



## Determination 2016/040

# Regarding the grant of a building consent for a modular house at 8 Crosby Road, Auckland and the use of modules designed locally but prefabricated offshore

### Summary

This determination considers whether the authority has exercised its powers correctly in granting a building consent for a house design that had a national multiple-use approval and consisted of modules that were manufactured offshore. The determination considers the extent to which the Building Act and its Regulations apply to the prefabricated modules, and discusses the range of information Building Consent Authorities can seek to satisfy themselves that the construction of prefabricated components will comply with the plans and specifications.

### 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 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 this determination are:
  - Auckland Council, carrying out its duties as a territorial authority or building consent authority, which applied for the determination (“the authority”)
  - the owners of the property, S Liaw and S Ong (“the owners”) acting through the regional distributor, EcoTech Homes (Auckland) Ltd, as an agent (“the distributor”).
- 1.3 Persons with an interest in this determination are the designer and supplier of the modules, EcoTech Homes (NZ) Ltd (“the supplier”), and the distributor.
- 1.4 The determination arises from the authority’s request to reconsider the building consent it issued for the owners to erect a new modular house on their property. The authority now wishes to amend the scope of this consent to exclude from the building consent the prefabricated modules used for this house, which have been designed in New Zealand and manufactured offshore. The plans and specifications for the house are covered by a national multiple-use approval (also known as a Multiproof certificate). This is one of two determination applications the authority has made on the same issue – the other involves a different owner but prefabricated modules supplied by the same company.

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<sup>1</sup> The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Ministry are all available at [www.building.govt.nz](http://www.building.govt.nz) or by contacting the Ministry on 0800 242 243.

- 1.5 The matter to be determined<sup>2</sup> is the authority's exercise of its powers of decision in granting the building consent.
- 1.6 In making my decision, I have considered the submissions of the parties and persons with an interest, and the other evidence in this matter.

## 2. Background

- 2.1 The owners' property comprises a 923m<sup>2</sup> section that slopes up from the road boundary to the west at a steady grade. It originally contained a single storey house and a driveway along the southern boundary leading to a garage.
- 2.2 The owners sought to subdivide their property into two freehold Lots: one 400m<sup>2</sup> Lot at the rear (eastern side) to contain a new single storey home and the other Lot at the front containing the existing house. Access to both Lots was proposed from a shared driveway along the property's southern boundary, with new parking for each house and the existing garage removed.
- 2.3 The owners accordingly made a restricted discretionary resource consent application to the authority under the Resource Management Act 1991 for the subdivision, related earthworks, parking and the construction of the new house.
- 2.4 Their application was processed non-notified on 12 November 2015 and the required land use and subdivision consents were also granted on that date.
- 2.5 On 9 December 2015 the owners applied to the authority for building consent to construct a new dwelling and related work including the likes of connections to public storm water and waste water systems.
- 2.6 The building consent application included plans and specifications from an architectural designer ("the owners' designer") for the erection of a 105m<sup>2</sup> house from prefabricated modules; the construction of two small timber frame decks, aluminium balustrades and landings; steps down to ground level on both sides; and a new timber retaining wall parallel to the house.
- 2.7 Plans for earthworks and sediment control, foundations, drainage and a floor plan, cross sections for connection of the modules to house piles, and details of the deck areas and fixings were accompanied by structural calculations (for the house piles, deck bearers and piles, and timber pile retaining wall). Additional information regarding the deck joists and balustrade design was also supplied.
- 2.8 The plans from the owners' designer included references to the Ministry's "MultiProof approved documents for information on 105 sq/m prefabricated modular home". I note that the plans and specifications this referred to (which include details for joining the modules) are covered by a national multiple-use approval (also known as a MultiProof certificate). This means a building consent authority ("BCA") must accept them as showing that if the products are installed, and the building work carried out, in accordance with the plans and specifications the house will comply with the Building Code<sup>3</sup>.
- 2.9 The modules, which are manufactured overseas and delivered to the building site, are made from a heavy steel alloy. Roofs are flat with channels for water flow, while the external walls have a profile similar to weatherboards. Temporary bracing and protective coverings are provided to large openings until the modules can be bolted together onsite.

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<sup>2</sup> Under section 177(1)(b) and 177(2)(f) of the Act.

