

## Part I – General

### 1.1 Scope

A. Furnish letters and hardware necessary to install thermoformed (formed) plastic letters and logos, as shown on drawings and herein specified.

### 1.2 Submittals

- A. Manufacturer's illustrated product literature and specifications.
- B. Installation instructions

### 1.3 Quality Assurance

- A. Manufacturer to have a minimum of 25 years experience in manufacturing letters.
- B. All letters to be manufactured by one manufacturer.

## Part II – Products

### 2.1 Acceptable Manufacturer or Manufacturer's Representative

- A. Gemini Incorporated  
103 Mensing Way  
Cannon Falls, MN 55009  
Phone: 800-538-8377 or 507-263-3957  
Fax: 800-421-1256 or 507-263-4887  
Email: sales@geminisignproducts.com  
Web: www.geminisignproducts.com

### 2.2 Materials

- A. Cellulose Acetate Butyrate (C.A.B.). Wood and Cotton fiber based plastic (non-petroleum). Fully recyclable.
- B. Material tested to J2527, based on test parameters of SAE J1960 for UV exposure resistance.
  - 1. Specific heat of about 0.35. Specific Gravity 1.16-1.21
  - 2. Heat Combustion of approximately 10,400 BTU per pound (2.42 x 10<sup>7</sup> J/Kg).
  - 3. Self Ignition temperature of 880° F (470°C), using ASTM D 1929.
  - 4. UL94 Flame Class: 94HB. Flame Spread Index: 130 (NFPA 286: Group B: Flame Spread: 26-75)
  - 5. Burn rate of .08/min.
  - 6. Smoke Develop. Index: 416
  - 7. Thermal Expansion rate: .00008/inch.

### 2.3 General Construction

- A. Thermoformed (Formed) in standard letter style or symbol, per catalog, or custom letters-logos, per customer's vector art files.
- B. Colors: Formed in standard pigmented C.A.B. color, or painted with acrylic polyurethane to match custom colors or art designs. Common options: painted returns, painted flange, painted border, painted face – one or multiple colors.
- C. Profiles: Flat face, Round Face, Prismatic Face or Sculpted per art. Individual letters/logos or connected per vector art.
- D. Sizes: single pieces up to 45"x 68". Larger pieces up to 2 sections.

### 2.4 Mounting & Hardware

- A. Mounting options: Plain, Flange, Stud (Stud/Brick, Stud/Block, Stud/Rail), Pad, Combination, Combination All, Outside Bracket.
- B. Hardware: 10-24 (3/16") 5056 Alloy Aluminum threaded studs (Stainless Steel 302 alloy Studs-optional). 2"-3" long studs are standard – longer studs available upon request.
- C. Drill Patterns available as installation guide for any mounting with studs. Spacing Guide for pad mounted letters.

### 2.5 Manufacture

- A. Letters shall be made of cellulose acetate butyrate (C.A.B).
- B. Letter shall be \_\_\_\_\_ letter style and shall be \_\_\_\_\_ inches high, as indicated on the drawings.
- C. Mounting shall be \_\_\_\_\_ and a drill pattern, designating stud locations, IS / IS NOT required for mounting on a \_\_\_\_\_ surface.

## Part III – Execution

### 3.1 Installation

- A. A qualified installer shall install formed plastic letters.

### 3.2 Warranty

- A. Letters should be guaranteed for the life of the business against defects.

### 3.3 Maintenance

- A. Cleaning as needed per manufacturer recommendations.