

## *Determination 2005/110*

# *Refusal of a code compliance certificate for a building with a “monolithic” cladding system at 18A Gilletta Road, Lynfield, Auckland – House 95*

## **1 THE DISPUTE TO BE DETERMINED**

- 1.1 This is a determination of a dispute referred to the Chief Executive of the Department of Building and Housing (“the Chief Executive”) under section 17 of the Building Act 1991 (“the Act”) as amended by section 424 of the Building Act 2004. The applicants are the two joint-owners (referred to throughout this determination as “the owner”), and the other party is the territorial authority. The application arises from the refusal by the territorial authority to issue a code compliance certificate for a 6-year old house unless changes are made to its monolithic cladding systems.
- 1.2 The question to be determined is whether on reasonable grounds the monolithic wall cladding as installed to the majority of the timber-framed external walls of the house (“the cladding”), complies with the building code (see sections 18 and 20 of the Act). By “the monolithic wall cladding as installed” I mean 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.
- 1.3 This determination is made under the Building Act 1991, subject to section 424 of the Building Act 2004. That section came into force (“commenced”) on 30 November 2004, and its relevant provisions are:
- “ . . . on and after the commencement of this section,—
- “(a) a reference to the Authority in the Building Act 1991 must be read as a reference to the chief executive; and

- “(b) the Building Act 1991 must be read with all necessary modifications to enable the chief executive to perform the functions and duties, and exercise the powers, of the Authority . . .”

It should be noted that the new legislation does not amend the determination process set out under the 1991 Act, other than to transfer the power to make a determination from the Building Industry Authority (“the Authority”) to the Chief Executive.

- 1.4 This determination refers to the former Authority:
- (a) When quoting from documents received in the course of the determination, and
  - (b) When referring to determinations made by the Authority before section 424 came into force.
- 1.5 In making my decision, I have not considered any other aspects of the Act or the building code.

## **2 PROCEDURE**

### **The building**

- 2.1 The building is a two-storey detached house, with an attached single storey garage and living room section, situated on an excavated sloping site in a medium wind zone in terms of NZS 3604: 1999 “Timber framed buildings”. The external walls of the house are of conventional light timber frame construction built on concrete block foundation and retaining walls. The walls are predominantly sheathed with monolithic cladding, with the remainder sheathed with timber vertical boards and battens. The house is of a fairly simple shape, and the upper floor oversails the lower section on one elevation. The main pitched roofs are covered with long run steel roofing, and have hip, valley, and wall to roof junctions. A timber-framed low-pitch roof covered with a butyl rubber membrane laid over a plywood substrate links the single and two-storey structures. This roof has junctions with the cladding and the main roofing. A small metal clad open raftered roof projects over the living room bay window. With the exception of the soffits over the main entrance and the living room bay window, there are no eaves or verge projections. The aluminium joinery is generally recessed into the cladding, but some units at the upper level are face fixed over the cladding. A timber-framed monolithic-clad chimney passes through one of the roofs.
- 2.2 Timber-framed close-boarded decks and associated steps are constructed against the cladding to the north and west elevations. A timber-framed pergola is fixed to one elevation of the building.
- 2.3 The specification calls for all wall framing to be Boric treated, but no evidence has been provided as to what treatment, if any, was applied to the external wall framing.
- 2.4 The majority of the timber-framed external walls of the house that are the subject of this determination are clad with a stucco system that is described as monolithic

cladding. In this instance it incorporates 4.5mm thick fibre-cement backing sheets fixed through the building wrap directly to the framing timbers, reinforcing mesh spaced off the backing, and a 20mm thickness of three-coat solid plaster finished with a 3-coat paint system. The balance of the cladding consists of Cedar vertical board and battens fixed through the building wrap to the framing timbers.

