



Determination 2009/69

The issuing of a code-compliance certificate for a house located at 15 Landmark Terrace, Orewa



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 the Department.
- 1.2 The applicants are Mr and Mrs J and F Buitendijk, who have agreed in writing to purchase the house (“the applicants”). The other parties are:
- Kensington Park Properties Ltd (in receivership) the current owner of the house (“the owner”), represented by the receivers
 - the Rodney District Council (“the authority”) carrying out its duties and functions as a territorial authority and a building consent authority.
- 1.3 I take the view that the matter for determination in terms of sections 177(b)(i) and 188² is whether the decision of the authority to issue a code compliance certificate for the house was correct.

¹ The Building Act 2004 and the Building Code are available from the Department’s website at www.dbh.govt.nz.

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.

- 1.4 In this respect, I note that while the original application was couched in terms of the code-compliance of the building, the applicants later informed the Department that the issuing of the code compliance certificate was to be the main consideration (refer paragraph 4.2). While I have also considered whether certain elements of the house are code-compliant, this has been considered in respect of the decision of the authority to issue the code compliance certificate. In addition, my comments may be of assistance to the parties in this matter.
- 1.5 In making my decision, I have considered the submissions of the parties, the report from an independent expert (“the expert”) commissioned by the Department to advise on this dispute, and the other evidence in this matter.

2. The building work

- 2.1 The building work consists of a two-storey house with a basement area that contains a garage, and which is situated on a sloping site and, according to the expert, is in a high wind zone for the purposes of NZS 3604³. The house is of light timber construction, apart from the basement which is of concrete block construction. The building has a concrete ground floor slab and concrete or timber-framed intermediate floors. The roof cladding is corrugated steel. Aluminium windows have been installed with external timber surrounds. The roofs have hip, valley, and wall junctions and generally have 650mm wide eaves and verge projections.
- 2.2 The house is relatively simple in plan and form and has a total of four decks attached to it. One deck is constructed of concrete and is situated partly over the garage and is partly cantilevered. The remaining decks are timber-framed and two of these are situated on the north elevation. The third timber-framed deck is situated at the upper floor level over the concrete deck and is supported from the house and on timber beams and columns. All the decks are protected by metal balustrades.
- 2.3 The wall cladding consists of fibre-cement weatherboards fixed to 20mm battens over a building wrap. The external angles of the weatherboards are covered by timber facings and a decorative band has been installed over the linings at each floor level.
- 2.4 I have not been provided with any direct evidence as to the treatment afforded to the external wall framing. However, based on the expert’s observations, I am prepared to accept this timber has been treated to a H3.1 level.

3. Background

- 3.1 The authority issued a building consent (No ABA-1001321) for the house in October 2007. The authority issued an amendment to the consent that was applied for on 22 November 2007. The amendment request included a revised set of drawings. A series of inspections were carried out from November 2007 to June 2008. The building’s designers issued a “Certificate of Practical Completion” for the house dated 5 September 2008.

³ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

- 3.2 I have not seen a copy of the building consent, but a report provided by the applicant's consultant includes details from the consent drawings that show the application of the weathertightness details taken from the Compliance Document E2/AS1.
- 3.3 The authority issued a code compliance certificate on 16 August 2008.
- 3.4 The applicants engaged a firm of consultant building surveyors to inspect the house and provide a report ("the consultants' report") on its condition. I refer in more detail to this report in paragraph 6.
- 3.5 The application for a determination was received by the Department on 19 December 2008. The Department requested further information from the applicant, and this was received on 22 January 2009.

4. The draft determinations

- 4.1 A copy of the first draft determination, which considered only whether the house complied with the building code, was sent to the parties for comment on 3 February 2009, and initially both parties accepted the draft determination.
- 4.2 On 20 February 2009 the applicants' legal adviser informed the Department that the applicants wished to have the matter concerning the authority's issuing of the code compliance certificate considered in the determination.
- 4.3 On 26 February 2009 the authority withdrew its acceptance of the draft determination due to concerns it had regarding the consultants' report.
- 4.4 The owner, through the receivers, also commented on the consultants' report as described in paragraph 5.2.
- 4.5 Copies of a second draft determination were forwarded to the parties on 7 May 2009. The applicants accepted the second draft. The authority did not accept the second draft but made no submission. The owner also did not accept the draft and requested a hearing (refer paragraph 8).

