



Determination 2011/039

Refusal to issue a code compliance certificate for a 14-year-old house with timber weatherboards and brick veneer at 28 Lanyon Place, Porirua



1. The matters 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. The applicant is the owner of the house, the M B and J M Paulin Family Trust (“the applicant”), acting via its lawyer, and the other party is the Porirua City Council (“the authority”), carrying out its duties as a territorial authority or building consent authority. I consider the builder of the house (“the builder”) to be a person with an interest in this matter.
- 1.2 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for a 14-year-old house, because it is not satisfied that the building work complies with the Building Code (First Schedule, Building Regulations 1992). The refusal arose because:
- the authority cannot locate some of its inspection records and therefore has no evidence that all required inspections had been completed
 - the authority also has concerns about:
 - the compliance of the house with relevant clauses² of the Building Code
 - the age of the building work substantially completed in 1996.

¹ The Building Act 2004 is available from the Department’s website at www.dbh.govt.nz.

² 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.

1.3 The matter to be determined³ is therefore whether the authority was correct to refuse to issue a code compliance certificate. In deciding this, I must consider:

1.3.1 Matter 1: The external envelope

Whether the external building envelope of the house complies with Clause B2 Durability and Clause E2 External Moisture of the Building Code. The building envelope includes the components of the systems (such as the brick veneer, the weatherboards, the windows, the deck, the roof cladding and the flashings), as well as the way the components have been installed and work together. (I consider this in paragraph 7.)

1.3.2 Matter 2: Other clause requirements

Whether the house complies with the remaining relevant clauses of the Building Code. (I consider this in paragraph 8.)

1.3.3 Matter 3: The durability considerations

Whether the building elements comply with Clause B2 Durability of the Building Code, taking into account the age of the house. (I consider this in paragraph 9.)

1.4 The available evidence

1.4.1 Although the applicant and the builder maintain that the authority carried out all relevant inspections during construction of the house, most of the inspection records cannot now be located. The authority has concluded that all of the required inspections were not completed.

1.4.2 In order to determine the compliance of this house, I have therefore addressed the following questions:

- (a) Is there sufficient evidence to establish that the building work as a whole complies with the Building Code? (I consider this question in paragraph 5). If so, a code compliance certificate can be issued.
- (b) If not, are there sufficient grounds to conclude that, once any outstanding items are repaired and inspected, the building work will comply with the Building Code? If so, a code compliance certificate can be issued in due course.

1.4.3 In making my decision, I have considered the submissions of the parties, the report of the expert commissioned by the Department to advise on this dispute (“the expert”) and the other evidence in this matter.

2. The building work

2.1 The building work consists of a detached house that is two storeys in part and is situated on an excavated level site in a very high wind zone for the purposes of NZS 3604⁴. Except for steel beams and lintel to the garage, construction is conventional light timber frame, with concrete foundations and floor slab, brick veneer and timber weatherboard wall claddings, aluminium windows and pressed metal tile roofing. Apart from an upper deck and some complex roof to wall

³ Under section 177(2)(d) of the Act

⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

junctions, the house is reasonably simple in plan and form and is assessed as having a moderate to high weathertightness risk (see paragraph 7.2).

- 2.2 At an upper level west bedroom, an enclosed deck, with a liquid-applied membrane floor, is set within the slope of the lower roof. The deck balustrades are clad on the outside with timber weatherboards and on the inside with fibre-cement sheet.
- 2.3 The upper level of the house has a hipped roof and the lower level roofs over the larger ground floor form hipped lean-to roofs against the upper walls. The 25° pitch roofs generally have eaves of more than 600mm overall, except for increased overhangs at the north and east verandahs.
- 2.4 The ground floor walls are brick veneer, which incorporates a drained and ventilated cavity. Upper level walls are clad in horizontal bevel-backed cedar weatherboards fixed directly to the framing over the building wrap, with timber facings to corners and timber scribes to window jambs.
- 2.5 The expert was informed by the builder that the framing was 'H1' treated and the expert observed an H1 stamp on timber framing in the roof space. However, given the date of construction of the house, I am unable to determine the particular level and type of treatment described as 'H1'. I therefore consider that the wall framing of this house may not be treated to a level that will provide resistance to fungal decay.

