# SECTION 02815

### Glass Fiber Reinforced Concrete Trash Receptacles

# STROMBERG Architectural Products Inc.

#### PART 1 GENERAL

# 1.1 SECTION INCLUDES

A. Glass fiber reinforced concrete trash receptacles as indicated on the drawings.

#### 1.2 RELATED SECTIONS

- A. Division 04 Section "Cast Stone".
- B. Division 05 Section "Metal Fabrications" for supplementary supports for large items.
- C. Division 06100 Section "Rough Carpentry" for supplementary supports for large items.
- D. Division 06610 Section "Glass Fiber Reinforced Plastic Fabrications".
- E. Division 09235 Section "Glass Fiber Reinforced Gypsum Fabrications".
- F. Division 09900 Section "Paints and Coatings" for field painting and sealing prior to painting.

## 1.3 REFERENCES

- A. ASTM C 150 Standard Specification for Portland Cement; 1999a.
- B. ASTM C 33-99 Concrete Aggregates
- C. ASTM C 666 Standard test Method for Resistance of Concrete to Rapid Freezing and Thawing
- D. ASTM C 979-82(1993): Pigments for Integrally colored Concrete.
- E. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials; 1999.
- F. ASTM G 23 Standard Practice for Operating Light-Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials; 1996.

# 1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including dimensions, finishes, storage and handling requirements and recommendations, and installation recommendations.

- C. Shop Drawings: For custom items, provide drawings showing dimensions, layout, joints, details, and interface with adjacent work; include field measured dimensions of the spaces where items are to be installed, if critical to proper installation.
- D. Samples: For each custom finish specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

# 1.5 QUALITY ASSURANCE

- A. Manufacturer: Obtain GFRC trash receptacle(s) as manufactured by a firm specializing in the manufacture of GFRC trash receptacle(s), with a minimum of ten years experience.
- B. Provide a list of projects comparable in size, scope, and complexity as indicated.
- C. Provide verification that glass fiber reinforced concrete trash receptacle meets or exceeds products specified.
- D. Installer Qualifications: Regularly engaged and experienced in the installation of glass fiber reinforced concrete products.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Transport, lift, and handle units with care, avoiding excessive stress and preventing damage; use appropriate equipment.
- B. Store products in manufacturer's unopened packaging until ready for installation, in a clean dry area protected from weather, moisture and damage; store units upright and not stacked unless permitted by manufacturer. Product shall be stored clear of the ground on non-staining pallets or other temporary planking.
- C. Protect product from staining, chipping, and other damage.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Stromberg Architectural Products Inc; PO Box 8036, I-30 West, 4400 Oneal, Greenville, TX 75404. ASD. Tel: (903) 454-0904. Fax: (903) 454-3642. Email: sales@strombergarchitectural.com. www.strombergarchitectural.com.
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

## 2.2 MATERIALS

- A. Glass Fiber Reinforced Concrete Trash Receptacles: High density concrete made of ASTM C 150 Portland cement, crushed stone, silica sand, and polymers reinforced with glass fiber and structural reinforcing as required; asbestos free.
  - 1. Color: As selected from manufacturer's selection.

- 2. Color: To match Architect's sample.
- 3. Surface Texture: Exposed surface as selected from manufacturer's selection
- 4. Style: (Select One) [As selected from manufacturer's line of products.] [As indicated in drawings.]
- 5. Density: 140 pcf (2240 kg/cu m).
- 6. Shell Thickness: 3/8" to 3/4 inch (9.5 mm), nominal.
- 7. Surface Burning Characteristics: Flame spread index of 0, smoke developed index of 5; when tested in accordance with ASTM E 84. Fuel contribution of 3.
- 8. Weather Resistance: No significant loss in strength or change in appearance after 200 hours accelerated weathering conducted in accordance with ASTM G 23.
- 9. Flexural Strength: 1000 to 1800 psi (6.9 to 12.4 MPa).
- 10. Modulus of Elasticity: 2 x 10<sup>5</sup> psi (1370 MPa).
- 11. Compressive Strength: Over 5000 psi (34 MPa).
- 12. Variation from Dimensions Indicated on Drawings: Plus and minus 1/8 inch (3 mm), maximum.
- 13. Variation from Plane Along Edge or Surface: Plus and minus 1/16 inch per linear foot (1.5 mm in 300 mm), maximum.
- 14. Outside Corner Radius: 1/16 inch to 1/8 inch (1.5 to 3 mm).
- 15. Draft Angle: 3 degrees, minimum, on returns, setbacks, reveals, and grooves.
- 16. Provide non-corrosive screwed or bolted anchors with reinforced holes through face of units.
- 17. Provide non-corrosive anchors and reinforced anchoring points as indicated on drawings.
  - a. Exposed Anchors: Type 304 Stainless Steel unless otherwise indicated.
  - b. Concealed Anchors: Hot-dipped Galvanized Steel unless otherwise indicated.

#### PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly constructed; verify that substrates are plumb and true.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
  - 1. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. Check field dimensions before beginning installation. If dimensions vary too much from design dimensions for proper installation, notify Architect and wait for instructions before beginning installation.

#### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

# 3.3 INSTALLATION

- A. Install in accordance with applicable code and manufacturer's recommendations, plumb and true to line; shim where necessary.
- B. Patch exposed anchor points to match color and texture of unit.
- C. Clean GFRC units according to manufacturer's written instructions.
  - 1. Remove dirt, stains, or other residue.
  - 2. Protect surrounding materials and surfaces during cleaning.

# 3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

**END OF SECTION**