



Determination 2015/071

Regarding the refusal to issue a code compliance certificate for an 11-year-old extension and alterations to an existing house at 3 Wahanui Road, Greenlane, Auckland



Summary

This determination considers the compliance of the building work in light of a refusal to issue a code compliance certificate; the refusal was primarily on the grounds of concerns regarding weathertightness and durability of the exterior cladding given the building's age.

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, K and H Franklin (“the applicants”) (I note that K Franklin is now a licensed building practitioner and was the builder of the work).
- the Auckland Council (“the authority”), carrying out its duties as a territorial authority or building consent authority.

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.

- 1.3 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for 11-year-old alterations to a house (“the alterations”). The refusal arose because:
- the authority is not satisfied that the building work complies with certain clauses² of the Building Code (First Schedule, Building Regulations 1992); in particular in regard to the weathertightness of the claddings
 - the building work had been undertaken under the supervision of Compass Building Certifiers (“the building certifier”), which was duly registered as a building certifier under the Building Act 1991 (“the former Act”), but which ceased operating as a certifier before it had issued a code compliance certificate for the house.
- 1.4 The matter to be determined³ is therefore whether the authority was correct in its decision to refuse to issue a code compliance certificate for the work. In deciding this matter I must consider whether the building work to the exterior building envelope that formed part of the consented work complies with Clause B2 Durability and Clause E2 External Moisture of the Building Code. The building envelope includes the components of the systems (such as the wall and roof claddings, the windows, the deck and the flashings), as well as the way components have been installed and work together.
- 1.5 Matters outside this determination**
- 1.5.1 Although consent drawings show a separate new detached garage building, that building work was deleted from the building consent (see paragraph 3.1) and is therefore not considered in this determination.
- 1.5.2 Over an extended period, the applicants have reclad most original exterior walls and replaced all of the original timber windows and doors. Some of that recladding appears to have been carried out very recently and was not included in the consented alterations. I have insufficient information to form a view on the compliance of the recladding work and, except for junctions with the latter, this determination is limited to the alterations described in the consent drawings.
- 1.5.3 I note that the owner may apply to the authority for a modification of the durability provisions for the 11-year-old alterations to allow the durability periods specified in Clause B2.3.1 to commence from the date of substantial completion in about 2004. Although I leave this to the parties to resolve, I comment on this matter in paragraph 6.2.
- 1.6 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.

2. The building work

- 2.1 The building work consists of a two-storey high extension to a detached house which is situated on a north-sloping site in a medium wind zone for the purposes of NZS 3604⁴. The expert takes the extension as facing north and this determination follows that convention. Although fairly simple in plan and form, the extension

² In this determination, references to sections are to sections of the Building Act and references to clauses are to clauses of the Building Code.

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

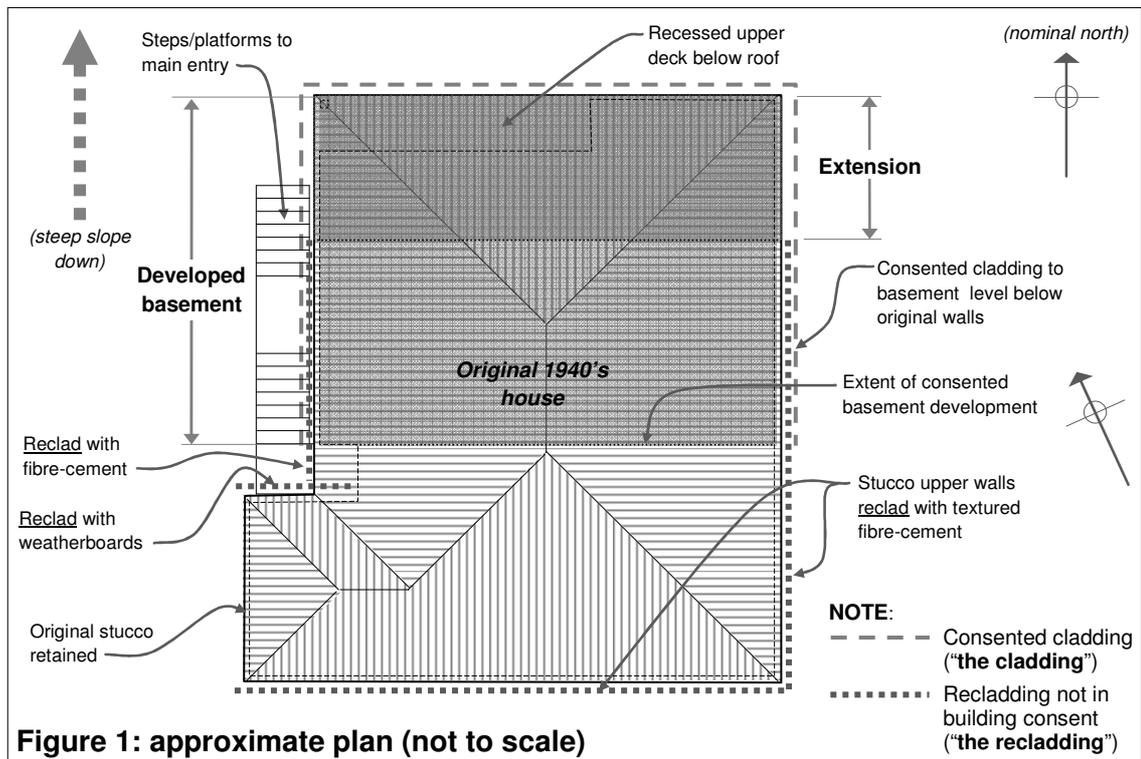
⁴ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

