

# Determination 2006/04

## Refusal of a code compliance certificate for 48 dwellings with “monolithic” and weatherboard cladding systems at 11 The Avenue, Albany, North Shore City

### 1 The dispute to be determined

1.1 This is a determination of a dispute under Part 3 Subpart 1 of the Building Act 2004 (“the Act”) made under authorisation by me, John Gardiner, Determinations Manager, Department of Building and Housing, for and on behalf of the Chief Executive of that Department. The applicant is Blue Sky Holdings Ltd and the other party is the North Shore City Council (“the territorial authority”). The application arises because the territorial authority did not issue a code compliance certificate for a 5-year-old complex comprising 48 units (“the complex”).

1.2 The questions to be determined are:

#### 1.2.1 Issue 1

1.2.1.1 Whether I am satisfied on reasonable grounds that the following items comply with the Building Code (see sections 177 and 188 of the Act):

1. The monolithic and rusticated Cedar weatherboard wall cladding as installed to the external walls of the buildings (“the cladding”), including the components of the system (such as the backing sheets, the flashings, the joints and the plaster and/or the coatings) as well as the way the components have been installed and work together.
2. The roof claddings.
3. The finished ground levels and secondary flow paths.

#### 1.2.2 Issue 2

1.2.2.1 Whether all building elements, incorporated in the complex, comply with clause B2 of the Building Code, considering the age of the construction.

- 1.2.2.2 I note that the applicant in its submissions also requested that the determination address the issues of the acceptability of producer statements and the veracity of certifiers' inspection records (refer to the letter described in paragraph 3.1). I consider that the determination process as set out in the Act does not allow me to determine these questions. Accordingly, this determination is restricted to the two issues described in paragraph 1.2.1.
- 1.2.2.3 In making my decision, I have not considered any other aspects of the Act or the Building Code.

## **2 Procedure**

### **2.1 The building**

- 2.1.1 The building work consists of a complex of 48 two-storey terraced or semi-detached units situated on a sloping site, which is in a medium wind zone in terms of NZS 3604: 1999 "Timber framed buildings". The units are of either of a terraced or semi-detached configuration and have single-storey attached single or double garages. The external walls are of conventional light timber-frame construction built on either concrete ground floor slabs or timber first floor framing. The external walls are clad with a mix of monolithic cladding and Cedar weatherboards, and the pitched roofs lack eaves and verge projections. The units are of fairly simple shape in plan and form and there are no attached decks or balconies.
- 2.1.2 The consented plans state that H1 treated timber is to be used for the external wall framing. However, I have not received any written information as to the treatment, if any, applied to this framing.
- 2.1.3 The cladding systems of the complex comprise of:
- what is described as monolithic cladding, consisting of 7.5 mm "Eterpan" fibre cement backing sheets fixed directly to the framing over the building wrap, to which a textured coating system is applied
  - Cedar rusticated weatherboards fixed directly to the framing over the building wrap and finished with a paint system.

I note that the consented plans show the backing sheets for the monolithic cladding to be "Harditex", not the "Eterpan" sheets actually installed on this project.

- 2.1.4 Progressive Building Systems issued two "Producer Statements" both dated 7 April 2004, in respect of the "Eterpan" cladding. One of these covered Units 1 to 12 and 23 to 48, and the other Units 13 to 24. Both statements noted that:
- the remedial work being carried out on the horizontal control joints would ensure that they met the requirements of E2
  - the sheet joints should be inspected annually

- the effectiveness of the sealant to the stop-end flashings required monitoring and maintenance
- the barge board details as constructed fulfil the requirements of E2
- once the wall retaining posts are trimmed to provide adequate cladding clearance, the durability requirements of B2 will be met.

2.1.5 I note that Units 23 and 24 are covered by both of these statements.

## 2.2 Sequence of events

2.2.1 The territorial authority issued a building consent on 19 April 2000. Further consents were also issued for a residential swimming pool in 2001 and an amendment covering the construction of a pool house in 2003.

