



## Determination 2018/062

### **Regarding the authority's refusal to issue a code compliance certificate for a 17-year-old house with monolithic cladding at 6 Drumquin Rise, Dannemora, Manukau**

**(to be read in conjunction with Determination 2017/008)**

#### **Summary**

This determination considers a second refusal to issue a code compliance certificate for a now 17-year-old house with monolithic cladding that was the subject of a previous determination. This determination discusses the validity of the refusal with regard to the time in which a building consent authority must make a decision, and the relationship between the requirement to give reasons for refusing to issue a code compliance certificate and the issue of a notice to fix. The determination considers the information the authority had before it at the time it made its decision and whether the items identified by the authority are compliant with the Building Code.

#### **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, Katie Gordon, Manager Determinations, 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:
  - the owner of the house, Ross Holyoake Family Trust (“the applicant”), acting through an agent (“the agent”)
  - Auckland Council (“the authority”), carrying out its duties as a territorial authority or building consent authority.
- 1.3 Certain matters regarding this building have been described in a previous determination, 2017/008 issued on 7 February 2017 (“the first determination”). That determination arose from the authority’s refusal to issue a code compliance certificate (“the first refusal”) for alterations that involved recladding and over-cladding. The determination considered whether the remediated wall claddings and the areas of original framing that had been retrospectively treated with site-injected timber preservative complied with the requirements of the Building Code<sup>2</sup> (First Schedule, Building Regulations 1992).

<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](http://www.building.govt.nz) or by contacting the Ministry on 0800 242 243.

<sup>2</sup> The Building Code is available from the Ministry’s website at [www.building.govt.nz](http://www.building.govt.nz).

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 The first determination concluded that the areas of original framing that had been treated complied with Clause B1 Structure and Clause B2 Durability. The determination also found that the remediated wall claddings complied with Clause B2 Durability and Clause E2 External moisture.
- 1.5 This second determination arises because the authority has again refused to issue a code compliance certificate (refer paragraph 2.4). In this determination, I refer to that refusal as “the second refusal”.
- 1.6 The matters to be determined<sup>3</sup> are:
- the authority’s exercise of its powers of decision in refusing to issue the code compliance certificate, and
  - compliance of the particular matters identified in the notice issued under section 95A.
- 1.7 In making my decision, I have considered the submissions of the parties, the report of the expert commissioned by the Ministry to advise on this dispute (“the expert”) and the other evidence in this matter.

## **2. The building work and background**

### **2.1 The building**

- 2.1.1 The building work consists of a two-storey detached house. Construction is generally conventional light timber frame<sup>4</sup> with concrete foundations and floor slab, monolithic cladding (EIFS<sup>5</sup>) and aluminium windows. The roofing is monopitched profiled metal. The house is reasonably simple in plan and form, with some high-risk features from the original construction having been removed.
- 2.1.2 Two steel-framed balconies with open timber floors and wire balustrades extend from the west walls of the upper bedrooms.

### **2.2 The original construction and remedial works**

- 2.2.1 The original construction was carried out under building consent no. 10/1951 issued by the authority on 22 June 2000 under the Building Act 1991 (“the former Act”). The final inspection was carried out after October 2002.
- 2.2.2 The house developed moisture problems, and in 2004 the original owners applied for a building consent to remove the cladding. In August 2004 a weathertightness report found very high moisture levels in some areas and a number of defects were identified. The authority refused to grant the consent due to the concerns identified in the report.
- 2.2.3 The applicant purchased the house in 2005 in an ‘as-is’ condition. The agent installed a moisture monitoring system and undertook investigation to determine the extent of timber damage.
- 2.2.4 The agent developed a remediation plan, and an application was made for an amendment to the original consent (10/1951), which was granted on 10 August 2007. The amendment was for ‘re-clad, exterior [alterations] to roof line, windows, chimney & remove decks’; the recladding included over-cladding some areas.

<sup>3</sup> Under sections 177(1)(b) and 177(2)(d) of the Act

<sup>4</sup> The framing is a mixture of new replacement framing treated to H3.2 and retained timber framing from the original construction that was later treated with a site-injected boron preservative. See Determination 2017/008 for more detail.

<sup>5</sup> Exterior Insulation and Finish System

During the period that the alterations were carried out, a number of timber samples were taken and reports on decay and boron analysis were completed.

- 2.2.5 Moisture monitoring continued and further alterations and repairs were carried out in 2009, with some areas of original framing treated with the injected preservative (see paragraph 1.33). As-built drawings were then prepared.
- 2.2.6 In 2011 cracking became apparent around the original chimney structure above a curved roof and more alterations were carried out to lower the chimney structure and install a membrane apron under the existing cowling. Adjacent framing had brush-on preservative applied and moisture monitoring probes were installed.

## **2.3 The first refusal and the first determination**

- 2.3.1 An application for a code compliance certificate was made in 2015, and a final inspection was carried out in August 2015. The authority refused to issue the code compliance certificate (“the first refusal”) on the basis that it was not satisfied the structure was performing where the preservative was applied to the framing. The authority also raised concerns that the elevated moisture levels and remedial work carried out in 2009 indicated the recladding was not successful.
- 2.3.2 The applicant sought a determination on the authority’s refusal. Based on the reasons the authority had provided for its refusal to issue the code compliance certificate, the determination considered the areas of the recladding and over-cladding which formed part of the 2007 amendment to the original building consent but were not inspected by the authority. The matter for determination was whether the areas of original framing that were treated with site-injected timber preservative complied with Clauses B1 and B2; and, whether the remediated wall claddings complied with Clauses E2 and B2. The determination did not consider the compliance of the areas of the building envelope that were inspected by the authority during remediation work or other building elements remaining from the original construction.
- 2.3.3 During the determination process an independent expert was engaged by the Ministry to carry out an assessment of the condition of the framing that had been injected with preservative in 2009, an assessment of some areas of the cladding that formed part of the 2007 building work which had not been inspected by the authority during construction, along with a review of the available information and evidence relating to those matters.
- 2.3.4 The first determination found there were reasonable grounds to conclude the areas of original framing treated with site-injected timber preservative complied with Clauses B1 and B2 of the Building Code and the remediated wall claddings complied with Clauses E2 and B2. The determination was issued on 7 February 2017.

## **2.4 The second refusal**

- 2.4.1 On 27 March 2017 the agent emailed the authority regarding the process for obtaining a code compliance certificate, and on 3 May 2017 the authority advised that due to the time since the last inspection a new final inspection would be required.
- 2.4.2 The authority carried out the final inspection on 31 May 2017. The authority also contacted the expert who had been engaged by the Ministry during the first determination to clarify the extent of the building work that was covered under the first determination.

- 2.4.3 On 26 July 2017 the authority issued notification under section 95A of the Act (the second refusal) that it was refusing to issue the code compliance certificate on the basis that it could not be satisfied on reasonable grounds that the building work complied with the Building Code. The authority included in the notice a list of 36 items it could not be satisfied complied with the Building Code (“the items”), though noting this was not an exhaustive list, and informing the agent that further information from an expert as to compliance beyond the matters listed was required. Table 1 (see Appendix B) reproduces the list of the items and notes the relevant clauses of the Building Code (which had not been identified in the refusal).
- 2.4.4 The authority stated that the items it had identified only concerned areas where the timber framing had not been remediated by way of site-injected timber preservative treatment or the cladding had not been remediated – meaning that the items identified related to areas that were not included in the scope of the first determination (see paragraph 2.3.2 regarding the scope of the first determination).
- 2.4.5 The agent responded to each of the items on 30 October 2017 as summarised in Table 1 (see Appendix B).
- 2.4.6 In relation to a complaint laid by the agent under section 200 of the Act the authority submitted its view that the first determination was narrow in scope and the authority had to further assess the remaining building elements for compliance.
- 2.4.7 The Ministry received the application for a determination on 29 November 2017, though payment of the application fee was not received until 1 February 2018.

