Determination 2008/22

Determination regarding refusal to issue a code compliance certificate for a house due to the territorial authority's decision not to rely on a building certifier's inspection reports at 116 Tanners Point Road, Katikati



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 A and S Flintoff ("the applicants") acting though an agent, and the other party is the Western Bay of Plenty District Council ("the territorial authority").
- 1.2 The matter for determination is whether the territorial authority's decision to decline to issue a code compliance certificate for a 5-year a house is correct. 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 ceased to operate as a building certifier before it had issued a code compliance certificate for the building work.

¹ The Building Act 2004 is available from the Department's website at www.dbh.govt.nz.

1.3 I consider that the matters for determination are:

1.3.1 Matter 1: The external envelope

Whether the claddings as installed the house comply with Clauses B2 and E2 (see sections 177 and 188 of the Act). By "the claddings as installed" I mean the components of the systems (such as the backing materials, the flashings, the joints and the coatings) as well as the way the components have been installed and work together.

1.3.2 Matter 2: The remaining Building Code clauses

Whether the remaining building elements comply with the relevant clauses of the Building Code.

1.3.3 Matter 3: The durability considerations

Whether the building elements comply with of the Building Code Clause B2 "Durability" taking into account the age of the building work.

- 1.4 In order to determine the matter, in this particular case, I must address the following questions:
 - (a) Is there sufficient evidence to establish that the building work as a whole complies with the Building Code? If so, a code compliance certificate can be issued (refer 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? If so, can the appropriate certificate can be issued in due course (refer paragraph 10).
- 1.5 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 the other evidence in this matter. I have evaluated this information using a framework that I describe more fully in paragraph 7.1.
- 1.6 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

2.1 The building work consists of a large detached house situated on a flat rural site, which is in a moderate wind zone for the purposes of NZS 3604². The single-storey house is a fairly simple "H" shape, with the south wing accommodating garage and bedroom areas, and the kitchen and living areas in the shorter north wing. Construction is conventional light timber frame, with a concrete slab, concrete block foundations, brick veneer and monolithic claddings, and aluminium windows. The house has a 27° pitch profiled metal hipped and gabled roof, with eaves and verge projections of about 600mm except for a number of bay windows.

² New Zealand Standard NZS 3604:1999 Timber Framed Buildings

- 2.2 The expert engaged by me (refer paragraph 1.5) noted that he was unable to inspect any of the concealed timber framing, and I note that the drawings describe the framing timber as "KD" [Kiln Dried]. Given the date of construction and the lack of other evidence, I consider the external wall framing to be untreated and therefore unable to provide sufficient resistance to fungal and insect attack if it gets and remains wet.
- 2.3 About three-quarters of exterior walls are clad in brick veneer. Apart from the garage gable end, the brick veneer is full height for the longer south wing, reducing to part-height in the north wing where EIFS³ monolithic cladding is installed above the brick. Although the expert was not able to identify the particular type, I note that the drawings describe the EIFS cladding as "Insulclad" and details appear similar to those specified for Insulclad cladding, with purpose-made flashings to windows, edges and other junctions. The cladding consists of 40mm polystyrene backing sheets fixed directly to the framing over the building wrap, and finished with a textured plaster system and an acrylic paint coating system.

3. Background

- 3.1 The territorial authority issued a building consent (No. 67623) on 7 August 2002, based on a building certificate issued by the building certifier on 15 July 2002.
- 3.2 The building certifier carried out the following inspections during construction:
 - footings on 28 August 2002 (which passed)
 - bond beam on 30 August 2002 (which passed)
 - underfloor and slab on 2 September 2002 (which passed)
 - building and plumbing prelines on 10 October 2002 (which passed)
 - final drainage on 9 December 2002.
- 3.3 Although it appears that the house was completed in 2002, I have received no record of any final inspection, and it appears that the matter of a code compliance certificate was not followed up by the original owner or the builder.
- 3.4 The building certifier ceased to operate as a building certifier on 30 June 2005 without having issued a code compliance certificate.
- 3.5 The applicants purchased the property in 2007 under the assumption that all matters had been resolved. On discovering that a code compliance certificate had not been issued for the building work, the owners approached the territorial authority and were apparently advised that a code compliance certificate could not be issued as too much time had elapsed (refer paragraph 4.1).
- 3.6 The territorial authority did not issue a notice to fix as required under section 164 of the Building Act 2004.
- 3.7 The Department received an application for a determination on 30 November 2007.