2.2.2 Rob Woodger Ltd (“the building certifier”) was engaged by 11 The Avenue Ltd (“the developer”) to carry out various site inspections. The building certifier produced progress reports as at 25 and 27 May 2003 for each individual unit. These reports noted that the pre-lining building work for Units 2 to 12 and Units 25 to 48 complied with the Building Code. However, the additional comments stated that this work to Units 2 to 4 had failed an inspection the day prior to the compliance date. While the fibre-cement external linings to Units 8, 9, and 13 to 23 were noted as being code compliant, the comments for Units 13 to 23 also noted failed inspections two days prior to the compliance date. Reports with the same information but dated 20 November 2003 were also supplied to the territorial authority for some of the units.

2.2.3 On 27 May 2003, the building certifier faxed the territorial authority formally advising it that the building certifier was no longer involved in the project and was therefore handing it back to the territorial authority for completion under section 57 (3b) of the Building Act 1991. The building certifier also attached the progress reports for each unit and three other documents dated 25 May 2003. One document was headed “Scope of Building Certifier’s Engagement Certificate: E/2000-1401”. This noted the exclusion “ Inspections to date by Rob Woodger, balance by council. Refer to monthly report attached”. The second document was “Building Certificate Number : C/2000-1401”, which stated that the building certifier was “satisfied on reasonable grounds that the building work complied with the listed provisions of the Building Code on the date of certification” The third document was a “Building Certifier’s Inspection Report” which stated:

THAT BUILDING WORK: Has progressed to the extent specified in the attached page headed ‘Progress as at 25/05/03 Monthly Report’ Number M/2000-1401.

I AM SATISFIED ON REASONABLE GROUNDS THAT TO-DATE THE BUILDING WORK: has been undertaken in accordance with the plans and specifications attached to the above Building Consent.

2.2.4 The developer forwarded a further set of individual progress reports from the building certifier dated 1, 3 and 4 December 2003, for the various units. These contained amendments to the reports dated 25 and 27 May 2003 for some of the

units. I note that for Units 14, 16, 17, 23, inspections were carried out in June 2003, which is after the date that the building certifier informed the territorial authority that he was no longer involved in the project.

2.2.5 On 3 October 2003, the territorial authority wrote to the developer enclosing a Notice to Rectify. The letter noted that certain units had been left in an unfinished state with some unprotected elements being exposed to the elements for an extended period of time. The territorial authority also described its dealings with the building certifier and noted that the inspection records were both incomplete and contained items that had not been inspected or had failed inspections. Documents, including producer statements, were also required from the developer. Final inspections of the units had revealed various defects, which the territorial authority identified under the headings of:

- Finished Ground Levels
- Claddings
- Detailing
- Surface Water.

2.2.6 The territorial authority noted the requirements of the Notice to Rectify and described the envisaged remedial work and the documents that must be provided. The territorial authority also listed building defects specific to Unit 13 and the requirement for flashings over ‘angle boxes’ to Units 14 and 15. The territorial authority described its concerns regarding the fire ratings of the units and requested a report from a suitably qualified and experienced fire engineer. The territorial authority concluded by noting that it must be fully satisfied on reasonable grounds that the complex was code compliant before it could issue a code compliance certificate. In this respect, the provision of producer statements and the like may not be sufficient to meet this requirement.

2.2.7 The Notice to Rectify was dated 3 October 2003 and it set out the background of the inspections. It also listed the defects, proposed remedial work, and the required documents as set out in the covering letter of 3 October 2003.

2.2.8 The developer commissioned a firm of consultants to review the integrity of the fire separations between the units. The consultants wrote to the developer on 14 November 2003 stating that, after completing two inspections on the units, they were satisfied “on reasonable grounds that the construction of the fire separations between the units complies as nearly as is reasonably practicable with the provisions of clause C3 Spread of Fire of the New Zealand Building Code and hence satisfies this aspect of the requirements of Section 46(4) of the Building Act”. The consultants also noted that they had not been given the opportunity to monitor the works during construction, had assumed that the work complied with the consent documentation, and had not carried out any invasive inspections.

2.2.9 In response to the Notice to Rectify the project manager wrote to the territorial authority on 18 November 2003, noting that various producer statements had been

signed off and remedial work had been undertaken in relation to the Cedar weatherboards and the ground levels. A hydraulic engineer had been engaged to review surface water problems, a report on the Eterpan linings was underway, and a firm had been engaged to carry out moisture testing. The defects in Unit 13 were being addressed and a firm of consultants was reviewing the fireproofing design and would inspect the design's compliance. The applicant was of the opinion that the project complied with the Building Code and a sign off should be granted by the territorial authority.

