



Determination 2013/042

Regarding compliance with the Building Code and with the building consent of roof structure components installed in a house at 16 Highland Drive, Richmond

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 and Assurance, Ministry of Business, Innovation and Employment (“the Ministry”²), for and on behalf of the Chief Executive of the Ministry.
- 1.2 In terms of section 176 of the Act the parties to the determination are
 - the owner of the property, the P & E A Williams Family Trust (“the applicant”)
 - Tasman District Council (“the authority”) carrying out its duties as a territorial authority or building consent authority
- 1.3 I consider that the following are persons with an interest in this determination:
 - G Vercoe, the franchise holder contracted to build the house (“the franchise holder”)
 - T Lineham, the builder who carried out the building work (“the builder”)
 - the supplier of the design and materials for the roof truss (“the truss supplier”)
- 1.4 This determination arises from the applicant’s concerns that the roof does not comply with Clauses B1 Structure and E2 External moisture of the Building Code³ and that it does not comply with the building consent. In respect of those matters the applicant is of the view that the code compliance certificate should not have been issued.
- 1.5 The matters to be determined⁴ are therefore:
 - whether the roof as constructed complies with Building Code Clauses B1 Structure, E2 External moisture and B2 Durability. For the purposes of this determination the “roof” includes the roof structure, the roof cladding, gutters and the associated components.
 - whether the under-slab damp proof membrane (“the DPM”) as installed complies with Clauses E2 External moisture and B2 Durability.

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 After the application was made, and before the determination was completed, the Department of Building and Housing was transitioned into the Ministry of Business, Innovation and Employment. The term “the Ministry” is used for both.

³ 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 (the First Schedule to the Building Regulations 1992).

⁴ Under sections 177(1)(a), 177(1)(b) and 177(2)(d) of the Act

- whether the support pillar complies with Clause B1
 - whether the code compliance certificate was correctly issued in accordance with section 94(1)(a), in that the roof had been built in accordance the approved building consent.
- 1.6 The issue of the code compliance certificate in regards to the compliance of a timber retaining wall built under the same consent is also the subject of Determination 2013/006⁵.
- 1.7 In making my decision, I have considered the submissions of the parties and persons with an interest, the reports of the expert commissioned by the Ministry to advise on the matter (“the expert”), and the other evidence in this matter.
- 1.8 Relevant sections of the Building Code and details from the Acceptable Solution E2/AS1 and the roof tile manufactures specifications discussed in this determination are set out in Appendix A.

2. The building work

- 2.1 The single storey house is built on a gently sloping hill site located in a high wind zone for the purposes of NZS 3604⁶. The house has been constructed with a concrete block and poured concrete foundation and floor slab, and light timber frame with brick veneer.

The roof and cladding

- 2.2 The roof structure comprises prefabricated roof trusses at 900mm centres with a pitch of 25°. 50 x 40mm battens support are installed over the trusses to support pressed and pre-painted metal tiles. Self-supporting building paper is installed under the battens.
- 2.3 The expert identified the roof plane braces as metal strap cross braces. Braces have been fixed in the roof plane over the double garage both sides of the ridge.

The pillar

- 2.4 The pillar supports a cantilevered section of roof that sits over a patio and consists of a H4 treated laminated timber post cast into a concrete footing and surrounded by brick veneer. From the engineer’s inspection report the footing is 450mm diameter and 1.8m deep.
- 2.5 The post supports a 295 x 85mm glue laminated beam within the roof space with a fixing bracket to the post. The pillar takes only roof, fascia, gutter, roof structure and soffit lining load and the effective roof area is approximately 7.9m².

⁵ Determination 2013/006: Regarding the issue of a code compliance certificate for a house and timber retaining wall

⁶ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

The valley boards

- 2.6 The expert described the valley boards as finished 90x19mm timber decking run on top of the truss chords, and provided an as built detail (see Figure 1).

