



Determination 2017/049

Regarding the refusal to issue a code compliance certificate for 11-year-old alterations to a house with mixed cladding at 240 Horndon Street, Darfield



Summary

This determination is concerned with the compliance of 11 year old alterations to a house built in the 1960s. The determination considers the authority's reasons for refusing the code compliance certificate, and whether the house complies with the requirements of the Building Code, particularly with respect to weathertightness and durability.

1. The matters to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ ("the current Act") made under due authorisation by me, John Gardiner, Manager Determinations 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 owners of the house, M and R Stills ("the applicants") acting through an agent
 - Selwyn District Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.
- 1.3 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for 11-year-old alterations and additions to an existing house, followed by its refusal to issue a consent amendment for repairs subsequently carried out. The refusals arose because the authority is not satisfied that the building work complies with certain clauses² of the Building Code (First Schedule, Building Regulations 1992). The authority's concerns primarily relate to the weathertightness of the wall cladding.

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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.building.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.

1.4 The matter for determination

1.4.1 The matter to be determined³ is whether the authority was correct to refuse to issue a code compliance certificate for the reasons given in its letter dated 16 June 2016 (see paragraph 3.3).

- 1.4.2 In deciding the above matters, and taking into account the recent repairs, I must consider:
 - (a) whether the external building envelope of the altered house complies with Clause B2 Durability and Clause E2 External moisture of the Building Code. The building envelope includes components of the systems (such as the wall claddings, the windows and the roof cladding) as well as the way the components have been installed and work together. I consider this in paragraph 6.1.
 - (b) whether the alterations comply with the other relevant clauses identified by the authority; namely Clause B1 Structure E1 Surface Water, G9 Electricity, G11 Gas as an Energy Source and G13 Foulwater. I consider this in paragraph 6.2.
- 1.4.3 In relation to the refusal to issue a consent amendment for repairs and changes from the work consented (see paragraph 3.5): this is considered in paragraph 8.
- 1.4.4 In making my decision, I have considered the submissions of 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.

1.5 Matters outside this determination

- 1.5.1 In its refusals, the authority limited its concerns to items associated with the clauses outlined above (see also paragraph 3.2.1). Apart from several items noted by the expert during his inspection, this determination does not address other clauses of the Building Code.
- 1.5.2 This determination is limited to the work carried out under Building Consent No. 040209 dated 8 February 2005 and the subsequent repairs; it does not include elements of the original house not affected by the alterations.
- 1.5.3 I also note that the owners will be able to apply to the authority for a modification of durability provisions to allow the durability periods specified in Clause B2.3.1 to commence from the date of substantial completion in 2006. I leave this matter to the parties to resolve.

2. The building work

2.1 The building work considered in this determination consists of extensive additions and alterations to an existing house on a level site in a high wind zone for the purposes of NZS 3604⁴. The expert has taken the garage door as facing south and this determination follows that convention.

2.2 The original house

2.2.1 The original building was a traditional single-storey 1960's house ("the original house"), with concrete foundations, timber-framed walls, concrete brick veneer cladding, timber windows and an 18° pitch hipped roof. The 110m² house was L-

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³ Under sections 177(1)(b) and 177(2)(d) of the Act

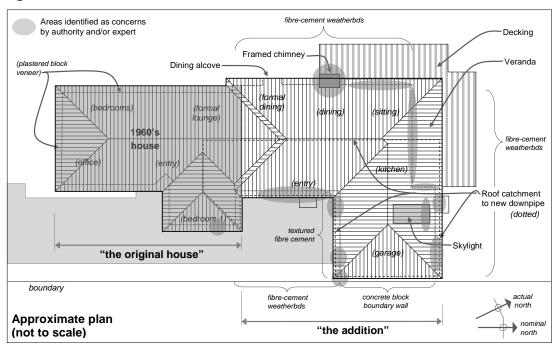
⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

shaped in plan, with three bedrooms, one bathroom, a kitchen/dining area and a living room in the east wing.

