Department of Building and Housing
Te Tari Kaupapa Whare

Determination 2012/017

Refusal to issue a code compliance certificate for a 7-year-old apartment building at 23 Marine Parade, Mount Maunganui, Tauranga

1. The matters to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004[1] ("the current 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, Button, Pumpkin and Co Ltd ("the applicant") acting through an agent, and the other party is the Tauranga City Council ("the authority"), carrying out its duties as a territorial authority and a building consent authority.

1.2 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for a 7-year-old apartment building ("the apartment building"), because it is not satisfied that the building work complies with certain clauses[2] of the Building Code (First Schedule, Building Regulations 1992). The authority's concerns relate to the apartment building's age and weathertightness.

[1] The Building Act 2004, the Building Code, the Compliance Documents, past determinations and guidance documents issued by the Department are available from the Department's website 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 The matter to be determined[3] is therefore whether the authority was correct to refuse to issue a code compliance certificate. In deciding this, I must also consider:

1.3.1 Matter 1: The external envelope

Whether the external building envelope of the apartment building complies with Clauses B2 Durability and E2 External Moisture. The building envelope includes the components of the systems (such as the monolithic cladding, the stone veneer, the plastered concrete block walls, the windows, the tiled decks, the roof membranes and the flashings), as well as the way the components have been installed and work together. (I consider this in paragraph 6.)

1.3.2 Matter 2: The durability considerations

Whether the building elements comply with Clause B2 Durability, taking into account the age of the building. (I consider this in paragraph 7.)

1.4 Matters outside this determination

1.4.1 I note that all inspections during the construction of this apartment building were undertaken by a building certifier approved under section 53 of the Building Act 1991 ("the former Act"). During 2003, the scope of approval for building certifiers was amended to exclude claddings outside Clause E2/AS1, and the project was therefore passed to the authority for completion of the cladding inspections. The certifier inspecting this particular building ceased operating as a building certifier in 2005.

1.4.2 A different building certifier, who continued operating under another name as the authority's agent, provided inspection services for the authority ("the authority's contractor"). I note that neither the authority nor its contractor raised any concerns about the original certifier's inspections of other elements of the construction. Accordingly, this determination is restricted to the matters described in paragraph 1.3.

1.5 In making my decisions, I have considered the applicant's submission, the report of the expert commissioned by the Department to advise on this dispute ("the expert"), and other evidence in this matter.

2. The building work

2.1 The building work consists of an apartment building that is three-storeys high in part with a basement carpark. The building is situated on a level corner site in a high wind zone for the purposes of NZS 3604[4]. The site faces the beachfront road, with basement access via a vehicle ramp from the side road. The building is complex in plan and form and is assessed as having a very high weathertightness risk.

2.2 The expert's report has taken the main entry face of the apartment building to be the north elevation; and this determination continues that convention. The building accommodates four dwellings, with carparking and storage in the basement level,

[3] Under sections 177(1)(b), and 177(2)(d) of the Act
[4] New Zealand Standard NZS 3604:1999 Timber Framed Buildings

Apartments 2, 3 and 4 in the ground floor level, and Apartment 1 in the two upper levels.

2.3 Construction

2.3.1 The basement and ground floor levels have a specifically engineered structure. The basement has concrete foundations and floor slab, reinforced concrete columns and beams and concrete block retaining walls supporting a suspended proprietary precast concrete ground floor slab. Concrete block ground floor walls support another concrete floor slab which forms the lower level floor of Apartment 1.

2.3.2 The remaining construction is generally conventional light timber frame, with a timber-framed floor to the upper level, monolithic and stone wall claddings, aluminium windows and butyl rubber membrane roofing. The timber-framed external walls extend to form parapets around multi-level flat roofs and decks.

2.3.3 A framed 'chimney' extends above the first floor living room roof, with a stone capping supported on stone spheres. The framed lift shaft extends above the second floor south corner, with the membrane-covered roof bordered with decorative stone bands and spheres.

2.3.4 The drawings call for exterior wall and balustrade framing to be 'H3 CCA treated' and the laboratory testing arranged by the expert has confirmed that timber samples from external wall/balustrade framing were 'treated with tributyl tin' to an equivalent of H3.1. Given this evidence and the date of framing installation during 2004, I accept that the wall framing of this apartment building is likely to be treated.

