Department of Building and Housing
*Te Tari Kaupapa Whare*

# Determination 2011/061

# The issuing of a code compliance certificate for a play centre at 2053 Miranda Road, Pokeno

## 1. The matter to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004[1] ("the current Act") made under due authorisation by me, John Gardiner, Manager Determinations, Department of Building and Housing ("the Department"), for and on behalf of the Chief Executive of that Department.

1.2 The parties to the determination are:

- the building owner, the Thames Valley Coromandel Play Centre Association ("the applicant")
- the Waikato District Council (including in its previous capacity as Franklin District Council) carrying out its duties as a territorial authority or building consent authority ("the authority")[2].

1.3 This determination arises from the decision of the authority to issue a code compliance certificate for the pre-school play centre.

1.4 The matters to be determined[3] are:

- whether the authority correctly exercised its powers when it issued the code compliance certificate
- whether, at the time the authority issued the code compliance certificate, the elements that make up the building work complied with Clauses B1 Structure, B2 Durability and E2 External moisture [4] of the Building Code (First Schedule, Building Regulations 1992, that was current at the time that the building consent was issued).

[1] The Building Act, Building Code, Compliance documents, past determinations and guidance documents issued by the Department are all available at www.dbh.govt.nz or by contacting the Department on 0800 242 243.
[2] The location in which the building work is located was formerly under the jurisdiction of the Franklin District Council. The reference to authority refers to both.
[3] Under sections 177 (1)(a), 177(1)(b), 177 (2)(d) of the current Act
[4] 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.

1.5 In making my decision, I have considered the submissions of the parties, the report of the independent expert ("the expert") commissioned by the Department to advise on this dispute, and the other evidence in this matter. Relevant clauses of the Building Act 1991 ("the former Act") and the Building Code are set out in Appendix A.

## 2. The building

2.1 The building work consists of a single-storey play centre constructed on a slightly sloping site in a high wind zone for the purposes of NZS 3604[5]. The play centre consists of a main internal play space, which contains a series of ancillary rooms, and a large outdoor play space.

2.2 The building is of timber-framed construction with the floor supported on braced timber piles. The exterior cladding consists of fibre-cement weatherboards directly fixed over a building wrap to the wall framing. The roof is pitched at various levels and is covered with long-run profiled pre-finished metal roofing with the eaves and verges having nil to 450mm wide projections. The outdoor play space has timber open-slat decking.

2.3 The expert has not been able to ascertain from his site inspection whether the external wall framing has received any preservative treatment.

## 3. Background

3.1 The building consent documentation included structural design calculations and details prepared by a firm of consulting engineers: this work was included in a Producer Statement - Design PS1 issued by the consulting firm. The design calculations included the foundation plan with the following noted:

> Foundations designed for 3Kpa loading
>
> Use 125 Senton piles for all anchor piles
>
> It is assumed that the ground complies with NZS:3604.

3.2 The "Carpenter" section of the specification also stated that the materials as shown on the drawings and workmanship under this section were to comply with the 'NZ Building Code, NZS 3604'.

3.3 The authority issued a building consent (No 49479) for the building in 2003, under the former Act.

3.4 Neither party has been able to provide copies of either the building consent or the subsequent code compliance certificate. However, from the information that I have received it appears that the building consent was based on a certificate supplied by a building certifier. As the authority carried out all the inspections of the building during its construction, it seems unlikely that the building certifier was involved after the building consent was issued.

[5] New Zealand Standard NZS 3604:1999 Timber Framed Buildings

3.5 The authority carried out eight inspections of the building work, up to and including 26 October 2003 when the competed building was passed as being code-compliant. The inspection carried out on 25 July 2003 was in relation to the sub-floor framing, which included the 'location of bracing, pile/bearer/joist connections'. All these elements were approved by the authority.

3.6 The authority issued a code compliance certificate for the building on 8 December 2003.

3.7 In 2009 the applicant arranged for an independent inspection of the building by a house inspection company. This company issued a report dated 18 August 2009 that noted certain building elements required attention; in particular the roofing intersections and the pile/bearer fixings.

3.8 On 17 May 2010, the authority issued "Non-Compliance Notification 6780" that noted:

> 12 Kn Connections uncomplete (*sic*) – Piles marked on Foundation Plan.

