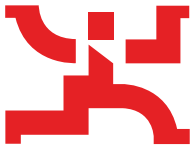


FOSROC



constructive solutions

TUNNEL CONSTRUCTION SOLUTIONS





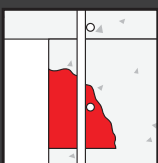
About Fosroc and Parchem

Fosroc is a world leader in construction solutions. Since the company's beginnings over 80 years ago, Fosroc has developed into an international leader in delivering construction solutions for virtually any building or infrastructure project. New or old construction above or below ground, we combine high quality products, expert technical support, customer service and innovation to give you the best solution for your project.

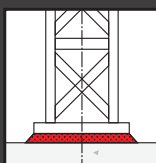
We provide construction solutions for; new and old concrete repair, grouts, waterproofing, joint fillers & sealants, industrial flooring, protective coatings, surface treatments, concrete admixtures and grinding aids.

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

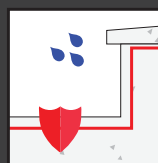
Parchem Construction Supplies, part of DuluxGroup, is the licensed manufacturer and distributor of Fosroc, Vector®, Vandex®, and EdenCrete® products in Australia, and Concrete Plus™ is the licensed distributor in New Zealand.



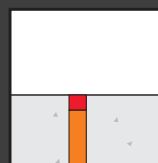
Concrete Repair



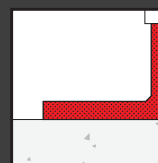
Grouts



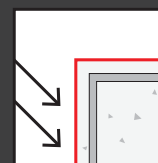
Waterproofing



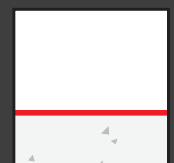
Joint Fillers & Sealants



Industrial Flooring



Protective Coatings



Surface Treatments

Tunnel Construction Solutions



New Austrian Tunneling Method (NATM)



Cut & Cover Method

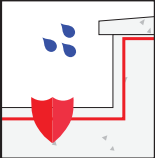
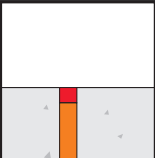
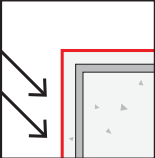



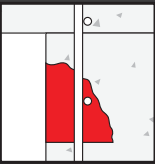
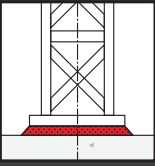

Drill & Blast Method

Our Range

Tunnel construction is a sophisticated process, it requires a complete range of materials that are capable of performing with concrete structures, soil, and machines.

Fosroc can provide tailored solutions for a range of tunnel construction methods to ensure that the construction process progresses smoothly and efficiently.

