

(**Note to Specifier:** This document has been prepared for Fab-Form Industries Ltd. (Fastfoot® product) in accordance with the Construction Specifications Institute (CSI) Section Format. The specifier should edit this document to fit the needs of the specific project. Fab-Form can be contacted for assistance with any of these changes.)



SECTION 03 10 00

CONCRETE FORMS & ACCESSORIES

PART 1 – GENERAL

1.01 SUMMARY

- Compliance with Division 1 – General Requirement.
- Supply and installation of Fastfoot® footing forms for structural cast-in-place concrete footings, installation of reinforcing steel bars and placement of concrete within the fabric forms.
- Adequate 2x4 screed boards and staking shall be provided by the installing contractor.

1.02 SCOPE OF WORK

- Furnish all labor, materials, tools and equipment to perform the installation of **Fastfoot®** concrete forms as manufactured by **Fab-Form Industries Ltd.**, Unit 212, 6333 148th Street, Surrey, B.C. V3W 3C3 – Canada; Tel.: (604) 596-3278 Fax: (604) 501-6090, email info@fab-form.com, website: www.fab-form.com.
- Furnish all labor to install the steel reinforcing bars, placement of concrete into the fabric forms and final cleanup.

1.03 MATERIALS/PRODUCTS INSTALLED BUT NOT SPECIFIED OR SUPPLIED UNDER THIS SECTION

- Rebar
- Concrete
- Hold-downs and anchors
- Bolts, sleeves, inserts, and hangers

1.04 ALTERNATES

- Alternate fabric-based footing forms shall not be accepted.

1.05 RELATED SECTIONS

(**Specifier Note:** Change the Section Numbers and Titles to correspond with specific project requirements.)

- Section 01 50 00 – Temporary Facility and Controls
- Section 03 05 00 – Basic Concrete Materials and Methods

- Section 03 20 00 – Concrete Reinforcement
- Section 03 30 00 – Cast-in-Place Concrete
- Section 06 00 00 – Woods and Plastics
- Section 07 10 00 – Damp-proofing and Waterproofing
- Section 07 11 00 – Damp-proofing

1.06 REFERENCES

(**Specifier Note:** Change the standards and references to correspond to the specific requirements and geographic location of the project.)

- ASTM E 1745-97 – Standard Specification for Plastic Water Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs
- ASTM E 96/E96M-05 – Standard Test Methods for Water Vapor Transmission of Materials
- ASTM F 1869-04 – Standard Test Method of Measuring Moisture Vapor Emission Rate of Concrete Using Anhydrous Calcium Chloride
- ASTM D 882 – Test Methods for Tensile Properties of Thin Plastic Sheeting
- ASTM D 1709 – Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method
- ASTM E 154 – Test Methods for Water Vapor Retarders Used in Contact with Earth under Concrete Slabs, on Walls, or as Ground Cover
- ASTM E 1907-4 – Standard Guide to Methods of Evaluating Moisture Conditions of Concrete Floors to Receive Resilient Floor Coverings
- ASTM D 751-00 – Standard Test Methods for Coated Fabrics
- CAN/CGSB-51.34-M86 – Vapour Barrier, Polyethylene Sheet for Use in Building Construction
- CSA A23.1 – Concrete Materials and Methods of Concrete Construction
- CSA A23.2 – Methods of Test for Concrete
- CSA A23.3 – Design of Concrete Structures
- CSA S269.3 – Concrete Formwork
- CSA A438-00 – Concrete Construction for Housing and Small Buildings
- ACI 301– Standard Specification for Structural Concrete
- ACI 318 – Building Code Requirements for Reinforced Concrete
- ACI 332 – Guide to Residential Cast-in-Place Concrete Construction
- ACI 347 – Guide to formwork for Concrete

1.07 SYSTEM DESCRIPTION

- Fastfoot® footing forming system consists of 120' rolls of high density polyethylene scrim coated with low density polyethylene. The scrim provides the tensile strength to withstand the concrete forces, while the low density coating acts as the capillary break, preventing the ground moisture from entering the footing concrete.

- The fabric rolls are C-folded to allow the fabric to be pulled between the screed boards, held in place by stakes driven in the ground. The edges of the fabric are stapled in position on the screed boards, using adjustment lines for correct positioning.

1.08 QUALITY ASSURANCE

- Comply with applicable governing codes and regulations.
- Follow manufacturer's training and installation procedures.
- Contractor is responsible for proper construction and installation of Fastfoot®, steel reinforcing and concrete placement.
- Approvals and Requirements.
- Installation to comply with project drawings and calculations.

