



PLANNING & COMMUNITY DEVELOPMENT



P.O. Box 905
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Carthage, NC 28327
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Central Permitting: 910.947.2221
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Manufactured Home Setup Guide

This information booklet will guide you to the different departments you need to visit for required permits, compliances, etc. Also, you will find information to assist you in the set up of your manufactured home. If you have any questions, please contact us at (910) 947-2221. The Code Enforcement Inspectors are in the office, Monday-Friday, between the hours of 8:00 AM to 9:00 AM and 4:00 PM to 5:00 PM.

STEP 1: Zoning, Watershed, Flood Hazard, 911 Address Compliance

- All persons placing a manufactured home in the Town Limits or the Extraterritorial Jurisdiction of Aberdeen, Pinebluff, Pinehurst or Southern Pines should contact the Inspection or Planning Department, in the respective town. The remainder of this booklet (with the exception of Step 3) will not apply to anyone in these jurisdictions.

Aberdeen	944-1115	2-mile jurisdiction (ETJ)
Pinebluff	281-3134	2-mile jurisdiction (ETJ)
Pinehurst	295-2581	2-mile jurisdiction (ETJ)
Southern Pines	692-4003	2-mile jurisdiction (ETJ)

(Note: 911 addressing outside town limits, including within ETJ, is done by County of Moore GIS (910) 947-1078)

- All persons placing a manufactured home with the Moore County Planning Jurisdiction should contact County of Moore Planning Department located at 1048 Carriage Oaks Dr, Carthage , or call (910) 947-5010.
- All persons placing a manufactured home in the Town Limits or the Extraterritorial Jurisdiction of Carthage, Cameron, Foxfire, Robbins, Taylortown, Vass or Whispering Pines should contact the Planning Department in the respective town for zoning, watershed and floodplain development approval.

Carthage	947-2331	(1 mile outside town limits)
Cameron	245-3212	(1 mile outside town limits)
Foxfire	295-5107	(1 mile outside town limits)
Robbins	948-2431	(1 mile outside town limits)
Taylortown	295-4010	(1 mile outside town limits)
Vass	245-4676	(1 mile outside town limits)
Whispering Pines	949-3141	(1 mile outside town limits)

Step 2: Moving Permit

Before moving a manufactured home, any person other than a manufacturer or retailer must obtain a moving permit from County of Moore Tax Department, if moving within Moore County, at 1 Courthouse Square (910) 947-2255.

The Moving Permit must be displayed near the license tag on the rear of the manufactured home.

Step 3: Septic Tank Approval

All persons (other than those on public sewer) **must** obtain the proper sewage disposal permit/certifications from County of Moore Environmental Health Department. This approval must be obtained before any manufactured home is

placed on the property.

An Improvement Permit, Authorization Permit and Operation Permit will be needed for a new septic tank. A re-certification approval will be needed for those planning to use an existing septic tank.

Bring a scaled plat of the property (1 inch = 40 feet or less) showing the existing and/or proposed improvements.

For further information, contact the County of Moore Environmental Health Division at:

1042 Carriage Oaks Dr.
Carthage, N.C. 28327
(910)947-6283

Step 4: Manufactured Home Set-Up Permit

A Set-Up Permit includes an inspection of the items required before you can occupy the manufactured home. The following items will be inspected:

1. Electrical Panels
2. Piers or blocking-under the unit
3. Tie-downs
4. Steps and handrails-at all entrances
5. Plumbing, water and sewer line connection
6. 911 Address-properly posted
7. HVAC system-if installed
8. Windows, doors and floors
9. Smoke detectors

A Set-Up Permit may be obtained at:

Central Permitting Office
1048 Carriage Oaks Dr
Carthage N.C. 28327
(910)947-2221

To apply for a Manufactured Home Set-Up Permit, you must have the following:

1. Zoning Certification (no age limit on manufactured home)
2. Watershed Certification, if applicable
3. Flood Hazard Certification, if applicable
4. Septic Tank Approval
5. 911 Address
6. Set-Up contractor's name and license number
7. Name where home was purchased
8. Electrician's name and license number

