



# Determination 2017/045

# Regarding compliance of a barrier to a swimming pool at 5 Hillary Street, Chedworth, Hamilton



## Summary

This determination considers the compliance of a number of features in a barrier to a swimming pool, including a bifold window that was installed as part of an alteration for which a code compliance certificate has been issued.

## 1. The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004<sup>1</sup> ("the Act") made under due authorisation by me, John Gardiner, Manager Determinations and Assurance, Ministry of Business, Innovation and Employment ("the Ministry"), for and on behalf of the Chief Executive of the Ministry.
- 1.2 The parties to the determination are:
  - the owner of the house, G Rowe ("the applicant")
  - Hamilton City Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.
- 1.3 This determination arises from a failed inspection of a residential swimming pool. The authority is of the view that a number of items that form part of the barrier to the swimming pool do not comply with section 162C of the Act<sup>2</sup> (refer paragraph 3.3).
- 1.4 The matter to be determined<sup>3</sup> is whether the physical barrier to the pool complies to the extent required by section 162C. In making this decision I must consider whether the barrier complies with the requirements of the Building Code (First Schedule, Building Regulations 1992) that are in force or that were in force when the pool was

<sup>&</sup>lt;sup>1</sup> The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Ministry are all available at www.building.govt.nz or by contacting the Ministry on 0800 242 243.

<sup>&</sup>lt;sup>2</sup> In this determination, unless otherwise stated, references to clauses are to clauses of the Building Code and references to sections are to sections of the Act.

<sup>&</sup>lt;sup>3</sup> Under section 177(1)(a) of the Act

constructed or with the Schedule to the Fencing of Swimming Pools Act 1987 (herein referred to as "the FOSP Act").

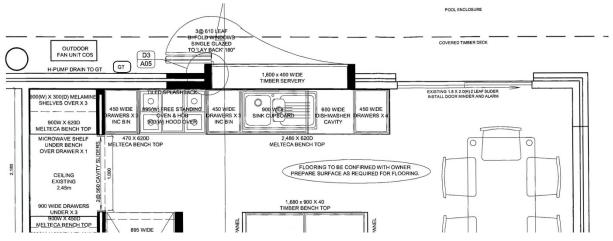
1.5 In making my decision I have taken into account the submissions of the parties and the other evidence in this matter.

## 2. The background and the barrier

- 2.1 The swimming pool and related fencing were constructed under a building permit issued in April 1986. The authority has submitted that, based on an inspection on 27 July 1999, it is satisfied that the fencing would have complied with the FOSP Act at the time it was constructed.
- 2.2 The external wall of the house forms part of the barrier to the pool. The wall incorporates a ranchslider, providing access into the immediate pool area from the dining room, and a bifold window in the kitchen.
- 2.3 The ranchslider has been fitted with a padbolt above 1.5m from the floor level and an audible warning device (the authority noted that the warning device has been deactivated). There is a cat-door fitted in the ranchslider, which has an opening of approximately 180mm in diameter.

## 2.4 The kitchen bifold window

- 2.4.1 The installation of the kitchen bifold window was carried out under building consent 2011/26049 issued on 30 May 2011 for alterations to the kitchen and the installation of a spa pool.
- 2.4.2 The bifold window is located above a kitchen sink bench and provides access between the kitchen and a timber servery within the immediate pool area. A photograph of the bifold window shows that it has been installed in line with the external wall, i.e. on the opposite side of the timber servery shown in the drawing below.



#### Figure 1: Kitchen plan (not to scale)

2.4.3 The notes on the plan submitted as part of the building consent application state:

The bi-folding windows must have self closing latches and if required to partially open, restrictors fitted which limit their opening to 100mm.

This specification complies with the general requirements of F4 AS1.

2.4.4 It is my understanding that the bifold window has neither self-closing latches nor restrictors, but that the relevant inspections carried out by the authority during

construction passed and a code compliance certificate was issued on 7 February 2014 for the building work carried out under building consent 2011/26049.