<sup>3</sup> Under section 30A of the Act

- 2.10 Building work onsite in relation to these modules includes the erection of the house, including insulating the joints and bolting together (at the roofline and base of the walls) the four modules which make up the final structure. The joints are covered by steel plates, the floor joins are covered and eaves are bolted on.
- 2.11 For the owners' house, three larger modules (one with an ensuite, part of the bedrooms and the kitchen area; one with bathroom, bedrooms and dining area; and another with more parts of the bedrooms and living area) and one smaller module (also with living area) were to be used.
- 2.12 On 16 December 2015, the authority emailed the owners' designer seeking some additional details. It accepted the building consent application on 21 January 2016.
- 2.13 On 11 February 2016 the authority emailed the owners' designer to request a copy of the relevant MultiProof certificate. A copy of MultiProof certificate A10025: EcoTech Homes (NZ) Limited for a single level 3 bedroom 3.5 unit prefabricated modular home (foundations not included) was supplied. However, further email correspondence between the authority, the distributor and the supplier followed between 15-22 February 2016, as the authority queried why this MultiProof certificate was for a three-bedroom house rather than a four-bedroom house as shown on the plans from the owners' designer. The supplier's response was that the entry area (in the EcoTech three-bedroom modular home design referred to in the certificate) could be a fourth bedroom, and the distributor suggested changing bedroom 3 on the consent application to an entry.
- 2.14 In relation to this, the authority noted the following on the building consent checklist:
- EcoTech modular home covered by MultiProof certificate. Note: certificate scope is for a 3 EcoTech modular home, however, the drawings supplied show 4 bedroom. Correct certificate required for the proposed unit type. Correct certificate provided.
- 25/02/16 Note: Cert for 3 bedroom without foundations however 4 bedrooms proposed – the fourth bedroom is meant as an entry. The variations of the cert do not apply for an additional bedroom. However upon assessment the variation is very minor and does not concern additional structure (i.e. walls), footprint, structure, weathertightness, just a mere change in name of spaces. Based on this assessment and discussion with manager [name] the certificate can still apply.
- 2.15 An addition to this note on 11 March 2016 added “as noted above, the entry conversion to bedroom 4 has no structural implications. Window still sits between structural elements and creation of bedroom only involves movement of internal non load bearing wall. Certificate is acceptable”.
- 2.16 On 4 March 2016 the authority emailed the distributor and said it still required a “statement stating that there would be no deviation from the approved EcoTech Certificate MultiProof set of drawings” before it could finalise the consent. A statement from the supplier dated 4 March 2016 and headed “Prefabricated modular building statement of conformity” was provided:
- This letter is to confirm the EcoTech Homes pre-built modular building order number 105-1502 proposed for assembly at 8 Crosby Road, West Harbour, Auckland for [the owners] conforms to the National Multiple Use certificate number A10025 (Rev 1 issued 7 December 2015) and or documentation included in the Building Consent application, subject to the exclusions if any as noted below.
- Exclusions: No exclusion to our knowledge.
- 2.17 On 14 March 2016 the authority issued a building consent (ABA-2015-2883) for a new dwelling. Attachments to the consent were a development contribution notice and a schedule of inspections and documentation required for compliance.

- 2.18 This schedule listed the required inspections as: siting, bored piles and timber retaining footings; subfloor framing; drainage, connection to public drains, and public drainage or water supply; and a final inspection. It also listed the producer statements, testing certificates and warranties required to confirm compliance during construction as: energy works certificates for both gas and electrical, a “PS3” producer statement construction for the installation of proprietary balustrades, a “PS4” producer statement construction review for an engineer’s observation of foundations and retaining walls, and a “Quality Assurance Certificate – EcoTech Homes”.
- 2.19 The requirements for this quality assurance certificate were given as:
- ...to be submitted by the contractor for the construction of EcoTech Homes pre-built modular building order number 105-1502 to ensure it confirms to National Multi Use [sic] Certificate number A10025 and certification that the work complies with the design and manufacturer’s specifications as approved in this building consent and any relevant New Zealand Building Code clauses.
- 2.20 The authority sought independent legal advice, receiving this from its advisers (“the authority’s legal advisers”) in a letter dated 18 April 2016, with respect to “buildings constructed overseas and then imported into New Zealand for use”.
- 2.21 This letter noted the authority’s concerns about whether it was capable of issuing, or being able to refuse to issue, a code compliance certificate in respect of this building consent and one issued for a similar project (refer paragraph 1.4) as it did not undertake any inspections during the overseas construction activities. It also noted that the authority was considering how it addressed these types of developments in future.
- 2.22 The Ministry received an application for determination on 19 May 2016.

### **3. Submissions**

- 3.1 With its application for determination the authority provided copies of:
- MultiProof certificate A10025 (rev 1 issued 7 December 2015) for EcoTech Homes’ single level, three bedroom 3.5 unit modular home (foundations not included)
  - the designer’s plans and specifications for the owners’ building project incorporating the prefabricated modules
  - the building consent for this project and a schedule of inspections and documentation required for compliance
  - correspondence between the authority, owners’ designer and the supplier and distributor, and other documentation relating to the building consent application and processing, including a Producer Statement PS1 – Design covering foundations and decks and another for the balustrade design, relevant engineering calculations for dead and live loads, bracing calculations, house and deck piles and the timber retaining wall, and details of the balustrades and deck joists
  - the authority’s report for a restricted discretionary resource consent application under the Resource Management Act 1991 and related documentation
  - a letter from the authority’s legal advisers (refer paragraphs 2.20 and 2.21).

### 3.2 The authority submitted:

[The authority] seeks amendment of the description in the building consent to be for building work only associated with relocation of a building in accordance with the legal advice which accompanies this application.

[The authority] seeks a determination on this issue among other reasons with a view to obtaining the [Ministry's] Chief Executive's views on the ancillary issues which the application raises.

