

Residential Swimming Pool Safety

1.0 Residential pools

Liverpool City Council is currently undertaking a swimming pool safety compliance checking program.

Council is inspecting all properties within the Liverpool local government area (LGA) to ensure swimming pools meet required safety regulations.

The occurrence of drowning in NSW is double that of any other state in Australia. Most private residential pool drowning victims are under the age of five and are residents or invited visitors. Council's compliance checking program aims to ensure that all pools within Liverpool meet the required regulations in order to reduce the occurrence of drowning.

This guide is based on the *Swimming Pools Act 1992* and Regulation which outlines the minimum safety requirements in regard to residential swimming pools. This guide has been created to provide advice to residential property owners in a simple, straight forward and user friendly format.

This guide targets many of the safety issues that arise with swimming pools located on residential properties, in particular barrier and fencing requirements, the placement of a resuscitation chart in the pool area, and safe and healthy pool practices.

2.0 Definition of a swimming pool

A 'swimming pool' is defined under Australian Standard 1926 as:

"any excavation, structure or vessel that can be filled with water to a depth of 300 mm or more and is used for swimming, wading or paddling or any other water activity. It includes spa pools and wading pools, but not spa baths or other bathroom fixtures.

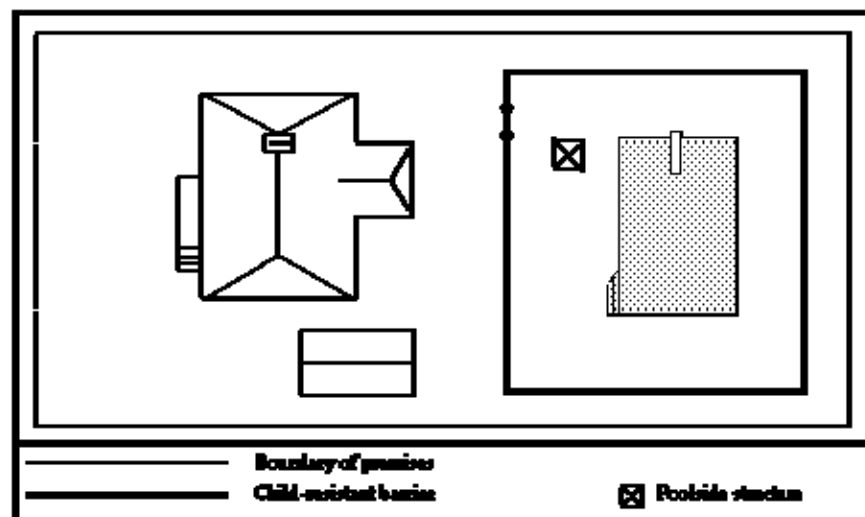
3.0 Fences and barriers

There are two standards of barrier or isolation fencing requirements for swimming pools. One set of rules relate to *child resistant barriers* for pools installed from 1 August 1990, the other to *child safe barriers* for pools installed prior to 1 August 1990.

3.1 Child resistant barriers

Child resistant barriers are required on all pools built on or after 1 August 1990. These pools must be positioned on the land so as to be:

- Entirely surrounded by an isolation fence
- Surrounded by a combination of an isolation fence with existing boundary fences
- A combination of the above in association with the wall of the house or other buildings (provided that there are no doors entering out into the pool area and that any window is fixed with a security grille).



3.2 Child safe barriers

Pools built before 1 August 1990, may not necessarily be required to be enclosed by a child resistant barrier where:

- The pool is separated from the street and adjoining properties by a child resistant fence
- The residence is made child safe. If the pool has isolation fencing, then the isolation fencing must not be altered.

To make doors and windows child safe, doors providing access to the pool area:

- Must be of substantial construction and cannot have any openings greater than 105mm within 1.5 metres above floor level
- When the door is not in use, it must be closed and secured by a locking device located at least 1.5 metres above floor level
- A door or door frame must not have a foothold wider than 10 mm at any point between the door release mechanism and 100mm above floor level.

If windows open into the pool area, the bottom opening panel of the window (when measured in the closed position) must:

- Be at least 1.2 metres above floor level
- Have no footholds wider than 10mm between the bottom of the lowest opening panel of the window and any point within 1.1 metres below the bottom of that panel
- Alternatively the window must be key lockable so that the window opens no further than 105mm.

Where windows open fully for the purpose of ventilating a room, the window must be protected by a fixed security grille over the openable portion of the window. An insect screen is not sufficient.

3.3 Spa pools

The water in the spa must not be accessible to young children. A spa pool is not required to be surrounded by a *child resistant barrier* if the spa is covered with a *child safe structure* such as a door, lid, grille or mesh. The cover must be fastened to the spa with a child resistant lock/device at all times when the spa pool is not in use. These requirements do not apply to a spa bath commonly found in bathrooms of dwellings.