1.09 DELIVERY, STORAGE AND HANDLING

- Deliver the product in original boxes with product listing and manufacturing label.
- Store materials in manufacturer provided boxes to prevent damage. Protect exposed fabric from extended exposure to direct sunlight.
- Handle and store product in a location that prevents physical damage and soiling.

1.10 WARRANTY

- Contact Fab-Form Industries Ltd. for a written copy of product warranty, or
- Refer to requirements of the project contract for warranty provisions.

1.11 SUBMITTALS

(Specifier Note: Change Section Numbers and Titles to correspond with specific project requirements)

- Product Data: Submit manufacturer's literature describing products and installation procedures.
- Shop Drawings: Submit drawings with dimensions, layout and form types and details.
- Steel Reinforcement: Submit schedule of reinforcing.
- Concrete: Submit proposed concrete mix design.
- Engineering Calculations: Provide structural calculations sealed by a Professional Engineer, if required.

PART 2 – PRODUCTS

2.01 MANUFACTURER

FAB-FORM INDUSTRIES LTD.
Unit 212, 6333 148th Street
Surrey, BC V3W 3C3, Canada
(888) 303-3278 - Toll Free
(604) 596-33278
(604) 501-6090 - Fax
<http://www.fab-form.com>

2.02 MATERIALS

- Fabric footing forms shall be manufactured by Fab-Form Industries Ltd. of Surrey, BC.
- Product is to be supplied through an authorized Fab-Form dealer or distributor.
- Substitutes and alternatives will not be accepted (see section 1.04).

2.03 CONCRETE

- Concrete supplied under section 03300 shall be normal weight having a minimum compressive strength of 2500 psi [17.2 MPa] at 28 days or as specified by the design engineer or code standard.
- Concrete supplied should have a water/cement ratio less than 0.55.

2.04 STEEL

- Reinforcing steel grade, size, placement and spacing under section 03210 shall be as specified by the design engineer or prescriptive tables applicable to the specific project.

2.05 MANUFACTURED COMPONENTS

(Specifier Note: Remove units not appropriate for use on specific project)

- FF37 – Fastfoot® Edging – a full folded 37” wide fabric roll used to edge form slabs, wide footings or pads up to 18” deep.
- FF50 – Fastfoot® Narrow – a C-folded 50” wide fabric roll used to form footings up 18” wide and 10” deep, or edge form up to 22” deep.
- FF62 – Fastfoot® Standard – a C-folded 62” wide fabric roll used to form footings up 24” wide and 13” deep, or edge form up to 28” deep.
- FF74 – Fastfoot® Wide – a C-folded 74” wide fabric roll used to form footings up 36” wide and 13” deep, or edge form up to 34” deep.

2.06 ACCESSORIES

- 3/8” staples for use in standard hammer tacker
- Scissors
- 2” tape for joints
- 12” width of Peel & Stick membrane to seal staple holes on edges of fabric and hold fabric edges in position

PART 3 – EXECUTION

3.01 EXAMINATION

- Inspect all areas included in Scope of Work; verify lines, levels and centers before proceeding with formwork; ensure dimensions agree with drawings.

3.02 INSTALLATION

- On impervious soils, a self-compacting granular layer 3" to 4" thick should be placed under the footings to ensure a separation between the footing concrete and any water ponding.
- Perimeter drainage (required on impervious soils and installed after completion of concrete foundation) should be properly graded, with the bottom of the drain pipe located at least 3" below the bottom of adjacent footing.
- Ensure there is no lateral sloping of ground perpendicular to the footing layout direction.
- Install the system in strict accordance with the Fastfoot® installation guide. Protect fabric from site damage.
- Leave screed boards in place to hold the fabric in position around the footing concrete. After concrete is hardened, fabric is pulled away from the screeds and laid across the top of the footing prior to installing the wall forms.
- After the wall has been formed and poured, a 12" width of self adhering bitumen backed polyethylene membrane (peel & stick) is run across the top of the footing to seal staple holes, and run up the side of the concrete wall (or ICF form). Ensure the concrete surface is prepared according to the self adhering membrane manufacturer's specifications.
- The bottom edge of the wall membrane is lapped over the vertical edge of the peel & stick membrane.
- Construct formwork to maintain tolerances as indicated per ACI 301 or CSA S269.3

3.03 FIELD QUALITY CONTROL

- Conformance to design drawings or pertinent Building Codes
- Rebar placement
- Site Tests: To be specified as required.
- Clean forms to remove foreign matter within forms prior to placing concrete.

3.04 PROTECTION

- Provide temporary cover to fabric forms to reduce exposure to UV light if backfilling is delayed more than 3 weeks.

END OF SECTION