

Part I – General

1.1 Scope

A. Furnish Letters/Logos and hardware necessary to install Fabricated Stainless Steel 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. 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. High-Grade, Pre-Finished Stainless Steel Alloy #304 & #316
- B. Titanium-Coated Pre-Finished Stainless Steel Alloy #304

2.3 General Construction

- A. Material Gauge: Fabricated letters up to 24" are produced with 18 gauge faces and 24 gauge returns; letters greater than 24" are produced with 16-18 gauges faces and 22 gauge returns.
- B. Cutting: Computer guided lasers cut letters, logos or shapes.
- C. Construction: Letter returns are cut to size based on the desired letter depth and bent to the contour of the laser cut faces to produce a hollow-backed letter with 90° angle edges. Inside joints are hand-soldered with a continuous bead of lead-free silver solder.
- D. Testing: Solder joints indicate the ability to withstand temperatures from -40°F to 220°F. Salt Fog tested to ASTM B-117-95 for corrosion resistance.
- E. Finishes: All Fabricated Stainless Steel letters are laser cut from pre-finished Stainless Steel (finish options below).
- F. Edges: The edges of all letter faces will have thin line of exposed silver stainless steel.

2.4 Finish Options

- A. 304 Stainless Steel
 - 1. Brushed finish (vertical grain standard, horizontal optional), 80-140 grit Hairline pre-finished sheet, face and/or returns, no clear coating.
 - 2. Painted finish, primed then sprayed with 2-part hardened acrylic polyurethane paint, oven baked.
 - 3. Polished #8 finish, pre-finished sheet, face and/or returns, no clear coating.
 - 4. #4 Soft Satin, pre-finished sheet with 150-180 grit (vertical grain standard, horizontal optional), face and/or returns, no clear coating.
 - 5. #4 Satin Gold Titanium, pre-finished sheet, same as #4 but with Gold Titanium finish.
 - 6. Perforated: small pre-finished perforated holes in face and/or returns, then painted with 2-part hardened acrylic polyurethane paint (standard or custom color), oven baked.
 - 7. Vibration finish, pre-finished sheet with simulated bead blasted face and/or return. no clear coating.
 - 8. Random Arc: pre-finished sheet with random arcs (swirls in material) face and/or returns, no clear coating.
- B. 316 Stainless Steel (more corrosion resistant-recommended for coastal installations)
 - 1. Brushed finish (vertical grain standard, horizontal optional), 80-140 grit Hairline pre-finished sheet, face and/or returns, no clear coating.
 - 2. Painted finish, primed then sprayed with 2-part hardened acrylic polyurethane paint, oven baked.
 - 3. Polished #8 finish, pre-finished sheet, face and/or returns, no clear coating.
 - 4. #4 Soft Satin, pre-finished sheet with 150-180 grit (vertical grain standard, horizontal optional), face and/or returns, no clear coating.

B. 304 Titanium Coated Stainless Steel

1. Brushed Titanium Finish (vertical grain standard, horizontal upon request), 80-140 grit Hairline pre-finished sheet, face and/or returns, available in Gold, Copper, Medium Bronze or Black Titanium coating; no clear coating.
2. Polished Titanium Finish: Polished Gold, Polished Copper, Polished Medium Bronze, Polished Black; face and/or returns, no clear coating.

2.5 Fabricated Type Options

- A. Fabricated with Solid Faces (backlit - optional LED package)
1. Solid Face with No Backs
 2. Solid Face with Backs
 3. Solid Face with Back and Removable cans
- B. Fabricated with Cut-Out Faces (face or backlit optional LED package)
1. Cut-out Face with Insert or Perforated Face, No backs.
 2. Cut-Out Face with Back
 3. Cut-Out Face with Insert, Backs, and Removable cans
- C. Open Channel Face
1. Open face with solid back

2.6 Back Options

- A. Metal Backs
1. Raw, unpainted or finished backs
 2. Removable or non-removable backs
- B. Lexan Backs
1. Removable, flush, clear or light diffused (6"-24" high: .118 gauge Clear Lexan. Over 24" high .236 Clear Lexan: Light Diffused Lexan .177 - all sizes)

2.7 Mounting Options

- A. Standard Mount Options: Strap Mount, Side Mount, Shadow-Free Studs, Removable Cans, and Detachable Studs.
1. Letters up to 6" high: 6-32 threaded studs. Over 6" up to 24": 10-24 threaded studs. Over 24": 1/4-20 threaded studs. All Stainless Steel Studs.
 2. Mounting locations determined by manufacture, or per supplied art.
 3. Standard stud lengths available with or without spacers. Standard studs are threaded into stud bosses, from the backs of the letters or letter returns with a Top or Bottom stud mount.
 4. Top and Bottom mounts over 8" high require tie-backs (not supplied) for letter support. Optional thick back, allowing extra structural support – reduce need for tie-backs.

2.8 Lit Fabricated with LEDs

- A. Fabricated letters lit with 12-volt DC LEDs - optional lighting packages.
1. Face lit letters with outline and acrylic inserts.
 2. Back (Halo) lit letters with clear or light-diffused Lexan backs.
 3. Removable cans or detachable stud options for mounting lit letters and allowing future servicing of LEDs.
 5. UL Listed Sign Sections with Class 2 power supplies, lead wires/cables, wiring diagrams and installation instructions supplied.

2.9 Manufacture

- A. Letters to be made with pre-finished Alloy 304 Stainless Steel in multiple finish options.
- B. Letters shall be _____ letter style and shall be _____ inches high and _____ inches deep, as indicated on drawings.
- C. Mounting shall be _____ and a mounting template designating stud hole locations (Is/Is Not) required for mounting on a _____ surface.

Part III – Execution

3.1 Installation

- A. A qualified installer shall install fabricated letters. Additional structural support may be required for larger/heavier letters and logos.

3.2 Warranty

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

3.3 Maintenance

- A. Cleaning of Letters/Logos as needed, per manufacturer's recommendations.