



## Determination 2013/073

### Regarding the refusal to issue a certificate of acceptance for a reconstructed balcony deck at 94 Wake Road, Riverhead, Auckland



#### 1. The matter to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004<sup>1</sup> (“the Act”) made under due authorisation by me, John Gardiner, Manager Determinations and Assurance, Ministry of Business, Innovation and Employment (“the Ministry”), for and on behalf of the Chief Executive of the Ministry.

1.2 The parties to the determination are

- J D Glover the applicant and Licensed Building Practitioner who supervised the building work (“the LBP”)
- The owner of the property, S Hopcroft (“the owner”), who is represented by the LBP.
- Auckland Council (“the authority”), carrying out its duties and functions as a territorial authority or a building consent authority.

1.3 This determination arises from the authority’s decision to refuse to issue a certificate of acceptance for a reconstructed balcony deck (“the deck”). The authority is of the view that the building work does not comply with Clause E2—External moisture of the Building Code<sup>2</sup> (First Schedule, Building Regulations 1992).

1.4 The matter to be determined<sup>3</sup> is, therefore, whether the authority correctly exercised its powers in refusing to issue a certificate of acceptance. In making this decision, I

<sup>1</sup> The Building Act, Building Code, Compliance documents, past determinations and guidance documents issued by the Ministry are all available at [www.dbh.govt.nz](http://www.dbh.govt.nz) or by contacting the Ministry on 0800 242 243.

<sup>2</sup> In this determination, unless otherwise stated, references are to sections of the Act and references to clauses are references to the Building Code

<sup>3</sup> Under sections 177(1)(b) and 177(3)(b) of the Act.

must also consider whether the completed building work complies with the relevant provisions of the Building Code.

- 1.5 In making my decision, I have considered the submissions of the parties, the report of an independent expert commissioned by the Ministry to advise on this dispute (“the expert”), and the other evidence in this matter.
- 1.6 The relevant sections of the Act are set out Appendix A.

## 2. The building work

- 2.1 The building work in question consists of the reconstruction of a large deck attached to the upper level of a two-storey house clad with brick veneer. According to the expert, the house is located in a low-to-medium wind zone and a medium corrosion zone for the purposes of NZS 3604<sup>4</sup>.
- 2.2 The deck extends the full width of the northeast elevation of the house and the reconstructed deck has the same plan profile as the original deck. It is constructed partly over living spaces, and partly over open space. The bulk of the deck is timber-framed, but is supported by steel beams and posts along its outer perimeter.
- 2.3 According to the LBP, the remedial work included the removal of the existing decking, the replacement of decayed and water-stained framing, and the installation of additional timber members. The steel beams and posts were retained and were treated with a rust-protection system. The LBP advises that the brick cladding and associated joinery units to the upper level had been removed and reinstated to facilitate the repair work.
- 2.4 The deck is lined with CCA treated plywood that is covered with a proprietary liquid-applied polyurethane waterproofing membrane (“the membrane”). The membrane is applied to all gutters, thresholds, and 150mm up all upstands. The membrane has an appraisal certificate<sup>5</sup>; the appraisal is current and states that the membrane system, used under ceramic or stone finishes on external decks, will comply with Clauses B2, E2 and F2 providing the system is ‘designed, used, installed and maintained’ according to the conditions described in the appraisal.
- 2.5 The body of the membrane is covered with tiles laid on an isolation mat and adhesive system. A gutter is constructed along the outer deck perimeter that is drained by four proprietary deck outlets connected to downpipes. According to information provided to the expert, the gutter and the membrane faces are painted with an oil-based etching primer and two coats of a proprietary paint.
- 2.6 The faces of the deck and the supporting posts are clad with compressed fibre-cement sheets fixed over a drained cavity. It is noted that some of the deck perimeter is formed to a radius – the expert is of the opinion that compressed fibre-cement sheet would be unable to be curved to this radius and the curved sections are more likely to clad with uncompressed fibre-cement.
- 2.7 A 1000mm high proprietary side-mounted glass barrier is installed to the deck perimeter fixed through the deck fascia.

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<sup>4</sup> New Zealand Standard NZS 3604:1999 Timber Framed Buildings

<sup>5</sup> BRANZ Appraisal No. 486 (2005)

