



Determination 2013/009

Regarding the refusal to issue a code compliance certificate for a 15-year-old house at 4 Swordfish Avenue, Whiritoa, Whangamata



1. The matter 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 and Assurance, Ministry of Business, Innovation and Employment (“the Ministry”), for and on behalf of the Chief Executive of the Ministry.
- 1.2 The parties to the determination are:
- B Scholz, the owner of the house (“the applicant”)
 - Hauraki District Council, carrying out its duties as a territorial authority or building consent authority.
- 1.3 The matter to be determined² is whether the authority was correct in its decision when it refused to issue a code compliance certificate for the house; because it was not satisfied that the house complied with certain clauses of the Building Code³ (First Schedule, Building Regulations 1992) that were current at the time the building consent was issued. The authority’s concerns relate primarily to the weathertightness of the external envelope (refer paragraph 3.4).
- 1.4 In making my decision, I have considered the submissions of the parties, the report of the expert commissioned by the Ministry (“the expert”), and the other evidence in this matter.

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

² Under sections 177(1)(b), and 177(2)(d) of the current Act

³ In this determination, unless otherwise stated, references are to sections of the current Act and references to clauses are references to the Building Code

1.5 The relevant section of the current Act is set out Appendix A.

2. The building work

- 2.1 The building work in question consists of a two-storey house and attached garage situated on a gently sloping beachfront site in high wind and exposure zones for the purposes of NZS 3604⁴. The house is assessed as having a moderate weathertightness risk.
- 2.2 The house and garage are of timber-frame construction, with the house built on piled foundations and the garage built over a concrete slab. The curved roof is supported by portal frames and curved glulam⁵ roof members, is covered with profiled metal roofing, and generally has good eaves and verge projections to three elevations. There are no eaves to the south elevation or over the northeast boxed window, and the roof purlins and the undersides of the metal roofing sheets are exposed on the east and west elevations.
- 2.3 The exterior walls are lined with PVC weatherboard cladding directly fixed to the framing, and the exterior joinery is comprised of powder coated aluminium units. One window located at the northwest corner is boxed out and some windows have circular head profiles.
- 2.4 A large timber framed balcony is constructed over a non-habitable space at the upper floor level adjoining the north elevation and is supported by timber beams and poles. The deck of the balcony is covered with ceramic tiles fixed over a liquid applied membrane and ply substrate. A glazed metal framed balustrade is top fixed through the tiled decking at the perimeter of the balcony. Two other timber-framed decks are situated at the lower north and west elevations; both with open timber decking.
- 2.5 A porch is constructed over the main entrance door and this consists of a curved metal profiled roof supported by timber columns and beams. The entry steps and landing are tiled.
- 2.6 Based on the levels of advanced decay that he discovered, the expert was of the opinion that the timber wall framing is untreated. The applicant has stated that treated timber was used and has submitted a copy of the specification that calls for 'internal timbers to be H1 treated'. However, given the date of construction during the late 1990's, and the expert's observations, it is unlikely that the framing timber is treated to a level that provides resistance against prolonged moisture ingress.

3. Background

3.1 The authority issued building consent No. 7321 for the house on 3 April 1997, under the Building Act 1991 ("the former Act").

3.2 The construction

3.2.1 Although the conditions attached to the building consent listed some specific inspections to be carried out, I have seen no records of what inspections were carried out during early stages of the construction. Construction was protracted and the house was not substantially completed until 2000.

⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

⁵ Glue-laminated timber

3.2.2 Following an inspection on 18 August 2000, the authority wrote to the applicant on 23 August 2000, noting that the house had been completed ‘to an interim stage’ and the following items needed to be attended to:

1. Complete the soffits and large ends to prevent the ingress of wind driven rain.
2. Complete the access to the garage.
3. Paint or protect all unpainted exterior timber to ensure that its durability is not compromised.
4. Extend the terminal vent to above the roof line.
5. Discharge all stormwater to approved soakholes.

The applicant was requested to complete the work urgently, so that the authority could ‘re-inspect for the code compliance certificate’.

3.3 It appears that the surface water work was completed in September 2004 and inspected by the authority. However the remaining unfinished items were not completed until 2007 and the applicant then sought a code compliance certificate.

