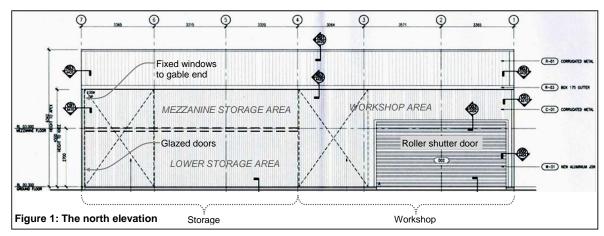




# **Determination 2019/021**

# Regarding compliance with Clause D1 of a staircase to the mezzanine level of a farm building at 2/149 Golden Valley Road, Waihi



## **Summary**

This determination considers the compliance of a set of stairs designed for access to a mezzanine level in a farm building. The determination discusses the classified use of the building and how the limits on application apply with regard to Clause D1 Access routes.

## 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, Katie Gordon, Manager Determinations, 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:
  - D and K Hallett ("the applicants") acting via the designer ("the designer")
  - Hauraki District Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.
- 1.3 This determination arises because the designer is seeking clarification regarding the classified use that applies to the proposed building ("the shed"), and which access provisions of the Building Code relate to this building. The authority is not satisfied that the staircase proposed for the shed ("the staircase") complies with Clause D1 of the Building Code<sup>2</sup> (First Schedule, Building Regulations 1992). The authority's concerns primarily relate to Clause D1.1(a) of the Building Code to 'safeguard people from injury during movement into, within and out of buildings'.

<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 sections are to sections of the Act and references to clauses are to clauses of the Building Code.

1.4 The matter to be determined<sup>3</sup> is therefore whether the proposed staircase will comply with Clause D1 – Access routes of the Building Code to the extent required in its intended use. In order to make this decision I must consider what the correct classified use for the building is under Clause A1 – Classified Uses, and the limits on application<sup>4</sup> in respect of Clause D1 of the Building Code as they apply in respect of that classified use.

1.5 I have not considered any other aspects of the proposed building work outside of the matters set out above or any other clauses of the Building Code. Relevant parts of the Act and the Building Code are provided in Appendix A1.1 to A1.7.

## 1.6 The evidence

- 1.6.1 In making this determination I have considered the submissions of the parties and the other evidence in this matter.
- 1.6.2 This determination is based on the designer's description that the shed 'will be used primarily as a storage shed on a rural property to store equipment for use on the property', with no people 'using the shed as a place of employment'. In addition, in response to the Ministry's request for clarification, the applicants have confirmed that the intended use of the shed is:
  - ...in line with "permanent or intermittent storage of equipment related to horticultural activities on the property" and that the frequency of use [of the mezzanine level] would be 1-2 times per month or less.
- 1.6.3 The designer refers to the authority's significant letters as either a 'decline letter' or a 'suspension letter'. Despite differences in terminology, correspondence titled as 'Incomplete Building Consent Application' or 'Request for further information' required additional information to be provided before the consent application could be accepted or to proceed.
- 1.6.4 For simplicity, this determination uses the single term 'request for further information' for the above correspondence and significant letters are given the following titles:

Table 1: Significant letters from the authority

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Date	Referred to by authority	Referred to by designer	Title given in this Determination	
13 December 18	Incomplete BC Application	Decline letter 01	"RFI(1)"	
14 December 18	Incomplete BC Application	Decline letter 02	"RFI(2)"	
19 December 18	Incomplete BC Application	Decline letter 03	"RFI(3)"	
31 January 19	Request for further information	Suspension letter 01	"RFI(4)"	
7 February 19	Request for further information	Suspension letter 02	"RFI(5)"	
27 February 19	Request for further information	Suspension letter 03	"RFI(6)"	
Note: BC = Building Consent				

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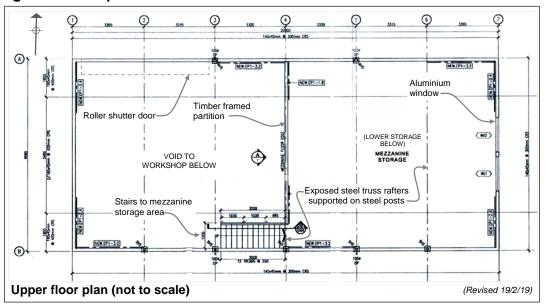
<sup>&</sup>lt;sup>3</sup> Under section 177(1)(a) of the Act

