BuiltReady

BuiltReady Scheme Technical Rules Resource

SEPTEMBER 2024

BUILDING PERFORMANCE

Te Kāwanatanga o Aotearoa
New Zealand Government

Ministry of Business, Innovation and Employment (MBIE)
Hīkina Whakatutuki – Lifting to make successful

MBIE develops and delivers policy, services, advice, and regulation to support economic growth and the prosperity and wellbeing of New Zealanders.

The BuiltReady technical scheme rules resource document is produced by the Building System Performance branch.

Information, examples and answers to your questions about the topics covered here can be found on our website: www.building.govt.nz or by calling us free on **0800 24 22 43**.

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1. BuiltReady scheme technical rules resource

The purpose of this resource is to support an understanding of the BuiltReady scheme rules for modular component manufacturer certification bodies, technical experts and assessors.

This resource seeks to:

- act as a guide to the scheme rules and the relevant provisions in the *Building (Modular Component Manufacturer Scheme) Regulations 2022* and the *Building Act 2004*
- provide detailed examples of how to interpret and implement the BuiltReady scheme rules.

INTRODUCTION

The *Building (Building Products and Methods, Modular Components, and Other Matters) Amendment Act 2021* (the Building Amendment Act) modified the *Building Act 2004* (the Building Act) as one part of a broader package of Building System Reforms. It introduced the new voluntary certification scheme for modular component manufacturers, known as the BuiltReady scheme.

The BuiltReady scheme has been established to support the increased use of offsite manufacturing approaches in the building sector. These manufacturing approaches can lift productivity, reduce building costs and time, and contribute to better environmental outcomes through a reduction in waste.

Under this scheme, the entire prefabricated construction process from design (where applicable), manufacture, assembly, transportation, and installation on site will be assessed and certified by an independent, accredited certification body. Third party inspections, audits and post-certification surveillance will ensure certified manufacturers are producing modular components that meet the requirements of the New Zealand Building Code (the Building Code).

The objective of the BuiltReady scheme is to provide confidence to regulatory authorities and the market regarding the conformity of registered manufacturers with the certification requirements of the scheme. The BuiltReady scheme is open to modular building manufacturers who supply modular components for installation within Aotearoa/New Zealand.

The BuiltReady scheme operates under the legislative framework provided by the Building Act, the *Building (Modular Component Manufacturer Scheme) Regulations 2022* (the Regulations) and the BuiltReady scheme rules.

The scheme rules are intended to align with the changes to the Building Act and Regulations, and to support their implementation by providing much of the operational detail for the BuiltReady scheme.

The Regulations and scheme rules commenced on 7 September 2022.

What the scheme rules cover

The scheme rules are secondary legislation made by MBIE's Chief Executive. Both the Building Act and Regulations require scheme parties to comply with the scheme rules. Failure to do so could result in suspension or revocation of accreditation or certification.

The scheme rules apply to the scheme parties, who are:

- the accreditation body
- accredited modular component manufacturer certification bodies
- registered modular component manufacturer certification bodies
- modular component manufacturers that have current BuiltReady certification, whether or not these manufacturers are registered.

The scheme rules supplement regulations made under the Building Act with respect to the accreditation body's accreditation of modular component manufacturer certification bodies (MCMCBs); and MCMCBs' certification of modular component manufacturers (MCMs). As the scheme rules are only one part of the legislative framework for the BuiltReady scheme, they should be read in conjunction with the Building Act and supporting regulations.

WHAT THE LAW SAYS

Section 272ZG of the Building Act specifies:

- the scheme parties
- what the scheme rules can cover, which includes rules about how the scheme parties are to perform their functions under the Building Act, rules about how manufacturers are to be evaluated, and resolution of disputes between scheme parties.

Regulations are made under section 402 of the Building Act.

Other key documents for the operation of this scheme include the international standard ISO/IEC 17065:2013 (*Conformity assessment – requirements for bodies certifying products, processes and services*), which is included by reference in the scheme rules. This standard is followed closely by the accreditation body and MCMCBs. It includes structural, resource, process, and management system requirements.

The BuiltReady Scheme Guidance for building consent authorities, manufacturers, and practitioners issued under section 175 of the Building Act also contains detailed guidance on the legislative requirements for scheme parties.

Further documents supporting the BuiltReady scheme's day-to-day operation include the accreditation body's accreditation manual (if any) and arrangements with MCMCBs, as well as the MCMCBs' own commercial arrangements with MCMs.

SCHEME FRAMEWORK

The framework in which the BuiltReady scheme operates in Aotearoa/New Zealand is supported by the Building Act, the Regulations and the BuiltReady scheme rules.

These three key pieces of legislation outline the roles and responsibilities for all scheme parties, while providing detailed requirements to ensure a registered MCM can consistently produce modular components that meet the requirements of the Building Code.

This legislative framework clarifies responsibility and potential liability in the event of a building or modular component defect and ensures that consumers and building consent authorities can have confidence in the scheme.

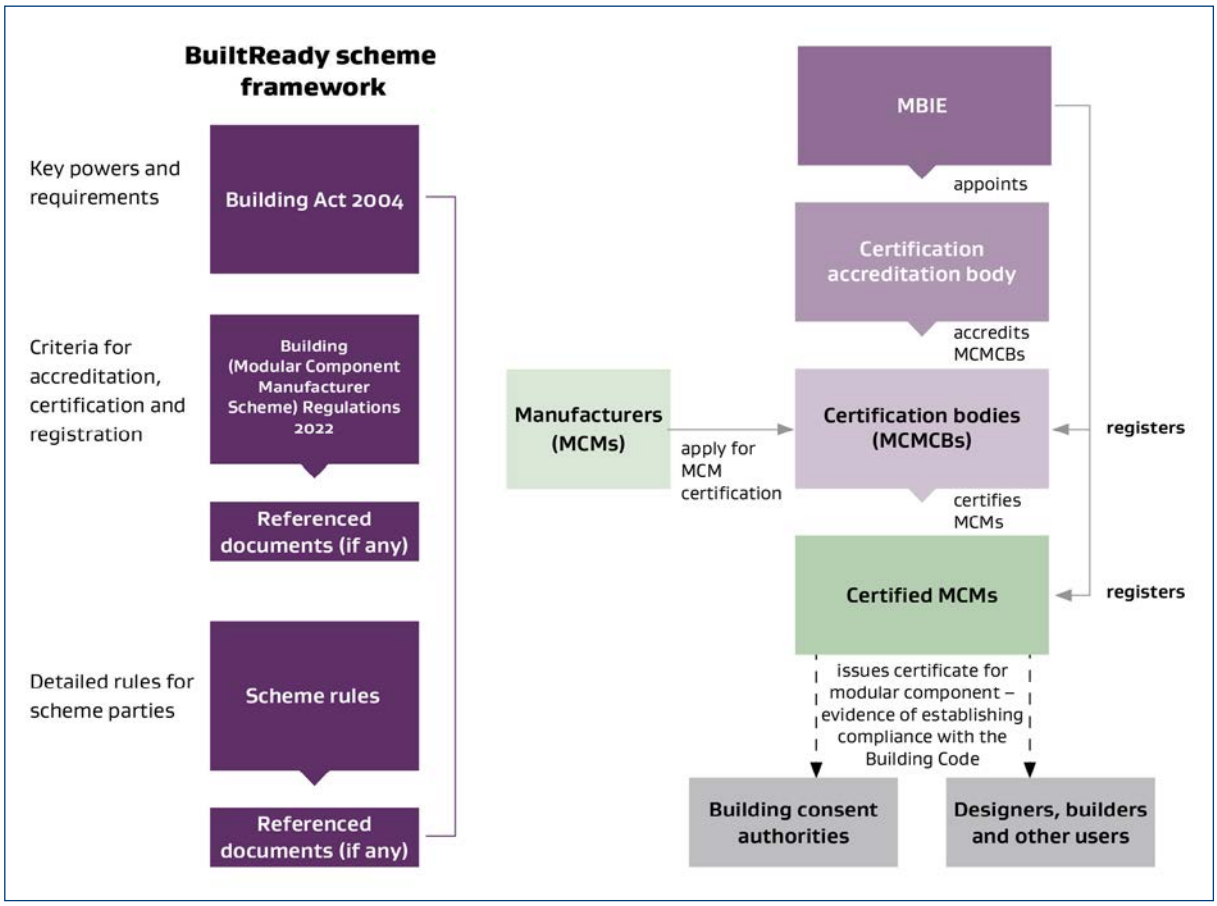

Figure 1: The system for managing BuiltReady certification

ROLES AND RESPONSIBILITIES

Ministry of Business, Innovation and Employment (MBIE):

- oversees the performance and effectiveness of the BuiltReady scheme
- appoints and monitors the accreditation body
- registers MCM certification bodies
- registers MCMs
- can suspend and revoke registration, accreditation or certification if required.

MCM certification accreditation body:

- responsible for assessing, accrediting, and monitoring MCM certification bodies
- can suspend and revoke accreditation if required.

MCM certification bodies (MCMCBs):

- evaluate, monitor, and audit MCMs against the BuiltReady certification criteria and standards
- issue MCM certification
- can suspend or revoke MCM certification if required.

Certified and registered MCMs:

- design (if applicable) and manufacture, transport, and install modular components that comply with the Building Code
- continue to meet the requirements set out in the Regulations and scheme rules
- issue accurate manufacturer's certificates for modular components for which they have been certified.

Registered MCMs also have a responsibility to communicate or act in timely manner in the following instances:

- anything that may impact certification or registration status, including any changes to contact details; changes to key people or adequate means assessment details; or changes to the policies, procedures and systems evaluated and audited according to certification criteria
- activation of a product recall
- suspension or revocation of MCM certification – stop issuing manufacturer's certificates, BuiltReady branding, notify customers.

Building consent authorities (BCAs):

- must accept a manufacturer's certificate issued by a registered MCM certified to design and manufacture modular components as evidence of compliance with the Building Code, provided the certificate is current and valid and the modular component is used in accordance with the scope and limitations as defined on the certificate. **This is a deemed to comply pathway**.
- For manufacturer's certificates issued by registered manufacturers certified to manufacture only, building consent authorities do not need to inspect any work covered by the certificate for compliance with the building consent, although they must still assess the design and any work not covered by the certificate (eg site works such as foundations and service connections). **This is a streamlined consent pathway**.

