



Determination 2010/114

Refusal to issue a code compliance certificate for a 7-year-old house completed under supervision of a building certifier at 41 Brighton Road, Waihi Beach



1. The matters to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ (“the Act”) made under due authorisation by me, John Gardiner, Manager Determinations, Department of Building and Housing (“the Department”), for and on behalf of the Chief Executive of that Department. The applicants are the owners B and D Anderson (“the applicants”) acting through their lawyer, 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 and for a 7-year-old house because it was not satisfied that it complied with certain clauses² 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 Building Act 1991, but which ceased operating as a certifier before it had issued a code compliance certificate for the building work.

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

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.

1.3 The matter to be determined³ is therefore whether the authority was correct in its decision to refuse to issue a code compliance certificate. In making this decision, I must consider:

1.3.1 Matter 1: The external envelope

Whether the external claddings to the house (“the claddings”) comply with Clause B2 Durability and Clause E2 External Moisture of the Building Code. The claddings include the components of the systems (such as the uPVC weatherboards, the windows, the roof cladding and the flashings), 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: The remaining Building Code clauses

Whether the building complies with the remaining 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 9.)

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. This determination therefore considers whether there is sufficient evidence to establish that the building work as a whole complies with the Building Code (I address this question in paragraph 5) and therefore it is reasonable to issue a code compliance certificate.

1.5 In making my decision, I have considered the applicants’ submission, 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 building work consists of a two-storey house situated in a high wind zone for the purposes of NZS 3604⁴. The house was constructed by a ‘group housing company’ and construction is conventional light timber frame, with a concrete slab-on-grade and foundations, uPVC weatherboards, profiled metal roof cladding and aluminium windows. The house is long and narrow, with some complexity in plan and form, and is assessed as having a moderate weathertightness risk (refer paragraph 7.2).

2.2 The northern end provides the double garage and main entry, which face the street. The multi-level 25° pitch hipped roofs have eaves of about 600mm above most walls. The ground floor walls project beyond the first floor on the east and west elevations, with the lower roofs forming lean-tos against the upper walls.

2.3 An enclosed deck from the upper floor lounge is situated mainly above the enclosed garage, with the upper roof extended to cover the northern end. The deck extends

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

⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

around the northeast corner of the lounge, with open metal balustrades and timber stairs to ground level at the south end of the deck.

2.4 Given the date of construction in 2002 and the lack of other evidence, I consider that the wall framing of the house is untreated.

2.5 The wall cladding

2.5.1 The cladding is a proprietary system of horizontally fixed inter-locking uPVC weatherboards fixed directly through the building wrap to the framing. The cladding manufacturer provides purpose-made uPVC flashings, trims and accessories, which include head, sill and jamb flashings for windows and doors.

2.5.2 The cladding system has been appraised by BRANZ⁵. The appraisal is still current and states that the direct-fixed cladding will comply with Clauses E2 and B2, providing the system is 'designed, used, installed and maintained' according to the conditions described in the certificate, which include:

- timber framed buildings to be within the scope of E2/AS1
- buildings to be of low to moderate weathertightness risk
- wind zones to be up to and including 'very high' wind
- aluminium joinery to have vertical jambs and horizontal heads and sills
- cladding to be installed in accordance with the manufacturer's instructions.

3. Background

3.1 The authority issued a building consent (No. 68004) to the applicants on 22 October 2002 under the Building Act 1991, with construction generally taking place during 2002 and 2003.

3.2 The building certifier carried out the following inspections:

- Foundations on 24 October 2002 (which passed).
- Pre-pour slab inspections on 31 October 2002 (which passed).
- Pre-line building and plumbing inspection on 19 December 2002 (which passed and noted 'Bracing OK, timber moisture OK, insulation OK').
- Drainage inspection on 18 February 2003 (which passed, noting 'received drainage asbuilt plan, sent to WBDC').

3.3 In letters to the applicants dated 7 May 2003, the building company confirmed the completion of the house and enclosed various information, noting:

A Code of Compliance [sic] is issued at completion of your house. If you require this document please contact [the building certifier] and they will issue a copy. Please note that all fees have been paid for.