- 2.2.10 The developer delivered a letter by hand to the territorial authority on 18 December 2003, applying for a code compliance certificate for the complex and describing various conditions that included the driveways and the fire ratings.
- 2.2.11 In a letter to the developer dated 19 November 2003, the territorial authority gave its reasons for not accepting the consultant's report of 14 November 2003 on the fire separation between the units. The territorial authority required an appropriate producer statement regarding this issue. The territorial authority also noted that it had not received documentation regarding other remedial matters and in particular that involving the Cedar cladding.
- 2.2.12 The building certifier faxed the territorial authority on 16 December 2003, expressing concern that the territorial authority had refused to accept further inspection records for the complex. The building certifier hoped that the territorial authority was not implying any impropriety on his behalf, as the records were true records produced to expedite the issuing of code compliance certificates.
- 2.2.13 The territorial authority responded to the building certifier by facsimile on 16 December 2003, stating that it was not refusing to accept inspections carried out while the building certifier was responsible for such. It was not in a position to accept documents that replaced those inspections. The territorial authority was also concerned that the building certifier appeared to have issued new monthly inspection records as at 1 December 2003, as at that time, Mr Woodger's company was no longer practicing as a building certifier.
- 2.2.14 The developer engaged a firm of consultants to inspect and report on certain aspects of the complex. The consultants produced a report dated 25 February 2004. This report:
- recommended that a suitable gutter guard be installed to the valley gutters and that there should be 6 monthly checks and associated cleaning of these gutters
  - noted that remedial work had been carried out to address the territorial authority's concerns regarding finished ground levels and was of the opinion that surface water could not now enter the units
  - noted that while there was evidence of ponding, surface water in most instances would exit prior to entering the complex
  - recommended amendments to the grated channel outside Unit 22 and the area in front of Units 33 to 36.

The consultant recommended that once all the proposed remedial work had been completed, that the territorial authority accept, on reasonable grounds, that clauses E1 and E2, relating to surface water and finished ground levels, have been complied with.

2.2.15 On 5 May 2004, the territorial authority wrote to the developer referring to a fax that it had forwarded to the applicant on 13 February 2004. The territorial authority noted that, following a request from the applicant's agent, for final inspections and the issue of interim code compliance certificates, it had inspected Unit 1. As this inspection had revealed some additional defects, further inspections of this and other units were required. The territorial authority would review the documents that had been forwarded to it by the applicants. The territorial authority's concerns related in general terms to:

- Cladding Systems
- Monolithic Face Fixed Cladding System
- Redwood (Cedar) Cladding
- Roofing
- Finished Ground Levels
- Former Certifier Monthly Reports
- Producer Statements
- Sundry Outstanding Matters.

Due to the number of concerns and outstanding issues, the territorial authority was not prepared to issue code compliance certificate for the units.

2.2.16 The building certifier faxed the developer on 19 May 2004, stating that he had double-checked all day-sheets for all the inspectors on 20 November 2001. Regarding the cladding, it could not be confirmed if a post-line check had been carried out on Units 28 and 29. While the site record for Unit 45 showed a post-line check for Unit 45 this was unlikely to be correct. Cladding inspections except for brick veneer were new. Apart from the bracing, there is no record of the unit cladding being inspected and the building certifier could not confirm that they had been. A summary of inspections was attached to the fax as well as some progress reports as at 19 May 2004.

2.2.17 In a further facsimile to the developer dated 30 May 2004, the building certifier noted that Units 25 to 28 had been passed for pre-lines only and the reference to Eterpan on these units was for the bracing only, not the entire cladding system.

2.2.18 The consultants engaged by the developer to inspect and report on certain aspects of the complex wrote to the developer on 1 June 2004, summarising the findings and recommendations of the report of 25 February 2004. The consultants stated that the

channel in front of Units 33 to 36 had been satisfactorily completed and that the recommended discharge apron was not now required. The consultants considered that the footpath outside Unit 33 did not need to be re-laid.