Additional resources:

- Building Act 2004
- Building (Modular Component Manufacturer Scheme) Regulations 2022
- BuiltReady website
- BuiltReady scheme guidance
- BuiltReady scheme rules
- BuiltReady step-by-step guides.

2. Technical rules resource

PART 1: PRELIMINARY PROVISIONS

This part of the scheme rules includes the full wording of definitions from the Building Act and the Regulations (which are applicable to the scheme rules) in *1.2 Interpretation*.

Note: the scheme rules document also contains an informative Appendix (Appendix 1), which highlights the relevant requirements in the Building Act and the Regulations.

PART 2: ACCREDITATION BODY REQUIREMENTS

This part of the scheme rules contains requirements for the accreditation body, which is responsible for accrediting MCMCBs and checking they continue to meet the accreditation requirements. MCMCBs must also be registered by MBIE before they can certify modular component manufacturers under the BuiltReady scheme.

Rules for the accreditation body cover some general requirements, including a clause that the accreditation body must review its accreditation decisions if there are any amendments to:

- the Building Code
- the Building Act
- the Regulations
- the scheme rules
- any documents included by reference in the Regulations or the scheme rules
- any relevant New Zealand Gazette notice.

The accreditation body must take appropriate action to ensure compliance with the Building Code and the BuiltReady scheme requirements is maintained.

The Building Act and Regulations contain detailed requirements for the accreditation body's granting, suspension, lifting of suspension, or revocation of an MCMCB's accreditation. These requirements include allowing the MCMCB at least three months following any changes to the Regulations to meet all the relevant criteria.

When conducting an audit of an accredited MCMCB, the accreditation body must review the MCMCB's policies, procedures and systems, which includes ensuring:

- their certification process is fit for purpose, as well as consistently and effectively implemented
- staff and contractors are familiar with certification requirements.

When conducting an audit, the accreditation body must review any complaints received by the MCMCB since the previous audit.

The accreditation body is also required to notify:

- MBIE's Chief Executive of any proposed limitations to an MCMCB's scope of accreditation
- an MCMCB in writing of its intention and reasons to suspend or revoke the MCMCB's accreditation
- an MCMCB of its decision and reasons to suspend, lift the suspension of, or revoke the MCMCB's accreditation
- an MCMCB of any impacts of their decisions on registration
- notify MBIE within seven days of granting, suspending, lifting the suspension of, or revoking an MCMCB's accreditation.

WHAT THE LAW SAYS

Section 272K of the Building Act specifies that the accreditation body must conduct an audit of an accredited MCMCB at least once in every 12 months or more frequently if regulation 26 of the Regulations applies.

Section 272L specifies that before suspending or revoking an MCMCB's accreditation, the accreditation body must –

- notify the MCMCB in writing of the intention to do so and the reasons for it; and
- give the MCMCB a reasonable opportunity to be heard.

If accreditation is suspended or revoked, the accreditation body must –

- notify the MCMCB in writing of its decision and the reasons for it
- explain the effect of section 272P(1), 272Q(1), or 272R(1)(a) – that registration is automatically suspended or revoked if accreditation is suspended or revoked under sections 272P and 272R.

Section 272M specifies that the accreditation body must notify the Chief Executive when it grants, suspends, lifts the suspension of, or revokes the accreditation of an MCMCB. The notification must be given within seven days after the grant, suspension, lifting of suspension, or revocation to which it relates.

PART 3: MCMCB ACCREDITATION REQUIREMENTS

This part of the scheme rules contains the requirements for MCMCBs to become accredited to the BuiltReady scheme. Note that an accredited MCMCB must also be registered with MBIE before they can accept applications from MCMs for certification.

An MCMCB must demonstrate that they have policies, procedures, and systems in place for evaluating a modular component manufacturer, which includes organisational and management systems; certification of manufacturers (including identifying the evaluation requirements, assessing the applicant's quality plan, carrying out risk assessments, and producing an evaluation plan); and acceptance of technical opinions.

An MCMCB must also have implemented policies, procedures and systems designed to ensure that the only certification activities they carry out are within their scope of accreditation. They must also have appropriate processes for keeping written records, receiving and handling disputes and complaints. All policies, procedures and systems must be consistent with the relevant scheme rules.

TECHNICAL COMPETENCIES

Rules 3.1.2 to 3.1.4 support regulation 11(1)(d), which requires an MCMCB to have policies, procedures, and systems with respect to its employees and contractors who carry out its certification functions under the BuiltReady scheme. An MCMCB must have enough employees and contractors to perform its functions and ensure they:

- are appropriately trained and are assessed on their competencies
- are able to demonstrate competencies related to the BuiltReady scheme for the scope of the MCMCB's certification
- have their performance monitored.

The competencies of the employees and contractors that an MCMCB uses are a key factor in being able to establish whether a certification body can successfully perform its functions in relation to its scope of accreditation.

Rule 3.1.3 outlines the technical competencies that are the minimum requirements for MCMCBs who apply to be accredited to certify MCMs to manufacture only modular components – there are additional competencies for MCMCBs who apply to accredit certified MCMs for design and manufacture.

Rule 3.1.4 specifies the additional competencies required for MCMCBs who apply to be accredited to certify MCMs for design and manufacture.

Specific competencies related to the design aspects of MCM certification include:

- an understanding of knowledge of building-related legislation, regulations and means of compliance relevant to the design and use of modular components
- an understanding of design standards and an ability to identify and produce specific design solutions
- an understanding of prototyping methods, including the use of design software (ie Building Information Modelling), to demonstrate the compliance of the modular component.

In determining how it deems its employees and contractors to be competent, the MCMCB should keep written records that identify how it reaches decisions regarding competency for its scope of accreditation.

Factors to take into consideration when making this decision include, but are not limited to: relevant qualifications held, experience within their field (particularly that related to modular component design), and references from industry peers and affiliations with professional associations (ie New Zealand Institute of Architects).

While a single person may possess more than one of the competencies outlined in the scheme rules, the requirements are likely to be covered by several employees and contractors. MCMCBs can engage specialist contractors on an ad hoc basis to satisfy the technical competency requirements. An MCMCB must have a process for how it identifies and engages the services of contractors where it does not have the necessary competencies required (eg a chartered professional fire engineer).

WHAT THE LAW SAYS

Section 272J of the Building Act contains requirements for accreditation including criteria for accreditation [these are in the Regulations, not in the Act], and how to make an application for accreditation.

Regulations 11 to 12 outline the required policies, procedures, and systems an MCMCB must have in place for accreditation including, for:

- certification of MCMs
- an MCMCB's scope of accreditation
- audits of certified MCMs
- employees and contractors
- written records
- disputes and complaints
- performing MCMCB functions at a geographical distance
- compliance with the scheme rules.

Note: the majority of competencies identified for accreditation are similar to those required by the CodeMark scheme.

Key competency differences between the BuiltReady and CodeMark scheme include:

- the application of the Building Code to modular components and their construction methods
- an understanding of how construction site practices and conditions can impact and affect the buildability of a modular component
- an understanding of manufacturing and supply chain audits
- an understanding of transport and logistical issues that may be experienced with transporting modular components to site.

REGISTRATION

As part of the registration function for BuiltReady, MBIE's Chief Executive will assess applications for registration of MCMCBs. MBIE's Chief Executive has delegated their role and responsibilities for these functions through to named positions within MBIE that work in the building regulatory system. The registration function will provide building consent authorities and other scheme users with confidence that MCMCBs are suitable for the scheme, and that MBIE is maintaining appropriate oversight of those issuing MCM certification.

To gain registration, an MCMCB will need to show evidence of accreditation in the scheme and pass a fit and proper person test. The fit and proper person test assesses the history and non-technical suitability of an MCMCB and its key people, including:

- history of civil proceedings and offences
- professional and financial management history
- compliance in similar schemes
- conflicts of interest
- other relevant factors.

WHAT THE LAW SAYS

Section 272N of the Building Act contains the registration requirements for MCMCBs, specifically the powers that MBIE's Chief Executive has in relation to registering a person as a MCMCB.

Regulations 13 to 16 contain criteria and standards for registration, including that an accredited MCMCB must be a fit and proper person to be registered as an MCMCB (by reference to specified attributes). These regulations also set out the information that the MCMCB must provide when applying for registration.

Rule 4.1.1(c) requires that the MCMCB must notify MBIE's Chief Executive within five working days if anything changes that may affect its registration status in relation to the information it previously provided under regulations 21 to 22.

Rule 4.1.1(d) requires that where MBIE's Chief Executive requests information to assist with any audit of the registered MCMCB or any decisions related to suspending or lifting the suspension of an MCMCB or MCM, this information is provided by the MCMCB as soon as is reasonably practicable.

For more detail on the registration process, visit BuiltReady | Building Performance

WHAT THE LAW SAYS

Sections 272N to 272T of the Building Act contains requirements for the Chief Executive's grant, suspension, lifting of suspension, or revocation of an MCMCB's registration. These sections also cover the Chief Executive's ability to audit a registered MCMCB to ascertain whether it continues to meet the registration criteria and whether there are grounds to suspend or revoke its registration.

Section 208 provides for an MCMCB to challenge the Chief Executive's decision (by appeal to the District Court) to refuse to register it as an MCMCB or to suspend, or refuse to lift the suspension of, its registration as an MCMCB.

Section 272ZI makes it an offence for a person who is not a registered MCMCB to carry out any of the functions of a registered MCMCB.

DISPUTES AND COMPLAINTS

An MCMCB must have processes for receiving and handling disputes and complaints in an appropriate manner (see regulation 11(1)(f)). Schedule 2(h)(vii) of the Regulations requires that each manufacturer's certificate issued by a registered MCM include an internet link to the publicly available information about the responsible MCMCB's complaints process. There are no additional requirements in the scheme rules.

