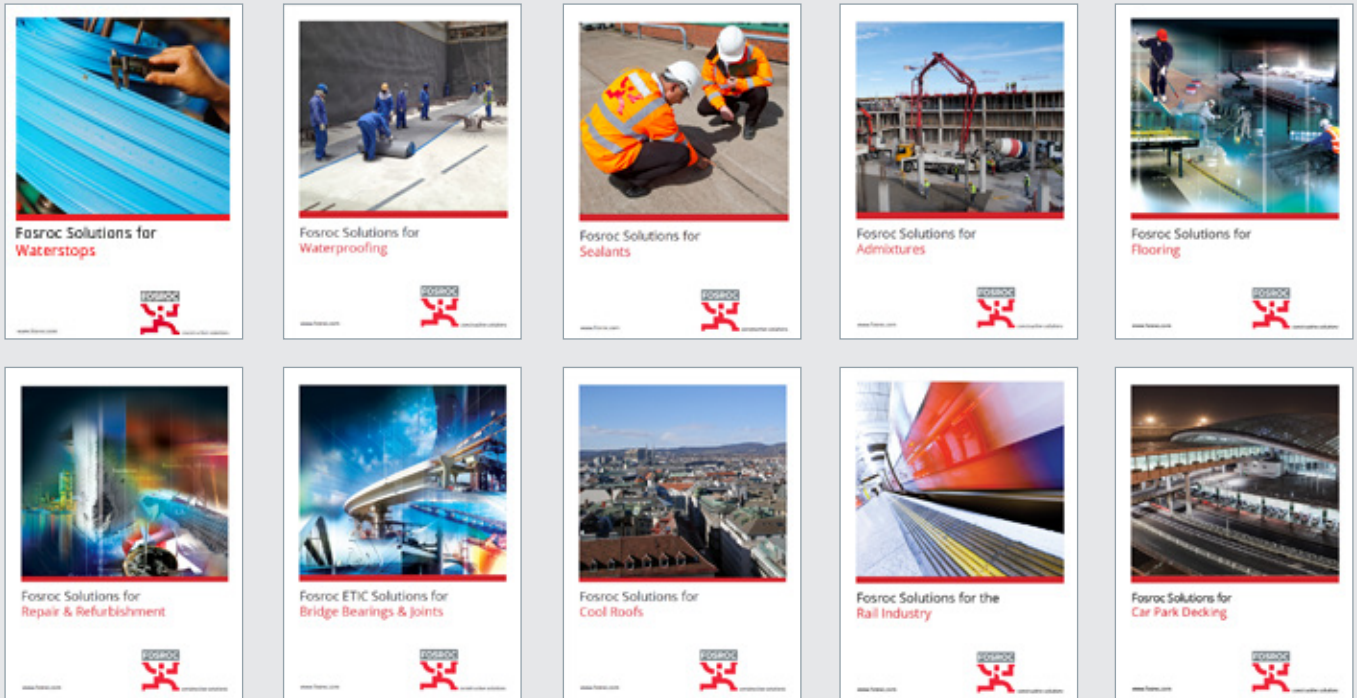
Fosroc is active in repairing all types of concrete structures and protecting them from the further actions of corrosive elements which affect the reinforcing steel. We can therefore guide our customers through the process of diagnosis, repair and protection with a harmonised solution to provide long term durability. Specialist contractors using Fosroc repair mortars, corrosion management, protective coatings and strengthening systems can not only repair damage but prolong the life of the building for many years beyond its design life. Our Specialist coating will not only provide durable protection to buildings, but also enhance their appearance.

Whether the problem is new- build defects, age related deterioration and everything in between, Fosroc's Technical know-how and remedial solutions deliver value way above industry standards. With a wide array of application techniques and detailed knowledge of the causes of deterioration, you will not find better support from your material solutions provider. For these reasons Fosroc has been involved in repairing and protecting important structures such as the Jamaraat Bridge in Mecca, London's BT Tower and the Tsing Ma Bridge in Hong Kong.

Time and again across the world, Fosroc's complete package of remedial solutions means that structures are being saved from demolition, adding decades to their life, saving clients' money and keeping vital infrastructure running.

- Renderoc cementitious and Nitomortar resin based repair mortars
- Nitofill Injection systems
- Corrosion management systems
- Dekguard Protective and decorative coatings
- Nitoplate and Nitowrap carbon, glass and aramid strengthening materials

Fosroc offers a full range of construction chemical solutions, helping to protect structures throughout the world. Please refer to our brochures, which include:



Details of your local Fosroc office can be found at  
[www.fosroc.com](http://www.fosroc.com)

**Important Note**

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it.



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