



Determination 2011/006

Refusal of a code compliance certificate for 10-year old house completed under the supervision of a building certifier at 155 Carlton Street, Tauranga



1. The matters to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ (“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 that Department. The applicants are the owners, M and A Shaw (“the applicants”), and the other party is the Tauranga City Council (“the authority”) carrying out its duties as a territorial authority or building consent authority.
- 1.2 This determination arises from the authority’s decision to refuse to issue a code compliance certificate for a 10-year-old house because it was not satisfied that the house complied with the Building Code (First Schedule, Building Regulations 1992). The refusal arose because the building work had been undertaken under the supervision of Bay Building Certifiers (“the building certifier”), which was duly registered as a building certifier under the former Building Act 1991, but which ceased operating as a certifier before it had issued a code compliance certificate for the work.

¹ The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Department are all available at www.dbh.govt.nz or by contacting the Department on 0800 242 243.

1.3 The matter to be determined² is therefore whether the authority was correct to refuse to issue a code compliance certificate for the building work. In deciding this, I must consider:

1.3.1 Matter 1: The external envelope

Whether the external envelope of the building (“the external envelope”) complies with Clause³ B2 Durability and Clause E2 External Moisture of the Building Code. The external envelope includes the components of the systems (such as the plaster and fibre-cement claddings, the windows, the roof tiles and the flashings), as well as the way the components have been installed and work together. I consider this in paragraph 7.

1.3.2 Matter 2: Other relevant code requirements

Whether the building work complies with the other relevant clauses of the Building Code. I consider this in paragraph 8.

1.3.3 Matter 3: The durability considerations

Whether the elements that make up the building work comply with Clause B2 Durability of the Building Code, taking into account the age of the house. I consider this in paragraph 9.

1.4 The available evidence

1.5 Based on the information available and records supplied, I consider there is sufficient evidence available to allow me to reach a conclusion on the code compliance of the building work. This determination therefore considers whether it is reasonable to issue a code compliance certificate for the building work. In order to determine that, I have addressed the following questions:

- (a) Is there sufficient evidence to establish that the building work complies with the Building Code? I address this in paragraph 5.
- (b) If not, are there sufficient grounds to conclude that, once any outstanding items are repaired and inspected, the building work will comply with the Building Code and a code compliance certificate is the appropriate certificate to be issued? I address this question in paragraph 10.

1.6 In making my decision, I have considered the submissions of the parties, the report of the expert commissioned by the Department to advise on this dispute (“the expert”), and other evidence in this matter.

² Under sections 177(1)(b) and 177(2)(d) of the Act.

³ 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.

2. The building work

- 2.1 The building work consists of a detached single storey house situated on an excavated northwest sloping site in an established urban suburb, and associated retaining walls which have been located to provide a flat site for construction. The site is considered a sheltered site, and is in a medium wind zone for the purposes of NZS 3604⁴.
- 2.2 The dwelling is relatively simple in shape and form, is of light timber frame construction and sits on timber foundation piles with the attached internal access garage on a concrete slab foundation.
- 2.3 The cladding is face-fixed textured and painted fibre-cement sheet and batten with face-fixed aluminium joinery throughout.
- 2.4 The roof is a simple, truss-style hip roof with a 20° pitch, and is clad in corrugated metal with guttering fitted along the roof's outer edge. A 600mm soffit has been provided on all elevations.
- 2.5 The expert noted that he was unable to establish whether or not the timber framing in the walls, roof and flooring of the dwelling had been treated. Given the date of construction in 1999, I consider that the wall framing is most likely to be untreated.

3. Background

- 3.1 On 16 February 1999 the authority issued a building consent (No. 98/2849) for the house under the Building Act 1991, based on a building certificate issued by the building certifier on 9 December 1998.
- 3.2 The authority's records show that the building certifier carried out the following progress inspections for the building work:
- footing inspection on 28 February 2000 (which passed)
 - block fill and sub-floor inspections on 7 March 2000 (both of which passed)
 - slab inspection on 8 March 2000 (which passed, noting that mesh had been installed)
 - drainage inspections on 29 March 2000 (which failed), repeated on 30 March 2000 (which passed)
 - pre-line/building and pre-line/plumbing inspections on 6 and 7 April 2000 respectively (both of which passed).
- 3.3 It appears that the building certifier did not carry out a final building inspection or issue a code compliance certificate. The building certifier ceased to operate as a building certifier on 30 June 2005 and became 'processing and inspections consultants' operating on the authority's behalf ("the contractor").

⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

3.4 The applicants believed a code compliance certificate had been issued (refer paragraph 4.2) and so the issue was not raised again until the applicant sought to sell the house in 2010.

3.5 The authority's refusal to issue a code compliance certificate

3.5.1 I have received no evidence indicating that the applicants applied for a code compliance certificate, however the authority has issued an undated 'draft certificate of acceptance' (No. 982849) at the request of the current owners of the property. I take this to indicate the authority's refusal to issue a code compliance certificate.

3.5.2 The draft certificate of acceptance states that

[the authority] has not inspected any of the building works as the Building Consent was approved and inspected by a private building certifier up to and including preline plumbing and building inspections. No further inspections were called for by the applicant. The [authority] cannot confirm that the building complies with Clause E2 External Moisture or B2 Durability.

3.6 The Department received an application for a determination on 5 October 2010.

4. The submissions

4.1 The applicants provided copies of:

- the consent drawings and specifications
- the consent documentation
- the certificate of compliance for electrical work, evidence of a property inspection and valuation following completion of the building work, and an invoice from the building certifier dated 9 December 1998
- some correspondence between the parties.

4.2 The applicants also stated in a letter to the Department dated 30 September 2010, which accompanied the application for a determination, that although the builder of the house has not kept records prior to 2000, 'he insists that the [code compliance certificate] was issued at the time of completion through [the building certifier]'.

4.3 The authority acknowledged the application for a determination in an email to the Department dated 12 October 2010, but did not make a submission.

4.4 A draft determination was issued to the parties on 12 January 2011. The draft was issued for comment and for the parties to agree a date when the house complied with Building Code Clause B2 Durability.

4.5 The parties agreed that compliance with Clause B2 was achieved on 6 April 2000.

4.6 The authority submitted in a letter dated 14 January in response to the draft, that the undated certificate of acceptance was a draft only and that the owner had requested this of the authority to find out what the wording of a certificate of acceptance would be. I have amended the determination accordingly.

5. Grounds for the establishment of code compliance

- 5.1 In order for me to form a view as to the code compliance of the building work, I established what evidence was available and what could be obtained, considering that the building work is completed and some of the elements were not able to be cost-effectively inspected.
- 5.2 In the absence of any evidence to the contrary, I take the view that I am entitled to rely on the building certifier's inspection records, but I consider it important to look for evidence that corroborates or contradicts these records. I consider that the level of that reliance is influenced by the information available to me and also by my evaluation of the house.
- 5.3 In summary, I find that the following evidence will allow me to form a view as to the code compliance of the building work:
- the record of inspections carried out by the building certifier, which indicates satisfactory inspections of parts of the building work (refer paragraph 3.2)
 - the drawings and specifications in the consent documentation
 - the expert's report (refer to paragraph 6).

6. The expert's report

- 6.1 As mentioned in paragraph 1.6, I engaged an independent expert to assist me. The expert is a member of the New Zealand Institute of Building Surveyors. The expert inspected the house on 29 October 2010 and provided a report that was completed on 23 November 2010.
- 6.2 The expert noted that generally the cladding has been 'well maintained and kept in good condition', and that it appears the dwelling has generally been constructed in accordance with the council approved plans and specifications. The expert also commented that the overall standard of workmanship/finish is 'very good'. In addition, the expert noted that roof hip flashings and apron flashing/wall junctions are well formed and sealed. The expert further commented that roof penetrations are 'appropriately sealed/flashed, not suspect'.
- 6.3 The expert noted that the timber retaining walls on the property appear to be 'in sound condition', that they show no signs of excessive lateral pressure, and that none of the walls exceed 1.5 metres at any point.
- 6.4 The expert provided with his report copies of the following documents from the authority's records:
- the building certificate issued by the building certifier
 - the construction inspection record.

