



Determination 2015/050

Regarding the refusal to issue a code compliance certificate for a 19-year-old house with a 14-year-old addition at 19A John Rymer Place, Kohimarama, 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 and its history.

The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ ("the current Act") made under due authorisation by me, John Gardiner, Manager Determinations and Assurance, Ministry of Business, Innovation and Employment ("the Ministry"), for and on behalf of the Chief Executive of the Ministry.
- 1.2 The parties to the determination are
 - the owner of the house, G Moore ("the applicant")
 - Auckland 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 an extended 19-year-old house because it was not satisfied that the building work complied with certain clauses² of the Building Code (First Schedule, Building Regulations 1992).

Tel: +64 4 901-1499

15 Stout Street, Wellington 6011 PO Box 1473, Wellington 6140, New Zealand

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, unless otherwise stated, references to sections are to sections of the Building Act 2004 and references to clauses are to clauses of the Building Code.

1.4 The matter to be determined³ is therefore whether the authority was correct to refuse to issue the code compliance certificate for the reasons given in its letter dated 1 December 2014. In deciding this matter, I must consider:

- (a) whether the external building envelope of the house complies with Clause B2 Durability and Clause E2 External moisture of the Building Code that was in force at the time the consents were issued. The building envelope includes the components of the systems (such as the monolithic wall cladding, the precast concrete panels, the deck, the windows and the roof cladding) as well as the way the components have been installed and work together. I consider this in paragraph 6.3.
- (b) whether other items identified by the authority comply with relevant Building Code clauses: namely Clauses E1 Surface Water, F4 Safety from falling and G12 Water supplies. I consider this in paragraph 6.4.

1.5 The building consents

- 1.5.1 This determination considers work undertaken under building consents issued for:
 - the original house:
 - o B1995/3809570 on 4 December 1995 for two new dwellings ("the original consent"), which included the original house at 19A
 - the extension to the house:
 - AC/01/15249 on 17 October 2001 for 'Addition of bedroom/ensuite and sitting room' ("the 2001 extension")
 - o AC/01/16492 on 22 November 2001 for 'Amend AC/01/15249 Change roof layout to meet planning requirements' ("the extension amendment").

1.6 Matters outside this determination

- 1.6.1 This determination does not consider the adjacent dwelling on the same leasehold property. The adjacent dwelling was constructed under the original building consent along with 19A but is separately owned. The adjacent dwelling also has a current building consent (No. 2014/15147 issued on 19 February 2015) for cladding replacement, which is also not included within the matter in paragraph 1.4.
- 1.6.2 A notice to fix was issued to the applicant on 20 July 2005, which has now been superseded by the 2014 final inspection. The matter to be determined is the authority's refusal dated 1 December 2014; the 2005 notice to fix is therefore not considered in detail.
- 1.6.3 When applying for the code compliance certificates for the subject house, the applicant 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 1997 for the original house and 2001 for the extension. Although I leave this matter to the parties to resolve in due course, I comment on this in paragraph 6.3.1 and paragraph 7.
- 1.7 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.

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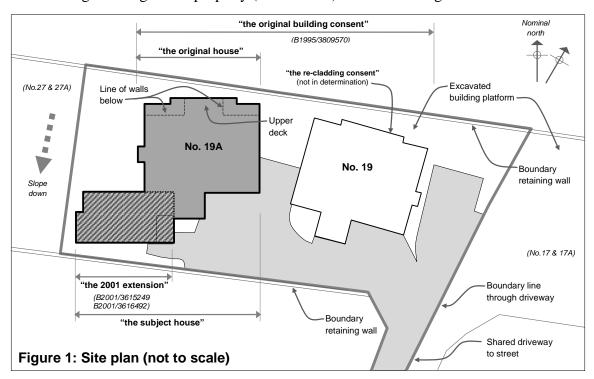
³ Under sections 177(1)(b) and 177(2)(d) of the Act

2. The building work

2.1 The development

2.1.1 The house is part of a larger development on an excavated south-sloping site in a high wind⁴ zone as described in NZS 3604⁵. Retaining walls created building platforms extending across the slope to include neighbouring two-unit properties.

