Department of Building and Housing
Te Tari Kaupapa Whare

Determination 2010/50

Determination regarding the refusal to issue a code compliance certificate for a 9-year-old building containing eight semi-detached townhouses at 20 to 20G Ruakiwi Road, Hamilton

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

1.2.1 The applicants are the owners of the eight units ("the applicants"), acting via a consultant ("the consultant"):

- 20 Ruakiwi Road: D and J Lovegrove, C Brinkworth ("Unit 1")
- 20A Ruakiwi Road: Twin Views Ltd ("Unit 2")
- 20B Ruakiwi Road: W Wang, T Ho ("Unit 3")
- 20C Ruakiwi Road: FCA Trustees 2008 Limited ("Unit 4")
- 20D Ruakiwi Road: T Thomsen ("Unit 5")

[1] The Building Act, Building Code, Compliance documents, past determinations and guidance documents issued by the Department are all available at www.dbh.govt.nz or by contacting the Department on 0800 242 243.

- 20E Ruakiwi Road: J and P Bridges, SR Hamilton Corporate Trustees Limited ("Unit 6")
- 20F Ruakiwi Road: Tarshi Properties Limited ("Unit 7")
- 20G Ruakiwi Road: G and G McDonald ("Unit 8")

1.2.2 The other party is the Hamilton City Council ("the authority") carrying out its duties and functions as a territorial authority or building consent authority.

1.2.3 The original application was made by the owners of Unit 7 and Unit 8, acting via a consultant ("the consultant"). The owners of Units 1 to 6 have subsequently elected to join the application (see paragraph 3.12).

1.3 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for a 9-year-old building containing eight townhouses ("the units"), because it is not satisfied that the building work complies with certain clauses[2] of the Building Code (First Schedule, Building Regulations 1992).

1.4 The matter to be determined[3] is therefore whether the authority was correct in its decision to refuse to issue a code compliance certificate. In deciding this matter, I must consider:

1.4.1 Matter 1: The external envelope

Whether the external claddings to the units ("the claddings") comply with Clause B2 Durability and Clause E2 External Moisture of the Building Code. The claddings include the components of the systems (such as the monolithic wall cladding, the brick veneer, the windows, the roof cladding and the flashings), as well as the way the components have been installed and work together. (I consider this matter in paragraph 8.)

1.4.2 Matter 2: The durability considerations

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

1.5 The evidence

1.5.1 In making my decision, I have considered:

- the submissions of the parties
- the reports of the two experts commissioned by the Department to advise on this dispute ("the first expert" and "the second expert")
- the report of the property inspection company commissioned by the building owners to inspect the building ("the inspection company")
- the consultant's report

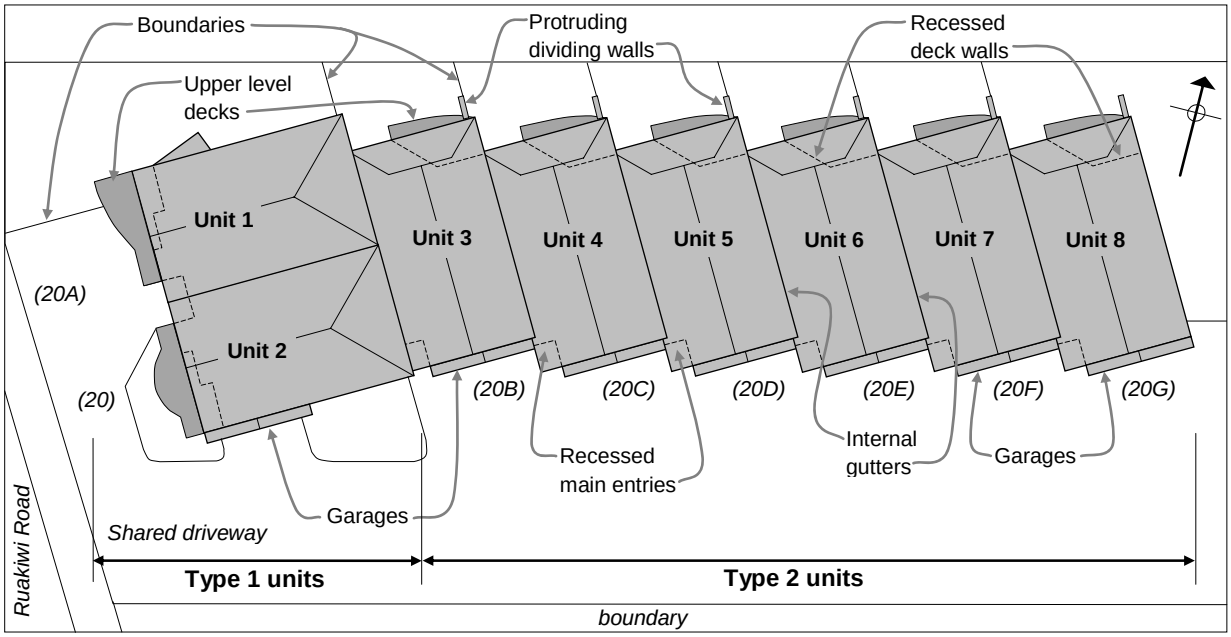
[2] In this determination, unless otherwise stated, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.
[3] Under section 177(b)(i) of the Act

