

Evolution to Modern-Day Factory-Built Homes

INFORMATION **GUIDE** 2013



P.O. Box 3538 Station Main
Sherwood Park, AB T8H 2T4
www.mhaprairies.ca



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DISCLAIMER

The Modular Housing Association Prairie Provinces is supplying this manual containing illustrations, information, pictures, and other material that are provided solely as sample documents for illustrative purposes. If any of the information in this information guide is contrary to legislation, the Provincial legislation applies.

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MODULAR HOUSING ASSOCIATION PRAIRIES PROVINCES

P.O. Box 3538 Station Main
Sherwood Park, AB T8H 2T4
www.mhaprairies.ca

Slide Show Presentation

Is a *Mobile* Home always Mobile?

Is a Modular Home Ever Mobile?

Document Benefits

This document and presentation can be adapted for training and information for the benefit of:

- Factory-built Industry members (provide consistency in understanding)
- Real Estate Agents, Assessors, Brokers
- Insurance Companies
- Government Representatives (Planners, Building Officials)
- Anyone else who could benefit from understanding current standards.

What Defines a Mobile Home?

For many, the term Mobile Home is associated with Tin Sided, dome-roofed homes such as this:



Although this home was built in the early 1970's, this vision remains the image in many peoples' minds when they hear the terms:

- Mobile Home
- Manufactured Home
- Modular Home
- And even Pre-Fab homes

Despite the evolution of the construction industry since the 1970's when this home was constructed, even new factory-built homes are often considered as being but "Trailer Houses".

Is THIS home *mobile*?



- Is it fair to call this home a "mobile house?"
- Is it right to finance, insure or appraise this home differently because part of it was pre-fabricated in a manufacturing facility?
- Or, should this home be treated like any other Real Estate?

This home was built using a combination of factory-built and site-built construction. It has no obvious features that "give it away" as being partially prefabricated. It will be appraised, financed, insured using the same criteria as though it were entirely site-built on owned land.

Would you say this house is **Mobile**?



Or This House?



This home is certainly *Mobile*, right?



Change of address. More fun in the
Philippines

Or would you ever consider a
Mobile Hotel?

The previous 3 structures were all site-built and are being relocated for some reason. Many companies move structures across great distances.

They are capable of moving building with minimal damage to the structure while removing from the old foundation and installation on the new foundation located somewhere else.



This is a Hotel that has been delivered via truck to this Barge will leave the barge and be delivered to it's next location by means of a regular Semi Tractor Trailer Truck.

So what do you do with **Mobile Homes** that are not **Mobile**?



This home is described as an early 1980's 14' wide Mobile Home defined by it's **CSA Standard's** label; certified to the CSA Z240 Standard

This home is situated on and welded to permanent pilings (foundation) and is part of the land, sold together as real estate.

By the nature this permanent foundation, this home" is no longer easily so **mobile**!

For **Financing** purposes, this home should be considered as **Real Estate**. Regardless of the nature of construction of the home, it will appreciate at a similar rate to other Real Estate and should be financed with the same rate, terms and amortization period of any other home all because it is considered an improvement to the land.

Then is **Modular Home** *Mobile*?



This home is described as a **Modular Home** defined by the CSA standard to which it was certified; CSA A-277, simply interpreted as being built to the regional building code of where it will be located.

It is easy to presume that this home is not movable; however, this is a show home at a home retail sales centre selling factory-built homes. Once sold, this home will be delivered to the customer's home site location, installed on a permanent, perimeter foundation (could even be a full basement). Once the home is **setup** on foundation, it will be no more mobile than a similar home built on-site.

This home will be financed, insured, appraised and resold by Real Estate agents using the same techniques as a home constructed using any other means.

Can a **Modular Home** be Mobile?



This can be a very confusing topic.

“**Modular**” is often misunderstood and is commonly used to refer to homes that are; built in more than one section, put together on site **and** constructed to be placed on a basement or perimeter foundation.

The above features do not describe this home; none-the-less, it is a “**Modular Home**”, constructed to meet the **CSA A-277 Certification Standard** and is located on a leased land.

This home is constructed using a steel frame for transportation and structural support at the home site where it is placed on wooden cribs, an approved CSA Z240.10.1 foundation for homes constructed with a steel frame.

The home owner pays a monthly lease fee. For all intents; this home is movable or **Mobile**. Although this home has been constructed to the building code at the time it was built, it will be financed as a chattel as it has not become part of the Real Estate. Financing is provided by lending institutions; however, the loan will be insured under a different CMHC program for **Chattel** financing.

Real Estate Agents selling homes in lease land communities know the land is not part of the sale, and they are selling a Chattel insured loan which includes a serial number identification. The community will also require specific criteria be met for the home's resale. The contract to list and sell this home will not be the same as a home attached to land.

Modular / Mobile Confusion



This home is only different from the one on the previous slide because it is considered “**Real Estate**”.

- 1990's 1200 sq' CSA A-277 (Modular)
- attached to the property
- home owner owns both home and land, not unlike a small affordable site-built home.

Although this home is technically attached and inseparable from the land for financing and real estate purposes, it still remains movable. The Modular Housing Association of Prairie Provinces (MHAPP) discourages the use of the term “Mobile” to describe this home as it infers it is not constructed to the provincial building code.

If the construction of this home is not understood, it could face scrutiny and inappropriate discrimination such as; real estate agents might not understand it should be sold as real estate, the home owner could face unrealistic insurance criteria or the home could be financed separately from the land at a higher rate of interest.

More than One Module Means Modular, Right?

This home is in the same lease land community and is often mislabeled.

- This home was delivered in 2 modules with the set up completed at the home site.
- This home was constructed in the early 1980's to the CSA Z240 Standard.



Despite this home being constructed by joining two modules, and although moving this home would not be easy, it is still be considered a "Mobile" home in the eyes of lenders and real estate agents because this home is not permanently fixed to real estate.

Movable vs. Mobile



One way or another, all homes and structures are movable. So what really is a "mobile home"?

A Mobile Home can be defined as:

- 1) Constructed as a Mobile home prior to CSA Z-240 Standard
- 2) Constructed to the CSA Z-240, Manufactured Home Standard (in Alberta, had to have been purchased new prior to 1992.)

Specific scenarios can have a combination of both; **for Real Estate purposes:**

- Mobile or Manufactured Home (A CSA Z-240) located on **Fee Simple Real Estate** will be sold in similarly to other Real Estate.
- A CSA A-277 (Modular Home) located on **Leased Land** will be sold as a chattel.



Terminology ([SCHEDULE 1](#)) Includes General Definitions and Off-Site Built Definitions

Understanding Housing and Other Products Table ([SCHEDULE 2](#))

Reviews various construction of housing and recreational living options depicting differences and similarities to help with understanding of the codes and standards each is constructed to. This 5-page table includes notes to assist with the reader's understanding.

Model Architectural Compatibility Guidelines ([SCHEDULE 3](#)) This document is intended for inclusion with land use bylaws to help ensure the “look” of the factory-built homes conforms to that of the community where it is sited.

Understanding Factory-Built Homes - Modular

The term modular simply describes a method of constructing a home in large sections, away from the home site, in a manufacturing facility. The type of housing constructed is determined by the building code to which it complies and definitively described using the following common housing configurations: Single detached or multi-family, single level or multi-storey. The term modular does not describe a type of home, just as the term site-built does not describe a type of home. They both describe alternative construction methods. Therefore; type of homes commonly described as a single family, town-home, duplex, 2-storey, etc., can be site-built, modular built, or built using a combination of both construction methods.



"The Factory-Built Housing Industry has the capability of providing a wide variety of home types, many of which focus greatly on affordability. For example, in many cases you would not find site-builders that would build a home that does not require an expensive basement for its foundation, or that would use alternative interior finishing materials that help to bring the price down."



Financing of Factory-Built Homes

Chattel Loan Insurance

Canadian Mortgage & Housing Corporation (CMHC) provides loan insurance for loans to purchase or refinance movable homes secured by a chattel mortgage (commonly understood as a mortgage). Maximum loan-to-values for purchase are 95% and 90% for refinance. Other CMHC underwriting policies and product-specific requirements apply unless otherwise noted.

A factory-built home (constructed to the CSA-A277 Certification Standard sometimes referred to as Modular) affixed permanently to land becomes real estate and therefore should be the same for sales process, financing and insuring the home.

Terms and Conditions:

Eligible units: New or existing one-unit (single family) dwellings that are designed to be transportable and meet maximum road widths as prescribed by provincial/territorial authorities. In addition, the following is applicable:

- New homes must be certified in accordance with the *CAN/CSA-Z240 MH Series-16* of standards (for Provinces that allow this standard). **NOTE:** New homes built to this Standard are not allowed to be placed in Alberta, although some municipalities' land-use bylaws continue to state the home must have a *CAN/CSA-Z240 MH* label; in which case, the home is built to the higher *CSA-A277* Standard and could have both labels.
- New factory-built homes must be constructed in a manufacturing facility certified in accordance with *CSA-A277* (modular), "Procedure for Certification of Factory Built Houses" and conforming to the construction standards referenced therein. ([SCHEDULE 5\(a\)](#))
- The borrower and the owner of the site must have entered into a site lease, tenancy agreement, or the borrower must have a letter of consent from the owner. The lease may be a short-term lease or a long-term lease if the unit is not permanently affixed.
- Compliance with provincial, territorial or municipal/local requirements with respect to the use of the site for residential purposes.
- Homes must be setup and anchored to meet provincial/territorial or local requirements. In the absence of these requirements, new homes must be set to comply with CSA standard [CAN/CSA-Z240.10.1-08](#). Existing homes do not have to comply with this standard but may use it as a guide.
- If substantiated, lending value may include normal set-up costs and the value of attachments (i.e., garages, porches, decks) as long as they are included in the purchase transaction and secured by the chattel loan document. The overall impact that attaching and removing these attachments will have on the home (damage, warranty, etc.) should also be considered.
- When a new unit is purchased, in the case of Alberta, the mandatory New Home Protection Act applies. In Saskatchewan and Manitoba, the home must have a one-year warranty against defects in material and workmanship and may have additional warranty. Please consult the Retail Sales Centre to confirm the warranty terms for Saskatchewan and Manitoba. **NOTE:** The Manitoba Government is expected to enact a mandatory new home warranty program effective January 1, 2020.
- Insurance coverage should include protection against damage during transport of the unit.
- The Approved Lender must register a form of chattel security that is valid and enforceable both as to remedies against the security and for the collection of loan repayments, in accordance with
- The Approved Lender should obtain an assignment or sublease of the borrower's site lease, tenancy agreement, or letter of consent, as additional security. The assignment must allow the Approved

Lenders to keep the payments current so the unit may remain on the site in the event of borrower default

on the chattel loan. An assignment is not necessary when the owner of the site does not agree to the unit being resold on the site. In such case, it is expected that the unit will be relocated prior to resale.

- Approved Lenders should note that specific loan servicing requirements apply to these loans which are in addition to or different from those requirements which apply to loans secured through a real estate mortgage. Contact CMHC Servicing Policy. Chattel Loan Insurance cannot be used in conjunction with:

- CMHC Income Property (1-4 Unit Rental Properties)
- CMHC Line of Credit
- CMHC Self-Employed Simplified
- Extended amortized periods
- Non-traditional down payment sources

NOTE: Under progress advance processing only two advances are permitted (up to 85% of the outstanding balance on the delivery of the home for the first advance and the remainder upon setup). The manufacturer of the home is not eligible for the Homebuilder Presold feature under progress advance processing policy.