<sup>&</sup>lt;sup>4</sup> The functional requirements under Clauses D1.2.1 does not apply to buildings with a classified use "outbuilding"

# 2. The building work

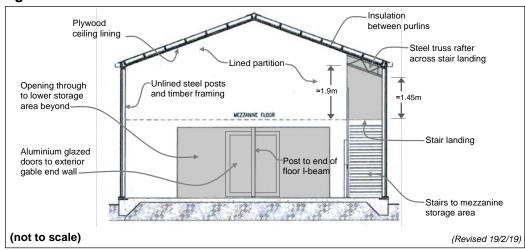
2.1 The building work is a 20m long x 9.1m wide single-storey detached shed on a large and relatively level rural site. The building has a simple corrugated steel barn form with a gable roof that is about 4.6m high at the eaves and 6.4m at the ridge line. Figure 2 shows the floor plan as per revision dated 19 February 2019.

Figure 2: Floor plan of the shed



2.2 The shed has a concrete slab and foundations, exposed steel posts with timber infill framing to the external walls, steel truss rafters with timber purlins, corrugated steel wall and roof cladding and aluminium joinery. The ceiling is insulated and lined with plywood (which is used as bracing), with exterior walls unlined. The mezzanine floor is timber framed, with a central steel I-beam supported on a post as shown in Figure 3.

Figure 3: East/west section of the eastern end

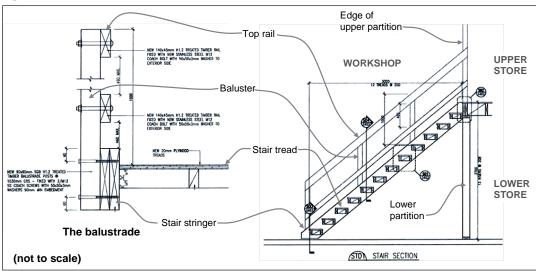


- 2.3 As shown in Figure 2 and Figure 3, the shed accommodates:
  - a workshop area at the western end from Grid 1 to 4, with a 3m high roller door in the north wall ("the workshop")
  - a storage area at the east lower level from Grid 4 to 7 ("the lower store")

• a mezzanine storage area at the east upper level, approximately 10m x 9.1m, from Grid 4 to 7 ("the mezzanine store").

2.4 The proposed timber stair to the mezzanine level provides access to store goods in the upper store. As shown in Figure 4, the staircase has a 1m high balustrade formed from 90 x 90mm balusters fixed to the stringer, with 140 x 45mm rails fixed to the tread side of the uprights and to the edge of the upper partition.

Figure 4: Stair balustrade



# 3. Background

# 3.1 The consent application

- 3.1.1 On behalf of the applicants, the designer applied for a building consent (No. 2018 3043) on 12 December 2018 to 'construct new work shed'.
- 3.1.2 The application form included a checklist to identify whether Acceptable Solutions, Verification Methods or Alternative Solutions were used as the intended means of compliance with the applicable code clauses. For Clause D1 Access Routes, the designer ticked D1/AS1 as the means of compliance.
- 3.1.3 The original consent application drawings showed double height partitions that formed 1.8m braced wing walls to the north and south edges of the mezzanine, with the remaining 5.5m long edge without separation from the void to the workshop.

## 3.2 Requests prior to acceptance of the consent application

3.2.1 As part of its consent processing, the authority sent a series of requests for information ("RFIs") to the designer during December 2018 (see Table 1), with various documents, additional information and responses provided by the designer as summarised below in Table 2:

Table 2: RFIs 1 – 3 and responses

RFI(1)	Attached a list of 5 items, which included requests for:	
13 December	o details of access to mezzanine storage area	
	<ul> <li>barrier/safety from falling details for mezzanine floor edge.</li> </ul>	
Designer's response	The mezzanine is 'only intended to be used as a storage area', with no permanent access and occasional access provided by a ladder.	

