

Determination 2009/39

Determination regarding the cancellation of an existing consent, and refusal to issue a new consent for additions and alterations to a house at 65 The Esplanade, Napier



1. The matters to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ ("the current 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 applicants are the owners and also the builder, A Taylor and J Curtis ("the applicants") acting through a building consultant ("the consultant") and the other party is the Napier City Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.
- 1.2 This determination arises from the decision of the authority to refuse to issue a building consent ("the new consent") for the completion of additions and alterations to a house ("the alterations") because it was not satisfied that the house would

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

- comply with certain clauses of the Building Code² (Schedule 1, Building Regulations 1992).
- 1.3 The application for the new consent to complete the work was made after the authority had cancelled the original building consent. I therefore have taken the view that the earlier decision to cancel the consent is also a matter to be considered. This decision is discussed in detail in paragraph 7.
- 1.4 I take the view that the matters for determination, in terms of sections 177(a), 177(b)(i) and 188 are:
 - whether the authority was correct in its decision to refuse to issue a new building consent; and
 - whether the building work completed to date complies with Clauses B2 Durability, E2 External Moisture, G12 Water Supplies and G13 Foul Water.
- 1.5 In making my decision, I have considered the submissions of the parties, the report of the expert commissioned by the Department to advise on this dispute ("the expert"), and the other evidence in this matter.

2. The building work

2.1 The building is a two storey house on a gently sloping coastal site, which is in a high wind zone for the purposes of NZS 3604³. The building was originally a small rectangular single-storey 1950's house ("the original house") with a timber frame, suspended timber framed floor and a concrete perimeter foundation wall.

2.2 The alterations

- 2.2.1 The building consent, issued in 2000, included extensive alterations and additions to the original house, including lifting the building to accommodate a new lower level that extends beyond the footprint of the original house. The consented work included the removal of most interior walls and the installation of a new roof and new external cladding to all walls.
- 2.2.2 The new lower is intended to accommodate a garage and workshop, two bedrooms, a bathroom and laundry facilities, and a storeroom. The upper level will provide living areas with a master bedroom and ensuite. An extension to the northeast corner provides an entry foyer set at mid-storey height, with stair access to upper and lower levels.
- 2.3 The resulting house is fairly complex in plan and form, with parapets bordering the main roof (which falls towards an internal gutter) and a two-level roof over the entry foyer. The consent drawings show the entry foyer walls fully glazed using a conservatory-type glazing system.

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

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 New Zealand Standard NZS 3604:1999 Timber Framed Buildings

2.4 Construction is generally conventional light timber frame with some specifically engineered steel beams and bracing, and has a concrete slab and foundations, concrete block retaining walls, monolithic wall claddings and flat membrane roofs. The monolithic cladding was specified as solid plaster over fibre-cement sheet backing sheets, with all windows and doors specified as new aluminium joinery.

2.5 Roof decks extend to the east and west above lower level bedroom areas. The decks have liquid-applied membrane floors and the consent documents called for glass balustrades mounted onto membrane covered upstands.

2.6 The as-built wall cladding system

- 2.6.1 At some stage during the construction, the cladding was changed to painted flush-finished fibre-cement sheets installed over battens. Revised construction details (refer paragraph 3.2) show a layer of building wrap installed over the backing sheets and the addition of '22mm thick H3 battens'.
- 2.6.2 The revised construction details show two layers of battens installed above the windows to form a band at the top of the upper walls. Elsewhere, a single layer is shown, except beside the garage door where the battens are shown as 8mm thick. Additional fibre-cement sheets are shown installed over a second layer of building wrap.
- 2.6.3 The revised construction details also show solid horizontal blocking above and below the windows and doors. The aluminium windows are shown recessed back from the face of the cladding, with the window face-fixed over the first backing sheet and building wrap layer. A metal head flashing is shown, with 'flashing tape' at the sill, and a metal flashing behind the window jamb.
- 2.6.4 No details at the parapet levels or at the bottom of the cladding are provided and the final flush coating is not specified.

