

# **Determination 2013/013**

# The refusal to issue a code compliance certificate for a 16-year-old building at 600 McLeans Island Road, Christchurch



# 1. The matters to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004<sup>1</sup> ("the Act") made under due authorisation by me, John Gardiner, Manager Determinations and Assurance, Ministry of Business, Innovation and Employment ("the Ministry"), for and on behalf of the Chief Executive of the Ministry.
- 1.2 The parties to the determination are:
  - the owner of the building, S Shim ("the applicant") acting through a building designer ("the designer")
  - Christchurch City 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 a 16-year-old building because it was not satisfied that the building work complied with certain clauses<sup>2</sup> of the Building Code (First Schedule, Building Regulations 1992).

<sup>&</sup>lt;sup>1</sup> The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Ministry are all available at www.dbh.govt.nz or by contacting the Ministry on 0800 242 243.

<sup>&</sup>lt;sup>2</sup> In this determination, unless otherwise stated, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.

1.4 The matter to be determined<sup>3</sup> is therefore whether the authority was correct to refuse to issue a code compliance certificate. In deciding this, I must consider:

## 1.4.1 Matter 1: The external envelope

Whether the external building envelope of the building complies with Clause B2 Durability and Clause E2 External Moisture of the Building Code that was current at the time the consent was issued. 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 the components have been installed and work together. I consider this in paragraph 6.

# 1.4.2 Matter 2: The requirements of the remaining Building Code clauses

Whether various other elements in the building work comply with the other relevant clauses of the Building Code that was current at the time the consent was issued. I consider this matter in paragraph 7.

# 1.5 The unauthorised changes

- 1.5.1 It is clear that many unauthorised changes from the original building consent have been made to this building including the upper level of the building being converted to bedrooms that are tenanted to golfing students. This work was undertaken at various times since 1996 including; during the original construction, following completion in 1997 to 2005 when an authorised alteration was made, and from 2005 to the recently completed work in late 2012.
- 1.5.2 Taking account of its current condition, this determination also considers whether a certificate of acceptance for this building is an appropriate means of resolving the status of the unauthorised building work. I address this question in paragraph 8.

#### 1.6 Matters outside this determination

- 1.6.1 The authority's record of a meeting with the applicant and designer noted that an application for a modification of Clause B2.3.1 would be required to allow durability periods to commence from substantial completion of the building. I therefore leave this matter to the parties to resolve in due course.
- 1.7 In making my decision, I have considered:
  - the submissions of the parties
  - the post-earthquake report of the engineering consultant ("the earthquake engineer") commissioned by the applicant

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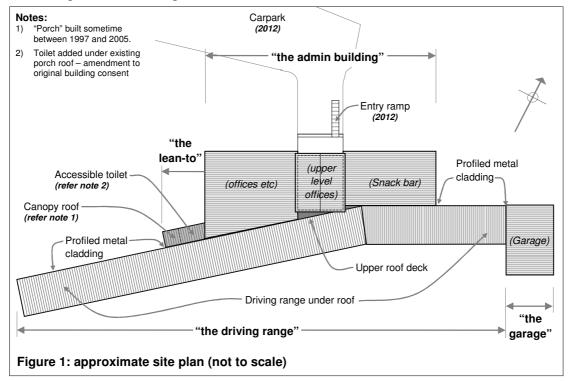
- the 'Fire Safety Design' report by the fire consultant engaged by the applicant ("the fire consultant")
- the report of the expert commissioned by the Ministry to advise on this dispute ("the expert")
- the other evidence in this matter.

