

## Guide Specification GFRC Planters & Furnishings

### 1.0 GENERAL

#### 1.1 WORK INCLUDED

- A. GFRC Planters & Furnishings

#### 1.2 RELATED WORK

- A. Section 033000 Cast-in-Place concrete
- B. Section 129233 Interior Planters
- C. Section 129333 Manufactured Planters
- D. Section 329433 Planters
- E. Section 129300 Site Furnishings

#### 1.3 SUBMITTALS

- A. Product Data: Manufacturer's standard catalog cut sheets.
- B. Samples: As required for color selection or material thickness only.
- C. Shop Drawings: For custom applications, showing critical sizes and dimensions for installation and integration with other work.
- D. Environmental Product Declarations (EPDs): Submit third-party verified and product-specific EPDs for the specified materials, demonstrating compliance with ISO 21930, 14025, and 14044, or equivalent standards.

#### 1.4 DELIVERY, STORAGE AND HANDLING

- A. Unwrap and inspect planters after delivery for signs of damage during transit.
- B. Protect Planters from damage during storage and handling.
- C. Store planters and planter liners out of harm's way, in their original packaging.

#### 1.5 PROJECT CONDITIONS

- A. Contractor to provide a level surface area, adequate for weight of planter and saturated soil of 110 lbs per cubic sq ft.
- B. Protect units from damage by adjacent work. Clean units with water spray to remove workplace dust.

#### 1.6 WARRANTY

- A. Product will be free from defects in material and/or workmanship for a period of 3 years from invoice date
- B. Warranty does not apply to damages from alteration, misuse, or installation damage
- C. Normal use of these products may result in scratches, nicks, and dents. These are considered normal wear, tear, and are not the responsibility of the manufacturer
- D. Manufacturer shall have field service team to advise on potential warranty issues
- E. Manufacturer will, at its option repair, replace, or refund the purchase price of products that are deemed defective by an authorized representative.

### 2.0 PRODUCTS

#### 2.1 ACCEPTABLE PRODUCTS/MANUFACTURERS

A. GFRC Planters & Furnishings, manufactured by Tournesol Siteworks LLC. 2930 Faber St., Union City, CA 94587 Tel: (800) 542-2282 tournesol.com

## 2.2 GFRC PLANTERS & FURNISHINGS

### **A. Materials –**

1. Cement TYPE I, II, or III per ASTM C150
2. Fibers: Alkali resistant, with a minimum zirconia content of 16 percent, 1 to 2 inches long, specifically produced for use in GFRC.
3. Aggregates per: ASTM C144, for sand and aggregates used for structural and aesthetic characteristics
4. Admixtures per ASTM C494, for concrete enhancing admixtures covering water reduction, retarding/accelerating set times, performance enhancement.
4. Coloring Pigments per ASTM C979 for integrally colored concrete.
5. Water: Potable; free from deleterious material that may affect color stability, setting, or strength of GFRC
6. Water-based fluoropolymer Stone Sealer

### **B. Construction –**

Architectural parts shall be fabricated by spray laminate method using suitable molds to attain the desired surface finish. The finished face mix shall be not less than 1/8" thick and thicker in those areas requiring additional structural strength. Where ribs or stiffeners are to be fastened to liner sections by spray laminating over premolded forms, the stiffeners or ribs shall be located and spray laminated into position before the section to which they are to be attached has passed the state of curing, and the finished joint shall be strong and durable.

- 1. Backing Mix:** Proportion backing mix of Portland cement, glass fibers, sand, and admixtures to comply with design requirements. Provide nominal glass-fiber content of not less than 5 percent by weight of total mix.
- 2. Face Mix:** Proportion face mix of portland cement, sand and admixtures to comply with design requirements.
- 3. Polymer Curing Admixture:** : 6 to 7 percent by weight of polymer curing admixture solids to dry portland cement.
- 4. Coloring Admixture:** Not to exceed 10 percent of cement weight.
- 5. Stone Sealer:** Applied as final protective coat with sprayer.

### **C. Performance characteristics –**

**Planters:** As confirmed by Finite Element Analysis (FEA), vertical walls will not deflect more than L/250 over the length (L) of planter when loaded with 110 lbs./cu.ft. level backfill soil media to within 2" of top of Planter. Manufacturer to provide copies of FEA results confirming this performance upon request. Similar performance with heavier soil media is available by specification.

**D. Finish –** specified finish; factory finished. Custom Colors if specified.

### **E. Sizes –**

Modular units fabricated to size by manufacturer as required to fill specified areas. Refer to catalog for standard sizes. Custom sizes as per approved shop drawings.

### **F. Drainage Holes**

1-5/8" Drain holes by manufacture unless otherwise specified.

### 2.3 PLANTER OPTIONS

#### **A. Integrated Accessory Pockets –**

Electrical boxes, irrigation access, electrical access, Audio components

#### **B. Integrated Options –**

Wally Bench, Casters, Scoops, Tourneseal, Tree Tiedowns, Lift Channels, False bottom, Reinforced bottom,

#### **C. Drainage control products –**

Pump-out pipe, sleeved corrugated drainage pipe, overflow drains, and atrium drain covers

### 3.0 EXECUTION

#### 3.1 PREPARATION

A. Prior to planter fabrication, the contractor shall verify as-built dimensions of planter area or receptacles to ensure proper size, fit and quantity required.

Installation area, unless otherwise specified, shall be smooth and level.

B. Unless planters have predrilled drainage holes they are to be located and made by contractor in the field to fit to drainage system.

#### 3.2 INSTALLATION

A. Provide continuous basal support.

B. Install pots level (or shim to level) to permit adequate drainage and irrigation.