

Manufactured Modular Component Guidance

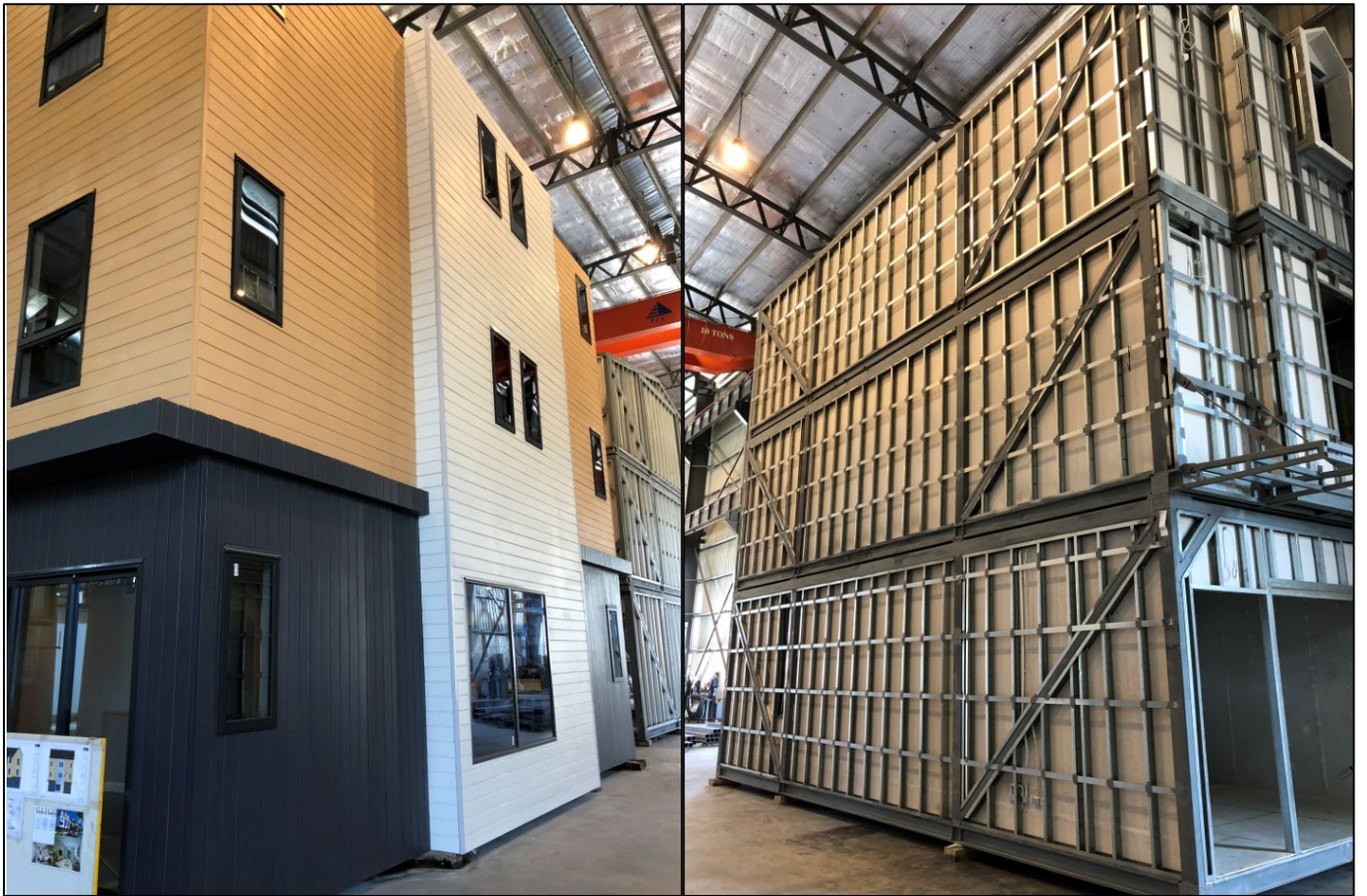


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1 Definitions

Modular component

The definitions of what are ‘modular components’ in this guidance document, and how that is intended to help a person apply for building consent, is limited to the types of products that would ordinarily require a building consent or form a significant part of a completed building.

Modular buildings (sometimes referred to as “*volumetric construction*” or “*panelised buildings*”) are buildings made up of components manufactured on assembly lines in factories and then assembled on-site in a variety of arrangements.

When making a building consent application with Auckland Council, you will be asked on the application form whether your building work contains modular components. This includes volumetric individual and stand-alone modules such as containerised buildings, completed bathroom pods and other multi-modular built-up systems which are later assembled on site individually or as combinations. This may also include panelised systems as part of the on-site assembly or the panelised modular components making up the majority of the building.

We regard a panelised system to include substantially complete things such as internal or external wall panels. In most cases these will be completed off-site and to a level that includes internal wall linings, plumbing 1st fix, electrical 1st fix, external wall underlays, external claddings with windows and doors, etc., or combinations of these.

Modular components when fully assembled on-site become part of what amounts to a substantially complete building.

At this stage, Auckland Council does not regard new homes built off-site in a yard or a factory as a modular component. This would be a building consent application for, as an example, a 3-bedroom transportable home. That would also apply to older types of relocated dwellings or buildings.

The defined term ‘modular component’ in this document is also not intended to include other features within the building that serve as architectural or service features. These could include things like a kit-set shower cubicle, flat-pack or pre-assembled kitchen cabinetry, flat-pack furniture, flat-pack garden sheds, spa pools and spa baths, etc. Manufacturing of modular and prefabricated products that are manufactured in NZ, in some cases may meet the definition in the Building Act 2004 of ‘*building work*’.

For this guidance document, Auckland Council only offers its opinion of what we consider to be products that are unlikely to be defined as such.

For example, simple sub-assemblies such as panels, bathroom pods, pre-nailed frames and trusses would not generally be defined as building work under the Building Act 2004. We would consider sub-assembly connected off-site to other sub-assemblies resulting in the building being substantially completed in the factory to be ‘*building work*’ as currently defined and treat it as such during the processing of a building consent.

For offshore manufacturing, the definitions are irrelevant as the manufacturing and assembly process are not defined as building work, regardless of the extent to which that is completed.

However, as soon as any of these are installed on-site, we believe that it would be deemed building work and therefore require a building consent, given the public policy drivers of safety behind the Building Act.

If you are unsure whether the building work you are planning on undertaking involves the use of modular components, please book a pre-application meeting by contacting the Auckland Council Project Assessment Manager in charge of modular design consent applications.

At the pre-application meeting, the process will be explained and the information discussed formally captured to become part of your building consent application. The captured information will outline the discussion and recommendations to help your building consent application process flow more smoothly.

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2 Why use this guide?

Use this guidance if it is your intention to apply for a building consent. Council strongly recommends following this guidance as best practice for an efficient consenting process.

There are 4 types of scenarios that this guidance is designed to help with:

Type 1:

All building work is covered by one consent issued by Auckland Council

- The fabrication of modular components takes place in Auckland
- The final site for the finished product is also in Auckland
- A memorandum of understanding (MOU) is the preferred method for describing and agreeing how the process will be managed by the customer and Council
- A detailed Quality Assurance (QA) plan demonstrating how quality control will be carried out within the factory and by whom is provided as part of the consent application

Type 2:

All building work is done in New Zealand, with some or all of the modular components manufactured outside of Auckland

- A building consent is issued by *another* Building Consent Authority (BCA) / Territorial Authority for modular components manufactured outside of Auckland
- The final site for the finished product is in Auckland with Auckland Council issuing the building consent for the site specific works and assembly
- The building consent and code compliance certificate (CCC) issued by the other BCA / Territorial Authority is provided as part of the building consent application to verify which work is covered by their consent

Type 3:

All building work is done in New Zealand, with some or all parts of the modular components manufactured outside of Auckland

- All building work is consented by Auckland Council with the fabrication of modular components taking place outside of Auckland and those components being treated as building products used in the construction of a building in Auckland
- The components are shipped to Auckland
- The final site of the finished product is in Auckland
- A memorandum of understanding (MOU) is the preferred method for describing and agreeing how the process will be managed by the customer and Council
- A detailed Quality Assurance (QA) plan demonstrating how quality control will be carried out within the factory and by whom is provided as part of the consent application

If Type 3 is being considered the applicant should seek independent advice as to whether the construction of modular components amounts to building work that requires a building consent. Section 40 of the Building Act makes it clear that it is an offence to carry out building work without a building consent.

Type 4:

Manufacture of modular components takes place off-shore and building work occurs in New Zealand

- Fabrication of modular components takes place off-shore with the components shipped to New Zealand
- The final site for the finished product is in Auckland
- A building consent is applied for to cover the incorporation of the modular components and the assembly on site in Auckland
- A product technical statement (described further in section 4.3 below) and detailed Quality Assurance plan regarding the factory manufacture process will need to be provided to enable the Council to be satisfied on reasonable grounds that the modular components meet all relevant provisions of the New Zealand Building Code (NZBC), and that the building work undertaken on site will meet all relevant provisions of the NZBC if the building work is carried out in accordance with the plans and specifications that accompany the application
- A memorandum of understanding (MOU) is the preferred method for describing and agreeing how the process will be managed by the customer and Council

If you are intending to carry out building work involving modular components, and what you are proposing to do does not fall within any of the options covered above please contact us to discuss your consenting journey.

There are different recommended requirements for each type. Refer to [Section 9](#) for specific details and examples for each type.

For the purpose of this guidance document, modular components constructed outside of New Zealand are considered to be building components, products or systems, as the circumstances require.

3 The Building Act 2004

The Building Act 2004 (the Act) sets out the rules for the construction, alteration, demolition and maintenance of new and existing buildings in New Zealand. This is the primary legislation this information booklet is based on.

There is one section of the Act we quote here for reference:

Section 49(1) of the Act says:

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



What does this mean?

Put very simply, job specific materials, systems construction details, etc. are required to be provided to the Council prior to granting a building consent. Performance based specifications (alone) will not be accepted as providing enough evidence to enable the Council to be satisfied on reasonable grounds that the proposed building work will comply with the NZBC.

Although section 49 is talking about '*building work*', and the manufacturing of a sub-assembly may not always clearly fall in line with that definition, the Auckland Council is taking the position that we will assess the manufacturing process in line with any Quality Management Systems as part of the assessment of a complex product (sub-assembly), that will later be assembled on-site, which is where the '*building work*' will commence.

In New Zealand, all information confirming compliance is required up front before a building consent is granted. All inspections, observations and the like carried out during and following construction are to verify that the building work is being undertaken in accordance with the consented building plans and supporting documents.

4 Process overview

4.1 Pre-application meeting

This section applies to **all Types** of scenarios that this guidance is designed to help with.

Your first step when looking to apply for a building consent for a development involving the use of prefabricated modular components, is to organise a pre-application meeting. Refer to the Auckland Council website on ways to book a pre-application meeting.

The anticipated outcome of the pre-application meeting is that you will gain an understanding of what documents you will need to provide, how to develop a technical statement, as well as working through the inspection programme and stages, etc.

These meetings will also cover all aspects of the approval process and identify any obvious risks or gaps in your project that indicate that it may be difficult to meet the Council's requirement to be satisfied on reasonable grounds that the intended building work (including all materials used in the building work) will comply with all the relevant requirements of the NZBC. Whenever an independent third-party inspection process is proposed to be used as part of this process, the certifier must be approved and agreed with Auckland Council.

Where applicable, essential information will be confirmed to enable the applicant to develop an acceptable Product Technical Statement (PTS). Refer to [Section 4.3](#) below for more information on PTS and [Appendix 4](#) for a sample PTS.

The process of the meeting may also cover the basic objectives of assessing factories' Quality Assurance Framework (QAF) and issuing a draft MoU while the QAF is being assessed. This service may be charged during the pre-application meeting.

A pre-application meeting may not be required if you have already completed pre-application meetings on a previous project, and there is a satisfactory working relationship with council.

4.2 Memorandum of Understanding (MoU)

This section applies to **Types 1, 3 and 4**.

A Memorandum of Understanding (MoU) is an agreement between Council and the applicant regarding the regulatory process. Amongst other things, it defines modular components as building components or systems, and is used when the applicant is relying on a Quality Assurance programme to help demonstrate compliance with the NZBC.

The MoU is customised to meet the needs of the specific relationship between the applicant and Council, and where applicable, can also include the performance expectations and agreements between the applicant and a manufacturer.

The agreement sets out to establish the following:

- The terms and conditions of the project
- The roles and responsibilities of all the stakeholders involved
- Key objectives
- The relationships between parties
- Any special conditions or limitations
- Timeframe constraints
- The management of change during fabrication
- The management of disputes between council and the applicant
- The controls of the Quality Assurance plan in the QAF.



Council and the applicant will generally enter into an MoU:

- When the project is for multiple units
- To agree on the purpose and strategy of the overall consenting and inspection process
- To agree the Product Technical Statement (PTS)
- To accept respective obligations and responsibilities

Refer to [Appendix 3](#) for an example of a Memorandum of Understanding. Please note that the appendix is an example only and each MoU will need to be customised specific to the relationship between Council and the applicant, and if relevant, the manufacturer.

4.3 Product technical statement

This section applies to **Type 4** but may also apply to all other types when agreed with Council.

Auckland Council considers a Product Technical Statement (PTS) is an essential part of the building consent application for projects using internationally sourced modular components as it aids in assessing NZBC compliance of any application.

Template guidance examples were developed by MBIE, in consultation with the building industry, to show how a system or product design could be supplied with a building consent application in order to demonstrate compliance with the NZBC.

A PTS contains and / or refers to technical information and independent verification that when assessed may be sufficient to demonstrate compliance with the performance requirements of the NZBC. It should be noted that a PTS does not replace your actual evidence of compliance with the NZBC. Council still needs to verify this in order to be satisfied on reasonable grounds that it meets the requirements of the NZBC.

The PTS process will cover three key stages of the development:

- The design of the modular component
- The fabrication of the modular component
- The transportation of units to a building site in Auckland

Guidance on this process can be found on the Ministry of Building Employment and Innovation website - [Product Technical Statement](#).

The PTS and Quality Assurance plan is assessed at the time of the building consent application process and the agreed method of inspection and certification is incorporated into the Form 5 building consent conditions, advice notes and inspection regimes.

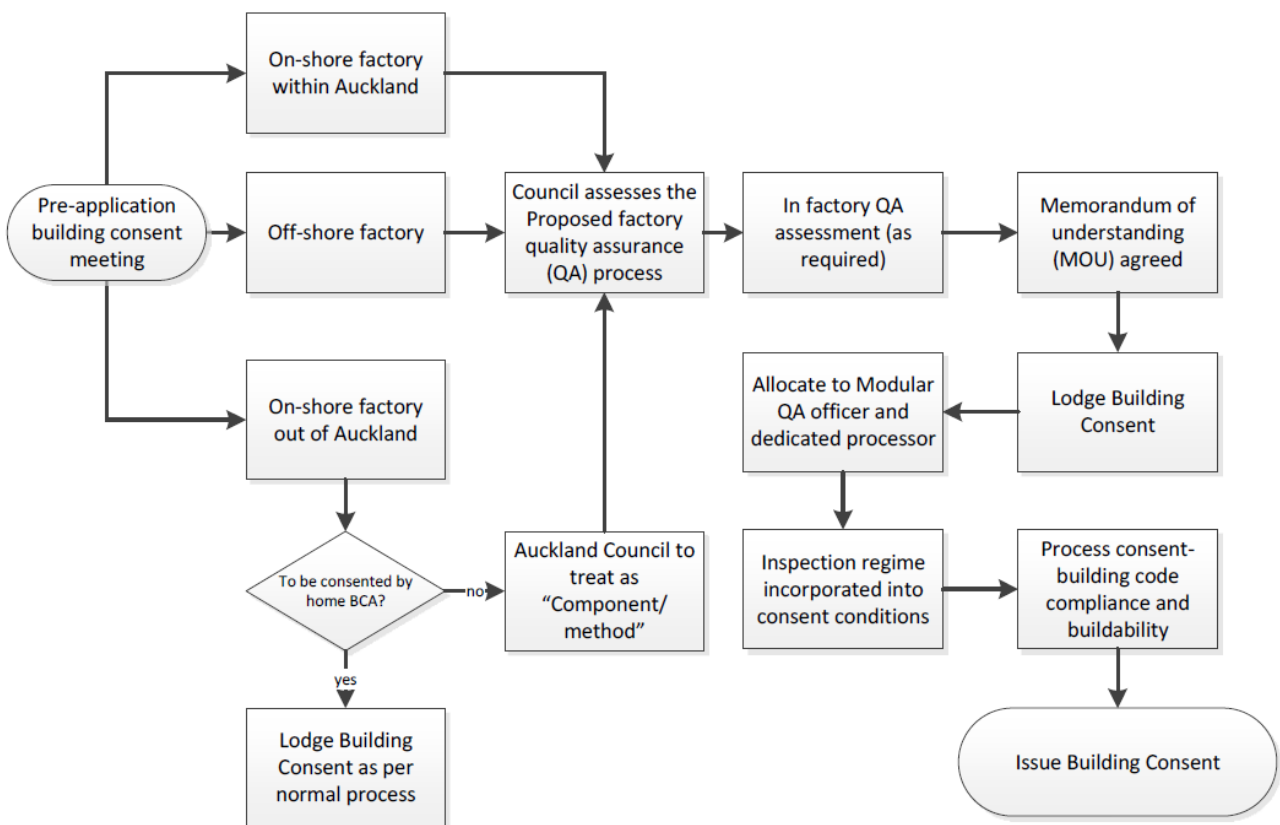
Refer to [Appendix 4](#) for an example of a Product Technical Statement.

Note:

In cases where modular components are constructed in New Zealand using well established designs, materials and systems Auckland Council may decided that a PTS is not required.

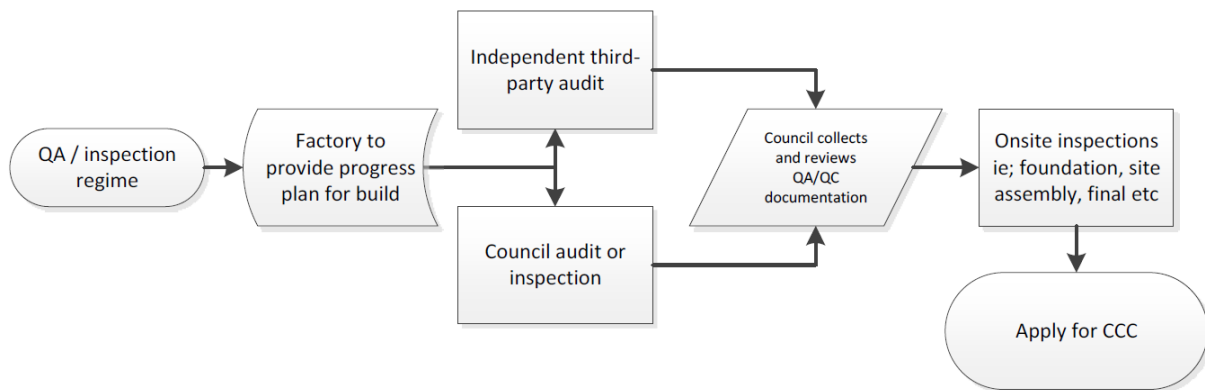
Building consent process

Diagram 1: Building consent process



Inspection regime process

Diagram 2: Inspection regime process



5 Application requirements

Regardless of Type, the application must have a clear description of work. The work to be consented by Auckland Council must be clearly marked and identify which Type it pertains to. The method and process of construction must be included. Refer to [Section 9](#) for examples of descriptions of work for each type.

Due to the various methods of construction being carried out in factories, standard assessment and inspection regimes may not be practical and the Council may choose to use alternative methods for ensuring compliance such as Quality Assurance plans and auditing processes.

Inspection programme and stages will be determined during the pre-application meetings. The agreed inspection programme must be sufficient to satisfy the Council (on reasonable grounds) that compliance with the NZBC will be achieved.

