# Installation of a small lift in an airport terminal building

# **1 THE MATTER TO BE DETERMINED**

- 1.1 The matter before the Authority is a dispute as to the installation, in the alteration of a building, of a proposed lift having dimensions smaller than the minimum specified in the relevant acceptable solution.
- 1.2 The Authority takes the view that it is being asked to determine:
  - (a) The extent to which the proposed lift is required to comply with the building code.
  - (b) If it is required to comply completely, whether it does so.
  - (c) If it is required to comply as nearly as is reasonably practicable, whether it does so.
- 1.3 In making its determination the Authority has not considered any other aspects of the Building Act 1991 or of the building code (the First Schedule to the Building Regulations 1992).

# 2 THE PARTIES

2.1 The applicant was the owner, acting through a project manager. The only other party was the territorial authority.

#### **3 BACKGROUND**

- 3.1 The lift is proposed to be installed as part of a major extension of an airport terminal building, which will approximately double the size of the building. There is no dispute that the building is one to which section 47A of the Building Act applies. There is no dispute that the extension is an alteration for the purposes of that section and of section 38.
- 3.2 The existing terminal building is on ground level except for a 290 m<sup>2</sup> upper floor containing management offices used by 10 or so people at a time. The extension will similarly be on ground level except for a 250 m<sup>2</sup> upper floor containing two "club lounges" and associated facilities for use by passengers who are members of an airline club, giving a design occupancy of 100 or so.
- 3.3 The proposed lift is intended to provide access for wheelchair users to the club lounges. Its internal dimensions are 1400 mm deep and 1100 mm wide. The current acceptable solution

for access and facilities for use by people with disabilities, NZS 4121 specifies minimum internal dimensions of 1400 mm deep and 1400 mm wide. (The current acceptable solution for non-domestic passenger and goods lifts, NZS 4332, specifies the same dimensions for lifts on access routes for people with disabilities.)

#### 4 THE LEGISLATION AND NZS 4121

- 4.1 The relevant provisions of the Building Act are:
  - (a) Section 7(1):

(1) All building work shall comply with the building code to the extent required by this Act, whether or not a building consent is required in respect of that building work.

(b) Section 38:

No building consent shall be granted for the alteration of an existing building unless the territorial authority is satisfied that after the alteration the building will—

- (a) Comply with the provisions of the building code for . . . access and facilities for use by people with disabilities (where this is a requirement in terms of section 47A of this Act), as nearly as is reasonably practicable, to the same extent as if it were a new building
- (c) Sections 47A(1) to (4):

(1) In any case where provision is being made for the construction or alteration of any building to which the public are to be admitted, whether on payment or otherwise, reasonable and adequate provision . . . shall be made for persons with disabilities who may be expected to visit or work in that building and carry out normal activities and processes in that building.

(2) Notwithstanding the provisions of subsection (1) of this section, in respect of the alteration of any existing building or premises, the Building Industry Authority may at any time by determination under Part III of this Act provide for a waiver or modification from all or any of the requirements of this section if, having regard to all the circumstances, the Building Industry Authority determines that it is reasonable to grant the waiver or modification.

(3) Any provision that is made to meet the requirements of disabled persons in accordance with New Zealand Standard Specification No 4121 . . . shall . . . be deemed to be one of the documents establishing compliance with the building code for the purposes of section 49 of this Act.

(4) The provisions of this section shall apply to, but shall not be limited to, buildings . . . that are intended to be used for or associated with one or more of the following purposes:

(a) Land, sea, and air passenger transport terminals and facilities and interchanges, whether wholly on land or otherwise:

(d) Section 49(1) and (2):

(1) The Authority may prepare or may approve, in whole or in part and subject to any modification it considers necessary or desirable, any document for use in establishing compliance with the provisions of the building code.

(2) Any document, prepared or approved by the Authority under subsection (1) of this section shall be accepted for the purposes of this Act as establishing compliance with those provisions of the building code to which it relates, but it shall not be the only means of establishing such compliance.

- 4.2 The relevant provisions of the building code are:
  - (a) Clause D1.3.2:

At least one access route shall have features to enable people with disabilities to:

- (b) Have access to the internal space served by the principal access, and
- (c) Have access to and within those spaces where they may be expected to work or visit
- (b) Clause D1.3.4:

An accessible route, in addition to the requirement of Clause D1.3.3, shall:

- (c) Include a lift complying with Clause D2... where:
  - (iii) buildings are two storeys high and have a total design occupancy of 40 or more persons on the upper floor, or
  - (iv) an upper floor, irrespective of design occupancy, is to be used for the purposes of public reception areas of banks, central, regional and local government offices and facilities, hospitals, medical and dental surgeries, and medical, paramedical and other primary health care centres,

#### 4.3 The relevant provisions of NZS 4121 are:

(a) Clause 209.2.1:

Lifts serving an access route shall have a minimum interior clear space of 1400 mm by 1400 mm

(b) Clause 304.1:

Lifts complying with section 209 shall be installed provided that in the case of a two-storey building where the gross floor area of the upper floor is less than 400 m<sup>2</sup>... a lift need not be provided [subject to certain conditions which are satisfied in this case].

