STROMBERG

ARCHITECTURAL PRODUCTS

Glass Fiber Reinforced Concrete Medallions & Plaques Installation Specifications SECTIONS:

> Signage - 101400 Plagues - 101416

Dimensional Letter Signage - 101419

Medallions and plaques to be set into masonry may be specified under 047200

PART 1 • GENERAL

1.1 Description:

This section covers all material, labor, accessories and appliances necessary for the complete installation of Glass Fiber Reinforced Concrete (GFRC) ornaments as indicated on the drawings and specified herein.

1.2 Manufacturer:

- A) All GFRC ornaments used in this work shall be manufactured by Stromberg Architectural Products, Inc.; P.O. 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.

1.3 Submittals:

- **A) 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.
- **B)** Custom Work: Furnish dimensioned camera-ready line art of proposed custom designs to manufacturer.
- **C) Product Data:** Submit manufacturer's data sheets on each product to be used, including dimensions, finishes, storage and handling requirements and recommendations, and installation recommendations.
- **D) Samples:** For each custom finish specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

PART 2 • PRODUCTS

2.1 Composition:

All Glass Fiber Reinforced Concrete ornaments shall be a matrix of 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. Density: 140 pcf (2240 kg/cu m).
- 5. Shell Thickness: 3/8 inch to 3/4 inch (9.5 mm), nominal.
- 6. 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.
- 7. Weather Resistance: No significant loss in strength or change in appearance after 200 hours accelerated weathering conducted in accordance with ASTM G 23.
- 8. Flexural Strength: 1000 to 1800 psi (6.9 to 12.4 MPa).
- 9. Modulus of Elasticity: 2 x 10⁵ psi (1370 MPa).
- 10. Compressive Strength: Over 5000 psi (34 MPa).
- 11. Variation from Dimensions Indicated on Drawings: Plus and minus 1/8 inch (3 mm), maximum.
- 12. Variation from Plane Along Edge or Surface: Plus and minus 1/6 inch per linear foot (1.5 mm in 300 mm), maximum.
- 13. Outside Corner Radius: 1/6 inch to 1/8 inch (1.5 to 3 mm).
- 14. Draft Angle: 3 degrees minimum on returns, setbacks, reveals, and grooves.
- 15. Provide concealed anchorage points for plaster type wire anchors.
- 16. Provide screwed or bolted anchors with reinforced holes through face of unit.
- 17. Provide anchors and reinforced anchoring points as indicated on drawings.

2.2 Joint Materials:

Elastomeric Joint sealant per Section 07.

2.3 Fabrication:

Glass Fiber Reinforced Concrete (GFRC) ornaments shall be manufactured in accordance with manufacturer's strict guidelines for ingredient ratios, material mixing and consolidation, mold surface integrity, color and finish uniformity and curing methods for maximum strength achievement.

2.4 Delivery, Storage, and Handling:

All Glass Fiber Reinforced Concrete ornaments shall be carefully loaded and packed for transportation avoiding excess stress, and preventing damage; use appropriate equipment. All product shall be released to freight carrier in a sound, unblemished and unbroken condition.

PART 3 • EXECUTION

3.1 Inspection:

- A) Inspect adjacent construction for conditions that would prevent proper installation of GFRC ornaments. Do not begin installation until substrates have been properly constructed; verify that substrates are plumb and true.
- B) If substrate installation 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.
- D) Verify that bearing surface is plumb and true.
- E) Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 Installation:

- A) Install Glass Fiber Reinforced Concrete ornaments true to line, plumb and level in accordance with applicable code and manufacturer's recommendations. Shim when necessary.
- B) Provide sealant joints between individual GFRC pieces at locations indicated on drawings:
 - 1. Sealant joints per Division 7 Section "Joint Sealants".
- C) Patch exposed anchor points to match color and texture of unit.
- D) Clean GFRC Units according to manufacturer's written instructions.
 - 1. Remove dirt, stains, excess sealant or other undesired materials.
 - 2. Protect surrounding materials and surfaces during cleaning.

3.3 Protection:

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

END OF SECTION