



Determination 2013/060

Regarding the refusal to issue a code compliance certificate for a 10-year-old house with a concrete tile roof at 209 Jowers Road, West Melton



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 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:
 - the owner of the house, R Aitken ("the owner")
 - Selwyn District Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.
- 1.3 I consider the former owners of the house, B and S Hodgman ("the former owners"), who made the initial application for determination through a quantity surveyor ("the quantity surveyor") are persons with an interest in this determination.
- 1.4 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for a 10-year-old house because it was not satisfied that the building work complied with certain clauses² of the Building Code (First Schedule, Building Regulations 1992). The authority's concerns about the compliance of the building work relate primarily to the weathertightness and durability of the roofing.

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

The matter to be determined³ is therefore whether the authority was correct to refuse 1.5 to issue a code compliance certificate. In deciding this, I must consider:

1.5.1 Matter 1: The compliance of the roof cladding

Whether the roof cladding to the house complies with Clause B2 Durability and Clause E2 External Moisture of the Building Code. The roofing includes the components of the system (such as the concrete tiles, the gutters and spouting and the flashings), as well as the way the components have been installed and work together. I consider this in paragraph 6.

1.5.2 Matter 2: The remaining code requirements

Whether the relevant building work complies with the following Building Code clauses: E3 – Internal moisture, G9 – Electricity, and G12 Water supplies. I consider this in paragraph 7.

1.6 Matters outside this determination

- 1.6.1 The authority has expressed concerns about possible deterioration of concealed elements (see paragraph 4.2.2), which I take to mean any potential structural implications associated with the weathertightness of the roof. I address that concern as part of Matter 1 in paragraph 6.1.2.
- 1.7 In making my decision, I have considered the submissions from the parties, the report of the expert commissioned by the Ministry to advise on this dispute ("the expert"), and the other evidence in this matter.

2. The building work

2.1 The building work consists of a single-storey detached house situated on a large rural site in a high wind zone for the purposes of NZS 3604⁴. The expert has taken the garage door as facing toward the southeast, and this determination follows that convention. The house is fairly simple in plan and form, and is assessed as having a low weathertightness risk.

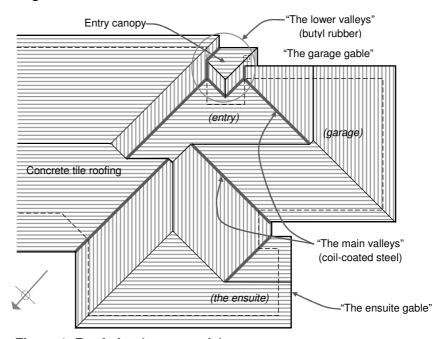


Figure 1: Roof plan (not to scale)

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

⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

2.2 Construction is generally conventional light timber frame, with concrete foundations and floor slab, brick veneer wall cladding with textured fibre-cement to three gable ends, concrete tile roofing and aluminium windows. The relevant section of the roof plan is shown in Figure 1 above.

- 2.3 The 25° pitch hipped and gabled roof has eaves and verges of more than 600mm overall. The two gable ends include steel 'secret gutters' at the verges; concealed below metal barge flashings and intended to direct water into external gutters. The main valleys to the roof are coil-coated steel, which fall towards butyl rubber lower valleys above the entry as shown in Figure 1.
- 2.4 The expert made no comment on the treatment, if any, of the framing timbers and the specification is silent as to treatment. Given the date of construction in 2003, I consider that the external wall framing is unlikely to be treated.

3. Background

3.1 The authority issued a building consent (No. BC 021431) to the former owners (care of a housing company) on 27 November 2002 under the Building Act 1991, and carried out various inspections from December 2002 to April 2003.

