Determination 2013/076

Regarding the refusal to issue a code compliance certificate for a 14-year-old house with monolithic cladding at 72 Samwell Drive, Porirua

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 and Assurance, Ministry of Business, Innovation and Employment ("the Ministry"), for and on behalf of the Chief Executive of the Ministry.

1.2 The parties to the determination are

- the owner of the house, B McKay ("the applicant")
- Porirua City Council ("the authority"), carrying out its duties as a territorial authority or building consent authority

1.3 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 was not satisfied that the building work complied with certain clauses[2] of the Building Code (First Schedule, Building Regulations 1992). The authority's concerns about the compliance of the building work relate to the weathertightness and durability of the wall cladding.

1.4 The matter to be determined[3] is whether the authority was correct to refuse to issue a code compliance certificate and to issue a notice to fix for the house. In deciding this, I must consider:

1.4.1 Matter 1: The wall cladding

Whether the monolithic wall cladding ("the cladding") to the house complies with Clause B2 Durability and Clause E2 External Moisture of the Building Code. The

[1] The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Ministry are all available at www.dbh.govt.nz or by contacting the Ministry on 0800 242 243.
[2] In this determination, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.
[3] Under sections 177(1)(b), 177(2)(d) and 177(2)(e) of the Act

cladding includes the components of the system (such as the backing sheets, the textured finish, the junctions and the flashings), as well as the way the components have been installed and work together. (I consider this in paragraph 6.)

1.4.2 Matter 2: 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 7.)

1.5 In making my decision, I have considered

- the submissions of the parties
- the report of the consultant engaged by the applicant ("the building surveyor")
- the report of the expert commissioned by the Ministry to advise on this dispute ("the expert")
- the other evidence in this matter.

2. The building work

2.1 The building work consists of a single-storey detached house situated on a level site in a high wind zone[4] for the purposes of NZS 3604[5]. The house occupies a rear section of a subdivided site, with a shared driveway providing access from the street to the east. The house is fairly simple in plan and form, and is assessed as having a low weathertightness risk.

2.2 Construction is generally conventional light timber frame, with concrete foundations and floor slab, monolithic cladding, pressed metal tile roofing and aluminium windows. The 25° pitch gabled roof has eaves of about 500mm overall and verges of about 400mm.

2.3 The monolithic wall cladding is a proprietary flush-finished fibre-cement cladding system that consists of 7.5mm thick fibre-cement sheets fixed directly through the building wrap to the framing, and finished with an applied textured coating system.

2.4 The expert forwarded a timber sample taken from the external wall framing for testing and the laboratory report confirmed that the sample was boric-treated to an equivalent of H1.2 (see paragraph 5.3.3). Given this evidence, I consider the wall framing of this house is likely to be treated to provide reasonable resistance to decay[6].

3. Background

3.1 The authority issued building consent No. ABA 990776 on 29 March 1999 to a housing company under the Building Act 1991 ("the former Act"). (I have not seen a copy of the building consent). The authority carried out various inspections during construction, including a pre-line inspection on 4 June 1999[7].

3.2 The housing company provided the applicant with a Master Builders 'Construction Certificate' dated 23 July 1999. The applicant moved into the house; believing that all final inspections had been carried out with no unresolved matters.

[4] According to the bracing calculations
[5] New Zealand Standard NZS 3604:1999 Timber Framed Buildings
[6] The durability of H1.2 treated timber was considered in Determination 2010/131
[7] The pre-line inspection record was the last record of any construction inspections that the authority has been able to locate.

3.3 I have seen no record of further inspections or correspondence until 2011, when the applicant was verbally advised that the property file for the house contained no records of final inspections or a code compliance certificate for the house.

3.4 Unable to locate the records, the applicant followed the matter up with the former owner of the housing company and was told that no records of that age were held but that 'he was not aware of any properties that were not issued with a code of compliance certificate *(sic)* as that was standard practice.'

