(**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.)



MONOPOUR PREFAB SYSTEM

SECTION 03 10 00

CONCRETE FORMS & ACCESSORIES

PART 1 – GENERAL

1.01 SUMMARY

- Compliance with Division 1 General Requirement.
- Supply and installation of Monopour Prefab System in conjunction with concrete reinforced with Helix Micro Rebar and placement of concrete within the fabric footing forms and the Nudura ICF forms.
- Adequate bracing shall be provided by the installing contractor.

1.02 SCOPE OF WORK

- Furnish all labor, materials, tools and equipment to install the Monopour Prefab Panels as manufactured by Fab-Form Industries Ltd., Unit 19, 1610 Derwent Way, Delta, B.C. V3W 3C3, Canada; Tel.: (604) 596-3278, email <u>info@fab-form.com</u>, website: <u>www.fab-form.com</u>.
- Furnish all labor to align and brace the Prefab Panels using Zont Bracing as manufactured by Fab-Form Industries Ltd., Unit 19, 1610 Derwent Way, Delta, B.C. V3W 3C3, Canada; Tel.: (604) 596-3278, email <u>info@fab-form.com</u>, website: <u>www.fab-form.com</u>.
- Furnish all labour to place concrete (including Helix Micro Rebar) into the footing forms, Nudura panels and complete final cleanup of concrete.
- Strip Zont Bracing from poured Monopour Prefab Panels.

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

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

1.04 ALTERNATES

• Alternative fabric-based footing forms or MP supports 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® MP System consists of:
 - a. Fabric footings attached to the base of the ICF block, manufactured of high density polyethylene scrim and 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;
 - b. MP Side Supports which hold the ICF blocks the footing height distance above the ground;

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

- Fastfoot® fabric footing forms and MP supports 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)

- MPSS Pairs of Fastfoot® MP Supports designed to support the ICF blocks approximately 6' on center;
- FF62 Fastfoot® Standard width, a C-folded 62" wide fabric roll used to form footings up 24" wide and 13" deep.
- FF74 Fastfoot® Wide a C-folded 74" wide fabric roll used to form footings up 36" wide and 13" deep.

2.06 ACCESSORIES

- 2" tape for fabric joints;
- Low expansion EPS foam for joining foundation components;
- 36" zip ties;
- 1-1/2" x #8 wood screws.

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.

3.023.02 INSTALLATION

- Ensure there is no lateral sloping of ground perpendicular to the footing layout direction;
- Install the MP system in strict accordance with the Fastfoot® MP System installation guide;
- After the footing and wall have been formed and poured, the damp proof membrane for the foundation wall should lap over the Fastfoot® fabric to prevent ground moisture entering the concrete;
- Pouring the footing and wall form at the same time can create form uplift as the wall concrete wants to 'blow up' the footing form. To prevent this, the footing and first block should be filled first with sufficient time so that the subsequent lift of concrete does not create hydraulic pressure in the footing concrete. A concrete professional should be contacted if in doubt.
- Construct formwork to maintain tolerances as indicated per ACI 301 or CSA S269.3

3.053.03 FIELD QUALITY CONTROL

- Conformance to design drawings or pertinent Building Codes;
- Rebar placement;
- Site Tests: To be specified as required.

3.07<u>3.04</u> PROTECTION

• Provide temporary cover to fabric forms to reduce exposure to UV light if concrete placement is delayed more than 3 weeks.

END OF SECTION