Department of Building and Housing
Te Tari Kaupapa Whare

Determination 2009/84

Refusal of a code compliance certificate for a 9-year-old house inspected by a building certifier at 3 Te Karaka Drive, Te Puna, Tauranga

1. The matters to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004[1] ("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, Mr and Mrs Wilson ("the applicants"), acting through a legal adviser, and the other party is the Western Bay of Plenty District Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.

1.2 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for a 6-year-old building, because it was not satisfied that the building work complies with certain clauses of 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

[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

Building Act 1991, but which ceased operating as a certifier before it had issued a code compliance certificate for the building work.

1.3 Based on the information available to me, and in the absence of any submission from the authority, I consider that the matter for determination[2] is whether the decision to issue a code compliance certificate was correct. In making this determination I have considered the following matters:

1.3.1 Matter 1: The building envelope

Whether the wall and roof claddings as installed on the house comply with Clause B2 Durability and Clause E2 External Moisture. By "the claddings as installed" I mean the components of the systems (such as the materials, the joints, the flashings and the coatings), as well as the way the components have been installed and work together. (I consider this matter in paragraph 7.)

1.3.2 Matter 2: Compliance with the remaining Building Code clauses

Whether the building complies with the remaining Building Code clauses relevant to this house. (I consider this matter in paragraph 8.)

1.3.3 Matter 3: The durability considerations

Whether the elements that make up the building work comply with Building Code Clause B2 Durability, taking into account the age of the house. (I consider this matter in paragraph 11.)

1.4 Based on the information and records supplied, I consider there is sufficient evidence available to allow me to reach a conclusion as to whether this building will comply with the Building Code once remedial work is completed. This determination therefore considers whether it is reasonable to issue a code compliance certificate. In order to determine that, I have addressed the following questions:

(a) Is there sufficient evidence to establish that the building work as a whole complies with the Building Code? (I consider this matter in paragraph 9.)

(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? (I consider this matter in paragraph 10.)

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

2. The building work

2.1 The house is a single-story detached building situated on level site that is in a medium wind zone for the purposes of NZS 3604[3]. The house is relatively simple in plan and form but with some complex features. It is timber framed on a concrete slab and footings and the pre-finished corrugated steel roofs are formed to a curved plane with 300mm to 600mm wide eaves and verge projections..

[2] Under section 177(b)(i) of the Act. 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] New Zealand Standard NZS 3604:1999 Timber Framed Buildings

2.2 The house is clad with a mixture of prefinished bitumen-impregnated cellulose-fibre corrugated sheets and uncoated plywood fixed directly through the building wrap to the framing.

2.3 According to the specification, the wall framing timbers were to be Boric treated in accordance with NZMP 3640[4]. However, the expert was unable to find any evidence as to the treatment, if any, of the external timber framing.

2.4 When evaluated using the E2/AS1 risk matrix, two elevations of the house have a low risk rating, and two elevations have a moderate risk rating.

3. Background

3.1 The authority issued building consent No 62873 for the house on 14 June 2000 under the Building Act 1991, with construction generally taking place during 2000 and 2002.

3.2 The building certifier carried out the following inspections:

- foundations on 28 June 2000, which passed
- concrete slab pre-pour on 7 July 2000, which passed
- plumbing and building pre-lines on 18 September 2000, which passed
- drainage on 5 October 2000, which required testing to be carried out.

3.3 The building certifier sent a "pro-forma" letter dated 23 October 2001 to the occupier/owner of the house. The letter noted that final inspections had not been completed and warned of the possible repercussions of not obtaining a code compliance certificate.

3.4 The building certifier's final inspection took place on 5 November 2002 and the inspections failed in respect of the drainage and plumbing.

3.5 The building certifier ceased to operate as a building certifier on 30 June 2005 without having issued a code compliance certificate.

3.6 On 23 June 2006, the authority wrote to the applicants, noting that, based on its previous experiences with the building certifier, 'the inspections supporting documentation and evidence' provided by the building certifier were not sufficient for the authority to issue a code compliance certificate.

