

Determination 2007/136

Determination regarding a code compliance certificate for a 7-year-old building at 23A and 23B Paterson Street, Hamilton



1. The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ (“the Act”) made under due authorisation by me, John Gardiner, Manager Determinations, Department of Building and Housing (“the Department”), for and on behalf of the Chief Executive of that Department. The applicant is J Norman (“the applicant”) acting on behalf of the company owning the building and the other party is the Hamilton City Council (“the territorial authority”).
- 1.2 The building (“Duplex 1”) contains two self-contained dwellings (23A and 23B); and is one of two detached buildings that were constructed under a single building consent. I have received no information about the second building (“Duplex 2”), which contains 23C and 23D, and this determination is therefore limited to Duplex 1.
- 1.3 This determination arises from the decision of the territorial authority to refuse to issue a code compliance certificate for a 7-year-old building (because it is not

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

satisfied that the building work complies with Clauses B2 Durability and E2 External Moisture of the Building Code² (First Schedule, Building Regulations 1992).

1.4 The matters for determination are whether:

1.4.1 Matter 1: The cladding

The cladding as installed on the Duplex 1 (“the cladding”) complies with Clause E2 “External Moisture” of the Building Code. By “the cladding as installed” I mean the components of the system (such as the backing materials, the flashings, the joints and the plaster and/or the coatings) as well as the way the components have been installed and work together.

1.4.2 Matter 2: The durability considerations

The elements that make up Duplex 1 comply with Building Code Clause B2 “Durability”, taking into account the age of the building.

1.5 There is an additional matter raised by the applicant:

1.5.1 Matter 3: Splitting the building consent

Duplex 1 is one of two buildings constructed under one building consent. The applicant has asked that the determination should direct the territorial authority to “split” the original consent into two separate consents, one of which would be for Duplex 1. That would make it possible for the territorial authority to issue a code compliance certificate in respect of the applicant’s building.

1.6 I note the applicant has stated he was informed by the territorial authority that its current policy is not to issue code compliance certificates for buildings completed more than 12 months ago (refer paragraph 4.1). I address this issue further in paragraphs 8.8.1 and 8.8.2.

1.7 In making my decision, I have considered the submissions of the parties, the report of the independent expert (“the expert”) commissioned by the Department to advise on this dispute, and the other evidence in this matter. I have evaluated this information using a framework that I describe more fully in paragraph 6.1.

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

2. The building

2.1 The building work consists of a single-storey detached building situated on a flat site, which is in a low wind zone for the purposes of NZS 3604³. The construction is conventional light timber frame, with a concrete slab, concrete block foundations, brick veneer and fibre-cement weatherboard claddings and aluminium windows. The building is fairly simple in plan, with each dwelling a mirror image of the other. The

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

³ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

25° pitch profiled metal hipped and gable roof is fairly complex, with projecting gables, stepped roof levels at both ends, and no eaves or verge projections (except for deep overhangs above concrete terraces to the north and above the main entries to the south). Small timber decks extend from the main entry doors.

- 2.2 The expert observed no evidence as to timber treatment and the specification calls for timber to be “not less than No.1 Radiata Pine”. Given the date of construction during 2000 and the lack of other evidence, I consider that the external wall framing is unlikely to be treated.
- 2.3 The building is clad in brick veneer over a cavity, with painted “Hardiplank” fibre-cement weatherboards installed above windows and to the gable ends.

3. Background

3.1 The territorial authority issued a building consent (No. 972/2000) on 26 April 2000 for Duplex 1 and Duplex 2, each comprising 2 self-contained dwellings, which appear to have been completed during 2000. The consent would have been granted under section 34 of the Building Act 1991.

3.2 I have received no records of the building consent or of any inspections undertaken during construction. According to the territorial authority, the buildings were constructed by a developer and it appears that the applicant purchased Duplex 1 in October 2001.

3.3 I am not aware of any correspondence with the territorial authority until 2007, when the applicant sought a code compliance certificate for Duplex 1. The applicant engaged a specialist inspection company which carried out a visual inspection on 13 August 2007 and provided a “condition report” for the building. The condition report recorded no evidence of moisture penetration or significant defects and advised that some minor maintenance tasks should be carried out, concluding:

The property as viewed from a visual inspection and in the writer's opinion is structurally sound and would be fair to assume would have been constructed as per the building regulations at the time of constructed *[sic]* in 2000.

3.4 The territorial authority carried out a final inspection on 15 August 2007, which identified the following items:

1. Paint exterior
2. Vermin proof cavities around doorways
3. Allow brick veneer to breathe around decks
4. Flashings short on gable ends
5. Back soaker to fit to some H/planks
6. Seal sides of tub units, kitchen benches and top of showers
7. Posts at front porches to have connections fitted
8. Access required to all units
9. Suggest smoke alarms be fitted to all units.

