

SECTION 03 11 19

INSULATING CONCRETE FORMING

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: Insulating concrete forms.
- B. Related Sections: Section(s) related to this section include:
 - 1. Concrete: Division 3 Concrete Sections.

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM C578 – Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.

1.03 SUBMITTALS

- A. Submit insulation manufacturer's product literature and installation instructions, including:
 - 1. EPS Code Compliance: Provide ICC-ES code report for EPS foam with evidence of compliance with code. Submit current compliance report numbers from ICC-ES with conformance to the International Building Code (IBC) and International Residential Code (IRC). Code report shall include compliance with ICC ES AC12 (Foam Plastic) dated June 2006.
 - 2. Third Party certification of flame spread and smoke developed indexes
- B. 20-year in-service, non-prorated thermal performance warranty.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.
- B. Pre-installation Meetings: Conduct pre-installation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions, and manufacturer's warranty requirements.

1.05 DELIVERY, STORAGE & HANDLING

- A. Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Storage and Protection: Store materials protected from exposure to harmful weather conditions and at temperature and humidity conditions recommended by manufacturer.
 - 1. Diamond Snap Form materials shall be stored and protected from weather. Cover stored units with tarps or similar protective wraps. Units shall be stored in a protected area and supported to prevent contact with the ground.
 - 2. Prior to installation, units shall be covered and protected from exposure to sunlight and moisture.

1.06 WARRANTY

- A. Provide Foam-Control EPS 20-year in-service, non-prorated R-value warranty covering the long-term thermal performance of expanded polystyrene insulation

PART 2 PRODUCTS

2.01 Insulating Concrete Forms.

- A. Manufacturer: Diamond Snap Form System
 - 1. Contact: Big Sky Insulations, 15 Arden Drive, Bozeman, MT 59714 Phone: 406-388-4146 email: www.diamondsnapform.com
- B. Proprietary Product(s): Diamond Snap Form
 - 1. Planks: 12 in. (304.8 mm) x 96 in. (2438.4 mm) Diamond Snap Form planks
 - 2. Diamond Snap Ties every 12 in. (305 mm) horizontally and vertically
 - 3. Thickness: (Specify thickness. Concrete wall systems in 4 in. (101.6 mm), 6 in. (152.4 mm), 8 in. (203.2 mm), and 10 in.

(254 mm) thickness are available.) Other sizes upon request.

2.02 PRODUCT SUBSTITUTIONS

- A. Substitutions: No substitutions permitted.

2.03 SOURCE QUALITY

- A. Source Quality Assurance: Each system component required shall be supplied by manufacturer and shall be obtained from selected manufacturer or its approved supplier.
- B. Source Quality: Obtain insulated concrete form system from a single manufacturer.

PART 3 EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

- A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions, and product carton instructions for installation.

3.02 EXAMINATION

- A. Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.
 1. Verify conditions of substrate, grade and other conditions which affect installation of form system. Any adverse conditions shall be reported in writing. Do not proceed with installation until adverse conditions are corrected.
 2. Verify details prior to starting Diamond Snap Form installation.
 3. Verify footings are level, square, and of sufficient width to support the Diamond Snap Form system.

3.03 PREPARATION

- A. Surface Preparation: (Specify applicable product preparation requirements.)

3.04 INSTALLATION

- A. Form Installation:
 1. Lay out concrete wall dimensions on footings with chalk lines. Install outside toe plate, vertical outside corner, T-intersection and opening braces. Plumb and secure bracing.
 2. Install first course of forms. Level as required. Install inside toe plate. Install all courses of Diamond Snap Form Wall working from corners. Cut Foam Control EPS with Perform Guard to fit wall.
 3. Place reinforcing bar vertically and horizontally as required. Use Diamond Snap-Tie rebar cradles for positioning of the horizontal reinforcing. Do not drag rebar over ties. Maximum Foam Control EPS horizontal or vertical unsupported distance shall be 7" (178 mm).
 4. Install walkway and vertical braces to support workers. Walkway shall be used to plumb the wall.
 5. Refer to Division 3 Concrete Section for Concrete. Concrete shall be 4" – 5" (102 mm – 127 mm) slump, 4000/ 5000 psi (27.6 – 34.5 MPa) strength, and maximum ¾" (19 mm) aggregate size.
- B. Finishes: (Specify finish of form system to suit project requirements.)
- C. Site Tolerances: (Specify applicable site tolerances for specified product(s) installation.)
- D. Related Products Installation: Refer to other sections listed in Related Sections paragraph herein for related products installation.

END OF SECTION