

Determination 2023/002

**Regarding the compliance of a pool barrier located close
to a property boundary with Clause F9**

8 Citrus Lane, Enner Glynn, Nelson

The matter to be determined

Does the proposed pool barrier on the north-western side of the property comply with clauses F9.3.1 and F9.3.3 of the Building Code?

Summary

This determination considers whether a proposed pool barrier near a property boundary complies with Building Code Clause F9. The determination looks at the requirements of the Acceptable Solution F9/AS1 as it relates to pool barriers near property boundaries and whether future changes a neighbour may make should be a factor when considering Building Code compliance of the pool barrier. This determination relates only to the north-western side of the pool barrier.

Once complete, the distance from the pool edge to the pool barrier on the north-western side will be 830mm, and the distance from the outside of the pool barrier to the property boundary will be approximately 500mm.

The pool barrier is a sufficient distance away that it only needs to comply as a pool barrier not located on a property boundary. The F9/AS1 requirement states the height of the barrier can be no less than 12000mm from the finished floor or ground level outside the pool barrier.

The authority has issues with the proposed barrier because F9/AS1 states there shall be no ground features or objects outside a pool barrier that falls within a 1200mm zone. Given the proximity of the pool barrier to the boundary, the authority is worried the owners won't be able to fulfil this requirement in the future. The owners have no control over what occurs on the other side of the boundary – however, they have a continuing obligation under the Act to maintain a compliant pool barrier.

Outcome

The proposed pool barrier on the north-western side of the property complies with clauses F9.3.1 and F9.3.3 of the Building Code.

In this determination, unless otherwise stated, references to “sections” are to sections of the Building Act 2004 (“the Act”) and references to “clauses” are to clauses in Schedule 1 (“the Building Code”) of the Building Regulations 1992.

The Act and the Building Code are available at www.legislation.govt.nz. Information about the legislation, as well as past determinations, compliance documents (eg, acceptable solutions) and guidance issued by the Ministry, is available at www.building.govt.nz.

1. The parties and the matter to be determined

- 1.1. This is a determination made under due authorisation by me, Charlotte Gair, Manager Advisory, Ministry of Business, Innovation and Employment (“the Ministry”), for and on behalf of the Chief Executive of the Ministry.¹
- 1.2. The parties to the determination are:
 - 1.2.1 K and R Gardiner and the 187 Bridge Trustees 96 Ltd, the owners of the property (“the owners”), represented by their architectural designer as their agent
 - 1.2.2 Nelson City Council, carrying out its duties as a territorial authority or building consent authority.
- 1.3. This determination arises from the authority’s refusal to grant a building consent for building work that included a pool barrier. This was due to its concerns that one side of the barrier, located close to the property boundary, could not achieve ongoing compliance with Clauses F9.3.1 and F9.3.3 of the Building Code. The owners disagree with this assessment and believe the proposed barrier complies.
- 1.4. The matter to be determined, under section 177(1)(a), is therefore whether the proposed pool barrier on the north-western side of the property complies with clauses F9.3.1 and F9.3.3 of the Building Code.

2. The building work

- 2.1. The owners’ property is in a residential area in Nelson. The property is partway down a hill and has been landscaped and built up with retaining walls to create level areas. In particular, there is an existing 900mm high concrete block retaining wall on the north-western boundary of the property. The wall is located approximately 200mm back from the actual boundary. The land below the wall (on the neighbour’s property) continues to slope gently downhill and currently has grass and an unpaved driveway on it.

¹ The Building Act 2004, section 185(1)(a) provides the Chief Executive of the Ministry with the power to make determinations.

- 2.2. The building work that is the subject of this determination involves the construction of a partially in-ground swimming pool, surrounding deck, and swimming pool barrier fence (“the pool barrier”) adjacent to the north-western boundary. Once complete, the distance from the pool edge to the pool barrier on the north-western side will be 830mm, and the distance from the outside of the pool barrier to the property boundary, will be approximately 500mm.
- 2.3. This determination relates only to the north-western side of the pool barrier. The owners initially submitted a design for this barrier, which incorporated a 1200mm high pool fence. This is the design of barrier that is the subject of this determination. To enable the building consent application to proceed, the owners have submitted a subsequent design for the barrier that incorporates a 1800mm high pool fence, and this has been accepted by the authority. However, the owners still believe the original design of barrier with the 1200mm fence complies with clause F9 and have sought a determination on this point.
- 2.4. The pool barrier, as it was originally designed, consisted of three layers or zones (see Figure 1).