- the other evidence in this matter.

1.5.2 I have evaluated this information using a framework that I describe more fully in paragraph 8.1.

2. The building work

2.1 The building is two-storeys high and situated on a narrow east sloping site in a medium wind zone in terms of NZS 3604[4]. The building sits along the site, with a shared driveway providing access to the units. The units are staggered in plan and step down the slope of the site as shown in the following site plan:



2.2 There are two different types of units ("Type 1 units" and "Type 2 units"). Type 1 units are larger, with entries facing the street, while Type 2 units face the driveway. The lower floors accommodate two bedrooms, a bathroom and the garage, with the living/kitchen areas, a bedroom and another bathroom in the upper levels. The building is assessed as having a moderate to high weathertightness risk.

2.3 Construction is conventional light timber frame, with concrete slabs, concrete block foundation and retaining walls, metal tile roof cladding and aluminium windows. The upper walls are clad in monolithic cladding, with brick veneer to the ground floor walls. The 30° pitch hipped and gable roofs have projections of about 100mm to 300mm beyond the external walls, except for the recessed deck walls. The stepped roofs result in complex junctions, including internal gutters above the party walls.

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

2.4 The decks

2.4.1 Upper decks are partly cantilevered and partly recessed to sit above enclosed areas below, with the roof providing a canopy above. The membrane-covered deck floors are curved at the outer edges.

2.4.2 The decks to Type 1 units have glass and metal balustrades, with the posts side-fixed into the timber trim at the deck edge. The Type 2 units have open metal balustrades fixed through the deck membrane, with the membrane turned down over the monolithic-clad deck edge.

2.5 The party walls between adjacent units are timber-framed, with fire-rated interior linings. The walls between Type 2 units extend out to form monolithic-clad barriers between adjacent decks, these project beyond the eaves by about 900mm.

2.6 The monolithic cladding

2.6.1 The monolithic wall cladding is an EIFS[5] system, with purpose-made flashings to windows, edges and other junctions. The second expert has identified the EIFS as a proprietary system in common use at the time of construction, with 40mm polystyrene backing sheets fixed directly to the framing, and finished with a mesh-reinforced plaster system and an acrylic paint coating system.

2.6.2 The EIFS cladding is applied to all the upper walls and also to the gable ends of the garage projections and above ground floor windows, where it forms recessed panels between the brick veneer. Decorative timber shingles are fixed over the EIFS at the upper parts of the gable ends.

2.6.3 On the east elevation of Unit 8 and several other areas where the upper and lower walls align, extra layers of polystyrene appear to have been installed to provide an increased cladding thickness that allows the EIFS to overlap the brick veneer at the inter-storey junction.

2.7 The expert noted no evidence of timber treatment, and the specification is silent on timber treatment for external wall framing. Given the date of construction in 1998 and the lack of other evidence, I consider that the wall framing is not treated.

3. Background

3.1 The authority issued a building consent (No. 1998/1861) during 1998, under the Building Act 1991. I have not seen a copy of the consent.

