

FACTORY-CONSTRUCTED HOUSING GUIDE

**Modular and Manufactured Housing
Resources for Building Officials**



Guide Developed by Senez Consulting Ltd.

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Acronyms and Abbreviations

ACBOA	Alliance of Canadian Building Officials' Associations
AHJ	Authority having jurisdiction
CSA	Canadian Standards Association / CSA Group
MBC	Manitoba Building Code
NBC	National Building Code
NFC	National Fire Code
NSBCR	Nova Scotia Building Code Regulations
OBC	Ontario Building Code
SCC	Standards Council of Canada

1.0 INTRODUCTION

1.1 Scope and Limitations

This guide has been prepared to support AHJs and Building Officials in navigating the regulatory framework governing factory-constructed buildings intended for use as housing in Canada.

The purpose of this document is to:

- Review how factory-constructed buildings, including manufactured homes, modular buildings, modules, and panels, are addressed within the National Building Code (NBC) and related CSA standards.
- Explain how the relevant CSA standards for factory-constructed buildings, modules and panels are referenced within the NBC and how they interact with provincial and territorial regulations.
- Provide an overview of what each applicable CSA standard covers and what it does not cover, to help distinguish factory certification from site-specific regulatory requirements.
- Summarize the roles and responsibilities of manufacturers, certification bodies, and authorities having jurisdiction (AHJs).
- Describe how AHJs determine compliance, including which manufactured components and products are certified at the factory and which are subject to municipal review and inspection.
- Present selected examples of provincial and territorial regulatory approaches.
- Identify regulatory and jurisdictional gaps and transitional challenges affecting manufactured and modular housing to support informed decision-making where regulatory clarity is lacking.

This guide focuses on practical application and interpretation from a national regulatory perspective, with particular attention to how building code compliance is achieved at both the factory and the installation site.

This document is not intended to:

- serve as a design guide or technical manual for manufactured or modular construction,
- replace or reinterpret the requirements of the NBC, provincial, territorial, local building codes, or by-laws, or referenced CSA standards, or
- provide jurisdiction-specific direction or approvals.

Instead, it aims to promote consistent understanding and informed decision-making in situations where regulatory requirements may not be clearly defined or where multiple compliance pathways exist.

1.2 Background and Purpose

Governments, at all levels, are promoting Modern Methods of Construction as playing a major role in solving our current housing shortages. The Alliance of Canadian Building Officials' Associations supports these efforts through the development of training and resources that will help build a clear and consistent understanding of the regulatory requirements that will allow these methods to be employed.

Factory construction can provide several practical advantages, including protection from weather, more controlled sequencing of trades, reduced material waste, improved recycling opportunities, and more consistent quality control. Building officials and AHJs are often asked to assess projects where construction occurs at multiple locations, where certification labels are present, and where the applicable regulatory pathway is not always clear.

This guide is intended to be a valuable tool for the building official community to facilitate the efficient utilization of these Modern Methods of Construction in a manner that will maintain the protections Canadian homeowners have come to expect.

1.3 How to Use This Guide

This guide has been developed to assist AHJs and Building Officials in navigating the regulatory framework for factory-constructed buildings, modules, and panels intended for use as housing in Canada. The document provides a national overview of how manufactured and modular housing is addressed within the NBC and applicable CSA standards, with selected examples of provincial and municipal variations. Users may find it helpful to approach the document as follows:

- **Section 2.0** and **Section 3.0** provide foundational information on definitions and the regulatory framework relevant to manufactured and modular housing.
- **Section 4.0** outlines the role and limitations of applicable CSA standards.
- **Section 5.0** focuses on roles and responsibilities, including the distinction between factory-certified work and site-specific requirements.
- **Section 6.0** addresses compliance, including document and plan examination, inspection approaches, occupancy, and permit closeout.
- **Section 7.0** and **Section 8.0** highlight variations in regulatory approaches and identify areas where additional judgment or supporting documentation may be required.

2.0 DEFINITIONS AND TERMINOLOGY

Factory-constructed housing uses terms that are often applied differently across codes, standards, manufacturers, regulators, and the public. For example, the terms “manufactured home,” “mobile home,” “modular building,” “prefabricated building,” and “factory-built housing” are sometimes used interchangeably, even though they may have different meanings under the applicable building code, local by-law, CSA standard, or certification program.

Unless otherwise noted, the definitions in this section are written in plain language for this guide, or are those included in CSA Z252:23. These definitions are intended to explain how the terms are generally used in the context of factory-constructed housing.

Where a term is defined in the applicable building code, regulation, or CSA standard, that definition should be used for the purpose of permit review, inspection, and enforcement in that jurisdiction.

Applicable building code – The building code in force in the jurisdiction where the building will be located, including applicable provincial, territorial, municipal, or local amendments.

Authority having jurisdiction (AHJ) – The authority responsible for administering and enforcing the building code that applies in the jurisdiction where the building will be located.

Certification – Confirmation by an accredited certification body that a product, process, system, building, module, or panel complies with the requirements identified in the applicable certification program.

Certification body¹ – An organization accredited to certify products, processes, or services in specific areas of competence.

Component¹ – An element manufactured as an independent unit, subsystem, or sub-assembly that can be joined or used together with other elements to form a building or module in a building.

Factory¹ – A manufacturing facility that provides protection of construction materials, components, equipment, and products against adverse environmental effects during fabrication and storage.

Factory-constructed building – A building that is partly or fully constructed in a factory before being transported to the final building site. This includes manufactured homes, modular buildings, prefabricated buildings, prefabricated modules, and prefabricated panels.

Manufactured home¹ – A single- or multi-section, one-storey dwelling that is designed and constructed for year-round occupancy, constructed in a factory, transported to the installation site, and ready for occupancy on completion of setup in accordance with the manufacturer's installation instructions.

Manufacturer¹ – The company that primarily engages in the transformation of materials or substances into new products.

Mateline¹ – The location or joint where two modules meet.

Module¹ – A Portion of a building constructed at an off-site factory and transported to its final location.

Modular building¹ – A building that is wholly or in part constructed of modules.

Modular construction¹ – A process that refers to the construction of the building or a part of it at an off-site factory. Modules are then shipped to their final location and then assembled and integrated with other on-site components using a combination of construction processes to form a complete building.

¹ CSA Z252:23 Definition

Panel/Panelized - A form of factory construction where flat building panels, such as wall, floor, or roof panels, are manufactured off-site and assembled into a building at the final installation site.

Off-site¹ – The location(s) away from the final building location where module(s) are constructed, typically a factory that supports rapid production of a structure.

On-site¹ – The final building location where the completed modules are transported to be installed, finished, and commissioned.

Prefabricated building¹ – A building partially or fully constructed in a factory.

Prefabricated panel¹ – An open or closed planar subassembly constructed in a factory and designed for use as an integral part of a building.

Prefabricated module¹ – An open or closed non-planar subassembly constructed in a factory and designed for use as an integral part of a building.

Quality program¹ – The procedures and activities implemented to achieve a quality system.

Quality system¹ – The documented procedures and organizational structure established to ensure the compliance of a product or services within specified requirements and to provide evidence of such compliance.

3.0 REGULATORY FRAMEWORK

3.1 NBC Application

The National Building Code of Canada (NBC) establishes minimum requirements for the design and construction of buildings related to health, safety, accessibility, protection of buildings from fire or structural damage, and the protection of the environment, and applies to both site-built and factory-constructed buildings.

This principle is fundamental to the regulation of factory-constructed buildings used as housing. Regardless of where construction occurs, buildings are required to comply with the applicable building code of the jurisdiction where they are to be installed.

The following sections provide background on the development, structure, and application of the NBC to support this understanding.

3.1.1 DETERMINATION OF THE APPLICABLE BUILDING CODE

The Constitution Act (formerly the British North America Act) delegates the responsibility of building regulation to the provinces and territories in Canada. Most provinces and territories adopt and/or adapt the NBC in some form as their applicable provincial regulation for the design and construction of buildings.

The extent of NBC adoption on a province/territory basis is detailed in **Table 1** and **Table 2** in Error! Reference source not found..

3.1.2 WHAT IS A BUILDING

The NBC defines a building as [Division A, Sentence 1.4.1.2.(1)]:

any structure used or intended for supporting or sheltering any use or occupancy.

The NBC does not define the term ‘structure’, but occupancy is defined as [Division A, Sentence 1.4.1.2.(1)]:

the use or intended use of a building or part thereof for the shelter or support of persons, animals or property.