<sup>&</sup>lt;sup>3</sup> Under sections 177(1)(b) and 177(2)(d) of the Act

# 2. The building work

2.1 The building work consists of a detached building situated on a level site in a high wind zone for the purposes of NZS 3604<sup>4</sup>. The building accommodates:

- at the front of the building: offices, cafeteria, storage, bedrooms and other facilities ("the admin building")
- a garage building to one side of the admin building ("the garage").
- at the rear of the building a covered driving range, which is about 60m long and links the admin building and the garage ("the driving range")
- an accessible toilet at the side of the admin building ("the lean-to").
- 2.2 The building is generally single-storey, with a small central upper level to the admin building as shown in Figure 1:



- 2.3 The driving range is specifically engineered, with exposed 200UB section steel frames at about 6m centres on concrete block foundations and a raised concrete platform. The remaining construction is conventional light timber frame, with concrete block foundations and concrete floor slabs, uPVC weatherboards, profiled metal cladding on some driving range walls, aluminium windows and doors and profiled metal roof cladding. The expert noted that the visible timber in the building is Douglas Fir, with no evidence of treatment.
- 2.4 The 35° gable roof to the upper level has eaves and verges of about 200mm, while lower pitch roofs are 5° to 8° monopitched roofs with no roof overhangs. The low-pitched roof of the driving range roof slopes towards internal gutters along the admin building. The driving range extends to both sides, with clad walls enclosing the southwest end and the roof terminating against the garage wall at the northeast end.

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<sup>&</sup>lt;sup>4</sup> New Zealand Standard NZS 3604:1999 Timber Framed Buildings

2.5 At the upper level of the admin building, a small membrane-covered deck forms an infill between the upper walls and the range roof and is accessible from one of the bedrooms. The deck floor is set below the surrounding roofs with the clad walls acting as barriers.

#### 2.6 The lean-to

- 2.6.1 Following construction, a 'porch structure' was added to the southwest end of the admin building forming a lean-to canopy against the driving range wall. The canopy appears to have been supported by timber posts and beams, with a metal roof to match existing roof cladding and a door opening onto the driving range platform.
- 2.6.2 In 2005, an accessible toilet was added beneath the existing porch roof, with exterior access to the toilet from the open end of the lean-to, and the door to the driving range remaining.

## 2.7 The wall claddings

- 2.7.1 Most walls are clad in horizontal pre-finished uPVC weatherboards fixed through the building wrap directly to the framing timbers. The proprietary weatherboards have a bevel-backed profile and incorporate an interlocking weather seal between boards. The manufacturer provides moulded corner soakers, flat soakers and various other mouldings. The weatherboard system is appraised by BRANZ<sup>5</sup> as suitable for direct-fixing to framing for buildings with a low or moderate weathertightness risk rating.
- 2.7.2 The admin building and the garage are clad in weatherboards, along with the southwest end of the driving range. The remaining front walls of the driving range are clad in vertical trough section pre-coated galvanised steel fixed directly to the steel frames, leaving the metal cladding exposed on both sides.

# 3. Background

- 3.1 The authority issued a building consent for the building (No CON 96006837) in 1996 under the Building Act 1991. I have not seen copies of the consent, the inspection records or any correspondence during and following construction of the building.
- I note that the building consent drawings (stamped 'amended plans') are dated June 1996, which indicates that the building was likely to have been completed by early 1997. Those drawings show a stairwell enclosed with timber framed walls and leading from the foyer to three offices on the upper level.

# 3.3 The 2005 alterations

- 3.3.1 In 2005, drawings were submitted for the conversion of an existing porch into an accessible toilet and the drawings were stamped as 'consent document' on 22 March 2005. The drawings describe the 'existing porch structure' as a lean-to canopy with a roof to match the remaining roof claddings.
- 3.3.2 In lieu of the stairwell shown in the original drawings, the 2005 drawings also show a free-standing circular staircase with a note stating 'existing "artistic stair" complying with NZBC D/AS1 fig 17' and label the upper rooms as 'stores'.

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<sup>&</sup>lt;sup>5</sup> BRANZ Appraisal Certificate No. 490 (2005)

# 3.4 The post-earthquake damage assessment

3.4.1 As mentioned in paragraph 1.7, the applicant commissioned an assessment of damage to the building following the 22 February 2011 earthquake and the 13 June 2011 aftershock. The earthquake engineer visited the property on 16 July 2011, providing a report dated 19 July 2011, which described the existing driving range structure and the admin building, noting that the latter provided 'office/residential facilities', with some of the rooms 'tenanted to golfing students.'