## 2.5 The 2017 failed pool inspection

- 2.5.1 On 9 March 2017 the authority carried out an inspection as required under section 162D of the Act. The authority wrote to the applicant on 10 March 2017 ("the failed inspection advice"), advising that the inspection had 'failed' and listing a number of items the authority considered did not meet the requirements of section 162C. The failed inspection advice referred to issues relating to gates, aids to climbing, height of the pool barrier, windows and doors opening into the immediate pool area, and the cover on the spa pool.
- 2.5.2 The applicant contacted the Ministry to request advice regarding the failed inspection, noting that a number of items listed by the authority in the failed inspection advice were present and formed part of the existing house before the applicant purchased it. The applicant stated that the kitchen bifold window was consented by the authority as part of alterations carried out in 2011, the authority's inspections of that building work had "passed", and that a code compliance certificate had been issued for that building consent.

## 3. The submissions

- 3.1 The Ministry received the application for a determination on 19 April 2017. The applicant provided a copy of the failed inspection notice and a covering letter setting out the background and the applicant's views on the outstanding issues.
- 3.2 On 22 May 2017 I requested from the authority:
  - confirmation of whether any of the building elements listed in the failed inspection notice were included in a building consent for which a code compliance certificate has been issued; and
  - confirmation of the list of items the authority maintains do not meet the requirements under section 162C to restrict access to the pool by unsupervised children under five years of age, taking into account section 162C(2)(b).
- 3.3 The authority responded on 24 May 2017, stating that it had carried out an inspection on 24 May and that as a result of actions already undertaken by the applicant the authority considered there were fewer matters requiring remedial work. The authority listed the outstanding issues as follows (in summary):
  - The cat door in the ranchslider, which is approximately 180mm in diameter and therefore exceeds the 100mm gap referred to in the FOSP Act.
  - Despite the notation on the plans referring to compliance with F4/AS1, there are no restrictors fitted to the bifold window to restrict the opening to less than 100mm this does not comply with the FOSP Act.
  - The spa is fitted with covers/lids that are heavy and durable, however a couple of the clips holding the lids in place are damaged and the authority recommends these be replaced or repaired.
  - A large chess set sits within the fenced pool area and 'should be removed from the fenced pool area in order to meet compliance with the [FOSP Act]'.
- 3.4 A draft determination was issued to the parties for comment on 9 June 2017.

- 3.5 The authority accepted the draft without further comment in a response received on 12 June 2017.
- 3.6 The applicant responded on 19 June 2017, noting that the draft determination was accepted but that the applicant did not necessarily agree with the legislative requirements, particularly in relation to the diameter of the cat door.

## 4. Discussion

## 4.1 The legislation

- 4.1.1 The Act was amended on 1 January 2017 to incorporate a set of special provisions relating to residential pools. The provisions include section 162C which requires that residential pools have physical barriers that restrict access to the pools by unsupervised children under five years of age, and 162D which requires inspections at least once every three years to determine whether the pool has a barrier that complies with the requirements of section 162C.
- 4.1.2 Under section 162C(2), the means of restricting access to the 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).

- 4.1.3 In this determination I have considered the phrase "when the pool was constructed" and how this is to be interpreted in the context of the special provisions relating to residential pools. The intention is that pool barriers must continue to perform at the standard they were intended to perform at when they were installed and barriers constructed under approval by way of building consent are not required to be upgraded when there are later changes to the requirements in the Building Code.
- 4.1.4 There will be circumstances when the pool and the barrier are constructed at different times, or where a barrier to the pool is altered sometime after the pool has been constructed or installed. I am of the view that in those circumstances the phrase "when the pool was constructed" in section 162C(2)(b) of the Act is to be read as the requirements of the Building Code in force at the time the barrier to the pool was constructed in this case the pool was constructed in 1999 but part of the barrier was altered in 2011 when the bifold window was installed; accordingly in terms of section 162C(2)(b) it is the Building Code requirements that were in force in 2011 when the barrier was altered that applies to the bifold window.
- 4.1.5 Section 450B sets out the provisions as they relate to residential pools that were constructed before 1 January 2017. Subsection (2) provides that existing pools are deemed to have barriers that comply with section 162C if the barriers
  - (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.