2.1.2 The house which is the subject of this determination (No.19A) was originally constructed under the same original building consent as the adjacent house (No.19). Both houses had very similar designs, construction and materials and share the same leasehold property, with driveway access to the street also shared with the neighbouring 2-unit property (17 and 17A) as shown in Figure 1.



2.2 The subject house (19A)

- 2.2.1 The building work consists of a detached house that is two storeys high with an attached single-storey extension. The expert takes the garage doors as facing south and this determination follows that convention.
- 2.2.2 Construction of the original house is generally conventional light timber frame, with concrete foundations and floor slab to the garage, and timber pile foundations elsewhere. The timber-framed walls were clad in a monolithic system, with aluminium windows and asphalt shingle roofing. The 2001 extension includes precast concrete wall panels with timber framed infills beneath windows.
- 2.2.3 The 22° pitch gable roofs are set at various levels with some flat membrane areas. The roofs have eaves and verge projections of about 300mm to 450mm overall. Although fairly simple in plan and form, the completed house includes some complex junctions and is assessed as having a high weathertightness risk.

⁴ According to the bracing calculations

⁵ New Zealand Standard NZS 3604:1999 Timber Framed Buildings

2.2.4 The expert was unable to identify timber treatment and I have received no evidence of treatment. Given the dates of framing installation in 1996 and 2001 and the timber damage observed by the expert, I consider that the external framing is unlikely to be treated to a level that will provide ongoing resistance to fungal decay.

2.3 The wall cladding

- 2.3.1 The original consent documents called for the cladding to be a monolithic cladding system described as stucco over a solid backing, which consisted of 4.5mm rigid backing sheets fixed through the building wrap directly to the framing timbers, and covered by a slip layer of building wrap, metal-reinforced 20mm thick solid plaster and a flexible paint coating.
- 2.3.2 The expert was able to observe the back of the cladding from the sub-floor and at a cut-out, noting that the stucco had been installed over a flexible backing. In this instance it appeared to consist of metal mesh reinforced solid plaster fixed through the building wrap directly to the framing timbers. The expert noted that it was possible fibre-cement backing sheets had been used for upper floor walls.
- 2.3.3 A proprietary plaster coating system was applied to the plaster cladding in 2014. The coating system is a component of a BRANZ appraised cladding system and is described in the appraisal as 'an approximate 2.5mm thick coat of meshed reinforcement plaster and an approximate 1-3 mm thick coat of coloured render' which, in this instance, is applied to the existing plaster surface. The textured render is finished with a proprietary paint coating.
- 2.3.4 The manufacturer of the plaster system provided a 10 year materials warranty and the applicator provided a 5 year warranty for the application of the plaster system 'over the existing stucco plaster', which covered the repair of 'any premature breakdown... ...directly attributable to any application defect or non-compliance' of the plaster system.

2.4 The decks

- 2.5 A tiled deck extends along the north face of the upper floor, with the central section built over a living space and the west and east ends supported on monolithic-clad balustrades. The tiles are adhered to a butyl rubber membrane and plywood substrate and the deck floor drains into four outlets through the clad balustrades, which discharge onto the paving below.
- 2.5.1 A series of exterior timber framed platforms, steps and planters are constructed at ground levels around the north and sides of the house, with paved concrete areas beneath the overhangs of the upper deck.

3. Background

3.1 The original construction

- 3.1.1 The authority issued the original building consent (B1995/3809570) under the Building Act 1991 ("the former Act") to a developer for two new dwellings. Although I have not seen a copy of this building consent, I note that the consent drawings for the '2 unit housing development' were stamped and endorsed by the authority on 4 December 1995.
- 3.1.2 The houses at 19 and 19A were built concurrently and the authority made various inspections during construction, including pre-line inspections from November 1996 to January 1997. The last inspection noted in the authority's inspection summary

was a drainage test on 21 March 1997. The developer subsequently went into receivership and the applicant (a builder) purchased the original house without it having a code compliance certificate issued against the original consent.

