Department of Building and Housing
Te Tari Kaupapa Whare

Determination 2010/062

The refusal to issue a code compliance certificate for a five-year-old house inspected by a building certifier at 112 McAlister Road, Whangarei

1. The matters to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004[1] ("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, Mr G McClellan ("the applicant"), and the other party is the Whangarei District Council ("the authority"), carrying out its duties and functions as a territorial authority or building consent authority.

1.2 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for a five-year-old house because it believes that adequate inspections were not carried out during construction of the house and it cannot therefore be satisfied that the building work complies with certain clauses[2] of the Building Code (First Schedule, Building Regulations 1992). The building work was undertaken under the supervision of Approved Building Certifiers Limited ("the building certifier"), which was duly registered as a building certifier under the Building Act 1991, but which ceased to operate as a building certifier before it had issued a code compliance certificate for the building work.

[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] 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 I therefore consider the matter for determination[3] is whether the decision of the authority to refuse to issue the code compliance certificate is correct. Therefore, I must consider the following:

1.3.1 Matter 1: The external envelope

Whether the external envelope to the house ("the external envelope") complies with Clauses B2 Durability and E2 External Moisture of the Building Code. The external envelope includes the cladding, its configuration and its components, junctions with other building elements, formed openings for windows etc, penetrations, decks, parapets, and the proximity of building elements to the ground. (I consider this matter in paragraph 7.)

1.3.2 Matter 2: The remaining Building Code Clauses

Whether the building complies with the remaining clauses relevant to this house. (I consider this matter in paragraph 8.)

1.3.3 Matter 3: The durability considerations

Whether the elements that make up the building work comply with Building Code Clause B2 Durability, taking into account the age of the house. (I consider this matter in paragraph 10.)

1.4 Although not specifically requested, this determination also considers whether it is reasonable to issue a code compliance certificate or a certificate of acceptance. In order to determine that, I have addressed the following questions:

(a) Is there sufficient evidence to establish that the building work as a whole complies with the Building Code? (I address this question in paragraph 6.)

(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, the appropriate certificate can be issued in due course. (I address this question in paragraph 9.)

1.5 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. I have evaluated this information using a framework that I describe more fully in paragraph 6.

2. The building work

2.1 The building is a fairly simple single-storey detached house situated on a flat rural site that is in a very high wind zone in terms of NZS 3604[4]. The house is generally conventional light-timber frame construction, rectangular in plan, with a concrete floor slab and foundations, part-height concrete block walls, profiled metal wall and roof claddings, plywood cladding and aluminium windows. The building is assessed as having a low to moderate weathertightness risk (refer paragraph 7.2).

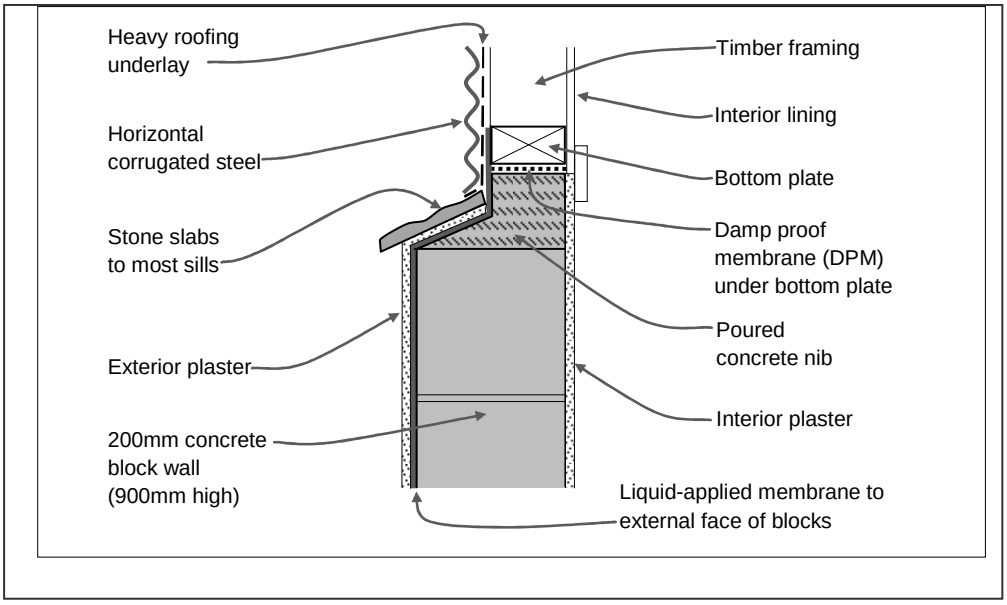
2.2 Except for the recessed walls, the 13° pitch roof has eaves and verge projections of 400mm minimum. The roof at the south-western end extends about 7m beyond the external wall to the living space, over a large open area. The south corner of this is

