

Waterstop Solutions

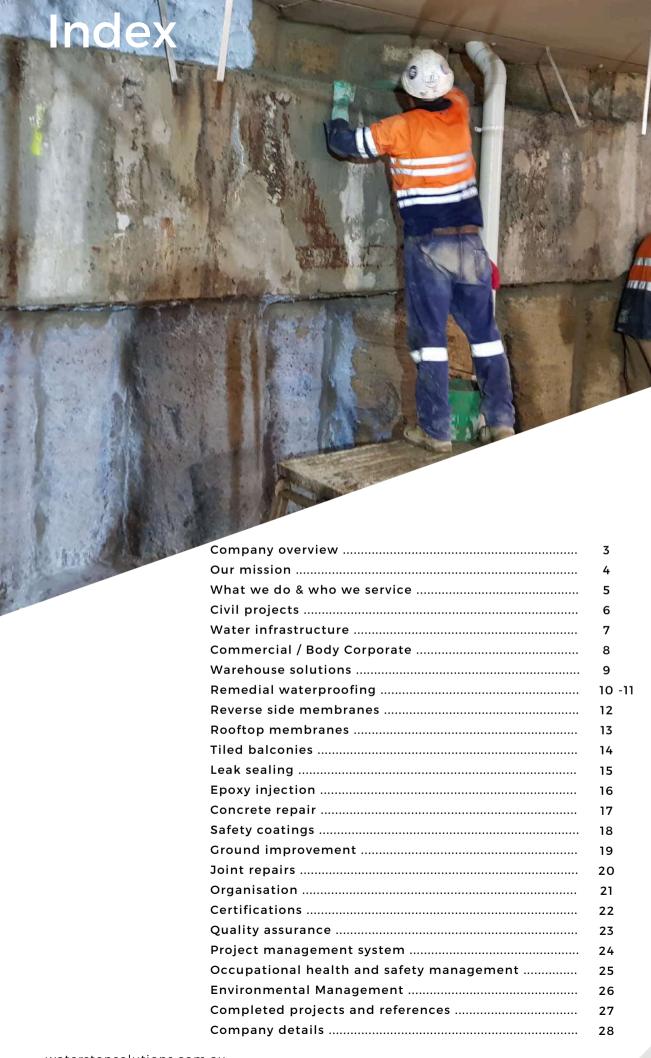
THE RESIDENCE OF

Remedial Waterproofing
Leak Sealing
Concrete Crack Injection
Concrete Repairs
Protective Coating
Ground Improvement
Slab Jacking
Joint Repairs

Waterstop Solutions

Benefit From Major Civil Works Experience

Issue 3 - 2024







Waterstop Solutions is a family-owned business, specialising in remedial waterproofing and concrete repair for commercial/residential buildings, water infrastructure and major civil works.

Established by Harold Du Toit in 2009 to service the construction of the Clem 7 tunnel, the team at Waterstop Solutions has since completed over 6000 projects across Queensland and New South Wales - notably Parliament House, Legacy Way Tunnel, Airport Link Tunnel, Steyne Hotel, Taronga Zoo, Bennelong Apartments "The Toaster and Sydney Harbour Bridge,

Together, our directors Harold Du Toit and Chris Anderson and our NSW manager Adrian Schokman share more than 60 years' worth of industry-leading remedial waterproofing and concrete repair experience.

Our passion for delivering exceptional service and workmanship has led us to the forefront of our industry, becoming a highly respected and sought after entity.

Driven to expand into Australia's largest remedial market, we now have offices located in Brisbane and Sydney with further expansion planned for the future.

As Waterstop Solutions continues to grow, our aim is to remain innovative and follow best-practice guidelines across all aspects of our business to ensure our clients' expectations are constantly exceeded.

We take great pride in our expansive portfolio and with a focus on developing strong policies and procedures, we will continue to complete work on time and within budget - without compromising quality or safety.





At Waterstop Solutions, our goal is to provide innovative, flexible and practical solutions to ensure the best possible outcomes for our clients.

We aim to deliver exceptional service to build and maintain long term relationships with our customers.