- (c) Schedule A, Passenger Transport Terminals:
  - 1 General

All parts of a terminal to which the public have access shall be served by access routes. This access provision shall apply above and below ground level, and shall include access to such facilities as restaurants, bars, cafes, canteens, shops, banks, and post offices.

#### 2 Accessible facilities

The following accessible facilities shall also be provided in accordance with this Standard:

(b) Lifts if the terminal comprises more than one level

# 5 THE SUBMISSIONS

- 5.1 The owner submitted:
  - (a) "The primary reason for wishing to use an alternative size lift car is that the lift will receive minimal use due to the facilities on the upper floor and the position of the staircase to the upper floor. The lift is in our opinion 'fit for the purpose' for this application."
  - (b) "The area being served by the lift is a restricted area to which general public are excluded, . . . one must be a [club] member to enter."
  - (c) "We consider that the proposed lift would only be used by wheelchair users and not the ambulant disabled because of the location and width of the stairs and the operating speed of the lift."
  - (d) There are "direct capital cost savings in excess of \$10,000".
  - (e) The extension is an alteration so that section 38 does not require full compliance with the provisions of the building code for access and facilities for use by people with disabilities but only compliance "as nearly as is reasonably practicable".
  - (f) The proposed lift dimensions comply with European requirements for access for people with disabilities as set out in ISO/DIS 4190-1 and also comply with the proposed requirement for lifts being installed in existing buildings set out in the current draft for the revision of NZS 4121.
  - (g) The lift complied with the acceptable solution in all respects other than its internal dimensions.
- 5.2 The territorial authority referred to the provisions of the legislation and submitted:
  - (a) "The reduced car size will compromise movement into within and out of the lift for people aided and unaided in a wheelchair. It would also be expected that luggage being part of the airport scene contributing to the already restricted area."
  - (b) "The lift is not constrained within the boundaries of an existing building and therefore there is no area restrictions or building constraints in terms of design features."

(c) "It is challenged that wheelchair users will only use the lift and that the general public is excluded from being [club] members. It is also appropriate that consideration should be given to future building development in this area."

# 6 **DISCUSSION**

#### 6.1 General

- 6.1.1 The Authority considers that the extension is new building work that is required to comply with the building code subject to any waivers or modifications granted by the territorial authority or the Authority. Section 34(7) prevents the territorial authority from granting any waiver or modification of the provisions of the building code for access and facilities for use by people with disabilities. Section 47A(2) authorises the Authority to grant such waivers or modifications, but only in respect of the alteration of an existing building.
- 6.1.2 The Authority emphasises that it considers the extension, including the lift, as new work as distinct from upgrading of an existing building. Section 38 requires that when an existing building is altered it is to be upgraded so that it complies with the provisions of the building code for access and facilities for use by people with disabilities "as nearly as is reasonably practicable". That test does not involve any waiver or modification of the building code, and a territorial authority therefore has the power to decide whether proposed upgrading does in fact comply as nearly as is reasonably practicable. (The same applies to upgrading required under section 46.) The Authority reads the reference to compliance "as nearly as is reasonably practicable" in section 38 to apply to compliance by the building as a whole after the alteration, not as exempting new work from the usual requirements for compliance with the building code.
- 6.1.3 For the reasons set out in Determination 95/008, the Authority takes the view that compliance with NZS 4121 is to be accepted as establishing compliance with the corresponding provisions of the building code.

# 6.2 Is a lift required for compliance with the building code?

- 6.2.1 The Authority does not accept the applicant's claim that the area to be served by the lift is "a restricted area to which general public are excluded". Membership of the clubs amounts to a right of admission to club lounges on payment. Thus the area concerned is one which people with disabilities may be expected to visit, see section 47A(1).
- 6.2.2 A lift is clearly required for compliance with clause D1.3.3(c)(iii) of the building code because the design occupancy of the new upper floor is well in excess of 40 persons.