5. The submissions

- 5.1 The applicants forwarded copies of:
- the consultants' report described in paragraph 6.1
 - the agreement for sale and purchase
 - the code compliance certificate
 - the designers' "Certificate of Practical Completion".
- 5.2 The receivers forwarded a submission to the Department dated 6 March 2009 on behalf of the owner, which was also a response to the first draft determination. The submission set out the matters that the receivers considered were those to be determined and described the background to the dispute. The main content of the

submission related to the consultants' report described in paragraph 6.1, and it was contended that; the building work does comply with the Building Code, the Council correctly issued the code compliance certificate, and outstanding matters had been attended to. Accordingly, in the receiver's opinion there was no reason for the code compliance certificate to be reversed. Attached to the submission was a report from a firm of waterproofing specialists.

5.3 Subsequently, in a letter to the Department dated 13 March 2009, the authority set out what it considered to be the matters to be determined. The submission also responded at length to the consultants' report. The authority concluded that:

- the building works complied with the Building Code
- the authority did not err in issuing the code compliance certificate
- there are no grounds, or insufficient grounds, for reversing the authority's decision to issue the code compliance certificate.

6. The consultants' report

6.1 As mentioned in paragraph 3.4, the applicants engaged a firm of consultants to provide an assessment of the condition of the building elements of the house. Initially, I was prepared to accept the assessment as providing sufficient information to enable me to determine the code-compliance of the house, and I have carefully considered both the consultants' report and the parties' comments regarding it. However, since the matters to be determined have been expanded, and in view of the comments on the report raised on behalf of both the owner and the authority, I am now relying on the independent expert's report as described in paragraph 7.

7. The expert's report

7.1 As described in paragraph 1.5, I engaged an independent expert, who is a member of the New Zealand Institute of Building Surveyors, to provide me with an assessment of those building elements subject to determination.

7.2 The expert examined the house on 4 April 2009 and provided a report dated 13 April 2009. The report in general noted that design and basic construction were of a high standard including features such as the installation of a cavity. However, the quality of workmanship in many places has resulted in a house that will require significant on-going maintenance. The expert also noted that certain remedial work had been carried out since the consultants' report was issued.

7.3 The expert's report questioned the designer's risk analysis and pointed out numerous departures from the amended consented documentation, which included the:

- increased height of the garden retaining wall
- replacing of timber with fibre-cement at some locations
- lack of a drip edge and capillary break to the plaster above the basement window

- different method for hanging the deck from the house, the possible lack of a flashing and the lack of a drip edge at this location
- bottom horizontal band shown at Detail 19⁴ does not incorporate the detailed flashing and drainage gap
- 25mm triangular fillet shown on Detail 20 has not been installed
- 70mm x 40mm aluminium T-section shown on Detail 22 has not been installed
- 75mm x 50mm colorsteel flashing shown at Details 27C and 27D was not installed
- detailed apron flashing kick-out was not provided (as shown on Detail 29)
- capillary break shown on Detail 32 was not constructed and the beam in question was clad in fibre-cement rather than the detailed timber
- the escutcheon plate on Detail 37A was not installed at all the pipe penetrations (paragraph 6.1 of the report), however the expert noted that the documents he viewed may not be exactly the same as shown by those held by the authority.

At this point, I am of the opinion that all these departures from the amended consent should have been apparent during the inspection procedures undertaken by the authority.

- 7.4 The expert took approximately 40 invasive moisture readings in the bottom plates. Of these, only three resulted in elevated readings of 20% to 22%, compared with the equilibrium moisture content range of 12% to 17%. The elevated readings were at locations adjoining two apron flashing ends and in the basement adjoining the rear garage blockwall. I consider that these elevated readings indicate that moisture is entering the building fabric
- 7.5 The expert was of the opinion that the following items were not code-compliant at the time his inspection was carried out:
- The unsatisfactory end finishings of the two apron flashings, which is confirmed by the higher moisture readings at this location (Clauses E2 and B2).
 - The buried timbers and accumulated water at the bottom of the stairs (Clause E1).
 - The lack of vermin-proofing at the base of the claddings
- 7.6 The expert noted that the current performance of the following features is adequate though immediate attention or maintenance is necessary.
- The exposed mesh and the inadequate waterproofing at the junction between the concrete deck and the house.
 - The inadequate weatherproofing to some of the penetrations through the cladding.
 - The penetration of the deck beams through the cladding.

⁴ The Detail references refer to those details provided on the amended consent documentation.

- The loose head flashings and the gaps between the head flashings and facing boards.
- Corrosion in the steel beam at the junction between the concrete deck and the house.

I note that without the required attention or maintenance being undertaken these features will not be compliant with Clause B2 “Durability”.

7.7 It was considered by the expert that further investigation is required in regards to:

- the ceiling insulation being continuous over the light fittings (Clause G9)
- stanchion fixings and column bases, which are high risk details, should be checked that they are in fact weathertight (Clause E2).