Quality Service, Quality Solutions

Our quality workmanship is underpinned by sound knowledge, experience and documentation, along with support from our technicians, partner suppliers and consultants.

We pride ourselves on using industry-leading technologies to deliver superior leak sealing and concrete repair solutions.

Our commitment to developing clear policies and procedures ensures our projects are well-managed.

We strive for excellence in all aspects of our business to deliver Quality Service, Quality Solutions.





Remedial Waterproofing - Leak Sealing - Concrete Crack Injection - Concrete Repairs Protective Coating - Ground Improvement - Slab Jacking - Joint Repairs

Who do we service?

- Building Maintenance Companies
- Body Corporate Services
- Transport (Roads, Bridges, Tunnels)
- Water Authorities
- Port Authorities
- City and Regional Councils
- Construction Companies
- Civil Infrastructure
- Construction Projects Units

- Property Managers
- Facility Managers
- Mining
- Churches
- Schools
- Residential Dwellings
- Commercial & Industrial Sites
- Property Developers
- Insurance Companies











































Bridges \



Commercial Buildings

Maintenance Solutions

Warehouse Solutions Tunnels and other subterranean structures are often designed with allowances for water ingress after the installation of the waterproofing system.

Our services include high pressure injection to prevent water ingress to various types of construction details and cracks. We specialise in the injection of all types of technologies including polyurethanes for leak sealing, epoxies for structural repairs and acrylic for "curtain" injection.

Bridges

Cracking, spalling, off-form defects and exposed reinforcement are all associated with concrete structures. With additives and special rapid set concrete recipes, new structures are still prone to defects during the construction process.

Waterstop Solutions specialises in completing new concrete structures to meet specifications and client expectations. We perform various tasks on bridges, void filling where the topping slab has separated from the bridge deck, leak sealing, structural crack repairs, concrete repairs and joint sealing.





Bridges

Water Infrastructure

Commercial Buildings

Maintenance Solutions

Warehouse Solutions

Water Infrastructure

Concrete water vessels such as reservoirs are under constant attack from chemicals, movement and other influences that can affect the durability of the asset.

Regular maintenance is not always a possible solution due to operational limitations and it is essential that repairs are carried out with this in mind. We expertly refurbish aged water storage facilities, including concrete repairs and protective membranes to walls, floors, roofs and columns.

Examples Of Projects

- Desalination Plants
- Manholes
- Reservoirs and dams
- Water Treatment Plants
- Waste Water Treatment Plants





Bridges

Water Infrastructure

Commercial Buildings

Maintenance Solutions

Warehouse Solutions

Commercial Buildings

Maintaining a commercial building in good working condition takes a lot of effort. Scheduled maintenance like plumbing, electrical and small repairs keep the facility operational.

However, issues like cracks, spalling and water ingress affect the integrity and longevity of the asset. These kinds of issues are usually not covered by a maintenance schedule.

The services that we offer to asset owners and maintenance managers include crack injection, epoxy injection for structural repairs, void filling, concrete repairs, joint repairs, waterproofing membranes in plant rooms and roof tops.

Maintenance Solutions

Maintenance managers and asset owners are invested in maintaining the durability of their structure. We have identified the demand for maintenance needs that extend beyond the regular scheduled items that affect functionality only.

The durability of concrete structures is under constant threat from movement, water ingress, cracking and carbonation; all influences that can affect the integrity and longevity of the asset.

Waterstop Solutions can assist in identifying these problems early and rectify them before they become a structural issue.





Bridges

Water Infrastructure

Commercial Buildings

Maintenance Solutions

Warehouse Solutions

Warehouse Solutions

Warehouse slabs, cold room floors and driveways are subject to impact damage from forklifts - especially electric forklifts. The small, solid rubber wheels impact upon joint shoulders and any small imperfections on the slab.

Often these areas will "grow" rapidly and become a potential risk for operators.

We specialise in joint repairs of this nature. In most cases, we alter the joint to accommodate the type of forklift used on the floor.

