

POOLS FOR SCHOOLS



MASTER POOL DESIGNERS AND BUILDERS.

QUALITY WITHOUT COMPROMISE SINCE 1957



CRYSTAL POOLS



CRYSTAL POOLS



Whether it's a small country public school or one of Sydney's elite educational institutions, Crystal Pools is unmatched for capability and experience in the specialist field of school pool construction. It's our design and construction expertise that will make a real difference to the smooth realisation of your project's vision – on time, on budget.

This information booklet is a first step in assisting schools to find the right information on procuring an aquatic asset.

Here we profile some of the many school swimming pools Crystal Pools has built, offering insight into our expertise in this specialty field.

KNOX GRAMMAR



PYMBLE LADIES COLLEGE



YIPIRINYA ALICE SPRINGS



QUEENWOOD GIRLS



TRINITY COLLEGE



ST PATRICKS COLLEGE



Specialists in pools for schools

PYMBLE LADIES COLLEGE

WATER 20m

Gold Coast Aquatic Centre:
Host to the 2014 Pan Pacific
Swimming Championships and the
2018 Commonwealth Games.





ABOUT US

Crystal Pools has a solid history of performance on a wide variety of government and commercial projects and is the name behind many of Australia's most innovative commercial pool projects.

Australia's most experienced. Unmatched in capability.

From the largest commercial aquatic centres to construction projects conducted in the remoteness of the Australian outback, we offer a technical expertise that's the envy of others. We are certified for government projects and are experienced at working with developers. Crystal Pools offers a total design and build service for corporates and smaller businesses alike. In fact, no other pool builder in Australia has the methodology and level of expertise

we have gained since 1957. That level of experience breeds natural efficiency and economy and is reflected in the bottom line of every project we do. The result for you is a better build yet at a similar price. From the beginning you also have access to case studies and references from construction companies, schools, property developers and councils who've relied on our experience to deliver them real results.

Our compliance methodology and standards of documentation are second to none.

Single point accountability

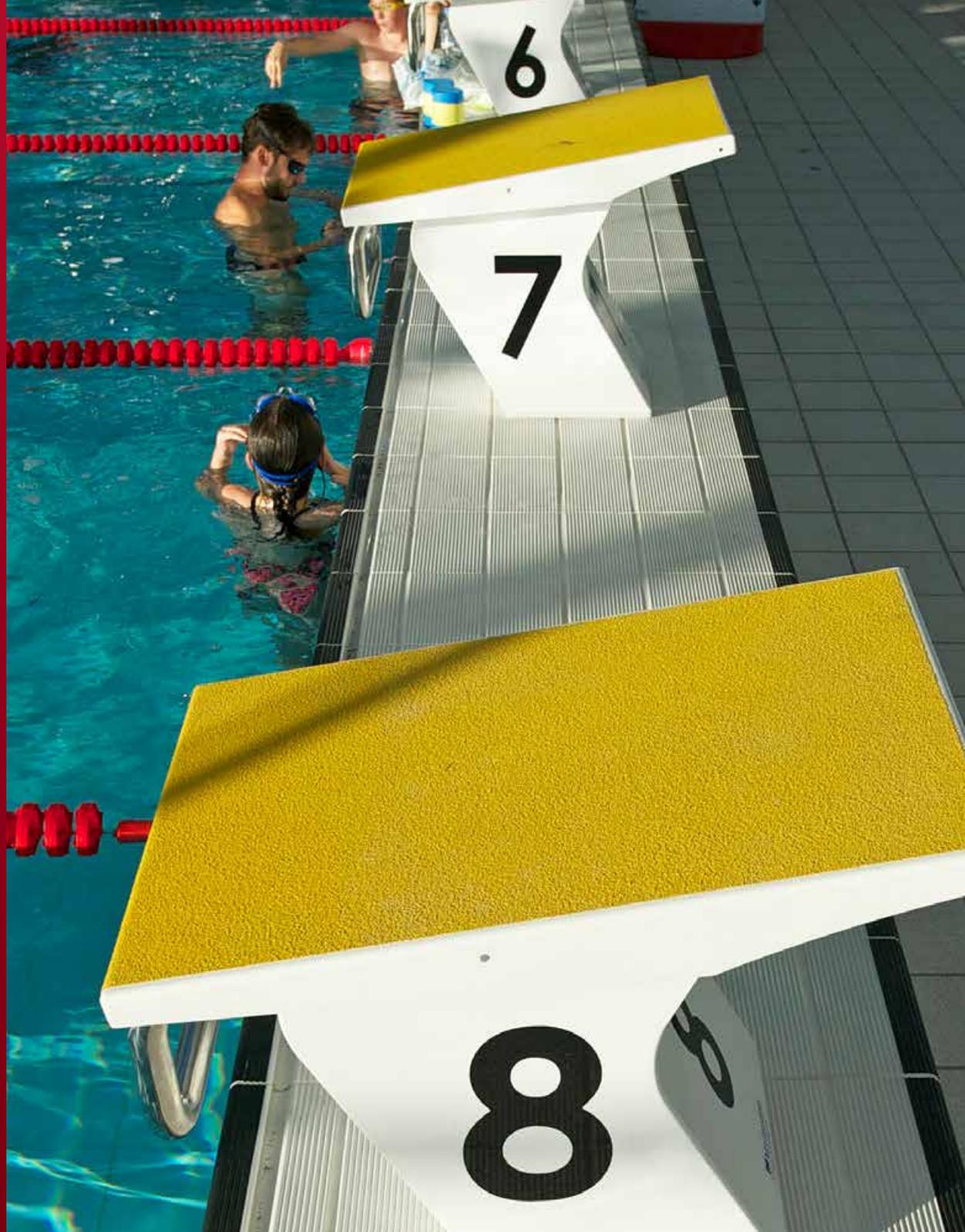
A cornerstone feature of the support we provide is to insulate you from potential headaches in the design and construction process. We offer a single point of contact. Another benefit in working with a single harmonious team is the ease of doing business; combined contract, combined supervision, combined payment systems and more.