⁵ BRANZ Appraisal Certificate No. 490 (2005)

- 3.4 Based on the above letter, the applicants assumed that all compliance issues had been completed and they just needed to contact the building certifier to obtain a copy of the code compliance certificate. In the meantime, without having carried out a final building inspection or issued a code compliance certificate, the building certifier ceased to operate as a building certifier on 30 June 2005 and became ‘processing and inspections consultants’ operating on the authority’s behalf (“the contractor”).
- 3.5 In June 2006, the authority sent out pro-forma letters to all owners of buildings with uncompleted building consents that had been constructed under the supervision of the certifier.

3.6 The authority’s pro-forma letter

- 3.6.1 In a pro-forma letter to the applicants dated 20 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:

...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. Unfortunately our experience to date is that these inspections, supporting documentation and evidence are not satisfactory to support Council issuing Code Compliance Certificates. Regrettably, this lack of satisfactory inspection detail puts Council in the position where it is unable at this time to accept liability for these deficient projects or issue Code Compliance Certificates.

- 3.6.2 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 advise owners of their right to seek a Determination from [the Department].

- 3.6.3 The authority also offered assistance with an application for determination, noting that it could make the application on the owner’s behalf, and attached a ‘Transfer Form’ to be filled in as required to initiate an assessment of the property. The authority concluded:

Please understand that this extra process is regrettable, but has been forced upon Council because it cannot accept any ongoing liability for private certifier projects (not Council projects) without being confident that the inspection documentation and inspections themselves were adequate in the first instance.

3.7 The authority's assessment

3.7.1 The applicants requested an 'assessment of the project' (as explained in the above letter) and the authority inspected the house on 8 September 2006. Following the inspection, the authority wrote to the applicants on 13 October 2006, listing the following 'non complying items' that were identified during its inspection:

1. The building appears to be sited in a hollow with no evident outlet and with the floor level below any possible overflow level and may be subject to inundation within the 50 year life of the building.
2. Ground levels raised and do not comply with minimum floor levels required in NZS 3604.
3. No spreaders on downpipes discharging onto the lower roofs.
4. Gap exists around roof flashing kickout southwest corner. Is it backflashed behind?
5. A hole exists in the flashing system at the northeast corner of front deck at the top of the spandrel roof. Can wind driven water penetrate here?
6. Head flashings above most external joinery fittings slope backwards towards the building instead of having a fall towards the exterior. In the event of failure of the sealant at the ends water will be directed behind the cladding.

3.7.2 The authority noted that the applicants 'may wish' to have the completed work inspected, but a code compliance certificate would not be issued, and:

That being the case, Section 91 of the Building Act 2004 requires that you apply for a Certificate of Acceptance...

If Council then decides it is able to issue a Certificate of Acceptance it will only cover those elements of the building that can be readily inspected and compliance with the Building Code determined.

3.8 It appears that there was no further correspondence until the applicants wrote to the authority on 23 September 2009 seeking a code compliance certificate. The authority responded in a letter dated 12 January 2010, referring to its earlier letter and confirming that it would not issue a code compliance certificate because:

...Council has had no involvement apart from the 6 September 2006 inspection and did not inspect any of the building work as it progressed.

3.9 In May 2010, the applicants' lawyer contacted the authority by telephone about the situation and was 'advised that a Certificate of Acceptance would not be issued either'. The lawyer then approached the housing company in regard to the items identified in the authority's letter dated 13 October 2006. In an email to the lawyer dated 10 August 2010, the housing company responded as follows (in summary):

- The house was built as per the levels set out on the consent drawings.
- Ground levels are the owners' responsibility.
- Although spreaders were not a requirement at the time of construction, these will be installed to the two relevant downpipes.
- The bottom of the apron flashing has been back flashed.
- The hole in the flashing will be attended to.
- The uPVC head flashings were installed in accordance with the 'regulations' at the time and have been back flashed.

- 3.10 The Department received an application for a determination on 20 August 2010 and sought further information, which was received on 2 September 2010.

