



# **Determination 2017/085**

# Regarding the authority's decision to issue a code compliance certificate for alterations to a house at 36A Simla Crescent, Khandallah, Wellington



### Summary

This determination considers the authority's decision to issue a code compliance certificate for alterations to an existing house and whether the building work complied with the building consent and the Building Code at the time of that decision.

### Index

| 1. | The matters to be determined | . 2 |
|----|------------------------------|-----|
| 2. | The building work            | . 3 |
| 3. | Background                   | . 5 |
|    | The submissions              |     |
|    | The expert's report          |     |
|    | Discussion                   |     |
| 7. | The decision                 | 14  |
|    |                              |     |

# 1. The matters to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004<sup>1</sup> ("the current Act") made under due authorisation by me, Katie Gordon, Manager Determinations, Ministry of Business, Innovation and Employment ("the Ministry"), for and on behalf of the Chief Executive of the Ministry. The decisions under section 184 of the Act to make this determination and under section 187 to engage an independent expert to assist were made by the previous Manager Determinations.
- 1.2 The parties to the determination are:
  - the owners of the house S and H Aitken ("the applicants")
  - Wellington City Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.

### **1.3** The reason for this determination

- 1.3.1 The application for this determination arises from the following:
  - Alterations to the house were carried out in 2015 and the authority issued a code compliance certificate for those alterations in February 2016. The applicants then engaged a property inspection company to assess concerns about the quality of finishes and defects, but the inspection company also identified changes from the consent documents.
  - The applicants then engaged a property and building consultancy ("the building surveyor") to assess the alterations. The surveyor's report identified various defects and departures from the consent documents. (I note the building surveyor identified 20 items, of which the applicants wanted the determination to consider 13 items, refer paragraph 4.1.2.)
  - After reaching a settlement with the builder, the applicants approached the authority about reviewing its decision to issue a code compliance certificate. The authority refused to re-inspect the building work and maintained that the code compliance certificate had been properly issued.
- 1.3.2 This determination arises from the decision of the authority to issue a code compliance certificate dated 12 February 2016 for the alterations. The applicants consider that the code compliance certificate should not have been issued due to:
  - differences between the as-built construction and the consent documents
  - the alterations not complying with certain clauses of the Building Code<sup>2</sup> (First Schedule, Building Regulations 1992). The applicants' concerns relate to structural and weathertightness defects identified by the building surveyor.
- 1.4 The matter to be determined<sup>3</sup> is therefore the authority's exercise of its powers of decision in issuing the code compliance certificate. In deciding this matter, I must consider whether the building work as constructed complies with the building consent and whether it complies with clauses B1 Structure, B2 Durability, and E2 External moisture of the Building Code.

<sup>&</sup>lt;sup>1</sup> The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Ministry are all available at www.building.govt.nz or by contacting the Ministry on 0800 242 243.

 $<sup>^{2}</sup>$  In this determination, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code  $^{3}$  Under sections 177(1)(b) and 177(2)(d)

1.5 In making my decision I have considered the submissions of the parties, including the inspection report provided by the applicants ("the building surveyor's report"), together with the report of the independent expert commissioned by the Ministry to advise on this dispute ("the expert") and the other evidence in this matter.

### 1.6 Matters outside this determination

- 1.6.1 The application for determination raised a number of issues concerning:
  - the validity of the authority's inspections and its failure to identify defects
  - workmanship and related contractual issues.
- 1.6.2 The conduct of the authority and contractual issues are outside the matters that can be considered under section 177 of the Act.
- 1.6.3 In general terms workmanship does not fall within the matters that can be considered under section 177 of the Act. Poor workmanship may or may not lead to building work not achieving the complying with the Building Code, and whether the building work complies with the Building Code is a matter that can be determined.
- 1.6.4 Matters relating to workmanship, over and above the minimum levels required to establish compliance, are covered in section 397 of the Act. The applicants can consider proceedings for breach of warranties under section 398 of the Act and also have the option of laying a complaint to the Building Practitioners Board under section 315 of the Act.
- 1.6.5 This determination is therefore limited to assessing the compliance of the building work with clauses outlined in paragraph 1.4.