- 4.1.6 The Ministry has provided guidance<sup>4</sup> for territorial authorities on the residential pool provisions of the Act.
- 4.1.7 Under section 164 of the Act, if an authority considers on reasonable grounds that a specified person is contravening or failing to comply with section 162C of the Act, the authority must issue a notice to fix to the specified person.
- 4.1.8 Based on the information provided, it is my understanding that the authority has given the applicant the failed inspection notice as a means of providing them the opportunity to remedy the issues that the authority considers do not comply, but the authority has not issued a notice to fix.

## 4.2 Compliance

- 4.2.1 Based on the submissions of the parties, I understand the dispute concerning compliance with section 162C is restricted to the following issues:
  - The cat door in the ranchslider.
  - The bifold window.
  - The clips on the spa cover.
  - The chess set within the immediate pool area.
- 4.2.2 I have addressed each of these items in the following paragraphs.

## The cat door

- 4.2.3 The applicant is required to comply with the requirement in section 162C(1) that the pool has a physical barrier that restricts access to the pool by unsupervised children under five years of age, and in this case the ranchslider door forms part of the barrier to the pool.
- 4.2.4 Section 162C(2)(b) provides the means of restricting access must comply with the requirements of the Building Code that were in force when the pool was constructed; in this case the relevant provisions would be those in place when the cat door was installed.
- 4.2.5 I have no information regarding the date the cat door was installed, and I accept the applicant's statement that the cat door in the ranchslider was in place prior to the applicant purchasing the property. At the time the pool was constructed (approx. 1999) the barrier would have needed to comply with Clause F4 of the Building Code and under section 162C must continue to comply to the same extent. I note that the Schedule to the FOSP Act was a means of establishing compliance with Clause F4 of the Building Code.
- 4.2.6 Clause F4.3.4(f) of the Building Code current at that time required the barrier 'restrict the access of children under 6 years of age to the pool or the immediate pool area'. I must therefore consider whether the ranchslider with the cat door installed complies with the Building Code performance requirement Clause F4.3.4(f).
- 4.2.7 While not the only means of complying with the Building Code, the Acceptable Solution F4/AS1 (current at the time the pool was constructed) is relevant in considering whether the cat door complies. Paragraph 1.2.1 of F4/AS1 states:

<sup>&</sup>lt;sup>4</sup> See https://www.building.govt.nz/building-code-compliance/f-safety-of-users/pool-safety/residential-pool-provisions-of-the-building-act-2004-guidance-for-territorial-authorities/

Barriers located in any part of a building likely to be frequented by children under the age of 6 years shall have:

a) No openings which will permit the passage of a sphere greater than given by Table 2, ...

Table 2 of the Acceptable Solution set the maximum sphere diameter for opening sizes in barriers in housing as 100mm (refer Appendix A.4).

- 4.2.8 Likewise, although NZS 8500 is not cited as a compliance document for Clause F4, it was approved by the Standards Council and must command respect as representing the consensus of the major national bodies represented, arrived at after a process of public consultation. As such, it can provide guidance in this matter.
- 4.2.9 Paragraph 3.7.1 of NZS8500 sets out the requirements that child-resistant doorsets shall comply with, and states:

(i) Pet doors to the immediate pool area are prohibited.

4.2.10 Taking into account the above, I conclude that the ranchslider with the cat door installed does not comply with the requirements of the Building Code that was in force when the pool was constructed.

