



Determination 2010/68

Determination regarding an application to amend a building consent for one unit in a 9-year-old block of twelve semi-detached townhouses at 139 to 161 Waterside Crescent, Gulf Harbour



1. The matters 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.

1.2 The parties

1.2.1 The applicants are the owners of a semi-detached townhouse (“Unit 147”), which is one of twelve units (“the units”) within a free-standing building (“Block B”). The owners, V and M Sturme, are acting via a building surveyor (“the surveyor”).

1.2.2 The owners of the other eleven units in the building are persons with an interest in this determination. Body Corporate Administration Services acts on behalf of the body corporate representing the owners of the twelve individual units in the building.

1.2.3 The other party is the Rodney District Council (“the authority”) carrying out its duties and functions as a territorial authority or building consent authority.

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

1.3 The reason for the application

1.3.1 The application for this determination arises from the following:

- An earlier decision of the authority to refuse to issue code compliance certificates for an identical adjacent block of units (“Block A”), because it was not satisfied that the building work complied with certain clauses² of the Building Code (First Schedule, Building Regulations 1992).
- The decision of the authority to issue amendments to the building consents for Block A to allow discrete repairs to be carried out to that building.
- The decision of the authority to issue notices to fix for the units in Block B.
- The application for building consents for Block B, in order to allow similar repairs to be carried out to Units 139 to 153 (“the repairs”).

1.3.2 The application for this determination is because the applicants are not satisfied that the proposed repairs will result in their unit (Unit 147) complying with Clauses B2 Durability and E2 External Moisture of the Building Code.

1.4 The matter to be determined³ is therefore whether the repairs proposed for Unit 147 will result in

- the claddings complying with Clauses E2 External Moisture and B2 Durability (insofar as it applies to Clause E2). By “the claddings” 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. (I consider this matter in paragraph 6.)
- the exterior wall framing complying with Clauses B1 Structure and B2 (insofar as it applies to B1), taking into account any damage to the framing that has resulted from the lack of weathertightness of the claddings.

1.5 I note that neither party has raised the matter of the durability of the elements that make up the building work, taking into account the age of Block B. I have assumed that this matter is left to the applicants to apply to the authority for a modification in respect of the durability provisions of Clause B2, once the cladding and all associated work has been made code compliant. I therefore leave this matter to the parties to resolve in due course.

1.6 The evidence

1.6.1 Block A was the subject of an application for a determination in 2006, which resulted in a draft determination being issued to the parties. Although that draft was not issued as a final determination, I have used some information gathered for the 2006 application during the preparation of this determination.

² In this determination, unless otherwise stated, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.

³ Under section 177(a) of the Act

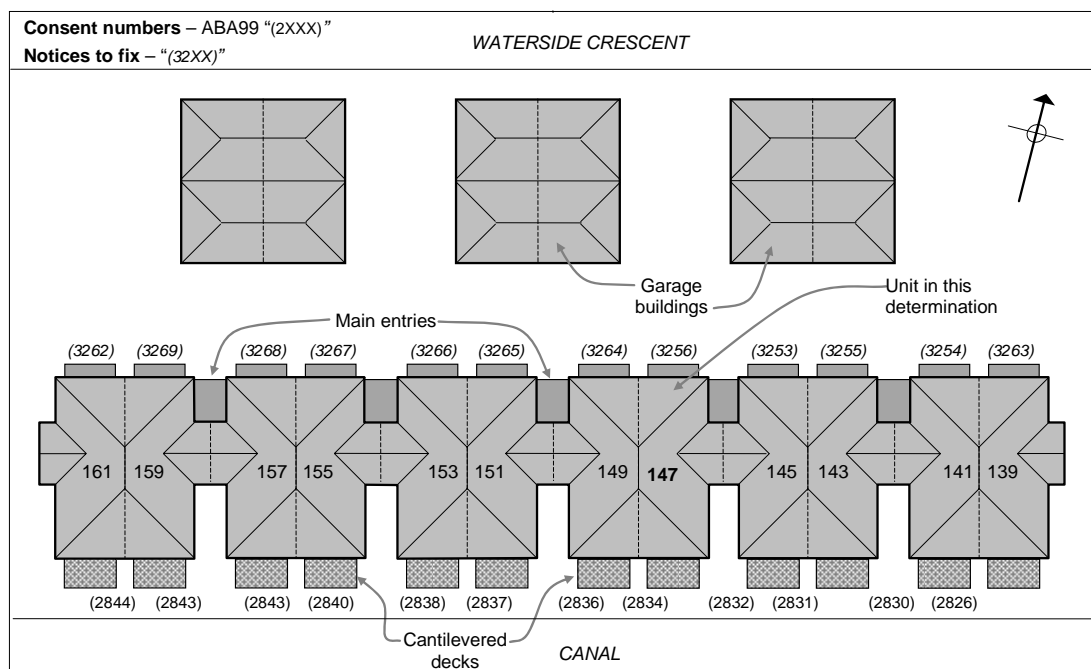
1.6.2 In making my decision, I have therefore considered:

- the submissions of the parties
- the 2006 expert's report on Block A
- the reports of the consultant engaged by the unit owners ("the consultant")
- the report of the building surveyor engaged by the applicants ("the surveyor"), who is also acting as the agent in this application
- the report of the independent expert commissioned by the Department to advise on this dispute ("the expert")
- the other evidence in this matter.

2. The building work

2.1 Block B is a long two-storey building situated on a flat site in a wind zone that the authority considers is medium for the purposes of NZS 3604⁴. The building comprises six essentially identical duplexes linked together by two-storey extensions to the main roof. Block B is sited along the water edge to the south, with three detached garage buildings to the north, each housing four garages. Each unit is separately titled and there is no common property within the building envelopes.

2.2 The following site plan shows Block B and the position of Unit 147 within the building. The sketch includes the building consent numbers and notice to fix numbers issued for each unit.



⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

- 2.3 Construction of Block B is generally conventional light timber frame, with a concrete slab and foundations, concrete block party walls, monolithic cladding and aluminium windows. The building as a whole is fairly simple in plan and form and is assessed as having a moderate to high weathertightness risk (refer paragraph 6.2).
- 2.4 Each unit has a tiled cantilevered deck extending to the south from the first floor master bedrooms, with metal balustrades fixed into tiled upstands and monolithic cladding applied to the vertical face at the outer edges of the decks.
- 2.5 The monolithic wall cladding is a hybrid system rather than a recognised proprietary cladding system. In this instance it consists of 7.5mm fibre-cement sheets, which are fixed through the building wrap directly to the framing timbers. The backing sheets are covered with fibreglass reinforced plaster, which varies from 8mm to about 16mm in thickness and includes metal reinforcing mesh at the external corners.
- 2.6 During the investigation and repairs to Block A, a large number of timber samples were taken from various areas and the test results confirmed that these samples were untreated. Based on this evidence and the similar construction of Block A, I consider that the external wall and deck framing to Block B is also untreated.

3. Background

- 3.1 The authority issued twelve separate building consents for Block B to a developer on 22 October 1999 under the Building Act 1991. I have not seen copies of the building consents.
- 3.2 A building certifier was engaged to carry out all inspections of Block B (along inspections of Block A), and to issue code compliance certificates on completion. Although I have not seen any records, based on the inspection records for Block A, Block B is likely to have been completed sometime during 2000.
- 3.3 The developer was taken under the control of a mortgagee company and the units were subsequently sold. Based on Block A's records, the building certifier returned documentation of outstanding consents to the authority in July 2002, stating that he had been unable to progress completion of the building work and was therefore ceasing to act as a certifier for the projects. The building certifier's approval as a building certifier expired on 22 October 2004.
- 3.4 In 2007, the authority and the Block A owners agreed that amendments would be sought to their original building consents. The consultant was engaged to investigate and prepare a proposal to repair that building. Following discussions and correspondence with the authority, a proposal was agreed and amendments to the building consents for the units in Block A were issued in March 2008.
- 3.5 The repairs to Block A were then carried out and the authority states that it:
...followed a rigorous inspection process to ensure that the correct amount of timber affected by decay has been removed and to ensure that flashing and construction joints installed in the monolithic cladding system to allow for seasonal movement.

- 3.6 The authority subsequently issued notices to fix dated 8 May 2009 for each unit in Block B 'to facilitate a resolution to the lack of clarity around the CCC status' of that building (I have seen no copies of inspection records, correspondence or the notices to fix). Agreement in principal was reached with the Block B owners to prepare a proposal based on the repairs to Block A.