### **3. The submissions**

- 3.1 The Ministry formally accepted the application on 2 February 2018, noting that this determination could not re-litigate matters covered in the first determination. The Ministry also noted that the authority was able to make an assessment of the building work that was not part of the scope of the first determination and make a new decision in regards to issuing a code compliance certificate despite items not previously being raised during the first determination.
- 3.2 The agent provided a submission setting out some of the background to the dispute and submitting:
- the authority has issued the second refusal ‘out of time’ and after the first determination was issued
  - the second refusal included items that existed at the time it carried out an inspection on 11 August 2015 and would have been apparent to the authority at that time
  - the authority has not issued a notice to fix
  - the authority has not responded to the information and questions put to it by the agent in relation to the second refusal.
- 3.3 The agent requested the determination address the following:
- Whether the authority has correctly exercised its powers in refusing to issue the code compliance certificate when in the agent’s view it had a duty to issue the certificate after the first determination.

- Whether the second refusal was valid: the agent is of the view the authority was out of time as the refusal was issued in July 2017 when the application for a code compliance certificate was made in July 2015.
- Whether the authority has correctly exercised its powers in respect of the items identified in the second refusal: the agent is of the view that some items are erroneous or not required by the Building Act or Building Code.

3.4 The authority made no submission in response to the determination application.

### **3.5 The first draft of the determination and submissions in response**

- 3.5.1 A draft of this determination was issued to the parties for comment on 26 March 2018 (“the first draft”). The determination considered the status of the authority’s refusal (refer paragraphs 6.1.1 to 6.1.15) and the items on the list the authority provided in the second refusal. The first draft concluded that not all of the listed items were grounds for refusal of a code compliance certificate and the decision to refuse to issue the code compliance certificate was not correct at least in respect of some matters. The draft reversed the authority’s decision, requiring the authority to make a new decision. The first draft also noted the agent had advised some of the items had subsequently been addressed, namely the downpipe clip (item 2.c) and the plugging of a downpipe (item 2.d).
- 3.5.2 The agent responded to the first draft in a letter dated 10 April 2018, providing further detail regarding the chimney structure and requesting the determination address the compliance of each of the items listed in the second refusal. The agent reiterated his view that the items included in the second refusal were not reasonable, and that an owner should be made aware of what building work required correcting ‘and to what code or standard’.
- 3.5.3 The authority did not accept the findings of the first draft and responded by email on 11 April 2018:
- The authority’s position in relation to items such as the damaged head flashings or degradation of barge flashings, which were considered in the first draft to be maintenance items, is they have the potential to affect the performance of the building work and accordingly must be attended to before a code compliance certificate is issued.
  - The authority queried whether a code compliance certificate is the correct certificate given the building work has ‘not been completed in accordance with the amendment (post 2004 Building Act) as-built drawings have previously been supplied and building works continued through until 2011 without the authority’s approval/inspection’.
  - The reference to the repositioning of probes in the list of items is related to concerns regarding reliance on information from poorly positioned probes.
  - The authority is of the view that any modification of the durability period would need to be backdated to when any part of the building element to which the modification is to apply was first constructed.
- 3.5.4 On 11 April 2018 the agent requested a hearing after receiving the authority’s submission.

### 3.6 Further submissions and new information

- 3.6.1 On 20 April 2018 I wrote to the parties and requested further information regarding the items listed that were in dispute before any hearing was held. I requested the authority provide a copy of the inspection record and any associated photographs from the final inspection, and any other evidence or information relevant to its reasons for refusing to issue the code compliance certificate. I also requested the agent provide evidence or information on those items that have subsequently been remediated or that the agent considers compliant. A reminder of my request was sent to the authority on 18 May 2018.
- 3.6.2 On 23 May 2018 the authority provided a copy of:
- a site meeting record dated 31 May 2017
  - approximately 500 photographs (undated and with no annotation) taken during the inspection on 31 May 2017.
- 3.6.3 On 25 May 2018 the agent raised concerns regarding the process of a final inspection being carried out after the first determination was issued and the likelihood of this occurring again after this determination.
- 3.6.4 After a review of the photographs I wrote to the parties on 30 May 2018, requesting the authority provide information that would assist in linking the relevant photographs as evidence to the items provided as reasons for its refusal. I also proposed to engage an expert to carry out an assessment of the compliance of each of the items.
- 3.6.5 The agent made another submission on 31 May 2018 after reviewing the photographs provided by the authority and provided comments on some items. I have incorporated the agents comments in the Table 1 (see Appendix B). The agent noted that there was no explanation of how the site meeting record, which contained no items at issue, later resulted in the list of items provided by the authority with the second refusal. The agent considered the only valid items were the reinstatement of two downpipe brackets and capping of an old downpipe outlet, which had been attended to. The agent remained of the view that the remainder of the items had been ‘fairly responded to’.
- 3.6.6 In light of the applicant’s earlier requests for a hearing, that the determination be made by 20 June 2018, and that the determination consider the compliance of each of the items, I wrote to the agent on 5 June 2018 for clarification of the applicant’s wishes to progress the determination. I set out a number of options for the applicant to consider, including the Ministry engaging an independent expert to assess the compliance of the items.
- 3.6.7 In a response received on 8 June 2018, the agent questioned:
- the process for an owner once a building consent authority issues notification under section 95A, particularly where an owner presents further information in support of the application for a code compliance certificate; and
  - whether the notification under section 95A in effect ‘ends the building consent’; and
  - the effect of a determination reversing the authority’s decision to refuse to issue a code compliance certificate.

- 3.6.8 The agent also raised concerns regarding the refusal not providing an exhaustive list of reasons, especially as the authority had noted areas that it did not inspect, and that this could cause further delays in obtaining a code compliance certificate. The agent suggested ‘deferring the determination’ until the expert engaged by the Ministry had reviewed the information and photographs and until there was a ‘finite list of refusal items’.
- 3.6.9 On 8 and 13 June 2018 the agent provided further submissions relating to the items shown in the photographs and compliance of the items in the second refusal, and provided moisture content readings taken on 12 June 2018. I have incorporated the agent’s comments in Table 1 (see Appendix B). The agent set out his views regarding the process after receiving a notification under section 95A and that he had elected to provide more information as a means of addressing the notice. The agent also advised of the applicant’s wishes in relation to the options presented to progress the determination. In relation to cracks in cladding being identified as a potential non-compliance, the agent noted that the authority should have taken into consideration that the cracking extends only through the outside coating, that the backing sheets have a water resistant layer preventing water entering the cladding sheets, are 50mm thick and incorporate grooves on the back surface for drainage.
- 3.6.10 On 15 June 2018 the authority provided comments for the photographs in relation to the items identified in the second refusal. I have summarised those comments in Table 1 (see Appendix B).
- 3.6.11 On 22 June 2018 the agent made two further submissions regarding the items, and I have included these in Table 1 (see Appendix B). On 5 July 2018 the agent advised ‘the owners have completed the list as included in the [second refusal]’.

## **4. The expert’s report and further submissions**

### **4.1 The expert’s report**

- 4.1.1 As mentioned in paragraph 1.7, I engaged an independent expert to assist me. The expert is a member of the New Zealand Institute of Building Surveyors. The expert reviewed the information that had been provided to the determination as well as the first determination. The expert provided a report completed on 4 July 2018, which was forwarded to the parties on 11 July 2018.
- 4.1.2 The expert commented on each of the items in the list (see Table 1, Appendix B), also taking into account the assessment of the expert engaged in the first determination where relevant. Based on a desktop review, the expert’s opinion was that most of the items identified by the authority are either cosmetic, maintenance, or are performing or ‘not a defect’. The expert made the following specific comments (in summary):
- The balcony barrier height discrepancy is minor and acceptable in the circumstances.
  - No defect was evident in the balcony fixings or sealing of the fixing penetrations.
  - There are significant gaps in the cladding that need vermin-proofing.
  - At least four smoke alarms have been installed, but the photographs do not confirm installation within 3m of all bedroom spaces.

- Confirmation by a plumber will be required to confirm the installation of backflow prevention devices.

#### **4.2 The agent's further submission**

- 4.2.1 The agent provided a submission on 19 July 2018 in response to the expert's report, stating that the gap in the cladding that required vermin proofing, the location of the smoke alarms, and confirmation of the installation of the backflow prevention devices 'have been attended to and are now ready for [the authority's] inspection'. The agent also noted that the cat door had now been removed and cladding made good, and that items identified by the expert as items of maintenance have been attended to.