The application should include the following information:

- Project overview and product description
- Designer's statement of compliance confirming that the design, and all specified material and products used, complies with the NZBC, or if the work is restricted building work, be accompanied by a certificate of work for the design
- Construction methodology
- Compliance path – a full description of how the design of the modular unit complies with every relevant clause of the NZBC, backed up by appropriate technical evidence. This could include:
 - Acceptable solution or designed to New Zealand standards, verified by plans and specifications
 - Verification methods as cited in a relevant acceptable solution
 - Independent assessment by bodies such as international testing laboratories or chartered professional engineers
 - Appraisals through product testing by independent recognized body, test reports by suitably qualified third party certifiers, performance claims by product certifying bodies, expert opinions
 - Industry based schemes where products are assessed based on specified industry requirements
 - In-service history on material or system performance
 - MBIE determinations
 - CodeMark *** (please refer to the limit of the application of Codemarked products provided at the end of this section)*
- Plans, specifications, calculations and if applicable, fire, accessibility and acoustic reports

- If the plans and specifications for the modular component are the subject of a national multiple-use approval (Multi Proof), a copy of it must be provided. Any departures or variations to the multi-use approval must be clearly outlined.
- Scope of use and high-risk areas such as welded steel components and assemblies, the use of overseas fabricated products to provide acoustic attenuation, fire rated assemblies, etc.
- Manufacturers' technical literature, test results and other endorsements
- Details of the construction methodology and maintenance requirements
- How modular components will be identifiable through the manufacturing, shipping, delivery and site assembly process
- Where there is an MoU in place approved and signed by all parties, the building consent application must include the reference number allocated to that MoU within the description of work

Supporting documentation must be relevant to the project and the specific modular components used. Generic specifications will be rejected on the basis that they do not provide the Council with sufficiently specific information to enable it to determine, on reasonable grounds, that the building work in question will comply with the NZBC.

Other consents may be required such as engineering application, vehicle crossing, Watercare approvals, resource consent, etc. As the applicant, it is your responsibility to ensure any relevant approvals are obtained.

Applicable to Types 1, 2 and 3 only

Auckland Council will require:

- A detailed Quality Assurance (QA) plan demonstrating how quality control will be carried out within the factory and by whom, however for Type 2, this will be used for supporting information purposes only as this would be covered by the building consent and CCC from the local BCA / Territorial Authority who issued it.

Applicable to Type 2 only

Auckland Council will require:

- A copy of the issued building consent, CCC and plans at the time of the application for building consent in Auckland in order to verify which work is covered by the existing building consent and which work will be covered by the site works consent.

Applicable to Type 4 only

Auckland Council will require:

- A product technical statement for all modular components as supporting evidence under their responsibilities described in section 14G of the Building Act
- A detailed Quality Assurance (QA) plan demonstrating how quality control will be carried out within the factory and by whom

The *'building work'* covered by the building consent issued by Auckland Council will cover the foundations, the services and the assembly of the modular components (with the modular components being treated as building components, subject to sufficient information having been provided).

Code Compliance Certificate application must be applied for in the usual way upon successful final inspection.

Plan drawing collation

While the drawing quality requirements are the same as for a standard building consent application, the way that you assemble that drawing set will make a big difference to the speed and efficiency that your building consent can be processed.

Rather than supply the drawing set in a traditional architectural fashion, it is strongly recommended that you separate the manufacturing details out completely, collating them in a way that represents the way the process will be delivered, as if in two stages.

Stage 1 would show all the details required to demonstrate compliance of the design in the manufacturing process for the modular component. Stage 2 would be clearly separated out for the on-site work such as the connections, interphases, and services, etc.

The drawing set should be extremely clear about what work takes place and in which location. This will help avoid causing confusion when the application is processed and will also help to justify your proposed inspection regime in a very specific and clear fashion.

It is critical that every design detail is included for the manufacturing of the products.

Design for Manufacture/Assembly (DFM/A) is a level above general design work and requires that the manufacturing process for the design and assembly be collaborative between engineers and designers.

By eliminating the costly and time-wasting requirements for multiple revisions and re-approvals, this approach is best suited to effective consenting and manufacturing by designing something and ensuring that it can be developed into shop drawings and assembled efficiently.

Design every facet of the product, select every material specifically and supply sufficient detail to install in a factory environment and later on-site as well.

Leave nothing to assumption!

Tell the story literally and graphically as it will occur from the factory to the site in sequential order rather than in the traditional architectural fashion. If you do this it will make it much easier for the Council to understand and assess your application and determine whether you have provided sufficient information to enable the Council to be satisfied, on reasonable grounds, that the building work you are planning to do complies with the NZBC.

Proposed inspection regimes

As part of the content that makes up your plans and specifications you should also supply a proposed inspection regime.

In effect, for most modular construction this will involve a mix of Quality Assurance in the factory, some independent third-party inspections, Council factory audits and on-site inspections for the work in Auckland or a combination of all of these processes. Whenever an independent third party is being used throughout this process they must be approved and agreed with Auckland Council.

This inspection regime may be subject to negotiation through the request for further information process. The Council must be satisfied that the inspection regime will meet the evidential requirements necessary in order to verify NZBC compliance of a manufactured product, and that it will provide appropriate evidence that the manufacturing and assembly of the products and site works to comply with an approved building consent.

A copy of our Council inspection template is available to allow you to edit the sequencing and the text related to the schedule to become specific to your building consent. This allows you to present the proposal in a consistent way and in a way that Project Assessment Officers are familiar with and so will be able to process more efficiently.

Refer to [Appendix 1](#) for a proposed list of notifiable inspections.

On-site Quality Assurance

Current experience has demonstrated that the manufacture of high-quality modular components, and the efficiencies gained by using them are often undermined by a lack of the same attention to quality on-site.

The traditional approach to design and to construction on site, has rarely utilised the same Quality Assurance checks and balances as a product manufacturer would, and has commonly used a reasonable amount of a 'build and design' approach.

This means that it is often possible to alter the building as it is erected to accommodate either flaws in the original design, or when there are issues with certain tolerances on-site.

When using off-site modular components as part of the overall construction on-site, the challenge for the developer and various site contractors is to ensure that quality and tolerances on-site are subject to the same scrutiny as in the factory.

Failing to observe this often leads to significant delays, as the completed modules and prefabricated products do not fit onto foundations and floor slabs correctly, or when services do not align with factory modelled access points.

Quality Assurance must be an end-to-end process from factory to site to gain the true efficiencies of using modular components.

Manufacturers should consider using appropriately qualified people to undertake the quality control checks at critical control points of manufacturing and fabrication. This will be further defined at the pre-application meeting.

Note:

From our experience, we strongly recommend that for anything other than 1-3 storey, detached dwelling types of buildings, that Building Information Modelling (BIM) to at least LOD 400 is utilised to ensure that any clashes between building elements are identified and modelled out during the design process.

Failing to do this has shown to be extremely costly and can result in deconstruction of complete modules to allow services to be installed, passive fire stopping to be completed correctly, etc.

****Codemark:**

This guidance document is written to illustrate some of the various methods of compliance available to designers when putting together a building consent application.

When a building consent application is made to supply a modular product, and the 'entire product' is certified with a NZ Codemark, not just part, (such as a water supply pipe within a wall panel, and the pipe has a Codemark), there are no requirements for the applicant to meet any of the requirements recommended in this guidance document.

This is because the entire product from end to end, i.e. design to manufacture, has already been confirmed through the building code verification and certification process.

This guidance document, and the use of the term 'Codemark' was written to describe how a Codemarked product, which will be used as part of a sub-assembly process, is deemed building code compliant by the Building Consent Authority (when used within the scope of that certificate), as one component of the overall product being manufactured.

The guidance document does not require the same process be observed for when an entire Off Site Manufactured (OSM) product has that NZ Codemark.

6 Manufactured modular components fabrication



A Quality Assurance Plan is used to help control the quality of the manufacturing where Auckland Council will be issuing the building consent and CCC.

It is the responsibility of the applicant to provide adequate information in the form of a Quality Assurance plan that is sufficiently detailed and robust to enable verification by the Council that the manufacture of modular components will comply with the approved design. This includes, but is not limited to, the use of appropriate materials and the construction methodology. The Quality Assurance plan must be approved by Council.

The Quality Assurance plan and proposed inspection regime should incorporate an onsite inspection and site observation process to be undertaken by Council or an agreed third party to verify that all components used are those specified in the design, and that the modular components being manufactured, and thereafter assembled on-site, comply with both the approved design and the NZBC.

The Quality Assurance plan should include:

- Details of the personnel undertaking technical roles, and where appropriate their skills and qualifications should be demonstrated
- Description of the process of fabrication, installation and assembly of components
- Verification of the use of materials and products
- Identification of any limitations or qualifications
- Inspection test plan
- Identification of process to address deficiencies
- Process for assessment and approval of any amendment relating to materials, specifications or methodologies
- Logistics plan from manufacture to building site
- Maintenance plan
- Warranties and guarantees provided by manufacturers and installers

Auckland Council is unlikely to accept a manufacturer's inspection alone as verification of compliance with an approved product technical statement and design. All inspections must be completed or reviewed by an approved independent third party as agreed with Auckland Council whether onshore or offshore or if realistic, directly, or indirectly, by Auckland Council staff or by other methods proposed that are approved.

Auckland Council will conduct a combination of onsite factory audits and desktop audits at agreed timeframes to ensure itself on reasonable grounds that the components are being built in conformity to consented drawings.

Audits of the factory process will be conducted directly by Auckland Council or by a third party, or any combination thereof. Should any significant issues be identified during the audit with the design or shop drawings, or with the compliance of manufacturing, production may need to be stopped until the issues are resolved.

This will be outlined and agreed in the MoU and will form part of that agreement, where the applicant and manufacturer understand that errors in the process, including any rework, must be corrected at their own cost before the product is completed and shipped to the New Zealand site in Auckland.

Refer to [Appendix 1](#) for the Proposed List of Notifiable Inspections and [Appendix 5](#) for an example of a Quality Assurance Plan.

7 Third party inspection requirements (if applicable)



Whenever an independent third party is engaged through this process, they must be approved and agreed with Auckland Council.

We can offer guidance on what type of third-party qualifications and experience are likely to be required on a case-by-case basis. This will likely be based on the complexity of a design, the location of the manufacturing and the risks associated with only indirect supervision of that process by Auckland Council.

Common examples could be, but are not limited to:

- Nationally or Internationally accredited organisations related to ISO certification
- Nationally or Internationally recognised structural engineering qualifications
- Nationally or Internationally recognised welding inspection qualifications
- Nationally or Internationally recognised plumbing, electrical or hydraulic qualifications
- Nationally or Internationally recognised passive fire installation qualifications

Council requires that independent third-party qualified certifiers be retained at the applicants expense to verify compliance with the approved plans and specifications during manufacturing. The Council will review proposed personnel or organisations identified by the applicant as being responsible for carrying out the inspection and certification of the modular components, and the management of the proposed Quality Assurance plan as part of your building consent application and Quality Assurance plan.

Third party representatives administering the Quality Assurance plan must be present on site with sufficient regularity. They should check and observe that the fabrication of wall, floor and roof framing, and surface protection against corrosion of structural steel is to the approved design. They must also ensure compliance with any other NZBC clauses accepted by Auckland Council as part of their remit within an approved Quality Assurance process.

Third party qualified certifiers appointed to monitor, and who have been approved by Council, will be subject to random audits. The Council reserves the right to perform these random audit inspections to assure itself that compliance is being achieved.

As an alternative, the applicant and the Council can enter into an agreement for the Council to carry out their own inspections. The inspector will visit the fabrication and assembly site(s) onshore or overseas to gather evidence in order to satisfy Auckland Council, on reasonable grounds, that the Quality Assurance plan set in place is being adhered to and the modular components have been built in accordance with the approved plans. Any such site visits will be at the applicant's cost.

Refer to [Appendix 10](#) for the requirements to become approved third-party reviewer.

8 Shipment

Council will accept a report from a suitably qualified independent third party confirming that the modular components are able to be shipped without sustaining damage or incurring defect.

An inspection by Council, or an approved third party as agreed with Council, will be required when the modular components arrive on site (or at an agreed alternative location) to check whether the modular components have been obviously damaged while being transported.

If damage or defect does occur, it is the applicant's responsibility to provide Council with a remediation plan to remedy that damage or defect occurring during transit

Confirmation of how this procedure will be carried out would be expected as a "hold point" in the proposed Quality Assurance plan that would be submitted with an application for building consent. If building work is required to repair damage to modular components the applicant will need to confirm with the Council whether a variation or modification to the building consent is required prior to the repair work commencing.

Refer to [Appendix 9](#) for an example of a Logistics Plan.



9 Description of work and requirements by type

Based on the various options available to you, the building consent description of work could be as follows:

Consent Application Example: Type 1

Prefabricated modular components built in Auckland for an Auckland site will be fully covered in one building consent. A pre-application meeting is arranged, and a MoU may be agreed with Auckland Council prior to the application for building consent being submitted. This will include the agreed process for the factory inspection or audit regime. During the factory build, Auckland Council, or an agreed third party, will inspect the QA process in the factory to ensure it is being followed and confirm the factory build complies with the approved building consent. The CCC will cover the entire project described on the building consent.

Consent Application Example: Type 2

Prefabricated modular components built in Wellington will be transported to site in Auckland. Consent for the modular components fabricated in the factory is issued by Wellington City Council to cover the building up to transportation stage. Building consent will need to be applied for in Auckland to cover the site specific works such as foundations, services, access, erection of the modular components and all interphases between modular components to cover weathertightness, fire rating and acoustics. A copy of the approved building consent issued by Wellington City Council must be provided with the building consent application to Auckland Council. The CCC issued by Wellington City Council must be provided prior to the CCC being issued by Auckland Council. No MoU is required in this circumstance as the factory build is fully covered under the CCC issued by Wellington City Council.

Consent Application Example: Type 3

Prefabricated modular components built in Wellington will be transported to site in Auckland. The applicant wishes to have one building consent covering everything, i.e. factory build in Wellington and assembly onsite in Auckland. A pre-application meeting is arranged, and an MoU agreed with Auckland Council prior to the application for building consent being submitted. This will include the agreed process for the factory inspection or audit regime. During the factory build, Auckland Council, or an agreed third party, will inspect the QA process in the factory to ensure it is being followed and confirm the factory build complies with the approved building consent. The CCC will cover the entire project described on the building consent with the modular components being treated as building products or components.

Consent Application Example: Type 4

Prefabricated modular components manufactured offshore in China that will be transported to a new site in Auckland to form a single level three bedroom detached dwelling. The building consent application covers how the modular components meet compliance standards and the method for providing evidence to support this. It will also contain details of the onsite assembly and erection methodology including all interfaces between modular components to cover weathertightness, fire rating and acoustics plus access routes and all services to and from the completed building.

Item	Type 1	Type 2	Type 3	Type 4
Pre-application meeting	✓	✓	✓	✓
Consent & CCC issued for building fabrication by other BCA / Council		✓		
Memorandum of Understanding	✓		✓	✓
Quality Assurance plan for factory fabrication	✓		✓	✓
Inspection of QA process by Council or agreed third party	✓	✓		
Inspection of QA process by agreed third party			✓	✓
Product Technical Statement	as agreed	as agreed	as agreed	✓
Logistics plan	✓	✓	✓	✓
Auckland Council issues consent & CCC covering entire project	✓		✓	✓
Auckland Council issues consent & CCC for site specific works only		✓		

10 Appendices

The appendices are examples only and should be customised to fit your project.

Appendix 1: Proposed List of Notifiable Inspections

Appendix 2: Product Technical Statement Process

Appendix 3: Memorandum of Understanding

Appendix 4: Product Technical Statement Sample

Appendix 5: Quality Assurance Plan

Appendix 6: Critical Material List

Appendix 7: Modular Inspection & Test Plan

Appendix 8: PTS Material Compliance

Appendix 9: Logistics Plan

Appendix 10: Requirements to Become an Approved Third Party Reviewer

Appendix 1: Proposed inspection regime

Proposed list of notifiable inspections:

- Inspections proposed by John Smith Manufacturing are shown in red
- Other inspections are to be populated and carried out by the BCA

In order for a code compliance certificate (CCC) to be issued, Council needs to be satisfied on reasonable grounds that the completed building work complies with the approved building consent. To enable this to be achieved, the building owner is responsible for ensuring the following inspections are booked and undertaken and supplying producer statements, testing certificates and warranties to confirm compliance during construction.

Required	Number	Inspection Type	Description
✓	0	Wall / roof framing IFG	<p>Wall / roof framing – in Wellington factory</p> <p>John Smith Manufacturing will use the Council approved quality assurance system to check all structural framing work in the factory including all factory installed framing connections.</p> <p>John Smith Manufacturing will supply correctly completed and passed QC inspection results as well as any records of non-compliance, the procedure to rectify the failed items and the approval of the repair prior to the QC recording passed inspections.</p> <p>Inspection results will be electronic clear high-resolution PDF copies with time and date stamped photographs of key elements, that also include frame identification that matches the building consent.</p>
✓	0	Wraps / cavity ICA	<p>Wraps – in Wellington factory</p> <p>John Smith Manufacturing will use the Council approved quality assurance system to check all structural framing work in the factory including all factory installed framing connections.</p> <p>John Smith Manufacturing will supply correctly completed and passed QC inspection results as well as any records of non-compliance, the procedure to rectify the failed items and the approval of the repair prior to the QC recording passed inspections.</p> <p>Inspection results will be electronic clear high-resolution PDF copies with time and date stamped photographs of key elements, that also include frame identification that matches the building consent.</p>
✓	0	Weatherboards and sheet claddings ICL	<p>Weatherboards and sheet claddings – in Wellington factory HOLD POINT</p> <p>John Smith Manufacturing will use the Council approved quality assurance system to check all structural framing work in the factory including all factory installed framing connections.</p> <p>John Smith Manufacturing will supply correctly completed and passed QC inspection results as well as any records of non-compliance, the procedure to</p>

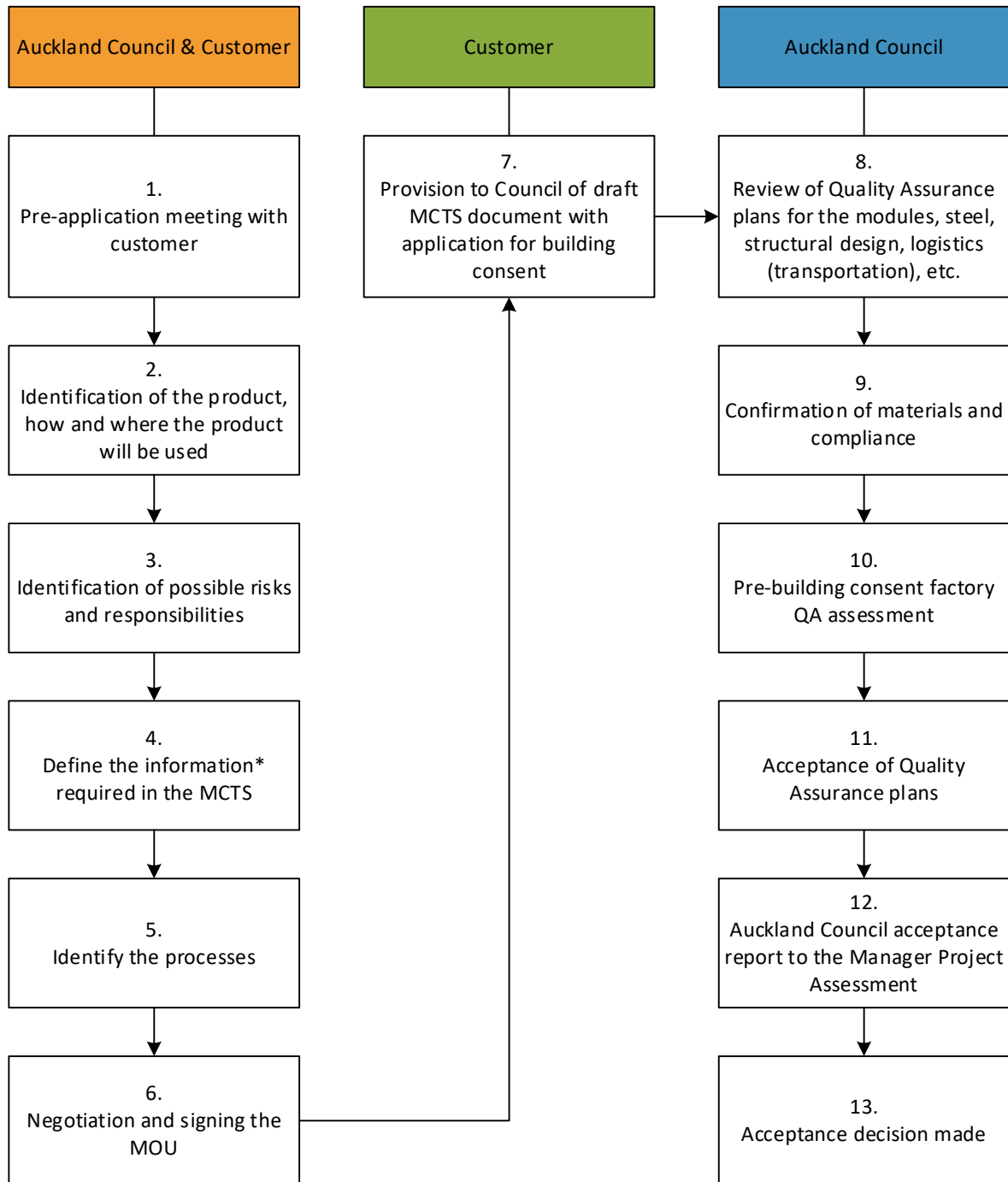
Required	Number	Inspection Type	Description
			<p>rectify the failed items and the approval of the repair prior to the QC recording passed inspections.</p> <p>Factory supervisor to sign off that all penetrations required to penetrate the wall cavity and cladding, have been correctly completed in accordance with the building consent prior to cladding application.</p>
✓	0	Transportation check and release	<p>Wellington factory</p> <p>John Smith Manufacturing will use the Council approved quality assurance system to check all frames and load lifting points are compliant, that loads have been correctly restrained as required by the structural engineer, and that all weathertightness wraps are installed to protect during transit.</p> <p>John Smith Manufacturing will supply correctly completed and passed QC inspection results as well as any records of non-compliance, the procedure to rectify the failed items and the approval of the repair prior to the QC recording passed inspections.</p> <p>Inspection results will be electronic clear high-resolution PDF copies with time and date stamped photographs of key elements, that also include frame identification that matches the building consent.</p>
✓	0	Siting IFO	<p>Siting – Auckland on-site</p> <p>John Smith Manufacturing to check the set-out of the building; boundaries defined and string lines in place.</p> <p>Note: A registered Land Surveyor’s certificate (or at the least email from the registered surveyor confirming siting) will be supplied before the foundation inspection is approved. If by email, the certificate will be supplied as soon as practicable to the BCA.</p>
✓	0	Foundation IFO	<p>Strip footings</p> <p>John Smith Manufacturing will use the CPEng on the Auckland Council Producer Statement Author Register to check all foundation work including confirmation of good ground assumed in the design, the foundation size, all reinforcing steel installation and associated DPM requirements.</p> <p>Approval to pour will be covered off by the supply of written site observations and PEF that will be supplied to Council prior to the next scheduled related inspection. PDF to include clear digital colour images of the compliant work.</p> <p>PS4 for all work inspected by the engineer will be supplied on completion of that scope of works rather than at CCC application stage.</p>
✓	1	Wraps / cavity ICA	<p>Cavity – on-site</p> <p>Council inspections will be called for to check the assembled panels on-site prior to the final installation of flashing and cladding components and check previously approved engineer’s site and factory observations.</p>
✓	0	Wall / roof framing IFG	<p>Wall / roof framing – on-site</p>