3.5 The final inspection report

3.5.1 Further discussions with the authority failed to resolve the issue and the applicant made a new application for a code compliance certificate on 1 August 2011. The authority carried out a final inspection of the house on 5 August and wrote to the applicant on 9 August 2011, stating that its inspection had 'identified a number of defects with the cladding system which we consider constitute failures of Clauses B2 and E2 of the New Zealand Building Code 1992'.

3.5.2 The authority attached a report on its final inspection, which described the cladding and noted that the timber was unlikely to be treated. Non-invasive moisture readings had been taken, which included the following elevated readings:

- 36% in the cladding and 99% in skirting near the garage laundry tub
- 34% in skirting adjacent to ensuite shower.

3.5.3 The report included photographs of the following defects (in summary):

- On-going leak to laundry tub
- Cracks to joints in backing sheets, including at corners
- Flashings – windows/doors
- Cladding ground clearances and cladding/foundation junctions
- Impact damage to one corner and at the bottom of cladding in one location
- Lack of head flashing to garage door
- Unsealed/unflashed penetrations and meter box
- Moisture in ensuite skirting
- Moisture damage to lounge door reveals.

3.5.4 The report stated that:

> A number of defects have been identified which may have allowed the ingress of moisture. Further investigation of the entire cladding system as a whole is required in order to establish the full extent of the defects and the damage that may have occurred to the underlying timber substrate as a result of these defects.

3.6 The notice to fix

3.6.1 The above letter also attached a notice to fix, dated 9 August 2011, which stated in the 'Particulars of Contravention or Non-Compliance' that the exterior cladding system 'does not comply Clauses B2 and E2 of the New Zealand Building Code 1992'. The notice also stated that the applicants must:

> Engage an independently qualified expert to report on all aspects of the existing external cladding system as a whole including the condition of the underlying timber

substrate. The expert must identify the type of cladding system installed and provide a remedial plan to address any issues of non-compliance that may be identified.

3.6.2 The notice also referred to the qualifications required of an acceptable expert and noted that a building consent would be required for cladding remediation work.

3.7 The building surveyor's report

3.7.1 The applicant engaged a registered building surveyor who visited the house on 21 September 2011 and 5 October 2011, providing a report dated 12 October 2011. The aim of the inspection was to investigate the items identified by the authority and to determine the scope of remedial work required.

3.7.2 The surveyor carried out a 'visual and limited intrusive' inspection and confirmed the exterior defects identified by the authority (see paragraph 3.5.3). He also removed a small section of lining at the window jamb to the master bedroom, where coating cracks were most apparent and noted that, despite some staining to the bottom of the trimmer stud, moisture levels were only 15% to 16%.

3.7.3 The expert noted that the plumbing leak in the laundry tub had been repaired and moisture levels had reduced to 15% or below, with no sign of deterioration to the timber and bolt fixing. The seal of the shower to wall junction was incomplete and damage was apparent in the skirting, although moisture levels were only 14%.

3.7.4 The building surveyor took 20 moisture readings into bottom plates, noting that most of these varied from 12% to 16% which the surveyor described as 'below or within the expected equilibrium moisture content'. Two 'slightly raised' readings were

- 19% beside the garage door
- 17% at a sheet crack under the toilet window.

3.7.5 The surveyor recommended the following repairs (in summary):

- reseal and test shower screen/wall junctions
- check and rectify condensation drains to sliding doors and refinish reveals
- install flashing to extend the drip edge above the garage door
- replace damaged cladding beside the garage door
- lower ground along east garage wall to increase cladding clearance
- install protective hoods to exhaust vents and seal cable penetrations
- install flashings/seals to meter box
- various repairs to textured fibre-cement cladding system (see Table 1, paragraph 3.8.2).

3.7.6 The surveyor concluded that, providing repairs were satisfactorily carried out, the cladding would meet the manufacturer's instructions.