3.9 On 12 August 2010, the applicant wrote to the builder regarding concerns that it had regarding the code-compliance of some of the building elements. These concerns included the pile attachments, the roofing at the change of pitch, and the quality of the painting to the balustrades.

3.10 In a letter to the applicant dated 21 September 2010, the builder noted that the sub-floor connections had been attended to and that the roofer had inserted foam between the joints of the roofing at the change of pitch.

3.11 In a letter to the builder dated 28 October 2010, the applicant stated that it still considered that the requirements of Clauses B1, B2, and E2 had not been met.

3.12 In a letter to the authority also dated 28 October 2010, the applicant reiterated the concerns that it had raised with the builder.

3.13 The Department received an application for a determination on 28 March 2011.

## 4. The submissions

4.1 In a covering note to the Department the applicant set out the background to the dispute. The applicant stated that it still had concerns regarding:

- the pile connections
- the roofing intersections
- the waste pipe supports
- the weatherboard flashing junctions.

4.2 The applicant provided copies of:

- documents relating to the building consent, including the plans and specifications
- the authority's Non-Compliance Notification 6780
- the house inspection company's report of 18 August 2009
- the correspondence with the builder and the authority
- some technical information
- a set of photographs showing aspects of the building.

4.3 The authority did not make a submission in response to the application.

4.4 A draft determination was forwarded to the parties for comment on 24 May 2011. Both parties accepted the draft without comment.

## 5. The expert's report

5.1 As described in paragraph 1.5, I engaged an expert, who is a registered architect, to provide me with an assessment of the building work that is the subject of this determination.

5.2 The expert inspected the property on 27 April 2011, and provided me with a report that was completed on 5 May 2011. The report described the building work and the background to the dispute, and set out the expert's observations and comments. I summarise the salient points as follows (the relevant Building Code clauses are indicated in brackets).

5.3 Despite remedial work having been carried out on the roof, the roof pitch junctions showed indications of corrosion that was likely to accelerate as the paint and zinc coating abraded further. Repairs were also required at the rivets at one junction of the hip and apron flashings and the barge flashing terminations lacked kick-outs and required maintenance. (Clause B2)

5.4 The following sub-floor fixing items did not meet the requirements of NZS 3604:

- The two floor bearers that did not have any end bearing.
- The joints in the bearers not being lapped or flitched.
- The bearers lacking joint connectors.
- The bearers not being connected to the piles.
- The bracing connections at positions A/M, M/B, and M1/A being inadequate.

The expert stated that, while these omissions did not necessarily mean that the requirements of Clause B1 in relation to the sub-floor framing had not been met, however engineering calculations would be required to demonstrate the framing's code-compliance.

5.5 Based on the age of the building and invasive inspections, which showed low moisture readings and sound timber framing, the expert was of the opinion that the cladding was code-compliant. While not all the recommended exterior joinery flashings had been installed, the expert considered that the joinery installation was adequate. However, the weatherboard butt joints and window scribers had not been sealed and it would be prudent to seal the weatherboard and window scribers as part of maintenance.

5.6 The expert noted that the exterior paintwork had deteriorated and re-painting was due.

5.7 Copies of the expert's report were forwarded to the parties on 10 May 2011.

## 6. Discussion

6.1 Based on the expert's comments set out in paragraph 5, I accept that the building does comply with the requirements of Clause E2. However, I do not consider that roofing of the building complies with Clause B2.

6.2 The expert has noted that certain elements of the sub-floor framing do not comply with the requirements of NZS 3604, which is designated in Approved Document B1/AS1 as being suitable as an Acceptable Solution.

6.3 As stated in paragraphs 3.1 and 3.2, the sub-floor framing in the consented documentation is referred to in terms of NZS 3604. Accordingly, this infers that both the 25 July 2003 inspection by the authority and the requirements set out in the Non-Compliance Notification would have been considered in terms of the building meeting the requirements of NZS 3604.