Set-Up Permit Fees:

Single-wide Manufactured Homes: \$100.00

Double-wide Manufactured Homes: \$130.00

Triple-wide Manufactured Homes: \$160.00

Manufactured-Home Set-Up Requirements

General Requirement:

1. All manufactured homes shall be set-up and inspected for compliance in accordance with the 2004 State of North Carolina "Regulation for Manufactured Homes" or as subsequently amended or revised.
2. Manufactured homes shall meet all set-back requirements for zoned, watershed and flood hazard areas.
3. Owners must make sure inspectors have access to the inside of the home.
4. All manufactured homes are to be set-up by a state licensed contractor. Manufactured home set-up manuals must be located where the inspector can easily refer to them.

Underpinning:

1. All manufactured homes must have either a solid foundation or skirting that fully encloses the crawl space beneath each manufactured home.
2. Inspections shall be made prior to installation of skirting/underpinning.
3. Masonry skirting (foundation) that exceed 40 inches in height, must have footing no less than 6" deep by 8" wide.
4. Proper ventilation of crawlspace shall be maintained. A crawlspace access door (size 18" x 24" min.) shall be installed in masonry type foundation.
5. Underpinning shall not be installed until all inspections are made.
6. Materials for skirting shall be those generally used and approved for skirting purposes.
7. Skirting, or the construction of a solid foundation, shall be completed within 90 days of the final inspection. An additional 90 day period, to complete skirting, maybe authorized by the Planning Dept. in cases where the applicant presents a documented hardship to compliance. Hardships may involve senior citizens, health issues or job related conditions.
8. Upon completion of installation of skirting a 6 mil vapor retarder must be installed to cover the entire ground under the home. Seams shall be overlapped 12".

Manufactured/Mobile Home Parks:

1. Each manufactured home shall be setup and installed in accordance with Standards specified in the 2004 "State of North Carolina Regulations for Manufactured Homes" or as subsequently amended or revised.
2. Manufactured/mobile homes in parks require 2 separate inspections before electric power can be allowed. The first inspection is the setup of the home, which includes blocking, tie-downs, all connections underneath the home, steps, handrails and 911 address. The second inspection is the underpinning.
3. Foundation enclosures or skirting must be installed within 90 days of the final inspection.

Addressing:

1. Homes that are visible and 75 feet or less from a public road, shall place their address on the home or in an obvious location.
2. Homes that are more than 75 feet from a public road, or not visible from the public road need to place their address at or on the home and at the entrance to their driveway or private road.
3. Numbers shall be 3" high and of the reflective type and may be posted on a mailbox, treated post or other means visible to emergency personnel.

Blocking:

1. Install solid footers 16 inches x 16 inches x 4 inches or two 8 inches x 16 inches x 4 inches with joint between block parallel with mobile home frame.
2. Footers should be placed on firm undisturbed soil, free of grass and organic materials. (Minimum 4 inches below the finished grade.)
3. Single stacked 8 inch x 16 inch block maybe used up to 36" inches high, except on corners.
4. Use double blocking on corners.
5. Use double blocking everywhere when over 36" inches high.
6. The long dimension of the block should be perpendicular with frame.
7. Use 4" solid cap blocks with wood wedges on top of piers.
8. Support piers or blocking for single and double wide, or multi-section homes shall be spaced in accordance with the manufacturer's setup manual. Pier spacing is measured from center to center. Supports (piers) shall be installed directly under the main frame (or chassis) of the manufactured home.
9. A minimum clearance of 12 inches should be maintained beneath the main frame and ground level.
10. Center line and perimeter block piers are required under door openings and bay windows or otherwise, where required by manufacturer's locations and identified with easily recognizable tags.
11. Elevated Manufactured Homes: When more than one-fourth (25%) of the area of the manufactured home is installed so that the bottom of the main frame members is more than 3 feet above ground level, the manufactured home stabling system shall be designed by a qualified professional engineer or architect. Plans and specifications for the setup bearing the seal of a professional engineer or architect shall be left with the homeowner or building official.

