



Determination 2012/001

Refusal to issue a code compliance certificate for an 11-year-old house with monolithic cladding completed under the supervision of a building certifier at 55B Oceanview Rd, Mt Maunganui



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 the determination are:

- the owner, R Veale (“the applicant”)
- Tauranga Council (“the authority”), carrying out its duties and functions as a territorial authority or building consent authority.

1.3 This determination arises from the authority’s decision to refuse to issue a code compliance certificate for an 11-year-old house because it was not satisfied that the house complied with clauses E2 External Moisture and B2 Durability of the Building

¹ The Building Act 2004, the Building Code the Compliance Documents, past determinations, and guidance documents issued by the Department are available from the Department’s website at www.dbh.govt.nz or by contacting the Department on 0888 242 243.

Code² (First Schedule, Building Regulations 1992). The refusal arose because the building has face fixed monolithic cladding, is more than 10 years old, and the building work had been undertaken under the supervision of Bay Building Certifiers Ltd (“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.

1.4 The matter for determination³ is whether the authority was correct in its decision to refuse to issue a code compliance certificate. In deciding this I must consider:

1.4.1 Matter 1: The external envelope

Whether the external envelope of the building (“the external envelope”) complies with Clause B2 Durability and Clause E2 External Moisture of the Building Code. The external envelope includes the components of the systems (such as the monolithic cladding, the deck, the windows, the roofing, and the flashings), as well as the way the components have been installed and work together.

1.4.2 Matter 2: 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.

1.5 The available evidence

1.5.1 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 consider 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 9.

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. The building work

2.1 The building is a two storey house sited on a relatively sheltered residential section in a medium wind zone in terms of NZS3604⁴.

2.2 The building is relatively simple in shape and form, and is of light timber frame founded on a perimeter masonry foundation and concrete floor with a suspended timber upper floor.

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

⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

- 2.3 The monolithic cladding is an EIFS⁵ system which consists of 60mm polystyrene sheets fixed over the building wrap to the framing, and finished with a textured and painted coating system. Recessed aluminium joinery includes windows and ranch slider doors. The ranch sliders open onto a timber slatted deck located along the north elevation on the second storey.
- 2.4 The roof is a simple 25° pitch truss construction clad in long run profiled metal roofing. A metal box gutter is fixed to the front of the 600mm perimeter soffit overhang.
- 2.5 The expert was unable to establish whether or not the timber framing in the walls, roof and flooring of the building had been treated but noted that at the time of construction, untreated timber was more commonly used. I consider the timber is unlikely to be treated to a degree that would prevent decay.

3. The background

- 3.1 On 24 January 2000 the authority issued a building consent for the building (no. 1655), under the Building Act 1991, based on a building certificate issued by the building certifier. I have not seen the certificate issued by the building certifier.
- 3.2 The authority's records note the following inspections were undertaken:
- Footing – 13 January 2000, fail. Engineer to confirm all foundations and underslabs.
 - Footing – 20 January 2000, pass. [Engineers report received]. Ground now okay.
 - Slab – 25 January 2000, pass.
 - Underfloor – 25 January 2000, pass.
 - Preline/plumbing – 13 March 2000, pass.
 - Preline//building – 11 April 2000, fail. Bolts and straps to go to bracing. 2 giv 1 Bs missing upstairs.
 - Preline/building – 17 April 2000, fail. Bolts missing.
 - Preline/building – 18 April 2000, pass.
 - Drainage – 3 July 2000, fail. Not sufficient stormwater.
 - Drainage – 4 July 2000, pass sewer. Site works draining stormwater onto neighbouring property. This is to be resolved before CCC.
 - Final/building – 15 September 2000, fail. Engineers design required for retaining wall. Surface water to be discharged, bracing required for deck. Deck missing connections. Handrail to stairs. Balustrade connections to house to be separated. Wet areas to seal (laundry). Nosings to be put on stairs (deck). 1/12/2000 Notice to Rectify issued by [the authority]. Retaining wall-boundary. Driveway drain.
 - Final/plumbing – fail. Not ready.
- 3.3 It appears that the building certifier did not carry out any further inspections or issue a code compliance certificate. The building certifier ceased to operate as a building certifier on 30 June 2005.
- 3.4 In August 2011, the applicant contacted the authority requesting that a code compliance certificate be issued.

⁵ Exterior insulation finishing system

- 3.5 On 10 August 2011, in a letter to the applicant the authority refused to issue a code compliance certificate explaining that it was because ‘the work was overseen by a Private Building Certifier and the dwelling has a face fixed cladding, is more than ten years old and [the authority] is unable to establish if the building complies with NZ Building Code clauses E2 External Moisture or B2 Durability’.
- 3.6 I note that following the request for a code compliance certificate the authority did not undertake a final inspection to enable it to form a view as to the compliance of the building work, nor did it provide to the applicant the option of the applicant engaging a suitably qualified expert to undertake an assessment of the building work.
- 3.7 An application for a determination was received by the Department on 22 August 2011.

4. The submissions

- 4.1 The applicant forwarded copies of:
- correspondence from the authority dated 10 August 2011, and
 - building consent plans that were stamped by the private certifier.
- 4.2 The authority acknowledged the application and provided a copy of the private certifier’s inspection record.
- 4.3 A draft determination was issued to the parties on 29 November 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.
- 4.4 The authority accepted the draft without comment and proposed a date of compliance with Clause B2 Durability as 15 September 2000. In an email to the Department dated 8 January 2012 the applicant accepted the draft and agreed with the proposed durability date.

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 have established what evidence was available and what could be obtained, considering that the building work is completed and some of the elements are 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 building work.
- 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 in the consent documentation
 - the expert’s report (refer 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. He visited the building on 6 October 2011 and furnished a report dated 10 October 2011. A copy of the report was provided to the parties on 10 October 2011.