3.4 The authority’s refusal to issue a code compliance certificate

3.4.1 The authority carried out a final inspection and subsequently wrote to the applicant on 3 September 2008 enclosing a ‘site instruction listing outstanding matters requiring attention’. I have not been provided with a copy of that instruction. (The applicant has advised that the letter was not received as it was sent to the wrong address.)

3.4.2 The authority expressed concerns that there were ‘issues outstanding’ from earlier inspections and stated that these:

... coupled with existing maintenance matters indicate that there are potentially weather tightness problems with the building. [The authority] cannot now be satisfied on reasonable grounds the building work complies with the New Zealand Building Code and accordingly it cannot issue a Code Compliance Certificate.

The authority also noted that the applicant had the option of seeking a determination from the Ministry, which would ‘investigate as an independent body and rule on the matter.’

3.5 The Ministry received an application for a determination on 2 November 2012.

4. The submissions

4.1 In a covering letter dated 9 September 2012 forwarded with the application, the applicant explained the circumstances leading to the protracted completion of the house and provided background to the dispute between the parties. The applicant stated that the outstanding work referred to by the authority in its letter of 23 August 2000 was rectified in 2007.

4.2 The applicant attached copies of the following:

- Some of the building plans and the structural calculations.
- The building consent and project information memorandum.
- Invoices from the plumbing and drainage contractors.

- The correspondence from the authority.

4.3 The authority made no submission in response to the application.

4.4 Copies of a draft determination were issued to the parties for comment on 10 December 2012. The authority accepted the draft without further comment in a response received on 21 December 2012.

4.5 The applicant's response to the draft

4.5.1 The applicant did not accept the draft determination and, in a letter received on 30 January 2013, made a submission in response to the draft and to a number of the items noted in the expert's report. The applicant accepted that 'water has entered at some sites and that some fittings are missing from the windows' and also that the tiled deck required work. The applicant provided sections from the specification for the work including the 'Materials Brief' and timber treatment. The applicant made the following comments (in summary):

- Treated timber framing was specified and was also observed during completion of interior linings by the builder/owner and the applicant, who were 'well aware of the need for using it.'
- The applicant did not receive the authority's letter dated 3 September 2008 refusing to issue a code compliance certificate (refer paragraph 3.4.1) and was not informed about the determination process until 2012.
- The rotting timber in the corner of the garage was caused by water being blown in under the garage door during storms due to the lack of seals at the bottom of the door; and this lead to water ponding in corners for long periods of time.
- Balustrades were 'inspected and signed off' by the authority as was the clearance between the decking and cladding.

4.5.2 The applicant accepted that the tiled deck 'does need some type of guttering fixed around it to take water away from the house and lower wood deck'. In regard to the tiled deck, the applicant also noted:

- the downpipe and gutters above the tiled deck had been blocked as the house was unoccupied. The blockages had caused water to run directly off the deck roof onto the tiled deck and then down the side of the house onto the timber deck, making the area 'especially wet and dirty' when the expert inspected the house
- the deck was retiled about three years previously when an attempt was made to improve the slope away from the house. It was intended to lower the front of the deck 'a small amount which should correct [the water ponding] problem'.

4.5.3 In respect of the applicant's submission on the treatment of the framing timber, I note the following:

- Specification of timber treatment does not of itself prove that such timber was installed in the house; further evidence in the form of timber invoices, laboratory analysis, or similar would confirm treatment levels if any.
- The level of timber damage observed by the expert indicates that the wall framing of this house is not treated to a level that provides sufficient resistance to decay.

- The framing timber is likely to have been installed during 1997/1998 and the description of the timber treatment as 'H1 treated' is not sufficiently definitive to confirm the level and type of treatment used.

4.5.4 I have considered the applicant's comments and amended the determination as I consider appropriate.

5. The expert's report

5.1 As described in paragraph 1.4, I engaged the services of an expert who is a member of the New Zealand Institute of Building Surveyors, to assist me. The expert examined the house on 23 November 2012 and produced a report that was completed on 29 November 2012. Copies of this report were forwarded to the parties on 4 December 2012.

5.2 General

5.2.1 The report described the house in general terms and gave some of the background to the dispute. The expert stated that while the building was 'well presented and maintained to a reasonable level', there was lack of attention in various areas including cladding junctions, roof eaves, head flashings and the deck construction.

