

Manufactured/ Mobile Home Installation Packet



**City of North Charleston
Building Inspections Department**

Mobile Home Installers Verification Form



Manufacturer's / Mobile Home address and Lot #

Please initial each line item listed below to verify you have received a copy of the applicable state codes and city ordinances.

- Inspection Procedures
- Manufactured / Mobile Home Installer Compliance Letter
- Overview of the SC Manufactured Housing Program
- South Carolina Code of Laws Chapter 79
- South Carolina Manufactured / Mobile Home Installation Requirements
- HUD issued/ data plate/ wind zone II
- Minimum Habitability Requirements SC State Code Section 79-43

Applicant's Signature

Applicant's Printed Signature

Date

Permits Required:

1. Building Installation/Set-Up & Plumbing Permit. Fee \$30.00
 - a. Permit must be displayed in a visible location on site.
2. Electrical Permit / HVAC disconnect. Fee \$30.00
 - a. Upon final inspection passing release is called in by inspector to SCE&G to activate service.
3. Gas Permit if applicable. Fee \$30.00
 - a. Same as electrical

Prior to any inspections, the following must be completed:

1. All permits must be obtained prior to any inspections
2. Electrical connection, trench to meter must be left uncovered
3. Plumbing & water connection
4. Gas connection, pressure test
5. Street address or lot # must be displayed on home
6. Street address or lot # must be displayed at meter.
7. Stairs and landing installed and tied/anchored down
8. Application for service must be made with SCE&G for electrical/gas prior to final inspection.
9. Manufactured home set-up/installation compliance letter completed with signatures on-site.
10. Any renovations, additions, enclosures, or repairs require a separate "Building Permit" application to include but not limited to any structural work such as: flooring, roofing, sheetrock, studs, insulation, window replacement, decks, porches, steps, sheds and fences.
11. Any additional Electrical, Mechanical (HVAC), Plumbing or Gas above normal maintenance requires a licensed contractor and permits.
12. Flood Zone lot requirements /Development Permit will be issued, cost is \$30.00
 - a. The lowest floor elevated to one foot above base flood elevation or:
 - b. The lowest part of the manufactured home chassis elevated at least 36 inches above ground grade level.
13. Manufacturer Installation Manual must be on site & available to inspector.
 - a. Manufactured home must be installed according to Manufacturer Specifications or:
 - b. South Carolina Regulations 79-42 or Appendix A and B at the end of SC Regulations 79 or:
 - c. Sections 40-29-50 of the SC Code and 19-425.43 Manufactured Home Installation Requirements or:
14. 2012 International Residential Code, Appendix E
15. Proof of HUD issued data plates

Inspection Request Guidelines:

1. Call to schedule Monday-Friday from 8:00am-9:00am for same day inspection.
2. Call 3:30pm-4:30pm for next day **only Monday-Thursday.**

MOBILE HOME SETUP COMPLIANCE LETTER

Attention: Manufactured/ Mobile Home Installers and Owners

The following is a letter that must be reviewed and signed by the owner of the home, as well as the installer hired to set up the home. Please verify that the installer is licensed with the State of South Carolina Manufactured Housing Board. The installer must sign below and check the box next to the applicable code. The owner of the home must sign as well. The inspector will verify that the letter is signed and posted on the home at the time of inspection. No electric or gas service will be released to SCE&G unless this is provided.

The manufactured/ mobile home located at _____
was installed according to: (Check one)

- Manufacturer's Specifications or
- 2012 International Residential Code, Appendix E or
- South Carolina Code Section 40-29-50 or South Carolina Regulation 19-425.43
- Wind II Data Plate within Manufactured Home or certified proof in lieu of
- Air conditioner disconnect must be installed & exterior unit elevated & strapped per code.

NOTE: The manufactured/ mobile home must comply with Wind zone 2 requirements.

The curtain wall and towing apparatus must be completely skirted around mobile home within 30 days of first inspection. Failure to do so is a citable offence per City Ordinance 6-5.1.

Print Installer's Name

Print Owner's Name

Signature of Installer

Signature of Owner

Installer's State License No.

A manufactured home installation permit application must be completed; submitted to Zoning Department; approved by Zoning; submitted to Building Inspections; approved by Building. A permit is required to replace existing installations, but only upon their removal.

Guidelines & Facts:

1. Factory-built homes manufactured before June 15, 1976 are mobile homes and are not to be installed in North Charleston.
 - a. Only owner occupied hardship cases of Pre-1976 mobile homes already located within the City limits will be considered for relocation or installation in North Charleston.
 - b. Pre-1976 Disclaimer form must be requested, completed, and approved by the Building Inspections Department to apply for an installation permit.
2. Only manufactured homes with the proper “data plate” stating the required HUD Code Wind Zone II or Wind Zone III construction will be considered for installation.
3. HUD labeled manufactured homes are constructed as single family detached residences only. They are not designed or intended for use as, nor will they meet any building code requirements for offices, stores/shops, classrooms, places of assembly, etc.
 - a. A change of occupancy is possible for HUD labeled home only upon approval of local jurisdiction and by meeting minimum compliance of current adopted codes.
4. All manufactured homes must meet the Minimum Habitability Standards as per SC Regulations 79-43.
5. Any repairs or alterations to a manufactured home must be permitted and will be inspected to current edition of the International Residential Code as adopted by the State. Fee based upon job cost.
6. Accepted licenses for repairs or alterations of manufactured homes are:
 - a. Manufactured Home Contractor/Repairer License.
 - b. Retail Dealer License is repairs are to home sold by dealer.
 - c. Residential Builders License if authorized by Residential Builders Commission.
 - d. Residential Specialty Contractor if authorized by Residential Builders Commission.
 - e. General Contractor License if authorized by Contractors Licensing Board.

