

*This section includes a manufacturer's guide specification for DYNAVOID EPS concrete void forms. Refer also to Beaver Plastics DYNAVOID Product Description for detailed product properties, options, and other technical information. This section includes performance, proprietary, and descriptive type specifications; edit to avoid conflicting requirements.*

## **Part 1          General**

### **1.1            SECTION INCLUDES**

*In this article, select the components that are intended to be part of the content of this section and will not be included in other sections. Keep the statements brief and concise.*

- .1          Expanded polystyrene void form material for use under structural slabs.

### **1.2            RELATED SECTIONS**

- .1          Section [03300] [03 30 00] - Cast-in-place Concrete: Supply of concrete.

### **1.3            REFERENCES**

*List reference standards that are included within the text of this section. Edit the following as required to parallel any reference standards statements within this section. Acronyms used for well known standards (first example) and defined text for less or named standards (second example).*

- .1          ASTM C578 – Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
- .2          ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials.
- .3          CAN/ULC-S701 – Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering.

### **1.4            PERFORMANCE REQUIREMENTS**

*Restrict statements in this article to identify system performance requirements or function criteria - where final design decisions or detailed sizing is performed by Contractor.*

- .1          Ability to deflect and collapse under a sustained stress produced by the slab self-weight.
- .2          Structural capacity to support concrete placing, finishing, and weight of slab till self-supporting.

### **1.5            SUBMITTALS**

*Do not request submittals if drawings sufficiently describe the products of this section or if proprietary specifying techniques are used. The review of submittals increases the possibility of unintended variations to drawings, thereby increasing the Specifier's liability. The following submittals are intended for review and acceptability.*

- .1          Section [01300] [01 33 00]: Submission procedures.
- .2          Product Data: Submit product data sheets in accordance with Section [01300] [01 33 00].

- .3 Samples:
  - .1 Submit samples for verification in accordance with Section [01300] [01 33 00].
  - .2 Submit <200 mm> <<8 inch>> square pieces of void-form material.
- .4 Test Reports: Submit substantiating engineering data, test results of previous tests that purport to meet performance criteria, and other supportive data.
- .5 Installation Data: Special installation requirements.

## **1.6 QUALITY ASSURANCE**

- .1 Manufacturer: ISO 9001:2000 registered company.
- .2 Perform Work in accordance with manufacturer's instructions.

## **1.7 DELIVERY, STORAGE, AND PROTECTION**

- .1 Section [01600] [01 61 00]: Transport, handle, store, and protect products.
- .2 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .3 Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- .4 Store materials off ground, protected from direct sunlight.
- .5 Remove damaged or deteriorated products from site.

## **1.8 ENVIRONMENTAL REQUIREMENTS**

- .1 Section [01600] [01 61 00]: Environmental conditions affecting products on site.

## **Part 2 Products**

### **2.1 MANUFACTURERS:**

- .1 Beaver Plastics: Model "DYNAVOID".
- .2 Substitutions: [Refer to Section [01600] [01 25 00].] [Not permitted.] [Refer to Instructions to Bidders.]

### **2.2 MATERIALS**

- .1 Void forms: Rigid, closed cell, expanded polystyrene (EPS) board, to CAN/ULC S701 and ASTM C578.
  - .1 Flame Spread / Smoke Developed Index: Less than 25/450 to ASTM E84.
  - .2 Dynavoid version to be selected by slab load. (see Dynavoid Selection Chart).
  - .3 Panel size: <[100x1220x1220 mm]> <<[4" X 4' X 4']>> <[150x1220x1220 mm]> <<[6" X 4' X 4']>> <[200x1220x1220 mm]> <<[8" X 4' X 4']>> panels.

**2.3 FABRICATION**

- .1 Fabricate material to deflect and collapse from expanding soils.
- .2 Fabricate material to support concrete placing, finishing, and weight of the slab.

**Part 3 Execution**

**3.1 PREPARATION**

- .1 Verify that site conditions are ready to receive work.
- .2 Verify lines, levels and centres before proceeding with void-form installation. Ensure site dimensions agree with shop drawings.
- .3 Beginning of installation implies acceptance of site conditions.

**3.2 INSTALLATION**

- .1 Install void forms to manufacturer instructions.
- .2 Protect forms from damage.
- .3 Lay panels on prepared, level ground, with joints tight.
- .4 Cut around protuberances, column bases, etc.
- .5 Use hardboard or fibreboard to distribute point loads, if required.

**3.3 MANUFACTURER'S FIELD SERVICES**

*This article is included to assist in field quality control of work being installed. The legal affect of this type of article is questionable and will not relieve the design professional of legal responsibility for the work described in this section.*

- .1 Section [01700] [01 45 00]: Prepare and start components.
- .2 Monitor and report installation procedures, unacceptable conditions and [\_\_\_\_\_].

**3.4 PROTECTION OF FINISHED WORK**

- .1 Section [01700] [01 45 00]: Protecting installed work.
- .2 Protect finished Work from damage.

**END OF SECTION**