3.2 The 2001 extension

- 3.2.1 The authority issued another building consent (AC/01/15249) under the former Act to the applicant on 17 October 2001 for 'Addition of bedroom/ensuite and sitting room' ("the 2001 extension"). A subsequent amendment to this consent (AC/01/16492) was issued on 22 November 2001 for 'Change roof layout to meet planning requirements'.
- 3.2.2 The authority carried out various inspections during the construction of the extension but no final inspection was carried out. In a letter dated 14 November 2003 the authority requested advice on the status of the building works.

3.3 The 2005 notice to fix

- 3.3.1 The authority carried out a final inspection of the extended house on 12 July 2005 and issued a notice to fix to the applicant on 20 July 2005. The notice identified a number of defects, most of which related to the durability of the wall cladding.
- 3.3.2 The letter accompanying the notice concluded that:

[The authority] would recommend that you engage the services of a suitably qualified person to review the attached NTF and to develop a proposed scope of work, which in their view would address all the areas of contravention. [The authority] will then review this proposal and if it agrees with it, will then advise you as to whether a building consent needs to be applied for.

3.4 The repairs

- 3.4.1 I have seen no evidence of further correspondence between the parties and it appears the original house had been leaking over a prolonged period; suffering moisture damage as a result. Without seeking approval from the authority, the applicant carried out repairs in 2014 that included replacing some decayed flooring and timber blocking beside the north and west walls of the original lower level.
- 3.4.2 In August 2014 the applicant also arranged for a proprietary plaster system to be installed over the original stucco plaster claddings (as outlined in paragraph 2.3.3). The expert noted that the new plaster system was not applied to all existing stucco walls of the extended house.

3.5 The 2015 refusal to issue a code compliance certificate

3.5.1 On completion of the repairs, the applicant applied for code compliance certificates for the extended house. The authority inspected the house on 27 November 2014 and wrote to the applicant on 1 December 2014 to advise that

...under Section 95A of the Building Act 2004 a [code compliance certificate] cannot be issued at this time.

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.

- 3.5.2 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.

Note: Please do not commence any remedial work until approved by [the authority] this work may require an application for a new building consent.

- 3.5.3 The authority noted that its identified areas of concern included, but were not limited to (in summary):
 - Item 1: The notice to fix process requirement (see paragraph 3.3.2)
 - Item 2: Non-compliance and concern regarding B1, B2, E1, E2, F4 and G12
 - Item 3: Remediation work completed without authority's knowledge
 - Item 4: Elevated internal moisture readings
 - Item 5: Cladding to ground clearances
 - Item 6: Floor to ground level clearances
 - Item 7: Head flashings
 - Item 8: Cladding cracks sealed
 - Item 9: Tiled deck membrane, deck outlets
 - Item 10: Falls to flashings
 - Item 11: Deck outlets not connected to stormwater
 - Item 12: Balustrade to wall junctions
 - Item 13: Lack of access to inspect roof
 - Item 14: PVC plumbing from water heater to exterior
 - Item 15: Subfloor ventilation
 - Item 16: Safety from falling from upper bedroom windows
 - Item 17: Smoke alarms.
- 3.6 The Ministry received an application for a determination on 10 December 2015 and sought further information from the parties, which was received on 27 February 2015.

4. The submissions

- 4.1 The applicant made no submission with the application but provided copies of:
 - the consent drawings for the original building and the extension
 - the building consents for the extension
 - the notice to fix dated 20 July 2005
 - the authority's refusal dated 1 December 2014
 - warranties from the plaster coating company.

4.1.1 The authority forwarded a CD-Rom, entitled 'Property File', which contained documents pertinent to this determination including:

- the original consent documentation
- the extension consent documentation
- the inspection records
- the letter attaching the notice to fix dated 20 July 2005
- various letters to the applicant
- various photographs and other information.
- 4.2 A draft determination was issued to the parties for comment on 25 May 2015.
- 4.3 The authority responded by email on 8 June 2015, accepting the draft without further comment.
- 4.4 Despite reminders sent on 30 June and 21 July 2015, the applicant did not respond to the draft.