3. Background

- 3.1 The authority issued a building consent for the house (No. ABA 5212) to the builder on 11 June 1996 under the Building Act 1991. The building consent did not call for any specific engineering inspections; listing the following required inspections:
 - two foundation inspections
 - a sub-floor plumbing inspection
 - building and plumbing pre-lining inspections
 - a drainage inspection
 - building and plumbing final inspections.
- 3.2 The builder and the applicants have stated that 'all relevant inspections were carried out', which I take to include the inspections listed above. The engineer has also provided a 'Producer Statement – PS4 – Construction Review' dated 3 November 2010, which covers 'steel beams and other structural framing etc.'
- 3.3 The only available records are of a pre-line inspection on 24 September 1996 and an inspection of ceiling battens on 23 October 1996. The pre-line inspection record shows ticks against bracing, fixings, framing, exterior joinery and insulation and also notes 'brickwork ties OK', while the other inspection was limited to the moisture content of the ceiling battens. (I note that these inspection records make no mention of any outstanding inspections).

- 3.4 The house was substantially completed by the end of 1996 occupied by 1 January 1997 (see paragraph 4.1). However, no final inspections were carried out and no code compliance certificate was sought until 2010.

3.5 The authority's final inspections

- 3.5.1 In response to a request from the builder, the authority carried out final building and plumbing inspections on 13 April 2010, which identified minor outstanding items.

- 3.5.2 In a letter to the builder dated 4 June 2010, the authority noted that, apart from the outstanding work, the building work appeared 'to have been completed as required by the consented documents.' However, the authority also stated:

Due to the age of the work and the performance requirements of Clause B2.3.1 of the New Zealand Building Regulations 1992 we are unable to issue a code of compliance certificate in this instance.

- 3.5.3 When the work was completed, the authority re-visited the site on 24 August 2010; confirming that 'all items that were noted have now been completed and inspected' and recording a 'pass' on the inspection sheet. The applicant's lawyer then wrote to the authority on 24 August 2010 to request a code compliance certificate with the completion date backdated to 1997. (I have not seen a copy of that letter).

3.6 The authority's refusal to issue a code compliance certificate

- 3.6.1 In response to the request for a code compliance certificate, the authority wrote to the applicant's lawyer on 3 September 2010 confirming that outstanding items had been completed and the inspections indicated that the house had been completed in accordance with the building consent. However, the authority noted that it had no record that all of the required inspections had been carried out and concluded:

As we have no record that all of the required inspections were completed, Council cannot be satisfied on reasonable grounds that the building work complies with the building code.

- 3.6.2 The authority also stated that 'current legislation does not allow the backdating of Code of Compliance Certificates and B2 as suggested in your letter'; noting that a determination could be sought on the matters.

- 3.7 On 8 December 2010, the Department received an application for a determination from the lawyer on behalf of the applicants. The application was accepted on 15 December 2010.

4. The submissions

- 4.1 In a letter to the Department dated 7 December 2010, the applicant's lawyer outlined the background to the dispute and requested a modification of Clause B2 to allow the durability requirements to apply from 1 January 1997. The applicant's lawyer also described the lack of inspection records, noting:

It is our client's view, and the view of our client's builder, that these have been misplaced by the local authority as they are adamant that all relevant inspections were carried out. The inspection sheets, we are advised, were also held by our client's builder until recently when they were discarded.

- 4.2 The application included copies of:
- the drawings and specifications
 - the authority's available inspection records
 - correspondence from the authority
 - various other statements, certificates and information.

4.3 The authority's initial submissions

- 4.3.1 The authority acknowledged the application in an email to the Department dated 9 December 2010, noting that it had originally refused to issue a code compliance certificate due to the age of the building work and the lack of inspections. However, the authority now also had concerns about the lack of engineering inspections and requested the determination to 'consider all relevant issues preventing the issue of the code compliance certificate.'
- 4.3.2 When responding to the expert's report on 18 February 2011, the authority expanded at length on its earlier emailed comments. The authority's comments that directly relate to the expert's report are summarised in paragraph 6.8, while the remaining general comments are summarised as follows:

The engineer's inspections

- The engineer's producer statement, which covers 'part only' of the structure, was not submitted prior to this application and includes no inspection history; indicating that he did not inspect the work he designed.
- The producer statement will not be accepted unless the engineer verifies that he inspected all of the building work he designed.

