

# ***Fire safety precautions in a house for people with intellectual disabilities***

## **1 THE MATTER TO BE DETERMINED**

- 1.1 The matter before the Authority is the refusal of a territorial authority to issue a building consent for proposed alterations to a house intended as a residence for people with intellectual disabilities. The point at issue is the fire safety precautions, specifically the fire alarm system, contributing to the means of escape from fire. The parties agreed that they wished the Authority to determine whether the proposed fire safety precautions complied completely with the building code.
- 1.2 The Authority takes the view that it is being asked in effect to determine whether, after the proposed alterations, the house will comply with the relevant provisions of clauses C2 and F7 of the building code (the First Schedule to the Building Regulations 1992).
- 1.3 In making its determination the Authority has not considered compliance with any other provisions of the building code or of the Building Act.

## **2 THE PARTIES**

- 2.1 The applicant was the owner, IHC New Zealand Incorporated (“IHC”), which owns and operates many homes for people with intellectual disabilities. The other party was the territorial authority.

## **3 BACKGROUND**

### **3.1 General**

- 3.1.1 The building concerned is a six bedroom detached house being altered for use as a residence for five principal users, being people with intellectual but not mobility disabilities, and a caregiver sleeping in the house and present between 10 pm and 7 am. In correspondence with the territorial authority, IHC described the principal users as follows:

. . . all residents are mobile and understand the risk of fire. They leave the building appropriately when the alarm is sounded.

- 3.1.2 The proposed alterations include the installation of a self-monitored manual fire alarm system, incorporating smoke detectors in each bedroom and the hall plus heat detectors in the kitchen, the laundry, and the combined living and dining room. The alarm system incorporates a defect-warning system but has no means of communication with the Fire Service. In terms of the Fire Safety Annex to Approved Document C4 the proposal is for an alternative solution comprising a Type 2e system with supplementary smoke detectors and heat detectors.

### **3.3 The sequence of events**

- 3.3.1 The applicant originally applied to the territorial authority for a building consent on the basis that the proposed fire safety precautions complied with the requirements for purpose group SA set out in Table B1 of the Fire Safety Annex to Approved Document C4. The Table B1 requirement is for a type 2e fire alarm system, and the proposal included additional detectors not required by Table B1. The territorial authority took the view that it was bound by the Authority's Determination 98/002 to treat the building as coming within purpose group SC and that Table B1 therefore required a type 4 fire alarm system (automatic fire alarm system with smoke detectors and manual call points).
- 3.3.2 The applicant's original application for this determination in effect asked the Authority to determine whether the building came within purpose group SA or SC for the purpose of complying with Table B1. However, that application was amended so that in effect it asked the Authority to determine "that the plans and specifications submitted in the building consent application constitute an alternative solution complying with the provisions of the building code for means of escape from fire".

## **4 THE BUILDING CODE, TABLE B1, AND DETERMINATION 98/002**

- 4.1 The relevant provisions of the building code are:

**C2.3.1** The number of open paths available to each person escaping to an exitway or final exit shall be appropriate to:

- (a) The travel distance,
- (b) The number of occupants,
- (c) The fire hazard, and
- (d) The fire safety systems installed in the firecell.

**C2.3.2** The number of exitways or final exits available to each person shall be appropriate to:

- (a) The open path travel distance,
- (b) The building height,
- (c) The number of occupants,
- (d) The fire hazard, and
- (e) The fire safety systems installed in the building.

**C2.3.3** Escape routes shall be:

- (a) Of adequate size for the number of occupants,
- (b) Free of obstruction in the direction of escape,
- (c) Of length appropriate to the mobility of the people using them . . .

**F7.3** A warning system shall consist of a combined fire detection and warning system that will alert people in adequate time for them to reach a safe place.

- 4.2 For the purposes of this determination, the Authority considers that the word “mobility” in clause C2.3.3(b) relates to the ability of the people using the escape routes to evacuate unassisted within the time available.
- 4.3 Compliance with Table B1 and the other relevant requirements of the Approved Documents is to be accepted as establishing compliance with the corresponding provisions of the building code, but it is not the only means of establishing such compliance. The relevant requirements of Table B1 is for a building in purpose group SA to have a type 2e fire alarm system and for a building in purpose group SC is to have a type 4 fire alarm system (automatic fire alarm system with smoke detectors and manual call points). Those purpose groups are defined as:

SC	Spaces in which principal users because of age, mental or physical limitations require special care or treatment.	Hospitals, care institutions for the aged, children, people with disabilities.
SA	Spaces providing transient accommodation, or where limited assistance or care is provided for principal users.	Motels, hotels, hostels, boarding houses, clubs, (residential), boarding schools, dormitories, community care institutions.
SH	Detached dwellings where people live as a single household or family.	Dwellings, houses, being household units, or suites in purpose group SA, separated from each other by distance. Detached dwellings may include attached self-contained suites such as granny flats when occupied by a member of the same family, and garages whether detached or part of the same building and are primarily for storage of the occupants’ vehicles, tools and garden implements.