[3] In terms of section 177(b)(i) of the Act
[4] New Zealand Standard NZS 3604:1999 Timber Framed Buildings

enclosed to form a garage ("the garage"). A bay window projection to the northeast gable end wall has a hipped lean-to roof clad in liquid-applied membrane over plywood, which is finished with spaced stone slabs adhered to the membrane.

2.3 The wall claddings

2.3.1 The lower 900mm of the house exterior walls are 200mm thick concrete block, with a plastered finish applied to the interior and exterior surfaces (in the latter case over a liquid-applied membrane). A concrete nib to the top of the block-work supports timber framing clad in horizontal corrugated steel. The general construction is shown in the following sketch:



2.3.2 The garage, the bay window, and the recessed entry wall are clad in painted plywood, which is fixed directly through the building wrap to the framing.

2.4 The expert took two timber samples from exterior wall framing and forwarded them to a testing laboratory for analysis. The biodeterioration consultant's analysis confirmed one sample as equivalent to H3.2 and the other to H3.1. Given this evidence, I accept that the exterior wall framing of the house is treated to resist decay.

3. Background

3.1 The authority issued a building consent (No. 68615) on 22 January 2004, under the Building Act 1991, based on a building certificate issued by the building certifier on the same date. The building certifier's 'Scope of engagement' included all inspections and the issue of the code compliance certificate. I note that the consent application documents record the applicant as both the designer and the builder.

3.2 No inspection records have been located. However, according to the applicant construction on the house commenced in January 2004 and:

> The first inspection was only a short time later and combined the effluent field with the foundation holes and footings, including steel, polythene and underslab drainage. About 3 months later, the frame was checked for fasteners, layout and moisture, also the waterproof membrane around the exterior. The moisture was too high so we waited 6 weeks and had it inspected along with the plumbing, insulation, bracing etc. Only a short time later the brace panels were inspected.
>
> That left only the final inspection.

3.3 On 29 September 2004, the applicant was informed that the building certifier's approval as a building certifier had expired on 6 September 2004. According to the applicant, 'electrical compliance was gained on [6 October 2004] and a week later we moved in'.

3.4 Early in 2008, the applicant requested the authority to undertake a final inspection. In a letter to the applicant dated 17 March 2008, the authority noted that a review of its property file revealed that there were no records of inspections and requested the provision of information, such as inspection sheets, as-built drainage drawings etc. The applicant responded on 27 March 2009, explaining the background and noting that they 'had no records of the inspections but would like to do anything possible to sort this out'.

3.5 Following telephone discussions, the authority wrote to the applicant on 7 April 2008, noting that the applicant's explanation of the claimed inspections showed 'some anomalies'. The authority re-confirmed that it had no record of any inspections taking place and noted that the lack of an as-built drainage plan was also a problem, concluding that the authority was therefore '...unable to take on this [project], as we cannot be sure, on reasonable grounds, that the [prior] inspections [referred to] have taken place.'

3.6 The Department received an application for a determination on 9 May 2008 and commissioned the expert to inspect the house. The inspection was delayed due to the lack of access to the house, but on 31 July 2009, the applicant advised the Department that he wished to continue with the application and make access available to the expert to assess the building work.

4. The submissions

4.1 The applicant forwarded copies of:

- some of the consent documentation
- the correspondence with the authority.

4.2 The authority made a submission in a letter to the Department dated 10 June 2008, which outlined the background to the situation and stated that it did 'not wish to process [the application for the code compliance certificate] further', as the assessment of the property file had revealed that:

> No evidence is available to suggest that any inspections have, in fact, been undertaken. Therefore, we cannot be reasonably satisfied that parts of the NZ Building Code B1, B2, E1, E2, G12, G13, H1 can be satisfied.

4.3 The authority forwarded copies of:

- the consent documentation and building consent
- the building certifier's building certificate and scope of engagement
- the correspondence with the applicant
- various other statements and information.

4.4 The first draft determination was issued to the parties for comment on 14 December 2009. Both the applicant and the authority accepted the draft without comment – the last response to the draft was received on 17 February 2010.