The authority's inspections

- The authority did not inspect the deck framing and substrate, so further extensive investigation is required due to the evidence of non-compliance.
- There is no verification that the bracing required in the consent documents has been installed and fixed correctly. Verification of compliance is required.
- The authority did not inspect the plumbing and drainage systems and 'unequivocal verification' is therefore required for all aspects of compliance.

The durability provisions

- The matters of non-compliance provided no basis for granting a modification of Clause B2.3.1
- Reliance on the Court's decision in *Palmerston North City Council v Morresey*⁵ as authority for the proposition that a waiver or modification of the Building Code can be made after a building consent is issued is flawed
- 'Given the implications of Section 393 [the authority] will not issue a code compliance certificate unless the Department ... determines that the building

⁵ See *Palmerston North City Council v Morresey* (Unreported, Judge Callaghan, 11 August 2008, District Court, Palmerston North, CIV-2007-454-000463).

complies with the Building Code and [the authority is] instructed ... to issue the applicable code compliance certificate.

4.4 The draft determination and the responses received

- 4.4.1 A draft determination was issued to the parties on 25 February 2011. The draft was issued for comment and for the parties to agree on a date when the house complied with Building Code Clause B2 Durability.
- 4.4.2 The applicant's lawyer accepted the draft on 10 March 2011 on behalf of the applicant and suggested the date of 1 January 1997 for commencement of durability provisions.
- 4.4.3 The applicant's lawyer also noted that the authority had stated that it would not issue a code compliance certificate or modify durability provisions unless instructed to do so by the Department and the determination should therefore require the authority to issue a code compliance certificate once all required remedial work is completed.
- 4.4.4 The authority made a detailed response to the draft in a letter to the Department dated 16 March 2011. The authority reiterated many of the matters raised in its earlier submissions and requested changes to the determination.
- 4.4.5 The authority's general comments, included the following (in summary):
- A 'visual inspection of accessible components, hearsay and a questionable PS4 statement' does not provide 'any sort of reasonable grounds for establishing compliance with the Building Code.'
 - 'To suggest that the ruling in *Morresey* provides the basis and authority for modifications of B2.3.1 is incorrect.' If the Department is adamant that B2 modifications are reasonable then the provisions of B2.3.1 should be rewritten.
 - Given the lack of inspections, the 'history of defects', and the likelihood of unidentified defects and 'further defects in the future', there are not reasonable grounds to conclude that the house can be made code-compliant. The authority is concerned about 'the liability issues' and will therefore not issue a code compliance certificate 'unless specifically instructed to do so'.
 - The building 'clearly did not comply with Clause B2' at the time of substantial completion given defects resulting in moisture penetration and a modification of Clause B2 'would be unreasonable and has no legal basis in this instance'. The authority will therefore not grant a modification 'unless directed to do so'.
- 4.4.6 The applicant's lawyer responded to the authority's comments in a letter to the Department dated 17 March 2011, which noted the following (in summary):
- Given that records were only recently discarded by the builder and that the available records were located by the authority only after prompting by the applicants, the only logical explanation is that the authority's records were 'misplaced.'
 - The authority's arguments are circular. The authority suggests 'that as the inspection sheets cannot be produced, the PS4 cannot be accepted.' The owners are fully entitled to rely on the PS4.

- The evidence of completed inspections is not ‘hearsay’ as it is based on direct statements of the builder and the applicants.
- Split and cracked weatherboards are maintenance issues and will be attended to, but the expert did not raise ‘serious concerns’ as stated by the authority. If the authority had concerns these should have been raised during the 2010 inspection.
- The authority’s opinion that there is a ‘high probability that further unidentified defects are present’ is not based on any evidence. ‘No evidence has been produced by the [authority] to confirm that the house does not [comply with Clause B1]’.
- Based on the evidence and 14-year-old satisfactory operation, the conclusion that plumbing and drainage complies is similarly justifiable.
- The owners considered the authority had overstated a number of issues, given that prior to commencing the determination those issues had not been identified and the authority had appeared content with the building work.