3.2 Construction commenced in 1998 and the authority inspected the units in pairs, with all pre-line inspections progressively completed and passed by September 1999. Although the inspection summaries are not clear, it appears that the initial final inspections were undertaken between June 1999 and June 2000.

[5] External Insulation and Finish System

3.3 The interim code compliance certificates

3.3.1 Outstanding items identified in the final inspections for each unit were completed and rechecked and interim code compliance certificates were issued as follows:

- Unit 1 and Unit 2 2 June 1999
- Unit 3 and Unit 4 28 June 1999 (some items to complete)
- Unit 7 15 October 1999
- Unit 5 6 July 2000
- Unit 6 17 August 2000
- Unit 8 13 December 2001
- Unit 4 30 November 2004

3.3.2 Each certificate noted that it was:

> An interim Code Compliance Certificate in respect of only part of the building work under the above Building Consent.

The issue of an interim code compliance certificate was carried out in accordance with the provisions of the former Act, and reflected a normal practice of the time.

3.4 The townhouses were progressively sold and occupied, with the original owners purchasing the units on the basis of the interim code compliance certificates and on the understanding that the developer would apply for a final certificate when all outstanding work was completed and inspected.

3.5 In 2006, the solicitor for the owner of Unit 7 sought clarification from the authority on the status of the code compliance certificate. The authority responded on 29 May 2006, noting that it 'would not automatically issue' a certificate as the building had monolithic cladding that now required an independent weathertightness assessment. The authority also suggested that action be taken 'as soon as possible as Council is now hesitant in issuing any Code Compliance Certificate on any project issued [with a building consent] before 2000.'

3.6 The inspection company's report

3.6.1 The unit owners commissioned a property inspection company to 'inspect and report on the exterior cladding' of the building. The inspection company visited the site on 21 July 2006.

3.6.2 The inspection company described the background and construction of the building, noting that windows in the EIFS cladding had metal head flashings, with uPVC jamb and sill flashings. Non-invasive moisture readings were taken around windows, and no evidence of moisture penetration was noted.

3.6.3 The report described various maintenance required and identified areas considered to be at risk, including:

- the lack of overflow provisions related to the railheads
- some cracks in the cladding
- the deck balustrades top-fixed through the deck membrane
- water marks to some soffits that need investigation
- the fixing of a pergola to Unit 1
- the lack of a capping to a small parapet in Unit 2

3.6.4 The report concluded that, provided remedial work was carried out:

> ...building should comply with the relevant New Zealand Documents for B2 Durability and E2 External Moisture identified at the time of construction.

3.6.5 It appears that some work was subsequently undertaken, including providing overflows to the railheads, alterations to balustrades in Type 1 units, and repairs to the bottom of apron flashings to the Type 1 units.

3.7 The report was forwarded to the authority, which responded on 14 September 2006 noting that the report was satisfactory and that when all of the repairs and recommended maintenance were complete the building would be re-inspected. However, a handwritten note added to the letter refers to a meeting with the authority which suggested that a code compliance certificate would not be issued for the whole building without a determination.

3.8 In late 2008, the owner of Unit 8 commissioned a visual inspection of the deck, which was carried out on 7 November 2008. The report noted that the soffit linings had been removed and there were no signs of any moisture penetration from the deck above.

3.9 The meeting with the authority

3.9.1 The original applicants met with the authority on 9 March 2009 to discuss the situation regarding code compliance certificates for the units. Meeting notes include the authority noting the following issues (in summary):

- The current Act does not recognise interim code compliance certificates.
- The authority's policy since late 2006 is that a final code compliance certificate cannot be issued for a building of this age because 'liability commences from the date that this certificate is issued'.
- The authority suggested a determination be sought that includes addressing durability concerns regarding the age of the units.
- Upgrading the existing balustrade fixings should not be undertaken until the outcome of any determination is known.

- Based on other decisions, the outcome of a determination is likely to be favourable, although it could 'require the cladding to be changed in terms of its current fixing methods'.