Exterior Steps and Stairways:

1. Rigid-type stairs and landings shall be installed and constructed of either treated lumber, metal, fiberglass or laid-in-place masonry. Loose stacked concrete blocks are **not** acceptable.
2. **General.** All stairs and landings constructed, in accordance with the code, shall be entirely self-supporting, unless designed and approved by a registered Engineer or Architect. Adequate bracing of stairway and landing structures shall be provided as required for lateral stability.
3. **Landings.** A minimum 3' x 3' landing shall be required at the top of all exterior stairs where egress door (not screen or storm door) swings outward over the stairs. Landings which are 36 square feet or less in area may be constructed according to the provisions of this code. All such landings, whether at the top or bottom of the stairs, which are greater than 36 square feet in area, are considered to be "decks" and shall be constructed in accordance with Appendix "A" of Volume VII NC State Building Code.
4. Stairways shall not be less than 36 inches (914 mm) in clear width. The minimum width at and below the handrail height shall not be less than 32 inches (813 mm) where a handrail is installed on one side and 28 inches (711 mm) where handrails are provided on both sides. Exterior handrails can be no larger than a 2 x 4.
5. **Treads and Risers.** The maximum riser height shall be 8-1/4 inches (210mm) and the minimum tread depth be 9 inches (228 mm), exclusive of nosing. The riser height shall be measured vertically between leading edges of the adjacent treads. The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The walking surface of treads and landings of a stairway shall be sloped no steeper than one unit vertical in 48 units horizontal (2 percent slope). The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch(9.5 mm). The height from the top tread or top of a landing (when a landing is present) to the door threshold shall not exceed 8-1/4". Where the bottom riser of an exterior stair adjoins an exterior walk, porch, driveway, patio, garage floor or finish grade, the height of the riser may be less than the height of the adjacent risers.

6. **Profile.** The radius of curvature at the leading edge of the tread shall be no greater than 9/16 inch (14.3 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1-1/4 inch (32 mm) shall be provided on stairways with solid risers. Beveling of nosing shall not exceed 1/2 inch (12.7 mm). Risers shall be vertical or sloped from the underside of the leading edge of the tread above at an angle not more than 30 degrees from the vertical. **Exception:** A nosing is not required where the tread depth is a minimum of 11 inches (279mm).
7. **Handrails.** Handrails having minimum and maximum heights of 30 inches and 38 inches (762 mm and 965 mm), respectively, measured vertically from the nosing of the treads, shall be provided on all open sides of stairways of four or more risers (when the elevation of the top of the uppermost riser is more than 30" above floor or grade below) that lead to a door, platform, porch, terrace or entrance building. All required handrails shall be continuous the full length of the stairs. Ends shall be returned or shall terminate in newel posts or safety terminals.
8. **Handrail Grip Size.** The handgrip portion of the handrails shall not be more than 3 1/2 inches in cross-sectional dimension, or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners.
9. **Guardrails.** Porches, balconies or raised floor surfaces located more than 30 inches (762 mm) above the floor or grade below shall have guardrails not less than 36 inches (914 mm) in height.
10. **Guardrail and Handrail Opening Limitations.** Guardrails and handrails on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of an object 6 inches (152 mm) or more in diameter. Horizontal spacing between the vertical members in required guardrails shall be a maximum of 4 inches (102 mm) at the nearest point between the members.

Exception: The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway, may be of such a size that a sphere 6 inches (153 mm) cannot pass through.

1. **Structural Requirements.** Guardrails and handrails shall be capable of withstanding a single concentrated load of 200 lbs. applied in any direction at any point along the top. Material for stairs and landings constructed of wood shall be No. 2 or better-treated **Southern Pine or the equivalent**. The minimum thickness of stair treads and decking for landings shall be as follows:

<u>Support Spacing</u>	<u>Tread or Decking (nominal)</u>
12" o.c.	1" S4S
16" o.c.	1" T&G
24" o.c.	1-1/4" S4S
32" o.c.	2" S4S

As an alternative, an engineered design certified by a Registered Engineer or Architect, may be provided. In this design the stair tread of floor deck shall be capable of supporting either a uniformly distributed live load of 40 psf or a 300 lb. concentrated load acting over an area of 4 square inches, whichever produces the greater stresses. Maximum allowable deflection under these loads shall be L/240.