3.7 The surveyor's report

- 3.7.1 The applicants sought advice on the proposed repairs and arranged for a building surveyor to assess Unit 147 in regard to the notice to fix. The surveyor visited the unit and wrote to the applicants on 12 October 2009.
- 3.7.2 The surveyor considered that the proposed remediation work 'could only be classed as temporary', as they included discrete repairs, which:
- ...can prove expensive and don't always cover all aspects of the dwelling. They have been found in general to provide a solution to the symptom whilst not addressing the cause.
- It is of our opinion that in order to achieve full compliance of the NZBC thus providing weathertightness and durability, then a full reclad should take place.
- 3.7.3 The surveyor provided a rough order of costs for the work considered necessary for Unit 147, which included removing all wall cladding and windows, replacing damaged timber, installing new wall cladding and reinstalling the windows.

3.8 The proposed repairs

- 3.8.1 Following completion of repairs to Block A, the consultant (who was responsible for managing that work) prepared a 'scope of work and specification' dated 7 November 2009 for similar repairs to units in Block B.
- 3.8.2 The proposal was based on Block A's documents and took into account 'refinements/revisions based on the experience gained during the repair work on Block A'. The consultant also referred to the draft determination prepared for Block A and included the following points about the investigation process:
- Investigations confirmed that the cladding system was flush-finished fibre-cement with a 9mm thin plaster coating, but there was no evidence that this 'unorthodox' system was defective.
 - Defects were found to be confined to details at various junctions of dissimilar materials, resulting in isolated moisture penetration.
 - Framing timber in all high risk areas are to be investigated by removing interior wall linings; and all damaged timber shall be replaced with H3.1 treated timber, with sound timbers protected with site-applied preservative.
 - Non-invasive moisture testing shall be carried out only to identify variations in moisture levels and to locate potential problem areas, with invasive moisture testing used to confirm excess moisture, which was defined as over 16%.
 - Photographic records shall be made of all areas of repair.

3.8.3 Drawings and specifications were provided and the list of the repairs to be carried out included the following work (in summary):

- remove internal wall linings at identified high-risk locations, replace all damaged timber and site-treat other exposed framing
- **general cladding repairs:**
 - establish correct clearances to paving and ground surfaces
 - remove plaster over foundation wall, apply weatherproof coating to concrete, seal and paint bottom edges of plaster and backing sheets
 - remove wire mesh reinforcing to corners and install proprietary reinforced uPVC corner moulds/flashings
 - install vertical movement joints to the north elevation, using proprietary uPVC jointers
 - repair cracks to the north elevation, which are all due to sagging of the lintel beam over the bay window and not to cladding defects
 - seal all cladding penetrations
 - install membrane skirt over protruding steel columns, to extend behind cladding and 150mm over frame timber vertically and horizontally
 - repaint exterior with approved acrylic elastomeric coating system
- **joinery repairs:**
 - grind out joinery junctions and install 5mm sealant under jamb flanges
 - seal head flashings ends, and install head flashings to two windows
 - reseal all aluminium joinery mitres and mullion/sill junctions
- **cantilevered decks:**
 - remove deck tiles and membranes, and cladding at deck to wall junctions
 - replace damaged timber and raise door thresholds
 - install new waterproofing membrane behind cladding and under sills
 - install copper flashing at cantilevered deck to wall junction
 - metal balustrades to be re-fixed with side-fixed brackets
- **roof junctions:**
 - increase clearances to 35mm at roof apron flashings to lean-to roofs and modify ends to provide kickouts
 - ease out fascia behind gutter, grind out plaster and insert flashing
 - remove lower level fascia/barge boards and complete plaster coating
 - fit copper soakers to all barge/fascia board corners and junctions
- **other items:**
 - extend timber screen beneath front doors and clad to form fire-rated wall
 - provide as-built drawings recording all variations from original drawings

- prepare maintenance schedule for implementation by the body corporate
- provide producer statements and warranties for the joinery restoration, cladding repairs, waterproof membranes and painting.

3.9 The consultant applied for building consents to cover ‘minor repairs to address weathertightness issues, satisfy NTFs 3253 – 3269, and obtain code compliance certificates’ for the units. It appears that building consents have been approved and repair work is underway on some units. However, the applicants did not finalise the application for Unit 147, so no repairs have commenced on that unit.