3.9.2 The authority apparently also provided a written statement, which included the following:

> Code compliance certificates (CCCs) will in most circumstances not be issued for outstanding building consents (those that have not been issued with a CCC) where the building consent was issued prior to the Building Act 2004 (either before the Building Act 1991 or in terms of the Building Act 1991 because:
>
> Council may not be satisfied on reasonable grounds that the provisions of the building code for
>
> 1 Durability in terms of B2 and/or
>
> 2 Weathertightness in terms of E2 and/or
>
> 3 Other appropriate provisions of the building code have been met and maintained in the period since the issue of the building consent.

3.10 The consultant's inspection

3.10.1 The original applicants subsequently commissioned the consultant to inspect Units 7 and 8, assess the inspection company's findings and to assist in an application for determination for their units. The consultant visited the site in May 2009 and reported on the results in his submission (refer paragraph 4.1).

3.10.2 The consultant noted that the building had been recently washed and cladding cracks sealed. Timber fascias, barge boards and soffits were repainted. The building has a building manager who arranges for the cladding to be washed annually.

3.10.3 The consultant noted that the 'head, jamb and sill flashings appeared typical for EIFS cladding systems', and non-invasive moisture readings around windows were low. There was also no sign of moisture penetration related to the cladding crack at the rainwater head, which now provided for overflow as recommended by the inspection company (see paragraph 3.6.3).

3.10.4 However, elevated readings were recorded under the balustrade fixings in Unit 7, which confirmed the inspection company's recommendations regarding the balustrade fixings (see paragraph 3.6.3).

3.10.5 The consultant considered that the 'general standard of workmanship was to a high standard and claddings had been installed with high levels of skill', and concluded:

> ...that there were no major or generic issues with the weathertightness of the external building envelope however there were minor maintenance issues that are a normal part of the ongoing maintenance requirements for EIFS claddings that should be attended to.

3.11 The Department received an application for a determination from the original applicants on 28 September 2009, and sought confirmation from the authority as to its refusal to issue a code compliance certificate. In a letter to the consultant dated 20 November 2009, the authority confirmed its written statement outlined in paragraph 3.9.2.

3.12 In an email to the Department dated 18 February 2010, the consultant stated that the owners of the remaining units had elected to join the application with the aim of achieving a code compliance certificate for the building.

3.13 In a letter to the consultant dated 25 February 2010, the Department explained that, as the remaining unit owners had joined the application, the remaining units would be inspected to provide further information about Units 1 to 6.

4. The submissions

4.1 The consultant provided a submission that outlined the matters to be determined, briefly described the background to the dispute, described the construction of the building and reported on his investigation of Units 7 and 8 (see paragraph 3.10). The consultant also set out reasons and justifications for the original applicants' request to have the consent amended so that code compliance certificates could be issued for their individual units.

4.2 The consultant forwarded copies of:

- the drawings
- some of the inspection records
- the interim code compliance certificates for each unit
- the inspection company's report on the building dated July 2006
- the Unit 8 deck inspection report dated November 2008
- the record of the meeting with the authority on 9 March 2009
- some other correspondence with the authority
- various other statements, appraisals, details and information.

4.3 The authority made a submission dated 15 October 2009, which supported modification of the durability provisions but not splitting the building consent to allow separate code compliance certificates. While recognising the difficulty facing owners within multiple unit buildings, the authority considered that if remedial work was required for the original applicants' units, then other unit owners would also be required to carry out repairs if their units were in a similar state. The authority concluded:

> In regard to the splitting of the consent we consider it a rather complicated affair, given that each unit will likely have the same issues. As such, we believe it would be more logical to ensure all units were satisfactorily tidied up, then to issue a modified CCC for the consent as per the original 8 units.

4.4 In a subsequent email to the Department on 13 November 2009, the authority confirmed that the primary issues were in regard to weathertightness and durability.

4.5 Copies of the submissions and other evidence were provided to each of the parties. Neither party made any further submissions in response to the submission of the other party.

4.6 A first draft determination was issued to the original parties on 15 December 2009. The draft was issued for comment and for the parties to agree a date when the house complied with Building Code Clause B2 Durability. The original applicants accepted the first draft determination on 13 January 2010.

4.7 After the remaining owners had joined the application and the second expert's report had been received, a second draft determination was issued to the parties on 1 April 2010. The second draft covered the building as a whole, and was issued for comment and for the parties to agree a date when the complex complied with Building Code Clause B2 Durability.

