

SECTION .1000 – DISASTER RESPONSE AND RECOVERY

11 NCAC 05A .1001 FEDERAL EMERGENCY MANAGEMENT AGENCY-OWNED TRANSPORTABLE TEMPORARY HOUSING UNITS

(a) Federal Emergency Management Agency ("FEMA")-owned transportable temporary housing units shall be installed in accordance with the manufacturer's installation instructions, the State of North Carolina Regulations for Manufactured Homes, and the North Carolina State Building Code. Such housing units may use the following alternative methods for the installation of the structures and their foundations:

- (1) Footings for piers may be placed on the surface grade in lieu of the frostline depth where the grade under the footing is undisturbed or a compaction test is provided by the installer of the transportable temporary housing unit to the authority having jurisdiction, and the underpinning encapsulates the entirety of the open space between the floor of the structure and the grade.
- (2) Longitudinal and lateral bracing systems may be used where pier footings are placed on grade surface, the height limitations described in the manufacturer instructions of the bracing system are not exceeded, and the four corners of the structure are provided with tie down strapping.
- (3) Positive drainage may be omitted where the grade under the structure contains no low areas or holes where water may accumulate.
- (4) Exterior landings for stairs not exceeding 36 square feet may be regulated by the applicable North Carolina Regulations for Manufactured Homes in lieu of the applicable North Carolina Residential Code.
- (5) Exterior landings for stairs may be omitted where the stairs are constructed in accordance with either the applicable North Carolina Regulations for Manufactured Homes or the applicable North Carolina Residential Code. If an exterior landing is omitted, the stair system shall have cross members on the structure side of the system for lateral support and all corners of the stair system shall be supported underneath by solid concrete blocks no less than four inches thick.

(b) External electrical systems used to supply power to FEMA-owned transportable temporary housing units and their equipment shall conform to the North Carolina Electrical Code. Such electrical systems may use the following alternative methods:

- (1) Electrical conduits may be installed without burial or further protection in the horizontal area between the electrical pedestal and the structure when such area is three feet or less.
- (2) Electrical conduits may be installed on top of the grade without burial where the conduit is boxed in with building materials, the covering is secured with driven stakes and supported to the grade no less than every five feet and at every direction of a bend to prevent movement, the covering is painted orange and orange paint is reapplied to the covering every 60 days, and the lumber used for the building materials is treated.
- (3) Ridged metal conduits may be installed on top of the grade without burial, supporting, or covering with building materials if the conduit is painted orange and orange paint is reapplied to the conduit every 60 days.
- (4) Recreational Vehicles, as that term is defined in G.S. 20-4.01(32b), may be hardwired directly to electrical equipment using wiring in non-flexible conduits rather than a plug-and-cap.
- (5) Any temporary electrical service or pedestal may utilize a single ground rod without a supplemental ground electrode where the service or pedestal is used exclusively for the connection of a FEMA-owned transportable temporary housing unit or its accessory structure and equipment, all ungrounded circuits do not exceed 150 volts to ground, and the rating of the single disconnecting means, or the summation of the ratings of multiple overcurrent devices that serve together as the disconnecting means, does not exceed 100 amperes.

(c) External plumbing systems for connection to FEMA-owned transportable temporary housing units and their equipment shall conform to the North Carolina Residential Code and the North Carolina Plumbing Code. Such plumbing systems may use the following alternative methods:

- (1) Water service and distribution pipes may be installed on top of grade where both sides of the piping are secured with driven stakes and supported to the grade no less than every five feet and at every direction of a bend to prevent movement, electrical self-regulating pipe heating cable is installed with the piping, piping insulation to prevent freezing encapsulates the piping and heating cable, and the piping insulation is painted orange and orange paint is reapplied to the piping insulation every 60 days.

- (2) Drain-waste-vent pipes for the building drain and sewer may be installed on top of grade where both sides of the piping are secured with driven stakes and supported to the grade no less than every five feet and at every direction of a bend to prevent movement, and the piping or its insulation where applicable is painted orange and orange paint is reapplied to the piping or its insulation every 60 days.
- (3) Drain-waste-vent pipes for the building drain and sewer installed on top of grade must be installed utilizing either a slope in accordance with the applicable North Carolina Plumbing Code or a sewage grinder pump including electrical self-regulating pipe heating cable and piping insulation to prevent freezing.
- (4) Where sewage grinder pumps are installed, the pump and tank shall be accessible for service, the pump tank shall be insulated with a box constructed from building materials and foam board of at least one and one-half (1 ½) inches thick, and the lumber used for the building materials shall be treated.

*History Note: Authority G.S. 58-78A-2; S.L. 2024-57, s. 1F.4.;
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