



ARCHITECTURE & ACCESS

Creating environments,
transforming lives.

Creating accessible aquatic
facilities

Outline

- Introduction – what we do and how we are involved
- Swimming and disability statistics
- Benefits
- Legislation that underpins design
- Key Access Features
- Future considerations

Introduction



Access Consulting Services

Specialist advice and practical solutions to achieve the requirements of access and universal design within the built environment.

Our experience

- Over 30 years providing access consulting services.
- Up-to-date knowledge of local policy, state and federal anti-discrimination laws, and building control regulations.
- Qualified and experienced team with in-depth knowledge of needs of people with disability.
- Unique capacity - multi-disciplinary team of access specialists - architects, occupational therapists, landscape & interior designers, project managers and OHS professionals.

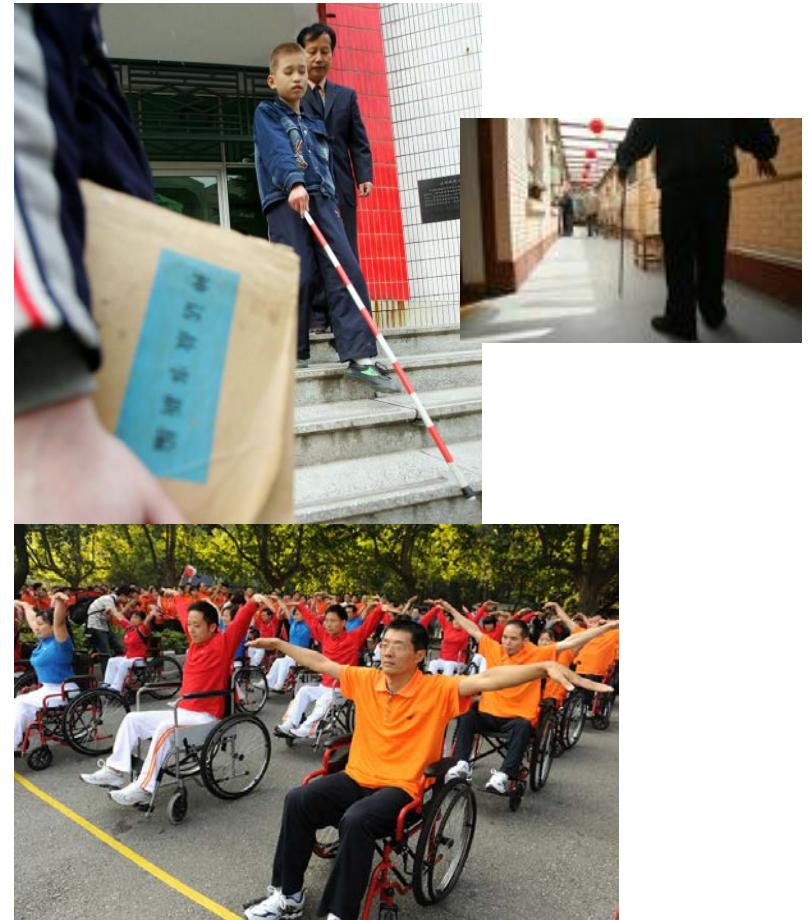
Our focus

- Our practice refers to the principles of universal design – equal access for all.
- Assisting clients to meet obligations to provide accessible to premises.
- Ensuring building work is done in compliance with building control legislation.
- Providing specialist advice to inform the work of owners, managers, architects, building certifiers, designers and property developers.
- Creating accessible workplaces, public facilities, commercial and residential developments.

Disability and swimming statistics

Almost 20% of the community have a disability:

- From 0 - 4 years, 4% and up to 60 - 69, 40%
- > 85 years - 81% have a disability
- Affects other people than those with a disability
- People with temporary impairments



Disability and swimming statistics

Swimming is Australia's leading sport with over six million Australians participating in swimming either regularly or occasionally in the last three months. Swimming is one of the rare Australian sporting pursuits where more women (3.45 million) participate than men (2.58 million).

