

Determination 2012/015

The code compliance of building work and the refusal to issue a code compliance certificate for a house at 6 Frizzell Court, Castle Hill, Canterbury



1. The matter 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.
- 1.2 The parties to this determination are:
 - the owners of the house, S Gleeson and A Moor ("the applicants")
 - Selwyn District Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.
- 1.3 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for a 7-year-old house because it was not satisfied that the building work complied with the Building Code (First Schedule, Building Regulations 1992). The refusal arose because the authority has concerns about:

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.

• work that was carried out before the consent was issued, and which the authority was now unable to inspect to determine compliance with certain clauses² of the Building Code

- the compliance of some other elements that vary from the consent documents
- the age of the building work that was substantially completed in 2004.
- 1.4 The matters to be determined³ are therefore whether the authority was correct to refuse to issue the code compliance certificate, and whether the building work undertaken prior to the issue of the building consent complies with the Building Code. In making this decision I must consider:

1.4.1 Matter 1: Compliance of the concealed elements

Whether concealed elements within and under the concrete slab and foundations comply with the Building Code, taking into account the engineering oversight and the lack of authority inspections during construction. Specifically, whether:

- the concealed structural elements comply with Clause B1 Structure
- the vapour barrier beneath the slab complies with Clause E2 External Moisture
- the concealed waste pipes comply with G13 Foul Water
- the under-slab insulation complies with H1 Energy Efficiency.

I consider this matter in paragraph 6.

1.4.2 Matter 2: The as-built variations to work as consented

- Whether structural bracing to the upper level timber framing complies with Clause B1 Structure of the Building Code, taking into account the change in a doorway position. I consider this in paragraph 7.3.
- Whether timber posts and beams to the verandahs comply with Building Code Clause B2 Durability, taking into account the change in the timber species used. I consider this matter in paragraph 7.4.
- 1.5 In making my decision, I have considered the submissions of the parties, the report of the officer of the Department who undertook a site inspection, and the other evidence in this matter.

2. The building work

- 2.1 The subject building work is to a two-storey house located on a level gravel terrace on the eastern side of the Southern Alps, which is in a specific design wind zone for the purposes of NZS 3604⁴.
- 2.2 The house has a concrete slab and foundations, with specifically engineered reinforced concrete block walls to the two-storey 'leg' of the T-shaped floor plan. These walls are clad in plastered 100mm thick concrete block veneer over a drainage gap, with decorative concrete 'stone' bands installed at every second course. The

_

² 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.

³ Under sections 177(1)(a), 177(1)(b) and 177(2)(d) of the Act

⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

800mm high concrete block walls below ground floor windows on the east and west elevations are covered with natural stone.

2.3 The remaining construction is conventional light timber framing, with plywood cladding, aluminium windows, and a profiled metal gable roof. Low-pitched verandahs form lean-tos above the south entry and along the north elevation. The verandah posts and beams are untreated New Zealand Oregon.

3. Background

- 3.1 After receiving resource consent for the house on 17 December 2003, the applicants lodged an application for a building consent on 9 January 2004. In a letter to the applicants dated 12 January 2004, the authority noted it was experiencing 'a very high volume' of applications and advised the applicants of the expected delay in issuing the building consent.
- 3.2 The building consent application was supported by a producer statement for the structural design dated 3 February 2004 from the design engineers.

3.3 Construction prior to the building consent

- 3.3.1 During February 2004, the applicants engaged another engineer ("the second engineer") to oversee structural elements during construction and 'speed up the project' in order to avoid foundation work during winter. The name of that engineer was included in the authority's list of 'frequently used professionals' at the time.
- 3.3.2 The second engineer informed the applicants that he had had discussions with the authority and had been 'cleared to start building' in March 2004, as the structural drawings had been seen and 'all was in order'. While there is no documentation of discussions or agreements, it was the applicants understanding that by hiring the second engineer to oversee the work as it proceeded they 'were working in tandem with [the authority's] inspections and that starting the project with his supervision was legitimate.'
- 3.3.3 Work commenced on the site in March 2004, with construction photographs taken showing foundations being poured, slab reinforcing in place, and the poured slab with four courses of blockwork laid. The authority was processing the consent application at this time, and a list of requirements was sent to the applicants on 4 March 2004.
- 3.3.4 There is some confusion as to what elements the second engineer inspected and when those inspections were carried out; the engineer did not provide any documentation of inspections at the time of construction and advised the authority on 23 October 2009 that his diary entries indicated pre-pour inspections were carried out on 17 January 2004 (I have not seen copies of those diary entries). I note that:
 - 17 January 2004 was before the design engineers provided their producer statement ("PS1") on 3 February 2004
 - the date is at odds with the applicants' statement that the engineer was working on a neighbouring property and was not engaged until February 2004, with construction commencing the following month

• the second engineer was apparently working at a neighbouring site in early 2004 and it is possible the diary entries relate to inspections of that neighbouring property

• if pre-pour inspections were carried out in January 2004, this would have allowed five months of construction before the authority's first inspection, and the description of progress at the time of the authority's first inspection is more consistent with two to three months work rather than five months.