includes some complex junctions and is assessed as having a high weathertightness risk.

- 2.2 The original 1940s house included two bedrooms, a study and a timber-framed undeveloped basement area. Construction was generally conventional light timber frame, with a concrete foundation wall, timber-framed floor, stucco wall cladding, and timber joinery and corrugated metal roofing. The 12° pitch hipped roof had eaves of about 200mm overall.

2.3 The altered house

- 2.3.1 The alterations are shown in Figure 1 and include joinery replacement and recladding to the existing exterior walls, which are not considered in this determination (see paragraph 1.5.2).



- 2.3.2 The two-storey extension is to the north of the original house and includes:

- removal of the study and an extension with a deck to the upper living area
- internal stairs to the new partial basement level
- in the basement level:
 - two additional bedrooms
 - family room
 - laundry and an additional bathroom.

- 2.3.3 Construction is generally conventional light timber frame construction with some specifically engineered steel elements and retaining walls, reinforced concrete slab and foundations to the basement, concrete block retaining walls, monolithic and weatherboard wall claddings and aluminium joinery. The original hipped roof is extended to match the original.

- 2.3.4 The expert was unable to identify timber treatment and noted that sub-floor framing was not dyed; indicating the framing was likely to 'pre-date the preservative treatments introduced by NZS3602:2003'. However, the expert also noted that the lack of damage to the balustrade framing top plate indicated the likelihood of treatment to at least some of that framing. The applicants have submitted that the external framing was all treated to H1.2 (refer paragraph 4.4); if the framing timber is treated to H1.2 then some periodic wetting may not be sufficient to damage the timber.

2.4 The wall claddings

- 2.4.1 According to the applicants, the extension framing was initially enclosed with painted plywood installed over building wrap, in order to provide temporary weatherproofing during the protracted completion of the cladding.
- 2.4.2 The primary wall cladding is a monolithic cladding system. The textured fibre-cement consists of 7.5mm thick fibre-cement backing sheets fixed through 20mm timber battens, the plywood and the building wrap to the framing, and finished with an applied textured coating system. The H3 treated cavity battens form a cavity between the cladding sheets and the plywood.
- 2.4.3 On the east and west elevations the inter-storey junction includes a metal flashing beneath the upper cavity, with the outer overlap hidden beneath a decorative mid-floor band formed from a fibre-cement weatherboard.
- 2.4.4 The north elevation of the extension is clad in a proprietary fibre-cement weatherboards consisting of 16x180mm painted fibre-cement boards which are fixed directly through the plywood and building wrap to the framing, with metal soakers to external corners, and under-flashings apparently installed beneath the fibre-cement sheet/weatherboard junctions.
- 2.4.5 Concrete block walls forming part of the exterior to the basement are over-clad with fibre-cement sheet on a cavity.