4.8 The applicants accepted the draft determination and proposed 1 September 2000 as the date for compliance with Clause B2 Durability being the date of substantial completion.

4.9 The authority has made no response to the second draft determination or the proposed date. I take this as an acceptance of the draft determination and that the authority does not dispute the proposed date.

5. The evidence of code compliance

5.1 In order for me to form a view as to the weathertightness and hence the code compliance of the building as a whole, I need to consider what evidence is available.

5.2 An important part of that evidence is the interim code compliance certificates issued by the authority for each unit. I note that these were issued as originally intended by the previous Act in that each certificate was issued in respect of completed work, albeit only part of the consented work for the total building.

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

- The interim code compliance certificates, which indicate compliance of the building elements within each unit as it was completed.
- The inspection company's report covering the weathertightness of the building, which described the construction and identified various weathertightness defects requiring attention.
- The consultant's report on the weathertightness of Unit 7 and Unit 8, which generally confirmed the findings of the inspection company's report.
- The first expert's report on Unit 7 and Unit 8 (see paragraph 6).
- The second expert's report on Units 1 to 6 (see paragraph 7).

6. The first expert's report

6.1 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 first expert inspected Unit 7 and Unit 8 on 20 November 2009 and provided a report that was completed on 25 November 2009.

6.2 The first expert noted that the overall standard of workmanship related to the wall claddings appeared to be generally good, except for items outlined in paragraph 6.6. The units had been recently repainted, with movement cracks filled.

6.3 The first expert noted he could not identify the particular type of EIFS system used, but considered that installation and detailing would have been typical at the time of construction (see also paragraph 7.4). There was no evidence of control joints, but these are not generally required for the dimensions of EIFS used on this building.

6.4 The windows are recessed, with metal head flashings and uPVC flashings that appeared satisfactory and typical of those in EIFS cladding systems. The first expert saw no sign of moisture penetration and considered that the flashings were performing adequately.

6.5 Moisture levels

6.5.1 The first expert inspected the interiors of Unit 7 and Unit 8, taking non-invasive moisture readings internally, and noted signs of moisture damage to:

- skirtings in the corner of a living room, below the rainwater head
- damaged ceiling linings in the garage below an upstairs shower, with damage also to the adjacent vanity.

6.5.2 The first expert took some invasive moisture readings through the cladding at areas considered at risk, and recorded elevated moisture levels of:

- 19% below the deck edge to wall junction of Unit 8
- 25% in the deck framing of Unit 7.

6.6 Commenting specifically on the claddings, the first expert noted that:

The decks

- the junction of the monolithic-clad edge of the decks with the walls lack saddle flashings and there are cracks at the junctions and evidence of moisture entry
- the balustrade post base-plates are top-fixed through the membrane and rely on sealants for weatherproofing, with elevated moisture in Unit 7's deck framing

The roof

- internal gutters between the units drain into rainwater heads at both ends, and there are associated cracks and evidence of moisture entry
- the junctions of the gutters with the rainwater heads are unflashed and the ends of apron flashings direct water into the cladding, with gaps, no kickouts, and a heavy reliance on sealants for waterproofing
- penetrations through the metal tile roofs are unflashed and rely on deteriorating sealants for maintaining weathertightness.

Maintenance

- the deck handrail to Unit 7 is pulling away from the cladding
- some recently repaired cladding cracks are reappearing
- the shower outlet to the upper level bathroom in Unit 7 is leaking.

6.7 The first expert noted that the defective details associated with the rainwater heads and the decks are repeated in the other Type 2 units.

6.8 The first expert also inspected the interior and exterior of Unit 7 and Unit 8 for compliance with other relevant clauses, and noted no apparent defects.

6.9 A copy of the first expert's report was provided to the parties on 1 December 2009.

7. The second expert's addendum report

7.1 As mentioned in paragraph 3.13, I engaged a second independent expert to assess Units 1 to 6. The expert is a member of the New Zealand Institute of Building Surveyors. The second expert inspected Units 1 to 6 on 13 March 2010 and provided an addendum report that was completed on 23 March 2010.

