

Introduction to AS1926.1-2012

A new standard for swimming pool fencing, Australian Standard AS1926.1-2012 has been introduced as is effective for pools and spas built after 1st May 2013. AS1926.1-2007 remains in use for pools and spas built prior to May 1st 2013.

Many of the aspects from AS1926.1-2007 are still present in the new standard, however there are a number of new regulations that need to be covered. This hand out will talk though all main issues when considering the pool fencing regulations of AS1926.1-2012.

Objective – The objective of this standard is to restrict the access of young children under the age of 5 to swimming pools.

Materials – Materials should be sufficiently strong to prevent forced entry by a child to a pool enclosure and should comply with AS1926.1-2012, glass safety barriers should also comply to AS1288 (Glass in Buildings). All barriers must be deemed fit and suitable for their intended purpose by your RBS.

CHILD RESISTANT DOORSETS & WINDOWS: (not illustrated)

Child Resistant Doorsets are NOT PERMITTED as part of your safety barrier for an outdoor swimming pool.
Child Resistant Windows to be restricted to 100 max opening or to be fitted with a security screen.

Where hinges protrude more than 10mm or the gap between the post and gate is greater than 10mm a 900 min. and a 1000 min. vertical separation is required to prevent hinges climbable.

TYPICAL SAFETY BARRIER:- The minimum height of an internal swimming pool barrier is 1200 measured on the approach side (outside) of the barrier. Refer figure 1. Where the barrier is to be installed on a slope and the fence panels are to be stepped, attention to the distance between the horizontal members of adjoining panels is required.
A 900 NCZ between the horizontal rails on each panel and 1000 Min. to the top must be maintained.
GATES:- Gates installed in the internal barrier must be self closing and self latching with a latch release 1500 high and must open away (outward) from the pool.

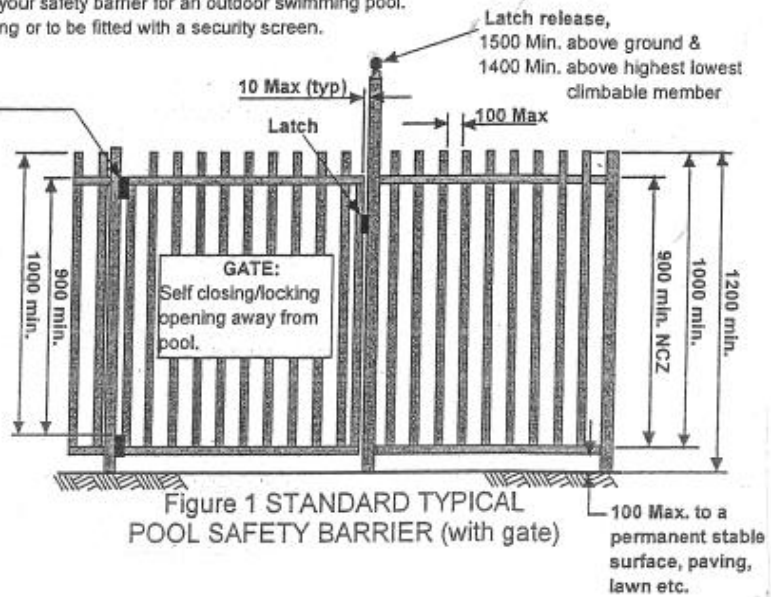
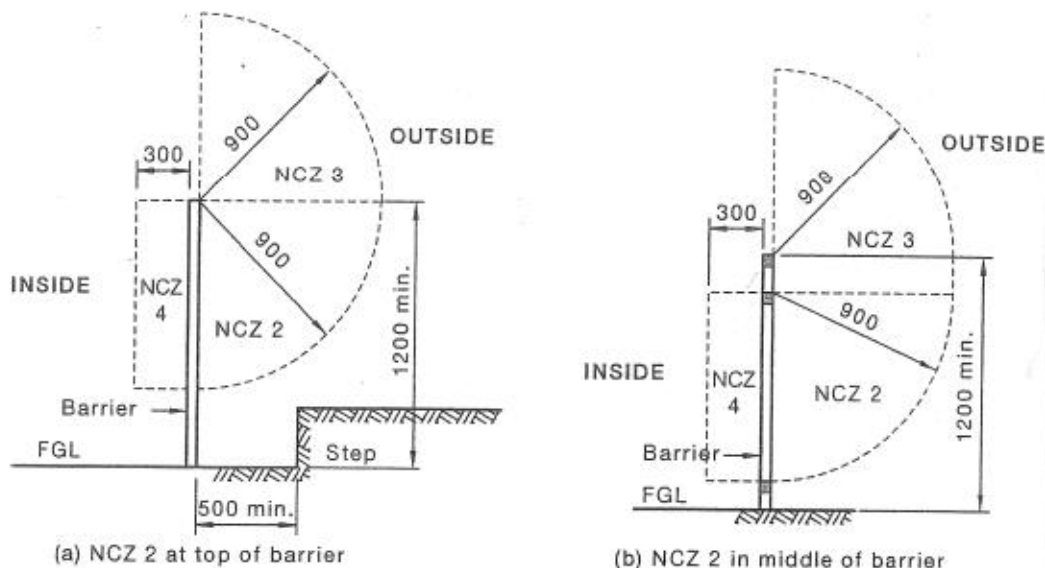


