

Determination 2023/001

Date: 13/01/2023

Regarding the compliance of particular elements of a swimming pool barrier

409 Hill Street, Thames

Summary

This determination considers particular elements of a pool barrier and their compliance with section 162C of the Building Act 2004. Those elements were constructed, installed, or erected prior to s162C coming into force, as part of a wider set of alterations at the property.



Figure 1: Elements of the pool barrier giving rise to the dispute

In this determination, unless otherwise stated:

- “sections” are sections of the Building Act 2004 (“the Act”)
- “clauses” are clauses in Schedule 1 (“the Building Code”) of the Building Regulations 1992
- “the FOSPA” is the Fencing of Swimming Pools Act 1987
- “FOSPA Schedule” is the Schedule to the FOSPA.

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 matter to be determined

- 1.1. This is a determination made under due authorisation by me, Peta Hird, Principal Advisor Determinations, 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. The trustees of the Hutt Family Trust² (“the owners”) who are the registered owners of 409 Hill Street (the property) where the swimming pool is located
 - 1.2.2. Thames-Coromandel District Council (“the authority”), the applicant in this determination, carrying out its duties as a territorial authority or building consent authority.
- 1.3. This determination arises from a dispute between the parties about the compliance of a swimming pool barrier at the property. The authority is of the view that specific elements of the barrier do not meet the Building Code requirements in Clause F9 *Means of restricting access to residential pools*³, and therefore it does not comply to the extent required by section 162C. These elements, which I refer to collectively as “the disputed elements”, are:
 - 1.3.1. the gate that restricts access from a deck extension (the “deck”) into the pool area
 - 1.3.2. the latch on the gate (the “latch”), and

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

² The owners say that the trust was dissolved after the application for the determination was made.

³ The purpose of this Building Code clause is to ensure the safety of unsupervised young children around swimming pools.

- 1.3.3. sections of the glass balustrade on either side of the gate, (“the sections of balustrade either side of the gate”)⁴.
- 1.4. The owners are of the view the authority is incorrect to assert that the disputed elements do not comply with the Act because:
 - 1.4.1. they were constructed under a building consent⁵ (the “building consent”) and are subject to a code compliance certificate.
 - 1.4.2. the authority carried out an inspection and found the pool barrier, which included the disputed elements, was compliant under the FOSPA.
- 1.5. The matter to be determined⁶ is whether any of the disputed elements that make up part of the pool barrier – as they were evident on 9 November 2021⁷ – comply with the Building Code to the extent required by section 162C of the Building Act.

Matters outside this determination

- 1.6. I note that the authority applied for a determination in relation to the compliance of particular matters with the Building Code. I only consider the compliance of the disputed elements in this determination;⁸ I do not consider any other aspects of the pool barrier, the compliance of the barrier as a whole or the full extent of the immediate pool area.
- 1.7. The authority issued a code compliance certificate for building work carried out under the building consent, which included the construction, erection, or installation of the disputed elements. No application has been received for a determination on the authority’s decision to grant the building consent or issue the code compliance certificate. As such, those matters are outside the scope of this determination.
- 1.8. I note that the authority submits that a glazed pot on the deck does not comply with the Act because, in its view, it is a ‘climbable object’. The owners have not provided a view on this but has indicated a willingness to move it away. That being so, I will give no further consideration to this issue and leave it to the parties to consider and resolve.

⁴ These include the two short sections of metal fencing each side of the gate that connect to the glass balustrade.

⁵ Building consent ABA2010/916 (issued 16th November 2010).

⁶ Under section 177(1)(a).

⁷ With the permission of the owner, the pool barrier was inspected by the authority on 9 November 2021.

⁸ Some items identified by the authority in its determination application as being non-compliant have been resolved by the owner.

2. The building work and background

- 2.1. The swimming pool at the property was constructed between 1988 and 1991. In 2005 the pool was drained and decked over. In 2010, the pool was reinstated, and the deck, including the disputed elements, was constructed under the building consent. The deck extends from the upper level of the dwelling and provides access down to the pool via an external staircase.

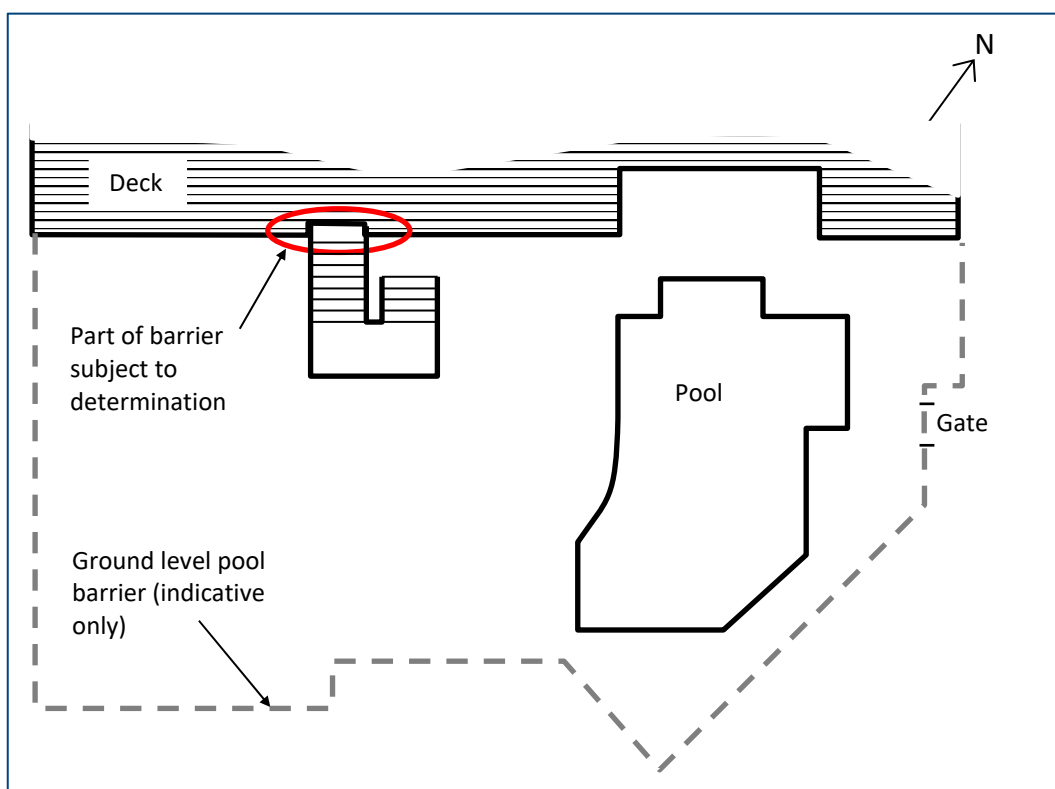


Figure 2: Site drawing (not to scale)