If a real estate mortgage is used to secure the loan then the home qualifies for Canadian Mortgage and Housing Corporation's mortgage loan insurance products, as a real estate mortgage is secured by the land as well as any structures on the property.

Some lenders offer varying payment schedules. As well, lenders can choose to offer any, all or no CMHC programs.

Homes in Lease Land Communities

Model Assignment of Lease Consent Agreement ([Schedule 4](#))

This document was developed as a coordinated effort with the Canadian Bankers' Association and the factory-built housing lease land communities in relation to a site lease agreement.

Please refer to the *Mobile Home Site Tenancies Act* (AB) *The Residential Tenancies Act, 2005* (SK) and the *Residential Tenancies Act* (MB) for more information regarding the sale of a home in a land lease community.

Notice to terminate a monthly tenancy by a Resident must be served on his landlord on or before the first day of a notice period of 2 consecutive tenancy months to be effective on the last day of the notice period in the case of AB. One Rental Period Notice in MB and in the case of SK; not earlier than one month after the date the notice is received; and the day before the day in the month, or in the other period on which the tenancy is based, that rent is payable under the tenancy agreement. **NOTE:** It is recommended the landlord review the Provincial Legislation in the Province your community resides.

The Real Estate agent or potential purchaser must be aware of the following forms that must be filled out and executed before the new tenant takes possession of the site.

- Tenancy Application
- Landlords / Residents' Registration & Information Sheet
- Policies & Regulations
- Mobile Home Site Lease Agreement

Please check with the specific Community as each Community's policies and procedures vary.

Building Code Requirement ([SCHEDULE 5](#))

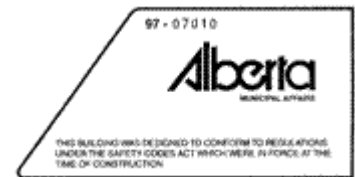
All factory-built homes must comply with the Alberta Building Code (ABC) and be certified compliant to the (ABC) under the CSA-A277 Certification Standard. ([SCHEDULE 5\(a\)](#))

In the case of Saskatchewan and Manitoba, all factory-built homes must comply with the *National Building Code (NBC)* ([SCHEDULE 14](#)) and be certified compliant to the (ABC) under the CSA-A277 Certification Standard. Manitoba and Saskatchewan also allow *CSA-Z240 MH* homes to be placed in their Provinces. Sales Centres are encouraged to check with individual municipalities to ensure which standard is required where the home is to be located.

In the case of factory-built homes (CSA-A277) vs. site-built, factory-built homes are inspected throughout the production process, whereas site-built homes are inspected at various stages on the home site. Both factory-built and site-built homes must comply with the same building code. The evolution of site-built homes has been greatly influenced by changes made to building codes and factory-built homes have evolved in the same manner.

Illustration of Alberta Municipal Affairs (AMA) Label

([SCHEDULE 6](#))



Understanding Labels

AMA Label ([SCHEDULE 6](#))

As is the case with site-built homes, all Modular Homes *placed in Alberta* must bear an AMA label prior to occupancy. To receive this label, the home must also bear the CSA-A277 label as inspected by one of 3 governing agencies. Site-built homes must undergo a series of inspections by the local municipal inspectors and be granted final inspection approval. The requirement for both site-built and factory-built homes to bear the AMA label has only been effect in recent years.

The Province of **Saskatchewan** does not provide a specific label (as the AMA label in Alberta) designating compliance with the *National Building Code* but rather rely on the Certification; however, there will be a label indicating the home is Certified to meet the Provincial Standard.

Organizations (CSA, Intertek or QAI) ensure compliance to the *National Building Code (NBC)* ([SCHEDULE 14](#)).

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The Province of **Manitoba** does not provide a specific label (as the AMA label in Alberta) indicating compliance with the **National Building Code** but rather rely on the Certification Organizations, (CSA, Intertek or QAI) to ensure compliance to the *National Building Code* ([SCHEDULE 14](#)).

CSA Certification Label ([SCHEDULE 7](#))

The CSA-A277 certification standard along with many other CSA standards can be enforced by any standards council accredited agency. In this case, CSA (Canadian Standards Association), Intertek and Quality Auditing Institute (QAI) are the only accredited agencies that can enforce the CSA-A277 certification standard at the time of publication of this document.

To ensure the home has been built to the Provincial Building Code, the building inspector looks for the Label produced by one of CSA, QAI or Intertek certifying compliance to the specific Province's Building Code and as certified under the CSA-A277 standard.

Effective in late 1976, compliance to CSA-Z240 MH standard became mandatory. The CSA-Z240 MH standard is a separate building code heavily based on the NBC, but not fully compliant whereas the CSA-A277 compliance standard certifies full compliance to the *Alberta Building Code* (ABC) and the *National Building Code* (NBC). Prior to the advent of the CSA-A277 standard, all factory-built (modular) homes were inspected for code compliance in the same manner as site-built homes. The CSA-A277 standard was fully implemented by the late 1970's and was acknowledged in all the Provinces in conjunction with CSA-Z240 MH until 1992. By 1992 the Alberta government mandated that ALL housing meet full compliance to the ABC, which resulted in the CSA-Z240 standard no longer being accepted in Alberta for homes built post 1992.

However, all the other provinces in Canada (including Saskatchewan and Manitoba) accept homes certified to the CSA-Z240 MH standard.

The Certification Mark includes:

- Manufacturer's name and address
- Model Identifier
- Serial Number
- Year of Manufacture
- Ground snow load and design snow load
- Thermal resistance of insulation and outdoor design temperature for heat loss calculations
- Factory installed appliances with make, model and energy source
- Complete electrical rating of circuitry (voltage, frequency, input current)

Built to the CSA Standard

The CSA-A277 Standard is a Certification Standard (not a building code). This Standard is used to certify a residential, commercial or industrial building for compliance to the building code as well as in the jurisdiction where the building will be sited.

In the case of Alberta, all homes must meet the *Alberta Building Code* and therefore, the CSA-A277 Standard has been applied. Whenever a home is constructed in a manufacturing facility for placement in Alberta, compliance to the *Alberta Building Code* is confirmed by a modular label placed in each home certifying compliance under the CSA-A277 Standard. This includes single section homes, multi section homes and multi-family dwellings. Confirm with the Manufacturer they are certified to build other than single family dwellings.

From a building inspection perspective, the Provinces of *Alberta, Saskatchewan and Manitoba* subordinates all building inspection responsibilities associated with the modules built in a manufacturing facility certified to produce homes / buildings to the *CSA-A277 Standard*, to any inspection agency that is accredited to certify to the CSA Standard.

Three organizations can provide testing and certification to the CSA standard. The organizations include [Canadian Standards Association \(CSA\)](#), [Intertek](#), and [Quality Auditing Institute \(QAI\)](#).

Certification Inspection Procedure and Company Logos ([SCHEDULE 7](#))

Labels to look for:



Canadian Standards Association (CSA) Label and CSA Specification Sheet ([SCHEDULE 8](#))



Intertek Label ([SCHEDULE 9](#))



QAI Laboratories, Ltd. (QAI) Label ([SCHEDULE 10](#))



Where Labels are Typically Found:

Newer Homes built after 1985

Most of these homes will have the SPECIFICATION SHEET on the inside of the door that covers

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the electrical panel. However, there is no specification for where the labels are to be posted other than they shall be placed in a readily accessible area. Generally, the Specification Sheet, CSA-A277 Label (and/or the CSA-Z240 MH Label for Saskatchewan and Manitoba) and (the AMA Label in the case of Alberta) will be found close together. There are many numbers on this Specification Sheet including; Serial Number, AMA Label Number (in the case of Alberta), Make and Model, Size, etc. ([SCHEDULE 8](#))

Older Homes built before 1985

Many homes built in the early 1980's should have the serial number in the same location as described above (Newer homes). Older homes also had most of the information on a specification sheet. The main difference is where this specification sheet is placed. Older homes usually had the specification sheet mounted on the inside of a door on one of the kitchen cabinets. The first location to check is the cabinet under the sink. If it is not found there, it is recommended you check the inside door of all the cabinets. Remember that the specification sheet could still be on the inside of the door covering the electrical panel.

If all Else Fail and no serial number or specification sheet can be found inside the home the next place to look is on the exterior of the home. First, look for any label or sticker that may have information regarding the home on it. If no such label is found, the most common place to find the serial number is on the front cross member of the home. Some homes may have a label or a small steel plate and others may have the numbers stamped into the metal of the cross member. See the MHAPP's Frequently Asked Questions ([FAQ](#)) for more information.

Appreciation/Depreciation

The appreciation in value of factory-built (modular or manufactured) homes comes back to the old real estate axiom - location, location, location. Factory-built homes will appreciate at the same rate as other homes in surrounding neighborhoods when properly sited and maintained.

This common misunderstanding about depreciation comes from the movable nature of some types of factory-built homes. Some consumers look for used factory-built homes and will pay a depreciated value to move it to a different location not unlike they would if they purchased a used site-built home and removed it from its foundation to move to another location.

In the context regarding homes appreciation / depreciation value, cost of homes is site specific, market value and importance of maintenance will impact on the price of the home. In some circumstances, a factory-built home could be more valuable because the home was constructed to be moved.

Life Span

Due to building code specifications, the CSA certification standards, the weather controlled building environment and quality of construction materials, factory-built housing has an equal or longer life span than site built homes. Proper maintenance is the key to longevity in all housing types. ([SCHEDULE 12](#))

Features of Factory-Built Adding to the Life Span

Benefits resulting due to homes being built in a climate controlled factory conditions:

- Assembly line procedures optimize insulation & air/vapour barrier installation, resulting in a

tighter and better insulated envelope which requires less energy to heat & cool.

- Ensures framing materials, sheathing, floor & roof decking are all installed dry and remain dry; therefore, moisture is not built into a structure during construction and that reduces potential for mould formation and moisture related performance and durability degradation.
- Factory-built homes/buildings usually carry total roof loads on the exterior walls of each module. This means most interior walls are not load bearing and can be easily removed or repositioned at any time to accommodate changing space needs which occur as children leave home, as adults' age, and for many other reasons.

Confirming the Size of Homes

Ensure the size of the home is the foot print of the home vs. home plus the hitch (if there is/was a hitch, normally the hitch would be 4 ft.). Including the 'length of the hitch' was common when stating the length of older homes; therefore; the dimensions still may include the length of the hitch to identify the shipping length, depending on the builder. The recommendation is the Real Estate Agent measures the home and room sizes to ensure the exact dimensions.

Evolutionary Time Line

Code Changes, evolutionary size increases and feature improvements (Significant Historical Dates related to Construction). Multi-section homes were available throughout this time-line, but for purposes of recognition we are focusing solely on single section homes.

Mobile Home -1955 - 1965 - 400 sq. ft. (10 x 48 - Upper limit of available module at that time) Pre-CSA Standards for Home Construction - typically the homes were built to American Mobile Home Standards and accepted as legal by Canadian Jurisdictions.