Source: Roy Morgan Single Source (Australia), January – December 2017

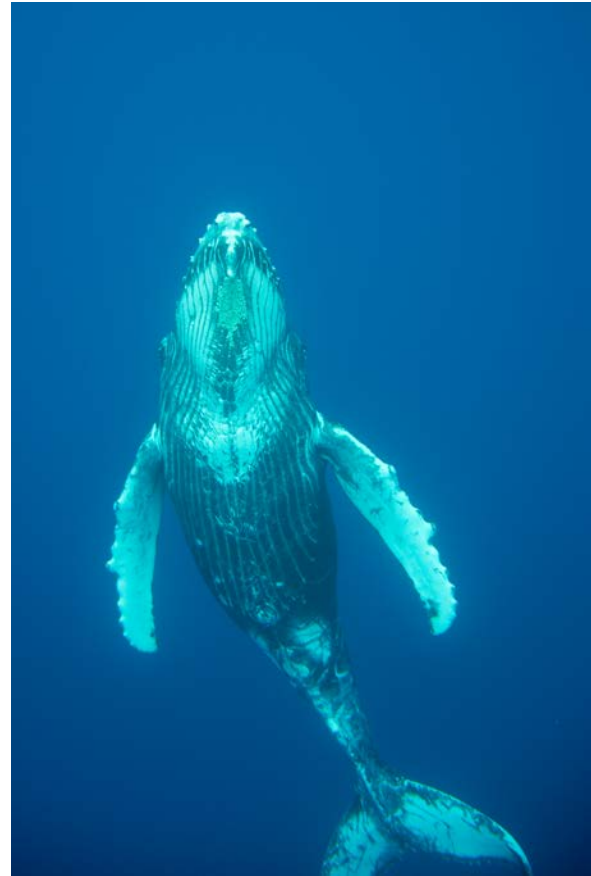


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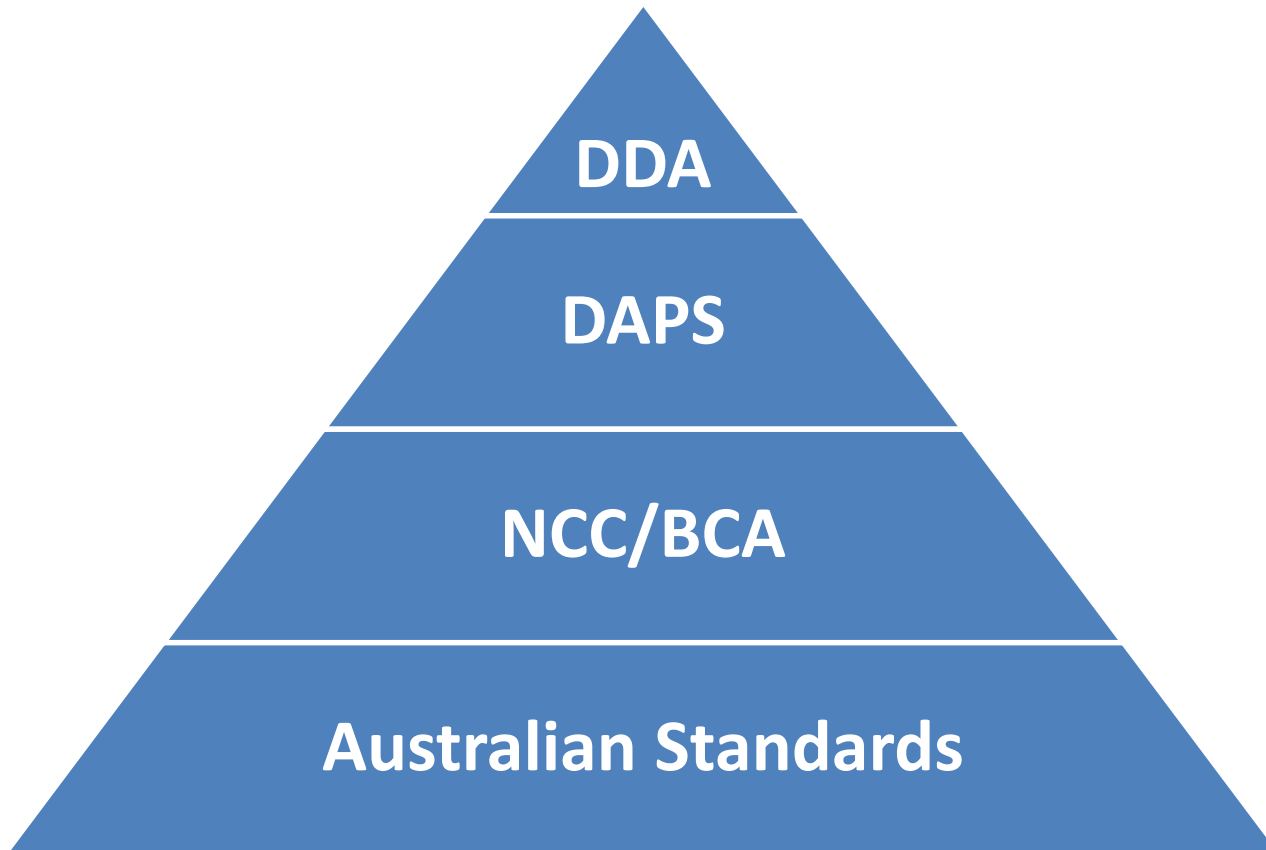
Benefits of Swimming