4.4.7 The authority responded to the applicant’s comments in a letter to the Department dated 21 March 2011, which repeated comments made in its earlier submissions.

4.5 My response to the authority’s submissions

The inspection records

- 4.5.1 I do not consider that the lack of a documented inspection history in any way indicates that the specifically engineered elements were not inspected by the engineer. In issuing a producer statement, the engineer has taken responsibility for the structural compliance of those elements covered by his statement.
- 4.5.2 Because some of its inspection records cannot be located by the authority, it has concluded that those inspections were not carried out despite the assurances of the owners and their builder that they were. I consider that the lack of documented evidence after 14 years does not by necessity lead to the conclusion the authority has reached.
- 4.5.3 I observe that the authority has a statutory duty (under section 27 of the Building Act 1991 and subsequently section 216 of the Building Act 2004) to maintain proper records regarding buildings in its district and it appears that the applicant is being disadvantaged as a result of the authority not carrying out this task.
- 4.5.4 Even if the inspections had not been completed, the Building Code is a performance-based document, and account must be taken of the building’s performance over 14 years, and the performance of the visible building elements. A determination considers all the available evidence: this includes, but is not limited to, the available inspection records.

The modification of Clause B2 Durability

- 4.5.5 The authority has stated that it will ‘not issue a code compliance certificate or grant a modification of Clause B2.3.1 unless [it is] specifically directed to do so by the Department ... in the final Determination’. The authority’s reasons for refusing to

consider modifying the commencement date for the durability periods in Clause B2.3.1 are unclear but the authority appears to consider there is no power to do so.

- 4.5.6 The delay between the completion of the building work in 1996 and the applicant's request for a code compliance certificate in 2010 means some elements of the house are now partly through or at the end of their required durability periods. In this circumstance it is only appropriate for the commencement date of the durability periods to be modified to match the reality of when the work was completed and when the durability period should have commenced. Previous determinations have considered the power to grant a modification of the commencement date for the durability periods (see for example, Determination 2006/85).
- 4.5.7 In addition, in *Morresey* the Council argued that it had no power under the former Act to waive or modify the application of the Building Code after a building consent had been issued. Before the Judge could deal with the appellant's submission that the Council was wrong to refuse to grant a waiver, the Judge had to decide whether the former Act permitted such a waiver or modification. The Judge concluded that the Act permitted waivers or modifications to be granted after a building consent was granted and then went on to consider whether a waiver should have been granted in that particular case.
- 4.5.8 The waiver sought in *Morresey* related to G12 so has little bearing on the particular facts of this determination. However, *Morresey* remains good authority for the proposition that a waiver or modification of the Building Code may be made after a building consent is issued. While *Morresey* concerned the former Act I consider the Judge's conclusion is equally applicable to the Act, given the relevant provisions of the Act relating to the grant of a waiver or modification have not changed significantly and the relevant provisions of the Building Code remain the same. I therefore do not accept the authority's position that it is unable to modify Clause B2.3.1.

The issue of a code compliance certificate

- 4.5.9 The authority's reasons for refusing to issue a code compliance certificate appear to be based on its concerns about the liability it may incur as a result of issuing the code compliance certificate. However, the authority is required to consider the relevant provisions of the Act when deciding whether to issue a code compliance certificate.
- 4.5.10 Upon receiving an application for a code compliance certificate that complies with the requirements of section 92 of the Act, the authority is required to consider the application and determine whether or not to issue a code compliance certificate in accordance with sections 94 and 95 of the Act. The authority is required to provide reasons if it refuses to issue a code compliance certificate (section 95A of the Act).
- 4.5.11 The fact that section 393 of the Act provides that the 10 year long-stop limitation period commences from the time a code compliance certificate is issued is not a good reason for the authority to refuse to issue a code compliance certificate. The authority has a range of statutory functions under the Act and, in my view, it is not for the authority to refuse to carry out its functions because there may be potential liability associated with the performance of those functions.