Common characteristics included: 2" exterior walls, 2 x 2 bow truss, metal roof, oil furnace, 6'6" height, and jalousie windows.

Mobile Home -1966-1971 -576 sq. ft. (12 x 48 - Upper limit of available module at that time) Pre-CSA Standards for Home Construction - typically the homes were built to American Mobile Home Standards and accepted as legal by Canadian Jurisdictions.

Common characteristics included: Oil or propane furnace introduced, 2" or 3" exterior walls, 2x2 box truss, jalousie windows, exterior wood hollow core doors, ceiling height 7 ft.

Introduction of 952 sq. ft. (14' Wide) Mobile Homes

Mobile Home -1972 -1975 -952 sq. ft. (14 x 68 - Upper limit of available module at that time)

CSA Certification Now Available

Common characteristics included: 2 x 2, 2 x 3, or 2 x 4 walls, gas or propane furnace, metal bow truss roof, metal slider mobile home windows, increased insulation, R-12 in the walls (Insulation becoming more important), ceiling height 7'6".

End of Jalousie (Metal Framed) Windows

Mobile Home -1976 – 1977 - 952 sq. ft. (14 x 68 - Upper limit of available module at that time)

CSA-Z240 MH standards became mandatory

Common characteristics included: 2 x 4 walls standard, slider windows, insulation R10, 2/12 metal roof introduced, metal exterior doors standard, end of metal bow truss roof, ceiling height 7.6 ft.

Mobile and Modular Home-1978 -1981 - 952 sq. ft. (14 x 68 - Upper limit of available module at that time) **Both CSA-Z240 MH and CSA-A277 (Modular) being used**

Common characteristics included: 2 x 4 walls, insulation R12, asphalt 2/12 pitched roof, metal exterior doors, metal slider windows, metal exterior storm doors, generally 7.6' ceiling height.

Mobile and Modular Home -1981 - 1984 - 1008 sq. ft. (14 x 72 - Upper limit of available module at that time) Common characteristics included: 2 x 4 walls, asphalt roof, 2/12 pitch roof, metal slider windows, R12 insulation, 980 sq. ft. home (14 x 70) still popular because of park sizes, wood and vinyl siding introduced.

**Introduction of 1216 sq. ft. (16' Wide) Mobile Homes
Now Commonly Referred as Manufactured Homes'**

Mobile Home or Modular or Manufactured Home - 1985 - 1988 - 1216 sq. ft. (16 x 76 - Upper limit of available module at that time) Common characteristics included: 2x4 walls, some 2x6 walls, increased insulation to R15, introduction of dehumidifier to solve humidity problems, introduction of bogey-style transport systems, 2-1/2/12 asphalt pitched roof, metal thermal pane windows, more vinyl and wood siding, skylights introduced, cathedral ceilings.

Modular or Manufactured Home -1989 -1991 -1248 sq. ft. (16 x 76 - Upper limit of available module at that time) **(Industry replaces term "Mobile Home" with "Manufactured Home")** Common characteristics included: 2 x 6 walls, stippled ceilings now standard, introduced PVC vinyl double pane windows, dehumidifiers now standard, skylights and vinyl or wood siding standard, no more metal siding.

In 1992, the Alberta Government mandated all new homes would be required to comply with the *Alberta Building Code (ABC)*. That ruling mandated that all factory-built / manufactured homes comply with the ABC. Saskatchewan and Manitoba continue to accept both homes built to the CSA-A277 and the CSA-Z240 MH Standards under the *National Building Code (NBC)*.

Modular Home -1992 -1996 1216 sq. ft. (16 x 76 standard foot print)

Built to the CSA-A277 Certification Standard required by the *Alberta Building Code (ABC)* or greater, different building facilities build to different building specifications; however, always built at least to the minimum standard required by the Province where the home will be sited. This includes CSA-A277 and or CSA-Z240 MH in Saskatchewan and Manitoba under the *National Building Code (NBC)*.

Modular Home -1997 - 2000 1216 sq. ft. (16 x 76 standard foot print)

Built to the CSA-A277 Certification Standard required by the *Alberta Building Code (ABC)* or greater, different building facilities build to different building specifications; however, the homes are always built at least to, the minimum standard required by the Province where the home will be sited. This includes CSA-A277 and or CSA-Z240 MH in Saskatchewan and Manitoba under the *National Building Code (NBC)*.

Introduction of 20' Wide Homes

Modular Homes - 2001 -1520 sq. ft. (20 x 76 standard foot print)

Built to the *CSA-A277 Certification Standard* required by the *Alberta Building Code (ABC)* or greater, different building facilities build to different building specifications; however, always built to at least the minimum standard required by the Province where the home will be sited. This includes *CSA-A277* and or *CSA-Z240 MH* in Saskatchewan and Manitoba under the *National Building Code (NBC)*.

Modular Homes - Current (width of modular homes can go from 20, 22, 24, 28, up to 30ft)

Built to the *CSA-A277 Certification Standard* required by the *Alberta Building Code (ABC)* or greater, different building facilities build to different building specifications; however, always built to at least the minimum standard required by the Province where the home will be sited. Therefore, in Saskatchewan and Manitoba, both the *CSA-A277* standard for building or the *CSA-Z240 MH* Standard continues to be accepted by the Provinces under the *National Building Code*.



Procedures for Listing and Selling within Leased Land Communities

Although some communities may vary, the following is a guideline to follow when listing and selling within a manufactured housing community.

- The Landlord requires notification when a home is listed within the community, therefore a "Notice of Listing" is to be completed, signed by the resident and submitted to the community office.
- Once the "Notice of Listing" is received, the Landlord does a maintenance inspection of the lot and exterior of home to ensure that it is to community standards.
- After the inspection, a Maintenance Memo detailing the required work to be done (if any) will be issued to the resident and a copy forwarded to the Real Estate Agent. It is important to note items detailed during the inspection must be completed prior to the sale of the home.
- Customers interested in buying must be approved to live in the community; therefore, a lease application must be submitted to the community office prior to finalizing the sale. Although processing times vary, it is important to provide the Landlord with as much time as possible to approve the customer.
- Each community may have their own set of "Community Guidelines" therefore it is important to check with the community office to arrange for a copy of those policies provided to the Real Estate Agent and/or customer.
- Once a customer is approved, notification will be sent to the customer and/or Real Estate Agent.



Foundations

Permanent Foundations Refer to CSA-Z240.10.1 (SCHEDULE 13)

Building inspectors approve the type of foundation used. All foundations in *CSA-Z240.10.1* for permanent building code are not limited to factory-built homes. Soil type is a key aspect on determining the foundation type and if there is a question regarding soil type, defer to the local building inspector. A correctly built foundation is critical to the longevity in all housing types.

Framed Homes vs. Non-Framed Homes

Factory constructed buildings are designed to be placed on basements, crawl spaces, pilings and other foundations compliant with the *Alberta Building Code (ABC)* in the case of homes sold for final location in Alberta and the *National Building Code (NBC)* for Saskatchewan and Manitoba. Alternatively, buildings may incorporate steel or wood longitudinal sub-frame rails which have been designed for placement on permanent surface foundation systems.

Surface Foundations

CSA-Z240.10.1 is a National Standard covering site preparation, foundations, and anchorage of factory-built homes and other homes/buildings that are deformation resistant foundations allowable under *CSA-Z240.10.1* and are uniquely designed to bear on surface footings, and offer excellent performance and durability. (*The Foundation Standard should not to be confused with the CSA Standard CSA-Z240 MH, the Manufactured Home Standard*). These surface foundations differ considerably from traditional foundations that must generally extend below the level of expected frost penetration, and are far more cost. Highly cost-effective *CSA-Z240.10.1* foundations provide major cost savings to help make factory-built homes one of Canada's most affordable single family detached housing options.

Surface foundations systems described in CSA National Standard *CSA-Z240.10.1* and are clearly stated to be permanent foundations. That Standard further describes the conditions under which ground anchorage is required and that requirement is based on the ability of each home to resist 1/50 wind pressures found in the area where each home is sited. Those wind pressures are found in a Table in both the *Alberta Building Code (ABC)* and the *National Building Code (NBC)*. *CSA-Z240.10.1* also describes the types of anchorage that can be used when it is required, and goes on to indicate: 'When wind-overturn calculations or local regulations require factory-built homes to be anchored, the anchorage system should be based on the manufacturer's anchorage instructions.'

In practice, under the provisions of *CSA-Z240.10.1*, with the exception of a couple of very high wind zones in the Crowsnest Pass area of Alberta, anchorage is not required to resist the regional wind pressures on any homes 16 feet wide or greater and set on surface piers no higher than 20 inches, with a 'footprint' of no less than 24 inches. Local building code inspectors and / or lenders might require specific foundation and anchorage requirements.

For the provinces of Saskatchewan and Manitoba, refer to the *National Building Code (NBC)* and review any appropriate Provincial Legislation.

**One type
of Permitted
Foundation**



Types of Foundation Permitted

While *CSA-Z240.10.1* accommodates foundation options other than wood cribbing and concrete block, the latter (as described below) are the most cost-effective and most commonly used. Wood Cribbing Piers constructed of sound lumber that is stacked with each layer placed at right angles and fastened securely to the one beneath. Unless the top surface of the footing under the crib is at least 2" above the adjacent ground surface, and the crib is separated from the footing by at least 0.15 mm-thick poly film, the first 6" of the crib must use lumber that has been pressure treated with a preservative or lumber in the form of recycled creosoted railroad ties. The top layer of the crib must use curbing or other means of restraint to prevent lateral sliding of the home.



Concrete Block Piers

Concrete block piers must utilize 8" minimum masonry units placed with their hollow cores in the vertical position. Cores may be filled with concrete or the masonry units may be dry-stacked. The top layer of block must use curbing or other means of restraint to prevent lateral sliding of the home.



Extending down 10 feet - the depth requirements is dependent on soil structure. Refer questions on full/in-ground piles to the appropriate section of the National Building Code of Canada (NBCC).

Anchorage to the foundation and anchorage below the frost line.



**Full Piers
Cement and
Steel**



Other Considerations

In both cases above:

- 1) the foundation must always support the home by way of the frame rails
- 2) the foundation pier spacing must comply with the manufacturers blocking plan
- 3) the height of foundation piers above the footings should not exceed their horizontal dimension measured at right angles to the length of the home (H to B Ratio of 1 to 1)

The foundation used in Leased Land Communities might have homes which were set up prior to 1998. In any case, all preparation to set up the homes was set up according to the CSA Standard in place at the time the home was originally set up. As in any situation where major renovating has been undertaken, it must be updated to current code. If only minor changes are undertaken on a home, updating to the current standard is not required.

Methods for ground preparation and foundations

Factory-built homes can be designed to be placed on basements or other perimeter foundations compliant with the *Alberta Building Code (ABC)* or the *National Building Code (NBC)* ([SCHEDULE 14](#)) {see appropriate Provincial Legislation}. Alternatively, they can incorporate longitudinal sub-frame rails, in which case they have been designed for placement on permanent surface foundation systems that comply with *ABC* or *NBC* foundation requirements under the provisions of the *CSA-Z240.10.1 National Standard*.