7.2 The second expert noted the following variations from the consent drawings:

- EIFS cladding has replaced timber weatherboards to the upper walls.
- Tiled shower areas have replaced acrylic shower cubicles.

7.3 The second expert noted that the overall standard of workmanship appeared to be generally 'very good' with the surface of the cladding in 'excellent condition', except for items outlined by the first expert and/or in paragraph 7.6. The brick veneer appeared satisfactory, with weep holes and top vents provided.

7.4 The second expert identified the cladding system as a common proprietary brand of EIFS and removed a small area of plaster at the sill to jamb junction of a window, noting that uPVC flashings had been installed in accordance with the manufacturer's instructions at the time.

7.5 The second expert inspected the interiors of Unit 1, 2, 4 and 5, taking 'numerous' non-invasive moisture readings internally. He also took 12 invasive moisture readings through the linings using long probes at locations considered at-risk. No evidence of moisture penetration was recorded.

7.6 The second expert noted that satisfactory remedial work appeared to have been carried out to Unit 1 and Unit 2. However, commenting specifically on the claddings to Units 3 to 6, the second expert noted:

- although Unit 1 and Unit 2 have satisfactory side-fixed balustrades, the other units have balustrade posts that are top-fixed through the membrane and rely on sealants for weatherproofing

- although Unit 1 and Unit 2 have satisfactory kickouts to apron flashings, the ends of apron flashings to other units lack kickouts, with gaps and a heavy reliance on sealants for waterproofing.

7.7 The second expert, noted that he was unable to get access to the interior of Unit 3 and made the following comments on the remaining units:

- The tiled shower floor to Unit 4 shows signs of waterproofing failure and the shower floor to Unit 5 appears to be 'suspect'.
- The glazed shower screens are not marked as safety glass.
- Some units lack smoke alarms within 3 meters of the bedroom doors.

7.8 A copy of the second expert's addendum report was provided to the parties on 23 March 2010.

Matter 1: The external envelope

8. Weathertightness

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

8.2 Weathertightness risk

8.2.1 This building has the following environmental and design features which influence its weathertightness risk profile:

Increasing risk

- the building is two storeys high
- there are partly cantilevered decks, with open metal balustrades, situated partly over lined ground floor spaces
- the upper walls have monolithic cladding fixed directly to the framing
- there are limited eaves and verge projections above most walls
- although fairly simple in plan, the roof includes complex junctions
- the external wall framing is not treated to a level effective in resisting decay if it absorbs and retains moisture.

Decreasing risk

- the building is in a medium wind zone
- eaves above the upper decks are more than one metre deep.

8.2.2 When evaluated using the E2/AS1 risk matrix, the weathertightness features outlined in paragraph 8.2.1 show that the east elevation of the building demonstrates a moderate weathertightness risk rating and the remaining elevations a high rating. I note that if the details shown in the current E2/AS1 were adopted to show code compliance, the monolithic cladding on this building would require a drained cavity. However, I also note that a drained cavity was not a requirement of E2/AS1 at the time of construction in about 1999.

8.3 Weathertightness performance

8.3.1 Generally the cladding appears to have been installed to good trade practice in accordance with the manufacturer's recommendations at the time of construction. However, the inspection company's report, the consultant's report and the two experts' reports satisfy me that remedial work is needed to a number of areas in the building as a whole.

8.3.2 Taking account of the inspection company's comments in paragraph 3.6.3, and the experts' comments in paragraphs 6.6 and 7.6, I conclude that remedial work is necessary in respect of the following:

General

- further investigation into the moisture levels and remedial work as necessary to the untreated framing associated with past and present moisture penetration (with particular emphasis on framing associated with the identified defects)
- maintenance to cracks in some areas in the cladding

The decks to Type 2 units

- the junctions of the deck edges with the walls
- the top fixings of the balustrade posts
- the fixing of some of the deck handrails to the walls
- the investigation of water marks to some deck soffits

The roofs

- investigation of the overflow provisions and the inadequate waterproofing of the rainwater heads to internal gutters
- inadequate weatherproofing of the bottom of apron flashings to Type 2 units
- the penetrations through the roofs.