### 3.3 The letter from the authority's legal advisers stated that they had been asked in particular for advice regarding:

- whether the construction of these buildings (this and a similar house – refer paragraph 2.21) was “building work” requiring consent under the Act
- if no building consent was required, whether a code compliance certificate could be required or refused
- if the building had a MultiProof certificate whether that provided the required approval to construct the building.

### 3.4 The authority's legal advisers said, in summary, that:

- Construction activities undertaken overseas were not able to be regulated by the Act. A building consent or code compliance certificate could not be issued for building work completed overseas as the jurisdiction of the Act was constrained to activities undertaken in New Zealand.
- In contrast, the building work required to install or establish buildings on a site in New Zealand, and any site works, was building work under the Act and required a building consent (and subsequently a code compliance certificate). The installation/ establishment onsite was effectively a building relocation and should be treated similarly.
- From a public policy perspective, there was no rational basis why an imported building could be established on a site and used without the need for building consent.
- Where a MultiProof certificate was in place and provided its requirements were met, the building consent authority must accept the building design as complying with the Building Code.
- If the building work that the MultiProof certificate authorised was undertaken overseas, the MultiProof certificate had no direct relevance. The activity was not considered to be building work under the Act so there was no need to assess or obtain approval for it by way of a MultiProof certificate.
- Any building work undertaken in New Zealand required building consent (unless exempted by the building consent authority) and any MultiProof certificate relevant to the building consent required for works actually undertaken in New Zealand needed to be considered.

### 3.5 The owners did not provide a submission in response to the determination application, nor did the persons with an interest.

### 3.6 The draft determination and submissions in response

3.6.1 On 11 July 2016 I issued a draft of the determination to the parties and persons with an interest. The draft concluded that the authority had been correct to include the prefabricated modules in the building consent granted to the owners and confirmed the authority's decision. The responses to this draft are covered in the following paragraphs.

3.6.2 On 25 July 2016 the authority advised that it did not accept the draft determination and included a letter from its legal advisers (written on the authority's behalf) setting out its reasons.

3.6.3 This letter said the authority did not agree with the draft determination's conclusion that it had exercised its powers correctly in granting the building consent for the owners' house. It requested that this determination be amended to:

- amend the scope of the building consent issued for the owners' house to exclude the prefabricated modules which had been manufactured offshore on the basis that the exercise of its power to issue the building consent (and a code compliance certificate) is restricted to building works which occurred in New Zealand and cannot include building works which occurred offshore
- confirm that MultiProof certificates only applied to building consent applications for building works to be undertaken in New Zealand (the authority also said it was not possible for the existence of a MultiProof certificate to retrospectively authorise building works undertaken offshore for which building consent cannot be required), and
- confirm that the prefabricated modules did not have product certificates (issued under section 269 of the Act<sup>4</sup>) and that, until they did, they should not be regarded as "products" compliant with the Building Code.

3.6.4 The letter also said, in summary:

- The authority supported the draft determination's conclusion that there was no power in the Act to regulate "building work" carried out offshore, and that a building consent could not authorise or apply to prefabrication work undertaken offshore.
- The authority considered the draft determination took the approach this conclusion did not apply if there was a MultiProof certificate in place, but the authority disagreed because:
  - A MultiProof certificate's function was to confirm that if building work is undertaken in accordance with the approved plans and specifications it will comply with the Building Code. It said a MultiProof certificate did not remove the need for a building consent.
  - If offshore building work was not building work covered by the Act and a building consent could not be required, it could not be covered by the Act irrespective of the existence of a MultiProof certificate. Equally, there was no jurisdiction to conclude that when a building (or part) constructed offshore entered New Zealand it could be retrospectively authorised by a MultiProof certificate. The Ministry should "take responsibility for MultiProofs that may have been issued on an invalid basis and which

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<sup>4</sup> In this determination, unless otherwise stated, references to sections are to sections of the Building Act 2004

provide a purported scope of application beyond which the Act allows for”.

- The prefabricated modules did not have a product certificate<sup>5</sup> and the authority did not consider them likely to be regarded as “products” given they were an entire building (or in this case, quarter of the entire building) that was already constructed. Even if they were considered “products”, they could only be considered under section 19 of the Act as sufficient for complying with the Building Code if certified. Further, the authority’s decision on the building consent would remain invalid as it was made on the basis of a MultiProof certificate rather than a “product”.

3.6.5 The authority also said the draft determination’s conclusion that the building consent was “granted for an entirely appropriate purpose” was not the issue to be determined. The matter to be determined was whether the authority could legally issue a building consent for “building works” undertaken offshore – specifically, whether the scope of the building consent granted in this case should be modified to exclude those building works which occurred outside of New Zealand.

3.6.6 Further, the authority said the draft determination did not provide clarity for future application of the Act to prefabricated modules constructed offshore.

The Draft Determination would force the authority (and other Building Consent Authorities (BCAs)) to issue building consents (and code compliance certificates (CCC)) for offshore building works based on the plans and designs of a New Zealand MultiProof [certificate] in a situation when no building consent can authorise those works.

This result exposes the authority (and other BCAs) to future liability should prefabricated elements of a building, or entire buildings, constructed overseas fail. In situations where significant amounts of building work occur offshore, the authority has no practical ability to inspect the prefabricated building (or parts of a building) to check consistency with the MultiProof [certificate] or its conditions, as they arrive already constructed in New Zealand.