### The bifold window

- 4.2.11 The bifold window, which forms part of the physical barrier restricting access to the pool, was constructed under a building consent issued in 2011. The authority carried out inspections during construction and subsequently issued a code compliance certificate in 2014 for the building work.
- 4.2.12 It is apparent on reviewing the drawings provided for the building consent application that there is conflict between the drawing itself, which shows the bifold window in a fully open position, and the notes alongside the drawing which state the window must have self-closing latches and restrictors fitted (refer paragraphs 2.4.2 and 2.4.3). This issue of conflicting information should have been addressed in the design stage before the building consent was issued. I have seen no correspondence or other information relating to the processing of that building consent that would indicate the conflicting information was identified by the authority and resolved with the designer or the applicant before the building consent was granted.
- 4.2.13 The authority is now of the view that the bifold window does not comply with the Building Code that was in force at the time the building consent and code compliance certificate was issued; preferring the requirement set out in the notes over the drawing itself. This implies that the authority now considers it issued the code compliance certificate in error<sup>5</sup>.
- 4.2.14 I have received no information that would indicate the bifold window had a selfclosing mechanism or restrictors at the time of construction. The notes requiring restrictors to limit the opening of the bifold window to 100mm clearly conflicts with the function of the bifold window as a means of providing access between the kitchen and the servery in the immediate pool area; which indicates that the restrictors may never have been installed. That the authority inspected and approved the building work indicates the authority had formed a view at the time that the bifold window, capable of being fully opened to provide access to the servery, complied with the Building Code.

<sup>&</sup>lt;sup>5</sup> This determination does not consider whether the authority correctly exercised its powers of decision when it issued the code compliance certificate for building consent no. 2011/26049 and when it granted that building consent.

- 4.2.15 I note here that in order for a child to access the immediate pool area by way of the bifold window, they would first need climb onto the kitchen bench and over or around the kitchen sink. The parties have not provided information regarding the height of the kitchen bench, but as these are typically constructed at 900mm high I have considered the compliance of the bifold window adjacent to a 900mm high bench.
- 4.2.16 A window at 900mm opening into an immediate pool area is below the minimum barrier height provided for in the Acceptable Solution F4/AS1 that was current at the time the window was installed<sup>6</sup> of 1000mm and the 1200mm minimum height set out in the Schedule to the FOSP Act and NZS8500. The current Acceptable Solution F9/AS1<sup>7</sup> sets out a minimum height for windows opening into the immediate pool area of 1000mm above floor level with no projections underneath of more than 10mm or a restrictor limiting the opening to 100mm.
- 4.2.17 The design of the kitchen bench includes a set of drawers at one end, which makes it easier for young children to climb up onto the bench and access the window. In addition, as the window has been installed adjacent to the bench and not on the other side of the servery as shown in the plans, the open window is more likely to be visible to a child in the kitchen area.
- 4.2.18 Given the location of the bifold window and features of the adjacent kitchen bench, I am of the view that the bifold window without self-closers and without restrictors does not comply with the requirements of Clause F4.3.4(f) of the Building Code that was in force when the building work was consented.

## The clips on the spa cover

- 4.2.19 The spa pool is within the immediate pool area and the physical barrier restricting access to the spa pool is the same as that for the swimming pool. The spa pool cover in this case is effectively a 'second line of defence'.
- 4.2.20 In addition, under section 162D(1) of the Act the periodic inspections of residential pools do not apply to small heated pools that have barriers that are exempt under Schedule 1 from the requirement to have a building consent. The cover to the spa pool falls under that exemption.
- 4.2.21 While the authority was not required to inspect the spa pool cover it has recommended to the applicants that the damaged clips be repaired or replaced. I am of the view that this is an item of maintenance for the applicants to consider.

## The chess set within the fenced pool area

4.2.22 The physical pool barrier encompasses the pool and an area around the pool referred to as the "immediate pool area". This term is defined in section 8 of the Act as meaning:

the land in or on which the pool is situated and so much of the surrounding area as is used for activities carried out in relation to or involving the pool

4.2.23 The term has been considered by the High Court in *Waitakere City Council v Hickman*<sup>8</sup> with the judgment addressing the issue of the types of activities carried out in conjunction with the use of the pool, including those that may be carried out independently of the use of the pool such as barbecues and entertaining.

<sup>&</sup>lt;sup>6</sup> Acceptable Solution F4/AS1 3<sup>rd</sup> edition, amendment 1. Effective from 21 June 2007 to 30 May 2017

<sup>&</sup>lt;sup>7</sup> Acceptable Solution F9/AS1 Residential pool barriers (First edition, effective from 27 April 2017).