Examples Of Projects

- Joint repairs
- Stabilising and lifting slabs
- Structural crack and concrete repairs
- Removing trip hazards
- General joint sealing repairs
- Safety coatings





Leak Sealing

Concrete Crack Injection

Concrete Repair

Protective Coating

Ground Improvement

Slab Jacking

Joint Repairs

Remedial Waterproofing

There are many causes of excess moisture in the structure of a building, such as leaking pipes and damage to gutters and roofs. However, a high proportion of damp problems in buildings are caused by rain penetration, condensation or rising damp.

Diagnosing the cause of dampness in a building is vital so that correct treatment and repair can be carried out to accurately address the source of the problem.

Common sources of external water penetration include: around windows, porous substrates, expansion joints, pipe penetrations and cracks in walls and floors.

Water leaking through such areas can create serious problems in roof tops, underground car parks, balconies, podium levels, basements and internal areas.





Leak Sealing

Concrete Crack Injection

Concrete Repair

Protective Coating

Ground Improvement

Slab Jacking

Joint Repairs

- Positive and negative side waterproofing
- Membranes liquid and sheet
- PWR Penetrating
 Waterproofing Repellent
- Protective sealers and coatings
- Barrier coating systems
- Void filling
- High and low flow water leak sealing
- Epoxy, polyurethane and acrylic crack injection
- Fall correction
- Waste installation
- Surface preparation
- Joint seal replacement
- Injectable Damp Proof Course (DPC) to treat rising damp

Examples Of Areas We Treat

- Podiums and balconies
- Plant rooms
- Concrete water tanks
- Dams and reservoirs
- Construction and expansion joints
- Porous substrates
- Construction joints
- Wall/floor and wall/ceiling joints
- Basements
- Concrete slabs

- Roof tops and green roof areas
- Retaining walls
- Underground carparks
- Manholes
- Concrete pipe joints
- Pipe and service penetrations
- Ponds and fountains
- Planters and garden beds



Reverse Side Membranes Waterproofing Membranes Ideally waterproofing is installed externally (positive side) against

Remedial Waterproofing

Leak Sealing

Concrete Crack Injection

Concrete Repair

Protective Coating

Ground Improvement

Slab Jacking

Joint Repairs

Ideally waterproofing is installed externally (positive side) against the soil. However, when access to the external wall is limited, we carry out remedial waterproofing internally (reverse side).

The waterproofing membrane systems we use create an effective barrier against waterborne salts. They are also resistant to atmospheric gases and can comply to potable water safety standards (AS4020).

Our systems are supported by manufacturer's warranties for 10 years, which are extendable to a further 10 years with maintenance applications.

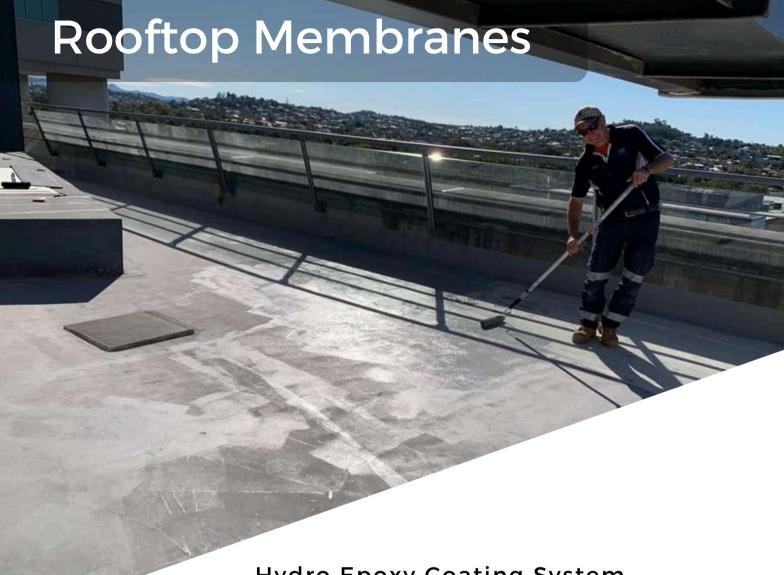
Reverse Side Membranes

Following vigilant surface preparation, we install a breathable reverse side membrane in multiple layers including a primer application,

The membrane is suitable to withstand water from the reverse side, meaning water pushing from behind the coating, without blistering or delaminating like normal membranes would in a short time frame.