2.3 The 2005 alterations and additions

2.3.1 The subject alterations more than doubled the floor area of the original house by adding about 160m² to the north of the original house as shown in Figure 1:

Figure 1: The addition



2.3.2 Construction of the extension is generally conventional light timber frame, with concrete foundations and floor slab, aluminium windows and profiled metal roofing. Wall claddings are a mix of monolithic cladding, plastered concrete block, and horizontal weatherboards. It appears that the original house was re-roofed as part of the alteration work.

2.4 Wall claddings

- 2.4.1 The primary wall cladding is fibre-cement weatherboards fixed directly through the building wrap to the framing. The east wall of the garage is a reinforced concrete masonry boundary wall.
- 2.4.2 The remaining walls and the framed chimney structure to the west are clad in a form of monolithic cladding, which consists of 7.5 mm thick fibre-cement sheets fixed through 20mm timber battens and the building wrap to the framing, and finished with an applied textured coating system ("the textured fibre-cement"). The H3-treated cavity battens form a cavity between the cladding sheets and the building wrap. The concrete brick veneer cladding to the original house has been plastered to match the textured fibre-cement cladding.

3. Background

3.1 The consent and construction

3.1.1 Nationwide Building Certifiers ("the building certifier") issued building certificate No. C/2004-3941 on 23 August 2004 based on the designer's drawings dated 15 December 2003. The certificate noted that the certifier would carry out inspections during construction and issue a code compliance certificate.

- 3.1.2 On behalf of the applicants, the building certifier submitted an application for a building consent on 8 September 2004 to construct an 'addition to existing dwelling' of 158m², accompanied by the building certificate.
- 3.1.3 The authority's records note that the consent application was placed 'on hold' in October 2004 and the building certifier ceased operating as a building certifier. All relevant files were transferred to the authority and it undertook all inspections.
- 3.1.4 The authority issued building consent No. 040209 to the applicants on 8 February 2005 under the Building Act 1991.
- 3.1.5 From the sequence of inspections, it appears that the alterations were carried out in stages over a protracted period. The authority carried out the following inspections during construction:
 - Foundations and floor slab in February 2005
 - Foundations and floor slab in September 2005
 - Half height block garage wall in September 2005
 - Partial pre-line to lounge and garage beam in November 2005
 - Pre-line and cladding in December 2005
 - Post-line bracing and sanitary drainage in March 2006
 - Woodburner installation in May 2007.
- 3.1.6 It appears that no final inspection was carried out and I have seen no further correspondence between the parties until 2016.

3.2 The 2016 final inspection

- 3.2.1 On 5 May 2016 the authority received an application for a code compliance certificate from the designer on behalf of the applicants. The authority carried out a final inspection on 24 May 2016, and the 'inspection notice' lists 30 areas requiring attention, including (in summary, with the authority's reference numbers in brackets):
 - E1 Surface Water:
 - o level of top of gully trap (7)
 - o gutter fall, downpipe position and discharge at garage firewall (8, 9, 16)
 - o too few downpipes for entire roof area (26)
 - E2 External Moisture (including B2):
 - o cladding penetrations (1, 2, 4, 11)
 - o lack of scribers to joinery jambs (5, 10)
 - o cladding clearances to paying and decking (6, 18, 19)
 - o unfinished or unsealed cladding (13, 17, 27)

- o chimney junctions (20 to 25)
- E3 Internal Moisture:
 - o unsealed laundry bench/wall junction (28)
- G11 Gas as an Energy Source:
 - o gas cylinders and pipe penetration (4)
 - o gas fire not installed (30)
- G13 Foul Water:
 - o main vent not secured (2)
 - o lack of frost protection to AAVs⁵ (3)
 - o level of top of gully trap (7)
 - o unvented laundry tub waste (29)
- Changes from consent documents:
 - o spa pool added (12)
 - o garage clear roofing (14)
 - o window not installed (15)
 - o downpipe moved (16)
 - o gas fire not installed per plans (30)

3.3 The refusal to issue a code compliance certificate

3.3.1 The authority wrote to the applicants on 16 June 2016, noting that it had completed a review of the project. The code compliance certificate was refused under Section 94A of the Act because the authority:

... is not satisfied on reasonable grounds that the work complies with the NZ Building Code Clauses B2 (Durability), E1 (Surface Water), E2 (External moisture), G9 (Electricity), G11 (Gas as an Energy Source) and G13 (Foulwater).