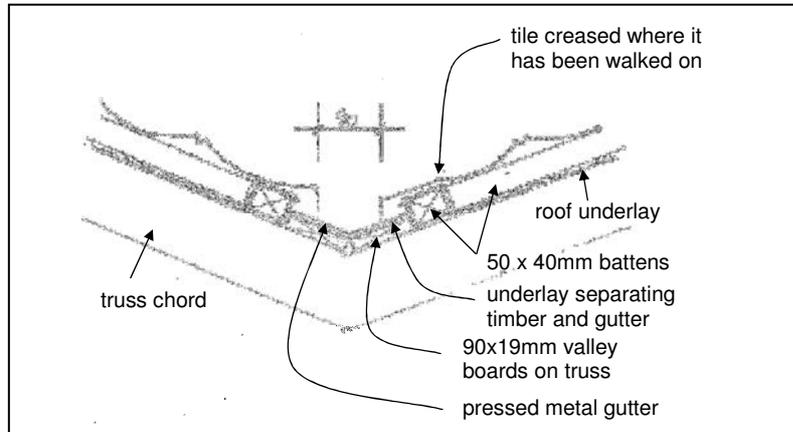


Figure 1: The valley gutters as built

The DPM

- 2.7 The polythene DPM is laid over pea metal on top of a granular base. The granular base slopes from minimal depth of fill at the garage end of the house (southeast) to over 1m at the northwest.

3. Background

- 3.1 The applicant purchased the property as a vacant section with the intention of constructing a residential dwelling.
- 3.2 On 29 August 2008 the authority issued a building consent (BC 080870) under the Building Act 2004 for the construction of the house, associated site works and retaining wall. The dwelling was subsequently constructed by the builder and was substantially completed by August 2009.
- 3.3 The authority undertook an inspection of the roof on 20 March 2009. The inspection sheet noted that the roof plane bracing was to be inspected at the next inspection.
- 3.4 A further inspection was undertaken on 3 April 2009, which records 'roof plane braces now in place, multi-grips now in place to trusses'.
- 3.5 On the 31 August 2009 the authority issued a code compliance certificate for the building work completed under building consent BC 080870.
- 3.6 At some time in March 2012 the applicant had the roof inspected by a representative of the roof cladding manufacturer. I have not seen a copy of any report or opinion provided by the representative. The applicant has stated that the representative noted:
- some tiles had been spray painted before installation and 'in time these painted tiles will turn white'
 - some tiles 'are not fixed into place'

- the ridge capping ‘needs to be removed and correctly installed to ensure weathertightness’
 - the roof valleys move when weight is placed on them. ‘An under roof inspection ... revealed that they were constructed without valley rafters.’ ‘However, the ... Acceptable Solutions and the manufacturer’s specification all show valleys mounted on valley rafters’.
- 3.7 The applicant emailed the authority and the franchise holder on 17 April 2012 noting the representative’s observations and sought clarification as to the installation of the roof trusses.
- 3.8 On 1 May 2012 the applicant again emailed the franchise holder outlining 14 ‘known warranty issues’, which included:
3. Patio pillar. The foundation for the patio pillar was an engineered design to withstand calculated load and lift for the roof area which required the construction of a 1600x800x800 foundation. However in installing the pillar [the franchise holder] ... augured a hole and had their engineer inspect the hole and sign off the construction as built per consented plan. The builders then bolted a post to a roof beam and concreted it into the hole. ...the structure was not built as per consented plan. The structural integrity of the support pillar is not known ...
 4. Damp proof membrane. ... The DPM [has been constructed] without a blinding layer of sand or building paper to prevent the DPM being damaged by the base metal. ...
 5. Roof tiles. ... a number of [the] roof tiles have been spray painted and in time the painted tiles will fade and turn white. ... a number of tiles are damaged... while others are not fixed into place. The ridge capping requires removal and correct installation.
 6. Roof valleys. ... Photographs of the underside of the roof valleys found these are laid on 19x90mm timber supported at 1800mm spacing without a valley rafter.
 7. Roof gutters. Roof gutters have water ponding in them and do not run down at the minimum 1/600. Some spouting has the drain pipe connected to the high end of the gutter. The installed spouting is not the box type [proprietary name] specified and shown on the construction plans.
- 3.9 On 4 May 2012 the applicant received an email from the truss supplier stating that ‘[t]he design and construction of the roof trusses complies with the building code and the [truss system designer] producer statement and layout issued at build stage to [the franchise holder]’.
- 3.10 The authority emailed to the applicant on 22 May 2012 in response to the list of 14 issues outlined by the applicant (refer paragraph 3.8). The authority noted:
3. Patio pillar / No failure noted. Engineer approved ground bearing. Meets B1.
 4. Under-slab DPM / Sand Blinding is specified in NZS 3604 under slab DPM. This is a non mandatory Acceptable Solution. The [authority’s inspector] has the discretion to make a judgement as to whether the backfill surface is smooth enough to dispense with the sand topping before laying of under-slab DPM.
 5. Roof tiles / ... this is an aesthetics issue [not a matter of Building Code compliance]. ... The assumption must also be that the original coating is still under the repainted surface. B2 Durability not an issue. [The authority has not received] information from any party to suggest that the ridge capping installation is incorrect.
 6. Roof valleys / as stated below the roof truss system is specific design and covered by the manufacturers producer statement. ... Has there been a leak?

