Department of Building and Housing
*Te Tari Kaupapa Whare*

# Determination 2011/092

# Regarding the refusal to issue a code compliance certificate for a 10-year-old apartment addition to a multi-storey building at 185 Victoria Street, Wellington

## 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.

1.2 The parties to the Determination are:

- the applicants, who are the owners of 29 units ("the apartments") within three levels added to a free-standing building ("the addition"). The apartment owners are represented by Body Corporate 88863 ("the body corporate") acting via a legal adviser
- Wellington City Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.

1.3 I consider that the owners of the remaining units in the building are persons with an interest in this determination.

[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 0888 242 243.

1.4 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for the 10-year-old addition, because it is not satisfied that the building work complies with certain clauses[2] of the Building Code (First Schedule, Building Regulations 1992).

1.5 The matter to be determined[3] is therefore whether the authority correctly exercised its powers in refusing to issue a code compliance certificate for the building work. In deciding this matter, I must consider:

- whether the addition as a whole, which was originally consented under the Building Act 1991 ("the former Act"), complies with the Building Code that was current at the time of consent; and this involves consideration of:
  - whether the interim code compliance certificates were correctly issued in respect of the work carried out under Building Consent No SR 64168 ("the original building consent") issued on 27 July 2000 under the former Act.
- whether the work carried out under the amendment to the original building consent which was issued on 26 November 2007 under the Act ("the remedial work"), complies with the amended building consent
- whether the remedial work complies with the Building Code.

## 1.6 Matters outside this determination

1.6.1 In correspondence to the applicants, from November 2008 to July 2009 the authority constantly identified that its refusal to issue a code compliance certificate relates to concerns the authority has regarding weathertightness and durability considering the age of the building work (refer paragraphs 3.7.1 to 3.9.1).

1.6.2 However, in a letter to the applicants of 6 April 2010 (refer paragraph 3.9.4) the authority has stated that it is 'unable to confirm that the only issue … is its concern about "serviceable life and durability"'. Further, in its submission in response to the draft determination (refer paragraph 4.2.1) the authority stated that it 'believes the Determination should be on all Code Clauses with particular focus on B2 [Durability] and E2 [External Moisture]'.

1.6.3 In regard to code clauses other than B2 and E2, I note the following:

- The authority has:
  - approved the consent drawings
  - carried out inspections during construction and after completion
  - issued interim code compliance certificates for the building work carried out under the original consent
  - received producer statements, warranties and other certificates
  - refused to carry out a final inspection of the remedial building work.
- The building has a current warrant of fitness.

[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.
[3] Under sections 177(1)(b) and 177(2)(d) of the Act

1.6.4 Taking into account the above, and that the parties have not identified any further items of dispute; I take the view that matters relating to compliance with the Building Code (refer paragraph 1.5) are restricted to:

- Whether the external claddings to the addition ("the claddings") comply with Clauses B2 Durability and Clause E2 External Moisture of the Building Code. The claddings include the components of the systems (such as the monolithic claddings, the corrugated steel, the metal-faced panels, the windows, the tiled decks, the roof cladding and the flashings), as well as the way the components have been installed and work together. (I consider this in paragraph 5.8.)
- Whether the structural condition of timber framing associated with weathertightness complies with Clause B2 insofar as it relates to Clause B1. (I consider this in paragraph 5.8.8.)
- Whether the building elements comply with Clause B2 Durability of the Building Code, taking into account the age of the addition. (I consider this in paragraph 5.9.)

### 1.7 The evidence

1.7.1 In making my decision, I have considered:

- the submissions by the parties
- reports commissioned by the applicants from the:
  - inspection company ("the building surveyor") – see paragraph 3.8
  - multi-disciplinary consultancy ("the consultant") – see paragraph 3.11
- the report of the expert commissioned by the Department to advise on this dispute ("the expert")
- the other evidence in this matter.

## 2. The building work

2.1 The addition is to a commercial building situated on a flat site in the central business district, which is in a high wind zone for the purposes of NZS 3604[4]. The altered building is 10-storeys high in part and rectangular in plan. The long street-facing elevation is referred to as west within this determination. The building is sited on the corner of two streets, with main entries along the west elevation.

2.2 As part of converting the original building to provide unit-titled apartments, three new levels ("Levels 7 to 9") were added during 2001 as shown in Figure 1.

### 2.3 The original building

2.3.1 The original 7-storey block was constructed in the mid-1960s as a retail, office and parking building, with a specifically engineered concrete column, beam and slab structure. The 4-storey podium occupied the entire site except for a recessed light well to the rear east boundary. The original building currently accommodates:

[4] New Zealand Standard NZS 3604:1999 Timber Framed Buildings

- entrance and lifts that provide access to Level 7
- retail and a commercial kitchen to the first floor ("Level 1")
- carparking on Level 1 to the fifth floor/podium roof ("Level 4B")
- apartments in the sixth and seventh floors ("Levels 5 and 6").

## 2.4 The addition

- As shown in Figure 1, Levels 7 to 9 are constructed around two internal voids ("the courtyards"). The original lifts were retained, with new stairs and open walkway decks around the courtyards providing access to the upper level apartments. The addition is complex in form and is assessed as having a high weathertightness risk.