3.8 The authority's response to the scope of repairs

3.8.1 In an email to the building surveyor dated 22 November 2011, the authority stated that it had reviewed the report; noting the conclusion that the proposed remedial work would result in the textured fibre-cement cladding complying with the manufacturer's 1998 technical specifications.

3.8.2 The authority had reviewed the proposed repairs to the cladding and considered that the following requirements were necessary in order to comply with the 1998 technical specifications (in summary, using the authority's numbering):

Table 1:

	Identified item	Proposed scope of repairs	Authority's requirements in response
1	Internal corners	Clean out/seal joint	Confirm 80mm wide 'Inseal' tape
2	Cracks	Grind out/reform joints	Assess framing condition behind Establish reason for cracking and rectify
3	Window heads	Reseal head flashing ends	Provide 5mm drainage gap between upper cladding and flashing
4	Window jambs	Reseal jamb junctions	Install seals behind jamb flanges
5	Cladding base	Remove foundation plaster and install closed cell foam	Install 'Inseal' tape, provide 6mm anti-capillary gap and seal back of fibre cement sheet
6	Cladding surface	Seal all exposed edges, repair damage and repaint.	No comment

3.8.3 The authority stated that if practical compliance with the manufacturer's 1998 specifications was not possible, then proposals needed to be assessed as alternative solutions. Confirmation was also needed that the proposed remedial work would result in the cladding complying with Clauses B2 and E2 of the Building Code.

3.9 Subsequent correspondence

3.9.1 Further correspondence and discussions followed between the authority and the building surveyor regarding the impracticality of removing cladding at internal corners and cracked joints (items 1 and 2) and of removing windows and doors to install seals behind jamb flanges (item 4).

3.9.2 During 2012, the building surveyor also sought guidance from the manufacturer's representative and obtained quotes for two repair and recoating options from a coating company (neither of which included removing joinery). The authority apparently agreed to accept invasive moisture testing during repairs of cladding cracks as a means of determining whether moisture had entered framing.

3.9.3 On 27 November 2012, the building surveyor retired and withdrew from the project; providing the applicant with names of several other building surveyors. In the meantime, the applicant had obtained another recoating quotation and submitted this to the authority on 12 December 2012.

3.9.4 Further correspondence continued between the authority and the applicant, with the authority confirming that although underlying timber could be assessed during repairs without removing wall cladding:

> Simply plastering over the cracks will not address the defects in [the building surveyor's report] as the reasons for the cracking need to be identified, any damage to the framing assessed and systems put in place to ensure that further cracking will not occur again in the future.

3.10 The Ministry received an application for a determination on 3 May 2013.

4. The submissions and the draft determinations

4.1 The initial submissions

4.1.1 The applicant provided a detailed submission dated 25 April 2013, which set out the background to the dispute and explained the efforts made to satisfy the authority's requirements since discovering in 2011 that the authority held no record of a code compliance certificate having been issued for the house. Discussions with the former owner of the housing company led her to conclude that the authority had issued a certificate but had lost it along with other documentation. Despite considering the authority's present demands to be 'inappropriate and unfair'; she was prepared to have the cladding repaired and refinished, which the applicant considered'goes above and beyond what is required.'

4.1.2 The applicant forwarded copies of

- the drawings and specification
- the available 1999 inspection records
- the housing company's 'Construction Certificate' dated 23 July 1999
- the authority's letter, inspection report and notice to fix dated 9 August 2011
- the report from the building survey dated 12 October 2011
- correspondence between the applicant, the building surveyor and the authority
- various other certificates, statements and other information.

4.1.3 In a submission received on 9 May 2013, the authority outlined the background to the situation noting that its final inspection on 5 August 2011 identified wall cladding defects which 'constitute failures of Clauses B2 and E2' and it was therefore obliged to issue a notice to fix. The authority had considered the building surveyor's report and 'remediation plan' and, following correspondence and discussions, had concluded that the proposals would not fully comply with the manufacturer's specifications. Correspondence with the applicant following the surveyor's retirement had failed to resolve the situation. The authority also considered that a modification of Clause B2.3.1 was inappropriate because the cladding as a system was not installed in accordance with the manufacturers specifications, and also because it had not been maintained.