3.2 The Interim Code Compliance Certificate

- 3.2.1 The authority carried out the first final inspection on 16 April 2003, which identified seven items requiring attention. An entry dated 23 April 2003 stated 'interim CCC to issue' and also noted that a reinspection would be required.
- 3.2.2 The authority issued an interim code compliance certificate to the former owners (care of the housing company) on 23 April 2003. The certificate stated there were:

Outstanding issues still to rectify/complete and be inspected before issue of full CCC:-

- 1. Top of shower liners to seal to wall.
- 2. Double sink to kitchen-waste connection to complete and also water connection.
- 3. Seal hand basin to wall at rear
- 4. Insulation to ceiling space to tidy up
- 5. P/S re gable end type of plaster system.
- 6. Clear all debris from both gutters and roof flashings includes screws and nails.
- 7. Some doubt about gable internal guttering depth upstand, will make further enquiries with roofing trades/suppliers as those details shown on our records are very different.
- 3.2.3 The former owners apparently did not see the certificate and were therefore unaware of the above list. As the franchise builder for the housing company subsequently entered into bankruptcy, the outstanding work was not completed; no final inspection was carried out in 2003 and no code compliance certificate was issued for the house.

3.3 The final inspections

- 3.3.1 The authority re-inspected the house on 8 December 2011, noting some earthquake damage to bracing, which is not part of this determination. Photographs and the inspection record also identified that
 - the hand basin to wall junction was still unsealed

- roof items had not been attended to, with
 - o internal gutter butyl rubber lining 'bagged' and timber exposed
 - o spouting butting into the textured fibre-cement cladding
 - o moisture stains to the ensuite soffit
 - o birds nesting at the entry valley
 - various other maintenance items.
- 3.3.2 The former owners engaged a builder to attend to the work, and the authority inspected the roofing repairs on 16 and 17 February 2012, noting:

barge detail now rectified as consented and valley widened, deflector to gable end yet to place, provision at fascia now made for discharge.

3.4 The refusal to issue a code compliance certificate

3.4.1 The former owners applied for a code compliance certificate on 24 February 2012 and the authority responded on 25 June 2012; explaining the durability requirements of the Building Code and noting its concerns about the liability it would incur should it issue a code compliance certificate for the house. The authority noted that its records showed that the house had been completed in April 2003 and, due to time elapsed the authority:

...cannot now be satisfied on reasonable grounds that the building work and elements will continue to satisfy the durability provisions of the Building Code for the prescribed period <u>after</u> the Code Compliance Certificate has been issued.

- 3.4.2 The authority noted that a site visit on 2 April 2012 had 'highlighted issues that have a direct bearing on weathertightness and maintenance'. As these areas also affected durability, 'due to the time they have been non-compliant would have most likely compromised hidden elements in the building'. The following examples were given:
 - The 'Butynol' [used for flashings and valley gutters] has perished and not adhered to the substrate in places and folds in the product hold water.
 - Gutters embedded in plaster.
 - Roof valley embedded in mortar.
 - No snow protection to internal gutter.
 - Exposed timber at the garage gable/valley junction.
 - Penetrations (heat pump) not sealed at soffit.
 - Water damage to soffit showing signs of water egress.
 - Basins not sealed to the wall.
 - Gutters not cleaned.
- 3.4.3 The authority also noted that the following were required:
 - An energy certificate for the electrical work
 - Test results from an approved laboratory to confirm that the water supply is of a satisfactory standard.
- 3.5 The Ministry received an application for a determination from the former owners on 26 April 2013.

4. The submissions

4.1 The former owners' submission

4.1.1 The former owners outlined the background to the situation, noting that all construction correspondence from the authority was care of the housing company. When the franchise owner for the housing company 'entered into bankruptcy and subsequently failed to complete the work listed by the [authority', they had therefore not been aware that there were unresolved issues; only becoming aware of the situation in 2011. They were now under the impression that the authority:

...is not able to issue a retrospective Final Code Compliance Certificate because our application now (through no fault of our own) is out of time.

- 4.1.2 The quantity surveyor also made a submission on the former owners' behalf, noting that the former owners did not know that an interim code compliance certificate had been issued which excluded outstanding items as the housing company had issued a guarantee implying that all matters were complete.
- 4.1.3 The former owners provided copies of:
 - the housing company's guarantee dated 23 April 2003
 - a laboratory analysis report on the water supply dated 6 September 2012
 - an Electrical Certificate of Compliance dated 7 April 2003.

