



Manufactured Building

Wayne Goodwin, Commissioner of Insurance
Rick McIntyre, Assistant State Fire Marshal

MEMORANDUM

Date: October 21, 2015 (replaces September 16, 2015 Tiny Homes in North Carolina memo)

To: Code Officials, Manufacturers, Consumers, and other Interested Parties

From: C. Patrick Walker, PE
Technical Services Manager
Manufactured Building Division
Office of State Fire Marshal/NC Department of Insurance

Re: Guidelines for Tiny Homes in North Carolina

There has been a nationwide movement recently regarding the usage of "Tiny Homes" as a viable single-family dwelling. Tiny Homes are acceptable as permanent single-family dwellings in North Carolina provided they meet the following minimum requirements.

NOTE: This is not intended to be an all-inclusive list of requirements. All code references are to the *North Carolina State Residential Code, 2012 edition* unless otherwise noted.

Tiny Homes in North Carolina

Administrative Requirements

1. Must be permitted by the local building official having jurisdiction over the building site – *Section 106.1 - NC Administrative Code and Policies, 2012 Edition*
2. Must be of open construction so unit can be fully inspected by the local building official – *Section 107.1 - NC Administrative Code and Policies, 2012 Edition*
3. May be constructed of closed construction at an off-site location if the off-site construction is inspected and certified under the NC Modular Construction Program. *NC General Statute 143:139.1*
4. Must meet local zoning and set-back requirements as applicable
5. Must meet community protective covenant requirements as applicable

Construction Requirements

1. Unit and its foundation must comply with the *North Carolina State Residential Code, 2012 Edition – Section 101.3.2.11 NC Administrative Code.*
2. Habitable Space is defined as 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.* - *Section R202*

3. Must have at least one habitable room with not less than 120 square feet of gross floor area - *Section R304.1*
4. Other habitable rooms must have not less than 70 square feet of floor area - *Section R304.2* - Exceptions: Kitchens
5. Habitable rooms must not be less than 7 feet in any horizontal dimension - *Section R304.3*
6. Ceilings Height Effect on Room Area – Portions of a sloped ceiling measuring less than 5 ft. or a furred ceiling measuring less than 7 ft. from the finished floor the finished ceiling shall not be considered as contributing to the minimum required habitable area for that room.
7. Ceiling heights must be a minimum 7 foot in habitable spaces, hallways, bathrooms, and toilet rooms – *Section R305*
8. Every dwelling unit must have toilet facilities – water closet, lavatory, and a bathtub or shower – *Section R306.1*
9. Must have a kitchen area with a sink – *Section R306.2*
10. All plumbing fixtures must be connected to a sanitary sewer or to an approved private sewage disposal system – *Section R306.3* (Storage tanks are not acceptable)
11. Must be provided with a heating facility – *Section R303.8*
12. Must meet the means of egress requirements - *Section R311*
13. Must meet the energy conservation requirements – *Section N1101.1*
14. **IF the unit is constructed through the NC Modular Construction Program**, the unit must also meet the following minimum construction and design standards for modular homes - *NC General Statute GS § 143-139.1.*
 - (1) Roof pitch. - For homes with a single predominant roofline, the pitch of the roof shall be no less than five feet rise for every 12 feet of run.
 - (2) Eave projection. - The eave projections of the roof shall be no less than 10 inches, which may not include a gutter around the perimeter of the home, unless the roof pitch is 8/12 or greater.
 - (3) Exterior wall. - The minimum height of the exterior wall shall be at least seven feet six inches for the first story.
 - (4) Siding and roofing materials. - The materials and texture for the exterior materials shall be compatible in composition, appearance, and durability to the exterior materials commonly used in standard residential construction.
 - (5) Foundations. - The home shall be designed to require foundation supports around the perimeter. The supports may be in the form of piers, pier and curtain wall, piling foundations, a perimeter wall, or other approved perimeter supports. (1971, c. 1099; 1989, c. 653, s. 2; 2003-400, s. 17.)
15. **IF the unit is constructed through the HUD Manufactured Housing Construction Program** the unit must also contain a minimum of 320 sq. ft. of floor area when erected. *24 CFR 3280.2 - Definition of Manufactured Home*

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NCDOI NOTE: This memo addresses structures intended for use as a permanent single-family dwelling. Units that are manufactured and certified by the **Recreational Vehicular Industry Association (RVIA)** are considered recreational vehicles and should be treated as such.