Note that **ISO/IEC 17065** also contains requirements for MCMCBs with respect to complaints and appeals (eg in clauses 4.6.(d) and 7.13).

PART 4: ACCREDITED AND REGISTERED MCMCB REQUIREMENTS

This part of the scheme rules contains ongoing requirements for accredited and registered MCMCBs, which are responsible for evaluating modular component manufacturers for BuiltReady certification. If an MCMCB decides to certify a modular component manufacturer, it will issue an MCM certificate, which will detail the manufacturer's scope of certification.

General requirements

Rule 4.1.1(a): An MCMCB must review all certification decisions within three months of amendments to the Building Code or any other document relevant to the BuiltReady scheme rules taking effect and ensure that appropriate action is taken at the end of the three-month period to ensure compliance with the amendments. Any changes to legislation are signalled in advance of any amendments taking effect, so an MCMCB should have adequate time to undertake a review and ascertain what actions are appropriate within three months of commencement.

Note that **rule 2.1(b)** obliges the accreditation body to review its accreditation decisions in the event of any amendments to the Building Code or any other document relevant to the BuiltReady scheme. This includes the Building Act, the Regulations, the scheme rules, any documents included by reference in the Regulations or the scheme rules, or any relevant *New Zealand Gazette* notice, and take appropriate action to ensure that compliance with the Building Code and the BuiltReady scheme requirements is maintained.

Information on upcoming legislative changes and news can be found on the website: Building Performance Updates (sign up to get weekly email updates).

ISO/IEC 17065:2013
(Conformity assessment – requirements for bodies certifying products, processes and services)

Rule 4.1.2 specifies that a MCMCB must comply with all applicable requirements under ISO/IEC 17065. This standard provides certification bodies with a set of requirements that enables them to undertake the certification of products, processes and services – it is also a requirement for certification bodies who wish to be accredited to the CodeMark scheme.

Notifications

A responsible MCMCB must ensure that it notifies the relevant parties when it issues an MCM certificate or intends to suspend or revoke the certification of an MCM.

Rule 4.1.1(b) requires an MCMCB to notify the accreditation body on a quarterly basis of the number and type of BuiltReady applications that it has active. This includes any applications that it has become the responsible MCMCB for during a quarter (ie where an MCM has changed certification bodies). This information must be provided within twenty working days from the end of each quarter, with the quarters being 31 March/30 June/ 30 September and 31 December.

WHAT THE LAW SAYS

Section 272W of the Building Act requires the responsible MCMCB to notify an MCM in writing of its intention to suspend or revoke certification, and its reasons; and give the proprietor a reasonable opportunity to be heard.

Section 272X requires a registered MCMCB to notify the Chief Executive within seven days when it does any of the following:

- certifies a person as an MCM
- suspends, or lifts the suspension of an MCM's certification
- revokes an MCM's certification
- becomes the responsible MCMCB for a MCM as a result of carrying out an audit under section 272V(3).

ISO/IEC 17065 also contains notification requirements, including that an MCMCB must:

- inform its clients of any information it intends to make public (eg to respond to complaints) and notify them of any confidential information it is required to release by law as authorised by contractual arrangements (**ISO/IEC 17065 clause 4.5**)
- inform its clients of any new or revised requirements that have been introduced for the BuiltReady scheme (**ISO/IEC 17065 clause 7.10.1**) and acknowledge receipt of any complaints and appeals; give formal notice of the outcome and end of the complaint process to the complainant whenever possible; and give formal notice of the outcome and end of the appeal process to the appellant (**ISO/IEC 17065 clause 7.13**).

Written records

An MCMCB must keep written records in relation to its decisions to either approve or reject an application for a person to be certified as a modular component manufacturer.

Rule 4.1.4 requires an MCMCB to ensure these records include a detailed technical rationale for their decision, both in relation to the outcome and the reasons for it. Written records must be kept for each key stage of the certification process including application, evaluation, and the final recommendation. Where evidence (ie technical opinions, reports) are assessed as part of the application process, an MCMCB must detail the type of evidence provided and how this supported the final recommendation.

Also refer to **rule 4.2.4** which has specific requirements for completing and keeping records relating to an MCMCB's risk assessments; and **rule 4.2.16** with respect to any decision to carry out a remote audit.

EVALUATION

Section 4.2 of the scheme rules, Evaluation, contains detailed rules for MCMCBs in their evaluation of a modular component manufacturer under the BuiltReady scheme. Figure 2 in the scheme rules summarises the process and highlights applicable requirements in **ISO/IEC 17065** for independent review.

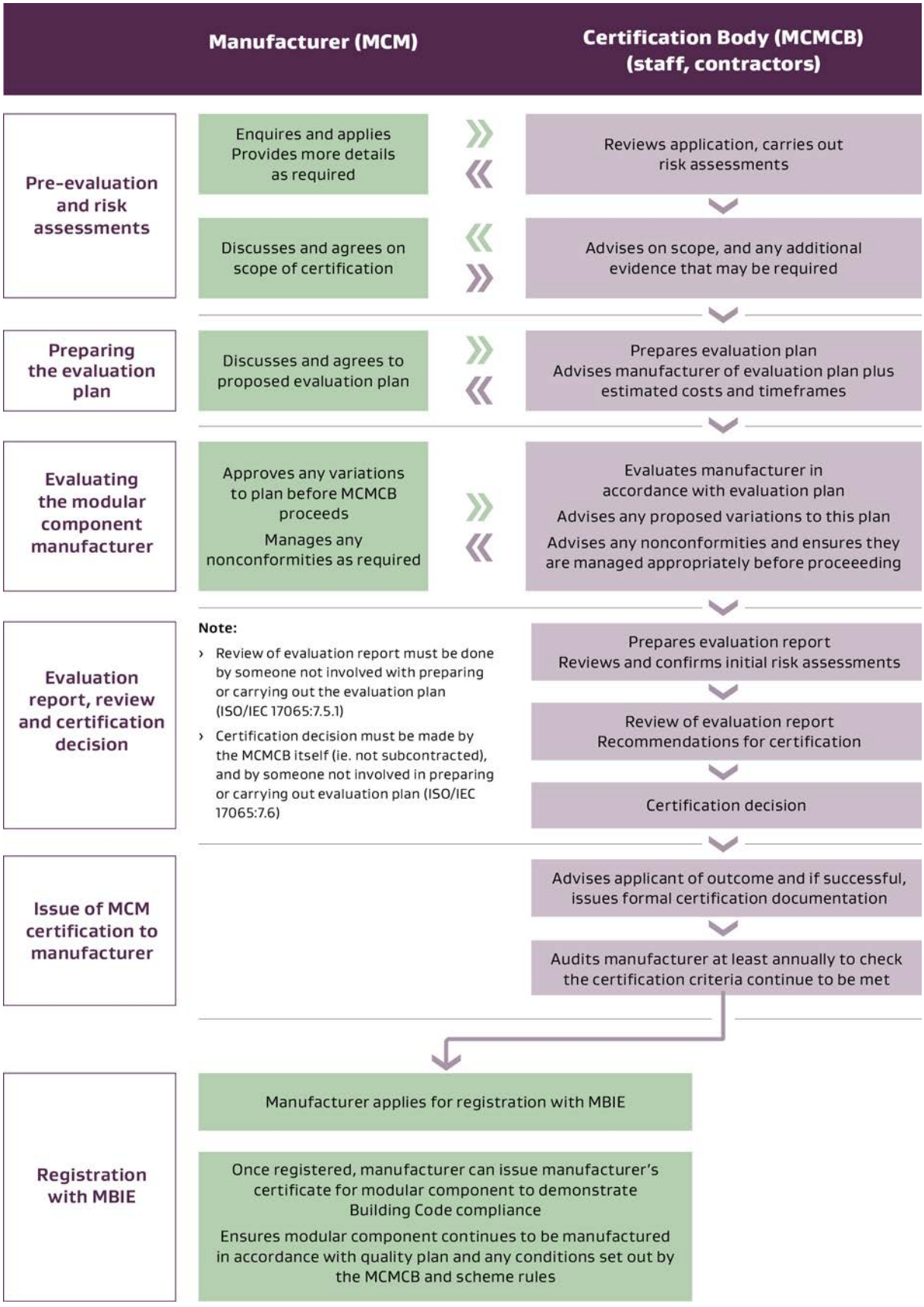

Figure 2: The evaluation process

WHAT THE LAW SAYS

Section 272U of the Building Act specifies that an MCMCB may (on application) certify a modular component manufacturer if satisfied that they –

- have the ability to competently and reliably design (where applicable) and manufacture modular components of the kind they are certified to design and manufacture or manufacture only to a standard that complies with the Building Code; and
- have policies, procedures, and systems that will result in them performing their functions as required above; and
- comply with the criteria and standards for certification prescribed by regulations and any scheme rules supplementing the regulations.

Regulation 17 outlines the minimum criteria and standards for certification including:

- a quality plan and quality management system designed to ensure that the person will meet all relevant requirements under the Building Act and any customer requirements; and
- a manufacturing process appropriate for the scope of certification the MCM is seeking; and
- a design process (where applicable) including demonstrating the MCM's ability to design components to a standard that complies with the Building Code; and
- employee and contractor processes and systems; and
- making and keeping of appropriate written records; and
- processes for receiving and handling disputes and complaints in an appropriate manner.

Pre-evaluation – scope of certification

When considering an application for certification (**rule 4.2.2**), an MCMCB must assess the application to determine the applicant's scope of certification. The scope should include whether an MCM is applying for design and manufacture or manufacture only for its modular components.

In addition, the MCMCB must determine the modular component type as defined in regulations 7 to 10 of the Regulations; any sub types and identified limitations across a modular component type; and the intended use of the modular component (residential and/or commercial).

Where the scope of certification is for a whole building (regulation 10) the scope should reference the national competency assessment system (NCAS) levels defined by MBIE.

For more information on the NCAS system: https://www.building.govt.nz/building-officials/national-bca-competency-assessment-system/national-bca-competency-assessment-system-levels

The levels within the NCAS system identify core competencies requirements for buildings based on their complexity, which covers both residential and commercial building typologies: eg single story through to 3 plus story residential dwellings (category R1 to R3) and commercial buildings of all types (category C1 to C3).