	A barrier is not required because limits on application of Clause F4 includes that 'F4.3.1 shall not apply where such a barrier would be incompatible with the intended use of an area' (see Appendix A1.5).	
RFI(2) 14 December	Updated the above list included requests for:  o details to show how users would access the mezzanine floor  o mezzanine floor edge barrier details, 'required for when people are in the upstairs mezzanine area working (reasonable barrier types could be used to aid in lifting items in this space when required)'.	
Designer's response	The mezzanine area is only intended for infrequent storage and is not intended to be used as a workspace.	
	There will be no permanent access to mezzanine, with occasional access 'via a hand held portable rung type ladder'.	
	Drawing A101 amended to show a partition to the mezzanine edge, with a central opening and 1.2m high gate.	
	All small/light items would be taken up ladder, with all larger items 'lifted up with mechanical assistance'.	
RFI(3) 19 December	Questioned how the then proposed ladder access would enable a person to move goods into the storage on the mezzanine floor, adding that 'additional proof of compliance will be required during processing stage'.	
Designer's response	The shed 'will be used primarily as a storage shed on a rural property to store equipment for use on the property' – people will not be using the shed as a place of employment.	
	As such, the shed is an outbuilding and 'should be processed as one'.	
	The functional requirement of Clause D1 Access Routes to provide 'reasonable and adequate access to enable safe and easy movement of people' does not apply to outbuildings (see Appendix A1.4).	

## 3.3 RFI(4) and the designer's response

- 3.3.1 On 19 December 2018, the authority accepted the consent application for processing.
- 3.3.2 The authority issued another request for information on 31 January 2019. The authority believed the design did not comply with Clause D1 (see Appendix A1.4) because (in summary):
  - The objective D1.1(a) to 'safeguard people from injury during movement into, within and out of buildings' applies to outbuildings.
  - The performance requirement D1.3.1(c) requires access routes for people to 'move into spaces within buildings by such means as corridors, doors, stairs...'
  - Meeting the performance requirement achieves the objective and/or functional requirements.
  - The Acceptable Solution D1/AS1 (see Appendix A1.7):
    - o only allows for stairs and fixed ladders not hand held portable ladders
    - o D1/AS1 5.1.1 states 'Rung-type ladders shall not be used where frequent access and the carriage of tools, equipment or materials are required'
  - A way of access to the mezzanine floor is needed that complies with D1/AS1.

- 3.3.3 The designer responded on the same day, including the following (in summary):
  - D1.3.1(c) is a performance requirement of D1.2.1, which does not apply to outbuildings, so providing a staircase is 'over and above' minimum code requirements and therefore D1/AS1 does not apply.
  - The Ministry's website provides guidance on how the Building Code works by explaining:
    - o the three levels of requirements as follows:
      - 1. Objective social objectives from the Building Act
      - 2. Functional requirement functions the building must perform to meet the Objective
      - 3. Performance the performance criteria the building must achieve. By meeting the performance criteria, the Objective and Functional requirement can be achieved.
    - o the limits on application of the code requirements as follows:

Alongside the Objective, Functional Requirement and Performance given for each Building Code clause, there is a note of any 'limits on application' (limits on where the clause can be applied).

For example, Functional Requirement D1.2.1 says "Buildings shall be provided with reasonable and adequate access to enable safe and easy movement of people" and the Limits on Application says "Requirement D1.2.1 shall not apply to Ancillary Buildings or Outbuildings".

 Based on the above, if a functional requirement does not apply to a building, then the performance requirement does not either.

## 3.4 RFI(5) and the designer's response

- 3.4.1 The authority did not accept the designer's logic and issued RFI(5) on 7 February 2019, which repeated the statements made in RFI(4). After discussing the matter with the authority, the designer sought advice from the Ministry and was informed that specific guidance could not be provided unless a determination was sought on the matter.
- 3.4.2 Rather than seeking a determination, the owners elected to provide a 'service stair' to the mezzanine level. Drawings were revised (as shown in Figures 2, 3 and 4) and submitted to the authority on 22 February 2019.

## 3.5 The final Request for information RFI(6)

- 3.5.1 The authority responded to the revised drawings by issuing RFI(6) on 27 February 2019, which raised the matter of non-compliance of the stair with the Acceptable Solution D1/AS1 (see Appendix A1.7) and stated:
  - 1. The design does not show proof of compliance with D1/AS1:
    - a) The handrail does not comply with D1/AS1 Section 6 figure 26A, graspable handrail, as proposed [the relative width] is 185mm.
       Please revise.
  - 2. Drawing A220 shows the height clearances at the top of the stairs. These height clearances do not comply with D1/AS1 section 1.4. Please revise.