5.2.2 The expert also noted that there were four instances where the constructed work differed from that shown on the consented plans.

5.3 Moisture levels

5.3.1 The expert carried out a visual inspection and observed a number of areas where moisture ingress was evident as follows:

- Fungus between the purlins at the southern end of the east elevation.
- Water stains on the dining room ceiling linings and on the garage wall and ceiling linings.
- The garage bottom plates, skirting, and plasterboard linings were highly decayed.
- Highly decayed drill shavings were obtained from the bottom plates where they adjoined the upper deck.
- Partially decayed drill shavings were obtained at the upper floor bottom plate below the northwest window.
- Mould on wall linings below the meter box.
- Decayed drill shavings obtained at the bottom plate at the lower floor beneath the northwest window and mould observed on the adjacent wall linings.

5.3.2 The expert undertook non-invasive and invasive moisture inspections on the external walls of the house in a number of areas considered to be at risk and recorded the following results:

- 18% at the plasterboard linings adjacent to the northwest window and at the bedroom linings below.
- 30% at the upper floor bottom plate below the northwest window.

- 24% at the bottom plate below the meter box.
- 36% at the bottom plate at the lower floor beneath the northwest.

5.4 The external envelope

5.4.1 Commenting specifically on the external envelope the expert noted:

- The curved barge flashings situated at the east and west elevations had unsealed and un-riveted junctions just below the horizontal level. As these eaves were open, moisture was unlikely to enter the dwelling.
- The underlay beneath the north elevation roof eaves had been cut back, potentially directing moisture into the building. In addition, the exposed fixings were corroding.
- Sealant installed at the west end of the north eaves was preventing moisture draining off the roof underlay.
- The curved apron flashing over the south entry porch had no turnout and was unsealed.
- Numerous roof nail fixings were corroded.
- The sealing of some exterior joinery head flashings was inconsistent. While there was no evidence of elevated moisture levels at these locations, the sealant was deteriorating due to UV exposure.
- There was a minimal clearance between the base of the external wall cladding of the garage and the driveway paving (with approximately 30-40mm between the garage slab and the driveway paving).
- Both garage door timber jambs were finished hard down onto the concrete paving allowing moisture to penetrate into the adjacent bottom plate.
- Two end plugs were missing from a window jamb on the east elevation.
- The plumbing penetration through the west elevation cladding was sealed but lacked a flange.
- The tiled balcony deck was flat at some locations and the surface water ran off the deck perimeter onto the deck joists and was not collected. The deck joists were mouldy but appeared to be adequately treated.
- The balcony stringer was fixed hard against the PVC weatherboards and the threshold clearance at the deck doors was only 43mm above the deck tiling.
- The balcony balustrade posts were top-fixed through the tiled decking.
- The decking to the north and west decks and the tiling to the south entry porch steps and landing were finished hard up against the wall linings.
- There were indications that the waterproofing membrane under the deck tiles was not turned up under the door sill thresholds.
- The meter box had a jamb flashing installed as a head flashing, and this resulted in the upstand trapping water against the cladding and directing it inside the jamb flashing junction.

5.5 Remaining code requirements

- 5.5.1 In regards to the outstanding items referred to by the authority (refer paragraph 3.2.2), the expert noted that the driveway from the road to the garage door had been completed, the terminal vent had been extended, and the surface water generally appeared to discharge into soakholes. The expert was not aware of any additional code-compliance issues or concerns apart from the matters referred to above.
- 5.5.2 Regarding Clause E1—Surface water, the expert noted that the ground levels below the house were lower than the surrounding ground levels. However, as the sub-floor sand foundation material had significant soakage capacity, the expert considered that this may not be a major issue. No ponding, mould, or other ill effects were visible in the sub-floor level.