2.4 The decks

2.4.1 Apartment 1 has ten decks on its lower level north, west and south elevations ("the cantilevered decks"). These decks extend from the first floor level of the building, with open metal balustrades and concrete floors. Decks are sized to accommodate the width of french doors with their decorative stone bands at jambs.

2.4.2 Apartment 1 has four additional decks situated above lower rooms as follows:

- Deck 1 opens from the second floor master bedroom on the north face, with the roof extended over the deck and supported on framed columns.
- Deck 2 opens from the second floor lift/stair lobby at the southeast corner, with exterior stairs ("the deck stairs") to Deck 4 below.
- Deck 3 is a small deck, with open metal balustrades, and which opens from the second floor study on the south face.
- Deck 4 is a large deck on the first floor, which extends the full length of the east elevation and along the north up to the main entry porch. The deck stairs provide access up to Deck 2 on the second floor.

2.4.3 The drawings call for deck falls of 1:75 toward gutters and outlets beside the balustrades, with deck floor substrates as follows:

- First floor decks: precast concrete floor slabs stepped down from inside levels.
- Second floor decks: 17.5mm H3 CCA treated plywood screw-fixed to framing.

2.4.4 The drawings call for 15mm thick stone tiles adhered to a synthetic butyl rubber membrane, which is confirmed by the membrane supplier's producer statement dated 7 September 2006. The drawings also called for butyl rubber to the deck stairs to be overlaid with membrane, but this had been replaced with a liquid-applied membrane.

2.4.5 The expert observed that the original installed deck stair membrane was a liquid-applied membrane (see paragraph 5.11.1), and the producer statement notes the use of a liquid-applied system comprising a multi-coat 1.2mm to 1.5mm thick liquid-applied, glass-fibre mat reinforced membrane. The manufacturer's instructions note that the membrane may be used as a waterproof membrane under tiles.

2.5 The wall claddings

2.5.1 The cladding system to most timber-framed walls is a form of monolithic cladding system known as EIFS[5]. This proprietary EIFS system includes 40mm polystyrene backing sheets fixed through castellated 20mm polystyrene battens and the building wrap to the framing and is finished with a proprietary coating system. The EIFS cladding includes purpose-made flashings to windows, edges and other junctions. Concrete beams, columns and block walls are plastered to provide a smooth finish, and are finished with an applied textured coating system to match the EIFS.

2.5.2 Deck balustrades, framed columns and parapets are clad in proprietary stone 'slips' adhered to 9mm fibre-cement backing sheets fixed through 20mm cavity battens and building wrap to the framing. The stone-clad balustrades and parapets form 'bands' that project by about 50mm beyond the EIFS face, with decorative profiled stone mouldings planted along the top.

2.6 The stone-clad balustrades and parapets

2.6.1 The balustrade framing is wrapped and covered with fibre-cement backing sheets, with flexible flashing tape over the top and stone applied to both sides. Stone mouldings and stone cappings are installed to the balustrade tops.

2.6.2 The parapets to first floor roofs ("the lower parapets") are clad in stone on both sides, with roof membrane extended up plywood backing sheets, over the top plate and turned down over the fibre-cement backing sheets on the outer face. Stone mouldings are planted at the top of the bands, with stone cappings to the tops.

2.6.3 At the second floor roof parapets ("the upper parapets"), the roof membrane extends up and over the top plate, with stone mouldings planted at the top of the bands and copper cap flashings over the tops.

3. Background

3.1 The authority issued a building consent for the apartment building (No. 10677) on 17 April 2003 under the former Act, based on a building certificate (No. 03/70) dated 31 March 2003 issued by the building certifier. I have not seen copies of the building consent or of the building certificate.

[5] Exterior Insulation and Finish System

3.2 The inspections

3.2.1 The building certifier carried out the following inspections during construction:

- Foundations, basement slab, lift well and columns to basement during May and June 2003 (which passed).
- Basement blockwork, concrete beams and ground floor concrete slab during July 2003 (which passed).
- Ground floor blockwork, concrete beams and first floor concrete slab during August 2003 (which passed).
- Pre-line building and plumbing inspections of Apartments 2 and 3 on 4 December 2003 (which passed).
- Pre-line building and plumbing inspections of the upper level of Apartment 1 on 22 January 2004 (which passed).
- Pre-line building and plumbing inspections of first floor lower level of Apartment 1 on 3 February 2004 (which passed).
- Drainage inspection on 9 June 2004 (which passed).
- Blockwork to vehicle ramp boundary wall on 29 October 2004 (which passed).