Based on the above and the lack of documented evidence, I consider it likely that construction did not start until March.

3.4 The verandah posts and beams

3.4.1 The authority's letter of 4 March 2004 included the requirement for a schedule of timbers, which the architect provided on 25 March 2004 stating that verandah posts and beams were to be 'N Z Oregon'. The authority's handwritten note on the former letter referred to that schedule and stated:

Exterior wall frames cannot be untreated. Oregon posts and beams are an alternative solution – justification required.

- 3.4.2 In a letter to the authority dated 20 April 2004, the applicants justified the choice of Oregon for the verandah posts and beams, including (in summary):
 - the species is dimensionally stable in the alpine environment
 - examples of untreated exposed Oregon in the area show no undue weathering
 - the 8m long beam to the north verandah can be milled in one piece
 - the second engineer had suggested a protective paint system for the timbers
 - the fixings are such that posts and beams can be replaced if necessary.
- 3.4.3 Although there was no formal response, a note was added to the annotated letter of 4 March 2004 stating 'amended to H3 Pinus Radiata after discussion with owner', and the applicants' letter was stamped as 'superseded' on 13 May 2004.

3.5 The engineer's inspections

- 3.5.1 The authority's letter of 4 March 2004 also sought confirmation of any inspections that the engineer 'may wish to carry out'. In a letter to the authority dated 26 April 2004, the applicants formally advised that the second engineer was engaged to supervise the following:
 - Pre foundation pour
 Soil bearing, siting, excavation, steel for foundations and floor ties
 - b) Pre slab pour Tailings/DPM insulation, mesh, wastes
 - c) Blockwork ½ height inspection Reinforcing, clean-outs
 - d) Pre-pour full height blockwork inspection Reinforcing, clean-outs

I note that by this time, most work in a), b) and c) had been completed.

3.6 The authority's inspections

3.6.1 The authority issued a building consent for the house (No. 040026) on 14 May 2004 under the Building Act 1991. The building consent listed the engineering inspections described in paragraph 3.5.1 along with the schedule of authority inspections required, which included pre-pour slab inspections.

- 3.6.2 The authority's first inspection was on 18 May 2004. The inspection was identified as 'other' and noted construction progress, including 'Oregon posts & beams to be painted & maintained re durability watertightness'. Despite being only four days after consent issue, the inspection record is silent on construction obviously having started prior to the building consent being issued: the first inspection noted 'looking good. OK to proceed'.
- 3.6.3 The authority carried out various other inspections during construction, including:
 - Preline/bracing and plumbing on 14 June 2004 (which passed)
 - Preline/bracing on 23 June 2004 (which passed, noting 'looking good')
 - Drainage on 23 July 2004 (which passed, but noting some work to complete).
- 3.6.4 It appears that the house was substantially completed by July 2004. Minor items were completed by the applicants over the next two years, with a final inspection not requested until 2006. The authority carried out a final inspection on 22 May 2006, which identified various minor outstanding items to be completed or resolved.
- 3.6.5 The authority did not re-inspect until 15 January 2009, with records noting '22/05/06 items now complete' and documentation required, including 'CCC application'. The applicants applied for a code compliance certificate on 20 January 2009. The second engineer submitted a PS4-Construction Review on 23 October 2009, which the authority refused to accept (see paragraph 3.7.2).

3.7 The refusal to issue the code compliance certificate

3.7.1 In a letter to the applicants dated 2 June 2010, the authority outlined the durability periods required in the Building Code, noting the delay between the substantial completion of the house in July 2004 and the application for a code compliance certificate in January 2009. The authority stated:

As a result of the time lapsed, [the authority] cannot now be satisfied on reasonable grounds that the building work and elements will continue to satisfy the durability provisions of the Building Code for the prescribed period <u>after</u> the Code Compliance Certificate has been issued.