4.5.12 Assuming the applicant undertakes the necessary remedial work in accordance with a proposal accepted by the authority (see paragraph 10.2 below), then on receipt of an application for a code compliance certificate the authority has a statutory obligation to consider that application and decide whether to issue a code compliance certificate.

4.6 I have considered the parties submissions and amended the determination as appropriate.

5. Grounds for the establishment of code compliance

5.1 In order for me to form a view as to the code compliance of the building work, I established what evidence was available and what could be obtained considering that the building work is completed and some of the elements were not able to be cost-effectively inspected.

5.2 The applicant and the builder maintain that the authority carried out all the required inspections and the records have been mislaid. However, the authority does not accept that; claiming that the lack of records means that only two inspections were carried out. In the case of this house, I note that:

- the applicants are the original owners of the house
- the house was constructed by a relative of the owners and the builder has a continuing involvement in seeking the code compliance certificate
- the pre-line inspection record does not note any outstanding inspections.

5.3 Taking account of the above and in the absence of any evidence to the contrary, I take the view that I am entitled to rely on the owners' and the builder's assurances that all necessary inspections were satisfactorily carried out. I am also entitled to rely on the producer statement issued by the registered engineer together with the electrical certificate with regard to inaccessible building components.

5.4 A condition for this reliance is that there should be corroboration of the impression given by the evidence. A visual inspection of accessible components can provide this and provide reasonable grounds to form a view on whether this house as a whole complies with the Building Code. Because visible parts of claddings are most vulnerable to failure, particular note is taken of the external envelope.

5.5 In summary, I find that the following evidence allows me to form a view as to the code compliance of the building work as a whole:

- The engineer's producer statement dated 3 November 2010.
- The authority's records of its pre-line inspections during construction in 1996 and its final inspections in 2010.
- The expert's report as outlined below.

6. The expert's report

6.1 As mentioned in paragraph 1.4, I engaged an independent expert to assist me. The expert is a member of the New Zealand Institute of Building Surveyors. The expert inspected the house on 27 January 2011, providing a report dated 4 February 2011.

6.2 General

6.2.1 The expert noted that the overall construction quality appeared to be 'excellent', with the house 'completed in a tradesman like fashion' using traditional techniques apart from the upper deck. He also noted that, apart from the balustrade capping, the visible parts of flashings appeared 'excellent and well proven'.

6.2.2 However, the expert also observed that the 14-year-old cedar weatherboards were now in need of maintenance, with splits and cracks in some areas that could allow moisture penetration in the future. The expert also noted that the pergola rafters at the northeast corner do not penetrate the weatherboards (although I note that the fixings do penetrate the cladding).

6.3 Windows and doors

6.3.1 The expert noted that windows were generally sheltered beneath deep eaves and observed that the joinery is rated 'VH' for the very high wind zone. The upper level windows are face-fixed over the weatherboards, with metal head flashings and timber scribes at the jambs. The ground floor windows are recessed within the brick veneer, with traditional sloping and projecting brick sills.

6.3.2 The expert investigated the two arched windows in the south (front) elevation and noted that these appeared satisfactory, with 'full curved head flashings and integrated jamb flashings'.

6.4 Moisture levels

6.4.1 The expert inspected the interior of the house, taking non-invasive moisture readings, and noted no evidence of moisture. Given the lack of evidence and the conventional wall claddings, the expert did not consider it necessary to carry out any further invasive moisture testing of upper and lower walls.

6.4.2 However, the expert noted signs of moisture penetration into the deck balustrades, with non-invasive moisture readings of 40% recorded directly beneath the downturn of the balustrade capping. The expert also noted some moisture damage to the fibre-cement at the bottom of the internal corner and took invasive readings; recording 32% within the fibre-cement and 20% in the balustrade framing.

6.5 Commenting specifically on the external envelope, the expert noted that:

- the flat-topped capping to the deck balustrade is not weathertight, with nailed and unsealed mitres at the corners which are loose
- the downturns to the capping can be lifted, with unsealed fibre-cement beneath and high moisture levels within the sheets

- the ends of the capping are sealed against the weatherboards, with no underlying saddle flashings at the junctions

(I also note that there appears to be insufficient clearance of the fibre-cement balustrade lining to the liquid-applied deck membrane.)