- 2.2. Access to the deck is through the living room of the house. The deck is approximately 36m² in size and the height from the deck floor to the pool area below is approximately 3.2m. The deck has a glass balustrade around its edge, and a metal gate which opens to an external staircase leading down to the pool. The staircase has handrails which adjoin at around the midpoint of the balustrade on either side of the gate (see Figure 1).
- 2.3. The glass balustrade is 1000mm high from the floor level of the deck. The balustrade presents a solid and sheer glass face, with a horizontal rail at the top and a horizontal rail and toe space at the bottom.

- 2.4. The gate is 1055mm high from the floor level of the deck and is constructed with vertical metal bars. The gate is self-closing with a spring loaded closer. The latch release for the gate is 1400mm above the floor level of the deck.
- 2.5. The gate is slightly set back from plane of the glass balustrade. Short sections of metal fencing on each side of the gate connect the gate to the glass balustrade. These sections are the same height as the glass balustrade (ie they are 1000mm high from the floor level of the deck).
- 2.6. A code compliance certificate for the “Deck Extension with Glass Balustrade” was issued on 8 April 2013. A site instruction notice dated 3 April 2013 states, “Constructed as per approved plans & approved amendment” and “Swimming Pool fencing complies with FOS[P]Act 1987”.
- 2.7. On 1 January 2017, the FOSPA was repealed and replaced with new provisions in the Act (sections 162A to 162E). On 17 August 2018 the swimming pool failed an inspection, and the authority advised the owners that the pool barrier did not comply.⁹ The site instruction notice stated (amongst other things), “Top pool gate is not 1.2m, & latch is not the required 1.5m. Fence either side is also required to be 1.2m...”.
- 2.8. There were other failed items in the 2018 inspection with regards to different aspects of the pool barrier. A further inspection was carried out in June 2019, with several items still deemed to be non-compliant. Following this inspection, the pool was emptied of water.
- 2.9. In a letter to the owner dated 6 June 2019, the authority requested that the gate, and the sections of balustrade within 1200mm of each side of the gate, be raised to a height of 1200mm, and the latch/locking device be raised to 1500mm.
- 2.10. The authority discovered the pool to be full of water again on 4 February 2021. A further inspection was attempted on 19 May 2021 but not completed.
- 2.11. I received an application for a determination from the authority on 10 August 2021.
- 2.12. Following my request for further information, the pool barrier was reinspected by the authority on 9 November 2021. The parties subsequently confirmed that several items previously identified by the authority as being non-compliant had been remedied. As those items are no longer a matter of dispute, I give them no further consideration in this determination.
- 2.13. The outstanding matters of dispute are as detailed in paragraph 1.3.

⁹ The inspection notice dated 17 August 2018 refers to the inspection as carried out under the FOSPA. However, the FOSPA had been repealed by that date and the authority’s obligation to inspect residential swimming pool barriers is under section 162D of the Act.

3. Submissions

The authority

- 3.1. In the determination application form, the authority stated that “portions of the swimming pool barrier do not comply with the Building Code nor does the fence comply with the Schedule of the Fencing of Swimming Pools Act 1987 that was in force when the pool was constructed”.
- 3.2. Following the pool inspection on the 9 November 2021, the features of the pool barrier which the authority deems to be non-compliant were narrowed and are outlined below.
- 3.3. The authority submits that the gate and sections of balustrade either side of the gate are approximately 1000mm high, in contravention of the following:

Clause F9 3.1 of the Building Code: 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/AS1 3.1.1: A gate in a *pool* barrier shall:

...

- b) Be at least 1200 mm high, and
- c) Comply with Paragraphs 2.1.2 to 2.1.7 above.

- 3.4. The authority submits that the latch on the gate is approximately 1400mm high from the outside of the pool area, and does not have another acceptable means of restricting a child from operating the latch, in contravention of the following:

Clause F9.3.3 of the Building Code: 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—

...

- (b) not be able to be readily opened by children...

F9/AS1 3.1.2(b): Where the latching device is otherwise accessible from the outside of the fence, gate, or door, the latching device shall be at least 1.5 metres above the ground on the outside of the fence.^[10]

- 3.5. The authority also submits that the gate, the latch and the sections of balustrade either side of the gate are contrary to previous determinations such as Determination 2017/082. The authority did not explain why it holds this view.

¹⁰ This wording appears in clause 9(3) of the FOSPA Schedule, not in Acceptable Solution F9/AS1. However, a similar means of restricting access to a latch is provided for in Acceptable Solution F9/AS1, see Figure 3(d) in Appendix A.

- 3.6. The authority submits that the disputed elements, which were constructed as part of a wider set of alterations, may not have been assessed by the authority during the consenting process as part of a swimming pool fence. That being so, they were not assessed for compliance with the pool safety legislation at that time.

The owners

- 3.7. The owners are of the view that the pool barrier complies with the Act and Building Code.

- 3.8. The owners submit:

3.8.1. The disputed elements were constructed according to a building consent and that building work was subsequently given a code compliance certificate.