3.4 The repairs and consent amendment application

3.4.1 The applicants engaged the agent and a builder to address the items identified in the authority's final inspection. The builder attached photographs of work and provided a statement dated 27 July 2016 describing repairs as shown in Table 1.

Table 1: The repairs

The i	nspection items	Repairs carried out
1	Vent pipe not sealed to soffit	Has been sealed
2	Vent pipe not secured	Brackets fitted
3	Lack of frost protection to AAVs	Frost protection fitted
4	Gas pipe penetration	Has been sealed
5	Lack of scribers to window jambs	Has been sealed
6	Lack of cladding clearances to paving	Paving removed, channel grate installed
7	Level of top of gully trap	Extension fitted
8	Gutter fall above garage door	Removed and reinstalled
9	Garage downpipe discharge to ground	Downpipe shifted to soak hole
10	Lack of scribers to garage door jambs	Scribers fitted
11	Unsealed cladding penetrations	Have been sealed

⁵ Air Admittance Valve

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The i	nspection items	Repairs carried out
12	Spa pool not fenced or empty	Spa pool emptied
13	Unpainted cladding at laundry door	Door step replaced, cladding painted
14	Clear roofing to garage Moisture barrier installed	
15	Window omitted Owner decided not to install	
16	Downpipe position changed	All gutters reinstalled with additional downpipes
17	Unpainted weatherboards below deck	Have been painted
18	Deck/weatherboard clearance	Deck trimmed back to give 12mm gap
19	Deck/textured cladding clearance	Deck trimmed back to give 12mm gap
20	Fascia embedded in texture coating	Fascia trimmed back and sealed
21	Lack of deflector at bottom of apron flashing	
22	Chimney/side roofs clearances	Plaster trimmed back
23	Chimney/upper roof junction	Fitted and passed during construction
24	No plaster under chimney cap flashing	Flashing fitted at junction
25	Moisture entry at chimney deflector	Inspected and no problem found
26	Too few downpipes for entire roof area	All gutters reinstalled with additional downpipes
27	Missing cladding at garage door	Has been repaired
28	Unsealed laundry bench/wall junction	Has been sealed
29	Laundry tub waste not vented	Vent fitted
30	Gas fire not installed	Owner decided not to install

- 3.4.2 On 30 September 2016, the agent applied for a consent amendment for the repairs and attached:
 - the builder's report and photos
 - the as-built surface water drainage plan dated 27 June 2016
 - the gas fitting certification certificate
 - the electrical safety certificate dated 24 August 2016
 - other documentation relating to the alterations and repairs.

3.5 The refusal to issue an amendment to the building consent

- 3.5.1 The authority responded to the application in an email to the agent dated 28 October 2016, which stated that it had reviewed the records and taken 'into account the period of time that had elapsed between the building consent being granted and the practical completion inspection.' The authority stated that the application for an amendment to the consent was 'refused under Section 50' of the Act for the following reasons (in summary):
 - weathertightness issues identified in the final inspection were not remedied for 10 years and could have resulted in other damage to the structure (Clause B1)
 - items at variance with the consent documents have been addressed, but the submitted drawings 'do not reflect all the changes'
 - there is insufficient evidence provided 'to confirm that the non-compliant items identified have been rectified to comply with the building code'.
- 3.6 The agent applied to the Ministry for a determination on 16 December 2016. The Ministry sought additional information from the parties on 20 December 2016 which was received on 8 February 2017.