# 2. The building work

### 2.1 The original house

- 2.1.1 The house is situated on a narrow site in a high wind zone<sup>4</sup> as defined in NZS 3604<sup>5</sup>. The site slopes up from the southwest street frontage to the rear northeast boundary.
- 2.1.2 The original three-bedroom house was built during the 1950's, with a partial basement level garage and storage areas on the lower level, and exterior concrete stairs leading up to the southwest entry. A flight of stairs provided internal access from the basement to the northeast single-storey section of the upper level.
- 2.1.3 Construction of the original house appears to have been traditional light timber frame with in-situ concrete foundations and basement walls, a timber framed floor, pressed metal tile hipped roof and weatherboard wall cladding and timber joinery.

### 2.2 The altered house

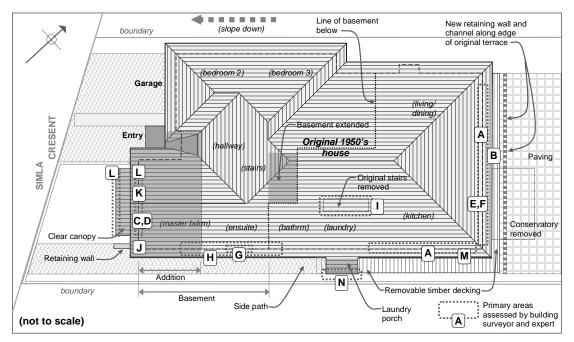
2.2.1 As shown in the sketch in Figure 1, alterations included demolition of the original concrete entry stairs, a small 2-storey addition to the southwest, a porch addition to the southeast, extensive interior alterations, and associated landscaping work.

<sup>&</sup>lt;sup>4</sup> According to the bracing calculations

<sup>&</sup>lt;sup>5</sup> New Zealand Standard NZS 3604:1999 Timber Framed Buildings

- 2.2.2 The house now accommodates the following:
  - Level 1 (the lower level): the main entry canopy facing the street, with:
    - the original garage to the northwest, with a new garage door
    - o new media/family room to the south corner, with a store to the northeast
    - o new toilet and storeroom to the northeast
    - new central stairwell to the upper level.
  - <u>Level 2 (the upper level)</u>: the stairwell landing in the original hallway, with:
    - o new master bedroom and ensuite to the southeast
    - new laundry and porch to the southeast, with the original stairwell infilled
    - the original bathroom to the southeast
    - o a new extended kitchen to the east corner
    - o living/dining to the north corner
    - the two original bedrooms to the northwest
    - a new deck from the laundry porch to the north corner.

### Figure 1: Approximate site plan



- 2.2.3 Construction is generally conventional light timber frame with some specifically engineered elements. The southwest extension includes a concrete slab and foundations and a concrete block wall to the southeast that extends beyond the south corner. The upper floor has timber flooring, timber weatherboard claddings and pressed metal roofing. New windows and doors are aluminium.
- 2.2.4 Given the age of the original house, I consider that the original timber framing is likely to be either heart Rimu or boric-treated, and the recent framing is likely to be H1.2 treated. I therefore consider that the external framing is likely to provide some resistance to fungal decay.

- 2.2.5 A timber framed deck with open timber slat floor extends as a walkway from the laundry porch around the east corner. The decking continues along the northeast face as a 'bridge' between a paved terrace and the exterior wall. The consent drawings call for decking to be installed 'in removable sections 1200 max length'.
- 2.2.6 For the two-storey extension, horizontal timber weather boards are fixed through 20mm H3.2 timber battens and the building wrap to the new timber framing. The remaining basement walls are the original plastered concrete or new plastered concrete block. Where original timber framed walls have been altered, new weatherboards are fixed through the building wrap directly to the framing timbers. The bevel-backed timber weatherboards have a profile to match the original cladding.