6.5 Moisture levels

- 6.5.1 The expert inspected the interior of the house and noted that there was ‘no evidence that moisture ingress is/has taken place’.
- 6.5.2 The expert took twenty six invasive moisture readings in the exterior walls at areas considered at risk, and noted the following elevated readings or signs of moisture:
- 32% in the bottom plate below the kitchen bay window
 - 29% in the bottom plate below the sliding door in bedroom 2
 - 21% in the bottom plate in the east elevation corner of bedroom 2
 - 20% in the top of the east elevation wall of bedroom 2
 - 21% in the bottom plate of bedroom 1’s east elevation wall.
- 6.5.3 I note that moisture readings above 18%, or which vary significantly, generally indicate that moisture is entering the structure and further investigation is needed.
- 6.6 Commenting specifically on the weathertightness of the external envelope, the expert noted:
- on the south elevation, there are cracks in the cladding below the toilet window, above the bedroom 2 window, and in the upper corner between bedrooms 1 and 2 and there is no soffit in this corner
 - there are no movement joints at 5.4 metres as recommended by the manufacturer and this could have contributed to the cracks in the cladding
 - the deck to the east and north elevations is fixed hard up to the cladding
 - there are no overflows installed to the fascia and gutter system
 - the aluminium joinery has been installed without sealant or other means of protection behind the facings in accordance with the manufacturers requirements and there are no sill trays (although these were only recommendations at time of construction).

6.7 Compliance with the other relevant code clauses

- 6.8 The expert assessed the building work for compliance with the other relevant clauses of the Building Code. In the expert’s opinion, based on visual observations, the following clauses have been complied with:
- C1 Fire safety and F7 Warning Systems
 - E1 Surface Water
 - E3 Internal moisture
 - F2 Hazardous building materials
 - F4 Safety from falling
 - G1 Personal hygiene
 - G2 Laundering

- G3 Food preparation and prevention of contamination
 - G4 Ventilation
 - G12 Water supply
 - G13 Foul water
 - H1 Energy efficiency
- 6.9 The expert also assessed the building work for compliance with Clause B1 Structure of the Building Code, and noted that
- the building certifier's inspection records and the expert's visual observations indicate that the building's footings are sound
 - the 100mm by 100mm post shown in the approved construction drawings to support the roof overhang at the entrance has not been installed, which has resulted in a noticeable sag in the roof at this location.
- 6.10 A copy of the expert's report was provided to the parties on 23 November 2010.

Matter 1: The external envelope

7. Weathertightness

7.1 The evaluation of building work for compliance with the Building Code and the risk factors considered in regard to weathertightness have been described in numerous previous determinations (for example, Determination 2004/1).

7.2 Weathertightness risk

7.2.1 The house has the following environmental and design features which influence its weathertightness risk profile:

Decreasing risk

- medium wind zone
- single storey building
- fully protected roof/wall intersections
- eaves generally 600mm in width
- relatively simple envelope complexity with single cladding type
- one open timber deck at ground level.

7.2.2 When evaluated using the E2/AS1 risk matrix, these features show that the house has a very low risk rating. I note that if the details shown in the current E2/AS1 were adopted to show code compliance, the fibre-cement sheet cladding would not require a drained cavity.

7.3 Weathertightness performance

7.3.1 Taking into account the expert's report, although the claddings generally appear to have been installed in accordance with good trade practice, I conclude that remedial work is necessary in respect of the matters described in paragraph 6.6:

- the cracks to the cladding and the lack of movement joints
- the lack of gap between the deck to the east and north elevations and the cladding
- in areas where high moisture readings were obtained the bottom plates should be checked for possible moisture damage
- the lack of overflows to the fascia and gutter system
- the lack of sealant or other means of protection of the jambs of the aluminium joinery, particularly required where joinery is not protected by the wide eaves or extends to bottom the wall.

7.4 Weathertightness conclusion

7.4.1 I consider the expert's report establishes that the current performance of the external envelope is not adequate because there is evidence of moisture penetration into the untreated timber framing. Consequently, I am satisfied that the house does not comply with Clause E2 of the Building Code.

7.4.2 In addition, the external envelope is also required to comply with the durability requirements of Clause B2. Clause B2 requires that a building continues to satisfy all objectives of the Building Code throughout its effective life, and that includes the requirement for the house to remain weathertight. Because the cladding faults on the house are likely to allow the ingress of moisture in the future, the building work does not comply with the durability requirements of Clause B2.