4. The submissions

4.1 The agent outlined the background to the situation and noted that all of the items identified by the authority in its final inspection had been attended to. The agent considered that the code compliance certificate was 'still refused, due to discrepancy in the drawings on file.' Amended documents were filed with an application for a building consent amendment.

- 4.2 The agent provided copies of:
 - the building consent dated 8 February 2005 and the consent drawings
 - the authority's inspection records
 - the 'practical inspection' list of identified items dated 24 May 2016
 - the builder's report on repairs dated 27 July 2016
 - the Compliance and Electrical Safety Certificate dated 24 August 2016
 - the application for a consent amendment dated 30 September 2016
 - email correspondence with the authority and the applicants
 - various photographs, calculations and certificates.
- 4.3 The authority forwarded a DVD containing the property file for this address on 8 February 2017. The authority stated its reasons for refusing to issue the code compliance certificate were provided in its letter dated 16 June 2016.
- 4.4 A draft determination was issued to the parties for comment on 18 May 2017.
- 4.5 The applicant accepted the draft without comment on 19 May 2017.
- 4.6 The authority did not accept the draft determination in a submission received on 29 May 2017. In a letter dated 26 May the authority noted that:
 - the wind zone for the site should be high not low
 - the use of sealant instead of scribers to window flashings as the 'primary' barrier to moisture was insufficient to satisfy Clauses B2 and E2 specifically where the sealant used has not been verified.

Typographical errors and corrections to aid clarity were also noted.

4.7 I have amended the determination as appropriate.

5. The expert's report

5.1 General

- 5.1.1 As mentioned in paragraph 1.4.4, I engaged an independent expert to assist me. The expert is a member of the New Zealand Institute of Building Surveyors. The expert inspected the house on 21 February 2017, providing a report dated 7 March 2017, a copy of which was forwarded to the parties on 17 March 2017.
- 5.1.2 The expert considered the interior finish had 'generally been finished to an acceptable trade standard' and the quality of finish in regard to the exterior was 'reasonably good' except for defects identified herein. The expert also considered that flashings were 'generally tidily fitted in a tradesman like fashion', except around the framed chimney structure.

5.1.3 The expert noted that the overall shape and form of the extension is 'largely in accordance with the architectural concept of the construction drawings reviewed'. However, several discrepancies were observed, including:

- an alcove extends out to the fascia line on the formal dining room west wall, with narrow full-height windows on either side
- the window to the garage north wall was omitted
- the location of the sitting room west doors has changed
- the canopies over both entry doors were omitted.

5.2 Assessment for compliance

- 5.2.1 Taking into account repairs carried out following the final inspection, the expert assessed areas identified by the authority in its final inspection record dated 24 May 2016. The following paragraphs summarise his assessment of as-built details, which are grouped according to the relevant code clauses. I have taken these comments into account in reaching my conclusions in Table 2 (see paragraph 6.4.1).
- 5.2.2 In order to assess the compliance of identified areas, the expert compared as-built details with recommendations within Acceptable Solutions and/or manufacturer's instructions while taking the particular circumstances into account.

5.3 Clause E1 Surface Water (items 7 to 9, 16)

- 5.3.1 In regard to the items identified by the authority, the expert noted that:
 - water is pooling in the gutter at the southeast garage corner (Item 8)
 - in regard to the downpipe at the garage firewall (Items 9 and 16):
 - o downpipe to northeast garage corner has been removed
 - o downpipe moved to about 3m to the west from the garage corner
 - o gutter receives a roof catchment calculated as about 135m², which is too large to be served by single 80mm diameter down pipe (as per E1/AS1).

