

Code compliance certificates for alterations to a house

1 THE MATTERS TO BE DETERMINED

- 1.1 The matters before the Authority arise out of a dispute, in the course of the sale and purchase of a house, about the issuing by a territorial authority of two code compliance certificates in respect of alterations. The dispute centres on moisture entering the house.
- 1.2 The Authority takes the view that it is being asked in effect to determine whether the building work involved in the alterations complies with clauses B1 Structure, B2 Durability, and E2 External moisture of the building code (the First Schedule to the Building Regulations 1992).
- 1.3 In making its decision, the Authority has not considered whether the building complied with any other provisions of the building code.

2 THE PARTIES

- 2.1 The applicant (referred to below as “the purchaser”) was the purchaser acting through a barrister. The other parties were the territorial authority acting through a firm of solicitors and the vendor acting through another barrister.

3 THE BUILDING AND THE SEQUENCE OF EVENTS

- 3.1 The building was originally erected some 40 years ago. It is a detached house of conventional light timber frame construction on three levels. Originally it was clad with flat cellulose cement sheets. Some alterations, including the application of plaster cladding over the sheets (stucco), had been made before the vendor purchased the property. The territorial authority had no record of those previous alterations.
- 3.2 The vendor made the following alterations under two building consents issued by the territorial authority in 1998:
 - Under the first building consent: Addition of a room to the ground floor and a complete new first floor containing two bedrooms, one with ensuite, bathroom, gallery, and decks.
 - Under the second building consent: Addition of a third bedroom to the new first floor.

There had apparently been an application to amend the first consent to include the addition of the third bedroom, but instead the second consent was issued for that purpose. The plans

and specifications for the first consent could not be found in the territorial authority's records, but appear to have been included in the documentation for the second consent.

- 3.3 Code compliance certificates in respect of the work covered by those consents were issued by the territorial authority in September and October 2000.
- 3.4 In June 2000, the vendor and the purchaser had entered into a conditional agreement for sale and purchase. The contract apparently became unconditional on some date in October 2000, allegedly in reliance on the code compliance certificates. However, the purchaser refused to settle on the grounds that building work under the building consents did not comply with the building code and the code compliance certificates should never have been issued. The vendor commenced Court proceedings to enforce the agreement, but those proceedings were adjourned pending this determination.

4 WRITTEN SUBMISSIONS

4.1 General

- 4.1.1 The purchaser's original submissions included three reports from a consultant ("the purchaser's consultant"), see 4.2 below. The vendor's submissions included a report from another consultant ("the vendor's consultant"), see 4.3 below. The territorial authority's submissions included documentation, including inspection reports, in respect of the second building consent (documentation in respect of the first consent could not be found), see 4.4 below.
- 4.1.2 Because of discrepancies between the reports, the Authority commissioned its own report from another consultant ("the Authority's consultant"), see 4.5 below.
- 4.1.3 The purchaser responded with further submissions and another report by the purchaser's consultant, the territorial authority responded to that report with further submissions, and the vendor responded with another report from the vendor's consultant, see 4.6 below.

4.2 The purchaser's reports

- 4.2.1 The reports submitted by the purchaser were based on visual inspection by the purchaser's consultant and information from the vendor and from an architect who had prepared some of the missing plans and specifications. The reports included photographs. They concluded that extensive work was needed to bring the building to compliance with the building code.

4.3 The vendor's report

- 4.3.1 The report submitted by the vendor, which also included photographs, was a detailed critique of the purchaser's reports. It was based on two inspections by the vendor's consultant during which "destructive work" (including removal of linings etc to inspect structural members) and various moisture content readings were taken. The builder responsible for the alterations was present at the first inspection.

- 4.3.2 The vendor's report said in effect that many of the matters raised in the purchaser's reports had nothing to do with the alterations but related to the existing building. Remedial work was recommended. The report concluded that there was no reason why the code compliance certificates should be revoked.

4.4 The territorial authority's response

- 4.4.1 In response to the purchaser's and vendor's reports, the territorial authority made two further inspections. It also pointed to its records of inspections under the second building consent. The territorial authority agreed with the vendor's report.

4.5 The Authority's report

- 4.5.1 At first sight, the purchaser's and the vendor's reports appeared to be significantly different. Accordingly, the Authority engaged its own consultant to give an independent opinion as to whether the building work under the building consents complied with the building code, and specifically to comment on certain items raised in the purchaser's and the vendor's reports.
- 4.5.2 The report from the Authority's consultant was based on a review of the submissions received from the parties to date, a review of the territorial authority's property file, and a site inspection. The builder responsible for the alterations was present at that inspection and identified the work covered by the building consents. The report included photographs and generally confirmed the vendor's report but recommended some additional minor remedial work. It noted that remedial work had been done in respect of some of the matters raised by the purchaser. It also listed some shortcomings of the existing building.