³ EIFS - External Insulation and Finish System

3.8 In a letter to the owners dated 6 December 2007, the territorial authority confirmed that it had refused to issue a code compliance certificate for the house noting:

The reason for this is that Council has not carried out any inspections and accordingly is not prepared to accept the liability that would be generated by issuing a Code Compliance Certificate.

The territorial authority went on to say:

Also, the Building Act 1991, under which this building consent was issued, required that reasonable progress be made. This requirement applies to both the building work and the administrative work associated with it, and with the last recorded inspection by [the building certifier] being 9 December 2002, reasonable progress cannot be considered to have been made in this instance.

This appears to be a reference to section 41(b) of the Building Act 1991. As that section refers only to "reasonable progress on the building work" I do not agree with the territorial authority's interpretation of section 41(b) that it also includes "administrative work". Irrespective of this, section 41 is concerned with the lapse or cancellation of a building consent and is not relevant to the decision to issue, or refuse to issue, a certificate of acceptance or a code compliance certificate.

4. The submissions

- 4.1 In a covering letter to the Department dated 27 November 2007, the owners provided some background to the determinable matters, explaining that they understood that, when the building certifier withdrew and handed the job to the territorial authority for completion, the original owner had been offered a "Code of Acceptance" which had not been taken up. The applicants stated that they had been advised that "the time for this has now expired" for the territorial authority to issue a code compliance certificate and that they were offered a "Code of Acceptance" (which I take to mean a certificate of acceptance) in its place. The applicants sought a code compliance certificate for the building.
- 4.2 The applicant forwarded copies of:
 - the drawings and specifications
 - some of the building consent documentation
 - the building certifier's inspection summary
 - a photographic record of the house construction
 - various calculations, producer statements and invoices.
- 4.3 In a letter to the Department dated 6 December 2007, the territorial authority attached a copy of the letter to the owners (refer paragraph 3.8) and stated:

I believe it would also be appropriate for the Department to consider the age of the building consent, and direct that the building consent be amended to reflect the effective date of completion.

Based on the inspection record from [the building certifier] I suggest that the appropriate date of completion would be around the end of December 2002.

- 4.4 Copies of the submissions and other evidence were provided to each of the parties. Neither party made any further submissions in response to the submission of the other party.
- 4.5 A draft determination was issued to the parties on 21 February 2008. The draft was issued for comment and for the parties to agree a date when the building complied with Building Code Clause B2 Durability.
- 4.6 The parties accepted the draft without comment and agreed that compliance with Clause B2 was achieved on 1 January 2003.

5. Grounds for the establishment of code compliance

- 5.1 In order for me to form a view as to code compliance, I need to establish what evidence is available and what can 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 this case the evidence consists of the summary of inspections carried out by the building certifier and the photographic record of the house construction. I first need to decide if I can rely on those inspections that were undertaken by the building certifier, particularly in regard to inaccessible building components.
- 5.3 In this case, the territorial authority does not believe it can rely on the building certifier's reports and any decision it makes with respect to compliance is limited by what items it is able to inspect. I therefore need to decide if I can rely on the building certifier's inspection summary, particularly in regard to inaccessible building components.
- 5.4 In the absence of any evidence to the contrary, I take the view that I am entitled to rely on the inspections undertaken by the building certifier. However, before deciding whether or not to rely on that inspection record, I consider it important to look for evidence that corroborates it.
- 5.5 In this particular case, corroboration comes from the visual inspection of the accessible components by the expert, which can be used to verify whether the building certifier's inspections were properly conducted.
- 5.6 I note that the inspection summary indicates that 9 inspections were required for the project, and 9 inspections were carried out, although I note that the summary shows that some of these inspections were combined and there was no final building inspection recorded.
- 5.7 In summary, I find that the following allows me to form a view as to the code compliance of the building work as a whole:
 - The summary of inspections carried out by the building certifier which indicates satisfactory inspections of the inaccessible components.
 - A series of photographs recording the construction of the house
 - The expert's report as outlined below.

