

# **DWELLING & FOUNDATION STANDARDS** rev1-2017

## **OCONTO COUNTY ZONING ORDINANCE CH. 14**

### **14.427 Primary Dwelling**

A parcel is permitted to have only one dwelling used for human habitation per parcel unless otherwise specifically permitted within a Zoning District. Any dwelling used for human habitation must contain a minimum of 700 square feet of living space. Two existing dwellings cannot be attached, combined or otherwise joined to each other. For structures constructed after January 1, 1997 additions to the structure will not be counted in determining if the 700 square foot minimum has been met. Furthermore, a dwelling may be used for human habitation in Oconto County only if:

1. The dwelling has a minimum nominal width of 14 feet, and;
2. The dwelling has a nominal roof pitch of three (3) inches of rise per twelve (12) inches of run, and;
3. The dwelling was constructed no more than 15 years prior to the date of application. Additions to existing conforming structures that are 15 years or older are not prohibited by this ordinance.
4. A dwelling that does not meet the criteria in 14.427 1. 2. and 3. may be used for human habitation as a conditional use if the dwelling has a nominal width of at least 14 feet.

### **14.423 Footings and Foundation**

1. Footings and foundations which meet the requirements of SPS 321, Wisconsin Administrative Code are required for single and two-family residences, manufactured homes and mobile homes.
2. A permit for footings/foundation may be issued prior to the issuance of a land use permit for the structure for which there will be footings/foundation on any parcel regardless of the intended use of the structure or the minimum parcel size required by the applicable zoning district provided:
  - a. A sanitary permit has been issued by Oconto County for the affected parcel.
  - b. The property owner signs a disclaimer acknowledging that there is no warranty or guarantee that the actual structure may be permitted.
  - c. The footings/foundation meet all setback requirements.
  - d. A fee is paid pursuant to Section 14.2904 of this ordinance.
  - e. The structure for which they will be the footings/foundation is built within one year, unless an extension is granted. If the structure is not built within one year, or the extended period, the footings/foundation must be completely removed.

## **WISCONSIN ADMINISTRATIVE CODE SPS 321 CONSTRUCTION STANDARDS**

### **Subchapter IV — Footings**

#### **SPS 321.15 Footings.**

**(1) GENERAL.** **(a)** The dwelling and attached structures, such as decks and garages, shall be supported on a structural system designed to transmit and safely distribute the loads to the soil.

**(b)** The loads for determining the footing size shall include the weight of the live load, roof, walls, floors, pier or column, plus the weight of the structural system and the soil over the footing.

**(c)** Footings shall be sized to not exceed the allowable material stresses.

**(d)** The bearing area shall be at least equal to the area required to transfer the loads to the supporting soil without exceeding the bearing capacity of the soil.

**(e) 1.** Structures supported on floating slabs or similar shallow foundations may not be physically attached to structures that are supported by footings that extend below the frost line unless an isolation joint is used between the structures, except as provided in subd. 2. This isolation shall extend for the full height of the structure.

**2.** Exterior ramps are not required to comply with subd. 1.

**(2) SIZE AND TYPE.** Unless designed by structural analysis, unreinforced concrete footings shall comply with the following requirements:

**(a) Continuous footings.** The minimum width of the footing on each side of the foundation wall shall measure at least 4 inches wider than the wall. The footing depth shall be at least 8 inches nominal. Footing placed in unstable soil shall be formed. Lintels may be used in place of continuous footings when there is a change in footing elevation.

**Note:** Unstable soil includes soils that are unable to support themselves at a 90 degree angle for the full depth of the footing.

**(b) Column or pier footing.**

1. The minimum width and length of column or pier footings shall measure at least 2 feet by 2 feet.

2. The minimum depth of column or pier footings shall measure at least 12 inches nominal.

**(c) Trench footings.** Footings poured integrally with the wall may be used when soil conditions permit. The minimum width shall be at least 8 inches nominal.

**(d) Chimney and fireplace footings.** Footing for chimneys or fireplaces shall extend at least 4 inches on each side of the chimney or fireplace. The minimum depth shall measure at least 12 inches nominal.

**(e) Floating slabs.** Any dwelling supported on a floating slab on grade shall be designed through structural analysis.

**(f) Deck footings.** Decks attached to dwellings and detached decks which serve an exit shall be supported on a structural system designed to transmit and safely distribute the loads to the soil. Footings shall be sized to not exceed the allowable material stresses. The bearing area shall be at least equal to the area required to transfer the loads to the supporting soil without exceeding the bearing values of the soil.

**(3) SOIL-BEARING CAPACITY.** No footing or foundation shall be placed on soil with a bearing capacity of less than 2,000 pounds per square foot unless the footing or foundation has been designed through structural analysis. The soil-bearing values of common soils may be determined through soil identification.

**Note:** The department will accept the soil-bearing values for the types of soil listed in the following table: - [See PDF for table](#)

**(a) Minimum soil-bearing values.** If the soil located directly under a footing or foundation overlies a layer of soil having a smaller allowable bearing value, the smaller soil-bearing value shall be used.

**(b) Unprepared fill material, organic material.** No footing or foundation shall be placed upon unprepared fill material, organic soil, alluvial soil or mud unless the load will be supported. When requested, soil data shall be provided.

**Note:** The decomposition of organic material in landfill sites established for the disposal of organic wastes may produce odorous, toxic and explosive concentrations of gas which may seep into buildings through storm sewers and similar underground utilities unless provisions are taken to release the gases to the atmosphere.

### **SPS 321.16 Frost protection.**

**(1) GENERAL.**

**(a)** Footings and foundations, including those for landings and stoops, shall be placed below the frost penetration level or at least 48 inches below adjacent grade, whichever is deeper, except as allowed under sub. [\(2\)](#).

**(b)** Footings may not be placed on frozen material.

**(2) EXCEPTIONS.**

**(a)** Frost protected shallow foundations shall be designed in accordance with ASCE-32 as adopted in Table 320.24-5.

**(b)** Portions of footings or foundations located directly under window areaways do not require frost protection provided the rest of the foundation is protected in accordance with this section.

**(c)** Footings and foundations may bear directly on bedrock less than 48 inches below adjacent grade provided all of the following conditions are met.

1. The rock shall be cleaned of all earth prior to placement.

2. All clay in crevices of the rock shall be removed to the level of frost penetration or to 1.5 times the width of the rock crevice, whichever is less.

3. Provisions shall be taken to prevent water from collecting anywhere along the foundation.

**(d)** Subsection [\(1\)](#) [\(a\)](#) does not apply to the footing for a ramp and its handrail posts unless the ramp abuts a frost-protected stoop or landing, in which case only the footing for that abutting end of the ramp is required to have the frost protection under sub. [\(1\)](#) [\(a\)](#), such as by bearing onto the stoop or landing, so that a tripping hazard is not created.

**Note:** See ch. SPS 325 Appendix A for further information.