The territorial authority did not issue a notice to fix.

3.5 According to the applicant, he was informed by building officials of the territorial authority that the building would not be issued with a code compliance certificate due to the age of the construction (refer paragraph 4.1).

3.6 On 30 August 2007, the Department received the application for a determination. The Department sought further information from the territorial authority regarding the building consent, and the matters to be determined, which was received on 13 September 2007.

4. The submissions

4.1 In the statement accompanying the application the applicant stated that the matter for determination was the refusal of the territorial authority to issue the code compliance certificate due to the construction being completed in 2000, noting:

I have been informed by the Hamilton City Council building department that it is now Council policy to not issue a certificate to buildings that were completed more than 12 months ago.

I have also been informed by the Hamilton City Council that the only way to have this certificate issued is to go through the process of a determination.

4.2 In a subsequent email to the Department dated 6 September 2007, the applicant asked that the matters for determination be extended to cover the question of the building consent, explaining:

The original consent applied to all four units, these are now in separate unit titles. We would like this consent to apply to units A and B only, as C and D are not owned by us and we have no expectation of ever receiving cooperation from the owner of C and D.

4.3 The applicant forwarded copies of:

- the consent drawings and specification
- the building consent application
- the specialist inspecting company's condition report
- the territorial authority's final inspection record.

4.4 In response to queries from the Department, the territorial authority (in an email dated 5 September 2007) described some of the history of the project, noting that the developer of the building was no longer operating in the region and that access to the other building on the site was not available when the recent inspection was carried out. The territorial authority noted:

Given that the buildings have probably been occupied for the last 6 years in an unfinished state and given the history of non-compliances and some of the mess this developer has left behind in other cases we are under no illusion that the buildings fail to meet B2 or E2 and probably a number of other sections of the building code.

- 4.5 The draft determination was issued to the parties on 14 November 2007. The draft was issued for comment and for the parties to agree a date when the building elements complied with the durability provisions of the Building Code.
- 4.6 The territorial authority accepted the draft and submitted that the building elements complied with Building Code Clause B2 Durability on 1 December 2000.
- 4.7 The applicants also accepted the draft and nominated 1 December 2000 as the date when compliance with Clause B2 was achieved. The applicant attached to his submissions, a letter to the territorial authority requesting it to “*create two separate amended building consents for duplex 1 and duplex 2*”.

5. The expert’s report

- 5.1 As discussed in paragraph 1.7, 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.
- 5.2 The expert inspected Duplex 1 on 9 October 2007, and furnished a report that was completed on 17 October 2007. The expert noted that the overall standard of workmanship was good, with generally satisfactory roof flashings, claddings, penetrations, clearances and window installation. The expert noted that the fibre-cement weatherboard above the windows overlapped the top flange, providing effective weatherproofing at the window and door heads. The expert noted that the building generally conformed to the consent drawings.
- 5.3 As most of the cladding was brick veneer, no invasive moisture testing was carried out. The expert inspected and took numerous non-invasive moisture readings throughout the interior of the house and noted no evidence of moisture penetration.
- 5.4 Commenting specifically on the wall and roof claddings, the expert noted that:
- the paint on the fibre-cement weatherboards is in poor condition
 - there is a soaker missing at one of the weatherboard joints
 - there are no kickouts at the bottom of the apron flashings, with moisture able to run behind the end of the gutters, staining the brick below.
- 5.5 With regard to other code requirements, the expert noted:
- the sealing of wet area fixtures and fittings has not been carried out
 - smoke detectors have not been installed.
- 5.6 The expert made the following additional comments on items identified by the territorial authority (refer paragraph 3.4):
- The post connections at the front entry porches appear adequate considering their position at the end of cantilevered roof trusses.

- While the small timber entry decks butt against the brick, impeding drainage at the bottom of the veneer, most junctions are protected by porch roofs and the areas involved are too minor to impact on the overall ventilation of the cavity.

5.7 A copy of the expert's report was provided to each of the parties on 30 October 2007.

6. Evaluation for code compliance

6.1 Evaluation framework

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

6.1.2 The approach in determining whether building work is weathertight and durable and is likely to remain so, is to apply the principles of weathertightness. This involves the examination of the design of the building, the surrounding environment, the design features that are intended to prevent the penetration of water, the cladding system, its installation, and the moisture tolerance of the external framing. The Department and its antecedent, the Building Industry Authority, have also described weathertightness risk factors in previous determinations⁵ (for example, Determination 2004/1) relating to cladding and these factors are also used in the evaluation process.

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

6.2 Weathertightness risk

6.2.1 In relation to these characteristics I find that this building:

- is built in a low wind zone
- is one storey and fairly simple in plan, with a more complex roof
- has brick veneer over a drained cavity, and fibre-cement weatherboards fixed directly to the framing

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.