3.10 The Department received an application for a determination on 18 December 2009.

4. The submissions

4.1 The applicants made no submission, but provided copies of:

- the surveyor’s letter dated 12 October 2009
- the consultant’s remedial proposal dated 7 November 2009.

4.2 The authority’s submission

4.2.1 The authority made a submission received by the Department on 1 May 2010, which outlined the background to the repair work and included the following comments:

- the repair work to Block A had allowed it to inspect and understand the sources of the leaks; and to clarify that failures of Clauses E2 and B2 resulted from discrete defects rather than systemic defects in the cladding system
- the authority’s rigorous inspection process had ensured that all affected timber was removed; and appropriate control joints, flashings and waterproofing installed
- the cantilevered decks had been found to have minimal damage to framing timbers, with no structurally significant decay
- the deck handrails have been changed from top-fixed to side-fixed.

4.2.2 The authority was now satisfied, on reasonable grounds, that the repaired Block A meets Clauses E2 and B2 of the Building Code. Based on its increased knowledge about the performance of the cladding system, the authority believed that the level of remedial work for Block B was able to be minimised, concluding:

[The authority] is satisfied that the existing cladding system can be accepted as an alternative solution based on its in-situ performance, subject to it being repainted with the appropriate elastomeric paint system.

[The authority] believes believed that the building work carried out as part of this amendment application will ensure that the original building consent is able to be issued with a Code Compliance Certificate.

4.3 The authority provided copies of:

- the approved amendment drawings and specifications for Block A
- biodeterioration reports dated 12 November 2007 and 11 December 2008 on timber samples from Block A

- the second draft determination (reference 1607) dated 28 March 2007 on Block A, including the expert's report dated March 2006 prepared for that determination.

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

4.5 The draft determination

4.5.1 The draft determination was issued to the parties for comment on 26 May 2010.

4.5.2 The authority generally accepted the draft on 31 May 2010; suggesting several non-contentious amendments which I have incorporated in the determination.

4.5.3 The surveyor responded to the draft on behalf of the applicants in a letter to the Department dated 1 June 2010. The surveyor raised a number of non-contentious and more significant points. I have considered these comments and have amended the draft as I consider appropriate. The surveyor included the following comments (in summary):

- If the authority inspected the framing to Block A from the inside, then all of the framing would not have been visible. Components such as external corner studs, exterior lintel beams and boundary floor joists could not have been seen.
- In regard to the consultant's report on the repairs (refer paragraph 3.8):
 - All of the reports mentioned cladding cracks, including within the body of the cladding. These are signs of failure and with no long term history there is no basis to conclude that the cladding system was satisfactory.
 - A significant amount of framing cannot be effectively site-treated from the inside, whereas the outside face is most at risk from moisture.
 - Non-invasive moisture testing is extremely unreliable.
 - Photographic records do not 'guarantee a weathertight home'.
 - The inside face of the bottom of the fibre-cement sheets cannot be sealed with the proposed method.
 - The proposed treatment at external corners is 'contrary to E2 so puts the total system at doubt'.
 - There is a limit on the size of cracks that elastomeric paints can accommodate.
 - The joinery sealants under jamb flanges can only be regarded as a 'temporary repair method'. The most common failure of joinery is at 'the sealant joints between head/jamb/sill (where installed) flashings'.
 - The untreated cantilevered decks should be replaced.
 - Exposed nails penetrating the membrane up-stands are not addressed.
- Targeted repairs 'cannot account for every possible moisture ingress feature so cannot guarantee' a weathertight building after completion.

- No mention is made of the need for air seals to the window repairs, which are critical to the performance of the joinery.
- No follow up investigation has been carried out on Block A to prove that the repairs have been successful, which is necessary before claiming that they were successful.

5. The expert's report

5.1 As mentioned in paragraph 1.6, I engaged an independent expert to assist me. The expert is a member of the New Zealand Institute of Building Surveyors. The expert inspected the Unit 147 on 18 March 2010 and provided a report that was completed on 25 March 2010.

5.2 The cladding (general)

5.2.1 The expert noted that the cladding is not a recognised proprietary system. Modified plaster is applied directly over the backing sheets, with the thickness varying from about 8mm at the windows to about 16mm. Metal mesh is used over the corners and fibreglass mesh to most other areas.