Figure 1 STANDARD TYPICAL POOL SAFETY BARRIER (with gate)

Non-Climbable Zones (NCZ)

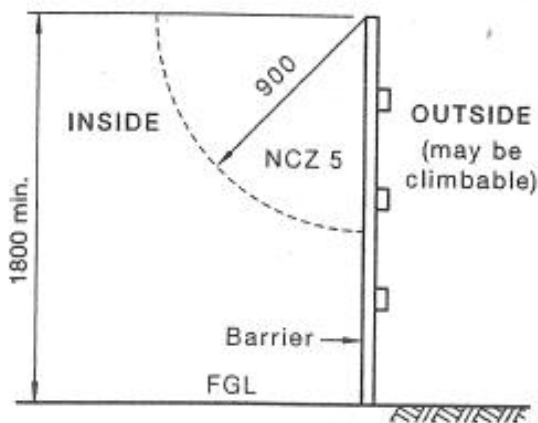
The NCZ is a 900mm high vertical continuous section on the barrier, free of projections and indentations greater than 10mm. Where the NCZ is measured from depends on if the barrier is a 1200mm pool fence, or an 1800mm boundary barrier. There are now 5 NCZ to be considered in accordance with figure 2.1. For NCZ definitions please see overleaf.



NOTE: The lower radius point of NCZ 2 may be located anywhere on the barrier provided there are no aids for climbing within the arc.

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FIGURE 2.1 EXAMPLES OF NON-CLIMBABLE ZONES (NCZs)



(c) Boundary barrier 1800 mm min.

NCZ1- is a 900mm vertical plate on the outside face of a barrier. This NCZ may be located anywhere within the perpendicular height of a barrier or, where present anywhere between horizontal components or handholds and footholds on a barrier.

NCZ2 – is a quadrant on the outside of a barrier created by a 900mm radius down from the top of NCZ1. NCZ2 is always immediately adjacent to NCZ1 on all barriers.

NCZ3 – is a quadrant on the outside of a barrier created by a 900mm radius up from the top of the barrier. When the top of the NCZ1 is below the top of a barrier then NCZ3 shall extend vertically down to the top of NCZ1.

NCZ4 – is required on all barriers with vertical openings 10mm to 100mm in width and is a 900mm high by 300mm wide deep rectangular space on the inside of the barrier and shall align with NCZ1.

NCZ5 – applies to 1800mm boundary barriers only (2.1. [c]). It is the quadrant on the inside of the barrier created by a 900mm radius down from the top of the boundary barrier.