CHAPTER 79.

DEPARTMENT OF LABOR, LICENSING AND REGULATION-- MANUFACTURED HOUSING BOARD

(Statutory Authority: 1976 Code Section 40-29-10)

79-1. Definitions.

- (A) "Act" means the "Uniform Standards Code for Manufactured Housing Act."
- (B) "Anchoring Equipment (Ties)" means straps, cables, turnbuckles, chains, or other devices of any kind including tensioning devices, which are used to secure a manufactured home to the ground or foundation.
- (C) "Anchoring System" means a method of construction which when properly designed and installed will resist overturning and lateral movement of the manufactured home.
- (D) "Approved" means acceptable to the authority having jurisdiction.
- (E) "Authority Having Jurisdiction" means the organization, office, or individual responsible for "Approving" equipment, an installation, or a procedure.
- (F) "Board" means the South Carolina Manufactured Housing Board.
- (G) "Diagonal Tie" means a tie intended to primarily resist horizontal or shear forces and which may secondarily resist vertical, uplift, and overturning forces.
- (H) "Department" means the Department of Labor, Licensing and Regulation and the staff responsible for providing administrative support to the Manufactured Housing Board.
- (I) "Dwelling Unit" means one or more habitable rooms which are designed to be occupied by one family with facilities for living, sleeping, cooking, eating, and sanitation.
- (J) "Frame, Main" means that part of the structural system which is normally used to transmit accumulative design loads to the support system.
- (K) "Foundation, Manufactured Home" means a site-built or site-assembled system of stabilizing devices which is:
- (1) Capable of transferring design dead loads and live loads required by Federal Regulations and other design loads unique to local home sites due to wind, seismic, and water conditions, that are imposed by or upon the structure into the underlying soil bedrock without failure;
 - (2) In frost susceptible areas, placed at an adequate depth, or otherwise adequately protected, to prevent frost damage: and
 - (3) Constructed of materials acceptable to the authority having jurisdiction (See Appendix B for examples).
- (L) "Gas Supply Connector, Manufactured Home" means a listed connector designed for connecting the manufactured home to the gas supply source.
- (M) "Ground Anchor" means a device at the manufactured home stand designed to transfer manufactured home anchoring loads to the ground.
- (N) "Habitable Room" means a room or enclosed floor space arranged for living, eating, food preparation, or sleeping purposes not including bathrooms, toilet compartments, laundries, pantries, foyers, hallways, and other accessory spaces.
- (O) "Hurricane-Resistive Manufactured Home" means a manufactured home which meets the wind design load requirements for Zone II in Subpart D, Section 3280-305(c)(2) of the Federal Standard or the applicable hurricane-resistive design requirements of the Standard for Manufactured Homes, NFPA 501B/ANSI A22 5.1 edition in effect at the time of manufacture.
- (P) "Inspector" means a person employed by the Department as being qualified to adequately inspect the construction, electrical installations and mechanical installations of manufactured homes, as well as the installation, tie-downs, blocking and sewer connections of new manufactured homes.
- (Q) "Install/Installed" means the installation operations performed at the occupancy site which render a manufactured home fit for habitation. Such operations include, but are not limited to, positioning, blocking, leveling, supporting, tying down, connecting utility systems, and assembling multiple or expandable units.
- (R) "Labeled" means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization acceptable to the "Authority having jurisdiction" and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

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(S) "Listed" means equipment or materials included in a list published by an organization acceptable to the "Authority having jurisdiction" and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and whose listing states either that the equipment or materials meets appropriate standards or has been tested and found suitable for use in a specified manner.

(T) "Manufactured Home" means a structure, transportable in one or more sections, which, in the traveling mode, is eight body feet or more in width or 40 body feet or more in length, or when erected on site, is 320 or more square feet and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and all systems, appliances, accessories, and furnishings sold with the home, including, among other things, the plumbing, heating, air conditioning and electrical systems.

(U) "Modify" means to alter, change, adjust or convert in compliance with the Standards for Manufactured Homes published by the US Department of Housing and Urban Development.

(V) "Permit" means a certificate issued by the Board allowing a retail dealer to temporarily conduct business away from the normal place of business.

(W) "Pier" means that portion of the support system between the footing and the manufactured home, exclusive of caps and shims.

(X) "Red Tag" means a printed notification issued by the Department that a manufactured home may not be offered for sale because of violations of the Act or these Regulations.

(Y) "Repair" means the renewal, replacement or reconstruction of any structural, mechanical, or electrical component of an existing manufactured home for the purpose of its maintenance.

(Z) "Site, Manufactured Home" means a designated parcel of land designed for the accommodation of one manufactured home, its accessory buildings or structures, and accessory equipment for exclusive use of the occupants.