- 3.4.2 The earthquake engineer noted that the assessment was based on a 'brief walkover inspection' limited to visual aspects of structural elements only, with no destructive testing, no documentation reviewed or 'calculations or other analyses' carried out. The earthquake engineer noted that the report was intended to provide 'best engineering judgements' in regard only to Clause B1 Structure, adding that 'reinspection may be required following further aftershocks.'
- 3.4.3 The earthquake engineer noted 'no signs of liquefaction or ground fissures' or any ground damage or settlement. The report identified some 'aesthetic' cracks in linings, hairline cracks to some concrete block foundation walls and the lack of seismic restraints to the hot water cylinder and suggested repairs to these areas.
- 3.4.4 The earthquake engineer was satisfied that the driving range and the admin building were 'structurally sound' and did not 'pose any potentially structural hazard which requires immediate attention', concluding that the structure:

...had not suffered major structural damages and the principal vertical and lateral load resistance systems of both buildings had performed well in the earthquakes. No major structural repairs or strengthening is required to both buildings...

## 3.5 The final inspection

- 3.5.1 The authority carried out a final inspection on 20 February 2012, which identified many defects, changes from the building consent and other items to be attended to, and noted that 'project not ready for final inspection. In a subsequent letter the authority identified 25 outstanding items, including (in summary with code clauses in brackets):
  - site drainage incomplete (E1)
  - in regard to weathertightness and durability (E2 and B2):
    - o durability of claddings to lean-to
    - o lack of inter-cladding and apron flashings to lean-to
    - o missing downpipe and spreader from upper level
    - o missing head flashing to one door
    - head flashings too short
    - o ground clearances to cladding
    - o unsealed penetrations
    - o insufficient step-down at entry
    - o gutters blocked with no overflow provisions
    - o deck clearances to cladding
    - o gaps to cap flashings
    - o loose metal claddings to upper level

- in regard to other building code clauses:
  - o seismic restraints to hot water cylinder (B1)
  - o incomplete carparking and site drainage (E1)
  - o as-built drainage plan required (E1 and G13)
  - o inadequate barriers to upper deck (F4)
  - o width of accessible toilet and toilet pan height (G1)
- in regard to other matters:
  - o changes to staircase from the building consent
  - o changes to layout and use of building
  - o top floor used for accommodation without appropriate safety systems
  - o no exit or emergency signage installed
- documentation required
  - o report from drainage engineer
  - o fire engineer's report
  - o resource consent for carpark
  - o certificate of public use or code compliance certificate prior to use.
- 3.5.2 A meeting was held onsite with the builder on 20 March 2012 to 'go over list of non compliant items' and the meeting record notes that the builder was 'warned that any work done prior to amended plans being approved will be at builders own risk'.

# 3.6 The fire consultant's report

- 3.6.1 A fire consultant was engaged who reviewed plans and provided a report titled 'Fire Safety Design', dated 19 April 2012. I note here that the plans appended to the report are not dated and identify the upper level as three offices.
- 3.6.2 The consultant noted the building was designed 'to be used as a golf driving range with associated office, storage and relaxation facilities', and identified the purpose group of fire cells for levels one and two as CS/WL<sup>6</sup>. The consultant assessed the drawings against the requirements of Clause C of the Building Code on that basis, concluding that the following should be incorporated into the plans and specifications (in summary):
  - double doors from snack bar to open into foyer
  - automatic entry doors to incorporate override facility
  - doors to escape routes to be able to open without use of keys
  - exit signs to be provided
  - specified fire alarm system to be installed
  - upper floor to have specified fire rating
  - interior surface finishes to have appropriate spread of flame indices
  - emergency lighting to be installed to stairs.

<sup>&</sup>lt;sup>6</sup> Schedule 2 of the Building (Specified Systems, Change the Use, and Earthquake-prone Buildings) Regulations 2005 CS (Crowd Small): enclosed spaces (without kitchens or cooking facilities) where 100 or fewer people gather for participating in activities. WL (Working Low): spaces used for working, business or storage – low fire load.