- 6.2.3 However, whether a lift is required for compliance with clause 304.1 of NZS 4121 depends on whether:
  - (a) The new upper floor only is to be considered, in which case the gross floor area of the upper floor is less than  $400 \text{ m}^2$  and a lift is not required, or
  - (b) The new upper floor is to be considered as an addition to the existing upper floor, in which case the aggregate floor area exceeds  $400 \text{ m}^2$  and a lift is required.
- 6.2.4 The Authority takes the view that where a building has two or more upper floor areas separate from each over, then those areas are to be treated as a single floor unless it would be clearly unreasonable to do so. In this case, relevant considerations are:
  - (a) The areas are more than 80 m from each other and serve completely different purposes.
  - (b) The individual areas of 290 m<sup>2</sup> and 250 m<sup>2</sup> are each less than the 400 m<sup>2</sup> at which a lift is required by NZS 4121, but the aggregate upper floor area of 540 m<sup>2</sup> is greater.
  - (c) The Authority does not consider that the owner is attempting to evade the need for a lift by separating the floor areas concerned.
  - (d) A lift would be required under clause D1 of the building code in any case, and would be required under NZS 4121 if the areas concerned were treated as a single floor.

On balance, the Authority considers that the design occupancy for the new upper floor in conjunction with the new total upper floor area outweighs the other considerations so that it would be unreasonable not to treat the building as having an upper floor that exceeds 400  $m^2$ .

6.2.5 Thus the Authority concludes that the installation of a lift is necessary for compliance with the building code.

#### 6.3 Does the proposed lift comply with the building code?

- 6.3.1 The acceptable solution is not the only means of complying with the building code. However, the acceptable solution may be used as a benchmark or guideline when considering whether some other means is to be accepted as an alternative solution complying with the building code.
- 6.3.2 In Determination 99/001, about the installation of a lift in the alteration of a primary school, the Authority said:

... a lift which does not comply with NZS 4332 only because the car size is smaller can clearly be used as an alternative solution if the actual car size, and the associated landings, provides adequate activity space for a person in a wheelchair.

The Authority now considers that to have been worded too broadly. It is not to be taken as a general statement that a smaller car size may always be used when a lift is installed in the course of an alteration. Each case must be treated on its merits, and what is adequate for a school is not necessarily adequate for an airport.

- 6.3.3 The Authority makes the following general observations about acceptable solutions and alternative solutions:
  - (a) Some acceptable solutions cover the worst case so that in less extreme cases they may be modified and the resulting alternative solution will still comply with the building code.
  - (b) Usually, however, when there is non-compliance with one provision of an acceptable solution it will be necessary to add some other provision to compensate for that in order to comply with the building code.
- 6.3.4 Applying that approach to the proposed lift:
  - (a) The Authority does not consider that the proposed lift is a special case less extreme than the worst case covered by the building code. In particular, the Authority does not accept that the applicant's claim that the use of the lift will be "minimal" and "only by wheelchair users" makes it a special case.
  - (b) There is no additional provision to compensate for the fact that the proposed lift does not comply with the minimum dimensions specified in the acceptable solutions NZS 4121 and 4332.
- 6.3.5 Accordingly, the Authority considers that the proposed lift does not comply with the building code. For the reasons indicated in 6.3.2 above, that is not to be taken as preventing a smaller lift car from being used where appropriate to comply with the building code "as nearly as is reasonably practicable" under sections 38 and 46. In the circumstances of this particular building, however, the Authority considers that in order to comply with the building code it is necessary to provide a lift with the normal car size.

#### 6.4 Is it appropriate to grant a waiver of the building code in respect of the lift?

- 6.4.1 As the lift is part of an alteration to the existing building, the Authority has the power, under section 47A(2), to grant a waiver or modification of the provisions of that section if it determines that it is reasonable to do so.
- 6.4.2 The Authority notes that the reduced dimensions in themselves are not always unreasonable. Lifts of similar dimensions to that proposed were accepted as complying "as nearly as is reasonably practicable" in Determinations 95/002 and 99/001, which both concerned the installation of a lift in an existing building. However, those determinations did not involve any waiver or modification of the building code but turned on what was reasonably practicable in the particular circumstances of the buildings concerned.

- 6.4.3 In considering whether it would be reasonable to waive compliance with the building code in respect of the dimensions of the lift, the Authority must take account of the particular circumstances of the building concerned. In this case, the applicant pointed to only three facts that the Authority considers to be relevant:
  - (a) The fact that the lift complies with European requirements as set out in ISO/DIS 4190-1. (The Authority does not take account of the draft revision of NZS 4121 mentioned in 5.1(f) above because the final revision might well be different.)
  - (b) The fact that if the upper floor areas were not treated as a single floor then a lift would not be required.
  - (c) The cost.
- 6.4.4 After careful consideration, the Authority concludes that in the circumstances of this case it would not be reasonable for it to waive compliance with building code.

# 7 THE AUTHORITY'S DECISION

- 7.1 In accordance with section 20, the Authority hereby determines that a lift complying with the building code is required to be installed, and that the proposed lift does not comply with the building code.
- 7.2 The Authority confirms the territorial authority's decision to refuse building consent for a lift having dimensions smaller than those specified in NZS 4121 and NZS 4332.

Signed for and on behalf of the Building Industry Authority on this 3<sup>rd</sup> day of October 2000

W A Porteous Chief Executive