Product	Product	Type	Description	General Advantages	Typical applications
 <p>Waterproofing</p>	Supercast PVC Waterstops	Extruded PVC waterstops	PVC waterstops designed to provide an integral sealing system for movement and construction joints in poured in-situ concrete. The range consists of centrally placed Hydrofoil profiles, externally placed Rearguard S and Rearguard R profiles.	Long term wet/dry cycle durability.	Construction & expansion joints.
	Hydrotite	Hydrophilic waterstops	Hydrophilic waterstop manufactured by C.I. Takiron Corp that expands in a controlled manner in the presence of moisture to create a pressure seal within construction joints in poured in-situ concrete.	Self adhesive, no site welding required.	Construction joints.
	Leakmaster	Water swelling sealant	Gun applied, water-swellaable, moisture cure polyurethane waterstop paste for bonding Hydrotite profiles to rough concrete surfaces. It can also be used for sealing joints where conventional solid waterstops cannot be applied easily.	Bonds to rough surfaces.	Construction joints.
	Proofex Engage	Pre-applied membrane system	A unique patented waterproofing membrane system comprising a cell mesh bonded to a blended polyethylene/polypropylene membrane which allows poured concrete to interlock, forming a tenacious mechanical bond.	Mechanically bonds to poured concrete, non water-tracking.	Walls, ground slabs, roofs.
	Proofex PGP	PVC sheet membrane	Loose laid, flexible PVC synthetic membrane for the waterproofing of tunnels and below ground structures.	High puncture resistance.	Walls, ground slabs, roofs.
	Proofex Sheetdrain 81	HDPE drainage membrane	Use for the protection and drainage of waterproofing membranes used on foundations which are subsequently backfilled. It is an excellent general protective membrane for construction sites where drainage quality and mechanical resistance is important.	Excellent drainage and mechanical resistance.	Vertical walls that are to be back-filled.
	Polyurea WPE110	Pure polyurea liquid membrane	Spray-applied, 100% solids, flexible, two-component, rapid curing pure polyurea system. Use as a waterproofing and protective coating.	Seamless system, rapid setting.	Roofs.
 <p>Joint Fillers & Sealants</p>	Nitoseal range	Joint sealants	Fosroc offers a comprehensive range of sealants, contact your local Fosroc Representative for product recommendations.		Concrete joints.
	Supercast Acrylate 200	Hydrophilic injection resin	Hydrophilic, cross-linked methacrylate gel. Three component resin injection system which reacts in-situ to form an elastic gel, capable of absorbing and desorbing water.	Pressure sealing.	Construction joints.
	Supercast Predimax	Injection hose	Double-walled, patented PVC injection hose specially formulated to be durable, robust and fully resistant to continuous immersion in ground water, saline, sewage, alkalis, acids, petrol, diesel and alcohol.		Use with Supercast Acrylate 200.
 <p>Protective Coverings</p>	Nitocote EP410	High build coating	Highly chemical resistant, high build, solvent free, two part epoxy coating. Provides protection to concrete in aggressive chemical exposure or immersion conditions. Available in white and grey.	Highly chemical and abrasion resistant.	Emergency zone areas.
	Dekguard Elastic	Protective coating	Crack accommodating elastomeric, pigmented, acrylic protective coating. Produces an excellent barrier to carbon dioxide, chloride ions, oxygen and water, particularly where there are cracks within the substrate. Available in a range of colours.	Accommodates substrate cracking and cyclic movement of cracks.	Internal & external vertical surfaces.
	Nitocote SN 508 Creme	Silane based sealer	Thixotropic, water dispersed emulsion of iso-octyltriethoxysilane that penetrates the surface of concrete over a few hours. Produces a water beading effect. Cream consistency prevents drips and runs.	Deep penetration into porous substrates.	External atmospherically exposed vertical surfaces.