6.6 The expert also commented on the compliance of the house with other relevant clauses of the Building Code (refer paragraph 8.3), concluding that, with the exception of the deck area, he considered that:

...all other applicable clause requirements are met and the house has shown to be durable and compliant.

6.7 A copy of the expert's report was provided to the parties on 8 February 2010.

6.8 The authority responded to the expert's report in a letter to the Department dated 18 February 2011, which also included a submission on more general matters which I have included as its submission within paragraph 4.3. The authority's comments that directly relate to the expert's report included:

- There are serious concerns about the entire deck structure as the membrane is ponding and there is little clearance to the inside floor level. The high moisture levels and the inadequate capping and junctions indicate that moisture is entering the cladding.
- The cracks and splits in the cedar weatherboards indicate that moisture has likely entered the H1 treated framing, which may be damaged and not in compliance with Clause B1. Further invasive moisture testing is needed.
- H1 treated timber will not prevent damage when there is prolonged wetting of the framing and it is extremely likely that external moisture is now reaching the framing and extensive invasive investigations are required.
- The pergola may not pass through the cladding but the fixings clearly do and further invasive investigations are needed.

Matter 1: The cladding

7. Weathertightness

7.1 The evaluation of building work for compliance with the Building Code and the risk factors considered in regards to weathertightness have been described in numerous previous determinations (for example, Determination 2004/1).

7.2 Weathertightness risk

7.2.1 The house has the following environmental and design features which influence its weathertightness risk profile:

Increasing risk

- the house is two-storeys high in part and sited in a very high wind zone
- although fairly simple in form, there are some complex roof to wall junctions

- the upper walls have horizontal weatherboards fixed directly to the framing
- there is an upper level enclosed deck situated above ground floor spaces
- the external wall framing may not be treated to a level that provides sufficient resistance to decay if it absorbs and retains moisture

Decreasing risk

- the house is reasonably simple in plan and form
- the cladding details generally use traditional conventional techniques
- the walls are sheltered by deep roof projections
- the ground floor cladding is brick veneer, with a drained and ventilated cavity.

7.2.2 When evaluated using the E2/AS1 risk matrix, these features show that one elevation of the house demonstrates a high weathertightness risk rating and the remaining elevations a medium risk rating. I note that, if the details shown in the current E2/AS1 were adopted to show code compliance, the horizontal weatherboards on the high risk west elevation of this house would require a drained cavity. However, I also note that this was not a requirement of E2/AS1 at the time of construction.

7.3 Weathertightness performance

7.3.1 Generally the claddings appear to have been installed in accordance with good trade practice at the time. However, taking account of the expert's comments in paragraph 6.5 and the evidence of moisture penetration into the deck, I conclude that further investigation and remedial work is necessary in respect of the following areas:

- further investigation of the deck balustrades:
 - to establish the extent of moisture penetration into underlying framing
 - to repair any damaged framing timbers
- the flat-topped capping to the balustrade:
 - the flat top and the loose unsealed mitres at the corners
 - the inadequate downturns for the very high wind zone
 - the lack of adequate flashings at the junctions with the walls
- the fibre-cement cladding to the inside face of the balustrade:
 - the unsealed fibre-cement beneath the capping
 - the moisture damage to the bottom at the internal corner
 - the apparent inadequate clearance of the fibre-cement balustrade lining to the liquid-applied deck membrane
- general maintenance in the form of:
 - repair and sealing of cracks to the cedar weatherboards
 - sealing of the fixings of the pergola rafters through the boards.

7.3.2 Notwithstanding the fact that the weatherboards are fixed directly to the framing, thus inhibiting free drainage and ventilation behind the cladding, I have noted that the weatherboards are generally installed according to good trade practice, in

accordance with traditional practices common at the time of construction. This assists the performance of the cladding in this particular case and can help the building to comply with the weathertightness and durability provisions of the Building Code.