⁵ Copies of all determinations issued by the Department can be obtained from the Department's website.

- has no eaves or verge projections
- has external wall framing that is not treated to a level that will provide resistance to the onset of decay if the framing absorbs and retains moisture.

6.2.2 The building has been evaluated using the E2/AS1 risk matrix. The risk matrix facilitates the summation of a range of design and location factors applying to a specific building design. The resulting risk rating can range from 'low' to 'very high'. The risk rating is applied to determine what claddings can be used on a building in order to comply with E2/AS1. A high risk rating will necessitate more rigorous weatherproof detailing; for example, a high risk rating is likely to necessitate particular types of cladding being installed over a drained cavity.

6.2.3 When evaluated using the E2/AS1 risk matrix, the weathertightness features outlined in paragraph 6.2.1 show that all elevations of this building demonstrate a low weathertightness risk. I note that, in order to comply with E2/AS1, the fibre-cement cladding would not require a drained cavity.

6.2.4 In this situation, NZS 3602:2003⁶ cited in the current Acceptable Solution for Clause B2 Durability, B2/AS1, requires H1.1 treated, or untreated kiln-dried, framing timber to be used in conjunction with cavity brick veneer cladding, but requires timber treated to H1.2 in conjunction with fibre-cement weatherboard cladding.

6.3 Weathertightness performance: exterior cladding

6.3.1 Generally the cladding appears to have been installed in accordance with good trade practice and, in most respects, in accordance with the manufacturer's instructions. Taking account of the expert's report, I conclude that remedial work is necessary in respect of:

- the inadequate paintwork to the fibre-cement weatherboards
- the lack of soakers to some fibre-cement weatherboards
- the inadequate weatherproofing at the bottom of the apron flashings.

6.3.2 I note the expert's comment in paragraph 5.6, and accept that the entry deck areas are adequate in the circumstances.

6.4 Evaluation of other code requirements

6.4.1 I note the expert's comments in paragraph 5.5, and conclude that remedial work is necessary in respect of the inadequate sealing of the interior wet areas. While they were not required at the time the consent for the building was issued, I also recommend the installation of smoke alarms.

6.4.2 I also note the expert's comment in paragraph 5.6, and accept that the post connections are adequate in the circumstances.

⁶ New Zealand Standard NZS 3602:2003 Timber and Wood-based Products for Use in Buildings

Matter 1: The cladding

7. Discussion

- 7.1 I consider the expert's report establishes that the current performance of the cladding is adequate because it is preventing water penetration into the building at present. Consequently, I am satisfied that the building work complies with Clause E2 of the Building Code.
- 7.2 In addition to complying with Clause E2, the building work 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 on the building are likely to allow the ingress of moisture in the future, Duplex 1 does not comply with the durability requirements of Clause B2. I have given further consideration to the question of B2 compliance under Matter 3 of this determination.
- 7.3 Because the faults identified with the cladding system occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 6.3.1 will result in the building becoming and remaining weathertight and in compliance with Clauses B2 and E2.
- 7.4 Effective maintenance of claddings is important to ensure ongoing compliance with Clauses B2 and E2 of the Building Code and is the responsibility of the building owner. The Department has previously described these maintenance requirements, including examples where the external wall framing of the building may not be treated to a level that will resist the onset of decay if it gets wet (for example, Determination 2007/60).
- 7.5 Other code clauses**
- 7.5.1 I consider that the satisfactory rectification of the item outlined in paragraph 6.4.1 will result in the interior of the building complying with Clause E3 Internal Moisture.
- 7.5.2 Based on the expert's assessment of visible components of the building together with the other documentation, I am satisfied that the building complies with the provisions of the remaining relevant code clauses.

Matter 2: The durability considerations

8. Discussion

- 8.1 There are concerns about the durability, and hence the compliance with the building code, of certain elements of the building taking into consideration the age of the building work completed in 2000. I have not been supplied with evidence that the territorial authority carried out a final inspection in 2000 to verify compliance with Clause B2 at that time.