4.5 Following this it was decided to amend the draft and reissue it to the parties for them to agree a date when the building elements, with the exception of the items to be fixed and verified, complied with Clause B2 Durability so that a code compliance certificate could be issued once full compliance had been established. The second draft determination was issued to the parties on 29 March 2010.

4.6 The authority, in a response to the second draft dated 21 April 2010, commented that it disagreed with the second draft because in its view it considers that there is insufficient evidence to meet the "satisfied on reasonable grounds" test due to:

- the lack of inspection records showing certifier supervision
- no evidence of producer statements or other certification apart from an electrical energy works certificate.

4.7 In addition the authority disagrees with a statement regarding the liquid applied membrane to the outer face of the concrete blocks and whether all of the exterior wall framing was treated. The authority did not submit a date for when the building elements complied with Clause B2 Durability.

4.8 The applicant's acceptance of the second draft was dated 11 April 2010. No additional comments were made and it proposed the date of 15 October 2004 for when the building elements complied with Clause B2 Durability.

5. The expert's report

5.1 A mentioned in paragraph 1.5, I engaged an independent expert to provide an assessment of the condition of those building elements subject to the determination. The expert is a member of the New Zealand Institute of Building Surveyors. The expert visited the site on 9 October 2009 and produced a report that was completed on 12 October 2009.

5.2 The expert noted the following variations from the consent drawings:

- Part of the open carport area has been enclosed to form a garage.
- The soffit lining is omitted.

- The roof rafters are at 900mm centres in lieu of 600mm.
- A woodburner has been installed.
- A truss has been installed to support the living area roof and ceiling over an increased span.

5.3 The exterior claddings

5.3.1 In general terms, the expert was of the opinion that the overall quality of construction was in the main 'quite high', and that 'thought has obviously been given to the detailing, and care has been taken'. However the expert also considered that the durability of some areas was questionable and that maintenance had been neglected.

5.3.2 The expert removed sections of metal cladding in the entry recess, and noted the liquid-applied membrane applied over the concrete nib and up the face of the bottom plate. The expert was unable to confirm whether the membrane extended down the face of the concrete block as shown in the drawings, although he noted that there were no signs of moisture penetration through the plastered block walls.

5.3.3 The expert inspected the interior, taking non-invasive moisture readings and noted elevated readings adjacent to the tiled shower and a bay window. The expert took about 30 invasive readings in the timber framing, with the following elevated readings noted:

- 19% to 21% in the walls around the shower area (relating to the tiled surfaces)
- 16% to 20% around the bay window in the northeast wall.

The expert noted that the equilibrium moisture content at the time was about 10% or 11%, with those readings significantly above the value deemed to need further investigation.

5.3.4 The expert made the following observations regarding the window and door joinery:

- The windows and doors in the plywood cladding are face-fixed, with metal head flashings and no sill or jamb flashings. The bay window door sills are set against a rebate in the floor slab, which the expert noted 'assists weathering'.
- In the masonry/corrugated steel walls, the timber plate above the concrete nib forms the window sill plate. Metal head and jamb flashings are installed to the windows with profiled compressible foam under the jamb flashing returns.
- The door jambs in the above walls are installed hard against the masonry without trim studs, and sealant or mortar is used to seal that junction.

5.3.5 Commenting specifically on the claddings, the expert noted that:

Windows and doors

- some sealants at window and door jambs are missing or deteriorating
- the profiled compressible foam at the jambs is missing in some areas
- the mortar at door jambs is not durable and is cracking in some areas

The bay window

- the plywood cladding is deteriorating, with unfilled nail holes, rusting nails and no cover flashings at the mitred corners
- clearances to the ground are inadequate, and moisture penetration is apparent
- the weatherproofing of the bay window roof is not durable, relying on liquid-applied membrane covered with spaced stone slabs that result in unfilled gaps under the apron flashing and provide an obstacle to rainwater shedding from the roof.

The roof

- some fixings at the ridge flashing are missing
- the underside of the soffits is unlined, exposing the roof underlay to weather

Maintenance

- the paint coating on the ply cladding has deteriorated
- sealants are deteriorating or missing in some areas, mortar at jambs has cracked and foam at jambs has fallen out
- a window pane is broken
- the bracket holding the light fitting in the gable end has broken
- the second-hand roller door to the garage is corroding
- the sealant to the pipe penetration through the roof is deteriorating.