3.7 In a pro-forma letter to the applicants dated 23 June 2006, the authority explained that when the building certifier ceased operating, an agreement had been made with a contractor to complete outstanding inspections on the building certifier's projects and make recommendations regarding the issuing of code compliance certificates. The authority went on to explain that the liability for building work imposed by the Act meant that:

[4] NZMP 3640: 1992 Specification of the minimum requirements of the NZ Timber Preservation Council Inc

> ...before Council accepts such liability by issuing Code Compliance Certificates it must be satisfied inspections carried out by Bay Building Certifiers and Bay Inspections were satisfactory to confirm projects have been completed to the standards required by the Building Acts 1991 and 2004.

3.8 The authority explained that further inspections were therefore required in order to determine:

- If a Code Compliance Certificate could be issued or whether more building work and inspections are necessary, or
- If a Certificate of Acceptance could be issued or whether more building work and inspections are required, or
- If a Certificate of Acceptance is not appropriate or a Code Compliance Certificate cannot be issued to advice owners of their right to seek a Determination from [the Department].

3.9 The applicants emailed the authority on 2 July 2006, noting that it was their understanding that a code compliance certificate had been issued for the house and requested confirmation of this from the authority.

3.10 The authority responded by email on 6 July 2006, stating that it had no record of a code compliance certificate being issued and suggested that the applicants contact the building certifier to confirm whether such a document had been issued.

3.11 Following an assessment of the project on 17 November 2007, the authority wrote to the applicants on 17 November 2006 listing some 9 items which in the opinion of the authority were non-compliant. The authority also noted that on completion of the remedial work it would only be prepared to issue a certificate of acceptance, rather than a code compliance certificate, for the building work in question.

3.12 The Department received an application for a determination on 23 June 2009.

4. The submissions

4.1 Neither party made a formal submission and the applicants forwarded copies of:

- the consent drawings and specification
- the consent documentation
- the inspection records
- the correspondence from the authority
- various other information.

4.2 A draft determination was issued to the parties on 7 September 2009. The draft was issued for comment and for the parties to agree a date when the house complied with Building Code Clause B2 Durability.

4.3 The applicant accepted the draft without comment. The authority also accepted the draft but sought clarification about the expert's comments with respect to the barrier to the swimming pool, and consequently whether the determination could deal with this matter as well. I have responded to this in paragraph 5.5.1.

4.4 Both parties agreed that compliance with Clause B2 was achieved on 16 November 2000.

5. The expert's report

5.1 As mentioned in paragraph 1.5, I engaged an independent expert to provide an assessment of the condition of those building elements subject to the determination. The expert is a member of the New Zealand Institute of Building Surveyors.

5.2 The expert visited the site on 18 July 2009 and produced a report that was completed on 5 August 2009 and which was forwarded to the parties on 14 August 2009. The expert's report described the background to the dispute and the general construction of the house.

5.3 The exterior claddings

5.3.1 In general terms, the expert was of the opinion that the claddings were well fixed and aligned, the roof and flashing work was 'tidy and effective', and the overall standard of workmanship and finish was good.

5.3.2 The expert carried out numerous non-invasive and invasive moisture content readings at the interior surfaces of the external walls and no elevated readings or evidence of moisture was apparent. However, evidence of moisture was apparent in internal walls adjacent to the showers, as outlined below in paragraph 5.4.1.

5.3.3 Commenting specifically on the claddings, the expert noted that:

- the wall claddings are either buried unprotected in the ground, or the cladding base of the linings is too close to the paved areas
- the vertical joints in the corrugated external linings need attention
- there is no sealing of the ends of the head flashings to the external joinery set into the shadowline clad walls
- the bottom of the apron flashings are unsealed and lack kick-out flashings
- the top of the electric meter box is and poorly sealed and has no flashing.

5.3.4 The expert noted that he was unable to ascertain whether a flashing system had been installed to the external joinery in the shadowclad lined walls. However, as there is no evidence of moisture ingress at these locations, I am prepared to accept the expert's opinion that the external joinery set into these walls is code-compliant.

5.4 The remaining code clauses

5.4.1 The expert assessed the compliance of the house with the other relevant clauses of the Building Code.

Clause C1 – Outbreak of Fire

There is insufficient information concerning the fire-rating of the timber chimney surround.

Clause E3 – Internal Moisture

Invasive moisture testing was carried out to the walls adjacent to the tiled showers produced a reading of above 80% at the en-suite shower location and readings of 25% and 41% at the main bathroom shower location. In the opinion of the expert, these readings indicated that the waterproofing of the showers had failed, allowing water to leak into the adjacent structures.