Note that **ISO/IEC 17065 clause 4.2** details an MCMCB's requirement to manage impartiality and independence. This does not preclude the possibility of exchange of information (eg request for further information or clarifying requirements) between the MCMCB and its clients.

Example 1	
Application type	Design and Manufacture
Modular component type	Volumetric structure
Sub type	• Enclosed structure with electrical systems • Fire safety aspects for commercial buildings • Limitations: excludes gas and plumbing systems.
Intended use	Residential and commercial buildings
Building complexity level (whole building only)	N/A

Example 2	
Application type	Design and Manufacture
Modular component type	Whole building
Sub type	• N/A • No limitations
Intended use	Residential and commercial buildings
Building complexity level (whole building only)	Up to and including R3 and C2

Example 3	
Application type	Manufacture only
Modular component type	Frame
Sub type	• Enclosed panel • Limitations: excludes electrical, plumbing and gas systems.
Intended use	Residential building only
Building complexity level (whole building only)	N/A

Conducting a risk assessment

The scheme rules relating to risk assessments include definitions of likelihood and consequence that need to be applied when determining a risk score for an applicant. Separate risk assessments are undertaken for design (if applicable), manufacturing and installation to allow for a nuanced and thorough conformity assessment profile.

The risk framework allows for an MCMCB to carry out risk assessment over three main phases. It is unlikely, although not impossible, that the consequence of failure once considered and given a score will alter throughout the evaluation process. The likelihood score, however, may alter depending on the information that is provided or gathered during the pre-evaluation and evaluation process.

1. Pre-evaluation and initial risk analysis of the MCM, utilising the information provided to the MCMCB by the applicant in the pre-evaluation phase.

During this phase, it is recognised that the information provided to an MCMCB at this point may not be a true reflection of the actual risk regarding the design (if applicable), manufacturing and installation policies, procedures, and systems, as it may be dependent on the applicant's understanding of what is required for certification. Once more information is gathered through subsequent phases, an MCMCB should reassess the residual risk for the design (if applicable), manufacturing and installation processes for the MCM's modular components.

2. Evaluation of MCM including carrying out the initial site manufacturing audit and installation inspection.

Within this phase, it is recognised that an MCMCB will be gathering further information about an MCM's policies, procedures, and systems and evaluating them against its scoped requirements. An MCMCB should also be assessing the information gathered for the purpose of verifying the initial risk assessment. For instance, whether the initial site audit of a manufacturing process determined that there were significantly greater (or lesser) quality controls in place than was evident through the information provided at the initial risk analysis phase. The likelihood score should therefore be reconsidered through the preparation of the evaluation report on evidence of the information gathered.

3. Preparation of the evaluation report and confirmation of the risk analysis.

This phase documents the evaluation process, which will provide a recommendation for the certification decision outcome based on all the information gathered and assessed during the pre-evaluation and evaluation phase. Confirmation of the residual risk assessment for an MCM should be recorded with its reasons for those decisions, including the on-going audit requirements.

Tables 1 to 3 and **Steps 1 to 5** in the scheme rules details the minimum risk assessment steps that a MCMCB must follow to assess an applicant for certification.

Step 1

For the type of prefabricated modular component being manufactured an MCMCB must assign a score between 1 and 3 that considers the consequences of failure of the component in its intended use(s) and the impact with respect to the building, its occupants, or other property, where:

- 3 – major impact
- 2 – moderate impact
- 1 – minor impact

Table 1: MC Type consequence score

Type	Sub-Type	Consequence
Type 1: Frames and panels	Open frame or truss	1
	Enclosed panel	1
	Electrical systems	2
Type	**Sub-Type**	
Type 2: Volumetric structures	Open frame	1
	Enclosed structure	2
	Electrical and/or plumbing systems	2
	Weathertightness aspects	2
	Fire safety	3
	Electrical and/or plumbing, and/or weathertightness, and/or fire safety	3
Type	**Sub-Type**	
Type 3: Whole buildings	Residential building (NCAS complexity level R1 to R3)	3
	Commercial building (NCAS complexity level C1 to C3)	3

GUIDANCE

The consequence score considers what could happen if the modular component were to fail.

Table 1: Risk assessment steps

Step 1

For the modular component type and sub-type identified as part of the scope of certification, assign a consequence of failure score (1-3) based on the information identified within Table 1 of the scheme rules.

Steps 2 to 5

Based on the information provided by the applicant, an MCMCB must identify factors outlined within the scheme rules with the potential to affect Building Code compliance. For these factors the MCMCB must identify a likelihood of failure score across the aspects of design (if applicable), manufacture and installation.

For design (where applicable):

Through pre-evaluation, the MCMCB should review the applicant MCM's documented process for managing its design activities to assess its extent and appropriateness for the modular component type. Within the process, the MCM must describe how it engages design resources (ie employees and/or contractors) relative to the Building Code requirements for its design, and how it deems these resources to be suitable and competent.

The applicant MCM should have a documented peer review process that ensures an independent review of all aspects of the design (eg structural elements, fire safety). The process should identify how it identifies and selects peer review resources that it deems to be appropriately competent and independent.

The level of prototyping the applicant undertakes should also align to the complexity of the modular component. For example, 3D modelling of design for whole building or use of software relating to structural modelling and analysis for panel/truss designs.

The assessment should also consider how the applicant would manage minor variations to its design that would occur through its manufacturing and installation process, in particular how it deems them to be compliant and how it documents any variations made. Minor variations will be required to be added to the manufacturer's certificate issued as part of the code compliance certificate application that confirms what has been built on site.

For manufacturing:

The extent and detail of the applicant MCM's quality plan, quality management system and any other factors an MCMCB deems relevant should be evaluated to determine the likelihood of failure relating to manufacturing activity. An MCMCB may consider relevant certification (ie **ISO 9001**), as a way to demonstrate a lower likelihood of failure score for manufacturing activities.

The controls identified within the quality plan should determine the checks undertaken at each stage of manufacturing relative to the modular component type. This may include critical measurements such as moisture content of timber framing and use of photographic evidence where applicable (ie friction fitting of insulation within enclosed panels).

For installation:

An MCMCB should consider the extent of installation instructions provided for the modular component and the systems the applicant has in place to ensure installers are trained and deemed competent to install its components.

For residential buildings, competency to install modular components may be demonstrated by way of a licensed building practitioner (LBP) for components such as panels. For volumetric structures and whole buildings, trained installers may be required.

Under the Building Act 2004, some residential building work is categorised as restricted building work and this onsite work must be carried out or supervised by an LBP. The LBP scheme is limited to residential work and identifies three categories of buildings and subsequent areas of practice that require LBPs to undertake the work.

For commercial buildings, an MCM must be able to demonstrate how its installers are competent in relation to any specific requirements that are unique to commercial installations such as aspects of fire separation or specified systems.

The applicant's installation procedures should include controls for ensuring its modular components are installed as per the instructions and how it may remediate any defects identified during installation.

It is expected that these cover any risk relating to onsite conditions that may be detrimental to installation, and the effects of exposure to the elements. Tolerances, particularly those related to joins/connections with other structures such as foundations or other modular and non-modular components should also be identified along with the remedial actions that would need to be applied when identified tolerances are not able to be achieved.

An MCMCB should consider transportation methods identified by the applicant, particularly where a range of methods are used (ie shipping, road and rail), and how the applicant ensures the integrity of its components through transportation to site.

To calculate a risk score and in doing so, establish the requirements for audits, surveillance, and inspections, the MCMCB should use **Table 2** to determine a risk score value of between 1 to 9 across each of design (if applicable), manufacture and installation. To calculate the risk score, the MCMCB must use the consequence score and multiply this by the likelihood score of non-compliance in respect to each of design, manufacture, and installation.

Risk assessment matrix		Consequence (sub type)		
		3	2	1
Likelihood	3	9	6	3
	2	6	4	2
	1	3	2	1

KEY:

Design risk score: requirements for audits, surveillance, and inspections

Risk score 9	Very low level of confidence in design process	Annual audit, with level of surveillance defined by an MCMCB
Risk score 4-6	Low level of confidence in design process	Annual audit, with level of surveillance defined by an MCMCB
Risk score 1-3	Normal level of confidence in design process	Annual audit

Manufacturing risk score: requirements for audits, surveillance, and inspections

Risk score 9	Very low level of confidence in manufacturer	Annual audit, with level of surveillance defined by an MCMCB
Risk score 4-6	Low level of confidence in manufacturer	Annual audit, with level of surveillance defined by an MCMCB
Risk score 1-3	Normal level of confidence in manufacturer	Annual audit

Installation risk score: requirements for audits, surveillance and inspections

Risk score 9	Very low level of confidence in installation consistency	Annual audit, and level of inspections defined by an MCMCB
Risk score 4-6	Low level of confidence in installation consistency	Annual audit, and level of inspections defined by an MCMCB
Risk score 1-3	Normal level of confidence in installation consistency	Annual audit

Table 2: Risk related requirements for site visits, audits, surveillance and inspections

The following examples illustrate how risk assessments may be carried out and how **Table 2** is applied to determine the minimum requirements for site visits and post-certification audits, surveillance, and inspections. Please note that these examples are for illustrative purposes only.

Example 4

Applicant A designs and manufactures enclosed volumetric structures that include electrical systems. Its intended use is within both residential and commercial buildings.