7. Roof gutter gradient. ... The gutters are installed flat and maintain aesthetic appearance, or they are laid with fall, which is commonly unacceptable to the eye. The B2 durability of the gutters is 15 years and with current coil coated product quality will achieve B2 despite ponding.

3.11 On 27 May the applicant wrote to the authority noting:

Support pillar

- the pillar was longer than allowed for in NZS 3604
- the foundation to the pillar had not been appropriately signed off

DPM

- the DPM was required to be protected from damage
- the DPM was observed 'being lacerated by the sharp pea metal base'

Metal roof tiles

- E2/AS1 says that tiles are to meet the requirements of NZS 4217
- 'a competent inspector' should have been aware of the tile's defects

Valley gutter

- the construction of valley gutters were described in E2/AS1 and NZS 3604
- no valley rafters has been installed and this would have been 'obvious to a Building Inspector'

Gutter gradients

- Clause E1 5.3.1 states 'all gutters shall fall to an outlet'
- the authority's position that a water filled gutter would last for 15 years before rusting out was disputed

3.12 The Ministry received the application for determination on 8 May 2012.

4. The submissions

4.1 In a letter to the Ministry dated 7 May, the applicant outlined concerns held regarding the roof as being that some roof tiles had been spray painted to match the specified colour, and construction of the roof trusses and roof valleys may not comply with the consent or with clauses B1 and E2 of the Building Code.

4.2 The applicant provided copies of:

- correspondence with the authority and the franchise holder
- correspondence with the roof truss supplier
- photographs of the roof cladding and trusses
- documentation from the truss supplier that formed part of the approved consent date stamped by the authority '29/8/08'. The documentation is authored by the 'Designer', and includes the truss layout plan referred to herein.

4.3 On 28 May the applicant forwarded a copy of the authority's email of 22 May 2012.

- 4.4 The authority did not acknowledge the application or submit a response to it; I take the authority's views expressed in its email to the applicant of 22 May 2012 in lieu of a submission.
- 4.5 The draft determination was issued for comment to the parties and persons with an interest in the matter, on 5 September 2012. The authority, the franchise holder, and the builder made no response to the draft determination.
- 4.6 The applicant responded to the draft determination in a submission dated 18 September 2012. In summary the applicant said that:
- Both the builder and the franchise holder were licensed building practitioners ("LBPs") approved by the Ministry.
 - The company that installed the metal tiles was no longer an approved installer for the manufacturer
 - The draft determination did not reference the applicants' correspondence to the authority (now included at paragraph 3.11).
 - Several as-built variations were considered to be 'major undocumented variations' to the consent; including, the changes to the valley rafters and the support pillar, and the painted roof tiles.
 - The valley rafters were a 'key component' and 'the design of the roof structure relies on all ... components for integrity and strength'. As a result of the as-built construction, the applicant did not believe the roof complied with NZS 3604.
 - The submission noted the actions of the authority, the franchise holder and the truss supplier and requested that any notice to fix be 'served' on these parties in addition to the applicant, but that the applicant be given a longer period in which to respond to the notice.
 - The submission noted some typographical errors, and similar.
- 4.7 The truss supplier responded to the draft determination in a submission dated 13 December 2012. The submission noted the following:
- The supplier did not accept some of the statements made by the applicant with respect to the metal roof tile manufacturer's recommendation' in relation to the roof valleys.
 - The design and supply of the trusses was a separate matter to the design and installation of the valley gutters. The reference to the 200x25 valley boards on the drawing for the truss design (refer paragraph 5.4.6) did not imply that the boards were part of the truss design; a letter from the truss manufacturer was provided to clarify this position.
 - The 'saddle trusses are not shown connected to the supporting trusses by joist hangers' as stated by the expert. The supplier confirmed that 'nail connections' of the five small saddle truss to truss connections was adequate.
 - The supplier requested 'a complete set of the documentation submitted for consent'. The supplier supplied two sets truss layout drawings to the franchise holder which the supplier 'understood' were submitted to the authority.

