Determination 2007/113

Determination regarding a code compliance certificate for a house at 6 Shepherds Road, Papakura



1. The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ ("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. The applicant is the owner of the building, C Murphy ("the applicant") and the other party is the Papakura District Council ("the territorial authority").
- 1.2 This determination arises from the decision of the territorial authority to refuse to issue a code compliance certificate for a 7-year old house because it was not satisfied that it complied with the Building Code² (First Schedule, Building Regulations 1992).

¹ The Building Act 2004 is available from the Department's website at www.dbh.govt.nz.

² The Building Code is available from the Department's website at www.dbh.govt.nz.

- 1.3 I consider that the matters to be determined are as follows:
 - Whether the cladding as installed on the building complies with clauses B2 "Durability" and E2 "External Moisture" of the Building Code (see sections 177 and 188 of the Act). By "the cladding as installed" I mean the components of the system (such as the backing materials, the flashings, the joints and the coatings) as well as the way the components have been installed and work together.
 - Whether the domed structure on the building complies with clauses B1, B2, and E2 of the Building Code.
 - Whether the foundations and associated piling comply with clause B1 of the Building Code.
- 1.4 In addition, the territorial authority has sought fully detailed as-built drawings for the stormwater and sanitary drainage to confirm that the completed installation complies with clauses E1 and G13 of the building Code.
- 1.5 Further to the matters to be determined, I notice that the notice to fix issued by the territorial authority requires the cladding to meet "the weathertightness principles of the Approved Document E2/AS1". E2/AS1 is one method, but it may not be the only method, of achieving code-compliance. Alternative solutions can also be considered, provided that they can also be shown to comply with the Code. The notice to fix also requires that the foundations and piling comply with "B1 Structure and/or alternate specific design". As regards the cladding, and the foundations and piling, I can only determine whether they comply with the requirements of the Building Code.
- 1.6 In making my decision, I have considered the submissions of the parties, the report of the independent expert ("the expert") commissioned by the Department to advise on this dispute, an opinion given by Departmental engineers, and the other evidence in this matter. With regard to the cladding and roofing, I have evaluated this information using a framework that I describe more fully in paragraph 7.1.
- 1.7 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.

2. The building

2.1 The building work consists of a large two-storey detached house situated on an excavated sloping cliff-top site, which is in a very high wind zone for the purposes of NZS 3604³. The house is extremely complex in plan and form, with some circular segments, and is topped by a 3.4 m radius dome. Construction is, in most part, conventional light timber frame constructed on concrete or timber-framed floors. The reinforced concrete beams under the ground floor slab are supported by bored concrete piles. The low-pitched roofs are at two main levels with perimeter parapet

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³ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

- walls and internal gutters. The external joinery units are recessed approximately 100mm in from the face of the cladding.
- 2.2 The dome is constructed from plywood sheeting fixed to 16 shaped laminated timber beams and associated framing. A parapet wall and gutter are constructed around the external perimeter of the dome and the dome and gutter surfaces are covered with a "Fibredeck" fibreglass membrane system that has a painted finish. A polished aluminium vented spire is attached to the top of the dome.
- A curved-on-plan timber-framed boarded deck is cantilevered out from the ground floor of the building at the east elevation and this has a glazed balustrade. A large timber-framed balcony runs along the entire length of the west elevation at first floor level. The balcony, which has a curved-on-plan section, is partly cantilevered and partly constructed over a living space. The plywood substrate on the balcony deck is finished with a fibreglass membrane and a timber-framed monolithic-clad balustrade constructed around the outer edges of the balcony. A pergola constructed with monolithic-clad timber-framed columns and beams is constructed at the north elevation.
- 2.4 From the information that I have been given, I accept that the external wall framing is treated to at least H3.1.
- 2.5 The walls and columns of the house are clad with an "Insulclad" polystyrene system that is directly fixed through a building wrap onto the timber framing and finished with polymer modified cement "adobe style" plaster and an acrylic paint system.
- 2.6 The plasterers have issued a producer statement dated 5 September 2006 relating to the cladding.