<sup>&</sup>lt;sup>8</sup> Randerson J, HC Auckland CIV 2003-404-7266

- 4.2.24 A number of previous determinations have also considered the term immediate pool area in relation to the size of the area and the types of features included in immediate pool areas and activities carried out<sup>9</sup>.
- 4.2.25 In this case the area encompassed by the physical barrier to the pool includes a paved area adjacent to the pool and a covered timber deck adjacent to the house. Within the paved area the built features include a spa pool and a plastered barbeque, and there is a picnic table and chairs and the outdoor garden chess set.
- 4.2.26 The authority is of the view that the chess set should be removed from the immediate pool area, presumably as the authority considers it is an activity that does not have an association with the use of the pool and so the physical barrier to the pool no longer complies in respect of the immediate pool area.
- 4.2.27 I disagree with the authority's view. It is my opinion that, similar to barbecues and entertaining contemplated by the High Court, the use of the garden chess set is the type of entertainment activity that may be carried out within the immediate pool area either in conjunction with the use of the pool or independently of the use of the pool.

## 4.3 Conclusion

4.3.1 Taking into account the discussion above, I conclude that the ranchslider with the cat door installed and the kitchen bifold window do not comply with the Building Code that was in force at the time the physical barrier to the pool was constructed, and so the physical barrier does not now comply to the extent required by section 162C of the Act.

## 5. The decision

5.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the physical barrier to the pool does not comply to the extent required by section 162C of the Act in respect of the cat door in the ranchslider and the kitchen bifold window.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 21 June 2017.

John Gardiner Manager Determinations and Assurance

<sup>&</sup>lt;sup>9</sup> See for example determinations 2015/039 and 2015/053

## Appendix A: The legislation

A.1 The relevant sections of the Building Act 2004 discussed in this determination:

#### 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
  - (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).
- (3) In the case of a small heated pool, the means of restricting access referred to in subsection (1) need only restrict access to the pool when the pool is not in use.
- (4) The following persons must ensure compliance with this section:
  - (a) the owner of the pool:
  - (b) the pool operator:
  - (c) the owner of the land on which the pool is situated:
  - (d) the occupier of the property in or on which the pool is situated:
  - (e) if the pool is subject to a hire purchase agreement (as that term is defined in the Income Tax Act 2007), the purchaser of the pool:
  - (f) if the pool is on premises that are not subject to a tenancy under the Residential Tenancies Act 1986 but the pool is subject to a lease or is part of premises subject to a lease, the lessee of the pool or the premises.

#### **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) If a territorial authority decides not to accept a certificate of periodic inspection from an independently qualified pool inspector under subsection (2), the territorial authority must, within 7 working days of making that decision, give notice to the chief executive of the decision and the reasons for the decision.
- (4) If an independently qualified pool inspector inspects a pool for the purpose of this section and decides that the pool does not have barriers that comply with the requirements of section 162C (subject to any waiver or modification granted under section 67A or 188), the inspector must, within 3 working days of the date of inspection, give written notice to the relevant territorial authority of the decision, attaching any information that the chief executive requires to accompany the notice.

(5) In this section,—

anniversary date, in relation to a pool, means-

- (a) the date of issue of the code compliance certificate or the certificate of acceptance in respect of the pool; or
- (b) in the case of a pool that did not require a building consent,—

(i) the date on which notice was given under section 7 of the Fencing of Swimming Pools Act 1987; or

(ii) if subparagraph (i) does not apply, the date on which the existence of the pool came to the knowledge of the territorial authority

certificate of periodic inspection means a certificate that-

- (a) is issued by an independently qualified pool inspector; and
- (b) is in the prescribed form (if any); and
- (c) certifies that a pool has barriers that comply with the requirements of section 162C (subject to any waiver or modification granted under section 67A or 188).