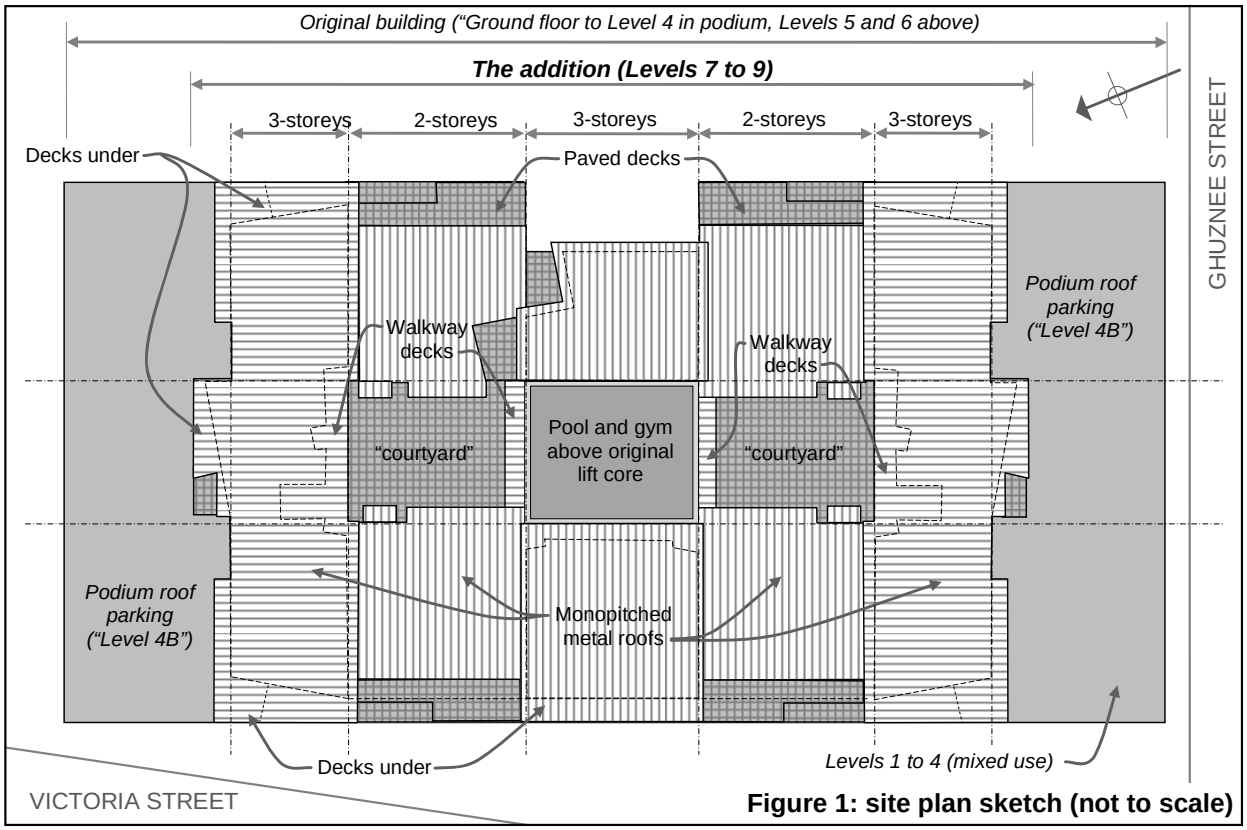


**Figure 1: site plan sketch (not to scale)**

2.4.1 The apartments are a mix of one and two-level units (shown shaded in the following table). During construction, six units were combined to form three larger apartments, leaving 29 units as shown below:

| Orientation | Level 7 (all 1-storey) | Level 8 | Level 9 |
|---|---|---|---|
| Southwest corner | 26 | 43 | 43 (upper level) |
| **West** | 27 (27/28 combined) | 44 (1-storey) | |
| | 29 to 32 | 45, 46 | 45, 46 (upper levels) |
| | | 47 (1-storey) | |
| Northwest corner | 33 | 48 | 48 (upper level) |
| **North** | 34 | | 56 (1-storey) |
| Northeast corner | 35 | 49 (49/50 combined) | 49 (upper level) |

| | | | |
|---|---|---|---|
| **East** | 36 (36/37 combined) | 51 (1-storey) | |
| | 38 to 40 | 52 | 52 (upper level) |
| | | 53 (1-storey) | |
| Southeast corner | 41 | 54 | 54 (upper level) |
| **South** | 42 | 55 (1-storey) | 57 (1-storey) |

2.4.2 The structure includes specifically engineered steel portal frames, with proprietary composite profiled steel and proprietary concrete/steel floor system to Level 8 and to the interior floors in Level 9. The structural drawings show that the decks and walkway floors to Level 9 have steel perimeter beams with infill timber framing. Exterior walls are timber-framed, with four types of wall claddings, aluminium windows and $10^{o}$ monopitched profiled metal roofs at varying levels.

2.4.3 The expert noted no evidence as to timber treatment. Given the date of construction in 2000 and the evidence of timber damage, I consider the external wall framing is likely to be untreated.

## 2.5 The wall claddings

2.5.1 The courtyard walls are clad in a monolithic wall cladding system, which consists of 7.5mm fibre-cement sheets fixed through the building wrap to the framing and finished with an applied textured coating system ("flush-finished fibre-cement"). This cladding is also installed to framed deck soffits and to the front faces of decks ("the deck bands") around the courtyards and on the outside elevations.

2.5.2 The remaining exterior walls are clad in a mix of materials, all of which appear to be fixed directly to the framing over the building wrap. The claddings are:

- a monolithic cladding system known as EIFS[5], which consists of 40mm polystyrene backing sheets finished with a proprietary textured plaster coating system and including purpose-made flashings to windows and other junctions
- corrugated steel installed horizontally
- flat metal panels with expressed joints.

## 2.6 The exterior decks

2.6.1 Each apartment has individual paved decks on the outside faces of the building ("the exterior decks"). Some balustrades are framed and clad in EIFS or corrugated metal, with metal cappings to the tops and flush-finished fibre-cement to the inside faces. Other balustrades are glazed, with metal posts top-fixed through the paved floors.

2.6.2 The deck floor systems differ for each level as follows:

- Level 7 decks are situated on the concrete roof slab of the original building overlaid with membrane and paving tiles.
- Level 8 decks have the proprietary concrete/steel floor system floor overlaid with membrane and paving tiles.

[5] Exterior Insulation and Finish System

- Level 9 decks have perimeter 200mm deep steel beams that form cantilevered frames infilled with timber joists and covered with plywood, membrane and paving tiles.

### 2.7 The courtyard decks

2.7.1 The paved courtyards to Level 7 are situated on the concrete roof slab of the original building, with stairs leading up to paved walkway decks that provide access to upper level apartments ("the walkway decks"). The walkway decks have open metal mesh balustrades.

2.7.2 At Level 8, the walkway decks extend along the north and south sides of each courtyard, while Level 9 walkways are limited to the north side of the north courtyard and the south side of the south courtyard. Deck floors are as follows:

- Level 8 walkways have the proprietary concrete/steel floor system floors with membrane and paving tiles.
- Level 9 walkways have an external 200mm deep steel beam in filled with timber joists and covered with plywood, membrane and paving tiles.

2.7.3 The east and west courtyard walls to Level 8 include small steel-framed cantilevered decks, which extend from bedroom areas with open metal mesh floors and lean-to canopies.

## 3. Background

3.1 The authority issued a building consent for 'new apartments on top of existing building (No. SR 64168) on 27 July 2000, under the Building Act 1991. Construction started in late 2000, with the first inspection in November 2000.

3.2 The authority carried out inspections during 2001, including:

- pre-line framing etc on 26 February, 7 March, 7 May, 17 July and 2 August
- cladding inspections on 29 May, 28 June, 10 July and 18 September (which noted that junctions and flashings sighted were 'complete and satisfactory')
- final inspections of units on 4 and 5 December 2001 and of common areas on 1 and 11 February 2002.

3.3 Linking the unit titles of the combined apartments delayed the issue of interim code compliance certificates for those apartments; and certificates were progressively issued as follows:

| **14 December 2001** | | | **19 December 2001** | **8 December 2004** |
|---|---|---|---|---|
| Level 8 | Level 8 | Level 9 | | |
| 26 | 43 to 48 | 56 | 33 | 27 (27/28 combined) |
| 29 to 32 | 51 to 55 | 57 | | 49 (49/50) |
| 34 and 35 | 45, 46 | | | |
| 38 to 42 | | | | |

3.4 The last interim code compliance certificate dated 8 December 2004 excluded the water supply connection and Apartment 36 (36/37 combined) pending linking its unit titles. These requirements were subsequently resolved and a final inspection was requested on 3 February 2005.

### 3.5 The notices to fix

3.5.1 Following inspections, the authority issued a notice to fix on 8 August 2005. The notice listed 12 items of 'contravention or non-compliance', with the following items related to the claddings:

- gap under cladding at top of stairs to unit 48
- penetrations through claddings at landings
- insufficient clearances between deck floors and claddings
- unsealed bottom edges of fibre-cement sheets
- cracks to flush-finished fibre-cement
- unsealed fibre-cement under horizontal control joint flashing.