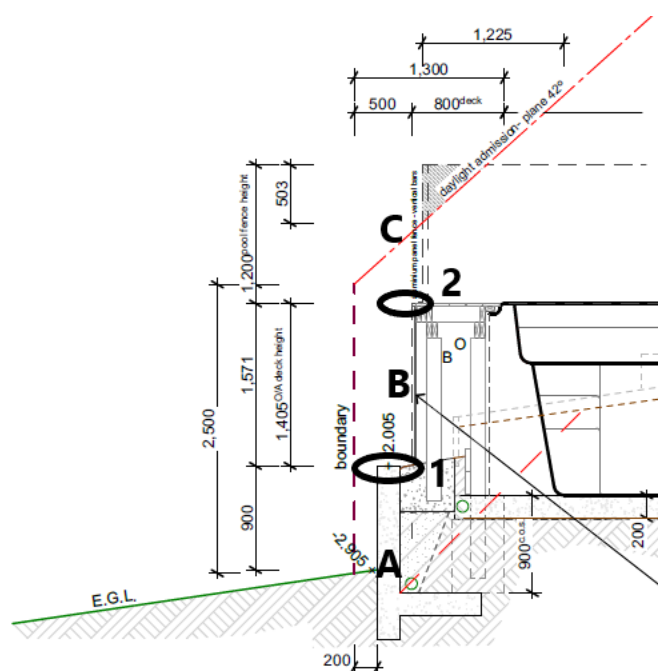


Figure 1. Extract from submitted plans for the pool barrier, showing various zones of its construction

- 2.5. At the base of the barrier (Zone A in Figure 1) is the existing 900mm high concrete block retaining wall (“the concrete retaining wall”), which is inset approximately 200mm from the actual property boundary.

- 2.6. The deck surrounding the pool is to be constructed on top of the land retained by this wall. The deck will have a finished floor height of 1405mm above the top of the concrete retaining wall and will be set back from its face by approximately 300mm (marked as Point 1 in Figure 1). The side of the deck above the wall (Zone B in Figure 1) is to be constructed from vertical H3-treated timber slats spaced 12mm apart (“the deck side”).
- 2.7. The metal pool fence (Zone C in Figure 1) is stated on the plans to comprise “Selected aluminium panel with post base plate connection 4/M8 SS bolts with 65x65x3mm washers or 120mm SS Coach screws” (“the pool fence”). The pool fence is to be constructed on top of the deck. No measurement has been given on the plans, and the owners have stated that the fence will be it constructed “on the edge of the deck”, so it is not clear if there will in fact be any ledge or projection at the point where the top of the deck and bottom of the fence meet (marked as Point 2 in Figure 1). The pool fence is 1200mm high. This gives a total combined height from the top of the concrete retaining wall to the top of the pool fence (Zones B and C) of 2605mm; and from the base of the concrete retaining wall to the top of the pool fence (Zones A, B and C) of 3505mm.

3. Background

- 3.1. On 25 May 2022, the owners applied for a building consent (220309) for a “Free standing swimming pool, timber deck, pool fence and SED retaining wall”. The application stated that the compliance of the swimming pool fence would be established using Acceptable Solution F9/AS1².
- 3.2. The authority issued requests for information, including in relation to (among other things) the pool barrier, the concrete retaining wall, the location of the pool and barrier relative to the property boundary, and the proposed barrier’s compliance with paragraph 2.1.6 of F9/AS1.
- 3.3. In essence, the authority was concerned that the plans did not show a 1200mm “no climb zone” on the north-western side of the pool. As the property boundary was within 1200mm of the proposed pool fence, “Compliance with paragraph 2.1.6 cannot be verified...as the ongoing compliance with para 2.1.6 needs to be able to be maintained and this cannot be guaranteed with no control over what happens on the neighbour’s property”.
- 3.4. The owners disagreed, as the pool fence was 1200mm high and non-climbable, the finished deck height was 2300mm above the ground level below, and there were no “ground features or objects outside the pool barrier (within 1.2m of the top of the barrier) on the northern side that would assist a child <5 years of age in climbing into

² Ministry of Business, Innovation and Employment. (2017). *Acceptable Solutions F9/AS1 and F9/AS2: For New Zealand Building Code Clause F9 Means of Restricting Access to Residential Pools*.

the pool enclosure. In the owners' view, paragraph 2.1.6 relates to pool barrier height and ensures there are no features or objects outside a pool barrier, on the site for which building consent is being applied for, that could be considered climbable. There is no requirement to "consider the need for maintenance in regard to neighbouring properties".