Swimming has many benefits:

- Life skill
- Physical
- Social
- Emotional
- Cognitive
- Recreational and fun
- Therapeutic



Building Legislation



Building Legislation

Only for any New Building works where Building Approval is required

**New Buildings
All Areas are required
to comply**

**No Building work
Premises Standard
does not apply
however open to DDA
Complaint**

**Existing Buildings
being upgraded by
Owner requirement
depends on Class**

- Areas that are being upgraded
- Principle Entrance to the Building
- Affected Part - Paths of travel from entrance to the new work
- Concessions –
- Toilets on floors being upgraded AS 1428.1 -2001
- Lifts existing 1100mm x 1400mm if travels more than 12 m

Building Legislation Aquatic Facilities

NCC Building Classification/Access
Code for Buildings DAPS

**Table D3.1 Requirements for access for
people with disabilities**

- Class 9b Assembly Building
- To and within all areas normally used by the occupants
- To wheelchair seating spaces in accordance with D3.9
- Not to tiers or platform seating areas that don't contain wheelchair seating spaces.



Building Legislation Aquatic Facilities

NCC Building
Classification/Access Code
for Building DAPS

**Table D3.1 Requirements for access
for people with disabilities**

- Class 10 Swimming Pool

To and into swimming pools
with a total perimeter greater
than 40 m, associated with a
Class 1b, 2, 3, 5, 6, 7, 8 or 9
building that is required to be
accessible.



Building Legislation Aquatic Facilities

NCC D3.10 Swimming pools

- (a) Not less than one means of accessible water entry/exit in accordance with **Specification D3.10** must be provided for each swimming pool required by **Table D3.1** to be accessible.
- (b) An accessible entry/exit must be by means of—
 - (i) a fixed or movable ramp and an aquatic wheelchair; or
 - (ii) a zero depth entry at a maximum gradient of 1:14 and an aquatic wheelchair; or
 - (iii) a platform swimming pool lift and an aquatic wheelchair; or
 - (iv) a sling-style swimming pool lift.
- (c) Where a swimming pool has a perimeter of more than 70 m in length, at least one accessible water entry/exit must be provided by a means specified in (b)(i), (ii) or (iii).
- (d) Latching devices on gates and doors forming part of a swimming pool safety barrier need not comply with AS 1428.1

Building Legislation Fixed or movable ramp

A fixed or moveable ramp must—

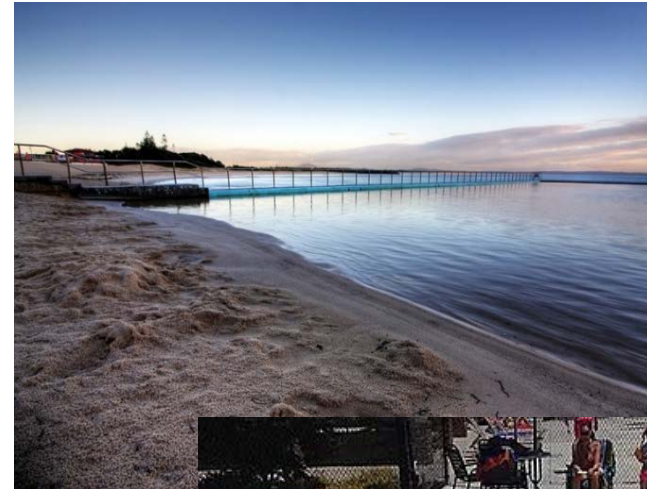
- (a) have a slip-resistant surface; and
- (b) have a maximum gradient of 1:14; and
- (c) have handrails complying with the requirements for ramps in AS 1428.1, installed on both sides of the ramp; and
- (d) have kerbs in accordance with the requirements for ramps in AS 1428.1; and
- (e) extend to a depth of not less than 900 mm and not more than 1100 mm below the stationary water level; and
- (f) have landings in accordance with the requirements for ramps in AS 1428.1, with a landing located at the bottom and top of each ramp and a landing must be located at a level between 900 mm and 1100 mm below the stationary water level.