5. The expert's report

As mentioned in paragraph 1.7, I engaged an independent expert to assist me who is a member of the New Zealand Institute of Architects. The expert inspected the house on 13 April 2015, providing a report completed on 18 May 2015. The parties were provided with a copy of the report on 20 May 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 letter of refusal dated 1 December 2014, and to assess code compliance of the building with the associated parts of Clauses B2, E1, E2, F4 and G12 identified by the authority.
- 5.2.2 Because the cladding on the original house was 19 years old and beyond the 15 year durability period set out in the Building Code, the expert noted that the focus of his investigation was whether the cladding had performed adequately since construction or 'whether moisture ingress during that period led to premature deterioration of the framing for which the durability period is 50 years.' The expert noted that the cladding to the extension is now about 14 years old.
- 5.2.3 The expert observed the following variations from original consent drawings:
 - in the original house
 - o a framed clad 'chimney' added to the west elevation
 - o arched windows replaced with rectangular joinery
 - o curve to upper north wall and deck balustrades changed
 - o deck changed from cantilevered by moving support columns
 - o changes to the south entry area
 - in the 2001 extension
 - o timber framed panels added under the windows
 - o change in shower room layout
 - o window added to west elevation

- o flat membrane roof areas not shown in drawings.
- 5.2.4 The expert also noted changes made to the house after completion, including:
 - various ground level decks and planters added
 - metal cappings to deck balustrades added
 - replacement of flooring and floor framing in 2014
 - repairs to the cladding made in 2014
 - new plaster coating applied in 2014.

5.3 Moisture testing and destructive investigations

- 5.3.1 The expert inspected the interior, observing that linings and trim had been recently redecorated and the current condition therefore provided little evidence of past performance. However, the expert noted soft and swollen plasterboard at the dining area window and also at the upper level southeast corner, where particle board flooring was water stained.
- 5.3.2 The expert took invasive moisture readings using long probes from the inside at various sample locations considered at-risk and recorded:
 - 21% and 22% in bottom plates to the extension south wall
 - 43% in the bottom plate to dining area north wall (sample 4)
 - 29% to an upper north deck joist
 - 36% in the upper deck balustrade top plate
 - over 18% at deck balustrade/wall junction
 - 21% in boundary joist to west ground floor (sample 2)
 - 23% at the sill/jamb junction to a lower east window (sample 1)
 - over 18% in the bottom plate at the upper southeast corner.
- 5.3.3 I note that readings over 18% generally indicate that moisture is entering the framing and further investigation is needed. The expert also noted that less than 50% of readings taken were under 18%, and these could also be expected to be higher during winter months.

5.4 The decayed samples

- 5.4.1 Sample 1 was taken from the bottom plate under a lower east window sill/jamb junction, where high moisture levels were recorded and a waste pipe penetrates cladding above. The expert removed a small section of lining from the inside of the wall and observed obvious decay in the framing and sample.
- 5.4.2 Sample 2 was taken from the boundary joist to the west ground floor and the expert noted that the sample 'had black mould on it, was brittle and obviously decayed'.
- 5.4.3 Sample 3 was extracted from a 'black, soft and obviously decayed' floor joist below the dining area.
- 5.4.4 Sample 4 was taken from the bottom plate under the dining area north window where swollen soft plasterboard and high moisture levels were noted. The expert removed a small section of lining from the inside of the wall and observed obvious decay in the framing and sample.

5.4.5 The expert did not forward the samples for decay analysis as they were obviously severely decayed. The expert did not continue with further investigation as other high moisture readings made it 'clear that there were likely to be other areas of damage'.