# 3. Background

### 3.1 The consented work

3.1.1 The authority issued building consent no. SR 319239 to the applicants on 22 December 2014 for:

Alterations and additions to existing dwelling. Remove conservatory and install new stacking doors. Demolish existing steps and front foundation wall. 2<sup>nd</sup> level extension. New ground floor entry and stairs. New laundry and kitchen joinery.

- 3.1.2 An engineer inspected specifically engineered elements during construction and provided a Producer Statement PS4 Construction Review (which I have not seen). After the demolition inspection on 20 January 2015, it was discovered that the original in-situ basement retaining walls included no waterproofing membrane and also that the damp-proof membrane ("DPM") under the original basement slab was not continuous.
- 3.1.3 The architect prepared revised drawings dated 5 February 2015. The engineer amended details, and an application for an amendment to the building consent was received by the authority on 16 March 2015. The application stated that it was for:
  - a. New revised stair layout
  - b. Extg insitu retaining walls to basement had no waterproofing membrane installed to back of them
  - c. Proposal to remove some extg insitu walls to allow waterproofing behind extg walls and new conc. Bk walls with [a proprietary liquid-applied water-proofing membrane]
  - d. Extg DPM under extg slab is not continuous so [a proprietary epoxy modified cementitious mortar] proposed to be applied over extg basement slab.
  - e. Application of waterproofing by [manufacturer's] approved applicator.
  - f. New beams to Gnd and 1st floors.

(The amendment was not formally stamped as approved by the authority until 11 November 2015, which is after the alterations were complete).

### 3.2 Construction

- 3.2.1 The engineer's remaining inspections included (in summary):
  - rear retaining wall on 5 and 20 February 2015
  - pre-pour slab on 24 February 2015

- steel beams and connections on 13 March 2015
- pre-pour basement slab and rear boundary retaining wall on 16 April 2015
- plywood diaphragm, steel beams and connections on 12 May 2015.
- 3.2.2 The authority's inspection summary indicate that inspections by the authority included (in summary):
  - pre-pour slab on 24 February 2015 (with the engineer)
  - pre-wrap and pre-clad inspections on 31 March and 10 April 2015
  - pre-pour foundation on 15 April 2015
  - pre-line building and plumbing, block wall tanking on 13 May 2015
  - post-line on 18 May 2015
  - final building on 14 September and plumbing on 16 October 2015.

### 3.3 Post-completion

3.3.1 The final building inspection record listed documentation required, which was apparently provided over the new few months. The authority issued a code compliance certificate for the alterations as per the original consent and also for:

Amendment #1: Revised stair layout with new beams and install waterproofing to the existing retaining walls and DPM to existing slab.

The certificate dated 12 February 2016 noted that the authority:

- .. is satisfied, on reasonable grounds, that
  - a. the building work complies with the building consent.
- 3.3.2 The applicants were out of the country when the building work was completed. On their return they discovered a number of areas of substandard wall and ceiling finishes and engaged a property inspection company to investigate these concerns.
- 3.3.3 The inspection company carried out a visual assessment of the finishing work, but also highlighted a number of defects and deviations from the consent documents. The applicants then engaged the building surveyor to assess the work (refer paragraph 1.3.1).

### 3.4 The building surveyor's report

- 3.4.1 The building surveyor visually inspected the building work on 13 April 2016 and provided a report dated May 2016. The report found that the majority of defects highlighted by the applicants 'were as a result of poor workmanship and departing from the consented plans.' The building surveyor recommended remedial repairs for cosmetic defects that did not affect code-compliance.
- 3.4.2 The building surveyor observed the following significant variations from the consent drawings, noting that some had contributed to the identified defects:
  - Head and sill flashing installation.
  - Door sill installation.
  - Deck construction.
  - Porch construction.