5.2.2 I note that the photographs of an exposed corner in Unit 145 indicates that the backing sheets are 7.5mm fibre-cement sheets with rebated edges, which are typically used for flush-finished fibre-cement cladding.

5.2.3 The windows are face-fixed against the backing sheets, with metal head flashings that project about 20mm past the jamb, no sill flashings and plaster butting against the edges of the window flanges.

5.3 Cladding cut-outs

5.3.1 Repairs were underway on the adjacent Unit 145, with plaster and/or cladding removed at various areas. As construction details are identical for all units, I accept that junctions exposed in Unit 145 are typical of similar junctions in Unit 147.

5.3.2 During his inspection, the expert was therefore able to observe the underlying construction exposed in Unit 145 at the following junctions:

- wall to roof junctions at the north lean-to roofs
- at the bottom of an upper corner to the wall above the north entry lean-to
- below the above junction, with severe decay obvious
- at the bottom of a corner to the north bay window, with severe decay obvious
- at the bottom of a corner to the south elevation, exposing the base moulding.

5.3.3 The expert also removed sections of cladding from the following areas of Unit 147:

- the sill to jamb junction of a north bedroom window
- at the bottom of a corner to the north elevation
- beneath the wall to lean-to roof junction at the north entry
- beneath the balustrade post fixings at the outer corner of the deck.

5.4 Moisture levels

5.4.1 The expert inspected the interiors of the unit, taking non-invasive moisture readings internally and noted no evidence of moisture. The expert also lifted carpet edges in various areas, noting no corroding fixings except for some minor rust to the smooth edge nails adjacent to the south doors.

5.4.2 The expert took a number of invasive moisture readings through the wall cladding around the building, noting that testing was at the end of a 'prolonged dry summer' and some low readings would likely exceed 18% in wetter seasons. Readings included:

- 14% at the window cut-out, but water stains seen in the sill framing
- 17% at the entry cut-out, but mould in the fibre-cement and decay in framing
- 16% and 17% at the deck side to wall junctions
- 20% and 32% at the cut-out below the top-fixed balustrade brackets.

5.4.3 The expert also observed severe decay where cladding had been removed over the following junctions in Unit 145:

- the bottom of a corner to the north bay window
- at the corner below the junction of the wall with the north entry lean-to roof.

5.5 Commenting specifically on the claddings, the expert noted that:

General

- the fibreglass mesh in the plaster appears to be missing at corners, and the metal mesh used at corners is corroding in some areas
- clearances from the cladding base to ground or paving are insufficient in some locations, including at garage walls where the cladding contacts soil and paving
- the uPVC moulding at the bottom of the cladding is installed over the backing sheets and the plaster extends down over the concrete foundation, with no moisture break provided to prevent moisture 'wicking' into the plaster
- there is no evidence that control joints have been provided in the stucco for walls where dimensions exceed the 5.4 metre length limit recommended by the manufacturer for flush-finished fibre-cement systems
- the horizontal inter-storey joint is exposed on Unit 145, and it is apparent that the uPVC jointer has been installed upside down
- there are a number of cladding cracks to north walls, with minor cracks to the south walls except for a horizontal crack at the inter-storey level
- some penetrations through the cladding are unsealed

Doors and windows

- the windows are face-fixed against unsealed fibre-cement backing sheets with inconsistent silicon sealing applied behind jamb flanges, the plaster finishing flush with the flanges, and cracks apparent at the junctions
- the ends of some head flashings are inadequately sealed

- the door threshold at the south deck is insufficient
- at the window cut-out, there are water stains to framing under a window mitre

The south deck

- the deck butynol turns down the face of the boundary joists, beneath the plaster, and the deck balustrades are fixed through the tiled edge up-stand into the framing
- there is no clearance from the cladding to the tiled surface and the tiled edge up-stands finishes above the base of the stucco plaster
- there is no evidence of satisfactory weatherproofing at the junctions of the deck ends with the walls, and moisture levels are elevated

The north lean-to roof junctions

- cladding clearances to apron flashings at the north lean-to roofs are insufficient
- the ends of apron flashings are poorly weatherproofed, with no kickouts and decay apparent below the entry lean-to
- uPVC flashings at the bottom of walls above the aprons have been installed over the fibre-cement backing sheets instead of correctly underlapping
- fascia boards to upper and lower roofs appear to have been installed over unsealed fibre-cement backing sheets, with bottom edges embedded in plaster.

