

Determination 2008/9

Determination about the code compliance of a barrier that has been built in accordance with a building consent, at Hutt Valley High School, Woburn Road, Lower Hutt

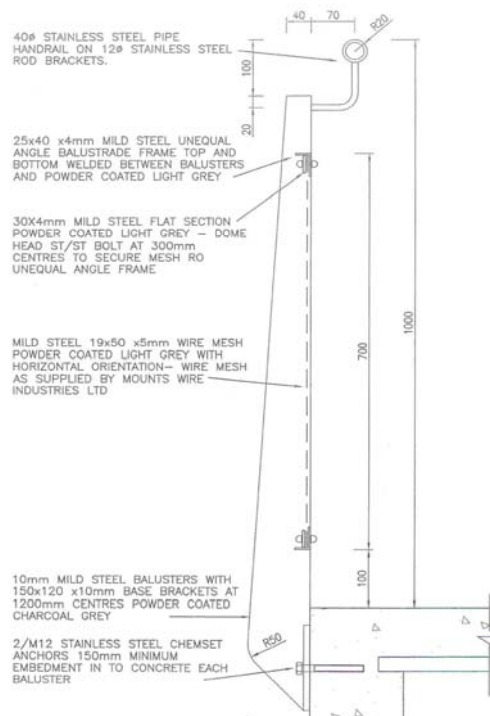


Figure 1: Section through the barrier

1. The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ (“the Act”) made under due authorisation by me, John Gardiner, Manager Determinations, Department of Building and Housing (“the Department”), for and on behalf of the Chief Executive of that Department. The applicant is the Hutt City Council (“the

¹ The Building Act 2004 is available from the Department’s website at www.dbh.govt.nz.

territorial authority”) and the other party is the owner of the building at Hutt Valley High School (“the school”) acting through a firm of consultants (“the consultants”).

- 1.2 This determination arises from the decision of the territorial authority to issue a notice to fix because it was not satisfied that certain barriers to stairs and landings comply with Clause F4 “Safety from falling” in the Building Code² (First Schedule, Building Regulations 1992).
- 1.3 The matter to be determined is whether the as-built barriers comply with Building Code Clause F4 “Safety from falling”.
- 1.4 In this determination, unless otherwise stated, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.

2. The barriers

- 2.1 The barriers have been installed to internal and external stairs and landings to a new arts and classroom block (“the building”) at the school. The barrier to the landing is shown in Figure 1.
- 2.2 The barriers are constructed of mild steel balusters supporting tubular stainless-steel handrails. The spaces between the balusters are in-filled with a mild steel wire mesh. The height from the floor to the top surface of the handrail is 1000mm. On the landings the in-fill mesh extends down to a line 100mm above the floor. On the stairs the in-fill mesh extends to a line sloped to match the pitch of the stairs and sufficiently close to the treads and risers to prevent the passage of a 150mm diameter sphere. There are no toeholds to the barriers less than 800 mm above either the landing or the stair treads.

3. Background

- 3.1 The territorial authority issued a building consent No. 060938 (which I have not seen) in August 2006 for the construction of the building.
- 3.2 The building was completed and the barrier was built in accordance with the consented plans. A final inspection carried out in May 2007. The final inspection said the work was complete with the exception of the external and internal barriers which the inspection report said did not comply with Building Code Clause F4.
- 3.3 The territorial authority issued a notice to fix dated 7 June 2007. Under the ‘Particulars of contravention or non-compliance’ the notice says:

External and internal [barriers] do not comply with NZBC F4 Safety from falling – Being the opening at the top of the balustrade is greater than 100mm as required by Table 2.

² The Building Code is available from the Department’s website at www.dbh.govt.nz.

(There is no Table 2 in the Building Code Clause F4 Safety from falling. I conclude that the territorial authority's reference was to Table 2 in the Acceptable Solution, F4/AS1.)

- 3.4 On 12 October 2007 the Department received an undated and unsigned application for determination.

4. The legislation

- 4.1 Relevant provisions of the Building Code include:

Clause F4–SAFETY FROM FALLING	
Provision	limitations on application
F4.3.4 Barriers shall: (g) Restrict the passage of children under 6 years of age when provided to guard a change of level in areas likely to be frequented by them.	Nil

- 4.2 The version of Acceptable Solution F4/AS1 that was in effect at the time the building consent was approved includes (a revision to F4/AS1 came into effect from 24 September 2007):

Clause 1.2 Barrier construction

Clause 1.2.1 Buildings frequented by young children

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, and
- b) No toe-holds between the heights of 150 mm and 760 mm above floor level (or stair nosing), except that perforated sheet, mesh, or trellis rigidly fixed over the full barrier height is acceptable provided that openings have a maximum dimension (other than perimeter) of 50 mm.