### 3. Background

- 3.1 It appears the house and deck was originally built in 2000 and that a code compliance certificate was issued in 2003. At some later stage the owner of the house became aware of water leaking into a living space under the deck and engaged the LBP to fix the leak.
- 3.2 The remedial work to the deck was carried out from late 2012 to early 2013 and the LBP initially considered the work could be carried out under Schedule 1(a) of the Act without the need for a building consent. According to the LBP it was when a building report was being prepared for a prospective purchaser that he became aware that consent should have been sought for the work. The LBP subsequently applied for a certificate of acceptance.
- 3.3 In January 2013 a firm of architects (“the architects”) wrote to the authority on behalf of the LBP, seeking a certificate of acceptance for the remedial work. (I note that the expert has confirmed that the architects were not involved at the documentation or construction stages of the reconstruction. The as-built drawings and specification notes provided by the architects are based on information supplied by the LBP.)
- 3.4 The architects set out the background to the reinstatement and described the remedial work that had been undertaken. The architects noted that in terms of Schedule 1 of the Act, it was ‘genuinely believed that the need for a building consent was considered as unnecessary’, however, when the full extent of the work was realised, it was realised that an application for a building consent should have been made. The decision was made to complete the building work and apply for a certificate of acceptance.
- 3.5 The architects noted that the work had been carried out by a licenced building practitioner and attached producer statements and warranties from the relevant persons engaged in the rectification work. Photographs and as-built plans were also attached to the correspondence.
- 3.6 On 11 April 2013 the authority wrote to a real estate agent (with a copy sent to the LBP), stating that there was a failure to demonstrate that the relevant building work complied with the Building Code. Accordingly, the application for a certificate of acceptance was refused. The authority said that without limiting the general areas of non-compliance, in particular the following was relevant:
- E2 – External Moisture: The deck has insufficient slope (Deck slope is 0.2 degrees at present, as the system used to waterproof the deck is an alternative solution, Council requires a minimum of 2.0 degrees in order for it to be satisfied that compliance is achieved)
- Compliance with the Building Code is important to ensure
- Living accommodation meets the minimum standards
  - The built environment meets the community expectation associated with the minimum standards
- 3.7 The Ministry received an application for a determination on 17 July 2013.

## 4. The submissions

- 4.1 The LBP made a formal submission dated 1 June 2013 that set out the background to the dispute. The LBP noted that:
- The falls to the deck were the same as on the original deck; the original deck was approved by the authority as part of the consented work.
  - The deck was not holding water and had sufficient falls to drain away from the house.
  - The 100mm step-down from the floor level and the height of the existing beams restricted the falls that could be achieved.
  - The original waterproofing membrane had disintegrated, and rotten timbers required floor joists be removed.
- 4.2 The LBP attached copies of:
- the architects' letter to the authority dated January 2013
  - the authority's letter to the estate agent dated 11 April 2013
  - some photographs of the deck.
- 4.3 The authority acknowledged the application and indicated it would make a submission: no submission was received.
- 4.4 A draft determination was issued to the parties for comment on 10 October 2013.
- 4.5 In an email on 22 October 2013 the authority accepted the draft without further comment.
- 4.6 In a response received on 30 October 2013 the LBP did not accept the draft determination and submitted copies of the following documentation:
- Invoices dated August 2012 for H3 treated ply and H3.2 framing timber, timber preservative, and stainless steel fixings
  - Photographs taken during construction showing:
    - new deck joists installed full length alongside existing joists
    - double joists to the perimeter
    - the original balustrades top-fixed and the re-installed balustrades face-fixed
    - preservative applied to existing framing
    - the fibre-cement sheets and cavity system at the deck beam, and the plastering applied over the fibre-cement sheets
    - the waterproofing membrane applied up and over the gutter and down to the top edge of the PVC cavity closer before the application of plaster
    - the rebated outlet to the deck gutter before the membrane was installed.
- 4.7 The LBP advised that:
- sealant was applied before the stainless steel coach screws for the handrail posts were installed, and an additional layer of sealant in an inverted 'u' shape

was applied to the back of the post prior to it being pushed onto the side of the upstand

- the paint used was based on advice from the waterproofing membrane supplier and the paint manufacturer
- the only areas left unpainted were those under the ranch slider; this area is not exposed to UV light and would be 'near impossible' to paint
- the holding of water in the gutter was due to a build-up of leaves and not the height of the outlet; the ply was rebated to allow the outlet to be installed at the correct height.

4.8 The LBP reiterated that the fall to the deck was dictated by the original construction, and that the ranch sliders and floor height to the rooms, and the steel beams supporting the deck, meant that changing the fall was not possible.

## 5. The expert's report

5.1 As described in paragraph 1.5, I engaged the services of an expert, who is a registered architect, to assist me. The expert examined the deck on 29 August 2013, and produced a report completed on 18 September 2013. Copies of this report were forwarded to the parties on 18 September 2013.

5.2 The report described the deck in general terms and gave some of the background to the dispute. It was noted that the deck fascia and the capping plaster finish were uniform and free from cracks. The expert could not find any evidence of leaks to the deck soffit and all non-invasive moisture readings were normal. The expert did not see any obvious damage to the interior room ceilings.

5.3 In the expert's opinion, the records, photographs and site evidence provided evidence of good practice for much of the deck's construction. However, there were areas that indicated departures from good practice and a lack of relevant records. In particular, the expert referred to the following issues that required additional evidence to establish code-compliance:

- The provision of invoices or other records establishing the treatment of the timber used.
- Verification of the boundary joist fixings to accommodate the balustrade loads.
- Clarification of whether the paired cantilevered joists were full length. If they were not, verification that they were structurally adequate.
- Photographic records of the fibre-cement sheets and cavity system at the deck fascia.
- Details or photographic records showing the sealing of balustrade fixings that penetrate the membrane.