The installed membrane is suitable for standard after-trades to be applied directly to it. Please consult us for further information if required to ensure compatibility of proposed finishes.





Leak Sealing

Concrete Crack Injection

Concrete Repair

Protective Coating

Ground Improvement

Slab Jacking

Joint Repairs

Hydro Epoxy Coating System

The waterborne epoxy coating system is installed in two layers as a moisture vapour barrier primer system. It has exceptional adhesion to concrete and excellent resistance to water and hydrostatic pressure. The WBE requires a protective coating if the treated area is going to be subject to UV light and /or traffic (foot or otherwise). This is an ideal treatment for efflorescence caused by rising damp in concrete slabs.

Acrylic Waterproofing Membrane

The key to successful remedial waterproofing is thorough surface preparation and vigilant detailing of all penetration and junctions married up with high quality materials.

On roof tops, we install a heavy duty, UV resistant modified acrylic membrane in multiple layers on to a moisture barrier primer system.

The primer system helps to prevent bubbling or blistering which is highly likely to happen in remedial waterproofing applications if not performed.

The membrane system is detailed to all penetration and junctions.





Leak Sealing

Concrete Crack Injection

Concrete Repair

Protective Coating

Ground Improvement

Slab Jacking

Joint Repairs

Penetrating Waterproofing Repellent

Penetrating Waterproofing Repellent - PWR, is commonly applied to areas such as tiled balconies.

The PWR is a clear white spirit based penetrating waterproofing repellent that will cure with a dry look offering minimal to no visual change to the substrate.

The system will penetrate into the substrate rendering it nonporous to water yet still allow it to breathe.

This system will also ease the cleaning of the area and reduce mould growth and dirt pick up.

For best performance the substrate should be dry before application.

This system normally requires re-application every 5-10 years, when exposed to the elements.





Leak Sealing 🗸



Concrete Repair

Protective Coating

Ground Improvement

Slab Jacking

Joint Repairs

Water leaks can emanate from an array of external and internal sources. Construction and expansion joints, movement cracks and pipe penetrations are just a few examples of situations where water can easily enter.

Leaks may become evident from elevated moisture levels, efflorescence and temperamental or active water leaks.

At Waterstop Solutions, we have highly skilled technicians who frequently perform successful remedial high pressure leak sealing injections. Whilst other remedial companies may do this only once a year, or at most once a month, on average, each of our technicians perform high pressure leak sealing injection works regularly each week,

With fine-tuned expertise in injection techniques, we rectify leaks directly using specialised leak sealing systems that are designed to provide the essential waterproofing protection required.

We use the highest quality TDI (toluene di-isocyanate) liquid polyurethane available, which forces the material into leaking cracks, joints and other defects, creating a permanent flexible seal

This material is hydrophilic, mixes easily with water and provides higher adhesion and less shrinkage than MDI (diphenyl methane di-isocyanate) Polyurethane, while still compliant to AS4020 (Australian Standard for potable water).







Leak Sealing

Concrete Crack Injection

Concrete Repair

Protective Coating

Ground Improvement

Slab Jacking

Joint Repairs

Concrete Crack Injection - Structural Repair

Waterstop Solutions helps restore the structural integrity of defects in concrete by injecting high quality liquid epoxy resin.

We repair everything from basic hairline fractures right through to structural damage.

Depending on the type of crack, there are three main injection techniques that we use:

- 1. Syringe or gravity Injection Low Pressure
- 2. Paste on Injection Packers Medium Pressure
- 3. Packer Injection High Pressure





Leak Sealing

Concrete Crack Injection

Concrete Repair

Protective Coating

Ground Improvement

Slab Jacking

Joint Repairs

The common signs of moisture-related concrete damage, known also as "concrete cancer", include cracking, rust stains and in the worst case, spalling. (i.e where moisture in the concrete has caused reinforcing steel bars to corrode).

