# Determination 2007/138

A dispute about a certificate of acceptance that excluded a carport which was rebuilt without a building consent at 32 Alexander Avenue, Papatoetoe, Auckland



## 1. The matter 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, Department of Building and Housing ("the Department"), for and on behalf of the Chief Executive of that Department. The applicant is the owner of the building, T P Field Developments Ltd, acting through an agent ("the applicant") and the other party is the Manakau City Council, acting through a firm of lawyers ("the territorial authority").
- 1.2 This determination arises from the decisions of the territorial authority:
  - (a) to issue a notice to fix for a 1-year-old replacement garage/carport ("the carport") because no building consent had been obtained for the building work
  - (b) to issue a certificate of acceptance that excluded the construction of the carport due to its "unacceptable construction".
- 1.3 The two matters for determination are whether the carport:
  - (a) required a building consent.

<sup>&</sup>lt;sup>1</sup> The Building Act 2004 is available from the Department's website at www.dbh.govt.nz.

- (b) complies with the Building Code<sup>2</sup> (First Schedule, Building Regulations 1992), in particular Clauses B1 "Structure", B2 "Durability", E1 "Surface Water", and E2 "External Moisture" (refer sections 177 and 188 of the Act).
- 1.4 In making my decision, I have considered the submissions of the parties, the report of an independent expert ("the expert") commissioned by the Department to advise on this dispute, and the other evidence in this matter.
- 1.5 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.

## 2. The building

- 2.1 The building work consists of a single-storey carport, which replaced an existing carport structure, and which is attached to a house situated on a level site. The carport has a concrete floor, part of which is existing paving, and there are timber framed external walls to one side and to the rear of the structure. The low-pitched roof has a junction with the adjoining house but there are no eaves or verge projections. A re-used aluminium framed window is installed in the rear wall of the building.
- 2.2 According to the expert the external wall framing is generally H3.2 treated, apart from that adjoining the carport opening, which is boron treated.
- 2.3 The walls of the building are clad with re-used vertical long-run trapezoidal profile steel sheets that are fixed directly to the framing through new building paper. The roof cladding is re-used trapezoidal profile colour-coated steel fixed over new foil underlay and netting. Both the wall and roof claddings have nail holes and scratches and are rusting at some locations.

## 3. Sequence of events

- 3.1 In June 1989, the territorial authority approved the erection of the original carport, which was shown on the plans as being 5700mm long x 3600mm wide. Following a final inspection of the building work on 25 October 1989, the territorial authority inspection sheet for the project recorded "[c]omplete except for c/slab". I note that the original carport was constructed prior to the Building Act 1991 coming into force.
- 3.2 The applicant claims that when the carport was constructed by a previous owner, its width was increased to 5000mm, a statement that is disputed by the territorial authority.
- 3.3 The original carport was demolished and the new carport, which is shown on the plans as being 5400mm long x 5010mm wide, was constructed some time in 2006. No building consent was applied for or issued regarding this new work. The construction of the carport was carried out in conjunction with other building work to the adjoining house.
- 3.4 The territorial authority issued a notice to fix dated 22 December 2006 that stated that no building consents had been obtained for the construction of the carport and the other building work. To remedy this omission, the applicant was to either apply

<sup>&</sup>lt;sup>2</sup> The Building Code is available from the Department's website at www.dbh.govt.nz.

for a building consent to remove both sections of building work or to apply for a certificate of acceptance for that work.

- 3.5 The applicant applied for a certificate of acceptance in respect of all the building work that had been carried out, and a certificate dated 17 May 2006 was issued by the territorial authority. The certificate listed completed building work which, in the territorial authority's opinion, was either acceptable or not acceptable. Included in the unacceptable work were elements of the carport. Under the exclusions that did not form part of the certificate of acceptance was "*the construction of the* [carport] *installation*".
- 3.6 The territorial authority issued a second notice to fix dated 14 June 2007 in relation to the carport only. It noted that to remedy the contravention or non-compliance, the applicant was to apply for a building consent to demolish the carport and was to carry out this task within 10 days of the issuing of the consent. This notice set out the reasons why the carport was excluded from the certificate of acceptance. These related to the:
  - rafters
  - roof falls
  - flashings and cappings
  - lack of a damp-proof course
  - compliance with E1
  - lack of an upstand to the front of the carport.
- 3.7 The applicant engaged the services of an advisor to inspect the carport. The advisor produced a report dated 18 July 2007. Following some invasive inspections, the advisor concluded that the carport had the same plan dimensions as the structure that it replaced. The advisor also said that:
  - the rafter spans complied with NZS 3604: 1999
  - the roof has more than a 3.12 degrees fall, which complies with the manufacturer's instructions
  - the capping and flashing complied with the Building Code current at the time of construction
  - the builder had informed him that DPC was used and it was observed that DPC is visible at some locations
  - Clauses E1 and E2 did not apply to the carport.
- 3.8 The Department received the application for a determination on 9 August 2007.