- The supplier agreed that the damage to the trusses was minor and it was ‘very unlikely’ that the damage would mean that the roof as a whole did not meet the requirements of Clause B1. The use of a notice to fix to effect repairs was questioned.
 - The submission noted typographical errors, and similar.
- 4.8 The applicant responded to the truss supplier’s submission on 29 December 2012 questioning how the compliance of the trusses with Clause B1 would not take into account the existence, or otherwise, of the valley rafters.
- 4.9 In response to the truss supplier’s submission in paragraph 4.6 I note the following:
- The consented truss layout plan referred to in paragraph 4.2 is marked up showing the location of joist (the plan also shows the location of ‘cyclone ties’, ‘muti-grips’ and ‘truss to top plate’ connectors).
 - The truss drawings referred to in paragraph 4.7 is all that has been provided to the Ministry and was made available to the truss supplier.
- 4.10 In response to the applicant’s submission I note the following:
- The franchise holder and the builder were not approved as LPBs at the time the work commenced and was substantially completed, so they cannot be considered as such in the determination.
 - NZS 3604 does not include within its scope prefabricated truss construction of the type used on the house. Prefabricated trusses of the type used in this instance are designed using specialist engineering software that will have used either NZS 4203⁷ or AS/NZS 1170⁸ to determine the required design loads.
- 4.11 The processing of the determination was delayed as a result of the determination referred to in paragraph 1.6: the subject of that determination was not directly related to the matters in dispute here.
- 4.12 With respect to the applicant’s submission with respect to who the notice to fix should be issued to; this is considered in paragraph 6.4.
- 4.13 The draft determination has been amended to acknowledge and take account of the submissions received. A second draft determination was issued to the parties and persons with an interest for comment on 14 March 2013.
- 4.14 In a response received on 8 May 2013, the applicant accepted the second draft without further comment.
- 4.15 No further submissions on the second draft were received from the authority or persons with an interest.

⁷ NZS 4203 Code of practice for the general structural design and design loadings for buildings

⁸ AS/NZS 1170 Structural design actions

5. The expert's report

5.1 General

5.1.1 As set out in paragraph 1.7, I engaged an independent expert, who is a member of the New Zealand Institute of Building Surveyors, to carry out an inspection of the house. The expert initially visited the site on 8 March 2011 and provided me with a report dated 10 March 2011 which included comment on the pillar and the under-slab damp proof membrane and construction photographs provided by the applicant. The expert also noted that the general standard of workmanship was poor.

5.1.2 The expert made a second inspection in respect of the roof only on 12 June, 10 July and 13 July 2012, and provided me with a report dated 8 August 2012. Observations and comment from both reports are summarised in the following paragraphs.

5.2 The under-slab DPM

5.2.1 In the first report the expert noted:

- lap tape has pulled away in some locations at DPM laps, however this is not unusual and there appear to be good laps at the DPM joins
- the depth of fill at the north and northwest ends will provide very good protection from ground moisture capillary action
- a visual inspection of an exposed section of the concrete floor slab in the garage (the most vulnerable end of the house due to the lesser depth of fill) showed no signs of dampness or moisture present in the floor slab and there was no evidence in floor coverings of any dampness coming through the slab
- there were no elevated moisture readings in the inside face of external walls or in internal walls.