THE CRYSTAL POOLS DIFFERENCE

The choice is Crystal because we deliver;

- **Expert advice** – you can count on us for valuable advice before you choose, before the contract, and for years to come
- **The best tradespeople in the industry** – master builders and craftsmen, many working with us for decades, not months
- **Accountability** – our methodology, expertise and insurances are in place to ensure you remain insulated from any issues
- **Capability** – clients praise us for our on-site problem solving abilities
- **Operational efficiency** – that goes directly to your bottom line
- **Competitively priced** – yet higher in quality
- **Superior inclusions** – innovative technologies, proven through rigorous testing
- **Uncompromising standards of quality** – thousands of our swimming pools have stood the test of time
- **Security** – Australian owned and operated since 1957, Crystal Pools is a financially solid company where the directors running the business work throughout the business
- **Awards** – Crystal Pools has won more than 220 major state, national and international pool awards
- **Accreditation** – long standing member of the Master Builders Association, the Housing Industry Association and the National Swimming Pool Institute
- **Expertise** – Over the decades Crystal has experimented with other construction technologies yet remains convinced concrete inground pools are vastly superior to any other construction method available. See our *Guide to Aquatic Planning & Procurement* and page 10 of this brochure for more information .

As commercial swimming pool specialists, we've developed an approach for clients that adds value at every stage of the process.







AWARDED FOR DESIGN AND CONSTRUCTION

For the last five years running Crystal Pools has won a host of major awards at the NSW MBA (Master Builders Association) Awards for both its residential and commercial pools.

With over 220 major state, national and international pool awards to date, for pool construction expertise *the choice* is Crystal Pools.

“MORE THAN 220 MAJOR STATE, NATIONAL AND INTERNATIONAL POOL AWARDS”

ARE METAL PREFABRICATION POOL STRUCTURES A VIABLE ALTERNATIVE FOR SCHOOL SWIMMING POOLS?

Are there cost and life cycle benefits and do they outweigh the compelling case for reinforced concrete structures with appropriate finishes?

When comparing a traditional concrete construction with pre-fabricated metal panel type constructions, it is wise to explore where this alternative stands and to understand the risks inherent with these fully imported pool products.