### **Sequence of events**

- 2.5 The territorial authority issued a building consent in November 1998.
- 2.6 The territorial authority carried out various inspections during the construction of the house and passed the pre-lining inspection on 3 February 1999, partially passed the post-line inspection on 9 February 1999, and passed the stucco and netting inspection on 15 February 1999.
- 2.7 The current owner took possession of the house on 6 April 2002 based on the provision that 6 items detailed on the territorial authority's checklist were completed. According to the owner these were duly completed and the territorial authority inspected the property on 14 October 2003, and listed 6 further items be rectified. The owner attended to these issues and the territorial authority inspected the house on 2 February 2004. The inspecting officer noted that "[a]ll recheck items complete but cladding system is stucco – no cavity! Will need to be assessed".
- 2.8 The territorial authority carried out a further site cladding inspection on 6 April 2004, and in a letter to the owner dated 14 April 2004, it regretted that the building might not comply with the building code in a number of respects. The territorial authority attached a Notice to Rectify also dated 14 April 2004 to this letter, together with a set of photographs illustrating items of non-compliance. The "Particulars of Contravention" attached to the Notice to Rectify noted:

A site inspection of the above property carried out on the 06 April 2004 revealed that the exterior cladding (plaster on [named product] of the new building constructed at the above address is a monolithic cladding system with no provision for ventilation of the wall space. Furthermore the exterior claddings have been installed otherwise than in accordance with, the manufacturer's specification, the acceptable solutions of the building code and accepted trade practices as detailed below.

1. The following have not been installed per the manufacturer's specifications
  - The exterior cladding system can be taken below finished ground, provided the bottom edge of the [backing sheet] is finished 50mm below finished floor level, and a styrene screed and PVC moulding are installed between the bottom edge of the [backing sheet] and finished ground level. These clearances have not been achieved.
  - Control joints at a maximum of 4.0 [M] centres vertically are required. Horizontal control joints have not been installed.
  - The minimum finished floor level to finished ground level is 150mm to paved surfaces. This clearance has not been achieved.

- Pipe penetrations through wall cladding must be sealed with a combination of an approved sealant and a flexible rubber flange to ensure that moisture cannot migrate into the wall cavity. This has not been achieved.
  - All vertical faces must have a drip edge formed within the cladding system. This has not been achieved at the garage door opening.
  - Head flashings must be installed above all joinery units. The flashings must extend a minimum of 30mm each side of the joinery facing and be turned up at the edges. This has not been achieved.
  - All external fixtures attached to the cladding must be sealed both to the body of the fixture and the wall fixings.
  - Where timber structures are attached to the plaster cladding a spacer must be used to ensure that a 10mm space is maintained to allow water to pass freely between the two surfaces. This had not been achieved with the fixing of the pergola, timber stairs and deck.
2. The following items have not been installed per the acceptable solutions of the building code, (no alternative solutions have been applied for)
- The distance between finished floor level and finished paving of 150mm has not been achieved.
  - Buildings shall have claddings that are waterproof, there appears to be cracking above a number of joinery units from the corners of the head flashing. Also at wall junctions and where the cladding extends below ground level.
3. The following items have not been installed per accepted trade practice
- All flashings are to be installed in such a way as to direct water away from the building, and prevent ingress of moisture
  - A minimum clearance of 50mm is required between the cladding and adjacent surfaces. There is minimal clearance has not been achieved (*sic*).
  - Penetrations through the cladding system shall be as waterproof as the cladding itself. There are a number of penetrations through the cladding that should be protected with rubber flanges and silicon[e], and in the case of the meter box, extractor fan outlet flashings have not been installed.
  - A minimum clearance of 50mm is required between the cladding and adjacent surfaces. There is minimal clearance between the roof and wall claddings.
  - Head flashings to project a minimum of 30mm past the edge of the window facing or flange, and the front edge at the ends of the flashings to be bent up. The head flashings do not project 30mm nor are they bent up.
4. Ventilated cavity system
- The Council has recently received information which shows that monolithic cladding systems without a drainage plane/cavity,

provision for adequate ventilation, drainage and vapour dissipation will, in the likelihood of leakage and/or the effects of residual moisture, cause irrevocable damage to the structural elements of the building.

The Council cannot be satisfied that the above building meets the performance requirements of Clauses B1 Structure, B2 Durability, E2 External Moisture, E3 Internal Moisture, G4 Ventilation and H1 Energy Efficiency Provisions of the Building Code...This is in breach of Sections 7(1), of the Building Act 1991...