3.6.7 On 29 July 2016 the distributor, expressed concern about the problems obtaining building consents from the authority for its modular housing when the same brand of modular homes had successfully obtained building consents and code compliance certificates in other parts of the country.

3.6.8 The distributor also said the owners had received a letter from the authority withdrawing their building consent and advising that it was applying for a determination. I have not seen a copy of correspondence indicating the authority had “withdrawn” the consent. A BCA has no statutory power under the Act to “withdraw” a consent: a consent may lapse and be of no effect but only under the provisions in section 52, or a BCA’s decision to issue the consent may be reversed by determination under section 177.

3.6.9 The distributor set out the background leading up to the consent being granted, and noted that it had met all of the regulatory requirements and in addition provided detailed quality assurance documentation and certification by an independent third party inspector. The distributor also said that Ecotech Homes now came with a 10 year warranty insurance, and the insurer would also from time to time arrange its own independent third party inspection “since, while fully satisfied our units conform to the New Zealand building code, as the warrantee they are keen to be seen to be monitoring our manufactured output”.

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<sup>5</sup> As defined in sections 268-272 of the Building Act 2004

- 3.6.10 In a response received on 17 August 2016 the owners accepted the draft determination without further comment.

## **4. Discussion**

### **4.1 General**

- 4.1.1 The authority’s legal advisers consider that the scope of the building consent it issued for the building project should be narrowed to only cover the onsite building work.
- 4.1.2 The authority’s legal advisers also state that, although the authority has already granted a building consent for the offshore works (i.e. the offshore prefabrication), “it was unlawful for it to do so and that building consent would likely be considered to be invalid”.
- 4.1.3 To understand more clearly how the Act applies in this situation, what the building consent should cover and how the authority should have exercised its powers I provide the following discussion.

### **4.2 Building work and building products, elements and components**

- 4.2.1 “Building work” is defined as work for, or in connection with, the construction of a building (section 7 of the Act); where to “construct, in relation to a building, includes to design, build, erect, prefabricate, and relocate the building”. The important terms here are “construct”, “build”, “erect” and “prefabricate”.
- 4.2.2 The ordinary meaning of the term “construct” is to “build or make (something, typically a building, road, or machine)”<sup>6</sup>.
- 4.2.3 In my view, to “construct” covers not only the activity of construction but also the installation or assembly of the building components used in that activity which combine to create the building as a whole. To “build” means to “construct (something) by putting parts or material together”<sup>7</sup>. To “erect” a building means to “put together and set upright (a building, wall, or other structure)”<sup>8</sup>.
- 4.2.4 The Building Code is performance based and specifies objectives, functional requirements and performance obligations that buildings, building elements, building systems and various other aspects of buildings must satisfy. The construction of a building to meet the Building Code involves both building work in respect of the assembly of components and the components themselves to produce a result – a building – that complies with the performance requirements of the Building Code.
- 4.2.5 The Act uses a range of terminology when referring to the role of the products, elements or components that go to make up a building. “Building methods or products” are defined in section 20(2)(c) as “building methods, methods of construction, building design, or building materials”, but the Act only uses this term in relation to product certification (in sections 261-272) and to the powers of the Chief Executive to issue a warning or ban in respect of the use of a building method or product (in sections 26-27).
- 4.2.6 The term “product manufacturer or supplier” is used in section 14G and provides a product manufacturer or supplier is responsible for ensuring that the product will, if installed in accordance with the technical data, plans, specifications, and advice

<sup>6</sup> Oxford Dictionary of English, 3<sup>rd</sup> ed., Oxford University Press, 2010

<sup>7</sup> Oxford Dictionary of English, 3<sup>rd</sup> ed., Oxford University Press, 2010

<sup>8</sup> Oxford Dictionary of English, 3<sup>rd</sup> ed., Oxford University Press, 2010

prescribed by the manufacturer, comply with the relevant provisions of the Building Code. However, section 14G uses the natural and ordinary meaning of “product” which is “an article or substance that is manufactured or refined for sale”<sup>9</sup>, not the specific term “building methods or products” as defined in section 20(2)(c).

- 4.2.7 In contrast, the Building Code does not refer to products but uses the general term “building element”, which is defined in Code clause A2 as “any structural or non-structural component and assembly incorporated into or associated with a building. Included are fixtures, services, drains, permanent mechanical installations for access, glazing, partitions, ceilings and temporary supports”. The Act does not use the term “building element”, although it does make an appearance in clause 31 of Schedule 1 in the exemption from the requirement for a building consent in relation to the removal of a “building element”.
- 4.2.8 The authority’s legal advisers take the view that “product” refers only to a “building method or product” that is covered by a product certificate under section 269. To avoid any confusion, I have used the more neutral term “component” throughout this determination to refer to the products (as generally referred to in section 14G), elements or other materials that are used to construct a building.

