

# TINY HOUSES AND THE 2020 MINNESOTA RESIDENTIAL CODE

Minnesota Department of Labor and Industry

## OVERVIEW

"Tiny houses" have received a lot of attention and interest in recent years. The following information is provided to clarify how these small structures are regulated by the Minnesota State Building Code. The Minnesota State Building Code is the standard of construction that applies statewide for the construction of buildings (MS 326B.121) including tiny houses.

Loosely defined, tiny houses range from about 100 to 400 square feet. The following describes how these houses are regulated by building codes, zoning codes and the Department of Housing and Urban Development (HUD).



The trend of tiny houses has received a lot of attention in recent years. This handout is provided to clarify how these small structures are regulated by the Minnesota State Building code.

## ZONING REQUIREMENTS

Municipalities establish zoning ordinances to regulate land use, location, height, width, type of foundation, number of stories and size of buildings. These zoning ordinances vary by municipality.

Minimum building size varies from areas of 500 to 2,000 square feet. Jurisdictions may also require minimum lot sizes related to the house size. Sometimes there are minimum house size requirements such as 24 feet by 24 feet or a minimum dimension of 20 feet. Because of these varying requirements, the jurisdiction must be consulted for specifics

## BUILDING CODES

The Minnesota Residential Code includes Appendix Q, Tiny Houses. The "code," for the purpose of constructing houses, means the 2020 Minnesota Residential Code. It is the standard that applies statewide.

The 2020 Minnesota Residential Code defines a dwelling as a single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. Appendix Q defines a tiny house as a dwelling 400 square feet or less in floor area excluding lofts. The code includes requirements for light, ventilation, heating,

### Other codes related to house construction include:

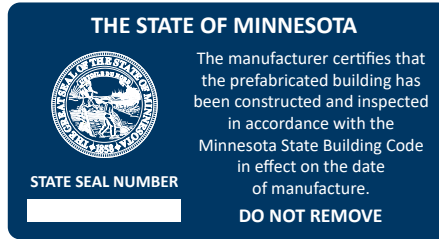
- Minnesota Energy Code
- Minnesota Mechanical Code
- Minnesota Electrical Code
- Minnesota Rules Chapter 1303
- Minnesota Plumbing Code

minimum room sizes, ceiling heights, sanitation, toilet, bath and shower spaces, emergency escape and rescue openings, means of egress, smoke alarms and carbon monoxide alarms.

# PREFABRICATED BUILDINGS

## Minnesota Rules, Chapter 1360

Tiny houses constructed as prefabricated buildings must comply with the requirements of Minnesota Rules Chapter 1360 and be designed and constructed in accordance with the Minnesota Residential Code. Review of building plans and inspections are performed by the Minnesota Department of Labor and Industry. The completed building requires a Minnesota prefabricated building label.



Example prefab construction label - located under kitchen sink.

Prefabricated building manufacturers are permitted to build three or fewer buildings per year. Construction of more than three buildings is regulated by Minnesota Rules Chapter 1361 for industrialized/modular buildings.

A data plate must be attached to the dwelling that includes the following minimum information:

- design loads
- codes
- IIBC label numbers
- serial numbers
- model designation
- date of manufacture
- name and address of manufacture
- occupancy and type of construction.

All on-site work is subject to local jurisdiction and inspections according to the Minnesota Residential Code.

# INDUSTRIALIZED/MODULAR BUILDINGS

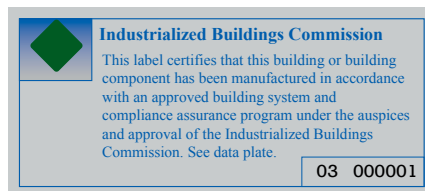
## Minnesota Rules, Chapter 1361; Interstate Industrialized Buildings Commission (IIBC)

Tiny houses constructed as modular buildings must comply with Minnesota Rules Chapter 1361 and the Interstate Industrialized Buildings Commission (IIBC). These modular dwellings must be designed and constructed in accordance with the Minnesota Residential Code. Review of dwelling plans and in-plant inspections are performed by a certified IIBC third-party agency.

Modular buildings must have IIBC construction labels on each building section or every 600 square feet of closed panels.

A data plate must be attached to the dwelling that includes the following minimum information:

- design loads
- codes
- serial numbers
- IIBC label numbers
- model designation
- date of manufacture
- name and address of manufacture
- occupancy and type of construction.



Example IIBC label - located inside each home section.

All on-site work is subject to local jurisdiction and inspections according to the Minnesota Residential Code.

# HUD MANUFACTURED HOMES

Tiny houses constructed as a manufactured home must comply with U.S. Department of Housing and Urban Development (HUD Code). "Manufactured home" means a single family dwelling in one or more sections, which in the traveling mode is 8 body feet or more in width or 40 body feet or more in length, or, when erected on site, is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities.

A data plate must be attached to the dwelling unit to include the following as a minimum:

- design loads
- codes
- label numbers
- serial numbers
- model designation,
- date of manufacture
- name and address of manufacturer

AS EVIDENCED BY THIS LABEL NO. [REDACTED]  
THE MANUFACTURER CERTIFIES TO THE BEST OF THE MANUFACTURER'S KNOWLEDGE AND BELIEF THAT THIS MANUFACTURED HOME HAS BEEN INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT AND IS CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE. SEE DATA PLATE.

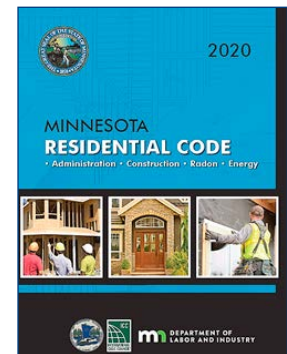
Example HUD construction label - located on exterior of each section.