5.4.2 For the reasons listed in the report, the expert was of the opinion that the house met the following Building Code clauses:

- Clause B1 - Structure
- Clause E1 – Surface Water
- Clause E2 – External Moisture
- Clause F2 – Hazardous Building Materials
- Clause G1 – Personal Hygiene
- Clause G2 – Laundering
- Clause G3 – Food Preparation and Prevention of Contamination
- Clause G4 – Ventilation
- Clause G12 – Water Supply
- Clause G13 – Foul Water.

5.4.3 The expert also noted that, as the building certifiers would have inspected the wall and roof insulation, it was reasonable to assume that the appropriate blanket type insulation would have been installed. (I note that the inspection summary recorded 'insulation in walls and ceiling'.)

5.5 Other matters

5.5.1 Although not part of his assessment, the expert referred to the barrier to a swimming pool adjacent the house. The expert commented on the features of the windows and doors to the house, and whether these complied with the Fencing of Swimming Pools Act 1987. The expert also noted that the gate to the pool barrier was not returning automatically to the latched position.

5.5.2 In response I note that the pool and pool barrier was the subject of a separate consent, the documentation for which I have not seen. I have seen no information to determine whether the doors and windows of the house bound the immediate pool area, and therefore form part of the barrier to the pool.

5.5.3 The expert also attached, to the report, copies of the following documents:

- A producer statement, dated 29 July 2009, from the installer of the septic tank, pump station, and effluent system
- A letter from a firm of professional surveyors dated 23 July 2009 to the applicants stating that the floor level of the house was determined to be at 'Reduced Level 3.00m in terms of Motukuri Datum'.

6. Evaluation for code compliance

6.1 I have evaluated the code compliance of this building by considering the following two broad categories of the building work:

- The weathertightness of the external building envelope (Clause E2) and durability (Clause B2 in so far as it relates to Clause E2).
- The remaining relevant code requirements.

In the case of this house, weathertightness considerations are addressed first.

Matter 1: The building envelope

7. Weathertightness

7.1 Generally the wall claddings appear to have been installed in accordance with good trade practice and the manufacturer's recommendations, but some areas of the roof cladding have not been satisfactorily completed. Taking account of the expert's comments in paragraph 5.3.3, I conclude that remedial work is necessary in respect of the following:

- The lack of adequate clearances from the cladding base to ground or paving.
- The vertical joints in the corrugated external linings.
- The lack of sealing to the ends of the head flashings to external joinery.
- The lack of kick-out flashings and sealing to the bottom of the apron flashings.
- The lack of adequate sealing to the meter box.

7.2 Weathertightness risk

7.2.1 This house has been evaluated using the E2/AS1 risk matrix. The risk matrix allows the summing of a range of design and location factors applying to a specific building design, with the resulting level of risk ranging from 'low' to 'very high'. This house has the following features which influence its weathertightness risk profile:

Increasing risk

- while the basic form of the house is relatively simple, it has some complex junctions and intersections
- two cladding types have been used

Decreasing risk

- the house is in a medium wind zone
- the house has a single storey
- most walls have eaves projections to shelter the walls

7.2.2 When evaluated using the E2/AS1 risk matrix, these features show that two elevations have a low risk rating and two elevations have a moderate risk rating.

7.3 Weathertightness conclusion

7.3.1 I consider the expert's report establishes that the current performance of the cladding is adequate because it is preventing water penetration into the building at present. Consequently, I am satisfied that the house complies with Clause E2 of the Building Code.

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

7.3.3 Because the faults identified with the roof cladding occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 7.1 will result in the house being brought into compliance with Clauses B2 and E2.

7.3.4 Effective maintenance of claddings is important to ensure ongoing compliance with Clauses B2 and E2 of the Building Code and is the responsibility of the building applicant. The Department has previously described these maintenance requirements (for example, Determination 2007/60).

Matter 2: Compliance with the remaining Building Code clauses

8. Discussion

8.1 Taking account of the expert's report, I conclude that the following items require attention (the relevant Building Code clauses are shown in brackets):

- The lack of information concerning the fire-rating of the timber chimney surround (Clause C1).
- The inadequate shower waterproofing to the main and ensuite bathroom showers, with water ingress into the adjoining structure (Clause E3)
- Investigation of the condition, and replacement if necessary, of the timber framing adjacent to the showers (Clause B1 Structure).

