

CITY OF AUBURN HILLS

GUIDE FOR MOBILE HOME INSTALLATION

The following is presented as a general guide to mobile home placement and is not intended to be all inclusive or to otherwise represent the codes and ordinances pertaining thereto.***

1. A permit is required from this office prior to the placement of the mobile home. We must have the following before the permit can be granted. A building permit application completed with the following information included.
 - a. Manufacturer
 - b. Year of manufacture
 - c. Serial Number
 - d. H.U.D. certification number (only on units built since 1976)
 - e. Size of unit
 - f. Site plan to be included.
2. The unit must be fully installed except skirting and connected to water, sewer, gas and electrical facilities prior to inspection.
3. An inspection of the interior of the home subsequent to placement is mandatory.
4. Permanent steps from all exterior doors must be installed. Railings on same must be provided on all open sides.
5. Utility connections are to be made as follows:
 - a) Water – the water connection is to be secured by straps or hangars to the underside of the home, not laying on the ground. It is to be provided with heat tape where subject to freezing. All hose bibs are to be equipped with vacuum breakers.
 - b) Natural gas – the connection is to be made with non-corrosive, approved metallic tubing, to be supported to the underside of the unit with a material of the same composition as the tubing (i.e., copper strapping to support copper pipe). Burial of the tubing from the gas meter to the underside of the home is acceptable.
 - c) Sewer – connections are to be made securely with clamps and rubber boots installed where the connection is made into the sewer line. Cleanouts must be provided. All piping must be installed to allow unobstructed flow.
6. All tie downs are to be installed in accordance with the approved tie down systems.
- *** 7. No occupancy of the unit is to take place prior to the approval of this office.

**EXCERPT FROM MOBILE HOME COMMISSION RULES,
CORPORATION & SECURITIES BUREAU, MICHIGAN DEPARTMENT OF COMMERCE**

Part 6. MOBILE HOME INSTALLATION

R 125.1601. Definitions.

Rule 601. As used in this part:

- a) "Anchoring equipment" means straps, cables, turnbuckles, chains, including tension devices, or other securing devices which are used with ties to secure a mobile home to ground anchors.
- b) "Anchoring system" means a combination of ties, anchoring equipment, and ground anchors, that will, when properly installed, resist movement of an implaced mobile home caused by wind forces.
- c) "Cap" means a solid concrete block, solid wood block, or solid steel plate which is placed on top of the pillar covering the width and length of the pillar.
- d) "Foundation" means the base upon which a mobile home rests.
- e) "Ground anchor" means any device designed to transfer the mobile home anchoring loads to the ground.
- f) "Installation" means the process of mounting the mobile home on a foundation. It includes the initial acts of jacking up the mobile home, leveling, and connecting utilities, and the attachments of skirting expandos, cabanas, carports, any device relating to barrier free design, and other fixtures to the mobile home pursuant to a signed work order.
- g) "Pillar" means the portion of the mobile home support system between the platform and the mobile home frame, exclusive of caps and shims.
- h) "Platform" means a 16-inch by 16-inch by 4-inch solid concrete block that is placed directly on the ground and serves as the foundation of a pillar. As an alternative, 2 8-inch by 16-inch by 4-inch solid concrete blocks may be used as platforms if the joint between the blocks is parallel to the steel I-beam frame.
- i) "Shim" means a wooden wedge with a 1-inch maximum thickness and not less than 4 inches wide and 6 inches long which, when driven in tightly in pairs between the cap and the mobile home frame, acts as a lending and stabilizing device.
- j) "Tie" means straps, cables, or a securing device used to connect a mobile home to ground anchors. (Effective 7/24/78; (a,b,c,i) Added 3/1/79; (h) Amended 10/1/79)

R 125.1602. Installation

Rule 602. (1) for all new mobile homes sold in Michigan, the manufacturer shall provide express written instructions for the installation specifying the location and required minimum imposed load capacity of pillars and the location and the required minimum imposed load capacity of any other recommended stabilizing devices.