<sup>&</sup>lt;sup>5</sup> The term "service stair" is defined in D1/AS1 as a stairway that is used, or intended to be used, infrequently by service personnel to gain access to spaces for the purposes of maintenance and the movement of goods.

<sup>&</sup>lt;sup>6</sup> Sheets A100, A101, A111 (Revision B) and new drawing S403 dated 19 February 2019.

3.5.2 In discussion with the authority, the designer noted that the handrail profiles in Figure 26 referred to by the authority were for 'private and common stairs', rather than the 'service stair designed' for the shed. In regard to clearance at the top of the stairs, it was observed that the head height (1450mm to 1893mm) beneath the steel truss at the top of the stairs (see Figure 3) is below the minimum 2m in section 1.4. The parties again discussed the limits on application, but the authority maintained its position and was 'not prepared to accept the limits on the application of D1.2.1' as being applicable to the objective of D1.1(a) (see Appendix A1.4).

## 4. The submissions

## 4.1 The applicants' submission

- 4.1.1 Unable to resolve the situation, the designer applied for a determination on 19 March 2019. The Ministry accepted the application on 29 March 2019. The Ministry sought additional clarification on the intended use of the proposed shed, which the applicants supplied on 9 April 2019 (see paragraph 1.5).
- 4.1.2 The designer made a submission on behalf of the applicants, which provided a 'summary of events' that set out the background to the dispute and the designer's view of the matter (in summary):
  - The definition of an outbuilding includes 'farm building' as an example, so the consent application for the shed should be processed as an outbuilding (see Appendix A1.2)
  - Functional requirement D1.2.1 for 'reasonable and adequate access' does not apply to outbuildings, so providing stairs is beyond the minimum requirements (see Appendix A1.4). Although D1.2.1 is a functional requirement of the objective D1.1(a), the authority maintains that the limit on application does not apply to the objective.
- 4.1.3 The designer provided copies of:
  - the drawings dated 11 December 2018 provided for the consent application
  - revised sheet A101 dated 17 December 2018 in response to RFI(2)
  - drawings revised on 19 February 2019 to include staircase
  - requests for information RFI(1) to RFI(6) from the authority
  - correspondence between the authority and the designer.

## 4.2 The authority's submission

- 4.2.1 The authority acknowledged the application on 27 March 2019 and included a submission which included the following general comments (in summary):
  - There are no other buildings on the site and currently no consent applications. The consent application for the shed has been processed as an outbuilding.
  - The definition of Outbuilding refers to buildings 'accessory to the principal use of associated buildings', with examples including 'farm building' or 'shed'.
  - The definition of a Commercial Building refers to a 'use in which any natural resources, goods, services or money are either developed, sold, exchanged or stored', with examples including a 'storage facility' (see Appendix A1.2).

• The framework of the Building Code is described in the Building Code Handbook. The Building Code framework has social objectives the building must achieve, followed by functional requirements that the building must perform to meet the objectives, and performance criteria which the building must achieve to meet the objectives and functional requirements (see Appendix A1.1).

- For Clause D1, outbuildings are:
  - o not excluded from the Objective to 'safeguard people from injury'
  - o are excluded from the Functional Requirement to provide 'reasonable and adequate access to enable safe and easy movement'.
- However, outbuildings are also excluded from some of the Performance Requirements set out in D1.3.2, D1.3.3(h) and D1.3.3(i) (see Appendix A1.4) so if the exclusion of outbuildings from Functional Requirements meant the former are excluded from D1 overall, then further exclusions set out in the performance clauses would be unnecessary.
- The repetition of certain exclusions within the performance clauses confirms that the remaining parts of D1 do apply to outbuildings. This is further confirmed by a reference to outbuildings within D1/AS1.
- 4.2.2 In regard to the consent application for the shed, the authority noted (in summary):
  - The designer ticked D1/AS1 as a means of compliance with Clause D1, and this is accepted as a means of providing for safe movement within the shed.
  - In regard to D1/AS1 (see Appendix A1.7):
    - o the stair landing height slopes down from about 1.8m to 1.5m, which does not comply with the minimum 2m in paragraph 1.4 of D1/AS1.
    - o the proposed handrail is a 140 x 45mm timber rail resulting in a handrail that is 135mm at the balustrades, which does not accord with paragraph 6.0.7 / Figure 26A of D1/AS1.
- 4.2.3 The authority provided copies of:
  - the consent application dated 12 December 2018
  - a processing checklist for 'Outbuildings and Farm Buildings'.
- 4.3 A draft of this determination was issued to the parties for comment on 2 May 2019. The applicants and the authority accepted the draft without further comment, with responses received on 8 and 13 May 2019 respectively.

