

## Part I – General

### 1.1 Scope

A. Furnish letters and hardware necessary to install Minnesota™ injection-molded plastic letters 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 20 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. LettersandSigns.com a division of trademarks Signs & Graphics LLC

11447 Strang Line Rd

Lenexa KS 66215

816-800-9444

Email: sales@lettersandsigns.com

Web: www.lettersandsigns.com

### 2.2 Materials

A. ABS (Acrylonitrile butadiene styrene) or CAB (Cellulose Acetate Butyrate)

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 107 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. Injection Molded in either Standard Styles or Custom National Programs are available.

B. Painted any standard or custom color with liquid acrylic polyurethane, then oven baked.

C. Profiles: Flat face and Prismatic Face (Architectural).

D. Standard Letter sizes or Custom National Programs

### 2.4 Mounting Hardware

A. Minnesota™ injection molded plastic letters available plain, stud, pad, combination, or combination all for mounting options.

B. All Minnesota™ injection molded plastic letters are mounted with 10/24 aluminum or stainless steel threaded studs.

### 2.5 Manufacture

A. Letters shall be made of ABS.

B. Letter shall be \_\_\_\_\_ letter style, \_\_\_\_\_ color, and shall be \_\_\_\_\_ inches high, as indicated on the drawings.

C. Mounting shall be \_\_\_\_\_ and a mounting template designating stud locations is/is not required for mounting on a \_\_\_\_\_ surface

## Part III – Execution

### 3.1 Installation

A. A qualified installer shall install Minnesota™ injection molded 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.