# 3.7 The authority's refusal to amend the consent

- 3.7.1 Drawings were apparently submitted with an application for an amendment to the building consent and the authority wrote to the applicant on 30 April 2012 stating that the application had been declined for the following reasons:
  - Age of building consent (16 years)
  - Scope of work has changed/increased
  - New work requires a new consent.
- 3.7.2 The authority required a 'new separate application for building consent' to be made for the new work and requested a:
  - ...pre-application meeting where 'issues such as fire, structure, change of use (partial?), and accessibility can be identified for your attention.'
- 3.7.3 A meeting was subsequently held with the applicant, the builder, and the designer on 9 May 2012 and the authority's record of that meeting notes the following (in summary):
  - Building Code issues:
    - o the building is operating without a code compliance certificate
    - o minor remedial work is needed to the building
    - o smoke alarms should be installed in meantime
  - town planning issues:
    - o there are three bedrooms in the upper level one residential unit is permitted across the whole site
    - o parking numbers must be assessed based on the recreational activity
    - o a resource consent may be needed if PIM shows non-compliance
  - a new building consent is needed to include:
    - o the change of use to part residential for the proposed work
    - o accessible routes to toilet and entry
    - o a new compliant staircase
    - o appropriate signage
    - o carpark including drainage
    - o a fire report, including residential use in building
    - o an accessibility report is needed.
  - other compliance matters:
    - application for waiver of durability required.
- 3.8 The designer apparently made some changes to the drawings, which are dated May 2012 and re-submitted them to the authority on 16 May 2012, presumably for a new building consent. I am not aware of correspondence or discussions relating to that application.

# 3.9 Subsequent building work

- 3.9.1 Notwithstanding the lack of consent, significant building work was carried out. The designer has submitted photographs showing that alteration and site work included:
  - carparking for 10 vehicles, driveway and associated site drainage

- timber ramp installed to entry of building
- removal of open circular stairs in entry foyer
- construction of a new staircase up to an altered upper landing.

3.9.2 During foyer alterations, a registered structural engineer inspected the existing steel beams and supports and submitted a Producer Statement – PS4 – Construction dated 26 September 2012.

# 3.10 The authority's refusal to issue a CCC

- 3.10.1 In a letter to the applicant dated 26 October 2012, the authority referred to its February inspection findings and its subsequent refusal to amend the original building consent. The authority refused to issue a code compliance certificate for building work under the original consent.
- 3.10.2 The authority stated that the reasons for its refusal were:
  - Items of non compliance identified at the last building inspection. These items
    of non compliance relate to the building consent issued and non compliance
    with the Building Code 1992.
  - Due to the age of the consent the durability requirements as set out in B2 of the New Zealand Building Code 1992 have been exceeded.
  - Repeated requests for information during the building consent process have not been attended to.

(The third bullet point above is presumed to relate to the application for a new building consent as required by the authority, which apparently has not yet been approved.)

3.11 The Ministry received an application for a determination on 16 November 2012.

## 4. The submissions

- 4.1 The designer made no submission on the applicant's behalf and forwarded copies of:
  - the original 1996 consent drawings
  - the 2005 amended drawings
  - the earthquake engineer's report dated 19 July 2011
  - the final inspection record
  - the fire consultant's report dated 19 April 2012
  - additional construction photographs of recent building work
  - some correspondence and meeting records from the authority.
- 4.2 The authority made no submission in response to the application.
- 4.3 A draft determination was issued to the parties for comment on 5 February 2013.
- Both parties accepted the draft without further comment, with the final response received on 26 February 2013.

# 5. The expert's report

As mentioned in paragraph 1.7, I engaged an independent expert to assist me. The expert is a member of the New Zealand Institute of Building Surveyors. The expert inspected the building on 11 December 2012 and completed a report dated 18 December 2012.

5.2 The expert noted that his assessment was focussed on the weathertightness and durability of the cladding, together with changes from the consent drawings and implications of those changes on the structure, and the change of use relating to sleeping accommodation.