Required	Number	Inspection Type	Description
			<p>John Smith Manufacturing will use the CPEng on the Auckland Council Producer Statement Author Register to check structural connections from frames to the foundation/slab, all frame to frame connections, all floor cassette to frame connections, all roof framing and roof framing connections prior to the inspection to close the envelope in.</p> <p>Inspection results will be electronic clear high-resolution PDF copies with time and date stamped photographs of key elements, that also include frame identification that matches the building consent.</p> <p>Approval to continue will be covered off by the supply of written site observations and PDF that will be supplied to Council prior to the next scheduled related inspection. PDF to include clear digital colour images of the compliant work.</p> <p>PS4 for all work inspected by the engineer will be supplied on completion of that scope of works rather than at CCC application stage.</p>
✓	1	Membrane / tanking ITK	<p>Membrane roof, deck and wet areas</p> <p>By Council to check the substrate application for the membrane prior to tiling wet areas.</p> <p>John Smith Manufacturing will ensure that a WPM installer currently approved on the Auckland Council Producer Statement Register installs the consented WPM without further need for Council inspection, and on completion will leave a PS3 for the Council inspector to collect at the next inspection.</p>
✓	1	Plumbing Pre-line IPP	<p>Pre-line plumbing</p> <p>By the BCA to check pip work is under test (water supply, sanitary wastes, internal storm water pipes, etc.)</p> <p>Note: This inspection may be included with the pre-line building inspection. When more than one inspection type is to be combined the contractor will book multiple slots to accommodation time required by the inspector.</p>
✓	1	Building Pre-line IPB	<p>Pre-line building</p> <p>By the BCA to check the building is weathertight, proprietary connections for bracing elements installed and moisture content below 18% prior to fixing any internal linings.</p> <p>When more than one inspection type is to be combined the contractor will book multiple slots to accommodate time required by the inspector.</p>
✓	1	Insulation IPB	<p>Insulation</p> <p>By the BCA to check the installation of all wall, ceiling and mid-floor insulation (thermal and acoustic) prior to installing interior linings.</p> <p>Note: This inspection may be included with the pre-line building inspection. When more than one inspection</p>

Required	Number	Inspection Type	Description
			type is to be combined the contractor will book multiple slots to accommodation time required by the inspector.
✓	1	Post line IPL	<p>Post line</p> <p>By the BCA to check nailing of all bracing elements nailed prior to installation of architraves, skirtings and cornices prior to any stopping.</p> <p>Note: This includes nailing of diaphragm ceilings and floors.</p>
✓	1	Fire rated linings IFR	<p>Fire rated linings and passive fire protection measures</p> <p>By the BCA to check fire rated linings; material, collars, wraps and other passive fire protection measures including suspended ceilings prior to any stopping.</p>
✓	1	Drainage IDT	<p>Drainage</p> <p>By the BCA to check that all stormwater and sewer drains have been laid to the correct fall and are under test prior to backfilling trenches.</p> <p>Note: An as-built plan is required at time of inspection.</p>
✓	1	Connection to public drains IDT	<p>Connection to public drains</p> <p>By the BCA to check the connection to a public drain; all connections should be by means of a Y junction.</p> <p>Note: Saddle connections are only permitted on concrete or earthenware public lines of ≥ 225mm diameter. No saddle connections are permitted on fibrolite pipes. Internal dropper pipes inside a manhole are not permitted without specific prior consent.</p>
✓	1	Stormwater detention tank IDT	<p>Stormwater detention tank</p> <p>By the BCA to check and confirm construction of the stormwater detention tank; all paved impervious areas draining to the tank shall be connected via a silt trap and catch pit. Tanks must not be located where they will adversely affect the structural integrity of buildings, driveways, sewers or retaining walls and provide unobstructed access to enable regular maintenance.</p> <p>Specifications for the stormwater detention tank shall be: Minimum tank volume: [insert] m³ Orifice diameter: [insert] mm Depth from inlet invert to orifice invert: [insert] m</p> <p>Note: An as-built plan is required at time of inspection showing the final location of the tank.</p>
✓	0	Acoustic testing ACT	<p>Acoustic testing</p> <p>By John Smith Manufacturing certified testing agent to check the acoustic performance between walls and floors in habitable spaces of apartment buildings and co-joined units.</p> <p>Note: This inspection is undertaken by a consultant prior to the final inspection after all decorating is</p>

Required	Number	Inspection Type	Description
			complete and floor coverings are in place. Please phone (insert consultant's number).
✓	1	Site meeting IME	<p>Site meeting (as required at any stage during construction on-site)</p> <p>To discuss any item of compliance relating to a building consent. Items recorded are:</p> <ul style="list-style-type: none"> - Reason for meeting - What is being discussed - Outcomes and responsibilities on various parties <p>Monitoring inspections to audit consultant's inspections and uplift documentation.</p> <p>Pre-construction meeting to discuss the project and proposed inspection regimes. For multi-unit developments of 4 or more units.</p>
✓	1	Final residential IF1	<p>Final inspection</p> <p>By the BCA to check that all construction associated with the building consent has been completed; this includes painting and decorating, floor coverings, fixtures, fittings, electrical work, heating appliances, etc.</p> <p>The factory QC documents that formed part of the QA will be checked then the CCC is applied for by the applicant.</p> <p>Note: Electricity must be connected at time of inspection.</p>
	TBC	Total number of inspections estimated for this project	

Appendix 2: Product Technical Statement Process



Required information

*The information required for a Modular Construction Technical Statement is project specific and generally should include:

- Product description, scope, use, location and limitations
- Statement of compliance
 - professional statement, signature(s) required
- Design compliance with NZBC
 - detail of how compliance is achieved with each clause
- Material compliance schedule
 - detail of all materials conforming the product, NZ Standards to meet and how compliance is achieved
- Evidence based for compliance
 - technical data, test, opinions, appraisals or product certification
 - evidence should be by a recognized New Zealand or International organisation, independent of the product manufacturer
- Plans and calculations
 - architectural, structural, hydraulic, mechanical, fire, acoustic and more if required
- Quality assurance process
 - description of process
 - acceptance criteria list
 - Quality Management Plan for high risk materials (steel fabrication, welding, steel coating, external claddings, etc.)
 - inspection and test plan (identification of product inspection and testing process)
 - logistics plan (description of packing, lifting and transport process)
 - installation information (identification of subcontractors and skills level requirement)
 - maintenance (identification of short or long-term maintenance)

**Appendix 3:
Sample of a Memorandum of Understanding**

Dated

**MEMORANDUM OF
UNDERSTANDING**

Between (name)

And

AUCKLAND COUNCIL

And

(name)

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SAMPLE

PARTIES

- (1) **AUCKLAND COUNCIL ("Council")**
- (2) **[PROJECT OWNER] ("Owner")**
- (3) **[OFF-SITE MANUFACTURER] ("Manufacturer")**

BACKGROUND

- A. The Owner wishes to undertake a project to construct building(s) at the project site. The project will involve a combination of standard building practices and off-site manufacture of building components. The project as a whole must comply with the Building Code. A Building Consent must be issued for the project prior to the start of construction.
- B. The building components will be manufactured on-shore or off-shore and then transported to the project site. The quality processes for manufacturing, logistics and assembly of the building components is to be set out in the Quality Assurance Framework. The Quality Assurance Framework will require an Individual Test Plan for each project that shall form part of the Building Consent application.
- C. The Council, Owner and Manufacturer have agreed to work in a collaborative manner to agree the Quality Assurance Framework so that consideration of the manufacturing, logistics and assembly process can be undertaken as expeditiously and efficiently as practicable.
- D. This MOU and related Quality Assurance Framework may be used for multiple Projects within the Term. An Individual Test Plan for each Project shall be submitted with each Building Consent application. There shall be a Building Consent application for each building lodged with the building consent authority for the location of the Project Site.

TERMS

1. DEFINITIONS

1.1 In this MOU, unless the context requires otherwise:

Building Code means the Building Code as described in the Building Regulations 1992

Building Component includes panels, pods, modules, assemblies or transportable volumes that have been off-site manufactured away from the project site

Building Consent has the meaning given to that term in the Building Act 2004

Code Compliance Certificate has the meaning given to that term in the Building Act 2004

Commencement Date has the meaning given to it in clause 3.1

Confidential Information has the meaning given to it in clause 14.1

Force Majeure Event means any unforeseen event beyond the reasonable control of the party affected by the event, in consequence of which the affected party cannot reasonably be required to perform its obligations under this MOU

Good Faith will not prevent a party from acting in its commercial self interest

Individual Test Plan (ITP) means the Manufacturer's quality control document. The ITP will be project specific and be included in the building consent application

LGOIMA means the Local Government Official Information and Meetings Act 1987

MOU means this Memorandum of Understanding, together with the schedules attached to this Memorandum of Understanding and any variations to it

Off-Site Manufacture means the manufacture of building components away from the project site

Project means the design, consent, procurement, construction and other activities required to deliver the desired buildings

Project Site means the final location where the building(s) shall be fixed to the ground and services

Quality Assurance Framework means a descriptive quality assurance plan that sets out how the Manufacturer's quality control will be undertaken, e.g. IPT's, during manufacture, logistics and assembly. The document shall be generic for all projects of the owner and agreed by the owner and council.

Term has the meaning given to it in clause 3.1

Working Day means any day other than a Saturday, a Sunday or a public holiday

1.2 In this MOU, unless the context requires otherwise:

(a) references to clauses and schedules are to clauses of, and schedules to, this MOU;

- (b) derivations of any defined word or term will have a corresponding meaning;
- (c) the headings to clauses are inserted for convenience only and will be ignored in interpreting this MOU;
- (d) the word “including” and other similar words do not imply any limitation;
- (e) a person includes any individual, company, corporation, firm, club, partnership, joint venture, association of persons (incorporated or not), trust or governmental agency (in each case, whether or not having separate legal personality);
- (f) the plural includes the singular and vice versa; and
- (g) a reference to a statute includes all regulations and other subordinate legislation made under that statute. A reference to a statute, regulation or other subordinate legislation includes that statute, regulation or subordinate legislation as amended or replaced from time to time.
- (h) a reference to the Council, Owner or Manufacturer includes their representatives or agents.

SAMPLE

2. PURPOSE AND STATUS OF MOU

2.1 Purpose of MOU:

- (a) Firstly, to record the manner in which the parties will work together to assist the Owner or the Manufacturer in the application for Building Consent(s) for the Project(s) and the processing of that application; and
- (b) Secondly, to record the manner in which the parties will work together to assist the Owner or the Manufacturer in their applications for Code Compliance Certificates under the building consent; and
- (c) Thirdly, to agree the steps, checks and records required under the Quality Assurance Framework to satisfy the Council that the activities undertaken to complete a building component can be relied upon for the purpose of Building Consent and Code Compliance Certificates.

2.2 The relationship of the parties to each other is that of independent contractors. Nothing in this MOU, and no action taken by either party under or in connection with this MOU, creates or will create, any joint venture, partnership, principal/agent relationship or other analogous co-operative entity or relationship between the parties, and neither party is entitled to pledge the credit of the other party or act as its agent, except as expressly authorised by this MOU.

3. TERM

- 3.1 This MOU will commence on the date that it is signed by both parties ("**Commencement Date**") and subject to clause 3.2 will expire on the date five years after the Commencement Date ("**Term**").
- 3.2 Subject to clause 3.3, the parties will undertake Good Faith negotiations regarding the possibility of extending or renewing the Term of the MOU. These negotiations will commence on or around the date that is six months before the end of the Term and will be triggered by the Owner and Manufacturer jointly providing written notice to the Council of their wish to commence negotiations.
- 3.3 Nothing in this MOU will oblige the parties to agree to entering into a new agreement or an extension or renewal of the Term of this MOU.
- 3.4 The parties acknowledge that the processes included within the MOU may be significantly affected by changes to the Building Act, Building Code and statutory processes; such as Multi-proof, Code Mark or Modern Methods of Construction Compliance work by MBIE. If any party considers significant changes have happened and therefore wishes to vary the MOU, that party can request in writing that the parties confer to consider whether variations should be made to the MOU.

4. KEY OBJECTIVES FOR OWNER AND MANUFACTURER

4.1 The Owner's and Manufacturer's key objectives under this MOU are:

- (a) To understand what is required within a Quality Assurance Framework to satisfy the Council on reasonable grounds that building components have been constructed in accordance with a building consent;

- (b) To ensure the timeframes of pre-application meetings and the processing of the building consent application are agreed;
- (c) To secure the issue of building consents for projects as expeditiously and efficiently as practicable following building consent application;
- (d) To have the methodology for manufacture, logistics and assembly assessed for compliance with the building code as expeditiously and efficiently as practicable;
- (e) To have the building component's design assessed for compliance with all relevant cause of the building code as expeditiously and efficiently as practicable;
- (f) To secure the issue of code compliance certificates for the project as expeditiously and efficiently as practicable following completion of the project.

5. KEY OBJECTIVES FOR THE COUNCIL

5.1 The Council's key objectives under this MOU are:

- (a) To undertake the processing of Building Consent applications for a unique construction methodology as expeditiously and efficiently as practicable;
- (b) To ensure that the Construction Methodology and the Project as designed, manufactured, consented and constructed comply with the Building Code and the Building Act 2004;
- (c) To comply with its duties under the Building Act 2004.

6. JOINT KEY OBJECTIVES

6.1 The parties' joint key objectives under this MOU are:

- (a) To achieve a clear compliance pathway and efficient processing of Building Consent applications;
- (b) To agree a clear compliance pathway and methodology for confirming that the building components and project comply with the Building Consent(s);
- (c) To achieve a clear compliance pathway and efficient processing of Code Compliance Certificate applications;
- (d) To create a model for future similar off-site manufacturer projects involving the parties.

6.2 The Council will use reasonable endeavours to assist the Owner and Manufacturer in achieving the outcomes it seeks through this MOU in so far as it is permitted by law, and subject to clause 12.1.

7. QUALITY ASSURANCE FRAMEWORK

7.1 The Manufacturer shall prepare within 20 working days of the commencement date a quality assurance framework document and be responsible for the document and version control.

- 7.2 The parties will work together to comment, discuss and update the quality assurance framework document until it is accepted by all parties. It will then be appended to this MOU and form a part of it, without any further formality.
- 7.3 The Council agrees that it will:
- (a) Assist the Owner and Manufacturer to understand what quality assurance information will be required by the Council to be included in the quality assurance framework
 - (b) Identify the information required in the Individual Test Plan to satisfy the Council on reasonable grounds that the building components have been constructed in accordance with the building consent design.
 - (c) Include the provision of quality assurance documents identified pursuant to clause 8.0 as a condition of the building consent(s).
- 7.4 The Manufacturer's quality assurance framework shall be specific to the methodology (panels, pods, modules, volumes, etc.). If the Manufacturer has more than one type of methodology a quality assurance framework specific to each methodology will be required.
- 7.5 The quality assurance framework will not consider quality control during design activities but shall consider how documents are presented so that they are easily read by Council during the building consent process.
- 7.6 The quality assurance framework shall consider manufacture, logistics and assembly and require a project specific individual test plan for these activities to be submitted with the building consent application. The individual test plan shall be a complete record of the quality control steps and checklists that will be completed following building consent approval. It is acknowledged that those steps and checklists will not be completed at the time of application.
- 7.7 The Individual test plan shall include the following information that the Council requires when processing a building consent:
- (a) The manufacturing address of each building component
 - (b) The address of the project site
 - (c) The methodology for manufacture, logistics and on-site assembly
 - (d) The checklists that shall confirm that each building component has been off-site manufactured in accordance with the building consent design and the quality assurance framework.
 - (e) The checklists that shall confirm that each building component has been transported in accordance with the quality assurance framework.
 - (f) The checklists that shall confirm that each building component has been assembled in accordance with the quality assurance framework.
- 7.8 The Owner and Manufacturer will provide the Council with such access to the manufacturing plant(s) and to the design specifications and other information as the Council requires in order to assess whether the quality assurance framework meets its requirements.

8. BUILDING CONSENT APPLICATION

- 8.1 The building consent application will provide all the information scheduled in, and in accordance with, the quality assurance framework with the building consent application.
- 8.2 The building consent application will provide the Council with a project specific individual test plan with the building consent application in accordance with the agreed quality assurance framework (which will be appended to this MOU).
- 8.3 To facilitate the expeditious processing of the Building Consent applications:
- (a) The applicant agrees to engage the Council in pre-application meetings in a timely fashion to allow the Council time to digest the Building Consent applications and provide its feedback so as to limit the need for any requests for further information;
 - (b) The parties agree that the first pre-application meeting will occur 10 working days prior to application or as otherwise agreed;
 - (c) The Council agrees that where further information is required to assess the Building Consent applications it will:
 - (i) Use all reasonable endeavors to identify those matters during the pre-application meeting;
 - (ii) Facilitate staging of building consents; and
 - (iii) Look for opportunities to obtain or address that further information by way of waiver, conditions of consent (whether prior to or in conjunction with the building consent, whether pre-construction or post construction).
- 8.4 The Owner and Manufacturer will provide the Council with such access to the manufacturing plant(s), project site and to the design specifications and other information as the Council requires in order to confirm adherence with the quality assurance framework.
- 8.5 The Council agrees to resource the processing of the Building Consent applications and any certificates required subsequently (such as Code Compliance Certificates) appropriately with the suitably qualified and experienced personnel
- 8.6 For the avoidance of doubt, nothing in this MOU derogates from the Council's obligation to process the Building Consent(s) within the relevant timeframes pursuant to the Building Act 2004.

9. MANUFACTURE OF BUILDING COMPONENTS

- 9.1 The Manufacturer and the Owner agrees to assist the Council by providing information and documentation in accordance with the quality assurance framework and individual test plan that demonstrate that the building components have been constructed in accordance with the design accepted by Council.
- 9.2 The Owner and / or Manufacturer shall complete the individual test plan submitted as part of the building consent application progressively through the manufacture, logistics and assembly processes

of each building component for the project.

- 9.3 The individual test plan shall be available upon request by the Council in respect of each building component. Each individual test plan shall accompany its building component through the manufacture, logistics and assembly process and be available for inspection at the project site before it is incorporated into the project.
- 9.4 Where a transporter, logistics personnel, crane operator, assembler or builder undertakes an activity considered by the individual test plan, the Owner shall require the performance of that person to be in accordance with the quality assurance framework and individual test plan.
- 9.5 The Owner and Manufacturer will provide the Council with such access to the manufacturing plant(s) and to the design specifications and other information as the Council requires in order to assess whether the off-site manufacture of the building components complies with all relevant clauses of the Building Code.
- 9.6 The Owner will indemnify and hold harmless the Council from and against all actions, claims, demands, losses, damages, costs and expenses for which the Council shall or may be or become liable in respect of and arising from any building component being incorporated into the Project which has not been constructed in accordance with the design that the Council has accepted complies with the Building Code and as required under the Building Consent.