4.2 The authority's submission

- 4.2.1 The authority made a submission dated 30 April 2013, which expanded on some of the points made in its refusal to issue a code compliance certificate and stated that its opinion remained as expressed in its letter of 25 June 2012.
- 4.2.2 In regard to the outstanding items identified in its refusal to issue a code compliance certificate, the authority added:
 - Rectification of items affecting weathertightness and durability is 'somewhat disconcerting' as no building consent has been issued for the work; the authority considers the original consent to be 'no longer operative'.
 - Roofing defects had been non-compliant for over 9 years and may have lead to water damage to concealed elements during this time.
 - The energy certificate provided by the former owners does not include all electrical work included under the building consent.
 - A single water test is insufficient to determine water potability.
- 4.2.3 The authority provided copies of
 - the consent drawings and specification
 - the building consent and project information memorandum
 - the inspection summary and interim code compliance certificate
 - the 'CCC application processing summary' dated 3 April 2012
 - the letter to the former owners dated 25 June 2012.

4.3 A draft determination was issued to the parties and persons with an interest for comment on 13 August 2013. No responses to the draft were received from the owner or the former owner.

- 4.4 The authority responded in a submission received on 17 September 2013, noting that it did not accept the draft determination. The authority noted some minor errors that have subsequently been corrected, and submitted (in summary):
 - While the energy work remains part of the building consent and an energy work certificate is not provided, the authority cannot be satisfied that the work complies.
 - The authority maintains its view as regard the water supplies and considers a finding as to compliance based on in-service performance is an assumption. While healthy adults build up immunity to unclean water, visitors and those with compromised health will be more vulnerable.
 - The authority does not have the power to 'cancel' a code compliance certificate once it has been issued; the same must apply to the authority's decision to refuse to issue a code compliance certificate i.e. the decision cannot be reversed by the authority. The refusal to issue the code compliance certificate means the building consent is no longer 'operative'.

5. The expert's report

As mentioned in paragraph 1.7, I engaged an independent expert to assist me. The expert is a member of the New Zealand Institute of Building Surveyors and inspected the house on 5 June 2013, providing a report completed on 7 June 2013. The parties were provided with a copy of the report on 11 July 2013.

5.2 General

- 5.2.1 The expert described the overall construction quality as a 'good standard', except for the roof and associated flashings as outlined below. He noted that the consent drawings contained only one expanded detail and the specification was generic in nature containing irrelevant sections and no specific references to this house.
- 5.2.2 The expert observed that the only difference appeared to be pre-coated galvanised steel used in lieu of butyl rubber membrane to the main valley gutters. The expert noted that some recent repair work had been carried out to some lower valley gutters.
- 5.2.3 The expert noted that the scope of his inspection was restricted to assessing the compliance of areas identified by the authority; particularly in respect of Building Code clauses B2 and E2. The expert commented on the bullet points in the authority's list of items (refer paragraph 3.4.2) referring to these as Items 1 to 9.

5.3 Membrane flashings and valley gutters

- 5.3.1 The expert assessed the membrane flashings and lower valley gutters against Item 1 in the authority's list of defects, noting that:
 - lower valleys are generally above the entry canopy, with no signs of water stains on the fibre-cement soffit canopy below and photos taken during repairs to the northern valley showing no water marks on timber roof framing
 - although the north valley membrane has been replaced, with the timber substrate replaced with plywood, the gutter slopes backwards

• in the south valley, the membrane is puckered, full of heavy moss growth and not fully adhered to a solid substrate

- membrane at the junction of the garage gable with the entry canopy extends in one piece from the lower south valley, becoming a combined valley/gutter, with an upstand against the gable wall and a kick out at the bottom
- eaves gutters were clean except for minor silt deposits, but roof valley gutters above the entry canopy have a building up of moss.

