

WATER & WASTE WATER SOLUTIONS





PARCHEM CONSTRUCTION PRODUCTS AND THE WATER INDUSTRY

Parchem Construction Supplies is a leading manufacturer and supplier of products and equipment to the Australian & New Zealand concrete and construction markets.

Through its divisions and heritage, Parchem has built over 50 years experience in servicing the construction, civil, and concrete industries.

Parchem has strong brands and a broad range of products. We pride ourselves on our expertise and continue to seek innovation, with access to new technologies through global networks.

Parchem design and manufacture goods specifically for the Australian market. Quality and performance are key, and this can be seen in our enviable product offering.

Parchem is the sole licensee of the Fosroc brand in Australia and New Zealand.

Parchem is the distributor of Vandex, Index, Hydrotite and Sewpercoat.



Supercast PVC Waterstop



Supercast PVC Waterstop

SUPERCAST PVC

High quality extruded PVC Waterstops that are suitable for expansion, construction and contraction joints for poured in situ concrete. Centrebult profiles are designed for applications requiring a centrally placed waterstop while Rearguard profiles are designed for casting into the external or back face of the concrete. These profiles are available in three sizes 150mm, 200mm and 250mm and have a range of standard and special custom made intersections available if necessary.

Supercast Waterstops meet AS4020 making them safe to use in potable water as well as sewerage treatment plants, wastewater treatment plants, swimming pools, basements of buildings etc.

HYDROTITE

In joints where movement is minimal, such as construction joints, hydrophilic waterstops can offer an alternative to traditional PVC profiles. Hydrotite is a hydrophilic waterstop which exhibits excellent durability and water sealing capacity, it expands as it absorbs water thus exerting pressure on the joint faces creating a barrier to the passage of water. Hydrotite is a premium grade water swellable waterstop for use in cast in situ concrete.

Typical applications where Hydrotite can be used in are sewerage treatment plants, reservoirs, water treatment plants, tunnels, swimming pools etc.

LEAKMASTER

In situations where a standard PVC or strip form of Hydrotite is impractical to use such as rough concrete joint surfaces a gun grade hydrophilic is a solution. Leakmaster is a gun applied hydrophilic mastic similar to the consistency of a polyurethane sealant. Like Hydrotite, Leakmaster is suitable in joints where movement is minimal such as construction joints and swells when water comes in contact with it to form a positive seal against the concrete surface.

Leakmaster is the ideal product to use in conjunction with Supercast PVC waterstops and Hydrotite to cover any waterstop detailing on your project. Leakmaster is available in 320ml cartridges and the product is applied via a standard caulking gun.

JOINT FILLERS AND SEALANTS

JOINT FILLERS

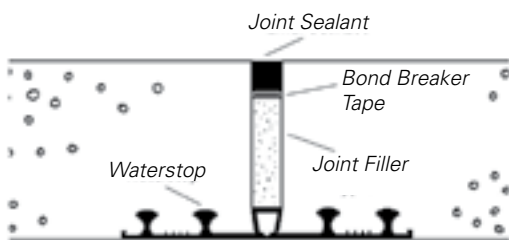
HYDROCOR

Expanding cork fillers have been used for decades to fill and seal joints in water retaining structures. Hydrocor Type 106 is an expanding cork which has the added feature of fibre reinforcement to control expansion in the length of the strip whilst maximising the expansion across the strip to help seal the joint after inevitable concrete shrinkage.

STIFFJOINT

Polyethylene is fast becoming the favoured joint filler material in water retaining structures due to its low cost and long term performance in immersed applications. Being closed cell polyethylene, Stiffjoint has a very low absorption property and high resistance to degradation. The product is available in various thicknesses and is easily cut to size on site to cater for construction variations.

Stiffjoint is ideal for joints in potable water structures and is totally compatible with all the joint sealants supplied by Parchem.