3.8.2. The disputed elements remain unaltered since the code compliance certificate was issued. In correspondence with the authority dated 23 October 2018, the owner said that the “pool fencing has not been altered since [the code compliance certificate] was issued.”

3.8.3. The authority deemed the pool barrier to be compliant by way of:

- an inspection note dated 3 April 2013 which says that the swimming pool fencing complies with the FOSPA
- a code compliance certificate issued by the authority on 8 April 2013 for work undertaken under a building consent
- an email from the authority dated 21 January 2016 which said “Have checked Council records, you had a consent ABA2010916 for deck extension with glass balustrade. The inspector passed the pool fencing with the final inspection. We don’t require to inspect your pool fence at this time.”

3.8.4. Young children cannot access the deck because the only means of access is via the dwelling. Even if they could access the deck, no child would try climb from the deck into the pool area because of the height of the drop from the top of the glass balustrade to the pool area below.

Draft determination

- 3.9. On 6 September 2022 a draft of this determination was issued to the parties for comment.

3.10. The parties accepted the draft determination, and the owners indicated a willingness to work with the authority to achieve compliance.

4. Discussion

- 4.1. As stated above, the matter to be determined is whether any of the disputed elements (which were constructed, erected, or installed between 2010 and 2013) comply with the Building Code to the extent required by section 162C of the Act.

Relevant legislation

- 4.2. On 1 January 2017, the FOSPA was repealed and new provisions relating to residential pools were added to the Act (sections 162A to 162E, 450A and 450B). The purpose of these new provisions is to prevent drowning of, and injury to, young children by restricting unsupervised access by children under five years of age to residential pools with a maximum depth of 400mm or more.¹¹ In certain specified circumstances these provisions provide for more than one way to achieve compliance.
- 4.3. I note during the legislative process that brought these provisions into law, a report provided by officials to the select committee commented:¹²

The policy intention is that the pool barriers must continue to perform at the standard they were intended to perform at when they were installed. Under FOSPA, pool owners have faced the potential of having to upgrade their pool barrier whenever the building code changes. Proposed section 162C(2) gives effect to this policy intention.

- 4.4. At the same time as these provisions were added to the Act, the existing provisions in the Building Code that related to pool barriers were repealed¹³ and a new Clause F9 *Means of restricting access to residential pools* was inserted into the Building Code in their place.
- 4.5. Section 162C(1) requires residential pools to have physical barriers that restrict access to the pool by unsupervised children under five years of age. Section 162C(2) states that the means of restricting access to a residential pool must comply with the requirements of the Building Code:
- (a) that are in force; or
 - (b) that were in force when the pool was constructed, erected, or installed (after 1 September 1987) and in respect of which a building consent, code compliance certificate, or certificate of acceptance was issued (in relation to the means of restricting access to the pool).

¹¹ See section 162A.

¹² Departmental Report to the Local Government and Environment Committee, Building (Pools) Amendment Bill (dated 8 March 2016), page 41, item 7.17.

¹³ These provisions were clauses within Clause F4 *Safety from falling*.

- 4.6. Sections 450A and 450B contain the transitional and savings provision for residential pools.¹⁴
- 4.7. Section 450A was revoked on 27 April 2017 by way of a notice in the New Zealand Gazette;¹⁵ so was only available as a way to comply with section 162C between 1 January 2017 and 27 April 2017. As such, this determination will not consider section 450A further.
- 4.8. For residential pools constructed before 1 January 2017, section 450B(2) provides that they are deemed to have barriers that comply with section 162C if they:
- (a) complied with the Schedule of the Fencing of Swimming Pools Act 1987 (as that schedule was in force) immediately before 1 January 2017; and
 - (b) continue to comply with those requirements subject to—
 - (i) any exemption that was granted under section 6 or clause 11 of the Schedule of that Act and that was subsisting immediately before 1 January 2017; and
 - (ii) the conditions of any such exemption.
- 4.9. In summary, the effect of these provisions for residential pools is that pool barriers must continue to perform to the standard they were intended to perform to when they were constructed. In general terms, a barrier that complies with the Building Code that was in force at the time of construction is not required to be upgraded when there are later changes to the requirements in the Building Code.

Ways to establish compliance in this matter

- 4.10. I turn now to the disputed elements that the authority considers to be non-compliant with the Building Code.
- 4.11. As noted above, the Act provides for more than one way to comply with section 162C in specified circumstances. In short, the Act allows owners of pools to have the option of complying with the current requirements of the Building Code or, *in specified circumstances*, the option of complying with the requirements of the legislation that applied when their pool was constructed or installed.
- 4.12. The authority has made a series of submissions as to how, in its view, the disputed elements do not comply with the Building Act. While it is clear to me that the authority has considered the compliance of each of the disputed elements against an Acceptable Solution (being Acceptable Solution F9/AS1), it does not appear to have considered the other compliance options that are available to the owners.

¹⁴ Transitional provisions indicate how new law will apply to circumstances that arose in the past; savings provisions continue something otherwise altered or ended by the new law.

¹⁵ The New Zealand Gazette is the official newspaper of the Government of New Zealand. Secondary legislation not drafted by the Parliamentary Counsel Office may be published or notified in the Gazette.

4.13. The pool was constructed between 1987 and 1991 and, subsequently, the disputed elements were constructed, erected or installed between 2010 and 2013. That being so, section 162C provides the owners with more than one option to comply. Those options are the requirements in:

4.13.1. the Building Code currently in force¹⁶ (more specifically, Clause F9 *Means of restricting access to swimming pools*), either:

- by way of the Acceptable Solution F9/AS1¹⁷
- as an alternative solution

4.13.2. an earlier version of the Building Code¹⁸ (more specifically, the version of Clause F4 *Safety from falling* that was in force at the time that the disputed elements were constructed, erected or installed),¹⁹ either:

- by way of the version of Acceptable Solution F4/AS1 that was in effect at that time²⁰
- as an alternative solution.