6. The expert's report

6.1 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.

6.2 The cladding

- 6.2.1 The expert inspected the house on 24 December 2007 and 15 January 2008 and furnished a report that was completed on 7 February 2008, which noted that the house appeared to be in accordance with the relatively comprehensive consent drawings and that a series of photographs taken during construction show elements that are now hidden.
- 6.2.2 The expert described the building as a well-maintained "high quality home" with the EIFS cladding adequately coated and "reasonably well fixed" and noted that the brick veneer had adequate weep holes and vents and the roof was "completed to a good standard". I note that control joints are not specified by the manufacturer for the dimensions of EIFS used on the walls of this building.
- 6.2.3 The expert noted that the windows in the EIFS cladding are in line with the brick veneer cavity below, with satisfactory metal head flashings and sloping EIFS cladding forming a projecting sill above the veneer. The EIFS sill continues above the part-height brick veneer cladding on the north wing. The expert also noted that the flat roof of the curved bay window in the west wall of the north wing protrudes by about 700mm, with EIFS installed above the underlying butynol membrane.
- 6.2.4 The expert inspected the interior of the house, taking non-invasive moisture readings internally, and no evidence of moisture was observed. The expert took further non-invasive moisture readings from the outside. As there were no obvious areas of high risk and no indication of any moisture problems, the expert did not consider it necessary to carry out invasive moisture testing.
- 6.2.5 Commenting specifically on the wall claddings, the expert noted that:
 - there are fine cracks at the mitres in the EIFS sills, although any moisture that penetrates is able to harmlessly dissipate from the brick veneer cavity below
 - the EIFS on the roof to the curved bay window has insufficient fall and water is ponding on the coating surface, risking moisture penetration into the polystyrene
 - the paint colour to the EIFS cladding is too dark, with a reflectivity value well below the manufacturer's minimum recommendations, which can result in undue movement and lead to joint cracking
 - there is a gap between the timber jamb and the brick veneer at the garage door
 - plant growth is blocking some weep holes in the brick veneer.

6.3 The remaining code clauses

6.3.1 The expert also assessed compliance with other relevant building code clauses, and made the following comments on those clauses relevant to this house:

• B1 Structure

Photographic records of construction indicate that proper construction practices were followed. The inspection record notes adequate inspections of the slab and foundations, and the internal and external visual inspection indicated no evidence of excessive movement or structural stress.

• E1 Surface Water

The building platform is elevated above the surrounding grassed farmland and all visible work in relation to stormwater collection and discharge appears satisfactory.

• E3 Internal moisture

There were no signs of actual or potential moisture problems within the house.

• G1 Personal Hygiene

Spaces and facilities are adequate and appropriate, with adequate provision for cleaning and protection against food contamination.

G4 Ventilation

Mechanical ventilation is adequate, and opening windows and doors provide adequate natural ventilation.

• G7 Natural Light

The house has adequate provision of natural light to all habitable rooms.

• G12 and G13 Water Supplies and Foul Water

The building certifier's inspection summary indicates that satisfactory plumbing and drainage inspections were undertaken, and the as-built plan was supplied. All fixtures appear to be in good operating condition and the septic tank and soakpits appear to be satisfactory with no damp areas or unpleasant odours.