12. **Ramps.** Ramps shall be at least 3 feet wide. The slope of the ramps shall not exceed 1 foot vertical in 12 feet horizontal.
13. **Auxiliary Structures.** All auxiliary structures (such as porches, decks, awning, cabanas, etc) not provided or approved by the home manufacturer shall be entirely self-supporting unless designed and approved by a Registered Engineer or Architect. All such structures shall be constructed in accordance with the North Carolina State Building Code, Volume VII.

Electric:

1. Outside service disconnection means shall be located so that a minimum working clearance of 36 inches in front of the equipment and 15 inches on either side is maintained. Service equipment, panel boards and disconnect shall be mounted at least 2 feet off the ground, measured to the bottom of the panel, and be placed within 35 feet of the home.

2. All wiring must be by a licensed electrician. An individual may wire his/her own home, provided they will be living in the mobile home and they comply with the North Carolina Mobile Home Set-up Requirements and National Electrical Codes.
3. Four conductor (wire) wiring shall be used on all manufactured homes with wire size according to the amperage rating. Wiring shall be installed in conduit, where located above ground, or buried to a depth of not less than 18 inches.
4. All homes are to have an 120 volt operable smoke detector with battery back-up. Older rental units require a battery type smoke detector.
5. Well pumps which are not within sight of outside service disconnect require a disconnect of their own.

Tie-downs:

1. Ties shall connect to the ground anchor and the main structure steel frame (I-beam) which runs length wise under the manufactured home. Ties shall not connect to steel outrigger beams which fasten to and intersect with the main I-beam unless otherwise specifically stated in the manufactured home set-up instructions.
2. Ties must make one complete revolution around the I-beam and extend down from the top of the I-beam to ground anchors. Ties shall be attached in a manner that would not allow releasing as settling occurs.

Installation of anchors with loads other than direct withdrawal:

1. When the load on the anchor is not applied in line with direct withdrawal for frame ties or double headed anchors (plus or minus 15 degrees), provision shall be made to minimize the deflection or slicing through the soil by the anchor rod at ground level.
2. The method of restricting lateral deflection shall be one of the following:
3. The encasement of the top portion of the anchor in a 10-inch diameter x 18 inches long cylinder of concrete, applied in line with direct withdrawal for frame ties or double headed anchors (plus or minus 15 degrees) provision shall be made to minimize the deflection or slicing through the soil by the anchor rod at ground level.
4. Stabilizing plates installed in front of each ground anchor shall be approved by a registered engineer or licensed architect.

Plumbing, Water and Sewer Connections:

1. Provisions for water such as wells, pumps, or city water meters, shall be installed and connected.
2. All plumbing, water and sewer connections must be completed before electric power is turned on.
3. Where black (ABS) piping and white (PVC) piping are connected, the connection shall be made by means of a Fernco clamp or a No-Hub clamp. Glued connections or other couplings are not acceptable.
4. Constant grade on sewer lines shall be maintained (1/8 inch to 1/2 inch per one (1) foot).
5. Sewer lines shall be supported at every 4 foot interval with strapping or other approved means of support.
6. All sweeps and other fittings should be installed with the flow or grade of the line.
7. Where sewer lines enter a septic tank the remaining opening around the line shall be sealed to prevent soil from entering tank. This section should remain uncovered for inspection.
8. Sewer lines extending more than 10 feet from the edge of the home shall have a cleanout placed within 10 foot.
9. A 3" sewer line is acceptable up to 10 feet beyond the edge of the home. At 10 feet a cleanout shall be placed and 4" pipe shall run the remainder of the distance to the septic tank.

Cleanouts:

1. A cleanout shall be placed within 10 feet of the edge of the of the home.
2. When using 3 inch pipe or smaller you are required to have cleanouts at 50 foot intervals.
3. When using pipe larger than 3 inches you are required to have cleanouts at 75 foot intervals.