Typical expansion joint detail

JOINT SEALANTS

EMER-SEAL PU40

With excellent resistance to biodegradation and the convenience of being a one component sealant, Emer-Seal PU40 is widely used throughout the water industry. Being a polyurethane Emer-Seal PU40 has superior abrasion resistance making it ideal for sewage and storm water application and with compliance to AS4020, the product is also suitable for use in potable water environments.

EMER-SEAL 200

Although multi-part sealants such as Emer-Seal 200 attract additional labour costs during installation, they generally offer benefits in their curing characteristics. Unlike single component sealants which cure by reaction with atmospheric moisture (humidity), Emer-Seal 200 is a two component polyurethane sealant which cures quickly, uniformly and predictably making it suited to new construction where deadlines are needed to be met and particularly repair situations where shut-down periods are limited.

EMER-BAND

In refurbishment situations, sometimes the most appropriate solution to a failed sealant/waterstop is to "bandage" the joint with a flexible strip bonded to both side of the joint. Retrofitting a water stop is almost impossible and joint sealants should not be relied upon as the primary seal in water retaining joints.

Emer-Band is a hypalon strip which is bonded to the concrete joint edges with Nitomortar AP Adhesive, a high strength epoxy paste. The flexibility of the hypalon allows the system to move yet tough enough to resist abrasion.

EMER-SEAL CR

Emer-Seal CR is a one part, gun applied non sag joint sealant designed for sealing expansion and construction joints exposed to aggressive chemical environments.

Emer-Seal CR utilises unique polymer technology which provides outstanding chemical resistance and cures by reaction with atmospheric moisture to form a tough flexible seal.

Emer-seal CR has AS4020 potable water certification.

Emer-Seal Sealant



Index Testudo

TORCH ON MEMBRANES

INDEX

Typically sheet membranes are used to waterproof large horizontal areas such as reservoir roofs but being certified to AS4020, they also get used for internal lining of water tanks which are leaking through cracks or porous concrete.

CEMENTITIOUS WATERPROOFING

VANDEX

Based in Switzerland, Vandex is the originator of “crystal growth” waterproofing. These products are cement based and provide the best solution to waterproofing on the negative pressure side of structures.

Parchem is the Australian distributor of the Vandex range which includes; Vandex Super; crystal growth waterproofing applied as a slurry to stop the ingress of water at either positive or negative pressure side of concrete. Vandex BB75 Z; 2 to 3mm trowel or spray applied waterproof screed suitable for use in potable water. Vandex Cemelast; flexible trowel or spray applied screed capable of 0.3mm crack movement and suitable for use in potable water. Vandex Plug; rapid setting plugging mortar to instantly stop leaks and flows from water retaining structures. Based on special cement blends, many of the Vandex products are also suitable for use in open sewage environments.



Vandex Concrete Grey

BELOW GROUND WATERPROOFING

PROOFEX ENGAGE

Innovative anti-tracking, pre-applied waterproofing system for below ground waterproofing.

The system has successfully waterproofed millions of square metres of below-ground structures. It can be found in projects in many countries around the world and is quite simply one of the best performing cost-effective below-ground waterproofing solutions available today.

Parchem have introduced the innovative Proofex Engage system, which incorporates a unique cell mesh that mechanically bonds to freshly placed concrete giving a tenacious waterproof seal, preventing water migration even if ground settlement occurs. It is installed rapidly with no need for blinding concrete, priming or protection and can be trafficked immediately after application. It is also gas resistant and highly durable and is unaffected by contaminants within the ground. Quality is assured through BBA and EN13967:2004 and the system is suitable for use in accordance with BS8102:2009 Grades 1, 2 and 3.



Proofex Engage

PROTECTIVE COATINGS

Sydney De-Salination Plant



NITOCOTE EP405

Nitocote EP405 is a two part epoxy coating which is brush, roller or spray applied to new and existing concrete surfaces to provide a smooth hygienic finish. Compliance to AS4020 at a very high surface contact rate is another feature of Nitocote EP405.