Also that the owner was required to:

1. Provide adequate ventilation to the monolithic cladding and into the wall frame space by means of either a ventilated cavity or alternative approved system, and ensuring all issues related to the above are resolved.
2. Lodge with the council an application, within 28 days from the date of this notice, for an amended building consent, and provide all necessary information that may be requested to allow this consent application to be processed, alternatively.
3. Confirm to council, within 28 days from the date of this notice, your intention to apply to the Building Industry Authority for a determination in accordance with the Building Act 1991

2.9 The owner applied for a determination on 1 August 2004.

### **3 THE SUBMISSIONS**

3.1 In a letter to the Authority dated 6 September 2004, the owner set out the sequence of events leading up to request for a determination, including the territorial authority's inspection process.

3.2 The owner also forwarded copies of:

- The plans and specifications;
- Some consent documentation;
- A "Final Checklist";
- The Notice to Rectify;
- The correspondence with the territorial authority; and
- A letter from the builder dated 10 October 2004, confirming the type of cladding installed on the house and identified the plasterers. The builder was unable to confirm whether the timber framing was treated.

3.3 In a covering letter to the Authority dated 28 October 2004, the territorial authority noted:

*Particulars of Contravention*

As detailed in the NTR the areas of contravention relate to six clauses of the Building Code, namely:

- B1 structure,
- B2 durability,
- E2 external moisture,
- H3 internal moisture,
- G3 ventilation, and
- H1 energy efficiency.

Specific construction defects may be grouped into the following areas:

- Ground clearances
- Control joints
- Flashings
- Drip edges
- Spacers where timber structures are attached to plaster cladding
- Cracking, and
- Insufficient means for dissipation of water where the water passes through the exterior cladding.

3.4 The territorial authority also forwarded copies of:

- The plans;
- Some consent documentation;
- A “Final Checklist”;
- The Notice to Rectify; and
- The correspondence with the owner.

3.5 Copies of the submissions and other evidence were provided to each of the parties.

3.6 In a letter to the Department dated 3 May 2005, the territorial authority commented on aspects of the Draft Determination. In particular, the territorial authority is concerned that paragraphs 5.1 and 8.2 indicate a scope of work required to make the house code compliant. The territorial authority claims that this is not part of the determination.

## **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. The relevant provisions of the building code say:

### **Clause B2—DURABILITY**

**B2.3.1** Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the specified intended life of the building, if stated, or:

- (a) The life of the building, being not less than 50 years, if:
  - (i) Those building elements (including floors, walls, and fixings) provide structural stability to the building, or
  - (ii) Those building elements are difficult to access or replace, or
  - (iii) Failure of those building elements to comply with the building code would go undetected during both normal use and maintenance of the building.
- (b) 15 years if:
  - (i) Those building elements (including the building envelope, exposed plumbing in the subfloor space, and in-built chimneys and flues) are moderately difficult to access or replace, or
  - (ii) Failure of those building elements to comply with the building code would go undetected during normal use of the building, but would be easily detected during normal maintenance.

### **Clause E2—EXTERNAL MOISTURE**

**E2.1** The objective of this provision is to safeguard people from illness or injury, which could result from external moisture entering the building.

**E2.2** Buildings shall be constructed to provide adequate resistance to penetration by, and the accumulation of, moisture from the outside.

**E2.3.2** Roofs and exterior walls shall prevent the penetration of water that could cause undue dampness, or damage to building elements.

- 4.2 There are no Acceptable Solutions that have been approved under section 49 of the Act that cover this cladding. The current Acceptable Solution, E2/AS1, allows for solid plaster systems with fibre cement backing sheets, but requires that they be fixed on battens to create a 20mm cavity between the sheet and the framing. The previous acceptable solution E2/AS1, which was in force when this consent was issued but which was revoked in February 2004, allowed for mesh reinforced solid plaster to be applied to fibre cement backing sheets that were face fixed to the framing. The cladding is not currently accredited under section 59 of the Act. I am, therefore of the

opinion that the cladding system as installed must now be considered to be an alternative solution

4.3 In several previous determinations, the Authority 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 in less extreme cases they may be modified 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. The expert inspected the building on 23 February 2005, and furnished a report that was completed on 10 March 2005. The expert removed a small section of the textured finish at one window and a facing below the living room window to examine the flashing details. The expert's report made the following specific comments on the cladding.