Consequence score	The MCMCB should consider this a consequence score of 3 (major impact). This is due to the type being a volumetric structure with electrical systems that is intended to be used in a commercial building and therefore fire safety aspects need to be considered.
Likelihood score (design)	The design of Applicant A's modular component requires technical competencies relating to fire safety to be engaged and subsequent peer review of these by an independent and competent resource. The applicant's procedures provide details of how this will occur. The applicant has defined a high-level design process including identification of its approach to managing minor variations. After identifying and considering these factors and a range of other factors relating to documentation submitted for Applicant A's design processes, the MCMCB assigns a likelihood score of 1 (non-compliance is unlikely).
Likelihood score (manufacturing)	The manufacturing of Applicant A's modular component has a number of controls identified within the submitted quality plan across each stage of the manufacturing process. Manufacturing occurs across a single site in Aotearoa/New Zealand and the manufacturer has ISO 9001 certification. After identifying and considering these factors and a range of other factors relating to Applicant A's modular component, the MCMCB assigns a likelihood score of 1 (non-compliance is unlikely).
Likelihood score (installation)	Applicant A relies on external contractors to install its modular components on site. The installation instructions provided are detailed and identify the competencies required of its external contractors. The process for verifying that installation has occurred according to the instructions are not clear and no evidence exists from previous installations. After considering this and other factors, the MCMCB assigns a likelihood score of 3 (non-compliance is very likely).

Using these scores, the minimum requirements for audits, surveillance and inspections are:

Design: consequence score 3 x likelihood score (design) 1 = **risk score of 3**
Minimum requirements from Table 2 are: annual audit.

Manufacturing: consequence score 3 x likelihood score (manufacturing) 1 = **risk score of 3**
Minimum requirements from Table 2 are: annual audit.

Installation: consequence score 3 x likelihood score (installation) 3 = **risk score of 9**
Minimum requirements from Table 2 are: annual audit, and level of inspections defined by the MCMCB.

Example 5

Applicant B designs and manufactures whole buildings which are intended to be used for residential and commercial purposes. It has identified these having a building complexity level of up to R3 and C2.

Consequence score	The MCMCB should consider this a consequence score of 3 (major impact). This is due to the type being a whole building.
Likelihood score (design)	The design of Applicant B's modular component requires technical competencies to cover its full scope of building work. The applicant has provided detailed procedures for its design processes including supporting evidence relating to its protoyping activities. The procedures do not cover fully how peer review of the design is undertaken for all technical aspects of the design. After identifying and considering these factors and a range of other factors relating to documentation submitted for Applicant B's design processes, the MCMCB assigns a likelihood score of 3 (non-compliance is very likely).
Likelihood score (manufacturing)	The manufacturing of Applicant B's modular component has a number of controls identified within the submitted quality plan across each stage of its manufacturing process. Manufacturing occurs across multiple sites overseas. The applicant has provided detailed procedures for its quality management system but does not hold any recognised certification. After identifying and considering these factors and a range of other factors relating to Applicant B's modular component, the MCMCB assigns a likelihood score of 3 (non-compliance is very likely).
Likelihood score (installation)	The applicant has a team of trained installers within Aotearoa/New Zealand and has a process for regularly assessing their competence. The applicant has provided detailed verification processes which its installers use, including how it manages defects identified during its installation process. The procedures cover transportation from its overseas sites. After considering this and other factors, the MCMCB assigns a likelihood score of 1 (non-compliance is unlikely).

Using these scores, the minimum requirements for audits, surveillance and inspections are:

Design: consequence score 3 x likelihood score (design) 3 = **risk score of 9**
Minimum requirements from Table 2 are: annual audit, with level of surveillance defined by the MCMCB.

Manufacturing: consequence score 3 x likelihood score (manufacturing) 3 = **risk score of 9**
Minimum requirements from Table 2 are: annual audit, with level of surveillance defined by MCMCB.

Installation: consequence score 3 x likelihood score (installation) 1 = **risk score of 3**
Minimum requirements from Table 2 are: annual audit.

The risk assessment framework outlined in **rule 4.2.3** contains the minimum requirements for MCMCBs to follow when conducting a risk assessment. An MCMCB may include more rigorous risk assessments steps or methodologies if they deem it necessary, as long the steps in rule **4.2.3** are followed.

Preparing the evaluation plan

An evaluation plan is the formal process used by MCMCBs to verify that the applicant MCM has meet all the requirements set out in the scheme rules and relevant legislation. **ISO 17065 section 7.4** specifies that a certification body must have an evaluation plan for the evaluation activities it plans on conducting.

Rule 4.2.5(a) to (g) covers the minimum requirements for an evaluation plan, including a defined scope of certification, consideration of the required technical competencies, assessment of the implementation of the required policies, procedures and systems, and the means of conformity assessment (including frequency of site visits as calculated from the risk assessment).

Rule 4.2.5(b) requires an MCMCB to consider all the technical competencies an MCM is required to demonstrate related to its scope of certification. This may be achieved by the MCMCB documenting its reasons for decisions against each of the technical competencies identified within the scheme rules and recording its decisions as to why it deemed them relevant to the MCM's scope of accreditation.

Rule 4.2.5(e)(iv) 'critical component' is defined in the scheme rules as:

> Any component used within the modular component that an MCM considers is critical to the modular component's Building Code compliance: ie likely to present a greater risk to the modular component's compliance if it failed and requires further controls within the quality plan.

Where the applicant MCM has identified critical components within its quality plan, the MCMCB must determine if the controls identified are appropriate for the relevant component. Controls may include testing or measurement of critical factors associated with the component (eg moisture content of timber framing). An MCMCB should also assess the quality plan to ensure components that it deems critical are identified within the quality plan.

Example 6

The applicant's product is a structural insulated panel (SIP). In this case, the MCMCB considers that the proprietary adhesive used is a critical component, as its failure would compromise the SIP's structural performance. The MCM, within its quality plan, should identify the controls it takes to ensure the SIP maintains its structural performance. This may include identification of the required curing time of the adhesive (as identified within product information) and how this is monitored and approved through the manufacturing process to ensure structural integrity of the modular component.

Example 7

The MCM plans to install specified systems, such as a sprinkler system, within its modular component that is a whole commercial building. Any specified systems would be deemed as a critical component. They must be installed in good working order and be deemed compliant by an Accredited Inspection Body (in this case a Sprinkler System Certifier). The quality plan should identify how this requirement to demonstrate compliance is met.

A compliance schedule to demonstrate the system is working as intended is required to be submitted to the relevant building consent authority as part of the code compliance certificate process. Note: An Independently Qualified Person (IQP) must be authorised by a territorial authority to undertake this work when a building becomes operational.

Example 8

Within the modular component design, the MCM has incorporated lifting eyes to enable the component to be safely transported and lifted onto site. Additional strengthening has been added to the building's superstructure (additional wall framing and bracing) to ensure transit loads are accounted for. This may be considered a critical component by the MCMCB as it may affect the structural elements of the building whilst it is installed on site. The quality plan should identify the engineering design aspects that deem the modular component to remain structurally sound once installed on site. Architectural and 'shop drawings' where applicable should demonstrate the critical aspects relating to the lifting eyes.

Rule 4.2.5(e)(vi) requires an MCMCB to assess that the applicant has identified how its modular components interact with other modular components, non-modular components, and other materials. This would include an MCM identifying how the modular component would interact with foundations. For example, the applicant would need to demonstrate how it can calculate the required tolerances and fixings to ensure a modular component will meet Building Code performance requirements for structural elements once installed. Where multiple modular components are being used within a single build (ie series of panels or volumetric structures), the applicant would need to demonstrate how structural integrity will be maintained when the components are connected together.

Rule 4.2.5(f) entails an MCMCB identifying within the evaluation plan how it will assess any supply chain controls the MCM has put in place to ensure that components supplied by third parties for use within its modular component meet their designated requirements. These requirements may be documented within an MCM's quality plan.

Rule 4.2.5(g) requires an MCMCB to ensure that its evaluation plan is aligned to any acceptance criteria documented within technical literature for building products that the MCM uses within its modular components.

Evaluating an MCM

A key aspect of evaluating an MCM is assessing that its policies, procedures, and systems meet all the requirements for certification identified within part 5 of the scheme rules (MCM certification requirements). These include appropriate processes systems for design (if applicable), modular component specifications (incorporating details of how Building Code compliance is met), quality management systems, quality plan, employee and contractor resource management, written records and complaints and disputes.

Rule 4.2.8 states that an MCMCB must carry out an initial manufacturing site visit including visits to multiple manufacturing sites where applicable. The purpose of the site visit is to ensure that the policies, procedures, and systems identified within the application have been implemented with sufficient evidence and that records are available to allow for the manufacturer to be effectively evaluated.

Rule 4.2.10 requires an MCMCB to ensure all the requirements for certification that are identified in part 5 of the scheme rules are met. For these requirements, an MCMCB must determine if they are appropriate for the scope of certification the manufacturer has applied for. For example, a manufacturer applying for certification to design and manufacture whole buildings should have a more comprehensive quality plan and modular component specifications when compared to a manufacturer applying for certification to only manufacture open frames or trusses.

When an MCMCB is evaluating an MCM's policies, procedures, and systems, it must ensure they meet the manufacturer's requirements for certification as set out in *Part 5: MCM certification requirements* of the scheme rules:

Certification requirements to be evaluated by MCMCB	Manufacturer's requirements for certification
design procedures and systems (where an MCM is applying for design and manufacture certification)	**See rule 5.1.1**
modular components specifications	**See rule 5.1.2**
quality management systems	**See rule 5.1.3**
quality plan	**See rule 5.1.4**
resource (employees and contractors) procedures and systems	**See rule 5.1.5**
competencies for manufacture	**See rule 5.1.6**
additional competencies for manufacture and design (if applicable)	**See rule 5.1.7**
written records	**See rule 5.1.3** (process incorporated into applicant's quality management system)
complaints and disputes	**See rule 5.1.3** (process incorporated into applicant's quality management system)

Where the application relates to design and manufacture of modular components, the applicant must also have a documented design process (**rule 5.1.1**) that incorporates:

- how it engages and ensures required competencies for the scope of work its design specialists undertake (**rule 5.1.1(a)(c)**)
- how peer review of design is undertaken for all aspects of the design, including variations that are not minor (**rule 5.1.1(d)(e)**)
- how minor variations are managed (**rule 5.1.1(b)**).

Rule 5.1.2: the modular component specification sheet provided by the applicant should detail how the modular component's design and all incorporated components meet the requirements of the Building Code. The specification sheet should identify the Building Code performance standards that are met for each relevant code clause. An MCMCB must consider the extent of the factors to be included in the specification sheet in relation to the type of component being manufactured.

