

SECTION 03135
INSULATING CONCRETE FORMS

GENERAL

1.1 SECTION INCLUDES

- A. Provide wall assemblies fabricated from insulating concrete forms, reinforcing steel, and concrete grout.
- B. Related Work Specified Elsewhere:
 - 1. Section 03300 – Cast-In-Place Concrete: Concrete foundations not part of insulating concrete form assemblies.
 - 2. Section 06100 – Rough Carpentry: Blocking windows and doors.
 - 3. Section 07160 - Bituminous Damproofing: Damproofing at below-grade walls.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- B. Shop Drawings: Submit shop drawings stamped by a structural engineer licensed in the jurisdiction of the project indicating dimensions, details of construction, and relationship with adjacent work
- C. LEED Documentation: Submit letter from manufacturer indicating location of manufacturing and recycled content of components by value, in accordance with USGBC LEED-NC Version 2.2 requirements.

1.3 QUALITY ASSURANCE

- A. Delegated Design: Contractor shall assume responsibility for engineering and installation of exterior wall assemblies fabricated with insulating concrete forms. Architect's review of shop drawings is limited to conformance with design intent only.
- B. Pre-Installation Conference: Convene a pre-installation conference sufficiently in advance of start of construction to coordinate installation of insulating concrete forms.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation. Protect from weather damage.

1.5 PROJECT CONDITIONS

- A. Observe environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PRODUCTS

1.6 MANUFACTURERS

- A. Acceptable Manufacturer: Tech Block International; PO Box 775795, Steamboat Springs, CO 80477. Tel: 720-221-3912. Email: information@techblock.com. Web: <http://www.techblock.com>. Production by local divisions as applicable:
1. Tech Block of New Mexico, 1805 Commercial Nw, Albuquerque, NM 87107

1.7 FACTORY FABRICATED BLOCK UNITS

- A. Size and Configuration:
1. Regular Blocks: 11 7/16 inches W by 32 inches L by 16 1/2 inches H (290 mm W by 813 mm L by 419 mm H).
 2. One-Sided Blocks: 11 inches W by 32 inches L by 16 1/2 inches H (279 mm W by 813 mm L by 419 mm H).
 3. Unfaced Blocks: 10 9/16 W by 32 inches L by 16 inches H
 4. Grout Cores: 6 inches (152 mm) diameter, spaced 16 inches (406 mm) on center both horizontally and vertically.
- B. Components:
1. Polystyrene: Expanded polystyrene.
 2. Reinforcing Steel: Grade suitable for application.
 3. Cement Grout: 3,000 psi unless indicated otherwise, with pea gravel aggregate.
 4. Attachment Surface OSB plywood.

EXECUTION

1.8 EXAMINATION

- A. Do not begin installation until conditions have been properly prepared.
- B. If building pad and footing excavation preparation are the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

1.9 INSTALLATION

- A. Install insulating concrete form assemblies in accordance with manufacturer's instructions including, but not limited to the following:
1. Dry stack forms with running bond layout.
 2. Coordinate with rough plumbing and electrical work. Do not run lines in vertical grout channels.
 3. Laterally brace walls as required for proper installation.
 4. Install J-bolts on tops of walls on 48 inch centers or per design.

END OF SECTION