6.4 I note that the authority passed the sub-floor framing in its site inspection of 25 July 2003 before it issued the code compliance certificate, which, from the inspection record, was to be completed before the subfloor was covered by the flooring. In addition, following the issue of the code compliance certificate, the authority issued its Non-Compliance Notification and the builder carried out remedial work to certain areas of the building. I am of the opinion that by issuing the Notification the authority accepted that the sub-floor framing was non-compliant at that stage (despite its acceptance on 25 July 2003). Accordingly, I consider it reasonable that the defects described by the expert would have been evident to the authority at the time it carried out its inspection.

6.5 While B1/AS1 describes only one method of achieving code-compliance, I accept the expert's recommendations that, if B1/AS1 is not the accepted criteria, engineering calculations are required to establish whether the foundations meet the requirements of Clause B1. However, whatever criterion is accepted, it is clear that the sub-floor framing required rectification in terms of meeting the requirements of NZS 3604 after the code compliance certificate was issued. This, together with the roofing defects, leads me to conclude that the authority erred when it issued the code compliance certificate.

6.6 Had the authority been aware that the work did not comply with NZS 3604, it should either have required remedial work to be undertaken so that that standard was met, or alternatively, required the owner to verify that the work complied with Clause B1 before issuing the code compliance certificate.

### Maintenance

6.7 The expert has also noted that the building requires some urgent maintenance to its exterior envelope. Adequate maintenance of the building should be carried out by the applicant in terms of the expert's recommendations.

6.8 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 Department has previously described these maintenance requirements, including examples where the external wall framing may not be treated to a level that will resist the onset of decay if it gets wet (for example, Determination 2007/60)

## 7. The decision

7.1 In accordance with section 188 of the Building Act 2004, I determine that:

- the building work does not comply with the Building Code in respect of Clause B2 Durability
- the authority did not have adequate grounds on which to be satisfied that the building's foundations complied with Clause B1 of the Building Code at the time of the issue of the code compliance certificate
- therefore, the authority incorrectly exercised its power in issuing the code compliance certificate. Accordingly, I reverse the authority's decision to issue the code compliance certificate.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 20 June 2011.

John Gardiner
**Manager Determinations**

# Appendix A: The legislation

## A.1 The Building Act 1991

A.1.1 The relevant provisions of the former Act are:

> **34 Code compliance certificate**
>
> (3) …the territorial authority shall issue to the applicant in the prescribed form, on payment of any charge fixed by the territorial authority, a code compliance certificate, if it is satisfied on reasonable grounds that—
>
> (a) The building work to which the certificate relates complies with the building code…

## A.3 The Building Code

A.3.1 The relevant provisions of the Building Code current at the time the building consent was issued are:

> **CLAUSE B1 STRUCTURE**
>
> **FUNCTIONAL REQUIREMENT**
>
> **B1.3.1** Buildings, building elements and sitework shall have a low probability of causing loss of amenity through undue deformation, vibratory response, degradation, or other physical characteristics throughout their lives.
>
> **CLAUSE B2 Durability**
>
> **FUNCTIONAL REQUIREMENT**
>
> **B1.2** Buildings, building elements and sitework shall withstand the combination of loads that they are likely to e4xperience during construction or alteration and throughout their lives.
>
> **PERFORMANCE**
>
> **B2.3.1** Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the specified intended life of the building, if stated, or:
>
> (a) The life of the building, being not less than 50 years, if:
>
> (i) Those building elements (including floors, walls, and fixings) provide structural stability to the building or
>
> (ii) Those building elements are difficult to access or replace or
>
> (iii) Failure of those building elements to comply with the building code *would go undetected* during both normal use and maintenance of the building
>
> (b) 15 years if:
>
> (i) Those building elements (including the building envelope, exposed plumbing in the subfloor space, and in-built chimneys and flues) are moderately difficult to access or replace, or
>
> (ii) Failure of those building elements to comply with the building code would go undetected during normal use of the building, but would be easily detected during normal maintenance.

(c) 5 years if:

(i) The building elements (including services, linings, renewable protective coatings, and *fixtures*) are easy to access and replace, and

(ii) Failure of those building elements to comply with the building code would be easily detected during normal use of the building.

## Clause E2 External moisture

### Performance

**E2.3.2** Roofs and exterior walls must prevent the penetration of water that could cause undue dampness, damage to building elements, or both.