Boundary Barriers

The minimum height of a boundary fence, if it is to be used as a boundary barrier, is to be 1800mm. This is to be measured from the internal finished ground level (FGL), which is the ground level or other permanent stable surface on the inside of a barrier (as seen in 2.1. [c]) They must be permanent and structurally adequate.

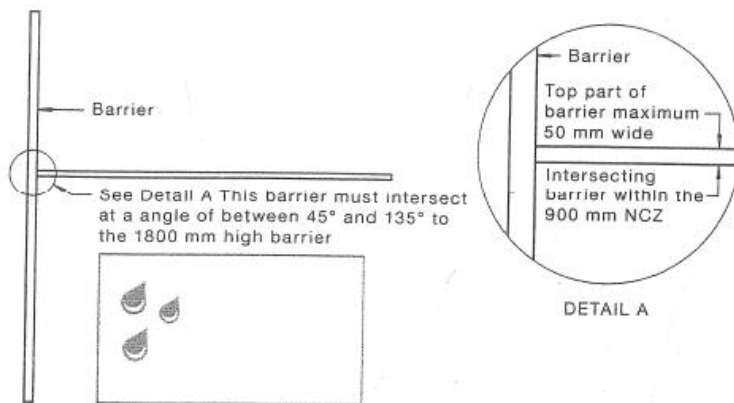
The maximum gap between ground level and bottom of fence is 100mm

Boundary fences have to be deemed non-climbable from the inside. The approach side has no NCZ and can be deemed climbable.

Intersections with boundary fences

This applies when a 1200mm pool barrier intersects with a boundary barrier to create a pool enclosure.

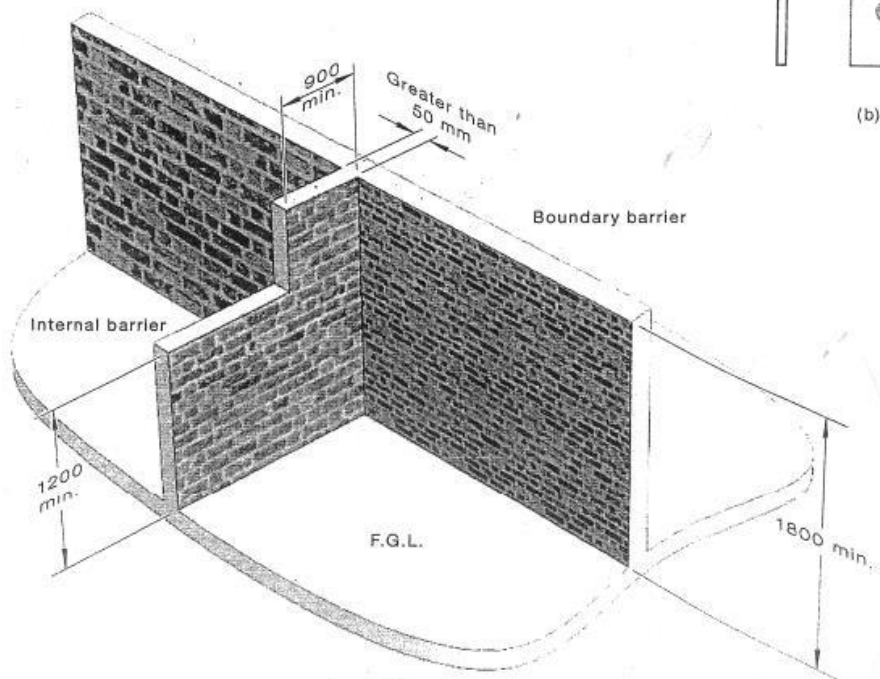
Where the top rail or surface of the internal 1200mm barrier is not more than 50mm wide at any point within the NCZ5, and the 1200mm barrier intersects to 1800mm boundary barrier at an angle between 45° and 135° it can be left with no alterations to the intersecting panels. (See figure 2.2.)