# 5.3 Variations from drawings

- 5.3.1 The expert noted variations from original and amended consent drawings, including:
  - in cafeteria area
    - o wall omitted between kitchen and snack shop
    - kitchen layout changed
    - windows and door changed
  - in foyer area
    - o south door sidelights added, leading to angled/exposed stair landing
    - o walls to pro shop/office changed
    - o entry canopy not constructed
    - o ramp added to main entry
  - in admin area
    - o classroom changed to two offices
    - o showers added to ablution areas
  - in upper level
    - o offices changed to bedrooms
    - door added to access roof deck
    - windows added
  - in garage
    - o window added
    - o no lining installed as a bracing element.
  - in driving range
    - o door to lean-to added
    - o door to garage changed
    - o opening beside garage added
  - lean-to accessible toilet layout changed.

# 5.4 Weathertightness

#### General

5.4.1 The expert considered the construction quality to be very poor, with work incomplete in some areas and the uPVC weatherboards not fixed in accordance with the manufacturer's instructions. The claddings showed a reliance on sealants as a 'first line' barrier to the entry of moisture, with 'little consideration given to sealing and weatherproofing the cladding systems to prevent water entry'.

5.4.2 The expert also noted that claddings had not been well maintained, with damage to some areas, loose cladding, corrosion to steel posts and roofing, lifting membrane and roof flashings, blocked gutters, missing gutter brackets and holes in gutters.

#### Moisture levels

- 5.4.3 The expert inspected the interior of the building and took non-invasive moisture readings through interior linings, noting that readings were 'within an acceptable range' when compared to a control reading on an internal wall. However the expert noted some obvious signs of moistures including
  - swollen skirting beside the accessible toilet door
  - damaged flooring at the door to the upper roof deck
  - adjacent to shower enclosures.
- 5.4.4 The expert also inspected the exterior and noted obvious areas where moisture could penetrate through the claddings, via cladding damage, holes and gaps, exposed timbers, unflashed junctions, peeling membrane and unsealed penetrations. In view of the significance and extent of cladding defects, the expert did not consider it necessary to carry out invasive moisture testing of the framing.

## **External envelope**

5.4.5 Commenting specifically on the external envelope, the expert noted that:

#### Wall claddings

- wall junctions are not weatherproof, with unplugged gaps, missing and/or incorrectly fitted jointers and jointers not in accordance with the uPVC manufacturer's instructions
- there are many areas where claddings are damaged, loose or poorly patched, with holes and gaps allowing moisture to penetrate
- junctions between the weatherboards and metal cladding are not flashed
- many areas lack sufficient clearance from the cladding to the paving and sufficient step up from the exterior paving or ground to interior floor levels
- penetrations through the cladding for plumbing pipes and cables are unsealed
- steel portal beams penetrate claddings, relying on sealant for weatherproofing and other junctions are unflashed
- building wrap visible from the upper roof space is damaged and/or missing

• the lean-to posts appear to be untreated and the bottom of the posts are set into concrete (I note that the lean-to was an open canopy prior to the toilet addition and there may be further posts within the wall.)

#### Windows and doors

- ends of head flashings do not extend past the window jamb flanges
- there are many unplugged gaps at jamb flanges to weatherboard junctions
- there is no head flashing fitted to the timber door in the framed wall at the end of the driving range
- the garage door jambs butt against the boards, with no cover or flashings
- at the projecting kitchen window, the fibre-cement soffit is unsealed and the membrane roof upstand overlaps weatherboards and is peeling away

#### The roof deck

- the upper wall cladding butts against the deck membrane, with no drip edge
- the junction of the deck barrier walls with upper walls is unflashed
- a metal corner flashing butts against the deck membrane
- the upper wall butts against flat metal sheet, with no backflashing
- the sills to the deck door are not weatherproof, with wet and damaged flooring adjacent to the door

#### *The roof claddings*

- the roofing is corroding and damaged in some areas, with loose nails and lifting flashings
- roof to wall junctions are not weathertight, with some areas lacking saddle and/or apron flashings
- there are no downpipes fitted to the upper roof gutters
- the internal gutter lacks provision for overflow and has blocked, with rotten timber apparent at upper end of the gutter
- further investigation is needed, including removing roofing, gutter membrane and substrate to establish the extent of moisture penetration and timber damage to the underlying framing.