- 4.5.3 The report concluded:

In my opinion the works that are the subject of the 1998 consents meet compliance with the New Zealand Building Code. . . .

The remedial works required to the building relate to works undertaken prior to the 1998 consents.

4.6 Further responses

- 4.6.1 In response to the vendor's and the Authority's reports, the purchaser submitted that the Authority's consultant "has been mistaken, perhaps because he has misunderstood what to inspect". The Authority takes that to query whether the Authority's consultant properly differentiated between the alterations and the original building.
- 4.6.2 There was also a fourth report from the purchaser's consultant. That referred to a meeting on site attended by the purchaser's consultant, the vendor's consultant' and one of the territorial authority's inspectors. That meeting was held after the inspections referred to in the vendor's consultant's report and in the territorial authority's submissions but before the Authority's consultant inspected the house.

- 4.6.3 The purchaser's consultant reported that remedial work on the alterations, specifically the use of sealant on gaps between a timber member in a balustrade and the plaster cladding had been unsuccessful. Water could enter through the gap and damage framing timbers. The timber member was found to be "saturated" and "fungal mycelae [*sic*] were seen on the timber", and there would be "easy passage of moisture to the [existing] structure below".
- 4.6.4 The purchaser's consultant also raised a new point, saying that in part of the alterations the plaster cladding was not supported on a continuous concrete footing, as required by the acceptable solution NZS 3604, but by timber piles.
- 4.6.5 The territorial authority responded that the "saturated" timber member was not moist to the touch but did have a moisture content exceeding the "accepted standard" of 24%. However, that member was of treated timber. There was no evidence of moisture penetrating the original part of the building through the balustrade, any moisture entry below the balustrade was attributable to a crack in the original plaster.
- 4.6.6 The vendor responded with another report from its consultant. It agreed with the report by the Authority's consultant. It did not consider that the fourth report from the purchaser's consultant added anything of significance that was relevant to the matters in dispute. Fungal mycelia indicated that water was entering the building but did not establish that the alterations did not comply with the building code.
- 4.6.7 On the basis of the information received, the Authority then sent the parties a draft determination, stating that if any of the parties did not accept the draft then the Authority would hold a formal hearing. The draft in effect said that the reports painted a picture of a house containing various comparatively minor defects that had allowed the entry of external moisture in the past. Such defects included an exterior light fitting and a TV aerial that penetrated the external cladding, blocked drainpipes, a deadbolt locking hole that penetrates a doorsill, and so on. However, reading all the reports together, and taking account of remedial work that had been done on the alterations, the Authority could find no evidence that the alterations did not comply with the building code.
- 4.6.8 The vendor and the territorial authority accepted the draft, but the purchaser did not, and accordingly a hearing was held.

5 THE HEARING

5.1 General

- 5.1.1 The purchaser sent written submissions to the Authority and the other parties in advance of the hearing. The vendor and the territorial authority responded in writing but chose not to appear at the hearing. The territorial authority also supplied engineering calculations and other documents that were missing from the territorial authority's files but had been obtained from the architect. Those missing documents arrived immediately before the hearing.
- 5.1.2 At the hearing, the purchaser was represented by legal counsel who called evidence from the purchaser and from the purchaser's consultant. The Authority's consultant was present by invitation of the Authority. Members of the Authority's staff were in attendance. The

opening of the hearing was delayed so that the documents just received from the territorial authority could be perused.

5.1.3 Counsel for the purchaser made general submissions and called the purchaser to explain the purchaser's concerns. One of those concerns was that a new house should essentially be maintenance-free. For example, he did not expect to have to inspect sealants - and if necessary replace them - at comparatively frequent intervals.

5.1.4 Counsel also pointed out that the plans and specifications for the first consent were missing, and in any case the alterations as built did not conform to the building consents in several respects. What reasonable grounds did the territorial authority have for being satisfied as to compliance with the building code in respect of building elements for which it had no plans and specifications? However, it was put to counsel that the Authority had no power to determine whether or not the territorial authority had reasonable grounds on which to issue the code compliance certificates, and counsel did not argue for a different view.