## 5. Discussion

# 5.1 Building use categories in the regulations

5.1.1 There are a number of different categories of buildings used in or for the purpose of the Act, the Regulations and the Building Code that are relevant in establishing regulatory obligations and how compliance is established. One of these categorisations is the classified use, which is defined in Clause A1 of the Building Code for the purpose of applying the performance requirements of the Building Code (see Appendix A1.2).

5.1.2 The categories are broadly grouped based on the activities carried out in the building (or part of the building), the level of occupation, the fire load, and the occupants' ability to respond to a fire event. The principles that underpin these classifications primarily concern the safety of people and the provision of access and amenities.

#### 5.2 The classified use of the shed

- 5.2.1 The authority has processed the building consent application as an outbuilding, but in submission to this determination the authority has raised the possibility that the shed, as a 'storage facility' could be classified as a commercial building. The authority has provided no further evidence to support that view.
- 5.2.2 The definitions for each of these classified uses is as follows:

## Clause A1 - Classified uses

#### 5.0 Commercial

**5.0.1 Applies** to a building or use in which any natural resources, goods, services or money are either developed, sold, exchanged or stored. Examples: an amusement park, auction room, bank, car-park, catering facility, coffee bar, computer centre, fire station, funeral parlour, hairdresser, library, office (commercial or government), Police station, post office, public laundry, radio station, restaurant, service station, shop, showroom, storage facility [my emphasis], television station or transport terminal.

#### 7.0 Outbuildings

7.0.1 Applies to a building or use which may be included within each classified use but are not intended for human habitation, and are accessory to the principal use of associated buildings. Examples: a carport, <u>farm building</u>, garage, greenhouse, machinery room, private swimming pool, public toilet, or <u>shed</u> [my emphasis].

- 5.2.3 The classification of the shed under Clause A1 establishes which performance clauses of the Building Code the building must comply with. For example:
  - Clause F6.2 relating to visibility of specified features in escape routes does not apply to outbuildings
  - Clause H1.2(a) relating to energy efficiency does not apply to outbuildings but does apply to commercial buildings
  - Clause G8.2, which concerns adequate artificial lighting to enable safe movement, applies to commercial buildings but not to outbuildings.

(Refer to Appendix A1.6 Table 3 for a list of clauses and limits on application that apply to outbuildings and/or commercial buildings.)

- 5.2.4 It is not always obvious which classified use a building will fall within; as activities that occur within the building may not neatly fit into those described or be able to be closely compared with given examples. However, I consider that the principles on which the categorisations have been grouped are relevant and can be used to establish the various use categories for buildings and in interpreting the examples given for those categories.
- 5.2.5 The purpose of the Building Act centres on the safety, health, and well-being of people using buildings. The designer has stated that the shed 'will be used primarily as a storage shed on a rural property to store equipment for use on the property', with no people 'using the shed as a place of employment' and the frequency of use of the mezzanine level anticipated as once or twice per month or less.

5.2.6 It is clear from the above description that the level of occupancy will be intermittent and is related to moving items to and retrieving items from the mezzanine level used for storage. No sanitary or similar facilities are provided for more frequent use of the shed and the mezzanine level is not proposed to be used for storage of goods as part of a commercial facility. I am of the view the intended use is in line with buildings classified as "outbuilding" where occupation levels are low in number and occupation occurs infrequently or irregularly.

- 5.2.7 The authority has identified that there are currently no other buildings on the property or building consents for the construction of other buildings, with the implication that the shed cannot be considered as an outbuilding because it is not 'accessory to the principal use of associated buildings'.
- 5.2.8 I do not accept that because there are currently no other buildings on the property this prevents the shed from falling within the classified use of outbuilding. Public toilets are an example given in Clause A1 as outbuildings, and it is not uncommon for these to be located within a park, reserve, or roadside with no other buildings in the area. It is the occupation of these buildings, being low in number and intermittent, that is relevant to these buildings being classified as outbuildings.
- 5.2.9 Taking account of the design features of the proposed shed together with the intended use of the shed as submitted to this determination, I am satisfied that the appropriate classified use for the shed under Clause A1 is "outbuilding".