3. Sequence of events

- 3.1 A geotechnical investigation report for the site dated March 1997 was prepared by a firm of consulting engineers, prior to the preparation of the drawings and the specifications.
- 3.2 According to the applicant, the territorial authority issued a building consent (No. 15945) in August 1999, under the Building Act 1991. The consent was based on a certificate supplied by A1 Building Certifiers Ltd ("the building certifier"). The applicant states she moved into the nearly completed house in December 2000 but it was not fully completed until early 2007.
- 3.3 Initially, the building certifier inspected the house during its construction and passed the final drainage inspection on 9 December 1999 and the pre-line inspection on 2 March 2000. The building certifier lost its approval as a building certifier on 18 September 2002, and the territorial authority then took over the inspection process. However, the territorial authority has informed me that it carried out one site inspection on 9 July 2001, but this was only in relation to a road crossing.

3.4 In response to queries that the applicant had raised regarding the issue of a code compliance certificate, the territorial authority wrote to the applicant on 15 December 2006. The territorial authority listed the items it required as:

- an observation certificate relating to the geotechnical issues
- an as-built drainage plan
- an independent external cladding report from a suitably qualified person.
- 3.5 The applicant engaged a building consultant ("the consultant"), whom I have been informed, was selected from a list provided by the territorial authority, to undertake a "weathertight assessment survey of external elements installed on the dwelling". The consultant undertook the assessment, which was based on a non-invasive investigation, and produced a report dated 11 May 2007. The report described the building and its principal elements in detail and noted that the elements were adequately constructed. No high-level moisture readings were observed.
- 3.6 Following what I assume was a final inspection of the property on 22 May 2007, the territorial authority wrote to the applicant on 23 May 2007. The territorial authority listed certain matters that required attention. These were in regard to:
 - the exterior cladding and its detailing, and the fact that the cladding had already been painted twice
 - whether the dome had been constructed differently to that shown on the approved plans
 - the lack of fully detailed as-built drainage plans
 - the supervision of the foundation construction.
- 3.7 The territorial authority attached a notice to fix, also dated 23 May 2007, to the above letter. The notice listed the particulars of contravention or non-compliance as:

Element of risk with finished cladding system.

Dome structure waterproofing.

Detailed drainage as-built plan not supplied.

Required Geotechnical Engineer inspection for foundations not carried out.

The territorial authority also set out the remedial work required in relation to the four listed concerns including:

Carry out remedial work and/or provide evidence that the installed cladding system will meet the weathertightness principles of E2/AS1.

Details of Dome structure (if construction differs from approved plans), product and application details of the waterproofing system used on the outer surface . . .

An as-built drainage plan to be supplied by the drainlayer responsible for the work carried out on the Sanitary and Stormwater systems . . .

Assessment of all documentation relating to the foundations and its piling by a registered Geotechnical Engineer . . .

- 3.8 The designer of the house ("the designer") is a Chartered Professional Engineer and has informed me that he is related to the applicant. In this instance I do not believe this represents a conflict of interest in his professional duty to the applicant.
- 3.9 The designer wrote to the territorial authority on 29 May 2007 making the points summarised below:
 - Care was given to the design of the wall cladding and its installation, which was undertaken by an experienced licensed practitioner
 - The report of the consultant, who was selected from a list provided by the territorial authority, appeared to be thorough. The designer requested that the territorial authority identify any specific problems that it had with the report.
 - The house had only been re-painted once.
 - The dome was not constructed differently to the approved plans
 - The drainlayer died before completing the as-built drawings and the designer queried what minimum detailing the territorial authority required
 - As the building certifier's inspector lacked the required knowledge, he had approved the designer taking over the supervision of the foundations and piling. Accordingly, as the designer considered the supervision to be within his expertise and experience, another geotechnical engineer was not engaged. The main piles had been bored an additional 2 metres deeper than indicated on the plans and the house has not shown any signs of distress or settlement. The designer had also issued a producer statement for the work in question. The designer did not believe that at this time another engineer could now make an inspection report. In addition, the territorial authority had already checked and accepted the design calculations.
 - H3 tanalised external framing timber had been used for the external wall framing as an additional safety precaution
- 3.10 The Department received an application for a determination on 3 July 2007.