2.2.19 On 8 June 2004, the territorial authority wrote to the developer noting that further inspections had been carried out on the various units including final inspections of the unit exteriors during the period 10 May 2004 and 20 May 2004. As a consequence of these inspections, the territorial authority raised questions as to the following general areas:

- Monolithic Face Fixed Cladding System
- Redwood (Cedar) Weatherboard Cladding
- Roof Cladding and Flashings
- Finished Ground Levels
- Former Certifier Monthly Reports
- Producer Statements
- Other Matters Outstanding

2.2.20 The territorial authority also noted that no inspections appeared to have been called for or undertaken in respect to the swimming pool. Consequent to a final inspection by the territorial authority it was noted that the steps leading to the pool had no handrail or barrier. This omission and other safety from falling issues needed to be addressed immediately. In order to satisfy the territorial authority as to code compliance, it required a producer statement from the pool installer or a suitably qualified and approved person. The territorial authority also requested a producer statement issued by a suitably qualified and approved person to verify the compliance of the timber pole retaining walls associated with the complex. The territorial authority also attached field memoranda and lists of defects that required attention. The territorial authority was unable to issue a code compliance certificate until all matters relating to the complex had been completed to its satisfaction.

2.2.21 On 15 March 2005 A+Waterproofing Limited wrote to the developer describing how all the horizontal and vertical joints had been rectified.

2.2.22 The applicant applied for a determination on 1 June 2005.

### **3 The submissions**

3.1 The applicant described some of the background to the dispute in a covering letter to the Department dated 27 May 2005. The applicant requested a determination on the following issues:

1. Acceptability of producer statements provided by Clode Consulting Limited.

2. Veracity of certifier's inspection records.
3. Finished ground levels and secondary flow paths.
4. Monolithic face fixed cladding.

3.2 The applicant also forwarded three supplementary notes to the Department on 30 May 2005. One note set out the background to the dispute and noted the measures that had been undertaken to remedy the various issues raised by the territorial authority. The applicant noted that the matters for determination were in relation to the finished ground levels and the secondary stormwater flow paths, particularly in relation to Units 33 to 36. The second note gave details of the acceptability of producer statements for the complex. The third note set out the applicant's concerns regarding the inspection process undertaken by the building certifier.

3.3 The applicant supplied copies of:

- correspondence with the territorial authority and the building certifier
- various inspection records
- the consultants' reports
- the letter of 15 March 2005 from A+Waterproofing Limited
- technical information
- various producer statements, including those relating to the Eterpan system
- an extract from E2/AS1
- a memo from PlasterTech Ltd dated 10 June 2004, which contained a sketch and described the methodology involved in repairing the mid-floor cracks in the cladding where control joints had not been originally installed.

3.4 In a covering letter, dated 8 November 2005, the territorial authority set out a short summary of events and noted that the matters of doubt are:

- Whether the installed cladding systems, including weatherboarding and roof cladding comply with clauses B2.3.1 and E2.3.2 of the Building Code.
- Whether finished ground levels and secondary flow paths comply with clause E1 of the Building Code.
- Whether all other building elements incorporated in the building comply with clause B2 of the Building Code, considering the age of construction.

3.5 The territorial authority supplied copies of:

- inspection records



- correspondence with the applicant
- 3.6 The draft determination was provided to the parties. The territorial authority responded by a letter to the Department dated 16 December 2005 and the applicant wrote to the Department on 19 December 2005.
- 3.7 The territorial authority noted that:
1. It had issued a Notice to Rectify and various follow-up letters and no purpose would be served by repeating the process. The territorial authority accepted that the process as set out in paragraph 8.4 should be followed.
  2. Defects that the territorial authority had identified as being additional to those described by the expert would be identified and remedied.
  3. The durability waiver should also be applied to the elements described in Issue 1.
  4. The determination refers to paragraph 4.6 which is not present (now amended to 5.5) and the reference to the land information memorandum should be changed to a reference to the project information memorandum.
- 3.8 The owner noted that it had made the application for a determination once the developer, who was now in liquidation, failed to provide a code compliance certificate. All meetings correspondence, etc prior to June 2005 were through the developer and not the applicant. I have made the necessary amendments to the previous draft determination to accommodate this information.