3.7.2 The authority also noted that records show that work commenced on the house prior to the issue of a building consent, and stated that it would not accept the producer statement for construction review as the second engineer had stated that he had carried out a pre-pour inspection on a date prior to the issue of the design engineer's producer statement (I have discussed this issue in paragraph 3.3.4). The authority also stated that it:

...has not had the opportunity to inspect those items such as; the vapour barrier, the under-slab insulation, the under-slab waste pipes, therefore can not verify compliance with code clauses E2, H1 and G13.

3.7.3 The authority also raised the matter of the New Zealand Oregon used for the verandah posts and beams, noting that as approval had not been given for its use the work 'is contrary to the approved building consent'. A revised plan showing as-built alterations had also not been received.

3.8 The applicants' response

- 3.8.1 The applicants responded to the authority's refusal on 23 June 2010, setting out the background and including the following points (in summary):
 - The consent application was lodged on 9 January 2004, but delays in issuing building consents meant that the consent application was not progressed until March 2004.
 - The second engineer was working on a neighbouring property in February and was engaged to work on this property to 'speed up the project'. The applicants were of the belief that the second engineer had been given informal clearance by the authority to start building in March; no documentation of engineering review was supplied.
 - The applicants believed that starting the project with the second engineer's supervision was legitimate and the owner assisted with construction from March 2004.
 - The verandah posts and beams were 'okayed by [the second engineer] and [the authority] at the time of installation' and are well painted with no sign of deterioration.

The applicants also attached an as-built plan of the altered bathroom as requested and asked the authority to reconsider its decision.

- 3.9 The authority responded on 29 July 2010, confirming its earlier decisions and adding that the amended plan showed that moving the upstairs bathroom door also affected the bracing in those walls.
- 3.10 The Department received the application for a determination on 22 September 2011.

4. The submissions

- 4.1 The applicants forwarded copies of:
 - the consent drawings
 - the building consent
 - correspondence with the authority
 - construction photographs of the concrete slab and foundations
 - the design engineer's 'Producer Statement-PS1-Design'
 - various other items of information.
- 4.2 The authority provided a submission dated 3 October 2011 to the application that amplified various points made during its correspondence with the applicants and provided copies of:

• the letter from the second engineer dated 23 October 2009

- the inspection records
- the as-built bathroom layout plan
- the annotated letter to the applicants dated 4 March 2004.
- 4.3 A draft determination was issued to the parties on 14 December 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. The applicants accepted the draft without comment.
- 4.4 The authority accepted the draft determination but noted matters summarised as follows:
 - The site was in a specific design wind zone.
 - The establishing code compliance 'by gauging how well the building stood up to recent earthquakes is irrelevant to this determination'.
 - The applicants requested that the engineer carry out the inspections listed in paragraph 3.5.1, which the authority agreed to.
 - The authority could not verify 'which documents were used by the inspecting engineer to determine code compliance'.
 - The authority sought to have the decision include the issue of a code compliance certificate; and the amendment of the consent to exclude those elements covered by a certificate of acceptance, and the modification of Clause B2.3.1.
- 4.5 In response to the authority's submission (second bullet point in paragraph 4.4) I note that the Building Code is performance-based; a proven history of in-use performance is a legitimate means of showing compliance with the Building Code, in the same manner that a building not allowing the ingress of water is proven performance against the requirements of Clause E2. I have considered the other matters raise by the authority and amended the determination as appropriate.
- 4.6 The parties agreed that compliance with Clause B2 in respect of the consented work was achieved on 1 August 2004.

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 some elements are not able to be cost-effectively inspected.
- 5.2 The applicants maintain that the second engineer's oversight during the premature start to construction ensured that the concrete slab and foundations accorded with the consented design. However, the authority does not accept that the second engineer's review provides sufficient verification of structural compliance and also maintains that other concealed elements within or under the slab were not properly inspected.

- 5.3 In the case of the foundations and concrete slab to this house, I observe that:
 - despite the authority not accepting the producer statement for construction review, the second engineer's submission of that statement indicates a belief that the work was code-compliant
 - the inspection records (see paragraph 3.6) generally indicate that the authority:
 - o inspected all above-ground stages of construction that involved structural bracing, fixings, plumbing and drainage
 - o noted the construction's good quality, with no mention of concerns about the slab and associated elements or about verandah posts and beams
 - o identified only minor outstanding items during the first final inspection in 2006, with no mention of outstanding inspections
 - o confirmed that outstanding items were complete in the final inspection in 2009, with no mention of outstanding inspections, structural bracing or the verandah posts and beams
 - since the final inspection, the house has experienced earthquake movement, which is expected to have tested its structural performance.
- Taking account of the above and in the absence of any evidence to the contrary, I take the view that I am entitled to rely on the applicants' statements that structural elements accord with the consented documents and also that the authority carried out sufficient satisfactory inspections during construction of bracing elements that are now hidden.
- A condition for this reliance is that there should be corroboration of the impression given by the evidence. A visual inspection of accessible components can provide this and provide reasonable grounds to form a view on whether this house as a whole complies with the Building Code.