2.5 The deck

- 2.5.1 The upper deck has a tiled floor recessed beneath a 1200mm deep overhang and is supported on upper and lower timber posts at the northwest corner. The timber-framed balustrades are clad in fibre-cement weatherboards on the outer face and include a glazed panel fixed behind a framed opening within the north elevation.
- 2.5.2 The textured fibre-cement inner cladding is installed over plywood and cavity battens, with a top plate extended the full width of the balustrade wall. The top of the balustrade is wrapped in a membrane flashing, with textured fibre-cement extended as a capping over the membrane.

3. Background

- 3.1 The building certifier issued a building certificate (No. 4420) dated 12 December 2002 for the alterations. Although the plans included a separate new detached garage building, notes on the plans state that this was 'not part of this building consent'. The authority issued a building consent (No. AC/02/09264) dated 23 December 2002 for a 'new family/rumpus, living room & deck'.

3.2 Construction

- 3.2.1 The building certifier carried out various inspections⁵ during construction. A handwritten summary appears to refer to two inspections of framing in November 2003 and a drainage inspection in December 2003, and it is likely that the extension was substantially completed and occupied during 2004. However, finishing work and recladding of original walls took place gradually over the next four years and I have seen no records of any inspections during that time.
- 3.2.2 The certifier ceased operating as a building certifier in December 2006 but continued to operate as a consultant (“the consultant”) apparently providing some building regulatory services to the authority.
- 3.2.3 According to the applicants, all work was completed by early 2008 and the consultant carried out a final inspection on 4 April 2008. The inspection record is on the authority’s letterhead and identified several minor outstanding items together with documentation to be provided.
- 3.2.4 The applicants attended to outstanding items and assumed that there were no further matters to be addressed; believing that the consultant had issued a code compliance certificate for the building work.

3.3 Handover to the authority

- 3.3.1 The consultant completed an ‘Advice of completion of building work’ on 29 April 2009 which noted ‘total inspections: 9’ and ‘uncompleted job returned to [the authority]’. Because the house was tenanted, the applicants did not receive a letter from the consultant dated 30 April 2009, which advised that the building consent had been passed to the authority ‘so that it may be brought to a conclusion.’
- 3.3.2 The letter explained that the authority would make contact ‘in the near future’ to arrange further inspections and explained that the reason was because the authority:
- ... has a special durability team to handle building consents that are taking longer than the expected time frame to complete.
- The time taken to complete the work authorised by the above building consent may affect the building work meeting the durability requirements of the NZ Building Code, and could compromise the issuing of the Code Compliance Certificate for this building consent.
- 3.3.3 I have seen no evidence of correspondence from the authority regarding the need for further inspections.

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

- 3.4.1 The applicants remained of the belief that code compliance matters had been resolved in mid-2008 until the property was being prepared for sale in 2015, at which point the applicants were informed that the house did not have a code compliance certificate and would require a ‘durability inspection’.
- 3.4.2 The authority inspected the house on 31 August 2015 and wrote to the applicants on 1 September 2015 to advise that ‘under Section 95A of the Building Act 2004 a CCC cannot be issued at this stage.’ The authority stated that:

Following the site inspection and subsequent ‘peer review’ process, [the authority] could not be ‘satisfied on reasonable grounds’ that building works comply with the NZ Building Code, or that it is performing as intended.

⁵ Although the advice of completion forwarded to the authority noted ‘total inspections: 9’, I have not seen records of those inspections.

3.4.3 The authority recommended that:

... you engage the services of a suitably qualified individual (Building Surveyor) who is qualified in Weather Tight assessment and Remedial Design.

This person must further investigate the performance of this building, also taking into account the items below and provide a 'scope of works' and any recommendations to [the authority] for further review.

3.4.4 The authority listed 'items identified' as follows but not limited to:

1. Cracking to cladding
2. Cladding not sealed at bottom edges
3. Mid floor band cracked (cannot confirm mid floor flashing detail)
4. Deck not constructed as per consented plans, posts added, changed from decking timber to membrane and tiled.
5. Flashing details.
6. Ground clearances not achieved.
7. First layer of cladding direct fixed, appears to be ply, shows signs of severe degradation.
8. Over clad appears to be on a cavity system with cavity battens showing degradation.
9. Outfall for deck should be directed into an acceptable outfall.
10. Scribes not sealed.
11. Flashing details to different cladding junctions. (weatherboards/plasterboard)
12. Confirmation required for bracing elements. Elevation D, bigger window added main floor.
13. Deck to post balustrade junction, cracks to base.
14. Original cladding and over clad not as per consented plans.
15. [The authority] does not approve building consents to over clad dwellings, due to the high risk factor in establishing code requirements.