5.5 The subfloor and clearances (samples 2 and 3)

- 5.5.1 The expert inspected framing and flooring visible from within the subfloor space, observing the extent of repairs carried out in 2014 and noting:
 - the site slope and the discharge of deck outlets onto north paving results in rain water running into the subfloor
 - there is no subfloor ventilation to the south and east and only small areas to the west
 - about 600mm of new flooring had been installed to a perimeter strip from the northeast corner of the dining area to the southwest corner of bedroom 5
 - new solid blocking was added between existing joists at the junction of the old and new flooring, with no under floor insulation installed under the latter
 - some areas of the original joists were water stained and decayed (sample 3), and remnants of removed decayed materials had been left on the ground
 - leaking was likely to be caused by the lack of clearances from paving and decking to the stucco, which had not been altered (sample 2)
 - at the north dining area wall, two deck outlets above discharge directly onto paving adjacent to the floor, adding to the water load at the junction
 - the decay in the remnants indicated that leaking had been occurring over a long period, starting well before the expiry of the 15-year durability of the cladding.
- 5.5.2 The expert observed the lack of separation between stucco and adjacent soil, paving, or decking on all elevations, which had lead to water wicking through the plaster and into the floor framing. The expert concluded that this 'is certainly one of the causes of leaks and decay to the floor and floor joists on the north and west where repairs were made in 2014.

5.6 Windows (samples 1 and 4)

- 5.6.1 The expert inspected the doors and windows, observing head flashings and noting:
 - joinery fixed flush with the face of the plaster, with a plastered planted border covering edges of the aluminium frames
 - sill flanges buried in the plaster, preventing moisture from escaping to outside
 - decayed framing under garage window (sample 1) and dining area window (sample 4), which appears to have been the result of one or a combination of:
 - o moisture penetrating window frame to stucco junctions
 - o moisture penetrating framing from the upper deck above the dining area
 - o moisture penetrating a waste pipe penetration above the garage window.

5.7 The new plaster coating

5.7.1 The expert inspected the 2014 plaster coating, noting the change in texture indicated that some areas of the original stucco had not been coated. The expert noted that:

• the new coating had been applied around all windows and doors and masks any pre-existing stucco damage or cracks

- over-spraying on adjacent decking showing that recoating stopped at deck level
- after the new textured coating was applied, a horizontal inter-floor control joint was cut into plaster on the south, west and east elevations likely in response to cracking at those junctions.

5.8 The upper deck

- 5.8.1 The expert observed that the upper deck membrane floor was tiled and balustrades were stucco-clad on both sides with a metal capping to the top, and noted that:
 - at the balustrade/wall junction, the top of the capping turns up to fit into a chase cut into the stucco (I consider it likely that the capping was installed as repairs as it is not shown in the consent drawings⁶)
 - there is no clearance from deck tiles to the stucco
 - the deck slope is 0.3°, which risks ponding and moisture penetration
 - deck outlets are membrane-dressed holes through the balustrades and membrane edges are loose, allowing moisture to drain into the framing
 - two outlets discharge directly onto ground level paving at the dining wall
 - a TV satellite dish is fixed into the top of the capping.
- 5.8.2 The expert considered that the high moisture levels in deck and balustrade framing were likely due to one or a combination of the above defects and further investigation is needed as this could have lead to decay in the timber.

5.9 The 2001 extension

- 5.9.1 The precast concrete panels to the extension walls include timber-framed infill panels beneath windows, with plaster carried over junctions. At the north wall, there is a narrow gap to an exterior retaining wall and the infill beneath the bedroom window is clad in unpainted fibre-cement sheet.
- 5.9.2 At the south wall, the expert noted:
 - plastered timber-framed infill panels are installed under the windows
 - the plaster over the timber/concrete junctions has cracked at a corner junction
 - high moisture levels in an adjacent bottom plate indicate moisture is entering.
- 5.9.3 The expert also noted that the apron flashing to the extension roof/wall junction includes an upstand against the original house wall. The top of the upstand is inserted into a chase cut into the stucco and the joint is poorly sealed in places.

5.10 The authority's other concerns

- 5.10.1 The expert assessed the compliance of other items identified by the authority, noting:
 - in regard to Clause E1 Surface water:
 - o the northeast corner downpipe discharges above a uPVC surface drain, with a right-angle bend open to blockage from debris

⁶ I note the alterations to the neighbouring house (built concurrently by the same builder to the same design) include removing the upper deck

- in regard to Clause F4 Safety from falling:
 - o the main internal staircase lacks a central barrier
 - o the upper windows lack sash stays to restrict openings.

5.11 The authority's list of concerns

5.11.1 The expert also assessed the list of concerns identified by the authority in its refusal. Table 3 summarises the expert's responses and I have added my comments in brackets where I consider appropriate.