4. The submissions

- 4.1 In the submission dated 17 August 2010 on behalf of the applicants, the lawyer outlined the background to the current situation. The lawyer noted that when the house was completed the applicants had been given the impression that a code compliance certificate was held by the building certifier.
- 4.2 The applicants forwarded copies of:
- some of the drawings
 - the building consent
 - the building certifiers inspection summary dated 29 June 2006
 - the correspondence with the authority and the housing company
 - a series of construction photographs
 - various other certificates, guarantees and information.
- 4.3 The authority did not acknowledge the application or make a submission in response. In declining to make a submission for this determination, the authority has not provided me with any evidence of why it considers the house is not code compliant.
- 4.4 A draft determination was issued to the parties on 4 October 2010. The draft was issued for comment and for the parties to agree a date when the house complied with Building Code Clause B2 Durability.
- 4.5 The parties accepted the draft without comment and agreed that compliance with Clause B2 was achieved on 1 April 2003.

5. Grounds for the establishment of code compliance

- 5.1 In order for me to form a view on the code compliance of this house, I 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 these records. I also consider that the level of that reliance is influenced by the information available to me and also by my evaluation of the house.
- 5.3 Due to the complexity of the junctions associated with some of the features of this house and the items listed in the authority's assessment of the house (see paragraph 3.7.1), I consider it important to verify that the building certifier's inspections of the external envelope were properly carried out.

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

- The record of inspections carried out by the building certifier, which indicates satisfactory inspections of the building work (refer paragraph 3.2).
- The authority's assessment of the house (refer paragraph 3.7.1).
- The drawings, photographs, producer statements and technical information.
- The expert's report on the exterior building envelope as outlined below.

6. The expert's report

6.1 As mentioned in paragraph 1.5, I engaged an independent expert to assist me in the evaluation of the external building envelope and the other matters identified by the authority. The expert is a member of the New Zealand Institute of Building Surveyors. The expert inspected the house on 8 September 2010 and provided a report that was completed on 17 September 2010.

6.2 General

6.2.1 The expert noted that the house generally appeared to accord with the consent drawings and specifications. The expert considered that the overall standard of workmanship was good, with the wall cladding, windows and doors, deck membrane and roofing generally installed 'as per manufacturers' specifications'.

6.2.2 The expert inspected the interior of the house, taking non-invasive moisture readings internally, and noted no evidence of moisture and all readings 'well below 18%'. The expert noted that there were no signs of moisture marks or damage to the carpet edges, the skirtings, the garage ceiling under the deck and in the ceiling spaces. In view of the lack of any apparent problems, the expert did not consider it necessary to carry out invasive moisture testing.

6.3 The uPVC weatherboards

6.3.1 The expert noted that the uPVC weatherboards were installed using the manufacturer's mouldings and flashings. Clearances below weatherboards varied from 150mm to about 50mm minimum at the garage walls, with the step up to the slab therefore about 100mm, which the expert considered to be satisfactory.

6.3.2 The expert noted that fixings to a downpipe on the west elevation were corroding, and considered that these should be replaced (see paragraph 6.10).

6.4 The windows

6.4.1 The expert noted that windows and doors were generally installed in accordance with the manufacturers' instructions at the time, with metal head flashings to all windows and no signs of moisture penetration.

6.4.2 The expert noted that metal head flashings to several windows had 'slight' falls towards the cladding, and the junction had been sealed with what appeared to be a type of uPVC adhesive. However, the expert noted that the windows in question

were well sheltered beneath the eaves. The dirt build-up on the cladding indicated that these window heads were seldom subject to rainwater and he therefore considered that these were adequate in the circumstances.

6.5 The roof

- 6.5.1 Although unable to get access to the upper roof, the expert investigated the ceiling space and noted no signs of any moisture penetration or past leaks. He observed fibreglass blanket insulation installed in the ceiling and also noted some cuts in the building paper that should be repaired or taped as a matter of maintenance.
- 6.5.2 The expert noted that the lower lean-to roofs incorporated proprietary flashings, with kickout deflectors installed to the bottom of the apron flashings. The back of the return end of the deflector on the west elevation had been recently sealed with a sealant. The downpipe discharging onto the lower west roof was fitted with a spreader.

