



## MANUFACTURED BUILDING

Toll free 800.587.2716 Tel 919.647.0000 Fax 919.715.0067

MIKE CAUSEY, INSURANCE COMMISSIONER & STATE FIRE MARSHAL  
BRIAN TAYLOR, CHIEF STATE FIRE MARSHAL

### MEMORANDUM

DATE: January 15, 2019 (replaces October 21, 2015 Recreational Park Trailer (Park Models)/ Permanent Dwellings Memo)

TO: Building Inspectors / Third Party Inspection Agencies / other Interested Parties

FROM: Michael J. Hamm, P.E.  
Chief Building Code Consultant  
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 **2017 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 m<sup>2</sup> (400 ft<sup>2</sup>) 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.*

OFFICE OF STATE FIRE MARSHAL

**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 the **2017 North Carolina Electrical Code (NEC with NC Amendments)**. See the attached interpretations for Articles 551 and 552 from the NC State Electrical Division.

**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 electrical, 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**

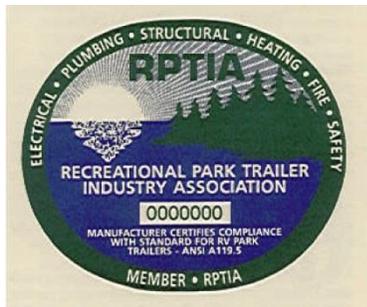
Some manufacturers are not members of the **Recreational Vehicle Industry Association (RVIA)** and are not authorized/able to certify and label their Recreational Park Trailers as being constructed in accordance with the **ANSI A119.5, Recreational Park Trailer Standard** under the RVIA Recreational 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)

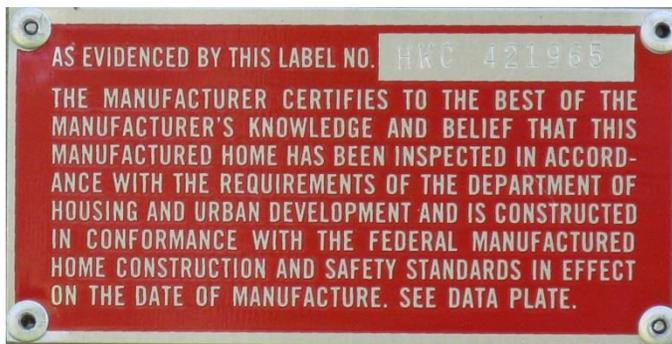


RVIA Recreational Park Trailer Label (new units)

**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**

**NC Department of Insurance  
Office of the State Fire Marshal - Engineering Division  
1202 Mail Service Center, Raleigh, NC 27699-1202  
919-647-0001**

**Recreational Vehicles and Recreational Vehicle Parks**

**Code:** 2017 Electrical Code  
**Section:** Article 551

**Date:** January 1, 2019

**Question 1:**

What sections of Article 551 are not enforced by the local electrical inspector in North Carolina?

**Answer 1:**

All of Parts II, III, IV, and V of Article 551.

Parts II, III, IV, and V of Article 551 regulate the electrical conductors and equipment installed within or on recreational vehicles. The State Electrical Division considers camping trailers, motor homes, recreational vehicles, travel trailers, and truck campers as described in Part I of Article 551 of the 2017 NEC, as also meeting the definitions of the same names as described in Article 1 of Chapter 20 in North Carolina General Statutes establishing the Division of Motor Vehicles.

Before the State Electrical Code can regulate an electrical installation, the Code must first have jurisdiction over the installation. In North Carolina, the State Electrical Code does not possess the authority to regulate the electrical wiring of vehicles, including recreational vehicles as defined in N.C. Gen. Stat. § 20-4.01(32b). The Division of Motor Vehicles of the Department of Transportation is the exclusive agency that enforces the regulations pertaining to vehicles including a vehicle's construction standards.

**Question 2:**

When remodeling a recreational vehicle, is the addition, modification, repair, or replacement to a component of the manufacturer's original electrical design subjected to any provisions of Article 551.

**Answer 2:**

No.