### **5. The second draft and submissions in response**

- 5.1 A second draft of this determination was issued to the parties for comment on 27 July 2018 ("the second draft"). In addition to the matters discussed in the first draft, the second draft considered the compliance of each of the items listed in the second refusal.
- 5.2 The second draft concluded that the barrier to the balcony complies with Clause F4.3.4(b) and (g) and with Clause B1, and with the exception of the location of smoke alarms there was sufficient information to be satisfied on reasonable grounds that the remaining items complied. The second draft concluded the smoke alarms do not comply with Clause F7.3.1 and accordingly the authority's decision to refuse to issue the code compliance certificate was confirmed.
- 5.3 The agent provided a submission on 30 July 2018 (in summary):
- The second refusal did not provide sufficient detail regarding non-compliance of the smoke alarms for the applicant to understand what the issue was, and the applicant would take steps to correct the positioning of the alarms. (See paragraph 6.4.18)
  - The applicant would arrange for plumbers certification to be provided for the flanges and vacuum breakers. (See paragraph 6.4.24)
  - The applicant would arrange corrections to the drawings to identify "remedial works" and submit these to the authority. (See paragraph 6.4.26.)
  - The applicant did not accept that the authority correctly exercised its powers of decision in issuing the second refusal, because items included in the list were not defects and did not affect compliance and the grounds for refusal were not provided.
- 5.4 The authority provided a submission in response to both the expert's report and the second draft on 6 August 2018. In regard to the expert's findings and the reliance on those findings, and on matters of compliance the authority submitted:
- Item 1(l) – sealing of meter viewing box panel. The expert's report appeared based on the agent's report and no comment was made regarding holes in the meter box that have not been sealed and may allow moisture ingress behind the cladding.
  - Item 1(a) – balcony barrier height. The authority is of the view that it does not comply with Clause F4.3.4(b) as the rooms are bedrooms in a residential dwelling and there is a likelihood of children frequenting the balcony.

- Item 3(f) – balcony structure. The deck construction is outside NZS 3604<sup>6</sup> and it is unclear how a compliance path has been established given this is a specific engineering design, and the change was unconsented and without supporting documentation. It is also unclear how penetrations have been sealed or protected and the impact this may have on Clauses B1 and B2.
- Item 4 – roof. It is not apparent which photographs the expert is referring to in concluding the roof is reasonably well installed and how he has reached the view that the roof areas comply.

5.5 The authority also made a number of comments regarding procedural matters (paragraph references in brackets):

- The authority understand that where building work is not substantively in accordance with the building consent, an amendment to remove that work from the consent will be required, and unless it is exempt work the applicant will need to seek a certificate of acceptance. And where building work is substantively in accordance with the building consent but a minor variation should have been obtained, accurate as-built plans are required. (See paragraph 6.5.3.)
- The authority is of the view that the commencement date for durability periods should be modified to the earliest date any element of the building work to which the modification applies was constructed. (See paragraph 6.5.7.)
- In regards to documentation, the authority is of the view that all potentially supporting documents that may be available should be gathered and the weight to be attached to any such document should be decided in light of all relevant factors. (See paragraph 6.4.27.)

5.6 The agent made another submission on 8 August 2018, and provided photographs of various aspects of the roofs and chimney structure, and of items that had been attended to during the determination process, and of work carried out in 2011. The agent noted that the changes in 2011 included lowering the chimney, changing the drainage soakers of the bi-folds, and “forming a drain off” at each end of the garage rebate. In the agent’s view, none of those items warranted discussion on durability modification, and the agent advised that an application for durability modification had already been made.

5.7 In relation to the balcony structure, the agent submitted though it was an alternative solution that did not mean that it was not compliant with the Building Code. In relation to the items referred to in the authority’s submission, the agent noted:

- Item 1(l) – the meter box viewing panel has been sealed (photographs provided)
- Item 3(f) – earlier photographs of the balcony fixings show additional studs have been fitted to offset the fixing holes (additional photographs provided)
- Item 4 – the upper roof was not altered, so would have been inspected as part of the original construction (photographs of upper and lower roof provided).

5.8 Despite a request put to the authority on 21 August and 11 September 2018 to expand on or clarify its concerns regarding my reliance on the expert’s findings without the benefit of a site visit, no further submission was received.

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<sup>6</sup> NZS 3604: 1999 Timber framed buildings

5.9 On 19 September 2018 I requested further information from the applicant. In response the agent provided the following documents by email on 1 and 2 October:

- Photographs of the upper (existing) and lower (new) roofs.
- Photographs of maintenance and other work carried out, including work described in paragraph 4.2.1 and of the chimney structure (refer paragraphs 2.2.6 and 5.6).
- Floor plans showing the current location of smoke alarms and photographs.
- Detail drawing of balcony fixing.

## 5.10 The expert's addendum report

5.10.1 The expert was provided with a copy of the parties' submissions, and was requested to review his initial findings and provide any further comment on the additional information.

5.10.2 The expert provided an addendum to the report on 24 October 2018, and this report was forwarded to the parties on the same day with the advice that any further remedial work undertaken would not be covered by this determination and would be subject to the normal regulatory processes.

5.10.3 With regard to the roof cladding, the expert noted:

- the installation of the upper atrium cladding was "in good order", with no concerns other than an open gap at the corner of one of the parapet flashing junctions
- the remaining upper roof cladding looks well detailed, other than the top-fixed metal parapet cap flashings on the internal gutter at the back of the roof which appear slightly dished.

5.10.4 The expert remained of the view that most of the items identified in the notice are either cosmetic, maintenance, performing adequately or not a defect. The expert concluded that:

- the balconies appear to have been installed in accordance with the engineer's sketch, with the exception of the mounting bolts being fixed fully through the framing
- the smoke alarm mounted more than 300m below the high ceiling is not in accordance with NZS 4514<sup>7</sup>
- confirmation by a plumber is required to confirm installation of backflow prevention devices
- the roof cladding appears to be performing adequately.

## 6. Discussion

### 6.1 Status of the second refusal

6.1.1 The applicant is of the view that the outcome of the first determination meant the authority was required to issue the code compliance certificate for the amended building consent.

<sup>7</sup> NZS 4514: 2009 Interconnected smoke alarms for houses

- 6.1.2 The first determination was made under section 177(1)(a) of the Act; as noted in paragraph 2.3.2, the determination considered whether particular building elements complied with the Building Code. The determination only concerned the areas of recladding and over-cladding which formed part of the 2007 amendment to the original building consent but were not inspected by the authority, including areas of original framing treated with site-injected timber preservative as part of those works. The determination did not consider the compliance of the areas of the building envelope that were inspected by the authority during remediation work, or other building elements remaining from the original construction, or the building work carried out in 2011.
- 6.1.3 That being the case, in order for the authority to make a decision on whether to issue a code compliance certificate it was for the authority to form a view on whether it was satisfied on reasonable grounds the building elements not included in the first determination comply with the Building Code. The authority reached the view that it could not be satisfied as to compliance, and notified the applicant of its decision to refuse to issue the code compliance certificate.
- 6.1.4 The applicant has also questioned whether the second refusal was valid on the grounds that the decision was ‘out of time’ (refer section 93(1)).
- 6.1.5 The Act requires an owner to apply for a code compliance certificate once the building work carried out under the building consent is completed (section 92), and the authority must make a decision whether to issue the code compliance within the time provided under section 93(1). The authority may require further information to inform its decision, in which case the time period is suspended until it receives the information (section 93(4)), or the authority may refuse to issue the code compliance certificate on the basis it considers the building work does not comply and further building work is required.
- 6.1.6 Put simply, the time period provided for in section 93(1) applies up until the time the authority has made a decision either to issue or refuse to issue the code compliance certificate and has notified the owner of its decision, subject to any requests for information during which the time period is suspended.
- 6.1.7 When the authority refuses to issue the code compliance certificate it must provide the owner with reasons for its refusal (section 95A). The section 95A notification informs the owner of the requirement to bring the building into compliance and thus obtain a code compliance certificate, and of information required (if any) to support the application for a code compliance certificate. In circumstances where further building work is required, the building work is not yet “completed” for the purpose of section 92.
- 6.1.8 Following a refusal to issue a code compliance certificate, an owner remains subject to the obligations in section 92 to apply for a code compliance certificate once the building work required to be carried out under the building consent is completed. It is for owners to decide when to address the matters that require attention to complete the building work. Once the works are completed and the owner has made a new application for a code compliance certificate, the provisions in section 93 as to the time within which an authority must make a new decision on whether to issue a code compliance certificate again apply.
- 6.1.9 It is not uncommon for this cycle of ‘application for a code compliance certificate/ refusal/ need for further building work’ to occur, and that this is followed by the building consent authority concerned making a new decision. I note the authority’s

website recommends that owners book a final inspection prior to applying for a code compliance certificate<sup>8</sup>; in that way the owner can be made aware of any building work that must be completed before the application for a code compliance certificate is lodged.