5.2.2 The expert was unable to establish whether any holes had been made in the DPM from the absence of a sand blinding layer; however the expert concluded from the observations that the DPM was performing adequately.

5.2.3 In the second report the expert noted result from a BRANZ⁹ 'taped sheet' test in which a sheet of polythene is taped to an area of concrete floor to test whether any moisture in the concrete slab was found trapped under the sheet. The polythene sheet has been left in place for 72 hours, and showed no moisture was found to be collecting on the underside of the polythene.

5.3 The pillar

5.3.1 In the first report the expert noted:

- The post has not been installed as per the consent documents which show the post supported on a galvanised post and bearer bracket; however the post is H5 treated so the expert did not consider this variance as one that would make the post non-compliant with the Building Code.
- There is no cracking in the brickwork mortar surrounding the post.

⁹ Building Research Association of New Zealand

- There is a small area of localised ground settlement in front of the pillar. This appears to be settlement in backfill adjacent the pillar, and not the settlement of the pillar itself.
- The connection to the roof beam appears sound, though the bolts are poorly aligned and lap each other.
- The gutter and fascia fall toward the pillar, with water ponding in the gutter. (Given the expert's observation I consider the ponding does not arise from the any settlement of the pillar.) The expert recommended a downpipe be fitted at the low point in the gutter.

5.3.2 In his second report the expert noted that the observations from the first report still applied, and that in his view the pillar was performing 'adequately'.

5.4 The roof

5.4.1 The expert's second report noted no signs of moisture ingress as a result of any defects in the roof.

Trusses

5.4.2 The expert observed that the truss layout was as per the supplier's design; however not all joist hangers were installed as shown in the truss layout plan (refer 4th bullet point, paragraph 4.2) and some truss hold-downs differ from those shown. The expert considered the nailing connections in lieu of the joist hangers were adequate for the five small saddle trusses where fitting joist hangers is not practical. The expert was unable to observe all perimeter truss hold-down connections, but where they could be viewed the expert observed cyclone ties and wire dog hold downs installed.

5.4.3 The expert noted an additional coved ceiling on the west wall of the master bedroom was not documented.

5.4.4 There was minor damage to trusses in isolated locations. The expert contacted the truss supplier and provided photographs and a description of the damage. The truss supplier advised it was unaware of the damage but considered it a 'reasonably minor [issue]' but noted how that it would be able to 'recommend specific remediation details'.

5.4.5 The expert considered the truss installation to be stable and secure. No deflections or movement was identified. However, the expert concluded that remedial action was required to repair both damaged trusses.

Valley gutter boards

5.4.6 The expert provided an as built valley gutter detail (refer Figure 1) and noted the differences between the as built, E2/AS1 and the metal roof tile manufacturer's specifications (refer Appendix A) as follows:

- truss layout plan 'called up' the valley boards (the truss layout plan states 'Also supply... 92m 200x25 H4 valley boards')
- the valley boards are not located as per E2/AS1 or the tile manufacturer's specifications; both the manufacturer's manual and the Acceptable Solution show valley boards to be cut between, not located on top of, the trusses

- the valley is not wide enough to walk in.
- 5.4.7 The expert noted that the valley boards on top of the truss effectively reduce the amount of upstand that can be formed on the valley gutter. The manufacturer's manual and the Acceptable Solution show the upstand at 35mm and 20mm respectively. The tile batten is 40mm thick and the valley board is 19mm thick, which establishes the effective valley gutter upstand height as 21mm.
- 5.4.8 The expert noted that there was no return on the top edge of the valley gutter upstand and a continuous batten has been fixed each side of the gutter. Damage was apparent to the tiles where the batten adjacent to the gutter has been walked on.
- 5.4.9 The expert observed no evidence of moisture ingress, and considered that the reduced size of the valley board would not compromise the function of the board. The expert noted that the valley boards are not connected to the continuous batten adjacent to the gutter; the continuous battens span up to 1.8m.