- 3.4.3 The building surveyor assessed the areas identified by the applicants. The following paragraphs outline defects considered likely to affect compliance with the building consent and/or the Building Code (with Areas A to N shown in Figure 1 in brackets) with comments in summary against each. Items not listed here were considered by the building surveyor to be cosmetic defects.
- 3.4.4 Items 6 to 9: Deck construction (Areas A and B)
  - The deck construction does not accord with the consent details and some areas do not comply with Clauses B1, B2 and E2 of the Building Code.
  - There are no joist hangers and the uncoated steel deck nails are corroding.
  - The ribbon plate is fixed with stainless steel coach screws in lieu of the bolts detailed in the drawings, with some screws fixed only to weatherboards, and the junction lacks washers to prevent moisture ingress.
  - Decking/weatherboard junctions lack 12mm drainage gap shown in drawings.
- 3.4.5 Items 10 to 11: Joinery installation
  - Window head flashings/facings do not accord with drawings or  $E2/AS1^{6}$  (C).
  - Head flashings prevent drainage from upper cavity and lack stop ends (D).
  - Head flashings to northeast deck doors include lapped joints (E).
  - Timber head facings lack drip edges (F).
  - Sill flashing extends under planted timber sills in lieu of drawing detail (G).
- 3.4.6 Item 14: The original stairwell (Area I)
  - The new floor framing is nailed to the original timber wall linings.
  - Joist ends are skew nailed to the trimming joists rather than minimum nail fixing method in NZS 3604 section 7.1.6.4.
  - There is a slight defection of the pantry flooring.
  - Although framing is 90x45mm in lieu of 140x45mm as shown in drawings, the size is sufficient for the small span of the opening.
- 3.4.7 Items 15, 16, 18 and 19: Weatherboards
  - The bottom edge of weatherboards is unsupported and the lack of a packing strip provides a gap that may allow vermin to enter the drained cavity (J).
  - The bottom edge of new weatherboards is unpainted, which may lead to deterioration. The cladding is required to achieve a durability of 15 years.
  - The bottom edge of original timber weatherboards is sealed to the foundation wall, preventing moisture from draining from behind the cladding.
  - The garden tap to southeast wall is not adequately sealed (M).
- 3.4.8 Item 17: Media room canopy
  - No apron flashing is installed at the roof/wall junction (K).
  - No brackets are installed to rafter ends as called for in drawings (L).

<sup>&</sup>lt;sup>6</sup> E2/AS1 is an Acceptable Solution for Building Code clause E2 External Moisture. Following E2/AS1 provides one way of complying with Building Code clause E2

### 3.4.9 Item 20: Laundry porch

- No brackets are installed to post/beam junctions as called for in drawings (L)
- Brackets are needed to resist uplift in high winds.
- 3.4.10 The building surveyor considered that the majority of internal finishing work concerns are of a minor nature and are considered to be easily rectifiable by competent tradespeople. The building surveyor concluded that the identified defects related to compliance with the consent drawings included (in summary):
  - the timber decks
  - the installation of the aluminium joinery
  - the patching of the floor over the original stairwell
  - the weatherboards installation
  - the laundry porch roof.

### 3.5 The authority's responses

- 3.5.1 Following a series of emails, on 10 January 2017 the authority responded to 'the specific areas of concern related to items 10 to 13' in the building surveyor's report. The authority reviewed the inspection records and considered that 'all reasonable steps' were taken during inspection to ensure the building work was undertaken in accordance with the building consent and the Building Code, and:
  - the authority 'is satisfied on reasonable grounds' that the building work complied with the Building Code at the time of the final inspection on 16 October 2015
  - the issue of the code compliance certificate on 12 February 2016 'signals the completion of the project and as a result the [authority] can no longer perform site inspections' unless a new building consent is applied for.
- 3.5.2 Following further exchanges between the applicants and the authority, the authority reviewed the property file and wrote to the applicants on 10 May 2017. The authority included the following comment (in summary):
  - The authority was satisfied on reasonable grounds that building work complied with the building consent, and the authority was required by section 94 to issue the code compliance certificate. There is no legal basis for the code compliance certificate to now be revoked.
  - Following the applicants' complaints, the process and inspections were reviewed and the authority concluded the code compliance certificate was validly issued, noting:
    - reasonable care taken to ensure compliance when inspecting the work
    - the variations observed were within 'the standard tolerance level for the building consent and not of the nature that a formal consent amendment was required'.
- 3.6 The Ministry received the application for a determination on 30 May 2017.

