

## ***EnergyEdge*<sup>®</sup> Product Guide Specification**

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat*, *SectionFormat*, and *PageFormat*, as described in *The Project Resource Manual—CSI Manual of Practice*.

The section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all “Specifier Notes” when editing this section.

Section numbers are from *MasterFormat* 1995 Edition, with numbers from *MasterFormat* 2004 Edition in parentheses. Delete version not required.

### **SECTION 03130 (03 11 19)**

#### **INSULATING CONCRETE SLAB EDGE FORMING**

Specifier Notes: This section covers *EnergyEdge*, LLC “*EnergyEdge*<sup>®</sup>” permanent, insulated, concrete slab edge forms. Consult *EnergyEdge*, LLC for assistance in editing this section for the specific application. *EnergyEdge* products are Patent Pending.

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Permanent, insulated, concrete slab edge forms.

##### **1.2 RELATED SECTIONS**

Specifier Notes: Edit the following list of related sections as required for the project. List other sections with work directly related to this section.

- A. Section 03300 (03 30 00) – Cast-in-Place Concrete.

##### **1.3 REFERENCES**

Specifier Notes: List standards referenced in this section, complete with designations and titles. This article does not require compliance with standards, but is merely a listing of those used.

- A. ASHRAE 90.1 – Energy Standard for Buildings
- B. IRC 2006 – Chapter 11, Table N1102.1, Slab & Basement R-value.
- C. IBC 2006 – Chapter 1, Administration, Section 101.4.7 Energy. Use IECC for energy efficiency.

- D. ASTM C 578 – Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.

#### **1.4 SYSTEM DESCRIPTION**

- A. Insulated Concrete Slab Edge Forms:
  - 1. Forms perimeter of required slab.
  - 2. Permanent forms remain in place after concrete hardens.
  - 3. Serves as integral finished and insulated slab edge.

Specifier Notes: The type and requirement for anchoring systems will vary with the type of wall system used. The EnergyEdge insulated concrete slab edge forms can be used with a variety of wall systems. Consult EnergyEdge, LLC for more information.

- 4. Serves as guide for straight and properly spaced placement of sill plate anchor bolts.
- 5. Provides required thermal continuation of building envelope on outside face of exposed slab edge from top of slab to top of concrete foundation.
- 6. Meets design criteria for slab edge insulation required by ASHRAE 90.1 building energy conservation standards.

#### **1.5 SUBMITTALS**

- A. Comply with Section 01330 (01 33 00) – Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including installation instructions.
- C. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- D. Warranty: Submit manufacturer's standard warranty.

#### **1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Delivery:
  - 1. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
  - 2. Deliver rail members to site in nested pairs to prevent damage to insulation.
- B. Storage:
  - 1. Store materials in accordance with manufacturer's instructions.
  - 2. Keep materials clean, dry, and protected from weather.
  - 3. Do not expose rail members to weather for more than 10 days.
- C. Handling: Protect materials during handling and installation to prevent damage.

### **PART 2 PRODUCTS**

#### **2.1 MANUFACTURER**

- A. EnergyEdge, LLC, 7701 East Kellogg, Suite 722, Wichita, Kansas 67207. Phone (316) 618-1983. Fax (316) 684-3984. Website www.energyedgeform.com. E-mail info@energyedgeform.com.

## 2.2 INSULATING CONCRETE SLAB EDGE FORMING

- A. Edge Forms: "EnergyEdge" permanent, insulated, concrete slab edge forms.
  - 1. Rail Members: "EE Rail". [Specify EE8fb or EE8mb]
    - a. Material: Virgin, extruded, E-shaped, fence-grade, PVC with UV inhibitors.

Specifier Notes: Concrete grey is the standard color for rail members. Consult EnergyEdge, LLC for availability of custom colors.

- b. Color: Concrete grey.
      - c. Protects and holds insulation in place.
    - 2. Brace Members: "EE Brace". [Specify EE8sb]
      - a. Material: Reclaimed, extruded, PVC.
      - b. Color: Black.
      - c. Supports rail members during concrete placement.
      - d. Acts as supporting chair for edge slab steel reinforcing.
    - 3. Connection Members: "EE Connectors". [Specify EE890 for 90° corners, works for both inside and outside]
      - a. Material: Virgin, extruded, E-shaped, fence-grade, PVC with UV inhibitors.

Specifier Notes: Concrete grey is the standard color for connection members. Consult EnergyEdge, LLC for availability of custom colors.

- b. Color: Concrete grey.
        - c. Transitions corners required by slab design.
      - 4. Insulation: R-Control "Perform Guard".
        - a. Material: Recycled, 2.0-pound, expanded polystyrene (EPS).
        - b. Thickness: 2-5/16 inches.
        - c. Nominal R-Value: 10, measured at 75 degrees F at exposed edge of slab.
        - d. Conformance: ASTM C 578, Type IX.
        - e. Does not contain CFSs, HCFCs, HFCs, or formaldehyde.
        - f. Insect resistant.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine areas to receive insulated concrete slab edge forms.
- B. Notify Architect of conditions that would adversely affect installation.
- C. Do not begin preparation or installation until unacceptable conditions are corrected.

### 3.2 PREPARATION

- A. Ensure concrete foundations for installation of insulated concrete slab edge forms are level to allow for full depth of rail member profile.
- B. Grind high spots of concrete foundations to allow for properly leveled edge forms.

### **3.3 INSTALLATION**

- A. Install insulated concrete slab edge forms in accordance with manufacturer's instructions.
- B. Layout slab edge to allow for proper horizontal relationship of finished surface rail member and wall construction.
- C. Install insulated concrete slab edge forms plumb, level, square, true to line, and to proper top-of-slab elevation.
- D. Rail Members: Field cut rail members in accordance with manufacturer's instructions.
- E. Brace Members:
  - 1. Install brace members in accordance with manufacturer's instructions at joints and within recommended distance of joints.
  - 2. Fasten brace members to concrete foundation with mechanical fasteners in accordance with manufacturer's instructions.
- F. Shims:
  - 1. Shims on Interior Side of Rail Members:
    - a. PVC or metal.
    - b. Do not use wood.
  - 2. Shims on Exterior Side of Rail Members: Wood, where shim material can be removed after concrete placement.
- G. Avoid direct discharge of concrete against rail members during concrete placement.
- H. Ensure concrete thoroughly surrounds brace members and fills cavities of rail members to full depth of insulation.
- I. Do not over vibrate concrete against rail members.
- J. Screed concrete level to top of rail members.

### **3.4 CLEANING**

- A. Clean surfaces of exposed rail members after concrete placement.

### **3.5 PROTECTION**

- A. Protect installed insulated concrete slab edge forms from damage during construction.

**END OF SECTION**