

## **Determination 2009/10**

# Dispute about the code-compliance of a 15-year-old house at 37A Bowes Crescent, Strathmore Park, Wellington



#### 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, John Gardiner, Manager Determinations, Department of Building and Housing ("the Department"), for and on behalf of the Chief Executive of the Department. The applicant is the owner, Mr Davies Howard ("the applicant"). The other party is the Wellington City Council (the authority) carrying out its duties and functions as a territorial authority or building consent authority.
- I take the view that the matters for determination, in terms of sections 177(a) and  $177(b)^2$  of the Act, are:

#### Matter 1: The code compliance of the house

(a) whether the house complies with relevant clauses of the Building Code<sup>3</sup> (First Schedule, Building Regulations 1992), and

Department of Building and Housing

<sup>&</sup>lt;sup>1</sup> The Building Act 2004 is available from the Department's website at www.dbh.govt.nz.

<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.

<sup>&</sup>lt;sup>3</sup> The Building Code is available from the Department's website at www.dbh.govt.nz.

(b) whether the decision by the authority to refuse to issue a code compliance certificate for the house was correct

#### Matter 2: the Durability considerations

- (c) whether the building elements comply with Building Code Clause B2 Durability taking into account the age of the building work.
- 1.3 In making my decision, I have considered the submissions of the parties, the report from an independent expert ("the expert") commissioned by the Department to advise on this dispute, and the other evidence in this matter. While I have carefully perused the background leading up to this determination and appreciate the concerns raised by the applicant, I have only summarised the points that are relevant in the context of the determination.

### 2 The building work

- 2.1 The building work that is the subject of this determination consists of a two-storey house situated on an excavated sloping site that is in a "specific" wind zone for the purposes of NZS 3604<sup>4</sup>. The building is of light timber construction on a concrete ground floor slab with a steeply sloping roof clad with light metal and fitted with five skylights. The roof has 400mm to 1000mm wide eaves projections but has no verge projections. The house is relatively simple in shape and plan and has a single storey garage attached to one elevation. The garage is roofed over with a deck formed from plywood with an applied liquid membrane. The deck is bordered by a timber balustrade.
- 2.2 The specification calls for the external wall framing to be No 1 grade boric treated, with the exception of the bottom plates, which were to be tanalised. However, I have not received any information as to the treatment, if any, that was actually applied to the framing as installed.
- 2.3 The external walls of the house, and some walls of the garage, are clad with rough-sawn, bevel-backed, unpainted cedar weatherboards fixed through the building wrap to the framing. The boundary walls to the garage are constructed of 150 mm thick concrete blocks. The building consent documents incorrectly show fibre-cement cladding to some of the garage walls.

# 3 Background

- 3.1 The authority issued a building consent (No 2129) for the house on 23 August 1993 under the Building Act 1991 ("the former Act").
- 3.2 The authority undertook inspections during the construction of the house and issued an interim code compliance certificate dated 21 March 1994. Based on the authority's site inspection and checking notes, this certificate excluded the decks that were not completed at the time the certificate was issued.

<sup>&</sup>lt;sup>4</sup> New Zealand Standard NZS 3604:1999 Timber Framed Buildings

3.3 I note that there is conflict between the parties as to whether a final inspection of the deck had taken place and whether a verbal approval had been given on behalf of the authority.

- Following lengthy correspondence between the parties, which included the applicant's concerns about some of the authority's processes, the authority wrote to the applicant on 13 February 2008. The authority noted that it would carry out a further inspection of the house if it was requested to do so. The applicant made such a request on 29 February 2008.
- 3.5 The authority carried out an inspection of the property on 10 March 2008 and subsequently wrote to the applicant on 10 April 2008. The authority noted that the purpose of the inspection was to check the code-compliance of the building. The authority listed 23 outstanding matters that were required to be addressed.
- I note that the authority has not issued a notice to fix in respect of the items listed in its letter dated 10 April 2008.
- 3.7 The application for a determination was received by the Department on 17 October 2008.