4.13.3. the FOSPA Schedule²¹ subject to any exemption under section 6 or clause 11 of the FOSPA Schedule and compliance with the conditions of the exemption, if any.

4.14. For the first two options above, the available means for complying are either by way of prescribed Acceptable Solutions or as alternative solutions. Each clause of the Building Code has an associated Acceptable Solution, which, if conformed with, must be taken as demonstrating compliance with the clause it relates to. However, an Acceptable Solution provides just one means of establishing compliance.²² That being so, it is open to the owners to demonstrate that their pool barrier achieves compliance with the Building Code clause by another means, known as an 'alternative solution'.

4.15. An alternative solution is all or part of a building design that demonstrates compliance with the Building Code, but differs completely or partially from the Acceptable Solutions or Verification Methods. Alternative solutions provide for innovation and flexibility in achieving compliance with the Building Code. For an alternative solution, what is evaluated is the solution's compliance with the performance criteria in the Building Code clause. The Building Code does not

¹⁶ Refer section 162C(2)(a).

¹⁷ Acceptable Solution F9/AS1 Means of Restricting Access to Residential Pools; first edition.

¹⁸ Refer section 162C(2)(b).

¹⁹ I note the wording in Building Code Clause F4 *Safety from falling* remained the same from 21 June 2007 until 1 January 2017.

²⁰ Acceptable Solution F4/AS1 Safety from falling; third edition; amendment 1.

²¹ Refer section 450B(2).

²² See section 21(2).

prescribe how work should be done (ie give specific construction details); instead, it states how completed building work must perform.

- 4.16. When undertaking an evaluation of an alternative solution it may be useful, as a starting point, to make comparisons with relevant compliance documents (eg the Acceptable Solution) and any standards. Additionally, it may be appropriate to consider other relevant information (eg research and reports about swimming pool barriers). Further, when evaluating alternative solutions for swimming pool barriers, it is important to keep front of mind the purpose of the relevant provisions in the Act, which is “to prevent drowning of, and injury to, young children by restricting unsupervised access to residential pools by children under 5 years of age.”²³
- 4.17. In making this determination I will consider whether any of the disputed elements achieve compliance with the Building Code to the extent required by section 162C via any of the options listed above.
- 4.18. However, I first address some of the submissions made by the owners regarding the pool barrier at their property.
- 4.19. The owners point out that the disputed elements were constructed under a building consent and that, after a final inspection of the building work (which noted the pool barrier as complying with the FOSPA), a code compliance certificate was issued by the authority. That being so, the owners submit the authority is incorrect to assert that the disputed elements do not comply with the Building Code.
- 4.20. Further, the owners say that the only way to access the pool is via the dwelling and the deck. They say children are unable to access the dwelling or the deck (where the disputed elements are located). The owners also say, even were a child to access the deck, they would not attempt to climb over the barrier because of the height of the drop into the pool area below.
- 4.21. Having considered those submissions, I note the following:
- 4.21.1. The fact that an authority has granted a building consent or issued a code compliance certificate for building work does not in and of itself make that work compliant with the Building Code. Whether or not building work has received a building consent or code compliance certificate, I can assess the building work as it presents and reach a different view as to its compliance. This was established an earlier determination which concludes that contravention of section 162C can occur despite there being a code compliance certificate in circumstances where the barrier was never compliant.²⁴

²³ See section 162A.

²⁴ See Determination 2022/025, at paragraphs 5.7 – 5.13.

4.21.2. Children are likely to frequent any dwelling at some time in its life. For example, the dwelling at the property may in the future be occupied by parents with young children or visited by children. Further, while the height of the drop into the pool area below may deter some children from climbing the barrier, others may still attempt to do so (eg young children who are confident or proficient climbers).

4.22. I now record my observations (in tables 1 to 4 below) about the performance of each disputed element against each of the options listed above and provide my findings as to their compliance with each.

Option one: Assessment against the current Building Code

4.23. Section 162C(2)(a) provides for residential pools to comply with the requirements of the Building Code currently in force, being Clause F9. I now consider whether the disputed elements comply with Clause F9, first as an Acceptable Solution and then as an alternative solution.

4.24. Acceptable Solution F9/AS1 sets out detailed specifications for pool barriers including the gates within them. In table 1 below I make observations about the relevant paragraphs in the Acceptable Solution regarding each of the disputed elements.

Table 1: Assessment against current Building code by way of F9/AS1

Acceptable Solution F9/AS1	My observations
<p>Paragraph 2.1.2 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.</p>	<ul style="list-style-type: none"> • The sections of balustrade either side of the gate are part of the pool barrier and are 1000mm from the floor of the deck. • These sections of the pool barrier do not comply with paragraph 2.1.2 because they are lower than the minimum height specified.
<p>Paragraph 2.5.1 When the floor of a balcony is more than 2400mm vertically above the immediate pool area, a barrier complying with Clause F4²⁵ may be used instead of a Clause F9 barrier provided that there are be (sic) no projections within 1200 mm below the top of it (such as a wall or landscaping feature) that could assist a child to climb down.</p>	<ul style="list-style-type: none"> • The pool barrier does not comply with paragraph 2.5.1 because: <ul style="list-style-type: none"> ○ The external stairs and the landing at the top of the stairs are part of the immediate pool area and are at the same height as the floor of the deck. ○ The handrails on the external stairs are within 1200mm of the top of the gate and the top of the sections of balustrade either side of the gate. ○ The handrails on the external stairs could assist a child under the age of

²⁵ A barrier at least 1000mm high complies with Clause F4, by way of Acceptable Solution F4/AS1.

	five as a toehold to climb down on to the stairs and into the immediate pool area.
<p>Paragraph 3.1.1 A gate in a pool barrier shall: ... b) Be at least 1200 mm high, and ...</p>	<ul style="list-style-type: none"> • The gate forms part of the pool barrier and is 1055mm high measured from the deck outside the pool barrier. • The gate does not comply with paragraph 3.1.1 because it is lower than the minimum height specified which is depicted in Figure 3(d) of F9/AS1 for this type of gate (see Appendix A).
<p>Paragraph 3.1.2 A latch on a gate in pool barrier shall: ... b) Be positioned so that it cannot be reached by a child from outside the pool area. Figure 3 [in F9/AS1] gives acceptable means of preventing a child reaching the latch, and ...</p>	<ul style="list-style-type: none"> • The latch on the gate is 1400mm high and of the type shown in Figure 3(d) of F9/AS1. • The latch does not comply with paragraph 3.1.2 because it is lower than the minimum specified height of 1500mm (as depicted in Figure 3(d) which gives an acceptable means of preventing a child reaching the latch).