The definition for “building” is purposely vague to be broadly applicable to structures that are clearly buildings, and those that may not normally be considered a building but may pose a danger to the public. Some delineation is provided in the National Fire Code of Canada (NFC), which distinguishes between buildings and facilities by noting that [Explanatory Note to Sentence 1.1.1.1.(1)]:

the term “facilities” is used in its broadest sense to include all premises that are not included in the definition of “building” in this Code, such as outdoor and underground areas, structures and equipment. Such “facilities” are often associated with storage, distribution and manufacturing activities.

This explanatory note suggests that some structures are not considered to be buildings. Additional examples are provided in the Guide to Part 3 of the 1995 NBC, which notes that a transmission tower, service tunnel, pedestrian bridge, walkway, dam or retaining wall may not be considered a building.

The term “building” is used by the NBC to define the “unit of control” upon which the application of regulations is delineated, and assumes adequate separation of adjacent buildings either spatially or by means of a firewall, which is defined to mean:

a type of fire separation of noncombustible construction that subdivides a building or separates adjoining buildings to resist the spread of fire and that has a fire-resistance rating as prescribed in this Code and has structural stability to remain intact under fire conditions for the required fire-rated time.

Thus, the vague definition of “building” is intended to apply the Building Codes to as many structures as possible.

Factory-constructed buildings, modules, and panels fall within this definition and are therefore subject to the same building code requirements as site-built construction. The location of construction, whether in a factory or on-site, does not change the application of the Code, but may affect how Code compliance is demonstrated.

3.2 CSA Standards

Standards are documents developed through a consensus-based process to establish common requirements, procedures, test methods, or guidance for products, systems, materials, services, or construction practices. In Canada, CSA Group publishes a wide range of standards used in the design, construction, certification, and approval of buildings and building components.

A CSA standard is not automatically a legal requirement simply because it exists. A standard becomes enforceable when it is referenced in the applicable building code, adopted by provincial or territorial regulation, required by another authority, or used as part of an accepted compliance or certification pathway.

Where construction occurs in a factory, compliance with the NBC or provincial/territorial codes cannot always be verified through traditional site inspection, as many building elements are concealed prior to delivery to the installation site. To address this limitation, certification processes and standards have been developed by CSA to support the confirmation of compliance with the applicable building code for factory-constructed buildings, modules, and panels.

Some CSA standards cover specific technical or construction requirements related to the design and installation of factory-constructed buildings. These include requirements for structural systems, foundations, or installation conditions that depend on the building's characteristics and intended use. Examples include:

- CSA Z240 MH Series, “Manufactured homes.”
- CSA Z240.10.1, “Site preparation, foundation, and installation of buildings.”
- CSA A660, “Certification of manufacturers of steel building systems.”

There are also CSA standards that address broader processes applicable to factory-constructed buildings, including fabrication, certification, delivery, and guidance on permit approval and inspection processes. These standards are generally applicable across a wide range of factory-constructed buildings. Examples include:

- CSA A277, “Procedure for certification of prefabricated buildings, modules, and panels.”
- CSA Z250, “Process for delivery of volumetric modular buildings.”
- CSA Z252, “Volumetric modular construction – Guide to compliance and approval processes.”

These standards are complementary and are often used together. It is important to recognize that no single CSA standard addresses all aspects of factory-constructed buildings, and not all of the standards are adopted by all provinces or territories.

3.3 Relationship Between NBC and CSA Standards

The NBC establishes minimum design and construction requirements for buildings, including factory-constructed buildings, modules, and panels. CSA standards and other referenced standards support those requirements by providing more detailed technical guidance, testing methods, certification procedures, and product requirements. When a standard is referenced in the NBC, it forms part of the Code compliance framework and applies only to the extent required by the applicable NBC provision.

The NBC Preface describes certification as confirmation by an independent organization that a product, process, service, or system meets a regulatory requirement. It explains that certification may involve physical examination, testing as specified in appropriate standards or other normative documents, an initial plant inspection, and/or follow-up unannounced plant inspections. This procedure leads to the issuing of a formal assurance or declaration, by means of a certification mark or certificate, that the product, process, service, or system is in full conformity with specified building code provisions.²

² National Building Code of Canada 2020, Volume 1, “Relationship of the NBC to Standards Development and Conformity Assessment,” “Conformity Assessment.”

4.0 CSA STANDARDS – WHAT THEY DO/DON'T DO

4.1 CSA A277 – Procedure for Factory Certification

CSA A277, “Procedure for certification of prefabricated buildings, modules, and panels,” (CSA A277) establishes a certification procedure for factory-constructed buildings of any occupancy. It is not a building code and does not contain technical design requirements. Rather, it provides a means of verifying that work completed in a factory complies with the applicable building code of the jurisdiction where the building will be installed.

The standard was developed to address a practical regulatory problem: once factory-constructed buildings, modules, and panels are delivered to the site, many concealed components can no longer be readily inspected by the AHJ. CSA A277 addresses this by providing a means to confirm compliance with the applicable building code for assemblies and modules at the factory. In this respect:

CSA A277 addresses:

- certification of the factory quality program,
- certification of the prefabricated product,
- auditing of the factory quality program, and
- in-factory inspection of the prefabricated product.

CSA A277 does not address:

- portions of buildings or services that are not completed in the factory,
- the transport of buildings,
- the erection of factory-constructed buildings, modules, and panels at a building site, or
- damage or modification that occurs after delivery.

When building design depends on site-specific conditions (e.g., limiting distances/spatial separation, environmental loads such as design heating, seismic, wind, rain and snow loads, or servicing requirements), those conditions are required to be accurately reflected in the building's design and fabrication. CSA A277 certification does not verify that the site assumptions used in the design are consistent with actual site conditions.

Although CSA A277 is not currently an acceptable solution under the NBC, it is discussed in Appendix A, A-1.1.1.1.(2), which notes that the Code applies equally to site-built and factory-constructed buildings and recognizes CSA A277 as a means of providing AHJs with some assurance that the concealed components do not require re-inspection on site. The AHJ may reasonably infer that a factory-constructed building with a valid CSA A277 certification label indicating code compliance is a credible basis for accepting concealed factory work without re-inspection, while final acceptance of the building and on-site work remains under the AHJ's jurisdiction.

4.2 CSA Z240 MH Series – Manufactured Homes

The CSA Z240 MH Series is a set of standards for manufactured homes that functions like a building code but is separate from the NBC and may differ from it in some respects. The CSA Z240 MH series applies only to one-storey manufactured homes and is therefore limited in scope. Although historically associated with what were commonly referred to as “mobile homes,” both the standards and the homes

built to the CSA Z240 MH Series have evolved considerably over time, including improvements in technical performance, energy efficiency, transportation, and installation. For that reason, the term “manufactured home” is now generally accepted.

The CSA Z240 MH Series includes:

- CSA Z240.0.1, “General requirements for manufactured homes.”
- CSA Z240.1.1, “Vehicular requirements for manufactured homes.”
- CSA Z240.2.1, “Technical requirements for manufactured homes.”
- CSA Z240.4.1, “Installation requirements for oil- and gas-fired appliances in manufactured homes.”

The standards in the MH series set technical requirements for manufactured homes. Some reference the NBC, while others provide alternative requirements to those of the NBC. The series also refers to CSA A277 for certain marking and installation requirements. Manufactured homes built to the CSA Z240 MH Series of standards are certified by accredited certification bodies, which issue and affix a label confirming compliance with these standards.

This standard requires that a manufactured home be designed and constructed as a completely integrated structure capable of sustaining the required design loads and transferring those loads to the foundation system without unsafe deformation or abnormal internal movement. The standard addresses many of the same core objectives for health and safety matters that would be addressed under Part 9 of the NBC for a similar one-storey dwelling, including:

- structural strength and rigidity, including resistance to vibration and deflection,
- protection against corrosion, decay, insects, and similar destructive forces,
- protection against the hazards of fire,
- safety in use,
- resistance to unwanted entry,
- indoor environmental conditions,
- sanitation, and
- thermal, HVAC, and plumbing system performance, including measures intended to avoid excessive energy use.

The standard also makes clear that where a matter is not covered by the standard, the manufactured home is required to comply with the NBC. In addition, where a material, equipment, system, or method of construction is not specifically covered by either the NBC or the standard, it is required to achieve at least the minimum level of performance contemplated by the standard, demonstrated through accepted engineering design for its intended use, or by testing that simulates normal service conditions.

CSA Z240 MH Series addresses:

- technical requirements for manufactured homes, and
- matters specific to manufactured homes, including some issues related to transport over roads.

CSA Z240 MH Series does not:

- serve as a generally referenced acceptable solution under the NBC, or
- on its own, establish compliance with the applicable provincial, territorial, or local building code.