7.8 The expert has also confirmed that the retaining wall has a fall height that exceeds one metre.

7.9 On 29 April 2009 the receivers forwarded a submission to the Department regarding the expert’s report. In general terms, the submission claimed that; the matters raised in the expert’s report were minor in nature and could be rectified, the building work was code-compliant, the authority correctly issued the code compliance certificate and, as outstanding matters had been attended to, there is no reason for the code compliance certificate to be revoked.

7.10 The receivers’ submission raised the following issues regarding the expert’s report:

- A reference to ‘owners’ should be changed to ‘owner’ and an amendment should be made to a reference to the authority’s inspections (those being for a different property).
- The retaining wall is 1.32 m high at its highest point, no steps have been provided to access the slope above, and the area above the retaining wall is fully fenced from neighbouring properties.
- The comment regarding fibre-cement installed on an adjoining property was not relevant.
- While the Detail 27D calls up a flashing, it is not apparent the flashing is detailed on 27C and the boxed corner is providing adequate protection.
- Though agreeing that wall ‘area A’ (on page A05 of the plans) should have a weathertightness risk score of 5, ‘area B’ should not as there is no roof butting on this area.
- The stanchion bases consist of two metal plates, with a single bolt securing the lower one and either four bolts or countersunk screws connecting the two plates together, with a plastic cap over the top. The square referred to as being plastic is metal with a protective coating.
- There are only two balustrade posts over the garage and they are within the line of the blockwork wall below, and on a sloping concrete deck with a waterproofing membrane installed.

- The authority has approved the kick out detail provided by the receivers and which they would like to install.

7.11 I have carefully considered the receivers' submission and have taken into account those items that I consider to be relevant.

8. The Hearing

General

8.1 A hearing was held at Orewa on 15 July 2009 before me. I was accompanied by a Referee engaged by the Chief Executive under section 187(2) of the Act. The hearing was attended by:

- the applicants, assisted by their consultant
- two lawyers representing the receivers, assisted by a consultant
- two representatives from the authority
- two other officers from the Department.

8.2 All the parties spoke at the hearing and the evidence presented enabled me to amplify or clarify various matters of fact and was of assistance to me in preparing this determination.

The receivers' submission

8.3 A submission prepared on behalf of the receivers was presented at the hearing, together with an affidavit presented on behalf of the receivers' consultant. I summarise the main arguments presented for the receivers at the hearing as follows:

- Only where there is insufficient detail provided in the consented documents should there be recourse to the Building Code when considering whether an authority had reasonable grounds for issuing a code compliance certificate. This was the approach taken by the Department in Determination No 2008/30
- While there were some minor variations from Figure 8 of E2/AS1, the ends of the apron flashings were, on reasonable grounds, compliant with the building consent. However, in order to remove any doubt as to their compliance the ends have been modified.
- While there may have been a change in the fixing of the upper floor deck support, it complies with the Building Code in terms of an alternative solution. The stringer has been moved up to line with the joists and there is doubt whether the consented flashing has been installed.
- The base of the weatherboards complies with Figure 26 indicated on the consented plans and also with the requirements of NZS: 3604. In any event, this is a minor matter that does not justify the reversal of the code compliance certificate.
- The alleged pooling of water under the stairs is a non-issue and is minor in the context of reversing the code compliance certificate. The silt deposit has occurred since the stair stringers were installed.

- Consideration had not been taken of the fact that the two high moisture readings may be the result of the timber framing not being allowed to dry due to the building paper and battens being nailed hard up against the framing. The apron flashing improvements ensure that any risk associated with the flashings has been negated. There is no moisture reading evidence that shows the deck beam fixing is causing moisture to enter the property.
- The membrane to the deck was installed after the bolt fixings were installed. A PS4 was issued on behalf of the installer and the exposed mesh noted by the expert was in a second layer providing a key for the applied batten. Moisture readings have not indicated any leakage onto the garage beam and the rust was surface rusting only.

The applicants' submission

8.4 The applicants' submissions, mainly presented by its consultant, can be summarised as follows:

- The applicants were concerned that the persons who had carried out the work were not in attendance at the hearing.
- The lack of kick-outs to the apron flashings was a major problem and the elevated moisture readings at these locations indicated this. The constructed detail did not comply with E2/AS1 and the repairs undertaken were an admission that the flashings were not originally adequate.
- There were some concerns regarding the amended deck junction with the house especially if the flashing was installed, as there was a chance that water could be discharged behind the packer.
- The consultant was not convinced that the lack of a continuous packer at the base of the weatherboards provided adequate vermin-proofing
- There is inadequate ground clearance at the location of the stair stringers and there could be a durability issue concerning the moisture in that area.
- The rusting of the garage beam is ongoing and this could be a result of moisture penetrating the deck membrane. The bolting through the membrane above the garage is a possible weakness and the fixing does not comply with the consent.