The applicant's quality management system and quality plan should meet the requirements identified in **rules 5.1.3 and 5.1.4.** The detail contained within the quality plan should be relative to the scope of the application.

Assessing technical opinions

Rule 4.2.11 covers the minimum requirements regarding assessing technical opinions. Clause (c) covers technical opinions that do not contain the direct evidence upon which the opinion is based: eg an opinion that references a test report but does not include it directly. In this type of case, an MCMCB must at least consider:

- the competence and credibility of the expert providing the technical opinion (**4.2.11(b)**)
- the relevance of the technical opinion to what is being evaluated (**4.2.11(a)**) as justification for accepting a technical opinion without direct evidence.

For instance, an applicant may produce a technical opinion of their modular component from an independent appraisal organisation well-known in the building product assurance sector. The technical opinion does not contain a type test or other direct physical evidence relating to the modular component's performance, but it is an engineering-based evaluation of the performance that the component is expected to achieve if it were tested.

To accept this technical opinion, an MCMCB must be satisfied that:

- the appraisal is relevant to the modular component (ie the appraisal is an assessment that the modular component is fit for purpose and complies with the Building Code)
- the appraisal organisation has suitably qualified staff (such as engineers and research scientists) and are competent and credible to evaluate the building product and to interpret evidence (eg technical literature) that form part of the appraisal
- if the technical opinion contains evidence, an MCMCB must be satisfied it is sound (ie a type test report from an accredited and reputable testing facility
- if the technical opinion does not contain direct physical evidence like a type test/test report, an MCMCB must be satisfied that the reason why is sound (ie the technical opinion draws on accepted literature, or references tests that have been carried out by an accredited laboratory or organisation).

Assessing technical competencies

Rule 4.2.12 requires an MCMCB to assess the competence of the applicant's resources (employees and contractors) to ensure they meet the requirements related to the scope of certification applied for. The competencies an applicant must be able to demonstrate are described in **rule 5.1.6**.

Rule 5.1.7 details additional competencies when applying for a certification scope that includes design. Factors an MCMCB should take into consideration when determining how the applicant has determined the competencies of its resources include:

- relevant qualifications held
- experience within their field (in particular that relating to modular component design and manufacture)
- references from industry peers and affiliations with professional associations (ie New Zealand Institute of Architects).

While a single person may possess more than one of the competencies required, these requirements are likely to be covered by several employees and contractors.

The applicant should also provide procedures and systems relating to ensuring it has an appropriate competency assessment framework, as identified in **rule 5.1.5.**

Identifying nonconformities during evaluation

Nonconformities are most commonly departures from: the quality plan or other scheme requirements; aspects of the modular component specification; or requirements in a relevant Standard.

Example 9

During a site visit to evaluate the applicant's manufacturing processes and implementation of its quality plan, the MCMCB notes that critical measurements identified within the quality plan relating to the moisture content of timber used within its framing are not recorded on a consistent basis.

The MCMCB identifies this as a nonconformity, referencing the quality plan and controls identified within it. The MCMCB decides to classify this as a major nonconformity because Building Code compliance is put at risk if these measurements are not undertaken and able to demonstrate suitable moisture content levels.

CONDUCTING SITE VISITS

Rule 4.2.15 identifies the requirements for an MCMCB to conduct a site visit as part of the evaluation process. The key purpose of this visit is for an MCMCB to assess evidence that the applicant has effectively implemented its policies, procedures, and systems, in particular evidence of implementation of the quality plan.

As part of the site visit, an MCMCB will verify the factors it identified through its initial risk assessment(s). It may update its risk assessment if it identifies any significant risks that were not apparent in its evaluation of the application. If this occurs, an MCMCB will document this and the reason for its decision to amend the risk assessment.

Remote assessments

When planning a remote assessment, it may be useful to:

- obtain a detailed floor plan of the manufacturing site that includes key features (eg the locations of each manufacturing process, incoming product inspection, storage areas, quality control, and in-house laboratory), and consider how best to carry out a walk-through of this site, and decide on the most appropriate technology and equipment (eg an online meeting platform used with webcam, smartphone cameras, and/or shared screens). It may also be worth using a hand-held mounting arm with the webcam or smartphone onsite to provide greater visibility for the remote assessor
- check this technology will work as required onsite: ie there is sufficient internet access to provide a stable connection and acceptable audio and video quality.

Suggestions for carrying out a remote assessment include:

- asking someone to accompany the MCMCB's representative onsite during their walk-through, to provide directions and safety alerts
- using the walk-through to show specific aspects of the manufacturing site and hold any discussions with staff such as workshop supervisors and operators
- reviewing procedures and records of routine activities (eg internal audits and management reviews) via webcam or shared screens.

Installation inspections

Where an MCMCB undertakes inspections of the installation of an applicant's modular component, as part of the inspection it must verify the factors identified within the risk assessment. These must be amended if any further significant risks are identified, along with recording the reasons for its decision.

As part of the installation inspection, an MCMCB should assess the practicality of installing the modular component and how appropriate and accurate the instructions are. In particular, it should assess how these factors work regarding connections with other modular and non-modular components (eg ease of connections to site services and foundations or connecting multiple modular components together such as panellised systems).

An MCMCB should assess, where possible, how the modular component is handled and stored on site in accordance with the applicant's instructions and procedures. In particular, an MCMCB should take note of any requirements relating to adverse weather conditions that may impact on the integrity of the modular component.

Evaluation report, review and certification decision

ISO/IEC 17065 clause 7.5.1 requires a review of the evaluation report to be carried out by person(s) who were not involved in the evaluation process. In many cases, this review is likely to involve more than one person, as reviewers will need to understand the technical significance of the evaluation report (ie understand testing, auditing and inspection), as well as advise on the extent to which the evaluation report addresses the applicable BuiltReady scheme requirements.

CERTIFICATION OF AN MCM

When an MCMCB decides to certify an applicant MCM, it will issue a certificate of conformity (MCM certification), which is evidence that the manufacturer has met all relevant certification criteria. This certificate will be loaded onto the register of registered manufacturers on the Building Performance website (www.building.govt.nz).

The MCM certificate should be checked by building consent authorities when processing a building consent or code compliance certificate application accompanied by a manufacturer's certificate from a registered MCM. This is to ensure the modular component specified by the manufacturer's certificate falls within their scope of certification.

Rule 4.2.22 specifies what needs to be included in a MCM certificate. The MCM certificate must define a manufacturer's scope of certification according to the modular component types it produces, as well as any identified limitations or exclusions. For example, a manufacturer may be certified to design and manufacture prefabricated frames and panels, but their certification is limited to un-serviced components only (ie no electrical, plumbing or gas services).

ISO/IEC 17065 clause 7.7 also outlines minimum information requirements for certification documentation which include:

- name and address of certification body
- date of certification
- name and address of manufacture
- signature of authorised representative of certification body.

Audits

This section contains rules for an MCMCB's audits of certified MCMs. MCMCBs must audit MCMs at least annually. Regulation 27 stipulates the factors that an MCMCB must take into account during its audit of an MCM, which include:

- the outcome of any risk assessments undertaken by the registered MCMCB into the certified MCM's performance of the certified MCM's functions
- any complaints or other feedback that the registered MCMCB has received in relation to the certified MCM's performance of the certified MCM's functions
- any relevant complaints or other relevant feedback of which the registered MCMCB is aware that relate to the performance of any functions that the person who is the certified MCM has under a similar scheme
- any other relevant matters that the registered MCMCB thinks ought to be taken into account.

Nonconformities identified during an audit

Rule 4.3.1 stipulates that when auditing an MCM, an MCMCB must:

- identify any nonconformities and act on these in accordance with **Table 4**
- inform the MCM of the required actions.

Level	Description of nonconformity	Initial action:	If the CAR is not closed out by the agreed date:
Minor	The potential impact is not likely to compromise Building Code compliance (eg aspects of the quality plan are not being followed but because of other factors compliance is not compromised).	An MCMCB must raise a Corrective Action Request (CAR) with respect to the nonconformity and agree a suitable closeout date with an MCM which reflects the potential impact of the nonconformity and how easily it can be rectified. **GUIDANCE** Closeout is normally at the next annual audit.	An MCMCB must review the reasons for non-closure with the certified MCM and, depending on the nature of the nonconformity and its potential to affect compliance, either: (a) determine that a minor nonconformity still exists, cancel the existing CAR and raise a new CAR with a new closeout date agreed with an MCM, reporting the action in the evaluation report, or (b) determine that the nonconformity is now a major or critical nonconformity and raise a new CAR with a closeout date as required for a major or critical nonconformity.
Major	The potential impact is likely to compromise Building Code compliance unless corrective action is taken promptly.	An MCMCB must raise a CAR with respect to the nonconformity and set a closeout date that does not exceed seven days. An MCMCB must not close out the CAR until the major nonconformity has been corrected and an MCMCB has verified the corrective action.	An MCMCB must determine that the nonconformity is now a critical nonconformity and take appropriate action.

Table 4: Nonconformities identified during audit

Level	Description of nonconformity	Initial action:	If the CAR is not closed out by the agreed date:
Critical	The potential impact requires immediate corrective action.	An MCMCB must raise a CAR with respect to the nonconformity requiring immediate corrective action to be taken. Further modular components must not be produced until the CAR is closed.	An MCMCB must determine whether to suspend or revoke an MCM's certification under section 272W of the Building Act.
		An MCMCB must not close out the CAR until the critical nonconformity has been corrected and an MCMCB has verified the corrective action. Verifying a corrective action with respect to a critical nonconformity requires: (a) onsite verification (for manufacturing site inspections or installation inspections); or (b) examination of revised documentation (for deficiencies in procedures or instructions).	

Table 4: Nonconformities identified during audit (continued)

Nonconformities are most commonly departures from: the quality plan or other scheme requirements; aspects of the product specification; or requirements in a relevant product Standard. Any nonconformities must be linked to the relevant performance provisions of the Building Code, where applicable.