5.3.6 The expert also made the following comments:

- Although the ply cladding to the exterior wall of the garage lacks a flashing at the horizontal joint, the garage is unlined and the framing will remain dry.
- Although some flashings to recessed walls are lacking, the deep roof overhangs protect these junctions from water penetration.

5.4 The remaining code clauses

Where possible, the expert observed the visible elements of the house and assessed compliance with the other relevant clauses of the Building Code.

B1 Structure

5.4.1 The expert observed no signs of movement related to the floor slab, foundations and concrete masonry, and stated

> With respect to the more obvious aspects of [Clause B1] for which no inspection records exist – the foundations, floor slab, masonry walls – all that can be said is that after four years, the floor shows no more cracks than normal. Given that most of the other details shown on the seven sheets of consented plans have been more or less followed, it is likely the unseen work was also carried out with the same level of diligence.

The expert also noted the following:

- The bracing over the carport and garage roof area has been changed and may not be adequate for the very high wind zone.

- There are no joist hangers to some of the carport and garage roof area.
- Rafter spacing has been increased from 600mm to 900mm and rafters/ purlins are skew-nailed to rafters, without joist hangars.
- A post in the kitchen is omitted, with a truss added to the ceiling space.
- Small brackets fix the rafters and purlins to the top plate, with only two nails to resist uplift and no solid blocking to resist lateral movement.

E1 Surface water

5.4.2 No signs of problems related to surface water drainage were noted, with falls away from the building and an as-built drainage plan provided.

However, the disposal of overflow water from the rainwater tanks could not be confirmed.

E3 Internal moisture

5.4.3 The expert noted the following:

- The tiled surfaces of the shower area are not waterproof, with elevated moisture levels recorded in surrounding walls.
- The toilet washbasin is not sealed to the wall.
- The laundry bench top is deteriorating.

G1 Personal Hygiene and G3 – Food Preparation

5.4.4 The sealing of the kitchen bench requires investigation.

G10 Gas as an Energy Source

5.4.5 There is an unrestrained gas cylinder that is corroding.

G13 – Foul Water

5.4.6 The expert could not confirm compliance with G13.

5.4.7 The expert was of the opinion that the house met the following Building Code clauses:

- Clause G2 – Laundering
- Clause G4 – Ventilation
- Clause G5 – Interior environment
- Clause G7 – Natural light
- Clause G8 – Artificial light
- Clause H1 – Energy Efficiency.

6. The establishment of code compliance

6.1 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.

6.2 In the case of this house, I note that the evidence able to be provided by the parties is very limited, with no inspection records to indicate satisfactory inspections of the inaccessible components by the building certifier.

6.3 In forming a view as to the code compliance of the building work as a whole, I have taken into account the following:

- The applicant's recollection of the certifier's inspections which in this instance I accept. The inspections have been questioned by the authority in the absence of the inspection records themselves (refer paragraphs 3.2 and 4.6).
- The expert's inspection of the accessible components, as outlined in paragraph 5, provides evidence of those elements that are meeting the performance requirements of the Building Code.

6.4 I also have the benefit of the fact that the building work is now 6 years old and its performance in use can be assessed against the performance requirements of the Building Code. Over this 6-year period, the building work is likely to have been subject to the extremes of climatic conditions expected at this location.

6.5 Once I have formed a view as to the code compliance of the building work I will assess whether this evidence is sufficient, in the context of the reasonable grounds test I must apply, to allow me to direct that a code compliance certificate be issued, or if it is not sufficient, what remedial work might be sufficient to remedy any shortfall in compliance.

Matter 1: The external envelope

7. Weathertightness

7.1 The approach in determining whether building work is weathertight and durable and is likely to remain so, is to examine the design of the building, the surrounding environment, the design features that are intended to prevent the penetration of water, the cladding system, its installation, and the moisture tolerance of the external framing.

7.2 Weathertightness risk

7.2.1 This house has been evaluated using the E2/AS1 risk matrix. The risk matrix allows the summing of a range of design and location factors applying to a specific building design. The resulting level of risk can range from 'low' to 'very high'. The risk level is applied to determine what claddings can be used on a building in order to comply with E2/AS1. Higher levels of risk will require more rigorous weatherproof

detailing; for example, a high risk level is likely to require a particular type of cladding to be installed over a drained cavity.

