



Determination 2016/039

Regarding the grant of a building consent for a modular house at 57 Hauraki Road, Waiheke Island, 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 the 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 2004¹ (“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 (“the authority”), which applied for the determination
- the owners of the property, SD, JL, MJ and HJ Hale (“the owners”) acting through Ecotech Homes (Auckland) Ltd as an agent (“the owners’ agent”).

1.3 I consider the following are persons with an interest in this determination:

- EcoTech Homes (NZ) Ltd, the designer and supplier of the modules
- EcoTech Homes (Auckland) Ltd, the regional 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

¹ The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Ministry are all available at www.building.govt.nz or by contacting the Ministry on 0800 242 243.

the same issue – the other involves a different owner but prefabricated modules supplied by the same company.

- 1.5 The matter to be determined² 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 section is about 827 m² and comprises a rectangular, sloping section abutting the road, and is in a high wind zone.
- 2.2 The owners sought to construct a small two-bedroom house on their property and applied to the authority for building consent on 8 December 2015.
- 2.3 The consent application included plans and specifications from a local architect that included the erection of a 75m² house from three prefabricated modules, the construction of a large timber deck on the road side and a balcony with steps down to the property on the other, and other amenities including a water tank and a waste water treatment/disposal system. These were accompanied by structural calculations for foundations, decking, balustrades and steps.
- 2.4 The building consent application also included the plans and specifications for the prefabricated modules. I note that these plans and specifications, (which include details for joining the modules and for connections to the storm water system) are covered by a MultiProof certificate³. This means a building consent authority ("BCA") must accept them as showing that, if the products are installed and the building work is carried out in accordance with the plans and specifications, the house will comply with the Building Code⁴.
- 2.5 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.
- 2.6 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 three modules which make up the final structure. The joints are covered by steel plates, the floor joins are covered and eaves are bolted on.
- 2.7 For the owners' house, two larger modules (one containing an ensuite, part of a bedroom, the kitchen area and bathroom; the other containing the rest of the bedroom, a dining area and the other bedroom) were to be used together with one smaller module for the lounge area.
- 2.8 The authority accepted the owners' building consent application on 21 January 2016 and issued the building consent (B/2016/533) on 17 February 2016.
- 2.9 The building consent stipulated the authority's inspections for onsite work (for siting, bored piles, subfloor framing, drainage, effluent disposal system and a final inspection) to confirm compliance during construction and, as is usual, required the

² Under section 177(1)(b) and 177(2)(a) of the Act.

³ Certificate A10028 for an EcoTech Homes 2 bedroom home without foundation plans.

⁴ Under section 30A of the Act

supply of various producer statements, testing certificates and warranties. In this case, the requirements were: energy works certificates for gas and electrical, a PS3 Producer Statement – Construction for the installation of balustrades, and a PS4 Producer Statement – Construction Review for an engineer’s observation of all specifically designed structural elements.

- 2.10 The authority completed inspections of the siting and foundations on 7 March 2016 and sub-floor fixings on 15 March 2016. An inspection of preline and plumbing work on 11 March was rescheduled.
- 2.11 I understand from the authority that the building project and associated inspections have proceeded since then, but I do not have copies of these inspections.
- 2.12 The authority sought independent legal advice with respect to “buildings constructed overseas and then imported into New Zealand for use”; receiving this from its advisers (“the authority’s legal advisers”) in a letter dated 18 April 2016.
- 2.13 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 of the offshore construction activities. It also noted that the authority was considering how it addressed these types of developments in future.
- 2.14 The Ministry received an application for determination on 19 May 2016.

3. The submissions and the draft determination

3.1 The initial submissions

3.1.1 With its application for determination the authority provided copies of:

- plans and specifications for Ecotech Homes’ two-bedroom modular house and MultiProof certificate A10027⁵
- architects’ plans and specifications for the owners’ building project incorporating the prefabricated modules
- correspondence between the authority and the owners and other documentation relating to the building consent application and processing, and including details about the onsite waste water system, a producer statement PS1 – Design covering foundations and decks and relevant engineering calculations for dead and live loads, wind and earthquake bracing, wall bracing etc, and an agreement to provide a producer statement for foundations and subfloor bracing during construction
- records of inspections undertaken by the authority since the consent was granted (refer paragraph 2.10), and
- a letter from the authority’s legal advisers (refer paragraphs 2.12 and 2.13).

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

- whether the construction of the buildings (this and a similar house – refer paragraph 2.13) was “building work” requiring consent under the Act

⁵ I note that certificate A10027 is for an EcoTech Homes (NZ) Limited single level 2 bedroom prefabricated modular home; however, the correct MultiProof certificate for these plans and specifications (and which an email from EcoTech Homes (Auckland) Ltd of 5 February 2016 indicates was supplied to the authority), is certificate A10028 for an EcoTech Homes 2 bedroom home without foundation plans.

- 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.

3.1.3 The authority's legal advisers said, in summary:

- 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 BCA 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 exempt) and any MultiProof certificate relevant to the building consent required for works actually undertaken in New Zealand needed to be considered.

3.1.4 No submissions were made by the owner's agent or the persons with an interest in response to the application.

3.2 The draft determination and submissions received

3.2.1 On 6 July 2016 I issued a draft of this 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 are summarised in the following paragraphs.

The authority

3.2.2 On 19 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.

3.2.3 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 269⁶) and that, until they did, they should not be regarded as "products" compliant with the Building Code.

3.2.4 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; the authority disagreed with this approach 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; 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 provide a purported scope of application beyond which the Act allows for".
 - The prefabricated modules did not have a product certificate⁷ and the authority did not consider them likely to be regarded as "products" given they were an entire building (or in this case, a third of the entire building) that was already constructed. Even if they were considered "products", they could only be considered under section 19 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".