# 4. The submissions

### 4.1 The applicants' submission

- 4.1.1 The applicants set out the background to the dispute, noting that the building surveyor's report had 'identified non-compliant issues with the building code and consented plans'. A settlement had been reached with the builder, and the applicants explained that their 'lawyer recommended we deal with the builder prior to making a complaint to the [authority] re their negligence'. The authority had maintained that the code compliance certificate had been issued correctly.
- 4.1.2 The application for determination was sought in respect of the following matters (items in brackets taken from the building surveyor's report):
  - a) Whether the following building work complies with the building code:
    - 1. Construction of the timber decks (items 6-9) ...
    - 2. Aluminium joinery installation (items 10-11)
    - 3. Patching over the floor over the stairwell (item 14)
    - 4. Exterior cladding (items 16<sup>7</sup>-19)
    - 5. The construction of the laundry porch roof (item 20)
    - 6. Lack of support of the stacking doors at the back of the house, no sill support , the doors appear to be supported by the deck (item 12)
  - b) The decision of the [authority] to issue a code of compliance certificate (sic).
- 4.1.3 The applicants provided copies of:
  - the consent drawings and consent amendment
  - some inspection records
  - the code compliance certificate dated 12 February 2016
  - the building surveyor's report dated May 2016
  - correspondence with the authority and others, photographs, and other information.

### 4.2 The authority's submission

- 4.2.1 The authority made no submission but submitted copies of additional information which included:
  - the inspection records
  - photographs taken during site inspections.

### 4.3 The draft determination and submissions in response

- 4.3.1 A draft determination was issued to the parties for comment on 1 November 2017.
- 4.3.2 The authority responded on 10 November 2017, accepting the draft but noting that while the nails in the deck appear to be corroding and indicate uncoated nails have been used but the authority considers this is not something that an inspector would be able to ascertain at the time of an inspection.
- 4.3.3 In a response received on 14 November 2017 the applicants accepted the draft without further comment.

<sup>&</sup>lt;sup>7</sup> Note: Item 15 is directly related to the cladding and the determination also considers this.

# 5. The expert's report

### 5.1 General

- 5.1.1 As mentioned in paragraph 1.5, I engaged an independent expert, who is a member of the New Zealand Institute of Architects, to assist me. The expert carried out an assessment of the house on 29 June 2017; providing a report finalised on 7 October 2017 which was provided to the parties on 12 October 2017.
- 5.1.2 The expert noted that the original house construction appeared sound and the new work was 'generally good but there have been a lot of deviations from the consented documents', which included changes to (in summary):
  - fixings to deck framing
  - deck door thresholds
  - deck/wall junctions
  - joinery head flashings and facings
  - window sill flashing in direct-fixed weatherboards
  - framing of original stair opening
  - base of drained cavity
  - fixings to media room canopy framing and roof/wall junction
  - fixings to laundry porch framing.

# 5.2 Clause B1 Structure, B2 Durability

- 5.2.1 The expert assessed the structural items raised in the building surveyor's report and considered that engineering advice is required for the following items:
  - The omission of the specified brackets from the porch roofs (Areas I and K).
  - The omission of joist hangers from the deck framing and the framing to the original stair opening (Area A).
  - The replacement of bolts with coach screws to the deck ribbon plates (Area B).
- 5.2.2 The expert also noted that the 'most obvious concern' was the use of bright steel nails to deck joists, and that these are already corroding (Area A).