## 5.3 Compliance with Clause D1 and limits on application

- 5.3.1 The authority has noted that the consent application nominated D1/AS1 as a means of compliance. Notwithstanding that, complying with an Acceptable Solution is not mandatory and the use of an Acceptable Solution is one way, but not the only way, of complying with Clause D1 for this particular building.
- 5.3.2 Before considering compliance of the stairs to the mezzanine level as an access route, it must first be established whether the shed, classified as an "outbuilding", is required to comply with the performance criteria in Clause D1.
- 5.3.3 Section 16 of the Act provides that the purpose of the Building Code is the prescription of 'functional requirements for buildings and the performance criteria with which buildings must comply in their intended use' (see Appendix A1.1).
- 5.3.4 Functional requirements and performance criteria are defined in section 7 of the Act as follows:
  - Functional requirements, in relation to a building, means those functions that the building is required to perform for the purposes of this Act.
  - Performance criteria, in relation to a building, means qualitative or quantitative criteria that the building is required to satisfy in performing its functional requirements.
- 5.3.5 Each clause of the Building Code has objectives, functional requirements and performance criteria, and these, along with the principles and purposes of the Act, are all linked and must be interpreted and applied consistently with each other. Performance criteria cannot be applied simplistically without considering the functions a building must perform and the outcomes the code seeks to achieve (the objectives).

5.3.6 Functional requirements can influence interpretation of performance criteria and hence affect the nature and scope of the performance criteria. Performance criteria may not make sense in isolation and so can only be understood when read in conjunction with the functional requirement. Equally, functional requirements may be incomplete or their scope unclear without an understanding of the outcomes sought to be achieved in respect of a building.

- 5.3.7 The functional requirement Clause D1.2.1 states "Buildings shall be provided with reasonable and adequate access to enable safe and easy movement of people", and the limits on application state that Clause D1.2.1 "shall not apply to ancillary buildings or outbuildings".
- 5.3.8 The authority contends that the limits on application in the functional requirement clause D1.2.1 do not flow down to the individual performance criteria in the authority's view it must be inferred that because some performance clauses have limits on application that list outbuildings and others do not have any limits on application, those that do not must apply to outbuildings.

  I disagree with the authority's interpretation in this matter.
- 5.3.9 The limits on application in the Building Code vary in how they are written in relation to the objectives, functional requirements, and performance clauses and as stated before, these must be read together. Some limits on application are only expressed in the functional requirement; for example the limits on application for Clause G7.2 states that the requirement to provide adequate openings for natural light and for visual awareness of the outside environment only applies to housing, old people's homes and early childhood centres. Clearly then, despite the fact that the performance clauses do not have any stated limits on application, the need to meet the performance criteria in order to achieve the functional requirement is only relevant for buildings with those classified uses and does not apply to other classified uses.
- 5.3.10 Likewise, some limits on application will be expressed in the objective clause only. In Clause D2 Mechanical installations for access for example, the limits on application for Clause D2.1, which relates to ensuring people with disabilities are able to carry out normal activities and processes within buildings, states that the objective clause D2.1(c) shall only apply to those buildings to which section 47A<sup>7</sup> of the Act applies. It would not be logical to read the functional requirements and performance criteria clauses without consideration for how the limits on application apply in respect of that objective i.e. in order to meet the performance criteria for Clause D2, reasonable and adequate provisions must be made for people with disabilities using mechanical installations for access.
- 5.3.11 In some clauses of the Building Code the limits on application against the functional requirement are repeated in the limits on application for specific performance criteria, and this is the case with Clause D1. The limits on application to Clause D1.3.2 and specific sub-clauses of D1.3.3 mean that the classified uses ancillary buildings and outbuildings are excluded from those performance requirements. However, additional classified uses are also included in the limits on application to Clauses D1.3.2 and D1.3.3, such as "industrial buildings where no more than 10 people are employed" (Clause D1.3.2) and "detached dwellings or within household units of multi-unit dwellings" (Clause D1.3.3(i)). The limits on application for those

Various limits on application in the Building Code refer to section 47A of the Building Act 1991; section 118 of the Building Act 2004 is effectively identical to that section and accordingly the limits on application should be interpreted to apply to buildings to which section 118 applies.

performance criteria restate the classified uses that appear in the limits on application to the functional requirement D1.2.1, but they also identify additional classified uses for the purpose of limiting that particular performance requirement.