4.1.4 The authority forwarded similar information to that provided by the applicant.

4.2 The first draft determination

4.2.1 A draft determination was issued to the parties for comment on 15 August 2013. The draft was issued for comment and for the parties to agree a date when the house complied with Building Code Clause B2 Durability.

4.2.2 The applicant responded in a letter dated 5 September 2013 requesting that a hearing be held on the matter.

4.2.3 The authority made no response to the first draft determination.

4.3 The hearing

4.3.1 I held a hearing in Porirua on Thursday 24 October 2013 at the request of the applicant. I was accompanied by a Referee engaged by the Chief Executive under section 187(2) of the Act, together with an officer of the Ministry. A representative of the authority, the applicant, and a builder advising the applicant were present.

4.3.2 Both parties spoke at the hearing and various matters were clarified regarding the process required for a code compliance certificate to be obtained after the determination is issued.

4.3.3 The applicant sought clarification on the items requiring remediation, and the builder and the applicant outlined proposed solutions for the identified defects.

4.3.4 The authority noted its disagreement with the expert's view expressed in table 3 (refer paragraph 5.4.4) that the back of the fibre-cement sheets did not require sealing.

4.4 The second draft determination

4.4.1 The draft determination was amended to take account the submissions received and the hearing, and a second draft was issued to the parties for comment on 4 November 2013.

4.4.2 The applicant accepted the second draft without comment on 7 November 2013, noting that she accepted 23 July 1999 as the date the durability periods should commence.

4.4.3 The authority responded to the draft on 3 December 2013. The authority accepted the draft but considered:

> … it is unfortunate that the owner will need to engage a further expert to produce a response to the revised notice to fix in the form of a detailed proposal for the house as a whole, as to the rectification or otherwise of the defects described in paragraph 6.3.1.
>
> … the determination could have considered the [building surveyors] remediation solutions in terms of compliance with the building code…

4.4.4 The authority considered that the Ministry 'should fully investigate all issues preventing the issuance of a code compliance certificate' and suggested that the Ministry should also consider 'the suitability of alternative solutions' proposed to remedy any defects.

4.4.5 The applicant responded to the authority's submission on the same day noting she did not believe she was required to engage an expert in order to develop a remediation proposal.

4.4.6 In response to the authority's submission I note the following:

- The determination does not require the applicant seek further expert advice.
- The remediation proposals were put forward by the builder at the hearing (refer paragraph 4.3.3) and there is no reason why such proposals cannot be used to provide a compliant solution. A builder can equally be considered a person with suitable experience in weathertightness remediation work.
- The builder's remediation proposals are not dissimilar to that proposed by the building surveyor.

- The authority, as an approved building consent authority, is able to assess proposed alternative solutions without the assistance of the Ministry.

5. The expert's report

5.1 General

5.1.1 As mentioned in paragraph 1.5, 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 28 June 2013 and provided a report dated 1 August 2013, which was provided to the parties on 6 August 2013.

5.1.2 The investigation aimed to assess 'the work and conclusions reached by [the building surveyor] in order to form a view on the cladding's weathertightness performance' and also to comment on internal moisture in regard to a shower.

5.1.3 The expert described the construction quality as 'average to the days standard', noting that the cladding had been finished 'to a standard acceptable at the time' and considered it 'at the higher end of the scale of the day with a number of variances to the specifications being considered normal'. The expert noted that no or minimal cladding maintenance had been carried out to the building envelope.

5.1.4 The expert scraped a small area of plaster and fibre-cement from a cracked internal corner on the northwest elevation and was able to observe that a rubber or compressed foam seal had been installed behind the backing sheets.

5.2 Windows and doors

5.2.1 The expert observed that windows and doors were face-fixed against the fibre-cement backing sheets prior to applying the coating system. Probing revealed no seals behind jamb flanges, with the textured coating taken over the jamb junction and onto the top of the head flashing – impeding drainage from cladding above windows.