As stated above in "Answer 1", the State Electrical Code does not possess the authority to regulate the electrical wiring or any alterations of the manufacturer's original electrical design of vehicles, including recreational vehicles.

**Question 3:**

Are Part I and VI of Article 551 enforced by the local electrical inspector in North Carolina?

**Answer 3:**

Yes.

Parts I or VI of Article 551 are concerned with the external environment and listed and labeled electrical equipment within a recreational vehicle park. Neither Parts I or VI of Article 551 have sections that regulate the construction and design of a recreational vehicle itself. Therefore, Parts I or VI of Article 551 are regulated by the State Electrical Code and enforced by the local electrical inspector.

**Question 4:**

Can a recreational vehicle not regulated by the State Electrical Code be hard wired by a permanent feeder or branch circuit to an electrical system that is regulated by the State Electrical Code?

**Answer 4:**

No.

If a recreational vehicle becomes a permanent structure and is no longer a vehicle, then the construction provisions of the permanent structure must be permitted, inspected, and comply with all the State Building Codes or be regulated by the NC Manufactured Building Division.

For the State Electrical Division to consider an apparatus a vehicle and not a permanent structure, the apparatus must maintain a standard of mobility. The State Electrical Division considers an apparatus as mobile when such apparatus can connect or disconnect from an external electrical supply system without engaging in the installation or alteration of any electric work, wiring, devices, appliances or equipment that is regulated by the State Electrical Code. Therefore, a vehicle that is not regulated by the State Electrical Code can only physically connect to an external electrical supply system that is regulated by the State Electrical Code by an accessible cord-and-plug.

**2017 State Electrical Code (NEC)**

**Article 552**

**Park Trailers**

**552.2 Definition.** (See Articles 100, 550, and 551 for additional definitions.)

**Park Trailer.** A unit that is built on a single chassis mounted on wheels and has a gross trailer area not exceeding 37 m<sup>2</sup> (400 ft<sup>2</sup>) in the set-up mode.

**North Carolina General Statutes**  
**Chapter 20.**  
**Motor Vehicles.**

Article 1.

Division of Motor Vehicles.

...

**§ 20-4.01. Definitions.**

...

**(32b) Recreational Vehicle.** – A vehicular type unit primarily designed as temporary living quarters for recreational, camping, or travel 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 travel trailer, motor home, travel trailer, and truck camper. This term shall not include a manufactured home as defined in G.S. 143-143.9(6). The basic entities are defined as follows:

G.S. 20-4.01 Page 10

- a. Camping trailer. – A vehicular portable unit mounted on wheels and constructed with collapsible partial side walls that fold for towing by another vehicle and unfold at the campsite to provide temporary living quarters for recreational, camping, or travel use.
- b. Fifth-wheel trailer. – A vehicular unit mounted on wheels designed to provide temporary living quarters for recreational, camping, or travel use, of a size and weight that does not require a special highway movement permit and designed to be towed by a motorized vehicle that contains a towing mechanism that is mounted above or forward of the tow vehicle's rear axle.
- c. Motor home. – As defined in G.S. 20-4.01(27)k.
- d. Travel trailer. – A vehicular unit mounted on wheels, designed to provide temporary living quarters for recreational, camping, or travel use, and of a size or weight that does not require a special highway movement permit when towed by a motorized vehicle.
- e. Truck camper. – A portable unit that is constructed to provide temporary living quarters for recreational, camping, or travel use, consisting of a roof, floor, and sides and is designed to be loaded onto and unloaded from the bed of a pickup truck.

**NC Department of Insurance  
Office of the State Fire Marshal - Engineering Division  
1202 Mail Service Center, Raleigh, NC 27699-1202  
919-647-0001**

**Park Trailers**

**Code:** 2017 Electrical Code  
**Section:** Article 552

**Date:** January 1, 2019

**Question 1:**

What sections of Article 552 are not enforced by the local electrical inspector in North Carolina?

**Answer 1:**

All of Parts II, III, IV, and V of Article 552.