# 5.5 Compliance with the other building code clauses

5.5.1 The expert also observed some other items that affect compliance with some of the relevant clauses of the Building Code and made the following comments. I have expanded on these comments where appropriate.

#### 5.5.2 B1 Structure

- Changes made from the consent drawings will impact on the bracing.
- Surface rust is developing on many areas on steel portal frames.
- Boulders are visible within the foundation concrete to the lean-to.

• Decay to some roof framing may have reduced the structural strength of the timbers, which needs investigation.

• There are no seismic restraints fitted to the hot water cylinder and header tank.

#### 5.5.3 D1 Access

- The dimensions of the entry ramp fall short of the requirements for such ramps as described in D1/AS1 (the edge upstand being 50mm not 75mm, and the handrail being 880mm high and not 900mm). The ramp was 260mm high at its highest point.
- There was a 50mm concrete kerb on the route between the accessible carport and the ramp

#### 5.5.4 C Clauses

• The rooms in the upper level have undergone a change of use from offices to sleeping accommodation.

#### 5.5.5 E3 Internal moisture

- There are internal leaks associated with the showers.
- The kitchen bench tops are not sealed to the walls.
- There is extensive mould on wall and ceiling linings in shower areas.
- There is a hole in the wall at the basin in the accessible toilet.

## 5.5.6 F4 Safety from falling

- Upper level windows lack restrictor stays.
- Barriers to the upper roof deck are too low.

## 5.5.7 G3 Food preparation

- The kitchen benchtops are not sealed to the walls.
- The rangehood is not securely fixed to the wall.
- The kitchen ceiling is sagging.

#### 5.5.8 G4 Ventilation

• There is insufficient ventilation to shower areas.

#### 5.5.9 G9 Electricity

• Cables above the switchboard are exposed.

#### 5.5.10 G13 Foul water

- The covers to the shower trap were loose.
- 5.6 The expert also recommended an application for a certificate of acceptance as a means of regularising the unauthorised work. I consider this in paragraph 8.
- 5.7 A copy of the expert's report was provided to the parties on 17 January 2013.

# Matter 1: The external envelope

# 6. Weathertightness

6.1 The evaluation of building work for compliance with the Building Code and the risk factors considered in regards to weathertightness have been described in numerous previous determinations (for example, Determination 2004/1).

# 6.2 Weathertightness risk

6.2.1 The building has the following environmental and design features which influence its weathertightness risk profile:

## Increasing risk

- the building is two-storeys high in part and is in a high wind zone
- most walls have no eaves to shelter the cladding
- most walls have uPVC weatherboards fixed directly to the framing
- there is an enclosed roof deck situated above lower rooms
- although fairly simple in form, there are some complex wall to roof junctions
- the external wall framing to the building is not treated and will provide only limited resistance to decay if it absorbs and retains moisture

## **Decreasing risk**

- some walls are sheltered by the deep roof to the driving range
- the building is fairly simple in plan and form.
- 6.2.2 When evaluated using the E2/AS1 risk matrix, these features show that elevations of the building demonstrate a moderate to high weathertightness risk rating. I note that the uPVC weatherboards are beyond the scope of the current E2/AS1 but have been appraised by BRANZ as suitable for direct-fixing to the framing of walls with a moderate weathertightness risk rating (see paragraph 2.7.1).

# 6.3 Weathertightness performance

- 6.3.1 It is clear from the expert's report that the uPVC weatherboards have not been installed in accordance with the manufacturer's instruction and the claddings are generally not installed to good trade practice. The external envelope is unsatisfactory in terms of its weathertightness performance, resulting in moisture penetration and decay to some of the framing. Taking into account the expert's report, I conclude that the areas outlined in paragraph 5.4.5 require rectification.
- 6.3.2 Considerable work is required to make the external envelope weathertight and durable. Further investigation is necessary, including a systematic survey of all risk locations, to determine the level of timber treatment (if any), moisture penetration, possible timber damage and the repairs required.