#### 4 The submissions

- 4.1 In a covering note to the application, the applicant set out the background to the matters in dispute.
- 4.2 The applicant forwarded copies of:
  - the plans
  - the interim code compliance certificate
  - the certificate of title
  - some of the building consent and inspection documentation
  - the correspondence between the applicant and the authority and other relevant communications.
- 4.3 The authority wrote to the Department on 20 November 2008, describing some of the background. The authority noted that only an interim code compliance certificate had been issued regarding the house. As the last site inspection had identified non-compliant building elements, the authority was unable to issue a final code compliance certificate.
- 4.4 The authority forwarded copies of:
  - the plans and specifications
  - the interim code compliance certificate
  - some of the building consent and inspection documentation
  - the correspondence between the applicant and the authority and other relevant communications.

4.5 The draft determination was sent to the parties for comment on 24 December 2008. The applicant accepted the draft.

- 4.6 The authority accepted the draft, but in a letter to the Department, dated 22 January 2009, the authority submitted that:
  - It had concerns about the age of the house, and its ability to meet the requirements of the Building Code with respect to B2 Durability, given the that the work had been completed for a considerable period of time.
  - Reference was made to some items that the determination found required maintenance to ensure on-going compliance. The authority said that when applying the WHRS<sup>5</sup> Act the Department found that the need for similar maintenance requirements were not code compliant because such items were viewed as 'future likely defects'. The authority sought clarification on the difference in interpretation.
- 4.7 In subsequent email correspondence between the Department and the parties, the parties agreed that the durability considerations be added as a matter to be determined, and that compliance with B2 Durability was achieved when the interim code compliance certificate was issued on 21 March 1994 (refer paragraph 3.2).
- 4.8 As to the clarification sought by the authority regarding what it sees as a lack of consistency between the interpretations by different sections of the Department, I comment as follows:
  - WHRS assessors reports are required by statute and are independent of the Department. A determination is a decision made by the Department where I may appoint an expert to assist me.
  - The reports produced by assessors under the WHRS Act are, amongst other things, intended to identify actual and potential weathertightness damage. Such reports concern houses that are leaking or are assessed as having the likely potential to leak.
  - Reports by experts used to assist me in making a determination are concerned with the present state of a building. Expert's reports do not specifically assess likely future damage.
  - The house in question is 15 years old. The cladding has met the requirements of the Building Code with respect to E2 External Moisture and B2 Durability. The cladding's required 15-year life, under Clause B2, has expired. However, the expert has noted that maintenance is required for ongoing compliance which I accept.
  - Other determinations have found that certain building elements comply with Clause E2, but not with Clause B2, and hence remedial work is required to achieve full code compliance.
  - In this respect I see no conflict between a determination's findings with respect to a building's required performance with respect to Clause B2, assuming a level of maintenance allowed for by Clause B2, and an assessor's finds with respect to 'future likely defects'.

<sup>&</sup>lt;sup>5</sup> Weathertight Homes Resolution Services Act

4.9 A second draft determination was sent to the parties for comment on 4 February 2009. The draft was issued for comment and for the parties to agree when the work contained in the first consent complied with clause B2 "Durability" of the building code (refer paragraph 4.7).

### 5 The expert's report

- As mentioned in paragraph 1.3, I engaged an independent expert, who is a member of the New Zealand Institute of Building Surveyors, to provide an assessment of those building elements that are subject to this determination (refer paragraph 3.5). The expert inspected the property on 28 November 2008 and provided me with a report that was dated 2 December 2008.
- The expert noted that the house had not been well maintained since it was completed. However, the expert was of the opinion that the building "has been well constructed with detailing that is providing a weathertight solution". Both non-invasive and invasive testing was carried out at the weatherboards and the external joinery mitres and no high moisture readings were obtained. The expert removed one section of weatherboard and noted that there was some water staining on the back of the board.
- 5.3 I have summarised below the observations of the expert regarding the building elements that have been referred to by the authority in its letter to the applicant dated 10 April 2008:

### 5.4 Non-compliant items

The expert was of the opinion that the following matters raised by the authority did not meet the requirements of the Building Code:

Building defects identified by the authority	The expert's findings
Seal the gap between the lower level vanity top and the wall	The vanity is not fixed back onto the wall and there is a gap between the top back edge of the vanity and wall. Water splash is able to enter down the back of the vanity top, which could cause damage to the internal linings. (Clause E3)
A graspable handrail is required for the lower flight of the internal stairs	A handrail has not yet been fitted to the lower set of four steps, which are therefore non-compliant. (Clause D1)
Complete the insulation for the upper level external walls for bedroom.	There are two areas that will require insulation to be fitted; in the southern bedroom on the first floor, and the northern bedroom on the first floor. The insulation has not been fitted professionally and there are large gaps at the edges. (Clause H1)
Additional 100mm x 75mm H4 treated timber bracing is needed for the deck structure	As the deck has no bracing, it does not meet the requirements of section 4.6 of NZS3604: 1990 or of the Building Code. (Clause B1)
Additional 125mm x 125mm H5 treated timber piles are required where the deck bearers are over spanned.	The side section of deck is resting on a 150 x 50 bearer that spans some 4 metres without any support. The deck does not comply either with NZS 3604: 1999 or the Building Code. (Clause B1)

Building defects identified by the authority	The expert's findings
Provide a landing for the single external door fitted at the rear of the garage.	The rear garage door is some 400 mm above the paved area and a step is required to be installed. (Clause D1)
Provide ventilation to the laundry space as discussed	There is presently no ventilation provided to the laundry space, which is an internal room with no windows or skylights. (Clause G4)
Separate the upper level safety barrier from the dwelling roof.	The handrail of the first level deck is butted and nailed into the metal barge of the roof. This detail is non-compliant. (Clause B2).

### 5.5 Items requiring maintenance only

The expert was of the opinion that the following matters raised by the authority, while meeting the requirements of the Building Code, required maintenance to ensure their continuing compliance:

Building defects identified by the authority	The expert's findings
Complete the fixing and sealing of the soffit linings	There is no evidence of the unsealed soffits allowing moisture into the dwelling. The soffit of the north west corner, where gaps have appeared due to movement in the fascia, needs to be repaired as part of routine maintenance.
Additional weatherproofing required at the weatherboard / soffit junction	Sealant bead at the weatherboard / soffit junction is in reasonable condition with minor holes. The sealant should be replaced during routine maintenance.
Open joints between some barge boards are to be made weathertight	The open joints in mitred corners of barge/fascia boards are typical for movement and should be repaired during regular maintenance. There is no indication that the joints are allowing moisture entry into the framing cavities.
Refit and seal some of the timber scribers where necessary	Movement in the scribers and the weatherboards has left 2-3mm gaps. The quality of the sealant applied to the gaps is poor and peeling away, though there is no evidence of moisture entry at the scribers. Any moisture that does enter can drain through the bottom of the windows and doors. Gaps should be repaired during routine maintenance.
The cedar weatherboard cladding needs to meet the requirements of NZS 3631 1988 New Zealand Timber Grading Rules.	There is excessive cupping and shrinkage in the weatherboards, which has left gaps at the laps and there has also been movement in the weatherboards. However, there was no indication of water entry at the laps. While the boards would not now meet the requirements of NZS 3631: 1988, there is no evidence to suggest that they do not meet Clause E2. However, this situation will not continue without on-going maintenance, including the replacement of some of the boards.