4. The submissions

4.1 In a covering letter dated 25 June 2007, the applicant set out the history and background to the dispute and noted that the house had not leaked in the 7 years since the cladding was installed. While accepting that the territorial authority had not been informed about the change to the waterproof membranes installed on the dome and balcony decks, the applicant noted that the membranes showed "no sign of

cracking, distress, or delamination, and indeed no leaks". The applicant stated that if the criteria of "proven in-service performance" and "quality of the finished application" are applied when assessing the membranes, they would prove to be code-compliant.

- 4.2 The applicant forwarded copies of:
 - the pre-design geotechnical report
 - the plans and specification
 - some consent and inspection documentation
 - the consultant's report dated 11 May 2006
 - the correspondence with the territorial authority
 - invoices for some of the materials used in the construction of the house
 - background information relating to the house and the designer
 - a set of photographs that showed various stages of the house construction.
- 4.3 Copies of the applicant's documentation were forwarded to the territorial authority.

5. The expert's report

- 5.1 As mentioned in paragraph 1.6, I engaged an independent expert, who is a member of the New Zealand Institute of Building Surveyors, to provide an assessment of the condition of those building elements subject to this determination.
- The expert inspected the cladding of the house on 2 August 2007 and furnished a report that was completed on 13 August 2007. The expert removed sections of cladding at various locations and I am prepared to accept that the details exposed at these situations apply to other similar locations throughout the building.
- 5.3 The expert took non-invasive moisture readings through the interior linings and those readings were within the "equilibrium range". Invasive moisture readings were also taken through the exterior cladding at 29 locations around the building and the following elevated level readings were recorded:
 - 24%, 25%, 28%, 66% and 97% at the west elevation.
 - 22%, 23% 25%, 28% (at 2 locations), 30% and 58% at the east elevation.
 - 25% at the south elevation.
 - 22%, 23% and 27% at the north elevation.

These moisture levels exceeded the normal equilibrium levels in the house which were between 14% and 15% and the maximum in-service moisture content as set out in Table 1 of NZS 3602⁴ and indicate that external moisture may be entering the structure. The expert also noted that there was minor staining to the inside surface of the dome but attributed this to moisture blown through the dome vent.

5.4 Commenting specifically on the cladding, the roofing and the drainage, the expert noted that:

The cladding

- there is minor cracking evident in the cladding
- the base of the cladding is in contact with the ground at some locations
- the base of the cladding is too close to the balcony decks
- where the base of the cladding is close to the finished ground levels, no moisture stop has been installed below the concrete slab level
- the ends of the head and sill flashings to the external joinery units do not extend sufficiently and the sill flashings do not turn down the face of the cladding
- no waterproofing or saddle flashing is installed where the balcony balustrade meets the adjoining southwest wall cladding
- there is no waterproofing or saddle flashings where the monolithic clad pergola members adjoin the wall cladding and the tops of these members lack crossfalls.

The balustrades

• the lack of metal handrails on the balcony balustrades means that the balustrades lack the required height.

The roofing

- the paint finish on the dome membrane is cracking and blistering in places
- the dome vent allows the passage of driven moisture
- the tops of the roof and dome parapets lack waterproof membranes and do not have sufficient cross-falls
- a gap has developed between the turndown of fibreglass membrane to the upper low-pitched roof and the adjoining apron flashing

⁴ New Zealand Standard NZS 3602:2003 Timber and Wood-based Products for Use in Buildings

• the section of higher level steel roofing to the garage that terminates behind the cladding lacks kick outs or diversion flashings.

Sewer and stormwater drainage

- there is little evidence on site as to the layout and components that make up the sewer and stormwater drainage systems and the expert suggested that a CCTV survey could be carried out to verify the as-built layout.
- 5.5 The expert also noted some variations between the consented plans and what was constructed. These were:
 - changes to 2 window positions
 - the omission of the upper balcony balustrade handrails
 - the lack of a membrane to the parapet tops
 - the substitution of Insulclad for the asbestos-cement linings shown for the roof parapet tops
 - the substitution of fibreglass for the butyl rubber membrane shown for some roof areas and gutters.
- 5.6 Copies of the expert's report were provided to each of the parties on 16 August 2007.