Review of dwelling plans and in-plant inspections are performed by HUD-certified third-party agencies. All on-site work is subject to the local jurisdiction and inspections according to the Minnesota Residential Code.

## SITE-BUILT STRUCTURES

Tiny houses constructed on site are regulated by the Minnesota State Building Code. The dwelling construction must comply with all the requirements of the Minnesota Residential Code.

The Minnesota Residential Code can be viewed at <http://codes.iccsafe.org/app/book/toc/Minnesota/Residential/index.html>.



### NOTE:

Recreational park trailers, or park models, are designed as **temporary** living quarters for recreational, camping or seasonal use but not as year-round dwellings. These trailers are often constructed to ANSI standard (A119.5) and are self-certified by the manufacturer.

## MINNESOTA RESIDENTIAL CODE

The following code references provide general code requirements related to dwelling construction. The dwelling must comply with all applicable requirements of the Minnesota State Building Code.

### General requirements

#### R202 – Definition of dwelling unit and habitable space.

Dwelling unit: A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

Habitable space: A space in a building

for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

#### R301.1 Application.

Buildings and structures must be constructed to safely support all loads, including dead loads, live loads, roof

loads, flood loads, snow loads, wind loads and seismic loads prescribed in this code. The construction of buildings and structures in this code must result in a structure that transfers all loads from their point of origin to the foundation.

**Continues on next page.**

## General requirements, continued.

### R303 – Light, ventilation and heating

Habitable rooms must have 8 percent of the floor area as natural light and 4 percent of the floor area as natural ventilation (see exceptions).

Bathrooms must have 3 square feet of natural light and 1.5 square feet of natural ventilation (see exception).

Mechanical ventilation must comply with Minnesota Rules 1322.

Dwelling must be capable of maintaining a minimum room temperature of 68 degrees at three feet above the floor and two feet from the exterior walls (excludes use of portable heaters).

### R304 – Minimum room areas

Habitable rooms must be at least 70 square feet in area and not less than 7 feet in any direction (except kitchens).

### R306 – Sanitation

Every dwelling unit must have a water closet, lavatory tub or shower and kitchen sink.

All plumbing fixtures must be connected to a sanitary sewer or approved private sewage system and an approved water supply.

Kitchen sinks, lavatories, bathtubs, showers, bidets, laundry tubs and washing machines must have hot and cold water.

### R307 – Toilet, bath and shower spaces

See the Minnesota Plumbing Code for required plumbing fixture clearances.

Bathtubs, shower floors, and walls must have a nonabsorbent surface a minimum of 6 feet above the floor.

### R310 – Emergency escape and rescue openings

Basements, habitable attics and every sleeping room must have at least one operable emergency escape and rescue opening of 5.7 square feet. (See

code for minimum dimensions).

### R311 – Means of egress

All dwellings must have a means of egress door with a clear width of 32 inches and a clear height of 78 inches.

A floor or landing is required on each side of exterior doors.

Exterior landings must be positively attached to the primary structure.

Hallways and stairways must have a minimum width of 36 inches.

Stair treads must be 10 inches minimum in depth, stair risers 7.75 inches in height, or as permitted in Appendix Q.

A floor or landing is required at the top and bottom of each stairway.

A handrail is required at stairs having four or more risers.

### R314 – Smoke alarms

Smoke alarms are required in each sleeping room, immediate vicinity of the bedrooms, and on each additional story of the dwelling including basements and habitable attics.

### R315 – Carbon monoxide alarms

Carbon monoxide alarms are required in every dwelling unit having fuel-fired appliances or attached garage.

### MR 1322 – Residential Energy Code

Dwellings must comply with the Minnesota Energy Code.

### MR 1346 – Mechanical Code

Dwellings must comply with the Minnesota Mechanical Code.

### MR 1303 – Radon requirements

Dwellings must comply with Minnesota Rules Chapter 1303 for either passive or active radon control systems.

### MR 1315 – Electrical Code

All electrical service, wiring and fixtures for the structure must comply with the National Electrical Code.

### MR 4715 – Plumbing Code

Dwellings must comply with the Minnesota Plumbing code.

## Appendix Q – Tiny Houses

### AQ101 – Scope

Tiny houses used as dwelling units must comply with the Minnesota Residential Code unless otherwise stated in Appendix Q.

### AQ102/R202 – Definitions

Tiny house: A dwelling that is 400 square feet or less in floor area measured from inside of wall to inside of wall and excludes lofts.

Loft: A floor level more than 30 inches above the main floor with a ceiling height less than 6 feet 8 inches and used as living or sleeping space.

### AQ103 – Ceiling height

Habitable space and hallways must have a minimum ceiling height of 6 feet 8 inches. Bathrooms, toilet rooms and kitchen shall have a minimum ceiling height of at least 6 feet 4 inches.

### AQ104 – Lofts (area and access)

Lofts used for living or sleeping require a floor area of 35 square feet minimum with a horizontal dimension not less than 5 feet. Loft ceiling heights less than 3 feet are not included in the minimum required loft floor area.

Lofts must have access by stairways, ladders, alternating tread devices, or ships ladders. (See section for specific compliance requirements).

Lofts guards are required on open side of lofts and cannot be less than 36 inches in height or one-half of the clear height to the ceiling, whichever is less.

### AQ105 – Emergency escape and rescue openings (EERO)

Emergency escape and rescue openings must comply with Section R310. (See exception for loft roof access windows).