3.5.2 The notice to fix was re-issued on 15 September 2006 and 30 November 2006.

### 3.6 The remedial work

3.6.1 In 2007, a proposal was developed for increasing cladding clearances and raising the door sills to the walkway decks around the courtyards. (I note that the latter was not carried out – refer paragraph 3.8.3).

3.6.2 The authority approved an amendment to the building consent for the remedial work on 26 November 2007.

3.6.3 On 9 April 2008, the body corporate engaged the consultant to assist in carrying out remediation work and to act as its agent. I have seen no records relating to the completion of this work.

### 3.7 The authority's refusal to issue a code compliance certificate

3.7.1 The authority met with the consultant on 13 November 2008 to discuss the situation. In a letter to the consultant, dated 27 November 2008, the authority confirmed the meeting and noted that the time past since the issue of the building consent in 2000, the notices to fix, and the amendment to the consent, raised the matter of the durability requirements under Clause B2. The letter also noted some 'constructed details that are divergent from the manufacturer's specifications and consented drawings'. The authority concluded that it could not issue a code compliance certificate as:

> Taking into consideration the length of time passed since the granting of the building consent and the time taken to begin remedying previously non compliant works, there is a significant uncertainty over the serviceable life and durability of the materials used.

> In this case we believe there is insufficient evidence to show "reasonable grounds" that the works would be compliant, even if the NTF issued 30/11/2006 is complied with.

3.7.2 The authority then met the body corporate on 28 November 2008 to discuss the situation. In a letter dated 8 December 2008, the authority confirmed the meeting and explained the durability requirements of the Building Code, noting that it needed to 'give specific consideration to the durability of the materials used in construction and the continuing weathertightness of the building'. The authority also stated that the details constructed were alternative solutions and it is the responsibility of the owner to demonstrate how the details meet the requirements of Clause E2, noting that it would therefore 'be necessary to engage expert advice on evaluation and documentation of the details performance and their compliance with E2'.

3.7.3 The authority suggested that, to 'progress the evaluation of the projects potential to obtain CCC', the body corporate could '...engage a professional building surveyor who specialises in building pathology and evaluation of issues relating to weathertightness homes resolution'.

3.7.4 The authority also clarified the status of the notice to fix and commented that the authority

> 'wish[ed] to make clear that the level of observation and understanding of the requirements for compliance with the NZ Building Code has dramatically increased since Nov 2006 and that unfortunately compliance with the NTF issued, via the details in amendment #3, [could not be considered] alone without consideration for the review of the whole projects compliance with NZBC'

The authority concluded by reiterating its position regarding its refusal to issue a code compliance certificate (refer 3.7.1).

3.7.5 It appears from correspondence, dated 22 December 2008 from the applicants to the authority, that the authority refused to undertake a requested inspection of the remedial work. In responding to the applicants in a letter dated 23 December 2008, the authority stated that 'the NTF [issued 30 November 2006] has expired, and as such should be replaced with a new notice that will address the project holistically, taking into account all of the requirements of the building code'. The authority reiterated that 'expert advice' was required for the whole of the building and that the remedial work alone would not address the extent of compliance required to obtain a code compliance certificate.

3.7.6 On 20 April 2009 the consultant met with the authority and the authority confirmed its position in a letter to the consultant dated the same day, including the following points:

- The notice to fix and amendment to the consent do not constitute 'a final list of requirements' for issuing a code compliance certificate.
- The building surveyor's report must be completed and submitted for the authority to consider whether it was 'a complete finding' of work required.
- All work, including maintenance must be completed before a code compliance certificate can be considered.
- All warranties need to be current to meet durability for their respective areas at the time of issuing of a code compliance certificate.

## 3.8 The building surveyor's report

3.8.1 The body corporate engaged the building surveyor to 'address items of concern' to the authority. The surveyor inspected the additions in April 2009 and provided a 'Report on remediation measures' dated 7 May 2009.

3.8.2 The building surveyor inspected the interior and exterior of the apartments, noting no evidence of moisture penetration. Non-invasive moisture testing was carried out in the interiors, and no elevated readings were recorded. However no invasive testing was carried out and the surveyor noted that 'small amounts of water penetration may be missed'.

3.8.3 The building surveyor noted that no courtyard doorways appeared to be allowing water past the sills and, as these were sheltered under upper decks or canopies, he did not see any need for raising door sills.

3.8.4 The building surveyor inspected the exteriors and noted:

- some balustrade cappings are incomplete at the ends
- the RHS posts penetrate cappings and need extra sealing or flashing
- there are no saddle flashings at junctions of balustrades and roof parapet cappings with walls
- some decks lack drainage outlets, relying on drainage over the edges
- open balustrades are top-fixed through the deck floors, although this may not be a problem due to concrete floors (I note that this does not apply to Level 9 decks, as outlined in paragraph 2.7.2.)
- some wire and light fitting penetrations through claddings are not sealed and some light fittings are 'full of water'
- exterior taps are partly recessed into cladding and are unsealed
- windows to flush-finished fibre-cement cladding in upper levels above the roofing are insufficiently sealed at the head flashings
- flexible boot flashings to pipe penetrations through the roof rely on sealant
- foot traffic on the roof has damaged some trays, with dents and split ribs.

3.8.5 The building surveyor concluded that:

> Overall I believe that the maintenance that has been carried out up to the present time has been more than adequate to both address faulty construction and future protection of the complex.

3.8.6 According to the building surveyor, he also met with authority officials on and off site to discuss work being carried out, with some work amended to comply with the authority's requirements. The consultant's file note dated 13 July 2009 lists changes to be made to the remedial work, which was subsequently completed.

## 3.9 Continuing correspondence

3.9.1 On 29 July 2009, the body corporate formally applied for a code compliance certificate and the authority responded on 20 August 2009. The authority did not

inspect the building work, but stated that it was unable to issue a code compliance certificate due to the length of time elapsed since the granting of the building consent and the time taken to begin to remedy previously non-compliant works, and the 'significant uncertainty over the serviceable life and durability of the materials used'.

3.9.2 The authority stated that it would take 'no further action' unless information indicated that the building work had become dangerous or insanitary. The authority noted that its concerns regarding durability were 'not an indication that your building is failing or deficient but simply that too long a period has elapsed since it was built'.

3.9.3 Further correspondence and discussions followed without resolution. In a letter to the authority dated 29 March 2010, the consultant stated that there appeared to be no option but to seek a determination and therefore requested an inspection to:

> ...ascertain whether there are any other issues other than the one referred to in your letter, namely the [authority's] concern about the "serviceable life and durability of the materials used" in the work on the building...
>
> ...If the [authority] refuses to inspect the work, please confirm in writing that the only reason it will not issue a Code Compliance Certificate is [it's] concern about the "serviceable life and durability of the materials used" in the work on the building.

3.9.4 The authority responded on 6 April 2010, stating that its view had not changed and repeating that it would take 'no further action'. The authority added that it was

> ...unable to confirm that the only issue preventing it issuing a CCC is its concern about 'serviceable life and durability'. As asked for in earlier correspondence, the [authority] requested that the owners engage a suitably qualified person (a member of the Society of chartered Building Surveyors and to the standard set down by the Society). To date we have not received a report that will truly reflect the building work or its current age.