6. The draft determination

- I prepared a draft determination and copies were sent to the parties on 20 August 2007.
- 6.2 The applicant responded to the draft determination, and the expert's report, in a fax to the Department dated 4 September 2007. The applicant's comments are summarised below:
 - The moisture readings obtained by the expert are at odds with those obtained by the applicant's consultant. It was noted that it had rained on the day that the expert inspected the building and the applicant queried whether this could have affected the readings. In addition, had the Department taken into account the facts that the wall framing was H3 treated and the "Insulclad" has a clearance gap at its base?
 - It was not accepted that the base of the cladding was too close to the decks of the balcony.
 - The applicant was in the process of getting comments from the "Insulclad" applicator regarding some details.
 - The handrail height would be rectified and the applicant required direction from the Department as to what is required.

 As the dome roof was not leaking and the notice to fix did not require any remedial work, the applicant objected to having to repaint the dome, which would be addressed under normal maintenance.

- The applicant saw no reason why a 15 degree cross-fall was required on the parapet cappings.
- The applicant did not see the need for a CCTV survey of the drainage. If one was required, then the territorial authority should pay for it.
- Some clarification was required regarding the comments set out in paragraph 5.5 concerning the variations from the consented plans.
- As the house was designed prior to the issuing of the E2/AS1 risk matrix, the applicant queried its relevance
- The designer had already provided a producer statement to the territorial authority and can provide evidence of a current professional indemnity insurance policy.
- 6.3 In a letter dated 18 August 2007, the territorial authority commented on the draft determination and the expert's report. The territorial authority was satisfied with the content of the expert's report and would issue a new notice to fix once the determination was finalised based on the items set out in the determination. I summarise the territorial authority's other comments below:
 - The territorial authority carried out one inspection of the property on 9 July 2001, which related only to a vehicle crossing. It also visited the site in May 2007, to view the issues raised by the building certifier.
 - There was concern about the variance of the moisture readings obtained by the expert and the territorial authority's consultant.
 - The oversight regarding the handrail height was acknowledged.
 - A producer statement/ letter of undertaking from the engineer who inspected the foundations were required, together with insurance coverage and detailed site inspection reports.
- 6.4 I note the following in response to the above:
 - Both the applicant and the territorial authority are concerned about the
 differences shown between the moisture readings taken by the expert and the
 applicant's consultant. I note that the consultant only took non-invasive
 readings, while the expert's readings set out in the determination are invasive
 ones. The expert's initial non-invasive readings did not indicate that any
 elevated levels of moisture were present.
 - The applicant also queries the accuracy of the published expert's moisture readings. While atmospheric conditions might affect day-to-day recordings in

a minor way, the elevated readings must be considered in the context of all the readings obtained. This approach indicates the major differences apparent between what can be considered as acceptable moisture levels, which average 17%, and the elevated readings, which average 35%.

- The H3.1 treated framing timber is certainly an advantage in assessing the structural durability of the durability of the external walls. However, even treated timbers may be susceptible to decay if exposed to moisture over extended periods of time. No doubt the territorial authority will take into account the treatment when assessing any proposed remedial work.
- The "Insulclad" data sheets current at the time of the construction required a 15 degree slope to the top of parapets and a 40mm high gap at the base of cladding adjacent to horizontal surfaces.
- It is over to the territorial authority rather than the Department to establish with the applicant a suitable method for fixing the balcony handrail.
- The reference to changes from the consented plans noted in paragraph 5.5 brings to the notice of the territorial authority that it should amend the original building consent to accommodate the changes so that the consent and code compliance certificate are in unison.
- The E2/AS1 matrix is used merely as a form of guidance and does not specifically impact on the decisions reached in the determination.
- 6.5 I have taken note of the parties' comments and have amended the determination as appropriate.

7. Evaluation for code compliance

7.1 Evaluation framework

- 7.1.1 In evaluating the design of a building and its construction, it is useful to make some comparisons with the relevant Acceptable Solution⁵, in this case E2/AS1, which will assist in determining whether the features of this house are code compliant. However, in making this comparison, the following general observations are valid:
 - Some Acceptable Solutions are written conservatively to 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 one or more other provisions to compensate for that in order to comply with the Building Code.