Appendix A Site Preparation

Note: This Appendix is not a mandatory part of this Standard.

A1. Typical site preparation for concrete pile or surface pier foundation systems is depicted in Figure A1.



Notes:

- (1) Ground cover to extend at least 150 mm (6 in) past the sides of the mobile home.
- (2) Backfill base and ground cover to be graded centre to outside or from side to side with a minimum slope of 2%.
- (3) Surrounding finished grade to slope away from home.

Ground Cover and Clearance Requirements

Ground Cover

Where normal soil conditions exist, a *National Building Code of Canada* (NBCC) compliant ground cover must be placed over the entire area under the home and extend 6" beyond the perimeter to prevent migration of moisture into the space beneath the home. Where unique soil conditions such as expansive clay exist, which may contribute to water pooling beneath surface foundation footings, alternate means of preventing water vapour from entering the home through the floor system may be used.

Ground Clearance

Under typical conditions, vertical clearance of at least 24" must be maintained between the finished grade under the home and the bottom of the floor joists. Where a home has a lowered section such as a sunken kitchen or living room, or the home is placed on a sloping site, the vertical clearance between the top of the finished grade and the bottom of the floor joists of the lowest point must be at least 12". In all cases vertical clearance sufficient to provide ready access to service and replace heating, plumbing and other equipment must be provided.

Ground Preparation for Surface Foundations

CSA-Z240.10.1 surface foundations are designed to provide excellent performance and durability, but that outcome is contingent upon proper site preparation. Top soil and all organic material must be removed from the home site below the footprint of the home. The base of the excavated site must be graded from the centre to the outside with a minimum slope of 2% to prevent water accumulation under the home, and then filled with gravel or other granular material to a level that is above to surrounding grade. If backfill is used where footing pads will be placed, it must be compacted and graded to a minimum 2% slope. Where soils under the home are free draining and the water table is such that water will not accumulate under the home, the base of the excavated site can be below the level of the finished grade of the site.

Types of Footings Permitted

Unreinforced Concrete

If the column footings are designed using unreinforced concrete, the minimum allowable thickness is 100 mm (4 in.) according to Clause 9.15.3.6.(1). This thickness may have to be increased to be not less than the projection of the footing beyond the column base plate. Reinforced, cast in place, or pre-cast concrete must provide equivalent strength and meet the same conditions applicable to unreinforced concrete.

Wood

Wood footings must be at least 3.5" thick and pressure treated with a wood preservative.

Other

Plastic waffle pads and other materials can only be used if it can be demonstrated on a case by case basis that strength and durability is at least equivalent to concrete alternatives above.

NOTE: Use of the above footing pad options is limited to pile type foundations that most commonly consist of wood cribbing or concrete block. Detailed guidance pertaining to soil conditions, footing footprint dimensions, and footing spacing is contained in the *CSA-Z240.10.1* Standard.

Anchorage Requirements (to foundation and anchorage below frost line)

When are they required?

Some lenders and/or municipalities may require more specific anchorage options. See the *CSA-Z24.10.1* Standard.

Anchorage Options

CSA-Z240.10.1 suggests numerous anchorage alternatives that have been proven effective.

Caution

When using anchorage of any kind in expansive clay soils that are common in Northern Alberta, much of Manitoba and elsewhere, the anchors can cause major damage to the structure of a home in the event of severe differential soil movement caused by frost heaving. To reduce the prospects of damage occurring, anchorage cables should be easily adjustable by the home owner and written instructions given to the homeowner to loosen the anchor cables to allow 3" - 4" of differential movement between the home and the anchors over the winter months.

Skirting and Crawl Space Ventilation

Skirting

Skirting should be designed to accommodate a minimum of 2" of vertical movement. Components of skirting in contact with the ground should be corrosion resistant or made to be corrosion resistant by way of a preservative coating. Skirting exterior surfaces should be painted or otherwise made weather resistant.



Types of
Skirting

Padding for Skirting

Vinyl Skirting



Crawl Space Ventilation

Ventilation of crawl space should be provided by installing screened grills in the skirting of at least 1 square foot of unobstructed venting for each 500 square feet of floor area of the home. The grills should be uniformly spaced on opposite sides of the home and positioned to minimize the prospects of obstruction by snow, leaves, etc.

Crawl Space Access

To facilitate inspections and maintenance at least one access panel of not less than 20" x 28" should be provided to the crawl space in an area that is close to water and sewer connections.

Caution: Appliances or clothes dryers should never be vented into the crawl space.

CSA-Z240.10.1 & Local Building Inspectors

Even though the *CSA-Z240.10.1* is referenced in both the National Standard, the *NBCC* and the *Alberta Building Code*, local building inspectors have the authority to reject its use or add additional requirements to its use in their jurisdiction.

Please contact the Modular Housing Association Prairie Provinces' office should you have any questions or concerns.



SCHEDULE 1 TERMINOLOGY

General Definitions:

Dwelling Unit - means a suite consisting of one (1) or more rooms operated as a housekeeping unit, used or intended to be used by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.

House – means a building or part of a building that provides a single dwelling unit only and is constructed for year-round use in accordance with the applicable provincial/territorial/municipal building code/regulation.

Single Detached House - A building containing only one (1) dwelling unit.

Semi Detached House - The part of a building, usually half of the building; that contains a single dwelling unit where the building contains two adjoining dwelling units only.

Dwelling, Multi-Residential - a building comprising multiple dwelling units that may be served by common or separate entrances from an exterior open space, and may or may not include common spaces and services.

Off-Site Built Definitions:

1) *Mobile Home* – A moveable home that originally included it's own running gear and was superseded by the modern day manufactured home in the early 90's.

2) *Manufactured Home* – means a one-storey building providing a single dwelling unit only, constructed in a factory in one or more modules in conformance with CSA Z240 MH Series and is ready for occupancy on completion of installation on a foundation, connection of services, and other set-up in accordance with the manufacturer's installation instructions.

3) *Modular Home* – means a building providing a single dwelling unit only, constructed in a factory in one or more modules in accordance with the applicable provincial/territorial/municipal building code/regulation (CSA A277) and is ready for occupancy on completion of installation on a foundation, connection of services and other set-up in accordance with the manufacturer's installation instructions.

4) *Modular Multi-Residential Building* – a building comprising multiple dwelling units that may be served by common or separate entrances from an exterior open space, and may or may not include common spaces and services where the modules are constructed in a manufacturing facility to the municipal building code/regulation (CSA A277).

5) *Ready-to-Move (RTM)* – means building providing a single dwelling unit only, constructed as a single module in accordance with the applicable provincial/territorial/municipal building code/regulation (CSA A277) and ready for occupancy on completion of installation on a foundation, connection of services.

6) *Park Model Trailer* – means a recreational product constructed in accordance with CSA Z241 to provide seasonal accommodation.

Note : CSA Z241 specifies, among other criteria, that these products

- must be built on a chassis mounted on wheels
- are intended for seasonal camping and not for year-round use.














7) *Recreational Vehicle* – means a vehicular-type product constructed in accordance with CSA Z240 RV Series that to provide seasonal accommodation.

Note : CSA Z240 RV Series specifies, among other criteria, that these products

- must has their own motive power or be mounted on or towed by another vehicle
- are intended to provide temporary living quarters for recreational, camping, or seasonal use, not year-round use.

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SCHEDULE 2 Understanding Houses and Other Products (Pages 1-5)

CONSTRUCTION TYPE	HOUSES						OTHER	
	ON-SITE CONSTRUCTION	OFF-SITE ⁽¹⁾ CONSTRUCTION			HYBRID ⁽²⁾ CONSTRUCTION			
	All Building Configurations and Materials (A, D, I)	Modular Homes (C, E, K, N)	Ready-to-Move (RTM) Homes (B)	Manufactured Homes (J, M) (3)	Panelized Homes (H)	Log Homes (O)	Park Model Trailers (G, L)	Recreational Vehicles (RVs) (F)
								
								

Note: Letters refer to pictures of homes

Numbers refer to 'Notes to Table'

Page 1

HOUSES & OTHER PRODUCTS**PROVIDING ACCOMMODATION****Similarities and Differences****CONTACTS**

www.cmhi.ca	info@cmhi.ca	1.613.563.3520
www.mhaac.ca	office@mhaac.ca	1.888.341.4663
www.mhaca.com	info@mhacbc.com	1.604.466.2006
www.mhaprairies.ca	znigro@mhaprairies.ca	1.866.866.8106

CONSTRUCTION TYPE		HOUSES						OTHER PRODUCTS	
		ON-SITE CONSTRUCTION	OFF-SITE ⁽¹⁾ CONSTRUCTION			HYBRID ⁽²⁾ CONSTRUCTION			
		All Building Configurations and Materials	Modular Homes (C, E, K, N)	Ready-to-Move (RTM) Homes ^(B)	Manufactured Homes (J, M) (3)	Panelized Homes (H)	Log Homes	Park Model Trailers (G, L)	Recreational Vehicles (RVs) (F)
Minimum Acceptable Compliance ⁽⁴⁾ ⁽⁵⁾		Building Code	Building Code	Building Code	CSA Z240 MH Series	Building Code	Building Code	CSA Z241	CSA Z240 RV Series
3rd-Party Certification for entire building ⁽⁶⁾									
	Required	No	⁽⁷⁾	⁽⁷⁾	CSA Z240 MH Series	No	No	⁽⁸⁾	⁽⁸⁾
	Available	No	CSA A277 Standard	CSA A277 Standard	CSA Z240 MH Series	No	No	Yes	Yes
Possible Residential Building Configurations ⁽⁹⁾									
	Single-Detached ⁽¹⁰⁾	Yes	Yes	Yes	Yes	Yes	Yes	No	No
	Multi-Dwelling Not Stacked	Yes	Yes	Yes	No	Yes	Yes	No	No
	Multi-Dwelling Stacked	Yes	Yes	Yes	No	Yes	Yes	No	No
	Constructed over Non-Residential	Yes	Yes	Yes	No	Yes	Yes	No	No

Note: Letters refer to pictures of homes

Numbers refer to 'Notes to Table'

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CONSTRUCTION TYPE	HOUSES						OTHER		
	ON-SITE CONSTRUCTION	OFF-SITE ⁽¹⁾ CONSTRUCTION			HYBRID ⁽²⁾ CONSTRUCTION				
	All Building Configurations and Materials	Modular Homes (C, E, K, N)	Ready-to-Move (RTM) Homes (B)	Manufactured Homes (J, M) (3)	Panelized Homes (H)	Log Homes	Park Model Trailers (G, L)	Recreational Vehicles (RVs) (F)	
Designed for Year-Round Occupancy (11)	Yes	Yes	Yes	Yes	Yes	Yes	No	No	
Dimensional Constraints	No	No	No	(12)	No	No	(13)	(14)	
Built Indoors	No	Yes	(15)	Yes	(16)	No	Yes	Yes	
Integrated Chassis Readily Transportable									
	Required	No	No	No	No	No	Yes	Yes	
	Optional	No	(17)	No	Yes	No	No	No	
Inspection Process									
	Local Building Official	Yes	Yes	Yes (19)	Yes (19)	Yes (19)	Yes	No	No
	3rd Party Certification	No	Yes	Yes	Yes	Yes	Yes (19)	Yes	Yes

Note: Letters refer to pictures of homes

Numbers refer to 'Notes to Table'

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CONSTRUCTION TYPE		HOUSES					OTHER PRODUCTS		
		ON-SITE CONSTRUCTION	OFF-SITE ⁽¹⁾ CONSTRUCTION			HYBRID ⁽²⁾ CONSTRUCTION			
		All Building Configurations and Materials	Modular Homes (C, E, K, N)	Ready-to-Move (RTM) Homes (B)	Manufactured Homes (J, M) (3)	Panelized Homes (H)	Log Homes	Park Model Trailers (O, L)	Recreational Vehicles (RVs) (F)
Financing									
	Mortgage / Conventional Financing	Yes	Yes	Yes	Yes	Yes	Yes	No	No
	Mortgage Loan Insurance	Yes	Yes	Yes	Yes	Yes	Yes	No	No
*Foundations									
	Permanent Foundations Required	Yes	Yes	Yes	Yes	Yes	Yes	No	No
	Permitted Foundation Types	Yes	Yes	Yes	Yes	Yes	Yes	No	No

*I.e., (1) Below Frost Penetration (basement, crawl space (heated not heated)); (2) Support Configuration (perimeter or point) (3) Combination of both (perimeter and point foundations that go below frost). Houses on perimeter foundations typically have point-supported central beams. The type of foundation depends on: number of storeys, deformation resistance, soil type, if the foundation contains heated space, weight of construction materials. Houses cannot be installed on a Z240.10.1 foundation unless its; 1-storey, deformation resistant (or its sitting on rock or well-drained granular soil, doesn't have heavy roofing, cladding materials or concrete floor topping).