⁶ 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 (First schedule, Building Regulations 1992).

⁷ As defined in sections 268-272 of the Building Act 2004

3.2.5 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.

3.2.6 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 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.

The owners

3.2.7 The owners' agent, who is also a person with an interest in this determination, 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.

3.2.8 The owner's agent 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.

3.2.9 The owner's agent advised that it first met with the authority's senior officials (representing building consenting, policy writers as well as legal advisers) in September 2015 at its display at the Auckland Home Show. It said EcoTech Homes (NZ) Ltd's founder and designer of the modular housing range was also there and answered the authority's technical questions.

...the huge public interest in Ecotech Homes convinced us of the need to have the [authority] fully involved with what we were planning for Auckland. Indeed after seeing the accommodation, time was made offsite with the officials to discuss any outstanding issues or concerns ... In the event, it was only the need for independent third party quality assurance inspection that was raised as something that remained to be resolved.

Subsequently, Ecotech Homes provided both [the authority] and [the Ministry] with copies of the manufacturer's very detailed quality assurance documentation. Furthermore, the China Classification Society, a globally recognised certified inspection company, was offered as the independent third party inspector.

In view of the above, you will also appreciate our deep concern after answering and satisfying all questions and modalities of the manufacturing process that there has been such a delay in achieving the essential unanimity between [the authority] and [the Ministry] to allow us to continue [to] meet the growing demand for our

products. We believe everything was and has been done to meet every regulatory requirement of our innovative products, and in so doing we have far exceeded the normal regulatory requirements of traditional building.

- 3.2.10 The owners' agent 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".
- 3.2.11 In the meantime, the owners' agent was not taking further orders from clients until it could be confident of achieving a satisfactory outcome in respect of code compliance certificates being issued.

4. Discussion

4.1 General

- 4.1.1 The authority's legal advisers consider that the scope of the building consent 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); 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)"⁸.
- 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"⁹. To "erect" a building means to "put together and set upright (a building, wall, or other structure)"¹⁰.
- 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.

⁸ Oxford Dictionary of English, 3rd ed., Oxford University Press, 2010

⁹ Oxford Dictionary of English, 3rd ed., Oxford University Press, 2010

¹⁰ Oxford Dictionary of English, 3rd ed., Oxford University Press, 2010

- 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 that 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 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”¹¹, 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”.

¹¹ Oxford Dictionary of English, 3rd ed., Oxford University Press, 2010

- 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.
- 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”¹². The extent of offsite manufacture (i.e. prefabrication) involved in a particular project may vary 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 approval

- 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 approved plans and specifications, if followed, will result in a code-compliant building (section 19(1)(ca)), 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.

¹² Oxford Dictionary of English, 3rd ed., Oxford University Press, 2010

5. The owners' building project

5.1 General

- 5.1.1 The owners' building consent application was for the construction of a two-bedroom 75m² house from three prefabricated modules. The application also included the construction of a large timber deck on the road side and a balcony with steps down to the property on the other, and other amenities including a water tank and a waste water treatment/disposal system.
- 5.1.2 The MultiProof certificate covered the plans and specifications for the modules themselves, 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) and details of connections to the storm water system. 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 from the building consent applicant (the owners) that there had not been a variation from the approved plans and specifications.
- 5.1.3 In relation to the project as a whole, the authority decided that the proposed building work and the associated assembly and incorporation of components 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).
- 5.1.4 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 etc as set out in paragraph 2.9. However, I note the authority imposed no particular conditions regarding the work associated with the prefabrication of the modules or verification of the compliance of the completed modules, as it was entitled to do, and would normally have been expected to do, given its ability to inspect those modules would be more limited than if they were constructed onsite.

5.2 The authority's decision to grant the building consent

- 5.2.1 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.
- 5.2.2 I do not have the jurisdiction under section 188 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.
- 5.2.3 The 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 LBPs 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.

- 5.2.4 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, but it chose not to.
- 5.2.5 The authority also had opportunity to consider what conditions, if any, it would add to the building consent regarding inspections or other assurances, to be provided by the building consent authority or third parties, to provide it with sufficient evidence to conclude the completed modules complied with the plans and specifications.
- 5.2.6 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.
- 5.2.7 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.
- 5.2.8 However, the authority did not avail itself of the opportunities to obtain further information or verification of the prefabrication process or the completed modules, and now seeks to remove the prefabricated modules from the building consent.

5.3 Relevance of the MultiProof certificate

- 5.3.1 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)).
- 5.3.2 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.
- 5.3.3 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 approved plans and specifications. The authority chose not to ask for any such specific assurances from the building consent applicant.
- 5.3.4 The authority also had opportunities to perform useful observations and inspections once the modules were delivered to the site (paragraph 5.2.6) 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.

- 5.3.5 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.
- 5.3.6 The MultiProof certificate also covers some onsite building work, as outlined in paragraph 2.4, for which the authority has already outlined a method for considering in the usual way through site inspections.

5.4 Inclusion of the components/prefabricated modules in the building consent

- 5.4.1 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.
- 5.4.2 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 (for example, the building consent includes a complete onsite wastewater disposal system comprising tanks, filter chambers, pumps, controllers and piping etc, most if not all of which is likely to have been prefabricated offsite as components or complete assemblies; specialist components or assemblies are also likely to have been manufactured offshore).
- 5.4.3 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.
- 5.4.4 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.
- 5.4.5 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 (such as the onsite wastewater disposal system, paragraph 5.4.2). While the building consent had no application to the prefabrication of the modules because that prefabrication occurred overseas, there were a range of steps the authority could have taken 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.

- 5.4.6 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.
- 5.4.7 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 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.
- 5.4.8 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 including offshore 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 use¹³), 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

¹³ 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.

- 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 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 25 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...

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 ...