Product	Product	Type	Description	General Advantages	Typical applications
 <p>Industrial Flooring</p>	Nitoflor PA	Polyaspartic coating	Solvent free, polyaspartic floor coating. UV and abrasion resistant top coat for resin floor systems or as a stand alone coating over correctly prepared concrete surfaces.	High abrasion resistance.	Entry & exit paths.
 <p>Concrete Repair</p>	Renderoc range	Patch repair mortars	Fosroc offers a comprehensive range of concrete repair solutions, contact your local Fosroc Representative for product recommendations.		Vertical and overhead concrete repairs.
	Guncrete E	Spray applied repair mortar	High strength, low shrinkage, high build dry-spray applied repair mortar.	High build.	Rock structure consolidation.
 <p>Grouts</p>	Conbextra range	Construction grouts	Fosroc offers a comprehensive range of grouts including cementitious and epoxy, thixotropic and pumpable grades. Contact your local Fosroc Representative for product recommendations.		Filling voids.
	Conbextra CB	Cementitious grout	High flow, high strength pumpable cementitious grout. High strength development allows early tensioning of cables.	High strength.	Backfilling behind concrete tunnel segments.
	Conbextra CB-C	Cementitious grout	High flow, Class A/Class C dual shrinkage compensated cable bolt grout. High strength development allows early tensioning of cables.	Dual shrinkage compensated.	Backfilling behind concrete tunnel segments.
	Nitofill PU130	Hydrophobic polyurethane grout	Multi-purpose hydrophobic polyurethane injection resin which is mixed with nominated levels of accelerator to initiate expansion in the product to seal leaking cracks and joints in concrete and fill voids in generally inaccessible locations.	Withstands high hydrostatic pressure.	Multi-purpose injection resin used to seal leaking cracks, failed joints or fill voids and fractures in concrete structures.
	Nitofill PU150	Hydrophilic polyurethane grout	Multi-purpose hydrophilic polyurethane injection resin with high elongation and flexibility. Reacts with available water to initiate expansion in the product to seal leaking cracks and joints in concrete and fill voids in generally inaccessible locations.	Reacts with available water.	Pump directly into leaking cracks, fractures or joints in concrete.
	Nitofill LV	Epoxy crack-injection system	High strength, low viscosity epoxy resin injection system that provides excellent bond to concrete and masonry. It is ideal for small scale crack repairs on site, suitable for in-situ or precast concrete elements.	Penetrates very fine cracks.	Structural crack repairs.
 <p>Surface Treatments</p>	Concure range	Curing compounds	Fosroc offers a comprehensive range of curing compounds, contact your local Fosroc Representative for product recommendations.		Curing concrete.