10. THE PROJECT

- 10.1 The Owner shall assist the Manufacturer and Council to understand those standard or traditional construction methodologies and works that form part of the Project and are subject to the building consent. Information and documents shall be made available upon request by the parties.

11. RELATIONSHIP MANAGEMENT

- 11.1 In relation to this MOU and the actions anticipated by it, the parties will:

- (a) Deal with each other in:
- (i) Good Faith;
 - (ii) Expediently; and
 - (iii) An open and transparent manner; and
- (b) Adhere to a policy of no-surprises.

- 11.2 In order to meet the objectives set out in clause 11, but without limiting its generality in their dealings with the Owner and Manufacturer, the Council will ensure that its officers, consultants and advisors:

- (a) Are transparent in communications and communicate the rationale and approaches behind decisions to be made;
- (b) Proactively disclose matters of concern or potential concern (including where third parties have sought information about the Owner's or Manufacturer's activities);
- (c) Consider options and solutions that are proportionate to the issues and risks that have been identified, where issues and risks are identified; and
- (d) Be responsive to the timeframes which Owner and Manufacturer face, so far as it is permitted

by law to do so.

12. CONFIDENTIALITY

- 12.1 Each party acknowledges that it may be provided with information during the course of this MOU which may be commercially sensitive and confidential regarding the other party's business and operations ("**Confidential Information**"). Each party acknowledges that it will use such Confidential Information only for the purposes of performing its obligations or exercising its rights under this MOU (including Council's statutory functions) and will not use or copy the Confidential Information for any other purpose whatsoever without the prior written approval of the other party. Neither party will disclose any Confidential Information to any third party except with the other party's prior written approval or except as may be required by law (including under LGOIMA).
- 12.2 The Council will notify the Owner or Manufacturer immediately if the Council receives any request under LGOIMA for any information, documents or other material that relates to this MOU and will take into account any reasonable request made to the Council in relation to that LGOIMA request.
- 12.3 This MOU agreement is confidential

13. ANNOUNCEMENTS

- 13.1 **Media releases:** Neither party will make any public statement, media release or comment to any media outlet relating to this MOU or the relationship between the parties without the prior written approval of the other party (not to be unreasonably withheld or delayed).

14. BUILDING ACT 2004

- 14.1 Nothing in this MOU is intended to or will be interpreted as limiting or negating the Council's powers and duties under the Building Act 2004 or imposing any liability on Council that it does not have as a matter of law. The Council will perform its obligations under this MOU in accordance with and subject to the Building Act 2004, and the Building Act 2004 will prevail in the event of any conflict between this MOU and the Building Act 2004.

15. COSTS

- 15.1 Except as expressly stated in this MOU, the parties will each bear their own costs and expenses incurred in the negotiation and preparation of this MOU.
- 15.2 In addition to the normal regulatory fees the Council charges for Building Consent and Code Compliance Consent applications, the Owner or Manufacturer (as appropriate) will immediately pay on demand to the Council all the Council's out of pocket costs and expenses (including by way of example any domestic and international travel and accommodation costs for council officers and consultants) incurred in performing the Council's obligations under this MOU.

16. MISCELLANEOUS

- 16.1 **Entire agreement:** This MOU is the whole and only agreement between the parties relating to its subject matter. Each party acknowledges that it has not been induced to enter into this MOU by any representation made by or on behalf of another party that is not repeated in this MOU.
- 16.2 **Force Majeure:** Neither party (the "**affected party**") will be liable to the other party for any delay or

failure to perform its obligations under this MOU caused by a Force Majeure Event, provided that the affected party:

- (a) has taken all reasonable steps to minimise any loss, damage or delay resulting from a Force Majeure Event;
- (b) has immediately informed the other party of the circumstances; and
- (c) requests the other party's approval (not to be withheld unreasonably) to extend time for the performance of the affected party's obligations under this MOU for a period of up to the same duration of the Force Majeure Event.

16.3 **Severance:** If at any time any provision of this MOU is or becomes unenforceable, illegal or invalid for any reason whatsoever, such provision will not affect the enforceability, legality, validity or application of any other provision of this MOU and any such provision will be deemed to be severed from this MOU without affecting the validity of the remainder of this MOU.

16.4 **Counterparts:** This MOU may be executed in any number of counterparts (including facsimile or scanned PDF counterpart), each of which will be deemed an original, but all of which together will constitute the same instrument. No counterpart will be effective until each party has executed at least one counterpart.

16.5 **Governing Law:** This MOU is governed by New Zealand law and the parties irrevocably submit to the non-exclusive jurisdiction of the New Zealand courts in any proceedings relating to it.

EXECUTED as an agreement

SIGNED for and on behalf of)
by (name))
)

Signature

Name

Position

SIGNED for and on behalf of)
AUCKLAND COUNCIL by)

Signature

Name

Position

Appendix 4: Product Technical Statement

A Product Technical Statement (PTS) should contain the following:

Company name and contact details

Include modular component manufacturer's name if a supplier is issuing the Modular Component Technical Statement (MCTS), e.g. the component's importer.

Modular Component Technical Statement version and date

This information is important as it allows users to check which document version they are referring to.

Name of building product / system

Where possible, include a unique product identifier making up the modular component so different users can be sure they are talking about the same product.

Include CBI (Coordinated Building Information) numbering if applicable.

Note that the Modular Component Technical Statement may cover families of similar products if they all have the same purpose, use and Building Code compliance obligations.

Purpose and use

State how and where the modular component can be used, using recognized New Zealand terms.

Include any limitations such as:

- Environmental, e.g. not to be used in certain wind, seismic or corrosion zones or in buildings with a high weathertightness risk score
- Requirements around building height or size
- Maximum structural loads
- Building use, e.g. commercial, residential, industrial, etc.
- Building type, e.g. timber framed or steel framed

When using terms such as "wind zone" or "risk score" provide a reference to where these terms are defined.

Conditions

Note any conditions on the use of the Modular Component Technical Statement. These might include requirements for supporting documents, such as appraisals, to be kept up-to-date and valid.

Compliance with the New Zealand Building Code

Clearly state the New Zealand Building Code (NZBC) performance clauses and sub-clauses that are relevant to the component.

Summarise the means of compliance with the performance criteria of each relevant Code clause:

- by following an Acceptable Solution or Verification Method
- by reference to test results relevant to the NZBC requirements, appraisals or product certification (Code Mark)
- through a combination of these and other evidence such as in-service history

Provide clear links to, or details of how to obtain, evidence supporting the means of compliance claims, e.g. test reports, technical opinions, appraisals, product certification or other supporting information.

Note that all the performance claims should be factual. If evidence, such as test results, are overseas sourced, this should include information showing the relevance to the NZBC environment. Details should be provided in English and measurements in metric.

Design, construction and installation instructions

Note and provide all links to any information required to ensure designers specify the modular components use correctly, e.g. regarding required locations or integration with other building projects.

State if certain installers must be used and / or an installation manual followed and provide a link to this.

Note that the supporting documents should be uniquely identifiable by date or version number to avoid any confusion. Any document referenced in a Modular Component Technical Statement should be readily available, e.g. able to download from the product suppliers or manufacturers website.

Maintenance requirements

If maintenance is necessary for the modular components ongoing compliance, make this clear and link to details of this.

For example, in some situations such as exposure to the elements, a product contributing to the makeup of the component may require repainting, recoating or even reapplication in order to achieve its stated life and meet the NZBC durability requirements.

Quality assurance

Briefly refer to any relevant quality assurance information, e.g. manufacturing controls, certification of testing organisations, ISO accreditation, etc.

Modular component support

Give full contact details, including website links, for the modular component manufacturer, modular component supplier and technical support. Ideally provide links to New Zealand based technical assistance.

Warranty information

Providing warranties for the modular component is not essential. However, if warranties are not offered this may be noted on the Modular Component Technical Statement.

SAMPLE

**Appendix 5:
Sample of a Quality Assurance Plan**

**QUALITY ASSURANCE PLAN
Off-Site Manufactured Building Components**

SAMPLE

Project:	
Principal:	
Revision:	
Date:	

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1. Scope of Quality Assurance Plan

This Quality Assurance Plan (QAP) has been produced specifically for the quality requirements of a manufactured modular for: _____ (company name)

The key personnel of the associated works are as follows:

Project:	
Principal:	
Regulatory Body:	
Manufacturer:	
LBP Designer:	
Third Party Inspectors:	

This document is referred to in the Product Technical Statement (PTS) under [Appendix 4](#).

This Quality Assurance Plan outlines the process in which the Manufacturer will ensure Design Compliance with NZBC.

This QAP provided is to use in conjunction with the Manufacturer's Quality Management System which is accredited to ISOxxxx and which outlines the Manufacturer's commitment to ensure that the Manufacturer's employees:

- Meet all regulatory and statutory requirements during the fabrication process
- Are suitably skilled and qualified to produce the required standards
- Maximise efficiency of production through effective organisation of production works and minimisation of rework
- Produce a level of quality and service that meets or exceeds the expectations of its customers by using the most effective methods, techniques and processes that are economically available
- Maintain and store the necessary documentation to provide verification of the standards that have been achieved
- Follow clear organisational structures for authorisation and responsibility

2. References

All materials supply and fabrication work for the project shall be carried out according to the standards and relevant codes as per the Product Technical Statement (PTS).

2.1 Product Technical Statement (PTS)

The Product Technical Statement contains technical information and the independent verification required to demonstrate compliance with the performance objectives of the New Zealand Building Code (NZBC).

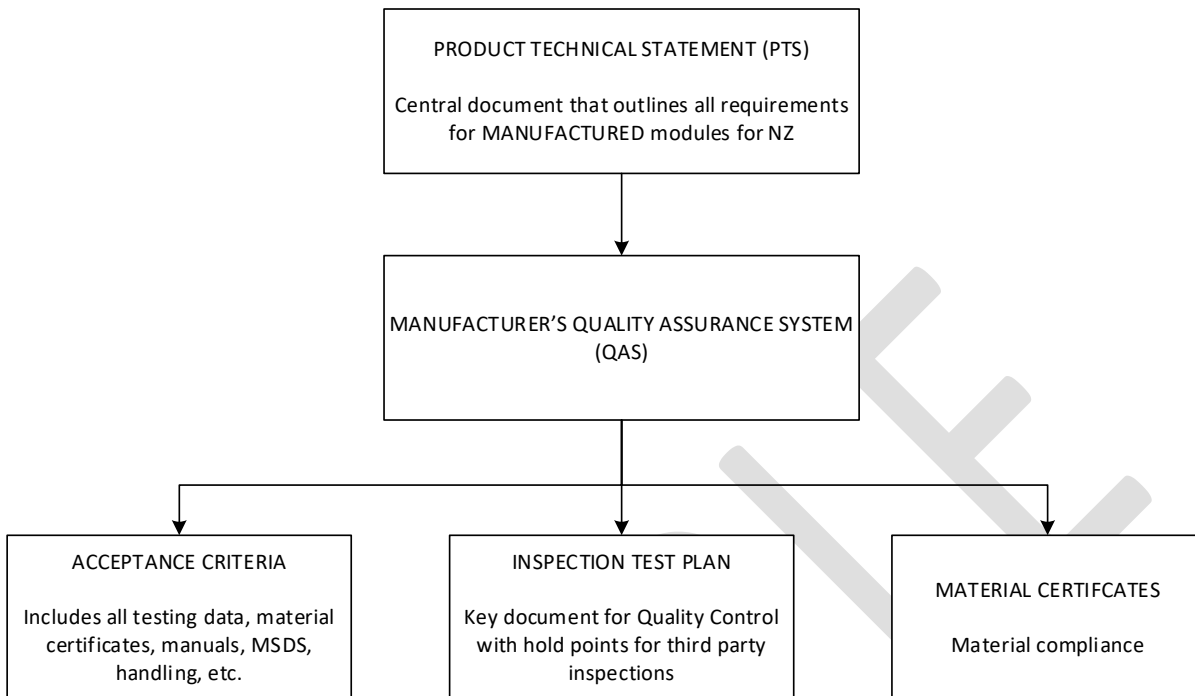
The Product Technical Statement will be used by Auckland Council to assess compliance with the NZBC for design and construction work.

Refer to [Appendix 2](#): Product Technical Statement Process

SAMPLE

3. Quality Assurance Plan

3.1 Overview



3.2 PTS material compliance (Appendix 7)

PTS Material Compliance represents a specific and defined list of conditions that must be met before the project can be considered complete.

PTS Material Compliance must be present in specific detail and agreed before work on the project has commenced.

In the event that a series of PTS Material Compliance is not met, or is met only partially, the final set of agreed deliverables might be rejected for final sign off.

Note that this PTS Material Compliance will be a requirement for PTS acceptance.

The general requirements of the PTS Material Compliance will be carried out by the relevant Quality Management Personnel in the following way:

- Ensure that the Manufacturer adheres to all hold points as detailed in the Inspection Test Plan (ITP) and any other Quality Control checks
- Liaise with any third party (independent) testing and inspection organisation
- Complete all testing and checks when required and in a timely and accurate manner
- Verify all visual inspections and carry out all dimensional verification
- Coordinate external material testing organisations
- Ensure all documentation is presented in an acceptable method as per client requirements and as outlined in the PTS Material Compliance

- Maintain traceability throughout the entire production
- Retain / issue all Quality Control Documentation as per client requirements

SAMPLE

4. Material Procurement

4.1 Procurement management

The Manufacturer will engage directly with various sub-suppliers and whereby they will be evaluated on the requirements of the project.

The Manufacturer is responsible for engaging appropriate suppliers that will supply suitable materials for each respective component. The procurement team will be responsible for collating all the data provided by each supplier to submit to the client for sign off before any material is purchased.

4.2 Procurement procedure

Before identifying and purchasing products, samples of each product will be provided in order to verify quality. Each sample material will be confirmed and signed off by the client.

Quality Assurance (QA) personnel will carry out a careful inspection as per the Quality Management document. Where required, some materials may need additional testing. The test sample will be marked and reported to the QA team after being processed. The QA team is then responsible for sending the sample to external testing facility.

After the materials have been approved through this process, the relevant QA personnel will sign off this document. Supply department will manage appropriate storage procedures.

4.3 Material selection criteria

The Manufacturer is responsible for the following:

- Raw materials comply with the relevant environmental standards
- Manufacturers provide main performance indicators, inspection stamps, date of manufacture, certificates, environmental certification, etc., comply with technical requirements, product specifications and relevant warranty
- Provide after-sales service where appropriate and previously agreed upon with the client

Refer to [Appendix 8](#) – Product Technical Statement Material Compliance

4.4 Material traceability system

The Manufacturer is responsible for the following:

- Clearly know batch numbers, suppliers, incoming date, quality-related information of raw materials used in each batch, track product quality
- Raw materials shelf life information

Any materials that do not comply with the relevant standards shall be rejected and shall not be used for fabrication on the project. It is the responsibility of the Manufacturer to ensure compliance as per this Quality Assurance Plan.

5. Shop Drawing Procedure

Shop drawings on the project are to be produced by the Manufacturer and checked in conjunction with the nominated LBP Designer by the client.

Before the manufacturer commences production, completed shop drawings will be reviewed by the nominated LBP Designer and any other third party as nominated by the client to assess suitability for production.

Upon approval, the LBP Designer will stamp the drawings and update the approved drawings register which will then be communicated to the Manufacturer.

The Manufacturer's document transmittal process will adhere to the client drawing numbering and revision system to maintain transparency and clarity of communication. All revised drawings shall then be marked as revised to avoid confusion during the production of the modules.

If the LBP Designer considers the shop drawings to be insufficient or inadequate for production, a request for information shall be issued to the client and include recommendations for rectification.

Should the LBP Designer discover any potential improvements that could be added to the shop drawings a request for information shall be issued to the client which includes proposed amendments.

However, the LBP Designer will not initiate any amendments to the shop drawings or allow any changes during production without the approval from the client and subsequent reissue of shop drawings.

Production will not commence until drawings are approved by the LBP Designer. Auckland Council shall be informed and provide acceptance for any changes or modifications of the PTS that affects the NZBC.

6. Inspection Test Plan

The Inspection Test Plan (ITP) will be required to record and control all inspection and testing requirements relevant to each discipline in the manufacturing process.

As an integral part of the QMS, the ITP will outline the various stages of work and indicate when to conduct tests and inspections and which parties should be involved.

The plan should propose hold or witness points at inspection and recommend permission to proceed upon approval. A hold point defines a checkpoint in which the successful completion and approval of an inspection or test must be carried out before further work can proceed.

The ITP will provide reference to required acceptance criteria, certifying or verifying documents to ensure the modular units will be built in accordance with PTS.

The Manufacturer is responsible for ensuring that the agreed hold, witness and review points have been observed as per the Inspection Test Plan (ITP).

Refer to [Appendix 7](#) – Inspection Test Plan

SAMPLE

7. Welding & Structural Steel

All welding shall be carried out by skilled welders who are experienced and New Zealand qualified to complete welding in accordance with AS/NZ 1554.1:2014.

The qualification and level of skill of all welders is to be reviewed and / or certified by the client's Independent Quality Assurance Representative.

Before commencement of any welding, the production team will plan the works using the Manufacturer's welding plan to be pre-approved by the client.

The welding plan shall include:

- The welder's identification details
- The Manufacturer's relevant welding specification procedure
- The intended weld type, size and process and edge preparation
- The required NDT
- Outline the required weld tolerances

Once welding, inspection and NDT are completed, the relevant documentation shall be finalized and approved by the qualified welding inspector and stored with the relevant NDT testing results.

- No welding line is to be flushed unless approval is obtained from the welding supervisor
- Welding lines shall be tested with appropriate test method to ensure quality welding lines are reached
- Edges shall be chamfered in accordance with the relevant New Zealand Welding Standards
- All Full Penetration Butt Weld's and shall be tested by UT
- For fillet weld's a minimum on 10% of the welding lines in a single piece shall be tested
- All welding lines shall be wire brushed for cleaning purposes

Refer [Appendix 8](#) – PTS Material Compliance

8. Electrical Testing

Electrical testing sheet is combined by electrical installation inspection checklist, internal electricity operational test and electricity commissioning test.

The purpose of this report is to aggregate each section of the electrical system; give descriptions and inspection criteria to the inspector to ensure the best quality performance is reached.

Electrical certificate must be provided by a New Zealand registered electrician.

Refer [Appendix 8](#) – PTS Material Compliance

SAMPLE

9. Plumbing – Hydrostatic Pressure Testing

The plumbing testing sheet is a detailed installation and testing report provided by the LBP. The report consists of two parts; plumbing installation check list and water pressure test.

A Producer Statement Construction (PS3) must be provided by a New Zealand registered plumber.

Refer [Appendix 8](#) – PTS Material Compliance

SAMPLE

10. Packing, Lifting & Transport

Refer [Appendix 9](#) – Logistics Plan (project based)

SAMPLE

11. Technical & Compliance Queries

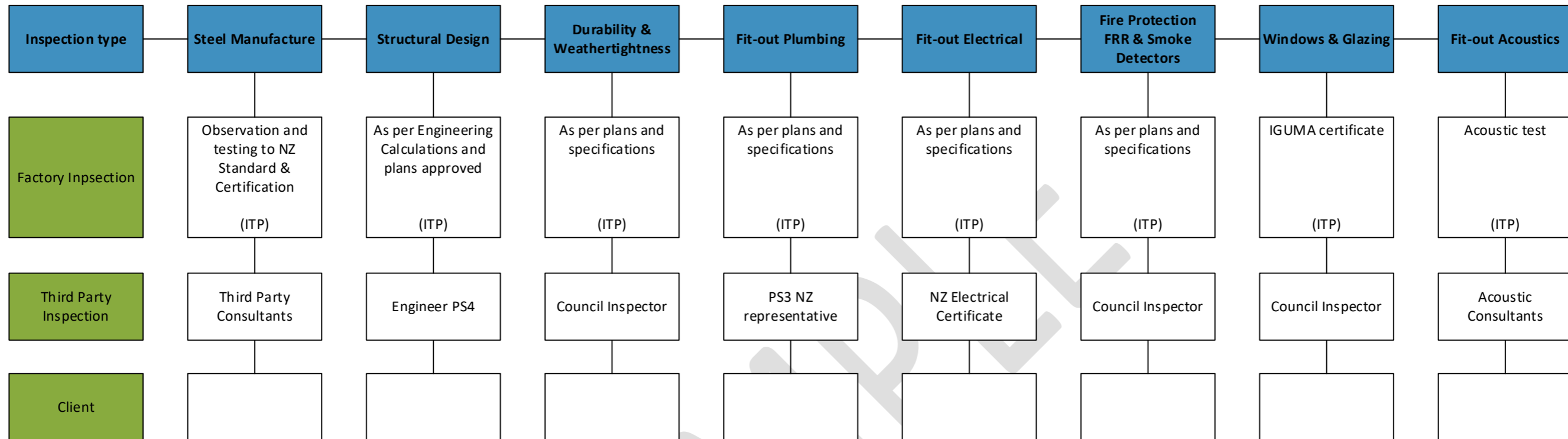
Technical and compliance queries can be raised by any party to request further information / clarification where needed.