### **4.3 The building consent process**

- 4.3.1 A building consent is an approval granted by a BCA that the building work described in the plans and specifications will result in the construction or erection of a building that complies with the Building Code if that building work is carried out in accordance with the plans and specifications.
- 4.3.2 A BCA’s responsibilities under the Act include checking each building consent application to ensure it complies with the Building Code and that building work has been carried out in accordance with the building consent for that work (section 14F(a)). These functions that are imposed on BCAs in respect of building consents are important for achieving the purposes of the Act, which include providing for the regulation of building work to ensure that people who use buildings can do so safely and without endangering their health, and promoting the accountability of BCAs who have responsibilities for ensuring that building work complies with the Building Code (section 3(a)(i) and (b)).
- 4.3.3 I note that in making determinations the Chief Executive must take into account the principles in section 4(2)(q)(ii) and (iii), which include the need to ensure BCAs are “accountable for their role in ensuring ... plans and specifications are sufficient to result in building work that (if built to those plans and specifications) complies with the Building Code” and that “building work ... complies with that building consent”.
- 4.3.4 The term “plans and specifications” is defined in section 7 as “the drawings, specifications, and other documents according to which a building is proposed to be constructed, altered, demolished, or removed” and can include “the proposed procedures for inspection during the construction, alteration, demolition, or removal of a building”. They usually comprise drawings of the proposed building and specifications for the components that will be used in the construction or erection of the building, and identify the standards the building work and components will comply with.

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<sup>9</sup> Oxford Dictionary of English, 3<sup>rd</sup> ed., Oxford University Press, 2010

- 4.3.5 Accordingly, the plans and specifications submitted with a building consent application provide a BCA with the information to decide whether, if the building work is carried out and the components are assembled, installed or incorporated in accordance with those plans and specifications, the building will meet the performance requirements in the Building Code
- 4.3.6 An important aspect of any decision by a BCA regarding whether to grant a building consent is the requirement for it to assess the relevance, credibility and comprehensiveness of the information provided about the performance of these components. This assurance information could include product technical statements, test results, product certificates, compliance with Acceptable Solutions or Verification Methods, testing against relevant New Zealand or international standards, industry codes of practice, independent assessments, or appraisals. It could be sourced in New Zealand or overseas.
- 4.3.7 When deciding whether to grant a building consent a BCA must also specify a method for checking that the building work will actually be carried out in accordance with the consented plans and specifications. This also involves considering whether the components to be used in constructing or erecting the building will meet the provisions of the Building Code.
- 4.3.8 While BCAs usually stipulate a list of inspections in a building consent (i.e. progress points at which the building work will be checked and components inspected), there is nothing in the Act that requires BCAs to restrict themselves to inspections. Inspections are a condition of a building consent and are provided for in section 90, but a BCA may supplement or substitute these inspections with other measures to satisfy itself that the building work will be carried out in accordance with the plans and specifications. For example, a BCA may be prepared to rely on other evidence such as product technical statements, manufacturers' quality assurance plans, third party oversight and statements, plant audits, project records, Licenced Building Practitioner (LBP) supervision and the like.
- 4.3.9 In summary, it can be seen from the above discussion that a building consent covers the carrying out of building work and the installation and assembly of components to construct or erect a building that will satisfy the performance obligations contained in the Building Code. In deciding whether to grant a building consent a BCA must consider the proposed methods that will be used to check whether the building work will be carried out, and the components will be assembled or installed, in accordance with the plans and specifications. These methods are likely to involve a mix of inspections by a BCA, third party assurances and specifications for the components to be used in the construction and erection of the building. The nature and extent of components in the plans and specifications accompanying a building consent application will vary with each building consent, but the Act requires a BCA to consider in each case whether the provisions of the Building Code will be met if the building work is carried out and the components installed or assembled as provided for in the plans and specifications.

#### **4.4 Prefabrication of building components**

- 4.4.1 The term "building work" includes to "construct" a building, which in turn includes to "prefabricate" a building. To "prefabricate" means to "manufacture sections of (a building or piece of furniture) to enable quick assembly on site"<sup>10</sup>. The extent of offsite manufacture (i.e. prefabrication) involved in a particular project may vary

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<sup>10</sup> Oxford Dictionary of English, 3<sup>rd</sup> ed., Oxford University Press, 2010

from relatively small building components such as window and door assemblies, to larger items such as wall panels and framing, through to modules or parts of buildings either pre-assembled or delivered to site as kitsets or flatpacks.

4.4.2 However, while prefabricated components may be large, they are still like any other components covered by a building consent in that a BCA needs sufficient information to conclude that, once they are assembled, installed or incorporated, the building will meet the performance requirements in the Building Code.

4.4.3 I note that prefabrication is generally undertaken in a controlled environment, such as a factory, and involves a number of repeat manufacturing processes and quality controls. Accordingly, there will often be suitable information that the manufacturer, prefabricator or the local supplier can provide to the BCA (e.g. a quality assurance plan and other material as noted above) regarding the compliance of components with the Building Code.

4.4.4 It is up to the BCA to decide whether it can rely on this or whether it requires any additional measures (e.g. some third party oversight, plant audits or other checks if these are not already part of the quality assurance plan for the components).