4.25. I note that Acceptable Solution F9/AS1 is silent as to balconies with stairs providing direct access to a pool. However, the Acceptable Solution expressly provides for balconies projecting into an immediate pool area.

4.26. Having considered each of the disputed elements for compliance by way of Acceptable Solution F9/AS1, I find that they do not comply by this means because:

4.26.1. the area of balcony floor inside the pool barrier (which acts as the landing for the external staircase) is part of the immediate pool area and, as such, does not come within the specifications in paragraph 2.5.1 of the Acceptable Solution that the balcony floor is more than 2400mm vertically above the immediate pool area

4.26.2. the handrails on the staircase are projections within 1200mm of the top of the gate and sections of balustrade either side, and could assist a child to climb down; as such, they do not come within the specifications in paragraph 2.5.2 of the Acceptable Solution (see Figure 6)

4.26.3. the gate is lower than the minimum height of 1200mm (as specified in paragraph 3.1.1 of the Acceptable Solution)

4.26.4. the sections of balustrade either side of the gate are lower than the minimum height of 1200mm (as specified in paragraph 2.1.2 of the Acceptable Solution)²⁶

4.26.5. the latch on the gate does not comply because it is lower than the minimum height of 1500mm (as specified in paragraph 3.1.2 of the Acceptable Solution).

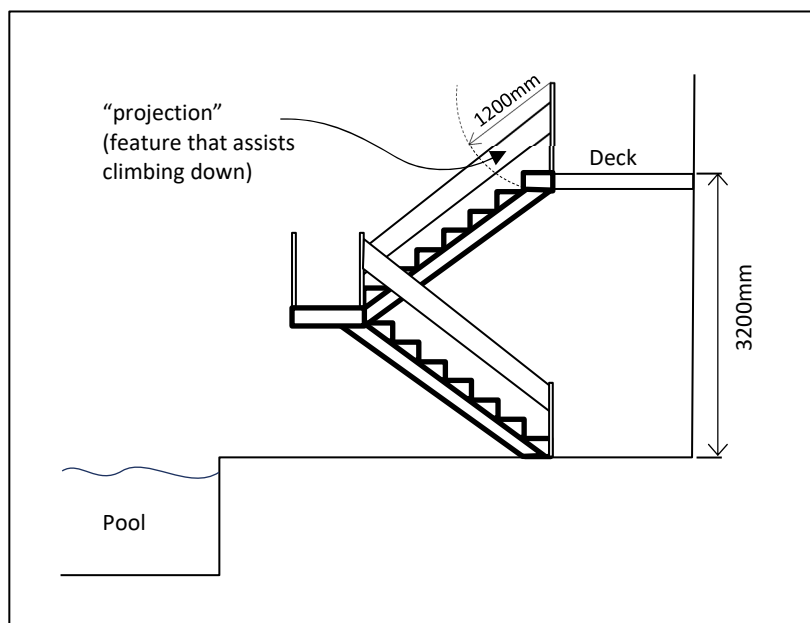


Figure 3: Drawing of projections within 1200mm

4.27. Accordingly, I conclude that none of the disputed elements comply with Clause F9 of the Building Code by way of Acceptable Solution F9/AS1. This means I must go on to consider the compliance of each element with Clause F9 as an alternative solution. I have summarised my observations in this regard in table 2 below and provided a more detailed analysis in paragraphs 4.28 to 4.40.

Table 2: Assessment against current Building Code as an alternative solution

Current Building Code		My observations
F9.3.1	<i>Residential pools</i> must have or be provided with physical barriers that restrict access to the <i>pool</i> or the <i>immediate pool area</i> by unsupervised young children (ie, under 5 years of age).	<ul style="list-style-type: none"> The gate and the sections of balustrade either side of the gate are part of the pool barrier but, due to the height and features of the elements these consist of, they do not restrict access to the immediate pool area by unsupervised children under 5 years of age.
F9.3.3	... Any gates must—	<ul style="list-style-type: none"> The gate is not compliant with F9.3.3 because it is able to be readily opened by children due

²⁶ In a letter to the owner dated 6 June 2019, the authority requested that the balustrade within 1200mm of each side of the gate be raised to a height of 1200mm.

	(a) ... (b) not be able to be readily opened by children; and (c)...	to the height of its latch (1400mm from the deck on the outside of the pool barrier) and the absence of any other features which restrict the ability of children to open the gate.
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- 4.28. Clause F9.3.1 of the Building Code requires residential pools to have physical barriers that restrict access to the immediate pool area by unsupervised young children; and Clause F9.3.1 also applies to gates which form part of a pool barrier. I note that neither Clause F9.3.1 nor any other clauses in the Building Code prescribe a minimum height for gates.
- 4.29. In my view, it is appropriate as a starting point to compare the height of the gate and the sections of balustrade either side of the gate with the height specifications in relevant compliance documents and standards. As discussed above, to comply with Clause F9.3.1 by way of the F9/AS1 the tops of the gate and the balustrade either side must be a minimum height of 1200mm from above the ground on the outside of the barrier.²⁷ I also note that the FOSPA Schedule and NZS 8500:2006²⁸ both specify a minimum height for pool gates and fences of 1200mm.²⁹
- 4.30. A 2009 study³⁰ on child safety barriers also provides some useful insights into pool barriers and relevant international standards. The study notes the World Health Organisation (WHO) recommended in 2006 that pool barriers should be at least 1200mm high and have no hand or footholds that could enable a young child to climb.³¹ The study went on to observe that in countries such as the United States and Australia – as of 2009 – a minimum height of 1200mm was generally specified, whereas, in Europe a minimum height of 1100mm was generally specified.³²
- 4.31. The study also observed that safety barriers should be seen as a means of limiting unsupervised access to a dangerous area rather than a means of completely preventing entry.³³ It noted an earlier study which observed many 4–5 year-old children climbing over barriers of heights from 1200mm to 1400mm, given sufficient time.³⁴ It observed the higher the barrier (all other features being the same), the fewer young children that could pass over the barrier and, for those that succeed in doing so, the greater the delay in their climbing time, thereby increasing the likelihood of a parent or caregiver intervening.³⁵ A similar view was expressed