Building Legislation Zero Depth Entry

A zero depth entry must have—

- (a) a slip-resistant surface; and
- (b) a maximum gradient of 1:14; and
- (c) a single handrail complying with the requirements for handrails in AS 1428.1, from the top of the entry point continuous to the bottom level area; and
- (d) a level area—
 - (i) 1500 mm long for the width of the zero depth entry at the entry point; and
 - (ii) located at the bottom of the zero depth entry at a level between 900 mm and 1100 mm below the stationary water level.



Building Legislation Platform Pool Lift

A platform swimming pool lift must be—

- (a) capable of being operated from the swimming pool surround, within the swimming pool, and on the platform; and
- (b) located where the water depth is not more than 1300 mm;
- (c) designed to withstand a weight capacity of not less than 160 kg and be capable of sustaining a static load of not less than 1.5 times the rated load.



Building Legislation

Sling Style Pool Lift

A sling lift must comply with the following:

- (a) A sling lift must be located where the water depth is not more than 1300 mm.
- (b) When the sling is in the raised position and in the transfer position, the centreline of the sling must be located over the swimming pool surround and not less than 450 mm from the swimming pool edge.
- (c) The surface of the swimming pool surround between the centreline of the sling and the swimming pool edge must have a gradient of not more than 1:50 and must be slip-resistant.

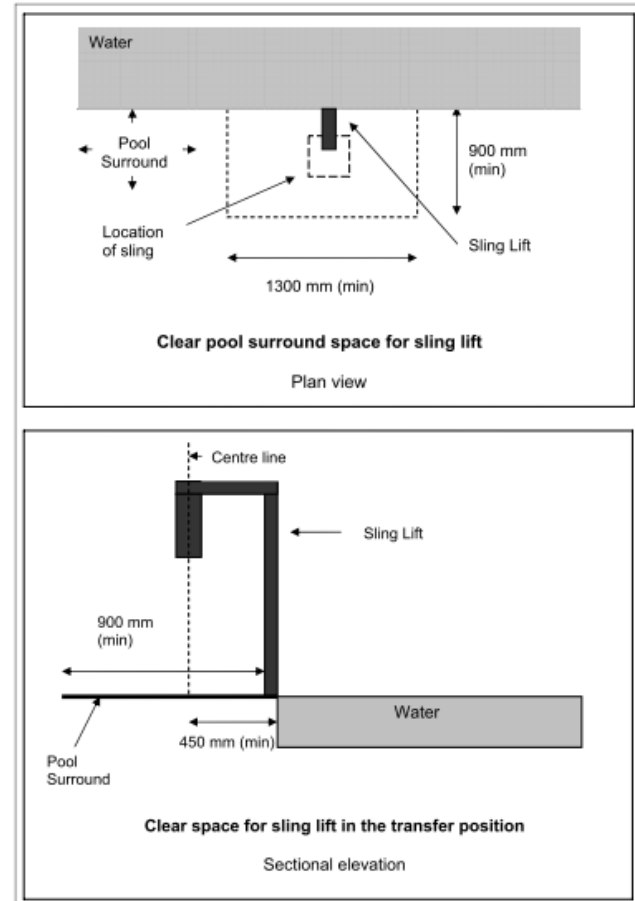


Building Legislation

Sling Style Pool Lift

- (d) A clear space—
- (i) not less than 900 mm x 1300 mm; and
 - (ii) with a gradient of not more than 1:50; and
 - (iii) having a slip-resistant surface; and
 - (iv) located so that the centreline of the space is directly below the lifting point for the sling,
- must be provided on the swimming pool surround parallel with the swimming pool edge on the side remote from the water (see Figure 5).

Figure D5.7 Clear pool surround space for sling lift



Building Legislation

Sling Style Pool Lift

(e) A sling lift must be capable of being operated from the swimming pool surround, within the swimming pool and from the sling.

(f) A sling must be designed so that it will submerge to a water depth of not less than 500 mm below the stationary water level.

(g) A sling lift must be designed to withstand a weight of not less than 136 kg and be capable of sustaining a static load not less than 1.5 times the rated load.



Building Legislation Aquatic Wheelchairs

An aquatic wheelchair must comply with the following:

- (a) The height of the top surface of the seat must be not less than 430 mm.
- (b) The seat width must not be not less than 480 mm.
- (c) A footrest must be provided.
- (d) Armrests must be located on both sides of the seat and must be capable of being moved away from the side of the chair to allow a person to transfer on and off the seat.