(AA) "Stabilizing Devices" means all components of the anchoring and support systems such as piers, footings, ties, anchoring equipment, ground anchors, or any other materials and methods of construction which supports and secures the manufactured home to the ground.

(BB) "Stand, Manufactured Home" means that area of a manufactured home site which has been reserved for the placement of a manufactured home.

(CC) "Structure" means that which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

(DD) "Support System" means a combination of footings, piers, caps, and shims that will, when properly installed, support the manufactured home.

(EE) "Vertical Tie" means a tie intended to resist the uplifting and overturning forces.

HISTORY: Added by State Register Volume 29, Issue No. 2, eff February 25, 2005

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79-42. Manufactured Home Installation Requirements.

(A) Scope and Applicability. New manufactured homes in the State of South Carolina must be installed per the Manufacturers Installation Instructions. Used homes, without manufacturers installation instructions, are to be installed per Manufactured Housing Board Installation Regulations. The Manufacturers Installation Instructions and the Manufactured Housing Board Installation Regulations shall preempt any existing local standard. (See paragraph G).

(B) Manufactured Home Installation. The Federal Manufactured Home Construction and Safety Standards Program (24CFR 3280, 3282 and 3283) requires that all manufactured homes be provided with installation instructions covering foundation, anchoring, utility connections, and other items. Where such installation instructions are provided, they shall be followed and supplemented by this regulation.

(1) Foundation Systems for Manufactured Homes. A Manufactured Home Foundation System is one constructed in accordance with the foundation system included in the manufacturer's installation instructions, supplemented by the requirements of these regulations. The manufacturer or homeowner shall be permitted to design for unusual installation not provided for in the manufacturer's standard installation instructions, provided a licensed professional engineer or architect approves the design in writing. When the manufacturer's instructions are not available Table 1 in Appendix A indexes information for the design of manufactured home foundation systems which meet the minimum criteria established in this regulation.

(2) Manufactured Homes with Manufacturer's Instructions. The manufacturer's instructions include a typical foundation system designed by a registered professional engineer or architect to support the anticipated loads specified in the manufacturer's installation instructions for the design zone (including climate) of installation, and shall meet the requirements of these regulations. These instructions shall be provided with the home following installation as required by 24 C.F.R., Parts 3280, 3282, and 3283 (42 U.S.C. 5401 et seq.).

(3) Manufactured Home Stabilizing Devices and Design. Each manufactured home, upon being installed on a manufactured home stand, shall have stabilizing devices, or shall be installed on a foundation constructed in accordance with the Standard Building Code. Stabilizing devices not provided with the manufactured home shall be listed or labeled to meet or exceed the design and capacity requirements of the manufactured home manufacturer's installation instructions and these regulations.

(a) Anchoring.

(1) Each manufactured ground anchor shall be listed and installed in accordance with the terms of its listing and the anchor manufacturer's instructions and shall include means of attachment of ties meeting the requirements of paragraph (B) (3) (b) (v). Ground anchor manufacturer's installation instructions shall include tensioning adjustments which may be needed to prevent damage to the manufactured home, particularly damage that can be caused by frost heave.

(2) Each ground anchor shall have the manufacturer's identification and listed model identification number marked thereon so that the number is visible after installation. Instructions shall accompany each listed ground anchor specifying the types of soil for which the anchor is suitable under the requirements of paragraph (B) (3) (b) (4) (a).

(3) Ground anchors, including means for attaching ties, shall be located to effectively match the anchoring system instructions provided by the manufactured home manufacturer, or, if there are no instructions, in accordance with the requirements of this section.

(4) If concrete slabs or continuous footings are used to transfer the anchoring loads to the ground, the following shall be required:

(a) Steel rods cast in concrete shall be capable of resisting loads as specified in paragraph (B) (3) (b) (4)(a).

(b) Deadman concrete anchors may be used in place of listed anchors if they meet the requirements of paragraph (B) (3) (b) (4) (a).

(c) Concrete slabs may be used in place of ground anchors, provided the slab is constructed so that it provides holding strength equal to the requirements of paragraph (B) (3) (b) (4)(a).

(b) Foundation Standards.

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(1) Support System Spacing. Unless a professional engineer or architect designs the entire support system, the support system shall be designed in accordance with this standard.

(2) Footings. Footings shall be sized to support the loads shown in the manufacturer's instructions and as specified below. Where no manufacturer's instructions are available, the footings shall be adequate in size to withstand the uniform live and dead loads of the manufactured home and any concentrated loads.

(a) The supports shall begin not more than two feet from the exterior of each end wall. Supports shall be installed directly under the main frame (chassis) of the manufactured home. The South Carolina Manufactured Housing Board may approve methods other than those specified herein.

(b) Table 2 in Appendix A shall be applicable unless the entire support system is designed and calculated by a registered professional engineer or architect.

(c) Footings shall be at least 144 square inches of solid concrete, block, or other materials approved for the intended use by the South Carolina Manufactured Housing Board. (Check Appendix B for minimum thickness.)

(d) Footings or pier foundations (unless approved by a registered professional engineer), when required, shall be placed level on firm undisturbed soil or on controlled fill which is free of grass and organic materials to minimum load-bearing capacity of 1000 pounds per square foot. Where unusual conditions exist, the spacing of piers and the load-bearing capacity of the soil shall be determined specifically for such conditions (see paragraph (6) (b)).