Table 3

Areas of concern per S95A refusal (in summary)		Comment	Relevant paragraphs
1	The 2005 notice to fix process requirement	(A scope of works for repairs carried out in 2014 was not submitted for approval)	3.3.2 3.4.1
2	Non-compliance and concern regarding B1, B2, E1, E2, F4 and G12	B1, G12: Inspection limited Remaining concerns agreed	5.4.5 5.3 to 5.9
3	Remediation work completed without authority's knowledge	Agreed (no proposal submitted or consent sought)	5.2.4
4	Elevated internal moisture readings	High moisture levels Decay found	5.3.3 5.4
5	Cladding to ground clearances	Agreed	5.5.2
6	Floor to ground level clearances	Agreed	5.5.2
7	Head flashings	High moisture levels under some windows	5.6
8	Cladding cracks sealed	New coating masks old cracks	5.7
9	Tiled deck membrane, deck outlets	Agreed	5.8
10	Falls to flashings	Sills unable to drain to outside	5.6.1
11	Deck outlets not connected to stormwater	Agreed	5.8
12	Balustrade to wall junctions	Agreed Moisture elevated at one junction	5.8 5.3.3
13	Lack of access to inspect roof	Inspection limited – not assessed	5.4.5
14	PVC plumbing from water heater to exterior	Inspection limited – not assessed	5.4.5
15	Subfloor ventilation	Appears inadequate	5.5.1
16	Safety from falling from upper bedroom windows	Agreed	5.10.1
17	Smoke alarms	Inspection limited – not assessed	5.4.5

5.12 Summary

5.12.1 The expert stated that his investigation:

...was cut short after decayed framing was found in four locations, with at least three different causes, high moisture readings were found in other locations and it became clear there were likely to be other areas of damage. A comprehensive investigation is necessary to record all damage and defects [which] is outside the scope of this investigation.

- 5.12.2 The expert considered that the house was 'suffering from the effects of water ingress over a substantial period' as a result of various defects in the external envelope and this had caused decay to the framing in several areas; concluding that the building did not and currently does not comply with Clause E2 and B2 of the Building Code.
- 5.12.3 The expert concluded that the following areas required further investigation and/or remedial work (I note that this is not necessarily a full list of defects):
 - cladding clearances
 - window to wall junctions
 - the upper deck and balustrades
 - further investigation to establish the:
 - o extent of moisture penetration and timber damage
 - o all causes of the leaks
 - o other defects in the construction.

6. Compliance of the building work

- Inote that the building consents considered in this determination were issued under the former Act, and accordingly the transitional provisions of the current Act apply when considering the issue of a code compliance certificate for work completed under these consents. Section 436(3)(b)(i) of the transitional provisions of the current Act requires the authority to 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 In order to determine whether the authority correctly exercised its power in refusing to issue a code compliance certificate for this house, I must therefore consider whether the stucco cladding complies with the relevant clauses of the Building Code.

6.3 The external building envelope

6.3.1 I note that an application can be made to the authority for a modification of durability requirements to allow durability periods to commence from the dates of substantial completion in 1997 and 2001. Although that matter is not part of this determination (see paragraph 1.4), I have taken the ages of the original house and extension into account when considering the performance of the exterior building envelope.

Weathertightness performance

6.3.2 It is clear from the expert's report that the stucco cladding was not been installed in accordance with good trade practice at the time. Taking account of the expert's report, I conclude that considerable work is required to make this house weathertight and durable. Further investigation is necessary, including the systematic survey of

all risk locations, to determine the full extent of any moisture penetration, timber damage and the repairs required.