• H1 Energy Efficiency

The building certifier's inspection summary indicates that wall and ceiling insulation was inspected and passed.

6.4 A copy of the expert's report was provided to the parties on 11 February 2008.

7. Evaluation for code compliance

7.1 Evaluation framework

- 7.1.1 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 insofar as it relates to clause E2).
 - The remaining relevant code requirements.

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

- 7.1.2 In evaluating the design of a building and its construction, it is useful to make some comparisons with the relevant Acceptable Solutions⁴, which will assist in determining whether the features of these houses are code compliant. However, in making this comparison, the following general observations are valid:
 - Some Acceptable Solutions cover the worst case, so that they may be modified in less extreme cases and the resulting alternative solution will still comply with the Building Code.
 - Usually, when there is non-compliance with one provision of an Acceptable Solution, it will be necessary to add some other provision to compensate for that in order to comply with the Building Code.

7.2 Evaluation of external building envelope for E2 and B2 Compliance

- 7.2.1 The approach in determining whether building work is weathertight and durable and is likely to remain so, is to apply the principles of weathertightness. This involves the examination of the design of the building, the surrounding environment, the design features that are intended to prevent the penetration of water, the cladding system, its installation, and the moisture tolerance of the external framing. The Department and its antecedent, the Building Industry Authority, have also described weathertightness risk factors in previous determinations⁵ (for example, Determination 2004/1) relating to cladding and these factors are also used in the evaluation process.
- 7.2.2 The consequences of a building demonstrating a high weathertightness risk is that building solutions that comply with the Building Code will need to be more robust. Conversely, where there is a low weathertightness risk, the solutions may be less robust. In any event, there is a need for both the design of the cladding system and its installation to be carefully carried out.

7.3 Weathertightness risk

- 7.3.1 In relation to these characteristics I find that this house:
 - is built in a moderate wind zone
 - is a fairly simple, one-storey building
 - has brick veneer, over a drained cavity, to most of the walls
 - has monolithic cladding fixed directly to the framing to some walls
 - has eaves and verge projections of about 600mm above most walls
 - has external wall framing that is not treated to a level that provides resistance to the onset of decay if the framing absorbs and retains moisture.

⁴ An Acceptable Solution is a prescriptive design solution approved by the Department that provides one way (but not the only way) of complying with the Building Code. The Acceptable Solutions are available from The Department's Website at www.dbh.govt.nz.

⁵ Copies of all determinations issued by the Department can be obtained from the Department's website.

- 7.3.2 The 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. The resulting level of risk can range from 'low' to 'very high'. The risk level is applied to determine what claddings can be used on a building in order to comply with E2/AS1. Higher levels of risk will require more rigorous weatherproof detailing; for example, a high risk level is likely to require a particular type of cladding to be installed over a drained cavity.
- 7.3.3 When evaluated using the E2/AS1 risk matrix, the weathertightness features outlined in paragraph 7.3.1 show that all elevations of the house demonstrate a low weathertightness risk rating. I note that, if the details shown in E2/AS1 were adopted to show code compliance, the monolithic cladding on this house would not require a drained cavity.

7.4 Weathertightness performance: exterior cladding

- 7.4.1 Generally the cladding appears to have been installed in accordance with good trade practice. Taking account of the expert's report, I conclude that remedial work is necessary in respect of the following:
 - the cracks at the mitres of the EIFS sills
 - the EIFS over the curved bay window roof
 - the gap between the timber jamb and the brick veneer at the garage door.

7.5 Evaluation of other code requirements

- 7.5.1 Based on the expert's comments as outlined in paragraph 6.3, there appears to be no evidence of any lack of compliance with other relevant clauses of the Building Code.
- 7.5.2 Taking account of the expert's assessment of visible components of the building together with the inspection records, the photographic record and other documentation, I consider that the building is likely to comply with the provisions of the remaining relevant code clauses.