8.2 I am prepared to accept that apart from the items outlined above, the house meets the requirements of the remaining code clauses. This opinion also includes the drainage system based on the installer's Producer Statement, which was a requirement noted by the authority in its letter of 17 November 2006 to the applicants.

8.3 In addition, I also accept the report from the professional surveyors that the house is at a reduced level of 3 metres in reference to the Moturiki datum. This was also noted by the authority as requiring confirmation.

9. Grounds for the establishment of code compliance

9.1 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.

9.2 In this case the evidence supplied by the applicant included:

- the building certifier's inspection summary (refer paragraph 3.2)
- the other certificates, producer statements and documentation.

9.3 The authority believes that any decision it makes with respect to compliance of the house is limited by what items it is able to inspect. I therefore needed to decide if I could rely on the inspections that were undertaken by the building certifier, particularly in regard to inaccessible building components.

9.4 In the absence of any evidence to the contrary, I take the view that I am entitled to rely on the inspection records, but I consider it important to look for evidence that corroborates these records and can be used to verify that the building certifier's inspections were properly conducted.

9.5 In summary, I find that the following evidence allows me to form a view as to the code compliance of the building work as a whole:

- The records of inspections carried out by the building certifier, which indicate satisfactory inspections of the inaccessible components.
- Producer statements, certificates and other information, which indicate compliance of certain building elements.
- The expert's report as outlined in paragraph 5.

10. The appropriate certificate to be issued

10.1 Having found that the building can be brought into compliance with the Building Code, I must now determine whether the authority can issue either a certificate of acceptance or a code compliance certificate.

10.2 The authority had also stated in its letter dated 17 November 2006 (refer paragraph 3.11) that, in terms of section 91, it could only issue a certificate of acceptance for the work and not a code compliance certificate. I note that section 91(3) refers only to building consent authorities. As such, and in the absence of any transitional direction, section 91(3) cannot apply to building certifiers being unable to issue a code compliance certificate.

10.3 The transitional provisions under section 437 of the Act provide 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. In the case of this house, the owner is seeking a code compliance certificate and has not applied for a certificate of acceptance.

10.4 In this situation, where I have reasonable grounds to conclude that the consented 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.

Matter 3: The durability considerations

11. Discussion

11.1 The authority has concerns about the durability, and hence the compliance with the building code, of certain elements of the building taking into consideration the age of the building work completed in 2001.

11.2 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).

11.3 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.

11.4 In this case the delay between the completion of the building work in 2000 and the applicants' 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.

11.5 It is not disputed, and I am therefore satisfied that all the building elements, with the exception of those items that are to be rectified, complied with clause B2 on 16 November 2000. This date has been agreed between the parties, refer paragraph 4.4.

11.6 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.

11.7 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.

(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 2000.

11.8 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.

12. What is to be done now?

12.1 A notice to fix should be issued that requires the owners to bring the house into compliance with the Building Code, identifying the items listed in paragraphs 7.1 and 8.1 and referring to any further defects that might be discovered in the course of investigation and rectification, but not specifying how those defects are to be fixed. It is not for the notice to fix to stipulate how the defects are to be remedied and the house brought to compliance with the Building Code. That is a matter for the owner to propose and for the authority to accept or reject.

12.2 I suggest that the parties adopt the following process to meet the requirements of paragraph 12.1. 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, produced in conjunction with a competent and suitably qualified person, as to the rectification or otherwise of the specified issues. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

12.3 Once the matters set out in paragraphs 7.1 and 8.1 have been rectified or resolved to its satisfaction, the authority may issue a code compliance certificate in respect of the building consent as amended.

12.4 I note the comments with respect to the barrier to the swimming pool made in paragraph 5.5.1 , and I draw the matter to the authority's attention for action as it considers appropriate.

13. The decision

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

- the building envelope does not comply with Clause B2 of the Building Code insofar as it relates to Clause E2
- the house does not comply with Clauses C1 and E3 of the Building Code.

Accordingly the authority was correct to decline to issue a code compliance certificate.

13.2 I also determine that:

(a) all the building elements installed in the house, apart from the items that are to be rectified as described in this determination, complied with Clause B2 on 16 November 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 16 November 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 paragraphs 7.1 and 8.1 of Determination 2009/84.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 8 October 2009.

John Gardiner
Manager Determinations