## **Issue 1: The wall and roof cladding, the ground levels, and the secondary flow paths**

### **4 The relevant provisions of the Building Code**

- 4.1 The dispute for determination is whether the territorial authority's decision to refuse to issue a code compliance certificate because it was not satisfied that the cladding complied with clauses B2.3.1 and E2.3.2 of the Building Code (First Schedule, Building Regulations 1992) is correct.
- 4.2 There are no Acceptable Solutions that have been approved under section 22 of the Act or section 49 of the Building Act 1991 that cover the monolithic cladding as installed on this complex. The cladding is not currently certified under section 269 of the Act. I am, therefore of the opinion that the cladding system as installed must now be evaluated as an alternative solution.
- 4.3 In several previous determinations, the Department has made the following general observations, which in my view remain valid in this case, about Acceptable Solutions and alternative solutions:

- Some Acceptable Solutions cover the worst case, so that they may be modified in less extreme cases and the resulting alternative solution will still comply with the Building Code
- Usually, when there is non-compliance with one provision of an Acceptable Solution, it will be necessary to add some other provision to compensate for that in order to comply with the Building Code.

## 5 The expert's report

- 5.1 The Department commissioned an independent expert (“the expert”) to inspect and report on the cladding and surface water drainage of the complex. The expert inspected the complex on 9 August, 15 and 16 September and 7 October 2005 and furnished a report that was completed on 12 October 2005.
- 5.2 The expert noted that the textured coating on the monolithic cladding is evenly and consistently applied. It was noted that some retrofitted control joints are installed in the cladding. While questions arise about the material used, the quality of the workmanship of the weatherboards appears to be acceptable. The expert found that, apart from the apron flashings, the roof flashings were acceptable. The expert also confirmed that the large-capacity drains recently installed at the front of the units perform adequately, but had doubts regarding the adjacent cladding that is hard down onto the paving.
- 5.3 The expert cut away small sections of the coating at various locations, and considered that the exterior joinery face fixed to the monolithic cladding is adequately flashed. Some of the locations where the cladding was removed showed indications that the framing timber is decaying. I accept that the locations opened are typical of similar locations around the complex.
- 5.4 The expert took internal moisture readings at 13 of the units and I accept that these investigations are representative of the complex as a whole. The non-invasive moisture readings indicated only one raised reading of 27.8% at Unit 12. The expert then took a further 72 invasive moisture readings throughout the complex and the following elevated readings were noted:
- 21% and 40%+ to Unit 1
  - 28% to Unit 5
  - 40%+ to Unit 9
  - 24% and 40%+ to Unit 12
  - 24% and 35% to Unit 21
  - 21% (at 2 locations) and 24% to Unit 22

- 24% to Unit 24
- 24% to Unit 30
- 40%+ to Unit 33
- 24% to Unit 36
- 40%+ to Unit 45.

Moisture levels above 18% recorded after cladding is in place generally indicate that external moisture is entering the structure.

5.5 The expert made the following specific comments on:

5.6 The monolithic cladding:

- control joints are not installed in the cladding at some locations
- some of the backing sheet layout is not in accordance with the manufacturer's recommendations
- there is pouting of the horizontal control joints at the inter-storey levels
- the colouring in the textured coating of Units 21 and 22 appears to be defective with extensive fading and discolouration evident
- the pvc external corner extrusions are delaminating
- there is cracking evident where the sheet joints have been cut out and repaired and at the junctions with other claddings
- in many instances, the minimum cladding to ground clearances have not been achieved and the cladding is taken hard onto the paving at some locations
- the textured cladding coating is not continued behind the fascias
- the cladding upstand above the valley gutter between Units 9 and 10 is uncoated and the joints are not filled
- in some instances, the retrofitted horizontal control joints and polystyrene bands make the apron flashing terminations more vulnerable to moisture ingress
- the head flashings at some locations is installed over the building wrap, which will direct moisture behind the cladding
- some apron flashings do not have end kick-out flashings and those that have been retrofitted have inadequately fitted kick-out flashings
- some penetrations through the cladding are ineffectively sealed.