5.4 Clause E2 External moisture, B2 Durability

- 5.4.1 The expert inspected the external building envelope of the house, taking into account the items identified by the authority and noting the repairs subsequently carried out.
- 5.4.2 In regard to cladding penetrations, the expert noted that:
 - the main vent is now sealed to the soffit lining and secured to the wall (Items 1 and 2)
 - the gas pipe from cylinders is now sealed through the weatherboard (Item 4)
 - all other penetrations have now been sealed 'albeit untidily' (Item 11)
- 5.4.3 <u>In regard to joinery jambs</u>, the expert noted that:
 - for the windows (Item 5):
 - o scribers have not been fitted at the window joinery jambs in accordance with manufacturer's details or E2/AS1
 - o gaps at window jambs are now filled with flexible sealant

- o there are no signs of past moisture entry at windows, with no elevated moisture readings on internal linings and trim
- scribers now 'neatly fitted' to facing boards at the garage rear door (Item 10)
- 5.4.4 <u>In regard to cladding clearances</u>, the expert noted that:
 - although driveway clearances do not accord with E2/AS1 and the cladding manufacturers' instructions, there is no evidence of associated past or current moisture entry after 11 years (Item 6)
 - decking now provides 12mm clearance from the weatherboards (with the weatherboards now painted) and 20mm clearance from the textured fibrecement (Items 17 to 19).
- 5.4.5 <u>In regard to the framed chimney junctions</u> (Items 20 to 25), the expert noted:
 - the fascia has been trimmed, but is sealed against the texture coating (Item 20)
 - the apron flashings lack kickouts to deflect water into the gutters (Item 21)
 - there is now 35mm clearance to north and south chimney cladding (Item 22)
 - there is 40mm clearance above the corrugations to the east cladding, with 'enough space to roll a golf ball along the internal gutter' and although small, there is no evidence of past or current moisture entry into framing (Item 23)
 - a flashing is now installed which underlaps the capping downturn and has 'a good overlap' over the chimney cladding (Item 24)
 - inspection of framing within the chimney structure and invasive moisture readings into bottom plates (Item 25) showed:
 - o no elevated moisture readings in bottom plates below the apron flashings
 - o no water stains in any framing adjacent to bottom of apron flashings.
- 5.4.6 The expert also noted items not identified by the authority as follows:
 - there are no flashings to the south toilet window and although well protected under the 700mm eaves, care is needed when house washing by hose
 - there is no head flashing to the garage north door and although well protected under the 700mm eaves, care is needed when house washing by hose
 - on the southeast corner of the garage, the edge of the cavity batten is exposed to weather and needs some sort of cover.

5.5 Clause E3 Internal moisture

5.5.1 The expert noted that the laundry bench/wall junction is now sealed (Item 28).

5.6 Clause G9 Electricity

5.6.1 Although not identified by the authority, the expert also noted that electrical cables were exposed within the framing adjacent to the garage north door. Cables are required to be protected by a conduit, or similar, if not concealed by linings.

5.7 Clause G11 Gas as an energy source

5.7.1 Taking into account the items identified by the authority and repairs subsequently carried out, the expert noted that:

- the gas cylinders appear to be satisfactorily installed and the gas pipe connection is now sealed through the weatherboards (Item 4)
- the gas fire has not been installed (Item 30).

5.8 Clause G13 Foul water (items 2, 3, 7, 29)

- 5.8.1 In regard to items identified by the authority and any repairs subsequently carried out, the expert noted that:
 - the main vent is now secured to wall (Item 2)
 - frost protection has been installed to both AAV's (Item 3); however, the protection provided a tight seal, limiting air ingress into the valve
 - both gully traps now meet G12/AS1 minimum 25mm upstand (Item 7)
 - the developed length of the tub and kitchen waste pipes both exceeded 7.5m, so required venting an AAV has now been fitted (Item 29).
- 5.8.2 The expert observed that the AAV below the south toilet window is at the head of the drain line and is therefore required to be an open vent pipe extending 600mm above the roof.
- 5.8.3 The expert also observed that the original gully trap on the east wall of the master bedroom is now disused as a result of the alterations (no waste pipe is keeping the gully trap charged with water), and should have been removed in order to comply with Clause G13.3.1 to 'avoid the likelihood of foul air entering the building'.