# 6.4 Weathertightness conclusion

6.4.1 I consider the expert's report establishes that the current performance of the external envelope is not adequate because it is allowing water penetration through some areas of the claddings at present. Consequently, I am satisfied that the building work does not comply with Clause E2 of the Building Code.

- 6.4.2 In addition, the building work is also required to comply with the durability requirements of Clause B2. Clause B2 requires that a building continues to satisfy all the objectives of the Building Code throughout its effective life, and that includes the requirement for the building to remain weathertight. Because the cladding faults on the building are likely to allow the ingress of moisture in the future, the building work does not comply with the durability requirements of Clause B2.
- 6.4.3 I consider that final decisions on whether code compliance can be achieved by either remediation or re-cladding, or a combination of both, can only be made after a more thorough investigation of the claddings, the deck, and the condition of the underlying timber framing. This will require a careful analysis by an appropriately qualified expert, and should include a full investigation of the condition of the underlying framing. Once the investigation is complete and the decision on remediation is made, the chosen remedial option should be submitted to the authority for its approval.
- 6.4.4 The Ministry has produced a guidance document on weathertightness remediation<sup>7</sup>. I consider that this guide will assist the owner in understanding the issues and processes involved in remediation work to the external envelope, and in exploring various options that may be available when considering the upcoming work required to the building.
- 6.4.5 I note here that many of the elements are beyond the service life required by Clause B2 of the Building Code.

# Matter 2: The requirements of the remaining Building Code clauses

## 7. Discussion

- 7.1 Taking account of the expert's report I conclude that the following items in the building do not comply with the relevant clauses of the Building Code and require attention (associated Building Code clauses are shown in brackets):
  - Investigation and/or repairs (in regard to Clause B1) to the:
    - o the effect of the changes on the bracing to the building
    - o the corrosion to the steel portal frames
    - o the boulders within the foundations to the lean-to
    - o the decay to roof framing
  - A report from a fire engineer taking into account the change of use to the upper level, and implementation of any recommended fire protection measures that may follow from this (Clause C)

<sup>&</sup>lt;sup>7</sup> External moisture – A guide to weathertightness remediation. This guide is available on the Ministry's Building and Housing website, or by phoning 0800 242 243

- The 50mm kerb between the accessible carpark and the entry ramp (D1).
- In regard to Clause E3:
  - o moisture problems around shower areas
  - o sealing of bench tops to walls in the kitchen
  - o hole in wall at accessible toilet hand basin.
- In regard to Clause F4:
  - o lack of restrictor stays to upper level windows
  - o height of barrier wall to upper roof deck.
- Insufficient ventilation to shower areas (G4).
- Exposed cables above the switchboard (G9).
- The lack of seismic restraints to the hot water cylinder and header tank (G12).
- Loose trap to the shower waste (G13).
- 7.2 I note that the above are based on observations by the expert and are unlikely to be an exhaustive list of items requiring attention; the expert has not investigated compliance with all of the clauses of the Building Code, such as the drainage (Clauses E1 and G13), and I leave these areas to the authority for consideration.
- 7.3 I note also that consent should be obtained prior to remedial work being undertaken.

# 8. Certificate of acceptance

- 8.1 Section 40 of the Act states that building work must not be carried out except in accordance with a building consent and Section 96 makes provision for the issue of a certificate of acceptance in certain circumstances. One of these circumstances is where 'a building consent was required but not obtained<sup>8</sup>'.
- 8.2 In such instances an authority may, on application under section 96(2), issue a certificate of acceptance but 'only if it is satisfied, to the best of its knowledge and belief and on reasonable grounds, that, insofar as it could ascertain, the building work complies with the building code'.
- 8.3 I note that significant unauthorised work has taken place at various times since the original building consent for this building was issued in 1996:
  - during original construction in 1996/1997 (see paragraph 3.3.2)
  - between 1997 and 2005 when an authorised alteration was made, with some changes obvious and apparently tacitly approved in the 2005 drawings (see paragraph 3.3.1).
  - from 2005 to work recently completed in late 2012 (see paragraph 3.9).
- 8.4 With respect to an application for a certificate of acceptance, section 97 requires the applicant to provide (if available) plans and specifications, and any other information that the authority reasonably requires.