- There is an absence of the control joints that are set out as a requirement in the relevant New Zealand Standard;
- There is cracking in the plaster above the windows on the east elevation;
- The garage to house wall junction is poorly detailed;
- The front edge of the horizontal first-floor flashing between the monolithic-clad walls and the Cedar-clad walls is plastered over;
- No drip edge or flashing is installed at the head of the garage door opening;
- There are locations where there is either no clearance or insufficient clearance between the base of the cladding and the ground or paving;
- In the monolithic-clad walls, neither the head nor the sill flashings project the required 30mm past the external window and door jamb lines, the front edge of the sill flashings are not correctly finished, and no jamb flashings have been installed. No sill flashing has been installed to the north elevation bedroom windows;
- In the Cedar-clad walls, the head flashing to the external windows and doors are cut level with the jamb lines and there are no jamb or sill flashings installed;



- Sections of the fascia at the roof level were fitted prior to plastering;
- The ends of gutter/spoutings are plastered into the chimney cladding;
- A section of roof framing above the living room is exposed;
- The main bearer of the north and west elevation decking and the pergola ribbon plate are bolted directly onto the cladding and no spacers have been installed; and
- Some penetrations through the cladding are inadequately sealed.

5.2 The expert carried out a series of non-invasive moisture tests at the interior of the external walls and no reading higher than 12.1% was recorded. Further non-invasive and invasive readings were made at the exterior of the external walls and no reading higher than 11.2% was recorded. Moisture levels above 18% recorded after cladding is in place generally indicate that external moisture is entering the structure.

5.3 Copies of the expert's report were provided to each of the parties and both accepted the report.

## **6 THE HEARING**

6.1 The owner requested a hearing, which was held before a tribunal consisting of the Determinations Manager and one Referee acting for and on behalf of the Chief Executive by delegated authority under section 187(2) of the Building Act 2004. At the hearing, one of the two owners attended, and the territorial authority was represented by one of its officers. Two staff members of the department were also in attendance. The owner and the territorial authority spoke at the hearing, and evidence from those present enabled me to amplify matters identified in the draft determination that I had prepared and circulated to the parties.

6.2 The owner described how outstanding items raised by the territorial authority had been attended to, but later inspections raised further issues. A delay in undertaking a final inspection suggested by the territorial authority regarding two minor matters meant that the house now came under the revised territorial authority inspection regime. This resulted in the cladding becoming an issue. The owner had tried to be flexible, but had become disillusioned with the process. The owner was under the impression that the determination, which found the house "weathertight and of sound construction" would solve the problem. The owner said that he had not discussed the rectification issues with the territorial authority.

6.3 The territorial authority stated that the question posed for determination was whether the cladding is code compliant. This had been answered in the negative by clause 8.1 of the draft determination (now clause 9.1), and the items set out in clause 6.8 (now clause 7.8) were advisory only. The territorial authority officer stated that he proposed to re-inspect the property and issue a notice to fix. The territorial authority could identify additional items requiring rectification over and above those already

listed in the Notice to Rectify and considered in the draft determination. The territorial authority would still be requiring the lack of a cavity to be addressed.

- 6.4 Following discussions, the parties agreed to follow a specified process. Initially, the territorial authority would issue a notice to fix, listing all the items that the territorial authority considers to be non-compliant. The owner will then produce a response to this in the form of a technically robust proposal, produced in conjunction with a specialist technical adviser engaged by him, as to the rectification or otherwise of the specified issues. The territorial authority would then consider these proposals in terms of the Act. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

## **7 DISCUSSION**

### **General**

- 7.1 I have considered the submissions of the parties, the expert's report and the other evidence in this matter, including that raised at the hearing. The approach in determining whether building work complies with clauses B2.3.1 and E2.3.2, 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.