3.5 After considerable correspondence between the parties the situation remained unresolved, and the Ministry received an application for a determination on 14 October 2015.

4. The submissions

4.1 The applicants outlined the background, explaining that the alterations were completed 'above and way beyond the prescribed drawings' and noting that all work 'was inspected and signed off.' The applicants were unaware of any outstanding issues until preparing to sell the property in 2015.

4.2 The applicants provided copies of:

- the consent drawings and structural calculations
- the building consent for the extension
- limited inspection records
- the letter from the consultant dated 30 April 2009
- recent correspondence with the consultant and the authority
- the authority's refusal to issue a code compliance certificate, dated 1 September 2015
- various producer statements, as-built details and other information.

- 4.3 A draft determination was issued to the parties for comment on 4 November 2015.
- 4.4 The applicants responded on 4 November 2015, accepting the draft determination and noting that ‘the balustrade framing in fact are battens, ... but I’m sure that can be determined on site with [the authority]’. In a further email on 6 November 2015 the applicants advised they had invoices for the timber used in the wall framing which show that it was H1.2.
- 4.5 The authority responded on 5 November 2015, accepting the draft determination but expressing dissatisfaction at the limits of the determination. The authority set out its view that the determination should consider the question of whether certificates of acceptance may be issued for the building work that has been carried out without consent.
- 4.6 In response to the authority’s submission I note the following:
- The determination application was made in respect of the authority’s refusal to issue a code compliance certificate; the authority made no submission in response to the application or raise the issue of broadening the scope that was applied for.
 - It is my understanding that no application for a certificate of acceptance has been made.
 - When the authority receives an application for a certificate of acceptance it is then for the authority to consider the compliance of the building work that has been carried out.

5. The expert’s report

- 5.1 As mentioned in paragraph 1.6, I engaged an independent expert who is a member of the New Zealand Institute of Architects to assist me. The expert inspected the house on 27 October 2015, providing a summary report completed on 2 November 2015. The parties were provided with a copy of the report also on 2 November 2015.

5.2 General

- 5.2.1 The expert noted that the scope of his inspection was to provide an opinion about items identified in the authority’s section 95A refusal to issue a code compliance certificate, and to assess code-compliance of those items with the associated parts of Clauses B1, B2 and E2.
- 5.2.2 The expert noted the lack of detailed inspection records during construction, with no record or date for post-line or cladding inspections, and a gap of 5 years between the certifier’s last inspection and the final inspection in 2008. The expert took 2004 as the likely date of substantial completion, but considered that a record of all construction inspections be obtained to verify this. I note that the completion date of exterior cladding is important, given the cladding’s 15-year durability requirement.
- 5.2.3 The expert’s photographs of the exterior show that many variations from the consent drawings were made during or following construction of the extension, including:
- in the extension:
 - fibre-cement weatherboards to parts of the north face
 - textured fibre-cement installed on cavity in lieu of direct-fixing

- cantilevered deck with spaced decking and glazed open balustrade changed to corner post-supported, with tiled floor and clad balustrades
- timber doors changed to aluminium bi-fold
- upper deck north window omitted, door size and position changed
- windows added to east elevation
- size of lower west window increased
- in the original house:
 - east, south and west walls reclad in textured fibre-cement sheet
 - north wall to entry reclad in weatherboards
 - original timber joinery replaced with aluminium
 - various changes to windows and doors.
 - original exterior steps to entry replaced.

5.3 Moisture testing and destructive investigations

- 5.3.1 The expert inspected the interior, observing that linings and trim were ‘free from obvious signs of water stains, mould, etc’, with low non-invasive moisture readings on internal linings.
- 5.3.2 The expert took invasive moisture readings using long probes from the inside at various sample locations considered at-risk, with readings between 14% and 15% below window jamb/sill junctions and at the bottom of northwest corner of the lower bedroom below the deck/wall junction. However, the expert also noted:
- deteriorated plywood and battens at the bottom of the over-clad concrete block east basement walls
 - waterstaining to timber panelling to deck soffit indicating past leaks, but no elevated readings at time of inspection
 - cracks to textured capping adjacent to corner post penetration, and 50% moisture level recorded in framing below
 - 22% below jamb/sill trim to glazed opening in north balustrade.
- 5.3.3 The expert removed a small section of cladding from the inner face of the northwest corner of the balustrade and observed that ‘water oozed out of the top plate under pressure from [a] chisel’.