4.3 Other CSA Standards and Guides

4.3.1 CSA Z240.10.1 — SITE PREPARATION, FOUNDATION, AND INSTALLATION OF BUILDINGS

CSA Z240.10.1 addresses site preparation, surface or permanent foundations, anchorage, and installation of certain buildings, including the connection of modules in multi-section prefabricated buildings. It is typically associated with single-storey or low-rise applications and is relevant where buildings are supported on surface foundations or otherwise rely on the deformation-resistance approach referenced in CSA Z240.2.1 (part of Z240 MH Series).

The NBC Appendix Note A-1.1.1.1.(2) identifies CSA Z240.10.1 as a referenced standard for surface foundations where buildings, not just houses, comply with the deformation resistance test in CSA Z240.2.1. It is not part of the CSA Z240 MH Series, even though the numbering is similar.

4.3.2 CSA Z250 — PROCESS FOR DELIVERY OF VOLUMETRIC MODULAR BUILDINGS

CSA Z250 addresses the processes and procedures that occur before and after factory construction, including design coordination, approvals, logistics, transportation, storage, site work, lifting, placement, installation, finishing, commissioning, and handover of volumetric modular buildings. It is intended to complement CSA A277, which addresses in-factory certification, by providing continuity between factory-certified work and on-site completion. Therefore, CSA Z250 does not address in-factory certification itself, but it is intended to facilitate module delivery, handling, installation, and completion in accordance with the requirements applicable at the building's installation location.

4.3.3 CSA Z252 — VOLUMETRIC MODULAR CONSTRUCTION - GUIDE TO COMPLIANCE AND APPROVAL PROCESSES

CSA Z252 is a guidance document intended to support the inspection, review, and approval of modular construction projects. It supplements CSA A277 and CSA Z250 and is intended to provide practical guidance to AHJs on permitting, applicable codes and standards, plan examination, factory certification, and the roles of third-party inspection agencies, as well as considerations for transportation, installation, and on-site inspection.

4.3.4 CSA A660 — CERTIFICATION OF MANUFACTURERS OF STEEL BUILDING SYSTEMS

CSA A660 applies to the certification of manufacturers of steel building systems. Although it is not commonly used for housing, it may be relevant to modular housing projects that use a steel building system, or to steel-framed modular construction within the scope of the standard. CSA A660 establishes a certification process based on audits of a manufacturer's plants, facilities, and quality control procedures, and provides a certificate of design and manufacturing conformance for steel building systems supplied by a certified manufacturer. The standard focuses on the certification of the manufacturer and its production processes, not the final erected structure. Inspection and approval of the completed building in its final installed condition remain under the jurisdiction of the AHJ.

5.0 ROLES AND RESPONSIBILITIES

5.1 Manufacturers

In a factory-constructed housing context, the manufacturer is primarily responsible for the work completed in the factory and for maintaining the systems and controls required to support certification.

Manufacturers are generally responsible for:

- constructing the building, module, or panel in accordance with the certified design and applicable building code and standards,
- implementing and maintaining the certified factory quality assurance program,
- preparing and applying required certification labels, markings, and specification sheets, and
- providing instructions and documentation for post-factory handling, connections, and delineation of on-site work.

The manufacturer's role extends beyond fabrication alone. It includes maintaining the documented procedures, quality controls, and supporting information needed for certification, inspection, transport, and installation.

5.2 Certification Bodies

Certification bodies provide independent review and oversight that support AHJ reliance on certified factory work that cannot be readily inspected on-site.

In a factory-constructed building context, certification bodies are generally responsible for:

- inspection of factory-constructed buildings, modules, or panels,
- auditing and surveillance of factory quality assurance programs,
- review of documentation and supporting certification records,
- verification that products are certified in accordance with the applicable standard and identified design scope, and
- issuance of certification labels, markings, or certificates within the applicable scope of accreditation.

5.3 Authorities Having Jurisdiction (AHJs)

Authorities Having Jurisdiction (AHJs) are responsible for administering and enforcing the building code that is applicable to the jurisdiction where the building will be located. This responsibility is tied to the final building site, not the location where the building, module, or panel was manufactured.

In the context of factory-constructed buildings, the AHJ's role is not displaced by factory certification. Rather, certification supports the AHJ's review by providing information about the work completed in the factory.

AHJs are generally responsible for:

- determining how certification will be applied within the jurisdiction,
- review of permit applications, drawings, and supporting documentation,

- determining that the proposed building design complies with the applicable building code, applicable law, zoning, grading, site servicing, etc.
- issuance of building permits,
- where certification is unavailable, not accepted, or does not cover the full scope of work under review, determining the service level for the review, inspection, or approval process for off-site work,
- inspection and approval of on-site work, including foundations, services, installation, and site-specific construction,
- assessing whether site-specific design assumptions, such as climatic data, limiting distance, and servicing conditions, are consistent with actual site conditions, and
- final acceptance of the building, including approval for occupancy.

In practice, a certification label may provide a reasonable basis for accepting certified factory work without re-inspection of concealed components. However, the AHJ should verify if the certification applies, its scope, and any gaps between the certified work and the applicable building code.

6.0 DETERMINING COMPLIANCE

All factory-constructed buildings, modules and panels are required to comply with the applicable building code at the installation site. Factory construction does not change that requirement; it changes how compliance is demonstrated. Where the applicable building code expressly recognizes a CSA standard, compliance with that standard may constitute an acceptable solution under Division B. Where it does not, the AHJ may need to consider other compliance pathways, including off-site reviews or, where appropriate, an alternative solution. Early engagement with the AHJ is therefore important, particularly where the proposed compliance path is not expressly recognized by the applicable building code.

6.1 Two-Part Compliance Model

Compliance for factory-constructed buildings can be understood as a two-part model:

1. factory construction, and
2. site construction.

Both parts are required to comply with the applicable building code applicable to the installation site, but they are reviewed and inspected differently because some work occurs off-site and may be concealed before delivery.

6.1.1 FACTORY CONSTRUCTION — OFF-SITE WORK

Factory construction includes work completed in a manufacturing facility before the building, module, or panel is transported to the installation site. Modular products may be completed to varying degrees, ranging from partially assembled components to modules with structure, finishes, building services, fixtures, and other systems already installed. However, because much of this work may be concealed before delivery, compliance is required to be verified through certification or off-site review/inspection.

6.1.1.1 Where CSA A277 certification is accepted

When CSA A277 is an acceptable solution under the applicable building code or when the AHJ accepts CSA A277 certification for new factory-constructed buildings, modules, or panels, the review process may be more streamlined. Certification provides a basis for the AHJ to rely on the certified factory work without re-inspection of concealed components, provided the certification applies to the project, the applicable building code, and the installation location.

The AHJ should still verify that:

- the certification applies to the specific project and jurisdiction,
- the certification label, specification sheet, and supporting documents identify the scope of certified work,
- the design complies with the applicable building code and site-specific conditions, and
- on-site work, including foundations, services, connections, and installation, is reviewed and inspected locally.

This approach is consistent with guidance that recognizes CSA A277 certification as a practical and reasonable means for an AHJ to verify factory-completed work is in compliance with the applicable building code.

6.1.1.2 Where CSA A277 certification is not accepted or is not provided

When CSA A277 certification is unavailable, not accepted by the AHJ, or does not cover the full scope of work under review, the AHJ will need to establish how the factory work will be reviewed or inspected before construction is concealed or the building is transported.

NBC Division C, Article 2.2.7.3. recognizes this issue and requires off-site reviews where a building or component is assembled away from the building site in a manner that prevents review on site:

Where a building or component of a building is assembled off the building site in such a manner that it cannot be reviewed on site, off-site reviews shall be provided to determine compliance with this Code.

Off-site reviews may include inspections of factory-completed work, carried out by the AHJ, a qualified third-party inspection agency, a registered professional, or another reviewer acceptable to the AHJ.

In such cases, the review should clearly identify:

- the applicable building code and compliance path,
- the scope of factory work,
- the inspection stages required before work is covered or concealed,
- the party responsible for each review,
- the documentation required prior to delivery and installation.

Early engagement, coordination, and communication are important because factory construction can proceed quickly, and key elements may no longer be visible once the building arrives on site.

6.1.2 SITE CONSTRUCTION — LOCALLY REGULATED WORK

Site construction is work completed at the installation site. This may include foundations, anchorage, site services, module-to-module connections, utility connections, exterior completion, interior finishes, and any other work not completed within the certified factory scope under AHJ jurisdiction.

Factory certification may support acceptance of the work that is under AHJ jurisdiction and completed off-site, but site construction remains subject to local AHJ review, inspection, and approval.

6.2 What is Considered “Certified”?

For the purposes of CSA A277, certification applies to the work completed within the certified manufacturing facility and within the scope of the approved certification program. As discussed in **Section 5.2** of this guide, certification is carried out by an independent certification body and is supported by factory quality assurance, surveillance, in-factory inspection, labelling, and supporting documentation.