- It is Crystal Pool's opinion that with an imported pool product your school's construction may potentially be prone to risks such as unforeseen shipping delays, transport mishaps, customs and duty issues and supply or replacement part delays due to European summer holidays (source of most pre-fab products).
- It is our opinion pre-fabs offer less protection under Australian Standards, Code of Practice or stage-by-stage certification and have engineering limitations.
- Pre-fabs carry risk of future repair costs on internal lining, risk of corrosion (even when stainless steel used), and risk of future repair costs due to their external piping.
- There are other inherent design limitations, curves and unusual shapes and depths for example. Their folded sheetmetal gutters are comparatively shallow and subsequently have limited surge holding capability, and may cause rebound issues. We believe their need to provide gutter drainage external of the shell is a design compromise.
- The financial viability of these pool types relies completely on a vinyl lined floor. In their short case history in Australia (20 years, versus conventional's

70 years) panel-type pools continue to have issues with liners and water tightness. Apart from the fact that the life of a vinyl liner is 15 to 20 years and as such may need to be replaced several times before a tiled pool has to be retiled.

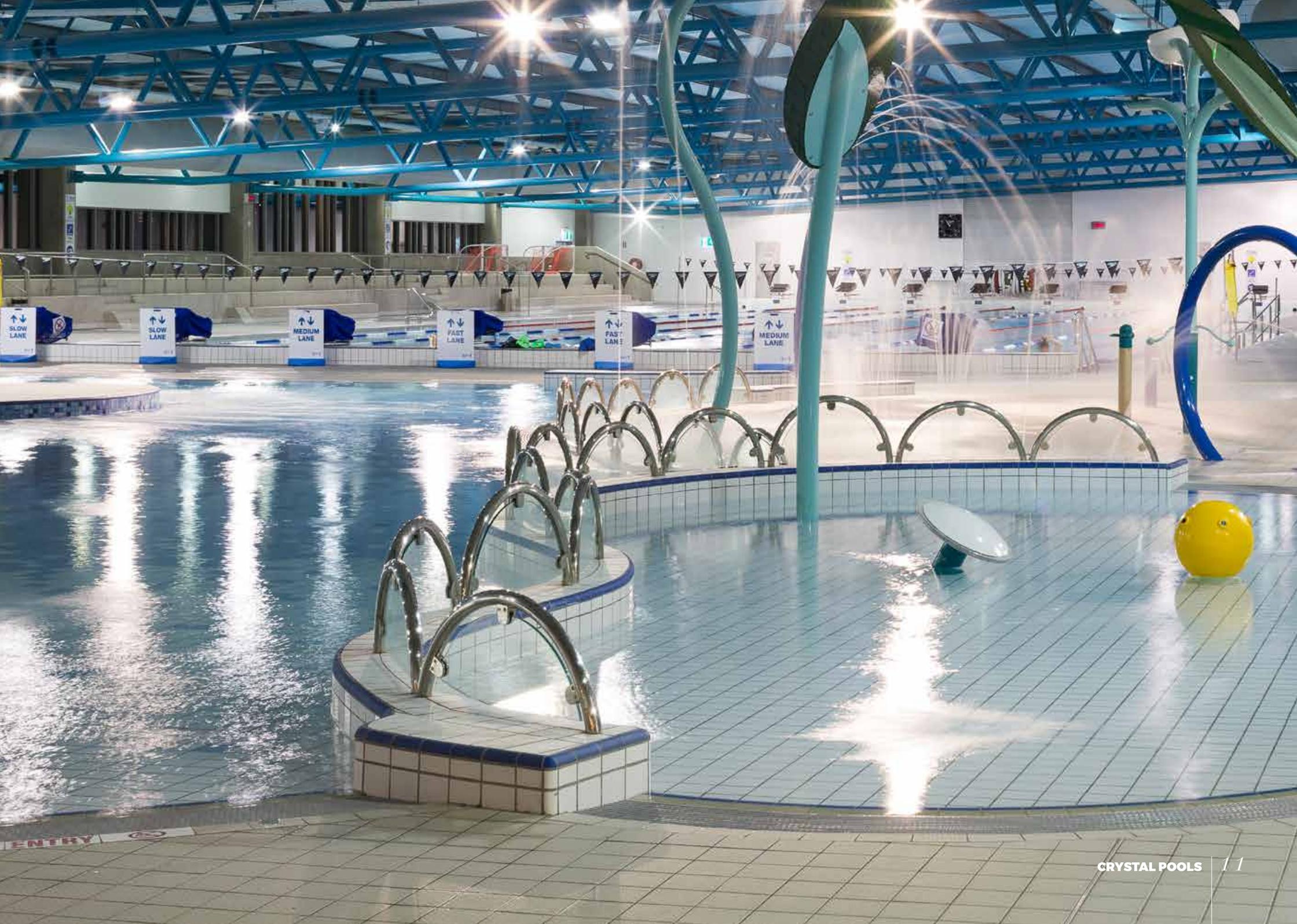
- There are also environmental and cost implications of additional heat loss. Concrete pools have a large thermal mass and limit heat losses through the thick concrete. Metal pools do not, and lose heat readily through the thin metal walls.
- Conventional constructions are engineered and proven to last well in excess of 50 years whereas pre-fab metal panel constructions offer a life expectancy half that. A 20 to 25 year service life* may not align with your expected service life from surrounding infrastructure. This again makes traditional pool building method the more favourable for Whole of Life Cost, in our opinion.