### 4. The submissions

4.1 In a covering letter to the Department dated 24 July 2007, the applicant noted that:

the [original] . . . carport was deteriorating . . . at time of removal of [the] rotten materials we noted more than 90% of the timber had signs of deterioration and therefore we removed all timber construction and used all new Tantalised (sic) H3 timber while retaining the two end steel posts in same position, and re-using the same metal roofing & metal exterior wall cladding.

The applicant also set out the background to the territorial authority's decision to issue a notice to fix and stated that, in line with the advice provided by the advisor, it did not accept the notice to fix.

- 4.2 The applicant forwarded copies of:
  - the plans for the new building work and for the original carport
  - the two notices to fix
  - the advisor's report.
- 4.3 In a submission by its legal consultants dated 23 August 2007, the territorial authority stated that, as it considered that the construction of the carport did not fall within the exemptions set out in Schedule 1 of the Act, a building consent was required. The territorial authority was of the opinion that the carport was of a greater plan area than the carport that it replaced. In support of this opinion, the territorial authority attached a brief of evidence from the previous owner. This owner described the construction of the previous carport and stated that the carport appeared wider than the previous one. The territorial authority also set out the background as to its actions regarding the carport and stated that it had taken appropriate action in this matter.
- 4.4 The territorial authority forwarded copies of:
  - plans and documentation covering work carried out on the property in 1967, 1972, and 1989
  - the statement of evidence provided by the previous owner
  - an aerial photograph of the property taken in 2000
  - the certificate of acceptance and associated information.
- 4.5 Copies of the submissions and other evidence were provided to the parties. Neither party made any further submissions in response to the information that was provided.
- 4.6 The draft determination was sent to the parties for comment on 12 November 2007. The applicant accepted the draft. The territorial authority also accepted the draft but submitted that the information described in paragraph 4.4 should also include an aerial photograph of the site taken in 2000. The territorial authority submitted that:

the photograph . . . clearly shows the [original] carport (and its shadow cast on the ground) to be significantly deeper than it is wide".

I have amended the determination accordingly. I acknowledge the submission made by the territorial authority about the aerial photograph. However, I do not believe the photograph is sufficiently clear to be able to provide firm evidence about the size of the original carport.

## 5. The expert's report

5.1 As mentioned in paragraph 1.4, I engaged an independent expert, who is a member of the New Zealand Institute of Building Surveyors, to provide an assessment of the carport.

- 5.2 The expert inspected the carport on 21 September 2007 and furnished a report that was completed on 2 October 2007. Following some invasive inspections, the expert observed that:
  - a slab exposed at the side of the carport under the new floor slab was of an earlier construction and was on the same line as the side wall of the carport
  - the two re-used steel corner posts were likely to be in the same position as they would have been in the previous structure
  - the steel brackets securing the ribbon board to the house had been moved from their original positions
  - it was not possible to ascertain if the re-used roof and wall cladding were salvaged from the previous carport.
- 5.3 The expert took invasive moisture readings from the bottom plate at four locations and no elevated readings were obtained. The wall framing, which is unlined internally, was "*free of mould, water stains and other evidence of water penetration*".
- 5.4 The expert compared the as-built structure with an undated plan of the building work that was apparently proposed to show all the amendments to the property, including the carport. The expert noted the following:
  - The rafters as installed are of a 185mm x 44mm finished size. One rafter was marked "*Southernpine H1.2*", the remainder were not marked but were of the same appearance. However, the plan the plan showed "*300 x 50 H3 Rafters*". The expert also noted large knots were evident in some of the rafters.
  - While the plan indicates a 3 degree fall, the installed roof has between 2.0 and 2.2 degree falls.
  - The expert was unable to confirm the as-built construction of the new section of the concrete floor slab, but considered that the existing concrete path that makes up part of the floor, is unlikely to be in accordance with the details shown on the plan.
- 5.5 The expert commented on the elements comprising the carport as follows:

#### Wall and roof claddings

- The wall and roof claddings showed signs of damage and contained some unfilled holes. There were burrs, rusting and the beginnings of paint failure at the ends of the roofing sheets. The expert considered that it was unlikely that the claddings would comply with the B2 durability period requirements.
- The roof cladding is fixed through the pan, which is contrary to the BRANZ recommendations for this type of roofing.
- The roofing was not nailed to every rafter and there were no side lap fixings or any seal.
- There are no profile closers installed at the eaves and the underlay does not reach the gutter line.
- The ground clearance of the wall cladding and the overlap of the cladding over the bottom plate are both inadequate.

### Flashings

- The window head flashing is near horizontal and is not folded down at the outer edge and there are no jamb or sill flashings installed at the window perimeters.
- No flashing has been installed where the roofing adjoins the house, nor at the vertical wall junction with the house.
- The north end corner flashing is not folded at the edges.

#### Structural issues

- Joist hangers (size and number of nails) used to fix every second rafter to the ribbon board may not be adequate.
- Some bottom plate fixing bolts are not hot-dipped galvanised and, given the inadequate ground level clearance, they are vulnerable to corrosion.
- Some of the rafter to ribbon plate fixings are not hot-dipped galvanised and, due to the lack of a flashing above them, are particularly vulnerable to corrosion.
- The framing at the main entry is boron treated (equivalent to a H1.2 treatment) and is vulnerable to decay.
- A damp-proof course is visible at various locations.
- While there is no upstand provided at the front of the carport, there is a shallow channel to the new concrete slab discharging to adjacent ground.
- 5.6 A copy of the expert's report was provided to the parties on 4 October 2007.
- 5.7 The applicant's advisor wrote to the Department on 11 October 2007, commenting on the expert's report. I summarise these comments as follows:
  - An independent engineer has confirmed that the 188mm x 44mm rafters were adequate and that the roof fall was more than 3 degrees.
  - The knots in the rafters would be attended to.
  - The rafter hangers would be properly attached.
  - A flashing at the junction with the house was not required as the roof framing was constructed with timber that was treated in excess of the required H3 treatment.
  - A corner wall flashing is not required.
  - The untreated timber to the main entry will be either replaced with H3 treated timber, or this part of the structure would be removed.
  - As the timber framing to the carport is H3 treated there is no need to flash around the window.
- 5.8 The advisor attached a copy of a letter from the timber supplier to the applicant dated 11 October 2007, which confirmed that the rafters had "*treatment to* . . . *H4 specification*". Copies of the engineer's calculations were also provided.

### 6. Discussion

#### 6.1 What Building Code clauses apply?

- 6.1.1 I note Building Code Clause E2 was amended on 21 June 2007. The submissions made by the applicant were made on the basis of the former E2, however, the changes that came into force on 21 June 2007 make no material difference to my view as to the compliance of the building with Clause E2.
- 6.1.2 Building Code Clause E2.2 says:

Buildings must be constructed to provide adequate resistance to penetration by, and the accumulation of, moisture from the outside.

However, the limitation on Building Code Clause E2.2 says that:

Requirement E2.2 does not apply to buildings (for example, certain bus shelters, and certain buildings used for horticulture or for equipment for washing motor vehicles automatically) if moisture from the outside penetrating them, or accumulating within them, or both, is unlikely to impair significantly all or any of their amenity, durability, and stability.

- 6.1.3 The carport is open to the weather, and in addition, significant moisture will be carried in on vehicles in wet weather. As provided by the limits on application to Clause E2.2, I am of the view that the building elements are such that the ingress of moisture is unlikely to impair significantly the carport's amenity, durability, and stability. The extent to which that has been achieved is discussed in 6.2.7 below. Accordingly, I consider that Clause E2 does not apply to the carport.
- 6.1.4 Building Code Clause E1.3.2 says:

E1.3.2 Surface water, resulting from an event having a 2% probability of occurring annually, shall not enter buildings.

However, the limitation on Building Code Clause E1.3.2 says:

Performance E1.3.2 shall apply only to Housing, Communal Residential and Communal Non-residential buildings.