7.4 Weathertightness conclusion

- 7.4.1 I consider the expert's report establishes that the current performance of the external envelope is not adequate because there is evidence of moisture penetration into the timber framing of the upper level deck. Consequently, I am satisfied that the house does not comply with Clause E2 of the Building Code.
- 7.4.2 In addition, the building envelope is also required to comply with the durability requirements of Clause B2. Clause B2 requires that a building continues to satisfy all the objectives of the Building Code throughout its effective life, and that includes the requirement for the building work to remain weathertight.
- 7.4.3 I note that the cladding materials in the house are already 14-years-old, which almost is the minimum effective life required for these elements. In the case of the weatherboards to the walls, the brick veneer and the roofing, I am satisfied that these claddings have remained weathertight to date and are therefore likely to comply with the durability requirements of Clause B2.
- 7.4.4 However, in the case of the deck, it is apparent that the cladding faults have been allowing moisture into the deck framing and are likely to continue to do so in the future. I am therefore satisfied that the deck claddings, including the deck membrane, do not comply with the durability requirements of Clause B2.
- 7.4.5 Because the faults identified with the deck occur in discrete areas, I am able to conclude that satisfactory investigation of the deck framing and rectification of the items outlined in paragraph 7.3.1 will result in the external envelope being brought into compliance with Clauses B2 and E2 of the Building Code.
- 7.4.6 The expert has noted the requirement for maintenance of the deteriorating cedar weatherboards, and this should be promptly attended to. Effective maintenance of claddings is important to ensure ongoing compliance with Clauses B2 and E2 of the Building Code and is the responsibility of the building owner. The Department has previously described these maintenance requirements (for example, Determination 2007/60).

Matter 2: Other clause requirements

8. Discussion

- 8.1 In assessing the compliance of this house with other relevant Building Code clauses, I have taken into account:
- the consent drawings
 - the expert's report, and the reported high quality of the construction
 - the authority's satisfactory pre-line and final inspection records

- the likelihood that other satisfactory inspections were carried out during construction, despite the lack of records now available.

8.2 B1 Structure

8.2.1 I note that, apart from the steel beam and lintel to the garage, the construction is conventional light timber frame, which is not expected to be reviewed by a structural engineer. Such construction is more appropriately included within an authority's normal inspection procedures.

8.2.2 I make the following observations:

- The engineer's producer statement confirms that the 'steel beams other structural framing etc.' were completed satisfactorily (see paragraph 3.3).
- The authority's pre-line inspection on 24 September 1996 ticked off relevant timber framing, bracing, straps, ties and fixings, noting 'brickwork ties OK'.
- The authority's final inspection records identified no visible signs of problems (refer paragraph 3.5).
- The expert observed no indications of failure after 14 years.

8.2.3 Taking the above into account, I am able to conclude that there are reasonable grounds to come to the view that the house complies with Clause B1 Structure.

8.3 The remaining relevant clauses

8.3.1 With respect to the remaining code clauses relevant to this house, I make the following observations:

- **E1 Surface water**

The house site is gently sloping, with the ground sloping away from the walls. The final inspections and the expert's report noted no visible signs of problems after 14 years. The expert noted that the paved surfaces have 'clearly been working well for many years' and observed adequate provision for stormwater disposal, noting that gully traps were 'well protected from stormwater entry'.

- **E3 Internal moisture**

The authority's final inspections noted no visible signs of problems and the expert recorded no evidence of interior moisture, noting that 'wet areas are well presented and operational'.

- **F2 Hazardous building materials**

Although the final inspection on 13 April 2010 recorded one pane of ensuite glass without a safety mark, the re-inspection on 24 August 2010 noted that all identified items had been 'completed and inspected'. The expert also observed that the windows were rated 'VH' for the very high wind zone.

The authority's final inspections made no comment on the proprietary shower cubicles, which are conventional units likely to include safety glass where required.

- **F4 Safety from falling**

The authority's final inspections noted no problems and the expert observed that the balustrades and stairwell complied with requirements.

- **G1 to G8 (Personal hygiene, Laundering, Food preparation, Ventilation Interior environment, Natural light, Electricity and Artificial light**

The house generally complies with the consent drawings and the drawings show adequate provision to comply with the requirements. The authority's final inspections noted no visible signs of problems and the expert's report noted no visible signs of problems after 14 years.

- **G12 Water Supplies and G13 Foul Water**

The expert noted that the facilities and systems were 'operating and in good working order' and the final inspections noted no visible signs of problems after 14 years.

