

Determination 2024/044

Whether a swimming pool barrier complies with Clause F9 of the Building Code

216b Ahiaruhe Rd, Carterton

Summary

This determination considers whether a swimming pool barrier complies with Clause F9.3.3 in relation to a pole on the outside of the barrier. The determination discusses whether the pole could assist children under 5 years of age in negotiating the barrier.



Figure 1. Photograph showing pole and fence at northeast corner.

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 matter to be determined

- 1.1. This is a determination made under due authorisation by me, Andrew Eames, for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment (“the Ministry”).¹
- 1.2. The parties to the determination are:
 - 1.2.1. J Lane and F Stefanski, the owners of the property (“the owners”), who applied for this determination.
 - 1.2.2. Carterton District Council (“the authority”), carrying out its duties as a territorial authority or building consent authority.
- 1.3. This determination arises from the failed inspection of a residential swimming pool in relation to a pole near to the pool fence (“the pole”). The authority considers the pool fence is not compliant with Clause F9 *Restricting access to residential pools* because the pole could provide climbing support to a child under the age of five.
- 1.4. The matter to be determined, under section 177(1)(a) is whether the pool fence complies with clause F9.3.3 in regard to the pole.
- 1.5. I have not considered the compliance of the pool fence in any other respect, and whether the building work complies with the building consent is outside the scope of the matter I have been asked to determine.

2. The background and building work

- 2.1. The in-ground pool is located in a courtyard, with the pool barrier consisting of the walls of the house at one end of the pool, and a glass barrier between the pool and courtyard along another side, and 1200mm high fencing on the other two sides. The fence has vertical metal bars with horizontal top and bottom rails. (See figure 1)

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

- 2.2. There is a pergola above the metal fencing. The majority of the pergola's supporting poles are in line with the fence, with the exception of the northeast corner where the fence steps in around the pole (see figures 1 and 2). The pole at this northeast corner is 76mm in diameter and is approximately 370mm from the metal fence.

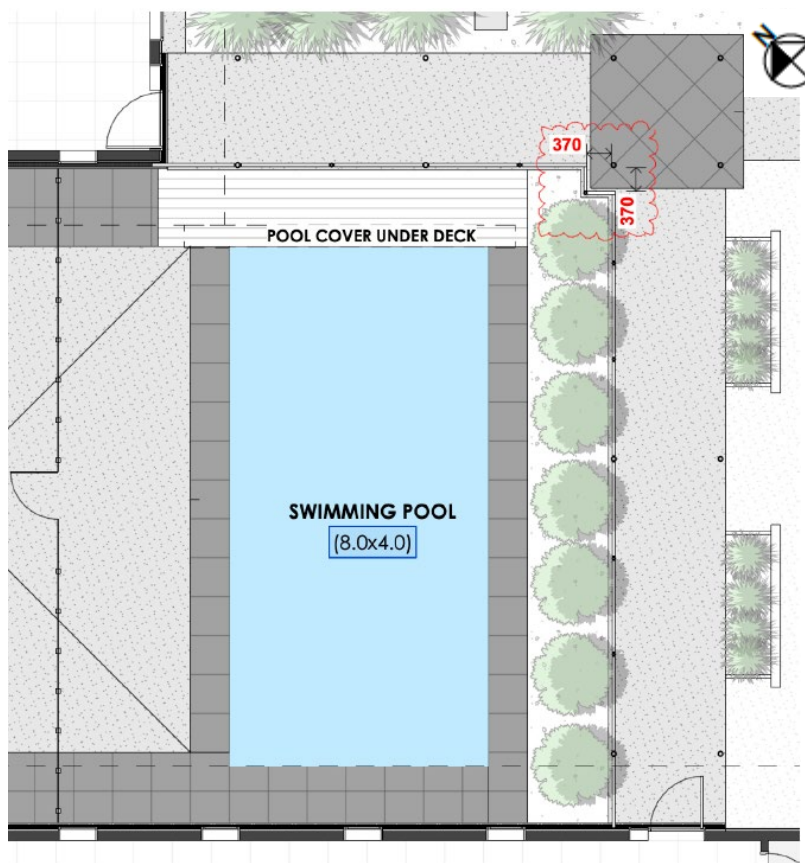


Figure 2. As-built site plan²

- 2.3. On 22 May 2024, the authority performed an inspection of the pool barrier. The resulting outcome was a “fail”. The authority’s inspection record noted, under the title ‘Fence at least 1200mm away from projections’:
- Fencing at north eastern corner is within 1200mm of walkway post, not compliant with [Building Code Clause] F9 2.1.6.^[3]
- 2.4. On 10 June 2024, the owners requested the authority reconsider their decision, and referred the authority to two previous determinations (Determination 2019/031 and Determination 2023/032) that involved permanent objects closer than 1200mm from pool barriers.