3.2.2 The building certificate issued on 1 November 2004 notes that it excludes 'exterior cladding' and states it is:

> A Building Certificate issued in respect of the building work with exclusions under the above building consent up to and including the last inspection dated 29 October 2004.

3.2.3 I have seen no records of further inspections of the building, which appears to have been substantially completed by the end of 2004. The building certifier's approval as a building certifier subsequently expired during 2005 and the project was passed to the authority's contractor for completion of the necessary cladding inspections and required documentation.

3.2.4 Various producer statements and warranties were provided during 2005 and 2006, but I have seen no records of any inspections carried out by the authority's contractor.

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

3.3.1 The applicants engaged a builder to inspect the apartments and in a letter to them dated 22 November 2009, the builder concluded that 'no leaks or repairs have occurred since completion 2003.'

3.3.2 Seeking a code compliance certificate for the building, the applicant's agent met with the authority's contractor at the site on 4 April 2011. The site visit record noted 'no obvious signs of moisture ingress', but identified a number of concerns about the claddings, including (in summary):

- inadequate drainage and venting of EIFS and stone claddings
- insufficient clearances at deck door thresholds
- insufficient cladding clearances at wall to deck/roof junctions

- the condition of the roof membrane
- the condition of roof gutters, with water ponding and no overflows
- the adequacy of roof parapets.

3.3.3 In a letter to the applicant dated 8 April 2011, the authority attached a copy of the site visit record and incorrectly described the building as 'alterations to a private hotel'. (I note that this referred to an earlier renovation of a hostel prior to the applicant's purchase of the property in 2000). The authority noted that a full inspection of the building had not been carried out, but 'matters of concern' had been observed and there were:

> ...enough of these in relation to compliance with NZBC E2 and B2, as set out in the notice to believe that a full survey of the building is warranted.

3.4 The Department received an application for a determination on 12 August 2011. Awaiting approval to undertake invasive investigations delayed further progress on the determination until November 2011.

4. The submissions

4.1 On behalf of the applicant, the agent explained the background to the situation and described materials used in the cladding systems; noting that the building had been constructed in accordance with the consent documents and the Building Code requirements at the time. The agent also noted that the applicant 'would be happy' for the durability provisions to commence from the date of substantial completion in 2004.

4.2 The applicant provided copies of:

- some of the consent drawings
- the building certifier's inspection summary
- the authority's contractor's site visit record
- the authority's letter dated 8 April 2011
- various producer statements, warranties and other information.

4.3 The authority acknowledged the application but made no submission.

4.4 A draft determination was issued to the parties on 3 February 2012. The draft was issued for comment and for the parties to agree dates when the apartment building complied with Building Code Clause B2 Durability.

4.5 Both parties accepted the draft without further comment and agreed that compliance with B2 was achieved on 29 October 2004.

5. The expert's report

5.1 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 visually inspected the building on 22 September 2011, revisiting it on 1 November and 25 November 2011.

5.2 The expert provided a report dated January 2012, which noted that although cladding details generally appeared to accord with the consent drawings there were several areas that didn't. The expert also noted that 'attention to detail' appeared to be relatively high, apart from those areas outlined below.

5.3 The expert identified vulnerable weathertightness areas in his initial inspection; and when approval was received carried out invasive investigation in the November inspections. The six main areas of concern identified by the authority (see paragraph 3.3.2) were assessed, along with four further areas observed to be at risk of moisture penetration.

5.4 Destructive investigations

5.4.1 To investigate underlying construction, the expert removed light fittings, grout or small sections of cladding and linings ("the cut-outs") at various locations. The expert made cut-outs at the following areas, and took five timber samples for analysis.

- Cut-out A (Sample 1/1): to inner face of first floor deck balustrade.

  Where light fittings were removed, the expert observed that the stone is adhered to fibre-cement backing sheets installed over timber battens and building wrap to the framing. The expert noted that the battens were castellated, including the horizontal batten at the base of the inside face.

- Cut-out B (Sample 2/1): to first floor deck balustrade capping stone.

  The expert observed that the framing is wrapped and covered in fibre-cement, with flexible flashing tape over the top and stone applied to the sides and top.

- Cut-out C: to first floor roof parapet capping stone and inside face.