5.4 Windows and doors

- 5.4.1 The expert assessed the joinery installation, noting the following:
- windows in weatherboard-clad walls are face-fixed, with metal head flashings, timber jamb scribes against jamb flanges, and drainage gaps under sill flanges
 - windows in textured fibre-cement clad walls are recessed by the cavity/cladding thickness, with visible uPVC flashings to the heads, jambs and sills
 - the above windows also include sloping sill and head reveals to drain water away from the window junctions.
- 5.4.2 The expert considered that joinery installation appeared satisfactory, with low moisture readings under windows indicating adequate performance.

5.5 The authority's list of concerns

5.5.1 The expert assessed the list of concerns identified by the authority in its refusal to issue a code compliance certificate. Table 1 summarises the expert's responses and I have added my comments in brackets where I consider appropriate.

Table 1

Areas of concern given in section 95A refusal (in summary)		Expert's comments
1	Cladding cracks	Isolated instances include: <ul style="list-style-type: none"> • minor crack in a bottom north weatherboard • minor crack to inter-storey band • cracks to top and side of balustrade capping
2	Unsealed edges to backing sheets	Agreed – some bottom edges unpainted
3	Inter-storey joint	Metal mid-floor flashing under fibre-cement band visible at the ends – appears adequate.
4	Deck construction changed	Deck floor shows no sign of structural problems, but may be prudent to obtain structural assessment of adequacy.
5	Flashing details	<ul style="list-style-type: none"> • Window flashings adequate (see paragraph 5.4.2) • Balustrade details at post and glazed opening not adequately flashed as shown by moisture penetration at junctions (see paragraph 5.3) • Weatherboard/fibre-cement junction at west balustrade lacks a scribe or any visible weatherproofing.
6	Ground clearances	<p>East elevation:</p> <ul style="list-style-type: none"> • The applicants propose to re-fix base flashing to allow drainage gap • Will be adequate in circumstances because cladding is fixed over concrete block basement walls <p>South elevation:</p> <ul style="list-style-type: none"> • Recladding not in building consent (not considered in this determination – see paragraph 1.5.2) <p>Other areas are adequate in circumstances, with reduced clearances sheltered under deck or roof overhangs and no associated moisture penetration.</p>
7	Degrading plywood over lower concrete block	<p>No significant risk to framing, but isolated repairs needed.</p> <ul style="list-style-type: none"> • Plywood/battens from upper reclad wall (see 8 below) extended over some areas of lower concrete block • Plywood/battens deteriorating or at risk due to lack of drainage at base • Proposed repairs should adequately address concerns (removing degraded timber, providing drainage gap, reinstating flashings)

Areas of concern given in section 95A refusal (in summary)		Expert's comments
8	Over-clad of original walls, with degrading cavity battens	Original walls were apparently re-clad not over-clad, with original stucco removed and replaced with: <ul style="list-style-type: none"> • plywood sheathing over building wrap (sealed for temporary weatherproofing pending final cladding) • fibre-cement cladding installed over battens (Recladding not part of consent and not considered in this determination.)
9	Deck outlet not connected to surface water drainage system	Agreed – risks water runoff down lower cladding. Outlet should be refixed as proposed.
10	Unsealed scribes to weatherboards	(I note that paint coating to some scribes has deteriorated, exposing timber – I consider this an item of maintenance.)
11	Flashings to inter-cladding junctions	Apparently protected with under-flashings but lacks a scribe at balustrade weatherboard/fibre-cement cladding junction For re-clad original walls, the following areas are in 'very poor condition': <ul style="list-style-type: none"> • northwest corner junction of weatherboard-re-clad original wall at entry with original stucco • southwest corner junction of original stucco to new re-cladding (As above, the re-cladding does not form part of consented work)
12	Changes to windows affect bracing	Require engineer to review bracing implications of window changes from original consent calculations (see paragraph 5.2.3)
13	Balustrade capping/post junction	Inadequate: <ul style="list-style-type: none"> • top plate saturated • balustrade framing may have deteriorated • investigation/repair of framing needed prior to repair.
14 15	Original stucco walls over-clad without approval	Original walls apparently re-clad, not over-clad, with original stucco removed and replaced with: <ul style="list-style-type: none"> • plywood sheathing over building wrap (sealed for temporary weatherproofing pending final cladding) • fibre-cement cladding installed over battens As above, the re-cladding does not form part of consented work and is not considered in this determination, however, the following is noted: <ul style="list-style-type: none"> • inadequate junctions between new claddings and original unchanged cladding • areas of unpainted weatherboards • lack of clearances to paving at south elevation • sub-floor vents covered by re-cladding and steps • degrading original timber in some areas