5.6 A copy of the expert's report was provided to the applicant, the body corporate and the authority on 9 April 2010.

Matter 1: the cladding

6. Weathertightness

6.1 The evaluation of building work for compliance with the Building Code and the risk factors considered in regards to weathertightness have been described in numerous previous determinations (for example, Determination 2004/1).

6.2 Weathertightness risk

6.2.1 Block B has the following environmental and design features which influence the weathertightness risk profile of Unit 147:

Increasing risk

- Block B is two storeys high
- although fairly simple in shape, the unit includes some complex junctions
- the monolithic cladding is fixed directly to the framing
- there are no eaves projections to shelter the walls
- there is a cantilevered deck, with a tile floor and metal balustrades
- the external wall framing is not treated to a level effective in resisting decay if it absorbs and retains moisture
- Block B is in a medium to high wind zone.

6.2.2 When evaluated using the E2/AS1 risk matrix, the weathertightness features outlined in paragraph 6.2.1 show that the front and rear elevations of Block B demonstrate a moderate weathertightness risk rating and the end elevations a low rating. In the case of Unit 147, the only elevations are front and rear and therefore medium risk. If the details shown in the current E2/AS1 were adopted to show code compliance, a drained cavity would be required for the cladding to Unit 147. However, this was not a requirement when Block B was constructed.

6.3 Weathertightness performance

6.3.1 As well as the expert's comments on Unit 147's claddings, my assessment of the cladding's weathertightness performance is also informed by:

- the expert's observations of areas exposed on the neighbouring Unit 145
- the 2006 expert's report on Block A
- the additional evidence collected during investigations and repairs to Block A.

6.3.2 Taking into account the above evidence, I consider that the following areas in Unit 147 require remedial work; and I have compared these to the repairs specified by the consultant in the consent application documents (see paragraph 3.8.3):

Work required per expert's report (refer paragraph 5.5)	Building consent application repairs (refer paragraph 3.8.3)
Investigate extent of decay at areas and replace damaged timbers.	Remove internal wall linings at identified high-risk locations and replace all damaged timber and site-treat other exposed framing
General cladding	
Inadequate clearances below the cladding of both the unit and the garage	Establish correct clearances to paving and ground surfaces
Lack of anti-capillary breaks at the bottom of the cladding.	Remove plaster over foundation wall, apply weatherproof coating to concrete, seal and paint bottom edges of plaster and backing sheets
Lack of fibreglass mesh to some areas	Remove wire mesh reinforcing to corners and install proprietary reinforced uPVC corner moulds/flashings
Lack of vertical control joints	Install vertical movement joints to the north elevation, using proprietary uPVC jointers
Inadequate inter-storey control joint, with an associated horizontal crack on south wall	(I note that this junction was not specifically identified by the consultant)
Cracks to the north elevation	Repair cracks to the north elevation
Inadequate sealing of cladding penetrations	Seal all cladding penetrations
Other minor cracks to south elevation	Repaint exterior with approved acrylic elastomeric coating system
Windows and doors	
Inadequate sealing behind some jamb flanges	Grind out joinery junctions and install 5mm sealant under jamb flanges
Inadequate sealing of ends of head flashings	Seal head flashings ends
Inadequate mitres to some windows, with moisture stains apparent at the cut-out	Reseal all aluminium joinery mitres and mullion/sill junctions

Work required per expert's report (refer paragraph 5.5)	Building consent application repairs (refer paragraph 3.8.3)
Cantilevered deck	
High moisture levels in deck timbers	Remove soffit, deck tiles and membranes – replace all damaged timber
Inadequate door threshold height	Raise door thresholds
Inadequate cladding clearances to tiles and lack of anti-capillary gap	Remove cladding at deck to wall junctions, reinstall with correct clearances
Inadequate deck to wall junctions	Install copper flashing at cantilevered deck to wall junction Install new waterproofing membrane behind cladding and under sills
The membrane turns down the boundary joists under the plaster	Install new membrane with new edge details
Penetrations of balustrade fixings through the tiles and deck membrane	Metal balustrades to be installed with side-fixed brackets
Roof junctions	
Inadequate cladding clearances above apron flashings to lean-to roofs uPVC base mould overlaps backing sheets	Increase clearances to 35 mm at roof apron flashings to lean-to roofs Cladding cut back so base detail revised
Lack of kick-outs, with decay identified under the front door apron	Modify apron ends to provide kickouts
The fascias and barge boards fixed against unsealed backing sheets	Ease out fascia behind gutter, grind out plaster and insert flashing Remove lower level fascia/barge boards and complete plaster coating Fit copper soakers to all barge/fascia board corners and junctions