Parts II, III, IV, and V of Article 552 regulate the electrical conductors and equipment installed within or on park trailers. The State Electrical Division considers park trailers as described in Part I of Article 552 of the 2017 NEC, as also meeting the definition of a recreational vehicle as described in Article 1 of Chapter 20 in North Carolina General Statutes establishing the Division of Motor Vehicles.

Before the State Electrical Code can regulate an electrical installation, the Code must first have jurisdiction over the installation. In North Carolina, the State Electrical Code does not possess the authority to regulate the electrical wiring of vehicles, including recreational vehicles as defined in N.C. Gen. Stat. § 20-4.01(32b). The Division of Motor Vehicles of the Department of Transportation is the exclusive agency that enforces the regulations pertaining to vehicles including a vehicle's construction standards.

**Question 2:**

When remodeling a park trailer, is the addition, modification, repair, or replacement to a component of the manufacturer's original electrical design subjected to any provisions of Article 552.

**Answer 2:**

No.

As stated above in "Answer 1", the State Electrical Code does not possess the authority to regulate the electrical wiring or any alterations of the manufacturer's original electrical design of vehicles, including park trailers.

**Question 3:**

Can a park trailer not regulated by the State Electrical Code be hard wired by a permanent feeder or branch circuit to an electrical system that is regulated by the State Electrical Code? Does calling the apparatus a “park model” make a difference?

**Answer 3:**

No.

If a park trailer becomes a permanent structure and is no longer a vehicle, then the construction provisions of the permanent structure must be permitted, inspected, and comply with all the State Building Codes or be regulated by the NC Manufactured Building Division.

For the State Electrical Division to consider an apparatus a vehicle and not a permanent structure, the apparatus must maintain a standard of mobility. The State Electrical Division considers an apparatus as mobile when such apparatus can connect or disconnect from an external electrical supply system without engaging in the installation or alteration of any electric work, wiring, devices, appliances or equipment that is regulated by the State Electrical Code. Therefore, a vehicle that is not regulated by the State Electrical Code can only physically connect to an external electrical supply system that is regulated by the State Electrical Code by an accessible cord-and-plug.

An apparatus called a trailer, park trailer, park model, tiny home, etc., has no bearing on the definitions within the NEC and the Statues. Definitions within the NEC and the Statues define and regulate what is described by such definition regardless of any other titles used to name the apparatus.

**2017 State Electrical Code (NEC)  
Article 552  
Park Trailers**

**552.2 Definition.** (See Articles 100, 550, and 551 for additional definitions.)

**Park Trailer.** A unit that is built on a single chassis mounted on wheels and has a gross trailer area not exceeding 37 m<sup>2</sup> (400 ft<sup>2</sup>) in the set-up mode.

**North Carolina General Statutes**  
**Chapter 20.**  
**Motor Vehicles.**

Article 1.

Division of Motor Vehicles.

...

**§ 20-4.01. Definitions.**

...

**(32b) Recreational Vehicle.** – A vehicular type unit primarily designed as temporary living quarters for recreational, camping, or travel 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 travel trailer, motor home, travel trailer, and truck camper. This term shall not include a manufactured home as defined in G.S. 143-143.9(6). The basic entities are defined as follows:

G.S. 20-4.01 Page 10

- a. Camping trailer. – A vehicular portable unit mounted on wheels and constructed with collapsible partial side walls that fold for towing by another vehicle and unfold at the campsite to provide temporary living quarters for recreational, camping, or travel use.
- b. Fifth-wheel trailer. – A vehicular unit mounted on wheels designed to provide temporary living quarters for recreational, camping, or travel use, of a size and weight that does not require a special highway movement permit and designed to be towed by a motorized vehicle that contains a towing mechanism that is mounted above or forward of the tow vehicle's rear axle.
- c. Motor home. – As defined in G.S. 20-4.01(27)k.
- d. Travel trailer. – A vehicular unit mounted on wheels, designed to provide temporary living quarters for recreational, camping, or travel use, and of a size or weight that does not require a special highway movement permit when towed by a motorized vehicle.
- e. Truck camper. – A portable unit that is constructed to provide temporary living quarters for recreational, camping, or travel use, consisting of a roof, floor, and sides and is designed to be loaded onto and unloaded from the bed of a pickup truck.