Audit and surveillance reports

Rules 4.3.3 to 4.3.6 specify the written records that an MCMCB is required to produce when undertaking an audit or surveillance activities (including installation inspections) of a certified MCM. The MCMCB must:

- keep detailed notes with respect to Building Code compliance
- use these notes to form the basis for an MCMCB's audit/surveillance report.

Rules 4.3.4 and **4.3.6(c)** outline what an audit or surveillance report must contain including:

- a summary of the audit or surveillance/inspection activity
- details of any nonconformities and the actions taken with respect to them
- any recommendations or opportunities for improvement that were identified during any audit or surveillance.

Rules 4.3.5 and **4.3.6(d)** require that audit, surveillance, and inspection reports are reviewed by people not involved in the report's preparation. This review should be documented by the MCMCB as evidence that an independent review of the report has occurred.

WHAT THE LAW SAYS

Section 272V of the Building Act specifies that an MCMCB must audit a certified manufacturer at least once in every 12 months (or more frequently if regulation 28 applies).

Regulation 27 specifies that a certification body must take the following matters into account in carrying out an audit:

- the outcome of any risk assessments undertaken by the MCMCB into the manufacturer's performance of its functions
- any complaints or other feedback that the MCMCB has received in relation to the manufacturer (including their performance of functions in a similar scheme)
- any other relevant matters the MCMCB think ought to be considered.

Regulation 28: audit conducted for cause

Regulation 28 requires an MCMCB to audit a certified manufacturer if there are grounds to suspend or revoke their certification under section 272W of the Building Act; or grounds to lift suspension (and more information is required to confirm).

Manufacturer's certificates

Manufacturer's certificates are primarily intended to be used by building consent authorities when processing a building consent as per section 45 of the Building Act, or a code compliance certificate application as per section 92 of the Building Act. Manufacturer's certificates provide detail to building consent authorities to help them determine what parts of the consent are covered by the BuiltReady certification and what they may need to inspect as other site-specific building work.

A manufacturer's certificate issued by a registered manufacturer is a first-party declaration of conformity. This means that the manufacturer is attesting that the modular component described in the certificate has been designed (if applicable) and manufactured according to the manufacturer's scope of certification. It also specifies that the manufacturer takes responsibility for the modular component.

Although they are termed 'manufacturer's certificates', it is important to note that they are not the same as the third-party certificate of conformity (MCM certificate) issued by an MCMCB. However, the certification details (such as scope) on both documents should match.

Different information is included in manufacturer's certificates issued at different stages of the building consent process. There are two main types of manufacturer's certificate:

1. a manufacturer's certificate accompanying an application for a building consent (as per section 45 of the Building Act)
2. a manufacturer's certificate accompanying an application for a code compliance certificate (as per section 92 of the Building Act).

Registered manufacturers certified to design and manufacture modular components can issue manufacturer's certificates that cover both the design and manufacture of the modular components included in the building consent. They will be deemed to comply with the Building Code, and the building consent authority only needs to inspect building work not covered by the manufacturer's certificate.

Registered manufacturers certified to manufacture only will be able to issue manufacturer's certificates for the modular components included in the building consent. The building design still needs to be approved by the responsible BCA, along with any building work not covered by the manufacturer's certificate.

Rule 6.4.3(a) and **(b)** requires registered manufacturers to use MBIE issued manufacturer's certificate templates. An additional rule also specifies that modular component manufacturers must not change the structure and the design of the certificate templates.

This will ensure that manufacturer's certificates issued by different registered manufacturers are aligned into a consistent and standardised format, which will aid building consent authorities to identify and understand them. The new rules will also ensure that manufacturers have a clear understanding of the information that needs to be provided on the certificates.

Liability

Manufacturer's certificates are a fundamental way in which the BuiltReady scheme clarifies liability, as the Building Act specifies that a building consent authority is not liable for anything done or omitted in good faith in reliance on a manufacturer's certificate. This means registered manufacturers are legally accountable for the statements they have made in their manufacturer's certificate.

The adequate means component of the registration process is designed to assess whether a registered manufacturer has the means to cover any civil liabilities that may arise in relation to their design (if applicable) and manufacture of their modular components.

The manufacturer's certificate issued at compliance stage must have a statement that the modular component has been installed correctly, so any changes after this point will be the responsibility of the building owner (and will likely require a building consent).

Oversight by the responsible MCMCB

The responsible MCMCB and MBIE have some oversight regarding the manufacturer's certificates issued by registered manufacturers:

- **rule 6.4.3:** a manufacturer must notify MBIE and their MCMCB in writing of all manufacturer's certificates issued at the end of each quarter (within 20 working days at the end of the quarter); and
- **rule 6.4.4:** upon request, a manufacturer must provide its MCMCB copies of the manufacturer's certificates it has issued (within five working days of the request).

Issuing inaccurate manufacturer's certificates could be grounds for suspension or revocation of certification. Where an MCMCB receives or becomes aware of a complaint in relation to the issue of certificates, it may request any related certificates to validate the complaint, and may as a result, trigger a 'for cause' audit as per regulation 28.

Rule 6.4.3 and Schedule 2 of the Regulations identifies minimum information requirements for manufacturer certificates.

Suspension or revocation of certification of an MCM

The responsible MCMCB has the power to suspend or revoke the certification of an MCM if it has reasonable grounds to believe the manufacturer does not meet certification requirements, has not complied with any scheme rules or has not been audited within the last 12 months.

Note: the audit requirement above does not apply if the MCM has been certified for less than 12 months.

If an MCM has its certification suspended, their registration will automatically be suspended, which means the manufacturer cannot issue any manufacturer's certificates during the period of suspension.

WHAT THE LAW SAYS

Section 272W of the Building Act specifies that the responsible MCMCB may suspend or revoke a manufacturer's certification if satisfied that they –

- no longer meet the criteria for certification in section 272U; or
- have failed to comply with any scheme rules; or
- have not been audited within the previous 12 months (or any shorter period prescribed for the purposes of section 272V(1)(b)).

MBIE's Chief Executive may exercise the powers of a responsible certification body under this section.

Automatic suspension

A manufacturer's registration is automatically suspended if their certification is suspended under section 272W.

Suspension by MBIE's Chief Executive

The Chief Executive may suspend a manufacturer's registration if satisfied that they:

- no longer meets the criteria for registration in section 272Y; or
- has failed to comply with any scheme rules; or
- the responsible MCMCB for the manufacturer has failed to comply with any scheme rules.

Section 272ZD specifies that the Chief Executive may urgently suspend a manufacturer's registration if the Chief Executive has reasonable grounds to suspect that they have:

- manufactured modular components that are likely to cause injury or death even if used in accordance with the manufacturer's instructions; or
- in connection with their modular components, failed to comply with the Building Act or any scheme rules;
- and, in addition to one of the above grounds, that conduct creates a risk of injury or death to any person or a risk to public safety that is sufficient to justify the immediate suspension of the person's registration.

However, if the Regulations (in the case of certification or registration) or scheme rules (in the case of certification) are amended, and an MCM ceases to meet the certification or registration criteria solely as a result of those amendments, their certification or registration cannot be suspended or revoked until three months after the amendments come into force.

The suspension period must also allow an MCM reasonable time to meet the certification or registration criteria or rectify their failure to do so. In the case of certification, an MCMCB must lift the suspension if satisfied that an MCM again meets those criteria or has been audited. In the case of registration, MBIE's Chief Executive must lift the suspension of registration if satisfied that the manufacturer again meets those criteria or has rectified the failure.

If the suspension is not lifted before the end of the suspension period, an MCM's certification and registration may be revoked. Registration is automatically revoked if either:

- certification is revoked
- registration is suspended, and the suspension is not lifted within twelve months after it was imposed (although if an application is made during that time to lift suspension and the application has not been decided within this time, the twelve-month deadline is extended until the application is decided).

Urgent suspension of a registered manufacturer by MBIE

MBIE's Chief Executive can also urgently suspend the registration of an MCM if they have reasonable grounds to suspect either:

- they have manufactured modular components that are likely to cause injury or death even if used in accordance with the manufacturer's instructions; or
- they have failed to comply with the Building Act or any scheme rules.

MBIE's Chief Executive can only urgently suspend the registration of an MCM if, in addition to the above grounds, the MCM's conduct creates a risk of injury or death to any person or a risk to public safety.

MBIE's Chief Executive may suspend an MCM's registration without giving them prior notice. If an urgent suspension is imposed, MBIE's Chief Executive must investigate to determine whether the manufacturer has engaged in the conduct detailed above and if there are grounds to suspend or revoke their certification or registration. On completion of the investigation, the Chief Executive must either lift the suspension, suspend, or revoke the MCM's certification or suspend their registration.

Using the BuiltReady brand

Schedule 1: Use of the BuiltReady brand outlines the formatting requirements for scheme participants if they want to use the brand in marketing or advertising. Using the BuiltReady brand is optional – unlike CodeMark, which requires the mark of conformity be printed on the certificate holder's certified building product, BuiltReady doesn't require the brand to be printed on modular components.

This is because an MCM itself is certified to produce and design (where applicable) modular components that fall under its scope of certification.

Registered MCMs who wish to use the BuiltReady brand in marketing or advertising may do so, but only in relation to the scope of certification. **Rule 6.7.1(a)** outlines that they must use the following statement with the advertising or promotional material:

> *This BuiltReady registered manufacturer's scope of certification covers [pick relevant scope: design and manufacture/manufacture only] in relation to [pick relevant certification type: type 1. frame and panel, type 2: volumetric structures, or type 3: whole buildings].*

The intent of this rule is to ensure that registered MCMs aren't misleading customers around the scope of certification. For example, if a company's scope of certification only covers manufacture only for panels and they only design homes, it would be misleading to state you're BuiltReady certified next to promotional material where you design homes.

Rule 6.7.1(b) also states that registered MCMs must follow *Schedule 1: Use of the BuiltReady brand*.

Registered MCMCBs and the MCM accreditation body can use the BuiltReady brand, provided they use it in accordance with Schedule 1.

Failure to follow the brand requirements outlined in *Schedule 1: Use of the BuiltReady brand*, as well as **rule 6.7.1**, may result in your suspension or revocation of certification as it would be breaking the scheme rules.