- 3.5. On 15 July 2022, the owners requested the pool barrier be considered an alternative solution and supplied a letter with additional information to demonstrate compliance with clause F9. The letter stated both the concrete retaining wall, the deck side and the pool fence all presented (at least) 900mm non-climbable zones, and had no protrusions that would aid in climbing, and hence complied with the "900 mm non climbable zone shown in Fig. 1 [of F9/AS1]".
- 3.6. However, the authority was still not satisfied that the proposed barrier complied with clauses F9.3.1 and F9.3.3, given it was located only 500mm from the boundary, and the owners had no ability to control what objects were being placed on the neighbouring property.
- 3.7. Accordingly, the owners supplied updated plans on 19 July 2022, showing the addition of a 1.8m high glass pool barrier on the north-western boundary. This was accepted by the authority as complying with clauses F9.3.1 and F9.3.3.
- 3.8. The owners then applied for a determination on whether the original design for the pool barrier, with the 1200mm pool fence, complied with clause F9.

4. Submissions

The owner

- 4.1. The owners stated the authority considered that when a 1200m radius is taken from the top of the pool fence this "breaches the vertical plane of the site boundary". According to the owners, the authority also considers the 700mm wide zone where this breach occurs, at between 2.5m and 3.6m above adjacent ground level, is climbable and therefore non-compliant.
- 4.2. The owners supplied copies of the plans showing the 1200mm pool fence, and their correspondence with the authority, including their letter of 15 July 2022, setting out their opinion of why the pool fence complies.

The authority

- 4.3. The authority states it was not satisfied the proposed barrier complied with paragraph 2.1.6 of F9/AS1 because the barrier did not provide "a 1200mm clear space free of features that would assist a child in climbing", as shown in Figure 2 of F9/AS1. The owners have no right to control what happens on the neighbouring property, and the neighbours may choose to plant trees, construct a building, or park

vehicles alongside the boundary, all of which “could assist a child in climbing within 1200mm of the proposed 1200mm high barrier”. The requirement to comply with the Building Code is ongoing, so the authority must consider how ongoing compliance is going to be achieved.

- 4.4. The authority noted that although F9/AS1 contains requirements for pool barriers located on a property boundary, it does not define what is meant by the term property boundary. The authority does not interpret “on a property boundary” literally, but “considers this to be there or thereabouts of the property boundary”, due to the requirements in paragraph 2.1.6. With respect to the buffer zone, the authority stated:

The acceptable solution F9/AS1 does not make any reference to a buffer zone, but clause 2.1.6 does require “...no ground features or objects outside a pool barrier within 1200 mm of the top of the barrier that would assist a child in climbing.” In effect, a 1200 mm high barrier needs to be 1200 mm away from a property boundary, ground feature or object to ensure ongoing compliance with this requirement. Alternatively, the property would need rights by way of an enduring agreement over the neighbouring property (outside the pool barrier).

- 4.5. The authority referred to Determination 2020/028 in support of its submissions.

5. Discussion

- 5.1. The owners have applied for a determination as to the compliance of a proposed pool barrier, which incorporates a 1200mm high pool fence, with clause F9.3.1 and clause F9.3.3 of the Building Code.
- 5.2. The authority, in its submission, has requested the proposed design be assessed against Acceptable Solution F9/AS1, as this was the grounds for compliance of the pool barrier originally advanced by the owners in their application for a building consent.
- 5.3. It is also important to note it is the Building Code the building work must comply with, not the acceptable solution. The Building Code is performance based, and while acceptable solutions provide one means of demonstrating compliance, they are not the only way. Other means of establishing compliance may be advanced as alternative solutions and must be assessed against the functional and performance requirements in the Building Code.

