

## Guide Specification Aluminum Bioretention Planters

### **1.0 GENERAL**

#### **1.1 WORK INCLUDES**

- A. Provision of Aluminum Bioretention planters

#### **1.2 RELATED WORK**

- A. Section 033000 Cast-in-Place concrete
- B. Section 129333 Manufactured Planters
- C. Section 329433 Planters
- D. Section 129300 Site Furnishings
- E. Section 334923 Storm Drainage Water Retention Structure.

#### **1.3 SUBMITTALS**

- A. Product Data: Manufacturer's standard catalog cut sheets.
- B. Samples: As required for color selection or material thickness only.
- C. 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 & inspect benches after delivery for signs of damage during transit.
- B. Protect planters from damage during storage and handling.
- C. Store planters indoors if possible. Do not stand or walk on planters.
- D. Planter can be lifted by provided straps into all four corners. Lift only 6" off ground. Planter not to be loaded when mobilizing.

#### **1.5 PROJECT CONDITIONS**

- A. Contractor to provide a level surface area, adequate for weight of planter and saturated soil of 130 lbs per cubic sq ft.
- B. Protect units from damage by adjacent work.

#### **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, and is not the responsibility of the manufacturer.
- D. Manufacture 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. Aluminum Bioretention Planters, manufactured by Tournesol Siteworks LLC. 2930 Faber St., Union City, CA 94587 Tel: (800) 542-2282  
Tournesol.com

## 2.2 ALUMINUM BIORETENTION PLANTER

### A. Materials

1. Planter – Aluminum – ASTM B209 – B5052-H32 Marine Grade 1/8" Aluminum sheet.
2. Fasteners: All fasteners are 304 commercial grade stainless steel.
3. Drainage – 4" PVC Perforated drain pipe, 4" PVC uprights with over flow drain and clean out cap. Outlet gasket by manufacturer 1/4" SS 304 compression plates with rubber molded gasket.

### B. Fabrication:

1. Aluminum Planters: Planter bodies to be formed and fully laser welded at vertical seams. 3" wide Top lips, to be press broke, seam laser welded. Floor fully welded for a water-tight to body. Following fabrication planter shall be cleaned by dry steam cleaning and zirconium solution. Corrosion-resistant zinc free epoxy primer shall be applied, 1-2mils thick. Protective powder coat shall be polyester or polyester TGIC powder, minimum 4 mils thick. Following application parts shall be baked until properly cured.
2. Drainage – PVC 4" dia Pipe provided and to be field cut. Overflow and cleanout assembled into planter on site by contractor.
3. Exit Gaskets – Laser cut Stainless steel plate with weld studs. Molded rubber compression gasket. Assembled by contractor onsite.

### C. Performance Characteristics:

1. Aluminum Planter: – As confirmed by Finite Element Analysis (FEA), vertical walls will not deflect more than L/300 over the length (L) of planter when loaded with 130 lbs./cu.ft. level backfill soil media to within 6" of top of Planter. Manufacturer to provide copies of FEA results confirming this performance upon request. Tested with 60/40 Sand to compost bioretention soil, 1" dia clean drain rock. See treatment rate data supplied by manufacture.

### D. Finishes:

1. Specified finish; factory finished. Custom Colors available if specified.

### E. Sizes:

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

## 2.3 PLANTER OPTIONS

- A. Splash Box & Spreader: Stainless Steel Splash boxes available in 18" and 24" Square. Stainless Steel Spreaders in 48", 60", and 72" Length.
- B. Exit Outflow Gasket Location: Standard side exit on end of planter. Other exit locations are custom.

- C. Custom Scoops: Non Standard planter walls may be lowered to allow multiple modular units appear to be one continuous unit.
- D. Wally Bench: Cantilevered bench – Contact manufacturer for size and installation requirements.

### **3.0 EXECUTION**

#### **3.1 PREPARATION**

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

#### **3.2 INSTALLATION**

- A. Planters Provide continuous basal support and Install level to permit adequate drainage, irrigation, and plumbing.