** Please note. Overseas pool manufacturers typically offer a service life, on the metal panels only, of up to 25 years and that is subject to specific site conditions and subject to good installation procedures.*

- Conventional concrete construction is still the preferred method for new aquatic centres around the globe and in Australia.

- Conventional concrete pool constructions in Australia benefit from broad based compulsory tendering in an evolved competitive marketplace.
- Surety in your investment decision is backed up by the diversity and sheer volume of case history supporting traditional pool building method. Whereas in the great majority of panel & vinyl pool cases, purchasers are totally reliant upon assurances offered by the manufacturers, in terms of what they consider to be fit for purpose.

As one of Australia's leading authorities in the design, specification and construction of commercial pools we have no aversion to adopting new technologies. Naturally we would be the first to adopt and recommend prefabrication to clients if we believed it offered an advancement in pool construction methodology, or conversely, delivered radically cheaper pricing to compensate for what is, in our opinion, an inferior end product with a much shorter service life.



ENTRY

A swimmer in a pool with arms raised. The swimmer is wearing a red swim cap and black goggles. The water is clear blue, and the swimmer's arms are extended upwards, creating a splash of white water. The swimmer is wearing dark swim trunks. The background is a bright, clear blue sky.

“Of all the types of swimming pools Crystal has built over the last six decades, nothing generates more pride and satisfaction than our school pool projects”

SCHOOLS WITH POOLS: A LEAGUE OF THEIR OWN

When a school acquires an aquatic asset, the school environment instantly changes up a gear and the school’s community is drawn closer together. At the individual level, swimming has the power to enrich a child’s life; socially, physically, and emotionally.

In the last 60 years we’ve built some of Australia’s most famous pool constructions. Perhaps it is because we’ve been around long enough to see our pools endure through the decades, that every new project brings so much pride and satisfaction to all involved. It is our growing list of school pool projects that seems to instill the most pride and satisfaction.

A school pool encourages healthy physical activity during a child’s formative years. Not only is swimming good for fitness, it is also proven to improve a student’s self esteem and place them ahead of non-swimming peers on a number of key developmental milestones. Furthermore, if a child acquires an early habit of aquatic exercise, they are more likely to stay active and healthy during adulthood.

School run learn-to-swim programs are proven to save lives as well as providing a pathway for students to gain a fundamental skill for life. The majority of children see pool based activities as fun. For those students who once a year tended to avoid that annual excursion to the swimming carnival, many new opportunities appear for the student to find joy and confidence in swimming at a pace that suits them. And for those children who might have physical limitations or are uncomfortable with other sporting activities, swimming is a low-impact alternative. Conversely, for students who demonstrate talent and dedication, school swimming facilities provide the opportunity to foster competitiveness and achieve success for the school and themselves, at the highest possible level.

SCHOOL POOL SPECIALISTS

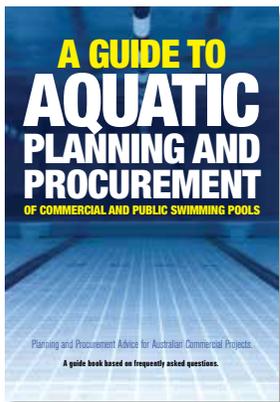
Crystal Pools offers demonstrated specialist experience working with schools and is also Australia's most experienced master pool builder. Six decades of accumulated commercial expertise translates into the smooth realisation of every school pool project we take on.

We understand the regulations and requirements involved with schools, their community and stakeholders. Our compliance methodology and standards of documentation are second to none, which is why we are also the choice for minimised risk and maximum accountability.