A CSA A277 label does not certify the building as a completed site installation. Rather, it identifies that the building, module, panel, or component has been manufactured under a certification program and in accordance with the applicable codes, standards, and specification sheet for that product. For AHJs, the label and specification sheet are key tools for understanding what has been certified and what remains outside the certified factory scope.

Typical factory-completed work certified to CSA A277 includes:

- concealed and covered assemblies completed in the factory,
- structural elements and assemblies constructed under the certified design,

- factory-installed plumbing, electrical, mechanical, or HVAC elements,
- factory-installed insulation, air/vapour barriers, cladding, interior finishes, and fire separations, and

other building components, systems, or assemblies identified on the specification sheet. A certification label, as shown in **Figure 1**, is required to identify:

- the certification body,
- the serial number, or product code and part number,
- the applicable codes and/or standards with which the product complies, and
- the specification sheet for the building, module, or panel.

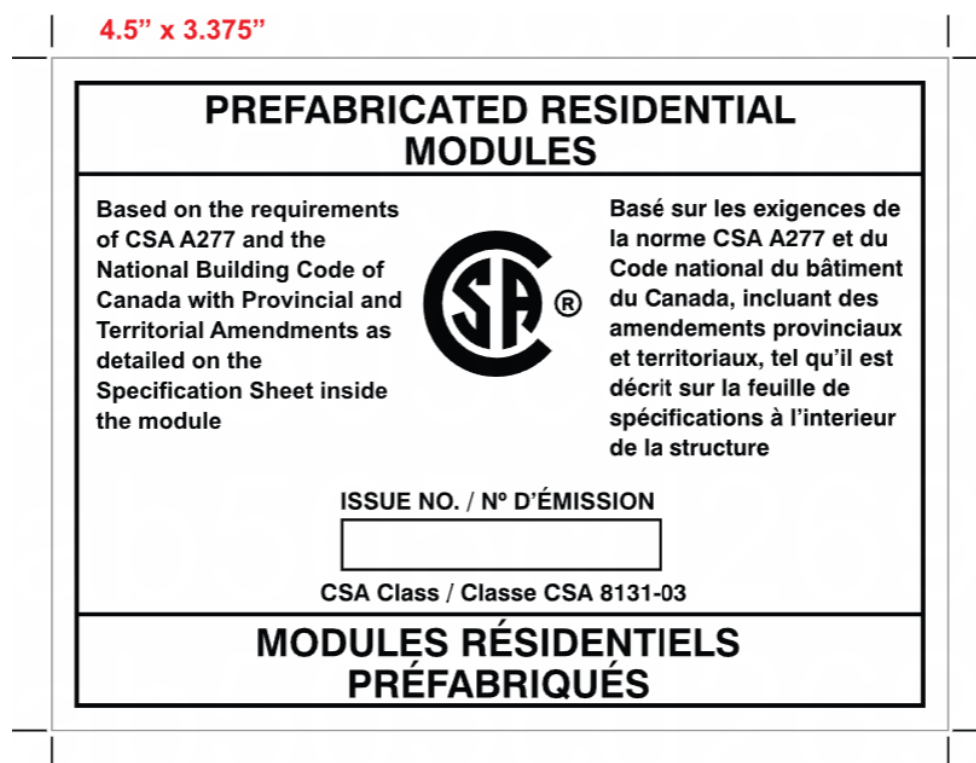


Figure 1: Example certification label

A specification sheet provides more detailed technical information and functions much like a code data summary for the certified product. It is required to be located where it is readily visible when the building is complete, such as at the electrical panel, mechanical area, utility room, closet, or another conspicuous location. A sample module specification sheet is shown in **Figure 2**.

Information required on a specification sheet includes⁴:

- all applicable codes/regulations that are achieved by the product at the building location,

³ CSA Z252:23, *Volumetric modular construction — Guide to compliance and approval processes*, Clause 8.3.5, reproduced for reference.

⁴ CSA Z252:23, *Volumetric modular construction — Guide to compliance and approval processes*, Clause 8.3.6.

- assumed loads for wind, snow, and earthquake, and climate zone, and
- energy performance levels of building envelope components and assemblies.

The comprehensive list of specification sheet information is found in CSA A277, Clause 7.4.2.

Where multiple modules of the same type are used in a single building, one specification sheet may be sufficient if it clearly applies to the relevant modules and is acceptable to the certification body and AHJ.