### **Weathertightness risk**

- 7.2 Recent research and experience, both internationally and locally, indicates that the impact of weathertightness problems in monolithic clad houses can be minimised if good and effective design and construction practices are followed.
- 7.3 The installation of exterior cladding to manufacturer's specifications and to accepted good trade practice is an important but not the only requirement to ensure good weathertightness performance.
- 7.4 The next priority is to reduce the ability of moisture to get through the cladding by using design measures that minimise the effects of the rain impacting on the walls:
- 7.5 I consider that the important matters for consideration are:
- Data show a strong relationship between the width of the eaves and the incidence of wall leaks. An effective deflection mechanism, such as eaves greater than 600 mm wide, has been shown by Canadian data to manage more than 90% of rain incidence;
  - While most reported leaks are substantially caused by defects in the cladding that require little or no wind pressure differential, it is believed that buildings in high and very high wind zones (as defined by NZS 3604) are likely to experience wind pressure differentials and thus a higher risk of water ingress;

- Taller buildings result in an effective increase in the catchment area of the wall. Available data suggest a clear correlation between higher number of storeys and an increased incidence of leaking;
- Complex roofs and overall envelope shapes where the roofs frequently intersect with the walls on upper floors create opportunities for leaks into the wall; and
- Recent data also shows that decks and balconies that are exposed in plan and/or cantilevered from the external walls are the most frequent location for water leaks.

7.6 Any likely penetration of moisture through the cladding can then be countered by a combination of effective drainage, ventilation of the drainage cavity and moisture tolerance in the external wall framing timber. In particular:

- The structure should allow water that has penetrated the cladding to drain out as quickly as possible. It is believed that generally a drainage cavity should be provided behind the outer cladding barrier in monolithic construction;
- The design of the outer walls should allow walls to dry to the outside once moisture penetrates the cladding and the moisture barrier. If walls do not dry, decay fungi can become established in as little as 3 months. Until scientific data on the optimum depth and configuration of the ventilation mechanism in New Zealand conditions is available, I consider that the drainage cavity should be not less than 20 mm deep; and
- The external walls should have some degree of decay resistance or moisture tolerance to allow for situations when moisture circumvents the cladding and moisture barriers and moisture levels in the timber rise to more than 18%.

7.7 In relation to these characteristics I find that the house:

- Apart from two locations, has no eaves or verge projections that could provide protection to the lower cladding;
- Is built in a medium wind zone;
- Is maximum two storeys high;
- Is fairly simple on plan;
- Has no balconies, but has a timber deck to two elevations;
- Has external windows and door without jamb flashings; and
- Has external wall framing that may not be able to resist the onset of decay if it absorbs and retains moisture.

## **Weathertightness performance**

7.8 Generally the cladding appears to have been installed according to good trade practice, but some junctions, edges, and penetrations are not well constructed. These areas are all as described in paragraph 5.1 and in the expert's report as being:

- The absence of control joints;
- The cracking in the plaster above the windows on the east elevation;
- The poorly detailed garage to house wall junction;
- The plaster over the front edge of the horizontal first-floor flashing;
- The lack of a drip edge or flashing at the head of the garage door opening;
- The locations where there is either no clearance or insufficient clearance between the base of the cladding and the ground or paving;
- In the monolithic-clad walls, the non-projecting head and the sill flashings, the incorrectly finished front edge of the sill flashings, the lack of jamb flashings, and the lack of sill flashings to the north elevation bedroom windows;
- In the Cedar-clad walls, the non projecting head flashing to the external windows and doors, and the lack of jamb or sill flashings;
- The sections of the fascia at the roof level that were fitted prior to plastering;
- The ends of gutter/spoutings plastered into the chimney cladding;
- The exposed section of roof framing above the living room;
- The directly bolted main bearer of the north and west elevation decking and pergola ribbon plate; and
- The inadequately sealed penetrations through the cladding.

7.9 Notwithstanding the fact that the backing sheets are fixed directly to the timber framing, thus inhibiting drainage and ventilation behind the cladding sheets, I find that there are compensating factors that assist the performance of the cladding in this particular case. These are:

- Generally, the cladding appears to have been installed according to good trade practice;
- The house is relatively simple on plan; and
- The house has no balconies.

- 7.10 I consider that these factors compensate for the lack of a full drainage and ventilation cavity and can allow the house to comply with the weathertightness and durability provisions of the building code.
- 7.11 I note that two elevations of the house demonstrate a moderate weathertightness risk rating, and the remaining two elevations a high rating, 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 building as actually built is assessed for the purposes of issuing a code compliance certificate.