The legislation

- 5.4. Section 17 establishes all building work must comply with the Building Code to the extent required by the Act. Section 19 stipulates a building consent authority must accept compliance with an acceptable solution as establishing compliance with the Building Code.
- 5.5. Subpart 7 of the Act also contains requirements for residential pools. Its purpose is to “prevent drowning of, and injury to, young children by restricting unsupervised access to residential pools by children under 5 years of age” (section 162A).
- 5.6. Section 162C establishes an ongoing requirement for residential pools to have a means of restricting access.

162C Residential pools must have means of restricting access

(1) Every residential pool that is filled or partly filled with water must have physical barriers that restrict access to the pool by unsupervised children under 5 years of age.

(2) The means of restricting access referred to in subsection (1) must comply with the requirements of the building code—

(a) that are in force; or...

(4) The following persons must ensure compliance with this section:

(a) the owner of the pool:...

- 5.7. As the owners’ pool is a new pool, the means of restricting access to the pool must fully comply with the requirements of the current Building Code. The relevant clause of the Building Code is clause F9 – Means of restricting access to residential pools, with the relevant performance clauses in the current case being F9.3.1 and F9.3.3.

Clause F9—Means of restricting access to residential pools

Objective

F9.1 The objective of this provision is to prevent injury or death to young children involving *residential pools*.

Functional requirement

F9.2 *Residential pools* with a maximum depth of water of 400 mm or more that are filled or partly filled with water must have means of restricting access that prevents unsupervised access by a child under 5 years of age.

Performance

F9.3.1 *Residential pools* must have or be provided with physical barriers that restrict access to the *pool* or the *immediate pool area* by unsupervised young children (ie, under 5 years of age).

F9.3.3 A barrier surrounding a *pool* must have no permanent objects or projections on the outside that could assist children in negotiating the barrier.

Any gates must—

(a) open away from the pool; and

(b) not be able to be readily opened by children; and

(c) automatically return to the closed position after use.

5.8. Also relevant are provisions in the Acceptable Solution F9/AS1, which have been referred to by both parties. Section 2 of the acceptable solution relates to barriers surrounding the immediate pool area and distinguishes between pool barriers that are located on a property boundary and those that are not. The relevant paragraphs in the current case are given below (figures 1 and 2 are copied in Appendix A).

2.1 Pool barriers

...

2.1.2 *Pool* barriers not on a property boundary shall have a height of not less than 1200 mm from the finished floor or ground level outside the *pool* barrier.

...

2.1.4 Figure 1 shows acceptable ways of constructing *pool* barriers that are not on a property boundary.

...

2.1.6 There shall be no ground features or objects outside a *pool* barrier within 1200 mm of the top of the barrier that would assist a child in climbing. Figure 2 gives acceptable methods for evaluating this requirement.

2.1.7 Any projections or indentions on the outside face of a *pool* barrier shall 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.

2.2 Pool barrier on a property boundary

2.2.1 If a *pool* barrier is located on a property boundary, it shall:

- a) Be not less than 1800 mm high, measured from the ground level on the *pool* side, and
- b) Have no openings that a 100 mm diameter sphere could pass through, and
- c) Be located not less than 1000 mm horizontally from the water's edge, and
- d) Have a 900 mm high zone on the pool side of the barrier that begins not more than 150 mm from the top and is constructed as specified in Paragraphs 2.1.3 and 2.1.7, to restrict climbing by children.

Comment: Should a child gain access to the top of the barrier from the outside, this construction method will prevent them from climbing down into the pool area.

Compliance by way of acceptable solution

- 5.9. Turning now to the owners' pool barrier, I will assess its compliance with the Acceptable Solution F9/AS1³.
- 5.10. Which paragraphs of the acceptable solution apply depend on whether the owners' pool barrier is constructed on a boundary. Paragraph 2.1.2 applies to pool barriers 'not on a property boundary'; while paragraph 2.2.1 applies to pool barriers 'located on a property boundary'. The requirements in the two paragraphs are quite different.
- 5.11. The term 'boundary' is not defined in the acceptable solution. It is, however, defined in clause A2 of the Building Code, as:
- boundary** means any boundary that is shown on a survey plan that is approved by the Surveyor-General and deposited with the Registrar-General of Land, whether or not a new title has been issued
- 5.12. I have not been provided with a survey plan for the owners' property. In the absence of such evidence, I assume the parties are satisfied that the owners' property boundary runs as marked on the plans, and that the proposed pool barrier's placement in relation to this boundary is also accepted. The distance shown on the plans between the top of the pool fence and the boundary is 500mm, and I will proceed on the basis that this is correct.
- 5.13. In my view, a barrier located 500mm back from a boundary cannot be "located on a property boundary". Conceivably, there may be a situation where a pool barrier, although not exactly on a surveyed boundary, is constructed so close to it as to be

³ An acceptable solution is a document issued by the Ministry, and when followed must be accepted as complying with the Building Code

able to be considered “located on a property boundary” for the purposes of F9/AS1. If that was the case, I would envisage that the barrier would be located just a few centimetres from the boundary, rather than 500mm.