#### **4.5 National multiple-use approvals**

4.5.1 A national multiple-use approval, or MultiProof certificate, is a decision by the Ministry's Chief Executive that, if building work is properly completed in accordance with the plans and specifications that accompany the application, that building work will comply with the performance requirements in the Building Code. A BCA must accept plans and specifications covered by a MultiProof certificate as complying with the performance requirements in the Building Code.

4.5.2 I note that while a BCA must accept that MultiProof plans and specifications, if followed, will result in a code-compliant building (section 19(1)(ca) of the Act), a BCA still needs to satisfy itself that the plans and specifications actually will be followed.

4.5.3 In other words, MultiProof certificate or not, a BCA still needs to be satisfied that the building work involved, and components incorporated or installed, in a particular project will be carried out in accordance with the consented plans and specifications. A BCA will usually incorporate these requirements as conditions of the building consent.

### **5. The owners' building project**

5.1 The owners' building consent application was for the construction of a four-bedroom 105m<sup>2</sup> house from prefabricated modules. The application also included the construction of two small decks, aluminium balustrades and landings, steps and a retaining wall.

5.2 The MultiProof certificate covered the plans and specifications for the modules themselves and details for joining these modules onsite to erect the house (including insulating the joints and bolting them together at the roofline and base of the walls, and covering the roof joints and floor joins). The authority was required to accept these plans and specifications as complying with the Building Code, and it relied on this along with a statement it requested, and which was provided by the supplier, that there would be no deviation from the approved plans and specifications (refer paragraph 2.16).

- 5.3 In relation to the project as a whole, the authority decided that the proposed building work and the associated assembly and incorporation of products would comply with the Building Code based on the plans and specifications, the applicable MultiProof certificate, structural calculations and associated assurances (e.g. certificates of design work as normally required).
- 5.4 The building consent granted by the authority then considered the erection of the building and associated structures on site and the compliance of these with the plans and specifications through the mix of producer statements, inspections and a “Quality Assurance Certificate – EcoTech Homes” (refer paragraphs 2.18 and 2.19).

## **5.5 The authority’s decision to grant the building consent**

- 5.5.1 The authority’s legal advisers have submitted that the building consent already issued for this project is invalid as it covers offshore “building work” for which a building consent is not required.
- 5.5.2 I do not have the jurisdiction under section 188 of the Act to declare a building consent “invalid”. A determination can only confirm, reverse or modify the decision or exercise of power to which it relates. In this case, I consider the question is whether the decision to grant the building consent including the prefabricated modules was correct.
- 5.5.3 These prefabricated modules are incorporated into, and are integral to, the overall building project (albeit as large components). The building consent has been granted for a mix of building work and components, as discussed earlier, so covers the construction and erection of the building. In this case there is simply more prefabrication than would normally be the case with, say, a new “spec” (speculative) house constructed onsite by licensed building practitioners and other tradespeople, even though such spec houses comprise increasingly large quantities of prefabricated components such as framing, window and door assemblies, panels and the like, and such components and assemblies are increasingly prefabricated offshore.
- 5.5.4 The authority was entitled to ask at the consent stage how the compliance of the completed prefabricated components would be checked against the plans and specifications. The authority could also have asked for a range of information relating to the offshore prefabrication process such as the relevant quality manual, quality assurance processes, third party verification, verification of the completed component, and any local certification available. In this case, it did require a quality assurance certificate from the manufacturer (which required confirmation that the modules complied with the design and manufacturer’s specifications as approved in the consent and any relevant Building Code clauses), as described in paragraph 2.19.
- 5.5.5 Once the modules were delivered to site, the authority had the opportunity to undertake a range of checks. For example, the authority would have been able to perform useful visual inspections of the modules and their construction, to observe the joint insulation and overall module assembly, and to undertake further inspection and testing (e.g. taking off electrical plates, testing for insulation etc) if this was considered necessary.
- 5.5.6 The authority was satisfied the provisions of the Building Code would be met if the prefabricated modules were erected in accordance with the plans and specifications in the building consent. The modules were like any other large components to be included in building work and were adequately described in the plans and specifications accompanying the building consent.

5.5.7 However, the authority now seeks to remove the prefabricated modules from the building consent.

## **5.6 Relevance of the MultiProof certificate**

5.6.1 The authority's legal advisers state that the MultiProof certificate relating to the prefabricated modules has no direct relevance for any building work carried out offshore. I concur with this view. The MultiProof certificate is an approval that if the building work covered by the approval is properly completed in accordance with the plans and specifications that accompany the approval, that building work will comply with the performance requirements in the Building Code (section 30F(1)(e)).

5.6.2 The MultiProof certificate did not make the prefabrication process "building work" when it was not otherwise building work; it did not authorise building work, as only a building consent can do that; and it did not extend the application of the building consent.

5.6.3 While the authority was required by section 19(1)(ca) to accept the MultiProof certificate as establishing compliance of the modules with the Building Code when deciding whether to issue the building consent, the authority was still entitled to ask how the compliance of the components incorporated/installed as a result of this offshore prefabrication would be checked against the MultiProof plans and specifications (and did so via its request for a quality assurance certificate).