- 5.3.12 As an outbuilding, the shed is excluded from the functional requirement to provide 'reasonable and adequate access to enable safe and easy movement of people'. Considering the purpose of the Building Code set out in section 16 of the Act (refer paragraph 5.3.1), and taking into account the discussion above, I conclude that the shed is not required to achieve the performance criteria in Clause D1.
- 5.3.13 The authority's concerns relate to the landing height and that the handrail as designed is not graspable. While not a matter of compliance, because I have concluded the shed is not required to meet the performance criteria in Clause D1, I suggest the applicants consider marking (highlighting) the lower edge of the truss to provide warning of the height restriction and improvements to the profile of the handrail and/or its fixing.

## 6. The decision

6.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the proposed staircase complies to the extent required in its intended use in relation to Clause D1 Access Routes of the Building Code.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 31 May 2019.

Katie Gordon Manager Determinations

# **Appendix: The legislation**

A.1 Various parts of the Building Act, the Building Code and the Acceptable Solution D1/AS1 are referred to in this determination and the more significant of these are provided in the following paragraphs.

## A1.1 Relevant provisions of the Act include:

## 3 Purposes

This Act has the following purposes:

- (a) to provide for the regulation of building work, the establishment of a licensing regime for building practitioners, and the setting of performance standards for buildings to ensure that—
  - (i) people who use buildings can do so safely and without endangering their health; ...
- (b) to promote the accountability of owners, designers, builders, and building consent authorities who have responsibilities for ensuring that building work complies with the building code.

#### 7 Interpretation

**functional requirements**, in relation to a building, means those functions that the building is required to perform for the purposes of this Act

**performance requirements**, in relation to a building, means qualitative or quantitative criteria that the building is required to satisfy in performing its functional requirements

## 16 Building code: purpose

The building code prescribes functional requirements for buildings and the performance criteria with which buildings must comply in their intended use.

#### A1.2 Relevant provisions of Building Code Clause A1 Classified Uses include:

**1.0.2** A building with a given classified use may have one or more intended uses as defined in the Act.

#### 5.0 Commercial

**5.0.1 Applies** to a building or use in which any natural resources, goods, services or money are either developed, sold, exchanged or stored. Examples: an amusement park, auction room, bank, car-park, catering facility, coffee bar, computer centre, fire station, funeral parlour, hairdresser, library, office (commercial or government), Police station, post office, public laundry, radio station, restaurant, service station, shop, showroom, storage facility, television station or transport terminal.

## 7.0 Outbuildings

**7.0.1 Applies** to a building or use which may be included within each classified use but are not intended for human habitation, and are accessory to the principal use of associated buildings. Examples: a carport, farm building, garage, greenhouse, machinery room, private swimming pool, public toilet, or shed.

## A1.3 Relevant provisions of Building Code Clause A2 Interpretation include:

**access route** a continuous route that permits people and goods to move between the apron or construction edge of the building to spaces within a building, and between spaces within a building

adequate means adequate to achieve the objectives of the building codehandrail a rail to provide both support to, or assist with the movement of a personintended use of a building includes—

(a) any reasonably foreseeable occasional other use that is not incompatible with the intended use; ...

**occupied space** any space within a building in which a person will be present from time to time during the intended use of the building

## A1.4 Relevant provisions of Building Code Clause D1 Access Routes include:

## Objective

#### D1.1 The objective of this provision is:

(a) safeguard people from injury during movement into, within and out of buildings,

#### **Functional requirement**

**D1.2.1** Buildings shall be provided with reasonable and adequate access to enable safe and easy movement of people

#### Limits on application

Requirement D1.2.1 shall not apply to ancillary buildings or outbuildings.

#### **Performance**

- **D1.3.1** Access routes shall enable people to:
- (c) move into spaces within buildings by such means as corridors, doors, stairs, ramps and lifts...

**D1.3.2** At least one access route shall have features to enable people with disabilities to...

## Limits on application

Performance D1.3.2 shall not apply to housing, outbuildings, backcountry huts, ancillary buildings, and to industrial buildings where no more than 10 people are employed.

