



Determination 2010/027

The code-compliance of proposed remedial work to a house at 110A Aranui Road, Mount Wellington, Auckland (to be read in conjunction with Determination No 2008/102)

1. The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ (“the Act”) made under due authorisation by me, John Gardiner, Manager Determinations, Department of Building and Housing (“the Department”), for and on behalf of the Chief Executive of that Department.
- 1.2 The parties to the determination are:
 - Mr G McDermit, the owner of the property (“the applicant”)
 - the Auckland City Council carrying out its duties and functions as a territorial authority and a building consent authority (“the authority”).
- 1.3 This determination is a second one involving the building in question, and it arises from the decision of the authority not to accept a rectification proposal to make a house code-compliant.
- 1.4 I have previously described certain building matters regarding the cladding system to this house. Those matters are described in Determination 2008/102 issued on 20 November 2008.
- 1.5 I take the view that the matter to be determined² is whether or not the proposed rectification building work complies with the Building Code (Schedule 1, Building Regulations 1992), and whether the authority was correct to decline to accept it. (refer to paragraph 3.11)
- 1.6 In making my decision, I have considered the submissions of the parties and the other evidence in this matter.

¹ The Building Act, Building Code, Compliance documents, past determinations and guidance documents issued by the Department are all available at www.dbh.govt.nz or by contacting the Department on 0800 242 243

² Under section 177(a) of the Act. 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.

2. The building work

- 2.1 The building work is proposed remedial work to address issues arising from the weathertightness of a house completed in mid-1997.
- 2.2 This is a two storey detached house on a slightly sloping section, with textured fibre-cement sheet cladding. The house has moderate risk elevations with eaves to most elevations. I have not been provided with any evidence that the timber external wall framing was treated. Untreated framing timber was in general use at the time the house was built, and given the extent of decay identified I consider the timber does not have adequate resistance to decay.

3. Background

- 3.1 The house in question was the subject to a determination (No 2008/102) issued in 2008, which found that the current performance of the cladding installed on the house was inadequate and did not comply with the requirements of Clauses B2 or E2. Because of the extent and complexity of the wall cladding faults that were identified, I considered that final decisions on whether code compliance could be achieved by either fixing the identified faults or full re-cladding, or a combination of both, could only be made after a more thorough investigation of the cladding and the condition of the underlying timber framing.
- 3.2 Following the issuing of the determination, the authority issued a notice to fix dated 10 February 2009. This notice required the applicant to lodge with the authority a “scope of works” outlining how each area of non-compliance was to be addressed and rectified.
- 3.3 The application for a determination was initially received by the Department on 18 February 2009. However negotiations regarding the remedial work continued between the parties from that date and the application was effectively placed on hold.
- 3.4 The applicant engaged the services of a firm of building consultants (“the building consultants”) to produce a proposed scope of work report. This report, which was dated 26 June 2009, concluded:

We are of the view that the only practicable and acceptable option to achieve compliance and durability with the Building Code is to replace the entire cladding system incorporating revised details as the works proceed.
- 3.5 On 10 July 2009, the authority wrote to the applicant, stating that in principle, the authority accepted proposal to carry out a full re-cladding of the house.
- 3.6 The applicant subsequently engaged a company that specialises in exterior systems (“exterior systems specialists”) to produce a proposal to rectify the defective cladding. The proposal, which was dated 21 July 2009, addressed the requirements of the notice to fix in terms of a targeted repair methodology rather than a full re-clad.
- 3.7 The applicant also arranged for a company (“the inspection company”) to carry out invasive testing of the exterior walls of the house, which was undertaken on 1 September 2009. A report dated 14 September 2009 was prepared, which detailed the invasive tests that had been made. Nearly all the readings taken at the bottom plates around the entire house showed high readings, of a range up to 50%. Similar high readings were also recorded around some of the exterior joinery units.