3.10 In contemplation of applying for a determination, the building surveyor revisited the site and in a letter dated 26 November 2010 confirmed that:

> ...as of now all the remedial works have been carried out and maintenance completed, it would be my expectation that the [authority] would carry out the final inspection toward the issue of the Code Compliance Certificate.

### 3.11 The consultant's report

3.11.1 In a report dated 13 December 2010, the consultant briefly described the background of the building work and his involvement with the recent remediation works. The consultant outlined and responded to some of the matters in the notice to fix.

3.11.2 In regard to the authority's letter dated 8 December 2008 (see paragraph 3.7) and subsequent correspondence, the consultant included the following (in summary):

- There was no mention of apparent durability concerns in any of the notices to fix, or at the time of approving the amended consent for the remedial work.
- As the authority granted the amended building consent it must have been satisfied that, if properly completed, the remedial work would comply with the code. This was completed without delay and should have been inspected, with either a code compliance certificate issued or written explanation provided.

- The body corporate engaged an 'experienced surveyor' who found no evidence of water entry or decay and did not consider that raising the courtyard door sills was necessary; and that work was therefore not carried out.
- All outstanding remediation has now been properly completed, but the authority does not know whether the building work '… complies with the building consent because it has refused to inspect the work. … a refusal to inspect the consented works is unreasonable and contrary to the intention of the [Act].'
- If the authority is 'legitimately concerned about the serviceable life and durability' of the work, then the durability provisions can be modified to apply from the date of substantial completion in December 2001.

3.12 The Department received an application for a determination on 24 December 2010 and sought further information from the authority on the matters in dispute, which was received on 9 February 2011.

# 4. The submissions

## 4.1 The applicants' submission

4.1.1 The applicants' submission included a summary of events leading to the current situation and referred to the consultant's report (see paragraph 3.11) for comments in support of the application.

4.1.2 The applicants provided copies of:

- floor plans for Levels 7 to 9
- the notice to fix dated 30 November 2006
- the warrant of fitness dated 26 July 2009
- the documentation for the amendment to the consent
- some correspondence between the parties
- the building surveyor's report dated 7 May 2009
- the consultant's report dated 13 December 2010
- various photographs, statements and other information.

4.1.3 When responding to the expert's report (see paragraph 5.7), the applicants added some general comments which I consider as expanding on its submission. The applicants' comments included the following (in summary):

- As the building work was properly completed in accordance with the amended building consent, a code compliance certificate should have been issued on completion of the work.
- The authority was not entitled to raise issues unrelated to the consented work and similarly, current issues raised by the expert are also not directly relevant. The relevant question is whether the work was properly completed in accordance with the plans and specifications and the evidence is that it was.

- It is 'wholly unsatisfactory' that the authority can 'avoid having to decide whether or not the works were properly completed by simply refusing to inspect the works'.

## 4.2 The authority's submission

4.2.1 The authority's submission dated 7 February 2011 stated that the letters dated 8 December 2008, 20 August 2009 and 6 April 2010 outlined its position 'in relation to reassessing the work prior to being able to issue a Code Compliance Certificate'. The authority also stated:

> At this time the [authority] have not been provided with a report from a suitably qualified person that demonstrates that the work complies with the Building Code and the owners have chosen to apply for a determination instead.
>
> The [authority] believes that the determination should be on all code clauses with particular focus on B2 and E2.

4.2.2 The authority forwarded a CD-Rom, which contained additional documents pertinent to this determination including:

- the original building consent and consent documentation
- the inspection records and the interim code compliance certificates
- correspondence with the applicants and the consultant
- various producer statements, certificates, warranties and other information.

## 4.3 The first draft determination

4.3.1 A draft determination was issued to the parties for comment on 23 May 2011. The draft considered the compliance of the external envelope and concluded that the authority was correct in its decision to refuse to issue the code compliance certificate as the addition did not comply with Clauses B2 Durability and E2 External moisture.

### The applicants

4.3.2 The applicants responded to the draft in a letter dated 17 June 2011. The applicants did not accept the draft and provided a detailed submission in response which included some errors of fact that I have amended.

4.3.3 The applicants reiterated their views regarding the matter to be determined, stating that the relevant question is whether the remedial work was properly completed in accordance with the amendment to the building consent. The applicants submitted that the determination should not consider matters of the compliance of the additions carried out under the original building consent issued in 2000, as that work was the subject of various interim code compliance certificates.

4.3.4 The applicants noted that they had received advice that during the remedial works undertaken under the amended consent some cladding was removed, and the applicants were seeking further information that may be available on the 'state of the framing under the cladding' at that time.

4.3.5 The applicants provided a further submission dated 19 August 2011. The submission noted that the applicants were seeking further technical and legal advice. The submission stated that the applicants were not in a position to respond in detail to the authority's submission of 18 August but noted that the applicants did not accept the factual and legal matters as set out in the authority's submission and that the authority had made no comment in regard to its refusal to inspect the remedial works.

4.3.6 Though the applicants had previously requested a hearing on the matters to be determined this request was withdrawn.

**The authority**

4.3.7 The authority initially responded via its legal adviser in a letter dated 17 June 2011. The authority agreed with the conclusion reached in the draft that the building did not comply with Clauses B2 and E2 and, accordingly, that the authority was correct not to issue a code compliance certificate.

4.3.8 The authority also requested the determination be amended in respect of comments made in the draft on the authority's apparent awareness of the nature of the defects to the building, and my comment that those concerns should have been conveyed to the applicants. The authority stated that its intention was to ensure that any expert engaged by the applicants did not limit the scope of investigation to 'the narrow range of matters identified in the notices to fix that had previously been issued'.

4.3.9 The authority provided a further submission dated 18 August 2011. The authority took issue with a matter the applicants had raised in their submissions. The authority considered the applicants were arguing that the approval of the amendment of the building consent in 2007 should be treated as an approval of the building work carried out under the original building consent issued in 2000. The authority disagreed with this and set out its view of the effect of the 2007 amendment:

- The application for amendment of the consent was 'relatively limited in scope' and was stated to be for 'work to comply with the notice to fix'.
- The issue of an amendment to the original building consent was not a 'de facto' approval of all the other completed building work.
- In considering whether the authority was correct to refuse to issue the code compliance certificate the determination must take into account all of the building work covered by consent No. 64168 and not be limited to the building work carried out under the amendment to the consent.
- In deciding weather to issue a code compliance certificate, the building work carried out under the original consent must be considered under the relevant transitional provision of the Act (section 436). Code-compliance is considered against the requirements of the Building Code that applied at the time the consent was issued.
- The statutory test to apply is however complicated by the amendment to the consent which was granted under the Act. The authority's view is that the building work carried out under the amendment to the consent is subject to section 94 of the Act, which requires that the building work complies with the building consent.

- The authority concluded that the correct approach for considering whether a code compliance certificate should be issued was a 'hybrid' approach whereby the building work carried out under the building consent issued under the former Act is assessed in accordance with the requirements of the transitional provision in section 436 of the Act, and the building work carried out under the building consent issued under the Act is assessed against the requirement of section 94 of the Act.