## D1.3.3 Access routes shall:

- (b) be free from dangerous obstructions and from any projections likely to cause an obstruction,
- (e) include stairs to allow access to upper floors...
- (j) have smooth, reachable and graspable handrails to provide support and to assist with movement along a stair or ladder,

#### Limits on application

Performance D1.3.3(h) shall not apply within industrial buildings, outbuildings and ancillary buildings.

Performance D1.3.3(i) shall not apply with detached dwellings or within household units of multi-unit dwellings, or to outbuildings and ancillary buildings

## A1.5 Relevant provisions of Clause F4 Safety from Falling include:

#### **Performance**

**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.

#### Limits on application

Performance F4.3.1 shall not apply where such a barrier would be incompatible with the intended use of an area....

# A1.6 Relevant limits on application for outbuildings and commercial buildings:

Table 3: Limits on application

Clauses	Not applicable to outbuildings	
C3.4	materials used as internal surface linings	
C5.3	providing hard stands for fire service vehicles	
C5.8	access for and safety of fire-fighters in buildings	
D1.2.1	reasonable and adequate access to enable safe and easy movement of people	
D1.3.3(h)	size of open risers in stairs	
D1.3.3(i)	containing isolated steps	
F6.2	visibility of specified features in escape routes	
G8.2	relating to adequate artificial lighting to enable safe movement in access routes	
F7.3.1	a means of warning must alert people to the emergency in adequate time for them to reach a safe place.	
G8.2	adequate artificial lighting to enable safe movement	
H1.2(a)	energy efficiency of building envelope	
	If no more than 10 people employed	
D1.3.2	access routes with features enabling people with disabilities to approach the building, have access to the internal space and the facilities for personal hygiene	
	Not applicable to outbuildings and commercial buildings:	
E1.3.2	surface water, resulting from an event having a 2% probability of occurring annually, shall not enter buildings	
E3.3.1	thermal resistance, ventilation and space temperature of habitable spaces	
H1.2(a)	energy efficiency	
Clauses	Not applicable to particular types of commercial buildings	
G3.2.1	hygienic storage, preparation and cooking of food	
G3.3.2(b)	spaces for food preparation and utensil washing	
G3.3.2(b)	spaces for food preparation and utensil washing	
G3.3.6	protection from contamination by vermin and prevention of contamination spreading	
G5.2.1(b)	provide adequate activity space for the intended use	
G5.3.4	at least one accessible reception counter or desk provided for public use	
G8.2	adequate artificial lighting to enable safe movement in access routes	
H1.2(c)	energy efficiency of artificial lighting	
H1.3.6	energy efficiency of HVAC systems	

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## A1.7 <u>Relevant sections of D1/AS1</u> include:

## 1.4 Height clearances

1.4.1 Access routes shall have height clearances complying with Table 1 and as shown in Figure 3.

Table 1:	Height Clearances Paragraph 1.4.1	
	ess spaces loor access, gth)	450 mm
Crawl spa (30 m max	ces for servicing ( length)	800 mm
Pedestriar (unlimited	access routes length)	2100 mm
	stairways and corridors 2 m in length)	2000 mm

#### 5.0 Fixed Ladders

#### 5.1 General

#### 5.1.1 Types of fixed ladders

- a) Step-type ladders (see Figure 19),
- b) Rung-type ladders (see Figure 20),
- c) Individual rung-type ladders (see Figure 24).

Rung-type ladders shall not be used where frequent access and the carriage of tools, equipment or materials are required.

#### 6.0 Handrails

- 6.0.7 Handrail profiles Handrails shall have a profile which can be readily grasped by an adult hand and shall be installed in a way that avoids the likelihood of personal injury. An acceptable handrail shall be shaped and located to ensure that, under normal usage, a person's hand will not contact adjacent walls, supporting brackets or fixings, or any other obstruction.
- 6.0.8 A graspable handrail profile shall have:
- a) A flat or convex upper surface,
- b) Arrised or radiused edges,
- c) A minimum cross section width of 20 mm, and
- d) A "relevant width" (as illustrated in Figure 26 (a)) across the top surface of no greater than 80 mm. Figure 26 (a) and (b) indicates some acceptable profiles but others may also be acceptable.