5.1.5 Counsel also made specific submissions in respect of particular items of building work that were claimed not to comply with the building code, and called the purchaser's consultant to give evidence in respect of claims that:

- (a) Water could enter the building through:
 - (i) Gaps on the tops of balustrades, see 5.2 below,
 - (ii) Stucco carried down to the deck at the bottoms of balustrades, see 5.3 below,
 - (iii) Stucco with no control joints, see 5.4 below, and
 - (iv) Windows with no flashings, see 5.5 below;
- (b) Certain posts supporting the new first floor were structurally inadequate, see 5.6 below; and
- (c) Fungal decay found on various structural members when claddings were removed.

That was not a specific defect but established that water had entered the house. It is not further discussed because there is no dispute that water had in fact entered the house through defects in the original building so that the decay was not necessarily caused or contributed to by defects in the alterations.

5.2 Water entering the building through the top of the balustrade

5.2.1 An external wall on the ground floor had originally extended above the roof as a parapet. When the first floor was added, parts of the roof were converted to decks and the parapets to those parts were converted to safety barriers referred to as balustrades. It was claimed that water could enter the building at both the top and the foot of the balustrades.

- 5.2.2 The original parapet was clad with stucco on the external face. In the building consent drawings the top of the balustrade was shown as having a stainless steel handrail supported by short brackets screwed into the top plate through a waterproof capping membrane. Stucco was to be applied over the top and down the inside face of the balustrade. The top of the balustrade was level, not sloped to facilitate shedding water. However, when the alteration was made, the capping was not installed and the stainless steel handrail was replaced by a timber rail spanning between new timber posts, which also formed the uprights of a pergola over the deck. From the photographs supplied, those posts appear to have replaced the original studs at the corners of the decks. There are 15 such posts.
- 5.2.3 Where each post penetrated the stucco on top of the balustrade, a sealant had been applied to seal the gap between the post and the stucco surrounding it. When the territorial authority and the Authority's consultant inspected the building they found the sealant to be in good condition. However, a photograph produced at the hearing showed that the sealant around at least one post had failed and water could enter the gaps. There was conflicting evidence as to whether ground floor framing timbers had been damaged as a result of moisture entering through those gaps.
- 5.2.4 The territorial authority's written submissions said that it was not aware of any evidence that water was entering the building through the top of the balustrade.

5.3 Water entering the building through the foot of the balustrade

- 5.3.1 The building consent drawings showed the deck having a membrane under tiles falling to the balustrade at the outside. As shown on the drawing, the stucco was to be carried down to the bottom of the balustrade and therefore below the level of water going to the drainage outlet. The membrane did not continue on under the balustrade, or turn up at the foot of the balustrade. Water could have entered the building by capillary action behind the stucco.
- 5.3.2 However, when the alteration was made, timber planks supported on battens laid on the membrane were used instead of tiles. The purchaser's consultant had been unable to see whether the stucco had in fact been carried down to the level of the membrane as shown in the consent drawings, but a photograph taken by the Authority's consultant could be interpreted as showing the stucco carried down only to the top of the battens, above the drainage outlet and well clear of surface water (unless the outlet was blocked).
- 5.3.3 The territorial authority's written submissions said that it was not aware of any evidence that water was entering the building through the foot of the balustrade.

5.4 Control joints in stucco

- 5.4.1 There was a conflict of evidence about the presence of control joints in the new stucco. The purchaser's consultant could find no indication of horizontal joints.

5.4.2 The vendor's consultant stated:

From the outset I have stated that the absence of control joints is of no particular consequence given the minimal wall elevations and the fact that there are no large stucco panels in this particular house.

As a postscript, however, I have been advised by the plastering contractor that the initial two coats of stucco plaster (ie the flanking coat and the straightening coat) do in fact have control joints to discriminate the wall into vertical panels.

5.4.3 The Authority's consultant said that it was common practice to make the joint in the first and second coats of plaster, but not in the final coat, and such a joint would not be visible on inspection. The Authority's consultant also took the view that the interface between the old and the new stucco, if made at an angle that would shed water, could be seen as equivalent to a control joint.

5.4.4 The territorial authority's written submissions said that it was not aware of any evidence that cracks in the stucco had occurred because of the absence of control joints, or that water had entered the building as a result.

5.5 Flashings to new windows

5.5.1 The purchaser told of seeing water streaks on window joinery. The purchaser's consultant attributed them to water entering around the windows.

5.5.2 The Authority's consultant said that water streaks on varnished timber joinery was frequently the result of condensation of internal moisture. The Authority's consultant also pointed to a photograph that indicated that the windows incorporated strips of sealant that were not exposed to sunlight and therefore not likely to deteriorate rapidly.