5.2.2 The expert inspected framing exposed at the building surveyor's cut-out below the master bedroom window (see paragraph 3.7.2); noting that water had run down the jamb trim stud onto the bottom plate, resulting in 'minor damage' to the timber.

5.3 Moisture levels

5.3.1 The expert took invasive readings into the fibre-cement backing sheets, along with readings through the cladding into the framing at sample locations measured by the building surveyor and considered to be at risk of moisture penetration.

Table 2:

Position	Moisture level in cladding	Moisture level in framing	Building surveyors report
Window to north east dining wall	28%	**15%**	14%
Window to north east bedroom 3	62%	**17%**	12%
Window to south east garage wall	42%	**18%**	13%
Meter box to south east garage wall	33%	**20%**	13%
Window to south west bedroom 4	43%	**18%**	15%

5.3.2 Moisture levels above 18% in the framing generally indicate that external moisture is entering the structure and investigation is needed. The expert noted that readings were taken during a cold wet winter period and I consider they would represent the higher level of seasonal variation. The expert also noted that, despite high moisture levels in the fibre-cement backing sheets, little moisture had penetrated into the timber framing.

5.3.3 The expert took a timber sample from exterior wall framing forwarded it to a testing laboratory for analysis; the biodeterioration consultant's analysis confirmed the sample as boric-treated to an equivalent of H1.2. The expert noted that the result was consistent with his observations.

5.3.4 Commenting specifically on the cladding, the expert noted that

- cracking has occurred at joints in the backing sheets, including at internal corners and is particularly evident on the exposed northwest elevation
- there is no drainage gap above the head flashing to windows and doors installed into gable end walls where joinery heads are exposed
- windows are face-fixed against fibre-cement backing sheets, with no seals behind jamb flanges and the coating applied after the window installation
- some of the bottom edges of fibre-cement backing sheets are unsealed
- the decorative plaster finish to foundations is blocking the drainage gap at the bottom of the cladding, but can be easily removed
- some cladding penetrations are insufficiently sealed and the meter box is not weathertight, allowing moisture to penetrate into the wall
- some cladding clearances are insufficient (see also paragraph 5.3.5)

General maintenance

- the cladding is due for re-painting and the coating requires repair
- lower corners and edges of cladding are damaged, exposing fibre-cement
- sealants at the ends of head flashings and some penetrations are deteriorating
- the minor leak at the shower screen requires attention.

5.3.5 The expert made the following additional comments:

- Although the base of the cladding lacks a seal, a gap has been provided that is sufficient to allow drainage and any potential moisture penetration would be likely to result from unsealed fibre-cement bottom edges allowing moisture to wick up and into the bottom plate.
- Although the back of the fibre-cement backing sheets have not been sealed, this is a common defect and is unlikely to cause moisture problems providing other identified defects are remedied and the cladding is maintained.
- Although there is a small section of cladding beside the garage door where clearances are insufficient, these are well drained surfaces sheltered by eaves and considered generally satisfactory if the plaster screed is removed and some additional protection provided. (I note that the applicant had earlier suggested adding a slot drain across that area as protection.)

- Although cladding butts against the top of head flashings, where there is shelter from the eaves this is unlikely to lead to moisture penetration.

5.4 The expert's conclusions

5.4.1 The expert concluded that the cladding was allowing low levels of moisture into the framing, but there was no sign of significant framing damage; adding that some items require 'repair and minor alteration' and the cladding is overdue for maintenance.

5.4.2 He also considered that incorporating some manufacturer's details would not have significantly changed the cladding's performance in respect of the requirements of Clause E2 of the Building Code.

5.4.3 In his opinion, the primary reason the cladding was not currently complying with Clause E2 was

> ...because the cladding system has not been maintained (it has essentially complied for many years of in-service exposure before finally failing to meet the original performance requirements due to a lack of maintenance).