(b) Intersecting barrier with top less than 50 mm in width

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FIGURE 2.2 BOUNDARY BARRIERS



(c) Intersecting barrier with top greater than 50 mm in width

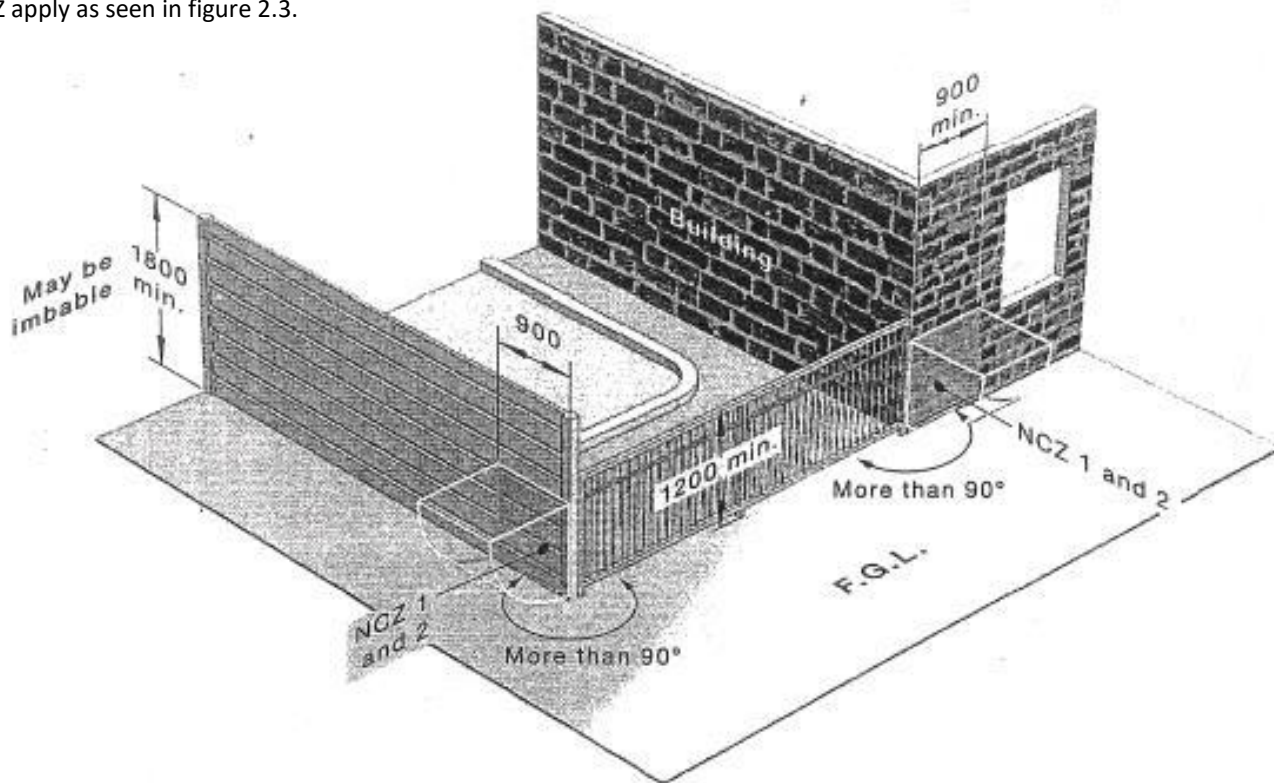
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FIGURE 2.2 (in part) BOUNDARY BARRIERS

Where the top rail or surface of the internal 1200mm barrier is greater than 50mm and is located within NCZ5, the height of the lower barrier shall extend to a height not less than 1800mm and extend not less than 900mm from the intersection (See figure 2.2.)

Barriers not less than 1800mm

A 1800mm high barrier that is not on a boundary or being used as a boundary fence may still be used as a pool barrier. In this case the barrier would not require any NCZ on the outside or inside of the fence. However if this intersects with a normal 1200mm pool barrier NCZ apply as seen in figure 2.3.