The longer problems are left untreated, the more damage and repair costs accelerate, and they can do so exponentially.

Contributing causes of the damage can be:

- The environment
- Lack of adequate protection or maintenance
- Design, or failures of the initial construction process.

The typical method of concrete cancer repair follows a process of:

- · Breaking out unsound concrete and saw cut repair zone perimeter.
- · Cleaning non-corroded steel reinforcing.
- Applying concrete primers and rust inhibitors to steel.
- After surface preparation to the substrate, depending on the extent of the concrete cancer, we may apply pins to further anchor the new concrete, to provide additional longevity of the repair.
- Reinstating with high build shrinkage compensated repair mortar.

Treatment of concrete cancer should incorporate proper weather / waterproofing membrane or it risks being a short term solution.





Leak Sealing

Concrete Crack Injection

Concrete Repair

Protective

Coating

Ground Improvement

Slab Jacking

Joint Repairs

We install safety floor coatings that provide protection against slips and falls. Traffic-able coatings and high-visibility finishes are included in our systems.

The coating that we use is a modified acrylic protective safety coating for concrete. This product is heavy duty and is applied in multiple layers, often to a moisture barrier primer system.

The slip resistant trafficable UV stable coating, available in a wide colour range, shows excellent performance in areas exposed to harsh weather and excessive wear.

This protective safety coating is hot tyre resistant and forms a hard wearing finish to surfaces like concrete drive ways, whilst protecting against slips and falls.

The products that we use are durable and able to withstand the impact of caustic chemicals in every type of environment, ranging from light pedestrian traffic through to heavy vehicular traffic.

With assistance from our partnered suppliers, we provide firstrate safety coating installations. We can assist in installing a wide range of coating options, from meeting new safety requirements in slip ratings through to high chemical resistant coatings for secondary containment bunds.





Leak Sealing

Concrete Crack Injection

Concrete Repair

Protective Coating

Ground Improvement



Joint Repairs

Improvement of ground conditions with cutting-edge mining technology.

We use moisture reactive polyurethane technology to lift and stabilise sunken concrete from underneath to deliver a permanent solution.

The polyurethane is injected underneath existing concrete. It is fast acting, expanding quickly up to 30 times its volume within seconds. The controlled placement of materials ensures that adjacent cracks, fissures and voids are filled and that the ground in the treated area is "glued" together, stabilising against future erosion in the immediate location.

Because the polyurethane can be open cell and permeable, this system will allow water to slowly seep through, if an application so requires, preventing pore pressure build up and reducing possible future erosion adjacent to the treated area.

In cases such as sinkholes, we may reinforce the polyurethane system with aggregate for added compressive strength and continuous ground support.





Leak Sealing

Concrete Crack Injection

Concrete Repair

Protective Coating

Ground Improvement

Slab Jacking

Joint Repairs

Maintenance And Repair Of Concrete Expansion Joints

Joints are subject to many factors which influence their design and service life. In stressed, load-bearing conditions, this service life can be compromised.

Joints between concrete sections in buildings are designed to accommodate movement from initial shrinkage through to movement due to the yearly thermal cycle.

To prevent ingress of foreign materials, which would affect joint movement, joints are sealed. A seal prevents water or chemical solution ingress into subsoil, whilst accommodating movement.

Joint are no longer functional once the seal is breached.

We have a deep understanding of what is involved in selecting the right joint system. We frequently perform joint replacement and install improvement systems to protect slab edges subject to vehicular impact.

Joints/cracks are usually prepared to accept the sealant with mechanical grinding. Porous substrates, such as masonry, are primed prior to installation. The new sealant is installed in a cross-sectional hour glass profile, to allow for maximum movement capability.

Examples of areas we treat

- Warehouse Facilities
- Industrial & Commercial Concrete Flooring
- Heavy & High Impact Traffic Areas





Our People

To honour our commitment to "Quality Service, Quality Solutions", Waterstop Solutions delivers an ongoing, in-house remedial repair training program to all Technicians.

At Waterstop Solutions we are proud of the calibre of our people and confident in their ability to deliver quality services and results, no matter the challenges.