### 5.7 The Cedar weatherboard:

- the quality of the weatherboard material is questionable, with evidence of cupping, splitting, and numerous knots (some of which have been repaired)
- the minimum cladding to ground clearances have not been achieved at some locations
- the sealing around the windows is ineffective, as are the timber plugs infilling the weatherboard grooves adjacent to the jambs. The sealant that has been retrospectively applied to the gaps at the jambs is also poorly applied
- the head flashings above some windows lack adequate end overhangs
- the weatherboards are finished with a dark coloured paint, which the expert considers makes the weatherboards susceptible to thermal movement on sunny days.

### 5.8 Ground drainage issues:

- where the cladding is taken hard down onto, or is in close proximity to the paved areas it is susceptible to splash effect from rainfall that could lead to the wicking up of moisture into the cladding
- where the parking bay for Unit 47 is adjacent to Unit 45, it falls towards the cladding of the latter unit, which is in contact with the sealed driveway.

### 5.9 Copies of the expert's report were provided to each of the parties.

## 6 Discussion

### 6.1 General

6.1.1 I have considered the submissions of the parties, the expert's report and the other evidence in this matter. The approach in determining whether building work complies with clauses B2, E1 and E2 is to examine the design of the complex, 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. The Building Industry Authority and the Department have described the weathertightness risk factors in previous determinations (refer to Determination 2004/01 et al) relating to monolithic cladding, and I have taken these comments into account in this determination.

### 6.2 Weathertightness risk

6.2.1 In relation to these characteristics I find that the complex:

- is built in a medium wind zone

- is two storeys high
- is fairly simple in plan and form
- has no eaves or verge projections
- has no attached balconies or decks
- has monolithic cladding and rusticated weatherboards that are fixed directly to the framing
- has external wall framing that is treated to a level that may not provide a good level of resistance to the onset of decay if the framing absorbs and retains moisture. The presence of decay that is already evident in the timber indicates to me that the timber treatment has not been very effective to date.

### **6.3 Weathertightness performance**

- 6.3.1 I find that the monolithic and Cedar weatherboard cladding in general does not appear to have been installed according to good trade practice. As a result, there are a number of identified defects, set out in paragraph 5.5 and in the expert's report, which have contributed to the moisture penetration already evident in several locations in the external walls of the complex.
- 6.3.2 I also find that the ground clearance and the secondary stormwater flow paths are not fully code compliant.
- 6.3.3 I note that all elevations of the complex demonstrate a high weathertightness risk rating as calculated using the E2/AS1 risk matrix. The matrix is an assessment tool that is intended to be used at the time of application for consent, before the building work has begun and, consequently, before any assessment of the quality of the building work can be made. Poorly executed building work introduces a risk that cannot be taken into account in the consent stage but must be taken into account when the complex as actually built is assessed for the purposes of issuing a code compliance certificate.

## **7 Conclusion**

- 7.1 I am satisfied that the current performance of both the monolithic and timber weatherboard claddings is inadequate because they have not been installed according to good trade practice and are allowing water penetration into the wall framing through numerous defects in the cladding at present. In particular, they demonstrate the key defects listed in paragraph 5.5. I have also identified the presence of a range of known weathertightness risk factors in this complex. The presence of the risk factors on their own is not necessarily a concern, but they have to be considered in combination with the significant faults identified in the cladding systems. This combination of risk factors and faults indicate that the structure does not have sufficient provisions to compensate for the lack of a drained and ventilated cavity.

Consequently, I am not satisfied that the cladding systems as installed comply with clause E2 of the Building Code.