Note: Letters refer to pictures of homes

Numbers refer to 'Notes to Table'

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CONSTRUCTION TYPE	HOUSES						OTHER PRODUCTS	
	ON-SITE CONSTRUCTION	OFF-SITE ⁽¹⁾ CONSTRUCTION			HYBRID ⁽²⁾ CONSTRUCTION			
NOTES TO TABLE	All Building Configurations and Materials	Modular Homes (C, E, K, N)	Ready-to-Move (RTM) Homes (B)	Manufactured Homes (J, M) (3)	Panelized Homes (H)	Log Homes	Park Model Trailers (G, L)	Recreational Vehicles (RVs) (F)
(1) Off-site construction requires some on-site assembly of multi-module buildings and connection to services. May include construction of garages, porches and installation of finishes, fixtures and appliances.								
(2) Hybrid construction involves off-site production of panels and log components then on-site assembly of those components and construction or installation of all other building elements.								
(3) "Manufactured homes" should not be confused with "mobile homes", which are no longer constructed and were built to significantly less-stringent requirements.								
(4) "Building code" includes provincial-territorial (P-T) building codes, P-T regulations that reference the National Building Code with or without amendment, and the Vancouver Building Bylaw. Compliance includes, for example, installation on a permanent (code-compliant) foundation. In most jurisdictions, compliance also includes compliance with Section 9.36, Energy Efficiency. Saskatchewan has yet to adopt these requirements; Quebec has different energy-efficiency requirements.								
(5) Certified products bear labels indicating the code or standard to which they comply.								
(6) For off-site constructed homes, certification applies to all aspects of the building completed off-site. For panelized and log homes, this is limited to the panels and log structure. Certification does not refer to, for example, energy performance certifications, or certification of individual materials or components installed in the building.								
(7) CSA A277 certification is required in Alberta and Quebec for off-site constructed buildings.								
(8) CSA Z241 or CSA Z240 RV Series Certification is not required by the product standard. This certification may be required by the province or territory where the product is manufactured or installed.								
(9) New and innovative house types such as stand-alone secondary suites, laneway houses and garden suites intended to provide affordable and infill housing are typically single-family detached houses. Some jurisdictions are permitting construction / installation over garages. "Tiny houses" are also permitted if they comply with the building code or CSA Z240 MH Series.								
(10) Defined by Canada Mortgage and Housing Corporation as "A single family dwelling that is not attached in any way to another dwelling unit or structure. A single detached house has open space on all sides and has no dwelling either above or below it."								
(11) The National Building Code (NBC) and codes/regulations based on the NBC provide less-stringent requirements where no heating system is installed to recognize dwellings intended to be used only in the non-heating season. The Ontario Building Code provides less-stringent requirements for seasonally occupied cottages.								
(12) One storey								
(13) Maximum 50 m ² gross floor area, including lofts, when in the set-up mode. Width greater than 2.6 m in transit mode.								
(14) In transit mode, maximum 2.6 m width and maximum length between 12.5 and 14.62 m depending on type of RV.								
(15) Required to be built under shelter certified under CSA A277								
(16) Panels are constructed under shelter and might be assembled outdoors								
(17) Possible but not typically done								
(18) Availability of chattel mortgage insurance may depend on whether the home is installed on a leased lot or whether it is constructed on a chassis.								
(19) Certified manufacturing facilities are certified for compliance to the specific standard for any of the work completed on site. Any work undertaken off site must be inspected by the local building official (in many cases the foundation work specifically). Log homes are built to a standard ICC 400 standard "Design and Construction of Log Structures" that is referenced in the NBC.								
Note: Letters refer to pictures of homes Numbers refer to "Notes to Table"								

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SCHEDULE 3 Model Architectural Compatibility Guidelines

Modular Housing Association Prairie Provinces

P.O. Box 3538, Station Main
Sherwood Park, AB T8H 2T4
Email: snigro@mhaprairies.ca
www.mhaprairie.ca



Tel. (780) 429-1798
Fax (780) 429-1871
Toll Free Line (866) 866-8106
Cell (780) 686-8687

Model Architectural Compatibility Guidelines

ADDRESSING DESIGN, CHARACTER AND APPEARANCE OF OFF-SITE BUILT HOMES

Applicable to: A277 Labeled Modular Homes, 20' or greater in width, placed in urban, suburban and rural residential communities.

1. **Height of the main floor** above grade shall be consistent with the height of the main floor of dwelling units in the immediate and general area;
2. **Roof pitch, style, and features** such as gables shall be consistent with the roofs of dwelling units in the immediate and general area;
3. **Roof overhang/eaves** shall be a minimum of 30 cm from surface of each side wall;
4. **Finishing materials** used on the roof and exterior walls shall be consistent with the materials used on dwelling units in the immediate and general area;
5. **Design** of each modular dwelling unit shall ensure the side facing the street on which the home fronts contains a prominently placed 'front door' and windows in quantity and size that are consistent with dwelling units in the immediate area;
6. **Foundations** shall be full perimeter and compliant with NBCC provisions contained in 9.15.2. Alternatively, homes designed to be supported on longitudinal floor beams using piling foundations and skirted perimeter enclosures must comply with provisions contained in NBCC 9.15.1.3;
7. **Skirting enclosures** shall be parged or finished similarly in appearance to that customarily found on basements of other detached dwellings in the immediate and general area.

What is a Modular Home?

Off-site built housing is defined under A277 certification normally as a Modular Home; however, may also be termed as a factory-built or Ready to Move (RTM) home. These terms simply describe a method of constructing a dwelling unit in one or more sections in a factory, away from the home site. The type of housing constructed is determined by the building code to which it complies and definitively described using the following common housing configurations: single detached, semi-detached or multi-family, single level or multi-storey. These terms do not describe a type of dwelling unit, just as the term site-built does not describe a type of dwelling unit, instead describes alternative construction methods. Therefore, type of dwelling units commonly described as a single family, town-home, duplex, two-storey, etc., can be site-built, factory-built, (modular-built, off-site built) or built using a combination of any of these construction methods.

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SCHEDULE 4 Model Assignment of Lease Consent Agreement

This agreement is endorsed by the Canadian Manufactured Housing Institute and the Canadian Bankers' Association.

MODEL ASSIGNMENT OF LEASE CONSENT AGREEMENT FOR MANUFACTURED HOMES

ENDORSED DECEMBER 2002

This Agreement is subject to all the rights and obligations of the tenant and landlord in the Site Lease Agreement.

TO: _____ (the "Lender")¹

ADDRESS _____

TELEPHONE: _____ FAX: _____ E-MAIL: _____

Re: _____² ("Tenant")

Lease of Land _____³ (the "Site")

Manufactured Home Site No. _____ LOT _____ BLK _____⁴ ("Site Lease")

from _____⁵ ("Landlord")

located at _____⁶ ("Community")

& Security Interest /Mortgage of Lender over Tenant's Rights in manufactured homes ("Home")/Site Lease.

By signing below, the Landlord agrees with the Lender and with each other person who has signed this consent as follows:

1. The Landlord confirms that:

a) The Tenant is about to or has entered into the Site Lease with the Landlord for a _____⁷ term, commencing on _____⁸ at a current rental of

\$ _____⁹ payable _____¹⁰ **1ST OF EACH MONTH**

b) The Site Lease, once executed, and / or the rules and regulations of the Community, if any, are attached as Schedule "A" to this Consent.

c) The Site Lease constitutes a valid and binding obligation of the Landlord and Tenant and neither the Landlord nor the Tenant is in default under the Site Lease as of the date of this Agreement.

2. The Home, including all attachments to it, is now and will at all times remain the property of the Tenant. The Home is not and will not become a fixture of the Community or the Site. The Landlord shall have no interest in the Home.

3. The Landlord acknowledges and consents to the Lender's security interest over the Tenant's personal property, including the Home, and to the mortgage of or assignment to the Lender of the Tenant's interest in the Site Lease and in any renewals, extensions, replacements or amendments of the Site Lease.

4. If the Tenant defaults under the Site Lease, before terminating the Site Lease or commencing eviction proceedings, the Landlord will advise the Lender in writing at the above address of the Tenant's default, within a reasonable time frame (within 90 days) and allow the Lender a reasonable amount of time (within 45 days after receipt of the notice) to cure the default, including payment of all arrears. The Lender will not be liable for any of the Tenant's covenants including payment of rent, prior to such notice, or until the Lender takes possession of the Home, whichever occurs first.

5. So long as all arrears are paid and obligations under the Site Lease are upheld, and ongoing rental payments are made when due then, upon default of the Tenant under the Lender's security, the Lender (including its employees and agents, but subject to the terms of the mortgage and/or other security agreed between the Lender and the Tenant) may enter the Community and take possession of or sell the Home (other than by on-site auction) while it is in the Community, or the Lender may remove the Home from the Community, on condition that the Lender promptly repairs any damage to the Community caused by such removal. Upon such removal or sale of the Home, the Lender will have no further obligations to the Landlord.

6. If the Lender sells the Home to a purchaser approved by the Landlord (which approval shall not be unreasonably withheld) and if the purchaser wishes the Home to remain in the Community, then the Lender may assign to the purchaser the Site Lease (for the remaining term, if any) or the Landlord will enter into a new lease with the purchaser on substantially the same terms and conditions as the Site Lease, whichever the Landlord chooses. ¹¹

7. The Consent is binding upon the parties hereto and their respective successors, assigns, executors and administrators. The Landlord warrants that the persons signing below are duly authorized to sign this consent. The Lender signs this agreement to acknowledge receipt of a copy of this agreement and this agreement shall not impose any additional obligations on the Lender other than those stipulated in this agreement.