Metal roof tiles

- 5.4.10 The expert made the following observations in regards the metal roof tiles:
- There are deformed tiles adjacent to the valley gutters: the damaged appears to have arisen from being walked on. There were scratches on some tiles that had damaged the surface coating.
 - some of the originally installed tiles were spray painted and have since been replaced
 - the roof tiles folded into the valley gutters finish clear of the gutter
 - some areas of sagging roof underlay at the top edge of the lapped sheet, but the laps are approximately 250mm and the lapping sheet has not sagged. The expert considered this was not uncommon and was adequate in terms of code-compliance.
- 5.4.11 The expert also noted that some tile side laps are lifting and need securing and one tile is lifting at a ridge, and a downpipe on the north corner is discharging onto the roof and is not fitted with a spreader.

6. Discussion

6.1 General

- 6.1.1 In terms of section 94(1)(a) of the Act, an authority can only issue a code compliance certificate if it is satisfied, on reasonable grounds, that the building work complies with the building consent.
- 6.1.2 In Determination 2008/30 I concluded that, in addition to compliance with the building consent, compliance with the Building Code was also required before an authority could issue a code compliance certificate. I am still of that opinion.
- 6.1.3 In the following I will therefore consider the compliance of the work with the approved consent, whether the work satisfies the requirements of the Compliance Documents where the work is not detailed, and whether the as-built work complies with the Building Code.

6.2 Compliance with the building consent

- 6.2.1 The DPM as installed is laid over pea metal on top of a compacted base. The installation is not in accordance with the approved plans which call for the DPM to be laid over '25mm sand blinding over 150mm min. compacted hardfill'.
- 6.2.2 The specification calls for the roofing to be fixed in accordance with the manufacturer's instructions, and I accept the expert's observations as to the construction details of the valley gutters.
- 6.2.3 The authority contends (paragraph 3.10) that the roof valleys were a specifically designed item 'covered by the manufacturer's producer statement'. I do not accept this position. The drawing for the truss layout provided by the truss supplier does not detail the valley gutters, but notes the supply of '92m 200x45 H4 valley boards'. The as-built valley boards are 90x19mm.
- 6.2.4 The valley gutters were not detailed in the approved consent. However, the approved consent drawings specify 'all construction to comply with ... NZBIA (*sic*) NZ Building Code / Approved Documents ...' which implies that E2/AS1 is to be used as a mean of compliance for anything not otherwise detailed in the drawings. The as-built valley gutters have not been built in accordance with the details contained in E2/AS1 that was in force at the time the consent was issued (refer Appendix A.2). The installation instructions of the roofing manufacturer have also not been followed (refer Appendix A.3).
- 6.2.5 With respect to the pillar, the consent documents show the post supported on a galvanised steel bracket; whereas the post has been cast directly into a concrete footing.
- 6.2.6 I also accept the observations of the expert in regard to the differences between the consented plans, the truss design drawings, and as built work in relation to covered ceilings (refer paragraph 5.4.3).
- 6.2.7 The following as-built work is at variance with the work as consented:
- the lack of protection provided to the DPM
 - the cover ceiling to the bedroom
 - the support post
 - the valley gutters.

These variations would have been apparent to the authority at the time of inspection.

6.3 Compliance with the Building Code

- 6.3.1 I note that a number of matters observed by the expert are matters of poor workmanship that are not necessarily related to a failure to achieve the minimum performance requirements of the Building Code.

Clause E2 External moisture

- 6.3.2 In respect of the DPM I note that although the DPM was not installed in accordance with the consent I consider it is performing adequately. Taking into account the expert's observations and testing, I am of the view that the concrete slab and DPM as installed complies with Clauses E2 and B2 of the Building Code.

6.3.3 In respect of the roof, I consider that remedial work is required in respect of the following:

- where tile side laps are lifting
- the tile lifting at the ridge
- the lack of spreader to the northern downpipe
- the lack of fall to the gutter above the pillar causing ponding.

6.3.4 I accept the expert's view that those defects are not currently allowing moisture ingress, however, I consider that they are likely to in the future, and therefore the roof as installed does not comply with Clause B2 insofar as it relates to Clause E2.

6.3.5 The valley gutters have a reduced cross-sectional area and therefore a lower capacity than that described in E2/AS1. The valley gutters collect water from relatively small areas of roof; the expert observed no water ingress adjacent the gutters and the gutters have been subject to several severe rainfall events since their completion. I consider the valley gutters are adequate in terms of the collection of water from the roof.