# 5.3 Clause E2 External Moisture

- 5.3.1 The expert took a limited number of non-invasive moisture readings which recorded no elevated moisture levels. However, he considered that the performance of window junctions could not be assessed without invasive investigations to establish the construction methodology and likelihood of failure.
- 5.3.2 The expert assessed the areas identified by the building surveyor and noted the following (corresponding area show in brackets):
  - The lack of a drainage gap at the deck/wall junctions (A).
  - The head flashings face-fixed to weatherboard, with no drainage gap from the upper cladding (C).
  - Overlapped joints in head flashings over deck doors, unlikely to result in moisture penetration because door heads are well sheltered beneath the eaves (E).

- The head facings lacking drip edges as shown in the consent drawings, minor variation unlikely to result in moisture penetration (F).
- The lack of packing to the bottom of weatherboards, resulting in large gaps that can allow rodent access into the drained cavity (M).
- The unsealed exterior tap cladding penetration (J).
- The media room roof/wall junction lacks an apron flashing (K).
- An unsealed gap below the sill to the original southeast basement window.
- Movement of the projecting sill to the media room doors, indicating a lack of sill support (C).
- 5.3.3 The expert also made the following comments on areas he was unable to fully assess for compliance without invasive investigation:
  - Although head flashings to deck doors include overlapped joints, this is unlikely to result in moisture penetration because door heads are well sheltered beneath the eaves.
  - Although head facings lack drip edges as shown in consent drawings, this is a minor variation unlikely to result in moisture penetration.
  - The sill flashing extends beneath (rather than above) the decorative window sill of the new ensuite window (installed within the original direct-fixed weatherboards).

### 5.4 Conclusion

5.4.1 The expert's conclusions on items in the building surveyor's report (excluding those considered to be cosmetic) are summarised in Table 1:

| Area | #  | Building surveyor  | Ε | xpert's observations  | Expert's conclusion  | Clause         |
|------|----|--|---|---|--|----------------|
|      | 6  | Deck framing nails uncoated and corroding  | • | Specified as galvanised or stainless steel                                | Not code-compliant   | B1<br>B2       |
| A    | 7  | Lack of joist hangers  | • | SS joist hangers<br>shown in drawings not<br>installed                    | Confirmation needed<br>from structural<br>engineer or install<br>consented fixings |                |
|      | 8  | Deck ribbon plate fixed with coach screws in lieu of detailed bolts  | • | M12 SS bolts with<br>50mm square washers<br>at 600mm centres<br>specified | Confirmation needed<br>from structural<br>engineer or install<br>consented fixings | B1<br>B2<br>E2 |
| В    |    | Some coach screws are installed<br>only into weatherboards, the<br>junction lacks washers to prevent<br>moisture ingress | • | Observed  | Not code-compliant   |                |
|      | 9  | Decking/weatherboard junctions<br>lack 12mm drainage gap   | • | Gap varies from zero to well below 12mm                                   | Not code-compliant   |                |
| с    | 10 | For walls with cavities:<br>Head flashings/ facings do not<br>accord with drawings or E2/AS1                             | • | Agreed<br>No downturn at ends   | Does not comply with<br>consent  | F2             |
| D    | 10 | Flashings prevent drainage from the cavity above windows   | • | Revised consent detail shows gap to drain                                 | Not code-compliant   | LZ             |