(2)The installation of mobile homes shall, at a minimum, comply with the following specifications:

- a) Pillars shall be installed directly under each main frame beam. If the distance between the main frame beams does not conform to the pad or pillars that are permanently installed on the mobile home site, cross beams shall be used. These cross beams may be of steel, or pressure-treated wood which resists decay, and has an imposed load capacity of 3, 000 pounds per square foot (PSF). The cross beams shall extend a minimum of 6 inches beyond each main frame beam, but shall not extend beyond the sides of the mobile home. A wood beam shall not rest on the ground, but shall rest on the cap. If the cross beam interferes with a utility to the mobile home, the cross beam placement may be between blocks. If a cross beam is used between blocks, it shall be a minimum of 6 inches by 8 inches.

- b) Pillars shall be placed on 10-foot centers along the length of each main frame beam, but may be placed at less than 10 feet centers. If the pillars interfere with the axle area, they may be placed to a maximum of 13 feet centers, but the pillar placement shall not be less in number than if placed on 10 foot centers.
- c) The pillars nearest each end of the mobile home shall be within 3 feet of either end.
- d) All grass and organic material shall be removed and the pillar or platform shall be placed on stable soil.
- e) Pillars shall be constructed of solid concrete, cored concrete blocks unless other cored concrete blocks are supplied by the consumer, or a heavy metal screw column which bears on both frame and foundation or other acceptable design and construction meeting mobile home industry standards.
- f) Concrete block pillars shall be constructed of regular 8-inch by 8-inch by 16-inch blocks and placed on the pillar platform. The blocks shall be placed with the open cells vertical and the blocking of the pillar shall be single tiered. A cap shall be placed on top of the pillar. A wood plate 1-inch by 8-inches by 16-inches or 2-inches by 8-inches by 16-inches may be placed on top of the cap for leveling. Shims may be fitted and driven tight between the wood plate or cap and the mainframe shall not take up more than 1-inch of vertical height.
- g) Pillars shall be installed perpendicular to the main frame of the mobile home.
- (3) Solid concrete pillars may be of cone or pyramid design with a minimum 16-inch base tapered to a minimum 9-inch top. Shimming shall be the same as for the concrete block pillar.
- (4) All pillars shall have a minimum imposed load capacity of 3,000 pounds.
- (5) If the manufacturer's recommended installation specifications exceed the minimum specifications stated in these rules, the manufacturer's specifications shall in all cases be complied with.
- (6) Mobile homes may be installed on a basement or crawl space-type foundation, provided the foundation complies with local building codes and ordinances, and meets the manufacturer's specifications for pillar placement and imposed load capacity. (Effective 7/24/78).

R 125.1602a. Installation; systems compatibility.

Rule 602a. All components used in the installation of a mobile home, such as platforms and pillars, shall be uniform in construction and shall be compatible with any existing system that may be installed on the mobile home site. (Effective 5/1/80).

R 125.1603. Utility hookups.

Rule 603. All utility hookups to a mobile home shall be in compliance with the following minimum standards:

- a) Water. Each mobile home shall be connected to the service outlet by semi-ridged tubing, such as copper tubing or approved plastic piping. The minimum size shall be ½-inch inside diameter or 5/8-inch outside diameter. An easily accessible hand-manipulated shutoff valve shall be installed on the water supply inlet to the mobile home. A water supply protection device, such as a heat tape, UL or similarly listed, shall be installed at the time the mobile home is installed on site to prevent the freezing of service lines, valves, and riser pipes. The starting point of the protection device, excluding the plug-in cord, shall be attached 1 inch beyond the underside and shall completely cover the full length of the piping to include the water service riser. The riser shall be insulated and covered to prevent loss of heat. The wrapping or spiraling of the protection device shall comply with the manufacturer's specification. If an extension cord is used, it shall be UL or similarly listed and shall be approved for exterior use.