5.4 Gutter end at garage gable

- 5.4.1 The expert assessed Item 2 in the authority's list, noting that:
 - the end of the gutter butts against the fibre-cement gable wall cladding, with the textured coating applied after the gutter was fixed
 - the gutter end is sheltered under the garage verge overhang and there is no evidence of water penetration, with no staining behind the gutter end or at the lower edge of the fibre-cement above the brickwork. (I also note that any moisture penetrating into the backing would drain onto the brickwork face.)

5.5 Mortar against metal valley liners

- 5.5.1 The expert assessed Item 3 in the authority's list, noting that:
 - there are five junctions where valleys meet ridges (refer Figure 1); and mortar has been carried onto the gutter lining as bird proofing in lieu of mesh, which is reported by roofers to be a common practice
 - cement plaster and coil-coated steel are noted in Tables 21 and 22 of E2/AS1 as compatible in both contact and water flow
 - the metal valley gutters have been in place for 10 years with no apparent problems and are required to achieve a 15 year minimum durability
 - although not noted by the authority, mortar also carries onto membrane valley linings and constricts the valley width.

5.6 Snow protection

- 5.6.1 The expert assessed Item 4 in the authority's list, noting that:
 - the single detail in the consent drawings shows a pipe fitted into the valley to provide protection against snow build-up, but no snow protection was fitted
 - plastic leaf guard is loosely fitted around the entry canopy roof, which is not effective for snow and will also not prevent leaf debris from accumulating.

5.7 Garage gable/valley junction

- 5.7.1 The expert assessed Item 5 in the authority's list, noting that:
 - timber is exposed where the metal barge to the end of the garage gable has been cut short and, despite recent remedial work, some timber is still exposed
 - the timber is not waterstained and there is no evidence of moisture penetration as the area is sheltered beneath the overhang of the adjacent canopy roof.

5.8 Heat pump pipe penetration

- 5.8.1 The expert assessed Item 6 in the authority's list, noting that:
 - installation of the heat pump was not part of the building consent, and was apparently installed in 2012
 - the pipes are now satisfactorily protected.

5.9 Water damage to ensuite soffit

- 5.9.1 The expert assessed Item 7 in the authority's list; removing a lower tile above the water stained soffit and noting that:
 - there is a short gutter at the eave, which slopes away from the downpipe allowing water to pond and overflow during heavy rain
 - the metal barge fascia is cut down to accommodate the roof flashing providing a path for water overflow from the spouting to enter the soffit
 - there is a 'secret gutter' beneath the metal barge flashing, which does not accord with the manufacturer's recommendations as it is distorted and undersized allowing water to spill over into the framed verge overhang
 - openings into the soffit space had also resulted in birds nesting in the framing
 - although there is water staining and mould growth on the fibre-cement soffit, there is no visual evidence of damage to the roof framing.

5.10 Unsealed wash hand basins

5.10.1 The expert assessed Items 8 and 9 in the authority's list, noting that although the two hand basins are not sealed at the junctions with the wall there is no sign that water has entered the unsealed junctions

5.11 Conclusion

5.11.1 The expert concluded that some areas of the roofing had not been installed in accordance with good trade practice and the manufacturer's recommendations. However, in regard to the authority's concern that leaking may have damaged hidden elements, he stated:

I found no evidence of water ingress and therefore have no reason to believe that the framing has been compromised.

5.11.2 The expert's opinions on the authority's list are summarised as follows (I have added comments in brackets where appropriate):