5.6 The site inspection

- 5.6.1 In order verify the impression given by the evidence, an officer of the Department visited the house on 3 November 2011 to carry out a visual inspection, reporting that the house appeared to have been 'built to a very good standard and is very well maintained'.
- 5.6.2 The officer observed that ceramic tiling to the ground floor slab was yet to be laid, which allowed inspection of the concrete surface. While some damage had been suffered during recent seismic activity, the following was observed and was considered to be cosmetic in nature:
 - fine diagonal cracking to slab in one small area
 - fine vertical cracking to the plaster over some upper window jamb reveals, in line with the drainage gap between the blockwork and the stone veneer
 - one hairline crack to the plastered stone veneer above the entry
 - fine cracking to some parts of the stone veneer to the low concrete block walls
 - a slight 'pulling away' of taped joint between sloped and flat ceiling linings.

- 5.6.3 The officer also observed:
 - no cracks running from any corners of window and door openings
 - no cracking or creasing to interior plasterboard linings, including to the twostorey-high stair well walls
 - no evidence of movement in the form of doors or windows jamming.
- 5.6.4 The officer commented on other matters raised by the authority as follows:

Clause B1 Structure

In regard to the changed bathroom door position:

- the doorway wall adjoins the rigid reinforced concrete block wall
- the remaining bracing in the upper level is evenly distributed and includes two long unbroken elements running in the same direction as the doorway wall
- adjacent wall linings are undamaged and doors are not sticking.

Clause B2 Durability

In regard to the verandah posts and beams:

- posts are clearly over-sized at 200mm x 200mm for the roofs supported
- beams are protected beneath the roof overhangs
- the posts and beams are in good condition, the paint coating is well maintained and there is no evidence of decay or deterioration
- posts are fixed to brackets that lift them clear of the paving
- posts and beams are able to be readily inspected and replaced if necessary.

Clause E2 External Moisture

In regard to the under-slab vapour barrier:

- there is no evidence of problems resulting from moisture migrating through the slab (in the form of dampness, efflorescence of the slab surface etc)
- given the locality, elevation and nature of the soil, it is unlikely that there would be any problems arising from ground water migration.

Clause G13 Foul Water

- pipe runs are relatively short and all drains are running freely
- there is no evidence of past blockages or present problems
- drains are freely discharging into gully traps.

Clause H1 Energy Efficiency

- the building consent was issued under the Building Act 1991, meaning that the completed work must comply with the Building Code that was in force at the time (rather than the consent)
- at the time the slab was laid in 2004, the Building Code allowed concrete slabs 'on grade' without the requiring further insulation. (It is noted that the changes

- to Clause H1 that came into effect in October 2007 also allow the use of concrete slabs 'on grade' without the need for additional insulation.)
- insulation installed beneath the concrete slab would have been in excess of the requirements of the Building Code at the time of construction.
- 5.6.5 The officer concluded that, in his opinion:

There is no evidence to suggest that the as-built work does not comply with the Building Code. Any current defects observed arise from the recent earthquakes; these defects are considered cosmetic in nature and do not impact on the compliance of the house.

6. Matter 1: Compliance of the concealed elements

- 6.1 The applicants have described the circumstances that resulted in some work being undertaken prior to the issue of the building consent and without inspections by the authority. I consider that these explanations appear reasonable, in the particular circumstances of the delays in consent processing around that time.
- Despite the lack of documented evidence and confusion over the start date, I also accept that work proceeded under review by the second engineer. The lack of documentation meant there was a lack of clarity regarding the level of overview provided during the slab and foundation construction.
- 6.3 When the first inspection of the house was carried out, only four days after the issue of the building consent, the concrete slab and foundations and some of the blockwork walls were in place and the authority was therefore unable to inspect elements concealed by the concrete. There were no concerns noted regarding those building elements on the inspection record.
- Apart from the two-storey concrete block walls, I note that the construction is conventional light timber frame which is generally not expected to be reviewed by a structural engineer. I accept that the applicants elected to have an engineer inspect the elements noted in paragraph 3.5.1. While three of these building elements were completed before the consent was issued, I accept that the applicant's contention that the three elements were inspected.
- 6.5 In reaching my conclusions as to the compliance of the concrete slab and associated concealed elements with relevant clauses of the Building Code, I have taken into account:
 - the consent documents
 - the building consent issued under the Building Act 1991, and the requirement for the work to comply with the Building Code that was in force at that time
 - the conventional nature of the concrete slab and foundations
 - the photographs taken during the foundation and slab installation
 - the second engineer's overview of the slab/foundations
 - the authority's records of satisfactory inspections after the consent was issued
 - the site inspection for this determination, which identified:

- o the very good standard of visible elements of the construction
- o lack of significant damage following earthquake movement
- o lack of any apparent problems associated with under-slab damp proof membrane and plumbing pipes.
- Taking the above into account, I am able to conclude that there are reasonable grounds to come to the view that:
 - the concrete slab and foundations comply with Clause B1
 - the under-slab vapour barrier complies with Clause E2
 - the concealed waste pipes comply with Clause G13
 - the slab and foundations comply with Clause H1 to the extent required at the time of construction.

6.7 Conclusion

6.7.1 I consider that there is sufficient evidence to establish on reasonable grounds that the concealed elements comply with the Building Code.

7. Matter 2: The as-built variations to the consented work

- 7.1 I have assessed the remaining concerns of the authority in regard to compliance of the consented building work with relevant clauses of the Building Code.
- 7.2 The authority raised no objections to the changes as construction proceeded; with the inspection records indicating satisfaction with the quality of work up to and including the more recent final re-inspection in 2009. The applicants were therefore not aware of any concerns until six years later when the authority refused to issue a code compliance certificate.

7.3 The structural bracing

- 7.3.1 I note that the authority inspected and passed the bracing during construction (see paragraph 3.6.3), with no comment made on any bracing reduction as a result of the changed bathroom door position and no instruction issued to reverse that change. Since completion, the bracing has been subject to severe earthquake movement and the site inspection was able to assess its performance.
- 7.3.2 The site inspection noted no damage to bathroom wall linings and doors are not sticking as a result of undue movement. It was also noted that the bathroom doorway wall adjoins a rigid reinforced concrete block structure, with the remaining bracing elements in the upper level evenly distributed and including two long unbroken bracing elements with the same orientation as the bathroom doorway wall.
- 7.3.3 Taking account of the site inspection and the other evidence, I am satisfied that the structural bracing, taking into account the change in position of the upper level bathroom doorway, complies with Clause B1 Structure of the Building Code.

7.4 The verandah posts and beams

7.4.1 I note that the authority inspected and identified the timber species used for the verandah during construction. Comments were limited to identifying the need for painting and maintenance (see paragraph 3.6.2) and no instruction was issued to change the timber species.

- 7.4.2 The site inspection noted that verandah posts are over-sized and are mounted on brackets to prevent moisture migration from the paving. Beams are sheltered from rainwater beneath the roof overhangs. The verandah timbers are painted and well maintained, with no evidence of deterioration. Timbers are able to be readily inspected and able to be replaced if necessary.
- 7.4.3 Taking the above into account and given normal maintenance, I am satisfied that the verandah posts and beams are likely to remain durable and in compliance with Clause B2 of the Building Code.

8. The refusal to issue a code compliance certificate

- 8.1 The authority has refused to issue the code compliance certificate for the reasons given in paragraph 3.7, namely:
 - compliance of the work done before the consent was issued (Clauses E2, H1, G13)
 - durability given the age of the building work (modification of Clause B2.3.1)
 - compliance of the as-built variations to the consent (Clauses B1, B2).

I have concluded that the house complies with Clauses B1, B2, E2, G13 and H1.

- 8.2 While the authority was correct to refuse the code compliance certificate given that it was applied for in respect of all the work including the work completed before the consent was issued, I do not consider the authority correctly exercised its powers under the Act in coming to the view that the work was not compliant, as it had:
 - incorrectly assessed the compliance of the work against the consent, rather than applying the transitional provisions of the Act and assessing compliance with the Building Code
 - determined compliance based on an ability to inspect completed work, rather than assessing compliance based on the building's performance in use
 - incorrectly applied the requirements of Clause H1 (refer paragraph 5.6.4)
- 8.3 I also consider the authority had the ability to amend the consent to exclude the work done before the consent was issued, and to modify the consent in respect of Clause B2.3.1, without the need for a determination.