  The expert observed that stone is adhered to the roof membrane; which extends up and over plywood substrate and top plate, turning down over the backing sheets to the outside stone. The expert observed moisture trapped against the membrane on the inner face after it had penetrated through the grout.

- Cut-out D: to grout between stone on the underside of upper parapet band.

  Removal of grout allowed the expert to observe the cavity and horizontal castellated battens.

- Cut-out E (Samples 2/2, 2/3 and 2/4): to deck staircase timber framing.

  Removal of fibre-cement linings to the underside of the deck staircase between Deck 2 and Deck 4 allowed the expert to observe past repair work, noting water staining on timber and 21% moisture content in the treads.

- Cut-out F: to lining of room beneath the top-fixed balustrade to Deck 3.

  The expert observed no signs of moisture, with 13% moisture content measured in the framing.

- Cut-out G: to apartment 4 living room skirting and lining.

  Signs of moisture and damage on internal timber battens to the concrete block walls were observed.

- Cut-out H: to basement carpark ceiling lining.

  Moisture-damaged carpark ceiling lining was removed and the expert observed moisture around a 100mm uPVC service pipe penetrating the wall.

5.5 Decay analysis

5.5.1 The laboratory report dated 3 October 2011 ("report 1") stated that Sample 1/1 was 'treated with tributyl tin' to an equivalent of H3.1. This sample 'contained fungal growths, but no structurally significant decay' and would be 'typically found in moisture compromised wall cavities and other locations'.

5.5.2 The second laboratory report dated 23 November 2011 ("report 2") stated that Sample 2/1 was also 'treated with tributyl tin' to an equivalent of H3.1. This sample contained 'traces of yeasts', possibly as a result of moisture ingress. The report also noted that the treatment of balustrade framing had likely mitigated the onset of significant decay in balustrade framing, but would not prevent future damage.

5.5.3 The report noted that Samples 2/2 and 2/4 were either 'perishable radiata pine, or were LOSP treated, this most likely depending on the age of the building'. Sample 2/3 was CCA treated to an equivalent of H3.2. All three samples from the staircase framing contained 'dense fungal growths' and had come 'close to conditions conducive to decay', but contained 'no structurally significant decay'.

5.6 Moisture testing

5.6.1 The expert noted signs of moisture staining to the bottom of external walls to ground floor Apartments 3 and 4. Removal of linings (Cut-out G) revealed moisture and damage to battens. The area was left open for two months and the next inspection observed that, although the timber had dried, there was still evidence of moisture at the junction of the concrete block wall with the concrete floor.

5.6.2 The expert hose-tested the junction but was unable to confirm that moisture originated from ground level. The expert considered that further investigation was needed, as moisture penetration may be due to one or more defects above in:

- parapet or roof/wall junctions
- cantilevered deck floor to wall junctions
- the EIFS to concrete block wall junctions
- the bottom of other EIFS and stone clad walls.

5.6.3 The expert carried out limited invasive moisture testing in addition to the destructive testing described above. Moisture readings generally ranged from 10% to about 15%, indicating the likely equilibrium moisture content in the framing. Two readings were elevated as follows:

- 21% in balustrade top plate to Deck 4 (Cut-out B)
- 21% in the deck stair treads (Cut-out E)

Moisture levels above 18%, or which vary significantly, generally indicate that external moisture is entering the structure and further investigation is needed.

5.7 Wall claddings

5.7.1 The expert was able to observe that the proprietary EIFS system to the timber-framed upper level walls is installed over castellated polystyrene battens, with uPVC closures at the bottom of the cavities. The system was generally in accordance with the manufacturer's instructions for the cavity system introduced in April 2003.

5.7.2 The expert noted that stone is installed to balustrades, parapets and some other areas. Investigations of the balustrades confirmed that the stone is adhered to fibre-cement backing sheets, which have been installed over timber battens and building wrap to the framing, with the top wrapped in flexible flashing tape. At the bottom of parapet bands, limited weep holes in the grout provide drainage to cavities.

5.8 Windows and doors

5.8.1 The expert noted that windows and doors in the timber-framed walls are installed within the EIFS cladding, and generally appear to accord with the drawings and the manufacturer's instructions at the time.

5.8.2 Vertical bands of decorative stone are installed over the EIFS at the sides of joinery units. The 175mm wide bands butt against the underside of the projecting parapet and balustrade stone-clad bands. At door sills, the deck membranes extend behind the sills, with deck floor tiles reducing clearances to the interiors to about 50mm.