- 8.2 The relevant provision of Clause B2 of the Building Code requires that building elements must, with only normal maintenance, continue to satisfy the performance requirements of the Building Code for certain periods (“durability periods”) “from the time of issue of the applicable code compliance certificate” (Clause B2.3.1).
- 8.3 These durability periods are:
- 5 years if the building elements are easy to access and replace, and failure of those elements would be easily detected during the normal use of the building
 - 15 years if building elements are moderately difficult to access or replace, or failure of those elements would go undetected during normal use of the building, but would be easily detected during normal maintenance
 - the life of the building, being not less than 50 years, if the building elements provide structural stability to the building, or are difficult to access or replace, or failure of those elements would go undetected during both normal use and maintenance.
- 8.4 It is not disputed, and I am therefore satisfied that all the building elements complied with Clause B2 on 1 December 2000. This date has been agreed between the parties, refer paragraphs 4.6 and 4.7.
- 8.5 In order to address these durability matters when they were raised in previous determinations, I sought and received clarification of general legal advice about waivers and modifications. That clarification, and the legal framework and procedures based on the clarification, is described in previous determinations (for example, Determination 2006/85). I have used that advice to evaluate the durability matters raised in this determination.
- 8.6 I continue to hold that view, and therefore conclude that:
- (a) the territorial authority has the power to grant an appropriate modification of Clause B2 in respect of all the building elements.
 - (b) it is reasonable to grant such a modification, with appropriate notification, because in practical terms the building is no different from what it would have been if a code compliance certificate for the building work had been issued in 2000.
- 8.7 I strongly recommend that the territorial authority record this determination and any modifications resulting from it, on the property file and also on any LIM issued concerning this property.
- 8.8 Building consents issued under the Building Act 1991**
- 8.8.1 The applicant has stated that he was informed by the territorial authority that its current policy is not to issue code compliance certificates for buildings completed more than 12 months ago (refer paragraph 4.1). I take this comment to refer to outstanding building consents issued under the Building Act 1991, which is the case in this instance.

- 8.8.2 This does not accord with my reading of the Act. Section 436 of the Act applies to building work carried out under a building consent granted under section 34 of the Building Act 1991, and therefore applies in this case. Section 436 requires that applications for code compliance certificates must be “*considered and determined as if this Act had not been passed*”. As Parliament included this provision in the Act in 2004, I conclude that it did not intend that applications for code compliance certificates could be refused solely because they were granted under the Building Act 1991.

Matter 3: Splitting the building consent

9. Discussion

- 9.1 The 2 buildings on the site have been constructed under a single building consent and the applicant is seeking a code compliance certificate for his building (Duplex 1).
- 9.2 At present a code compliance certificate is only able to be issued in respect of all the work under the building consent. If the owner of Duplex 2 has no interest in the code compliance of their building, and the building itself does not comply with the Building Code, this non-compliant work will prevent the applicant obtaining a code compliance certificate in respect of Duplex 1.
- 9.3 The applicant has therefore requested that the building consent be split into two separate consents, so that the code compliance of Duplex 1 and Duplex 2 may be dealt with separately.
- 9.4 In regard to the 2000 consent, I take the view that, as Duplex 1 and Duplex 2 are now separately owned and stand-alone buildings, each building should be able to be assessed separately for compliance with the building code.
- 9.5 I therefore consider that, on receipt of a written request from the applicant, the territorial authority should modify the original 2000 building consent to create two separate amended building consents, one for Duplex 1 and one for Duplex 2. The applicant has now made that formal request as noted in paragraph 4.7. The owner of either building can then apply for a code compliance certificate in respect of their building without requiring the cooperation of the owner of the other building.

10. The decision

- 10.1 In accordance with section 188 of the Building Act 2004, I hereby determine that Duplex 1 does not comply with Clauses B2 and E3 of the Building Code, and that the items listed in paragraphs 6.3.1 and 6.4.1 are not code-compliant. Accordingly, I confirm the territorial authority’s decision to refuse to issue a code compliance certificate.

10.2 I also determine that:

- (a) all the building elements installed in the building, apart from the items that are to be rectified as described in this determination, complied with Clause B2 on 1 December 2000.
- (b) The territorial authority is to split the original consent for Duplex 1 and Duplex 2 into two consents as detailed in section 9 above.
- (c) the building consent (in respect of Duplex 1) is hereby modified as follows:

The building consent is subject to a modification to the Building Code to the effect that, Clause B2.3.1 applies from 1 December 2000 instead of from the time of issue of the code compliance certificate for all building elements except those elements that have been altered or modified as set out in paragraphs 6.3.1 and 6.4.1 of Determination 2007/136.
- (d) the territorial authority is to issue a code compliance certificate in respect of the building consent for Duplex 1 as amended, once the matters set out in paragraphs 6.3.1 and 6.4.1 have been fixed to its satisfaction.

10.3 The territorial authority should now issue a notice to fix that requires the owner to bring the building into compliance with the Building Code, incorporating the defects listed in paragraphs 6.3.1 and 6.4.1 and referring to any further defects that might be discovered in the course of rectification. The notice to fix should not specify how those defects are to be fixed. That is a matter for the owner to propose and for the territorial authority to accept or reject.

10.4 I would suggest that the parties adopt the following process to meet the requirements of paragraph 10.3. Initially, the territorial authority should issue the notice to fix. The owner 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.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 7 December 2007.

John Gardiner
Manager Determinations