Items	Authority's concern	Expert's comments	Clauses
1	Condition of butyl rubber flashings/gutters	South lower gutter membrane puckered, not adhered and has heavy moss growth North lower gutter replaced but slopes backwards	B2, E2
2	Gutter end embedded	Coating applied after spouting in place, but sheltered with no signs of water damage to fibre-cement.	-
3	Roof valleys embedded in mortar	Common practice as bird proofing Mortar compatible with coil coated steel and membrane No apparent problems for metal valleys (satisfactory). Mortar constricts width of membrane gutter	B2
4	No snow protection to valleys	Pipe protection shown in drawings Does not comply with NZS 3604:1999	B2, E2
5	Exposed timber	Fascia cut short. Repair work has not remedied.	B2, E2
6	Heat pump pipe penetration	Not part of building consent work, but now remedied.	-
7	Water damage to ensuite soffit	Secret gutter not installed to manufacturer's instructions and is overflowing into roof space	B2, E2
8	Basins not sealed to walls	Not sealed.	B2, E3
9	Gutters not cleaned	Maintenance required.	-

6. Matter 1: The roof cladding

6.1 Weathertightness performance

- 6.1.1 Although most of the roofing appears to have been installed in accordance with average trade practice and the manufacturer's instructions at the time, there are several areas where that is not the case. Taking account of the expert's report, I conclude that the following areas require further investigation and remedial work:
 - the lower valley gutters above the entry canopy, in respect of:
 - o the inadequate membrane gutters
 - o the slope of the north lower gutter
 - o the width restriction imposed by the mortar
 - o the exposed timber
 - o the heavy moss growth in the gutters
 - the inadequate and undersized secret gutters to the ensuite and garage gable ends, resulting in the water penetration into the ensuite soffit
- 6.1.2 I accept the expert's comments on the apparent lack of damage to underlying timber framing and I consider that further investigation can be carried out and observed by the authority when the above areas are rectified, with repairs made if necessary.

6.2 Weathertightness conclusion

6.2.1 I consider the expert's report establishes that the current performance of the roof cladding is not adequate as there is evidence of water penetration into the ensuite soffit, I also consider the remaining areas listed in paragraph 6.1.1 require further investigation; I am therefore satisfied that the roof does not comply with Clause E2 and Clause B2 of the Building Code.

6.2.2 Because the identified cladding faults occur in discrete areas, I am able to conclude that satisfactory investigation and rectification of the areas outlined in paragraph 6.1.1 will result in the roof cladding being brought into compliance with Clause E2 and Clause B2 of the Building Code.

6.2.3 The authority and the expert have observed the lack of maintenance to the roofing. 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 Ministry has previously described these maintenance requirements (for example, Determination 2007/60).

7. Matter 2: The remaining code clauses

7.1 Clause E3 – Internal moisture

- 7.1.1 In April 2003 the authority raised concerns about the two basins not being sealed to the wall; from the authority's photographic record, the problem with the lack of sealing applies to the vertical edges to the basins. Though the lack of sealant means that the basins as installed do not comply with the Acceptable Solution E3/AS1, the expert noted that in inspecting the wall beside and within the vanity there was no evidence of water runs from the unsealed junction.
- 7.1.2 I am of the view that the basins have performed adequately in their 10 years of service and are likely to continue to do so. I therefore consider that the two wash hand basins as installed comply with Clause E3 of the Building Code.

7.2 Clause G9 – Electricity

- 7.2.1 The authority noted in its submission of 30 April 2013 that the energy certificate supplied did not include the underground mains from the boundary to the meter box, and that this work was included in the building consent.
- 7.2.2 While section 94(3) of the Act says that failure to provide an energy works certificate is 'sufficient reason' to refuse to issue a code compliance certificate, the absence of a certificate does not prevent a code compliance certificate from being issued. I have addressed this issue in a previous determination involving the authority⁵, and I remain of the view this provision allows the authority to apply this requirement as it considers appropriate. As the building work is in the order of 10 years old, the provision of an electrical energy works certificate at this time for the electrical work not covered by the existing certificate would appear to be of limited value.

7.3 Clause G12 – Water supplies

- 7.3.1 The authority contends that it does not have sufficient evidence to be satisfied that the water supply is potable and therefore complies with Clause G12. Water is potable if it is safe for drinking. One water test has been completed (in September 2012) that shows the water to be safe for drinking.
- 7.3.2 While the authority considers two more tests are necessary to allow for 'seasonal fluctuations', the owners have used the water supply since 2003 with no apparent ill effects. I consider the water is potable for the purposes of Clause 12.