Building defects identified by the authority	The expert's findings
"Turn outs" are required for the apron flashing up stands where they terminate into the wall cladding system.	Turnouts at any flashing upstands would be the professional way to detail any such like junction. Only one end of apron flashing above the door on the north elevation was visible, and has sealant applied to it. The sealant used at this junction is adequate and if routinely maintained will not fail in the future.
All mechanical fixings under the open timber deck structure need to be stainless steel.	The present mechanical fixings are galvanised steel and are in accord with NZS 3604:1990, which was the applicable standard at the time of construction. There are fastenings that have corrosion to a level that they will fail and these should be replaced during routine maintenance.
Some components of the deck safety barrier require attention. A broken rail and loose vertical battens were noted.	This is a maintenance issue insomuch that an upright has been broken and not replaced. The section of unfinished balustrade on the south end has a drop of only 900mm.
Drip edges are required in areas of the deck	While this item is compliant and does not require immediate attention, to eliminate any future risk of a failure at this joint it could be better detailed during routine maintenance
Provide a written statement from a suitably qualified person re the status of the external aluminium joinery.	The expert observed that, apart from the bay window of the kitchen, all the joinery mitres were tight. There was no evidence of any moisture entry through the windows, and any water entering the mitres can drain out of the base of the windows and doors. Generally, the windows are in a good condition for their age, and while some minor pitting was observed, this was in areas where the rain does not get to the windows. Routine maintenance of these windows should sustain the level of durability required. It was concluded that the windows have met the in-service requirements of Clause E2 and do not require attention
Provide a current manufacturer's appraised product warrant and approved applicators certificate for the waterproof membrane applied to the upper level external deck surface.	The liquid applied membrane fitted over a ply substrate to the deck over the garage is compliant. Given the age of the dwelling the membrane can be considered to have demonstrated it will meet code requirements, therefore manufacturers warranties are no longer relevant. Routine maintenance is required to keep it compliant.

### 5.6 Miscellaneous items

The expert also commented on the following authority concerns:

Building defects identified by the authority	The expert's findings
Replace the lower level shower wall linings	The chipping is minor and there were no unusual moisture readings. Though compliant, it would be prudent to provide a further bead of sealant at the bath, lining junction and to the timber trim at the back of the bath.
A second seismic restraint is required for the hot water cylinder	While this item was in fact non compliant, it no longer requires attention.

Building defects identified by the authority	The expert's findings
Provide copies of the electrical and gas certificates	The applicant has advised that the electrician who had installed the electrical wiring could not be located. If the authority did not have a copy of the electrical certificate, an independent inspection of the wiring system could be undertaken. The expert believed that the claimant now has a certificate for the new gas installation.
Complete the application for CCC	The applicant to undertake

### Matter 1: The code compliance of the house

### 6 Discussion

- Taking into account the expert's report, I am satisfied that the current performance of the building elements listed in paragraph 5.4, indicates that they do not meet the requirements of the Building Code. Consequently, I am satisfied that the building work does not comply with Clauses B1, B2, D1, E3, G4, and H1.
- 6.2 The expert has also noted, as listed in paragraph 5.5 that certain elements of the house require urgent maintenance. Effective maintenance of building elements is important to ensure ongoing compliance with the Building Code and is the responsibility of the building owner. The Department has previously described these maintenance requirements, for example, in Determination 2007/60.
- 6.3 Section 436 of the Building Act 2004 sets out the transitional provision for issuing code compliance certificates for building work consented under the Building Act 1991. As the building work in dispute was consented under the 1991 Act, the transitional provisions of the Act apply, in particular section 436, which states:
  - (2) An application for a code compliance certificate in respect of building work to which this section applies must be considered and determined as if this Act had not been passed.
  - (3) For the purposes of subsection (2), section 43 of the former Act
    - (a) remains in force as if this Act had not been passed; but
    - (b) must be read as if
      - (i) A code compliance certificate may be issued only if the territorial authority is satisfied that the building work concerned complies with the building code that applied at the time the building consent was granted . . .
- The consent for the house was issued in 1993. Therefore the compliance of the building has to be assessed in accordance with the Building Code that was extant at that time. I take this to also mean that if the consent was granted on the basis of a Compliance Document, the building is to be assessed against the version of the relevant Compliance Document that existed at the time the consent was granted.