5.9 The expert's conclusions

- 5.9.1 The expert concluded that the disused gully trap did not comply with Clause G13, and there was no open vent to the head of the sewer drain. I also note that the exposed wiring observed by the expert within the garage north framing requires attention to comply with Clause G9 Electricity.
- 5.9.2 Although the expert noted no other evidence of non-compliance, he observed that the following items required attention to ensure compliance with Clause B2:
 - The lack of cladding clearances from paving around the southeast internal corner.
 - The bottom of the apron flashings to the framed chimney.
 - The lack of a head flashing and jamb seals to the toilet window.
 - The lack of a head flashing to the garage rear door.
 - The exposed cavity batten to the garage southeast corner.

6. The compliance of the alterations

6.1 Clause E2 External moisture, and B2 Durability

6.1.1 A final inspection was not carried out until some 10 years after the alterations were constructed and the authority identified a number of defects, most of which were subsequently attended to by the builder. Despite that delay, the expert has found no evidence of associated moisture entry into the timber framing.

- 6.1.2 Generally, wall and roof claddings appear to have been installed in accordance with reasonable trade practice and the manufacturer's instructions at the time. However despite repairs, the expert has identified some areas which require further work to ensure that weathertightness is maintained and I accept that attention is required to those items identified in paragraph 5.9.2.
- 6.1.3 I consider the expert's report establishes that the current performance of the building envelope is adequate because there is no evidence of past or current moisture penetration into the timber framing. Consequently, I am satisfied that the claddings currently comply with Clause E2 of the Building Code.
- 6.1.4 However, the alterations are also required to comply with the durability requirements of Clause B2, which requires a building to satisfy all the objectives of the Building Code throughout its effective life. The durability requirements of Clause B2 include a requirement for wall claddings to remain weathertight for a minimum of 15 years and for timber framing to remain structurally adequate for a minimum of 50 years.
- 6.1.5 Although roof and wall claddings are now some 11 years old, the expert's investigations have found some defects that require attention to ensure that the claddings meet their minimum durability requirement and also to continue to protect the underlying timber framing. I am therefore satisfied that the building envelope does not comply with Clause B2 insofar as it applies to E2.
- 6.1.6 Because the identified cladding faults occur in discrete areas, I am able to conclude that satisfactory rectification of the areas as outlined in paragraph 5.9.2 will result in the alterations being brought into compliance with Clauses B2 and E2 of the Building Code.

6.2 The remaining compliance matters

- 6.2.1 Taking account of the expert's report and the other evidence, I consider the following areas require attention (with the associated clauses shown in brackets):
 - The size of the north downpipe for the roof catchment area served (E1 Surface water).
 - The exposed loose wiring to the garage wall framing (G9 Electricity).
 - The lack of an open vent pipe to the head of the sewer drain (G13 Foul water).
 - The disused gully trap (G13 Foul water).
- 6.2.2 In respect of Clause E1, I do not consider the water pooling in the gutter at the southeast garage corner is a matter for concern unless the ponded water is flowing back into the building and not to the outside.
- 6.2.3 Taking account of the expert's report, I am satisfied that the alterations as completed then subsequently repaired are likely to comply with relevant parts of the other

clauses considered by the expert during his inspection: namely B1 Structure (as it applies to weathertightness), E3 Internal moisture and G11 Gas as an energy source.

6.3 Maintenance

- 6.3.1 Prior to the 2016 repairs, the authority had identified some areas where a lack of finishing or maintenance could have lead to deterioration of claddings and components. Although a modification of durability provisions will mean that the claddings have already met 11 of the 15 years required by the Building Code, the expected life of the extension as a whole is considerably longer.
- 6.3.2 Interior areas such as laundry tubs also require sealants to protect against internal moisture penetration into the underlying timber framed walls. Careful maintenance is needed and must continue to ensure that claddings and linings continue to protect the underlying framing for its minimum required life of 50 years for the structure.
- 6.3.3 Effective maintenance of the house is important to ensure ongoing compliance with the Building Code and is the responsibility of the building owner. The Ministry has previously described maintenance requirements associated with the external building envelope (for example, Determination 2007/60).