5.6.4 The authority also had opportunities to perform useful observations and inspections once the modules were delivered to the site (as noted in paragraph 5.5.5) but appears to have now decided that these opportunities are not sufficient for deciding whether or not the prefabricated modules comply with the plans and specifications.

5.6.5 The MultiProof certificate has attached to it the plans and specifications the prefabricated modules must comply with, but the MultiProof certificate does not otherwise assist the authority to decide whether the completed modules comply with those plans and specifications. The authority must make that decision based on the information it has about the prefabrication of the modules, the compliance of the completed modules, and any inspections of the modules undertaken by the authority.

5.6.6 The MultiProof certificate also covers some onsite building work, which the authority has already outlined a method for considering in the usual way through site inspections.

## **5.7 Inclusion of the components/ prefabricated modules in the building consent**

5.7.1 The authority now considers that the building consent issued for the owners' project wrongly included the prefabricated modules. This would consequently restrict the scope of any code compliance certificate issued at the completion of this project.

5.7.2 The prefabricated modules were just another component to be used in the construction and erection of the building and were included within the building consent as would be the case for any other components.

5.7.3 As the authority's legal advisers have observed, offshore prefabrication is not "building work" under the Act. The building consent was not required in respect of the offshore prefabrication as it is not "building work", and the building consent could not authorise or apply to the offshore prefabrication work as there is no power in the Act to regulate building work carried out offshore.

- 5.7.4 The authority's legal advisers submitted the inclusion of the prefabricated modules in the building consent would require it to assess the compliance of the completed modules retrospectively. That is not the case. The time for the authority to consider the appropriate checks and assurance relating to the component modules was at the time it granted the building consent. The authority is not required to assess the compliance of prefabricated components retrospectively but should decide at the time of granting a building consent how the compliance of prefabricated components will be assessed.
- 5.7.5 The authority properly included the prefabricated modules within the building consent, as it did with a number of other components or systems included in the building consent. While the building consent had no application to the prefabrication of the modules because that prefabrication occurred overseas, there were a range of steps that the authority could have taken in addition to its requirement for a quality assurance certificate from the manufacturer to obtain assurances that the prefabrication process would comply with the plans and specifications and that the results of the prefabrication work, i.e. the completed module components, would comply with the plans and specifications. If the authority was not satisfied with the assurances provided in the application regarding the controls on the prefabrication work or the compliance of the completed module components, the authority could have refused to grant the building consent.
- 5.7.6 To conclude, the building consent concerned building work to be carried out, and components to be assembled, installed and incorporated, here in New Zealand as a building. Therefore, in my view, the authority's decision to grant the building consent was correct.
- 5.7.7 Even if I am wrong in this conclusion, the threshold to be satisfied in order for me to modify a building consent under section 188 of the Act to exclude certain work sometime after the building consent has been granted and the building work completed by the owners is not insignificant. If the authority is right that it was in error to include the prefabricated modules in the building consent, it is not clear to me that the error is such that it would be appropriate to correct it by excluding the modules from the building consent.
- 5.7.8 For example, if it turns out that the modules comply with the plans and specifications (and I make no comment on that as it is not the subject of this determination) it is not obvious the error should be corrected by excluding the modules from the building consent. Considerable work has been undertaken by the owners in reliance on the building consent and its modification would leave the owners with a code compliance certificate for only part of their building when the whole building actually complies with the building consent and Building Code.

## **6. The need for BCAs to check the compliance of components in a building consent**

- 6.1 I have included the following discussion for the benefit of all BCAs to assist them in their assessment of the compliance of components in a building consent where those components may be large, complex or involve offsite prefabrication.
- 6.2 At the time of granting a building consent, a BCA should carefully consider the nature of the proposed building work and prefabrication contained in a building consent application. For example, some of the factors that might change work that is "building work" to being not "building work" include where the prefabrication takes

- place (i.e. whether it is carried out in New Zealand or offshore), the reason for the prefabrication (whether it is for a particular building or as generic components for an unspecified use<sup>11</sup>), and its final destination (a site in New Zealand or a site overseas).
- 6.3 The plans and specifications accompanying a building consent application may cover a wide range of prefabricated components: for example, door and window assemblies, to framing, to building systems, to modules or kitset elements. It is up to the BCA in each case to decide what level of information and assurance is required in respect of the building work and components in a building consent application.
- 6.4 When a BCA is considering a building consent application, it may be that some components are commonly used and have a sound track record of compliance with the provisions of the Building Code. In this case, a BCA may be happy to accept these components without further assurances of their compliance. However, other components may be novel or unknown to a BCA and it would therefore be prudent for them to examine the claimed performance of these components more carefully and seek further evidence of performance if necessary.
- 6.5 A BCA is entitled to impose conditions on building work and the use of components to assure itself that these will comply with the plans and specifications accompanying a building consent application. If a BCA is not satisfied that prefabrication work will comply with the plans and specifications or that particular components will comply with the Building Code, it should seek further information or assurances from the building consent applicant. The information and assurances could concern controls on, third party oversight of, or assessments on completion of, the prefabrication work; e.g. in relation to the prefabricator's quality assurance plan, plant audits, project records, and LBP supervision. The information and assurances available are likely to depend on the degree of supervision and quality control of the prefabrication work. They could be sourced in New Zealand or overseas.
- 6.6 Assurances regarding completed prefabricated components could include independent assessments or appraisals, product technical statements, test results, product certificates, compliance with Acceptable Solutions or Verification Methods, or testing against relevant New Zealand or international Standards or industry codes of practice.
- 6.7 To conclude, at the time of granting the building consent it is the role of a BCA to decide what checks will be necessary to provide itself with satisfactory assurances that prefabricated components, when completed, will comply with the plans and specifications included in the building consent application. If satisfactory