3.4 Indoor pools

Indoor pools must be isolated from the remainder of the residence by ensuring that a *child safe barrier* is provided to all windows and doors with access to the pool.

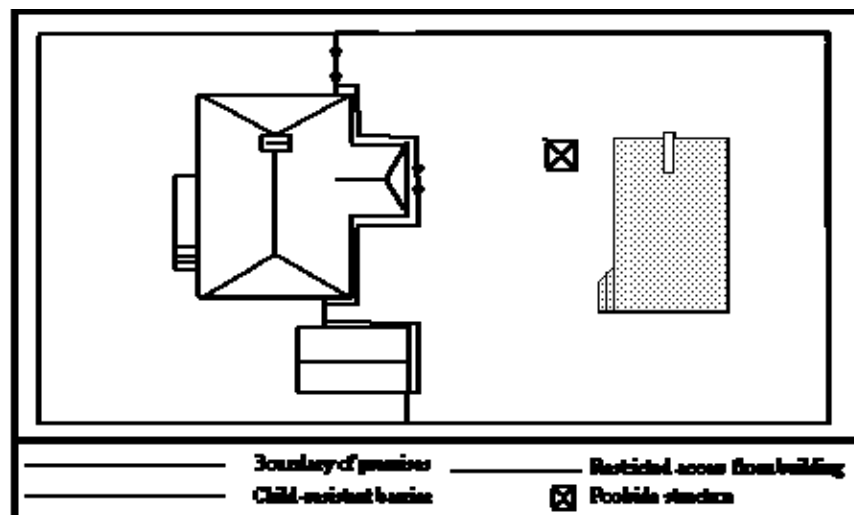
4.0 Exemptions

The *Swimming Pools Act 1992* allows for exemptions to the isolation fencing requirements under certain circumstances.

4.1 Small properties

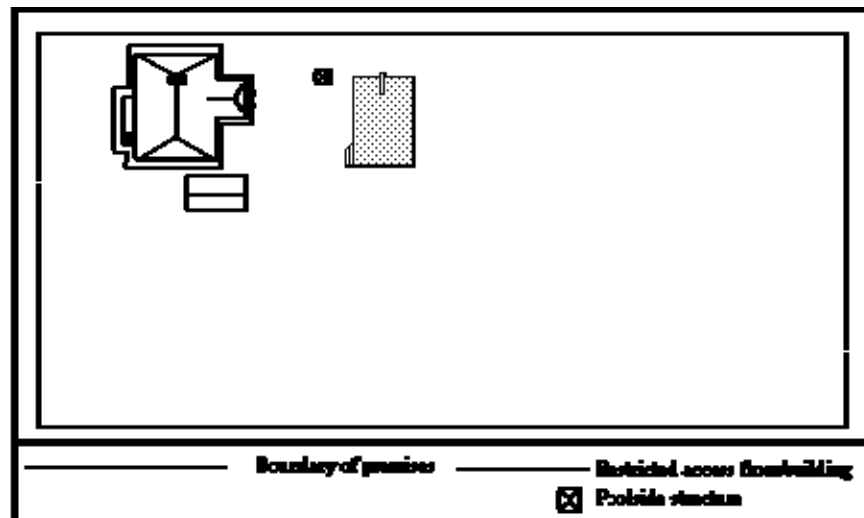
Pools located on small properties (less than 230m²) must be either:

- Enclosed by a *child* resistant barrier
- Within a yard area enclosed by *child safe barriers*.



4.2 Large and waterfront properties

Pools located on large properties (two hectares or more in size) or having frontage to any large body of water (such as a permanently flowing creek, a river, a canal, a pond, a lake, a reservoir, an estuary, the sea or any other body of water, whether natural or artificial), are not required to be enclosed with isolation fences. However, the residence must be provided with *child safe barriers*.



5.0 Fencing requirements

5.1 Construction

Safety fencing must be made from durable materials that can withstand exposure to weather, sunlight, pool chemicals and water. The fencing cannot be made of materials that can be torn, stretched, pierced or cut.

5.2 Location of the pool

For safety (resuscitation) purposes, there should be a minimum distance of one metre between the edge of the pool and the required fence or barrier. The pool should be visible through or over the fence from the commonly used areas of the house or yard.

5.3 Height

Fences and gates (other than perforated materials) must have an effective height of at least 1.2 metres at any point along the outside surface of the fencing.

5.4 Horizontal members

Horizontal fencing sections are required to be at least 900mm apart in order that they do not provide assistance for a child to climb a fence. Ideally, all horizontal fencing sections such as rails, rods, wires or bracing that could be used for climbing should be placed on the pool side of the fence.

The rails, if located on the outside of the fence, are to be not less than 900mm apart when measured between the top surfaces of the rails, and the top surface of the lower rails is to be at least 1100mm from the top of the fencing.