DO NOT REMOVE / NE PAS ENLEVER			
PREFABRICATED MODULES SPECIFICATIONS NAMEPLATE			
Plaque signalétique technique pour modules préfabriqués			
MANUFACTURER/FABRICANT _____		DATE OF MANUFACTURE _____	
FACTORY ADDRESS / ADRESSE DE L'USINE _____		DATE DE FABRICATION _____	
MODEL NO./N° DE MODÈLE _____	SERIAL NO./N° DE SÉRIE _____	CSA LABEL NO./ÉTIQUETTE CSA N° _____	
PROVINCE OF DESTINATION/PROVINCE DE DESTINATION _____		ALBERTA PROVINCIAL LABEL NO./ _____	
ÉTIQUETTE PROVINCIALE DE L'ALBERTA N° _____			
THIS MODULE IS BUILT IN COMPLIANCE WITH PART _____ OF THE _____		BUILDING CODE, 20 _____ EDITION/	
CE MODULE EST CONSTRUIT CONFORMÉMENT À LA PARTIE _____ DU CODÉ DU BÂTIMENT _____		ÉDITION 20 _____	
STRUCTURE SYSTEM/SYSTÈME DE STRUCTURE _____			
DWG. NOS./DESSINS N°S _____			
GROUND SNOW LOAD _____ kPa	ROOF DESIGN SNOW LOAD _____ kPa	FLOOR LOAD _____ kPa	
CHARGE DE NEIGE AU SOL _____ kPa	CHARGE DE NEIGE CALCULÉE AU TOIT _____ kPa	CHARGE AU PLANCHER _____ kPa	
ATTIC LOAD _____ kPa	WIND LOAD (1/50) _____ kPa	SEISMIC DATA Sa(0.2) _____ kPa	
CHARGE AU GRENIER _____ kPa	CHARGE DE VENT (1/50) _____ kPa	DONNÉES SISMQUES Sa(0.2) _____ kPa	
PLUMBING SYSTEM / SYSTÈME DE PLOMBERIE _____			
DWG. NOS./DESSINS N°S _____			
TYPE OF DWV SYSTEM _____		TYPE OF POTABLE WATER SYSTEM _____	
TYPE DE SYSTÈME D'ÉVACUATION, DE VENTILATION ET D'ÉGOÛT _____		TYPE DE SYSTÈME D'EAU POTABLE _____	
POTABLE WATER TESTED AT 700 kPa FOR _____ HOURS		SYSTEME D'EAU POTABLE ÉPROUVÉ À 700 KPa PENDANT _____ HEURES	
ELECTRICAL SYSTEM / SYSTÈME ÉLECTRIQUE _____			
DWG. NOS./DESSINS N°S _____			
VOLTS (AC), _____ VOLTS (DC), 60 Hz., _____ AMPÈRES		NO. OF ENERGIZED CIRCUITS _____	
		N° DE CIRCUITS SOUS TENSION _____	
HEATING SYSTEM / SYSTÈME DE CHAUFFAGE _____			
DWG. NOS./DESSINS N°S _____			
TYPE OF HEATING : OIL _____ GAS _____		FIELD INSTALLED/INSTALLÉ SUR SITE _____	
TYPE DE CHAUFFAGE : HUILE _____ GAZ _____		ELECTRICAL _____ FACTORY INSTALLED _____	
		ÉLECTRICITÉ _____ INSTALLÉ EN USINE _____	
THIS MODULE IS DESIGNED TO MEET HEAT LOSS REQUIREMENTS _____			
CETTE MODULE EST CONÇUE POUR SATISFAIRE AUX PRESCRIPTIONS _____			
DE PERTE DE CHALEUR À LA TEMPÉRATURE INTÉRIEURE MOYENNE DE _____			
CETTE MODULE EST CONÇUE POUR SATISFAIRE AUX PRESCRIPTIONS _____			
DE PERTE DE CHALEUR À LA TEMPÉRATURE EXTERIEURE MOYENNE DE _____			
DESIGN HEAT LOSS OF BUILDING _____ W/BTU/H			
PERTE DE CHALEUR CALCULÉE DE LA BÂTIMENT _____ W/BTU/H			
FURNACE OUTPUT _____ W/BTU/H			
DÉBIT CALORIFIQUE DE LA FOURNAISE _____ W/BTU/H			
THERMAL INSULATION _____			
TOIT : R _____ (isolant seulement), valeurs RSI _____			
CEILING : R _____ (isolant seulement), valeurs RSI _____			
WALLS : R _____ (isolant seulement), valeurs RSI _____			
FLOOR : R _____ (isolant seulement), valeurs RSI _____			
PLANCHER : R _____ (isolant seulement), valeurs RSI _____			
HAS TRADE-OFFS BEEN USED TO ESTABLISH REQUIRED THERMAL RESISTANCE PERFORMANCE? YES ☐ NO ☐			
DES COMPROMIS ONT-ILS ÉTÉ FAITS POUR ÉTABLIR LE RENDEMENT DE LA RÉSISTANCE THERMIQUE REQUIS? OUI ☐ NON ☐			
ASSEMBLY OR ASSEMBLIES WHERE TRADE-OFFS HAVE BEEN MADE: _____			
ASSEMBLAGE OU ASSEMBLAGES OÙ DES COMPROMIS ONT-ÉTÉ FAITS: _____			
THE AREAS AFFECTED IN M²: _____ LES ZONES TOUCHÉES EN M²: _____			
RSI VALUES FOR AFFECTED AREAS _____ VALEURS RSI POUR LES ZONES TOUCHÉES _____			
OVERALL THERMAL TRANSMITTANCE OR ENERGY RATING FOR WINDOWS AND DOORS: _____			
TRANSMISSION THERMIQUE GLOBALE OU COTE ÉNERGÉTIQUE POUR FENÊTRES ET PORTES: _____			
OVERALL THERMAL TRANSMITTANCE FOR SKYLIGHTS: _____			
TRANSMISSION THERMIQUE GLOBALE POUR LANTERNEAUX: _____			
IS CLADDING ASSEMBLY CONSTRUCTED WITH A CAPILLARY BREAK? YES ☐ NO ☐			
L'ENSEMBLE DU REVÊTEMENT EST-IL CONSTRUIT AVEC UNE COUPEURE CAPILLAIRE? OUI ☐ NON ☐			
HAS A SPRINKLER SYSTEM BEEN INSTALLED IN THE FACTORY? YES ☐ NO ☐			
UN SYSTÈME DE GICLÉURS A-T-IL ÉTÉ INSTALLÉ DANS L'USINE? OUI ☐ NON ☐			
HAS THE MODULE BEEN TESTED AND EVALUATED IN ACCORDANCE WITH THE DEFORMATION RESISTANCE TEST IN CSA Z240.2.1 AND COMPLIES WITH THE ACCEPTANCE CRITERIA FOR DEFORMATION RESISTANCE? YES ☐ NO ☐			
LE MODULE A-T-IL SUBI DES ESSAIS ET DES ÉVALUATIONS CONFORMÉMENT À L'ESSAI DE RÉSISTANCE À LA DÉFORMATION PRÉCISÉ DANS LA NORME CSA Z240.2.1 ET AUX CRITÈRES D'ACCEPTATION POUR LA RÉSISTANCE À LA DÉFORMATION? OUI ☐ NON ☐			
THE FOLLOWING LIST OF COMPONENTS, ASSEMBLIES AND SYSTEMS WILL BE COMPLETED ON SITE AND ARE SUBJECT TO INSPECTION AND PERMITS BY THE LOCAL AUTHORITY HAVING JURISDICTION: _____			
LA LISTE SUIVANTE DES COMPOSANTS, ASSEMBLAGES ET SYSTÈMES SERA REMPLIE SUR LE SITE ET CEUX-CI SONT SUJETS À UNE INSPECTION ET AUX PERMIS DE L'AUTORITÉ COMPÉTENTE LOCALE: _____			
NOTES:			
1. INTERCONNECTION OF MODULES OR COMPONENTS ON SITE, COMPLETION OF STRUCTURAL, PLUMBING, ELECTRICAL AND HEATING SYSTEMS ON SITE, AND CONNECTION TO SERVICES ARE OUTSIDE THE SCOPE OF CSA CERTIFICATION, THEY MUST BE FINISHED AS SPECIFIED IN THE ELECTRICAL, PLUMBING, MECHANICAL AND BUILDING DRAWINGS AND ARE SUBJECT TO PERMITS AND INSPECTIONS BY THE LOCAL AUTHORITIES HAVING JURISDICTION.			
L'INTERCONNEXION DES MODULES OU DES COMPOSANTS SUR SITE, L'ACHÈVEMENT DES SYSTÈMES STRUCTURAUX ET ÉLECTRIQUES, DE PLOMBERIE ET DE CHAUFFAGE SUR SITE ET LE BRANCHEMENT AUX INSTALLATIONS TECHNIQUES SONT EXCLUS DU CHAMP D'APPLICATION DE LA CERTIFICATION CSA.			
ILS DOIVENT ÊTRE TERMINÉS TEL QU'IL EST SPÉCIFIÉ SUR LES DESSINS D'ÉLECTRICITÉ, DE PLOMBERIE, DE BÂTIMENTS ET MÉCANIQUES ET SONT ASSUJETTIS AUX PERMIS ET AUX INSPECTIONS DES AUTORITÉS COMPÉTENTES LOCALES.			
2. THIS CERTIFICATION IS AS NOTED ABOVE AND COVERS THE APPLIANCES DESCRIBED BELOW ONLY WHEN INSTALLED IN THE FACTORY. CETTE CERTIFICATION EST TELLE QUE NOTÉE CI-DESSUS ET COUVRE LES APPAREILS DÉCRITS CI-DESSUS SEULEMENT LORSQU'ILS SONT INSTALLÉS EN USINE.			
FACTORY INSTALLED APPLIANCES / APPAREILS INSTALLÉS EN USINE			
NOTE: (N/A) MUST BE MARKED IF APPLIANCES ARE NOT INSTALLED / (S/O) DOIT ÊTRE INSCRIT SI LES APPAREILS NE SONT PAS INSTALLÉS			
1. FURNACE	MAKE	MODEL	FUEL (NATURAL GAS, PROPANE, OIL, ELECTRIC)
2. WATER HEATER			COMBUSTIBLE (GAZ NATUREL, PROPANE, HUILE OU ÉLECTRICITÉ)
3. RANGE			
4. WASHER/DRYER			
5. REFRIGERATOR			
6. OTHER			
		(TYPE)	
FORM/FORMULAIRE K3.X.X	MATERIAL/MATÉRIEL #1005173	(REVISED)/(RÉVISÉ) 06/21	ISSUE NO./N° D'ÉMISSION



Figure 2: Example CSA A277 prefabricated modules specification sheet⁵

For AHJs, the key point is that certification should be reviewed together with the label, specification sheet, drawings, and supporting documents.

6.3 AHJ Review – General

AHJ review should focus on the relationship between the certified factory work and the completed building at the installation site. Even where CSA A277 certification is accepted for factory-completed work, the AHJ remains responsible for reviewing the site-specific, locally regulated, and non-certified portions of the project.

Early engagement with the AHJ is particularly important for factory-constructed buildings, modules, or panels. Pre-application discussions can help confirm the applicable compliance path, required documentation, inspection approach, treatment of CSA A277 certification, and whether any alternative solutions or additional reviews are required before fabrication proceeds.

The AHJ review for factory-constructed housing generally includes:

- zoning and applicable law,
- lot grading, drainage, and site servicing,
- foundations, supports, and building anchorage,
- electrical safety requirements, where applicable to the AHJ,
- assembly, placement, and connections completed on site,
- continuity of fire separations, building envelope, and building services at module interfaces,
- damage that occurs during transportation, storage, lifting, placement, or installation,
- final installation, testing, and occupancy requirements.

6.4 Document Submissions

A building permit submission should clearly identify what is completed in the factory, what is intended to be completed on site, and how the completed building will comply with the applicable building code at the installation location. This is particularly important for factory-constructed buildings because design, fabrication, transportation, installation, and final completion may involve different parties, locations, and inspection responsibilities.

Documentation should be sufficient to allow the AHJ to determine:

- the applicable building code, standards, and compliance path,
- whether an acceptable solution or alternative solution compliance path is proposed,
- the scope of certified factory work,
- the scope of site-completed work,

⁵ CSA Z252:23, *Volumetric modular construction — Guide to compliance and approval processes*, Clause 8.3.6, reproduced for reference.

- the parties responsible for each part of the work,
- the inspections, testing, reviews, and verifications required before occupancy.

Documents submitted for review may include, as applicable:

- completed permit application and other municipal forms, as applicable,
- permit drawings for both factory and site-completed work,
- building code analysis, building code data matrix, and/or code report,
- alternative solution proposal, where applicable,
- module schedule or list of modules to be installed,
- certification records, test reports, or supporting documentation,
- scope of work,
- responsibility assignment matrix,
- factory-versus-site scope delineation matrix,
- construction, delivery, and installation schedule,
- modular connection details or connection point schedules,
- details for components, assemblies, or systems to be completed on site,
- additional drawings or documents required by the AHJ for site-specific review.

