Diagonal wire balustrade to a common stair in a multi-unit dwelling

1 THE MATTER TO BE DETERMINED

- 1.1 The matter before the Authority is a dispute about whether a diagonal wire balustrade to a common stair in a multi-unit dwelling is required to restrict the passage of children, and if so, whether it will do so.
- 1.2 The Authority takes the view that it is being asked to determine whether the stair concerned complies with clause F4 "Safety from falling" of the building code (the First Schedule to the Building Regulations 1992).
- 1.3 In making its determination the Authority has not considered any other aspects of the Building Act 1991 or of the building code.

2 THE PARTIES

- 2.1 The applicant was the owner of the building acting through a firm of architects. The other party was the territorial authority.
- 2.2 Both parties wished to speak and call evidence at a formal hearing by the Authority. Accordingly, they were sent a draft of this determination and each of them accepted it without the need for a hearing.

3 BACKGROUND AND SUBMISSIONS

- 3.1 The building is an existing three-storey apartment undergoing alterations to provide an additional storey. There is a single apartment on each floor. The upper apartments are served by a lift. The common stair is the exit route for those apartments. There are emergency exit doors into the stair from the three upper apartments, and into the street from the bottom of the stairs. Those doors are locked against entry in the other direction, so that there is no access to the stair for members of the public.
- 3.2 The stair has a stainless steel handrail with a balustrade of stainless steel wires parallel to the pitch line and at a spacing of 85 mm. The applicant described the wires as "thin" but did not state the exact diameter. The wires are attached to and run between vertical steel posts at the ends of each flight. The opening between adjacent posts is less than 100 mm. The wires also pass through vertical steel plate balusters at mid-flight.

3.3 The dispute was as to whether the balustrade was required to restrict the passage of children, and if so, whether it would do so. There was no dispute about the height of the handrail, the size of the gaps between wires, or the structural strength of the balustrade.

4 CLAUSE F4 OF THE BUILDING CODE

- 4.1 The relevant provisions of clause F4 of the building code are:
 - **F4.3.1** Where people could fall 1 metre or more from an opening in the external envelope or floor of a building, or from a sudden change of level within or associated with a building, a barrier shall be provided.

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.

5 THE SUBMISSIONS

- 5.1 The applicant submitted that the stair would not be frequented by children, saying:
 - ... this is not comparable to a situation inside a house, where unsupervised children can wander at will. Nor is it a public area, where many users frequent the space. It is in a private dwelling and it is not in a readily accessible area. . . .
- 5.2 The applicant also submitted that the balustrade would restrict the passage of children. Because the Authority takes the view that the stair is not an area likely to be frequented by children under 6 years of age, see 6 below, there is no need to discuss that submission.
- 5.3 The territorial authority submitted that the stair was an area likely to be frequented by children because:
 - (a) The stair is accessible to children "by definition" because it is an egress route;
 - (b) "Residents including children are likely to use the stairs for access frequently";
 - (c) "We can imagine scenarios such as mother stops on stairs to chat with neighbour in passing and bored toddler plays on balustrades while mother is distracted";
 - (d) "Balustrade likely to be inviting for children to play on".
- 5.4 The territorial authority also submitted that the balustrade would not restrict the passage of children, but again there is no need to discuss that submission.

6 DISCUSSION

6.1 What is the meaning of "likely to be frequented"?

- 6.1.1 The first question to be asked is whether the stair is "likely to be frequented by" children under 6 years of age.
- 6.1.2 The word "likely" was considered in *Auckland CC v Weldon Properties*¹, in which the District Court held that in the context of section 64 of the Building Act:

"likely" does not mean "probable", as that puts the test too high. On the other hand, a mere possibility is not enough. What is required is "a reasonable consequence or [something which] could well happen".

- 6.1.3 The Authority takes the view that the same meaning is to be given to the word "likely" in clause F4.3.4(g) of the building code.
- 6.1.4 The word "frequent" is not defined in the Building Act or the building code, and as far as the Authority is aware has not been interpreted by the Courts in the context of clause F4. However, the relevant definition in the *Concise Oxford Dictionary* is "v.tr. attend or go to habitually".
- 6.1.5 The Authority accordingly takes the view that for a location to be "likely to be frequented by" children under 6 years of age it could well be that such children will be there habitually. It is not enough that they could well be in the location from time to time. If a location is frequented by children then anyone visiting that location at an appropriate time could well expect children to be present on many if not most occasions.
- 6.1.6 The Authority therefore considers that the territorial authority applied the wrong tests when it referred to the stairs being "accessible" to children. It applied the right test when it referred to the stairs as being a location that "children are likely to use . . . frequently", but for the reasons set out below the Authority does not agree that children are likely to frequent the stairs.

6.2 Are the stairs likely to be frequented by children?

- 6.2.1 In general, children are likely to frequent any household unit at some time in its life. That is why the acceptable solution F4/AS1 requires safety barriers that will restrict the passage of children in any building having the classified use "Housing".
- 6.2.2 However, although the building concerned comes within that classified use, the stairs are not in a household unit, and the acceptable solution is not the only way of complying with the building code.
- 6.2.3 In fact, the stair serves only three apartments (household units), which are also served by a lift.

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¹ Auckland CC v Weldon Properties Ltd 8/8/96, Judge Boshier, DC Auckland NP2627/95.

- 6.2.4 The Authority does not accept that children are likely to use the stair frequently, considering that residents are far more likely to use the lift than the stair, especially when accompanied by children. The territorial authority's scenario of neighbours stopping to chat on the stairs seems unrealistic as anything more than an occasional possibility when the lift is out of action.
- 6.2.5 Furthermore, the stair is accessible from the three upper apartments only through security doors. Obviously, children under 6 will be able to open those doors to get from the apartments to the stair and from the stair to the street. Nevertheless, it can be assumed that residents will discourage their children from playing on stairs from which the only unlocked way out is on to the street. That is not to say that children will not use the stair, but in the Authority's view it does mean that they will not frequent it.

6.3 Conclusion

- 6.3.1 For the reasons set out above, the Authority considers that the stair is not a location likely to be frequented by children under 6.
- 6.3.2 Accordingly, the balustrade is not required to comply with clause F4.3.4(g) of the building code. The Authority offers no opinion as to whether or not the balustrade does in fact comply with that clause.
- 6.3.3 As indicated in 1.3 above, the Authority has not considered the other relevant provisions of the building code. However, the Authority observes that structures incorporating tensioned wires raise issues of structural strength and durability in regard to maintaining wire tension that will need to be resolved by the parties, see Determination 2001/2.

7 THE AUTHORITY'S DECISION

7.1 In accordance with section 20 of the Building Act, the Authority hereby reverses the decision of the territorial authority to refuse building consent, and determines that the stair concerned does comply with clause F4 "Safety from falling" of the building code.

Signed for and on behalf of the Building Industry Authority on this 28th day of August 2001

W A Porteous Chief Executive