5.5 Vertical members

Vertical members such as palings, rods or wires must not be more than 100mm apart.

5.6 Perforated materials

If the fence is made from perforated materials or mesh, such as chain wire, it must be at least 1.8 metres high and with a 450mm angled section on top. This top section must be inclined at an angle of 135 degrees to the outside of the fence.

Perforated materials with openings of more than 50mm must not be used for pool fences or gates as they may be easily climbed.

5.7 Outside surface

If there are any projections from or indentations into the outside surface of the fence, they must not provide a foothold wider than 10mm. If they do, they must be spaced at least 900mm apart and the lowest one must be at least 1.1 metres below the top of the fence.

5.8 Ground clearance

The gap between the bottom of the fence and ground level must not be more than 100mm.

5.9 Dividing fences

In situations where it is intended to use a property dividing fence as part of a child resistant barrier, the responsibility of constructing, altering, repairing, replacing or maintaining the dividing fence rests with the owner of the premises on which the pool is located. Alternatively, if a number of pools are involved, responsibility rests with the owners of the respective premises.

5.10 Obstructions

There must be a clear span of 1.2 metres from the fencing to finished ground level or to any projection from or objects on the ground in the yard area. This requirement extends to large pot plants and any trees/shrubs which could provide climbing access by children and render ineffective the 1.2 metre high pool fence.

5.11 Walls

If a wall is used as part of the pool barrier, it must be solidly built with vertical sides and be at least 1.2 metres in height. There must be no footholds wider than 10mm within 1.1 metres of the top of the wall.

6.0 Landings, balconies and high-level windows

Landings, balconies and high-level windows adjacent to swimming pools areas require special attention.

6.1 Landings and balconies

Landings and balconies that are less than 2.4 metres above the swimming pool are required to have swimming pool fencing as their balustrade, i.e. 1.2 metres high of approved construction.

6.2 High-level windows

Where windows and balustrades are less than 2.4 metres above ground level, they are to comply with the requirements for 'child safe' windows/fences.

In situations where the windows or balcony/landing of the dwelling is greater than 2.4 metres above the level of the pool, the requirements of the Act and Regulation do not apply. In such circumstances, the window requires no special protection and the railing height is required to be a minimum of 1 metre as specified under Part 3.9 of the Building Code of Australia.

7.0 Gates and fittings

7.1 Gates

A pool gate must be fixed so that:

- It opens outwards only, away from the pool area
- The gate must self close and self latch from any position
- It is clear of any obstruction that could hold the gate open, and
- When the gate is lifted up or pulled down, the movement does not release the latching device, un hinge the gate or provide a ground clearance of more than 100mm.

7.2 Latching device

All gates must be fitted with a self-latching device that operates automatically when the gate closes and stops the gate being reopened unless the mechanism is manually released. The gate release mechanism is required to be located at 1.5 metres above ground level or if the release or the latch is located less than 1.5 metres above ground level, the following conditions must be adhered to:

- The latching device and its release must be on the pool side of the fencing
- To release the mechanism from the outside, you must have to reach up more than 1.2 metres
- The latching device must be at least 150mm below the top of the gate or at least 150mm away from any hand holds on the inside of the fence, and
- The latching device must be shielded so that there are no holds or openings greater than 10mm within 450mm of the operating parts of the latch and the top of the gate.

8.0 General guidelines and recommendations

8.1 Resuscitation chart

The occupier of any premises in or on which a swimming pool is situated must ensure that there is at all times a resuscitation sign, maintained in a prominent position in the immediate vicinity of the pool.

The sign must state “Young children should be supervised when using this swimming pool” together with instructions detailing resuscitation techniques for adults, children and infants according to the Australian Resuscitation Council’s document on Cardio Pulmonary Resuscitation. Approved resuscitation charts can be purchased from large pool retail outlets or by contacting Council.

8.2 Noise

To protect the amenity of the neighbourhood, noise generating equipment (e.g. pool pumps and motors) shall be located as far as practical away from adjoining property boundaries and habitable rooms in adjoining residences.

A sound proof enclosure shall be required around such equipment if a noise nuisance is likely to be created.

The Noise Control regulations indicate that swimming pool pumps should not be operated between 8pm and 7am on weekdays and 8pm and 8am on weekends and public holidays if they can be heard from an adjoining dwelling.

8.3 Lighting

The lighting of pools and surrounding areas should be carefully positioned to minimise the impact on adjoining properties.

8.4 Drainage

All overflow water and drainage, including backwash from filter washing, shall be connected to the sewer. Sydney Water should be contacted prior to the connection being made. Sewer surcharge or backflow shall not contaminate the pool.

In unsewered areas, overflow should be directed to trenches well clear of adjoining property boundaries. Contact Council for advice on proposed locations.