- 6.1.10 I do not consider that the second refusal was “out of time” on the basis that the decision made under s95A was made in July 2017.
- 6.1.11 The application for a code compliance certificate was first lodged in July 2015, after which the authority carried out a final inspection. On 9 September 2015 the authority notified the applicant of its reasons for refusing to issue the code compliance certificate (refer paragraph 3.6 of the first determination). I have not considered whether the authority met its statutory obligations under section 93(1) at the time the application was refused, because that is not a matter for determination under section 177. However, I note that the time in which the authority is required to make its decision stops when the authority notifies the applicant of that decision.
- 6.1.12 In response to the applicant’s request for a better explanation of the reasons for the refusal, the authority requested further information that it considered was required in order to support the application (refer Table 2 of the first determination). Under section 93(4) the period in which the authority must make its decision whether or not to issue a code compliance certificate is suspended if the authority requires further reasonable information; though in this case the authority had already made its decision.
- 6.1.13 On 14 September 2015 the applicant applied for the first determination – I note that this suspends a building consent authority’s exercise of its powers of decision where that decision relates to the matter to be determined (section 183(1)).
- 6.1.14 The first determination was issued on 7 February 2017, and the applicant contacted the authority regarding the code compliance certificate on 27 March 2017. It is not apparent from the documents provided to me why there was a delay between that correspondence and the arrangements for a final inspection to be carried out in May, and I make no decision on whether the authority met its obligations in this respect as this is not a matter for determination under section 177 of the Act.
- 6.1.15 However, in my opinion even if the authority has not met its obligations under section 93 with regard to the time period in which to make a decision, it does not follow that the decision to refuse to issue the code compliance certificate is invalidated simply on the basis that the decision was not made within the specified time period.

## **6.2 Section 95A notices and notices to fix**

- 6.2.1 The applicant has also commented on the authority not having issued a notice to fix. The relationship between the requirement to give reasons for refusing to issue a code compliance certificate (section 95A) and the issue of a notice to fix (section 164) is discussed in Determination 2013/015<sup>9</sup>. In short:
  - The two processes are distinct, and an authority will not normally issue a notice to fix at the same time as notification under section 95A unless the particular circumstances warrant it.

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<sup>8</sup> See <https://www.aucklandcouncil.govt.nz/building-and-consents/understanding-building-consents-process/complete-project/building-certificates-compliance/Pages/apply-for-code-compliance-certificate.aspx>

<sup>9</sup> Determination 2013/015 The refusal to issue a code compliance certificate and the simultaneous issue of a notice to fix for a 14-year-old house (8 April 2013)

- The reasons for refusing to issue a code compliance certificate do not have to satisfy the same evidential threshold of a notice to fix in terms of failure to meet the requirements of the Act or Building Code.
- Notification under section 95A provides an owner with notice of the work required in order to obtain a code compliance certificate.
- A notice to fix is an enforcement notice that requires a person to carry out work to remedy a breach of the Act or Code, specifies a time period for doing so, and may be enforced by prosecution.

### **6.3 The authority's second refusal**

- 6.3.1 The authority's reason for declining to issue a code compliance certificate in July 2017 under section 95A was that it could not be satisfied on reasonable grounds that the building work complies with the Building Code. The second refusal provided a list of items that the authority considered it could not be satisfied as to compliance, which was based on observations during the final inspection carried out on 31 May 2017.
- 6.3.2 The building elements identified by the authority as matters of concern were evident in the photographs taken by the authority and include the likes of high moisture readings (non-invasive), cracks in the cladding, location of smoke alarms, height of the balcony barrier, and various building elements in the external envelope that the authority considered at risk of moisture ingress.
- 6.3.3 Taking into account the information the authority had before it at the time I consider the authority correctly exercised its powers when it refused to issue the code compliance certificate.
- 6.3.4 However, the applicant subsequently provided additional information that contradicted the basis on which the authority had formed its view, and the applicant also carried out remedial work in relation to some items. In addition, the applicant is of the view that not all of the items identified by the authority were matters of non-compliance, and subsequently applied for this determination.
- 6.3.5 In order to decide whether to confirm, reverse or modify the authority's decision, I have considered the compliance of each of the items identified by the authority.

### **6.4 Compliance of the items identified in the refusal**

- 6.4.1 In the first draft of this determination I reached the view that there was sufficient information for me to conclude that some of the grounds for refusal in the notice should not have been included because they did not raise issues of non-compliance, and some of the items were matters of maintenance.
- 6.4.2 Subsequently, at the request of the applicant to expand the scope of the matter to be determined to consider the compliance of each of the items, I engaged the expert to undertake a desktop review of the information available (refer paragraphs 4 and 5.10). I note the agent also carried out further remedial works and provided further submissions regarding the compliance of the items (see Table 1 Appendix B).
- 6.4.3 Taking into account all of the evidence before me and the opinion of the expert, I have reached the following conclusions regarding compliance of the items:

***The balconies – barrier height (items 1.a and 3.f)***

- 6.4.4 While the height of the barrier is not in accordance with the minimum set out in the Acceptable Solution, I am of the view that the height is adequate in this particular circumstance.
- 6.4.5 In my opinion there are mitigating features of the design that assist in its compliance in relation to the risk of young children climbing the barrier.
- 6.4.6 I have also considered the height of the barrier in relation to the possibility that persons leaning against the barrier may, by their centre of gravity, topple over the barrier. The question is whether the barrier at 983mm (as compared with 1000mm for a barrier complying with F4/AS1<sup>10</sup>) would act as a fulcrum or pivot causing a person leaning against or moving into the barrier to topple over it if that person's centre of gravity was above 983mm, and therefore whether the barrier is safeguarding a significantly smaller proportion of the population than would a barrier that is compliant with F4/AS1.
- 6.4.7 The barrier height in this case is only marginally lower than that in the Acceptable Solution, and in this respect I consider that it would be adequate in terms of safeguarding a similar proportion of the population as a F4/AS1 compliant barrier. In reaching this view I have taken into account the location, size, and that use of the balconies is likely to be limited.
- 6.4.8 I conclude therefore that the balconies comply with Clause F4.3.4(b) and (g).

***The balconies – structural fixing (items 2.a and 3.f)***

- 6.4.9 The authority had concerns regarding the balcony fixing and vertical support timber which it considered may have been compromised. Taking into account the additional information provided by the applicant and the opinion offered by the expert, I consider there are reasonable grounds to be satisfied that the structural fixing of the balconies complies with Clause B1.

***Vermin proofing (item 1.r)***

- 6.4.10 The authority identified gaps around the sills of door joinery where vermin are likely to enter, and the agent has explained that the gaps resulted from relocation of joinery during remedial work to install new cladding over existing cladding in some areas.
- 6.4.11 The performance clause of the Building Code that relates to vermin proofing for detached dwellings is clause G3.3.1 (see Appendix A.2). G3.3.1 requires food preparation facilities include 'space for a refrigerator, or a perishable food storage area capable of being cooled and protected from vermin and insects'. For the purpose of compliance with Clause G3, it is the space in which perishable food is stored that must be protected, not the entire dwelling.
- 6.4.12 Vermin proofing features in a number of Acceptable Solutions: E2/AS1 for Clause E2 External moisture (which is relevant for vermin proofing as part of cladding systems), G13/AS1 Sanitary Plumbing for Clause G13 Foul water, and G3/AS1 for Clause G3 Food preparation and prevention of contamination.
- 6.4.13 The inclusion of vermin proofing in E2/AS1 is for the purpose of ensuring that where vermin proofing is installed in cladding systems it does not impact on drainage and ventilation of the cavity.