7.2.2 This house has the following environmental and design features which influence its weathertightness risk profile:

Increasing risk

- the house is in a very high wind zone
- although fairly simple in shape, the house has three different wall claddings and a bay window that incorporates complex junctions

Decreasing risk

- the house is one-storey high
- eaves and verge projections are more than 300mm above all walls
- roof to wall intersections are fully protected.

7.2.3 When evaluated using the E2/AS1 risk matrix, the weathertightness features outlined above show that one elevation of the house demonstrates a moderate weathertightness risk rating and the remaining elevations a low rating. While not a requirement when this house was constructed, a drained cavity is now required by E2/AS1 for the horizontal corrugated steel cladding at all risk levels.

7.3 Weathertightness performance

7.3.1 Generally the claddings appear to have been installed in accordance with good trade practice and the manufacturer's recommendations; however some areas have not been satisfactorily completed. Taking account of the expert's report, I conclude that remedial work is necessary in respect of the following areas (identified in paragraph 5.3.5):

- some sealants, and the profiled compressible foam, at some window and door jambs are missing or deteriorating, and the mortar at door jambs is not durable and is cracking in some areas
- at the bay window; the plywood cladding is deteriorating, with unfilled nail holes, rusting nails and no cover flashings at the mitred corners, clearances to the ground are inadequate, and the weatherproofing of the bay window roof is not durable
- some fixings at the ridge flashing to the roof are missing and the underside of the soffits is unlined
- maintenance is required:
    - to the paint coating on the ply cladding
    - to the sealants and foam of the jambs
    - to the broken window pane
    - to the light fitting bracket in the gable end
    - to the roller door at the garage

- to the pipe penetration sealant at the roof.

7.3.2 I also note the expert's comments in paragraph 5.3.6, and accept that these areas are adequate in the current circumstances. However I note that, in regard to the garage, this will depend on retaining the unlined condition of the external timber framing.

7.3.3 Notwithstanding the fact that the corrugated steel cladding is fixed directly to the timber framing, thus limiting drainage and ventilation behind the cladding, I have noted the following compensating factors that assist the performance in this particular case:

- apart from the noted exceptions the cladding is installed to good trade practice
- the external wall framing is treated to a level effective in resisting decay
- there is no evidence of moisture penetration associated with the horizontal corrugated steel cladding after more than five years.

7.3.4 I consider that these factors help compensate for the lack of a drained cavity and can assist 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 water penetration into the building at the northeast bay window at present. Consequently, I am satisfied that the house does not comply with Clause E2 of the Building Code.

7.4.2 In addition, the building work 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 house to remain weathertight. Because the faults to the external envelope on the house are likely to allow the ingress of moisture in the future, the building does not comply with the durability requirements of Clause B2.

7.4.3 Because the faults identified with the external envelope occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 7.3.1 will result in the house being brought into compliance with Clauses B2 and E2.

7.4.4 I note the expert's comments on neglected maintenance to this house. 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: The remaining Building Code clauses

8. Discussion

8.1 The proven in-service performance and the expert's investigation and comments (refer to paragraph 5.4.1) provides me with reasonable grounds to conclude that the foundations, floor slab and masonry walls comply with Clause B1.

8.2 However, the expert noted the following details of the as-built structure that were not built in accordance with the consented plans (refer to paragraph 5.4.1):

- The bracing and joist hangers to the carport and garage roof area
- The rafter spacing and fixing
- The support of the ceiling above the kitchen bench
- The fixings of the rafters and purlins to the top plate

Therefore, I consider that there are not reasonable grounds to conclude these elements of the building work complied with Clause B1. An investigation by a structural engineer will be required to confirm the adequacy of these elements and their compliance with the Building Code.

8.3 The expert was unable to inspect the concealed pipes, hot water cylinder, and the disposal of the overflow water from the rainwater tank. However, the expert inspected a gully trap and the water tank, and noted that the hot water cylinder was installed in the position shown in the plans.

8.4 I note the Private Utility Service Asbuilt record, although completed by the owner as indicated on the back of the form, records the registered drainlayer's name and number. The work was installed by a registered drainlayer and the owner has made a declaration that the as built record was an accurate representation of the work that was carried out and the expert's inspection confirms this. I therefore consider that I have reasonable grounds to conclude the building work complies with Clauses E1, G12 and G13.

8.5 Taking account of the expert's report, I note the following items do not comply with the Building Code:

- The waterproofing to the shower area (Clause E3).
- The sealing of the washbasin in the toilet to the wall (Clause E3).
- The laundry bench (Clause E3).
- The sealing of the kitchen bench (Clauses G1 and G3).
- The gas cylinder (Clause G10).