NCDOI NOTE: See the NCDOI Recreational Park Trailer Memo for Requirements for Recreational Park Trailers (Park Models, Park Model RV's)



Manufactured Building

Wayne Goodwin, Commissioner of Insurance
Rick McIntyre, Assistant State Fire Marshal

MEMORANDUM

DATE: October 21, 2015 (replaces September 3, 2014 Recreational Park Trailer (Park Models)/ Permanent Dwellings Memo)
TO: Building Inspectors / Third Party Inspection Agencies / other Interested Parties
FROM: C. Patrick Walker, P.E.
Technical Services Manager
Manufactured Building Division
RE: Recreational Park Trailers (Park Models)/ Permanent Dwellings

The purpose of this memorandum is to clarify the position of the NC Department of Insurance on the requirements for the labeling and setting up of "Recreational Park Trailers" (formerly "Park Model" recreational vehicles) as permanent dwelling units. All references herein to the North Carolina Electrical Code are to the 2011 Edition (National Electrical Code (NEC) w/NC Revisions).

RECREATIONAL VEHICLE: (defined by HUD in 24 CFR 3282.8 (g) Manufactured Home Procedural and Enforcement Regulations)

As defined by HUD in 24 CFR 3282.8 (g) Manufactured Home Procedural and Enforcement Regulations

A recreational vehicle is a vehicle which is:

- (1) Built on a single chassis;*
- (2) 400 Square feet or less when measured at the largest horizontal projections;*
- (3) Self-propelled or permanently towable by a light duty truck; and*
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.*

As defined in Article 551, NEC

A vehicular-type unit primarily designed as temporary living quarters for recreational, camping, or travel use, which either has its own motive power or is mounted on or drawn by another vehicle. The basic entities are travel trailer, camping trailer, truck camper, and motor home.

As defined in ANSI A119.5, Park Model Recreational Vehicle Standard, 2015 Edition

A vehicular type unit primarily designed as temporary living quarters for recreational, camping, travel or seasonal use, that either has its own motive power, or is mounted on, or towed by another vehicle. The basic entities are: camping trailer, fifth wheel trailer, motor home, travel trailer and truck camper.

PARK MODEL RECREATIONAL VEHICLE - also known as Recreational Park Trailer and Park Model

As defined in ANSI A119.5, Park Model Recreational Vehicle Standard, 2015 Edition

A single living unit that is primarily designed and completed on a single chassis, mounted on wheels, to provide temporary living quarters for recreational, camping, or seasonal use, is certified by the manufacturer as complying with all applicable requirements of ANSI A119.5 and:

- (a) Has a gross trailer area not exceeding 400 square feet (37.15 square meters) in the setup mode or*
- (b) If having a gross trailer area not exceeding 320 square feet (29.72 square meters) in the setup mode, has a width greater than 8.5 ft. (2.59 meters) in the transport mode.*

As defined by Article 552.2, NEC

A unit that is built on a single chassis mounted on wheels and has a gross trailer area not exceeding 37 m² (400 ft²) in the set-up mode.

General Requirements per Article 552.4, NEC

A park trailer as specified in 552.2 is intended for seasonal use. It is not intended as a permanent dwelling unit or for commercial uses such as banks, clinics, offices, or similar.

GROSS TRAILER AREA – (as defined in ANSI A119.5, 2015 Edition)

The total plan area measured to the maximum horizontal projections of exterior walls in the setup mode.

NCDOI Note: Loft areas that are habitable room(s) (5 ft. or greater ceiling height) shall be included in the gross trailer areas. Accessible loft spaces with ceiling height less than 5 ft. are not included in the gross trailer area. Per HUD, roof overhangs are not included in the calculation of the gross trailer area. Any units to be labeled under the HUD manufactured housing program must contain a minimum of 320 sq. ft. in gross trailer area.

NORTH CAROLINA CODE REQUIREMENTS:

Recreational Park Trailer - Electrical Supply System

The electrical supply system to Recreational Park Trailers is required to be installed and inspected in accordance with Article 552 of the North Carolina Electrical Code (NEC). The power supply is installed in accordance with Section 552-43 of the 2011 NEC. Section 552-43(A) states:

(A) *Feeder. The power supply to the park trailer shall be a feeder assembly consisting of not more than one listed 30-ampere or 50-ampere park trailer power-supply cord with an integrally molded or securely attached cap, or a permanently installed feeder.*

NCDOI Note: All permanently installed feeders must be permitted and inspected by the local building official having jurisdiction.