For more complex projects, a code report, module schedule, responsibility assignment matrix, and scope delineation matrix can be helpful. These documents can clarify which work is factory-certified, which work is site-installed, which party is responsible for demonstrating compliance, and which inspections or reviews are required at each stage of the project.

A connection point schedule can also be useful where structural, mechanical, electrical, plumbing, fire protection, or building envelope systems are completed or joined on-site. These details help the AHJ understand where factory construction ends, where site construction begins, and how continuity will be achieved at module interfaces.

Annex C of CSA Z250 contains an example of a scope of work document that identifies potential roles and responsibilities of various stakeholders. Additionally, CSA Z252 includes useful examples in the Annexes, including a sample Building Code Matrix, a typical content list for a code report, and a scope delineation matrix, which can assist AHJs and applicants in organizing this information.

6.5 Inspection Approaches

Inspection requirements for factory-constructed buildings should, if feasible, be established early in the project, before factory construction, delivery, and installation are underway. The inspection approach will depend on the applicable building code, the jurisdiction's treatment of CSA A277 certification, the scope of certified factory work, and the work that remains to be completed at the installation site.

Where construction occurs in a factory, inspection or review of the off-site work may be carried out through different approaches, depending on the certification pathway and the requirements of the AHJ.

This may include:

- **certification body inspection**, where a certification body reviews the factory quality program, conducts surveillance, and inspects products within the scope of certification,
- **AHJ inspection**, where building officials or their representatives inspect factory work directly, typically for code-related matters that would normally be inspected on-site,
- **third-party inspection**, where a qualified third-party inspector, agency, or professional acceptable to the AHJ performs inspections or reviews on behalf of or in support of the AHJ's review process.

Certification body inspectors and building officials assess similar technical requirements, including compliance with the applicable building code at the installation site. However, their roles differ. Certification body inspectors assess the compliance of the plants and products they certify within the scope of the certification program and at the intended installation locations. AHJ inspectors assess compliance with the issued building permit, site conditions, permit documents, and local inspection requirements. Third-party inspectors acting on behalf of the AHJ may be used when the factory is located outside the jurisdiction, where the AHJ requires additional support, or when specialized review is needed.

Inspection planning should identify the stages of construction that require review, the party responsible for each review, and the points in the process when work is required to remain visible and accessible. This is especially important for connection points, matelines, structural anchorage, mechanical, electrical and plumbing interfaces, fire separations, fire blocking, building envelope continuity, and life safety systems.

Where certification is accepted, site inspections should generally focus on:

- foundations, supports, and anchorage,
- module placement and setting,
- structural connections and connection points,
- continuity and alignment of matelines,
- site-installed mechanical, electrical, plumbing, and fire protection connections,
- continuity of fire separations, fire stopping, and fire blocking,
- continuity of water, air, vapour, thermal, and cladding systems,
- exterior finishes, roofing, and weather protection completed on site,
- interior finishing at matelines and site-built common areas,
- damage that occurs during transportation, storage, lifting, placement, or installation,
- final installation, testing, commissioning, and occupancy readiness.

CSA Z252 emphasizes that connection points and other inspection locations should be identified during design and manufacturing so they remain accessible for on-site inspection or review. It also notes that modules are certified for their intended application and installation location, and that the completed building is required to be reviewed in its final installed condition. Deficiencies identified after delivery should be addressed through an appropriate repair process before final acceptance.

The detailed inspection items will vary by project. A sample site inspection checklist is provided in **Appendix B** of this Guide to help AHJs and building officials identify project-specific inspection considerations. Additionally, CSA Z250 outlines more detailed processes for delivering modular buildings, including placement and setting, installation and finishing, and commissioning.

6.6 Occupancy and Permit Closeout

Occupancy and permit closeout procedures for a factory-constructed building are generally handled in the same way as they would be for a similar housing project constructed using conventional site-built processes.

Closeout documentation may include:

- general review letters or professional field review reports,
- CSA certification documents, including labels and specification sheets,
- verification, commissioning, or testing reports,
- confirmation that deficiencies or transport-related damage have been addressed,
- final inspection reports,
- any occupancy documentation required by the AHJ.

Final occupancy should be based on the completed building in its installed condition, including review of required labels, specification sheets, site connections, verification reports, and final inspections.

6.7 Other Considerations

6.7.1 ACCELERATED BUILD AND PRE-BUILD APPROACHES

Some modular projects use accelerated or pre-build approaches to reduce delivery timelines. These approaches can be useful for repeatable building types, such as housing. However, they require careful coordination since fabrication may begin before all local approvals, site conditions, or permit requirements are known or finalized.

- An accelerated build approach typically involves starting fabrication before the building permit is issued. This may be considered when the design team, manufacturer, and AHJ have engaged early and there is sufficient information to confirm compliance with the applicable building code and applicable law, climatic data, site-specific design criteria, and the certification pathway.
- A pre-build approach typically involves constructing modules before a specific building permit, and sometimes before the final building site is confirmed. This approach carries greater regulatory risk since local zoning, applicable law, climatic data, site servicing, foundation design, limiting distance, and other site-specific requirements may not yet be known.

Where accelerated or pre-build approaches are proposed, early engagement with the AHJ is essential. The AHJ may choose not to accept factory work that proceeds before the applicable code compliance path, site-specific assumptions, and inspection approach have been confirmed. CSA Z250 and CSA Z252 support early planning, communication, role clarity, delivery processes, and coordination between factory and site phases, but they do not eliminate the need for AHJ acceptance of the proposed approach.

6.7.2 USED/RELOCATED MODULAR BUILDINGS OR COMPONENTS

Used or relocated modular buildings or components require additional diligence since the original certification may not reflect the building's current condition, new installation site, or applicable building code edition requirements.

Where certification labels and specification sheets are present, they may assist the AHJ in understanding the original certified scope and design assumptions. Where they are missing, incomplete, or not applicable

to the new location, the AHJ may require additional documentation, engineering review, investigation, testing, or other information to support approvals.

6.7.3 DAMAGED OR ALTERED MODULAR BUILDINGS OR COMPONENTS

Damage or alteration to the building, module, or panel after factory certification may affect the AHJ's ability to rely on the original certification. This includes damage during transportation, storage, lifting, placement, or installation, as well as changes made after certification.

Where damage or alteration affects structural elements, fire separations, building envelope continuity, building services, fire protection, or other regulated systems, the AHJ may require repair details, manufacturer confirmation, certification body input, engineering review, testing, or inspection before acceptance.

The original certification may still be useful, but it should not be automatically relied upon for damaged or altered portions without further review.

6.8 Decision Checklist

Where certification is acceptable to the AHJ as a compliance path, the following checklist may be used when reviewing factory-constructed buildings, modules, and panels.

The AHJ should consider the following:

- Is there a certification label?
- Does the specification sheet match the installation site?
- Does the certification identify the applicable building code or standard?
- Are site-specific assumptions confirmed, including climatic data, foundation design, anchorage, energy efficiency, and other local requirements?
- Was the building, module, or panel damaged, altered, relocated, or modified after leaving the factory?
- What work remains to be reviewed or inspected locally?

Where the answer to any of these questions is unclear, the AHJ may request additional documentation, clarification from the certification body or manufacturer, or supporting review by a qualified professional, as appropriate to the project and the applicable local process.

7.0 PROVINCIAL AND TERRITORIAL VARIATION

Factory-constructed buildings, modules, and panels intended for use as housing are regulated by a national framework of model codes and CSA standards, but the application of that framework may vary by province, territory, and local authority. As discussed in **Section 3.1.1** of this Guide, this variation occurs because the NBC is a model code and does not have legal effect until adopted by the applicable jurisdiction.

The treatment of CSA standards also varies. A CSA standard may be referenced directly in a building code, discussed in an appendix note, adopted through provincial or territorial regulation, required by policy, or accepted by an AHJ as part of a compliance approach. As a result, certification to CSA A277 or labelling to the CSA Z240 MH Series may be treated differently depending on the jurisdiction where the building is installed.

7.1 Why Differences Exist

Building regulations in Canada are implemented at the provincial and territorial level through adoption and modification of the NBC. In practice, this means that the same factory-constructed building may be subject to different technical requirements, administrative requirements, inspection expectations, or certification acceptance pathways depending on where it is installed.

Variation can arise from:

- different editions of the NBC being adopted,
- provincial or territorial amendments to the NBC,
- different treatment of CSA A277 in the applicable code or regulation,
- different treatment of CSA Z240 MH Series manufactured homes,
- local by-laws, zoning, servicing, and applicable law requirements,
- different AHJ policies for accepting factory certification or requiring additional review.