Table 1: The building surveyor's identified items

| Area | #  | Building surveyor  | Expert's observations   | Expert's conclusion   | Clause |
|------|----|--|---|---|--------|
|      |    |  | cavity <ul> <li>Flashing face fixed to weatherboards</li> </ul>   |   |        |
| E    |    | Head flashings to NE deck doors<br>include lapped joints   | <ul> <li>Observed but door<br/>heads sheltered under<br/>eaves</li> </ul>   | Code-compliant<br>(workmanship issue)   |        |
| F    |    | Head facings lack drip edges   | <ul> <li>Minor departure</li> <li>Unlikely to lead to moisture penetration</li> </ul>   | Code-compliant<br>(workmanship issue)   |        |
| G    | 11 | For direct-fixed wall:<br>Sill flashing extends under planted<br>timber sills in lieu of as detailed   | <ul><li>Observed</li><li>Unable to determine effectiveness</li></ul>  | Likely code-compliant   | E2     |
| I    | 14 | Original stairwell infill:<br>Framing nailed to original timber<br>wall linings<br>Joist ends skew nailed to trimming<br>joists<br>Insufficient nailing, no joist<br>hangers | <ul> <li>90x45 timber trimmers<br/>nailed into 10mm thick<br/>timber linings</li> <li>90x45 joists skew<br/>nailed into trimmers</li> </ul> | Confirmation needed<br>from structural<br>engineer, or install<br>consented fixings.              | B1     |
| J    | 15 | Bottom of walls with cavities:<br>Lack of packing strip to support<br>weatherboard edge<br>Large gap allows vermin to enter  | Observed  | Not code-compliant  | E2     |
|      |    | cavity   |   |   |        |
|      | 16 | Bottom edge of new timber<br>weatherboards not painted   | <ul> <li>Not observed during<br/>inspection</li> </ul>  | -   | B2     |
| к    | 17 | Media room canopy: No apron<br>flashing installed at roof/wall<br>junction   | <ul> <li>Apron flashing clearly<br/>shown in drawings</li> </ul>  | Omission of flashing<br>unlikely to affect E2 for<br>the building envelope<br>(workmanship issue) | E2     |
| L    | 17 | No brackets installed to rafter ends   | <ul> <li>Brackets clearly shown<br/>in drawings</li> </ul>  | Confirmation needed<br>from structural<br>engineer, or install<br>consented fixings.              | B1     |
|      | 18 | Bottom edge of original boards<br>sealed to foundation plaster,<br>prevents moisture draining from<br>behind cladding  | Agreed  | Not code-compliant  | E2     |
| М    | 19 | Garden tap not adequately sealed   | <ul> <li>Easily remedied</li> </ul>   | Not code-compliant  | E2     |
| N    | 20 | No brackets to post/beam<br>junctions  | <ul> <li>Brackets clearly shown<br/>in drawings</li> </ul>  | Confirmation needed<br>from structural<br>engineer, or install<br>consented fixings.              | B1     |

# 6. Discussion

### 6.1 General

- 6.1.1 The matter in dispute is the authority's exercise of its power of decision when it issued the code compliance certificate for the alterations. In deciding this matter I must therefore consider:
  - whether the building work in the alterations complies with the building consent and the relevant clauses of the Building Code
  - whether there were reasonable grounds for the authority to issue a code compliance certificate for the building work under the alterations.
- 6.1.2 Section 94 of the Act requires an authority to issue a code compliance certificate only if it is satisfied on reasonable grounds that the building work complies with the building consent. In Determination 2008/030 I considered a two-stage approach to the issuing of a code compliance certificate under the Act: firstly, whether there were reasonable grounds to be satisfied that building work complied with the building consent; and second, whether items not in accordance with the consent comply with the Building Code.

# 6.2 Compliance with the building consent

- 6.2.1 Taking account of the expert's report and excluding items considered to be minor variations and/or contractual matters, I consider that the alterations do not comply with the building consent drawings in respect of:
  - changes in fixings to the deck framing
  - the lack of the gap specified for the deck/wall junctions
  - the installation of joinery head flashings and facings
  - the fixings to floor framing of original stair opening
  - the lack of packing strip to the base of drained cavities
  - changes in fixings to the media room canopy and laundry porch framing
  - the lack of apron flashing to the media room canopy roof/wall junction.
- 6.2.2 Although the test of compliance with the building consent has not been met in respect of the above items, I am of the view that establishing compliance with the Building Code of the as-built work is also required as there may be some instances where building work does not comply with the consent but still complies with the Building Code.