6.2 General

6.2.1 The expert noted that the building had been constructed in accordance with the consented plans and specifications, apart from the omission of the lower apron roof areas.

6.2.2 The expert considered that the standard of the materials and workmanship associated with the construction of the building was 'satisfactory'. He found that the cladding system had been well fixed and aligned, and roof flashings were tidy and effective.

6.3 Moisture levels

6.3.1 The expert inspected the interior of the house and took non-invasive moisture readings; noting no evidence of moisture penetration

6.3.2 The expert took invasive moisture content readings in exterior locations considered "high risk". Readings ranged from 7% to 23%, with elevated moisture content readings in 4 of the 36 locations as follows:

South elevation

- bottom plate LHS of entrance door 22%
- bottom plate between garage and front entrance door 23%

East elevation

- bottom plate LHS of garage 22%
- bottom plate RHS of garage 19%

I note that moisture readings above 18%, or which vary significantly, generally indicate that moisture is entering the structure and further investigation is needed.

6.4 Commenting specifically on the weathertightness of the external envelope, the expert observed:

- ground clearances along the south, west and part of the east elevation were less than that recommended in E2/AS1 and the slightly elevated moisture content levels suggests some wicking was occurring
- head and jamb flashings had not been installed to the garage door frame or to the electricity meter box
- downpipe connections were leaking and needed to be fixed
- the horizontal EPS band at the intermediate level has parted from the wall in some places
- waste pipe penetrations required sealing.

6.5 The expert also commented that there had been a general lack of maintenance, noting that:

- the box gutters showed signs of premature deterioration and require attention
- there was cracking on the sills and at the sill/jamb junctions
- corrosion to the meter box should be addressed.

6.6 The expert also commented that:

- there was no evidence to suggest that any of the flashing systems at the windows and doors had not performed and were not continuing to perform
- the condition of the long run colour steel roof was appropriate for its age and roof penetrations were well flashed
- control joints were not required as the walls do not exceed the height/length at which these would be required

7. Matter 1: The external envelope

7.1 The evaluation of building work for compliance with the Building Code and the risk factors considered in regards 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:

Increasing risk

- the house is two storey
- the EIFS cladding is fixed directly to the untreated framing
- there is a timber slatted deck on the north elevation

Decreasing risk

- the house is in a medium wind zone
- there are 600mm eaves to shelter the cladding on all elevations
- the envelope is simple and has a single cladding.

7.2.2 When evaluated using the E2/AS1 risk matrix the house has a medium weathertightness risk rating. If details shown in the current E2/AS1 were adopted to show code compliance, a drained cavity would be required for all elevations. However, this was not a requirement at the time of construction.

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 paragraphs 6.4 and 6.5.

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 as there is evidence of moisture ingress in some locations. Consequently, I am satisfied that the external envelope 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 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 owner. The Department has previously described these maintenance requirements, including examples where the external wall framing of the building may not be treated to a level that will resist the onset of decay if it gets wet (for example, Determination 2007/60)

8. Matter 2: The durability considerations

- 8.1 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 applicable code compliance certificate" (Clause B2.3.1).
- 8.2 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.
- 8.3 In this case the delay between the completion of the building work and the applicant's request for a code compliance certificate means 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.
- 8.4 It is not disputed, and I am therefore satisfied, that all the building elements in respect of building consent no. 1655, excluding those items that are to be rectified as described in paragraphs 6.4 and 6.5 of this determination, complied with Clause B2 on 15 September 2000 (4.4).
- 8.5 In order to address these durability issues when they were raised in previous 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.

8.6 I continue to hold the view, and therefore conclude that:

- the authority has the power to grant an appropriate modification of Clause B2 in respect of the building elements if requested by the owner
- it is reasonable to grant such a modification because in practical terms, the building is no different from what it would have been if a code compliance certificate had been issued when the building work was completed.

8.7 I strongly suggest 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.

9. The appropriate certificate to be issued

9.1 Once the building is brought into compliance with the Building Code, the authority will need to decide whether to issue a certificate of acceptance or a code compliance certificate.

9.2 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. In the case of this building, the applicant is seeking a code compliance certificate.

9.3 In this situation, where there are reasonable grounds to conclude that the building work complies with the Building Code, I take the view that a code compliance certificate is the appropriate certificate to be issued in due course.

10. What is to be done?

10.1 The authority should issue a notice to fix requiring the owner to bring the building work into compliance with the Building Code. The notice should identify the defects listed in paragraphs 6.4 and 6.5 and refer to any further defects that might be discovered in the course of investigation and rectification. The notice should not specify how those defects are to be fixed and the building brought into compliance with the Building Code, as that is a matter for the owners to propose and the authority to accept or reject.

10.2 In response to the notice to fix, the owners should engage a suitably qualified person to determine the extent of the defects and produce a proposal describing how the defects are to be remedied. The proposal should be submitted to the authority for approval. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

10.3 Once the agreed matters have been rectified to the authority's satisfaction, the authority may issue a code compliance certificate in respect of the building consent modified as described in paragraph 8.

11. The decision

11.1 In accordance with section 188 of the Building Act 2004, I determine that the building does not comply with Clause E2 and B2 of the Building Code, and accordingly I confirm the authority's decision to refuse to issue a code compliance certificate.

11.2 I also determine that:

- a) all the building elements installed in the house, apart from the items that are to be rectified, complied with Clause B2 on 15 September 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 15 September 2000 instead of from the time of issue of the code compliance certificate, except for the items to be rectified as set out in Determination 2012/001.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 19 January 2012.

John Gardiner
Manager Determinations