We recognise that the company's main asset is its people and therefore we invest heavily in the development and retention of employees through training, seminars and professional development.

We aspire to be a company that continues to attract, develop and retain people whose values align with our own of - Respect, Reliability and Responsibility - and who seek to actively contribute to the collective long-term success of Waterstop Solutions and its team members.



Certifications



By law, waterproofing companies in Queensland require only one licensed trades person.

Waterstop Solutions has several qualified staff members with a Certificate III in Waterproofing, in addition to our other skilled technicians. Other team members possess qualifications in Project Management and Business Management.

We encourage all our staff members to pursue education and training to further their professional expertise.

It is highly uncommon for a company in our field to have so many qualified staff, and this is something of which Waterstop Solutions is very proud.





Proud member of







Quality Assurance

Waterstop Solutions' quality systems, policies and procedures are compliant across Australia to AS/NZS ISO 9001, ISO 4801, ISO 14001

Our Quality Policy Statement illustrates a commitment to the quality management principles advocated by ISO (International Organisation for Standardisation) and we seek to address those principles by:

- · Customer focus
- Leadership
- · Staff Contribution
- · Process approach
- · Systems approach to management
- · Continual improvement
- · Factual approach to decision making
- Mutually beneficial supplier relationships

Structured internal audits are performed to ensure ongoing compliance and continual improvement of our systems and procedures. Quality Management Software is used to identify, record, and measure all business processes.





Project Management

Waterstop Solutions uses AroFlo as an in-house Project Management System, which facilitates our management of resource allocation, quoting, job sheets, invoicing purchasing. It is also used to record communications and variations.

AroFlo enables us to integrate all the varying facets of projects, including quoting, data libraries, invoicing, time sheets, authorisations, e-forms, job costing, inventory management, asset management and purchasing.

All notes, documents and photos are timestamped and immediately uploaded to the cloud-based software for easy access when required.

The system is also used to interface with our financial and management accounting system for accurate, live reporting.

AroFlo is a powerful cloud-based job management software that is accessible from desktops and any mobile device. It gives us a central port from which to manage all our jobs and projects - from the initial query and quote, through to the final invoicing - while providing our clients with next level accountability and documentation.



Occupational Health and Safety Management

Occupational Health and Safety Management

Waterstop Solutions is committed to providing a safe and healthy working environment for all employees, visitors and members of the public.

Hazards to health and safety will be removed or, where this is not practicable, they will be managed so as to prevent injury, illnesses and dangerous events.

Waterstop Solutions considers safety and incident prevention to be vital to the ultimate success of the organisation's operations and it forms an integral part of management's responsibilities.

A comprehensive safety system has been implemented across the business in compliance with Occupational Health & Safety legislation. Our safety system fully satisfies Australian Standard AS/NZS 4801.

All employees and sub-contractors engage in the system and are made aware of their responsibilities through company and project inductions, Job Safety and Environment Assessments (JSEA), Safe Work Method Statements, Toolbox meetings and competency assessments. Regular safety audits/inspections are conducted at the company's headquarters and job sites.

Waterstop Solutions is Cm3 prequalified for our OHS/WHS capabilities and practices. CM3 Certification Number: 9923



Integrated Management Systems Occupational Safety Hazards

Environmental Management

Waterstop Solutions is committed to undertaking its activities in an environmentally responsible manner and effectively managing any risk that may impact upon the environment.

Waterstop Solutions manages its work activities in a manner that is consistent with the principals of ecological sustainability.

Our Environmental System fully complies with Australian Standard AS/NZS 14001, and we are committed to optimising our performance, so that it conforms to the requirements of the ISO 14001 standard for Environmental Management.

The Polyurethane resins we predominantly use (TamPur 130 and TamPur 150) for leak sealing and crack injections have been tested by AWQC for use in contact with drinking water. The Water Potability Certificates for TamPur 130/150 confirm they been product tested for and are compliant with the AS/NZA 4020 and compliant with the latest standard.