With Crystal Pools you have access to case studies and references from many other schools who've relied on our experience and capabilities to deliver them an iconic school pool built to stand the test of time. Built on time and on budget.

DIVE DEEPER

Supporting this brochure, Crystal Pools also recommends the following reference material which can be downloaded in pdf format at the commercial pools section of our website:



A Guide to Aquatic Planning & Procurement of commercial and public swimming pools

This 16 page white paper is essential reading as it covers every aspect of getting the most out of your aquatic asset.

Major Projects Completed

Download an up-to-date list of our most recent projects.



RECEIVE ADVICE WITHOUT OBLIGATION

Every school project requires a custom solution. As specialists we offer economical solutions to every requirement from A to Z.

Feasibility Studies include the analysis of Topographic, Geotechnical and Services Constraints, User Requirements, Town Planning Compliance, Operation and Maintenance Cost Analysis.

Engineering Services we provide from our own consultants include; Architectural, Civil, Structural, Hydraulic and Electrical.

Project Management – you may wish to prepare the site yourself or you can opt for a full turnkey solution where we manage all the trades, materials and equipment from start to finish.

Maintenance Programs – Ask us how our *reporting and scheduled maintenance* service can deliver cost efficiency to your investment.

Knox Grammar

BY CRYSTAL POOLS





MINI CASE STUDY Knox Grammar School

PROJECT LOCATION	Wahroonga, Sydney, NSW
PROJECT SUMMARY	The Knox Grammar pool saw Crystal Pools install a 50m Olympic pool and a learn-to-swim pool in a new state-of-the-art aquatic centre.
PROJECT SCOPE	Concrete structures. Fully tiled.
AQUATICS ENGINEER/CONSULTANT	Stevenson & Associates
COMPLETION	October 2015 (Contract awarded Dec 2014)
TOTAL POOL SURFACE (M²)	(1) 1,255m ² (2) 635m ²
POOL VOLUME (M³)	(1) 1,600m ³ (2) 450m ³
POOL FILTRATION & WATER TREATMENT	Cutting-edge ultra violet and UFF filtration system ensuring pristine water quality and low levels of chlorine

Project Description:

The Knox complex features a separate learn to swim pool and a heated indoor 50m swimming pool with mid-pool boom allowing multiple configurations including water polo, swimming training and deep and shallow water aqua aerobics.

- Challenges:**
- Limited room on site for construction
 - Narrow school access road.



Pymble Ladies College

BY CRYSTAL POOLS



**MINI
CASE
STUDY**

Pymble Ladies College

PROJECT LOCATION	Pymble, Sydney, NSW
PROJECT DESCRIPTION	A fully tiled 8 lane 50m pool meets FINA standards for dimensions, lighting and water quality, also a 25m x 15m training pool.
PROJECT SCOPE	Conventional form and poured concrete structure. Fully tiled.
DEVELOPER / BUILDER	GNFP
COMPLETION	February 2016
TOTAL POOL SURFACE (M²)	(1) 1055m ² (2) 128m ²
POOL VOLUME (M³)	(1) 720m ³ (2) 100m ³
POOL FILTRATION & WATER TREATMENT	UFF Filtration System with UV and a chlorine generator.



Project Description:

This multi million dollar aquatic and fitness centre replaced the school's old 50m outdoor pool as part of the school's Centenary redevelopment. The new Aquatic and Fitness Centre includes a 50m heated indoor, eight lane swimming pool with multiple dive platforms, a large purpose built learn to swim pool, a multi-purpose fitness centre, incorporating strength and conditioning facilities, and consultation and remedial treatment rooms.

Challenges:

- Tight time frame
- Re-built on demolition site of old pool
- On piles
- Partially suspended.

St Patricks College

BY CRYSTAL POOLS



Before



**MINI
CASE
STUDY**

St Patricks College

PROJECT LOCATION	Sutherland NSW
PROJECT SUMMARY	Refurbish existing 25m swimming pool and construct a new fully tiled dual purpose 50m x 20m swimming and water polo pool.
PROJECT SCOPE	Conventional 50m form and poured concrete structure, fully tiled. A refurbished 25m pool, fully tiled.
AQUATICS ENGINEER/ CONSULTANT	RH Consulting Engineers Crystal Pools
COMPLETION	March 2016
TOTAL POOL SURFACE (M²)	300m ²
POOL VOLUME (M³)	410m ³
POOL FILTRATION & WATER TREATMENT	Sand Filtration System with Prominent Procal



Project Description:

Construction of a new swimming pool inside the existing swimming pool structure.