Weathertightness conclusion

- 6.3.3 I consider the expert's report establishes that the current performance of the building envelope is not adequate because there is evidence of moisture penetration into the timber framing over an extended period of time. Consequently, I am satisfied that the cladding currently does not comply with Clause E2 of the Building Code and also did not comply with Clause E2 for the period required under Clause B2 of the Building Code. Due to the level of timber damage observed by the expert, I am also not satisfied that the framing complies with Clause B1 of the Building Code.
- 6.3.4 The durability requirements of Clause B2 include a requirement for wall claddings to remain weathertight for a minimum of 15 years. Although the original cladding is now 18 years old and the extension cladding is 14 years old, the moisture levels and timber condition observed by the expert indicates that moisture has penetrated the claddings over an extended period, resulting in significant decay and damage. I take the view that such moisture penetration indicates that the cladding has not met the minimum life required by the Building Code and I am therefore satisfied that the building envelope did not comply with the durability requirements of Clause B2.
- 6.3.5 In addition, the expected life of the underlying structure is considerably longer and the claddings need to protect the underlying structure of the original house for the further 32 years required to meet its minimum life of 50 years. Because the cladding faults will continue to allow moisture into the framing (which has a 50-year service requirement) in the future, the building work also does not comply with the durability requirements of Clause B2 insofar as it applies to Clause B1.
- 6.3.6 Final decisions on whether code compliance can be achieved by remediation or recladding, or a combination of both, can only be made after a more thorough investigation of the external envelope and of the condition of the underlying timber framing. This requires a careful analysis by an appropriately qualified expert, with the chosen remedial option submitted to the authority for its approval.
- 6.3.7 I note that the Ministry has produced various guidance documents⁷ on weathertightness remediation which will assist the owner in understanding the issues and processes involved in remediation work to the cladding, and in exploring various options that may be available when considering the upcoming work required.

6.4 The authority's remaining concerns

- 6.4.1 Taking account of the expert's report, as outlined in paragraph 5.10.1, I consider that the following items require attention:
 - in regard to Clause E1 Surface water:
 - o the north east corner downpipe
 - in regard to Clause F4 Safety from falling:
 - o the lack of a central handrails to the main internal staircase
 - o the lack of restriction to opening sashes to upper windows.

Weathertightness guidance documents are available through the Ministry's website at http://www.building.govt.nz/weathertightness-guides

6.4.2 I note the authority identified the lack of smoke alarms (item 17). Although these were not a requirement of the Building Code when the original house was constructed, I strongly urge the owner to install smoke detectors in accordance with current requirements.

6.4.3 I have insufficient information to conclude on the authority's concerns in regard to the plumbing from the water heater (item 14).

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 many previous determinations I have taken the view that a modification of this requirement can be granted if I can be satisfied that the building complied with the durability requirements at a date earlier than the date of issue of the code compliance certificate, that is agreed to by the parties and that, if there are matters that are required to be fixed, they are discrete in nature.
- 7.3 However, because of the extent of further investigation required into the stucco claddings, the condition of the timber framing and therefore the structure of the house, and the potential impact of such an investigation on the external envelope, I am not satisfied that there is sufficient information on which to make a decision about this matter at this time.

8. What happens next?

- 8.1 I note that the original building consent was issued to the developer, and two building consents for the 2001 extension were issued to the applicant. As noted in Determination 2014/035⁸, a notice to fix is not able to be issued to a current owner in respect of breaches of the Act or Regulations in respect of work carried out by a previous owner. In this case the authority is limited to issuing a notice to fix only in respect of the building work carried out as part of the 2001 extension and the unconsented building work.
- 8.2 The applicant should develop and submit a detailed proposal to the authority to address the matters of investigation and non-compliance noted herein; this should be produced in conjunction with a suitably qualified person experienced in weathertightness remediation, and 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.

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⁸ Determination 2014/035: The issue of a notice to fix for weathertightness remedial work carried out by a previous owner

9. The decision

- 9.1 In accordance with section 188 of the Building Act 2004, I hereby determine that:
 - the timber framing does not comply with Building Code Clauses B1 and B2
 - rainwater drainage does not comply with Building Code Clauses E1
 - external wall claddings do not comply with Building Code Clauses E2 and B2
 - the staircase and upper windows do not comply with Building Code Clause F4 and accordingly, I confirm the authority's decision to refuse to issue a code compliance certificate for building consents B1995/3809570, AC/01/15249 and AC/01/16492.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 5 August 2015.

John Gardiner

Manager Determinations and Assurance