²⁷ See paragraph 2.1.6 of Acceptable Solution F9/AS1.

²⁸ New Zealand Standard *Safety Barriers and Fences Around Swimming Pools, Spas and Hot tubs*, Standards New Zealand (2006).

²⁹ See clause 1(1)(a) of the FOSPA Schedule and the definition of ‘fence’ in section 2 of the FOSPA. Also see NZS 8500:2006 paragraph 3.3.1, the definitions of ‘barrier’ and ‘fence’ in paragraph 1.2, and Figure 3.6(a).

³⁰ *Child safety barriers – Study commissioned by ANEC* (European Association for Consumer Representation in Standardisation).

³¹ As above, page 12.

³² As above, pages 12-13.

³³ As above, pages 6 and 13.

³⁴ As above, page 13.

³⁵ As above, page 29.

by the WHO which – in 2017 – said, “increasing the height of the fencing makes crossing the barrier more challenging – a [1400 to 1500mm] high barrier is effective for children under 6 years.”³⁶

- 4.32. The study also noted that there may be means *other than height* by which a barrier will be made more difficult to climb. It referred to another study that undertook a test with a wide plate on top of a barrier which significantly reduced the success of children aged 3-4 years from climbing over.³⁷ The study undertook a similar test of a barrier (of 1200mm height) with a 100mm wide “hard to grip” top rail, which was found to significantly reduce the success of children of 4-5 years from climbing when compared with a barrier of the same height with a 40mm wide top rail.³⁸
- 4.33. I consider this information is relevant in determining whether the gate complies with Clause F9 of the Building Code as an alternative solution. At 1055mm it is 145mm lower than the minimum height specified in the compliance documents and standards discussed above. I note a gate which is 1055mm high will be easier or quicker for children under 5 years of age to climb than a gate 1200mm high.
- 4.34. For this gate to comply as an alternative solution, I am of the view that the difficulty of climbing the gate would need to be greater to compensate for the lower height. I do not see any unique feature or features associated with the gate that would compensate for the lower height. That being so, I find that the gate does not restrict access to the immediate pool area by unsupervised young children and, as such, does not comply with Clause F9 of the Building Code as an alternative solution.
- 4.35. I now turn to the latch on the gate, which is required by Clause F9.3.1 of the Building Code to restrict access to the immediate pool area by unsupervised young children. Further, Clause F9.3.3 provides that gates must not be able to be readily opened by children.
- 4.36. As discussed above, to comply with Clauses F9.3.1 and F9.3.3 by way of F9/AS1 a latch on a gate in a pool barrier must “be positioned so that it cannot be reached by a child from outside the pool area.”³⁹ The Acceptable Solution goes on to provide a number of diagrams depicting means of preventing a child from operating a gate latch.⁴⁰ One of those diagrams depicts a gate latch release that functions in much the same way as the latch in question; that diagram specifies a minimum height of 1500mm.⁴¹ Further, I note that the FOSPA Schedule⁴² and NZ 8500:2006 both

³⁶ *Preventing drowning: an implementation guide* (2017), World Health Organisation, ISBN: 9789241511933 at page 27

³⁷ *Child safety barriers – Study commissioned by ANEC* (European Association for Consumer Representation in Standardisation), page 13.

³⁸ As above, page 29.

³⁹ Acceptable Solution F9/AS1, paragraph 3.1.2(b).

⁴⁰ As above, Figure 3.

⁴¹ As above, Figure 3(d).

⁴² From the date the FOSPA came into force in 1987 until its repeal in 2017.

specify minimum heights of 1500mm for gate latch releases which also function in much the same way as the latch in question.⁴³

- 4.37. Considering features other than height, a latch that requires a level of force or mechanical operation beyond the abilities of a child to operate would also achieve the Clause F9.3.3 requirement that gates must not be able to be readily opened by children. This method of compliance is available as an alternative solution even though it is not contemplated in the Acceptable Solution, the FOSPA Schedule or NZ 8500:2006.
- 4.38. The latch release on the gate is lower than the minimum height specified in the compliance documents and standards referred to above. I note a latch release of 1400mm high is easier for children under 5 years of age to reach and operate than a latch release of 1500mm high. For the latch on the gate to comply as an alternative solution, I am of the view that the difficulty of either reaching or operating the latch (or both) would need to be greater to compensate for the lower height. I do not see any unique feature or features associated with the latch that compensate for the lower height. That being so, I find that the latch on the gate can be readily opened by children and, as such, it does not comply with Clause F9 of the Building Code as an alternative solution.
- 4.39. I turn now to the sections of the balustrade either side of the gate, which are required by Clause F9.3.1 of the Building Code to restrict access to the immediate pool area by unsupervised young children. In my view, it is appropriate in this case to compare the height of those sections of the balustrade (being 1000mm from the floor of the deck) with the height specifications in relevant compliance documents and standards.
- 4.40. As discussed above, the height of the sections of balustrade either side of the gate is 200mm lower than the minimum height in Acceptable Solution F9/AS1, the FOSPA Schedule and NZS 8500:2006.⁴⁴ I note a balustrade of 1000mm high would be somewhat easier or quicker for children under 5 years of age to climb than a balustrade of 1200mm high.
- 4.41. I acknowledge that children are unlikely to negotiate the balustrade where there is a significant drop and no means to climb down (eg no projections which assist climbing down into the immediate pool area). However, I consider that there is a real risk that a child may attempt to climb the balustrade where it adjoins the external stairs.