#### 164 Issue of notice to fix

- (1) This section applies if a responsible authority considers on reasonable grounds that—
  - (a) a specified person is contravening or failing to comply with this Act or the regulations (for example, the requirement to obtain a building consent); ...
- (2) A responsible authority must issue to the specified person concerned a notice (a notice to fix) requiring the person—
  - (a) to remedy the contravention of, or to comply with, this Act or the regulations;

#### 450A Transitional and savings provision for residential pools

- (1) Fencing of a residential pool in accordance with clauses 1 to 10 of the Schedule of the Fencing of Swimming Pools Act 1987 (as that schedule was in force immediately before 1 January 2017) is an acceptable solution for establishing compliance with the building code for the purpose of section 162C.
- (2) Sections 22(2) and (3), 23, 24, and 25A apply to the acceptable solution in subsection (1) as if it had been issued by the chief executive under section 22(1) of this Act.
- (3) In this section and the Schedule of the Fencing of Swimming Pools Act 1987,-

*fence* includes any part of a building, and any gate or door, that forms part of a fence

*fencing* means any barrier or barriers used to enclose a pool (or an immediate pool area) so as to restrict or prevent access to the pool.

#### 450B Savings provision for existing residential pools

- (1) This section applies to a residential pool that was constructed, erected, or installed before 1 January 2017 (an existing pool).
- (2) An existing pool is deemed to have barriers that comply with section 162C if the barriers—
  - (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.

- (3) Alternatively, an existing pool is deemed to comply with section 162C if all of the following apply:
  - (a) the outside surface of the side walls of the pool is constructed so as to inhibit climbing; and
  - (b) no part of the top of any side wall of the pool is less than 1.2 m above-

(i) the adjacent ground level; and

(ii) any permanent projection from the ground outside of the pool and within 1.2 m of the walls of the pool; and

(iii) any object standing on the ground outside of the pool and within 1.2 m of the walls of the pool; and

(c) any ladder or other means of access to the interior of the swimming pool-

(i) can be readily removed or made inoperable; and

(ii) is removed or made inoperable whenever the pool is not intended to be in use.

Sections 162C, 162D, 450A and 450B were inserted, on 1 January 2017, by section 17 of the Building (Pools) Amendment Act 2016 (2016 No 71).

A.2 The Fencing of Swimming Pools Act 1987 (repealed on 1 January 2017):

#### 2 Interpretation

In this Act, unless the context otherwise requires,-

fence-

- (a) means a fence that complies with the requirements of the building code in force under the Building Act 2004 in respect of swimming pools subject to this Act; and
- (b) includes any part of a building and any gates or doors that form part of the fence
- gates or doors does not include any door to which clause 11 of the Schedule applies
- *immediate pool area* means the land in or on which the pool is situated and so much of the surrounding area as is used for activities or purposes carried on in conjunction with the use of the pool

# 13B Fencing in accordance with Schedule must be treated as means of compliance

Any provision that is made for the fencing of swimming pools that is in accordance with the Schedule must, in respect of—

- (a) matters subject to the Building Act 2004, be treated as an acceptable solution or a verification method establishing compliance with the building code for the purposes of section 19 of that Act, and the requirements of this Act:
- (b) building and premises not subject to the Building Act 2004, be treated as a reasonable and adequate provision for the purposes of this Act.

#### Schedule

#### Means of compliance for fences under this Act

#### Height

- 1(1) The fence shall extend—
  - (a) at least 1.2 metres above the ground on the outside of the fence; and
  - (b) at least 1.2 metres above any permanent projection from or object permanently placed on the ground outside and within 1.2 metres of the fence.
- (2) Notwithstanding subclause (1), where the fence is constructed of perforated material, netting, or mesh and any opening in the material, netting, or mesh has a dimension (other than the circumference or perimeter) greater than 10 mm, the fence shall extend at least 1.8 metres above the ground or the projection or object.