(3) Piers. Piers or load-bearing supports or devices shall be designed and constructed to evenly distribute the loads. Load-bearing supports or devices shall be listed and labeled, shall be designed by a registered professional engineer or architect, shall be approved for the use intended, or piers shall be constructed as follows:

(a) Piers less than 36 inches in height shall be constructed of open or closed cell, eight inches by 16 inches, concrete blocks (with open cells vertically placed upon the footing). Single-stacked block piers shall be installed with the 16 inches perpendicular to the main (I-beam) frame. The piers shall be covered with a two inches by eight inches by 16 inches wood or concrete cap (See Figure B-10, Appendix B).

(b) Subject to the limitations of paragraph (B) (4) (b), piers between 36 inches and 80 inches in height and all corner piers over three blocks high shall be double blocked with blocks interlocked and capped with a four inches by 16 inches by 16 inches solid concrete block, or equivalent (See Figure B-11, Appendix B).

(c) Subject to the limitations of paragraph (B) (4) (b), piers over 80 inches in height shall be constructed as per paragraph (B) (3) (b) (3) and they shall be laid in concrete mortar and steel reinforcing bars inserted in block cells with the block cells filled with concrete (See Figures B-12 (a) and B-12 (b) in Appendix B).

(d) Steel Piers. Steel piers, when used, shall be in compliance with paragraph (B) (3) (b) (5)(l), after fabrication to provide corrosion protection (See B-8 in Appendix B).

(e) Walls. Load bearing and nonload-bearing walls constructed on site shall be constructed of concrete, masonry, or any other material or system that is recognized by the authority having jurisdiction. Minimum thickness shall be that required to resist lateral pressure from adjacent earth and support design loads as determined by acceptable engineering practice.

(4) Anchors.

(a) Capacity of Anchors. Each approved ground anchor, when installed, shall be capable of resisting an allowable working load at least equal to 3,150 pounds in the direction of the tie plus a 50 percent overload (4,725 pounds) without failure.

(b) Anchoring Equipment. Anchoring equipment, shall be capable of resisting an allowable working load equal to or exceeding 3,150 pounds and shall be capable of withstanding a 50 percent overload (4,725 pounds) without failure of either the anchoring equipment or the attachment point on the manufactured home. When the stabilizing system is designed by a qualified registered professional engineer or architect, alternative working loads may be used provided the anchoring equipment is capable of withstanding a 50 percent overload. All anchoring equipment shall be listed or labeled as being capable of meeting all the requirements of this section.

(c) Anchor Installation Specifications. Each type anchor suitable for this purpose shall have specification data showing the soil classification(s) for which it qualifies.

(d) Anchors designed for connection of multiple ties shall be capable of resisting the combined working load and overload consistent with the intent expressed herein, and shall be installed to resist resultant forces.

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(e) Selection of Anchors. Anchor selection shall be based on a determination of the soil class at the depth the anchor helical plate will be installed.

(f) Other Anchoring Devices. Other anchoring devices meeting the requirements of this section shall be permitted if acceptable to the authority having jurisdiction.

(g) Depth of Anchors. All anchors shall be installed to the full depth shown in the anchor manufacturer's installation instructions. The load-carrying portion of the ground anchors shall extend below the frost line.

(5) Ties. Strappings or other approved methods or material shall be used for ties. All ties shall be fastened to ground anchors and drawn tight with turnbuckles or other adjustable tensioning devices or devices supplied with the ground anchor.

(a) Tie materials shall be capable of resisting an allowable working load of 3,150 pounds with no more than two percent elongation and shall withstand a 50 percent overload (4,725 pounds total). Ties shall comply with the weathering requirements of paragraph (B) (3) (b) (v) l).

(b) Ties shall connect the ground anchor and the main structural steel frame (I-beam or other shape) which runs lengthwise under the manufactured home. Ties shall not connect to steel outrigger beams which fasten to and intersect the main structural frame unless specifically stated in the manufacturer's installation instructions.

(c) Connection of the cable frame tie to the manufactured home I-beam or equivalent main structural frame member shall be by a five-eighths inch drop-forged closed-eye bolt through a hole drilled in the center of the I-beam web or other approved methods. The web shall be reinforced if necessary to maintain the designed I-beam strength.

(d) Cable ends shall be secured with at least three U bolt-type cable clamps with the U portion of the clamp installed on the short (dead) end of the cable to assure strength equal to that required by paragraph (B) (3) (b) (v) a).

(e) Number of Ties. The minimum number of ties per side for various lengths of manufactured homes in hurricane zone shall be in accordance with Table 3 in Appendix A.

(f) Location of Ties. When continuous straps are provided as vertical ties, such ties shall be positioned at rafters and studs. Where a vertical tie and diagonal tie are located at the same place, both ties shall be permitted to be connected to a single ground anchor, provided that either the anchor used is capable of carrying both loadings, or that the load capacity of the total number of anchors used is equal to 3150 pounds. Working load plus 50 percent overload (4725 pounds.) times the number of ties specified in Table 3 in Appendix A.