NITOCOTE EP410

The aggressive conditions found in sewage environments require special treatment. Nitocote EP410, a two part epoxy coating, is formulated to resist the chemical attack and high abrasion found in Sewage Treatment Plants.



Nitocote EP410



REFURBISHING EXISTING PLANTS

Deterioration of water industry structures – from chemical attack, abrasion and climatic conditions - can result in leakage through to complete failure of systems. Reinforcing steel corrosion leads to spalling of concrete - a major problem to the integrity of any structure. As infrastructure ages the potential for concrete failure increases and left unchecked this damage can result in major disruption to supply and services.

CONCRETE REPAIR

RENDEROC HB40

Renderoc HB40 is formulated to achieve up to 40mm build in single vertical applications by trowel method. Exceptionally low shrinkage properties of the product ensure that cracks in the repair will not occur. Renderoc HB40 is compatible with concrete of compressive strengths 30-45 MPa.

RENDEROC HB70

When higher compressive strength is required for repairs, Renderoc HB70 can achieve up to 70 MPa @28 days while still offering excellent high build characteristics.

RENDEROC LA55

Renderoc LA55 is a flowable microconcrete which is ideal for deep repairs and concrete reinstatement. With a compressive strength of 60 MPa @ 28 days the product is also suitable in structural concrete.

NITOMORTAR EL-HB

Nitomortar EL-HB is ideal for rehabilitation of manholes, lining sluices and other high-build repairs in sewage environments.

NITOMORTAR AP

Nitomortar AP is a multipurpose epoxy adhesive and repair paste. It can be used to bond, fill, repair and level concrete structures in numerous situations. Some of the features of the Nitomortar AP include:

- Fast cure – 66 MPa after 24 hours
- Potable water approved to AS4020.2005
- Excellent Resistance to abrasion and impact
- Unaffected by a wide range of acids, alkalis and industrial chemicals

PROTECTIVE LINING SYSTEMS



Spray application of Nitocote EP500 inside sewer



SewperCoat being sprayed into a manhole

NITOCOTE EP500

A new generation epoxy lining mortar that can be applied in thinner applications from 2-5mm thick. Also for the relining and rehabilitation of trunk line sewers, wet wells and manholes.

NITOMORTAR EL

A trowellable epoxy mortar with maximum chemical and abrasion resistance for the protection of concrete and similar substrates. Ideal for rehabilitation of manholes, lining of outfalls, sewers and similar structures. The thickness it is applied is between 6-12mm.

SEWPERCOAT

The only proven 100% calcium aluminate mortar able to resist the most aggressive biogenic corrosion conditions found in wastewater infrastructures. SewperCoat's specific mineralogy provides a protective-reactive barrier to biogenic corrosion conditions, as proven by nearly two decades of outstanding performance.

POLYUREA WPE110

A fast setting, rapid curing, flexible, two component spray applied polyurea coating for steel and concrete substrates. The material is potable water approved and can be used in various structures such as reservoirs, desalination plants, primary and secondary containment, clarifiers, aeration tanks, sludge compartments and manholes.



STRONG SUPPORT FOR PLANT AND EQUIPMENT

Throughout the water industry, pumps and equipment need to be positioned securely and precisely to ensure long term performance, often under extreme conditions.

Utilising both cement and resin based technologies; Parchem is able to offer the client a wide range of precision grout and anchoring products suitable for nearly any application in the water industry.

CEMENTITIOUS GROUTS

CONBEXTRA HF

Conbextra HF is formulated to provide superior flow characteristics enabling it to be placed under very large base plates whilst still achieving the maximum effective bearing area.

CONBEXTRA GP

Conbextra GP is used for general purpose grouting where it is essential to eliminate shrinkage when completely filling voids or grouting between a base plate and substrate. It can also be used for anchoring a wide range of fixings such as masts and anchor bolts.