8.6 I also consider that the expert's report and the other documentation, allow me to conclude that the building work is likely to comply with the remaining relevant clauses of the Building Code.

9. The appropriate certificate to be issued

9.1 Although there are no inspection records available, I am of the opinion that, with the noted exceptions (refer paragraphs 7.3.1 and 8.5), the proven in-service performance and the expert's investigation and comments, in conjunction with the applicant's assertion that inspections were carried out, provides me with reasonable grounds to conclude the compliance of the building as a whole can be established. An investigation is required by a structural engineer into the adequacy of the structural elements as noted in paragraph 8.2.

9.2 The defective items, as noted in paragraphs 7.3.1 and 8.5 require remedial work. However, it is my view that the building can be brought into compliance with the Building Code. Therefore, I must now determine whether the authority should issue either a certificate of acceptance or a code compliance certificate.

9.3 Section 437 of the Act provides for the issue of a certificate of acceptance where a building certifier is unable or refuses to issue either a building certificate under section 56 of the former Act, or a code compliance certificate under section 95 of the current Act. In such a situation, an authority may, on application by the owner, issue a certificate of acceptance or a code compliance certificate. In the case of this building work, I note that the applicant has not sought a certificate of acceptance.

9.4 Taking all the above into account, I am of the view that a code compliance certificate is the appropriate certificate to be issued in due course, once the defects have been remedied to the satisfaction of the authority, and the structural elements have been verified as adequate.

Matter 3: The durability considerations

10. Discussion

10.1 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).

10.2 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.

10.3 In this case, the delay since the substantial completion of the house in October 2004 raises the issue of when all the elements of the house complied with Clause B2, given that various elements of the building are now well through 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.

10.4 The authority has not submitted a date on which it considers the building elements complied with Clause B2. The applicant has proposed a date of 15 October 2004, being the date of substantial completion. I am satisfied that all the building elements, with the exception of those items that are to be fixed, complied with Clause B2 on 15 October 2004.

10.5 In order to address these durability issues, when they were raised in previous determinations, I sought and received clarification of general legal advice about waivers and modifications. That clarification, and the legal framework and procedures based on the clarification, is described in previous determinations (for example, Determination 2006/85). I have used that advice to evaluate the durability issues raised in this determination.

10.6 I continue to hold that view, and therefore conclude that:

(a) the authority has the power to grant an appropriate modification of Clause B2 in respect of the building elements

(b) it is reasonable to grant such a modification, with appropriate notification, because in practical terms the building is no different from what it would have been if a code compliance certificate for the house had been issued when the building work was substantially completed in 2004.

10.7 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.

11. What is to be done now?

11.1 The authority should now inspect the visible building elements of the house and issue a notice to fix that requires the owners to bring the house into compliance with the Building Code, taking into account the items listed in paragraph 7.3.1, 8.2 and 8.5 and referring to any further defects that might be discovered in the course of inspection, investigation and rectification, but not specifying how those defects are to be fixed. It is not for the notice to fix to stipulate how the defects are to be remedied and the house brought to compliance with the Building Code. That is a matter for the owner to propose and for the authority to accept or reject.

11.2 I suggest that the parties adopt the following process to meet the requirements of paragraph 11.1. Initially, the authority should inspect the house and issue the notice to fix. The owner should then produce a response to this 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 issues. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

11.3 I also note that the expert has identified some variations the house as constructed and the consent documentation, and the building consent should be amended by the applicant to reflect those changes. I would suggest this be done in conjunction with the required investigation by a structural engineer into the adequacy of the structural elements noted in paragraph 8.2.

11.4 Once the matters set out in paragraph 7.3.1, 8.2 and 8.5 have been rectified or resolved to its satisfaction, the authority may issue a code compliance certificate in respect of the building consent as amended.

12. The decision

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

- the external envelope does not comply with Building Code Clauses E2 and B2
- the house does not comply with Building Code Clauses E3, G3 and G10, and I do not have reasonable grounds to conclude the house complies with Clause B1

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

12.2 I also determine that:

(a) all the building elements installed, apart from the items that are to be rectified as described in this determination, complied with Clause B2 on 15 October 2004.

(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 15 October 2004 instead of from the time of issue of the code compliance certificate for all building elements except the items to be rectified as set out in Determination 2010/62.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 16 July 2010.

John Gardiner
Manager Determinations