Challenges:

- Working around school exams
- Access very limited
- Limited plant room space

Trinity Grammar School

BY CRYSTAL POOLS



**MINI
CASE
STUDY****Trinity Grammar School**

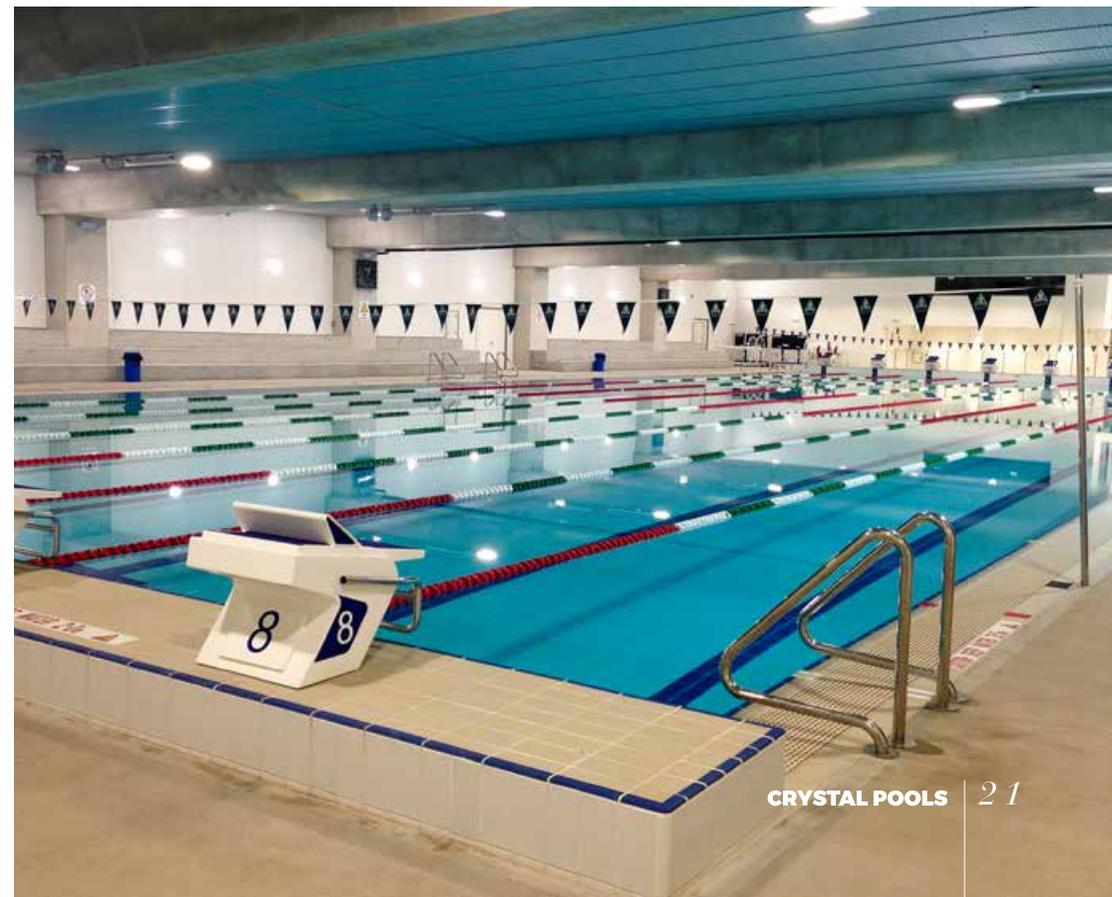
PROJECT LOCATION	Summer Hill, NSW
PROJECT SUMMARY	Refurbish existing 25m swimming pool and construct a new fully tiled dual purpose 50m x 20m swimming and water polo pool.
PROJECT SCOPE	Conventional 50m form and poured concrete structure, fully tiled. A refurbished 25m pool, fully tiled.
AQUATICS ENGINEER/ CONSULTANT	Stevenson & Associates
COMPLETION	October 2015
TOTAL POOL SURFACE (M²)	(1) 1,000m ² (2) 425m ²
POOL VOLUME (M³)	(1) 2,000m ³ (2) 980m ³
POOL FILTRATION & WATER TREATMENT	UFF Filtration System with UV

Project Description:

Trinity Grammar School wanted a new aquatic centre to replace the school's old 25m outdoor pool. The new facility now consists of two quality swimming pools; a refurbished 25m pool and also a new 50m swimming pool underneath the school. We possessed the capabilities to construct the 50m basement pool and install a swimwall to divide the pool length, allowing water polo to be played.