Key Access Issues

Ensure the needs of all users including people with a disability are considered early in the design:

- Accessible Parking in close proximity to entrance
- Accessible entrances and gates (wider doors accommodate wheelchairs and prams)
- Continuous accessible path of travel to and through the facility
- Slip resistant surface finishes, non abrasive, easy to clean
- Route to the pool from change are free of hazards and obstacles, provides a handrail for guidance
- Entry into the pool (as described), independent entry is preferred
- Aquatic Wheelchairs (2) and storage provided
- Location for storage of other mobility aids close to the pool
- A holder for walking sticks and crutches adjacent at the top of stairs is recommended.

Key Access Issues

- Contrasting and tactile pool edging is recommended to assist people with low vision identify the water's edge.
- Contrast nosings to stairs, slip resistant treads
- Handrails at pool entry points and kerbrails
- TGSi to ramps and stairs into pools not recommended due to their abrasive nature, domed buttons can be used on handrails to define ends
- Clear identification through design of entries into the pool
- Audible and visual alarm facilities to warn users of water movement sequence
- Amenity and directional signage with Braille and tactile features
- Furniture material selection take into account sensitive skin
- Wall surfaces free of sharp or rough surfaces

Key Access Issues

- Seating close to pool for resting
- Access within spa and sauna facilities included
- Access to accessible unisex change rooms
- Family and group change rooms
- Integrated Pram and Wheelchair seating considered in planned and temporary seating areas
- Ambulant toilet and shower facilities considered
- A range of locker heights provided
- Gender equal facilities
- Changing Places – Adult Change Facilities
- Thermal Comfort
- Evacuation considered

Key Access Issues



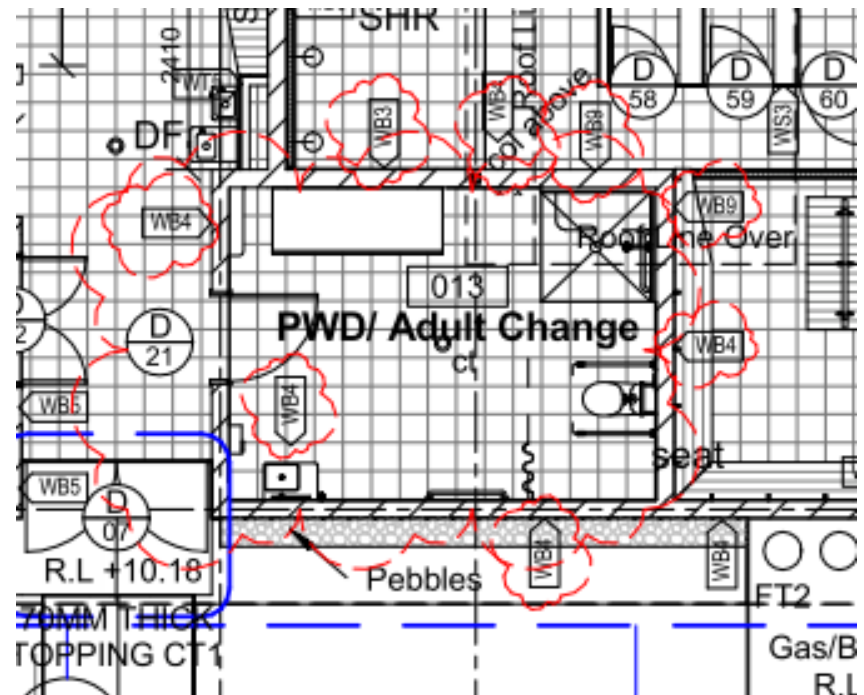
Future Considerations

Changing Places

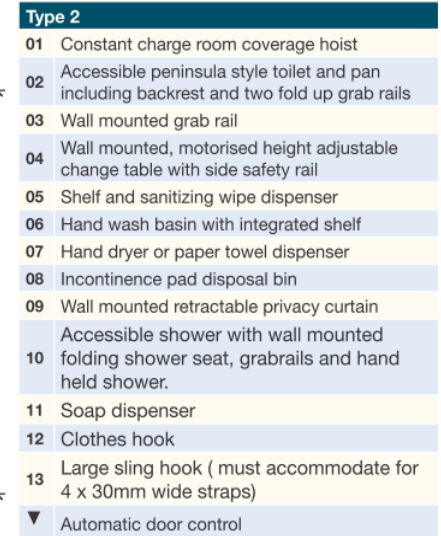
Change facilities to include WC pan, basin, hoist & adult change table.

Showers in pool facilities.

Provided in addition to accessible toilet/shower facilities.



Accessible Change
facilities provision is under
review for Class 9b
buildings and is poised to
become a mandatory
requirement in the next
NCC/BCA 2019.



Questions



Contact us

Thank you

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Contact us

