## FOUNDATION / FOOTING REQUIREMENTS

Richfield Township Building Department

**RESIDENTIAL** (applies to slab-on-ground, basement, and crawl space)

- Footings must extend below the frost line. Normally, the bottom of footings must be at least 42 inches below grade UNLESS an exception is granted by the Building Official. Call for footings inspection before pouring concrete or setting posts.
- Footing must be minimum 12 inches wide and 6 inches thick UNLESS an
  exception is granted by the Building Official. Rebar not required but recommended.

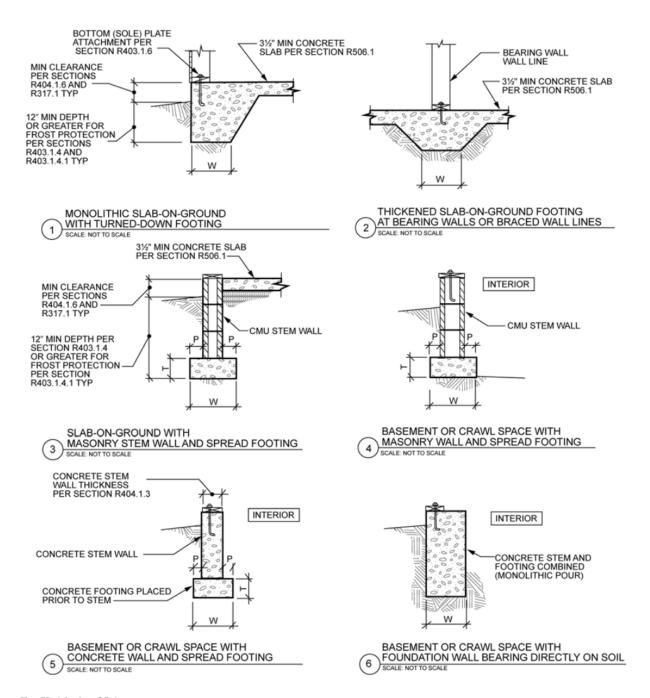
  <u>Call for footings inspection before pouring concrete</u>. Then pour footing first and
  allow to harden before building on it.
- Footing size will be larger if the building is more than one story or includes masonry. Size will be determined by the current Michigan Residential Building Code and confirmed by the Building Official at Plan Review.
- For slab-on-ground, a turned-down monolithic concrete foundation is permitted, provided it extends below the frost line and is a minimum 12 inches wide UNLESS an exception is granted by the Building Official. See next page for details. <u>Call for footings inspection before pouring concrete.</u>
- For other foundation construction methods, see next page for details. Width of all foundations, "W" is minimum 12 inches, but may be wider if the structure above requires.

#### **POLE BARNS**

- Posts must be 6x6 or 4x6 preservative-treated with certification stamp.
- Post holes must be at least 42 inches below grade and have minimum of 6" thick concrete at the bottom with a minimum 12" high concrete collar.
- It is highly recommended that posts extend below the frost line, 42 inches below grade. For pole barns less than 600 s.f., frost protection is not required by the building code, but a minimum depth of 24 inches is required by our building department.
- All posts must be supported on a footing in the bottom of the posthole. This can be
  a 12-inch diameter concrete pad that is 6 inches thick, or you can use a 12"
  Composite Post Foundation (Home Depot, SKU# 121-105) placed in bottom of
  post hole, 42" below grade.
- Alternately, 12-inch diameter solid concrete piers extending 42 inches below grade are permitted, with anchor bolts embedded to provide connection to the posts with the proper post base (such as Simpson ABA66Z Post Base). <u>Call for footings</u> inspection before pouring concrete.

### **DETACHED ACCESSORY BUILDINGS**

- For detached accessories buildings such as garages and sheds less than 600 square feet, frost protection of the foundation is not required by code, but is highly recommended. Minimum depth of footings is 24 inches below grade if frost protection is not desired.
- See above details for Residential footings for use in detached accessory buildings, or use construction methods in Pole Barns detailed above.



For SI: 1 inch = 25.4 mm.

W = Width of footing, T = Thickness of footing and P = Projection per Section R403.1.1

#### NOTES:

- a. See Section R404.3 for sill requirements.
- b. See Section R403.1.6 for sill attachment.
- c. See Section R506.2.3 for vapor barrier requirements.
- d. See Section R403.1 for base.
- e. See Figure R403.1.3 for additional footing requirements for structures in SDC D<sub>0</sub>, D<sub>1</sub> and D<sub>2</sub> and townhouses in SDC C.
- f. See Section R408 for under-floor ventilation and access requirements.

# FIGURE R403.1(1) PLAIN CONCRETE FOOTINGS WITH MASONRY AND CONCRETE STEM WALLS IN SDC A, B AND Ca, b, c, d, e, f