⁴³ See clause 9(3) of the FOSPA Schedule; also see paragraph 3.4.4.1 and Figure 3.6(d) of NZS 8500:2006.

⁴⁴ NZS 8500:2006 explicitly refers to balconies that project into an immediate pool area. In specified circumstances, a balcony balustrade can achieve the standard other than by way of the minimum height specified in the standard. However, sections of balustrade either side of the gate fall outside those specified circumstances for the same reasons given in paragraph 4.26. Therefore, if NZS 8500:2006 was used, the sections of balustrade either side of the gate would need to be a minimum of 1200mm to meet that standard.

- 4.42. For the sections of balustrade either side of the gate to comply as an alternative solution, I am of the view that the features of the balustrade would need to somehow to compensate for the combination of the lower height of the balustrade and the adjoining stair handrails. I do not see any unique feature or features (eg, a hard to grip top rail) that compensate for them. That being so, I find that the sections of balustrade either side of the gate do not restrict access to the immediate pool area by unsupervised young children and, as such, do not comply with Clause F9 of the Building Code as an alternative solution.
- 4.43. In summary, I conclude that none of the disputed elements comply with Clause F9 of the Building Code as an alternative solution.

Option two: Assessment against an earlier version of the Building Code

- 4.44. Section 162C(2)(b) provides for the disputed elements to comply with the version of the Building Code that was in force at the time the elements were constructed, erected or installed (the “former Building Code”). The relevant clauses are F4.3.3, F4.3.4(f) and F4.3.5 as they appeared in the former Building Code. I note they are the only performance requirements in that version of the Building Code relevant to swimming pool barriers.
- 4.45. Firstly, I consider compliance of the disputed elements with the former Building Code by way of the relevant Acceptable Solution F4/AS1 (third edition, amendment 1). The reference to swimming pool barriers is in paragraph 1.2.7 of the Acceptable Solution, which says “The [FOSPA Schedule] is a means of establishing compliance with NZBC Clause F4”.
- 4.46. That being so, the FOSPA Schedule – as worded when the disputed elements were constructed, erected, or installed – is incorporated into the Acceptable Solution for Clause F4 of the former Building Code.⁴⁵ I summarise my observations in table 3 about the compliance of disputed elements with the Clause F4 of the former Building Code by way of Acceptable Solution F4/AS1.

Table 3: Assessment against former Building Code by way of F4/AS1

FOSPA Schedule	My observations
Clause 1 (1) The fence shall extend-	<ul style="list-style-type: none"> The gate and sections of balustrade either side of the gate are part of the ‘fence’ for the pool.

⁴⁵ I note the FOSPA Schedule was amended on 20 November 1989 and retained the same wording until the repeal of the FOSPA and the FOSPA Schedule on 1 January 2017.

(a) At least 1.2 metres above the ground on the outside of the fence; and	<ul style="list-style-type: none"> The gate and sections of balustrade either side of the gate do not comply with the specified height because the top of the gate and the sections of balustrade either side are less than 1.2 metres above the floor of the deck.
<p>Clause 9</p> <p>(1) Every gate or door shall be fitted with a latching device.</p>	<ul style="list-style-type: none"> The gate is fitted with a latching device.
<p>(2) Where the latching device is accessible from the outside of the fence only by reaching over the fence, gate, or door or through a hole in the fence, gate, or door, the latching device and the lowest point of any hole giving access to it shall be at least 1.2 metres above the ground on the outside of the fence.</p>	<ul style="list-style-type: none"> n/a.
<p>(3) Where the latching device is otherwise accessible from the outside of the fence, gate, or door, the latching device shall be at least 1.5 metres above the ground on the outside of the fence.</p>	<ul style="list-style-type: none"> The latching device for the gate does not comply with the specified height because it is accessible from the outside of the gate (ie from the deck) and is less than 1.5 metres above the floor of the deck.

4.47. Considering the above, I am of the view that:

4.47.1. the gate does not comply with the minimum height of 1200mm as specified in clause 1(1)(a) of the FOSPA Schedule

4.47.2. the latch release on the gate does not comply with the minimum height of 1500mm as specified in clause 9(3) of the FOSPA Schedule

4.47.3. the sections of balustrade either side of the gate do not comply with the minimum height of 1200mm as specified in clause 1(1)(a) of the FOSPA Schedule.

4.48. As each of the disputed elements do not comply with the FOSPA Schedule (as it appeared when the disputed elements were constructed, erected or installed), accordingly, they do not comply with Clause F4 of the former Building Code by way of Acceptable Solution F4/AS1.

4.49. I must now consider whether the disputed elements otherwise comply with the Clause F4 of the former Building Code as an alternative solution. My observations in this regard are summarised in table 4 against the relevant performance criteria.

Table 4: Assessment against the former Building Code as an alternative solution

Former Building Code		My observations
F4.3.3	Swimming pools having a depth of water exceeding 400mm, shall have barriers provided.	<ul style="list-style-type: none"> The pool has a depth of water exceeding 400mm. The gate and deck balustrade form part of the pool barrier.
F4.3.4	Barriers shall: <ul style="list-style-type: none"> (a) ... (b) ... (c) ... (d) ... (e) ... (f) in the case of a swimming pool, restrict the access of children under 6 years of age to the pool or the immediate pool area (g) ... (h) ... 	<ul style="list-style-type: none"> The gate and sections of balustrade either side of the gate are part of the 'pool barrier' but they do not restrict access to the pool or the immediate pool area by children under 6 years of age.
F4.3.5	Barriers to swimming pools shall have in addition to performance F4.3.4: <ul style="list-style-type: none"> (a) all gates and doors fitted with latching devices not readily operated by children, and constructed to automatically close and latch when released from any stationary position 150 mm or more from the closed and secured position, ... 	<ul style="list-style-type: none"> The gate is fitted with a latching device. The gate is able to be readily operated by children due to the height of its latch (being 1400mm from the deck on the outside of the pool barrier) and the absence of any other features which restrict the ability of children to open the gate. There is no dispute that the gate automatically closes and latches as required by F4.3.5.