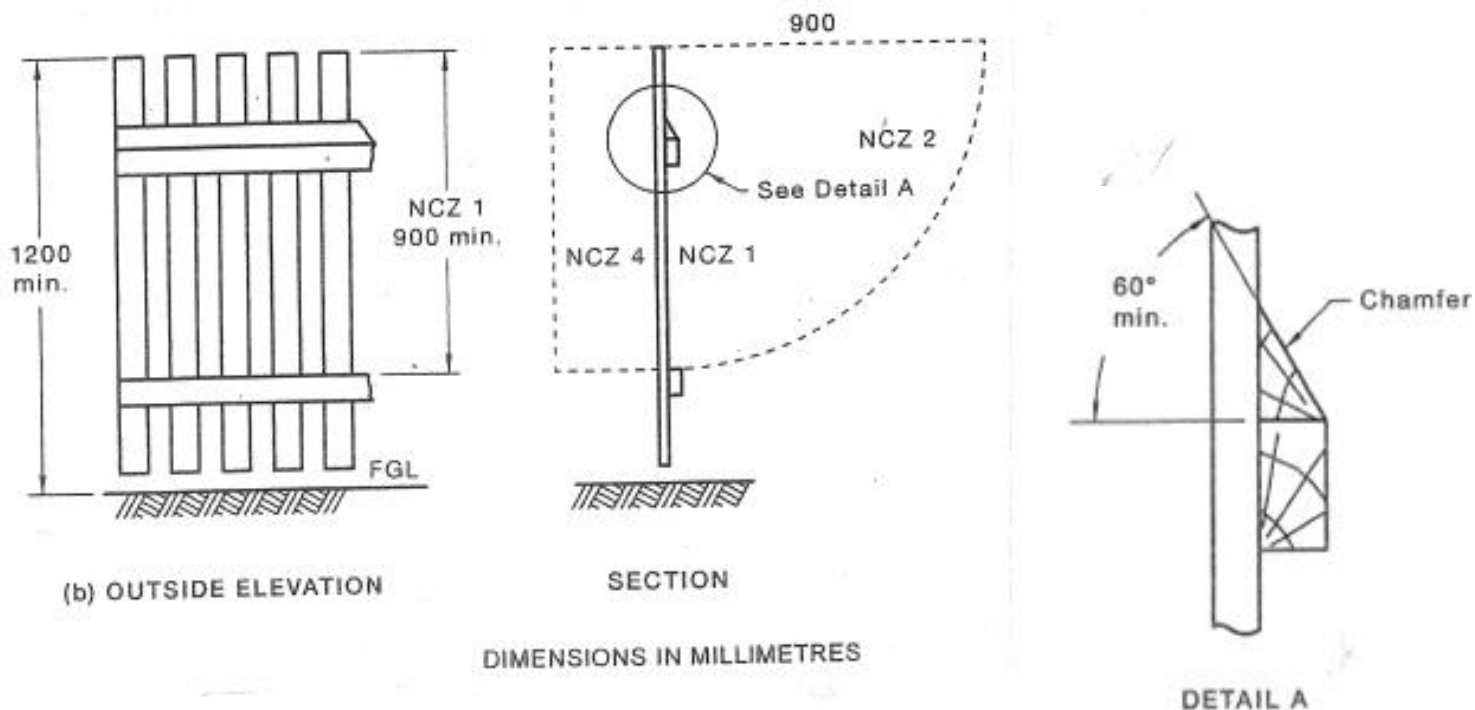


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FIGURE 2.3 INTERSECTING INTERNAL BARRIERS

Horizontal Components of Barriers

No barrier shall incorporate a horizontal component within NCZ1 and 2, that has a top surface greater than 10mm which could be considered a hand hold or foothold, unless such a surface is sloped at not less than a 60° angle from the horizontal plane.



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How to construct Safety Barriers on Sloping Sites