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<sup>10</sup> F4/AS1 is the Acceptable Solution for Clause F4 Safety from falling

- 6.4.14 However, vermin proofing the external envelope of a dwelling also reduces the likelihood of damage caused to other building elements that are not easily accessible, such as building wrap, insulation, and electrical wiring, and assists in preventing contamination of spaces and their ventilation.
- 6.4.15 In this case the agent has advised the gap around the sills of door joinery has since been addressed and has provided photographic evidence of the vermin proofing as installed.

***Smoke alarms (item 2.l)***

- 6.4.16 The second refusal listed ‘smoke alarms not installed in some required areas or installed in a non-compliant locations’ (item 2.1). The agent responded that the alarms have been installed in the ‘most accessible easy to access locations’ taking into account the type of alarm, and the 9m high atrium which is 3.5m above the passageway.
- 6.4.17 Clause F7.3.1<sup>11</sup> requires ‘A means of warning must alert people to the emergency in adequate time for them to reach a safe place.’ In considering whether the location of the smoke alarms will perform and provide adequate warning, I have relied on NZS 4514<sup>12</sup>, which gives instructions for the physical location of smoke alarms.

Paragraph 5.2.5 of that standard states:

5.2.5 Dead air spaces

Smoke alarms shall not be located in dead air spaces (as shown in figure 5.1) or close to ceiling obstructions where dead air spaces may be created.

(see Appendix A.3 for figure 5.1)

- 6.4.18 Photographs taken by the authority during the final inspection on 31 May 2017 showed two smoke alarms located in the ‘dead air’ space on the ceiling – one approximately 100mm from the junction with the wall, and the other approximately 160mm.
- 6.4.19 There do not appear to be any mitigating features that would compensate for this positioning in the dead air space. I therefore concluded in the second draft of this determination that at least two of the smoke alarms did not comply with Clause F7.3.1, noting that this is a simple compliance matter that could be resolved between the parties in due course. I note the applicant has since moved the alarms; however, as noted by the expert (refer paragraph 5.10.4), one of the alarms remains in dead air space as it is located more than 300m below the high ceiling.
- 6.4.20 I conclude that compliance with Clause F7.3.1 has not been achieved, and I reiterate that this is a simple issue that can be resolved between the parties in due course.

***Other items***

- 6.4.21 Taking into account the information before me and the opinion of the expert, I consider there is sufficient information to be satisfied on reasonable grounds that the following items listed in the second refusal comply with the relevant clauses of the Building Code (item number in brackets) subject to normal maintenance and taking into account the time in service since construction in relation to required durability periods:

**Cladding, External, Joinery**

Cladding penetration where pvc piping has been installed (1.c)

<sup>11</sup> Clause F7.3.1 was added to the Building Code on 24 April 2003

<sup>12</sup> New Zealand Standard NZS 4514:2009 Interconnected smoke alarms for houses

Cracks in cladding, as identified in photographs (1.d)  
 Damaged head flashing West elevation, ground floor (1.e)  
 Barge flashing West elevation (1.f)  
 Cladding penetrations – lack of EDPM washers<sup>13</sup> (1.g)  
 Exposed wiring (1.h)  
 Facings to garage door opening (1.i)  
 Joinery mitres (1. k)  
 Meter box viewing panels (1.l)  
 Growths at the sill / jam location (1. m)  
 MS sealant at the jamb locations (1.n)  
 Cladding clearances (1.o)  
 Transition flashing from joinery to cladding - West elevation upper level (1.p)

Internal

Bathroom membrane (2. b)  
 Cracks in ceiling and wall board linings (as identified in photographs) (2.c)  
 Cracks in the slab edge (2. d)  
 Soffit to wall cladding flashing – detail D27 (2.e)  
 Corner flashing – detail D32 (2.f)  
 Stop end flashings – detail D33 (2.h)  
 Discolouration of particle board flooring (2.i)  
 Elevated non-invasive indicative moisture readings (2.j)

Other

Fascia detail (3.e)

***Remediated items***

- 6.4.22 The agent has advised that remedial action has been taken in relation to some of the items, specifically: the cat door has been removed and cladding made good (1.b), a plumber has fitted flanges to a number of pipes (1.j) and backflow prevention installed to outside taps (3.b), a downpipe clip has been reinstalled (3.c) and another downpipe has been plugged (3.d).
- 6.4.23 I acknowledge the authority's concerns regarding the potential risk posed to underlying building elements over time from moisture ingress where various penetrations were not sealed at the time of construction and various items of maintenance not attended to. However, taking into account the assessments carried out during the first determination and the evidence available subsequently, I consider that there is reasonable grounds to be satisfied that the underlying building elements will not have been subject to dampness or damage to the extent that they would fail to meet the relevant durability requirements<sup>14</sup>.
- 6.4.24 The recent installation of the flanges is work that is subject to the requirements of the Building Code, and in order to establish compliance the applicant can provide to the authority a certificate from the plumber for this work.

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<sup>13</sup> EDPM is a synthetic rubber

<sup>14</sup> Subject to modification of the start dates from the dates as discussed in paragraph 5.5.

### ***Documentation***

- 6.4.25 The authority identified items where there were variances between the as-built work and the documentation: a fascia detail (item 3.e) and misidentification of another detail (item 2.g). I consider these minor, and taking into account the expert's opinion I am satisfied the fascia detail as built complies.
- 6.4.26 The authority also identified that the as-built drawings has been labelled as "proposed works" (item 3.a). The agent noted this was in order to differentiate the remedial works from the existing construction. It is my view that the description could be misleading to a potential future purchaser as indicating that the authority had approved the works described in the drawings. In my opinion the drawings should be amended to correctly reflect the circumstances. The applicant has stated that he intends to amend the drawings.
- 6.4.27 The authority has also requested a number of documents (items 5 to 12). As noted in previous determinations, given the time since the work was substantively completed such documents have little or no relevance to a contemporary decision to be made regarding compliance. The absence of such documentation or certification does not of itself mean that the building work does not comply with the performance requirements of the Building Code.<sup>15</sup>

### ***Other***

- 6.4.28 Regarding the dislocated probes (refer paragraph 3.5.3 and Table 1, Appendix B item 2(k)), I acknowledge the authority's concern regarding reliance on probes if they are not correctly located. In the first draft of this determination I stated that while the dislocation of the probes was not grounds for refusing to issue a code compliance certificate, it may bring into question moisture readings from those probes if relied on as evidence of compliance.
- 6.4.29 I accept the agent's statement that the probes have been re-installed correctly and the latest moisture readings can be relied on.

## **6.5 Durability and the scope of the code compliance certificate**

- 6.5.1 While not within the scope of the application for this determination, the authority has raised questions concerning the scope of the code compliance certificate in relation to works carried out at various times since construction, and a modification of Clause B2.3.1, and the applicant has requested this matter be addressed in the determination.
- 6.5.2 The building consent for which the applicant is seeking to obtain a code compliance certificate was the approval for building work undertaken as part of the original construction in 2002 as well as the approved remedial work in 2007. Further alterations and repairs were carried out in 2007 and 2011 without approval from the authority first being obtained.
- 6.5.3 The question of whether the additional works carried out without approval first being obtained should be the subject of a separate application for a certificate of acceptance will depend on a number of factors. The authority should take into consideration whether the alterations and repairs are within the scope of the open building consent and of a type generally consistent with the consented work, and/or whether the work is of the nature that would be exempt under Schedule 1 of the Act. As noted in the authority's submission (refer paragraph 5.5 bullet point #1), where building work is substantively in accordance with the building consent but a minor variation should

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<sup>15</sup> For detailed discussion regarding requests for documentation and energy works certificates, see Determinations 2015/015 and 2012/019.

properly have been obtained, then accurate as-built plans must be provided to the authority.

