Flat Cut Metal - Letters & Logos Specifications

Part I – General
1.1 Scope
A. Furnish letters and hardware necessary to install Flat Cut Metal letters and logos, 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 (Metal Options)
A. Aluminum - 5052 Alloy
B. Bronze – C22000 Commercial Alloy
C. Brass – C46400 Alloy (No Lead)
D. Copper – C1100 Alloy
E. Stainless Steel – C304 Alloy and 316 Alloy (more corrosion resistant)
F. Cor-Ten™ Steel – A588
2.3 Process
A. Cutting
   1. Flat Cut: Laser or Waterjet cut (based on Metal, Gauge and Product), using computer-guided equipment.
   2. MINI Letters: Precision CNC cut. (under 3"high), using computer guided equipment.
   3. Premium Finish: Hand sanded or polished, face-return combinations.

2.4 Finishes (meeting ASTM G4A specifications)
A. Aluminum
   1. Brushed face, 5052 Alloy, #2-#3 finish (#4 optional) vertical grain direction standard; horizontal grain, random arc, or orbital sanded optional. Bead-blasted returns, clear low-gloss powder coating, baked.
   2. Painted face & returns (standard or custom colors), 5052 Alloy, bead-blasted returns, sprayed with acrylic polyurethane (1.75 +/– .25 mils thick) gloss, semi-gloss, satin or matte sheen, baked.
   3. Clear Anodized, 6061 Alloy, bead-blasted returns, process complies with AA-M33-C22-A31 Architectural Class II sulfuric anodizing process with coating thickness of 0.4 mil to 0.7 mil., no clear coat.
   4. Gold Anodized, 6061 Alloy, bead-blasted returns, process complies with AA-M33-C22-A43 for Architectural Class I sulfuric anodizing process with a coating thickness of 0.7 mil and thicker, no clear coat.
   5. Medium Bronze Anodized, 6061 Alloy, bead-blasted return, process complies with AA-M33-C22-A44 for Architectural Class I sulfuric anodizing process with a coating thickness of 0.7 mil and thicker, no clear coat.
   6. Dark Bronze Anodized, 6061 Alloy, bead-blasted return, process complies with AA-M33-C22-A44 for Architectural Class I sulfuric anodizing process with a coating thickness of 0.7 mil and thicker, no clear coat.
   7. Black Anodized, 6061 Alloy, bead-blasted return, process complies with AA-M33-C22-A44 for Architectural Class I sulfuric anodizing process with a coating thickness of 0.7 mil and thicker, no clear coat.
   8. Champagne and Light Bronze Anodized, 6061 Alloy, bead-blasted returns, process complies with AA-M33-C22-A44 for Architectural Class I sulfuric anodizing process with a coating thickness of 0.7 mil and thicker, no clear coat.
   9. Polished, 6061 Alloy, (not a mirror finish) then Anodized any standard Anodized color, or left Clear Polished Anodized. Process meets AA-M33-C22-A43 for Architectural Class I sulfuric anodizing process with a coating thickness of 0.7 mil and thicker, no clear coat.
   10. Polished #8 faces, 5052 Alloy, bead-blasted returns, 2-part hardened gloss acrylic polyurethane clear coat, baked.
   11. Rust Powder coated, bead-blasted returns, baked.
   12. Premium & Premium MINI Letters: hand sanded, interior display quality finishing, no clear coat on MINI.

B. Bronze/Brass/Copper
   1. Brushed face, #2-#3 finish (#4 optional) vertical grain standard; horizontal grain optional, bead-blasted returns, 2-part hardened acrylic polyurethane low-gloss clear coat (gloss optional), baked.
   2. Polished face, #8 finish, bead-blasted returns, 2-part hardened acrylic polyurethane gloss clear coat, baked.

3. Oxidized, US10B finish, (available as Standard, Light or Dark Oxidized), bead-blasted returns, 2-part hardened acrylic polyurethane low-gloss clear coat, baked
4. Traditional or Turquoise Patina (finish varies from letter to letter, not uniform), light clear coat, baked.
5. Premium & Premium MINI Letters: hand sanded, interior display quality finish. No clear coat on MINI.

C. Stainless Steel (304 or 316 Alloy) Passivated following ASTM A 967 and ASTM 2700 standards, to protect against corrosion.
   1. Brushed face, #2-#3 finish (#4 optional) vertical grain standard; horizontal grain optional, bead-blasted returns, no clear coat-standard, optional low-gloss clear coating.
   2. Polished #8 face, bead-blasted returns, no clear coat-standard, optional gloss clear coating.

D. Cor-Ten™
   1. Natural rust, color will vary from letter to letter as metal oxidizes, no grain direction, bead blasted returns, no clear coat. Cor-Ten B meeting ASTM A588 and A606 Type 4 requirements.

E. Gemini standard Flat Cut Metal Letters do not have polished returns. Premium Finish Letters are available with combinations of Brushed, Polished or hand-sanded faces, straight or beveled returns (price varies by options chosen).

2.5 Mounting Hardware & Options
A. Blind stud standard, available aligned for Brick, Block, or Rail. Optional Single or Double Rail, Top/Bottom Rail, Bottom angle Bracket (min. 3/8"thick), Top or Bottom Stud (min.3/8"th). Tie-backs recommended for any Top & Bottom mounts on letters over 8"high - not included.
B. Letters under 15", drilled & tapped for 10-24 studs. Thin strokes, 6-32 or 4-40 studs.
C. Letters 15"+, drilled & tapped for 1/4-20 studs (Aluminum studs with Alum letters, Stainless Steel studs with Stainless or any red metal letters).
D. Metal spacer sleeves available upon request, standard or custom lengths available.

2.6 Fabrication
A. Letters shall be made of_____.
B. Letter shall be _____ letter style and shall be _____ inches high, as indicated on the drawings.
C. Finish shall be_____.
D. 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 Flat Cut Metal letters and logos. Additional structural support may be required on larger and heavier Letters & Logos. Stronger adhesives, such as Epoxy may be required to install with studs on heavier products.

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.