5.5.3 The territorial authority's written submissions conceded that "flashings constructed over windows and doors are a good building practice". However, it pointed out that flashings were not mandatory and that it was not aware of any evidence that water was entering the building around the doors and windows.

5.6 Posts supporting the first floor

5.6.1 In submissions prepared before engineering documentation had been supplied by the territorial authority, counsel for the purchaser queried the structural adequacy of certain 125 mm by 125 mm posts supporting a new bedroom, saying that the building consent drawings called for 250 diameter poles. Counsel said that engineer's calculations and drawings were not available at the time of final inspection by the territorial authority for the code compliance certificates. "It is difficult to see how the Council can certify that the building complies with the code and is able to stand up without these calculations."

5.6.2 The Authority's consultant said that the posts complied with the acceptable solution, NZS 3604. It was not significant that the stucco cladding was not supported by a continuous

concrete foundation in accordance with NZS 3604. It was not very heavy, weighing approximately 22 kg/m², and the room concerned appeared to be well braced.

6 DISCUSSION

6.1 The Authority's jurisdiction

- 6.1.1 The Authority takes the view that the matters it may determine are limited by the relevant words of section 18 of the Building Act:

An application to the Authority under section 17 of this Act shall be limited to whether or not, or to what extent, particular building work or proposed building work (including any actual or proposed demolition) complies with all of the provisions, or with any particular provision, of the building code . . .

The Authority has no jurisdiction to determine whether or not, when it issued the code compliance certificates, the territorial authority had reasonable grounds for being satisfied as to compliance with the building code.

- 6.1.2 Furthermore, as it said in Determination 2000/3, the Authority takes the view that it is required to use the most up-to-date information available to it, even when that information was not available at the time the territorial authority decided to issue the code compliance certificate.

6.2 The burden of proof

- 6.2.1 The purchaser's consultant said in effect that it was not possible, without opening up the building, to tell whether or not various parts of the alterations complied with the building code. Some of those parts differed from the plans and specifications submitted for building consent, and some might have been covered up without being inspected by the territorial authority. Counsel for the purchaser argued that the territorial authority could not have had reasonable grounds on which to be satisfied as to whether those parts complied with the building code.

- 6.2.2 The Authority took that to be an argument that there was an onus on the territorial authority to justify its decision to issue the code compliance certificate, initially to the purchaser when it first disputed the decision and then to the Authority in the course of the determination.

- 6.2.3 In *Auckland CC v NZ Fire Service*¹ the High Court has held that in a determination the Authority:

must have evidence to support its conclusion, but it is not helpful . . . to consider matters of evidence in the traditional sense of the onus or burden of proof.

- 6.2.4 The Authority accordingly takes the view that in this determination the Authority cannot decide that parts of the building do not comply with the building code unless there is some evidence of non-compliance. In other words, for the purposes of this determination it is not

¹ *Auckland CC v NZ Fire Service* 19/10/95, Gallen J, HC Wellington AP 336/93, noted [1995] BRM Gazette 189.

enough that the purchaser has cast doubt on whether the territorial authority had reasonable grounds for deciding that those parts did comply, the Authority must also have some specific evidence that they do not comply.

- 6.2.5 The Authority is also of the opinion that, in the absence of evidence to the contrary, it is entitled to assume that the building control system has been properly applied and gives a reasonable assurance that building work done under the Building Act and in accordance with its procedures does comply with the building code.

6.3 Departures from the building consent

- 6.3.1 The Authority recognises that changes to the approved plans and specifications are frequently made in the course of construction. Whether such a change necessitates a formal amendment to the building consent is matter of extent and degree. The matter was considered by the High Court in *M & L More Ltd v Beadle*², where it was observed:

When a building inspector for a local authority signs a final certificate certifying that building works have been completed in accordance with the permit issued by the authority it must always be persuasive evidence that in fact there is compliance with the permit. However, that is not necessarily the end of the matter. . . . there will quite frequently in the course of construction be variations from the permit plans which the relevant building inspector regards as minor, or not critical to compliance with Council requirements. In such cases the inspector will certify compliance notwithstanding such variations which will be incorporated in the certified approval.

- 6.3.2 The territorial authority's documents show that the code compliance certificates were withheld because, amongst other reasons, an amended plan was required. In any case, the fact that certain parts of the alterations do not conform to the building consent is not evidence that they do not comply with the building code.

6.4 Relevant requirements of the building code

- 6.4.1 The relevant provisions of clauses B2 and E2 of the building code are:

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:

² *M & L More Ltd v Beadle* 4/12/97, Potter J, HC Auckland CP 482/96.