- **H1 Energy Efficiency**

The drawings call for ceiling and wall insulation and the expert observed that the house was 'well insulated within the ceiling cavity'.

8.4 Based on the above observations, I consider that the expert's report, the authority's pre-line and final inspections and the lack of any apparent problems after 14 years, provide me with reasonable grounds to conclude that the building work is likely to comply with the remaining relevant clauses of the Building Code.

Matter 3: The durability considerations

9. Discussion

9.1 The authority also has concerns regarding the durability, and hence the compliance with the building code, of certain elements of the house taking into consideration the age of the original building work completed in 1996.

9.2 The relevant provision of Clause B2 of the Building Code requires that 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).

9.3 These durability periods are:

- 5 years if the building elements are easy to access and replace, and failure of those elements would be easily detected during the normal use of the building
- 15 years if building elements are moderately difficult to access or replace, or failure of those elements would go undetected during normal use of the building, but would be easily detected during normal maintenance
- the life of the building, being not less than 50 years, if the building elements provide structural stability to the building, or are difficult to access or replace, or failure of those elements would go undetected during both normal use and maintenance.

- 9.4 In this case the delay between the completion of the building work in 1996 and the applicant's request for a code compliance certificate has raised concerns that various elements of the building are now well through or beyond their required durability periods, and would consequently no longer comply with Clause B2 if a code compliance certificate were to be issued effective from today's date. I have not been provided with any evidence that the authority did not accept that those elements complied with Clause B2 at a date in 1996.
- 9.5 The applicant has stated that the house was substantially completed by 1997 and proposed that the durability periods for the building work should commence from 1 January 1997 (refer paragraphs 4.1 and 4.4.2). The authority has declined to accept that the durability periods can be modified and consequently has not provided a completion date for the consented work.
- 9.6 Despite the lack of any agreement by the authority, I conclude that the date proposed by the applicant is reasonable, and that the consented work, apart from the matters that are to be rectified, complied with Clause B2 on 1 January 1997.
- 9.7 I therefore conclude that:
- (a) the authority has the power to grant an appropriate modification of Clause B2 in respect of all the building elements, if requested by an owner
 - (b) it is reasonable to grant such a modification, with appropriate notification, as in practical terms the building is no different from what it would have been if a code compliance certificate for the building work had been issued in 1996.
- 9.8 I strongly suggest that the authority record this determination and any modifications resulting from it, on the property file and also on any LIM issued concerning this property.

10. What is to be done now?

- 10.1 A notice to fix should be issued that requires the applicant to bring the house into compliance with the Building Code, including the investigations and defects identified in paragraph 7.3.1, but not specifying how those defects are to be fixed. It is not for the notice to fix to specify how the defects are to be remedied and the building brought to compliance with the Building Code. That is a matter for the owner to propose and for the authority to accept or reject.
- 10.2 I suggest that the parties adopt the following process to meet the requirements of paragraph 10.1. The applicant should produce a response to the notice to fix in the form of a detailed proposal, produced in conjunction with a competent and suitably qualified person, as to the rectification or otherwise of the specified matters. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.
- 10.3 Once the matters set out in paragraph 7.3.1 have been rectified to its satisfaction, the authority may issue a code compliance certificate in respect of the building consent amended as outlined in paragraph 9.

11. The decision

11.1 In accordance with section 188 of the Building Act 2004, I hereby determine that:

- the external envelope does not comply with Building Code Clauses B2 and E2
- the house complies with the remaining relevant clauses of the Building Code

and accordingly, I confirm the authority's decision to refuse to issue a code compliance certificate.

11.2 I also determine that:

- (a) all the building elements installed in the house, apart from the items that are to be rectified as described in Determination 2011/039, complied with Clause B2 on 1 January 1997.
- (b) the building consent is hereby modified as follows:

The building consent is subject to a modification to the Building Code to the effect that, Clause B2.3.1 applies from 1 January 1997 instead of from the time of issue of the code compliance certificate for all the building elements, except the items to be rectified as set out in paragraph 7.3.1 of Determination 2011/039.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 20 April 2011.

John Gardiner
Manager Determinations