9. What is to happen next?

9.1 The building work undertaken prior to consent

9.1.1 Notwithstanding the circumstances and that the applicants were of the understanding that the building work was commencing with the authority's approval; the consequences of the owner undertaking construction prior to the issue of the building consent now fall on the owner.

- 9.1.2 Section 437(1)(a) of the Act provides for the issue of a certificate of acceptance where building work has been carried out for which a building consent was required under the former Act but where consent was not obtained.
- 9.1.3 In such a situation, a territorial authority may, on application, issue a certificate of acceptance but 'only if it is satisfied, to the best of its knowledge and belief and on reasonable grounds, that, insofar as it could ascertain, the building work complies with the [Building Code]'5. In this instance it is the concealed elements and foundations (refer paragraph 1.4.1) that were constructed without building consent having been obtained and for which a certificate of acceptance is the appropriate regulatory mechanism for regularising the work.
- 9.1.4 An application for a certificate of acceptance requires an authority to consider all the available evidence, such as plans and specifications, producer statements, the builder's records, the owner's records, any expert reports, and the authority's own experience and knowledge of the builders and designers involved in the work in order to ascertain whether the building work complies with the Building Code.
- 9.1.5 In a previous determination (2011/043) I discussed the provisions for a certificate of acceptance where there is building work that cannot be inspected and for which there is no evidence available to determine whether it complies with the Building Code. However, in this instance I am of the view that there is sufficient evidence available to form a view on reasonable grounds as to compliance of the concealed elements and foundations.
- 9.1.6 Under section 97, with respect to an application for a certificate of acceptance, it is the applicant who must provide sufficient information to the authority to establish the level of compliance achieved. I note that the applicant still needs to follow the authority's process and apply for a certificate of acceptance for the building work. This determination may be used to support the application along with any further documentation and specifications required by the authority for the authority to consider issuing the certificate of acceptance. I note also that the building consent No. 040026 will require amendment to exclude those building elements covered by the certificate of acceptance.

⁵ Section 96(2)

⁶ Under section 97

9.2 The building work undertaken after consent

9.2.1 Subject to the building consent being amended to exclude those building elements that will be covered by the certificate of acceptance and to reflect the as-built building work, I consider that a code compliance certificate is the appropriate certificate to be issued for the building work undertaken after the consent was issued. The issue of the code compliance certificate then raises the matter of the durability of the building work taking into account it was completed in 2004.

- 9.2.2 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).
- 9.2.3 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.
- 9.2.4 In this case the delay between the completion of the consented building work in 2004 and the applicant's request for a code compliance certificate has raised concerns that various elements of the building are now well through or beyond 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. I have not been provided with any evidence that the authority did not accept that those elements complied with Clause B2 at a date in 2004.
- 9.2.5 It is not disputed, and I am therefore satisfied, that all the building elements in respect of building consent no. 040026 complied with Clause B2 on 1 August 2004 (refer paragraph 4.6).
- 9.2.6 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.
- 9.2.7 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 the building elements, if requested by the owner.

(b) it is reasonable to grant such a modification, with appropriate notification, as in practical terms the building is no different from what it would have been if a code compliance certificate for the building work had been issued in 2004.

9.2.8 I strongly recommend that the authority record this determination and any modifications resulting from it, on the property file and also on any LIM issued concerning this property.

9.3 Conclusion

- 9.3.1 The building consent is to be amended to exclude the work carried out before the consent was issued on 14 May 2004. On application by the owners, a certificate of acceptance can be issued by the authority in respect of the work completed before the consent was issued.
- 9.3.2 The building consent is also to be modified in respect of Clause B2.3.1 (refer paragraph 10.3). A code compliance certificate can then be issued by the authority in respect of the amended and modified consent.

10. The decision

- 10.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the authority was correct to refuse to issue the code compliance certificate but incorrectly exercised its powers in coming to this decision as it applied the incorrect test.
- 10.2 I also determine that:
 - the concealed structural elements comply with Clause B1 Structure
 - the slab vapour barrier complies Clause E2 External Moisture
 - the concealed waste pipes comply with Clause G13 Foul Water
 - the concrete floor slab complies with Clause H1 Energy Efficiency
 - the verandah posts and beams comply with Clause B2 Durability.
- 10.3 I also determine that:
 - (a) all the building elements installed in the house complied with Clause B2 on 1 August 2004.
 - (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 1 August 2004 instead of from the time of issue of the code compliance certificate for all the building elements as described in Determination 2012/014.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 1 March 2012.

John Gardiner

Manager Determinations