## **8 CONCLUSION**

- 8.1 I consider that the expert's report establishes there is no evidence of external moisture entering the house, and accordingly, that the monolithic cladding does comply with clause E2 at this time.
- 8.2 However, 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 faults in the house are likely to allow the ingress of moisture in the future, the house does not comply with the durability requirements of clause B2.
- 8.3 I also consider that because the faults in the house cladding occur in discrete areas, I am able to conclude that rectification of the identified faults will consequently bring the cladding into compliance with the code. Once the cladding faults listed in paragraph 7.8 have been satisfactorily rectified, this house should be able to remain weathertight and thus comply with both clauses E2 and B2.
- 8.4 I note that effective maintenance of monolithic claddings is important to ensure ongoing compliance with clause B2 of the building code. That maintenance is the responsibility of the building owner. The 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, re-painting, replacing sealants, and so on.
- 8.5 I emphasise that each determination is conducted on a case-by-case basis. 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.

- 8.6 I decline to incorporate any waiver or modification of the building code in this determination.
- 8.7 In response to the territorial authority's letter to the Department of 3 May 2005, I consider that I am entitled to determine whether proposed building work complies with the code, and in fact I have done so in this case. However, the question of whether the work has been properly completed and is code compliant requires careful inspection. I do not believe in this case that the territorial authority's inspections meet this standard. I note that the territorial authority's inspection described in a "Final Checklist" dated 2 February 2002 passed the following items in respect of the exterior of the building:
- Floor clearance from ground level;
  - Cladding clearance from ground level;
  - Secondary flow path;
  - Cladding painted;
  - Window scribes;
  - Flashings; and
  - Control joints.
- 8.8 In addition, none of the items that required attention after this final inspection related to the exterior cladding.
- 8.9 The Notice to Rectify issued on 14 April 2004 listed Particulars of Contravention that included:
- Floor clearances;
  - Ground clearances;
  - Control joints; and
  - Flashings.
- 8.10 I am disturbed to note that these obvious building defects were not discovered during the February 2002 final inspection. They are also issues that are unrelated to the question of a cavity that the territorial authority has raised. Furthermore, the expert has noted other omissions, such as the lack of jamb and sill flashings to the windows in the Cedar-clad walls, which are not covered by the Notice to Rectify. It can be seen that the expert's report provides the comprehensive description of the building's outstanding shortcomings that should have been detected before or at the final inspection process and incorporated in the Notice to Rectify.

## **9 THE DECISION**

- 9.1 In accordance with section 20 of the Act, I determine that the house is weathertight now and therefore the cladding complies with clause E2. However, as there are a number of items to be remedied to ensure it remains weathertight and thus meet the durability requirements of the code, I find that the house does not comply with clause B2. Accordingly, I confirm the territorial authority's decision to refuse to issue the code compliance certificate.
- 9.2 I find that once the items of non-compliance that are listed in paragraph 7.8 are rectified to the approval of the territorial authority, together with any other instances of non-compliance that become apparent in the course of rectification, the cladding as installed on the house will consequently comply with the building code, notwithstanding the lack of a drainage cavity.
- 9.3 I note that the territorial authority has issued a Notice to Rectify requiring provision for adequate ventilation, drainage and vapour dissipation. Under the Act, a Notice to Rectify can require the owner to bring the house into compliance with the building code. The Authority has already found in a previous determination (2000/1) that the Notice to Rectify cannot specify how that compliance can be achieved. As noted in paragraph 6.4, a new notice to fix should now be issued that requires the owner to bring the cladding into compliance with the building code, without specifying the features that are required to be incorporated. It is not for me to dictate how the defects described in paragraph 7.8 are to be remedied. How that is done is a matter for the owner to propose and for the TA to accept or reject, with either of the parties entitled to submit doubts or disputes to the Chief Executive for another determination.
- 9.4 As described in clause 6.4, the parties have agreed on a procedure that is to be followed in respect of the above actions. I would also like to remind the territorial authority in preparing its notice to fix that the Chief Executive might already have decided upon some of the issues that may be raised by the territorial authority in its notice to fix, including the territorial authority's requirement for a ventilated and drained cavity or equivalent, and that re-submissions on these items might not be appropriate in the context of this determination.
- 9.5 Finally, I consider that the cladding will require on-going maintenance to ensure its continuing code compliance.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 25 July 2005.

John Gardiner  
**Determinations Manager**