REVISIONS: JANUARY 2021

THE FOLLOWING ARE "BLUE PAGE" UPDATES TO THE 2019 EDITION.

1.3 SCOPE

1.3.1 Applicability (page 9)

The provisions of this Code shall apply to the installation, alteration, repair, use and occupancy of every manufactured home and the installation thereof. All appurtenances (i.e. field equipment, etc.) connected or attached to such manufactured homes shall comply with the *North Carolina Residential Code*, current edition and the North Carolina State Electrical Code, current addition. All NEW homes shall be installed in accordance with the Manufacturer's Installation Instructions, which are required to comply with the HUD document, *24 CFR Part 3285, Model Manufactured Home Installation Standards.* All USED manufactured homes **with a date of manufacture prior to January 1, 2009** shall be installed in accordance with the provisions of this Code. This Edition has been updated to meet or exceed the requirements of *24 CFR Part 3285, Model Manufactured Home Installation Standards.* All USED manufactured homes **with a date of manufacture on or after January 1, 2009** shall be installed in accordance with the Manufacturer's Installation Instructions, if available, OR the provisions of this Code. For ALL homes that are installed using the Manufacturer's Installation Instructions, any applicable areas not covered in the Manufacturer's Installation Instructions shall be in accordance with this Code.

NOTE: IN ALL CASES WHERE ELECTRICAL CONNECTIONS OR EQUIPMENT ARE FIELD INSTALLED CONTACT THE LOCAL AUTHORITY HAVING JURISDICTION (LAHJ).

1.3.4 Repairs & Alterations (page 10)

The *State Plan* (see **Appendix L**) requires that repairs or alterations to **USED** manufactured homes be inspected by an independent third-party inspection agency approved by HUD and that a certification be issued that repairs have been properly made. However, repairs and alterations may be inspected and approved by local officials. Minor repairs and alterations that are inspected and approved by local officials shall comply with the applicable requirements of the *North Carolina Residential Code* (current edition), or shall be of materials and workmanship that equal to or better than that of the original construction of the home. All electrical repairs, alterations, and additions that are inspected and approved by the local officials shall comply with the North Carolina State Electrical Code, current addition. A certification shall be issued indicating that the repairs have been properly made. As an alternate to local inspection, such repairs and alterations may be certified by a North Carolina registered engineer or architect. The certification shall be in the form of a *sealed* document which states that the engineer, architect or his or her representative has personally inspected the home and confirmed that all repairs comply with applicable Sections of the *North Carolina Residential Code,* current edition and the North Carolina State Electrical Code, current addition. For specific procedures regarding the repair of damaged homes and homes sold for salvage, see **Appendix C**. The Data Plate (if present) and the HUD label (if present) shall not be removed from the home in the course of making repairs. Repairs or alterations of **NEW** homes cannot take the home out of compliance with the regulations in 24 CFR Part 3280 or Part 3282.

3.12 ELECTRICAL REQUIREMENTS (pages 65-70)

3.12.1 Electrical Requirements -- General

All electrical conductors and equipment installed within or on manufactured homes as part of the dwelling shall comply with the North Carolina State Electrical Code, current addition; except that the original unaltered factory wiring of the manufactured home may comply with either the North Carolina State Electrical Code current addition, or Parts I and II of Article 550 of the National Electrical Code (NEC), 2005. All field installed electrical appurtenances connected or attached to such manufactured homes including service equipment, feeders, service entrance conductors, additional lighting and receptacles, and field installed HVAC systems shall comply with the North Carolina State Electrical Code, current addition

3.12.2 Electrical Inspections for Manufactured Home Dealer Lots

Due to the temporary nature of the set-ups on the dealer lots, the following special provisions are applicable:

1. Feeder assemblies need not be sized to carry the full calculated load for the unit.
2. Manufactured home units may be powered via a supply cord.
3. A disconnecting means within 30 ft. of the unit is not required.
4. Ground electrodes are not required to ground each temporary manufactured home setup except at the service equipment.

3.12.3 Miscellaneous Lights and Fixtures

Some homes may be delivered with exterior lights, ceiling fans, and chain-hung fixtures not yet installed. Each of these fixtures must be grounded by a fixture grounding screw or wire. For chain-hung fixtures, use both grounding methods. When fixtures are mounted on combustible surfaces such as hardboard, install a noncombustible ring to completely cover the combustible surface exposed between the fixture canopy and the wiring outlet box. If siding has not been installed at a fixture location, remove the outlet box and install the siding with a hole for the outlet box. Then reinstall the outlet box and proceed as for other fixtures. All fixtures shall be installed in accordance with their listing.