- 6.5.4 Clause B2 of the Building Code requires 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).
- 6.5.5 This raises the question of an amendment to the building consent in respect of Clause B2.3.1 for those building elements that are well through or beyond their required durability periods, as those building elements would consequently no longer comply with Clause B2 if a code compliance certificate were to be issued effective from today’s date.
- 6.5.6 I have considered this in many previous determinations and I maintain the view that the authority has the power to grant an appropriate modification of Clause B2 in respect of all such building elements, if requested by an owner. Such a modification is made somewhat complex in this case as the building work has occurred in different stages over a substantial period of time.
- 6.5.7 The authority has submitted that the commencement date for durability periods should be modified to the earliest date any element of the building work to which the modification applies was constructed (see paragraph 5.5, bullet point #2). I agree that it would be reasonable to modify the commencement date for durability periods in respect of building elements remaining from the original construction which have now been in service some 15 years, and building elements completed under the amendment to the consent.
- 6.5.8 The applicant stated that an application has been made for a modification, and I leave that to the parties to resolve in due course.

## 7. The decision

- 7.1 In accordance with section 188 of the Building Act 2004, I hereby determine that:
- the authority correctly exercised its powers in respect of the second refusal based on the information available to the authority at the time it made its decision on 26 July 2017;
  - the barrier to the balcony complies with Clause F4.3.4(b) and (g), and with Clause B1;
  - the smoke alarms do not comply with Clause F7.3.1 and therefore I confirm the authority’s decision to refuse to issue the code compliance certificate.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 11 December 2018.

Katie Gordon  
**Manager Determinations**

## Appendix A

A.1 Sections of the Building Act 2004 discussed in this determination:

### **92 Application for code compliance certificate**

- (1) An owner must apply to a building consent authority for a code compliance certificate after all building work to be carried out under a building consent granted to that owner is completed.
- (2) The application must be made—
  - (a) as soon as practicable after the building work is completed; ...

### **93 Time in which building consent authority must decide whether to issue code compliance certificate**

- (1) A building consent authority must decide whether to issue a code compliance certificate for building work to which a building consent relates within—
  - (a) 20 working days after the date specified in subsection (2); or
  - (b) any further period after the date specified in subsection (2) that may be agreed between the owner and the building consent authority concerned.
- (2) The date referred to in subsection (1)(a) and (b) is—
  - (a) the date on which an application for a code compliance certificate is made under section 92; or
  - (b) if no application is made, the expiry of—
    - (i) 2 years after the date on which the building consent for the building work was granted; or
    - (ii) any further period that may be agreed between the owner and the building consent authority concerned.
- (3) Subsection (1) applies whether or not an application for a code compliance certificate is made under section 92.
- (4) A building consent authority may, within the period specified in subsection (1), require further reasonable information in respect of the application for a code compliance certificate, and, if it does so, the period is suspended until it receives the information.

### **95A Refusal to issue code compliance certificate**

If a building consent authority refuses to issue a code compliance certificate, the building consent authority must give the applicant written notice of—

- (a) the refusal; and
- (b) the reasons for the refusal.

A.2 Relevant clauses of the Building Code discussed in this determination

### **Clause F4—Safety from falling**

#### Objective

F4.1 The objective of this provision is to safeguard people from injury caused by falling.

#### Functional requirement

F4.2 Buildings shall be constructed to reduce the likelihood of accidental fall.

Performance

F4.3.4 Barriers shall: ...

(b) be of appropriate height, ...

(g) restrict the passage of children under 6 years of age when provided to guard a change of level in areas likely to be frequented by them.

**Clause G3—Food preparation and prevention of contamination**

Objective

G3.1 The objective of this provision is to:

(a) safeguard people from illness due to contamination, ...

Functional requirement

G3.2.1 Buildings shall be provided with space and facilities for the hygienic storage, preparation and cooking of food, that are adequate for the intended use of the building.

Performance

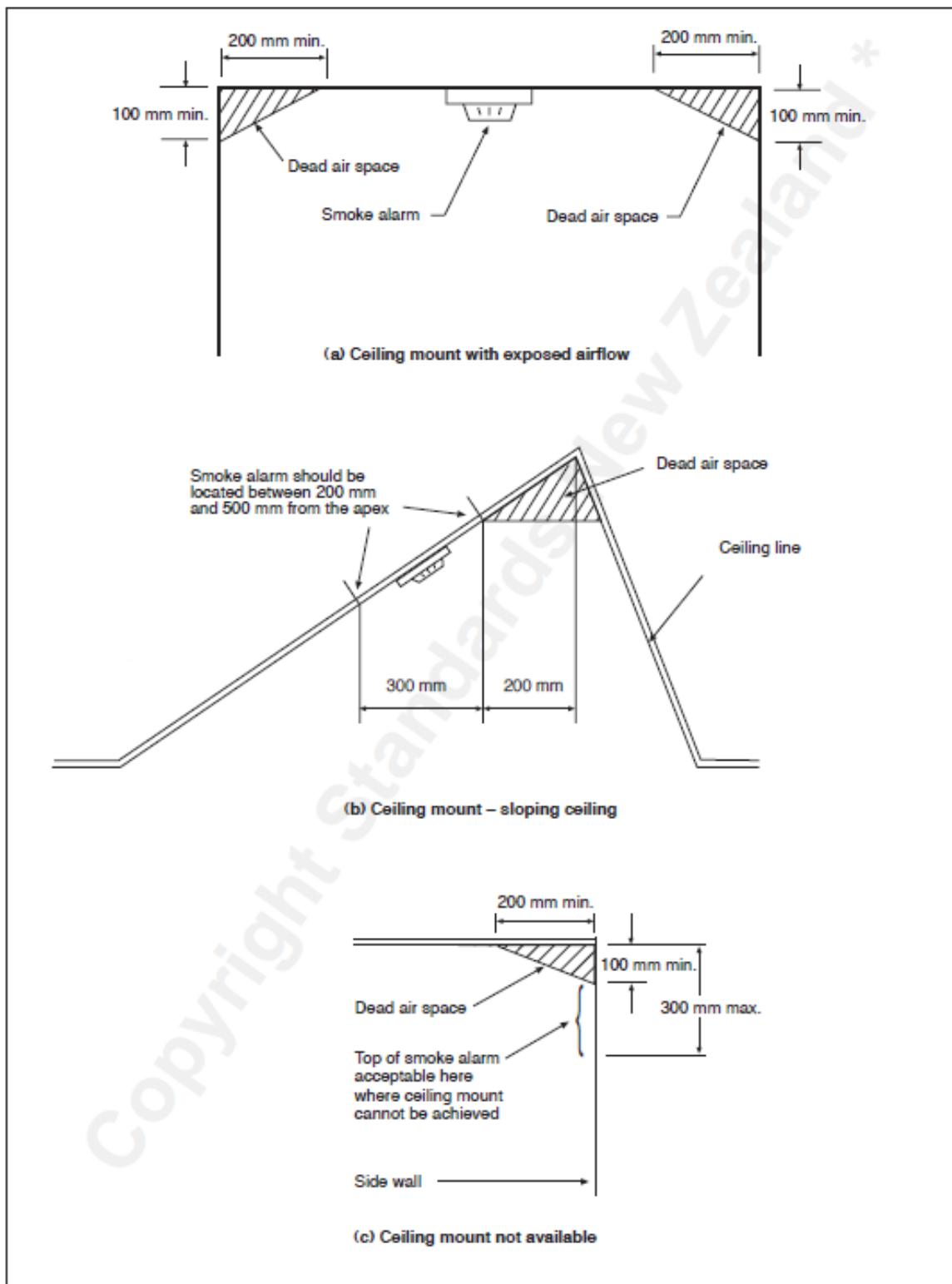
G3.3.1 Food preparation facilities shall be hygienic and include:

(a) space for a refrigerator, or a perishable food storage area capable of being cooled and protected from vermin and insects, ...

