



Barriers for swimming pools



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Strict regulations ensure the safety of children around swimming pools by requiring the installation of suitable barriers and restricting access. We look at the requirements and where to find them.

WE ENJOY an enviable outdoor lifestyle in New Zealand, and as our climate continues to warm, the number of residential swimming pools will probably continue to increase accordingly.

Keeping children safe around pools

Along with the enjoyment of these pools comes the legal obligation and responsibility for safeguarding children from the risks of these fun-filled features. This responsibility includes restricting unsupervised access by children – especially those under 5 years of age – to residential swimming pools.

The guideline for pool barriers was traditionally the Fencing of Swimming Pools Act 1987, but this was repealed by the Building (Pools) Amendment Act 2016, which inserted new provisions into the Building Act 2004.

Building Code clause F9

The Building (Pools) Amendment Act created a new Building Code clause F9 *Means of restricting access to residential pools*. This includes F9/AS1, which provides the Acceptable Solution for swimming pool barriers in general, and F9/AS2, which provides the Acceptable Solution for pool covers.

Clause F9 of the Building Code relates directly to section 162C(1) of the Building Act, which requires all residential pools to have barriers to restrict access by unsupervised children under 5 years of age. This section applies to pools constructed before the amendment to the Building Act and those built after in compliance with clause F9. Barriers also need to be maintained so they continue to be effective.



Specifically designed frameless toughened glass barriers are popular around swimming pools.

Barriers needed for all pools over 400 mm deep

Pool barriers are required for all swimming pools that have a capacity to hold more than 400 mm depth of water. A pool fence must enclose the 'immediate pool area' (that is, the pool itself along with a confined area around the pool where activities related to or involving the pool take place).

Activities not related to or involving the pool must be kept outside the pool area. These include vegetable gardens, clotheslines and children's play areas.

Using the immediate pool area to access the house from the property boundary or to gain access to other parts of the property from the

house would, in most cases, conflict with the definition of immediate pool area.

A compliant pool barrier can be a fence or other forms of construction, such as a concrete block wall. Specifically designed frameless toughened glass barriers are growing in popularity.

The wall of a house or other building can also form part of the barrier to the immediate pool area or may enclose the total immediate pool area – for example, an indoor pool.

Pool barrier requirements

Dedicated pool barriers not on a property boundary must be no less than 1,200 mm high

measured from the finished floor or ground level outside the pool barrier.

Pool barriers may be angled no more than 15° from vertical and must only slope away from the pool. Any rods, rails or wires forming part of a pool barrier that are not vertical must be a minimum of 900 mm apart vertically to restrict climbing by toddlers or children.

There must be no openings in the pool barrier that a 100 mm diameter sphere can pass through.

Range of acceptable pool barriers

Acceptable ways of constructing pool barriers that are not on a property boundary are shown in Figure 1 of F9/AS1 and include solid panel type barriers, fencing with vertical members that include horizontal structural members, horizontal fencing and metal rail fencing.

F9/AS1 Figure 1 illustrates specific ground clearances, overall barrier heights and horizontal and vertical spacing requirements.

Consider space immediately outside pool

Determining the required barrier height is dependent on the characteristics of the space immediately outside the pool barrier. Changes in level adjacent to the barrier or the presence of climbable objects, buildings or other structures may enable a child to scale the barrier.

F9/AS1 Figure 2 shows acceptable methods for evaluating the impact of these ground features or objects outside the pool barrier but within 1,200 mm of the top of the barrier.

Any projections or indentations on the outside face of a pool barrier must not have a horizontal projection from the face of the pool barrier greater than 10 mm unless they are at least 900 mm apart vertically.

Barriers on property boundary slightly different

If a pool barrier is located on a property boundary it must be at least 1,800 mm high measured from the ground level on the pool side and located at least 1 m horizontally from the edge of the pool.

There must be no openings that a 100 mm sphere could pass through, and requirements regarding any rods, rails or wires and projections and indentations must be as per pool barriers surrounding the immediate pool area.

The pool owner must ensure there are no ground features, plantings, buildings or other structures that enable a child to scale the pool barrier on the boundary of the property.

More requirements if building wall is part of barrier

When a wall of a building, such as the home, forms part of the pool barrier, there are specific requirements for openings.

Where there is a window that can open above and within 2.4 m vertically of the immediate pool area, the window must have either:

- the lower edge of the opening no less than 1 m above the floor level inside the building with no projections underneath of more than 10 mm
- a restrictor limiting the size of the opening to prevent passage of a 100 mm sphere
- a permanently fixed screen preventing the passage of a 100 mm sphere.

F2/AS1 requires safety glass for glazing within 2 m vertically and 2 m horizontally of walking surfaces alongside pools.

F9/AS1 also limits the size of any doors accessing the immediate pool area to no greater than 1 m in width. These doors must have a self-closing device or an audible alarm and a self-latching device at least 1,500 mm above finished floor level that is released manually.

A sign reading *Swimming pool. Close the door.* must be fixed adjacent to the door handle, as per F9/AS1 section 4.2.2 (d). Specific functional and performance requirements for the self-closing device and door alarm are also noted in F9/AS1 sections 4.2.3, 4.2.4 and 4.2.5.

Alternative compliance methods

These are Acceptable Solutions for residential pool barriers, but designers should be familiar with the *New Zealand Building Code Handbook*, which explains alternative methods of achieving compliance. Designers using F9/AS1 should also check for amendments on a regular basis.

Remember, pool barrier requirements are not a substitute for the presence of an adult to supervise children under 5 years of age using swimming pools. ◀

Note ▶ Building Code clause F9 is freely available from www.building.govt.nz.