



Determination 2017/054

Regarding the compliance of fibre-cement cladding installed to the building at 140 Ghuznee Street, Te Aro Wellington



Summary

This determination is concerned with the compliance of 13-year-old alterations to a building. The determination considers the authority's reasons for requiring more information about the building's compliance and whether the building work complies with the Building Code with regard to weathertightness and durability.

1. The matter to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ ("the Act") made under due authorisation by me, John Gardiner, Manager Determinations, 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 building, Proswell Ltd ("the applicant") acting through an agent ("the agent").
- Wellington City Council ("the authority"), carrying out its duties and functions as a territorial authority and building consent authority.

1.3 This determination arises from the decision of the authority not to issue a code compliance certificate until more information was provided regarding the compliance of building work carried out in 2004. The decision arose because the authority is not

¹ 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.

satisfied that the building work complies with certain clauses² of the Building Code (First schedule, Building Regulations 1992).

- 1.4 The authority's concerns related to fibre-cement wall cladding, as well as building work to the interior and roof. However, the applicant has confirmed that they wish the scope of this determination to be limited to the compliance of the fibre-cement cladding installed to some areas of the building ("the cladding") in 2004 under building consent No. SR107719.
- 1.5 The matter to be determined, then, is whether the cladding complies with Clause B2 and Clause E2 of the Building Code that was in force at the time the consent was issued.
- 1.6 In making my decision, I have considered the submissions of the parties, the report of the independent expert ("the expert") commissioned by the Ministry to advise on this dispute, and the other evidence in this matter.

2. Background and building work

2.1 The existing building

- 2.1.1 The building is three storeys high and situated on a level site in central Wellington. Built in 1982, the building underwent alterations and extensions to convert it to its current use as a student hostel. The building as altered has concrete masonry walls at ground floor level, with the other two storeys consisting of timber framing and steel portal frames. The original (and mostly retained) wall cladding was plaster and timber weatherboards.
- 2.1.2 The cladding which is the subject of this determination, installed during the alterations, was direct fixed through the building wrap to the framing. On the west elevation plasterboard was installed between the building wrap and the timber framing.

2.2 Background

- 2.2.1 The authority issued building consent No. SR107719 in late 2003 under the Building Act 1991 ("the former Act"). Building work was carried out in 2004 and a final inspection was carried out in February 2005. At that inspection the officers of the authority noted the need for remedial and additional work.
- 2.2.2 A meeting was next held on site with the authority on 25 January 2013. The site report from that meeting recorded that 'the purpose of the meeting was to discuss the inspection process should an inspection be carried out' and that 'no inspection was undertaken'.
- 2.2.3 In 2016 the agent requested an inspection, which took place on 30 May 2016. The stated purpose of the inspection was 'to enable the [authority] to consider whether the work carried out under this consent meets the requirements of the building code, and if a code compliance certificate can be issued'.
- 2.2.4 Following that inspection the authority wrote to the applicant summarising its findings in a letter dated 16 June 2016.

² In this determination, references to clauses are to clauses of the Building Code and references to sections are to sections of the Act.

2.3 Inspection outcome letter dated 16 June 2016

- 2.3.1 The letter made a number of points in respect of the 30 May 2016 inspection and the steps required for the issue of a code compliance certificate.
- 2.3.2 The authority required the applicant to provide a report from a building surveyor. The authority said the report would need to ‘confirm that the performance requirements of the relevant building code clauses are being met for the external envelope [...] formed as part of this consent’, based on ‘adequate testing, including invasive and destructive testing where necessary’.
- 2.3.3 The applicant was required to then submit a “repair schedule” for any proposed remedial work for approval before commencement. The applicant was also required to apply for a modification of Clause B2.3.1, with the suggested date for the commencement of the durability provisions being February 2005.
- 2.3.4 Various other stipulations were made for the provision of documentation not relevant to the matters to be determined here. I have omitted references to those matters.

2.4 Further correspondence

- 2.4.1 The agent objected to the direction to engage a building surveyor, and asserted in emails of 1 and 10 August 2016 that the authority could not require the engagement of a building surveyor as a condition to taking further action toward issuing a code compliance certificate.
- 2.4.2 In response the authority stated:
- It was not refusing to issue a code compliance certificate; rather, it was ‘establishing the items needing to be resolved so that issue of a code compliance certificate could be considered’.
 - Invasive testing was needed to establish the performance and compliance of building work completed 11 years prior, and a building surveyor was appropriately qualified to carry out such work.
- 2.4.3 There was further correspondence between the agent and the authority on 16 and 17 August 2016. The authority explained that the requirement for a building surveyor to investigate was ‘due to the period of time elapsed since the work was completed, observations at the recent site inspection and current knowledge regarding product performance’.
- 2.4.4 The applicant then applied for a determination about whether ‘the external cladding of alterations is compliant with issued building consent’ (sic). I note that this would be a relevant test for building work carried out under the 2004 Act, but as the consent in this case was issued under the former Act, the test is whether the building work complies with the Building Code that was in force at the time.
- 2.4.5 The Ministry received an application for determination on 16 November 2016.