(g) Spacing of Vertical Ties. Vertical ties shall be as evenly spaced as practicable over rafters or over studs along the length of the manufactured home with not more than eight feet open-end spacing on each end.

(h) Special Ties. Clerestory roofs and add-on sections of expandable manufactured homes shall have provisions for vertical ties at the exposed ends.

(i) Alternate Method Using Strapping. If the alternate method incorporating straps specified in Table 3 in Appendix A is used, the baling straps shall be wrapped completely around the manufactured home passing under the main steel frame, with both ends of each strap fastened together under tension. The straps shall be in accordance with paragraph (B) (3) (b) (v). The method used to connect the ends of the strap shall not reduce the allowable working load and overload. S traps shall be installed in accordance with the requirements for ties in paragraph (B) (3) (b) (v) a) through l).

(j) Tensioning Device Design. Tensioning devices such as turnbuckles or yoke-type fasteners shall be ended with a clevis or forged or welded eyes.

(k) Permanency of Connections. Anchoring equipment shall be designed to prevent self-disconnection when ties are slack. Open hook ends shall not be used in any part of the anchoring system.

(l) Resistance to Weather Deterioration. All anchoring equipment exposed to weathering shall have a resistance to weather deterioration at least equivalent to that provided by a coating of zinc on steel of not less than 0.30 ounces per square foot on each side of the surface coated, as determined by ASTM Standard Methods of Test for Weight of Coating on Zinc-Coated (Galvanized) Iron or Steel Articles (ASTM A90-B1).

(4) Placement of Manufactured Homes.

(a) Clearance Under Homes. A minimum clearance of 12 inches shall be maintained beneath the lowest member of the main frame (I-beam or channel beam) in the area of utility connections. No more than 25 percent of the underside of the main frame of the home shall be less than 12 inches above grade.

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(b) Plates and Shims. A wood plate not exceeding two inches in thickness and shims that transfer loads uniformly not exceeding one inch in thickness shall be permitted to be used to fill any gap between the top of the pier and the main frame. Two, two inches or four inches solid concrete blocks shall be permitted to be used to fill the remainder of any gap. Shims shall be at least nominal four inches wide and six inches long and shall be fitted and driven tight between the wood plate or pier and main frame.

(c) Elevated Manufactured Homes. When the manufactured home is installed on a basement or split entry type foundation over a habitable lower-level area, or when more than one-fourth of the area of a manufactured home is installed so that the bottom of the main frame members are more than three feet above ground level, the foundation system shall be designed by a registered professional engineer or architect and the installation shall be approved by the local authority having jurisdiction.

(d) Removal of Manufactured Home Transportation Components at Time of Installation. No portion of a manufactured home shall be removed when located on its home site unless it is designated to be removable and removed in accordance with the manufacturer's instructions.

(5) Ventilation of Manufactured Homes.

(a) Access to and Ventilation of Underfloor Areas.

(1) Provisions shall be made to minimize condensation in underfloor areas through ventilation openings or other suitable means.

(2) If combustion air for heat-producing appliance(s) is taken from within the underfloor areas, ventilation shall be adequate to assure proper operation of the appliance(s). This requirement shall take precedence over the provisions of paragraph (B) (5) (a) (i).

(3) Ventilation openings shall be provided for low profiled manufactured homes that are installed by depressing the supporting foundation in accordance with paragraph (B) (5) (a) (iv).

(4) A minimum of four ventilation openings shall be provided from the underfloor space to the exterior. One shall be placed at or near each corner as high as practicable. Their total net area shall be calculated by: $a = A/150$ where:

A = the area of the crawl space, square feet

a = the total net free vent area.

(a) Openings shall provide cross ventilation on at least two opposite sides. The openings shall be covered with corrosion resistant wire mesh not less than one-eighth inch and not more than one-half inch in any dimension or with screened louvered openings to retard entry of dry vegetation, waste materials, or rodents.

(b) Intake air for ventilation purposes shall not be drawn from underfloor spaces of the home.

(c) Moisture producing devices, such as dryers, shall be vented to the atmosphere in such a manner to insure that moisture laden air is carried beyond the perimeter of the home.

(d) Curtain Walls. Curtain walls, if used, although not necessary for stabilizing the home, shall be installed in accordance with the manufacturer's installation instructions. It shall be secured, as necessary, to assure stability, to minimize vibrations, to minimize susceptibility to wind damage, and to compensate for possible frost heave. Access opening(s) not less than 18 inches in any dimension and not less than three square feet in area shall be provided and shall be located so that any water supply and sewer drain connections located under the manufactured home are accessible for inspection. Such access panel(s) or door(s) shall not be fastened in a manner requiring the use of a special tool to remove or open same. On-site fabrication of curtain wall shall meet the objectives cited herein. Materials designed for curtain walls may be used, including, but not limited to vinyl, treated wood, corrosion resistant metal or masonry products. Curtain walls constructed or installed in accordance with this provision satisfy the requirements of the Act.

(6) Maintenance.

(a) Protection of Ties and Manufactured Home Roofing and Siding. Protection shall be provided at sharp corners where the anchoring system requires the use of external cables or straps. Protection shall also be provided to minimize damage to roofing or siding by the cable or strap.