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<sup>11</sup> A number of judicial decisions have decided that "building work" must be associated with the construction or erection of a building on a particular site. If the work is generic for use in unspecified or unknown buildings and is not associated with a particular site where the building will be located, it will not be building work. See, for example: *GLE Holdings Ltd v Tile 'N' Style Ltd* [2014] NZHC 802 at [33]-[45]; *Deeming v EIG-Ansva Ltd* [2013] NZHC 955 at [40]-[42]; *North Shore City Council v The Attorney-General as Successor to the Assets and Liabilities of the Building Industry Authority* [2012] NZSC 49 at [209]-[210] per Blanchard J; and *Thomson v Christchurch City Council* High Court, Christchurch, Gendall J, 28 March 2011, CIV-2010-409-2298 at [45]. The Court of Appeal decision in *Carter Holt Harvey Ltd v Minister of Education* [2015] NZCA 321, at [156] and [163], quoted approvingly from the High Court decision (*Minister of Education v Carter Holt Harvey Ltd* [2014] NZHC 681), where Asher J stated in relation to the phrase relating to "building work":

[143] ... On one hand it cannot have been the case that the manufacture of anything that was designed to be in a building could be treated as "relating to building work". If that were so not only would nails, paint, glass and other materials that are generally on the market be included, but also, theoretically, so could certain chattels and fixtures such as internal lightbulbs and internal security systems designed for buildings.

[144] It is not possible to propose any neat phrase or cut-off line which could apply. However, there is a natural distinction between work, design and products intended for a particular building and generic products that are available on the general market and are not destined for a particular building, which would include cladding and cladding systems.

The Supreme Court dismissed the appeal in *Carter Holt Harvey Ltd v Minister of Education* [2016] NZSC 95, although in respect of the application of the longstop in section 393(2) of the Act to particular buildings see [109] - [121] of that decision.

information and assurances regarding the checking of building work or components are not forthcoming, a BCA should consider refusing to grant the building consent. It is not for a BCA to take upon itself the risk that completed prefabricated components might not comply with the plans and specifications. A BCA has all the tools it needs to manage any potential liability arising from the risk that the completed prefabricated modules may not comply with a building consent.

- 6.8 A BCA also has a number of powers under the Act to enforce compliance with any building consent conditions it imposes when granting a building consent. For example, when checking components a BCA is entitled to issue a notice to fix where that component is not in accordance with the plans and specifications or building consent conditions.

## **7. The decision**

- 7.1 In accordance with section 188 of the Act, I hereby determine that the authority has exercised its powers correctly in granting the building consent for the owners' house consisting of prefabricated modules and I confirm the authority's decision to grant the consent.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 26 August 2016.

John Gardiner  
**Manager Determinations and Assurance**

## Appendix A: Relevant extracts from the Building Act 2004

### 7 Interpretation

#### building work—

- (a) means work—
  - i. for, or in connection with, the construction, alteration, demolition, or removal of a building; and
  - ii. on an allotment that is likely to affect the extent to which an existing building on that allotment complies with the building code; and
- (b) includes sitework; ...

**construct**, in relation to a building, includes to design, build, erect, prefabricate, and relocate the building

### 8 Building: what it means and includes

- (1) In this Act, unless the context otherwise requires, building—
  - (a) means a temporary or permanent movable or immovable structure (including a structure intended for occupation by people, animals, machinery, or chattels); ...

### 30A National multiple-use approval establishes compliance with building code

- (1) A national multiple-use approval establishes that the plans and specifications to which it relates comply with the building code...

### 49 Grant of building consent

- (1) A building consent authority must grant a building consent if it is satisfied on reasonable grounds that the provisions of the building code would be met if the building work were properly completed in accordance with the plans and specifications that accompanied the application...

### 90 Inspections by building consent authorities

- (1) Every building consent is subject to the condition that agents authorised by the building consent authority for the purposes of this section are entitled, at all times during normal working hours or while building work is being done, to inspect—
  - (a) land on which building work is being or is proposed to be carried out; and
  - (b) building work that has been or is being carried out on or off the building site; and
  - (c) any building.
- (2) The provisions (if any) that are endorsed on a building consent in relation to inspection during the carrying out of building work must be taken to include the provisions of this section.

- (3) In this section, inspection means the taking of all reasonable steps to ensure that building work is being carried out in accordance with a building consent.

**94 Matters for consideration by building consent authority in deciding issue of code compliance certificate**

- (1) A building consent authority must issue a code compliance certificate if it is satisfied, on reasonable grounds,—
  - (a) that the building work complies with the building consent; and ...