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## **Product Information Bulletin**

National Building Code of Canada 2015 Requirements for Concrete Footings (As manifested in CSA A23.1)

AccuFooting is designed to function as a footing form-board spacer and brace while positioning and retaining the reinforcement bar. AccuFooting was specifically designed to address code requirements:

- 1. Manufactured of HDPE plastic which provides the following inherent properties:
  - a. Corrosion-resistant
  - b. Dimensionally stable
  - c. Decay resistant
  - d. Electrically insulating
  - e. Non-hygroscopic (does not absorb or transmit moisture)
- 2. Accurately positions, secures, and supports the reinforcement bar within the finished forms.
- 3. Maintains a minimum concrete cover of 75 mm.
- 4. Reduces or eliminates reinforcing bar contact with the soil, oiled form boards, and many other jobsite sources of contamination.
- 5. Designed and field tested to withstand real life construction loads and continue to perform its intended function.

The *National Building Code of Canada 2015* references *CSA A23.1-14 – Concrete materials and methods of concrete construction* as the primary document for establishing the minimum requirements for forming and pouring concrete footings as well as the placement and securing of reinforcement in those footings. Following are specific code sections related to the AccuFooting form brace:

National Building Code of Canada 2015 References Related to AccuFooting	
Section 9.3. Materials, Systems and Equipment	Section 9.15. Footings and Foundations
9.3.1. Concrete	9.15.1. Application
9.3.1.1. General	9.15.1.1. General
9.3.1.6. Compressive Strengths	9.15.3. Footings
9.3.1.7. Concrete Mixes	9.15.3.1. Footings Required
9.3.1.9. Cold Weather Requirements	9.15.3.2. Support of Footings
Section 9.4. Structural Requirements	9.15.3.3. Application of Footing Width and Area Requirements
9.4.1. Structural Design Requirements and Application Limitations	9.15.3.4. Basic Footing Widths and Areas
9.4.1.1. General	9.15.3.5. Adjustments to Footing Widths for Exterior Walls
9.4.4.2. Foundation Capacity in Weaker Soil and Rock	9.15.3.6. Adjustments to Footing widths for Exterior Walls
Section 9.12. Excavation	9.15.3.9. Step Footings
9.12.4. Trenches Beneath Footings	



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## CSA A23.1-14 References Related to AccuFooting

6.1.4 Dissimilar metals... shall be electrically separated by an electrical insulating dielectric material.

6.1.6.1 Reinforcement, at the time concrete is placed, shall be free from mud, oil, or other contaminants that can adversely affect the bond.

6.5.3.4.2 Stay-in-place form spacers exposed to weather, earth, or moisture shall not be made from wood and shall be corrosion-resistant, dimensionally stable, and decay resistant.

6.6.6.2.1 The specified cover for reinforcement shall be based on consideration of life expectancy, exposure conditions, protective systems, maintenance, and the consequences of corrosion. Notes:

(3a) Service life can be improved by increasing the cover...

(4) ...Service life can be extended by reducing the variability in placement of reinforcement.

6.6.6.2.3 The specified cover for steel reinforcement...shall be not less than the largest of the limits for each relevant exposure condition in Table 17.

Cast against and permanently exposed to earth, including footings... 75 mm (See Below)

6.6.6.2.4 In corrosive environments, the concrete cover to the sheath shall be not less than 50 mm.

6.6.7.1 General Reinforcement shall be accurately positioned, secured, and supported, using bar supports, side form spacers, and internal spacers, to ensure proper concrete cover and spacing within allowable tolerances before and during placing of concrete.

6.6.7.2.1 Bar supports shall have sufficient strength and stiffness to carry the loads from the reinforcement, construction crew, and concreting pressures without failure, displacement, or significant deformation.

6.6.7.2.3 Bar supports shall be made of precast concrete, plastic, or steel.

6.6.7.2.4 Where concrete surfaces are to be exposed to weather, earth, sea water, de-icing salts, corrosive chemicals, or any exterior exposure to weather, the bar supports shall be nonconductive and have a geometry and bond characteristics that deter the movement of moisture from the surface to the reinforcement.

6.6.8 Tolerances for location of reinforcement

- (a) Concrete cover: +/- 12 mm
- (b) where the depth of a flexural member...is

(ii) larger than 200 mm but less than 600 mm: +/- 12 mm