DATED THE _____ DAY OF _____, 200 _____.¹²

Signature of Landlord

Signature of Tenant

Signature of Lender

Print Name of Landlord

Print Name of Tenant

Print Name of Lender

¹ Insert branch address ² Insert name of borrower(s) ³ Insert description of site on which the Home is located and boundaries measured from fixed point of reference ⁴ Insert site # ⁵ Insert name of Landlord ⁶ Insert name and description of Community ⁷ Insert term of Site Lease (e.g. month to month, one year) ⁸ Insert date Site Lease commences ⁹ Insert rental ¹⁰ Insert frequency of rental payments (e.g. monthly) ¹¹ Providing the physical condition of the home meets community standards ¹² Insert day, month and year.

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SCHEDULE 5 ALBERTA BUILDING CODE

Building Codes & Standards

This section links you to information on where the following Codes and Standards are available. Most Codes and Standards are published by external organizations and are not available on-line.

- While the NECB 2011 edition is currently the required standard in Alberta until updated by the NECB 2015 edition, there is now an added incentive for making the NECB 2015 (including the 2017 interim changes) the new required standard. The NECB in electronic form is now free of charge from the National Research Council and Natural Resources Canada.
- National Energy Code for Buildings 2017 ([to purchase](#)) **NEW**

Each code has a coming into force date and a transition period. For more information on the timelines for the Alberta codes see the link below:

[New Alberta Building, Fire and Energy Codes Notice](#) **NEW**

[CSA-A277-16 Procedure for Certification of Prefabricated Buildings, Modules, and Panels](#) **NEW**
See SCHEDULE 5 A

Relocatable Industrial Accommodation

Changes have been made to Part 10 Quality Management System for factory-built relocatable industrial accommodation units for all out-of-province and out-of-country manufacturing facilities. These changes provide the capacity for national and international on-site factory inspection for compliance to the Part 10 Quality Management System and the *Safety Codes Act* by third party certification bodies accredited by the Standards Council of Canada. [Click here](#) for more details.

All in-province manufacturing facilities will continue under the existing Part 10 quality management system.

Please direct your questions to:

Phone: 1-866-421-6929
(local callers must dial the 1-866)
780-644-1010 (outside of Canada)
Fax: 780-427-8686
E-mail: safety.services@gov.ab.ca

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Energy Codes

Alberta and Manitoba have adopted by regulation the National Energy Code for Buildings (NECB) 2011 edition and energy efficiency requirements for housing and small buildings under section 9.36 of their respective Building Code editions. Saskatchewan will be adopting 9.36 as at January 01, 2019.

Both the NECB and section 9.36 under the Alberta Building Code provided an in-force date and a transition period. The coming into force date is the date on which the codes apply or may be enforced. The transition period is to allow construction under the previous Building Code tip adapt to the new energy efficiency requirements. All coming into force dates have a standard 6-month transition period to construct in the previous code provided a permit has been issued prior to the end of the transition period; or the safety codes officer is satisfied that the preparation of the plans and specifications for the project commenced prior to the coming into force date. The objective of this section is to prevent unnecessary and costly changes to construction already underway or plans that have been substantially developed for construction.

The timeline for the adoption of the latest *Alberta* codes are:

Codes	Coming into force or Implementation Date	Transition Period End Date
National Energy Code of Canada for Buildings 2011	November 1, 2015	May 1, 2016
Section 9.36 Energy Efficiency, Alberta Building Code 2014	May 1, 2016	November 1, 2016

The development of the new Model National Energy Codes started in 2007 at the initiation of the Council of Energy Ministers from across Canada. In 2008, all provincial and territorial governments endorsed the upgrading of the original 1997 Model National Energy Codes by 2012 for both buildings and houses. The development of the new energy efficiency codes has been undertaken by the National Research Council (NRC) with full participation of all provinces and territories.

The NECB and energy efficiency requirements for houses and small buildings in the NBC is the result of an extensive consultation process involving stakeholders from Canadian industry, multiple levels of government (federal, provincial, territorial and municipal), the construction industry, and the general public. It was developed by the Canadian Commission on Building and Fire Codes with technical support and funding provided by NRC and Natural Resources Canada (NRCan) as part of its commitment to improving the energy efficiency of Canadian buildings and reducing greenhouse gas emissions. The energy codes place Canada on a comparable footing with most countries that lead the world in energy efficient building construction.

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Information on Energy Codes

To view detailed information and presentations on energy codes, please access the following links:

- [National Energy Code of Canada for Buildings - Home Page](#)
- [Online Presentations for National Energy Code of Canada for Buildings 2011 and Energy Efficiency in Housing and Small Buildings](#)

What components of a building will energy efficiency requirements affect?

The Energy Codes will deal with the following building components:

1. **Building Envelope.** Is the separation between the interior and the exterior environments of a building, comprising of its exterior walls, roof, foundation and slab on ground.
2. **Lighting.** Includes interior and exterior lighting components and systems connected to the buildings electrical service.
3. **HVAC.** Heating, ventilating and air-conditioning covers items such as ducting and piping, controls, ventilation and related equipment.
4. **Service Water Heating.** Is concerned with systems used for the supply of water for purposes other than space heating.

Will the Energy Codes dictate how I must build?

No, whether considering a large commercial complex or a single-family house you will have several approaches to select from to suit the needs of the owner, the budget, and the location. The approaches can be described as follows:

1. **Performance.** The expected energy performance characteristics for the building are met using a design prepared by a qualified professional. This approach offers the greatest possible design flexibility while still meeting energy efficiency goals.
2. **Performance using Simple Trade-Off.** The expected energy performance characteristics for the various building elements are met; however, within in each building element, i.e. exterior windows, it is possible to ‘trade-off’ increased performance in one element for reduced performance in another (i.e. increase wall insulation to allow more less efficient windows). This can be done by the builder without needing to engage a professional designer.
3. **Prescriptive.** The expected energy performance characteristics for the various building elements are met by following the prescribed approach set out in the Code. For example, by following the prescribed level of thermal insulation and number of windows for the region where the building is to be constructed.

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How energy efficient will new homes be?

All Canadian jurisdictions have agreed that the minimum energy efficiency level of homes should be comparable to the EnerGuide 80 standard. Many Albertans are familiar with the Built Green program and EnerGuide 80 is comparable to the Gold level under that program. Establishing the minimum energy efficiency standard for a home does not prevent homebuilders or owners from striving for even greater energy efficiency levels (i.e. a 'net zero' home).

How much will the Energy Codes add to the cost of a building?

Complying with the Energy Codes will add something to the initial construction cost of most buildings. However, there are reports suggesting that for houses there will be zero impact on a family's monthly household budget. This is because the added monthly mortgage charge on a standard 25-year mortgage will be off-set by the amount saved on the monthly heating bill through reduced consumption. Other factors that affect construction cost include:

1. Some homebuilders are already building to high energy efficiency standards which may mean zero increase for their homes.
2. Size and configuration (i.e. square footage, number of stories, lot orientation).
3. Location in the province, meaning homes in the south can be constructed slightly differently from those in the north to achieve the same level of energy performance.
4. Commodity costs both during construction and once occupied.

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Schedule 5(a) Factory-Constructed Homes Comply with ABC

BUILDING CODE VARIANCE

STANDATA

May 2017

14-BCV-005
Page 1 of 2

CSA-A277-16 PROCEDURE FOR CERTIFICATION OF PREFABRICATED BUILDINGS, MODULES, AND PANELS

PURPOSE

To recognize the acceptability of CSA-A277-16 "Procedure for certification of prefabricated buildings, modules, and panels".

DISCUSSION

The Alberta Building Code 2014 (ABC 2014) applies the same requirements to site-built and factory-constructed buildings. It may be difficult to determine whether a factory-constructed building complies with the ABC 2014 once it has been delivered to the construction site because many of the wall, roof and floor assemblies are closed in and their components cannot be inspected. CSA A277-16, "Procedure for Certification of Prefabricated Buildings, Modules, and Panels," was developed to address this problem with regard to residential, commercial and industrial buildings.

CSA-A277-08 "Procedure for factory certification of buildings" is the current standard referenced in ABC 2014, and was recently updated to CSA-A277-16.

CSA-A277-16 has updated criteria that is aligned with the requirements of the ABC 2014 and provides greater safety performance than the currently referenced CSA-A277-08 edition.

- CSA-A277-16 includes but is not limited to the following categories: Energy Performance
- Thermal Performance
- Trade-offs related to Thermal Resistance Performance
- Occupancy Classifications
- Part 10 of the ABC

CODE REFERENCE

Division C, Article 2.4.5.1. states:

2.4.5.1. Factory-Built Assemblies

1) Where a 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 carried out to determine compliance with this Code.

2) Except as provided in Sentence (3), factory-constructed and other off-site-constructed *buildings* that are constructed after 01 May 2015 shall be certified in accordance with CSA A277, "Procedure for Factory Certification of Buildings," by an organization accredited for this purpose by the Standards Council of Canada, to confirm that the *building* complies with the technical requirements, or objectives and functional statements, of this Code.

Unless stated otherwise, all Code references in this STANDATA are to Division B of the Alberta Building Code 2014.

Issue of this STANDATA is authorized by
the Building Administrator

[Original Signed]
Paul Chang



Alberta Municipal Affairs – Community & Technical Support, 16th Floor, 10155 – 102nd Street, Edmonton, Alberta, Canada, T5J 4L4
Phone: 1-866-421-8929 Email: safety.services@gov.ab.ca Website: www.municipalaffairs.alberta.ca

3) Every relocatable industrial camp *building* that is constructed after 01 May 2015 shall be certified by an organization approved for this purpose by the *Chief Building Administrator*, to confirm that the *building* complies with the objectives and functional statements of this Code.

VARIANCE

This variance provides approximately equivalent or greater safety performance with respect to persons and property as that provided for by the Safety Codes Act. Under section 38 of the Safety Codes Act, a written variance may apply to any thing, process or activity to which the Act applies, including any code, standards or body of rules declared in force by this Act. The Act is paramount to the ABC 2014, which is why variances may be issued related to Division C of the ABC 2014.

Certification in conformance with CSA A277-16, "Procedure for Certification of Prefabricated Buildings, Modules, and Panels," is considered to comply with ABC 2014 Division C, Article 2.4.5.1. Factory-Built Assemblies.

CSA A277-16, "Procedure for Certification of Prefabricated Buildings, Modules, and Panels," ISBN : 978-1-4883-0209-1 published and distributed by:

CSA Group
178 Rexdale Boulevard,
Toronto, Ontario
Canada M9W 1R3
Toll-Free Phone Number: 1-800-463-6727
Phone Number: (416)-747-4044
Web: shop.csa.ca

This VARIANCE is applicable throughout the province of Alberta.