5.4.4 The expert's comments on the authority's requirements are summarised as follows (with my comments added in brackets):

Table 3:

	Identified item	Authority's requirements	Expert's comments	Paragraph references
1	Internal corners	Seals behind corners	Installation of seals confirmed.	5.1.4
2	Cracks	Assess condition of timber framing behind cracks	Framing confirmed as H1.2 treated, with evidence of only minor moisture penetration or damage to date.	5.3.3 5.3.1 5.2.2
		Establish cause(s) for cracking	(I note that several walls are longer than 5.4m with no control joints.)	5.3.4
3	Window heads	Drainage gap between flashing and upper cladding	Coating taken over flashing (unlikely to lead to moisture penetration for windows sheltered beneath eaves).	5.2.1 5.3.4 5.3.5
4	Window jambs	Seals behind flanges	Has resulted in elevated moisture, with minor damage to one exposed window confirmed.	5.3.1 5.2.2
5	Cladding base	Seals behind edge	Seals not considered necessary.	5.3.5
		Anti-capillary gap	Sufficient drainage gap provided if foundation plaster finish removed.	5.3.4
		Seal back of sheets	Not considered necessary	5.3.5
6	Cladding surface	(building surveyor's proposed work apparently accepted)	All exposed edges require sealing and damage requires repair. Cladding due for recoating/repainting Lack of maintenance primary cause of moisture penetration	5.3.4 5.4.1

6. The compliance of the external envelope

6.1 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).

6.2 Weathertightness risk

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

Increasing risk

- the house is in a high wind zone
- the walls have monolithic cladding fixed directly to the framing

Decreasing risk

- the single-storey house is simple in form, with few complex junctions
- the wall cladding is sheltered by eaves and verges.
- the external wall framing is treated to provide resistance to decay if it absorbs and retains moisture.

6.2.2 Using the E2/AS1 risk matrix to evaluate these features, the elevations are assessed as having a low weathertightness risk rating. If details shown in the current E2/AS1 were adopted to show code compliance, a drained cavity would be required for all elevations. However, this was not a requirement at the time of construction.

6.3 Weathertightness performance

6.3.1 Taking account of the expert's report and the building surveyors report, I conclude that remedial work is necessary in respect of the following areas:

- the cracks to the cladding
- the unsealed/unflashed meter box and vent
- for the face-fixed windows and doors, the
  - unsealed jamb flanges
  - lack of drainage gaps above head flashings to joinery in gable end walls
- for the base of the cladding, the
  - cladding clearance beside the garage door
  - drainage gaps blocked by foundation plaster
  - unsealed bottom edges to fibre-cement backing sheets
- in regard to the lack of internal and external maintenance;
  - deteriorating exterior paint and coating finishes, cracks and damage
  - unsealed/unpainted edges of fibre-cement backing sheets
  - deteriorating sealants to cladding penetrations and ends of head flashings
  - for the shower, the leak at the shower screen to wall junction.

6.3.2 I also note the expert's comments as outlined in paragraph 5.3.5 and accept that these areas are adequate in the particular circumstances described.

6.4 Weathertightness conclusion

6.4.1 I consider the expert's report establishes that the current performance of the textured fibre-cement cladding is not adequate because there is evidence of moisture penetration into the backing sheets and the timber framing. Consequently, I am not satisfied that the house currently complies with Clause E2 of the Building Code.

6.4.2 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 house to remain weathertight. Because the cladding faults will allow continue to allow the ingress of moisture in the future, the building work does not comply with the durability requirements of Clause B2.

6.4.3 Because the identified cladding faults occur in discrete areas, I am able to conclude that satisfactory investigation and rectification of the items outlined in paragraph 6.3.1 will result in the external envelope being brought into compliance with Clauses B2 and E2 of the Building Code.