7.4.3 Because the faults identified with the claddings occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 7.3.1 will result in the building work being brought into compliance with Clauses B2 and E2 of the Building Code.

Matter 2: Other relevant Code requirements

8. Discussion

8.1 The omission of the 100mm by 100mm post detailed in the consented plans has resulted in noticeable sagging of the roof overhang adjacent to the front entrance of the house. I concur with the expert's view that because the post has not been installed, the wind uplift resistance of the roof at this location may also be compromised.

8.2 I therefore conclude that the house does not comply with Clause B1 Structure of the Building Code.

- 8.3 The expert's report and the other evidence does, however, provide me with reasonable grounds to conclude that the building work complies with the other relevant clauses of the Building Code.

Matter 3: The durability considerations

9. Discussion

- 9.1 There are concerns about the durability, and hence the compliance with the Building Code, of certain elements of the building taking into consideration the completion of the building work in 2000.
- 9.2 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 applicable code compliance certificate" (Clause B2.3.1).
- 9.3 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.
- 9.4 In this case the 10-year delay between the completion of the building work in 2000 and the applicant's request for a code compliance certificate in 2010 has raised concerns 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.
- 9.5 It is not disputed, and I am therefore satisfied, that all the building elements installed in the house, with the exception of the items that are to be rectified, complied with Clause B2 on 6 April 2000. This date has been agreed between the parties, refer paragraph 4.5.
- 9.6 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 issues raised in this determination.

- 9.7 I continue to hold that view, and therefore conclude that:
- (a) the authority has the power to grant an appropriate modification of Clause B2 in respect of all of the elements of the building if requested by the applicant
 - (b) it is reasonable to grant such a modification, with appropriate notification, because in practical terms the building is no different from what it would have been if a code compliance certificate had been issued in 2000.
- 9.8 I strongly suggest that the authority record this determination, and any modification(s) resulting from it, on the property file and also on any LIM issued concerning this property.

10. The appropriate certificate to be issued

- 10.1 Having found that the building work can be brought into compliance with the Building Code, I must now determine whether the authority whether a certificate of acceptance or a code compliance certificate is the appropriate certificate to be issued.
- 10.2 Section 437 of the Act provides for the issue of a certificate of acceptance where a building certifier is unable or refuses to issue either a building certificate under section 56 of the former Act, or a code compliance certificate under section 95 of the current Act. In such a situation, a building consent authority may, on application, issue a certificate of acceptance.
- 10.3 I note that a draft certificate of acceptance was issued by the authority for the house at the request of the applicants. I also note that in this case, the applicants have indicated in their application for a determination that they are seeking a code compliance certificate for the completed building work.
- 10.4 In this situation, where I have reasonable grounds to conclude that the building work can be brought into compliance with the Building Code, I take the view that a code compliance certificate is the appropriate certificate to be issued in due course.

11. What is to be done now?

- 11.1 The authority should now issue a notice to fix that requires the owners to bring the alterations into compliance with the Building Code. The notice to fix should identify the items listed in paragraphs 7.3.1 and 8.1 and refer to any further defects that might be discovered in the course of investigation and rectification, but should not specify 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 building brought to compliance with the Building Code. That is a matter for the owners to propose and for the authority to accept or reject.
- 11.2 The applicants should then produce a response to this in the form of a detailed proposal, 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.

11.3 Once the matters set out in paragraphs 7.3.1 and 8.1 have been rectified to its satisfaction, the authority may issue a code compliance certificate in respect of the building consent, amended as outlined in paragraph 12.2. I also note the variations from the building consent drawings identified by the expert (see paragraph 6.9), and I leave this to the parties to resolve.

12. The decision

12.1 In accordance with section 188 of the Building Act 2004, I hereby determine that:

- the external envelope of the house does not comply with Clauses B2 and E2 of the Building Code
- the building work does not comply with Clause B1 of the Building Code

and accordingly I confirm the authority's decision to refuse to issue a code compliance certificate.

12.2 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 6 April 2000.
- (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 6 April 2000 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 7.3.1 and paragraph 8.1 of Determination 2011/006.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 2 February 2011.

John Gardiner
Manager Determinations