- 6.1.5 There appears to be no doubt that the house, to which the carport is attached, complies with Clause E1. I consider the carport falls outside the definition of *"Housing, Communal Residential and Communal Non-residential buildings"*, and I am therefore of the view that Building Code Clause E1.3.2 does not apply to the carport. I note also that the carport is not likely to collect or concentrate water that leads to damage or nuisance to the house.
- 6.1.6 I recognise that under the Building (Specified Systems, Change the Use, and Earthquake-prone Buildings) Regulations 2005 the house itself is use SH (Sleeping Single Home), and that applies also to associated "garages (whether detached or part of the same building)". However, the uses defined in those Regulations apply only in respect of changes of use in terms of sections 114 and 115, and I take the view that those uses are not relevant to the interpretation and application of the classified uses defined in Clause A1 which apply for the purposes of the Building Code.
- 6.1.7 In addition, as the rafters and the wall framing, with one exception, are constructed with timber treated to a minimum level of H3.2, there is no requirement that they be further protected from the ingress of moisture in order for the building to comply

with Clauses B1 and B2. However, there remain other building elements that need to be rectified in order for them to comply with Clause B2.

#### 6.2 Does the carport comply with the Building Code to the extent required?

- 6.2.1 Taking into account the expert's report, I am satisfied that the current performance of the elements installed on this carport is inadequate in the following respects:
  - The condition of the wall and roof cladding (burrs, rust and the onset of paint failure).
  - The excessive knots in the rafters.
  - The fixing of every second rafter to the ribbon board.
  - The un-galvanised fixings to the bottom plates and the roof ribbon plates.
  - The inadequately treated timber to the carport opening.
- 6.2.2 Based on the expert's report I am prepared to accept that a damp-proof course has been provided under the bottom plates and that an upstand is not required at the front of the carport. Apart from the condition of the cladding itself, where the expert has pointed out other cladding defects (flashings, holes, roof slope, etc), I have determined that these do not impact on the code-compliance of the carport. I have also accepted the applicant's submission as to the acceptable size, quality and timbertreatment of the rafters.
- 6.2.3 Because the faults identified with the carport occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 6.2.1 will result in the building being in compliance with Clauses B1 and B2.

#### 6.3 Was a building consent required?

- 6.3.1 The territorial authority has argued that as, in its opinion, the carport is larger than the original carport that it replaced and is basically changed structurally, the new building work required a building consent. The territorial authority's contention as to a change in size and structure is supported by the brief of evidence supplied by a previous owner as described in paragraph 4.3.
- 6.3.2 The applicant has stated that the original carport was built to a greater plan size than shown on the original plan, a size that is the same as the carport. The applicant considers that as it was therefore "re-constructing the same structure"; a building consent was not required. Invasive investigation carried out on the property also provides some evidence to support the applicant's contention. However, as noted in paragraph 4.1, the applicant has submitted that the previous carport, which was 17 years old, was in such a state of disrepair, that all the timber was replaced.
- 6.3.3 Section 41(1)(b) of the Act states that a building consent is not required for any building work described in Schedule 1. This matter revolves around the interpretation of paragraph (a) of Schedule 1, which states:

#### Exempt building work

A building consent is not required for the following building work:

- (a) any lawful repair and maintenance using comparable materials, or replacement with a comparable component or assembly in the same position, of any component or assembly incorporated or associated with a building, including all lawful repair and maintenance of that nature that is carried out in accordance with the Plumbers, Gasfitters, and Drainlayers Act 1996:
- 6.3.4 I note the reference to lawful repair and maintenance which I take to mean repair and maintenance that will lead to on-going compliance with the Building Code. "Lawful" in this context also means compliant with the Act.
- 6.3.5 I carried out an extensive analysis of paragraph (a) in Schedule 1 of the Act in Determination 2006/116. I am of the opinion that this analysis is relevant to the carport in question because I have to determine the meaning of the words "using comparable materials, or replacement with a comparable component or assembly in the same position, of any component or assembly incorporated or associated with a building..."
- 6.3.6 Determination 2006/116 defined "comparable" as the use of "similar materials and similar configuration . . . equivalent to or as good as that of the originals". Likewise, I must now decide whether the new structure is made of "similar materials and similar configuration" to the original building, and whether the performance of its component building elements, in terms of the Building Code is "equivalent to or as good as that of the original". I note that all these requirements must be met for the new structure to meet the criteria set out in Determination 2006/116 and other like determinations.
- 6.3.7 As regards the first criterion, "*similar materials*" I note that there is uncertainty in the documentation I have received as to the materials used in the construction of the superseded carport. The plans that were approved by the territorial authority in 1989 do not show a concrete floor slab. There are no perimeter walls shown, only a side panel supported on two pipe columns is indicated. This would also mean that there was no window installed. The previous owner has stated that the original carport did not have wall enclosures and the floor was not concreted. On the other hand, the applicant maintains that the re-cladding was carried out using materials from the existing structure.
- 6.3.8 In paragraph 6.3.7 I considered a comparison between the materials or components, used in the respective buildings. I turn now to the second criterion, "the configuration" of the assemblies used in each of the systems. The assembly of such systems is usually described in scaled detailed drawings that show the relative positions (the configuration) of the components and the fixings, flashings, jointing and coatings necessary to make the assembly work properly. I am of the opinion that a change in size of a replacement building would have also a bearing on the "*configuration*" of the building elements. However, in the current situation, there is also conflicting evidence as to the size of the new and the replaced structures.
- 6.3.9 It is my view that when exemption from the requirement for a building consent is being considered under Schedule 1(a) of the Act, any analysis of comparability of materials, components or assemblies will depend on the comparison of materials and configurations discussed in paragraphs 6.3.7 to 6.3.8 inclusive. If the new structure was either of a larger size, and/or the cladding and other materials differed from that

used on the original carport, then I would conclude that the criteria set out in paragraphs 6.3.7 to 6.3.8 have not been met, and consequently a building consent was required.

- 6.3.10 Unfortunately, because of the conflicting evidence I have received, I cannot make an exact comparison between the new and replaced structures. Consequently, I cannot reach a conclusion as to whether the stated criteria have been met.
- 6.3.11 However, in the current situation the entire carport has been replaced. I note that paragraph (a) of Schedule 1 is written in terms of "*replacement with a comparable component or assembly incorporated or associated with a building...*". Paragraph (a) of Schedule 1 therefore anticipates replacement parts in an existing building and that replacing or re-building an entire building would not be exempt from a building consent by virtue of paragraph (a) alone. This can be compared with, for example, paragraphs (i) and (j) of Schedule 1, which use the term "building work" in relation to potentially entire and new structures.
- 6.3.12 I conclude, therefore, that the replacement of an entire building is excluded by the wording set out in paragraph (a). Accordingly, I take the view that a building consent would be required for the construction of the carport.
- 6.3.13 Under paragraph (k) of Schedule 1, the territorial authority can forgo the requirement for a building consent if building work meets certain criteria. However, the territorial authority has not indicated that it would be prepared to take such an approach, nor have I seen evidence that the applicant has applied for exemption under paragraph (k) of Schedule 1.

### 7 The decision

- 7.1 In accordance with section 188 of the Building Act 2004, I determine that:
  - (a) the carport does not comply with Clauses B1 and B2 of the Building Code, and accordingly confirm the territorial authority's decision to exclude the carport from the certificate of acceptance.
  - (b) the construction of the carport required a building consent and accordingly confirm the territorial authority's decision to issue a notice to fix.
- 7.2 I note that the territorial authority has issued two notices to fix. The territorial authority should withdraw the notice to fix issued on 14 June 2007, and issue a new notice to fix that requires the owner to bring the carport up to compliance with the Building Code, identifying the defects listed in paragraph 6.2.1. The notice to fix should not specify how those defects are to be fixed, as that is a matter for the owner to propose and for the territorial authority to accept or reject. It is important to note that the Building Code allows for more than one method of achieving compliance.
- 7.3 I would suggest that the parties adopt the following process to meet the requirements of paragraph 7.2. Initially, the territorial authority should issue the notice to fix. The owner should then produce a response to this notice in the form of advice from a competent and suitably qualified person, as to the rectification or otherwise of the specified issues. Any outstanding items of disagreement can then be referred to the Chief Executive for a further binding determination.

- 7.4 The territorial authority shall issue a Certificate of Acceptance, in respect of the carport, once the items listed in the notice to fix have been fixed to its satisfaction.
- 7.5 I make no decision as to how the territorial authority should deal with the matter of building work that should have been the subject of an application for building consent.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 19 December 2007.

John Gardiner Manager Determinations