5.6 Other items noted

5.6.1 During his inspection of the sub-floor, the expert also observed that the framed walls of the extension lacked insulation from the sub-floor space. The expert noted that the work was unlikely to meet the requirements of Clause H1.

5.6.2 The expert's photographs and notes also indicate a lack of finishing/maintenance in a number of areas, including some:

- unsealed edges to fibre-cement backing sheets
- peeling paintwork to timber scribes
- isolated unrepaired cracks
- unpainted fibre-cement weatherboards.

5.7 Summary

5.7.1 The expert concluded that in his opinion:

- the moisture levels in deck balustrade framing and the bottom of the cavity over the basement east concrete block walls indicate failure to comply with Clauses E2 and probably B2
- water-staining to the deck soffit leads to concerns that the deck may not comply with Clauses E2 and B2
- window changes may have reduced bracing and possibly compliance with Clause B1 (although I note that the plywood used as temporary weatherproofing of exterior walls may have compensated for any reduction in bracing value)
- the lack of insulation of sub-floor partitions to the rumpus room and staircase indicate a likely lack of compliance with Clause H1.

5.7.2 In regard to the extension, the expert concluded:

Elsewhere, the condition of the extension construction and performance several years after construction provides reasonable evidence of compliance with the NZBC parts E1, E2 and B2, subject to normal maintenance and various repairs & modifications noted above, which the owner has agreed to.

5.7.3 In regard to the recladding of the original stucco walls, the expert stated:

Further information about the recladding, including the date when it was carried out, condition of the framing behind it, provisions for underfloor ventilation, etc. would be required to enable an opinion as to compliance. Moisture readings indicate that the window installation in these areas is adequate.

6. Compliance of the consented extension

6.1 I note that the building consent considered in this determination was issued under the former Act, and accordingly the transitional provisions of the current Act apply when considering issuing a code compliance certificate for work completed under this consent. Section 436(3)(b)(i) of the transitional provisions of the current Act requires the authority issue a code compliance certificate only if it 'is satisfied that the building work concerned complies with the building code that applied at the time the building consent was granted'.

- 6.2 An application can be made to the authority for a modification of durability requirements to allow durability periods to commence from the date of substantial completion sometime in 2004. Although that matter is not part of this determination (see paragraph 1.5.3), I have taken an anticipated modification into account when considering the weathertightness performance of the claddings as most areas of cladding to the extension have continued to perform for some years.
- 6.3 In order to determine whether the authority correctly exercised its power in refusing to issue a code compliance certificate for this extension, I must therefore consider whether the claddings comply with the weathertightness and durability provisions of the Building Code that was current at the time the consent was issued.

7. Discussion

7.1 Weathertightness risk

- 7.1.1 This extension has the following environmental and design features, which influence its weathertightness risk profile:

Increasing risk

- the extension is two-storeys high
- the extension has two types of wall claddings and some complex junctions
- some walls have weatherboard cladding fixed directly to the framing
- apart from a deck recess, there are no eaves to shelter the cladding
- the extension has an upper deck, with tiled floor and fully clad balustrades
- external wall and deck framing may not be treated to a level that provides sufficient resistance to decay if it absorbs and retains moisture.

Decreasing risk

- walls have textured fibre-cement cladding fixed over a drained cavity.

- 7.1.2 Using the E2/AS1 risk matrix to evaluate these features, elevations are assessed as having a high weathertightness risk rating. If current E2/AS1 details were adopted to show code compliance, drained cavities would be required for all claddings. Although this was not a requirement at the time of construction in 2003, I note that drained cavities are installed behind the textured fibre-cement cladding.