4.3.10 The authority also addressed the point that it had issued interim code compliance certificates for all 29 units covered by the original building consent. The authority commented:

- The 'limits on application' on clause B2.3.1 indicate that the assessment of compliance with B2 is only made at the time a code compliance certificate issued and not at the time an interim code compliance certificate is issued.
- The interim code compliance certificates issued were subject to the condition that the certificates were 'only valid to the extent that [the building work] continues to comply with the building code'.
- Although the authority may not have had any concerns about the durability of the building work at the time the interim code compliance certificates were issued, due to the subsequent passage of time and potential degradation of the building work it is now relevant to the decision to issue a code compliance certificate.

4.3.11 I have considered the parties responses and amended the determination accordingly.

### 4.4 The second draft determination

4.4.1 The second draft determination was issued to the parties for comment on 21 September 2011.

4.4.2 Both parties accepted the second draft determination without further comment.

## 5. Discussion

### 5.1 General

5.1.1 In order to form a view as to whether a code compliance certificate can be issued for building consent SR 64169, I have considered:

- whether the addition as a whole, which was originally consented under the Building Act 1991 ("the former Act"), complies with the Building Code that was current at the time of consent; and this involves consideration of:
  - whether the interim code compliance certificates were correctly issued in respect of the work carried out under Building Consent No SR 64168 ("the original building consent") issued on 27 July 2000 under the former Act.
- whether the work carried out under the amendment to the original building consent which was issued on 26 November 2007 under the Act ("the remedial work"), complies with the amended building consent
- whether the remedial work complies with the Building Code.

## 5.2 The interim code compliance certificates

5.2.1 By issuing interim code compliance certificates under the former Act, the authority had decided that part of the building work at that time complied with the Building Code.[6] The authority takes a limited view of the effect of these certificates in its submission dated 18 August 2011.

5.2.2 Firstly, the authority argues that Clause B2.3.1 only applies once a code compliance certificate is issued, and does not apply to an interim code compliance certificate. I cannot agree with the authority's interpretation of the limits on application proviso to Clause B2.3.1. That proviso refers to a 'code compliance certificate' and the term is defined in Clause A2 as 'a certificate to that effect issued by a territorial authority or a building certifier pursuant to section 43 of the [former] Act'. The definition of 'code compliance certificate' as used in Clause B2.3.1 therefore included reference to an interim code compliance certificate. The definition in section 2 of the former Act was to the same effect. The durability periods referred to in Clause B2.3.1 therefore commenced at the time the various interim code compliance certificates were issued by the authority.

5.2.3 Secondly, the authority takes the view that the nature of the various interim code compliance certificates were limited by the conditions on the certificates that said:

> This certificate is only valid to the extent that all of the work described in the 'Particulars of Building Work' continues to comply with the building code.

5.2.4 The meaning of the condition is unclear, and the authority has not provided the basis on which such a condition has been imposed. It appears to say that, to the extent that any of the building work covered by an interim code compliance certificate ceases to comply with the Building Code, the interim code compliance certificate is invalid. Section 43(4) of the former Act described interim code compliance certificates in the following way:

> The provisions of this section shall be deemed to enable interim code compliance certificates to be issued, subject to specified conditions, in respect of any part of any building work for which a building consent had previously been issued, ... but those interim certificates shall be replaced by the issue of a single code compliance certificate for the whole of the building work at the time the work is completed … .

5.2.5 Section 43(4) of the former Act enabled interim code compliance certificates to be issued for 'part of any building work' but otherwise they were to be issued in accordance with the terms of section 43. Code compliance certificates could only be issued under that provision in respect of building work that complied with the Building Code (unless subject to a waiver or modification). Therefore, while the authority could issue interim code compliance certificates for parts of the building (as it did in this building) in my view, the authority could not change the nature of those interim code compliance certificates by limiting or excluding the application of particular provisions of the Building Code (unless that was done by way of waiver or modification).

[6] Further discussion of the nature and effect of interim code compliance certificates appears in Determination 2011/015 and may be of assistance to the parties.

5.2.6 However, while interim code compliance certificates have been issued, I accept that in the period since the issue of the certificates the knowledge and understanding of how compliance can be achieved with respect to some Building Code clauses has changed. In addition, the actual performance of the building against the requirements of the Building Code can be determined by inspection.

5.2.7 In such circumstances I believe it is prudent for the authority to verify the ongoing compliance of the completed work, particularly work with a high consequence of failure. Should matters of non-compliance be identified the authority may, depending on the circumstances and extent of the non-compliance, do one or a combination of:

- advise the owner that remedial work is necessary to make the building code-compliant by way of a new notice to fix
- seek a determination reversing the interim code compliance certificates
- declare the building dangerous or insanitary should the circumstances warrant it.

5.2.8 The remainder of this determination considers the compliance of the building work as described above in paragraph 5.1.

### 5.3 The remedial work – compliance with consent

5.3.1 In its letter dated 27 November 2008 (refer paragraph 3.7.1) the authority stated that some 'constructed details … are divergent from the manufacturer's specifications and consented drawings'. It is not entirely clear whether this was in respect of the remedial work or the work carried out under the original building consent.

5.3.2 In a letter to the Department dated 6 May 2011 the applicants responded to the expert's report (refer paragraph 5.7), commenting that the expert did not dispute their consultant's conclusion that the remedial building work had been carried out in accordance with the consent documents (refer paragraph 3.11.2).

5.3.3 I note that the applicants have sought a final inspection of the remedial work and that this has been refused by the authority. In my view the authority is unable to decline to carry out the normal functions of a building consent authority as provided for in the Act. This includes carrying out a final inspection if one is requested, in this instance for the remedial work undertaken as an amendment to the building consent.

5.3.4 I consider that there is currently insufficient evidence provided, as part of the determination process, to establish whether the remedial work complies with the amended building consent.

5.3.5 I note that it is well within the ambit of the authority's duties to undertake an inspection and form a view on this matter, and that it is not necessary for this action to be delayed for the determination. However, the compliance of the remedial building work with the amended consent will form only a part of the grounds on which the authority is to consider the issue of the code compliance certificate.

5.3.6 I do not share the authority's view of the applicant's submission on the effect of the amendment to the building consent (refer paragraph 4.3.9). In my opinion, the applicants are of the view that the building work carried out under the 2007

amendment complies with the Building Code, notwithstanding the authority's refusal to inspect that work, and that the building work carried out under the consent issued in 2000 complies with the Building Code because interim code compliance certificates have been issued in respect of that work.

## 5.4 Compliance with the Building Code

5.4.1 I note that the items referred to on the notice to fix dated 30 November 2006 appear to have been addressed by way of the remedial work, and this of itself is not in dispute between the parties. I therefore only consider those items in respect of their compliance as described in paragraph 1.6.4.

5.4.2 In refusing to issue a code compliance certificate the authority referred to its concerns being weathertightness and durability of the materials considering the age of the building work. The authority also requested that the owner engage an appropriately qualified person to undertake weathertightness evaluation.

5.4.3 Although I consider the authority's action to be appropriate in requesting such an evaluation be undertaken, I note that the authority's requirement for such an evaluation was not contained within the notices to fix, nor in the correspondence with the applicants until after an amendment to the consent had been granted, the remedial work was carried out, and a code compliance certificate sought. The authority raised the matter of the durability requirements at that later stage (refer paragraph 3.7.1).