SAMPLE

Appendix 6: Critical Material List

Item No.	Modular Material	Product	Possible Examples for Certification / Standard Provided	Status	Notes
1.	Structural and steel	Steel structure	Mill certificate with Q345B demonstration (refer AC1828 – Guidance for structural steel compliance path)		
2.	Welding	Welding of steel			
3.	Paint	Corrosion protection paint			
		Intumescent paint (fire rated and paint for exterior of unit)	BS476 UKAS Certificate ISO4624 Exova Certificate		
		Odourless mouldproof interior emulsion paint	GB9756 CNAS test report GB18582 CNAS test report		
4.	Unit cladding	Steel sheeting	Mill certificate with Q345B demonstration		
5.	Flashings	Steel	Mill certificate with Q345B demonstration		
6.	Fixings	Stainless steel			
7.	Unit insulation	Glasswool	AS/NZ4859.1 test report		
8.	Internal lining	Fire rated plasterboard	Knauf test report		
	Internal lining – wet areas	Plasterboard – Aqua / Acoustic rated	Knauf test report		
9.	Acoustic materials		On site test		
10.	Flooring substructure	Plywood flooring	EN13986 GBT17656		
11.	Plumbing	Pipes (cold potable water only) - PVC-U	AS2887 Saiglobal certificate AS/NZS1260 Saiglobal certificate		
		Polyethylene	AS2537 Saiglobal certificate AS/NZS2492 Saiglobal certificate		
12.	Windows & glazing	Shower glazing / safety glass	AS/NZS2208 certificate		
		Window glazing / double glassing	AS/NZS2208 certificate		
		Window framing	AS4420.2 test report		
13.	Flooring	Carpet tile	GB18587 CNAS hazard material test report QB/T2755 CNAS test report		
		Vinyl	EN14041 certificate DIN51130 SGS test report		
		Adhesives	GB18583 test report		
		Sealants – fire resistant sealant	BS476 & EN1336-4 fire test report AS1530.4 test report AS4072.1 test report		
		Sealants – mouldproof silicon sealant	JC/T885 CNAS test report		
14.	Fire alarm / smoke detector	New section for fire alarm / smoke detector requirements and NZBC compliance	To be completed by ???		

Appendix 7: Manufactured Modular Production Inspection and Test Plan Example



Notes

The pathway shown is considered the minimum inspection types.

NZ Representative: Observe and confirm QA plan is being followed and report any non-compliance and remedial actions (form of inspection / observation to be agreed with Auckland Council)

Third Party Inspection: To be carried out by organisations acceptable to Auckland Council. Acceptance will be based on appropriate experience / qualifications.

Client: Owner of the project

ITP: Inspection Test Plan

Appendix 8: PTS Material Compliance Example

Item No:	Unit Material	Product	Possible Examples of Standard Description / Testing Information Provided	Factory Inspection		Third Party Inspection		Client Inspection	
				Accept	Reject	Accept	Reject	Accept	Reject
1.	Epoxy paint	Intumescent epoxy paint	BS476 UKAS Certificate ISO4624 Exova Certificate						
2.	Unit cladding	Steel sheeting	Mill certificate with Q345B demonstration						
3.	Unit structure	Steel structure	Mill certificate with Q345B demonstration (refer AC1828 – Guidance for structural steel compliance path)						
4.	Unit insulation	Glasswool	AS/NZS4859.1 test report						
5.	Internal living	Fire rated plasterboard	Knauf test report						
6.	Internal lining - wet areas	Plasterboard – Aqua / Fire / Acoustic rated	Knauf test report						
7.	Flooring substructure	Plywood flooring	EN13986 GBT17656						
8.	Electrical	All electrical fixtures to meet NZ standards	All electrical fixtures to meet NZ standards						
9.	Appliances	Bathroom exhaust fan	AS/NZS60335.2 SGS certificate AS/NZS60335.1						
10.	Flooring	Specifications only required for wet areas							
11.	Bathroom	Safety glass for shower surrounds to be listed in NZ Standards							
12.	Entry door requirements	Door entry (MDF)	GB11718 test report						

Item No:	Unit Material	Product	Possible Examples of Standard Description / Testing Information Provided	Factory Inspection		Third Party Inspection		Client Inspection		
				Accept	Reject	Accept	Reject	Accept	Reject	
13.	Plumbing	Pipes (hot & cold potable water) – Copper	No copper pipe							
14.		Pipes (hot & cold potable water) – PVC	No PVC pipe							
15.		Pipes (hot & cold potable water) – Galvanised steel	No galvanised pipe							
16.		Pipes (cold potable water only) – PVC-U	AS2887 Saiglobal certificate AS/NZS1260 Saiglobal certificate							
17.		Polyethylene	AS2537 Saiglobal certificate AS/NZS2492 Saiglobal certificate							
18.		Shower base	None							
19.		Shower head & rail	AS/NZ3663 Saiglobal certificate AS/NZS6400 WELS of 3							
20.		Shower mixer	AS/NZS3718 Saiglobal certificate							
21.		Basin mixer	AS/NZS3718 Saiglobal certificate AS/NZS6400 WELS of 5							
22.		Floor waste	None							
23.		Shower waste	None							
24.		Toilet	AS/NZ1172.2 & 1172.1 Saiglobal certificate AS/NZS6400 WELS of 3							
25.		Basin	None							
26.		Kitchen mixer	AS/NZ3718 Saiglobal certificate AS/NZS6400 WELS of 5							
27.		Windows & glazing	Shower glazing	AS/NZS2208 certificate						
28.			Window glazing	AS/NZS2208 certificate						
29.			Window framing	AS4420.2 test report						

Appendix 9: Logistics Plan Example

Logistics Plan

SAMPLE

Project:	
Principal:	
Revision:	
Date:	

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1. Packing, Lifting and Transport

Table 1: Summary of modules (dimensions and weight)

S/N	Type	mm L	mm W	mm H	Qty.	m ² Area/ Module	m ² Volume/ Module	Tonne Weight/ Module
1	M1 (S1+C+S1M)	12988	2850	3010	95	33.5	100.78	11.98
2	M2 (S2+C+S2M)	10520	2850	3010	8	29.98	90.25	10.76
3	M3 (S1+C+S2M)	11754	2850	3010	17	31.74	95.51	11.43
4	M4 (S2+C+S1M)	11754	2850	3010	18	31.74	95.51	11.43
5	M5 (S5)	4238	3480	3010	8	14.75	44.39	7.56
6	M6 (S6)	6444	3480	3010	8	22.43	67.5	5.01
7	M10 (S1M+C)	7254	2850	3010	11	18.91	56.91	6.14
8	M11 (S2)	4500	2850	3010	38	12.83	38.6	5.24
9	M12 (S2M)	4500	2850	3010	33	12.83	38.6	5.24
10	M13 (S3)	4611	2900	3010	6	13.37	40.25	4.43
11	M14 (S4)	6601	3480	3010	4	22.97	69.14	7.54
12	M15 (S1)	1734	2850	3010	3	14.58	43.87	5.68
13	M20 (S1+C+S10) S1+C+S2 stair	11754	2850	3010	3	31.74	95.51	7.17
14	M21 (S1+C+S11) S1+C+S2 stair	11754	2850	3010	1	31.74	95.51	7.17
15	M22 (S1+C+S13) S2+C+S2 stair	10520	2850	3010	1	29.98	90.25	6.33
16	M30 (S10+C+S1M) S1+C+S2 stair	11754	2850	3010	3	31.74	95.51	7.17
17	M31 (S11+C+S1M) S1+C+S2 stair	11754	2850	3010	1	31.74	95.51	7.17
18	M32 (S13+C) S2+C	6020	2850	3010	1	17.16	51.64	4.93
Total					259			

1.1 Internal fixtures and fittings packing

The following indicates how the internal fixtures and fittings are to be fastened during transit.

Toilet:

Cistern lid should be fixed by PET fridge tape



Shower:

Shower head will be protected by wrapping it with EPE foam sheet membrane and then taped to secure position using PET fridge tape.



Cabinets and doors:

All cabinet doors, mirror cabinet doors and drawers should be fixed by PET fridge tape as shown in Figures 4 to 6.

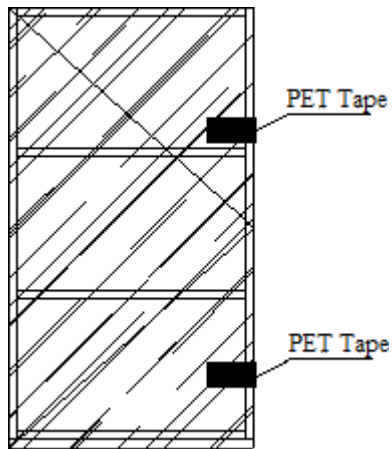


Figure 4: Mirror cabinet

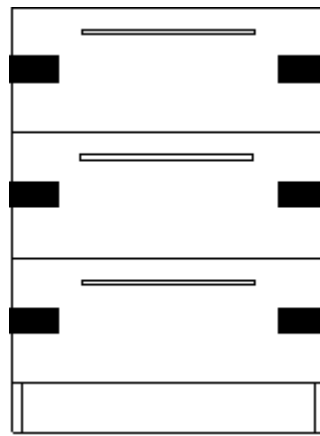


Figure 5: Drawer

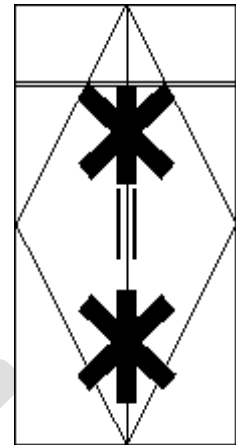


Figure 6: Wardrobe

Bathroom door to be locked with screwdriver or similar from outside. Lock type is shown as follows.



This part will be facing the door
Setting this screw will lock the door

The location of the bed and wardrobe is permanently fixed to the internal steel studs as show in Figure 8 and 9.

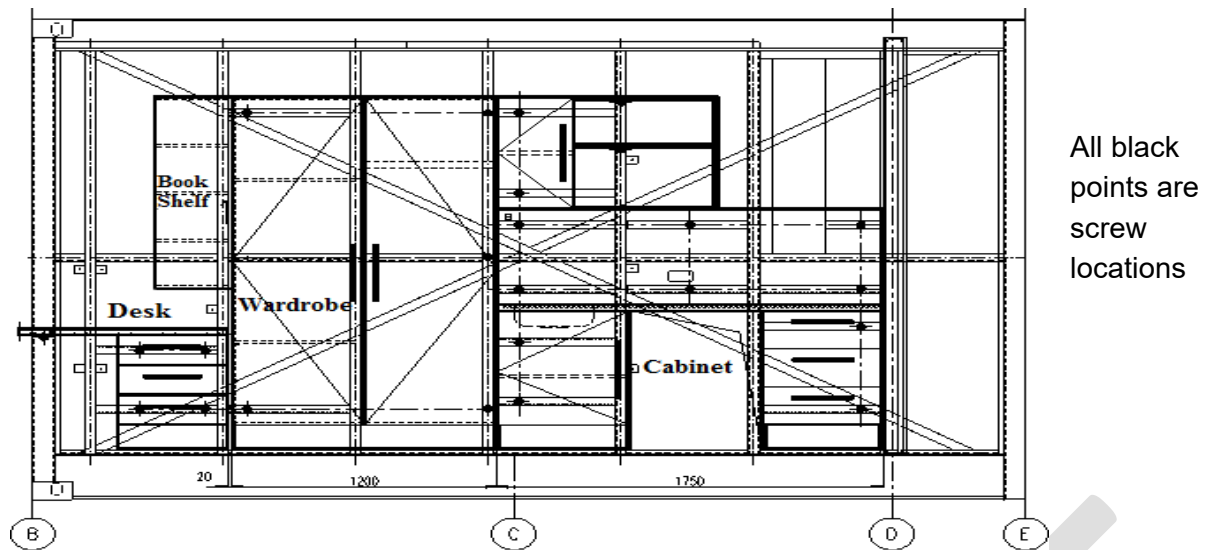


Figure 8: Desk, bookcase 1, wardrobe, kitchen cupboard fixation

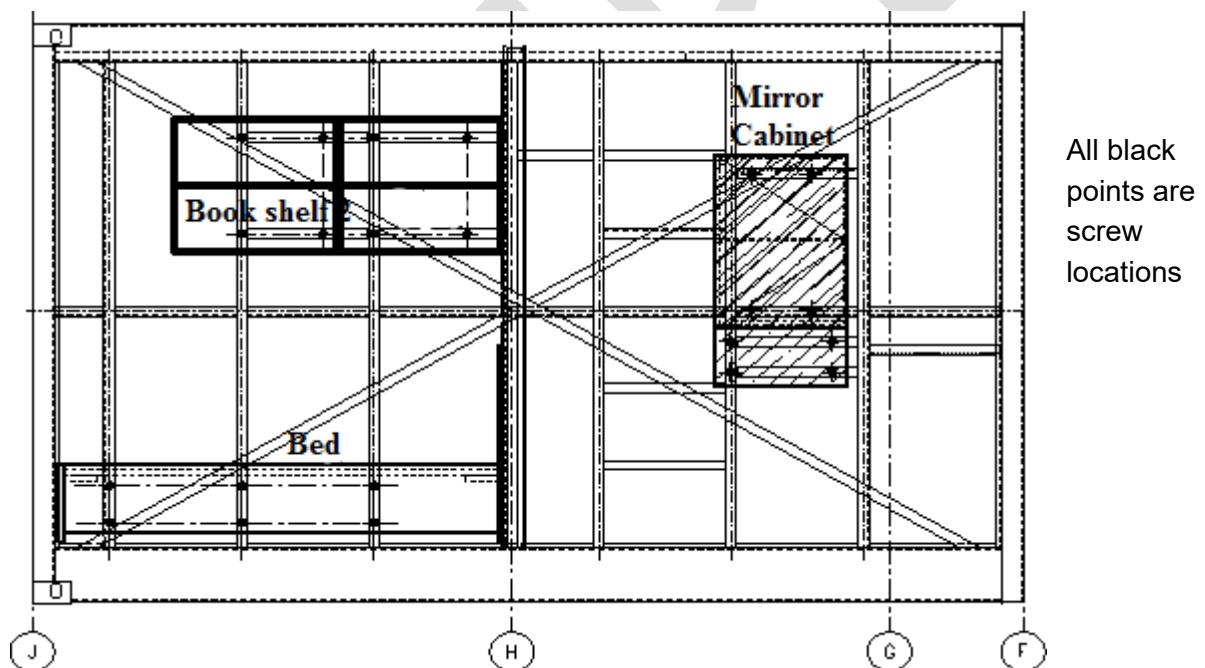


Figure 9: Bed, bookcase 2, mirror cabinet fixation

Shower screen can be locked into place by pushing the latch up and down. Refer to Figure 10 below.



Shower screen can be locked by directly pushing the latch up and down

Figure 10: Shower screen

Furniture, fixings and equipment:

Mattress will be put directly on the bed and then fixed by packing belts. Refer to Figure 11 below.



Figure 11

Other furniture, fixings and equipment (FFE) will be placed in the corridor with steel rack (weld from square hollow section (SHS) 20*20*2mm), single side tape to be used on the bottom of SHS, fill with extruded polystyrene (XPS) all round. Refer to Figures 12 and 13.

Refer to Appendix A for list of FFE that will go on the rack.

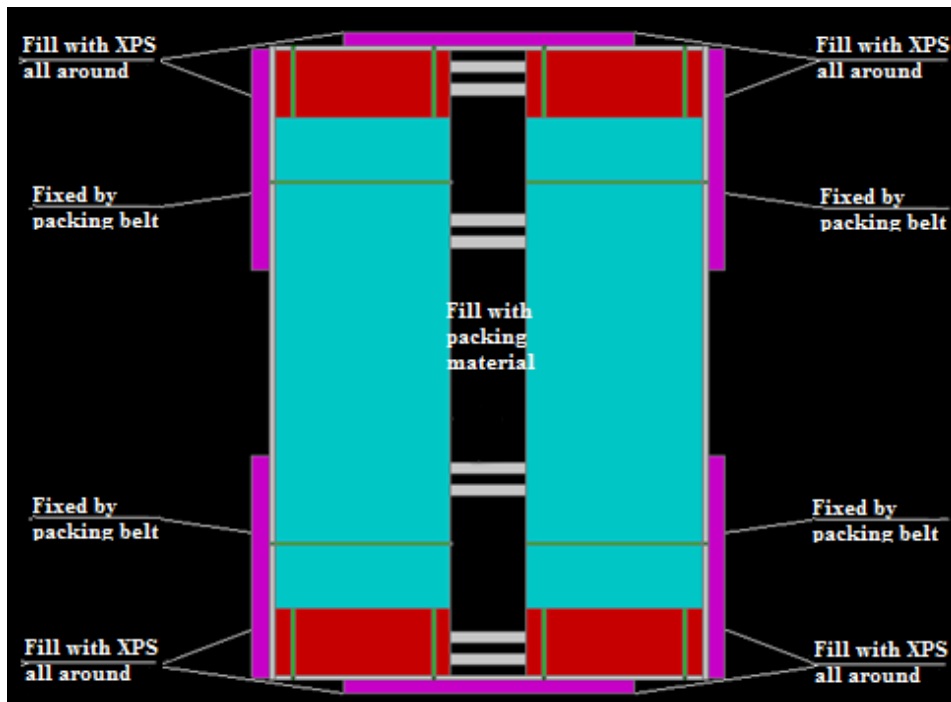


Figure 12

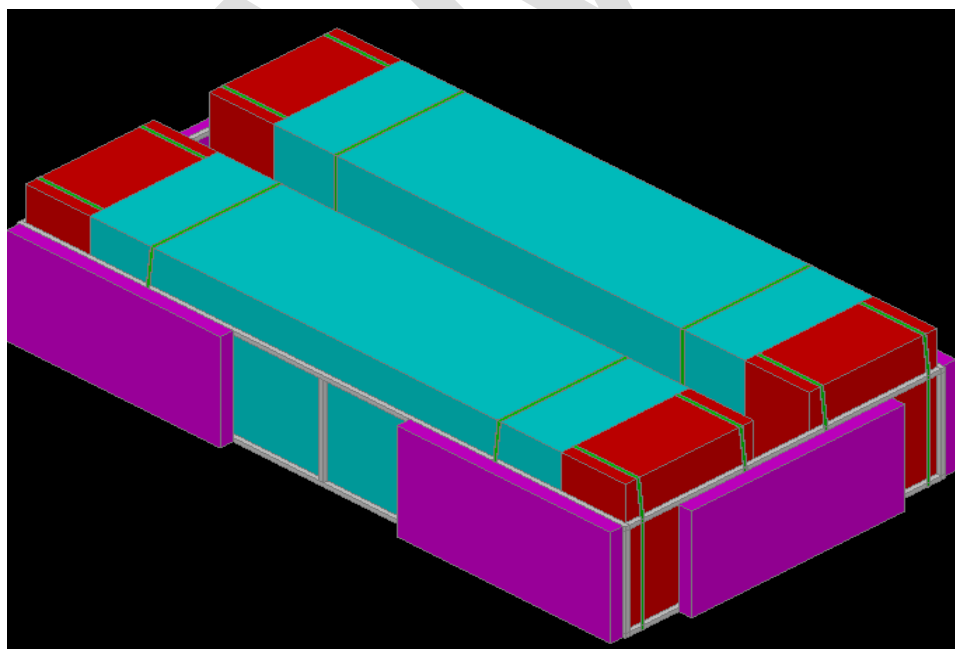


Figure 13

Penetrations to be sealed:

Corridor openings are to be sealed with 9mm plywood connected by self tapping / self drilling screws. Access to the modules will be through single door on one side of the corridor for inspection purposes. Refer to Figures 14.1, 14.2 and 14.3.