FOR TOUGHER STRONGER CONCRETE

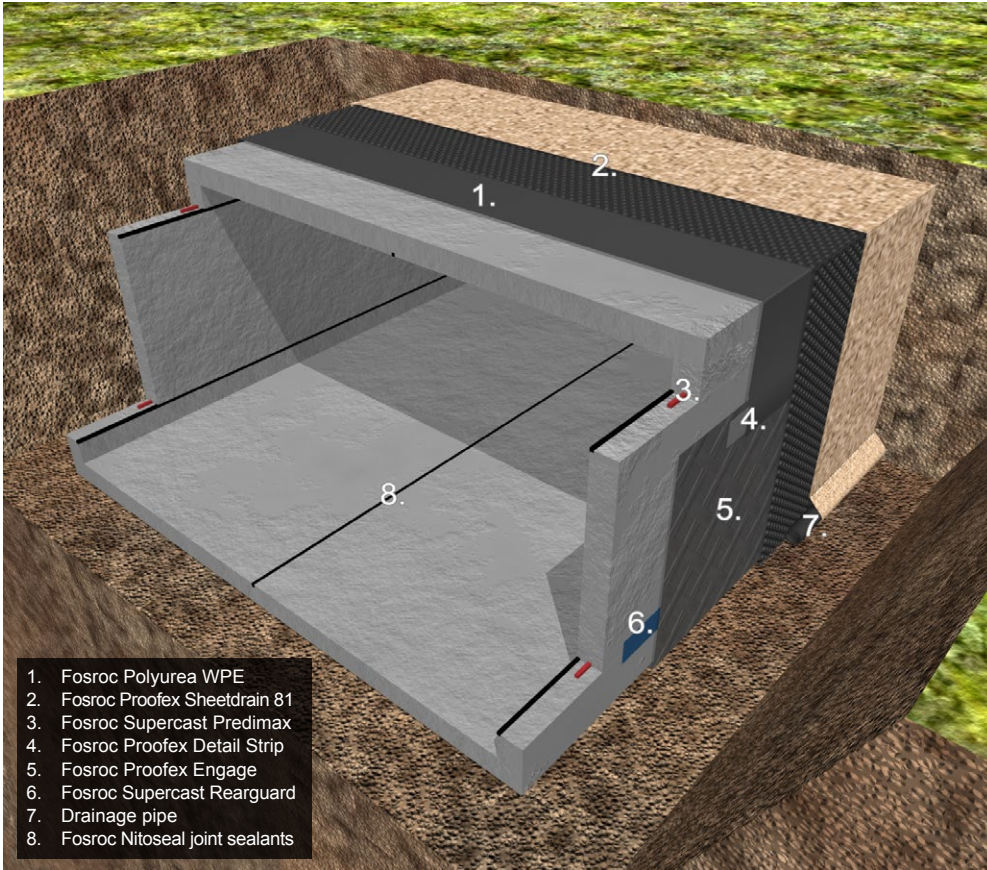


Developed by Eden Innovations LLC, EdenCrete® is a carbon nanotube-enriched liquid additive that elevates concrete structures to new levels of strength and toughness. When added to concrete mixtures, it performs like multiple additives rolled into one. It boosts surface abrasion resistance and produces extremely low permeability while improving strength properties [i.e., compressive, flexural, and split-tensile] like no other product on the market today. EdenCrete is ideal for use in Fosroc Guncrete for rock wall consolidation, and precast concrete in tunnel construction projects.

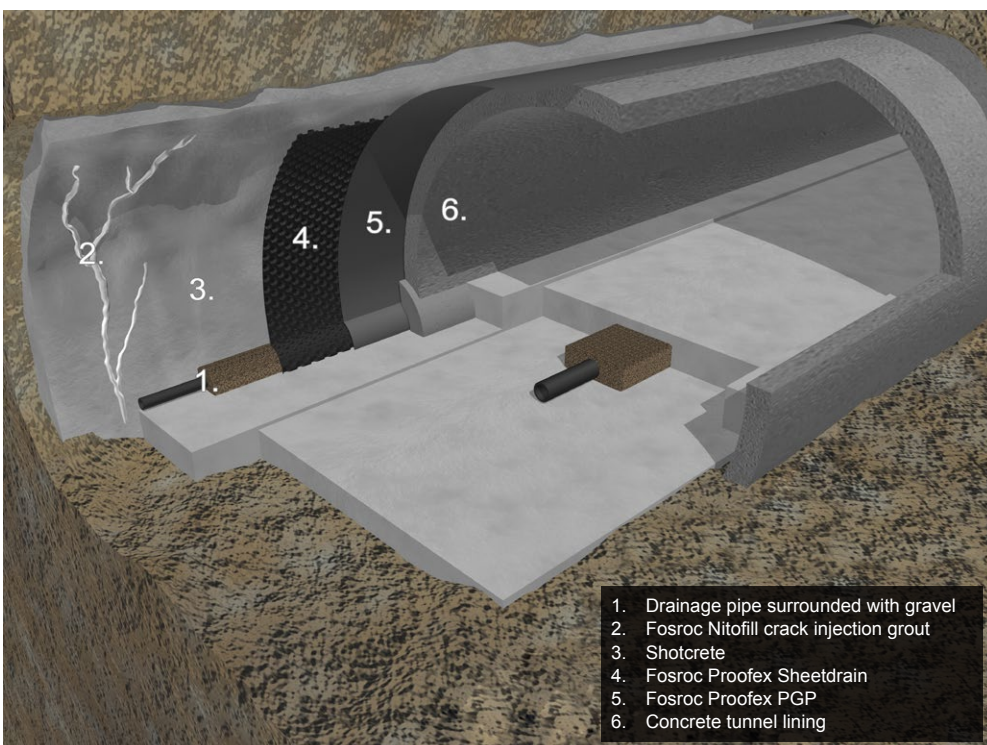
Parchem is the licensed distributor of EdenCrete products in Australia, and, Concrete Plus is the licensed distributor in New Zealand.