2.7 The building work completed to date

- 2.7.1 The building work is unfinished, with the house at an unoccupied 'shell' stage, with several rooms partly lined, although some bathroom and laundry fittings are in a working condition. The floor slabs to the lower level, the membrane to the external foundation walls, framing, bracing, linings, insulation, plumbing and drainage are all unfinished. The original foundation walls have been retained to the south elevation.
- 2.7.2 The exterior of the house is also unfinished, with the wall claddings and other paintwork incomplete. The cladding is temporarily finished with plastered joints and a paint coating applied over the fibre-cement sheets. Instead of installing all new aluminium joinery, the majority of the windows to the lower level are re-used timber windows. The specified glass balustrades have been replaced with monolithic-clad barriers.
- 2.7.3 The expert has noted that the visible timber comprised native timbers to the original house framing, some timbers marked as H1 or H3, and other framing marked as 'UT Keep Dry'. However, the applicants and the consultant have stated that 'there is no

untreated timber to exterior walls' (refer paragraph 6.10). I accept that most of the exterior wall framing is likely to be treated.

3. Background

- 3.1 The authority issued a building consent (No. 001458) on 8 June 2000, under the Building Act 1991 ("the former Act").
- 3.2 At some stage, a decision was made to change the cladding from stucco to flush-finished fibre cement. According to the applicants, a drawing of the revised details was submitted to the authority on 12 October 2001 (refer paragraph 2.6).
- 3.3 Construction was undertaken by the applicants, and the authority carried out the following inspections:
 - Pile holes and foundations on 12 October 2001
 - 'Sewers' on 27 November and 5 December 2002
 - Foundations and floor slabs on 16 January and 7 February 2003
 - Part of the garage on 27 February 2003, which was the last inspection recorded.
- 3.4 No further inspections were undertaken and building work continued with the exterior cladding installed some time in 2005.
- 3.5 The applicants engaged the consultant to inspect the project and advice on actions needed to complete the work. The consultant inspected the property on 6 May 2008 and made enquiries with the authority on 12 May 2008.
- 3.6 In a letter to the applicants dated 13 May 2008, the authority noted that the last inspection was carried out more than five years previously and a building consent will lapse if reasonable progress has not been made, stating:
 - Because of the number of years since our last inspection the building consent 001458 is now cancelled. To carry on building work you will now have to apply for a new building consent.
- 3.7 A structural engineer viewed the work completed to date and, in a letter to the authority, dated 30 July 2008, noted that he saw 'no reason why those works could not be completed to the intent of the original design'.
- 3.8 In a letter to the authority dated 27 October 2008, the consultant described the work proposed to finish the project, noting:
 - ...we believe that the existing cladding and flashings have been well installed and appear weather tight.
 - There appeared to be no visual evidence of any ingress of moisture to the interior and with the proposed additional textured coating to the exterior it will add further weather protection to the dwelling.
- 3.9 The consultant noted that the applicants were applying for a building consent to complete the interior work in accordance with the original documents and asked the

authority to consider approving this prior to the completion of the exterior work. The consultant attached statements from:

- the installer of the balustrades
- the installer of the membrane roof system
- a letter from the structural engineer (refer paragraph 3.7)
- a statement from the applicants on the exterior cladding and flashings.
- 3.10 In a letter to the applicants, dated 20 November 2008, the authority requested a 'full itemised schedule of work to be completed'.
- 3.11 In a letter to the applicants dated 15 December 2008, the authority noted that it had inspected the house and had decided to decline the application for a building consent, noting:

The decision is made on the grounds that we will not be satisfied that when the work is completed that the building will not comply with the following clauses:

- B2 Durability
- E2 External Moisture
- G12 Water Supplies
- G13 Foul Water
- 3.12 The Department received an application for a determination on 16 January 2009.

4. The submissions

- 4.1 In a letter to the Department dated 12 January 2009, the consultant outlined his involvement with the project since his engagement in May 2008.
- 4.2 The consultant forwarded copies of:
 - the consent drawings and specification, and amended details
 - the building consent
 - the inspection summary
 - the correspondence with the authority
 - various producer statements, technical information and other statements.
- 4.3 A copy of the applicant's submission was provided to the authority. The authority acknowledged the application, but made no submission.
- 4.4 A draft determination was issued to the parties for comment on 27 April 2009. The authority accepted the draft without comment.

4.5 The applicant's response to the draft

4.5.1 The applicants commented on the draft determination in a letter to the Department dated 6 May 2009. The applicants noted that the draft had not considered the consultant's comments on the expert's report (refer paragraph 6.10) and explained

that building work is unfinished because they 'were told to stop work over a year ago'.

- 4.5.2 The applicants included the following summarised comments on the draft:
 - The cladding change was submitted to the authority on 12 October 2001.
 - There is no new untreated timber in the exterior walls.
 - The water stains occurred during heavy rains early in construction and when stacked timber was hosed due to 'an infestation of ants'.
 - There is no evidence of decay beneath the parapet tops.
 - There are control joints installed and provision for drainage in the cavity.
 - The expert's water testing 'would make any window leak'.
 - The consent drawings showed an alternative roof framing spacing.
 - The roof is generally installed to a satisfactory standard, apart from a crack and the lack of paint.
 - The cladding is weathertight 'and further, with the new coating it will be even more so'.

