

## Part I – General

### 1.1 Scope

A. Furnish plaques and hardware necessary to install metal plaques 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 15 years experience manufacturing plaques.

B. All plaques 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: 877-877-2922 or 507-263-3957

Fax: 800-627-8547 or 507-263-4887

Email: [plaques@geminisignproducts.com](mailto:plaques@geminisignproducts.com)

Web: [www.geminisignproducts.com](http://www.geminisignproducts.com)

### 2.2 Materials (Metal Alloy options)

A. Bronze: Etched or Precision Tooled C22000 alloy. Cast NAVY G alloy

B. Aluminum: Precision Tooled 5052 alloy or Cast 514 Alloy

C. Brass: Etched or Precision Tooled C46400 alloy

D. Copper: Etched C11000 alloy

E. Stainless Steel: Etched or Precision Tooled 304 or 316 alloy.

### 2.3 Process Options

#### A. Precision Tooled Plaques

1. Metal Alloys: Precision cut from Bronze (Lead free), Aluminum, Brass (Lead free).
2. Thickness: 1/8", 3/16", 1/4" and 5/16" thick metal (varies by size/material) Up to 40" x 84" as a single piece.  
Thicker plaques available upon request - or deeper Cast Plaque optional.
3. Double-sided plaques available.
4. Borders: No border, no border bevel, Single Line, Single Line Bevel, Single Line Wide Bevel, Double Line, Double Line Bevel, Double Line Wide Bevel, Inset Single Line, Inset Single Line Bevel, Inset Double Line, Inset Double Line Bevel, Projected Bevel or custom per art.
5. Background colors: Black, Dark Oxide, Brown, Duranodic Bronze, 46 standard colors or custom color match.
6. Raised copy: horizontal brushed grain direction is standard (vertical direction optional). Painted or polished available upon request.
7. Background textures: Leatherette, Stipple, Sand, Pebble or Bead-Blasted.
8. Clear coat options: Satin sheen is standard; Semi-Gloss, Gloss or Matte available upon request.
9. Finishes - specialty bronze: Verde Patina, Turquoise Patina, Green Patina, Light Oxidized, Oxidized or Dark Oxidized.
10. Mounting options (standard): Blind Mount, Solid Wall Mount, Hollow Wall Mount, Wood Mount, Post Cap, Garden Stake, or Post Mounts.
11. Rosettes. Optional sizes and styles per catalog.
12. Shapes: square, rectangle, circle, oval, custom shape or logos available.
13. Portraits and Images: Bas Relief, Flat Relief, etched or hi-resolution printed.
14. Inserts: optional etched, cast, ceramic, engraved, or hi-resolution printed.

#### A. Cast Architectural Plaques

1. Metal Alloys: Cast in Bronze (No Lead NAVY G). Aluminum 514 Alloy.
2. Cast depth varies by plaque size.  
Less than 324 sq" - 5/16" deep, 324-575 sq" - 1/2" deep, 576-1295 sq" - 3/4" deep, over 1295 sq" - 1" deep  
Deeper plaques available upon request.
3. Borders: No border, no border bevel, Single Line, Single Line Bevel, Single Line Wide Bevel, Double Line, Double Line Bevel, Double Line Wide Bevel, Inset Single Line, Inset Single Line Bevel, Inset Double Line, Inset Double Line Bevel, Projected Bevel or custom per art.
4. Background colors: Black, Dark Oxide, Brown, Duranodic Bronze, 46 standard colors or custom color match.
5. Raised copy: horizontal brushed grain direction is standard (vertical direction optional). Painted or buffed available upon request.
6. Background textures: Classic Leather, Leatherette, Stipple, Sand, Pebble or Bead-Blasted.
7. Clear coat options: Satin sheen is standard; Semi-Gloss, Gloss or Matte available upon request.

8. Finishes - specialty bronze: Verde Patina, Turquoise Patina, Green Patina, Light Oxidized, Oxidized or Dark Oxidized.
9. Mounting options (standard): Blind Mount, Solid Wall Mount, Hollow Wall Mount, Wood Mount, Post Cap, Garden Stake, or Post Mounts.
10. Rosettes. Optional sizes and styles per catalog.
11. Shapes: square, rectangle, circle, oval, custom shape or logos available.
12. Inserts: etched, cast, ceramic, engraved, or hi-resolution printed
13. Portraits and Images: Bas Relief, Flat Relief, PhotoRelief or etched
14. Specialty: Cast Memorial, cast donor trees, standard cast government seals.

#### C. Etched Architectural Plaques

1. Metal Alloys: Bronze (C22000), Brass (C46400), Copper (C11000) and Stainless Steel (C304 & 316 Alloys).
2. Thickness: 1/16", 1/8", 3/16" and 1/4". Copper – 1/16", 1/8", 1/4" only.
3. Size: Bronze, Stainless, Brass, Aluminum up to 36" x 72". Copper up to 36" x 60".
3. Edges: Square Edge (standard), Bevel Edge.
4. Background: common background is Brushed (horizontal grain standard) or polished.
5. Recessed copy – standard, optional raised with limits. Photo etch is optional.
6. Clear coating: Satin (standard) optional Semi-Gloss, Gloss or Matte.
7. Mounting: Plain, Blind Stud Mount, Stud Boss Mount, Double Faced Tape Mount, Through-hole Mount.
8. Rosettes: optional sizes and styles per catalog.

#### D. Wayfinding Plaques

1. Multiple Wayfinding Options
  - a. ADA, machined, brushed copy with painted Background, multiple gauges available.
  - b. ADA, machined, raised copy with hi-Resolution print, multiple gauges available.
  - c. Full color ADA, machined, painted background with painted raised copy, multiple gauges available.
  - d. Full Color ADA, machined, printed hi-Resolution printed panels, multiple gauge aluminum options.
  - e. Standard ADA compliant directional signage with raised copy and solid Braille machined into plaques. Standard 7" x 8-1/2" x 1/4" thick in Aluminum, Bronze and Brass. Stipple or Sand background painted any standard or custom color
  - f. Beveled edge injection-molded plaque frames

#### 2.4 Mounting Hardware

- A. Hardware: standard hardware provided with plaque. Hardware type & size, based on plaque type and size. Common mounting methods, including Blind Mount(A), Solid Wall Mount(B),Hollow Wall Mount(C.), Wood Wall Mount(D) Optional: Garden Stake Mount(E), Post Mount(F), Post Cap(R.), Projected Wayfinding Mount. Install instructions available.

#### 2.5 Manufacture

- A. Plaques shall be made of either Bronze (C22000) Aluminum (#5052) or Brass (C46400).
- B. Plaques shall use \_\_\_\_\_ letterstyle with letters that are \_\_\_\_ inches high, as indicated on the drawings.
- C. Mounting shall be \_\_\_\_\_

### Part III – Execution

#### 3.1 Installation

- A. A qualified installer shall install plaques. Additional structural support may be required for larger/heavier plaques.

#### 3.2 Warranty

- A. Plaques should be guaranteed for the life of the business against defects. Clear coat refinishing services available.

#### 3.3 Maintenance

- A. Cleaning of Plaques as needed, per manufacturer's recommendations.