# 6.3 Compliance with the relevant clauses of the Building Code

- 6.3.1 Where as-built work does not comply with the consent but still complies with the Building Code, consent amendments may be the most appropriate regulatory action to correct the matter. However, that does not apply to some areas in these alterations.
- 6.3.2 Taking account of the expert's report I consider that compliance has either not been achieved, or has not been adequately demonstrated, in respect of the following clauses:

Clauses B1 Structure, and B2 Durability:

- the use of uncoated steel nails in the deck framing
- structural investigation and advice in regard to:
  - the lack of consented brackets to the canopy roofs
  - the lack of consented joist hangers to the deck framing
  - fixings to the infill framing to the original stair opening
  - the adequacy of the fixings, and replacement of bolts with coach screws to deck ribbon plates.

### Clauses E2 External moisture, and B2 Durability:

- the lack of a drainage gap at deck/wall junctions
- the lack of a drainage gap from the drained cavity above windows
- the lack of packing strips to weatherboards, with excessive gaps at bottom of cavities
- the unsealed exterior tap penetration through the weatherboards
- the unsealed gap under the original southeast basement window
- the movement to the projecting sill of the media room doors.
- 6.3.3 I note the expert's comments in paragraph 5.3.3, and I accept that these areas are adequate in the circumstances.

### 6.4 The decision of the authority to issue the code compliance certificate

- 6.4.1 In various submissions from the applicants, matters have been raised relating to aspects of the building work that have not been constructed in accordance with the plans and specifications.
- 6.4.2 Having carefully examined all the arguments and evidence put before me, I have reached the conclusion that at the time that the code compliance certificate was issued the areas listed in paragraph 6.3.2 were non-compliant or required verification to establish compliance. These include items that would have been readily apparent to the authority at the time of its inspections and at the time it issued the code compliance certificate. The authority has submitted that the uncoated nails would not have been apparent to an inspector (refer paragraph 4.3.2); regardless of whether or not that is the case I consider there were a number of items that would have been apparent.
- 6.4.3 I conclude the authority did not have reasonable grounds to be satisfied that the building work had been completed in accordance with the building consent and also that compliance with the Building Code had been achieved. Accordingly, I consider that in terms of section 94(1)(a) the authority did not have reasonable grounds on which to issue the code compliance certificate.

# 7. What happens next?

7.1 I have come to the conclusion that the building work does not comply with the building consent and in some respects does not comply with the Building Code, and accordingly this determination reverses the authority's decision to issue the code compliance certificate.

- 7.2 The authority may issue a notice to fix under section 164 of the Act requiring the applicants bring the building work into compliance. The notice should include the investigations and defects identified in this determination (refer paragraph 6.3.2), but not specify how those defects are to be fixed that is a matter for the applicants to propose and for the authority to accept or reject.
- 7.3 The applicants can then produce a response to the notice in the form of a detailed proposal to specifically address the matters of non-compliance and investigation for the areas identified, and rectification of the specified matters.
- 7.4 Once the building has been brought into compliance a code compliance certificate will be able to be issued.
- 7.5 Any outstanding items of disagreement could then, if necessary, be referred to the Chief Executive for a further binding determination.

# 8. The decision

- 8.1 In accordance with section 188 of the Building Act 2004, I determine that when the code compliance certificate was issued:
  - the building work did not comply in some respects with Clauses E2 and Clause B2 of the Building Code, and
  - the deck framing nails did not comply with Clause B2 insofar as it applies to Clause B1 of the Building Code;
  - accordingly I determine that the authority incorrectly exercised its powers in issuing a code compliance certificate for building consent no. SR 319239, and I reverse that decision.
- 8.2 Based on the information before me I am unable to determine whether fixings to the deck framing, the laundry porch, the media room canopy, and the infill stair framing comply with Clause B1 and B2 of the Building Code.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 27 November 2017.

Katie Gordon Manager Determinations