8.3.3 Notwithstanding the fact that the EIFS backing sheets are fixed directly to the timber framing, thus inhibiting drainage and ventilation behind the cladding sheets, I have noted certain compensating factors that assist the performance of the cladding in this particular case:

- The cladding generally appears to be installed according to good trade practice.
- The windows appear to be adequately flashed.
- Moisture penetration appears limited to areas where defects have been identified.

These factors can assist the building to comply with the weathertightness and durability provisions of the Building Code.

8.4 Other issues

8.4.1 I note that the second expert has commented on several other issues, and I conclude that remedial work is necessary in respect of the following (the associated relevant clauses are noted in brackets):

- inadequate waterproofing to some of the tiled shower areas (Clause E3)
- lack of safety markings to the glazed shower screens (Clause F2).

8.4.2 I also note that the second expert raised the lack of smoke alarms. While these were not a requirement at the time the building was constructed, I strongly urge the applicants to install these as they are a current requirement for residential buildings of this type.

8.5 Conclusion

8.5.1 I consider the inspection company's and the experts' reports establish that the current performance of the cladding is not adequate because it is allowing water penetration through the cladding at present. Consequently, I am satisfied that the building does not comply with Clause E2 of the Building Code.

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

8.5.3 Because the faults identified occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 8.3.2 will result in the building being brought into compliance with Clauses B2 and E2. However, further investigation into the moisture levels and remedial work as necessary to the untreated framing associated with past and present moisture penetration is required.

8.5.4 I am also able to conclude that satisfactory resolution and/or rectification of the items outlined in paragraph 8.4.1 will result in the building being brought into compliance with Clauses E3 and F2.

8.5.5 It is emphasized that each determination is conducted on a case-by-case basis. Accordingly, the fact that a particular cladding system has been established as being code compliant in relation to a particular building does not necessarily mean that the same cladding system will be code compliant in another situation.

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

Matter 2: The durability considerations

9. Discussion

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 building work during 1999 and 2000.

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

9.3 These durability periods are:

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

9.4 In this case the delay since the completion of the building work has raised concerns that various elements of the building are now well through or beyond their required durability periods, and would consequently no longer comply with Clause B2 if a code compliance certificate were to be issued effective from today's date.

9.5 The authority has not submitted a date on which it considers the building elements complied with Clause B2. The applicant has proposed a date of 1 September 2000, being the date of substantial completion. I am satisfied that all the building elements, with the exception of those items that are to be fixed, complied with Clause B2 on 1 September 2000.

9.6 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.

9.7 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

(b) it is reasonable to grant such a modification, with appropriate notification, because in practical terms the building is no different from what it would have been if a code compliance certificate for the building had been issued in 2000.

9.8 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.

10. What is to be done now?

10.1 A notice to fix should be issued that requires the owners of all the units to bring the building into compliance with the Building Code, identifying the defects listed in paragraph 8.3.2 and paragraph 8.4.1 and referring to any further defects that might be discovered in the course of investigation and rectification, but not specifying how those defects are to be fixed. It is not for the notice to 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.

10.2 I suggest that the owners and the authority adopt the following process to meet the requirements of paragraph 10.1. Initially, the authority should issue the notice to fix. The unit owners should then produce a response to this in the form of a unified detailed proposal, produced in conjunction with a competent and suitably qualified person, as to the rectification or otherwise of the specified matters. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

10.3 I also note that there have been a number of obvious changes from the consent drawings and I leave the matter of appropriate documentation of these changes for the authority to resolve with the owners.

11. The decision

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

- the external envelope does not comply with Building Code Clauses B2 and E2
- some of the shower areas do not comply with Building Code Clause E3
- there is insufficient marking to the glass to conclude the shower screens comply with Clause F2

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

11.2 I also determine that:

(a) all the building elements installed in the house, apart from the items that are to be rectified as described in this determination, complied with Clause B2 on 1 September 2000.

(b) the building consent is hereby modified as follows:

The building consent is subject to a modification to the Building Code to the effect that, Clause B2.3.1 applies from 1 September 2000 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 8.3.2 and paragraph 8.4.1 of Determination 2010/50.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 17 June 2010.

John Gardiner
Manager Determinations