3. Submissions

- 3.1 With the application, the agent provided copies of the following documents:
- correspondence relating to the building work
 - plans and specifications of the proposed building work
 - site inspection records and reports.

- 3.2 On 9 December 2016 the authority provided a copy of the approved specification and consent documents as issued.
- 3.3 The draft determination was issued to the parties on 19 May 2017.
- 3.4 In a response received on 26 May 2017, the authority indicated it agreed with the draft determination.
- 3.5 The agent did not agree with the determination and submitted that the authority ‘should only require the building cladding to comply with the Building Consent as issued in 2003’ and that if there was to be recladding it should ‘comply with the Consent drawings and good practice at the time the Consent was issued and not 2016 practice which may be more onerous’.

4. The expert’s report

- 4.1 As I mentioned in paragraph 1.6, I engaged an independent expert to assist me. The expert is a member of the New Zealand Institute of Architects.

4.2 Non-invasive and invasive testing

- 4.2.1 The expert visually inspected the internal linings of external walls, and took non-invasive moisture readings of those linings. He took a number of invasive moisture readings of the timber framing and removed three samples for laboratory analysis.
- 4.2.2 The expert’s test results showed generally low (under 18%) moisture levels³ across the three elevations tested. However, while moisture levels were low the expert noted that fungal growth and mould were observed on internal linings in those areas.
- 4.2.3 The expert removed three samples of framing timber from different locations adjacent to the new fibre-cement cladding. Laboratory analysis of those samples found fungal growth and yeast, including current or recently active fungi, which could only have grown at moisture levels higher than those measured at the particular point in time by the expert.
- 4.2.4 The expert observed that the following construction details could be contributing to the failure of the fibre-cement cladding:
- Head flashings to the joinery units not installed in accordance with good practice at the time.
 - Gaps between the lengths of flashing.
 - Junctions between the new cladding and existing cladding/joinery.
- 4.2.5 The expert concluded:
- fungal growth and mould indicated water ingress, and therefore failure of parts of the cladding to comply with the Building Code
 - there was a need for further investigation before the authority could form a view on reasonable grounds as to how compliance with the Building Code would be achieved.
- 4.3 A copy of the expert’s report was provided to each of the parties on 15 March 2017.

³ Refer *Weather-tightness: Guide to the Diagnosis of Leaky Buildings* (May 2011), Department of Building and Housing

5. Discussion

- 5.1 I consider the expert's report establishes that the performance of the cladding is inadequate because there is evidence that it is allowing water penetration into the building which is causing undue dampness and damage to building elements. Moisture ingress and the presence of fungal growth and mould indicate a failure to comply with Clause E2.3.2 of the Building Code. Consequently, I am satisfied that the cladding does not comply with Clause E2 of the Building Code which was in force at the time the building consent was issued.
- 5.2 In addition, the building is required to comply with the durability requirements of Clause B2 Durability. Clause B2 requires that a building continue to satisfy all the objectives of the Building Code throughout its effective life. Because the cladding faults are allowing the ingress of moisture and will continue to do so until remedied, the external envelope does not comply with the durability requirements of Clause B2 in force at the time.
- 5.3 The agent submitted that any necessary remedial work should only be in accordance with the original consent drawings, and should not be required to be constructed in accordance "with 2016 practice" (refer paragraph 3.5). The agent expressed concerns that should re-cladding be needed the requirements may be more onerous than what was approved in 2003.
- 5.4 I note that while the performance requirements of the relevant clauses of the Building Code (E2, B2) have not changed significantly from 2003 to the present day, understanding of the performance of building elements and construction methods has altered over that period. It is acknowledged that as a result some of the elements and methods accepted as compliant with the Building Code in 2003 would not be considered compliant today.
- 5.5 However, it is not within the scope of this determination to stipulate how the building is to be brought into compliance with the Building Code.

6. What happens next?

- 6.1 I am unable to conclude, with the information available to me, whether or not repair of specific areas (as opposed to partial or full re-cladding) would result in compliance with Clauses E2 and B2. I consider that final decisions on whether code compliance can be achieved by either repair or re-cladding, or a combination of both, can only be made after a more thorough investigation of the fibre-cement cladding.
- 6.2 If the applicant still wishes to seek a code compliance certificate, they should provide a detailed proposal to the authority to specifically address the matters of non-compliance and investigation for the areas identified, produced in conjunction with a competent and suitably experienced person. As the expert also noted, members of the New Zealand Institute of Building Surveyors are not the only competent professionals capable of carrying out this task. Any items of disagreement can then be referred to the Chief Executive for a further binding determination.

7. The decision

- 7.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the fibre-cement clad walls, as described in paragraph 1.4 of this determination, do not comply with Clause E2 and Clause B2 of the Building Code that was current at the time the consent was issued.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 13 July 2017.

John Gardiner
Manager Determinations and Assurance