- (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.

B2.3.2 Individual building elements which are components of a building system and are difficult to access or replace must either:

- (a) All have the same durability, or
- (b) Be installed in a manner that permits the replacement of building elements of lesser durability without removing building elements that have greater durability and are not specifically designed for removal and replacement.

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

6.5 Water entering the building through the top of the balustrade

- 6.5.1 The evidence established that water could enter the building through the top of the balcony, establishing that the building does not comply with clause E2.3.2 of the building code.
- 6.5.2 That being so, the required durability for the sealants is of academic interest only in the context of this determination. However, the matter was discussed at the hearing, and in particular the purchaser said that he did not expect to have to do significant on-going maintenance on a new building (presumably referring to the alterations only). The Authority considers that expectation to be unrealistic. Stucco claddings require re-painting even more frequently than timber weatherboards, and the Authority takes the view that for the purposes of clause B2 “normal maintenance” includes such painting. The Authority also takes the view that it would be normal for a house owner to notice, and to remedy, obvious cracks associated with sealant failure in locations that are clearly visible during the ordinary use of the house.
- 6.5.3 The Authority records that in this case it takes the view that the external cladding of the balustrade, including the sealant, was required to have a durability of 5 years. As it did not, the structural timbers that could be unduly damaged by such water also did not have the required durability of the life of the building.

6.6 Water entering the building through the foot of the balustrade

- 6.6.1 The Authority was given no evidence that water might enter the building through the foot of the balustrade. However, the foot of the balustrade as shown in the relevant building consent drawing does not comply with the building code. The balustrade was not constructed entirely in accordance with that drawing, but it is not clear whether it differs from the drawing in respect of the stucco being clear of the deck membrane or of the deck

membrane either continuing on under the balustrade or turning up at the foot of the balustrade. There is therefore evidence both ways as to whether or not the foot of the balustrade complies with the building code.

6.7 Control joints in stucco

6.7.1 Again, the Authority was given no evidence that water might enter the building through cracks attributable to the lack of control joints. There was evidence that vertical control joints had been installed, but the Authority did not take that as establishing that horizontal joints had not been installed.

6.7.2 The Authority observes that the purpose for requiring control joints in areas of stucco exceeding certain dimensions is to localise shrinkage cracking at the joints. Otherwise, there would be a random pattern of shrinkage cracks. However, such cracks will not necessarily admit water through the full depth of the plaster coatings. If water does pass through the plaster, it will not necessarily penetrate the building paper. The Authority was not given any evidence that water was in fact entering the building through cracks in the stucco.

6.8 Flashings to new windows

6.8.1 Again, the Authority was given no evidence that water might enter the building because of the lack of flashings to new windows. Flashings are required by NZS 3604, but compliance with NZS 3604 is not the only means of complying with the building code.

6.9 Posts supporting the first floor

6.9.1 The Authority was given no evidence that the posts concerned were not structurally adequate. There was, however, evidence that they were not significantly different from what is specified in the acceptable solution NZS 3604.

7 CONCLUSIONS

7.1 On the evidence available to it, the Authority concludes that the alterations comply with the building code except for a failure to comply with clause B2.3.1(c), and therefore clause E2.3.2 at the tops of the balustrade, and possibly also at the foot of the balustrade.

7.2 The Authority recognises those are comparatively minor matters that should be easy to rectify. Nevertheless, it means that the alterations do not comply with the building code. Under section 43(5), therefore, it is necessary to issue a notice to rectify requiring work not done in accordance with the building code to be rectified.

7.3 It is not for the Authority to direct how the tops of the balustrades are to be altered so as to bring them to compliance with the building code. That is a matter for the owner to propose and the territorial authority to approve. However, the Authority observes that contributory factors appear to include that the top of the balustrade is horizontal and does not readily shed water, the absence of a water-proof capping, and that weather-related changes in

moisture content, particularly of the posts, appears to have resulted in shrinking and swelling movements greater than the sealant could accommodate.

8 THE AUTHORITY'S DECISION

8.1 In accordance with section 20 of the Building Act, the Authority hereby modifies the territorial authority's decision to issue the code compliance certificates in respect of the alterations by substituting a decision to issue a notice to rectify, the particulars of contravention to be that:

- The top of the balustrade does not comply with the building code and is to be rectified so as to prevent water from entering the building, and
- The bottom of the balustrade does not comply with the building consent and is to be opened up for inspection and if necessary be rectified so as to prevent water from entering the building.

Signed for and on behalf of the Building Industry Authority on this 27th day of June 2001

W A Porteous
Chief Executive