Bigfoot Systems Inc.
RR#2, Mahone Bay
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MODEL BF20, BF24, BF28 AND BF36 BIGFOOT SYSTEMS® FOOTING FORMS

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Canadian Construction Materials Centre
CCMC 12839-R

ICC Evaluation Services Inc.
ESR - 2148

BIGFOOT SYSTEMS® IS THE ORIGINAL CODE EVALUATED ENGINEERED FOOTING FORM FOR CONSTRUCTION TUBES THAT MEETS OR EXCEEDS THE BUILDING CODES THROUGHOUT NORTH AMERICA.

DOCUMENTATION

FORM DESCRIPTION

Bigfoot Systems® Footing Form is an engineered designed footing form made from recycled high density polyethylene which replaces the wood formwork. The footing form is cone-shaped with an allowance for standard fibre construction tubes to be attached to the top of the footing form. Bigfoot Systems® Footing Forms are available in four different sizes: Model BF20, Model BF24, Model BF28 and Model BF36. The BF20, BF24 and BF28 have a uniform height with six flanges at the top to accommodate the different sized construction tubes. The cone-shaped footing form is attached to the construction tube with a minimum of four #8-10 wood screws, then set into the ground on undisturbed soil or 4 in. - 6 in. (10.16 - 15.24 cm) compacted crushed stone or gravel and leveled. The Bigfoot Systems® Footing Form may be backfilled and is then filled with concrete to create a monolithic pour which forms the footing and pier as one unit. The construction tube and footing form remain in place after the concrete is cured.

The BF36 has a uniform height with 4 flanges at the top, which are cut and removed to accommodate different size construction tubes. Attach the construction tube to the Bigfoot with a minimum of six ¾ to 1-inch-long (19.1 to 25.4mm). No.8, wood corrosion-resistive screws evenly spread around the diameter of the base. For the BF36 align the Bigfoot Systems® Footing form and construction tube with batter board lines, plum and brace as per Bigfoot Systems Inc. Instruction Manual. Backfill must be placed over the footing form to a minimum height of 2 feet (610mm) from the bottom of the footing form and compacted with a mechanical compactor. Continue backfilling in 8-to 12-inch (203mm to 305mm) lifts to a maximum height of 5 feet. Compaction must be carried out between each lift. The concrete must be placed in lifts that are 10 to 16 inches (254 to 406mm) in height, with the concrete being consolidated after each lift as per previous instructions.

BIGFOOT SYSTEMS® FOOTING FORMS DETAILS

Four sizes are available:

MODEL BF20 is 20 in. (50.80 cm) in diameter at the base, which will accommodate the 6 in. (15.24 cm) small, medium and large construction tubes and the 8 in. (20.30 cm) small, medium and large construction tubes.

MODEL BF24 is 24 in. (60.96 cm) in diameter at the base, which will accommodate the 8 in. (20.30 cm) small, medium and large construction tubes and the 10 in. (25.40 cm) small, medium and large construction tubes.

MODEL BF28 is 28 in. (71.12 cm) in diameter at the base, which will accommodate the 10 in. (25.40 cm) small, medium and large construction tubes and the 12 in. (30.48 cm) small, medium and large construction tubes.

MODEL BF36 is 36 in. (91.44 cm) in diameter at the base, which will accommodate the 12 in (30.48cm) 14 in (35.56cm) 16 in (40.64cm) and 18 in (45.72cm). The BF36 is also available in metric, which will accommodate construction tubes (300mm-450mm).

The ribs on the sloped portion of the footing form give added strength to resist distortion of the form from the backfill or the concrete and allow trapped air to escape.

The small vent holes in the sloped sections allow the escape of air trapped inside the footing form when the footing is being poured with concrete, which prevents honeycombing of the concrete.

The sloped footing base eliminates any 90-degree angles and allows any ground water running down the pier to drain away from the footing. The sloped surface of the Bigfoot System® Footing Form creates a resistance area when backfilled which withstands frost heave and bending forces exerted against the vertical piers.

The top rings of the Bigfoot Systems® Footing Forms are designed to accept various inside diameter construction tubes from various manufacturers for each Bigfoot Systems® Footing Form model. The rings not used must be cut off at the top of the ring being used and removed before any concrete is poured.

The bottom base flange is designed to fit flat on the excavated area and has perimeter detents at the base of each rib where 3/8 in. (9.53 mm) holes are to be drilled on a 45 degree angle to receive a minimum of 12 in. (30.50 cm) spikes driven in at a 45 degree inward angle. This will anchor the footing form in position for above ground use or when the unit has not been backfilled.
Refer to specific literature from Construction Tube Manufacturers for technical information on acceptable length of construction tubes. External vibration to consolidate concrete may be necessary, such as using an orbital vibrator sander or tapping on the outside of construction tubes for columns exceeding 8 ft. (2.44 m).

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