Appendix 1: The BuiltReady scheme framework

Appendix 1 provides more detail of the legislative framework for the BuiltReady Scheme. It lists sections of the Building Act relating to BuiltReady accreditation, certification, and registration alongside the relevant Regulations and scheme rules.

Building Act 2004	Building (Modular Component Manufacturer Scheme) Regulations 2022	BuiltReady scheme rules
Accreditation of MCM certification bodies (MCMCBs)		
272I: Appointment of modular component certification accreditation body		
	Reg. 25: Audit of accredited MCMCB Reg. 26: Audit of accredited MCMCB conducted for cause	*Part 2: Accreditation body requirements* • Rules 2.1-2.2
272J: Accreditation of modular component manufacturer certification body **272K**: Audit of accredited MCMCB	Regs. 11-12: Criteria and standards for accreditation as a MCM certification body Reg. 29: Fees (as set out in Schedule 3) Schedule 3: Part 1: Fees (accreditation of MCM certification body)	*Part 3: MCMCB accreditation requirements* 3.1 General requirements • Rules 3.1.1-3.1.3 *Part 4: MCMCB requirements* 4.1 General requirements • Rules 4.1.1-4.1.4
272L: Suspension or revocation of accreditation of MCMCB		
272M: MCMC accreditation body must notify chief executive of grant, suspension, lifting of suspension, or revocation of accreditation		
Also see: • **272ZI**: Offence to misrepresent status as MCMC accreditation body		

Building Act 2004	Building (Modular Component Manufacturer Scheme) Regulations 2022	BuiltReady scheme rules
Registration of MCM certification bodies		
272N: Registration of MCM certification body	Regs. 13-16: Criteria and standards for registration of MCM certification body Reg. 29: Fees (as set out in Schedule 3) Schedule 3: Part 1: (registration of MCM certification body)	*Part 4: MCMCB requirements* 4.1 General requirements • Rule 4.1.1.(c)(d)(e)
272O: Audit of registered MCMCB		
272P: Suspension of registration of MCMCB		
272Q: Lifting of suspension of registration of MCMCB		
272R: Revocation of registration of MCMCB		
272S: Urgent suspension of registration of MCMCB		
272T: Investigation following urgent suspension		
Also see: • **200–203C**: Disciplinary powers in relation to complaints • **204**: Special powers of chief executive for monitoring performance of functions under this Act • **208**: Appeals to District Court • **272ZI**: Offence to misrepresent status		
Certification of modular component manufacturers		
272U: Certification of MCM	Reg. 17: Criteria and standards for certification as MCM	*Part 4: MCMCB requirements* 4.2 Evaluation • Rules 4.2.1-4.2.22 *Part 5: MCM certification requirements* 5.1 MCM certification requirements • Rules 5.1.1-5.1.7
272V: Audit of certified MCM	Reg. 27: Audit of certified MCM Reg. 28: Audits of certified MCM conducted for cause	*Part 4: MCMCB requirements* 4.3 Audit • Rules 4.3.1-4.3.6
272W: Suspension or revocation of certification of MCM		*Part 6: Certified MCM requirements* • Rules 6.1.1-6.6.2
272X: Notification to chief executive by registered MCMCB		

Building Act 2004	Building (Modular Component Manufacturer Scheme) Regulations 2022	BuiltReady scheme rules
Registration of modular component manufacturers		
272Y: Registration of MCM	Regs. 18-23: Registration of modular component manufacturer Reg. 29: Fees (as set out in Schedule 3) Schedule 3: Part 1: Fees (registration of MCMs)	
272Z: Audit of registered MCM		
272ZA: Suspension of registration of MCM		
272ZB: Lifting of suspension of registration of MCM		
272ZC: Revocation of registration of MCM		
272ZD: Urgent suspension of registration of MCM		
272ZE: Investigation following urgent suspension		
Manufacturer's certificates for modular components		
272ZF: Registered MCM may issue certificate for modular components	Reg. 24: Information requirements for certificate issued by registered MCM Schedule 2: Content of manufacturer's certificates for modular components	*Part 6: Certified MCM requirements* • Rules 6.4.3-6.4.5
Also see: • **208**: Appeals to District Court • **272ZJ**: Offence to misrepresent modular component as manufactured by registered MCM		

Appendix 2: Schedule 2: Content of manufacturer's certificates for modular components

In accordance with Regulation 24 of the Regulations, a manufacturer's certificate that a registered manufacturer issues must include the following information:

SCHEDULE 2: PART 1: CERTIFICATES ISSUED FOR PURPOSES OF SECTION 45(1)(BB) OR (BC) OF ACT

In accordance with regulation 24(1) and section 272ZF(2)(b) of the Building Act, a certificate for a modular component issued by a registered MCM must include the following information:

General

(a) the date of issue of the certificate:

(b) the certificate number:

(c) whichever of the following applies:

  (i) a statement that the certificate is issued for the purposes of section 45(1)(bb) of the Building Act:

  (ii) a statement that the certificate is issued for the purposes of section 45(1)(bc) of the Building Act:

(d) a description of the modular component sufficient to identify it:

(e) a statement, in the name of the registered MCM, that the registered MCM takes responsibility for the modular component in respect of which the certificate is issued:

Registered MCM: general details

(f) the following general information about the registered MCM:

  (i) their legal name:

  (ii) their trading name, or trading names, in New Zealand:

  (iii) their New Zealand Business Number (if any):

  (iv) their address for service in New Zealand:

  (v) their email address and phone number in New Zealand:

  (vi) their Internet site:

  (vii) a link to (or the address of) the Internet site where information on the registered MCM's complaint process can be accessed:

Registered MCM: MCM scheme details

(g) the following information about the registered MCM:
  (i) the scope of the registered MCM's certification:
  (ii) the date of their last audit (if any) as a certified MCM under section 272V of the Building Act:
  (iii) the date of their last audit (if any) as a registered MCM under section 272Z of the Building Act:

Responsible MCMCB details

(h) the following information about the responsible MCMCB:
  (i) their legal name:
  (ii) their trading name, or trading names, in New Zealand:
  (iii) their New Zealand Business Number (if any):
  (iv) their address for service in New Zealand:
  (v) their email address and phone number in New Zealand:
  (vi) their Internet site:
  (vii) a link to (or the address of) the Internet site where information on the responsible MCMCB's complaint process can be accessed:

Design specifications
(only applicable if the certificate is issued for the purposes of section 45(1)(bb) of the Building Act)

(i) a description of the design of the modular component that will support the intended use of the modular component:
(j) a link to (or the address of) the Internet site where further details of the design can be accessed:

Manufacturing specifications

(k) a description of the processes to be used in the manufacture of the modular component:

Manufacture statement

(l) if the certificate is issued for the purposes of section 45(1)(bb), statements that the modular component –
  (i) will be manufactured, stored, transported to site, and installed according to the design specifications in the certificate; and
  (ii) will be manufactured according to the manufacturing specifications in the certificate; and
  (iii) will comply with the other details of the certificate:
(m) if the certificate is issued for the purposes of section 45(1)(bc), statements that the modular component –
  (i) will be manufactured, stored, transported to site, and installed according to the consented design; and
  (ii) will comply with the other details of the certificate:

Signatures

(n) the signatures of the registered MCM's authorised representatives.

SCHEDULE 2: PART 2: CERTIFICATES ISSUED FOR PURPOSES OF SECTION 92(3)OR (3A) OF ACT

In accordance with regulation 24(2) and section 272ZF(2)(b) of the Building Act, a certificate for a modular component issued by a registered MCM must contain the following information:

General

(a) the date of issue of the certificate:
(b) the certificate number:
(c) whichever of the following applies:
  (i) a statement that the certificate is issued for the purposes of section 92(3) of the Building Act:
  (ii) a statement that the certificate is issued for the purposes of section 92(3A) of the Building Act:
(d) a description of the modular component sufficient to identify it:
(e) a statement, in the name of the registered MCM, that the registered MCM takes responsibility for the modular component in respect of which the certificate is issued:

Registered MCM: general details

(f) the following general information about the registered MCM:
  (i) their legal name:
  (ii) their trading name, or trading names, in New Zealand:
  (iii) their New Zealand Business Number (if any):
  (iv) their address for service in New Zealand:
  (v) their email address and phone number in New Zealand:
  (vi) their Internet site:
  (vii) a link to (or the address of) the Internet site where information on the registered MCM's complaint process can be accessed:

Registered MCM: MCM scheme details

(g) the following information about the registered MCM:
  (i) the scope of the registered MCM's certification:
  (ii) the date of their last audit (if any) as a certified MCM under section 272V of the Building Act:
  (iii) the date of their last audit (if any) as a registered MCM under section 272Z of the Building Act:

Responsible MCMCB details

(h) the following information about the responsible MCMCB:
  (i) their legal name:
  (ii) their trading name, or trading names, in New Zealand:
  (iii) their New Zealand Business Number (if any):
  (iv) their address for service in New Zealand:
  (v) their email address and phone number in New Zealand:
  (vi) their Internet site:
  (vii) a link to (or the address of) the Internet site where information on the responsible MCMCB's complaint process can be accessed:

Manufacture statement

(i) if the certificate is issued for the purposes of section 92(3), whichever of the following applies:

  (i) a statement that the modular component has been manufactured, stored, transported to site, and installed in accordance with the manufacturer's certificate issued at the building consent application stage (such statement to include the certificate number of that certificate):

  (ii) a statement that the modular component has been manufactured, stored, transported to site, and installed in accordance with the manufacturer's certificate issued at the building consent application stage, except for the described variations (such statement to include the certificate number of that certificate and to describe the variations):

(j) if the certificate is issued for the purposes of section 92(3A), a statement that the modular component has been manufactured, stored, transported to site, and installed in accordance with the consented design and the manufacturer's certificate issued at the building consent application stage (such statement to include the certificate number of that certificate):

Signatures

(k) the signatures of the registered MCM's authorised representatives.

Te Kāwanatanga o Aotearoa
New Zealand Government