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⁵ Determination 2013/035 Regarding the refusal to issue a code compliance certificate for a 14-year-old house and a 15-year-old quarantine building

8. Other matters

8.1 I note that the authority's submission indicated that the authority considers the consent is no longer "operative" as the authority has refused to issue a code compliance certificate. The authority submitted that as a code compliance certificate cannot be reversed and brings a building consent to an end, so too the refusal to issue a code compliance certificate cannot be reversed and brings a building consent to an end. Following a refusal to issue a code compliance certificate an owner is required to apply for a new building consent in order to carry out any building work necessary to bring a building into compliance with the Building Code. The authority submitted that a 'possible' ramification of its refusal to issue a code compliance certificate is that it would bring an owner's obligations under the Act to an end, and put any obligation to apply for a code compliance certificate on hold indefinitely.

- 8.2 I consider the authority is incorrect in this respect. The scheme of the Act requires an authority to provide an owner with reasons when refusing to issue a code compliance certificate (section 95A). This informs the owner of the further work required in order to bring the building into compliance with the building consent and thus obtain a code compliance certificate. There is no basis for suggesting, as the authority has done, that a refusal to issue a code compliance certificate brings a building consent to an end. This would result in the untenable situation that an owner would have to apply for a new building consent every time the authority refuses to issue a code compliance certificate. This could result in an owner having to apply for a number of building consents just to carry out the final work required to obtain a code compliance certificate. If the authority's submission were accepted it would also make it unclear on what basis a notice to fix could be issued following a refusal to issue a code compliance certificate as section 166(1) provides that a notice to fix can only be issued while a building consent is operative.
- 8.3 Following a refusal to issue a code compliance certificate an owner still remains subject to the obligations in section 92 to apply for a code compliance certificate once the building work required to be carried out under the building consent is completed, and the provisions in section 93 as to the time within which an authority must decide whether to issue a code compliance certificate apply.
- 8.4 A building consent will remain in force and "operative" until such time as it ceases in accordance with the provisions of the Act. There are a number of ways in which this can happen including:
 - the building consent lapses in accordance with section 52 if the building work to which it relates does not commence within 12 months after the date of the issue of the consent;
 - the building consent is amended or replaced by a subsequent building consent that covers all of the work in the building consent;
 - a code compliance certificate is issued in respect of the building work carried out under the building consent;
 - a determination reverses the decision of an authority to issue a building consent.

I do not consider that a refusal to issue a code compliance certificate under section 95A means that a building consent is no longer operative.

9. Modification of the durability periods in Clause B2.3.1

9.1 I note that the age of the building work will also raise concerns regarding compliance with Clause B2.3.1, taking into consideration the the completion of the house in 2003, and the delay in seeking a code compliance certificate.

- 9.2 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).
- 9.3 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.
- 9.4 I leave this matter to the parties to resolve in due course. 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.

10. What is to be done now?

- 10.1 A notice to fix should be issued that requires the owners to bring the house into compliance with the Building Code, including the defects identified in paragraph 6.1.1, but not specifying how those defects are to be fixed. It is not for the notice to fix to specify how the defects are to be remedied and the building brought to compliance with the Building Code. That is a matter for the owners to propose and for the authority to accept or reject.
- 10.2 I suggest that the parties adopt the following process to meet the requirements of paragraph 10.1. Initially, the authority should issue the notice to fix. The owner should then produce a response to this in the form of a detailed proposal for the roof repairs 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.
- Once the matters set out in in paragraph 6.1.1 have been rectified to its satisfaction, the authority shall issue a code compliance certificate in respect of the building consent amended as outlined in paragraph 9.

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

11. The decision

In accordance with section 188 of the Building Act 2004, I hereby determine that the roof cladding does not comply with Building Code Clauses E2 and B2 and accordingly, I confirm the authority's decision to refuse to issue a code compliance certificate.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 30 September 2013.

John Gardiner

Manager Determinations and Assurance