Variations in approaches are important for factory-constructed buildings since design and fabrication may occur in one jurisdiction while installation occurs in another. Certification may provide useful evidence of compliance for work completed in the factory, but the AHJ for the receiving jurisdiction should request confirmation that the building complies with the applicable code, local requirements, and site-specific conditions at the installation location.

7.2 Example: Manitoba Approach

Manitoba offers a clear example of how a province can use a technical bulletin to specify how manufactured and modular housing are regulated under its building code. The bulletin states that manufactured homes are considered buildings under “The Buildings Act” and are required to comply with the Manitoba Building Code (MBC). It also affirms that the MBC covers both site-built and factory-constructed buildings, with local land authorities confirming compliance through permits, inspections, by-laws, policies, and procedures.

From a policy perspective, the published technical bulletin clarifies and builds on the NBC Appendix Note, providing land authorities a clearer path to accept CSA certification under defined circumstances.⁶

The bulletin states that for new homes built in a CSA A277-certified facility, applicable labelling and documentation may be used to support the permitting and inspection process. It also states that Inspection and Technical Services (ITS) considers manufactured homes certified to CSA Z240 MH Series to meet the intent of the MBC, and that land authorities can usually accept them.

At the same time, the bulletin respects the role of local authorities. For ready-to-move (RTM) and modular housing, a land authority may still enforce the MBC by arranging staged inspections during off-site construction and by requiring relevant engineering or technical assessments and documentation. This approach is helpful as it frames certification as a reasonable compliance tool while still providing the local authority with an alternative compliance path when certification is unavailable, not accepted by the land authority, or does not cover the full scope of work under review.

The ITS bulletin addresses four common scenarios:⁷

- **a manufactured home already on site and not being moved**, where the MBC does not apply and no building code enforcement is required, whether or not a certification label is present,
- **a new manufactured home moved to a site**, where CSA A277 labelling and documentation may support permitting and inspections, and CSA Z240 MH Series homes are generally considered to meet the intent of the MBC,
- **a used manufactured home moved to a new site**, where existing CSA labels or documentation may support review, but further engineering or technical reports may be required where labels are missing or compliance is uncertain,
- **a home damaged in transit, damaged on site, or altered**, where further engineering or technical assessments may be required and inspectors may require covered elements to be exposed for inspection.

The bulletin also clarifies that electrical requirements are administered separately, and that First Nations lands under federal jurisdiction are not subject to “The Buildings Act” or the MBC, and that inquiries should be directed to the jurisdiction where the manufactured home will be located.

The Manitoba approach offers AHJs a clear framework: CSA A277 and CSA Z240 support factory-constructed housing acceptance, but land authorities can require inspections, documentation, or reviews. Certification applies to work at the manufacturing facility and doesn't replace the need to address site-specific needs, damage, alterations, electrical approvals, or local permits.

7.3 Other Examples

7.3.1 ONTARIO AND ALBERTA – CSA A277 AS AN ACCEPTABLE SOLUTION

The Alberta Edition of the National Building Code, Division C, Article 2.5.1.1., “Factory-Built Assemblies,” recognizes CSA A277 certification. It states that factory-constructed and other off-site-constructed buildings built after a certain date and certified in accordance with CSA A277 by an SCC-accredited organization are considered to comply with the Code.

⁶ National Building Code of Canada, Division A, Appendix A, Note A-1.1.1.1.(2), “Factory-Constructed Buildings.”

⁷ Manitoba Inspection and Technical Services, *Manufactured Homes under the Manitoba Building Code*, ITS 25-007

In Ontario, the Ontario Building Code (OBC) has provisions for site-assembled and factory-built buildings. OBC Article 9.1.1.9. applies to specific Part 9 buildings and deems them acceptable solutions under Division B when designed and built per CSA Z240.2.1 or CSA A277. Further, OBC Division C, Section 1.12., addresses factory-constructed buildings within the scope of Part 3, and deems them compliant with the OBC when the building is designed and built in accordance with CSA A277. Under Ontario's framework, CSA A277 serves as a recognized compliance path for the factory-built portion of the building.

7.3.2 REGINA, SASKATCHEWAN – LOCAL ADVISORY APPROACH

The City of Regina provides a useful example of a local advisory document that translates the NBC Appendix Note guidance into municipal permit expectations. Regina's Planning and Development Services Advisory identifies manufactured and modular buildings as buildings constructed off-site and transported for installation.⁸

In Regina, permit applicants require a modular building drawing package, site-specific foundation drawings, and a CSA A277 Certificate of Compliance for off-site components that cannot be inspected. It also directs applicants to NBC Appendix Note A-1.1.1.1.(2) and notes that the City accepts CSA A277 certification as part of its local permit process.

This approach is useful since it shows how a municipality can use a short industry advisory to clarify local expectations. It identifies the additional documentation required for modular buildings, while still requiring site-specific foundation design, barrier-free review, energy efficiency documentation, and oversized move permits where applicable.

7.3.3 NOVA SCOTIA – PROVINCIAL GUIDANCE APPROACH

Nova Scotia provincial guidance is similar in purpose to the Manitoba bulletin, but it is more directly tied to definitions in the Nova Scotia Building Code Regulations (NSBCR). The guideline defines "manufactured home," "modular building," and "modular panel" by reference to certification under the CSA Z240 MH Series or CSA A277, and states that the NSBCR apply to manufactured homes, modular buildings, and modular panels.⁹

The Nova Scotia guideline indicates that a modular building or modular panel is required to be certified to CSA A277 to be considered modular under the NSBCR, and that a manufactured home is required to be certified to the CSA Z240 MH Series. It also notes that, where a new manufactured home or modular building is properly certified and marked and moved to a site, it may be considered to comply with the NSBCR, while the AHJ remains responsible for site-specific matters such as spatial separation, seismic design, heating loads, wind, rain and snow loads, foundations, underground plumbing, final grading, and other on-site work.

Like Manitoba, Nova Scotia also addresses used, relocated, altered, and damaged buildings. Where labels and documentation remain in place, they may support the permitting process, but certification applies only to work completed at the manufacturing facility. The guideline notes that buildings cannot be "recertified" once they leave the manufacturing facility, and that renovations, alterations, damage, or unsafe conditions may require further review by the building official.

⁸ City of Regina, Manufactured Homes & Modular Buildings, Planning and Development Services Advisory, February 2026.

⁹ Nova Scotia Growth and Development, Manufactured homes and modular buildings under the NSBCR

8.0 REGULATORY GAPS AND CHALLENGES

8.1 Certification vs Code Compliance Gap

A key regulatory challenge with factory-constructed housing is understanding the difference between certification and compliance with the applicable building code.

Specifically, CSA Z240 MH Series contains technical requirements for manufactured homes and resembles a building code in some respects, but it is not fully aligned with the NBC or every provincial or territorial building code. Some provisions reference building code requirements, some use performance requirements without providing clear quantitative criteria, and some differ from comparable building code provisions. For that reason, a label indicating compliance with the CSA Z240 MH Series should not automatically be treated as confirmation that the home complies with the building code in force at the site where it will be located.

This creates a practical gap for AHJs. In some jurisdictions, CSA Z240 MH Series certification may be accepted as meeting the intent of the applicable building code, while in others it may require additional review, documentation, or an alternative solution path.

For example, Clause 13.1 of CSA Z240 MH Series requires a manufactured home to comply with:

- NBC 9.36., Energy Efficiency,
- building energy efficiency requirements in force at the installation location, or
- Clauses 13.2 to 13.4.¹⁰

However, many jurisdictions have energy efficiency requirements that differ from those in CSA Z240 MH Series. While a manufacturer may comply with Clauses 13.2 to 13.4 for energy efficiency, the resulting energy use outcomes may not align with the jurisdictional expectations.

Therefore, while accepting CSA Z240 MH Series-certified homes may be a reasonable compliance path for AHJs, it is necessary to understand the design assumptions used to manufacture the home to determine whether any additional site-specific or building code-specific requirements remain to be addressed.

8.2 Jurisdictional Challenges

Factory-constructed housing often involves more than one jurisdiction. A building, module, or panel may be designed in one province, manufactured in another province or country, transported through multiple jurisdictions, and installed in a municipality with its own zoning, applicable law, permit, servicing, and inspection requirements. The building code that matters is the code that applies where the building will be located.

Interprovincial movement can pose challenges since provinces and territories do not apply CSA standards consistently. Some jurisdictions reference CSA A277 directly, some rely on appendix guidance, some accept certification through policy or local practice, and some may require additional review or inspection. Local requirements may also differ for zoning, grading, foundations, servicing, energy efficiency, accessibility, and transportation permits. As a result, a building acceptable at one site or in one jurisdiction may not automatically be acceptable in another.