4.5.3 The applicants concluded:

We accept that there is some remedial work, and a reasonable amount of works still to be completed to bring the house up to Code compliance standard.

5. The relevant legislation

5.1 The relevant sections of the current Act:

Building Act 2004

- 49 Grant of building consent
 - A building consent authority must grant a building consent if it is satisfied on reasonable grounds that the provisions of the building code would be met if the building work were properly completed in accordance with the plans and specifications that accompanied the application.
- 52 Lapse of building consent

A building consent lapses and is of no effect if the building work to which it relates does not commence within—

- (a) 12 months after the date of issue of the building consent; or
- (b) any further period that the building consent authority may allow.
- 433 Transitional provision for building consents granted under former Act
 - A building consent that was granted under section 34 of the former Act before the commencement of this section must, on that commencement, be treated as if it were a building consent granted under section 49.

6. The expert's report

As mentioned in paragraph 1.5, I engaged an independent expert to provide an assessment of the condition of those building elements subject to the determination. The expert is a member of the New Zealand Institute of Building Surveyors. The expert inspected the house on 9 February 2009 and furnished a report that was completed on 20 February 2009.

- 6.2 The expert noted variations from the consent drawings, including:
 - Solid plaster cladding changed to two layers of fibre-cement, with consequential changes in window flashing details.
 - Reduction in amount of glazing to the entry foyer, and other changes to the windows.
 - Re-used timber windows in lieu of aluminium to most ground floor windows.
 - Sections of glass balustrades replaced with monolithic-clad walls.
 - Sarking under the plywood roof substrate omitted
 - The stainless steel parapets cappings omitted.
- 6.3 The expert also noted work that had not been completed, including:
 - Foundations and floor slabs to the ground floor.
 - Membrane to the external foundation walls.
 - Interior framing, linings, fixings and bracing.
 - External and internal plumbing and drainage work.
 - Exterior cladding and final coatings.
 - Weatherproofing of windows.
 - Linings to soffits under upper walls.
- The expert noted that the overall construction showed 'that a lot of the work has been done by workers that lack the skills and construction knowledge required for a professional finish', with little thought given to the long term weathertightness of details, many of which are reliant on the use of paint coatings and sealant.
- 6.5 The expert removed sections of cladding at the sills of two timber windows, timber french doors and an aluminium window to observe the underlying construction. The expert noted that H3 treated trimmers are used at the jambs and a timber sill is planted under the windows, with fibre-cement over the sloping top and face and the underside timber exposed. Liquid-applied membrane has been applied over the sill and jambs. The exterior doors have exposed timber sills.

6.6 Moisture

6.6.1 The expert inspected the unfinished interior and noted acceptable non-invasive moisture readings. However, water stains were apparent in some exposed framing, although the expert could not identify when the staining occurred.

As the region has had a dry summer and most walls were unlined, the expert considered that moisture readings would be of limited use in terms of assessing the building's weathertightness performance. The expert noted area of water staining but could not tell when this had occurred. The expert therefore carried out water testing of various areas (using a hand-held hose), and noted water entering at:

- the sill of the basement laundry timber window
- the sill of the garage timber window
- the sill of the aluminium window to a basement bedroom
- the sill of the aluminium door to a basement bedroom
- the sills of the timber windows to a basement bedroom
- the sill of the fover aluminium window.
- 6.6.3 The expert also found evidence of decay in the timber beneath the parapet tops.
- 6.7 Commenting specifically on the building work, the expert noted that:

The fibre-cement cladding

- the sheets are misaligned in some areas
- the cladding lacks any textured coating, with jointing compound poorly applied and paint only to the sheets
- there is no evidence of control joints installed to the cladding
- the cavity behind the cladding lacks any provision for drainage
- penetrations through the cladding are unsealed

The windows and doors

- the windows have no sill flashings and lack jamb flashings or seals, with cracks apparent and testing showing moisture entry
- the door sills are not weathertight, with testing resulting in moisture entry
- there are gaps at the ends of some head flashings, and bare timber is visible

The roof and parapets

- the underside of the plywood substrate at the front entry is water stained
- the spacing of the framing under the plywood substrate is well beyond the 400mm centres specified by the membrane manufacturer, resulting in flexing
- the membrane has not been coated as specified by the manufacturer
- the roof membrane has torn in one area, and there are signs of repairs
- the parapets have flat fibre-cement tops, no cappings and no evidence of saddle flashings at the junctions with the walls, and decay in the framing is apparent

The decks

• there is no clearance to the deck surface from the monolithic cladding on the clad balustrade to the west deck

• the monolithic-clad balustrades have flat tops, no cappings, and no evidence of saddle flashings at the junctions with the walls.