CONBEXTRA UW

Not all installation can be done in "dry" conditions. Remedial work may need to be carried out underwater. Conbextra UW contains special "antiwashout" additives which enable the product to be flowed or pumped into gaps underwater, displacing the water in the process.

EPOXY GROUTS

CONBEXTRA EP RANGE

Epoxy resin based grouts offer two important features often required in the water industry; high tensile bond strength for installations with vibration or dynamic loads and chemical resistance.

Gaps from virtually 0.25 to 300mm can be grouted using products from the Conbextra EP range of free flowing epoxy resin grouts.

Conbextra EP10 - low viscosity epoxy grout for gaps 0.25mm to 10mm. Also used for crack injection and anchoring up to 10mm annuluses.

Conbextra EP65 Plus - Ultra high strength, high flow epoxy grout for gaps 10-100mm. Also used for anchoring of steel bars.

Conbextra EP120 - flowable epoxy grout for gaps 10 to 120mm.

Conbextra EP300 DP - Low exotherm three part epoxy resin grout suitable for large volume pours. Conbextra EP300 DP is designed to be grouted into gaps from 10mm up to 300mm.

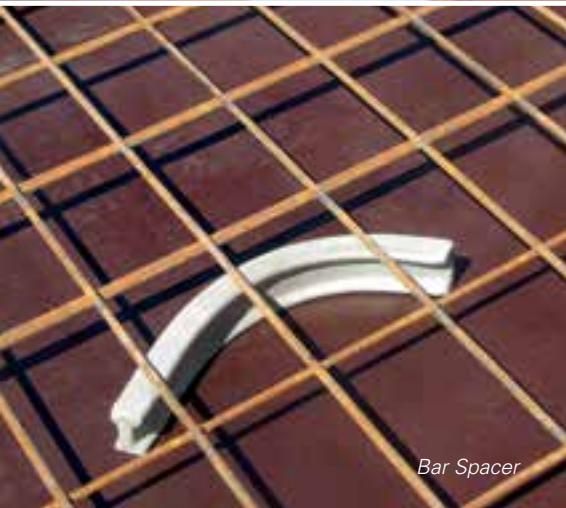
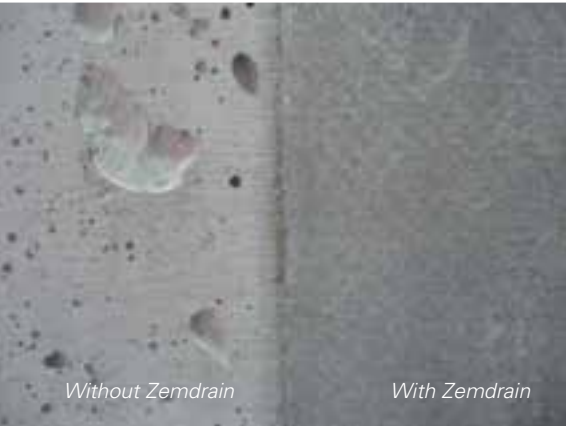
RESIN ANCHORS

POWERS FASTENERS

Parchem is pleased to be a distributor of the Powers Fasteners range of chemical and mechanical anchors.

Powers Fasteners Australasia provides a wide range of unique innovative fastening solutions. Powers fastening products can assist people with fastening to concrete, block, brick, steel and drywall every day.





ZEMDRAIN

Zemdrain is a Controlled permeability formwork liner (CPRF) for high quality durable concrete surfaces. Its a thermally bonded polypropylene membrane that is placed to the internal face of formwork to provide a high quality durable surface. The controlled permeability formwork liner provides a mechanism through which surplus water and air can migrate in a controlled manner resulting in a reduction in the formed surface water/cement ratio and porosity, thereby improving surface strength, durability and overall appearance of the concrete. Application areas for Zemdrain include:

- Water Containment Structures
- Waste Water Plants
- Precast Elements
- Canals & Reservoirs

Parchem is dedicated to customer service, so please contact us for more information about our range.



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