5.4.4 The applicants sought to comply with the authority's request by engaging a building surveyor. It is not clear from the information provided whether the authority reviewed or accepted the surveyor's report, however it appears there was consultation with the authority at some level (refer paragraph 3.8.6). There is also no correspondence from the authority indicating that the authority considered the surveyor's report deficient in anyway.

5.4.5 I note that the authority has also not undertaken an inspection of the remedial work (refer paragraph 5.3.3). Had it done so, the authority would have been in a position to consider the compliance of the addition as a whole and issue a new notice to fix if one was required.

5.4.6 I note that the notices to fix issued by the authority do not reflect the authority's concerns regarding the compliance of the building, particularly in relation to weathertightness. While the issue of a notice to fix is intended to advise owners of breaches of the Act and the Regulation, in this case the applicants are also required to refer to other correspondence to get an understanding of the authority's concerns.

5.4.7 I previously described the matters relating to compliance with the Building Code that are to be considered (refer paragraph 1.6.4) and I have discussed each of these in turn in paragraphs 5.8 and 5.9.

5.4.8 The following evidence has allowed me to form a view as to the code-compliance of the addition as a whole:

- the approved consent drawings

- the inspections carried out by the authority during construction and after completion
- the interim code compliance certificates issued for the building work carried out under the original consent
- the producer statements, warranties and other certificates
- the reports commissioned by the applicants from the building surveyor (see paragraph 3.8) and the consultant (see paragraph 3.11)
- the expert's report (refer paragraph 5.5).

## 5.5 The expert's report

5.5.1 As mentioned in paragraph 1.7, 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 addition on 1 March 2011, providing a report dated 22 March 2011.

### General

5.5.2 The expert noted that the internal layout to a number of apartments had changed from that shown in the original consent drawings.

5.5.3 The expert noted that, although the overall construction quality was 'generally good', there were a 'large number of construction details that have not had a lot of thought put into their ability to keep water out' and to provide long term durability.

### The decks

5.5.4 I note that the decks fall into two categories; those around interior courtyards and those on the exterior faces of the building. The decks have a variety of features that the expert has referred to in his comments on moisture penetration and defects.

5.5.5 Within the table included in paragraph 5.5.6, I have classified the decks as follows:

**A: Exterior decks** (to outer sides of building)

**A1**: Level 7/ 8 corners, with clad/glazed balustrades

**A2**: Level 7 north/south elevations, cantilevered with glazed balustrades

**A3**: Level 7/8 to east/west elevations, with glazed balustrades

**A4**: Level 8 north/south elevations, over lower rooms with free-standing clad wall to north/south and glazed balustrades elsewhere

**A5**: Level 9 west elevation, with steel/timber-framed floors and glazed balustrades

**A6**: Level 9, steel/timber-framed floors with clad/glazed balustrades

**B: Courtyard decks** (decks around interior courtyards)

**B1**: Level 8 north/south walkways, with metal balustrades

**B2**: Level 8 east/west sides, cantilevered with metal floors and balustrades

**B3**: Level 9 north/south walkways, with steel/timber-framed floors and metal balustrades

### Moisture levels

5.5.6 The expert inspected interiors and exteriors of each apartment, taking limited invasive moisture readings and making several cladding cut-outs. The expert noted evidence of moisture penetration as shown in the following table.

| Apartment number | | Signs of moisture<br>*Cladding materials:*<br>*(1) Flush-finished fibre-cement (2) EIFS (3) Horizontal corrugated steel (4) Metal sheet with expressed joints.* | | | |
|---|---|---|---|---|---|
| | | ***Window/doors*** | ***Decks** (refer paragraph 5.5.5 for deck type)* | | ***Other*** |
| **LEVEL 7** | | | | | |
| **26** | SW | Interior crack below bedroom window | **A1** | Cracked deck band/wall junction (1)/(2)<br>Cracks in deck band (1) | |
| **27** | W | Interior crack below living room window | **A3** | Fungal growth from decayed plywood behind deck band (1) | Crack to internal corner (1) |
| **29** | W | Cracks at jamb/sill junctions (2) | **A3** | Cracks in deck soffit (1) | Cladding cracks (2) |
| **30** | W | | **A3** | Cracks in deck soffit, with seepage next to clad column (1) | |
| **31** | W | Gaps at jamb junctions (2) | **A3** | Cracks and decay to deck soffit (1) | |
| **32** | W | Damaged door/window sills (2) | **A3** | Cracks and decay to deck band (1) | Crack to internal corner (2)<br>Carpet staining<br>Skirting delamination<br>Stains behind vent cover |
| **33** | NW | Swollen skirtings under windows<br>Water stains, bubbling paint and cracks below sills (2) | **A1** | Cracks and decay to deck soffit (1)<br>Cracked deck band/wall junction (1)/(2) | |
| **34** | N | Cracked jamb/sill junction, with 20% moisture level and decayed drillings (2) | **A2** | | |
| **35** | NE | No elevated moisture but decayed drillings at jamb/sill junction (2) | **A1** | | |
| **36** | E | | **A3** | Cracked deck band/wall junction (1)/(2)<br>No elevated moisture but decayed drillings at deck band (1)<br>22% moisture at external corner (2)<br>Cracks/seepage in deck soffit (1)<br>Decayed timber visible within soffit space at framed deck band (1)<br>Deteriorated sealant to tiles upstand | Crack to internal corner (1) |
| **38** | E | Cracked window/door sills (2) | **A3** | | |
| **39** | E | Cracked window/door sills (2) | **A3** | Decayed timber behind deck band (1) | Plaster fallen away |
| **40** | E | Swollen skirting at deck door<br>Cracked window sills (2) | **A3** | | Crack to internal corner(1)<br>Cladding butts to inter-storey flashing (1) |
| **41** | SE | | **A1** | Gap to deck band/wall junction (1)/(2)<br>Cracks in deck soffit (1) | |
| **42** | S | Cracked window/door sills (2)<br>Cut-out to jamb/sill junction (2) | **A2** | Tiles removed to expose deck edge under post fixing | |
| **LEVEL 8** (single-storey apartments) | | | | | |
| **44** | W | Jamb/sill junction cracks (2) | **A3**<br>**B2** | Skirting cracks to deck doors | Crack to internal corner (2) |
| **47** | W | Jamb/sill junction cracks (2)<br>Water damaged skirting | **A3**<br>**B2** | | Crack to internal corner (2) |
| **51** | E | | **A3** | Cracks to deck soffit linings<br>Cracked tiles at balustrade post fixing | |