6.4 Conclusions

6.4.1 Taking account of the expert's report and the other evidence, Table 2 summarises my conclusions on the authority's concerns identified for this house, together with other items noted by the expert during his inspection. Areas requiring attention or repair are highlighted and shaded.

Table 2

Authority's area of concern		Subsequent repairs	My comments	Compliance		
B1 St	B1 Structure					
	(Paragraph 3.5) Damage from delayed repairs		(Paragraph 6.1.3) No evidence of historic or current moisture penetration into framing causing damage or decay	Complies		
E1 Su	irface Water					
7	Gully trap top	Extension fitted	Both gully traps now meet G12/AS1 for minimum 25mm upstand	Complies		
8	Gutter fall	(Paragraph 3.4.2) gutters reinstalled with extra downpipes (As-built supplied)	Water pooling at SE corner	Complies, unless ponded water entering building		
9	Downpipe discharge			Attention required		
16	Downpipe position		Roof catchment area too large			
26	Too few downpipes		for single 80mm diam. downpipe			
E2 Ex	E2 External Moisture					
1	Vent pipe not sealed to soffit	Sealed	Satisfactory	Complies		
2	Vent pipe not secured	Secured	Satisfactory	Complies		
4	Gas pipe penetration	Sealed	Satisfactory	Complies		
5	Lack of scribers to window jambs	Sealed	 (Paragraph 5.4.3) scribers not fitted gaps filled with sealant No evidence of past or current moisture penetration 	Complies		

Authority's area of concern		Subsequent repairs	My comments	Compliance
6	Lack of cladding clearances to paving	Channel grate installed	(Paragraph 5.9.2) Repairs insufficient in long term	Repairs required
10	Lack of scribers to garage door jambs	Scribers fitted	Satisfactory	Complies
11	Unsealed cladding penetrations	Sealed	Satisfactory	Complies
13	Unpainted cladding at laundry door	Door step replacedCladding painted	Satisfactory	Complies
14	Clear roofing to garage	Moisture barrier installed	Satisfactory	Complies
15	Window omitted	No effect on compliance	e	
17	Unpainted weatherboards below deck	Have been painted	Satisfactory	Complies
18	Deck/weatherboard clearance	Deck trimmed back to give 12mm gap	Satisfactory	Complies
19	Deck/textured cladding clearance	Deck trimmed back to give 12mm gap	Satisfactory	Complies
20	Fascia embedded in texture coating	Fascia trimmed back and sealed	Fascia sealed to plasterNo evidence of past or current moisture penetration	Complies
21	Bottom of apron flashing		 (Paragraph 5.9.2) No kick out to bottom Reliant on copious sealant only No evidence of past or current moisture penetration Unsatisfactory in long term 	Repairs required
22	Chimney/apron flashing clearance	Plaster trimmed back	Satisfactory	Complies
23	Chimney/upper roof junction	Fitted and passed during construction	Clearances sufficient Small but no evidence of past or current moisture penetration	Complies
24	No plaster under chimney cap flashing	Flashing fitted at junction	Capping downturn extended with new flashing Sufficient overlap to cladding	Complies
25	Moisture entry at chimney apron flashings	Inspected and no problem	 (Paragraph 5.9.2) No evidence of past or current moisture penetration Adequate to date but repairs required for durability 	Repairs required to bottom of apron flashings
27	Missing cladding at garage door	Has been repaired	Satisfactory	Adequate
	ernal Moisture		 (Paragraph 5.9.2) no flashings to S toilet window no head flashing to garage N door edge of cavity batten exposed on SE corner of the garage No evidence of past or current moisture penetration Adequate to date but repairs required for durability 	Repairs required