## 5 THE SUBMISSIONS

- 5.1 Neither the applicant nor the territorial authority made specific submissions in addition to the file documents relating to the territorial authority’s consideration of IHC’s application for building consent, which included all relevant details and identified the points in issue.
- 5.2 In the course of the determination, at the Authority’s request, IHC explained how it used a classification system as to the ability of people with intellectual disabilities in and a corresponding level of fire precautions considered appropriate for the classification concerned. That system is not discussed further for the reasons set out in 6.1.4 below.

## **6 DISCUSSION**

### **6.1 General**

- 6.1.1 The Authority emphasises that one of the important reforms introduced by the Building Act was the opportunities for innovation created by the change to the performance-based building code specifying what a building is to achieve instead of the previous prescriptive regulations specifying detailed design and construction requirements. Unfortunately, in this case both parties treated an acceptable solution as if it were a prescriptive regulation.
- 6.1.2 IHC had originally applied for the building consent on the basis that the house was a purpose group SH building but complied with the more demanding requirements for purpose group SA. The territorial authority refused building consent because, as was mentioned in Determination 98/002, houses such as the one concerned come squarely within the words defining purpose group SC in that the principle users are “people with disabilities” and “require special care or treatment” (otherwise they would not be living in the building). The words which define purpose group SC do not allow for any consideration of types of disability or of degree or extent of disability.
- 6.1.3 A territorial authority cannot properly refuse building consent simply because the proposed building work does not comply with the acceptable solution. The question is whether it complies with the building code. In other words, whether the proposal can be accepted as an alternative solution.
- 6.1.4 Because each building must be considered on its merits, the Authority considered that it need not consider the classification system which IHC uses as part of its internal decision-making. Whether that system is seen as guidelines or rules, it is not binding on anyone other than IHC and the Authority cannot and will not attempt to determine whether the system is to be accepted as an alternative solution. The Authority’s determination is limited to whether the particular building work concerned complies with the building code.
- 6.1.5 When considering any proposed building work as an alternative solution, the acceptable solution may be used as a guideline or benchmark for evaluating the alternative solution (see Determination 99/002). The Authority considers that an acceptable solution must necessarily cover the worst case which can come within its scope. Other cases may be such as to justify an alternative solution less restrictive than the acceptable solution.

### **6.2 The proposed fire safety precautions**

- 6.2.1 Considering the proposed fire safety precautions and using Table B1 as a guideline or benchmark, the Authority notes that the definition of purpose group SC, and particularly the words “care institutions for . . . people with disabilities” covers a wide range of buildings. The fire safety precautions required by Table B1 must be appropriate for the worst case. The Authority will not attempt to define the worst case that can come within those words, but it is not a house whose principal users are mobile and understand the risk of fire.

- 6.2.2 As this is not the worst case of a purpose group SC building, the fact that the proposed fire alarm is not equivalent to the type 4 system required by Table B1 does not prevent that alarm from being appropriate for this particular building.
- 6.2.3 In fact, this building can be seen as similar not so much to a purpose group SC hospital as to a purpose group SA boarding school or a hostel, which are buildings for which a type 2e fire alarm system is specified in Table B1.
- 6.2.4 On that basis, the proposed system, effectively an enhanced type 2e system, can be seen as being appropriate for the building concerned.

## **7 CONCLUSIONS**

- 7.1 The fact that the principle users are mobile and understand the risk of fire means that the proposed fire alarm system is suitable as an alternative solution which complies with the relevant requirements of clauses C2 and F7 for this particular house.
- 7.2 Because the mobility of the principal users is critical to the suitability of the fire alarm system, it is necessary to include that in the description of the intended use of the building which will appear first on the building consent and subsequently on the code compliance certificate, the compliance schedule, and each annual building warrant of fitness. Any change in the mobility of the principal users will amount to a change of use for the purposes of section 46, and the fire safety precautions may well have to be upgraded.

## **8 THE AUTHORITY'S DECISION**

- 8.1 In accordance with section 20(a) of the Building Act the Authority hereby determines that:
- (a) A building consent is to be issued for the proposed alteration of the house; and
  - (b) That building consent and subsequent documents issued under the Building Act shall record that the intended use of the house is as:

Residence for no more than 5 IHC clients who are mobile and understand the risk of fire plus one caregiver sleeping in the house and present between 10 pm and 7 am.

Signed for and on behalf of the Building Industry Authority on this 23<sup>rd</sup> day of August 1999

W A Porteous  
Chief Executive