| Apartment number | | Signs of moisture<br>*Cladding materials:*<br>*(1) Flush-finished fibre-cement (2) EIFS (3) Horizontal corrugated steel (4) Metal sheet with expressed joints.* | | | |
|---|---|---|---|---|---|
| | | ***Window/doors*** | ***Decks** (refer paragraph 5.5.5 for deck type)* | | ***Other*** |
| | | | **B2** | Missing deck tile at deck edge | |
| **53** | E | | **A3**<br>**B2** | | Crack to internal corner (2) |
| **55** | S | Damaged skirting under window | **A4**<br>**B1** | Water damaged skirting to entry | |
| **LEVEL 8/9** (two-storey apartments) | | | | | |
| **43** | SW | Skirting to front door<br>Cracked window sill (2)<br>Bubbling paintwork under sill (2) | **A1**<br>**A6**<br>**B1** | Cracks in deck soffit (1)<br>Incomplete balustrade capping (1) | Damaged skirting behind toilet<br>Damaged ceiling paint |
| **45** | W | Jamb/sill junction cracks (2) | **A3**<br>**A5** | | |
| **46** | W | | **A3**<br>**A5** | | |
| **48** | NE | | **A1**<br>**A6**<br>**B1** | | |
| **49** | SW | Cracked window sills/jambs (2)<br>Cracked window/door heads (2)<br>Cracked skirtings under windows<br>Cracked window sills (2)<br>Cracked linings, swollen skirtings under windows | **A1**<br>**A4**<br>**A6**<br>**B1** | Cracked deck/wall junctions (2) | |
| **52** | E | Carpet stains under windows<br>Cracked window sills (2) | **A3**<br>**A6**<br>**B1** | Skirting, lining, paintwork to front door | Cladding cracks (2)<br>Damaged ceiling |
| **54** | SE | Cracked door sill (2)<br>Unsealed gaps to jambs (4) | **A1**<br>**A6**<br>**B1** | | Cladding cracks, with water leaching (2) |
| **LEVEL 9** (single-storey apartments) | | | | | |
| **56** | N | Cracked jamb/sill junction<br>Cut out - no sealant at junction | **A6**<br>**B3** | | |
| **57** | S | Cracked door and window sills | **A6**<br>**B3** | | |

5.5.7 Due to the obvious moisture penetration and timber damage the expert limited invasive moisture testing; concluding that extensive invasive testing and destructive investigation would be needed to establish the full extent of moisture penetration and timber damage.

**The external envelope**

5.5.8 Commenting specifically on the external envelope, the expert highlighted general details that he considered were causing water entry at present or would in the future:

**General**

- there are numerous areas where timber framing has high moisture levels and damage, and further investigation is needed to establish the full extent of moisture ingress and damage

- there are cracks to the EIFS and flush-finished fibre-cement claddings, with water stains and water leaching from some cracks

**The decks**

- water entry is apparent to both the exterior and the courtyard decks, with water staining and cracking apparent in soffit and band cladding; and decay found in a number of areas, which is likely to be widespread
- some deck bands are directly above windows and doors of lower walls, with moisture entry and decay apparent in some areas
- while deck floors to Level 8 use the proprietary concrete/steel floor system soffits and deck edge bands are timber-framed and clad (I note that Level 9 decks are timber framed within a steel perimeter frame and increase the consequences of any timber damage)
- the deck edge is unprotected, allowing water entry behind the cladding below (I also note that retro-fitted metal flashings to some deck edges indicate that those areas are likely to have suffered moisture entry in the past)
- posts to glazed balustrades are top-fixed to deck floors with tiles cut around the base, which is likely to have contributed to moisture entry at the deck edges
- junctions of fibre-cement deck bands with EIFS walls rely on the heavy use of sealant for weatherproofing, with cracks and decay apparent in some areas
- junctions of some exterior deck and balustrade walls with floors include skirting tiles that allow moisture to be trapped in the cladding behind the tiles
- corrugated metal cladding butts against deck tiles and claddings to the inside faces of deck balustrades and free-standing walls also lack clearance

**Windows and doors**

- there are many signs of moisture penetration into windows and doors, with bubbling paint, cracked reveals and decay in some areas
- jamb to sill junctions in EIFS window reveals are cracked, and cut-outs revealed no seals to prevent moisture entry
- the junctions of sill flanges to EIFS reveals are filled with sealant, so preventing moisture from draining to the outside
- jamb flashings to some deck doors extend behind deck skirting tiles, allowing moisture draining from the doors to be trapped at the bottom of the wall
- there are gaps in jamb seals to the face-fixed windows in metal panel claddings

**The roofs**

- there are many complex junctions and intersections and a reliance on the heavy use of sealants at penetrations and flashings
- there is evidence of leaks above two apartments, which require investigation.

5.5.9 The expert considered that the details and identified defects 'clearly suggest that further water entry will occur until major repairs are undertaken' and concluded that:

> ...a full invasive investigation will be required to confirm all the issues and the extent of work that will be required to get this building code compliant.

5.6 A copy of the expert's report was provided to the parties on 24 March 2011.

## 5.7 The applicants' response

5.7.1 The applicants responded to the expert's report in a letter to the Department dated 6 May 2011, which attached responses to the expert's report from the consultant, the building surveyor and the body corporate.

5.7.2 The applicants noted that the expert's report did not dispute the consultant's conclusion that the building work in the amended consent for the remedial work (refer paragraph 3.11.2) had been carried out in accordance with the consent documents and also made some general comments about the matter, which I have included within the applicants' submission outlined in paragraph 4.1.

### The consultant's response

5.7.3 The consultant commented in detail on the expert's report, and included the following general comments (in summary):

- Most indications or potential for water entry relate to cracking in fibre-cement, which is to be expected given the age. Maintenance is required but there is no evidence of associated water entry.
- The use of sealants is common and acceptable, although these require ongoing maintenance as they deteriorate over time. Most issues associated with sealants are a result of outstanding maintenance.
- There is a waterproof membrane under the deck tiles to prevent water entry. There is no evidence that water running off the deck tiles has caused damage.
- There is no evidence that the lack of cladding clearances at decks has lead to any moisture penetration.
- There is no evidence of leaking at handrails, window and door flashings, and the roof, so details should therefore be considered to be sound. Damage identified was from a roof leak that was repaired some time ago.
- While there is some decayed timber framing, it is very localised and limited to some lower deck soffits. The expert's limited moisture readings do not suggest extensive severe damage or systemic failure and any damage can be remedied during maintenance.
- Reference to water running behind the cladding is not of concern as it can escape onto the membrane underlying the deck tiles; and there is no evidence that the deck membrane is either missing or poorly installed.
- The top-fixed metal deck balusters are only of concern if water damage is apparent below.

5.7.4 The consultant also responded to the expert's comments on individual apartments (see paragraph 5.5.6), noting the lack of evidence of underlying damage to areas where expert had noted surface defects. The consultant considered that most defects were maintenance items and included the following comments (in summary):

- Apartment 27: fungal growth from water runoff is not uncommon.
- Apartment 33: bubbling paint is a minor maintenance matter and swollen skirtings could be old damage from a past event.
- Apartment 34: the expert's drillings appear dry and do not bind together.
- Apartment 35: further investigation is needed to conclude causes.
- Apartment 36: there is no evidence of poor execution or structural damage.
- Apartment 39: the deck soffits require investigation.
- Apartment 42: the expert's removal of deck tiles was excessive, with no benefit and possible damage to the membrane.
- Apartment 54: leaching appears to be external staining from surface cracks catching rainwater grime, with no evidence of underlying moisture.

5.7.5 The consultant concluded that the faults identified 'seem to be very localised and minor in nature, with no evidence of 'widespread damage creating uninhabitable spaces'. He stated that the building had demonstrated watertightness over ten years, except for the deck soffits where it 'is not overly consequential' and:

> Therefore, this building does not need any wholesale restitution of structural framing, damaged interior linings, removal of interior mould or flooring as is common with buildings that leak.