6.8 Plumbing and drainage

- 6.8.1 The expert considered the water to the house was potable. The pipework was able to be inspected and tested before the internal linings were installed. The toilets have been installed and there were found to be operating properly.
- 6.8.2 The internal drainage system is yet to be completed and has been modified to allow the applicants to use the toilets and washing facilities on a temporary basis. The surface water drains into an onsite soak pit. The drains had been inspected by the authority.
- A copy of the expert's report was issued to the parties for comment on 26 February 2009.

6.10 The consultant's response to the expert's report

- 6.10.1 The consultant responded to the report in a detailed submission to the Department dated 23 March 2009.
- 6.10.2 The consultant challenged some of the expert's findings, including the following summarised comments:
 - A drawing of the change from stucco cladding to flush-finished fibre cement was submitted to the authority on 12 October 2001.
 - There is no untreated timber in the exterior walls.
 - The cladding has a cavity, with vertical saw cuts applied to the horizontal batten at the bottom in order to allow air flow.
 - The cladding and associated flashings have been weathertight to date. The water entry reported by the expert resulted from directing high pressure hose water against the flashings.
 - Proprietary flashings are used at the new aluminium windows, which have been effective in preventing moisture penetration.
 - There is no evidence of decay to parapet framing or to the roof substrates, with no water stains showing on the underside of the exposed plywood. Any water stains noted are old and date back to leaks during construction.
 - The consent drawings show two options for the roof, with an alternative noted as 15mm ply over framing at 900mm centres. The completed roof is stronger than either option in the drawings, being 17.5mm plywood over 100mm x 50mm framing at 500mm centres.
 - The expert's criticism of workmanship is not specific. While some areas might not be 'quite up to standard', a variety of tradesmen and professionals have been involved with the construction.
- 6.10.3 The consultant concluded by explaining that qualified experienced tradesmen and contractors will be used to complete the project, stating:

It is not the intention of [the applicants] to have a house that leaks. The application for the building consent to carry out the work to complete the project included a full exterior coating system applied by an approved applicator and it included sealing all areas of potential leaks and includes any building work to assist in achieving a complete weather tight house to a compliance level.

6.10.4 I have considered those comments and amended the determination as I consider appropriate

7. Refusal to issue a new building consent

- 7.1 In this case, the authority has declined to issue a new building consent for the work to be complete the building. It seems clear that the building work in question is largely to complete the building in terms of the original consent, including some items of rectification.
- 7.2 In addition, as the work has been commenced, any new consent could be considered as being retrospective. Accordingly, before considering the application for a new building consent I will consider whether the building consent was validly cancelled by the authority. If not, then it follows the building consent is still in force and the building work will fall to be considered under the original consent.
- 7.3 The building work was carried out in terms of the former Act but the building consent was lapsed and cancelled on 15 December 2008 when the current Act was in force.
- 7.4 Section 433 of the current Act requires a building consent issued under the former Act, with two exceptions not relevant to this issue, to be 'treated' as if it were a building consent issued under section 49 of the current Act. In other words, section 433 requires the provisions in the current Act relating to building consents to be applied to a building consent issued under the former Act as though that building consent was issued under the current Act.
- 7.5 Section 52 of the current Act is a provision relating to building consents under the current Act and, pursuant to section 433, section 52 also governs the lapse of a consent issued under the former Act. Under section 52, a consent lapses if the building work to which it relates does not 'commence' within 12 months after the date of the issue of the consent. In terms of the matter in question, it is my view that there are no grounds for the authority to lapse the consent under section 52 of the current Act.
- 7.6 In addition, the reason given by the authority for the lapse and cancellation of the consent was because the 'last inspection had been carried out more than 5 years before'. This is clearly not a reason to lapse a building consent in terms of section 52 of the current Act.
- 7.7 Therefore I conclude that the authority was in error when it purported to cancel the consent in terms of section 52 of current Act. It follows from this conclusion that the authority could not require the applicants to apply for a new building consent.

