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DEPARTMENT OF BUILDING INSPECTION
COUNTY OF GOOCHLAND
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Manufactured Homes/Construction Trailer Installations

1. **DPOR requirements**
   Contractors shall be licensed by DPOR in one of three areas in order to install modular or manufactured buildings. Proof of licensure is required at time of applying for permit application. There are:
   a. **"Modular/manufactured building contracting"** (Abbr: MBC) means that service which provides for the installation or removal of a modular or manufactured building manufactured under ANSI standards. This classification does not cover foundation work; however, it does allow installation of piers covered under HUD regulations. It does allow a licensee to do internal tie-ins of plumbing, gas and electrical or HVAC equipment. It does not allow for installing additional plumbing, electrical, or HVAC work such as installing the service meter, or installing the outside compressor for the HVAC system. The H/H and BLD classifications also provide for this function. See below.
   b. **"Highway/heavy contractors"** (Abbr: H/H) means those individuals whose contracts include construction, repair, improvement, or demolition of the following: bridges, railroads, dams, roads, drainage systems, runways, foundations, streets, parking lots, structural signs & lights, public transit systems & tanks. The functions carried out by these contractors include but are not limited to the following: building demolition , non-water well drilling, clearing paving, concrete work pile driving, excavating road marking, grading & steel erection. These contractors also install, maintain, or dismantle the following:
      1. Power systems for the generation and primary and secondary distribution of electric current ahead of the customer's meter;
      2. Pumping stations and treatment plants;
      3. Telephone, telegraph or signal systems for public utilities; and
      4. Water, gas, and sewer connections to residential, commercial, and industrial sites, subject to local ordinances.
      This classification may also install backflow prevention devices incidental to work in this classification when the installer has received formal vocational training approved by the board that included instruction in the installation of backflow prevention devices.
   c. **"Building contractors"** (Abbr: BLD) means those individuals whose contracts include construction on real property owned, controlled or leased by another person of commercial, industrial, institutional, governmental, residential (single-family, two-family or multifamily) and accessory use buildings or structures. This classification also provides for remodeling, repair, improvement or demolition of these buildings and structures. A holder of this license can do general contracting. If the BLD contractor performs specialty services, all required specialty designations shall be obtained. The building classification includes but is not limited to the functions carried out by the following specialties: billboard/sign contracting, landscape service contracting, commercial improvement contracting, marine facility contracting, farm improvement contracting, modular/manufactured building contracting, home improvement contracting, recreational facility contracting.

2. VCC 424.2

Code requires compliance with manufacturer's installation instructions or 24 CFR Part 3285

a. Refer to manufacturer's installation instructions
b. If no manufacturer's installation instructions refer to 24 CFR Part 3285. If 24 CFR Part 3285 does not address the particular installation requirements, the installer shall first attempt to obtain Design Approval Primary Inspection Agency (DAPIA) approved designs and instructions
c. If DAPIA drawings are not obtainable then approved RDP designs conforming to the requirements of Manufactured Housing Consensus Committee shall be used

3. Site Preparation Inspection

a. Approved drawings shall be on-site.
b. Foundation on firm undisturbed soil compacted to a min. of 90%
c. All organic debris removed from footings
d. Graded for adequate drainage to prevent water accumulation under unit (½"/1' for first 10 feet)
e. Minimum 6 mil polyethylene ground moisture control vapor retarder shall be provided under all units with skirting and lapped a minimum of 12"

4. Foundations

a. Piers shall be of concrete block, pressure-treated wood meeting AWPA U1-04 for use with ground contact or adjustable metal
b. CMU minimum 8"X8"X16" with cells aligned vertically at right angles to one another
c. Caps shall be a minimum of 4" solid concrete, 2" thick hardboard or corrosion resistant ½" thick steel and shall be the same width and length as the pier
d. Double stacked block piers shall have installed with the long dimension across joint in the CMU blocks below
e. Gaps not exceeding 1" between main chassis support and the foundation below shall be filled with a pair of 4"X6"X1" shims. Gaps greater than 1" shall be filled with 2" hardwood plates or 2" or 4" solid concrete block
f. Manufactured piers must be selected so that the adjustable risers do not extend more than 2" when finally positioned
g. A minimum of 12" shall be maintained between the unit frame and grade under all parts of the unit
h. Footings shall extend a minimum of 18" below grade
i. Pier height
    1. Piers < 36" in height - single CMU blocks dry stacked with long side at right angle to unit frame
    2. Piers 36" to 67" – and all corner piers more than 3 blocks high shall be double interlocked CMU blocks dry stacked or engineer design
    3. Piers >67" – shall be designed by a registered engineer
j. Pier location & spacing
    1. No more than 24" from both ends
    2. Spaced not more than 120" on center under than main frame rails
    3. Perimeter piers shall be located under side wall exterior doors and other side wall openings of 48" or greater and under load-bearing porch posts, factory installed fireplaces and fireplace stoves
k. Footings shall consist of:
    1. 1200psi, 4" pre-cast concrete pads or,
    2. 3000psi, 6" poured-in-place concrete
    3. ABS footing pads
    4. pressure treated lumber is acceptable but not recommended
l. footing size – assuming 2000psi soil and 5000lb footing capacity a minimum of 20"X20"X6" cast-in-place footing or a 20"X20"X4" pre-cast concrete pad is required

5. **Anchorage**
   a. Unit properly blocked and level
   b. Installation instructions on site
      1. Maximum spacing (see below)
      2. Minimum and maximum angles of diagonal ties (typically 45 degrees)
      3. Connection requirements for diagonal ties (wrapped completely around main frame rail)
      4. Method of strap attachment to ground anchors (minimum of three complete rotations)
      5. Strapping protected from sharp corners
      6. Requirements for sizing and installation of stabilizer plates provided
      7. Anchor heads shall be flush to the ground
      8. Straps shall be properly tensioned, no sags
      9. Anchors within 6" of side of unit
      10. Any damaged, rusted or altered parts
   c. Anchors listed and protected against corrosion
   d. Straps listed and conform to ASTM D3953
   e. Anchors approved for soil type
   f. Strap spacing: (wind zone I)
      1. 12'/24'unit:
         a. Up to 25" AFG = 14'-2"
         b. 26"to 33" AFG = 11'-9"
         c. Up to 46" AFG = 9'-1"
         d. Greater 46" need engineer's design
      2. 14'/28' unit:
         a. Up to 25" AFG = 18'-2"
         b. 26"to 33" AFG = 16'-1"
         c. 34" to 46" AFG = 13'-3"
         d. 47" to 67" AFG = 10'-0"
         e. Greater than 67" need engineer's design
      3. 16'/32' unit:
         a. Up to 33" AFG = 19'-0"
         b. 34" to 46 AFG = 16'-5"
         c. 47" to 67" AFG = 13'-1"
         d. Greater than 67" need engineer's design

6. **Skirting**
   a. Weather resistant
   b. Durable, suitable for exterior exposures
   c. Secured to resist wind, frost heaves and vibration
   d. One opening with a minimum 18" in any direction and a minimum of 3 sq. ft.
   e. Access panel shall not require special tool to open
   f. On-site fabricated skirting shall meet manufacturer's specifications, the VCC and 24 CFR Part 3285
   g. Brick skirting pilasters at openings and every 6' o.c. (ACI 530)

7. **For more information, reference this HUD link:**
   http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/rmra/mhs/smhi