- b) Mobile home fuel supply systems shall be as follows:
- i. Furnaces, hot water heaters, appliances, or any item of equipment which uses gas shall be fully compatible with the type of gas used. An easily accessible, approved hand shutoff valve controlling the flow of gas to the entire gas piping system shall be installed as close as possible to the service meter or supply connection of the liquified petroleum gas container. Approved piping with a minimum 1/2-inch inside diameter or 5/8-inch outside diameter shall be used for any gas line. After appliances are connected, the piping system shall be tested to not less than 10 inches nor more than 14 inches of water column (1/2 PSI), and the appliance connections shall be tested for leakage with soapy water or bubble solution.
 - ii. A mobile home fuel supply system other than gas shall comply with state and local codes and ordinances, but, at a minimum, shall comply with the standards contained in paragraph 4.3.1 to 4.3.4, national fire protection association number 5018, 1974,

“Standard for Mobile Homes, Body and Frame Design and Construction Requirements; Installation of Plumbing, Heating and Electrical Systems,” which are adopted in these rules by reference. Copies of the standards are available from the National Fire Protection Association, 470 Atlantic Avenue, Boston, Massachusetts 02210 at a cost of \$4.00, or from the Department of Commerce, Corporation and Securities Bureau, Mobile Home Division, P.O. Box 30222, Lansing, Michigan 48909 at a cost of \$4.00.

- c) Sewer. At a minimum, schedule 30 plastic pipe with a minimum 3-inch diameter shall be used from the mobile home outlet to the site sewer service line. The sewer line shall be supported at not less than 4-foot intervals. Plumber’s strapping shall be used for support where possible. All joints shall be sealed to preclude leaks. There shall be an approved seal at the sewer riser. All plumbing shall be installed pursuant to local codes.
- d) The electrical supply line from the service line to the mobile home shall be completed in a safe and workmanlike manner. Where the calculated load is more than 50 amperes or where a permanent feeder is used, the supply shall be connected by a person who is licensed under Act No. 217 of the Public Acts of 1956, as amended, being **§338.881** et seq. of the Michigan compiled Laws (Effective 7/24/78; (a,b,c,d) Amended 5/1/80).

R 125.1604. Skirting.

Rule 604. (1) Mobile home skirting shall be vented. Louvered or similar vents shall be at a minimum of 600 square inches per 1000 square feet of living space. A minimum of 1 vent shall be placed at the front and rear of the mobile home and 2 to each exposed side. An access panel of sufficient size to allow full access to utility hook ups located beneath the mobile home shall be installed. All skirting shall be manufactured of fire-resistant material and certified as such by the manufacturer.

- 2) Skirting shall be installed in a manner so as to resist damage under normal weather conditions to include, but not limited to, damage caused by freezing and frost, wind, snow, and rain. (Effective 7/24/78).

R 125.1605. Anchoring systems, generally,

Rule 605. (1) Effective 6 months after filing of these rules with the Secretary of State, a mobile home anchoring system sold and installed in this state shall comply with the following:

- a) Be designed and constructed in compliance with the United States Department of Housing and Urban Development regulations entitled "Mobile Home Construction and Safety Standards", which are adopted herein by reference. Copies of the standards may be obtained from the Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402 upon request for 24 C.F.R., Parts 0-499, (Mobile Home Construction and Safety Standards) at a cost of \$5.00, or from the Department of Commerce, Corporations and Securities Bureau, Mobile Home Section, P.O. Box 30222, Lansing, Michigan 48909 at a cost of \$5.00.
- b) Be installed in compliance with the manufacturer's specifications.
- c) Be approved for sale and use within this state by the Michigan Construction Code Commission.
- 2) An anchoring system that is sold in this state shall be certified in writing by the manufacturer as meeting the standards required by these rules.
- 3) A manufacturer shall furnish and ship with each approved anchor system information pertaining to the type or types of soil the system has been tested and certified to be installed in, and instructions as to the method of installation and periodic maintenance required.
- 4) Model number shall be permanently marked on each anchor system. (Effective 3/1/79).

MOBILE HOME PARKS