Clause B1 Structure

6.3.6 I am of the view that the support pillar as installed complies with Clause B1.

6.3.7 I consider the damaged roof trusses do not comply with Clause B1, and although the damage is relatively minor in extent, remedial work is necessary before the completed truss installation as a whole can be considered to meet the requirements of the truss design and the approved consent.

6.3.8 While the valley boards are not wide enough to walk on, the 50x40mm continuous batten adjacent the boards will be walked on: the continuous batten spans up to 1.8m. An internal review by the Ministry has found that the continuous batten will resist wind uplift, but it is not adequate in terms of the live load from a person on the roof. The framing immediately adjacent the gutter does not comply with Clause B1 and additional support under the continuous batten is required.

6.4 The issue of the notice to fix

6.4.1 The applicant has requested that I direct that any notice to fix be issued to the franchise holder and the truss supplier in addition to the authority and that the applicant should have a longer period in which to respond to the notice. Who should be responsible for bringing the work into compliance is not a matter that I can make a decision on under the provisions of the Act.

6.4.2 Section 164 states that a notice to fix applies to a specified person who is contravening or failing to comply with the Act. Section 163 states that a specified person means:

- a) the owner of a building; and
- b) if the notice to fix relates to building work being carried out,--
 - (i) the person carrying out the work; or
 - (ii) if applicable, any other person supervising the building work.

- 6.4.3 The matter of who a notice to fix can be issued to has been discussed in previous determinations including Determination 2009/109 and 2010/073. Determination 2009/109 found that a notice to fix was unable to be issued to only the builder and I continue to hold that view. Therefore, a notice to fix must always be forwarded to the building owner or their nominated representative.
- 6.4.4 The applicant has requested a notice to fix be issued to the truss supplier but in my opinion there is no power under the Act to do so. The definition of 'specified person' in section 163 of the Act only refers to the owner of a building, the person carrying out the building work, or any other person supervising the building work. The truss supplier is a product manufacturer and would not fall within any the categories of person listed in section 163 to whom a notice to fix can be issued.
- 6.5 In Determination 2011/073 the owners sought to have a notice to fix issued to the builder but at the same time owner had refused to allow the builder any further involvement in the work. In that case I considered that the issuing of a notice to fix to the builder was not correct as the builder had no legal ability to carry out the building work required by the notice to fix.
- 6.6 In this case the applicant is looking to the franchise holder to correct defects in the work, and it appears that the applicant and the franchise holder have been in close communication about the franchise holder's obligations in relation to the consented work since before its completion. The franchise holder was contracted to build the house and has supervised a range of the building work that has been undertaken. The owner has requested a notice to fix be issued to the franchise holder and, therefore, it can be assumed that the franchise holder will have the legal ability to carry out any necessary remediation work. I note that there may also be warranties or guarantees in place between the owner and the franchise holder and that these could be rendered void if remediation work was carried out by anyone except the franchise holder. In light of all these factors I believe it would be reasonable for the authority to issue the notice to fix to the franchise holder in addition to the applicant.

7. What is to happen next?

- 7.1 As noted in paragraph 1.6 another determination regarding a timber retaining wall on the property has resulted in the issue of the code compliance certificate being reversed.
- 7.2 The authority should issue a notice to fix, requiring the building work to be brought onto compliance with the Building Code. It is not for the notice to fix to specify how the defects are to be fixed: 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 method of achieving compliance.
- 7.3 Various as-built changes from the consent drawings are noted in the reports received. I consider the matter of the as-built changes also needs to be addressed. I leave this matter to the parties to resolve.

8. The decision

8.1 In accordance with section 188 of the Building Act 2004, I hereby determine that

- the roof as installed does not comply with Clause B1 Building Code, and Clause B2 insofar as it relates to Clause E2
- the under-slab damp proof membrane as installed complies with Clauses E2 External moisture and B2 Durability
- the support pillar as installed complies with Clause B1 Structure
- the code compliance certificate was incorrectly issued in respect of the roof as installed: that certificate has already been reversed in a previous determination.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 17 July 2013.

