

SECTION**19.0.0 Footings, Foundations and Slabs****19.1.0 Footings****19.1.1 Soil Conditions for Footings, Foundations and Slabs**

No footings shall be placed on frozen ground and all footings shall rest on undisturbed, solid ground. During construction, footing depths shall be extended to solid ground as directed by the Building Commissioner whenever, in his opinion, such extension is necessary due to conditions encountered; provided, that if the Building Commissioner considers it necessary he may require logs of borings of the materials and analyses made to determine the soil bearing values of the soils.

19.1.2 Bottom of Footings

The bottom of all footings shall be not less than three feet six inches (3'6") below the adjoining finished grade that will exist after final grading.

19.1.3 Materials

All footings shall be constructed of concrete and shall conform to: Section 20.0.0, "Concrete Construction." All buildings over two (2) stories in height, or over twenty-five feet (25' 0") above grade, shall have reinforced concrete footings and foundations complying with American Concrete Institute Standards.

19.1.4 Pier Footings

Pier footings, other than deep caissons and piles, are prohibited for exterior walls and foundations of all buildings. However, pier footings will be allowed as foundations under interior columns in buildings. Footings under piers and columns shall be not less than thirty-six inches (36") square and shall have a minimum thickness of twelve inches (12").

19.2.0 Size of Footings**19.2.1 One Story Buildings**

Footings for one- (1) story buildings shall be a minimum of ten inches (10") in thickness, measured vertically and at least eighteen inches (18") in width, measured horizontally. Footings for buildings of two or more stories in height, or for walls extending over 12' 0" above grade, shall be at least 12" thick and 24" wide.

19.3.0 Foundations**19.3.1 Materials**

All foundations, of whatever type, shall be constructed of 3,000 p.s.i. (28 day) concrete, except that buildings and structures over two (2) stories in height shall be constructed of reinforced concrete, in conformity with the provisions of Section 20.0.0 "Concrete Construction."

19.3.2 Sizes of Foundations

Foundation walls for one- (1) story buildings shall be a minimum of eight inches (8") in thickness. However, foundation walls where the footing or basement slab is more than 4' 0" below finished grade shall be a minimum of ten inches (10") in thickness.

Foundation walls for two (2) story buildings under 25' 0" in height shall be a minimum of ten inches (10") in thickness, measured horizontally, through a cross-section of the foundation.

Foundation walls for three (3) story buildings over 25' 0" in height shall be a minimum of twelve inches (12") in thickness.

19.3.3 Crawl Spaces

Crawl spaces shall be a minimum of two feet six inches (2'6") in height measured from final surfacing to the underside of floor joists or slabs.

19.4.0 Footings and Foundations for Garages and Accessory Buildings

19.4.1 Attached Garages and Accessory Buildings

Attached garages and accessory buildings shall have the same type and thickness of footings and foundations as the buildings to which they are attached, and shall have footings at least three feet six inches (3' 6") below finished grade.

19.4.2 Detached Garages and Accessory Buildings

Detached masonry garages and accessory buildings shall have foundations with footings, which shall be at least three feet six inches (3' 6") below finished grade. One story detached garages and one story detached accessory buildings that are of light frame construction and that are at least two feet or more from the main building and not more than 1,000 square feet in area, or 50 feet in any dimension, may rest upon solid concrete slab foundations with reinforced thickened edges, provided, that such thickened edges are not less than twelve inches (12") in width at the bottom and twelve inches (12") in depth, rest upon solid undisturbed earth and extend not less than one foot (1' 0") below finished grade.

19.5.0 Slabs for Floors and Pavements

Slabs for floors and pavements, including floors for basements and garages, shall be not less than five inches (5") thick. Slabs on grade for required rooms of dwelling units shall be reinforced with not less than 6" x 6" x No. 10 welded steel wire mesh. Slabs on grade other than those for required rooms, may be four inches (4") thick if reinforced with minimum 6" x 6" x No. 10 welded steel wire mesh.

19.5.1 Sidewalks

All sidewalks within the lot lines of the building being built shall be at least four inches (4") thick and not less than two feet six inches (2' 6") wide. Reinforcing will not be required except in concrete stairways. All concrete shall comply with Section 20.0.0, "Concrete Construction".