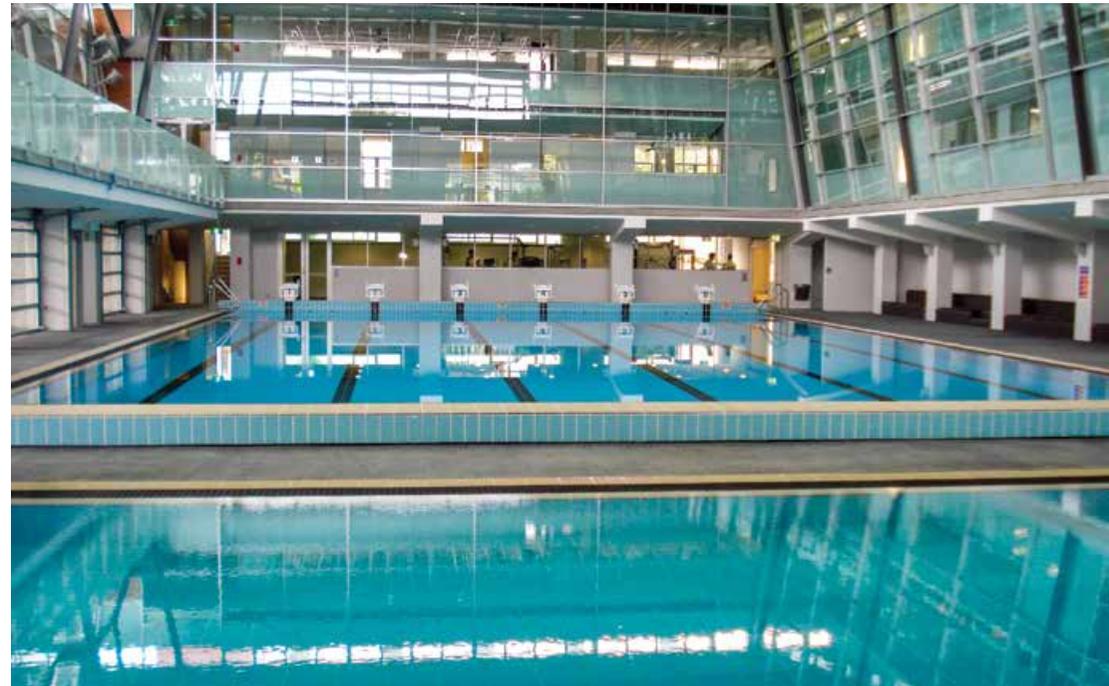
Challenges:

- Construction in high density residential area to underground basement site.
- Large drop to site for deliveries and movement of materials
- Swimwall installation a challenge



Queenwood

BY CRYSTAL POOLS





**MINI
CASE
STUDY**

Queenwood Girls School

PROJECT LOCATION	Mosman, Sydney, NSW
PROJECT DESCRIPTION	A fully tiled 25m x 15m pool and a 12m x 7m training pool
PROJECT SCOPE	Indoor heated 25m x 15m swimming pool. Construction of pool shells. Fully tiled.
AQUATICS ENGINEER/CONSULTANT	Stevenson & Associates
COMPLETION	September 2006
TOTAL POOL SURFACE (M²)	(1) 375m ² (2) 84m ²
POOL VOLUME (M³)	(1) 720m ³ (2) 100m ³
POOL FILTRATION & WATER TREATMENT	UFF Filtration System using UV

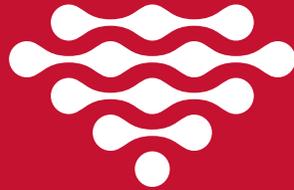
Project Description:

25m swimming pool with water polo field and a 13m learn-to-swim pool

Challenges:

- Construction access on busy roads
- Rock excavation
- Pool positioned 2 levels below street level





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The choice is Crystal!

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Builders Gold License
No. 34505

Master Builders
Association NSW

Member since January 1957