*Limits on application*

Performance G3.3.1(a) and (b) shall apply to housing, work camps, old people's homes, early childhood centres and commercial or industrial buildings whose intended uses include the handling of perishable food

## A.3 NZS 4514 Figure 5.1 Dead air spaces



## Appendix B

**Table 1: Applicant's and expert's comments on the items identified in the authority's s95A notification**

Item no.	Areas of concern	Relevant code clause	Applicant's response to s95A		Expert's comment
			Subsequent information <sup>16</sup>		
<b>1. Cladding, External, Joinery</b>					
a)	Barrier height is non-compliant at the Juliet balcony locations.	F4	Balcony was designed with sufficient space for 50mm decking but was not manufactured according to the instructions. The wood slats were not accounted for when the balcony was constructed which has resulted in the height being marginally lower than 1000mm. Height ranges from 992 to 998mm. Minimal non-compliance. Difference in height from Acceptable Solution is offset by removal of toe hold in design, claw bars, and access is by key – these compensating features mean it is an adequate height with regard to children climbing the barrier. Free climb is 980mm compared to F4/AS1 610mm. <sup>17</sup> In an inspection record dated 11 August 2015 the authority had 'passed it with a tick'. The balcony is not an area that could accommodate table and chairs and is rarely used.	Door locks reduce the likelihood of access to balcony by children. Minimal height reduction (16mm) unlikely to result in barrier being more climbable by children or an adult tipping over. Height is adequate in the circumstances.	
b)	Cat door cladding penetration does not appear to have been flashed.	E2/B2	Issues with function of cat door required resolving first. Recladding of this wall included H3 framing and/or brush on treatment. Sealed. MDU <sup>18</sup> reading 15.9% Intends removing cat door. Cat door removed and cladding made good.	Unable to confirm if sealant has been installed behind the flange. However, it is a minor penetration in a sheltered location that is unlikely to result in significant water penetration. Adjacent MDU reading recorded as 15.9%. Head flashing unnecessary in this case.	

<sup>16</sup> On 19 July 2018 the applicant also advised that items identified in the expert's report as maintenance 'have been attended to'.

<sup>17</sup> Applicant's earlier submissions requested waiver or modification, later submissions requested assessment as an alternative solution

<sup>18</sup> Moisture detection unit

Item no.	Areas of concern	Relevant code clause	Applicant's response to s95A	Expert's comment
			Subsequent information <sup>16</sup>	
c)	Cladding substrate alternated / damaged at the base of cladding were ( <i>sic</i> ) pvc piping has been installed. An example can be seen at the West elevation.	E2/B2	Related to installation of 3 air-con units. All directed downward, 2 don't breach cladding and other has been sealed at base. Cosmetic issue only. Not causing moisture ingress.	The penetrations are directed downward and do not appear to be a risk. Cosmetic issue only.
d)	Cracks in cladding. An example can be seen in the East elevation.	E2/B2	Cracks are small separations of outer coating. Cladding and sealants have been in service for 10 years. No evidence of moisture entry.  Applicant has since carried out maintenance.	Photographs indicate minor cracking only that is subject to maintenance.
e)	Damaged head flashing observed at the West elevation, ground floor.		Does not impact on the flashing function. No evidence of moisture entry.	
f)	Degradation of the barge flashing has been observed at the West elevation.	E2/B2	17 years old and has passed minimum durability requirement. Maintenance issue.	Photograph indicates barge flashing junction is lapped and riveted. No visible evidence of degradation other than mould, which is a maintenance issue.
g)	EDPM washers have not been installed in a number of areas (as identified in the as-built drawings).	E2/B2	No photos show location, no description.	Photo P2030369. Cladding penetrations appear reasonably well sealed and in accordance with similar manufacturer's installation detail for a pergola. Recent MDU readings all normal. No indication in the photos of moisture penetration to the interior. Sealing of the deck fixings and downpipe clips are maintenance.
h)	Exposed wiring through what appears to be an unsealed penetration, East elevation, North end.	E2/B2	Wire appears to be radio connection wire. Penetration well sealed.  Has been trimmed off and cladding made good.	Normal MDU readings recently recorded at the garage door jambs. No indication of corrosion where nails have not been punched. Appears to be maintenance related.
i)	Facings to garage door opening have not remained adequately sealed to the cladding, have not been adequately protected, have not had their fixings punched, filled, and protected. Unable to determine a compliant coverage to the return facings i.e. lining to the inner face of the opening, South elevation.		No evidence of moisture issues. Garage was re-built with CCA H3.2 framing. Facing has been in place 10 years.  Issue is different expansion rates. Does not need sealing as the cladding joint is well protected behind the garage liner. MDU readings all acceptable.  Has subsequently sealed facings.	
j)	Flanges have not been installed in a number of areas (as identified in the as-built drawings).	E2/B2	Applicant identified a number of pipes without flanges. Framing is H3. Maintenance issue.  Plumber has since installed flanges.	The pictured junction appears reasonably well sealed. Installation of flanges was optional on the manufacturer's details at the time of installation. Maintenance item.

Item no.	Areas of concern	Relevant code clause	Applicant's response to s95A	Expert's comment
			Subsequent information <sup>16</sup>	
k)	Joinery mitres appear to be opening up in areas, an example can be seen at the West elevation garage location.	E2/B2	Construction details provide for drainage – doors are set down into the floor slab, so any leakage will drain. Each door has a MDU either side. High scan reading by authority is the concrete base.	The joinery mitre opening up is not conclusive evidence of small joint sealant failure at the junction. MDU reading of 13% indicates joinery is performing adequately.
l)	Meter box viewing panels have not remained adequately sealed, East elevation.	E2/B2	The meter box is well sealed against the original stucco plaster line. Room (tool shed) is unlined and framing is dry. The rear of the meter box door was taped.	Applicant has advised the viewing panels have now been sealed. No MDU probe installed on the store wall near the meter board. Experience suggests inadequate sealing of meter box viewing panels has not resulted in decay. Maintenance.
			Applicant has since resealed viewing panels on meter box door.	
m)	Moisture egress has been observed at the sill / jam location. Growths evident to the drip edge at the base of the cladding, West elevation.	E2/B2	“Growth” is on the plaster and concrete. It is cosmetic / maintenance issue only and not evidence of moisture ingress. MDU readings all dry. Chemical cleaning has been applied.	The joinery is sheltered by wide eaves and the MDU assumed nearby (#61) has a normal reading, indicating this is an external maintenance item.
n)	MS sealant at the jamb location was not observed in a number of areas (as identified in the as-built drawings).	E2/B2	Nothing viewable in photographs. All appear maintained.	The manufacturer's window jamb reveal detail requires installation of sealant behind the jamb flange prior to plastering, so the bulk of the sealant should be hidden. The lack of visible sealant is therefore not an indicator of any significant issue and recent normal MDU readings suggests surface cracking at junctions is a maintenance issue.
			Applicant has sealed what can be seen.	
o)	Non-compliant cladding clearances have been observed in a number of areas.	E2/B2	No change since 2015 inspection – which passed. Moisture readings over past 8 years demonstrate compliance. Assessment of E2 should take into account the concrete nibs and history of dry walls. The area in one of the photographs is in front of the garage and has a well formed slope away. [applicant also provided drawings and build photographs of various areas relating to cladding clearances].	The applicant has provided evidence that there is a masonry wall at the entry steps cladding junction. Elsewhere some of the pictured cladding clearances appear less than prescribed by manufacturer or Acceptable Solution, but cladding is not in contact with paving. Photos and recent MDU readings indicate there is no issue with moisture being drawn up behind the cladding.
p)	Transition flashing from joinery to cladding is non-compliant at the lap junction, West elevation upper level.	E2/B2	No explanation or photo representing this.	Photo indicates a minimal lap of approx.. 30mm at the transition flashing junction. However the junction is sheltered, riveted and assumed well sealed. This is a maintenance item.
			Protected by a massive eave, nevertheless applicant has since sealed the joint again.	