Figure 14.1

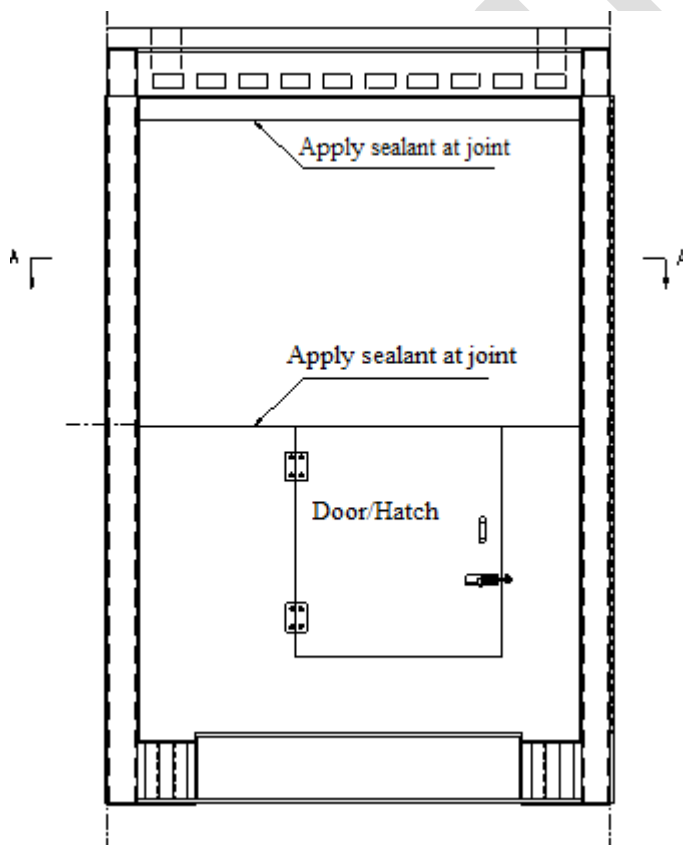


Figure 14.2

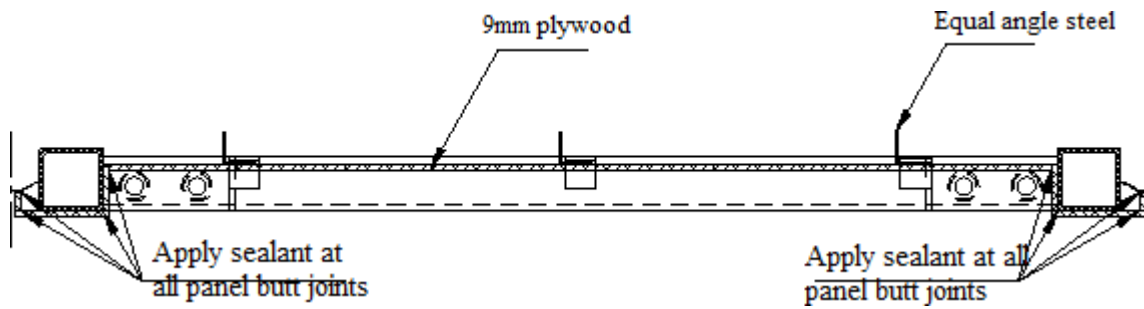


Figure 14.3

Service riser openings:

For the service riser hole on top of the module, 9mm plywood will be glued to cover the opening and to protect from weather during transit.

Ventilation openings:

Seal with XPS at the external of the module and apply sealant in between.

Overall packaging:

Once all fixtures and fittings have been packed internally, a customized protective cover will be fitted externally for weather protection, and then fixed with a PVC packing belt, as well as nylon ropes for binding. Refer to Figure 15.



Figure 15

1.2 Lifting and transit plan from factory to port

All windows and doors to be closed and locked securely.

The swipe access cards will be wrapped with EPE membrane, and then attached to the cartons of a home appliance inside the modules.

Lift with special sling + D shackle + steel wire rope. Put the module on the flat truck. Refer to Figure 16.

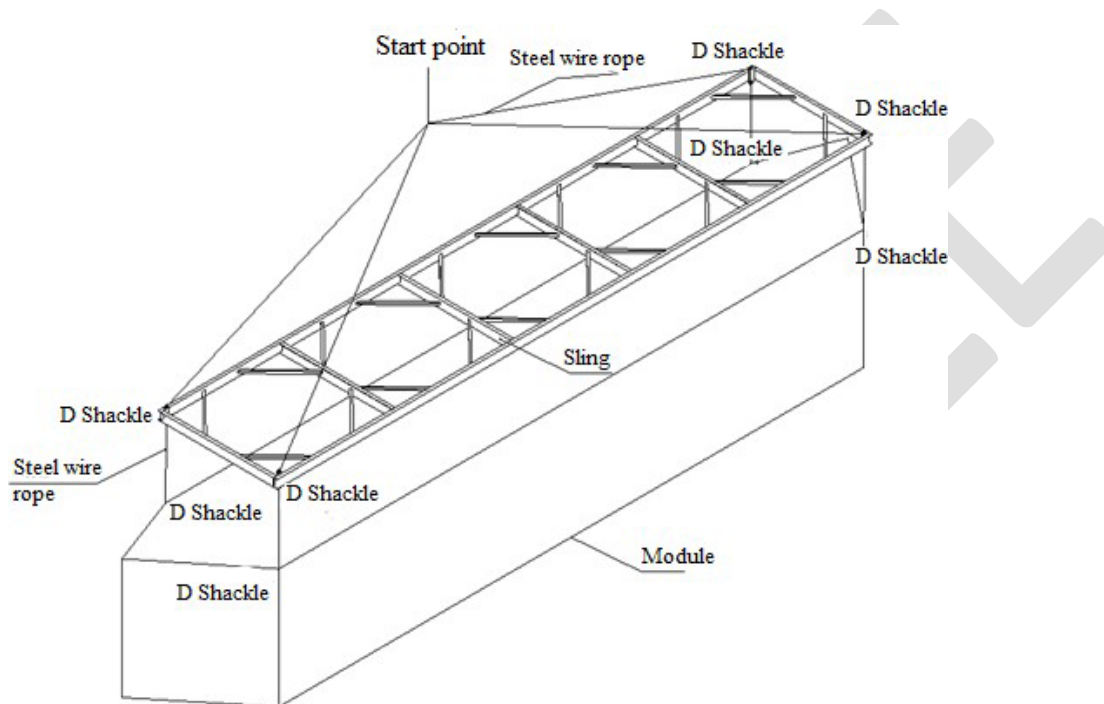


Figure 16: Lifting schematic

Sling external dimension is approximately 11000*3300*400 (to be confirmed with structural team). Put 3000*150*12mm OSB at the bottom of the steel beam on the flat truck to avoid movement. Refer to Figure 17.

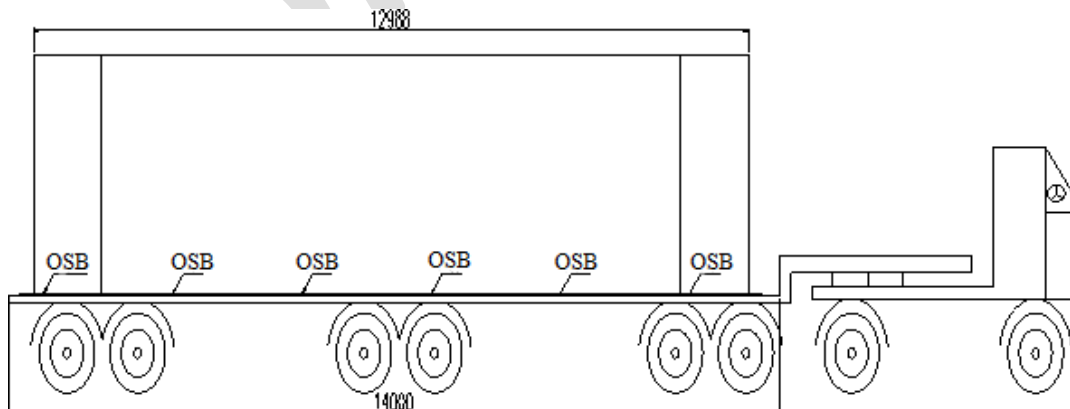


Figure 17: Truck loading schematic

Note: OSB to separate module and truck (average 4 to 6 pcs) to provide support/cushioning.

Tie down point is the round hole at the top of the surface of four channel steels. Refer to Figure 18.

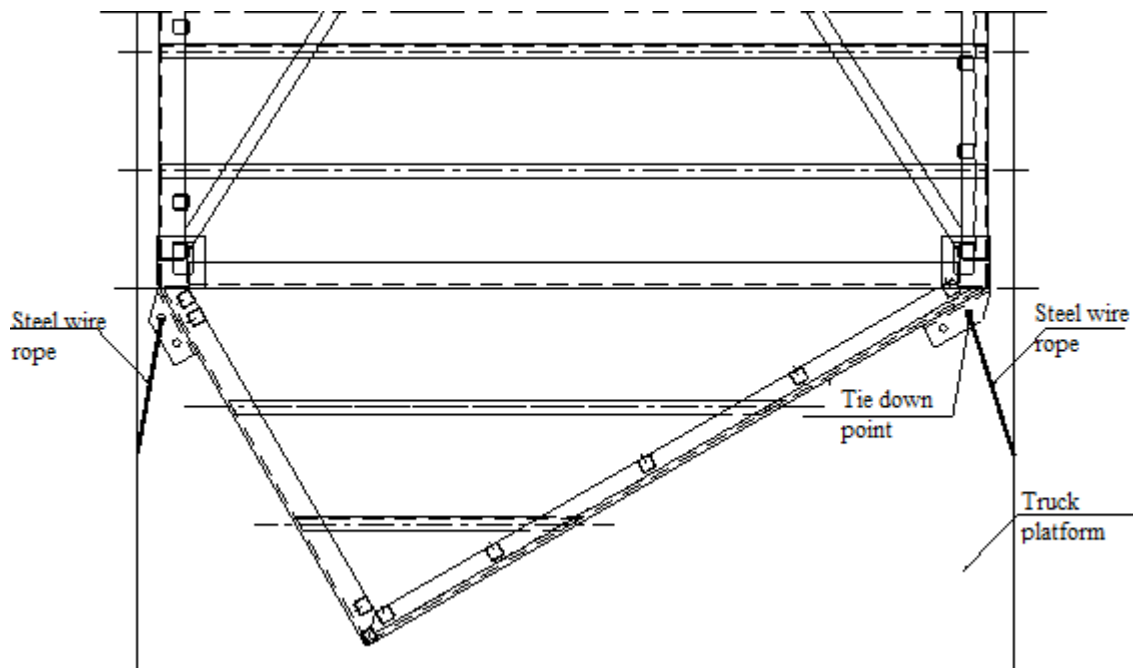


Figure 18: Picture of land transportation binding

1.3 Stowage and lashing plan for ocean transport

Modules are brought alongside vessel on trucks one by one. Certified spreader with 4 hooks to the corner castings of the unit will be required to be placed between the modules and lifted slowly to the vessels hold.

The units will be unhooked and lashings / securing of the cargo will occur as per the attached lashing plan. Chains / lashing will be secured to hold by welding into vessels tank top / side of holds.

All of the loading will need to be supervised for smooth / secure operations and will require a team with vast experience in this type of cargo.

Upon completion of loading the Master and Port Captain will double check all lashing arrangements to ensure that everything is safe and ready to be transported.

During transit the crew will check the lashing daily and do tightening if required.

Upon arrival at the discharge port the crew will start to commence unlashings of the cargo if local regulations permit, in order to ensure a smooth discharge.

Discharge will use a certified spreader to lift the units with 4 hooks to the corner castings to a truck which is standing alongside.

The cargo will be unhooked when safely positioned on the trucks.

Refer to Appendix B, C and D, for stowage and lashing plans.

Photo of twist lock (example only):

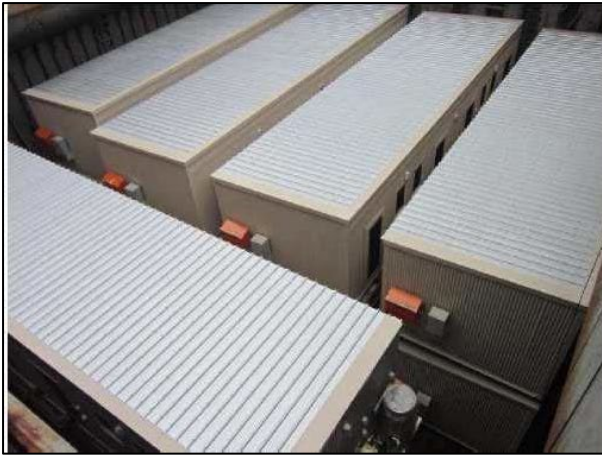


Hatch condition photos (example only):



Hold No.2 after holding

Hold No.3 after loading



Hold No. 4 after loading



Hold No. 5 after loading



Hatch over No.1 after loading



Hatch cover No.2 after loading



Hatch cover No.3 after loading



Hatch cover No.4 after loading



Hatch cover No.5 after loading



After loading



After loading



After loading



After loading



After loading

1.4 Transportation plan

Module transport

There will be two shipments for the modular units, each with 130 and 129 units respectively. The vessel being used for transportation of the modules will be a general purpose vessel which will arrive into the break-bulk wharf in Auckland from China. The sea journey should take approximately 21 days on the basis it will be a direct sail (no other port calls) and weather permitting.

(Company name) will be on the contracting party to purchase the modules from (the manufacturer) with shipping terms FREE ON BOARD UNDER TACKL AT _____ PORT (tbc).

XXX Ltd will contract with YYY Ltd to sell the modules in shipping terms – cost, insurance and freight (CIF).

ZZZ Ltd will import the modules into New Zealand and arrange New Zealand custom clearance accordingly.

The first shipment (arrival Auckland circa end April 2020 – TBC) should include modules required for ground, first and second level and should arrive at port in Auckland at least 20 days prior to their first requirement on site, so that unexpected delays would not impact on the site delivery / building schedule. The second shipment (arrival circa late May 2020 – TBC) should be scheduled to arrive at Auckland at a time that is suitable to avoid delays in building schedule and reduce storage costs. This needs to be agreed in coming weeks. Any temporary protection material for shipment and trucking will need to be appropriately disposed of in this process.

The modules will have a unique identifier number system. Refer to Appendix E.

Transportation in China:

Factory

First inspection will take place once production is complete and as part of the handover and acceptance process. The modules will be inspected (refer to Appendix A and B) thoroughly by (third party) to ensure that they have met compliance and quality standards and the supply contract has been fulfilled before the transportation process commences. The acceptance criteria will be signed off at the factory loading area before loading of the units onto the trucks. The modules and any associated goods such as lifting frames must be sufficiently clean to adhere to NZ quarantine standards when they are to arrive at port in Dalian.

Customs clearance

All required China export custom clearance procedures are to be followed by (the supplier) for the export of the modules and lifting frames and all documentation (e.g. bill of lading, packing

declarations, commercial invoices detailed in credit terms) and approvals obtained and subsequently checked to by (the shipping company).

It normally takes 3 days for export procedures to be completed after all goods have arrived at the Dalian port and it is vital that there are no delays that may cause the shipping company to charge detention fees due to the vessel being delayed. Therefore (the supplier) are responsible for allowing sufficient time for these procedures to occur within the timeframe agreed.

(The shipping company) shipping agent at Dalian will also liaise directly with (the supplier) export shipping agent to make certain customs clearance is achieved and within agreed timeframes.

Factory

Modules will be lifted on to the road transport trucks and then the modules will be secured onto the trucks with interlocking twist locks. The lifting points on the module should be clearly marked - the ISO corner castings for top lifting by spreader bar. Refer to section 1.2 Lifting plan for more details.

A to B

Trucks will take the route as instructed by (the supplier). It will take approximately 24 hours from A to B under normal conditions.

Dalian Port

Deliver to a storage site in very close proximity to the loading berth of the ocean going vessel (berth will be nominated by the shipping company near the time of loading).

At this point a second inspection (pre-shipping) will be done by (third party) in the storage area in order to check for any transit damage, in consultation with (the supplier). Documentation that outlines that this inspection has taken place will form a part of the acceptance criteria. (The supplier) will allocated personnel to be at the port for the duration of the modules arriving and being checked at the port leading up to shipment.

The modules will then be delivered to the ships side by (the supplier's) trucks when requested to do so by stevedores in charge of loading the ship. This should be done in a timely and efficient fashion to avoid delay in loading and vessel departure within contracted lay time period – this is the responsibility of (the supplier) to make certain modules are in position at the wharf to be loaded as quickly as required by stevedores.

Stevedores will start to lift the modules from the loading berth onto the ship and secure them in place one by one. (Third party) shipping terms agreed with (shipping company) are liner terms – hook/hook off. Generally, the first tier is secured by welding stopper plates to secure the units onto the floor of the hold. The second and subsequent tiers are fixed using the twist locks and so on. The interlock corner castings have been designed to be fitted flush with the bottom of the modules with no protrusions which will assist in creating a fuller touching surface for better weight spread and friction to stabilize the modules further for stacking and lashing

purposes. The final stow plan will be set by the shipping company but as there are 12 different module types the configuration of the 2 shipments (module types) should be agreed prior by parties so that the module types will stack on top of each other well and be able to be locked in place and so that the modules required earlier at site in NZ are available and accessible, e.g. when and where modules are to be placed at storage site prior to final movement to construction site.

China (Dalian Port) to New Zealand (Auckland Port):

Refer to:

Section 1.3 Stowage and lashing plan for ocean transport

Appendix B, C and D

Transportation in Auckland:

Auckland Port

(The shipping company) employed NZ stevedores will lift the modules from the vessel and hook off directly on to road trucks. The NZ stevedores are responsible for unsecuring the modules and ensuring the lifting process onto road trucks that will be waiting in position alongside the ship of the wharf side.

Once the modules are unhooked from the crane the shipping transport company's responsibilities are complete.

At this point an inspection will be carried out to check for transmit damage during the ocean transport. Prior security access to wharf side will have to be organized accordingly for relevant individuals who must conform to all safety requirements of the Auckland Port Authority. This will be a visual inspection by (third party), (the shipping company) and (the transport company) on the exterior of the modules. Lifting frames provided by (the supplier) will need to be available and accessible.

Once this inspection has been done (the transport company) will have transit responsibility for the onward movements to storage and ultimately to site.

Customs clearance

New Zealand customs and Ministry for Primary Industries (MPI) clearance of the modules to enter into NZ will be prearranged in a timely fashion by (xxx) using authorized company (xxx) – a NZ customs clearance agency. This will avoid unnecessary delays in the unloading process which could cause significant demurrage charges for the account of (xxx). Any quarantine customs inspections can occur using a custom built hatch for access.

A to B

(The transport company) will collect the modules via their road trucks and deliver the modules to the storage facility at (address). It will be the transportation company's responsibility to secure the modules safely onto the road trucks and make certain the loads conform with all regulations on weight and wide load as outline by the Ministry of Transport.

The road trucks to be used will be 6 (estimate) x 13-15 meter flat deck semi-trailers. Twist locks have been built into the modules (attach finalised transportation drawings) in positions to allow for spacing to suit a standard road trailer width and length wise. Some twist locks on trucks are adjustable assisting in securing the modules for road transport. If twist locks are not at container spacing, then chains will have to be used for load restraint (this would add time to the pick-up cycle).

Estimates provided by (the transport company) were that to pick up the modules from alongside the ship and deliver to storage and then return to wharf side to collect another module would take 45-55 minutes off peak and 70-80 minutes peak time.

Storage

Modules will be lifted off from the trucks and rested on the ground. This will require lifting frame, hoist or a mobile crane (possibly 50 tonne capacity) TBC. Modules will be stored (likely 2 high) in such a way that will allow the units to be delivered to the site in the order required. The order the modules come off the vessel and later moved to storage and site is vital. This is to be agreed prior by parties and will assist in minimizing storage space required. Modules will be identified using a unique identifier number.

(The transport company) are an MPI approved transitional facility.

(Third party) will carry out the fourth inspection (internally and externally) in order to confirm there has been no damage in the road truck movement. At this point any transit damage can be fixed using NZ certified/qualified workers and the work then signed off as satisfactory by (third party). These repairs, such as touch up on painting, will be arranged to occur inside the storage facility.

When the modules are required on-site, they will be lifted on to the road trucks supplied by (the transport company) according to the agreed timetable. They will then deliver the modules to site in order and timing directed by (xxx). The road movement itself to site will be controlled by (the transport company).

Construction site

Trucks will arrive on site according to timetable agreed taking into account times when movements are allowed and qualified workers are on site.

Final (fifth) inspection involving (third party) for transit damage will take place at site. Each module has hatch access and a step ladder could be used to gain access from the truck. This will need to be accounted for as part of the time management in the delivery schedule, as will time taken to remove any protective packaging.

Once the modules have been accepted, (the developer) will take over from this point on. (The developer) will also require a lifting frame or equivalent on site.