SCHEDULE 6 Alberta Municipal Affairs Label

INFORMATION BULLETIN

STANDATA

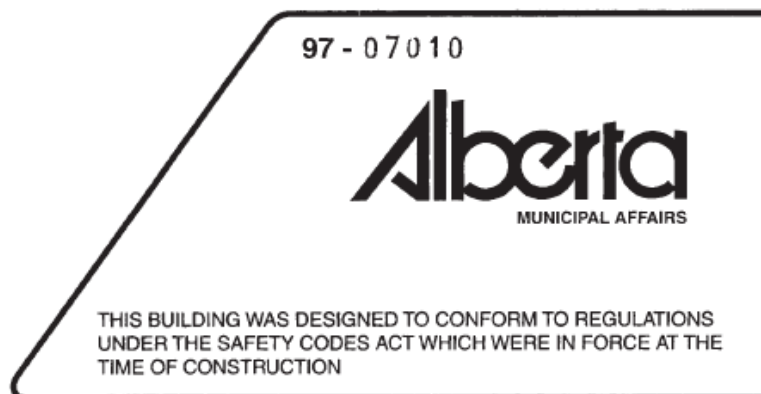
June 2005 97-IB-003R3
Page 1 of 4

MANUFACTURED HOMES AND RELOCATABLE INDUSTRIAL ACCOMMODATION

Alberta Municipal Affairs issues three labels for two types of manufactured structures; manufactured homes (mobile homes, off-site manufactured homes and ready-to-move (RTM) homes) and relocatable industrial accommodation. The labelling program is used to show compliance with the Alberta Building Code 1997 (ABC 1997) and associated regulations. Label facsimiles together with comments on their use are given below.

1. New Manufactured Homes

Alberta Municipal Affairs labels are only applied to manufactured housing units that have been fully completed in the factory. Typically, these units are manufactured to the CSA-Z240 MH series of standards and must also comply with the ABC 1997. Units will then be eligible for both CSA and Alberta Municipal Affairs labels. A sample of the Alberta Municipal Affairs label for factory completed units follows:



ISSUE OF THIS INFORMATION
BULLETIN IS AUTHORIZED BY
THE DIRECTOR/ADMINISTRATOR

C.M. TYE



SAFETY CODES COUNCIL



Alberta Municipal Affairs, 16th Floor, Commerce Place, 10155-102 Street, Edmonton, Alberta, Canada, T5J 4L4

Many off-site manufactured homes are sold as incomplete units where owners opt for completing them in-situ. These units are manufactured using the CSA-A277 standard (see also STANDATA 97-13-037). As

with fully completed homes, the ABC 1997 is the construction standard. Because these units leave the plant at varying degrees of completion the owner must obtain all necessary permits for the remaining work to be completed.

Manufactured housing units in this category will not receive an Alberta Municipal Affairs label; however, will be provided with a CSA-A277 label signifying that construction completed in the factory meets the A3C 1997. This work is contracted out under an agreement between Alberta Municipal Affairs and the certification organization (CSA QAI or Intertek) whereby the certification organization reviews the construction plans, distribute labels, and conducts periodic plant inspections. In Saskatchewan and Manitoba, the certification organization provides similar services; however these two provinces do not provide a provincial label.

For each unit the manufacturer will also provide the purchaser with written confirmation of the work completed in the factory. This is then provided to the local *Safety Codes Officer (SCO)* to support the release or permits for the on-site construction necessary to complete the home. (see Article 1.2.1.1)

Existing Manufactured Homes

Homes with Alberta Municipal Affairs Labels

When an existing factory-built home is to be relocated, it may have an AMA label attached giving the local SCO assurance it was constructed in conformance with the Alberta Building Code in force at the time of manufacture. The first two numbers on the label will designate the Alberta Building Code edition. For example, "85" confirms it was constructed or has been upgraded to comply with the Alberta Building Code 1985. The unit may also have a CSA-A277 or CSA-Z240 label.

The local SCO may wish to perform an inspection of a home before relocation to determine if any changes have been made to the unit since construction. If this is the case, the SCO may require the owner to obtain permits and perform upgrades should deficiencies be identified.

In all *three prairie provinces* and whether or not the unit requires upgrading, a permit will normally be required to site the home at the new location. This permit will cover items such as limiting distance (spatial separation), the foundation/anchorage system, entrance stairs, deck additions and site grading (see Article 1.2.1.1).

Homes without Alberta Municipal Affairs Labels (with CSA Label)

When an existing factory-built home is to be relocated in Alberta and does not have an AMA label, but has a CSA label, the unit should be inspected by an SCO. In this case, the SCO will issue a report to the owner or any safety deficiencies to be addressed before the unit is moved. Items may include bedroom window sizing, smoke alarms, exit doors, solid fuel fired appliances, and protection of wall surfaces around kitchen ranges. The permit will also cover the siting issues dealt with above.

2 / 97-IB-003R3

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Schedule 7 Certification Inspection Procedures

The manufacturing facility constructing factory-built homes are certified by a certification body (CSA, Intertek or QAI) that certifies the homes comply with Canadian Standards. This procedure enables each manufacturing facility to build fully finished homes, place a certification label on the manufactured (mobile) home certifying compliance to the *CSA-Z240 MH* National Mobile Home Standard, and place a certification label certifying compliance to the *NBCC*, or Provincial Building Code. For Homes sited in Alberta, it further enables the factory to apply an Alberta Municipal Affairs Label certifying *Alberta Building Code (ABC)* compliance.

CSA certification ensures each manufacturing facility maintains strict quality control and inspection programs and utilized well trained labour, a design staff with thorough building code knowledge, and skilled inspectors that monitor and inspect each home at each stage of production process. In addition, Certification personnel conduct periodic inspection of the homes being produced in the factory. The Certification Label placed on each home is numbered and a serial number is assigned to each home. A permanent record of the Certification Label number, the serial number and the specifications of each home produced is maintained by the manufacturer.

Labels to look for:



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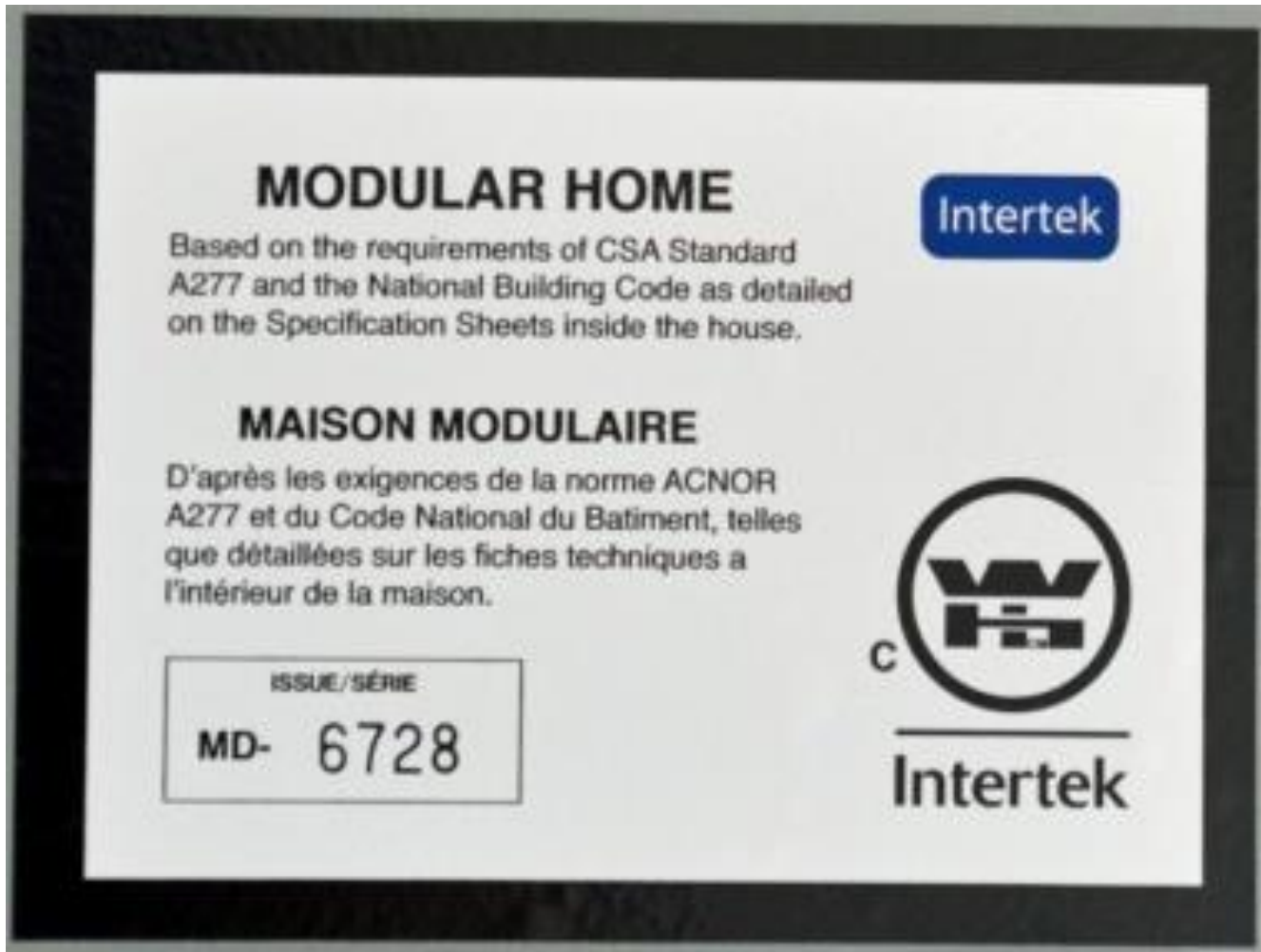
Schedule 8 CSA Label



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Schedule 9 Intertek Label



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SCHEDULE 10 Quality Auditing Institute Label



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SCHEDULE 11

MODULAR-BUILT HOMES SPECIFICATION NAMEPLATE

Home description on the document includes:

- Date of Manufacture
- Manufacturer (and address)
- Model and Serial Number
- Roof Design Snow Load
- Ground Snow Load
- Thermal Resistance of Insulation
- Window Ratings
- Outside Design Temperature
- List of Factory Installed Appliances
- Electrical System
- Plumbing System
- Warnings related to Natural Gas or Propane System



SPECIFICATION NAMEPLATE PLAQUE SIGNALÉTIQUE

MANUFACTURER INFORMATION/ INFORMATION DU MANUFACTURIER

MANUFACTURER/
Fabricant:

PROJECT NAME OR MODEL NUMBER:
Nom du projet ou numéro de modèle:

DATE OF MANUFACTURE/
Date du fabricant:

MODULE SERIAL NUMBER OR PRODUCT CODE:
Numéro de série du module ou code de produit:

FACTORY ADDRESS/
Adresse de l'usine:

CSA A277 CERTIFICATION LABEL NUMBER:
/ CSA A277 étiquette de certification QAI numéro:

DESIGN DATA/ DONNÉES DE CONCEPTION

PRODUCT TYPE:
Type de produit (choisir un seul)

- ☐ PREFABRICATED BUILDING/Bâtiment Modulaire
☐ PREFABRICATED MODULE / Module Préfabriqué
☐ PREFABRICATED PANELS / Panneaux
☐ ELECTRICAL FEATURES ONLY/ Structures des seules caractéristiques électriques
☐ RELOCATABLE UNIT (ALBERTA PART 10) / Unité Relocalisable

☐ (PART 9) ☐ (PART 4)

FOUNDATION TYPE/ CHECK ONE:

Type de Fondation (choisir un seul):