5.9 Membrane roofs

5.9.1 The expert observed that the 1.5mm butyl rubber membrane to upper and lower roofs generally appeared in good condition, with no evidence of significant peaking or popping, but some fading as expected after seven years.

5.9.2 Despite lacking some corner coving, there was no sign of damage. While the use of lap tape could not be confirmed, there was no sign of any deterioration at seamed joints. All roof areas had more than one outlet but no overflows.

5.10 Roof parapets

5.10.1 At upper roof parapets, the roof membrane extends up the inner face of the parapet, with a copper capping to the top. The expert noted that joints are soldered, with expansion joints provided and junctions with walls sealed with sealant. At lower

roof parapets, the membrane extends up and over the parapet backing sheets, with stone adhered to the top and roof side of the membrane.

5.11 The deck stairs

5.11.1 Drawings called for the prefabricated timber stairs linking Deck 2 and Deck 4 to be overlaid with butyl rubber membrane, extended 200mm up the sides of the walls and balustrades. However, a liquid-applied membrane had been installed instead.

5.11.2 The expert discovered that the stairs had leaked and repairs were undertaken in 2009. Construction photographs of the repair work and destructive investigations (see paragraph 5.4.1 Cut-out E) confirmed that:

- decayed timber treads and risers were replaced
- new plywood substrate was installed, with joints and junctions taped
- stone adjoining the staircase was removed
- plaster over the adjoining EIFS was ground back
- liquid-applied membrane was installed, extending over landing and stringers
- stone and plaster was applied where removed
- new spaced timber decking was installed above the membrane.

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

General

- elevated moisture levels recorded in timber below indicates a full investigation is needed into the durability and weathertightness of repairs to the deck stairs
- investigation is needed into the cause(s) for moisture ingress into some junctions between the concrete block walls and the concrete ground floor
- investigation is needed into the durability of seals to:
  - the aerial fixed through the roof membrane
  - the top-fixed metal balustrade to Deck 3
- a pipe penetration through the concrete block basement wall below ground level is allowing moisture to penetrate
- in some areas, there is no drainage at joinery sills to allow any moisture entering around joinery to freely drain to the outside

Cavity drainage

- moisture can penetrate joints of the stone cladding and through the fibre-cement backing sheets into cavities, which have insufficient drainage at:
  - the stone-clad parapet bands
  - some stone-clad deck balustrades
  - stone vertical bands at doors to first floor cantilevered concrete decks
- there is also insufficient drainage from some cavities at:
  - junctions between EIFS and plastered concrete block walls

- junctions between the horizontal stone ledges beside deck stairs and the adjacent EIFS and stone claddings.

Balustrades and parapets

- flat stone cappings to balustrade tops allow moisture to penetrate, with fungal growth detected in a top plate
- flat stone cappings to lower roof parapet tops allow moisture to penetrate into, and become trapped within, ineffectively drained cavities
- although drawings show membrane exposed on the roof side of lower parapets, stone has been installed, which butts against the roof membrane and traps moisture at the junction.

5.13 The expert made the following additional comments:

- Although floor clearances are reduced to about 50mm by the thickness of deck tiles, the membrane extends under door sills and there is no sign of moisture penetration, staining or corrosion of carpet fixings.
- Where there is sufficient cavity drainage of adjacent EIFS, decorative stone bands installed over EIFS at joinery units and external corners and butting against deck tiles are unlikely to lead to moisture penetration.
- An isolated area of damage to the membrane roof is not affecting its current performance and can be attended to as part of regular roof maintenance.
- The minor ponding to some gutters and lower roofs is unlikely to affect the weathertightness and durability of the roofs, which are good condition.
- Although clearances of stone cladding to inner faces of the balustrades are limited, cavities are able to drain and should continue to do so, providing drainage gaps are maintained.

5.14 The expert also commented on the lack of safety from falling (Clause F4) in respect of:

- the sill height of 700mm to Apartment 1 master bedroom ensuite; bi-fold windows open into a flat roof that in turn has no provision for safety from falling
- the top of the external stars to Apartment 1; access to an area of flat roof that has no provision for safety from falling.

5.15 I note also that the expert's photographs show there is a spa pool on the deck to the southeast upper level of Apartment 1. The spa pool has no barrier to restrict the passage of children under 6 years of age.