3.12.3.1 Exterior Lights

Remove the junction box covers and make wire-to-wire connections using wire nuts. Connect black wires to black, white to white, and ground to ground. Push the wires into the box and secure the light fixture to the junction box. Caulk around the base of the light fixture to ensure a water-tight seal to the sidewall.

3.12.3.2 Ceiling Fans

Ceiling fans shall be installed with the trailing edges of the blades at least 6 feet 4 inches above the floor.

CAUTION: BEFORE FOLLOWING THE STEP-BY-STEP PROCEDURE BELOW, BE SURE THAT POWER TO FAN WIRE CIRCUIT IS TURNED OFF AT THE PANEL BOX.

1. Remove the fan manufacturer’s installation instructions from the package and determine the method of fan attachment to the beam.
2. If the center beam (shipped loose) does not contain a precut hole for the electrical box, cut a hole with a hole saw approximately 1/4" larger than the box diameter at the proper location (center line of hole should line up with location of supply wire through ceiling) and centered in the width of the beam.
3. Install the box in the hole and secure flange to the center beam with 4 - #6 x 1" screws.

4. Insert the ceiling wire through a knock-out hole in the side of the electrical box. NOTE: It may be necessary to cut a notch from the top on the supply wire side of the center beam hole to allow the supply wire to be inserted in the electrical box without binding against center beam during installation. Leave approximately 4" of wire free in the box.
5. Secure the center beam in place over the center line joint. Be sure that fan supply wire is not pinched or penetrated with beam fasteners.
6. Secure electrical box to ridge beam with #8 x 2 1/2" wood screws through the two holes in the top of the box.
7. Strip about 3/4" of insulation from the white and black conductor ends.
8. Position the non-combustible flash ring (provided) over the electrical box so that finished surface (adjacent to electrical box) which is to be covered by fan canopy is not exposed.
9. Follow the manufacturer's installation instructions for mounting the fan assembly to the box and for electrical wiring of the fan. Use provided electrical connectors for splicing wire. Be certain that fan is grounded as specified in manufacturer's instructions and that wires are connected properly (white-to-white and black-to-black).

NOTE: Installation of a ceiling fan when the home has a protruding ridge beam will differ slightly from the above. Follow the fan manufacturer's installation instructions.

3.12.4 Electrical Testing

Although Federal Regulations require that dielectric, continuity, operational, and polarity tests be performed at the factory in accordance with the 2005 NEC; the manufacturer may also require testing at the site. The following Sections describe normal testing procedures at the site. However, specific testing requirements described in the Manufacturer's Installation Instructions should be followed.

3.12.4.1 Continuity Test

The continuity test is made between an accessible connection with the equipment ground (grounding bus) and all noncurrent-carrying metal parts. The accessible connection to ground may be the ground bus in the panel, a noncurrent-carrying metal part such as the frame, metal siding, or range hood that is bonded to the grounding bus, or the ground prong on outlets. Any noncurrent-carrying metal part may be used as the grounding point as long as one check is made to assure that there is continuity with the ground bus in the electrical panel.

1. 1.Using a continuity tester, test all noncurrent-carrying metal parts to assure continuity to ground. Noncurrent-carrying parts to be checked include the following:
    a. Appliance enclosures, including fans.
    b. Fixture enclosures and canopies.
    (Note: If the manufacturer checks the polarity of fixtures by conducting a polarity test, it is not necessary to conduct a separate continuity test of the same fixtures. A polarity tester with connectors will check adequate bonding.)
    c. Metal siding.
    d. Metal roof, especially if a nonmetallic siding is used.
    e. Metal water supply lines.
    f. Metal HVAC ducts (foil covered insulated ducts do not need to be checked).
    g. Gas lines.
    h. Manufactured home frame.

    On multi-wide units, this test shall be performed only after all electrical connections between the units are completed. Bonding between the frames of individual units must also be completed as shown in the Manufacturer's Installation Instructions.