² In the plan submitted and approved in the building consent application, the supporting poles along the short end of the pool were inside the pool barrier, and the pole at the northeast corner was set in line with the metal fence.

³ The reference to 2.1.6 appears to be to a paragraph in the Acceptable Solution F9/AS1. An Acceptable Solution is one way, but not the only way, to comply with the Building Code.

- 2.5. On 12 June 2024, the authority responded maintaining their position. The authority stated that the pole adjacent to the pool fence could allow a child under the age of five to gain access to the pool without supervision, using the pole “as a climbing point”. The authority provided the owners with a summary of their review of the previous determinations referenced by the owners.

3. Submissions

The owners

- 3.1. The owners submitted that the pole would not assist a child in climbing the metal fence. The owners made the following points (in summary):
 - 3.1.1. The pole's smooth surface and lack of features like toe or hand grips, indentations, or notches make it difficult to climb. Without natural holds, climbers cannot secure a grip or foothold, significantly increasing the risk of slipping and falling. Therefore, the pole's smoothness and lack of features ensure it remains unclimbable.
 - 3.1.2. The physical demands required are beyond the capabilities of a typical five-year-old. Climbing a pole requires significant upper body strength, coordination, and endurance, which young children lack.
 - 3.1.3. Even if a child managed to climb the pole, they would face an even more complex challenge: extending their body horizontally while maintaining a firm grip. This manoeuvre demands exceptional core strength and balance, involving reaching out with a foot or hand to find purchase on the fence.
 - 3.1.4. Scaling a 1.2m high pool fence from this position requires extraordinary coordination and physical prowess. The child would need to transfer their weight from the pole to the fence, a task that tests strength, balance, and spatial awareness, all of which are typically underdeveloped in children of this age group.

The authority

- 3.2. The authority did not provide a submission in response to the application for determination but provided a copy of the approved building consent plans dated 17 January 2022, and the inspection report dated 22 May 2024.

4. Discussion

4.1. Section 17 of the Act requires all building work to comply with the Building Code. The relevant performance clause of the Building Code in this case is F9.3.3:

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.**
[my emphasis]

4.2. There are various means by which building work can be shown to comply with the Building Code, including by way of an Acceptable Solution.⁴

4.3. The Acceptable Solution F9/AS1⁵ mirrors the language used in the Building Code, but prescribes a minimum distance of objects from the barrier:

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.** ... [my emphasis]

4.4. The pole is clearly within 1200mm of the fence, but whether assessing compliance by way of the Acceptable Solution or as an alternative solution, the critical question is whether pole would assist a child to negotiate the barrier.

4.5. I do not agree with the owners' view that a young child would not be capable of climbing the pole itself. A 2009 study on child safety barriers provides useful insights to how children negotiate barriers, including barriers consisting of vertical members that are commonly used around swimming pools.⁶

4.6. However, the same study notes that barriers can be used to prevent or delay children's access to swimming pools but "it is hard to construct barriers that will protect all children", and "the time of delay is an important property of a safe barrier as it gives the caregiver time to react".

4.7. F9/AS1 provides for a variety of barriers that are deemed to comply with the Building Code, including types with uprights that would be graspable by young children.

4.8. In this case, the pole has a larger diameter than the vertical metal bars of the fence, meaning it would need to be grasped in two hands by a child climbing it. However, the pole is similar to the metal fence in other aspects; it is a vertical element with a smooth surface. In this respect I am of the view that the pole does not aid a child in

⁴ Section 22(2) A person who complies with an acceptable solution or a verification method must, for the purposes of [the] Act, be treated as having complied with the provisions of the building code to which that acceptable solution or verification method relates.

⁵ Acceptable Solution F9/AS1 for New Zealand Building Code Clause F9 Means of Restricting Access to Residential Pools, First edition (27 April 2017)

⁶ See for example *Child safety barriers*, Study commissioned by: ANEC (European Association for Consumer Representation in Standardisation) Engdahl, Spaglund, Waller (2009)

negotiating the barrier, as it does not offer any means of support or assistance that is not present in the barrier itself.

- 4.9. On that basis, I conclude the pole at the northeast corner does not provide assistance to a child negotiating the barrier and therefore the barrier complies with clause F9.3.3 in regard to the pole.

5. Decision

- 5.1. In accordance with section 188 of the Building Act 2004, I determine that the swimming pool barrier at the northeast corner complies with Clause F9.3.3.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 20 August 2024.

Andrew Eames

Principal Advisor, Determinations