⁵ An Acceptable Solution is a prescriptive design solution approved by the Department that provides one way, but not the only way, of complying with the Building Code. The Acceptable Solutions are available from The Department's Website at www.dbh.govt.nz.

7.1.2 The approach in determining whether building work is weathertight and durable and is likely to remain so, is to apply the principles of weathertightness. This involves the examination of 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. The Department and its antecedent, the Building Industry Authority, have also described weathertightness risk factors in previous determinations (for example, Determination 2004/1) relating to cladding and these factors are also used in the evaluation process.

7.1.3 The consequences of a building demonstrating a high weathertightness risk is that building solutions that comply with the Building Code will need to be more robust. Conversely, where there is a low weathertightness risk, the solutions may be less robust. In any event, there is a need for both the design of the cladding system and its installation to be carefully carried out.

7.2 Weathertightness risk

- 7.2.1 In relation to these characteristics I find that the house:
 - is built in a very high wind zone
 - is two-storey
 - is very complex in plan and form
 - has a large dome feature
 - lacks eaves or verge projections that could protect the cladding
 - has a cantilevered ground floor deck
 - has a large first floor balcony that is partly cantilevered and partly constructed over a living space
 - has external wall framing that is apparently treated to a level that provides resistance to the onset of decay if the framing absorbs and retains moisture.
- 7.2.2 The house has been evaluated using the E2/AS1 risk matrix. The risk matrix allows the summing of a range of design and location factors applying to a specific building design to provide a risk rating that can range can range from 'low' to 'very high'. The risk rating is applied to determine how claddings can be used on a building in order to comply with E2/AS1. A higher risk rating will require more rigorous weatherproof detailing; for example, a higher risk rating is likely to require a particular type of cladding to be installed over a drained cavity
- 7.2.3 When evaluated using the E2/AS1 risk matrix, one elevation of the house demonstrates a high weathertightness risk and the remaining elevations a very high risk.

⁶ Copies of all determinations issued by the Department can be obtained from the Department's website.

7.3 Weathertightness performance

7.3.1 Generally the cladding appears to have been installed in accordance with good trade practice. However, based on the expert's opinion, I accept that remedial work to both the cladding and the roofing is necessary in respect of the following:

The cladding

- the minor cracking in the cladding
- the base of the cladding being in contact with the ground at some locations
- the base of the cladding being too close to the balcony decks
- the lack of a moisture stop below the concrete slab level where the base of the cladding is close to the finished ground levels
- the insufficient extension of the ends of the head and sill flashings to the external joinery units and the lack of sill flashing turn-downs
- the lack of waterproofing or a saddle flashing where the balcony balustrade meets the adjoining southwest wall cladding
- the lack of waterproofing or saddle flashings to the monolithic clad pergola members where they adjoin the wall cladding and the lack of cross-falls to the tops of these members.

The roofing, including the dome

- the cracked and blistered paint finish on the dome membrane (I note these could be considered matters relating to maintenance)
- the dome vent allowing the passage of driven moisture
- lack of waterproof membranes and sufficient cross-falls to the tops of the roof and dome parapets
- a gap between the turndown of fibreglass membrane to the low-pitched roof and the adjoining apron flashing
- the lack of kick outs or diversion flashings where the section of higher level garage roofing terminates behind the cladding.
- 7.3.2 Notwithstanding the fact that the cladding is fixed directly to the timber framing, thus limiting drainage and ventilation behind the cladding, I have noted certain compensating factors that assist the performance of the cladding in this particular case:
 - Apart from the noted exceptions, the cladding is installed to reasonable trade practice.

• The house has external wall framing that is likely to be treated to a level that provides resistance to the onset of decay if the framing absorbs and retains moisture.

7.3.3 I consider that these factors help compensate for the lack of a drained cavity and can assist the building to comply with the weathertightness and durability provisions of the Building Code.

7.4 Weathertightness discussion

- 7.4.1 I consider the expert's report establishes that the current performance of the cladding and roofing, including that to the dome, is not adequate because they are allowing some water penetration into the building at several locations at present.