5.16 A copy of the expert's report was provided to the parties on 18 January 2012.

Matter 1: The cladding

6. Weathertightness

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 The apartment building has the following environmental and design features which influence its weathertightness risk profile:

Increasing risk

- the apartment building is in a high wind zone
- the apartment building is three-storeys high in part
- there are complex roof and wall junctions, parapets and other features
- there are framed decks with clad balustrades, situated over enclosed areas
- there are no eaves to shelter the claddings.

Decreasing risk

- the ground floor and basement have masonry walls
- the ground and first floors have suspended concrete floor slabs
- the EIFS and stone claddings to upper floors are fixed over a cavity
- the external wall framing is treated to a level that provides resistance to decay if it absorbs and retains moisture.

6.2.2 When evaluated using the Clause E2/AS1 risk matrix, these features show that the elevations of the apartment building demonstrate a very high weathertightness risk rating.

6.3 Weathertightness performance

6.3.1 Generally, the claddings appear to have been installed in accordance with good trade practice and the manufacturer's instructions at the time. However, taking account of the expert's report, I conclude that further investigation and remedial work is necessary in respect of the areas identified in paragraph 5.12.

6.3.2 I note the expert's comments in paragraph 5.13 and accept that these areas are acceptable in these circumstances.

6.4 Weathertightness conclusion

6.4.1 I consider the expert's report establishes that the current performance of the building envelope is not adequate because there is evidence of moisture penetration into several areas of the external building envelope. Consequently, I am satisfied that the apartment building does not comply with Clause E2.

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

6.5 Because the faults identified with the building occur in discrete areas, I am able to conclude that satisfactory investigation and rectification of the items outlined in paragraph 5.12 will result in the external envelope being brought into compliance with Clauses B2 and E2.

6.6 Effective maintenance of claddings is important to ensure ongoing compliance with Clauses B2 and E2 and is the responsibility of the building owner. The Department has previously described these maintenance requirements (for example, Determination 2007/60).

Matter 2: The durability considerations

7. Discussion

7.1 There are 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 apartment building in 2004.

7.2 The relevant provision of Clause B2 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 In this case, the delay since the completion of the building has raised 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 code compliance certificates were to be issued effective from today's date. However, apart from the exterior building envelope, I have not been provided with any evidence that the elements did not comply with Clause B2 at the end of 2004.

7.5 It is not disputed, and I am therefore satisfied, that all the building elements in respect of consent No 10677, excluding those items that are to be rectified as described in paragraph 5.12 of this determination, complied with Clause B2 on 29 October 2004 (refer paragraph 4.5).

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 code compliance certificates for the building work had been issued in 2004.

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. The issuing of a code compliance certificate

8.1 As the building consent was issued under the former Act, the issuing of a code compliance certificates is subject to the requirements of section 436 of the current Act. Accordingly, the apartment building has to comply with the requirements of the Building Code that was in force at the time the building consent was granted in order for a code compliance certificate to be issued.

8.2 In light of the concerns that have been identified regarding code-compliance, I conclude that the authority was correct in refusing to issue a code compliance certificate for the apartment building.

9. What is to happen next?

9.1 The expert has identified changes from the original documentation that are apparent in the constructed building work. The applicant should take the necessary steps to seek amendments to the original building consent documentation in accordance with the completed work.

9.2 I note that the authority has not carried out a full final inspection of the building, and the expert has generally confined his investigations to areas identified by the authority in its site visit. The authority should now carry out a final inspection of the building, and then issue a notice to fix that requires the owners to bring the apartment building into compliance with the Building Code. I note the expert's comments in paragraph 5.14 and also my observation at paragraph 5.15 regarding areas which do not comply with Clause F4 Safety from falling, and I draw these to the authority's attention for resolution as it considers appropriate.

9.3 The notice to fix should include the investigations and defects identified in paragraph 5.12 along with any other matters identified by the authority, but not specify 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 owners to propose and for the authority to accept or reject.

9.4 I suggest that the applicant then 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 investigation and 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. The decision

10.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the external building envelope does not comply with Clauses E2 and B2 of the Building Code, and accordingly I confirm the authority's decision to refuse to issue a code compliance certificate.

10.2 I also determine that:

(a) all the building elements installed in the building, apart from the items that are to be rectified as described in this determination, complied with Clause B2 on 29 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 29 October 2004 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 5.12 of Determination 2012/017.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 5 March 2012.

John Gardiner
Manager Determinations