Agreement needs to occur on how many and what type of modules are delivered from storage to site. Time estimates provided by (the transport company) for trucking from storage to site are the same as detailed above for movement from wharf to storage area.

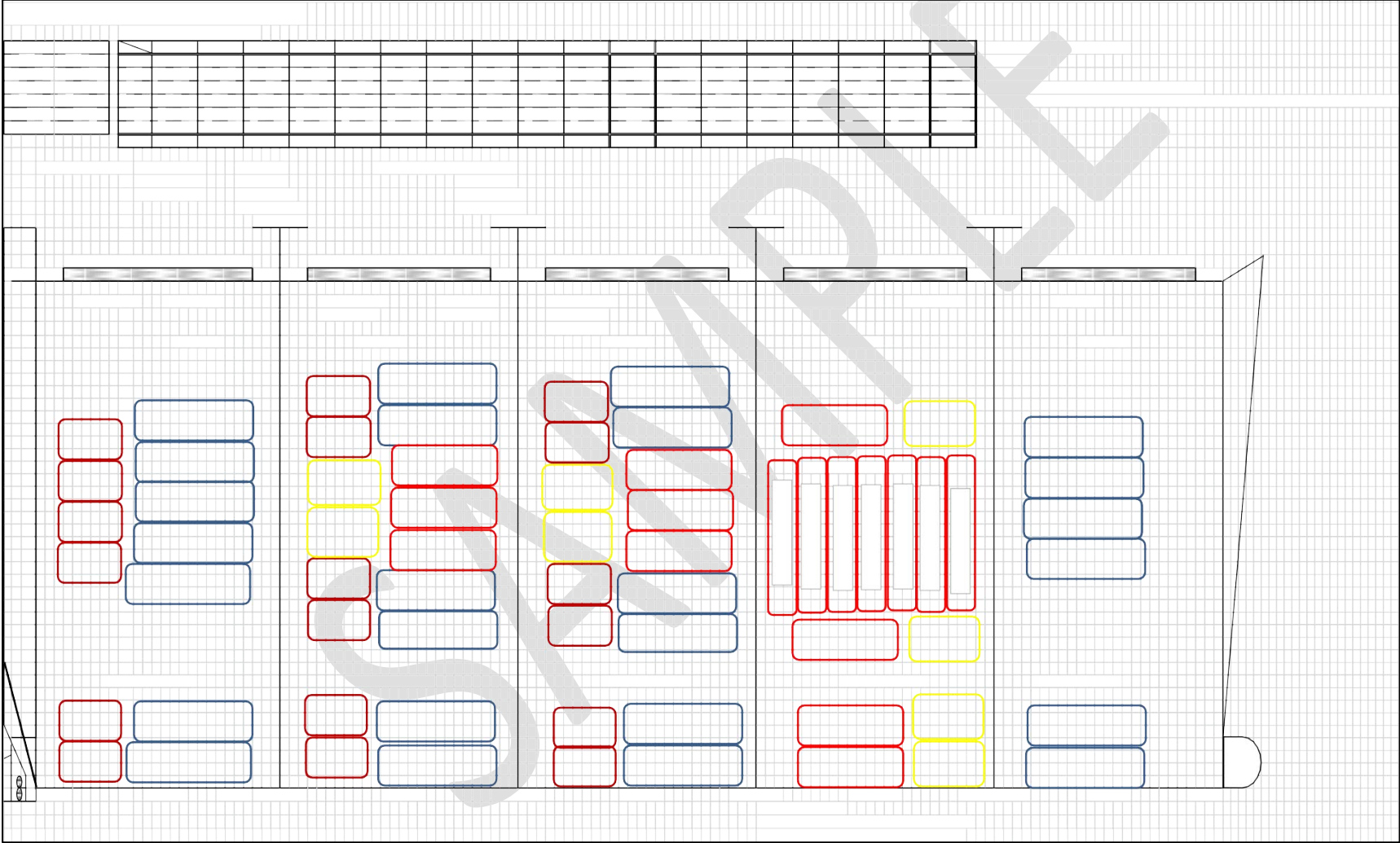
Notes:

- Lifting will be done using the lifting frames provided by (the supplier). Two sets of lifting frames will be shipped along with the modules and will be used in the warehouse and on-site.
- Adequate marine insurance will be arranged by (xxx) that will cover the logistics of the movement of the modules from origin to final destination, including any temporary storage (for up to 3 months).
- Auckland Council reserves the right to inspect the units when they land in New Zealand.

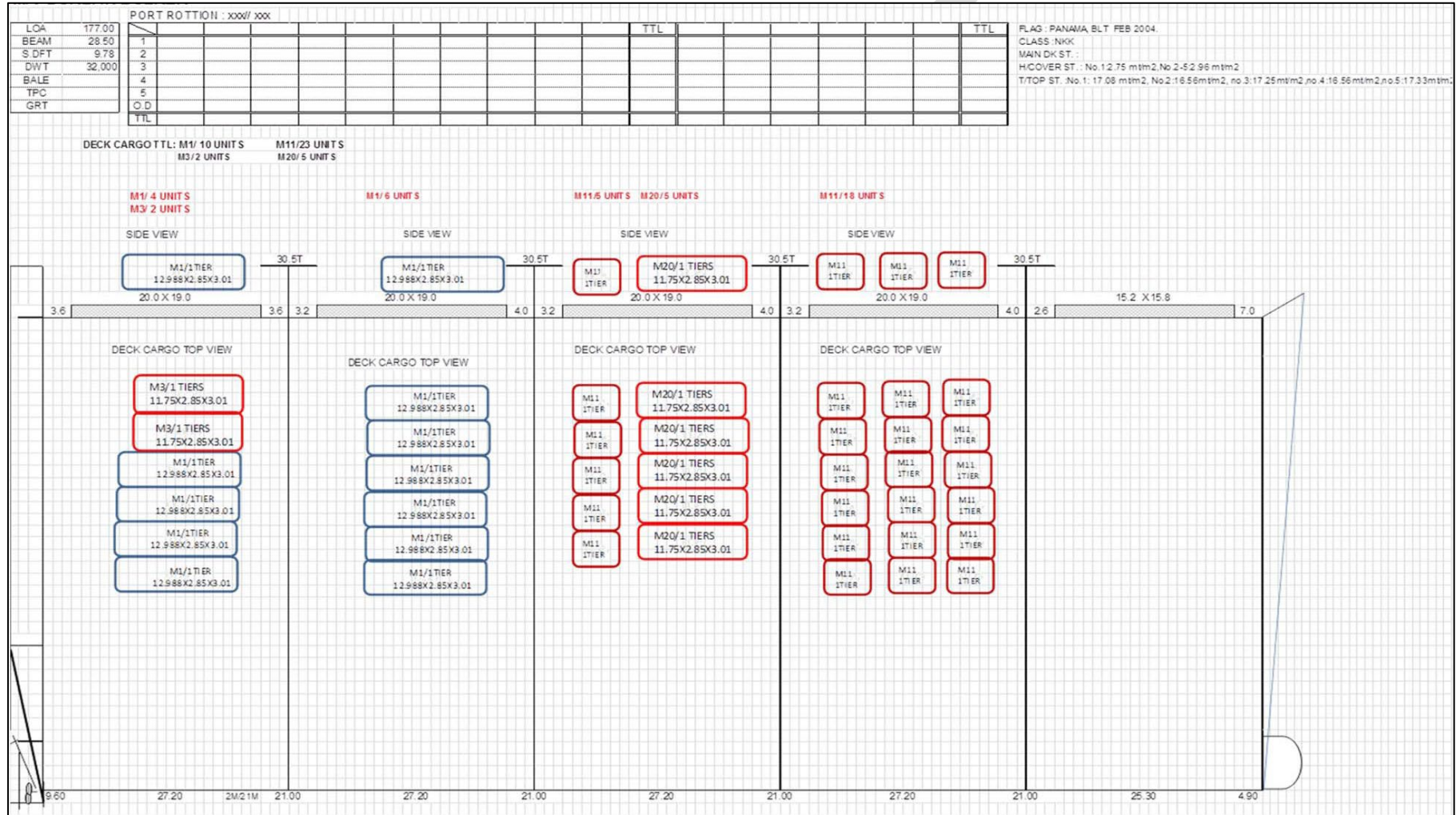
Appendix A

No.	Item	Specification	Remark
1	Chair		
2	Carpet in corridor	500*500*7mm	
3	Carpet glue	10kg / barrel	
4	Calcium silicate board ceiling	595*595mm	
5	Painted main stud	32*24*3000mm, white	
6	Painted main stud	32*24*3000mm, white	
7	Painted sub stud	28*24*600mm, white	
8	Painted side stud	22*22*3000mm, white	
9	Load-bearing stud	38*12, L=3000mm	
10	D-T bracket		
11	Bracket for load bearing stud		
12	Phillips countersunk self-tapping, self-drilling screw	ST4.2*32mm	
13	Hexagonal nut	M6	
14	Round gasket	D=6mm	
15	TV		
16	Microwave oven		
17	Fridge	HS-121L(N) W*D*H: 472*450*860mm	
18	Hotplate	HBE824B1 W*D*H: 290*510*66mm	
19	Rangehood		TBC
20	Electrical heater		YBC
21	Cover for bathroom ceiling light		
22	Air outlet pieces	300*300 0.6mm bend from 0.6mm galvanised steel sheet	
23	Louvre air outlet	340*340*34mm aluminium	

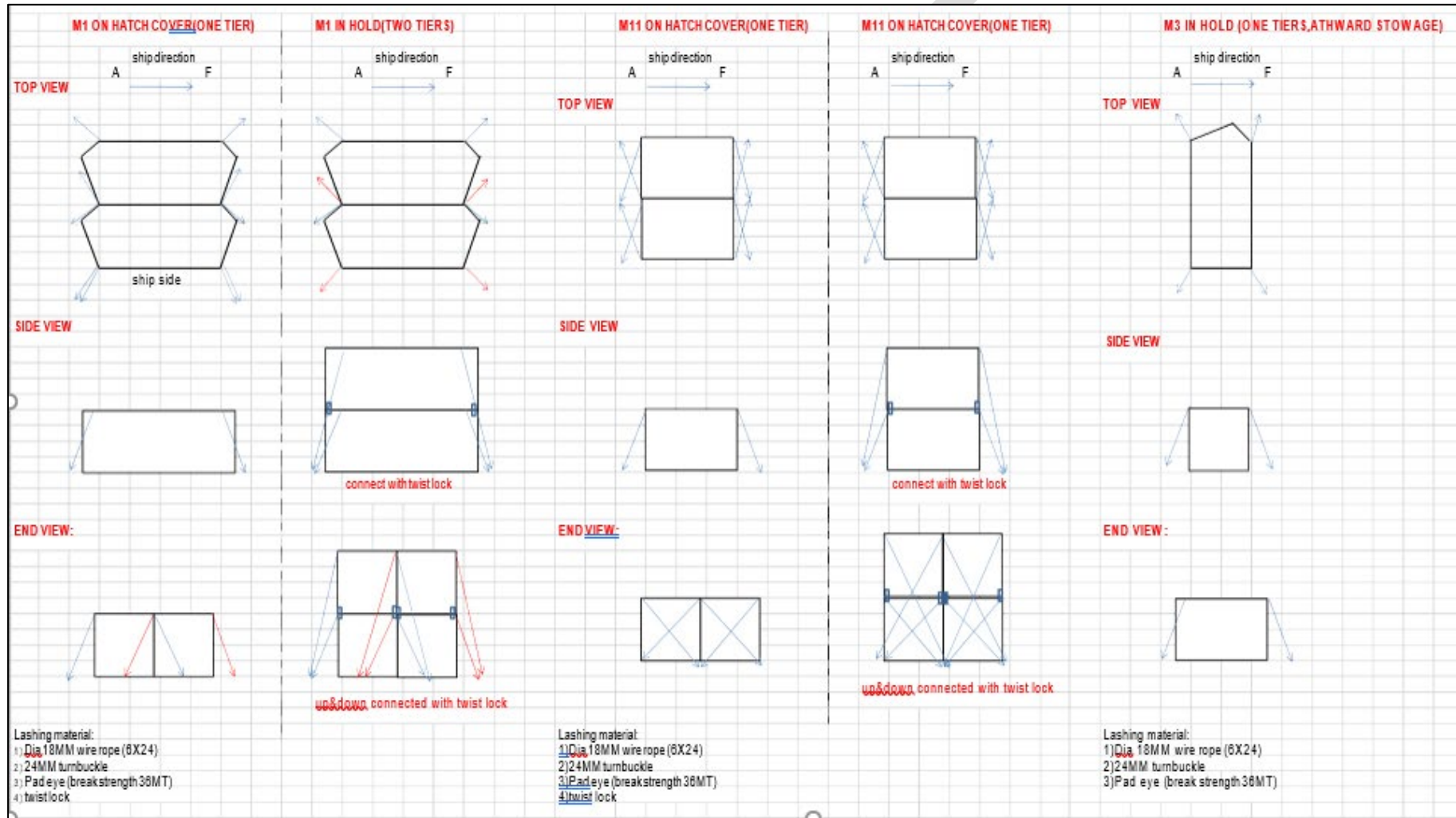
Appendix B: Pre-stowage Plan (Hold Cargo)



Appendix C: Pre-stowage Plan (Deck Cargo)



Appendix D: Lashing Plan



Appendix E: Unique Identifier Table with Weight and Dimensions

No.	Unique Identifier	Module (M)	Level	Weight (mt)	Area (m ²)	Volume (m ³)	Height (mm)	Length (mm)	Width (mm)
1	G-A3/1-M6-1	6	G	5.01	22.43	67.5	3010	6444	3480
2	G-A3/1-M5-2	5	G	7.56	14.75	44.39	3010	4238	3480
3	G-A3/2-M2-3	2	G	10.76	29.98	90.25	3010	10520	2850
4	G-A3/3-M1-4	1	G	11.98	33.5	100.78	3010	12988	2850
5	G-B3/1-M1-5	1	G	11.98	33.5	100.78	3010	12988	2850
6	G-B3/2-M1-6	1	G	11.98	33.5	100.78	3010	12988	2850
7	G-B3/3-M1-7	1	G	11.98	33.5	100.78	3010	12988	2850
8	G-C3/1-M1-8	1	G	11.98	33.5	100.78	3010	12988	2850
9	G-C3/2-M1-9	1	G	11.98	33.5	100.78	3010	12988	2850
10	G-C3/3-M1-10	1	G	11.98	33.5	100.78	3010	12988	2850
11	G-D3/1-M22-11	22	G	6.33	29.98	90.25	3010	10520	2850
12	G-D3/2-M1-12	1	G	11.98	33.5	100.78	3010	12988	2850
13	G-D3/3-M1-13	1	G	11.98	33.5	100.78	3010	12988	2850
14	G-E3/1-M1-14	1	G	11.98	33.5	100.78	3010	12988	2850
15	G-E3/2-M1-15	1	G	11.98	33.5	100.78	3010	12988	2850
16	G-E3/3-M1-16	1	G	11.98	33.5	100.78	3010	12988	2850
17	G-F3/1-M1-17	1	G	11.98	33.5	100.78	3010	12988	2850
18	G-F3/2-M1-18	1	G	11.98	33.5	100.78	3010	12988	2850
19	G-F3/3-M12-19	12	G	5.24	12.83	38.6	3010	4500	2850
20	G-H3/4-M13-20	13	G	4.43	13.37	40.25	3010	4611	2900
21	G-H3/3-M11-21	11	G	5.24	12.83	38.6	3010	4500	2850
22	G-H3/2-M12-22	12	G	5.24	12.83	38.6	3010	4500	2850
23	G-H3/1-M11-23	11	G	5.24	12.83	38.6	3010	4500	2850
24	G-H2/5-M12-24	12	G	5.24	12.83	38.6	3010	4500	2850
25	G-F1/1-M10-25	10	G	6.14	18.91	56.91	3010	7254	2850
26	G-E1/3-M10-26	10	G	6.14	18.91	56.91	3010	7254	2850
27	G-E1/2-M10-27	10	G	6.14	18.91	56.91	3010	7254	2850
28	G-E1/1-M10-28	10	G	6.14	18.91	56.91	3010	7254	2850
29	G-D1/3-M10-29	10	G	6.14	18.91	56.91	3010	7254	2850
30	G-D1/2-M10-30	10	G	6.14	18.91	56.91	3010	7254	2850
31	G-D1/1-M32-31	32	G	4.93	17.16	51.64	3010	6020	2850
32	G-C1/3-M10-32	10	G	6.14	18.91	56.91	3010	7254	2850
33	G-C1/2-M10-33	10	G	6.14	18.91	56.91	3010	7254	2850
34	G-C1/1-M10-34	10	G	6.14	18.91	56.91	3010	7254	2850
35	G-B1/3-M10-35	10	G	6.14	18.91	56.91	3010	7254	2850

No.	Unique Identifier	Module (M)	Level	Weight (mt)	Area (m ²)	Volume (m ³)	Height (mm)	Length (mm)	Width (mm)
36	G-B1/2-M10-36	10	G	6.14	18.91	56.91	3010	7254	2850
37	G-B1/1-M4-37	4	G	11.43	31.74	95.51	3010	11754	2850
38	G-A1/3-M4-38	4	G	11.43	31.74	95.51	3010	11754	2850
39	G-A1/2-M2-39	2	G	10.76	29.98	90.25	3010	10520	2850
40	G-A1/1-M6-40	6	G	5.01	22.43	67.5	3010	6444	3480
41	G-A1/1-M5-41	5	G	7.56	14.75	44.39	3010	4238	3480
42	1-A3/1-M6-42	6	1	5.01	22.43	67.5	3010	6444	3480
43	1-A3/1-M5-43	5	1	7.56	14.75	44.39	3010	4238	3480
44	1-A3/2-M2-44	2	1	10.76	29.98	90.25	3010	10520	2850
45	1-A3/3-M1-45	1	1	11.98	33.5	100.78	3010	12988	2850
46	1-B3/1-M1-46	1	1	11.98	33.5	100.78	3010	12988	2850
47	1-B3/2-M1-47	1	1	11.98	33.5	100.78	3010	12988	2850
48	1-B3/3-M1-48	1	1	11.98	33.5	100.78	3010	12988	2850
49	1-C3/1-M1-49	1	1	11.98	33.5	100.78	3010	12988	2850
50	1-C3/2-M1-50	1	1	11.98	33.5	100.78	3010	12988	2850
51	1-C3/3-M1-51	1	1	11.98	33.5	100.78	3010	12988	2850
52	1-D3/1-M20-52	20	1	7.17	31.74	95.51	3010	11754	2850
53	1-D3/2-M1-53	1	1	11.98	33.5	100.78	3010	12988	2850
54	1-D3/3-M1-54	1	1	11.98	33.5	100.78	3010	12988	2850
55	1-E3/1-M1-55	1	1	11.98	33.5	100.78	3010	12988	2850
56	1-E3/2-M1-56	1	1	11.98	33.5	100.78	3010	12988	2850
57	1-E3/3-M1-57	1	1	11.98	33.5	100.78	3010	12988	2850
58	1-F3/1-M1-58	1	1	11.98	33.5	100.78	3010	12988	2850
59	1-F3/2-M1-59	1	1	11.98	33.5	100.78	3010	12988	2850
60	1-F3/3-M12-60	12	1	5.24	12.83	38.6	3010	4500	2850
61	1-H3/4-M13-61	13	1	4.43	13.37	40.25	3010	4611	2900
62	1-H3/3-M11-62	11	1	5.24	12.83	38.6	3010	4500	2850
63	1-H3/2-M12-63	12	1	5.24	12.83	38.6	3010	4500	2850
64	1-H3/1-M11-64	11	1	5.24	12.83	38.6	3010	4500	2850
65	1-H2/5-M12-65	12	1	5.24	12.83	38.6	3010	4500	2850
66	1-H2/4-M11-66	11	1	5.24	12.83	38.6	3010	4500	2850
67	1-H2/3-M12-67	12	1	5.24	12.83	38.6	3010	4500	2850
68	1-H2/2-M11-68	11	1	5.24	12.83	38.6	3010	4500	2850
69	1-H2/1-M12-69	12	1	5.24	12.83	38.6	3010	4500	2850
70	1-H1/4-M11-70	11	1	5.24	12.83	38.6	3010	4500	2850
71	1-H1/3-M12-71	12	1	5.24	12.83	38.6	3010	4500	2850
72	1-F1/3-M11-72	11	1	5.24	12.83	38.6	3010	4500	2850
73	1-F1/2-M15-73	15	1	5.68	14.58	43.87	3010	5734	2850
74	1-F1/1-M1-74	1	1	11.98	33.5	100.78	3010	12988	2850