☐ PERIMETER FOUNDATION WALL/ Mur de fondation périmétrique

☐ PIERS/ Pieux, piliers: 1/50 WIND PRESSURE/Pression du vent: _____ (kPa)
(For resistance to overturning without anchorage/
Pour résistance au renversement sans ancrage)

ANCHORAGE/ Ancrage: (YES/NO): _____

(The building installed on piers was evaluated to the deformation resistance test in accordance with
CSA Z240.2.1/ Ce bâtiment est installé sur des pieux se qualifiant pour un test de déformation et de
résistance en conformité avec la norme CSA Z240.2.1)

ENVELOPE EFFECTIVE THERMAL RESISTANCE: (CHECK ONE)
Enveloppe résistance thermique effective (choisir un seul)

☐ PRESCRIBED/Imposé

WALLS / Mur: _____ (RSI)

FLOORS / Plancher: _____ (RSI)

CEILING / Plafond: _____ (RSI)

☐ TRADE OFF/ Compromis:

ASSEMBLIES AFFECTED/ Zones affectées: _____

AREA AFFECTED/ Zones affectées (m²): _____

CAPILLARY BREAK IN CLADDING: (YES/NO): _____
Fuite capillaire dans le parement

CLIMATE ZONE: PROVINCE: _____ ZONE: _____
Zone Climatique:

FLOOR LIVE LOAD/ charge au plancher: _____ (kPa)

SPECIFIED SNOW LOAD/ (1/50): _____ (kPa)
Charge de neige spécifiée

SEISMIC RESPONSE S_s(0.2): _____

Réponse sismique

HOURLY WIND PRESSURE (1/50): _____ (kPa)

(For resistance to racking & uplift /
Pour la résistance au soulèvement par le vent)

WINDOWS/DOORS/SKYLIGHTS THERMAL CHARACTERISTICS:
Caractéristiques thermiques des fenêtres, puits, et portes de lumière:

MAX. U-VALUE:
coefficient U de transfert thermique: _____ W/(m²·K)

ENERGY RATING:
Cote énergétique: _____

OUTSIDE DESIGN TEMPERATURE:
Température extérieure de conception: _____

HEAT LOSS/ Perte thermique: _____ (°C)

HEAT GAIN/ Gain thermique: _____ (°C)

FACTORY INSTALLED APPLIANCES / APPAREILS INSTALLÉS À L'USINE

APPLIANCE TYPE	MAKE / MARQUE	MODEL / MODÈLE	FUEL / COMBUSTIBLE

SITE INSTALLED COMPONENTS, ASSEMBLIES, AND SYSTEMS COMPOSANTES, ASSEMBLAGES ET SYSTÈMES INSTALLÉS SUR PLACE

COMPLIANCE / CONFORMITÉ

Units bearing this label were manufactured in the above indicated factory address and have been constructed to the following building code(s) and standards:
L'unité portant cette étiquette a été fabriquée à l'adresse de l'usine apparaissant plus haut et a été construite en conformité aux normes et codes du bâtiment

ELECTRICAL SYSTEM / ÉLECTRIQUE:

Volts: _____ V Hertz: 60 Hz Amps: _____ A

PLUMBING SYSTEM / PLOMBERIE:

Supply water system tested at 700 kPa (100 PSI) / Installation sous pression éprouvée à 700 kPa (100 PSI)
Drainage system tested at 35 kPa (5 PSI) / Installation sous pression éprouvée à 35 kPa (5 PSI)

NOTES:

- Any additions or modifications to factory installed systems must be authorized by the appropriate provincial or municipal authorities having jurisdiction. Toute adjonction ou modification aux installations doit être autorisée par les autorités provinciales ou municipales compétentes.
- QAI Listing only covers the systems noted above only when installed by the manufacturer in a factory / L'inscription de QAI ne couvre que les systèmes mentionnés ci-dessus et seulement lorsque installés en usine par le fabricant
- (NA) Under the heading "Factory Installed Appliances" indicates that appliances are not factory installed. (NA) Sous l'en-tête « Appareils installés à l'usine » indique des appareils non installés à l'usine.
- This specification nameplate and the exterior QAI label provide the only evidence of Listing. Cette plaque signalétique ainsi que l'étiquette extérieure QAI constituent les seules preuves de la certification QAI.
- Those portions of the Modular Building to be completed on site are subject to inspection by local building inspectors (A277 A1.2). Les parties de la maison modulaire qui doivent être accomplies sur l'emplacement sont sujettes à l'inspection par les inspecteurs des bâtiments locaux (A277 A1.2).
- It is recommended that highway authorities be consulted on regulations applicable in areas into which this unit may be moved, especially in regard to permits and maximum allowable lengths and widths. Il est recommandé de consulter les autorités routières au sujet des règlements applicables dans les régions à l'intérieur desquelles cette unité peut être transportée, particulièrement en ce qui concerne les longueurs maximales admissibles.
- Nameplate must be applied to a location that is readily visible after completion of the building / Doit être appliqué à toutes les parties encore visibles après la finition du bâtiment.
- In the case of multi-unit or multi-suite buildings, each unit or suite shall have this label / Dans le cas de bâtiments à unités multiples ou à suites multiples, chaque unité ou suite devra recevoir cette étiquette.

**DO NOT REMOVE
NE PAS ENLEVER**

NAMEPLATE SERIAL # : _____

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Schedule 12 Calculating Life Span on a Home (for more information contact the MHAPP office directly as MHI Canada is no longer operating)

MHI Canada

Trade Association to the Manufactured Housing Industry

99 Bank Street, Suite #409, Ottawa, Ontario K1P 6B9

Ph: (613) 747-7083

Fax: (613) 747-6264

E-mail: mhicanada@cw.ca

Re: Serviceable life expectancy of mobile homes

While there are no formal Canadian statistics addressing the serviceable life of mobile homes, from the late 1950's to the mid 1970's more than 225,000 mobile homes were sold in Canada and the vast majority of those homes are still occupied. Much like traditional site-built homes, mobile homes require routine maintenance and this is the single most important factor in their longevity. From a practical perspective most mobile homes produced prior to 1972 used lighter framing materials than those used in traditional site built homes, so theoretically the ultimate serviceable life could be less.

In 1972 the Canadian Standards Association developed a National Construction Standard for Mobile Homes (CSA Z240 MH) and in all important areas related to health, safety and durability the structure of mobile homes built in compliance to this Standard were fully comparable to site built homes of that period. By 1976 all 10 Provinces made that CSA Standard mandatory, and the modern day mobile home was formally born. Since 1976 each time the National Building Code of Canada is revised, CSA examines those revisions and those related to basic health and safety are adopted in a new edition of the Z240 MH Standard.

Unrelated to the code comment above, when mobile homes do suffer a shortened serviceable life expectancy it is generally related to foundation related problems resulting from poor installation and/or poor maintenance. The very same problems shorten the serviceable life of site built homes.

In summary, there is much evidence to suggest that since 1976, mobile homes set on properly installed foundations that are properly maintained will last as long as site built homes constructed during the same period. Reinforcing the latter is the fact that when CMHC now underwrites mortgages on resale mobile homes, rather than using the year of manufacture as the determinant of condition as they did in the past, condition now is determined by an appraisal in the same manner it is for resale site built homes.

Sincerely,



Hank Starno,
President

SCHEDULE 13

CSA-Z240.10.1 Site Preparation, Foundation, and Anchorage of Manufactured Homes

Preface

This is the third edition of *CSA-Z240.10.1*, Site preparation, foundation, and anchorage of manufactured homes. It supersedes the previous editions, published in 1994 and 1986 under the title Site Preparation, Foundation, and Anchorage of Mobile Homes.

1. Scope

1.1 This Standard applies to manufactured and modular-built homes designed to be supported on longitudinal floor beams. **NOTE:** For simplicity, the term "manufactured home" is used in this Standard to refer to both manufactured homes and modular-built homes.

1.2 This Standard includes requirements for the following aspects of manufactured home installation: (a) site preparation; (b) foundations for single- and multiple-section single-storey units; (c) anchorage; (d) connection of multiple-section units; and (e) skirting.

1.3 This Standard is intended to be used by installers, inspectors, and owners of manufactured homes.

1.4 Foundation systems designed and constructed in accordance with this Standard are permanent installations.

1.5 In CSA Standards, "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; "should" is used to express a recommendation or that which is advised but not required; "may" is used to express an option or that which is permissible within the limits of the standard; and "can" is used to express possibility or capability. Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material. Notes to tables and figures are considered part of the table or figure and may be written as requirements. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

1.6 The values given in SI (metric) units are the standard. The values given in parentheses are for information only.

Click for the most recent [CSA Z240.10.1-16 Standard](#)

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Foundations for Deformation Resistant Buildings

STANDATA – 97-IB-037R1

The STANDATA Bulletin covering the use of *CSA-Z240.10.1* foundations up until the revised STANDATA Bulletin was issued in September 2005, as follows:

9.15.1.4. Foundations for Deformation Resistant Buildings

- 1) Where the superstructure of a detached building conforms to the requirements of the deformation resistance test in *CAN/CSA-Z240.2.1.*, "Structural Requirements for Mobile Homes," the foundation is permitted to be constructed in conformance with *CSA-Z240.10.1* "Site Preparation, Foundation and Anchorage of Mobile Homes". Therefore modular-built or manufactured homes built under the *CAN/CSA-A277* standard would not be included under Sentence 9.15.1.4. (1) of the Alberta Building Code 1997 as an exception".

The revised STANDATA that solved the problem reads as follows:

9.15.1.4. Foundations for Deformation Resistant Buildings

- 1) Where the superstructure of a detached building conforms to the requirements of the deformation resistance test in *CAN/CSA-Z240.2.1.*, "Structural Requirements for Mobile Homes", the foundation is permitted to be constructed in conformance with *CSA-Z240.10.1*, "Site Preparation, Foundation and Anchorage of Mobile Homes". Foundations constructed in conformance with *CAN/CSA-Z240.10.1* can be used for modular-built or manufactured homes. (*CAN/CSA-A277* and *CAN/CSA-Z240 MH*) provided that the superstructure of the homes satisfies the criteria of deformation resistance test in conformance with *CAN/CSA-Z240.2.1.*

As noted previously, the revised STANDATA Bulletin fully solved the problem with *CSA-A277* modular-built Homes using *CSA-Z240.10.1* Standard foundations, but it did not change the Standard in any way.

Modular-built and manufactured homes (single & multi section) that are supported on longitudinal floor beams. The design of each model intended for *CSA-Z240.10.1* foundation application which must be tested in the manufacturing facility and found to conform to the requirements of the deformation resistance test in *CAN/CSA-Z240.2.1.* In order to substantiate conformance, the CSA Specification Sheet on each home must be permanently marked to read as follows: The design of this home has been tested and evaluated in accordance with the Deformation Resistance Test set forth in CSA Standard *CAN/CSA Z240.2.1.*, and is in full compliance.

The above marking is what local building inspectors must see in order to be sure a home is deformation resistant, and therefore can utilize a *CSA-Z240.10.1* surface foundation. The marking can be found on the CSA Specification Sheet located on the electrical panel door of all homes produced by MHA member housing manufacturers.

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Intent Statements

- [Supplement to the NECB 2011: Intent Statements](#)
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