7.8 It also follows that, while I do not need to consider whether the authority was correct in its decision to refuse to issue a new building consent on the basis that it could not be satisfied on reasonable grounds that the proposed work would comply with the Building Code, I am of the opinion it would be prudent to do so.

7.9 Taking into account the expert's report and the information contained in the application for the new building consent itself, I am of the opinion that the authority was correct in its overall decision to decline the application. I will now proceed to consider whether the building work that has been completed to date complies with the relevant provisions of the Building Code.

8. The roof and wall claddings

- 8.1 In evaluating the design of a building and its construction, it is useful to make some comparisons with the relevant Acceptable Solutions⁴, 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 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.
- 8.2 Taking into account the expert's report, I am satisfied that the roof and wall claddings have not been installed according to good trade practice or to the manufacturer's instructions. It is clear from the expert's comments, as outlined in paragraph 6.7, that the claddings to this house are unsatisfactory in terms of their weathertightness.
- 8.3 The changes from the original consent drawings, the state of the unfinished work, and the inadequate weatherproofing of many junctions have contributed to water penetration and possible decay. Consequently, I am not satisfied that the roof and wall cladding systems, as installed, comply with Clause E2 of the Building Code.
- 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 requirements for the house to remain weathertight. Because the cladding faults on the building are likely to continue to allow the ingress of moisture in the future, the building work does not comply with the durability requirements of Clause B2.
- 8.5 Remedial work may need to include removal of windows and doors, parts of the claddings and the replacement of decayed timber. In addition, I observe that the building work appears to have been undertaken over a significant period of time during which some of the building elements may have exposed to the weather and suffered some deterioration.

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⁴ 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.

8.6 I consider that a more thorough investigation is required before the method of remediation can be decided, either by targeted repairs, re-cladding, or a combination of both. This will require a careful investigation and analysis by an appropriately qualified expert. Once that decision is made, the chosen repair option should be submitted to the authority for its consideration and approval.

8.7 I note that the Department has produced a guidance document on weathertightness remediation⁵. This guide will assist the applicants in understanding the issues and processes involved in remediation work, and in exploring various options that may be available to them when considering the upcoming work required to the house.

9. The plumbing and drainage

- 9.1 The authority has not explained why it considers that the plumbing and drainage will not comply with Clause G12 and Clause G13 when the work is completed. I note that the authority inspected the 'sewers' and floor slabs from November 2002 to February 2003 (refer paragraph 3.3), with no problems identified in regard to plumbing and drainage. I therefore consider the pipes and connections that are now concealed were inspected and accepted as satisfactory by the authority.
- 9.2 I note the expert's comments, as outlined in paragraph 6.8, on the unfinished plumbing and drainage work, and that the pipework is currently visible and accessible for inspection and testing as required by the authority, with the opportunity for any problems to be resolved as the work progresses.
- 9.3 I am therefore satisfied that, given appropriate inspections by the authority, the plumbing and drainage could comply with Clause G12 and Clause G13 when the work is completed.

10. What is to be done now?

- 10.1 The authority should reinstate the original building consent, and a notice to fix should be issued that requires the applicants to bring the building work into compliance with the Building Code, identifying the items listed in paragraph 6.7. The notice should refer to any further defects that might be discovered in the course of investigation and rectification, but shall not specify how those defects are to be fixed. It is not for the notice to fix to stipulate directly how the defects are to be remedied and the house brought to compliance with the Building Code. That is a matter for the applicants to propose and for the authority to accept or reject.
- I would suggest that the parties adopt the following process to meet the requirements of paragraph 10.1. Initially, the authority should reinstate the building consent and issue the notice to fix. The applicants should then produce a response to this in the form of a detailed 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.

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 $^{^{5}}$ External moisture – A guide to weathertightness remediation. This guide is available on the Department's website, or in hard copy by phoning $0800\ 242\ 243$

I note that the expert has identified variations between the consent drawings and the addition as constructed, and I leave that matter to the authority to resolve with the applicants as it considers appropriate.

11. The decision

- 11.1 In accordance with section 188 of the Building Act 2004, I hereby determine that:
 - the building work completed to date does not comply with Clauses B2 and E2 of the Building Code.
 - The authority was correct in its decision to refuse to issue the new building consent, but only on the basis that it could not be satisfied on reasonable grounds that the proposed work would comply with the Building Code.
- As explained in paragraph 9, I cannot yet make a determination, in accordance with section 188 of the Act, as to whether the building will comply with Clauses G12 and G13 of the Building Code when the proposed work is completed.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 8 June 2009.

John Gardiner

Manager Determinations