- 5.14. However, that scenario is theoretical. In the current case, I consider the owners’ pool barrier is a sufficient distance from the boundary that it is not on a property boundary, making the relevant paragraphs of F9/AS1 those in section 2.1.
- 5.15. Paragraph 2.1.2 states pool barriers not on a property boundary shall have a height of not less than 1200mm from the finished floor or ground level outside the pool barrier. There is some disagreement on whether the retaining wall, the side of the deck or the fence constitute parts of the pool barrier. For the purposes of paragraph 2.1.2 it is not relevant, as the pool fence is itself 1200mm high, and the paragraph’s requirements are fulfilled.
- 5.16. Paragraph 2.1.4 refers to Figure 1 as showing acceptable ways of constructing pool barriers that are not on property boundaries. This too is not relevant here, as I understand that is no dispute between the parties as to the construction of the proposed 1200mm fence.
- 5.17. Where the issue arises is with respect to paragraph 2.1.6 of F9/AS1. This paragraph states there shall be no ground features or objects outside a pool barrier within 1200mm of the top of the barrier that would assist a child in climbing the barrier, with Figure 2 giving examples of how this requirement is to be evaluated.
- 5.18. The authority is concerned that, given the proximity of the pool barrier to the boundary, the owners are not able to fulfil this requirement. Other than the 500mm strip between the fence and the boundary, the owners are unable to control what climbable objects or features are placed on the neighbour’s property. The authority considers it conceivable that an object or feature could be located there in future, allowing the pool barrier to be circumvented. The authority relies on F9/AS1 Figure 2⁴ in making this judgment, and the 1200mm arc drawn from the top of the barrier that must be feature or object free.
- 5.19. The owners, on the other hand, have argued given the topography of the land, with the neighbour’s property sloping downhill from the boundary, the residential nature of the area where the properties are located, and the overall height of the top of the pool fence from the ground (3505mm), it is unlikely an object or feature of sufficient height for a child to climb it and thereby reach the top of the pool fence could be placed, built, parked or grown immediately next to the boundary.

⁴ See Appendix A.

- 5.20. I consider at the time of the building consent decision there were no objects or features in place within the 1200mm arc described above, and therefore the requirement in paragraph 2.1.6 is met. I also agree with the owners that the overall height of the top of the pool fence from the adjacent ground level would serve as a deterrent to a small child climbing up to it.
- 5.21. In terms of any future objects or features that could be placed on the other side of the boundary within the 1200mm arc, I accept the owners have no control over what occurs on the other side of the boundary. However, I note they have a continuing obligation under s162C of the Act⁵ to maintain a compliant pool barrier and would potentially have to make alterations to the barrier if changes were to occur on the other side of that boundary which rendered it non-compliant with the requirements of section 162C.
- 5.22. I also consider that any changes that impacted the barrier would be identified in the periodic inspections of the pool barrier required by section 162D:

162D Periodic inspections of residential pools

(1) Every territorial authority must ensure that the following residential pools within its jurisdiction are inspected at least once every 3 years, within 6 months before or after the pool's anniversary date, to determine whether the pool has barriers that comply with the requirements of section 162C:

(a) residential pools other than small heated pools:

(b) small heated pools that have barriers that are not exempt, in terms of Schedule 1, from the requirement to have a building consent.

(2) A territorial authority may accept a certificate of periodic inspection from an independently qualified pool inspector for the purpose of subsection (1) in lieu of carrying out an inspection under section 222.

(3) ...

- 5.23. Accordingly, I consider that the pool barrier complies with paragraph 2.1.6 of F9/AS1, and therefore must be accepted as complying with clauses F9.3.1 and F9.3.3.