**The building surveyor's response**

5.7.6 The building surveyor responded to the expert's comments by re-inspecting and taking non-invasive moisture readings at some areas identified by the expert. The building surveyor noted that most areas appeared satisfactory, although some further investigation and maintenance was required.

5.7.7 The building surveyor concluded that:

> ...there is no direct evidence of failure. There are areas of the cladding which do not meet current requirements but this detailing was approved in the Building Consent. I do not believe one drilling of possible decay is a "clear breach of B2". The failures listed in the report are old detailing rather than leaks. From this further inspection it appears that most if not all of the "issues" raised can be remedied by maintenance.

**The body corporate's response**

5.7.8 The body corporate confirmed that there had been no complaints from residents about water entry into apartments apart from a roof leak some time ago which was addressed at the time.

5.7.9 The body corporate confirmed that it was aware of the maintenance obligations and would continue to attend to all matters identified as promptly as possible. Deferred maintenance is considered to be a priority and work has been undertaken.

## 5.8 Weathertightness

5.8.1 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).

5.8.2 The addition has the following environmental and design features which influence its weathertightness risk profile:

**Increasing risk**

- the altered building is ten-storeys high in part and sited in a high wind zone
- there are complex deck to wall and roof to wall junctions
- there are four types of cladding fixed directly to the framing
- there are enclosed timber-framed decks to all levels, some of which are situated above enclosed areas
- some upper level walls have oblique eaves that expose vulnerable junctions
- the external wall framing is not likely to be treated to a level that provides resistance to decay if it absorbs and retains moisture

**Decreasing risk**

- most floors are concrete or concrete-topped
- some upper level walls have generous eaves to shelter the cladding.

5.8.3 When evaluated using the E2/AS1 risk matrix, these features show that the elevations of the building demonstrate a very high weathertightness risk rating. I note that, if the details shown in the current E2/AS1 were adopted to show code-compliance, all of the wall claddings would require a drained cavity. However, this was not a requirement at the time of construction.

**Weathertightness performance**

5.8.4 It is clear from the expert's report that the building envelope of this addition is unsatisfactory in terms of its weathertightness performance, which has resulted in signs of moisture penetration in numerous areas and decay likely in some of the framing. Taking into account the expert's report, I conclude that areas outlined in paragraph 5.5.8 require rectification, although I note that this list is unlikely to be complete at this stage.

5.8.5 Considerable work is required to make the addition weathertight and durable. Further investigation is necessary, including the systematic survey of all risk locations. Such a survey will need to incorporate extensive invasive moisture testing and the removal of claddings where there is evidence of past or current moisture entry. The investigation must determine causes and the full extent of moisture penetration, timber damage resulting from past and current moisture penetration, and the effectiveness of any past repairs before establishing the repairs now required.

### Weathertightness conclusion

5.8.6 I consider the expert's report establishes that the current performance of the building envelope of this addition is not adequate because there is evidence of extensive moisture penetration and decay in the timber framing. Consequently, I am satisfied that the addition does not comply with Clause E2 of the Building Code.

5.8.7 In addition, the building envelope is also required to comply with the durability requirements of Clause B2. Clause B2 requires that a building continues to satisfy all the objectives of the Building Code throughout its effective life, and that includes the requirement for the building work to remain weathertight. Because the cladding faults on the addition are likely to allow the ingress of moisture in the future, the building work does not comply with the durability requirements of Clause B2.

5.8.8 I consider that final decisions on whether code compliance can be achieved by either remediation or re-cladding, or a combination of both, can only be made after a more thorough investigation of the claddings and the condition of the underlying timber framing. This will require a careful analysis by an appropriately qualified expert, and must include a full invasive investigation of the extent, level and significance of moisture penetration and any timber decay to the framing to establish the ongoing compliance of the external framing with Clause B1 Structure. Once that decision is made, the chosen remedial option should be submitted to the authority for its approval.

5.8.9 I note that the Department has produced a guidance document on weathertightness remediation[7]. I consider that this guide will assist the owners in understanding the issues and processes involved in remediation work to the buildings, and in exploring various options that may be available when considering the upcoming work required to the addition.

## 5.9 The durability considerations

5.9.1 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 addition in 2001.

5.9.2 The relevant provision of Clause B2 of the Building Code requires that building elements must, with only normal maintenance, continue to satisfy the performance requirements of the Building Code for certain periods ("durability periods") "from the time of issue of the applicable code compliance certificate" (Clause B2.3.1).

5.9.3 In previous determinations (for example Determination 2006/85) I have taken the view that a modification of this requirement can be granted if I can be satisfied that the building complied with the durability requirements at a date earlier than the date of issue of the code compliance certificate, that is agreed to by the parties and that, if there are matters that are required to be fixed, they are discrete in nature.

5.9.4 Because of the extent of further investigation required into the condition of the timber framing and therefore to parts of the addition's structure, and the potential

[7] Weathertightness – Guide to remediation design. This guide is available on the Department's website, or in hard copy by phoning 0800 242 243

impact of such an investigation on the external envelope, I am not satisfied that there is sufficient information on which to make a decision about this matter at this time.

## 6. The actions of the authority

6.1 The authority has informed the applicants that it will take 'no further action' unless information indicated that the building work had 'become dangerous or insanitary' (refer paragraph 3.9.2). This position is restated in the authority's letter to the applicants dated 6 April 2010 (refer paragraph 3.9.4).

6.2 In response to the draft determination the authority has also stated

> The [authority] observes that the Department will need to revisit question (sic) of overall compliance with clause B2 of the building code in due course, once further information is revealed through the investigative process [as described in the] draft determination.

6.3 In my view the authority is unable to decline to carry out the normal functions of a building consent authority as provided for in the Act. This includes:

- the requirement to undertake a final inspection if one is requested, in this instance for the remedial work undertaken under the amendment to the building consent
- the requirement to undertake inspections if so requested, for remedial work undertaken as a result of this determination
- the requirement to consider an application, if one is received, and the evidence provided in support of such an application for a code compliance certificate under section 94 of the Act, and, if the application is to be refused, provide reasons for this under section 95A.

It is not appropriate for the authority to simply refer the matter to the Department for a further determination.

## 7. What is to be done now?

7.1 The authority should inspect the addition and make a decision in terms of the options discussed at paragraph 5.2.7 as to whether it intends to:

- advise the owner that remedial work is necessary to make the building code-compliant, or
- seek a determination reversing the interim code compliance certificate.

7.2 If the interim code compliance certificates are reversed, the authority should then issue a notice to fix that requires the owners to bring the addition into compliance with the Building Code, including but not limited to the defects identified in paragraph 5.5.8, without specifying how those defects are to be fixed. It is not for the notice to fix to specify how the defects are to be remedied and the addition brought to compliance with the Building Code. That is a matter for the owners to propose and for the authority to accept or reject.

7.3 I suggest that the parties adopt the following process to meet the requirements of paragraph 7.1. Initially, the authority should inspect the addition 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.

## 8. The decision

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

- the external envelope of the addition does not comply with the Building Code Clauses E2 and B2 of the Building Code that was current at the time of consent
- there is insufficient evidence to establish on reasonable grounds that the external framing complies with Building Code Clause B2 insofar as it relates to Clause B1

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

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 14 October 2011.

John Gardiner
**Manager Determinations**