5.4 The expert noted that the membrane was listed on the authority's 'External Membranes Register' as being a proprietary product that the authority considered satisfied the requirements of the Building Code.

5.5 The expert noted that the membrane as installed fell outside the scope of the Approved Document E2/AS1 and the BRANZ appraisal in respect of the slope to the deck and gutter. The appraisal said the minimum fall to decks and gutters 'must be

1:60'. The appraisal also said '[i]nadequate falls will allow moisture to collect and increase the risk of deterioration of the membrane and tiling finish'.

- 5.6 The expert measured the slope of the deck using a digital level. While the deck generally sloped at an angle of 0.2 degrees, there were some flat spots that allowed water to pond. The gutter slope varied up to a maximum slope of 0.5 degrees. The gutter outlets were positioned above the bottom of the gutter which did not allow the gutter to fully drain.
- 5.7 The appraisal said the membrane 'must be protected from exposure to UV light and from physical damage by ceramic or stone tile finishes'. The body of the deck was protected with ceramic tiles. For the remaining areas the membrane's installation instructions provide for the use of metal flashings or three coats of UV-stable paint.
- 5.8 In this case the gutter and upstand has been painted. The expert noted that the paint manufacturer had advised that the paint finish used was not recommended for the horizontal surfaces of a gutter. The expert also observed that some of the membrane upstands were not painted.
- 5.9 While some of the as-built deck details were not standard in terms of the manufacturer's installation instructions, the expert had not considered these in detail as they did not relate to the deck slope being the sole reason for the refusal of the certificate of acceptance given by the authority.

## 6. Discussion

- 6.1 Schedule 1(a) of the Act provides for some building work to be exempt from the need for a building consent to be obtained. However, paragraph (iii) of Schedule 1(a) excludes the 'repair or replacement (other than maintenance) of any component or assembly that has failed to satisfy the provisions of the Building Code for durability, for example, through a failure to comply with the external moisture requirements of the Building Code.' There is no dispute between the parties that the building work carried out required building consent, and that a certificate of acceptance is the appropriate regulatory mechanism to regularise the building work.
- 6.2 I note also that section 17 of the Act requires that all building work must comply with the Building Code to the extent required by the Act, whether or not a building consent is required in respect of that building work.
- 6.3 Section 96(1)(a)(ii) states that a territorial authority can, on application, issue a certificate of acceptance if 'a building consent was required for the work but not obtained'. However, due to its concerns about the slope to the deck, the authority refused to issue such a certificate of acceptance.
- 6.4 The expert referred to additional evidence that was required to ensure that certain building elements of the deck as constructed are compliant with the Building Code (see paragraph 5.3). The LBP has subsequently provided further information (refer paragraph 4.6), and I therefore consider that:
- invoices supplied for the deck joists provide sufficient evidence that the timber is treated to an appropriate level
  - photographs show the replacement cantilevered deck joists as full length

- the sealing of balustrade fixings is adequate based on the methodology described by the LBP.

6.5 However, I accept that the expert's report establishes that the slope to the deck is inadequate and causes water to pond on the deck surface, and that there is a lack of proper drainage to the gutter due to the top of the outlets being above the base of the gutter and inadequate slope. In addition I also accept the expert's opinion that the membrane upstands and the gutter are inadequately protected from the effects of UV light, and that verification of the boundary joist fixings to accommodate the balustrade loads is required.

6.6 In view of the conclusions that I have reached, I am of the opinion that the deck does not comply with the requirements of Clause E2. I therefore find that the authority was correct in its decision to refuse to issue the certificate of acceptance.

## **7. The Decision**

8.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the building work carried out without consent to reconstruct the deck does not comply with Clause E2 of the Building Code; accordingly I confirm that the authority correctly exercised its powers when it refused to issue a certificate of acceptance.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 21 November 2013.

John Gardiner  
**Manager Determinations and Assurance**

## Appendix A: the Legislation

A.1 The relevant sections of the Building Act 2004 include:

**96 Territorial authority may issue certificate if acceptance in certain circumstances**

- (1) A territorial authority may, on application, issue a certificate of acceptance for building work already done—
- (a) if—
  - (ii) a building consent was required for the work but not obtained...

A.2 Schedule 1 of the Act includes (my emphasis):

A building consent is not required for the following building work:

- (a) any lawful repair and maintenance using comparable materials, or replacement with a comparable component or assembly in the same position, of any component or assembly incorporated or associated with a building, including all lawful repair and maintenance of that nature that is carried out in accordance with the Plumbers, Gasfitters, and Drainlayers Act 2006, except—
  - ...
  - (iii) repair or replacement (other than maintenance) of any component or assembly that has failed to satisfy the provisions of the building code for durability, for example, through a failure to comply with the external moisture requirements of the building code; or