#### Ground clearance

2 Any clearance between the bottom of the fence and ground level shall not exceed 100 mm.

#### Materials

- 3 All materials and components shall be of a durable nature and shall be erected so as to inhibit any child under the age of 6 years from climbing over or crawling under the fence from the outside.
- 4 Except where the fence is horizontally close-boarded or is made of perforated material, netting, or mesh, the spacing between adjacent vertical pales, panels, or other posts shall not exceed 100 mm at any point.
- 5 All fencing supports, rails, rods, and wires, that are not vertical, and all bracing that is not vertical, shall be inaccessible for use for climbing from the outside.
- 5A Notwithstanding clause 5, a fence may have horizontal supports, rails, rods, or wires, that are accessible for use for climbing from the outside, and horizontal bracing that is accessible for such use, if—
  - (a) the distance between any 2 of them at any point is at least 900 mm; and
  - (b) there is no other support, rail, rod, wire, or bracing (other than a vertical rail) between the same 2 at any point.
- 6 Where any perforated material, netting, or mesh is used, no opening in that material, netting, or mesh shall have any dimension (other than the circumference or perimeter) greater than 50 mm.
- 7 All perforated material, netting, or mesh material shall be firmly attached at both top and bottom to a rail, pipe, or similar firm structure, or otherwise be of such a nature that the fence cannot readily be crossed by children under the age of 6 years.

#### Gates and doors

- 8 Every gate or door shall be so constructed as to comply with the relevant requirements of clauses 1 to 7, and shall be so mounted that—
  - (a) it cannot open inwards towards the immediate pool area:
  - (b) it is clear of any obstruction that could hold the gate or door open and no other means of holding the gate or door open is provided:
  - (c) when lifted up or pulled down the gate or door does not release the latching device, come off its hinges, or provide a ground clearance greater than 100 mm.

#### Operation of gates and doors

- 9(1) Every gate or door shall be fitted with a latching device.
- (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.
- (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.
- 10 Every gate or door shall be fitted with a device that will automatically return the gate or door to the closed position and operate the latching device when the gate or door is stationary and 150 mm from the closed and secured position.

#### Doors in walls of buildings

- 11 Where any building forms part of a fence and the pool is not contained within the building, any door that gives access to the immediate pool area need not comply with the requirements for gates or doors set out in clauses 8 to 10 to the extent (if any) that the territorial authority is satisfied that such compliance is impossible, unreasonable, or in breach of any other Act, regulation, or bylaw, and the door is fitted with a locking device that, when properly operated, prevents the door from being readily opened by children under the age of 6 years.
- A.3 The relevant clauses of the Building Code in force at the time building consent no. 2011/26049 was issued:

#### Clause F4 – Safety from falling

F4.3.4 Barriers shall:

. . .

(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. ...

#### Limits on application

Performance F4.3.4(f) shall not apply to any pool exempted under section 5 of the Fencing of Swimming Pools Act 1987.

F4.3.5 Barriers to swimming pools shall have in addition to performance F4.3.4:

(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, but excluding sliding and sliding-folding doors that give access to the immediate pool surround from a building that forms part of the barrier, and

(b) no permanent objects on the outside of the barrier that could provide a climbing step.

A.4 The relevant paragraph of the Acceptable Solution current at the time the pool and associated barrier were constructed:

1.2.1 Barriers located in any part of a building likely to be frequented by children under the age of 6 years shall have:

b) No openings which will permit the passage of a sphere greater than given by Table 2, ...

Table 2: Acceptable Opening Sizes for Barriers (Note 1)   Paragraphs 1.2.1 a), 4.0.2 b) c)		
Age group	Examples of application (Note 2)	Maximum sphere diameter (mm)
Children under 4	Housing, early childhood centres, shopping malls, health care facilities	100
Children of 4 and 5	Cinemas, motels, halls, churches, bridges with pedestrian access	130
Note:		

1. Opening size restrictions are chosen on the basis of child head and chest dimensional statistics.

2. Because the barrier opening size is determined by the age and likely presence of children, and not by the classified use of the *building*, it is reasonable to expect different parts of a *building* to have different requirements. For example, in a public hall children may be expected in a public gallery, but not in a gallery reserved for lighting equipment or musicians. In shopping malls children are expected in public areas, but not in areas for the preparation of food or the unloading and reception of stock.