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<sup>&</sup>lt;sup>8</sup> Section 96(1)(a)(ii) of the Act

8.5 Section 96(2) requires an authority to consider all the available evidence such as plans and specifications, producer statements, the builder's records, the owner's records, any expert reports, and the authority's own experience and knowledge of the builders and designers involved in the work in order to ascertain whether the building work complies with the Building Code. I note also that the authority may inspect the building work which, along with information supplied by the applicant and the information in this determination, would assist the authority in forming a view as to compliance with the Building Code.

- 8.6 Section 96(2) of the Act is silent on work that cannot be inspected and for which there is no evidence available to determine whether it complies with the Building Code. However, Form 9 requires an authority to list the building work that complies with the Building Code and in my view this list provides the basis for an authority to list only the building work that can be ascertained complies with the Building Code. (I have discussed the issuing of a certificate of acceptance, and the use of Form 9, in further detail in Determination 2009/113.)
- 8.7 In my view an application for a certificate of acceptance requires an authority to conduct a detailed assessment of the information submitted to support the application plus, if it is appropriate, conduct a site inspection. With appropriate assessment of the submitted information together with a site inspection, an authority should be been able to come to a decision on compliance of the building work 'insofar as it could ascertain', while limiting that conclusion to work it was able to reasonably assess.
- 8.8 I note that in this instance, as remedial work will be required to bring the building work carried out under consent into compliance with the Building Code before a code compliance certificate can be issued, it may be appropriate for the application for a certificate of acceptance to be made subsequent to the investigation of the building's condition and in conjunction with an application for building consent to carry out remedial work, refer paragraph 9.5.

# 9. What happens next?

- 9.1 A notice to fix should be issued that requires the owner to bring the building into compliance with the Building Code, including the defects identified in paragraph 5.4.5 and paragraph 7.1 and referring to any further defects that might be discovered in the course of investigation and rectification, but not specifying how those defects are to be fixed. It is not for the notice to fix to specify how the defects are to be remedied and the building brought to compliance with the Building Code. That is a matter for the owners to propose and for the authority to accept or reject. It is important to note that the Building Code allows for more than one means of achieving code compliance.
- 9.2 The notice to fix should include the requirement for a full investigation into the moisture levels and condition the timber framing of the walls, the roof and the roof deck, referring also to the need for laboratory testing of framing samples to establish the full extent, levels and structural significance of decay to the framing. In respect of the unauthorised building work and the change of use, the notice should include the requirement for; a report from a fire engineer that takes into account the use of bedrooms in the upper level, an assessment by a suitably qualified engineer in

respect of the changes to the bracing and the foundation to the accessible toilet, and for the owner to apply for a certificate of acceptance.

- 9.3 The applicant should produce a response to the notice in the form of a detailed proposal, produced in conjunction with a competent and suitably qualified person as to the investigation and rectification or otherwise of the specified matters in respect of the consented building work.
- 9.4 In addition, the consent will require amendment to exclude those elements that were removed or altered as part of the unauthorised building work and to include a modification of Clause B2.3.1 to the effect that the durability periods begin from the date of substantial completion (refer also paragraph 1.6.1).
- 9.5 A certificate of acceptance is the appropriate regulatory mechanism to regularise the building work that was carried out without consent first being obtained. I am of the view that a certificate of acceptance would likely be very limited in scope if it was sought at this time. It is therefore suggested that a certificate of acceptance is sought after the further investigations referred to herein, including the advice of the structural and fire engineers.
- 9.6 Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

## 10. The decision

- 10.1 In accordance with section 188 of the Building Act 2004, I hereby determine that:
  - the building does not comply with the Building Code that was current at the time of issue of the building consent in respect of clauses E2, B1, B2, C, E3, F4, G4 and G9

and accordingly, I confirm the authority's decision to refuse to issue a code compliance certificate for building consent CON 96006837.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 15 March 2013.

John Gardiner

**Manager Determinations and Assurance**