Table 2: Acceptable Opening Sizes for Barriers

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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 <i>building</i> , it is reasonable to expect different parts of a <i>building</i> 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.		

5. The submissions

- 5.1 In a covering letter dated 11 December 2006, but received on 12 October 2007, the territorial authority referred to “a [barrier] matter at issue between ourselves and [the consultants]. The territorial authority did not explain how barriers, that had been approved and built in accordance with the consented plans, had become the subject of a notice to fix.
- 5.2 The territorial authority forwarded copies of:
- correspondence between the territorial authority and the consultants
 - photographs of the building work.
- 5.3 On 10 December 2007 a draft determination was issued to the parties for comment and to seek further submissions. In particular submissions were sought regarding the likelihood that the building was frequented by children under six years of age.
- 5.4 On a letter received on 14 January 2008, the consultants made a submission, in the form of a letter and attachments, as to why they considered the building was unlikely to be frequented by children under six years of age.
- 5.5 No response to the draft was received from the territorial authority.

6. Discussion

- 6.1 It appears the building consent was issued by the territorial authority in the belief that children under six years of age were unlikely to frequent the building, but this was no longer considered to be the case when the code compliance certificate was sought.
- 6.2 Under section 94(1)(a) of the Act, if a territorial authority is satisfied on reasonable grounds that building work complies with the building consent, it must issue a code compliance certificate, unless certain other conditions which do not apply in this case, are not met. A territorial authority therefore is required to assess whether the work as described in the building consent application will comply with the building code.
- 6.3 The dispute concerns whether the building is likely to be frequented by children under six years of age, and if it is, whether the height of the toeholds and size of openings in the barriers are code compliant. The overall height of the barriers is not in dispute.
- 6.4 If children under six years of age are likely to frequent the building, Clause 1.2.1(b) of Acceptable Solution F4/AS1 does not allow any toeholds between “150 mm and 760 mm above floor level”, and Table 2 of Acceptable Solution F4/AS1 does not allow any openings larger than 130mm for children between the ages of 4 and 5, and openings no larger than 100mm for children under 4 years of age.

6.5 The barrier as approved in the building consent, and as built, has

- a toehold 800mm above floor level
- openings in the barrier greater than 100 and 130mm.

6.6 In a letter to the territorial authority, dated 17 May 2007, the consultants said:

The high school campus is not a community facility and was therefore not considered as a site frequented by persons under the age of 6.

The barrier provides no footholds up to 800mm high, nor openings between the bottom rail and the stair, which would allow a 150mm sphere through. The handrail stands forward from the balustrade on brackets off the balusters.

6.7 The territorial authority made no submission as to why it considered that the barriers no longer complied with the Building Code or the Acceptable Solution.

6.8 A submission from the consultants, received on the 14 January 2008, provided information about the physical nature of the school's grounds, and buildings, and their after-hours use. The consultant supplied relevant extracts from the school prospectus about its facilities and the programmes offered at the school. The consultants said:

The [school] campus is a secondary school located on the fringes of the commercial business district of Hutt City within a predominantly residential zone. It is fronted to the north by [a road] and to the south by playing fields and beyond to [a river]. To the east and west are residential properties which are all separated from the school grounds by generally 1.8m high fences.

[The school] currently does not provide any crèche or day care facilities for children under secondary school age, nor does it operate Community Education classes or allow outside interest groups to use its facilities to which families might attend.

The grounds are closed to the public out of hours with access ways secured with bollards and chains to restrict vehicle entry.

The campus does not include any outdoor play facilities which would encourage persons under 6 years of age to enter the grounds to play.

While the private boundaries are generally fenced, the public boundaries are generally not fenced.

6.9 I accept the consultants submission and I am therefore of the view that the building is unlikely to be frequented by children under six years of age. I conclude that the barrier as consented, and as constructed, complies with the Building Code Clause F4 "Safety from falling", and the Acceptable Solution F4/AS1.

7 The Decision

- 7.1 In accordance with section 188 of the Act, I determine that the territorial authority is to reverse its decision to issue the notice to fix dated 7 June 2007.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 8 February 2008.

John Gardiner
Manager Determinations