Additionally, overseas fabrication can also present challenges. Modules manufactured outside Canada are required to comply with the applicable Canadian building code, standards, and local requirements at the

¹⁰ CSA Z240 MH Series:16, “Manufacture homes,” Clause 13.1, reproduced for reference.

installation site. If CSA A277 certification is proposed, an accredited certification body is still required to review, inspect, and certify the modules before they are shipped. If certification is unavailable, not accepted, or cannot be completed before delivery, the AHJ may require third-party inspections, engineering documentation, an alternative solution, or other evidence of compliance.

For this reason, early coordination is especially important when factory construction happens outside the AHJ's typical inspection zone.

8.3 Existing/Relocated Buildings

Existing and relocated factory-constructed buildings require further review since initial certification may not align with site conditions or the current edition of the applicable building code. A label or specification sheet helps AHJs understand the scope, assumptions, and standards, but it is not an automatic approval for new locations.

Certification applies only to work completed at the certified manufacturing facility. Once a building, module, or panel leaves the factory, it typically can't be re-certified. Therefore, for a relocated building, the AHJ may need to assess whether the original design assumptions remain applicable to the new site, considering factors such as climate, snow, wind, seismic, foundation, anchorage, service, and energy efficiency requirements. If labels or documents are missing or incomplete, the AHJ may require engineering review, reports, testing, or other documentation before acceptance.

If a building or component is damaged during transit, on-site, or altered after certification, while the original certification may be useful for background, the affected work may require additional review, repair, professional involvement, inspection, or exposing concealed elements before final acceptance.

8.4 AHJ Risk and Decision Making

AHJs often face decisions where certification is clear for some project parts but is incomplete or uncertain for others. The main risk is accepting certification for work not covered by the certification or re-reviewing already certified work. A good approach is to assess the certification's scope, identify what's outside it, and document the basis for acceptance or requesting more info.

Certification may generally be accepted as part of the AHJ's review where:

- the certification body is accredited or otherwise acceptable to the AHJ,
- the label, certificate, and specification sheet are available and apply to the specific building, module, or panel,
- the certification identifies the applicable building code/standards,
- the certified scope is clear,
- the building has not been damaged, altered, or relocated in a way that affects the certified work,
- the site-specific assumptions used in the design are consistent with the actual site conditions, and
- site-completed work remains subject to local review and inspection.

Additional information should generally be requested where:

- certification is unavailable, missing, incomplete, or not acceptable to the AHJ,
- the label or specification sheet does not clearly apply to the project or installation site,
- the building was certified to a standard that is not recognized in the jurisdiction,

- the certification does not cover the full scope of work under review,
- the project relies on CSA Z240 MH Series certification, but the AHJ determines that the standard does not address a local condition,
- site-specific design assumptions are missing, unclear, or inconsistent with actual site conditions,
- factory-completed work was concealed before an accepted inspection or review could occur,
- the building, module, or panel has been damaged, altered, or relocated,
- the building was manufactured outside Canada, and Canadian certification or inspection records are incomplete, or
- the AHJ requests professional review, testing, or third-party inspection to support a decision.

Decisions around certification should be proportionate to the project, the level of risk, the clarity of the documentation, and the extent to which the certification applies to the work under review. Where certification provides a clear and reasonable path for accepting factory-constructed buildings, modules, and panels, the AHJ may then focus its review on site-specific matters, installation, connections, services, damage, and final occupancy. Where certification does not provide that basis, the AHJ may require additional documentation, inspections, testing, professional review, or an alternative solution before accepting the work.

9.0 CONCLUSION

Factory-constructed housing, including manufactured homes, modular buildings, modules, and panels, remains subject to the applicable building code in the jurisdiction where the building will be located. The fact that some or all construction occurs in a factory does not change this requirement, but it does affect how compliance is reviewed, documented, and accepted.

CSA standards and certification programs provide important tools for supporting the review and acceptance of factory-completed work. In particular, certification can provide a reasonable basis for AHJs to rely on work completed in a certified factory where that work cannot readily be inspected after delivery. However, certification does not replace the AHJ's authority or responsibility for administering and enforcing the applicable building code at the final building site.

Clear separation between factory-completed work and site-completed work is essential. Project documentation should identify what has been certified, what remains subject to local review and inspection, and what site-specific assumptions have been used in the design. This includes matters such as foundations, anchorage, servicing, climatic data, energy efficiency, spatial separation, module connections, damage, alterations, and final installation.

A consistent approach to factory-constructed housing depends on early coordination, clear documentation, and a shared understanding of the roles of manufacturers, certification bodies, and AHJs. Where roles are clearly defined, certification can support an efficient approval process while maintaining the regulatory oversight required to meet the objectives of the applicable building code.

Applicable Building Codes for Provinces and Territories



APPLICABLE BUILDING CODES

Table 1: Provinces and Territories that adopt the NBC and NFC.

Province/Territory	Extent of Adoption
New Brunswick	Province-wide adoption of the NBC and NFC with some modifications and additions.
Nova Scotia	
Manitoba	
Saskatchewan	
Newfoundland and Labrador	Province-wide adoption of the NBC and NFC, except aspects pertaining to means of egress and to one- and two-family dwellings within Group C in Part 9.
Northwest Territories	Territory-wide adoption of the NBC and NFC with some modifications and additions.
Nunavut	
Yukon	
Prince Edward Island	Province-wide fire code not based on the NFC. Major municipalities adopt the NBC

Table 2: Provinces that Publish Their Own Codes Based on the NBC AND NFC.

Province/Territory	Extent of Adoption
Alberta	Province-wide building and fire codes that are substantially the same as the national model codes with variations that are primarily additions.
British Columbia	
Ontario	Province-wide building and fire codes based on the national model codes, but with significant variations in content and scope. The Ontario Fire Code, in particular, is significantly different from the NFC.
Quebec	Province-wide building code that is substantially the same as the NBC. Major municipalities adopt the NFC.

Suggested Site Inspections



INSPECTIONS

1) Site servicing and foundations

- ☐ Footings and foundations,
- ☐ Anchorage,
- ☐ Module-to-foundation connections,
- ☐ Grading, drainage, and service penetrations.
- ☐ Setting, placement, and structural connections
- ☐ Module placement and alignment,
- ☐ Plumbness and tolerances,
- ☐ Structural connection points,
- ☐ Mateline continuity,
- ☐ Support conditions before placement.

2) Building envelope and exterior completion

- ☐ Water, air, and vapour barriers,
- ☐ Exterior insulation,
- ☐ Fire-resistance ratings, where applicable,
- ☐ Cladding,
- ☐ Mateline façade work,
- ☐ Roofing,
- ☐ Gutters, downspouts, rainwater leaders, and flashing.
- ☐ Interior finishing and site-built areas
- ☐ Mateline trim, paint, flooring, doors, and finishes,
- ☐ Stairs, corridors, common areas, and other site-built work,
- ☐ Fire shafts and separations,
- ☐ Elevating devices,
- ☐ Accessibility signage and required building signage.

3) Mechanical systems

- ☐ Continuity of HVAC systems through matelines,
- ☐ Duct connections,
- ☐ Diffusers and grilles,
- ☐ Common area HVAC installations,
- ☐ Access to service connections.
- ☐ Electrical and communication systems
- ☐ Continuity through matelines,
- ☐ Emergency lighting,
- ☐ Exterior lighting,
- ☐ Site-installed electrical and communication systems.



4) Plumbing systems

- ☐ Continuity through matelines,
- ☐ Connections to domestic water mains and unit stubs,
- ☐ DWV and sanitary stack connections,
- ☐ Roof penetrations,
- ☐ Storm drainage systems,
- ☐ Hydronic connections,
- ☐ Pipe insulation,
- ☐ Backflow and backwater devices,
- ☐ Pressure testing.

5) Fire protection and life safety systems

- ☐ Continuity of fire alarm systems through matelines,
- ☐ Sprinkler and standpipe connections,
- ☐ Fire department connections,
- ☐ Fire detectors, smoke alarms, co alarms, speakers, and strobes completed on site,
- ☐ Annunciator panels and fire alarm panels completed on site,
- ☐ Fire extinguishers,
- ☐ Maglocks,
- ☐ Verification and commissioning reports.

6) Fire-rated assemblies and fire separations

- ☐ Continuity at matelines,
- ☐ Fire stopping,
- ☐ Fire blocking in concealed spaces,
- ☐ Continuity between modules, floors, and ceilings,
- ☐ Exit stairs, elevator shafts, vertical service spaces, and other rated enclosures.

7) Sound transmission

- ☐ STC/ASTC continuity at matelines and between modules,
- ☐ STC/ASTC continuity at elevator shafts, refuse chutes, and other applicable assemblies.