Matter 1: The external envelope

8. Discussion

- 8.1 I consider the expert's report establishes that the current performance of the claddings is adequate because they are currently preventing water penetration into the building. Consequently, I am satisfied that the claddings comply with clause E2 of the Building Code.
- 8.2 I note that the expert refers to the reflectivity of the paint on the EIFS cladding and plant growth blocking weep holes in the brick veneer. Given the relatively small areas of EIFS, the shelter provided by the eaves, and the proven performance in use, I consider the EIFS cladding will meet the durability requirements of the code. However, in the course of the normal maintenance, I recommend that the cladding be

recoated with a paint colour that has a higher reflectance value. Clearance of the weep holes is normal maintenance and should be attended to as required.

- 8.3 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 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.
- 8.4 Because the faults identified with the cladding systems occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 7.4.1 will result in the house being brought into compliance with clauses B2 and E2.
- 8.5 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).

Matter 2: The remaining Building Code clauses

9. Discussion

- 9.1 I consider that the expert's inspection and comments as outlined in paragraph 6.3.1 establishes that the building work complies with all other relevant clauses of the building code. Based on the expert's assessment of visible components of the building, together with the inspection records and other documentation, I therefore consider that the building is likely to comply with the provisions of the remaining relevant code clauses.
- 9.2 I accordingly consider that the building work complies with clauses B1, E1, E3, G1, G4, G7, G12, G13 and H1 of the Building Code.

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 territorial authority should issue either a certificate of acceptance or a code compliance certificate.
- 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 territorial authority may, on application, issue a certificate of acceptance or a code compliance certificate. In the case of this building work, I note that the applicant has not sought a certificate of acceptance.

10.3 I am of the view that a code compliance certificate is the appropriate certificate to be issued in this situation, as I have reasonable grounds to conclude the building work can be brought into compliance with the Building Code.

Matter 3: The durability considerations

11. Discussion

- 11.1 The territorial authority has concerns about the durability, and hence the compliance with the building code, of certain elements of the house taking into consideration the completion of the building work in 2002.
- 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 The 5-year delay between the substantial completion of the house and the owners' request for a code compliance certificate raises the issue of when all the elements of the house complied with Clause B2. I have not been provided with any evidence that the building certifier did not accept that those elements complied with Clause B2 when the house was completed in 2002.
- 11.5 It is not disputed, and I am therefore satisfied, that all the building elements complied with Clause B2 on 1 January 2003. This date has been agreed between the parties, refer paragraph 4.6.
- 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 territorial authority has the power to grant an appropriate modification of clause B2 in respect of the building elements
- (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 for the house had been issued in early 2003.
- 11.8 I strongly recommend that the territorial 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?

- 12.1 I note that the territorial authority has not issued a notice to fix. A notice to fix should be issued that requires the owners to bring the house into compliance with the Building Code, identifying the defects listed in paragraph 7.4.1 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 me to decide directly 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 territorial authority to accept or reject.
- 12.2 I would suggest that the parties adopt the following process to meet the requirements of paragraph 12.1. Initially, the territorial authority should issue the new 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.

13. The decision

- 13.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the wall claddings do not comply with clause B2 of the Building Code, and accordingly confirm the territorial authority's decision to refuse to issue a code compliance certificate.
- 13.2 I also determine that:
 - (a) all the building elements installed in the building, apart from the items that are to be rectified, complied with clause B2 on 1 January 2003.
 - (b) the building consent is 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 January 2003 instead of from the time of issue of the code compliance certificate for all building elements, provided that the modification does not apply to those elements of the building which have been altered or modified as set out in Determination 2008/22.

- (c) following the modification set out in (b) above, the territorial authority is to issue a code compliance certificate in respect of the building consent as amended.
- 13.3 The territorial authority shall issue a code compliance certificate once the items listed in the notice to fix (refer paragraph 12.1) have been fixed to its satisfaction.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 14 April 2008.

John Gardiner Manager Determinations