**MANUFACTURED HOME INSTALLATION GUIDELINES**

**APPLICABILITY**

These guidelines provide the minimum requirements for the installation of used manufactured homes within manufactured home parks. No mobile home manufactured prior to June 15, 1976; that does not qualify as a HUD Manufactured Home, shall be permitted to be installed in the City of Bismarck ETA. For the purpose of this document, a mobile home shall be considered a manufactured home.

All individuals performing new manufactured home installations must be registered with the North Dakota Department of Commerce, Division of Community Services as a Certified Manufactured Home Installer. Used homes are exempt from the Department of Commerce Program guidelines but such installers shall comply with the City of Bismarck installation guidelines.

**SETBACKS AND FIRE SEPARATION**

Manufactured homes and accessory structures must comply with the setbacks adopted in Title 14 of the City of Bismarck Code of Ordinance.

* Front Yard Setback: (Thru Street) 15’ from end of street, front of curb from a manufactured home or accessory structure to a public right of way.
* Front Yard Setback: (Private Road) No setback unless home can be moved to 10’ fire code from a manufactured home or accessory structure.
* Rear Yard Setback: 10’ from a manufactured home (Minimum 10 FSD between manufactured homes on an adjacent lot).
* Side Yard Setback: 10’ from a manufactured home (Minimum 10 FSD between manufactured homes on an adjacent lot).
* 10’ from accessory structures on an adjacent lot (Minimum 10’ FSD between structures on an adjacent lot).
* Front Yard Setbacks: (Non-Conforming Manufactured Home Parks) 15’ from a manufactured home or accessory structure to a public right of way. Any park built prior to June 1, 2017 are non-conforming parks.

**SITE PREPARATION**

The portion of the lot where the manufactured home will be placed must provide adequate support for the placement of the home. The support system must be constructed on firm, undisturbed soil, or compacted fill. All organic material and debris must be removed in areas where support systems are to be placed. After organic material has been removed, the home site must be crowned and graded to ensure adequate drainage.

* **Site Drainage**
* Drainage must be provided to direct surface water away from the home to protect against erosion of the foundation supports and to prevent water from accumulating under the home.
* The area of the site covered by the home must be graded, sloped, or designed to provide drainage from beneath the home.
* The ground immediately adjacent to the home must be graded to divert drainage away from the home. Natural drainage must be diverted around and away from the home.
* **Vapor Barrier**
* If the space under the home is to be enclosed with solid skirting or other solid materials, a vapor barrier must be installed on the ground beneath the home or provided with ventilation at a rate of 1 square inch for each 150 square feet of under-floor area.
* The vapor barrier must be a minimum of six mil polyethylene sheathing or equivalent.
* The entire area under the home must be covered and all joints in the vapor barrier must be overlapped at leave twelve inches and sealed. All voids or tears in the vapor barriers must be sealed.
* The vapor barrier may be placed directly beneath footings, or otherwise installed around or over footings placed at grade, and around anchors or other obstructions. If no vapor barrier adequate, venting must be provided.

**SUPPORT SYSTEMS**

* Used manufactured homes may be installed without a frost protected foundation; however, individual support systems and load-bearing support systems must be sized and located to support the loads specified in the City of Bismarck’s guidelines.
* Support systems shall be spaced not more than ten feet apart for manufactured homes 12 feet wide or less, and not more than eight feet apart for manufactured homes over 12 feet wide, beginning from the front wall of the manufactured home, with not more than two feet open-end spacing at the area of the main frame. Supports shall be installed directly under the main frame of chassis of the manufactured home.
* Double-wide manufactured homes built with a conventional frame shall have additional supports placed under the center marriage line and at the support columns located at the sides of center wall openings eight feet in width or greater.
* Support systems must be placed on firm, undisturbed soil, or compacted fill. All organic material and debris must be removed in areas where support systems are to be placed. Where questionable soil conditions exist, support systems must be designed specifically for such conditions.
* Support systems shall be not less than 16 -inch by 16-inch, or 256 square inches.
* Support systems may be nominal 4-inch thick precast concrete, nominal 4-inch thick poured in place concrete slabs, listed and labeled prefabricated ABS, or other methods or materials designed by a registered professional engineer.
* Open cell blocks must be placed with open cells vertically and at right angles to the support systems.
* When blocks are stacked side by side, each layer of block must be placed at right angles to the preceding one.
* Horizontal offsets from the top to the bottom of the support system must not exceed one-half inch.
* Structural loads must be evenly distributed across capped hollow support systems.
	+ - * Caps must be solid concrete or masonry at least 4-inch nominal thickness, or hardboard lumber at least 2-inch nominal thickness, or other approved listed material.
			* All caps must be of the same length and width of the support system on which they rest.
			* When split caps are used of double stacked blocks, the caps must be installed with the long dimension across the joint in the blocks below
* Any gaps that occur during the installation process between the base of the main chassis beam and the foundation support system must be filled by nominal 4-inch by 6-inch by 1-inch shims to level the home and fill any gaps between the base of the main chassis beam and the top of the support system cap.
	+ - * When multiple shims are used, they may not total more than 1-inch in height
* Support systems less than 36 inches in height:
	+ - * Support systems are permitted to be constructed of single, open, or closed cell concrete blocks, 8-inch by 8-inch by 16-inch when design capacity of the block is not exceeded.
			* Single-stacked support systems shall be installed with the 16-inch dimension perpendicular to the main frame. The support system shall be covered with a 4-inch by 8-inch by 16-inch concrete cap.
* Support systems between 36-inches and 67-inches in height and all corner support systems over three blocks high must be constructed out of double, interlocked concrete blocks. The design capacity of the blocks may not be exceeded.
* Support systems designs over 67-inches in height must be designed by a registered professional engineer.

**ANCHORS AND TIE-DOWNS STRAPS**

All manufactured homes are required to be tied down in accordance with the anchoring manufacturer’s installation instructions. In the absence of the anchoring manufacturer’s tie-down instruction, the home must be tied down in accordance with the following specifications. Singlewide manufactured homes require both diagonal and vertical lines. Doublewide manufactured homes require only diagonal lines.

**UTILITY CONNECTIONS** The following sections have not been completed

* Plumbing
* Electric
* Fuel gas