# Matter 2: The durability considerations

#### 7 Discussion

7.1 The relevant provision of Clause B2 of the Building Code requires that building elements must, with only normal maintenance, continue to satisfy the performance

requirements of the Building Code for certain periods ("durability periods") "from the time of issue of the code compliance certificate" (Clause B2.3.1).

These durability periods are:

- 5 years if the building elements are easy to access and replace, and failure of those elements would be easily detected during the normal use of the building
- 15 years if building elements are moderately difficult to access or replace, or failure of those elements would go undetected during normal use of the building, but would be easily detected during normal maintenance
- the life of the building, being not less than 50 years, if the building elements provide structural stability to the building, or are difficult to access or replace, or failure of those elements would go undetected during both normal use and maintenance.
- 7.2 In this case, the delay between the issuing of the building consent in August 1993 and the applicant's request for a code compliance certificate in 2007 has raised concerns with the authority that various elements of the building are now well through their required durability periods and would consequently no longer comply with Clause B2 if a code compliance certificate were to be issued effective from today's date.
- 7.3 It is not disputed, and I am therefore satisfied, that all the building elements complied with Clause B2 on 21 March 1994, refer paragraph 4.7.
- 7.4 In order to address these durability issues, when they were raised in previous determinations, I sought and received clarification of general legal advice about waivers and modifications. That clarification, and the legal framework and procedures based on the clarification, is described in previous determinations (for example, Determination 2006/85). I have used that advice to evaluate the durability matters raised in this determination.
- 7.5 I continue to hold the views expressed in the previous relevant determinations, and therefore conclude that:
  - (a) the authority has the power to grant an appropriate modification of Clause B2 in respect of all of the building elements in the building that were constructed under the building consent.
  - (b) it is reasonable to grant such a modification, with appropriate notification, because in practical terms the construction is no different from what it would have been if a code compliance certificate had been issued when the building was substantially completed in 1994.
- 7.6 I strongly recommend that the authority record this determination, and any modification resulting from it, on the property file and also on any LIM issued concerning this property.

#### 8 What is to be done now?

8.1 A notice to fix should be issued that requires the owner to bring the building work into compliance with the Building Code, identifying the defects listed in paragraph 5.4, and referring to any further defects that might be discovered in the course of

rectification, but not specifying how those defects are to be fixed. It is not for the notice to fix to specify how the defects are to be remedied and the unit brought to compliance with the Building Code. That is a matter for the owner to propose and for the authority to accept or reject.

- I suggest that the applicant and the authority adopt the following process to meet the requirements of paragraph 7.1. Initially, the authority should issue the notice to fix. The owner should then produce a response to this in the form of a detailed proposal, together with suitable amendments to the plans and specifications, produced in conjunction with a competent and suitably qualified person, as to the rectification or otherwise of the specified matters. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.
- 8.3 Once all the defects listed in paragraph 5.4 have been rectified to the satisfaction of the authority, and following receipt of an application from the owner for a code compliance certificate, the authority may a code compliance certificate in respect of the building consent as amended.
- 8.4 As noted in paragraph 2.3 there has been a change of cladding to some of the walls to the garage from that shown on the consent documentation. The consent documentation should be amended accordingly.

#### 9 The decision

- 9.1 In accordance with section 188, I hereby determine that
  - (a) the house does not comply with Clauses B1, B2, D1, E3, G4, and H1 of the Building Code, and
  - (b) I confirm the decision of the authority to refuse to issue a code compliance certificate for the house.

#### 9.2 I also determine that:

- (a) all the building elements installed in the building, apart from the items that are to be rectified as described in this determination, complied with Clause B2 on 21 March 1994.
- (b) the building consent is hereby modified as follows:

The building consent is subject to a modification to the Building Code to the effect that, Clause B2.3.1 applies from 21 March 1994 instead of from the time of issue of the code compliance certificate for all the building elements, except the items to be rectified as set out in paragraph 5.4 of determination 2009/10.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 25 February 2009.

John Gardiner

**Manager Determinations**