(b) Maintenance of Anchoring Systems. The homeowner shall be advised that tie tension should be checked and adjusted when necessary to prevent damage to the manufactured home from settling or other unforeseen movements (such as frost heave).

(C) Plumbing. Each manufactured home stand shall be provided with a water supply and sewer located and arranged to permit attachment to the manufactured home in a workmanlike manner.

(D) Mechanical Equipment (Heating and Cooling)

(1) Exterior Mechanical Equipment.

(a) Mechanical equipment installed outside of and not attached to a manufactured home shall be mounted on a level concrete slab not less than three and one-half inches thick, a precast reinforced concrete slab, treated wood of equivalent strength, or be mounted in accordance with the equipment manufacturer's installation instructions.

(b) Mechanical equipment installed outside shall be listed and labeled for outside installation and installed in accordance with the manufacturer's installation instructions.

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(c) Mechanical equipment shall not be installed in a manner that would obstruct any means of required egress. Mechanical equipment shall not be installed in window openings which are part of an existing system and shall not obstruct sidewalks or other means of egress from the manufactured home.

(E) Manufactured Home Electrical Connections.

(1) When a manufactured home consists of two or more sections, all utility connections from one section to another shall be installed in accordance with the manufacturer's installation requirements. In the absence of manufacturer's instructions utility connections shall be made in accordance with the National Electrical Code.

(2) No rigid utility connections shall be made unless the home is installed on a foundation constructed in accordance with the Standard Building Code.

(3) All manufactured home utility services shall be connected to the supply sources only with approved materials.

(4) When a manufactured home is equipped with a meter base from the manufacturer, a municipality or county cannot require that the home be hooked up in any other fashion.

(F) Dealer Lot Installation.

(1) All manufactured homes stored on dealership lots shall be installed to such a degree as to not allow damage to occur while the home is on display.

(a) Piers. Pier requirements for dealer lot installations shall equal one-third the required piers for field installation in accordance with the manufacturer's installation instructions. In areas where special pier installations are required, the dealer shall incorporate these piers in the lot installation

(b) Used Manufactured Homes. Used manufactured homes offered for sale on dealership lots shall be installed to assure that load-bearing supports maintain the integrity of the home. Dealer lot **COPY OF** owners will have the discretion as to what extent installation is necessary. However, in no situation shall any unit be installed on a dealer lot without pier support.

(G) National Flood Insurance Program. In areas where a community meets the eligibility requirements for the National Flood Insurance Program, the local jurisdiction having authority shall have the authority to change, delete or modify these regulations in order to comply with the National Flood Insurance Program created by the National Flood Insurance Act of 1968, as amended. A copy of any different standard adopted under this paragraph shall be filed with the South Carolina Manufactured Housing Board.

HISTORY: Added by State Register Volume 29, Issue No. 2, eff February 25, 2005.

79-43. Used Manufactured Home Minimum Habitability Requirements.

(A) Scope and Applicability. No person or retail dealer shall sell to a consumer for occupancy any used manufactured home to be used for the purpose of living, sleeping, cooking, or eating therein, which does not comply with the following requirements. Any home meeting the standards for habitability of this Section may be placed for occupancy throughout the State. No additional regulation or standard may be enforced with regard to the condition or repair of the home.

(B) Facilities Required.

(1) Sanitary facilities. Every Manufactured home shall contain not less than a kitchen sink, lavatory, tub or shower, and a water closet all in good working condition and properly connected to an approved water and sewer system. Every plumbing fixture and water and waste pipe shall be properly installed and maintained in good sanitary working condition free from defects, leaks, and obstructions.

(2) Hot and cold water supply. Every manufactured home shall have connected to the kitchen sink, lavatory, and tub or shower an adequate supply of both cold water and hot water. All water shall be supplied through an approved distribution system connected to a portable water supply.

(3) Water heating facilities. Every manufactured home shall have water heating facilities which are properly installed and maintained in a safe and good working condition and are capable of heating water to such a temperature as to permit an adequate amount of water to be drawn at every required kitchen sink, lavatory basin, bathtub or shower at a temperature of not less than 120 degrees Fahrenheit.

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(4) Heating facilities. Every manufactured home shall have heating facilities which are properly installed and maintained in safe and good working condition, and are capable of safely and adequately heating all habitable rooms, and bathrooms. Where a central heating system is not provided, each manufactured home shall be provided with facilities whereby heating appliances may be connected. Unvented fuel burning heaters shall be prohibited except for gas heaters listed for unvented use and the total input rating of the unvented heaters is less than 30 BTU per hour per cubic foot of room content. Unvented fuel burning heaters shall be prohibited in bedrooms.

(5) Cooking and heating equipment. All cooking and heating equipment and facilities shall be installed in accordance with Federal Manufactured Home Construction and Safety Standards and shall be maintained in a safe and good working condition. Portable cooking equipment employing flame is prohibited.

(6) Smoke detector. Every manufactured home shall be provided with an approved listed smoke detector, installed in accordance with the manufacturer's recommendations and listing. When activated, the detector shall provide an audible alarm.

(7) Windows. Every habitable room excluding bathrooms, kitchens and hallways, shall have at least one window or skylight facing directly to the outdoors.

(8) Ventilation. Every habitable room shall have at least one window or skylight which can be easily opened, or such other device as will adequately ventilate the room.