The authority's submission

8.5 I summarise below the authority's submissions at the hearing:

- The authority would have inspected the apron flashings at the batten installation stage, although there may be questions as to the ultimate projection of the flashing ends, which were not inspected at that later date.
- The revised deck stringer height would act in the same way as the consented detail.
- The authority was primarily concerned with the preparation of the decking substrate and it was difficult to inspect the membrane as installed. There would have been reliance placed on the provision of a producer statement.

- The inspections carried out were reasonably rigorous and applicators are now licensed with regard to quality assurance and expertise.

8.6 It was mutually agreed that a site visit to view the property would not be necessary.

9. Discussion

The issuing of the code compliance certificate

9.1 As previously described, I am of the opinion that the matter to be considered in this determination is the authority's decision to issue the code compliance certificate.

9.2 In terms of section 94(1)(a) of the Act, an authority can only issue a code compliance certificate if it is satisfied, on reasonable grounds, that the building work complies with the building consent. As set out in paragraph 7.3, the expert has noted some 11 discrepancies between the details as constructed compared with details set out on the amended consented plans. Some of these discrepancies were further discussed at the hearing, and I note that the submission made on behalf of the receivers at the hearing accepted that there was a change in the deck support fixing and possibly regarding the lack of vermin-proofing. While a portion of these differences are minor, I am of the opinion that the majority of these changes should have been obvious to an inspector even though the authority's inspections are somewhat limited.

9.3 Accordingly, these discrepancies are sufficient for me to accept that the house was not completed in accordance with the building consent and that the authority's decision to issue the code compliance certificate should be reversed.

9.4 Having reached this decision, there is no need for me to apply the two-stage approach to the issuing of a code compliance certificate under the current Act that was established in Determination 2008/30. There, I noted that there would be instances where, if the consent documentation lacked all the details required to establish compliance with the Building Code, this also could be taken into account in deciding the validity of an authority's issuing of a code compliance certificate.

9.5 In any event, while they are not germane to my decision, the departures from the Building Code in this instance are relatively minor. Accordingly, they would not be to considered as grounds for the authority to refuse to issue a code compliance certificate for this particular house.

The code-compliance of the building

9.6 I consider the expert's report establishes that the performance of certain building elements contained in the house (as listed in paragraph 7.5) did not meet the requirements of the Building Code at the time that they would have been inspected. In this respect, I have considered the Building Code that was current at the time that the building consent was issued and only those matters that should have been apparent to the authority at the time it carried out its inspections. In this respect, I appreciate that the 5-hour inspection by the expert will provide a more detailed list of defects of varying significance for consideration than was available to the authority.

- 9.7 Based on the expert's report I am of the opinion that the elements which are non-compliant mean that the following Building Code requirements have not been met:
- Clause B2 "Durability"
 - Clause E2 "External Moisture"
 - Clause E1."Surface Water"
- 9.8 With regard to the expert's opinion concerning the lack of vermin proofing, while the provision of vermin proofing is described in E2/AS1, it is not a requirement of the Building Code.
- 9.9 There is the lack of a barrier on top of the retaining wall, which has a fall height exceeding one metre. I note that the retaining wall holds up a garden area that is surrounded by what appears to be an adequate fence. In paragraph 7.1 of Determination 99/012, the Building Industry Authority (the precursor to the Department) was of the opinion that Clause F4.3.1 was to be interpreted as requiring a barrier where it is reasonably foreseeable that people are likely to be at risk if there is no barrier. I am prepared to accept this interpretation, and taking into account the current situation, I am of the opinion that a barrier is not required to the top of the retaining wall.
- 9.10 I agree with the expert's opinion that, apart from the items listed in paragraph 7.5, the other items listed in paragraph 7.3 are code-compliant, as is the garage beam. I note also that some of the items listed by the expert have subsequently been rectified and are therefore code-compliant at this time.

10. What is to be done now?

- 10.1 In accordance with the decision reached in this determination, the authority should issue a notice to fix for any items that it considers to be non-compliant. Once any such items have been rectified to the authority's satisfaction, it should, on receipt of an application from the owners, amend the consent to accommodate any constructed changes and issue a code compliance certificate in line with the amended consent.
- 10.2 In addition, the authority should take appropriate steps to recover copies of the code compliance certificate dated 16 August 2008 that it has already issued.

11. The decision

- 11.1 In accordance with section 188 I hereby determine that the decision of the authority to issue a code compliance certificate be reversed, as the house as constructed does not comply with the building consent.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 26 August 2009.

John Gardiner
Manager Determinations