⁵ See paragraph 5.6

6. Decision

- 6.1. In accordance with section 188 of the Building Act 2004, I determine the proposed pool barrier on the north-western side of the property complies with clauses F9.3.1 and F9.3.3 of the Building Code.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 20 January 2023.

Charlotte Gair

Manager Advisory, Building Resolution

APPENDIX A: F9/AS1 FIGURES 1 AND 2

Figure 1: Acceptable pool barriers
Paragraphs 2.1.4, 2.1.5

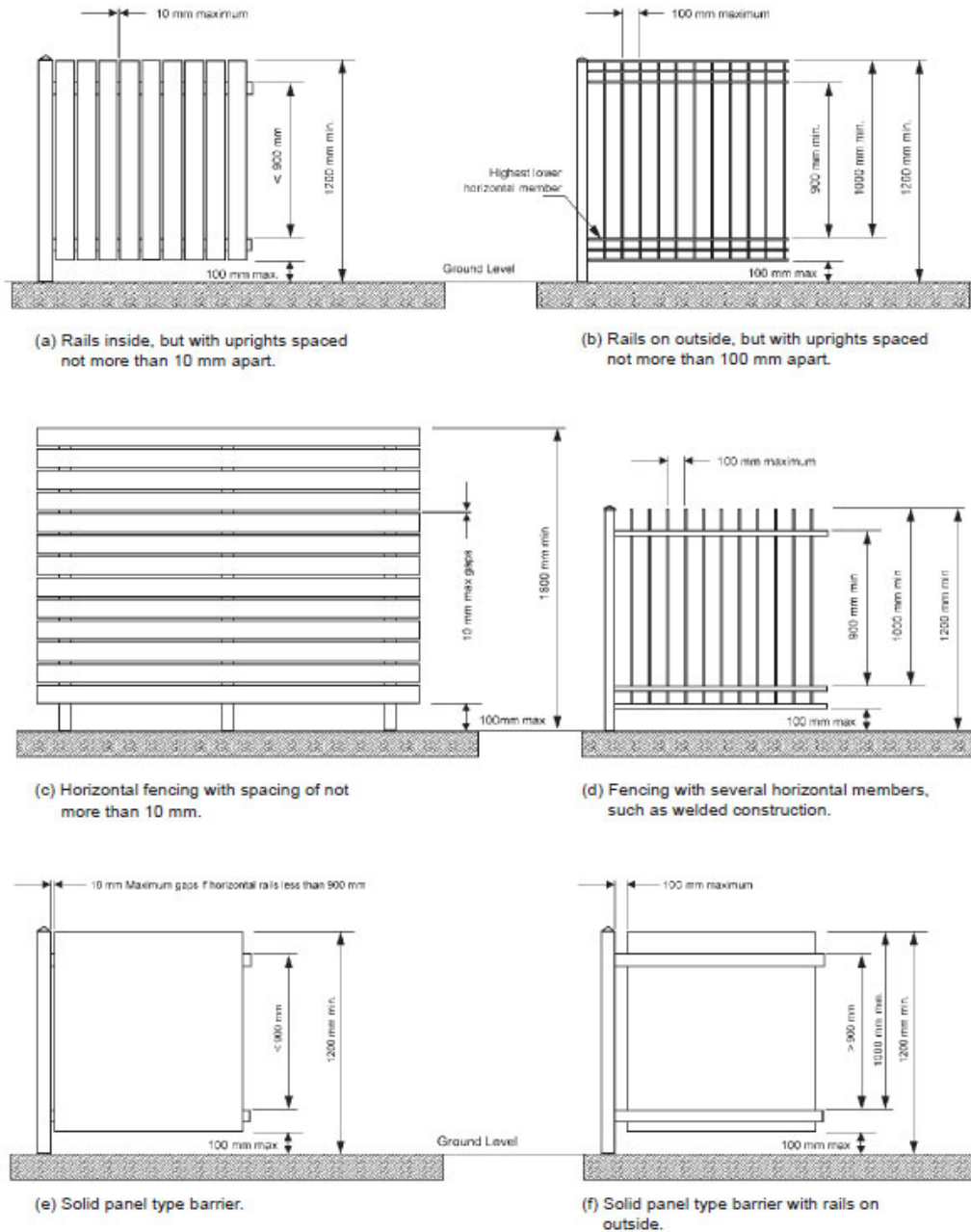


Figure 2: Determining pool barrier height
Paragraph 2.1.6