6. Discussion

6.1 Establishment of compliance with the Building Code

- 6.1.1 The transitional provision in section 436 of the current Act requires the authority to consider an application for a code compliance certificate under the former Act. Section 43(3) of the former Act (as modified by section 436(3) of the current Act) requires the authority to issue a code compliance certificate ‘if it is satisfied on reasonable grounds that the building work to which the certificate relates complies with the building code that applied at the time the building consent was granted’.
- 6.1.2 I consider the expert’s report clearly establishes that the current performance of the building envelope is not adequate because there is evidence of moisture penetration and of decay. Consequently, I am satisfied that the house does not comply with Clause E2 of the Building Code.
- 6.1.3 In addition, the building is required to comply with the durability requirements of Clause B2. Clause B2 also 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 house will continue to allow the ingress of moisture in the future and as there is already decay present in the wall framing, I consider the house does not comply with Clause B2.
- 6.1.4 Given the extent of non-compliance with Clause E2, the lack of treatment to the external framing and the expert’s limited investigation, the building’s current and ongoing compliance with Clause B1 must also be considered in any further investigation. The rectification of the building will require careful investigation into the causes, extent, level and significance of moisture ingress and decay, and any required timber replacement in the framing. I note here that the cladding materials in the house are already 15-years-old, which is the minimum effective life required for these elements.
- 6.1.5 Taking into account the expert’s report I consider that the house complies with Clause E1 in respect of the level of the sub-floor under the house in relation to the external ground levels, and I accept the expert’s findings that the driveway, the terminal vent, and the surface water disposal have been addressed.

6.1.6 As I have found that the house does not comply with the requirements of Clauses B2 and E2, I am of the opinion that the authority was correct in its decision to refuse to issue the code compliance certificate.

6.2 Durability concerns

6.2.1 I note that the age of the building work will also raise concerns regarding compliance with Clause B2.3.1, taking into consideration the age of the building work and the delay in seeking a code compliance certificate.

6.2.2 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).

6.2.3 I continue to hold the views expressed in previous relevant determinations; that an authority, following the appropriate application from the owner, has the power to grant a modification to the Building Code requirements of an existing building consent without a determination (refer also to the article titled ‘Modification of durability periods’ in Codewords Issue 39, August 2009⁶). I am of the view that a modification of this requirement can be granted if the authority can be satisfied that the building complied with the durability requirements at a date earlier than the date of issue of the code compliance certificate, that is agreed to by the parties and that, if there are matters that are required to be fixed, they are discrete in nature.

6.2.4 However, because of the extent of further investigation required for this house and the potential impact of such an investigation on the external envelope, I am not satisfied that there is sufficient information on which to make a decision about this matter at this time and I leave this matter to the parties to resolve in due course.

6.2.5 I strongly suggest that the authority record this determination and any modifications resulting from it, on the property file and also on any LIM issued concerning this property.

7. What happens next?

7.1 The authority should issue a notice to fix requiring the owner to bring the building into compliance with the Building Code. The notice should identify the defects listed in paragraph 5.4.1 and the investigations referred to in paragraph 6.1.4, and refer to any further defects that might be discovered in the course of investigation and rectification. The notice should 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 owner to propose and for the authority to accept or reject. It is important to note that the Building Code allows for more than one means of achieving code compliance.

7.2 The applicant 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 matters. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

⁶ Codewords articles are published by the Department and are available on the Department’s website at www.dbh.govt.nz/codewords-index

7.3 I also note that the expert has described some differences between the house as constructed and the consented plans. I recommend that the parties take the necessary steps to amend the consent to record the as-built construction.

8. The Decision

8.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the house does not comply with Clauses B2 and E2 of the Building Code that was current at the time the building consent was issued, and accordingly I confirm the authority's decision to refuse to issue the code compliance certificate.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 28 February 2013.

John Gardiner
Manager Determinations and Assurance

Appendix A: the Legislation

8.2 A.1 The Building Act 2004

436 Transitional provision for code compliance certificates in respect of building work carried out under building consent granted under former Act

- (1) This section applies to building work carried out under a building consent granted under section 34 of the former Act.
- (2) An application for a code compliance certificate in respect of building work to which this section applies must be considered and determined as if this Act had not been passed.
- (3) For the purposes of subsection (2), section 43 of the former Act—
 - (a) remains in force as if this Act had not been passed; but
 - (b) must be read as if—
 - (i) a code compliance certificate may be issued only if the territorial authority is satisfied that the building work concerned complies with the building code that applied at the time the building consent was granted; and
 - (ii) section 43(4) were omitted.