(9) Electric service. Where there is electric service available to the manufactured home, every habitable room or space shall contain at least two separate and remote convenience outlets and bedrooms shall have, in addition, at least one wall switch controlled ceiling or wall type light fixture. In kitchens, three separate and remote convenience outlets shall be provided, and a wall or ceiling type light fixture controlled by a wall switch shall be required. Every hall, water closet compartment, bathroom, laundry room or furnace room shall contain at least one electric fixture. In bathrooms a wall switch shall control the electric light fixture. In addition to the electric light fixture in every bathroom and laundry room there shall be provided at least one convenience outlet. Any new bathroom outlet shall have ground-fault circuit interrupter protection. Every such outlet shall be properly installed, shall maintain in good and safe working condition, and shall be connected to the source of electric power in a safe manner.

(10) Exterior Walls. Every exterior wall shall be free of holes, breaks, loose or rotting boards or timbers and any other conditions which might admit rain, or dampness to the interior portions of the walls or to the occupied spaces of the manufactured home.

(11) Roofs. Roofs shall be structurally sound and maintained in a safe manner and have no defects which might admit rain or cause dampness in the walls or interior portion of the home.

(12) Window sash. Window sash shall be properly fitted and weather tight within the window frame.

(13) Interior floors, walls and ceiling. Every floor, interior wall and ceiling shall be substantially rodent proof, shall be kept in sound condition and good repair and shall be safe to use and capable of supporting the load which normal use may cause to be placed thereon. Every toilet, bathroom and kitchen floor surface shall be maintained so as to be substantially impervious to water.

(14) Structural supports. Every structural element of the dwelling shall be maintained structurally sound and show no evidence of deterioration which would render it incapable of carrying normal loads.

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(15) Dangerous structures. Any manufactured home which shall be found to have any of the following defects shall be red tagged and deemed unfit for human habitation, and shall be so designated by the placement of a red tag on the home by the State Inspector. Placement of the red tag means that the manufactured home cannot be sold unless and until repairs are completed and the home is brought back into compliance with this section of the regulations.

(a) One which is so damaged, decayed, dilapidated, unsanitary, unsafe or vermin-infested that it creates hazard to the health or safety of the occupants or the public.

(b) One which lacks illumination, ventilation or sanitation facilities adequate to protect the health or safety of the occupants or the public.

(16) Removal of red tag. An employee of the South Carolina Manufactured Housing Board can only remove the red tag, after inspection and verification that repairs have been completed. Removal of red tag by any licensee prior to this verification could result in license revocation or suspension by the South Carolina Manufactured Housing Board.

(C) Exception for Homes Purchased for Repair.

(1) If a home is to be sold for purposes of repair prior to occupancy, the provisions of this Section will not apply if the purchaser shall have executed a document indicating the home is purchased for purposes of repair and not for habitation until the standards established hereby are met.

(2) No home may be placed for occupancy until standards herein are met.

HISTORY: Added by State Register Volume 29, Issue No. 2, eff February 25, 2005

Section 6-5.1. Special requirements for mobile/manufactured homes: permanent link to this piece of content

Mobile homes established after the effective date of this ordinance and mobile homes existing on the effective date of this ordinance, including the relocation and replacement thereof shall:

(1) Be installed in accord with the installation requirements of section 19-425.43 of the South Carolina Manufactured Housing Board Regulations,

(2) Be underskirted around the entire home with brick, masonry, vinyl, treated wood, painted or stained, or similar material designed and manufactured for permanent outdoor installation,

(3) Have installed or constructed and attached firmly to the mobile home and anchored securely to the ground, stairs, porches, entrance platforms, ramps or other means of entrance and exit to the mobile home in accord with applicable building codes,

(4) Have all moving or towing apparatus removed or concealed with skirting, including hitch, wheels and axles,

(5) Not be joined, affixed or in any way combined with another mobile home unless such units are fully enclosed by common exterior siding completely encircling said units, together with a unified roof, approved by the city building official or his/her designee.

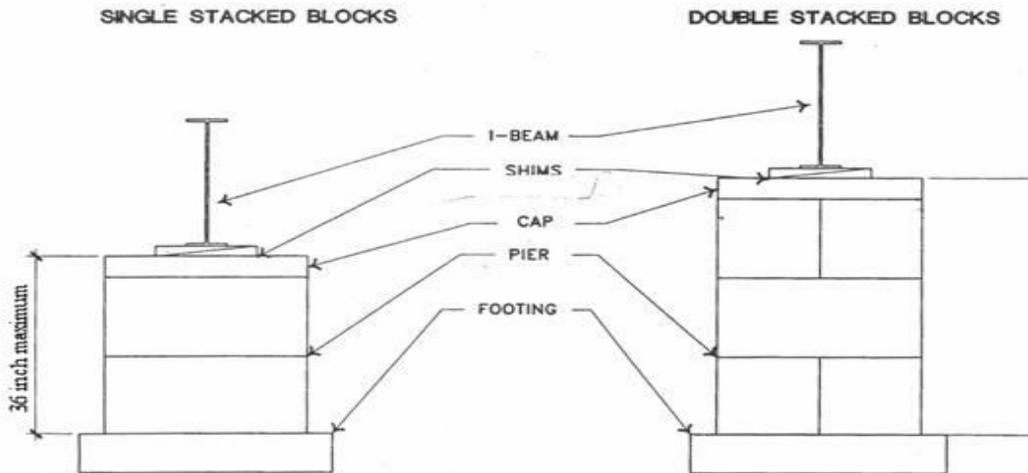
Mobile homes in existence on the effective date of this ordinance shall within six (6) months of such date be brought into compliance with the requirements of this section, or be declared by the zoning administrator, chief building official, or other designee, to be in violation of the provisions herein, subject to penalties as provided in section 7-4.