No.	Unique Identifier	Module (M)	Level	Weight (mt)	Area (m ²)	Volume (m ³)	Height (mm)	Length (mm)	Width (mm)
75	1-E1/3-M1-75	1	1	11.98	33.5	100.78	3010	12988	2850
76	1-E1/2-M1-76	1	1	11.98	33.5	100.78	3010	12988	2850
77	1-E1/1-M1-77	1	1	11.98	33.5	100.78	3010	12988	2850
78	1-D1/3-M1-78	1	1	11.98	33.5	100.78	3010	12988	2850
79	1-D1/2-M1-79	1	1	11.98	33.5	100.78	3010	12988	2850
80	1-D1/1-M30-80	30	1	7.17	31.74	95.51	3010	11754	2850
81	1-C1/3-M1-81	1	1	11.98	33.5	100.78	3010	12988	2850
82	1-C1/2-M1-82	1	1	11.98	33.5	100.78	3010	12988	2850
83	1-C1/1-M1-83	1	1	11.98	33.5	100.78	3010	12988	2850
84	1-B1/3-M1-84	1	1	11.98	33.5	100.78	3010	12988	2850
85	1-B1/2-M1-85	1	1	11.98	33.5	100.78	3010	12988	2850
86	1-B1/1-M1-86	1	1	11.98	33.5	100.78	3010	12988	2850
87	1-A1/3-M1-87	1	1	11.98	33.5	100.78	3010	12988	2850
88	1-A1/2-M2-88	2	1	10.76	29.98	90.25	3010	10520	2850
89	1-A1/1-M6-89	6	1	5.01	22.43	67.5	3010	6444	3480
90	1-A1/1-M5-90	5	1	7.56	14.75	44.39	3010	4238	3480
91	2-A3/1-M6-91	6	2	5.01	22.43	67.5	3010	6444	3480
92	2-A3/1-M5-92	5	2	7.56	14.75	44.39	3010	4238	3480
93	2-A3/2-M2-93	2	2	10.76	29.98	90.25	3010	10520	2850
94	2-A3/3-M1-94	1	2	11.98	33.5	100.78	3010	12988	2850
95	2-B3/1-M1-95	1	2	11.98	33.5	100.78	3010	12988	2850
96	2-B3/2-M1-96	1	2	11.98	33.5	100.78	3010	12988	2850
97	2-B3/3-M1-97	1	2	11.98	33.5	100.78	3010	12988	2850
98	2-C3/1-M1-98	1	2	11.98	33.5	100.78	3010	12988	2850
99	2-C3/2-M1-99	1	2	11.98	33.5	100.78	3010	12988	2850
100	2-C3/3-M1-100	1	2	11.98	33.5	100.78	3010	12988	2850
101	2-D3/1-M20-101	20	2	7.17	31.74	95.51	3010	11754	2850
102	2-D3/2-M1-102	1	2	11.98	33.5	100.78	3010	12988	2850
103	2-D3/3-M1-103	1	2	11.98	33.5	100.78	3010	12988	2850
104	2-E3/1-M1-104	1	2	11.98	33.5	100.78	3010	12988	2850
105	2-E3/2-M1-105	1	2	11.98	33.5	100.78	3010	12988	2850
106	2-E3/3-M1-106	1	2	11.98	33.5	100.78	3010	12988	2850
107	2-F3/1-M1-107	1	2	11.98	33.5	100.78	3010	12988	2850
108	2-F3/2-M1-108	1	2	11.98	33.5	100.78	3010	12988	2850
109	2-F3/3-M12-109	12	2	5.24	12.83	38.6	3010	4500	2850
110	2-H3/4-M13-110	13	2	4.43	13.37	40.25	3010	4611	2900
111	2-H3/3-M11-111	11	2	5.24	12.83	38.6	3010	4500	2850
112	2-H3/2-M12-112	12	2	5.24	12.83	38.6	3010	4500	2850
113	2-H3/1-M11-113	11	2	5.24	12.83	38.6	3010	4500	2850

No.	Unique Identifier	Module (M)	Level	Weight (mt)	Area (m ²)	Volume (m ³)	Height (mm)	Length (mm)	Width (mm)
114	2-H2/5-M12-114	12	2	5.24	12.83	38.6	3010	4500	2850
115	2-H2/4-M11-115	11	2	5.24	12.83	38.6	3010	4500	2850
116	2-H2/3-M12-116	12	2	5.24	12.83	38.6	3010	4500	2850
117	2-H2/2-M11-117	11	2	5.24	12.83	38.6	3010	4500	2850
118	2-H2/1-M12-118	12	2	5.24	12.83	38.6	3010	4500	2850
119	2-H1/4-M11-119	11	2	5.24	12.83	38.6	3010	4500	2850
120	2-H1/3-M12-120	12	2	5.24	12.83	38.6	3010	4500	2850
121	2-H1/2-M11-121	11	2	5.24	12.83	38.6	3010	4500	2850
122	2-H1/1-M14-122	14	2	7.54	22.97	69.14	3010	6601	3480
123	2-F1/3-M11-123	11	2	5.24	12.83	38.6	3010	4500	2850
124	2-F1/2-M15-124	15	2	5.68	14.58	43.87	3010	5734	2850
125	2-F1/1-M1-125	1	2	11.98	33.5	100.78	3010	12988	2850
126	2-E1/3-M1-126	1	2	11.98	33.5	100.78	3010	12988	2850
127	2-E1/2-M1-127	1	2	11.98	33.5	100.78	3010	12988	2850
128	2-E1/1-M1-128	1	2	11.98	33.5	100.78	3010	12988	2850
129	2-D1/3-M1-129	1	2	11.98	33.5	100.78	3010	12988	2850
130	2-D1/2-M1-130	1	2	11.98	33.5	100.78	3010	12988	2850
131	2-D1/1-M30-131	30	2	7.17	31.74	95.51	3010	11754	2850
132	2-C1/3-M1-132	1	2	11.98	33.5	100.78	3010	12988	2850
133	2-C1/2-M1-133	1	2	11.98	33.5	100.78	3010	12988	2850
134	2-C1/1-M1-134	1	2	11.98	33.5	100.78	3010	12988	2850
135	2-B1/3-M1-135	1	2	11.98	33.5	100.78	3010	12988	2850
136	2-B1/2-M1-136	1	2	11.98	33.5	100.78	3010	12988	2850
137	2-B1/1-M1-137	1	2	11.98	33.5	100.78	3010	12988	2850
138	2-A1/3-M1-138	1	2	11.98	33.5	100.78	3010	12988	2850
139	2-A1/2-M2-139	2	2	10.76	29.98	90.25	3010	10520	2850
140	2-A1/1-M6-140	6	2	5.01	22.43	67.5	3010	6444	3480
141	2-A1/1-M5-141	5	2	7.56	14.75	44.39	3010	4238	3480
142	3-A3/1-M6-142	6	3	5.01	22.43	67.5	3010	6444	3480
143	3-A3/1-M5-143	5	3	7.56	14.75	44.39	3010	4238	3480
144	3-A3/2-M2-144	2	3	10.76	29.98	90.25	3010	10520	2850
145	3-A3/3-M1-145	1	3	11.98	33.5	100.78	3010	12988	2850
146	3-B3/1-M1-146	1	3	11.98	33.5	100.78	3010	12988	2850
147	3-B3/2-M1-147	1	3	11.98	33.5	100.78	3010	12988	2850
148	3-B3/3-M1-148	1	3	11.98	33.5	100.78	3010	12988	2850
149	3-C3/1-M1-149	1	3	11.98	33.5	100.78	3010	12988	2850
150	3-C3/2-M1-150	1	3	11.98	33.5	100.78	3010	12988	2850
151	3-C3/3-M1-151	1	3	11.98	33.5	100.78	3010	12988	2850
152	3-D3/1-M20-152	20	3	7.17	31.74	95.51	3010	11754	2850

No.	Unique Identifier	Module (M)	Level	Weight (mt)	Area (m ²)	Volume (m ³)	Height (mm)	Length (mm)	Width (mm)
153	3-D3/2-M1-153	1	3	11.98	33.5	100.78	3010	12988	2850
154	3-D3/3-M1-154	1	3	11.98	33.5	100.78	3010	12988	2850
155	3-E3/1-M1-155	1	3	11.98	33.5	100.78	3010	12988	2850
156	3-E3/2-M1-156	1	3	11.98	33.5	100.78	3010	12988	2850
157	3-E3/3-M1-157	1	3	11.98	33.5	100.78	3010	12988	2850
158	3-F3/1-M1-158	1	3	11.98	33.5	100.78	3010	12988	2850
159	3-F3/2-M1-159	1	3	11.98	33.5	100.78	3010	12988	2850
160	3-F3/3-M12-160	12	3	5.24	12.83	38.6	3010	4500	2850
161	3-H3/4-M13-161	13	3	4.43	13.37	40.25	3010	4611	2900
162	3-H3/3-M11-162	11	3	5.24	12.83	38.6	3010	4500	2850
163	3-H3/2-M12-163	12	3	5.24	12.83	38.6	3010	4500	2850
164	3-H3/1-M11-164	11	3	5.24	12.83	38.6	3010	4500	2850
165	3-H2/5-M12-165	12	3	5.24	12.83	38.6	3010	4500	2850
166	3-H2/4-M11-166	11	3	5.24	12.83	38.6	3010	4500	2850
167	3-H2/3-M12-167	12	3	5.24	12.83	38.6	3010	4500	2850
168	3-H2/2-M11-168	11	3	5.24	12.83	38.6	3010	4500	2850
169	3-H2/1-M12-169	12	3	5.24	12.83	38.6	3010	4500	2850
170	3-H1/4-M11-170	11	3	5.24	12.83	38.6	3010	4500	2850
171	3-H1/3-M12-171	12	3	5.24	12.83	38.6	3010	4500	2850
172	3-H1/2-M11-172	11	3	5.24	12.83	38.6	3010	4500	2850
173	3-H1/1-M14-173	14	3	7.54	22.97	69.14	3010	6601	3480
174	3-F1/3-M11-174	11	3	5.24	12.83	38.6	3010	4500	2850
175	3-F1/2-M15-175	15	3	5.68	14.58	43.87	3010	5734	2850
176	3-F1/1-M1-176	1	3	11.98	33.5	100.78	3010	12988	2850
177	3-E1/3-M1-177	1	3	11.98	33.5	100.78	3010	12988	2850
178	3-E1/2-M1-178	1	3	11.98	33.5	100.78	3010	12988	2850
179	3-E1/1-M1-179	1	3	11.98	33.5	100.78	3010	12988	2850
180	3-D1/3-M1-180	1	3	11.98	33.5	100.78	3010	12988	2850
181	3-D1/2-M1-181	1	3	11.98	33.5	100.78	3010	12988	2850
182	3-D1/1-M30-182	30	3	7.17	31.74	95.51	3010	11754	2850
183	3-C1/3-M1-183	1	3	11.98	33.5	100.78	3010	12988	2850
184	3-C1/2-M1-184	1	3	11.98	33.5	100.78	3010	12988	2850
185	3-C1/1-M1-185	1	3	11.98	33.5	100.78	3010	12988	2850
186	3-B1/3-M1-186	1	3	11.98	33.5	100.78	3010	12988	2850
187	3-B1/2-M1-187	1	3	11.98	33.5	100.78	3010	12988	2850
188	3-B1/1-M1-188	1	3	11.98	33.5	100.78	3010	12988	2850
189	3-A1/3-M1-189	1	3	11.98	33.5	100.78	3010	12988	2850
190	3-A1/2-M2-190	2	3	10.76	29.98	90.25	3010	10520	2850
191	3-A1/1-M6-191	6	3	5.01	22.43	67.5	3010	6444	3480

No.	Unique Identifier	Module (M)	Level	Weight (mt)	Area (m ²)	Volume (m ³)	Height (mm)	Length (mm)	Width (mm)
192	3-A1/1-M5-192	5	3	7.56	14.75	44.39	3010	4238	3480
193	4-A3/3-M3-193	3	4	11.43	31.74	95.51	3010	11754	2850
194	4-B3/1-M3-194	3	4	11.43	31.74	95.51	3010	11754	2850
195	4-B3/2-M3-195	3	4	11.43	31.74	95.51	3010	11754	2850
196	4-B3/3-M3-196	3	4	11.43	31.74	95.51	3010	11754	2850
197	4-C3/1-M3-197	3	4	11.43	31.74	95.51	3010	11754	2850
198	4-C3/2-M3-198	3	4	11.43	31.74	95.51	3010	11754	2850
199	4-C3/3-M3-199	3	4	11.43	31.74	95.51	3010	11754	2850
200	4-D3/1-M21-200	21	4	7.17	31.74	95.51	3010	11754	2850
201	4-D3/2-M3-201	3	4	11.43	31.74	95.51	3010	11754	2850
202	4-D3/3-M3-202	3	4	11.43	31.74	95.51	3010	11754	2850
203	4-E3/1-M3-203	3	4	11.43	31.74	95.51	3010	11754	2850
204	4-E3/2-M3-204	3	4	11.43	31.74	95.51	3010	11754	2850
205	4-E3/3-M3-205	3	4	11.43	31.74	95.51	3010	11754	2850
206	4-F3/1-M3-206	3	4	11.43	31.74	95.51	3010	11754	2850
207	4-F3/2-M3-207	3	4	11.43	31.74	95.51	3010	11754	2850
208	4-F3/3-M12-208	12	4	5.24	12.83	38.6	3010	4500	2850
209	4-H3/4-M13-209	13	4	4.43	13.37	40.25	3010	4611	2900
210	4-H3/3-M11-210	11	4	5.24	12.83	38.6	3010	4500	2850
211	4-H3/2-M12-211	12	4	5.24	12.83	38.6	3010	4500	2850
212	4-H3/1-M11-212	11	4	5.24	12.83	38.6	3010	4500	2850
213	4-H2/5-M12-213	12	4	5.24	12.83	38.6	3010	4500	2850
214	4-H2/4-M11-214	11	4	5.24	12.83	38.6	3010	4500	2850
215	4-H2/3-M12-215	12	4	5.24	12.83	38.6	3010	4500	2850
216	4-H2/2-M11-216	11	4	5.24	12.83	38.6	3010	4500	2850
217	4-H2/1-M12-217	12	4	5.24	12.83	38.6	3010	4500	2850
218	4-H1/4-M11-218	11	4	5.24	12.83	38.6	3010	4500	2850
219	4-H1/3-M12-219	12	4	5.24	12.83	38.6	3010	4500	2850
220	4-H1/2-M11-220	11	4	5.24	12.83	38.6	3010	4500	2850
221	4-H1/1-M14-221	14	4	7.54	22.97	69.14	3010	6601	3480
222	4-F1/3-M11-222	11	4	5.24	12.83	38.6	3010	4500	2850
223	4-F1/2-M11-223	11	4	5.24	12.83	38.6	3010	4500	2850
224	4-F1/1-M4-224	4	4	11.43	31.74	95.51	3010	11754	2850
225	4-E1/3-M4-225	4	4	11.43	31.74	95.51	3010	11754	2850
226	4-E1/2-M4-226	4	4	11.43	31.74	95.51	3010	11754	2850
227	4-E1/1-M4-227	4	4	11.43	31.74	95.51	3010	11754	2850
228	4-D1/3-M4-228	4	4	11.43	31.74	95.51	3010	11754	2850
229	4-D1/2-M4-229	4	4	11.43	31.74	95.51	3010	11754	2850
230	4-D1/1-M31-230	31	4	7.17	31.74	95.51	3010	11754	2850

No.	Unique Identifier	Module (M)	Level	Weight (mt)	Area (m ²)	Volume (m ³)	Height (mm)	Length (mm)	Width (mm)
231	4-C1/3-M4-231	4	4	11.43	31.74	95.51	3010	11754	2850
232	4-C1/2-M4-232	4	4	11.43	31.74	95.51	3010	11754	2850
233	4-C1/1-M4-233	4	4	11.43	31.74	95.51	3010	11754	2850
234	4-B1/3-M4-234	4	4	11.43	31.74	95.51	3010	11754	2850
235	4-B1/2-M4-235	4	4	11.43	31.74	95.51	3010	11754	2850
236	4-B1/1-M4-236	4	4	11.43	31.74	95.51	3010	11754	2850
237	4-A1/3-M4-237	4	4	11.43	31.74	95.51	3010	11754	2850
238	5-E3/3-M3-238	3	5	11.43	31.74	95.51	3010	11754	2850
239	5-F3/1-M3-239	3	5	11.43	31.74	95.51	3010	11754	2850
240	5-F3/2-M3-240	3	5	11.43	31.74	95.51	3010	11754	2850
241	5-F3/1-M12-241	12	5	5.24	12.83	38.6	3010	4500	2850
242	5-H3/4-M13-242	13	5	4.43	13.37	40.25	3010	4611	2900
243	5-H3/3-M11-243	11	5	5.24	12.83	38.6	3010	4500	2850
244	5-H3/2-M12-244	12	5	5.24	12.83	38.6	3010	4500	2850
245	5-H3/1-M11-245	11	5	5.24	12.83	38.6	3010	4500	2850
246	5-H2/5-M12-246	12	5	5.24	12.83	38.6	3010	4500	2850
247	5-H2/4-M11-247	11	5	5.24	12.83	38.6	3010	4500	2850
248	5-H2/3-M12-248	12	5	5.24	12.83	38.6	3010	4500	2850
249	5-H2/2-M11-249	11	5	5.24	12.83	38.6	3010	4500	2850
250	5-H2/1-M12-250	12	5	5.24	12.83	38.6	3010	4500	2850
251	5-H1/4-M11-251	11	5	5.24	12.83	38.6	3010	4500	2850
252	5-H1/3-M12-252	12	5	5.24	12.83	38.6	3010	4500	2850
253	5-H1/2-M11-253	11	5	5.24	12.83	38.6	3010	4500	2850
254	5-H1/1-M14-254	14	5	7.54	22.97	69.14	3010	6601	3480
255	5-F1/3-M11-255	11	5	5.24	12.83	38.6	3010	4500	2850
256	5-F1/2-M11-256	11	5	5.24	12.83	38.6	3010	4500	2850
257	5-F1/1-M4-257	4	5	11.43	31.74	95.51	3010	11754	2850
258	5-E1/3-M4-258	4	5	11.43	31.74	95.51	3010	11754	2850
259	5-E1/2-M4-259	4	5	11.43	31.74	95.51	3010	11754	2850

Appendix 10: Requirements to become approved third-party reviewer

Council will only consider accepting third party inspections from people who have applied and have:

Table 1: Evidence to demonstrate suitability and competence

Suitability	Competence
Detailed information about work history and relevant experience in the building industry within New Zealand or overseas	Demonstrated competence in the type and scale of project subject to the producer statements the applicant wishes to issue: <ul style="list-style-type: none"> • CV • Company profile • Awards / recognitions
Qualifications	Formal technical / professional qualifications in the area of work, e.g. Civil, Mechanical, Hydraulic, Fire. If not available, then demonstrated proof of at least 10 years practice in New Zealand may be considered appropriate.
Appropriate level of professional indemnity and public liability insurance	Certificates of insurance <ul style="list-style-type: none"> • Amount held • Period of cover
Appropriate level of public liability and contractor's insurance	Certificates of insurance <ul style="list-style-type: none"> • Amount held • Period of cover
Proven performance / historical records, i.e. previous work history with Council, complaints, etc.	Evidence of successful completion of technical courses, assignments or projects
Attestations or character references from suitably qualified persons	References from peers within the industry confirming the technical knowledge, ethics and integrity of the applicant
Professional affiliations	Membership of appropriate trade / professional affiliations and evidence of continued professional development Confirmation of practice fields
Quality assurance systems and principles (mandatory for all high-risk applications)	Council preference is that the producer statement author's organization has a QMS in line with ISO 9001:2015 and the QMS has been certified by a JAS-ANZ accredited third party such as Bureau Veritas, Telarc, SGS or other similar organisations
Sample copies of statements / site observations records	Sample of completed documents intended to be issued for review purposes only to confirm standard and quality of documentation

The decision whether to approve an application from a person to become a third party inspector is at the sole discretion of Council.

It is crucial to Council to have trust and confidence in its third party inspectors because for the most part, Council staff place complete reliance on a Quality Assurance Plan and Product Technical Statement (PTS) as evidence of compliance with NZBC and technical requirements.

It is vital to Council that the NZBC and technical requirements are met because when Council issues a building consent or code compliance certificate for building works it owes a duty of care in relation to that work.

Chartered Professional Engineers and Registered Architects must provide written evidence from their respective professional bodies confirming their practice areas.

All other applicants must provide sufficient evidence to demonstrate their suitability and competence as per the table above.

Some examples of suitable evidence:

- Detailed examples of project worked on and applicant's role in the project
- Design checklists / tools
- Site observation reports
- Quality assurance measures

Find out more: **phone 09 301 0101**
or visit **aucklandcouncil.govt.nz/**