- 7.2 In addition, the complex 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 complex to remain weathertight. Because the cladding faults in this building are allowing the ingress of moisture at present, the complex does not comply with the durability requirements of clause B2.
- 7.3 I find that, because of the extent and apparent complexity of the faults that have been identified with the cladding, I am unable to conclude, with the information available to me, that remediation of the identified faults, as opposed to partial or full re-cladding, could result in compliance with clause E2. 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 cladding. This will require a careful analysis by an appropriately qualified expert. Once that decision is made, the chosen remedial option should be submitted to the territorial authority for its comment and approval. If the territorial authority chooses to reject the proposal, then the applicant is entitled to seek a further determination on whether the proposed remedial work will led to compliance with the requirements of clauses E2 and B2.
- 7.4 I note that, once the complex has been made compliant with the Building Code, effective maintenance of the claddings is important to ensure ongoing compliance with clause B2 of the Building Code. That maintenance is the responsibility of the owner. The Building Code assumes that the normal maintenance necessary to ensure the durability of the cladding is carried out. For that reason clause B2.3.1 of the Building Code requires that the cladding be subject to “normal maintenance”. That term is not defined, and I take the view that it must be given its ordinary and natural meaning in context. In other words, normal maintenance of the cladding means inspections and activities such as regular cleaning, repainting, replacing sealants, and so on.
- 7.5 I am also of the opinion that apart from the apron flashing defects (noted in paragraph 5.5) that the roofing and its associated flashings comply with clauses B2 and E2 of the Building Code.
- 7.6 I am also satisfied that the finished ground levels and secondary flow paths do not entirely comply with clauses E1 and E2 of the Building Code.
- 7.7 The territorial authority has raised issues regarding the fire separation between the units and some safety aspects of the swimming pool. As these matters have not been referred to me for determination, I accept that they have been resolved to the satisfaction of the territorial authority.
- 7.8 In the circumstances, I decline to incorporate any waiver or modification of the Building Code in this determination.

## 8 The decision

8.1 In accordance with section 20 of the Building Act 1991, I hereby determine that:

1. The monolithic and weatherboard cladding systems as installed do not comply with clauses B2 and E2 of the Building Code.
2. Apart from the apron flashings, the roofing and its associated flashings comply with clauses B2 and E2 of the Building Code.
3. The finished ground levels and secondary flow paths do not comply with the requirements of clauses E1 and E2 of the Building Code.

8.2 Accordingly, I confirm the territorial authority's decision to refuse to issue a code compliance certificate.

8.3 I note that the territorial authority has issued a Notice to Rectify. A new notice to fix should be issued that requires the applicant to bring the complex up to compliance with the Building Code. It is not for me to decide directly how the defects are to be remedied and the cladding, ground clearances and secondary flow paths brought to compliance with the Building Code. That is a matter for the applicant to propose and for the territorial authority to accept or reject.

8.4 I would suggest that the parties adopt the following process to meet the requirements of paragraph 8.3. Initially, the territorial authority should issue the notice to fix, listing all the items that the territorial authority considers to be non-compliant. The applicant should then produce a response to this in the form of a technically robust proposal, produced in conjunction with an expert, 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.

8.5 Finally, I consider that the cladding will require ongoing maintenance to ensure its continuing code compliance.

## Issue 2: The additional durability considerations

### 9 Discussion

9.1 I note that the relevant provision of clause B2 of the Building Code is that building elements must, with only normal maintenance, continue to satisfy the performance requirements of the Building Code for certain periods "from the time of issue of the applicable code compliance certificate".

9.2 As set out in paragraphs 3.4 and 3.7(3), the territorial authority has concerns about the durability, and hence the compliance with the Building Code, of certain elements of the complex, considering the building work was completed in 2001. I am of the opinion is that the territorial authority should amend the original building consent by making it subject to a waiver of the Building Code in accordance with section 67 of

the Act to the effect that the durability is to be measured from the date of the substantial completion of the complex instead of from the time of the issue of the code compliance certificate. The land information memorandum for this complex should also be amended in line with the above. For the purposes of this determination, I am of the opinion that “substantial completion” of the complex is achieved when the complex is ready for occupation. I do not accept the comment from the territorial authority that the amendment should be to the project information memorandum. The latter document relates only to the building consent, whereas the land information memorandum is permanently attached to the territorial authority’s records.

## **10 The decision**

- 10.1 I determine that the territorial authority is to amend the original consent, issued in April 2000, to incorporate a waiver of clause B2 of the Building Code to the effect that the required durability periods for the building elements put in place in the course of work carried out under that consent are to be measured from the date of the substantial completion of the building and not from the date of the issue of a code compliance certificate. For the avoidance of doubt I determine that this waiver is not to be applied to elements that have been renewed or replaced since the original construction and for which little of the required durability period has elapsed at the time of this determination.
- 10.2 Following this amendment, any code compliance certificate subsequently issued by the territorial authority should be issued in line with the amended building consent.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 2 February 2006.

John Gardiner  
**Determinations Manager**