Recreational Park Trailer - Temporary Installation

Since these units are defined to be temporary structures, it is not permissible to set them up as permanent dwelling units. Therefore it is our interpretation that they cannot have any permanent plumbing or mechanical connections. However, for safety reasons we will allow these units to be temporarily blocked up and anchored against overturning forces, but to remain classified as a temporary structure, the wheels and axles must remain on the unit at all times. We recommend that all recreational vehicles used for temporary recreational dwellings be set-up in accordance with the manufacturer's recommendations. Accessory structures may not be supported by these units.

Recreational Park Trailers – Permanent Installation

A Recreational Park Trailers constructed in accordance with ANSI A119.5, Recreational Park Trailer Standard and only labeled as a Recreational Park Trailer under the Recreational Park Trailer construction program of the Recreational Vehicle Industry Association (RVIA), cannot be accepted as a permanent dwelling structure in North Carolina. However, sometimes manufacturers will dual label their Recreational Park Trailers by constructing them through the RVIA program and also through the NC Modular Construction Program or the HUD Manufactured Housing program, dual labeling the unit for each respective program. Labeled Recreational Park Trailers that are also constructed and dual labeled in accordance with the NC Modular Construction Program may be permanently installed as a single family modular dwelling in accordance with the NC Residential Code provided the installation meets the current NC Code's foundation/anchoring requirements and meets the local zoning ordinances. This is acceptable because the unit is dual labeled with a North Carolina Modular Construction Validating Stamp as a modular dwelling unit. Labeled Recreational Park Trailers that are also constructed and dual labeled in accordance with the *Federal Manufactured Housing Construction and Safety Standards* as a single family (HUD) manufactured home may be permanently installed as a single family manufactured home dwelling in accordance with the *State of North Carolina Regulations for Manufactured Homes* provided the installation meets the foundation/anchoring requirements of these regulations and the local zoning ordinances. This is acceptable because the unit is dual labeled with a HUD manufactured housing label.

Recreational Park Trailers - Unlabeled/Site Constructed

Some manufacturers are not members of the Recreational Vehicle Industry Association (RVIA) and are not authorized/able to certify and label their Recreational Park Trailers as being constructed in accordance with the ANSI A119.5, Recreational Park Trailer Standard under the RVIA Recreational Park Trailer construction program. Unlabeled and/or site-constructed Recreational Park Trailers cannot be accepted as a permanent dwelling structure in North Carolina. Unlabeled and/or site-constructed Recreational Park Trailers must meet the electrical construction and inspection requirements as indicated above and must be no larger than 400 sq.ft. gross trailer area as defined in ANSI A119.5, Recreational Park Trailer Standard – 2015 Edition. All unlabeled and/or site constructed recreational park trailers greater than 400 sq.ft. gross trailer area will be considered to be a non-complying single family dwelling in violation of the NC Residential Code.

LABELS

Labels – Acceptable Examples of Recreational Park Trailer (Park Model) Labels for Temporary Use



RVIA Park Model Label (oldest units)



RPTIA Park Model Label (older units)

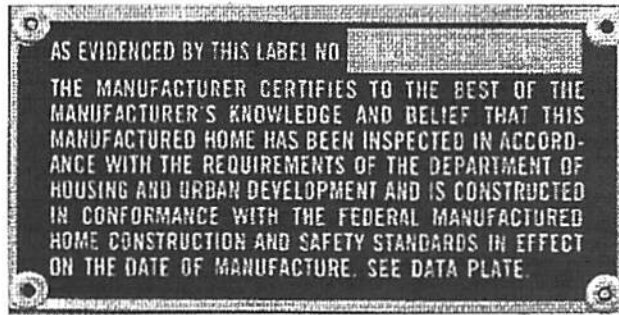


RVIA Recreational Park Trailer Label (new units)

Labels – Required for Permanent Installations



NC Modular Construction Validating Stamp



HUD Manufactured Housing Label

NCDOI Note: See the NCDOI Tiny Homes Memo for Requirements for Tiny Homes