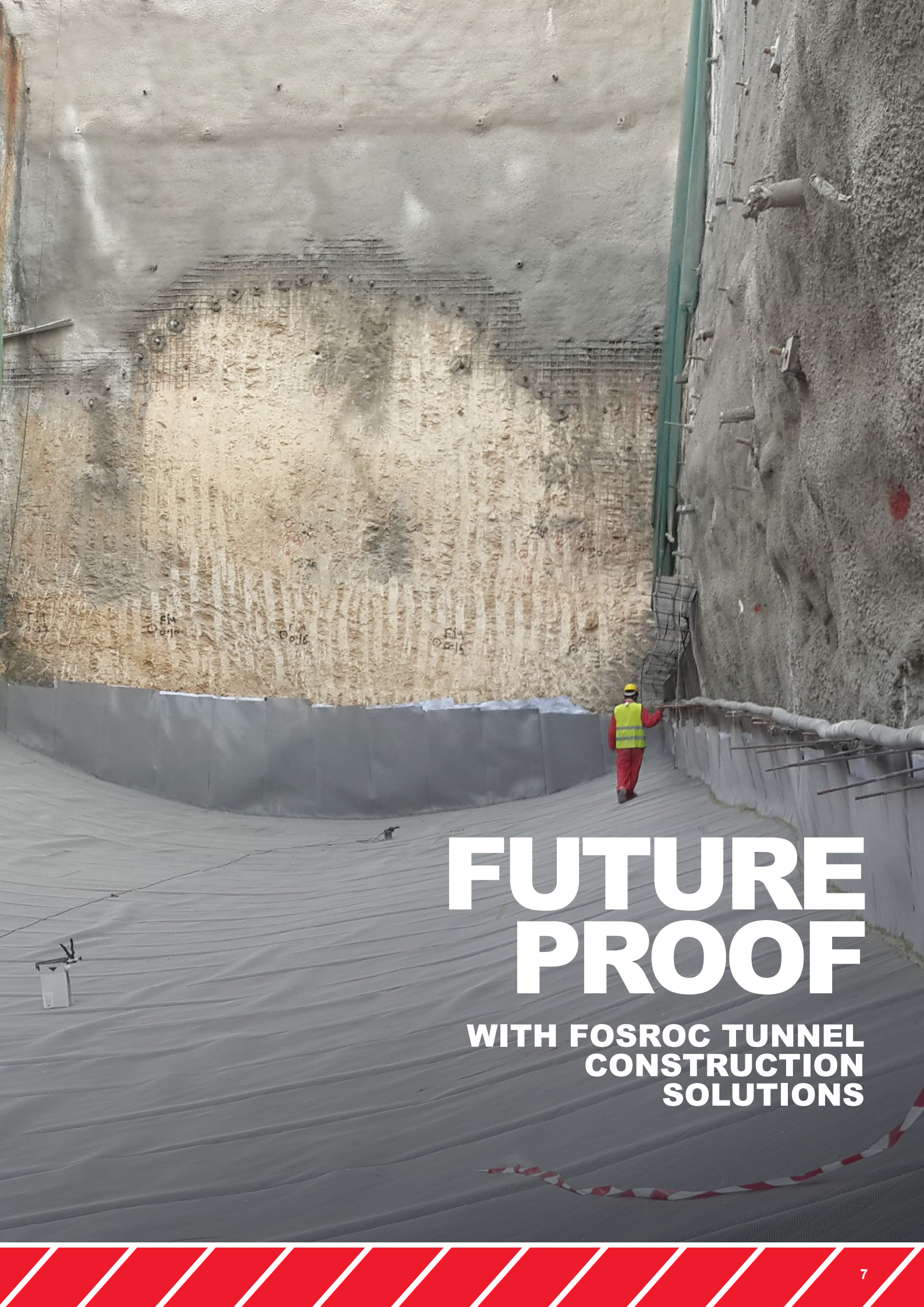
System Recommendations

Cut & Cover Method



Tunnel waterproofing





FUTURE PROOF

WITH FOSROC TUNNEL
CONSTRUCTION
SOLUTIONS



constructive solutions

World leaders in construction solutions

Fosroc is a world leader in the delivery of virtually any type of construction project, combining high quality products, expert technical support, customer service and innovation.

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