John Gardiner
Manager Determinations and Assurance

Appendix A: The legislation

A.1 The Building Code

The relevant provisions of the Building Code current at the time the building consent was issued are:

Clause B2--DURABILITY

FUNCTIONAL REQUIREMENT

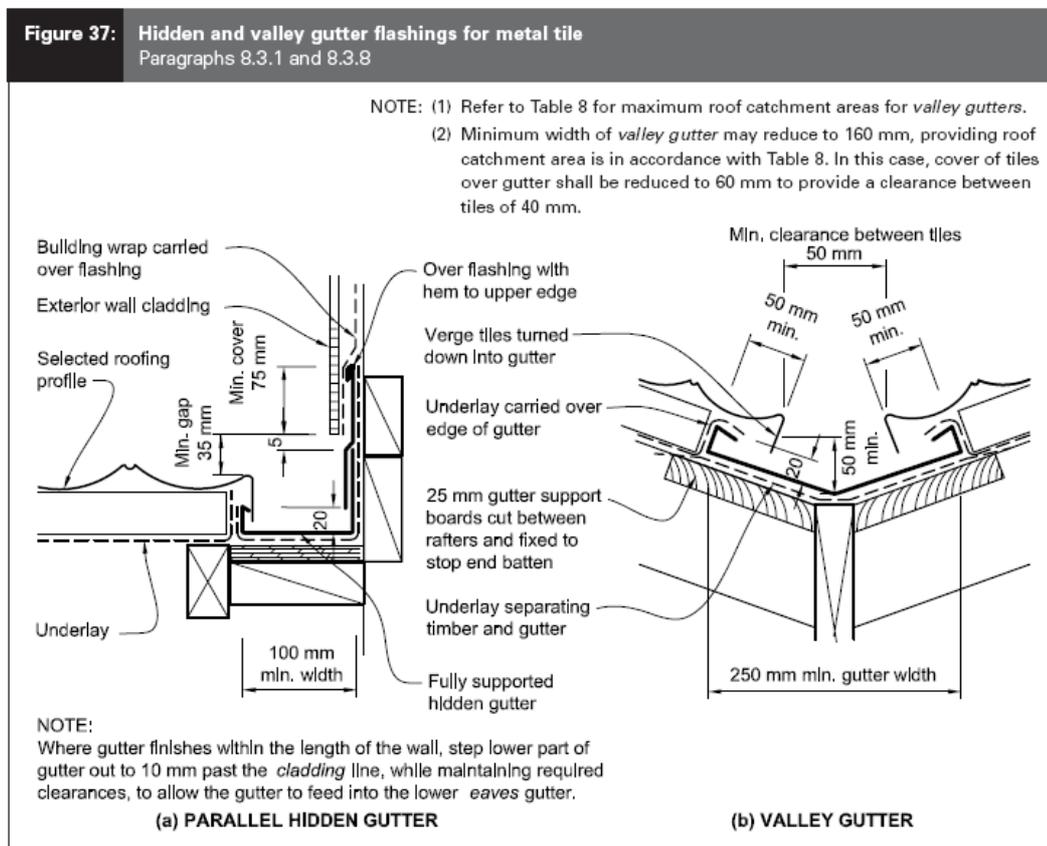
B2.2 Building materials, components and construction methods shall be sufficiently durable to ensure that the building, without reconstruction or major renovation, satisfies the other functional requirements of this code throughout the life of the building..

PERFORMANCE

B2.3.1 Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the specified intended life of the building, if stated, or:

- (a) The life of the building, being not less than 50 years, if:
 - (i) Those building elements (including floors, walls, and fixings) provide structural stability to the building or
 - (ii) Those building elements are difficult to access or replace or
 - (iii) Failure of those building elements to comply with the building code would go undetected during both normal use and maintenance of the building

A.2 Acceptable Solution E2/AS1 in force at the time the consent was issued



A.3 The roof tile manufacturer's specified details

6. Valleys

The accompanying details suggest some of the ways valley gutters may be fitted. Local accepted practice, building regulations and site conditions will dictate the final method. The valley gutter is formed from [trade name] steel sheet, the size being determined in accordance with local conditions.