Item no.	Areas of concern	Relevant code clause	Applicant's response to s95A	Expert's comment
			Subsequent information <sup>16</sup>	
q)	Upper level cladding not inspected due to access (not inspected in full).		Was able to be inspected. Applicant has requested inspection if one is required.	No specific issues identified by the authority. No obvious issues evident in the photos. Cladding generally looks in good order and reasonably well maintained.
r)	Vermin proofing at the sill locations.	G3	Gap is marginal and would not allow vermin entry.	Significant gaps below the joinery that need to be vermin proofed. Given these gaps are at the edge of the concrete floor slab, there does not appear to be any associated weathertightness issues.
			Applicant has packed what he could, noting that the joinery units are all sunk into concrete so have an additional step.	
			Has been attended to and ready for inspection.	
<b>2. Internal</b>				
a)	Balconies fixing and vertical support timber compromised through further investigation (observed in the upper level bedroom).	B1/B2, F4	Additional stud at the location to mitigate for the portion of framing removed for the bolt hole and rebate for washers when new balcony installed. Builder installed additional stud to allow for the loss of strength. This was inspected by expert [in first determination] when all 4 sides were exposed.	Photos show the removal of a small section of timber at the lower end of the stud. No steel strapping securing the studs to the floor is visible, but this would be expected on the exterior face of the framing (not the interior face). Assuming studs have been adequately skew nailed, the cutout is not expected to significantly compromise the structural performance. One photo indicates one of the balcony base connection points is in the vicinity of the cutout and may be compromised, but the other base connection point is likely to be firmly secured into the floor framing. The two handrail connection points appear to be soundly secured into the studs well above floor level. No distortion of framing, linings or cladding evident that would indicate any structural inadequacy.
b)	Bathroom membrane performance to be investigated and evidenced.	E3	Not altered or affected by 2008/2009 works. Ceiling below removed for ongoing inspections. Not possible to inspect from above. Cutout in ceiling below master bedroom shower showed no sign of issues and was left open for future inspection.	No obvious visual issues with bathroom tiling. The underside of the master bedroom shower can be inspected through the cutout. The lack of any ceiling moisture issues noted by the authority indicates the bathroom membrane is performing adequately.
c)	Cracks in ceiling and wall board linings observed.	B1 (indicator)	Various reasons for cracking, including: thermal movement causing joints to open, timber replacement and settlement, plasterboard settling, or located below [proprietary preservative treatment] which is known to wet framing below application points. Maintenance of internal linings not a compliance issue.	The minor wall and ceiling cracks appears to be aesthetic only. Maintenance issue.

Item no.	Areas of concern	Relevant code clause	Applicant's response to s95A	Expert's comment
			Subsequent information <sup>16</sup>	
d)	Cracks in the slab edge have been observed (internally at the ground floor), West elevation.	B1 (indicator)	No 'opening' of cracks in slab, minor and stable. Reinforced. Minor plaster cracks where rebate has been filled not affecting slab performance or compliance.	Cracks in the edge of the concrete floor slab in the photos appear to be cosmetic only.
e)	D27 soffit to wall cladding flashing does not appear to have been installed, specified material and dimensions not identified in as-built drawings.	E2/B2 Document ation	Flashing is evident and functional – no evidence of moisture ingress. Flashing is in place on negative sloping soffits. Standard butt joint is protected by large eaves so flashing not required for standard square soffit connection. Lower soffit is even more protected. Drawing could be amended.	Soffit flashings are not required on positive sloping soffits. Photos indicate a soffit flashing has been installed on negative sloping soffit junctions on the east and west elevations.
f)	D32 corner flashing detail differs from onsite construction in reference to the as-built drawings, specified material and dimensions not identified, over flashing evident onsite.	Document ation	Roofer has made his own stop ends which appear better than E2/AS1 and as built drawings. Well sheltered by eaves. Does not affect compliance.	No apparent defects visible on the supplied photographs; this is a maintenance item.
g)	D32 misidentified in elevation plan 2.4 (as-built drawing), suspect D33 to be relevant detail.	Document ation	Mistake in plan would not affect builder following plans, which had been completed by the time the amended plans were prepared.	No defect identified.
h)	D33 as-built detail differs from the onsite construing ( <i>sic</i> ) i.e. dimensions, return hems, roofing material etcetera.	Document ation	Flashing is in place and effective.	The pictured stop end flashings appear to be well sealed and functional. Maintenance item.
i)	Dis-coloration of the particle board flooring has been observed in the upper level bedrooms.	E2 or E3	Discolouration caused by carbonisation due to UV, humidity or moisture and is not evidence of durability failure. Discolouration is clear sealant applied along [preservative treated] walls acting as a dam to stop overflow of [the preservative].	Water ingress typically easily identifiable from 'tide' marks extending across particle board flooring. There is no significant staining visible in the photos.

Item no.	Areas of concern	Relevant code clause	Applicant's response to s95A	Expert's comment
			Subsequent information <sup>16</sup>	
j)	Elevated non-invasive indicative moisture readings have been observed onsite. Note: Some areas were not tested due to cabinetry, fixtures, furniture, height (access), and stored items.	E2/B2	Inspection scan readings are false – abnormal readings at steel columns and concrete walls. See MDU readings – no high readings.	The applicant has provided details showing where surface moisture readings have been influenced by structural steel members behind the wall linings. No indication in photos of swelling or movement of the trims away from the wall linings that is typical of elevated underlying moisture levels. Normal MDU readings indicate no significant moisture issues.
k)	Probe removed aside the cat door location, some probes appear to require re-positioning i.e. not seated flush with the timber trim, unable to identify whether this will affect the probe reading.	Not a compliance issue	Dog had been dislodging them. Not a compliance issue.	No defect identified.
			Applicant has re-installed all missing probes and taken new moisture readings.	
l)	Smoke alarms not installed in some required areas or installed in a non-compliant locations.	F7/C4	Located in most accessible easy to access locations taking into account 9m high atrium (3.5m above suspended passage).	Installation of the four smoke alarms in photos appears reasonable, but missing confirmation of installation within 3m of all bedroom spaces.
<b>3. Other</b>				
a)	As-built drawings identified as "proposed" works. All applicable notations to be modified accordingly.	Documentation	'Proposed' appears on 4 sheets but was the designer's way of describing existing work and new work. Does not affect compliance.	No defect identified.
b)	Back flow prevention devices have not been installed.	G12	Plumber has since fitted vacuum breakers for outside taps – removed all taps and extended threaded pipe and fitted flanges to all pipes.	No evidence of compliance available. [note – expert's comment was prior to submission from applicant advising plumber had remediated].
c)	Downpipe clip to be re-installed.		Ready for inspection.	
d)	Downpipe yet to be sealed off, refer as-built drawings 2.2.		Area was replastered in 2014. Bracket has since been refitted.	Maintenance item.
e)	Fascia detail (onsite) differs from the as-built drawings. Fascia detail to as-built drawings isn't achievable i.e. return hems to fibre cement boards.	Documentation	Detail has not changed since construction in 2000.	No defect identified. Fascia appears to be reasonably well installed with adequate top cover and a drip edge.
f)	Juliet balconies to be investigated for compliance with B1, B2, and F4.	B1/B2, F4	Not enough information. Repeat of 2a and 1a. Builder made allowance for framing damage from bolts and height acceptable.	Refer to above comments 1g and 2a.

Item no.	Areas of concern	Relevant code clause	Applicant's response to s95A	Expert's comment
			Subsequent information <sup>18</sup>	
<b>4. Roof</b>				
a)	Not inspected due to access.		Access is available. Applicant has requested inspection if one is required.	No defect identified. Photos indicate the roofing has been reasonably well installed with riveted and sealed junctions and acceptable clearances to upper level cladding.
<b>Documentation</b>				
5	Drainage as-built plan showing S/S and S/W <sup>[20]</sup> .	Documentation	Only change to 2000 plans is two downpipes from the removed decks have been plugged.	No defect identified.
6	Electrical certificate to be legible (dates), work details to include lighting outlets, socket outlets, etc. Alternatively an electrical reverification certificate is to be obtained.		No change to previous plans. The remediation scope of the electrician appeared to be isolate, remove, re-instate existing power outlets, sockets, lights etc. No change to power box.	
7	Gas certificate.		Additional gas water heater installed. Copy of was requested but plumber claims it was previously supplied and does not hold records to reproduce it.	
8	Engineers site observations for the nib walls identified in the as-built drawings.		No engineer site observation required by consent or amendment. Nib walls are minor and would not affect overall structure; they are missing from original construction drawings.	
9	PS3 <sup>[21]</sup> cladding.		Provided in amendment and code compliance certificate applications.	
10	PS3 drainage.		Not required as part of consent or amendment. Some invoices available.	
11	PS3 glazing.			
12	PS3 plumbing.			
Please note if the above documentation is not available alternatives should be proposed within the scope of works.			Items requested as part of the amendment were supplied at the time of lodgement.	

<sup>18</sup> On 19 July 2018 the applicant also advised that items identified in the expert's report as maintenance 'have been attended to'.

<sup>20</sup> Sanitary sewer (S/S) and Storm-water (S/W)

<sup>21</sup> Producer Statement – Construction (PS3)