7.2 Performance

- 7.2.1 Generally wall claddings appear to have been installed in accordance with good trade practice and the manufacturer's instructions at the time. Apart from the deck area and the lower east elevation, the consented extension appears to have remained weathertight for more than 10 years, but the expert has identified discrete areas that require attention.
- 7.2.2 Based on the expert's comments and photographs, I consider that the following areas require further investigation, maintenance and/or repairs:
- maintenance and paintwork as outlined in paragraph 5.6.2 (E2.3.2, B2.3.1)
 - repairs to plywood and battens over concrete block walls (E2.3.2, B2.3.1)
 - provision for drainage to bottom of cladding over concrete block walls (E2.3.5, B2.3.1)

- structural confirmation of deck and bracing changes (B1, B2.3.1)
- insulation to sub-floor walls (H1)
- lack of a handrail to the external stairs along the west elevation (D1.3.3(j))

Upper deck and balustrades (E2.3.2, B2.3.1)

- junction of weatherboard balustrade cladding to fibre-cement wall cladding
- downpipe re-connection to deck outlet
- moisture penetration into the balustrade framing
- further investigation of the deck balustrade to establish:
 - extent of moisture penetration and timber damage (B1)
 - all causes of the leaks
 - any other defects in construction.
- further investigation of the water-stained deck soffit to confirm the:
 - weathertightness of the deck floor
 - condition of the deck floor substrate and framing (B1).

7.2.3 I also note that the expert's report identified a number of items in regard to the recladding work carried out on most of the original walls. As outlined in paragraph 1.5.2, although the compliance of this work is not assessed within this determination, I draw the expert's comments to the parties' attention for appropriate resolution.

7.3 Conclusion

- 7.3.1 I consider the expert's report establishes that the current performance of the building envelope to the consented extension is not adequate because there is evidence of moisture penetration into several areas of the timber framing. Consequently, I am satisfied that the cladding currently does not comply with Clause E2 of the Building Code. Without a structural review, there is insufficient evidence to establish whether the extension complies with Clause B1.
- 7.3.2 The extension is 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, and that includes the requirement for the extension to remain weathertight. 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. Because of the past and current moisture penetration into the deck and balustrades with the possibility of undiscovered damage to framing, I am satisfied that the claddings and timber framing have not complied with Clause B2.
- 7.3.3 Because the identified moisture penetration, cladding faults and lack of insulation occur in discrete areas, I am able to conclude that satisfactory investigation and rectification of areas outlined in paragraph 7.2.2 will result in the extension being brought into compliance with Clauses B1, E2, B2 and H1 of the Building Code.
- 7.3.4 It is emphasised that each determination is conducted on a case-by-case basis. Accordingly, the fact that particular cladding systems have been established as being code-compliant in relation to a particular building does not necessarily mean that the same cladding system will be code-compliant in another situation.

- 7.3.5 I also note there are many variations in the as-built extension from the consent drawings (see paragraph 5.2.3), and I leave the appropriate documentation of those changes to the parties to resolve.
- 7.3.6 The expert's photographs indicate a lack of finishing/maintenance in a number of areas (see paragraph 7.2.2). 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, including examples where the external wall framing of the building may not be treated to a level that will resist the onset of decay if it gets wet (for example, Determination 2007/60).

8. What happens next?

- 8.1 The applicants should develop and submit a detailed proposal to the authority to address the matters of investigation and non-compliance noted herein, produced in conjunction with a person suitably experienced in weathertightness remediation. This should be submitted to the authority for its consideration and approval. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

9. The decision

- 9.1 In accordance with section 188 of the Building Act 2004, I hereby determine that, for the work described in building consent No. AC/02/09264:
- external wall claddings do not comply with Building Code Clauses E2 and B2
 - the subfloor walls do not comply with Building Code Clause H1
- and accordingly, I confirm the authority's decision to refuse to issue a code compliance certificate for the building consent.
- 9.2 I have insufficient evidence to make a decision in respect of the compliance of the deck and balustrade framing with respect to Building Code Clauses B1 and B2.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 11 November 2015.

John Gardiner
Manager Determinations and Assurance