Major Projects

- Sydney Harbour Bridge
- Taronga Zoo
- Clem 7 Tunnel
- Airport Link Tunnel
- Legacy Way Tunnel
- Gateway Duplication
- Commonwealth Games Facilities
- The Gabba
- Stvene Hotel
- Lady Cilento Hospital
- Royal Brisbane Women's Hospital
- Northern Busway
- Western Freeway
- Eastern Busway
- Port of Gladstone and Port of Brisbane
- M & A Building
- Green Square
- Anzac Square
- "The Toaster" Bennelong Apartments

Wivenhoe Dam

Tugan Desalination Plant

Eildon Hill Reservoir

Kuraby Reservoir

Springfield Lakes

Kimberley Park Reservoir

Green Hill Reservoir

Blackwater Coal Mine

Clinton Coal Gladstone

Bulimba Creek Upgrade

Paradise Dam

Wesley Mission Facilities

Holy Family Catholic Church

Archdiocese Catholic Church

Oaks Hotels

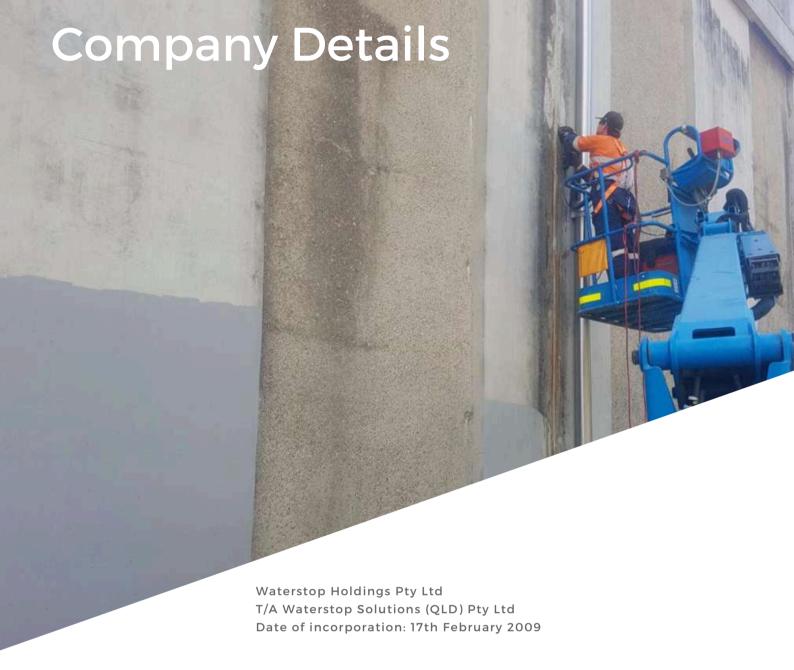
Parliament House

AFP Head Quarters

- Major Civil Works
- Remedial Basement Work
- Water Treatment Plants
- Waste Water Treatment Plants
- Pump Stations
- Man Holes
- Below Grade Construction
- Military Bases
- Emergency Services
- Balcony and Podiums
- Reservoirs and Dams
- Bridges, Roads and Tunnels
- Warehouses and Hardstands
- Concrete Tanks and Pools

- Marine Structures
- Road Authorities
- Aged Care Facilities
- City Councils
- Water Utilities
- · Numerous domestic and body corporate properties





QBCC Licence Number: 1162603

NSW Builders Licence Number: 347295C

NSW Building Practitioner Licence: BUP0003240

CM3 Certification Number: 9923

Waterstop Solutions (QLD) Pty Ltd

Phone: (07) 3205 1899 Email: info@wsqld.com.au

Website: waterstopsolutions.com.au

Registered Business Address:

4/17 Kenworth Place Brendale QLD 4500

Postal Address: P O Box 5445, Brendale QLD 4500

ABN: 57 135 385 036

Waterstop Solutions (NSW) Pty Ltd

Phone: (02) 9346 8308

Email: admin@wsnsw.com.au

Website: waterstopsolutions.com.au

Registered Business Address and

Postal Address: 32/14 Loyalty Road North Rocks NSW 2151

ABN: 36 626 746 370