(Ord. No. 1998-99, 12-11-98)

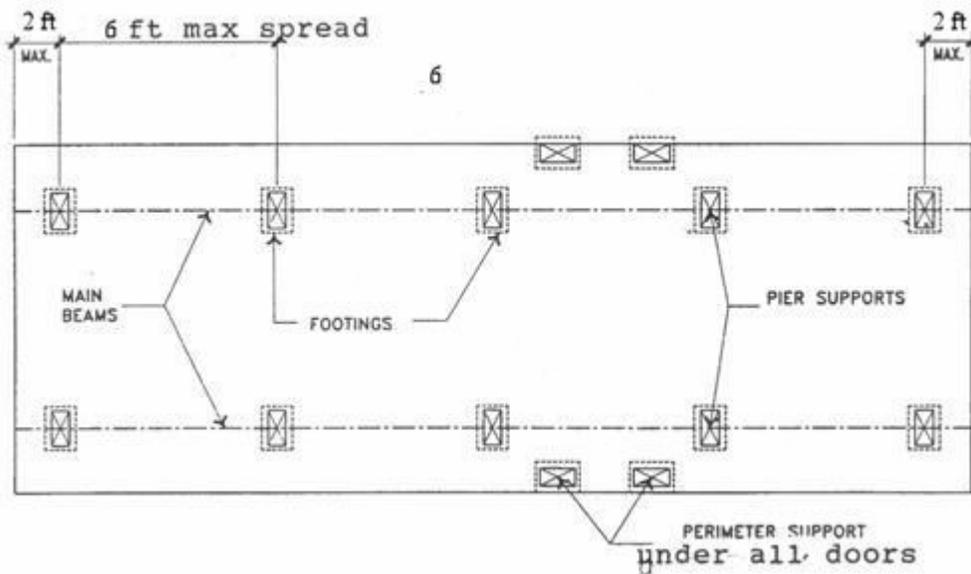
COPY OF STATE CODE LAW PROVIDED BY THE CITY OF NORTH CHARLESTON FOR YOUR CONVENIENCE

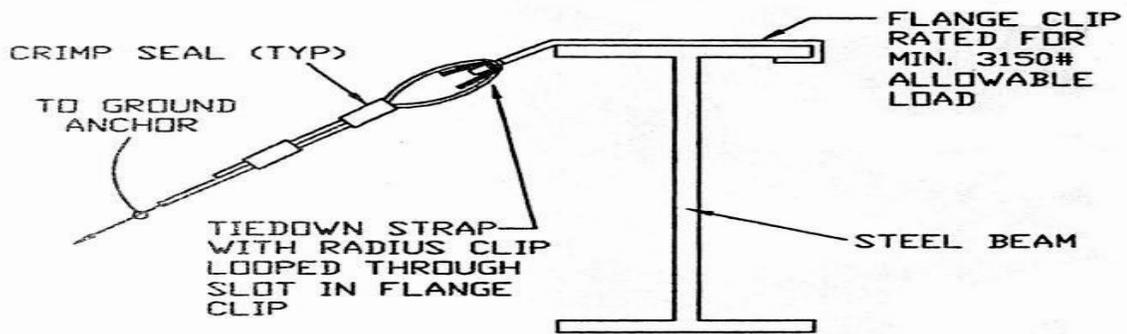
TYPICAL SINGLEWIDE OR DOUBLE WIDE HOME PER BLOCKING CONSTRUCTION

PER CONSTRUCTION



- MAXIMUM HEIGHT OF SINGLE STACKED BLOCKS UNDER THE I-BEAMS IS 36 INCHES.
- PIERS BETWEEN 36 INCHES AND 80 INCHES IN HEIGHT SHALL BE DOUBLE STACKED.
- PIERS EXCEEDING 80 inches IN HEIGHT SHALL BE INSTALLED PER A STATE OF SOUTH CAROLINA REGISTERED ENGINEER OR ARCHITECT DRAWING OR THE UNIFORM STANDARDS CODE FOR MANUFACTURED HOUSING.





FRAME DIAGONAL TIEDOWN

STEEL FRAME TIEDOWN STRAP CONNECTIONS

Number of Ties Required per Side of Single Section
Manufactured Home

| <u>Length of Home (ft)</u> | <u>No. of Vertical Ties</u> | <u>No. of Diagonal Ties</u> |
|----------------------------|-----------------------------|-----------------------------|
| up to 45 | 2 | 4 |
| 46 to 49 | 2 | 5 |
| 50 to 58 | 3 | 5 |
| 59 to 70 | 3 | 6 |
| 70 to 73 | 3 | 7 |
| 74 to 84 | 4 | 7 |