4.50. In paragraphs 4.28 to 4.40, I carried out a detailed analysis to assess compliance as an alternative solution against the performance requirements of Clause F9. I am of the view that the same reasoning applies in assessing compliance as an alternative solution for Clause F4 of the former Building Code. Therefore, based on that reasoning together with my observations in table 4, I conclude that none of the disputed elements comply with Clause F4 of the former Building Code as an alternative solution.

Option three: Assessment against section 450B

4.51. A remaining option for compliance is by way of section 450B. This section deems the FOSPA Schedule – as that schedule was in force immediately before 1 January 2017 – to be a means of compliance with section 162C for residential

pools that were constructed, erected or installed before 1 January 2017 (the “statutory end date”).

- 4.52. Information provided by the authority indicates the pool was constructed between 1988 and 1990 which is before the statutory end date. I also note that the disputed elements were constructed, erected, or installed some twenty years after the pool but before the statutory end date.
- 4.53. The means of compliance available under section 450B – being the FOSPA Schedule as it appeared immediately before 1 January 2017 – is identical to the version of the FOSPA Schedule considered above (see paragraphs 4.45 to 4.48).⁴⁶ There I concluded that none of the disputed elements comply with the FOSPA Schedule; accordingly I am of the view that none of the disputed elements comply with section 162C by way of section 450B.⁴⁷ As such, it is unnecessary for me to undertake any further assessment for the purpose of considering compliance under section 450B.

5. Conclusion

- 5.1. I conclude that the disputed elements do not comply to the extent required by section 162C by any of the available means.
- 5.2. It appears that the owners and authority are in discussions as to a solution for making the disputed elements compliant. Any proposal should take into account the findings in this determination.

6. Additional comments

More than one means of compliance may be available

- 6.1 In this case, the authority assessed the compliance of the disputed elements against the criteria in F9/AS1 but not as an alternative solution. This approach appears to be common in contemporary inspections of pool barriers. Compliance with an Acceptable Solution is just one means of satisfying Building Code requirements; building consent authorities, territorial authorities and independently qualified pool inspectors must remain mindful that compliance with the Building Code can also be achieved by way of alternative solutions. Additionally, a pool barrier can comply with 162C either by way of requirements of the Building Code currently in force (ie Clause F9), or by the other means of compliance that are available under section 162C or 450B (subject to meeting the relevant criteria).

⁴⁶ That being the FOSPA Schedule as it appeared between 2010 and 2013 when the disputed elements were constructed, installed or erected.

⁴⁷ I may have reached a different conclusion if an exemption had been granted under sections 6 FOSPA for any of the disputed elements. I have received no information that any such exemptions exist for the disputed elements.

- 6.2 Consequently, when carrying out an inspection of a pool, it is important that inspectors are alert to all compliance options available. To this end, relevant factors include:
- 6.2.1 when the pool and any elements relating to the pool barrier were constructed, erected, or installed
 - 6.2.2 whether the pool and any elements relating to the pool barrier have a building permit, building consent, code compliance certificate, or certificate of acceptance
 - 6.2.3 whether an exemption was granted under the FOSPA for any elements relating to the pool barrier and, if so, the conditions of any such exemption.

Notices to fix for non-compliant pool barriers

- 6.3 Section 164 provides for a territorial authority to issue a notice to fix to the specified person concerned if the person is contravening or failing to comply with the Act or the regulations. In relation to pool barriers, if a territorial authority determines the pool does not have a compliant barrier (as required by section 162C) the territorial authority can issue a notice to fix to the specified person concerned.
- 6.4 The provisions do not limit authorities' powers to a particular point in time; a notice to fix can be issued at any time during the lifetime of the pool if the pool barrier does not meet the compliance requirement in section 162C.
- 6.5 These ongoing provisions ensure the effectiveness of the barrier restricting access to the pool by unsupervised young children does not become compromised over time, whether because of lack of maintenance, alterations, or for some other reason. On that basis, I am of the view that a notice to fix for contravention of section 162C can be issued irrespective of whether or not a pool barrier is the subject of an existing code compliance certificate. This approach aligns with the legislative intent of the special provisions for residential pools to have a compliant barrier throughout the lifetime of the pool to prevent death or injury of young children.⁴⁸

⁴⁸ This accords with the views in Determination 2022/024 at paragraphs 5.4 and 5.5.

7. Decision

- 7.1 In accordance with section 188(1)(b) of the Building Act 2004, I determine the disputed elements of the pool barrier, as they were evident on 9 November 2021, do not comply with the Building Code to the extent required by section 162C of the Act.

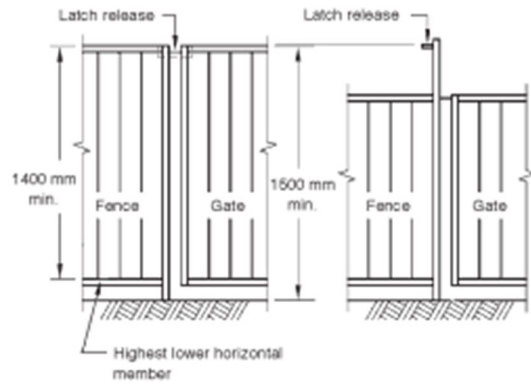
Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 13 01 2023.

Peta Hird

Principal Advisor Determinations

APPENDIX A

Figure 3(d) as appears in Acceptable Solution F9/AS1



(d) Shield not required for latch or release located at 1500 mm or higher.