- 3.8 The inspection company also removed eight core samples from the base levels of external wall framing and forwarded them to a firm of consulting industrial microbiologists for testing. The subsequent tests showed that there were varying levels of soft rot (up to an intermediate stage) in five of the samples.
- 3.9 The exterior systems specialists emailed the authority on 11 September 2009, attaching a copy of the 21 July 2009 rectification proposal. It was noted that the high readings appeared to be related to the lack of sealant to the exterior joinery unit jambs and the short head flashings. It was estimated that some 5% of the structure would need treatment or replacement.
- 3.10 The exterior systems specialists then provided a revised and more detailed proposal dated 14 September 2009. This proposal included a 3 year monitoring programme that would be carried out subsequent to the proposed remedial work.
- 3.11 On 2 October 2009, the authority responded to the proposal of 21 July 2009 in a letter to the second consultants. The authority stated that while a targeted approach to rectification could be acceptable in principle, it was a complex issue requiring a thorough investigation of the property by a suitably qualified and experienced building consultant who was familiar with 'leaky building' related issues. The authority set out an outline list of the information that it would require to be submitted as part of any building consent application.
- 3.12 The authority also noted that ongoing moisture meter readings and monitoring of the entire dwelling would be required at six-monthly intervals for a minimum period of two years prior to the authority considering a code compliance certificate. The results of the readings would be relied on by the authority to assist it to establish code-compliance. Any unfavourable readings that were not to the satisfaction of the authority would require further investigation, and remedial work would then be required before the authority was able to proceed with the applicant's application for a code compliance certificate.
- 3.13 Subsequently the application for a determination was reactivated and the authority clarified its position in letter to the Department dated 30 November 2009 (refer to paragraph 4.2).
- 3.14 Following requests from the Department for more detail, further proposed cladding details were provided by the exterior systems specialists in emails dated 15 December 2009 and 22 December 2009.

4. The submissions from the parties

- 4.1 The applicant did not make a formal submission and forwarded copies of:
- the notice to fix
 - the proposal to rectify prepared by the exterior systems specialists
 - the invasive reports prepared by the inspection company dated 10 September 2009 and 14 September 2009
 - some detail drawings and specifications relating to the proposal to rectify
 - Determination 2008/102
 - some of the correspondence between the parties.

- 4.2 The authority provided a submission in a letter to the Department dated 30 November 2009. The authority set out the background to the dispute and stated it was the scope of works that was in dispute. The authority did not believe that the work outlined in the proposal to rectify would, when completed, make the house code-compliant. The authority forwarded copies of material similar to that provided by the applicant.
- 4.3 A draft determination was issued to the parties for comment on 5 February 2010. The authority accepted the draft without comment.
- 4.4 The applicant did not accept the draft, referring to the authority's letter of 2 October 2009 (refer paragraph 3.11), the financial implications of a full re-clad, and the applicant's wish that the code compliance of the remedial work be decided after the proposed targeted repairs had been completed, and not after a period of moisture monitoring.
- 4.5 I acknowledge the applicant's position. However, for the reasons given below I do believe the circumstances that apply in this instance enable me to change my view of the matter.

5. Discussion

- 5.1 I accept that the proposal to rectify prepared by the second consultants does attempt to remedy the faults that are set out in the notice to fix dated 10 February 2009. For the most part, the problems relating to Clauses B2 and E2 have been addressed. This is in respect of the rectification proposals regarding individual building elements, which would address the immediate Clause E2 concerns, and go some way towards rectifying the B2 requirements. However, in my opinion the repairs proposed in this case do not of themselves fully satisfy the ongoing requirements of Clause B2 and therefore of the code compliance of the cladding in its totality.
- 5.2 As set out in the invasive report there are areas in all of the exterior walls of the house that show high-to-excessive moisture readings, which could have been present for some time and would have initiated decay. This is confirmed by the consulting industrial microbiologists' report, which describes levels of soft rot damage in the exterior wall framing that is affecting the performance of those members.
- 5.3 If only targeted repairs are carried out, I can not be satisfied that all the damaged timbers will be identified and rectified. As the timber wall framing is untreated, any remaining affected timber could degrade, which may also affect adjoining timbers that are not at risk at the present time. These conclusions are also borne out in the report prepared by the building consultants.
- 5.4 In this regard, I note that the building consultant is a qualified building surveyor and well experienced in the remediation of leaking buildings. While respecting the competence of the exterior systems specialists, I am not aware that they have had an equivalent in-depth involvement or experience with respect to remediation work. This leads me to place more weight on the opinion of the building consultant in reaching my decision in this case.
- 5.5 In Determination 2008/102 I noted the house had a moderate weathertightness risk rating and if this type of cladding (fibre cement sheets) was installed in accordance with the current requirements of E2/AS1, it would be required to be installed over a drained and ventilated cavity.

- 5.6 While a drained and ventilated cavity would provide some resilience to installation faults, I note that the existing cladding is not installed in accordance with the manufacturer's installation instructions. I consider the proposed repair methodology will not compensate for the existing systemic cladding faults.
- 5.7 Therefore, based on the above discussion, I accept the authority's contention that the proposed building work will not be sufficient in this case to bring the building into compliance with the requirements of Clause B2.

6. The decision

- 6.1 In accordance with section 188 of the Building Act 2004, I hereby confirm the authority's decision that the proposed remedial work will not result in the building complying with the Building Code.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 23 March 2010.

John Gardiner
Manager Determinations