6.5 Maintenance

6.5.1 I note that the wall cladding is already 14-years-old, which is almost the minimum effective life required for this element. However, the wall cladding has not remained weathertight for the minimum 15 years required by the durability provisions (see paragraph 7.3) and the expert considered that this has been primarily caused by the lack of maintenance to the textured fibre-cement cladding.

6.5.2 Effective maintenance of claddings is important to ensure on-going compliance with Clauses B2 and E2 of the Building Code and is the responsibility of the building owner. The Ministry has previously described these maintenance requirements, including examples where the external wall framing of the building may not be treated to a level that will resist the onset of decay if it gets wet (for example, Determination 2007/60).

6.6 The notice to fix

6.6.1 This building consent was issued under Section 34 of the former Act. If a code compliance certificate had been applied for on completion in 1999, the authority would have considered that application and issued a notice to rectify if it did not consider that the building work complied with the Building Code.

6.6.2 When the applicant requested a code compliance certificate in 2011, the consent was still 'open' and, as such, the transitional provisions of the 2004 Act apply. These include the requirement for an authority to issue a code compliance certificate only if it 'is satisfied that the building work concerned complies with the building code that applied at the time the building consent was granted'. As the authority was not satisfied that the work was code compliant, it issued a notice to fix (the equivalent of a notice to rectify under the former Act).

6.6.3 I am satisfied that this house does not comply with the Building Code and that the authority made appropriate decisions to refuse to issue a code compliance certificate and to issue a notice to fix. This determination identifies some specific areas that need to be addressed and the notice should be modified accordingly.

7. The durability considerations

7.1 The authority has concerns about the durability, and hence the compliance with the Building Code, of certain elements of the building taking into consideration the completion of the house in 1999.

7.2 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).

7.3 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.

7.4 The delay since the completion of this building raises concerns that many 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. However, aside from those items identified in this determination, I have not been provided with any evidence that the remaining building elements did not comply with Clause B2 in 1999.

7.5 It is not disputed, and I am therefore satisfied, that with the exception of those elements set out in paragraph 6.3.1, all the building elements complied with Clause B2 on 23 July 1999. I consider the defects to the house are discrete in nature, and I do not accept the authority's view that a modification of Clause B2.3.1 is inappropriate (refer paragraph 4.1.3).

7.6 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.

7.7 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 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 1999.

7.8 I strongly recommend 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.

8. What happens next?

8.1 The notice to fix should be modified to take account the findings of this determination, identifying the items listed in paragraph 6.3.1 and referring to any further defects that might be discovered in the course of investigation and rectification, but not specifying how those defects are to be fixed. It is not for the notice to stipulate directly how the defects are to be remedied and the house brought to compliance with the Building Code. That is a matter for the owners to propose and for the authority to accept or reject. It is important to note that the Building Code allows for more than one means of achieving code compliance.

8.2 I suggest that the parties adopt the following process to meet the requirements of paragraph 8.1. Initially, the authority should revise and reissue the notice to fix. The owner should then produce a response to this in the form of a detailed proposal for the house as a whole, produced in conjunction with a competent person with suitable experience in weathertightness remediation, as to the rectification or otherwise of the specified matters and apply for an amendment to the consent to record the remedial work. Any outstanding items of disagreement can be referred to the Chief Executive for a further binding determination.

8.3 Once the matters set out in in paragraph 6.3.1 have been rectified to its satisfaction, the authority shall issue a code compliance certificate in respect of the building consent amended as outlined in paragraph 7.

9. The decision

9.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the external building envelope does not comply with Clauses B2 and E2, and the shower screen to wall junction does not comply E3 of the Building Code that was current at the time the consent was issued. Accordingly I confirm the authority's decisions to refuse to issue a code compliance certificate and to issue a notice to fix for the building work.

9.2 I also determine that all the building elements installed in the house, apart from the items that are to be rectified as described in Determination 2013/076, complied with Clause B2 on 23 July 1999: 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 23 July 1999 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 6.3.1 of Determination 2013/076.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 9 December 2013.

John Gardiner
Manager Determinations and Assurance