2. Failure to assure continuity to ground requires repair and retesting.

3.12.4.2 Polarity Test The polarity test shall be performed as follows:

1. Turn the main circuit breaker and each individual circuit breaker on.
2. Using equipment that is capable of determining an incorrect wiring configuration, check each 120-volt receptacle and light socket for correct polarity. A conversion device may be required to test various fixture bulb sizes and outlet configurations.
3. GFCI-protected receptacle outlets should be tested to assure that the circuit is open after the test button on the outlet has been depressed.
4. Faulty electrical wiring and fixtures require repair and retesting.

3.12.4.3 Operational Test The operational test shall be performed as follows (note that the operational test may be performed concurrently with the polarity test):

1. All circuit breakers are to be turned on.
2. Check all light fixtures by placing a bulb in the socket and turning the switch on and off.
3. Using a pigtail light, check all 240-volt receptacles to determine if there is power going to both legs of the circuit.
4. Check all 120-volt receptacles to be sure that each is operational. This check may be made with a polarity tester or a pigtail light. Switched receptacles require the switch to be turned on and off. Appliances such as stoves, ranges, washers, dryers, water heaters, furnaces, air conditioners, evaporative coolers, and heat exchangers do not have to be checked to be sure they are operational. However, the power source must be assured.
5. Check all receptacles on a GFCI circuit by pushing the test button to determine if the power route to the receptacle has been interrupted. Be sure that the receptacles requiring GFCI protection are on the correct circuit.
6. Failure of electrical wiring or fixtures requires repair and retesting.

3.12.5 Telephone and Cable TV

The walls and floors of a manufactured home contain electrical circuits, plumbing, and duct work. Therefore, careless installation of telephone and cable television lines may be result in serious electrical shock hazards as well as damage to the home. Contact with these systems must be avoided when drilling through and placing cables within wall and floor cavities. Only trained professionals should handle such work. Failure to follow these instructions could result in serious personal injury or death.

North Carolina General Statute

NCGS § 143-143.11

(INSERT WITH GENERAL STATUTES BETWEEN 143-143.10A AND 143-143.11A ON PAGE 34)

§ 143-143.11. License required; application for license. (a) It shall be unlawful for any manufactured home manufacturer, dealer, salesperson, or set-up contractor to engage in business as such in this State without first obtaining a license from the Board for each place of business operated by the licensee, as provided in this Part. The fact that a person is licensed by the Board as a set-up contractor or a dealer does not preempt any other licensing boards' applicable requirements for that person. (b) Application for the license shall be made to the Board at such time, in such form, and contain information the Board requires, and shall be accompanied by the fee established by the Board. The fee shall not exceed three hundred fifty dollars ($350.00) for each license issued. In addition to the license fee, the Board may also charge an applicant a fee to cover the cost of the criminal history record check required by G.S. 143-143.10A. (c) In the application, the Board shall require information relating to the matters set forth in G.S. 143-143.13 as grounds for refusal of a license, and information relating to other pertinent matters consistent with safeguarding the public interest. All of this information shall be considered by the Board in determining the fitness of the applicant. Once the Board has determined that an applicant is fit, the Board must provide the applicant a license for each place of business operated by the applicant. (d) All licenses shall expire, unless revoked or suspended, on June 30 of each year following the date of issue. (e) Every licensee shall, on or before the first day of July of each year, obtain a renewal of a license for the next year by applying to the Board, completing the necessary hours of continuing education required under G.S. 143-143.11B, and paying the required renewal fee for each place of business operated by the licensee. The renewal fee shall not exceed three hundred fifty dollars ($350.00) for each license issued. Upon failure to renew by the first day of July, a license automatically expires. The license may be renewed at any time within one year after its lapse upon payment of the renewal fee and a late filing fee. The late filing fee shall not exceed three hundred fifty dollars ($350.00). (f) Repealed by Session Laws 2005-297, s. 1, effective August 22, 2005. (g) Notwithstanding the provisions of subsection (a), the Board may provide by rule that a manufactured home salesperson will be allowed to engage in business during the time period after making application for a license but before such license is granted. (h) As a prerequisite to obtaining a license under this Part, a person may be required to pass an examination prescribed by the Board that is based on the Code, this Part, and any other subject matter considered relevant by the Board. (1981, c. 952, s. 2; 1985, c. 487, s. 1; 1987, c. 429, s. 19; 1987 (Reg. Sess., 1988), c. 1039, ss. 2, 3; 1989, c. 485, s. 44; 1991, c. 644, s. 35; 1999-393, s. 1; 2003-400, s. 10; 2005-297, s. 1.; 2005-451, s. 1; 2009-451, s. 21.4.)