Authority's area of concern		Subsequent repairs	My comments	Compliance	
28	Unsealed laundry bench/wall junction	Has been sealed	Satisfactory	Complies	
G9 EI	ectricity				
	Lack of certification		(Paragraph 3.4.2)Compliance and Electrical Safety Certificate 24 Aug 2016	Complies	
Additi	onal item		(Paragraph 5.6.1) Exposed cabling in garage	Attention required	
G11 0	Gas as an Energy Sou	rce			
4	Gas pipe penetration	Has been sealed	(Paragraph 5.7.1)Cylinder installation appears satisfactoryPipe penetration satisfactory	Complies	
30	Gas fire not installed	No effect on compliance	9		
G13 F	G13 Foul Water				
2	Vent pipe not secured	Brackets fitted	Vent now secured to wall	Complies	
3	Lack of frost protection to AAVs	Frost protection fitted	(Paragraph 5.8.1) Frost protection installed to AAV's. Protection limits air ingress into valves	Attention required	
7	Gully trap top	Extension fitted	Both gully traps now meet G12/AS1 minimum 25mm upstand	Complies	
29	Laundry tub waste not vented	Vent fitted	AAV has now been fitted	Complies	
Additional item			(Paragraph 5.8.2) Open vent required to head of sewer drain	Attention required	

7. The durability considerations

- 7.1 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).
- 7.2 In this case the 11-year delay since the substantial completion of the alterations raises concerns that many elements of the building are now beyond their required durability periods, and would consequently no longer comply with Clause B2 if a code compliance certificate were to be issued effective from today's date.
- 7.3 I have considered this issue in many previous determinations and I maintain the view that:
 - (a) the authority has the power to grant an appropriate modification of Clause B2 in respect of all the building elements, if requested by an owner
 - (b) it is reasonable to grant such a modification, with appropriate notification, as 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 at the time of substantial completion of the alterations in September 2006.

I therefore leave the matter of amending the building consent to modify Clause B2.3.1 to the parties once the matters addressed in this determination are resolved.

8. The application to amend the building consent

8.1 The authority has refused to issue a building consent amendment for the reasons given in its email dated 28 October 2016 (see paragraph 3.5). The amendment covers repairs and as-built changes made to the original consent. The consent was issued under the Building Act 1991, and issue of the code compliance certificate is determined by compliance against the requirements of the Building Code that was in force at the time the consent was issued (section 436).

8.2 A building consent amendment is required to be granted before the work concerned is carried out; it is unable to be issued retrospectively. In light of this, I am of the view that the repair work can be recorded as a minor variation to the original consent with the as-built documentation serving as a record of the work completed onsite.

9. What happens next?

- 9.1 I note that the building consent was issued to the current owners of the house, and a notice to fix is able to be issued to the applicants in respect of breaches of the Act or Regulations. Any notice to fix should take into account the findings of this determination, identifying the areas outlined in paragraphs 5.9.2 and 6.2.1. Alternatively, the authority may elect to deal with the matter via a notice issued under section 95A of the Act.
- 9.2 The applicants should produce a detailed proposal to specifically address the matters of non-compliance, produced in conjunction with a suitably competent person. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.
- 9.3 A code compliance certificate will be able to be issued once these matters have been rectified and the matter of amending the building consent to modify Clause B2.3.1 has been resolved.

10. The decision

- 10.1 In accordance with section 188 of the Building Act 2004, I hereby determine that:
 - the building envelope does not comply with Clause B2 insofar as it applies to Clause E2, and
 - some of the building work does not comply with Clauses E1, G9, and G13 of the Building Code;

accordingly, I confirm the authority's decision to refuse to issue a code compliance certificate for the alterations.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 5 July 2017.

John Gardiner

Manager Determinations and Assurance