6.6 The deck

- 6.6.1 The expert noted that the deck was overlaid with a sheet butyl rubber membrane, which extended as an upstand behind the weatherboards and over a small upstand at the deck edge, with a metal fascia fixed to the outside.
- 6.6.2 The metal balustrade was fixed to the upstand, with a seal visible between the baseplate and membrane. The expert investigated the garage ceiling, and could see no signs of any moisture penetration from the deck above. The gap at the end of the fascia beside the external stairs had been recently sealed.
- 6.7 The expert concluded that the claddings had been satisfactorily installed in accordance with manufacturers' instructions and trade practice at the time of construction and, subject to some minor maintenance, were 'performing as was intended by the requirements of the New Zealand Building Code'.

6.8 Surface water

- 6.8.1 The expert noted that roof stormwater was piped to the road kerb. As the authority had identified concerns in regard to site drainage, the expert assessed the section for compliance with Clause E1 Surface Water of the Building Code. I note that the expert's inspection was carried out at the end of a wet winter/spring.
- 6.8.2 The expert noted that there were three adjoining houses in the cul-de-sac; an older house to the west and a newer house to the east. The three neighbouring sections were all below other surrounding sections and the road; with the lowest ground level at the rear of the old house to the west (at about 500mm below).
- 6.8.3 The expert noted that there was no site drainage and spoke to the owner of the neighbouring house to the east. The neighbour informed him that he 'had seen some puddles of water on the grassed areas during heavy rainfall, but the water was draining away in the sandy soils without ever flooding the dwelling.'

- 6.8.4 The expert concluded that the sandy soils have been able to effectively drain rainwater, although he noted that the drainage capacity of soils can be diminished over time ‘by factors that cannot be controlled such as wind blown silt.’
- 6.9 The expert noted that items identified by the authority’s (see paragraph 3.7.1) have ‘either been addressed or have not caused any breach of the requirements of NZBC’.
- 6.10 A copy of the expert’s report was provided to the parties on 9 June 2010. The lawyer responded on 22 September 2010, noting that arrangements had been made to replace the downpipe fixings ‘with some that comply with the durability requirements’.

Matter 1: The external envelope

7. Weathertightness

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

7.2 Weathertightness risk

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

Increasing risk

- the two-storey house is in a high wind zone
- the external wall framing is not treated to a level that provides resistance to decay if it absorbs and retains moisture
- the walls have weatherboard cladding fixed directly to the framing
- although fairly simple in plan and form, the house includes some complex roof to wall junctions
- there is an enclosed deck situated partly over an enclosed garage

Decreasing risk

- the deck is sheltered beneath the extended upper roof
- there are eaves projections to shelter the walls.

- 7.2.2 When evaluated using the E2/AS1 risk matrix, these features show that all elevations of the house demonstrate a moderate weathertightness risk rating. I note that the direct-fixed uPVC weatherboards to this house are an alternative solution to E2/AS1 and have been appraised by BRANZ as compliant with Clauses E2 and B2 for buildings of low to moderate weathertight risk (see paragraph 2.5.2).

7.3 Weathertightness performance

7.3.1 Taking account of the expert's report, the claddings appear to have been installed in accordance with good trade practice and to the manufacturers' instructions at the time of construction.

7.3.2 I note that some minor maintenance is required for the following areas:

- the corroding downpipe fixings
- the cuts in the building paper beneath the upper roof
- the unpainted ends of the kickouts to the apron flashings.

7.4 Weathertightness conclusion

7.4.1 I consider the expert's report establishes that the current performance of the building envelope is adequate because it is preventing water penetration through the claddings at present, and that there are also no cladding faults on the house likely to allow the ingress of moisture in the future. Consequently, I am satisfied that the house complies with Clauses E2 and B2 of the Building Code.

7.4.2 I have identified some areas where maintenance is required (see paragraph 7.3.2). 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

8. Discussion

8.1 The site drainage

8.1.1 Taking account of the expert's report, I am satisfied that the house complies with Clause E1 of the Building Code, notwithstanding the low level of the site. However, I also note the expert's comment in paragraph 6.8.4 regarding the possibility of the currently effective drainage capacity of the soil being reduced in the future.

8.1.2 While I am satisfied that the surface water drainage on this site has been adequate for more than seven years and is likely to remain adequate in the future, I suggest that the owners consider installing site drainage as a precautionary measure.