 Consequently, I am satisfied that the building does not comply with clause E2 of the Building Code.
- 7.4.2 In addition, the building 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 and roofing faults on the building allow the ingress of moisture, the house does not comply with the durability requirements of clause B2.
- 7.4.3 In this case the faults identified with the cladding and roofing systems occur in discrete areas and I am able to conclude that satisfactory rectification of the items outlined in paragraph 7.3.1 will result in the building remaining weathertight and in compliance with clauses B2 and E2.
- 7.4.4 Effective maintenance of cladding and roofing (in particular monolithic cladding) 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).

7.5 Sewer and stormwater drainage

- 7.5.1 I have been informed by the applicant that, due to the death of the drainlayer, an asbuilt drainage plan was not provided to the territorial authority. I accept that the drainage was approved as complying with the building code by the building certifier on 12 December 1999. The expert was unable to establish the as-built layout of the drainage systems, however, he has suggested that a CCTV survey could be used to establish this.
- 7.5.2 I support a CCTV survey, or similar, to verify the as-built drainage. However, it is open to the applicant and the territorial authority to agree on a suitable method to ascertain the layout of the drainage.

7.6 The foundations

7.6.1 As described in paragraph 3.1, an original geotechnical report was produced prior to the design process undertaken for the building. The designer also states that the territorial authority had checked and accepted the design calculations.

- 7.6.2 Professional engineers employed by the Department have examined the design process and are of the opinion that the parameters in the geotechnical report, which gives clear parameters for design, have been used correctly. The engineers considered that it would be a reasonable expectation that a structural engineer would use this information to design the foundations.
- 7.6.3 The Departments engineers were also of the opinion that the foundation piles have been adequately designed to cope with a likely land movement consistent with a slip circle failure. In addition, the pile design reflects the recommended founding levels of the geotechnical report. The Departments engineers noted that the piles had been taken beyond these levels during construction. Finally, the Departments engineers checked on the loads to the foundations and agreed with the sub-soil characteristics and design loads adopted by the designer.
- 7.6.4 Based on the conclusions reached by the Department's engineers, I am prepared to accept that the foundations for the house with its associated piling comply with the requirements clause B1 of the code.

7.7 The structure of the dome as built

7.7.1 The territorial authority has questioned whether the dome was constructed in accordance with the consented plans, and from that, raised doubt about its compliance with clause B1 structure. I accept the designer's confirmation (refer paragraph 3.9) that the dome was constructed in accordance with the consented plans. I am therefore of the view that the dome complies with clause B1.

7.8 Safety from falling

7.8.1 The lack of the metal balcony balustrade handrails now means that the balustrade heights do not comply with clause F4 "Safety from Falling". Although not the subject of this determination, this omission should be rectified as soon as possible to the satisfaction of the territorial authority.

8. Changes to the consented plans

8.1 I also note the changes from the consented plans as described in paragraph 5.5 and consider that the original consent should be amended to accommodate these changes.

9. The Decision

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

- the cladding and the roofing of the building do not comply with clauses B2 and E2 of the Building Code. Accordingly, I confirm the territorial authority's decision that the building does not comply with the Building Code
- the balcony balustrades do not comply with clause F4 of the Building Code
- the dome, the foundations and associated piling comply with clause B1 of the Building Code
- 9.2 I note that the territorial authority has issued a notice to fix. Under the Act, a notice to fix can require the owner to bring the additions into compliance with the Building Code. The Building Industry Authority has found in a previous Determination 2000/1 that a Notice to Rectify (the equivalent to a notice to fix under the Building Act 1991) cannot specify how that compliance can be achieved. I concur with that view.
- 9.3 The territorial authority should now issue a new notice to fix that requires the owners to bring the building up to compliance with the Building Code, identifying the defects listed in paragraph 7.3.1, but not specifying how those defects are to be fixed. That is a matter for the applicants to propose and for the territorial authority to accept or reject. It is important to note that the Building Code allows for more than one method of achieving compliance.
- 9.4 I would suggest that the parties adopt the following process to meet the requirements of paragraph 9.3. Initially, the territorial authority should issue the notice to fix, listing all the items that the territorial authority considers to be non-compliant. The owner should then produce a response to this in the form of a technically robust 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.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 28 September 2007.

John Gardiner

Manager Determinations