- 6.3.3 The expert has identified the inadequate inter-storey joint exposed during repairs to Unit 145, with a jointer apparently installed upside down; and I note that this has not been identified in the building consent documentation.
- 6.3.4 The surveyor has also noted that there is no proposal to install air seals to the windows and doors and I accept that these are important in preventing moisture that may penetrate from being drawn into the wall via pressure differentials.
- 6.3.5 Taking into account the expert's report, the consultant's proposal and the surveyor's response to the draft, I consider that the following additional work is required to the following areas:
- the inadequate inter-storey control joints
 - the lack of air seals to the window and door joinery.
- 6.3.6 Apart from the above items, I am satisfied that the repairs specified in the consent application documents appear to adequately cover the defects identified by the expert.
- 6.3.7 Notwithstanding the fact that the backing sheets are fixed directly to the timber framing, thus inhibiting drainage and ventilation behind the cladding sheets, I have

noted certain compensating factors that can assist the performance of the cladding in this particular case:

- Moisture penetration and damage appears to be limited to defective junctions.
- The scope of repairs includes the preparation of a maintenance schedule for implementation by the body corporate.

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

6.4 Weathertightness conclusion

- 6.4.1 I consider the expert's report establishes that the cladding to Unit 147 does not comply with Clause E2 or Clause B2 of the Building Code. However, because the faults identified occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 6.3.2 will result in the unit being brought into compliance with Clauses B2 and E2.
- 6.4.2 With the repair of the additional items outlined in paragraph 6.3.5, I consider there are reasonable grounds to come to the view that the repairs proposed for Unit 147 (and currently underway for the other units in Block B) will satisfactorily rectify the items outlined in paragraph 6.3.2. This will result in the unit being brought into compliance with Clauses B2 and E2.
- 6.4.3 The external walls of the units in Block B are not common property (see paragraph 2.1); and I note that the applicant has been invited to make a separate proposal to the authority for remedial work to re-clad his unit and install a drained ventilated cavity. I discuss this further in paragraph 7.1.
- 6.4.4 It is emphasized that each determination is conducted on a case-by-case basis. Accordingly, the fact that a particular cladding system has been established as being code compliant in relation to a particular building does not necessarily mean that the same cladding system will be code compliant in another situation.
- 6.4.5 I note that the proposed work includes providing the body corporate with a maintenance schedule for Block B. Effective maintenance of this building's claddings will be particularly important to ensure ongoing compliance with Clauses B2 and E2 of the Building Code and this is the responsibility of Block B's building owners via the body corporate as their representative. 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. What is to be done now?

- 7.1 The applicants maintain that their unit requires re-cladding over a drained cavity rather than the proposed more discrete repairs. However I have had to assess the adequacy of the proposed repairs against the level necessary to achieve minimum compliance with the Building Code in order to allow the units to be issued with code compliance certificates on completion of the work to the satisfaction of the authority.

Notwithstanding that, the applicants are entitled to carry out remedial work that they consider will improve on the level of compliance achieved by discrete repairs; by applying for a separate building consent for proposed changes to Unit 147 (see paragraph 6.4.3).

- 7.2 Should the applicants elect to submit a separate application, then I suggest they and the authority adopt the following process. The authority has issued the notice to fix for Unit 147. The owners should produce a response to this in the form of a detailed proposal, which may include the provision of a cavity, together with suitable changes to the plans and specifications, produced in conjunction with a competent and suitably qualified person, as to the rectification or otherwise of the specified matters. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

8. The decision

- 8.1 In accordance with section 188 of the Building Act 2004, I hereby determine that, providing the items identified in paragraph 6.3.5 are satisfactorily remedied, the repairs proposed for Unit 147 will result in the claddings complying with Clauses B2 Durability and E2 External Moisture.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 9 August 2010.

John Gardiner
Manager Determinations