8.2 Other relevant requirements

8.2.1 With respect to clauses relevant to this house, I make the following observations:

- **B1 Structure**

The house is a fairly simple conventional structure and the inspection summary notes satisfactory inspections of the foundations, concrete block and the floor slab. The

summary also notes that the bracing was passed during the pre-line inspections and the authority's assessment noted no visible signs of problems.

- **E1 Surface water**

I have discussed site drainage in paragraph 8.1 above. In regard to the building, the inspection summary indicates satisfactory inspections of drainage, with an as-built drainage plan submitted to the authority.

- **E3 Internal moisture**

The authority's assessment noted no visible signs of problems and the expert saw no evidence of interior moisture.

- **F2 Hazardous building materials**

Shower cubicles are proprietary units and sliding glass doors are conventional units. These would have been inspected during pre-line inspections; indicating that safety glass is likely to be installed where required.

The authority's assessment also identified no problems.

- **F4 Safety from falling**

The balustrades to the deck and exterior stairs appear adequate.

The authority's assessment noted no visible signs of problems and the expert noted no apparent problems relating to the interior stairs.

- **G1 to G8 (Personal hygiene, Laundering, Food preparation, Ventilation Interior environment, Natural light, Electricity and Artificial light**

The house generally complies with the consent drawings, the interiors were inspected by the building certifier and the drawings show adequate provision to comply with the requirements. The authority's assessment noted no visible signs of problems.

An electrical compliance certificate for the house has been provided.

- **G12 Water Supplies and G13 Foul Water**

The inspection summary indicates satisfactory inspections of drainage, with an as-built drainage plan submitted to the authority.

- **H1 Energy Efficiency**

The building certifier's inspection summary indicates that satisfactory preline inspections were undertaken, with insulation noted in walls and ceilings.

The expert has also observed that ceiling insulation had been installed.

- 8.3 Based on the above observations, I consider that the expert's report, the building certifier's inspection records, the authority's assessment and the other documentation, allow me to conclude that the building work complies with the remaining relevant clauses of the Building Code.

Matter 3: The durability considerations

9. Discussion

- 9.1 There are concerns regarding 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 2003.
- 9.2 The relevant provision of Clause B2 of the Building Code requires that building elements must, with only normal maintenance, continue to satisfy the performance requirements of the Building Code for certain periods (“durability periods”) “from the time of issue of the applicable code compliance certificate” (Clause B2.3.1).
- 9.3 These durability periods are:
- 5 years if the building elements are easy to access and replace, and failure of those elements would be easily detected during the normal use of the building
 - 15 years if building elements are moderately difficult to access or replace, or failure of those elements would go undetected during normal use of the building, but would be easily detected during normal maintenance
 - the life of the building, being not less than 50 years, if the building elements provide structural stability to the building, or are difficult to access or replace, or failure of those elements would go undetected during both normal use and maintenance.
- 9.4 In this case the delay between the completion of the building work in 2003 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. 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 2003.
- 9.5 It is not disputed, and I am therefore satisfied, that all the building elements complied with Clause B2 on 1 April 2003. This date has been agreed between the parties, refer paragraph 4.5.
- 9.6 In order to address these durability issues when they were raised in previous determinations, I sought and received clarification of general legal advice about waivers and modifications. That clarification, and the legal framework and procedures based on the clarification, is described in previous determinations (for example, Determination 2006/85). I have used that advice to evaluate the durability issues raised in this determination.
- 9.7 I continue to hold that view, and therefore conclude that:
- (a) the authority has the power to grant an appropriate modification of Clause B2 in respect of all the building elements if this 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 2003.

9.8 I strongly suggest 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.

10. The decision

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

- the external envelope complies with Clauses E2 and B2 of the Building Code
 - the house complies with the remaining relevant clauses of the Building Code
- and accordingly, I reverse the authority's decision to refuse to issue a code compliance certificate.

10.2 I also determine that:

- (a) all the building elements installed in the house complied with Clause B2 on 1 April 2003.
- (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 April 2003 instead of from the time of issue of the code compliance certificate for all the building elements.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 22 November 2010.

John Gardiner
Manager Determinations