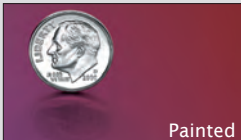
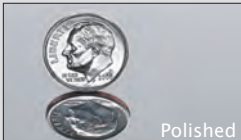


Gemini Stainless Steel Fabricated Letters

**Alloy 304:** The standard stainless steel alloy used by Gemini is #304, which will resist tarnishing under most circumstances. Titanium-coated stainless provides the ultimate “Gold” finish available. This material is comprised of #304 stainless coated with a thin layer of tinted titanium. Due to the fabrication process, the edge of all faces on letters and logos will have a thin line of exposed #304 stainless that will be buffed smooth on polished letters, or stroked on natural satin letters to maintain consistency in appearance. Other colors of titanium-coated stainless are also available upon request.



Other Material Specifications

For most letters, 20-gauge material provides the proper balance of strength and weight. Some larger letters require 18-gauge material for extra strength.

All letters are hand welded, and tests on our welds indicated the ability to withstand temperatures below -40° F and exceeding to 350° F.

The standard polished material used by Gemini is a high grade of single directional polish. Virtually no grain is visible to the naked eye. For the most discerning customers, we also offer a truly non-directional polished material at a slightly higher cost.

Gemini uses only lead-free silver solder for all fabricated letters and logos.

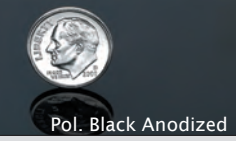
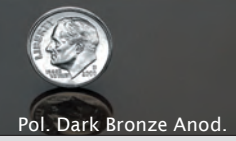
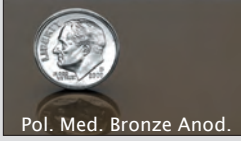
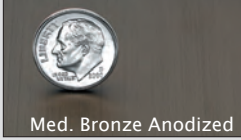
The standard mounting methods for fabricated letters involve a welded strap joining the returns of the letter with a stud-welded boss to accept mounting studs centered on the strap. This method produces an exceptionally strong fabricated letter by giving strength to the already formidable welded side returns.



Gemini Flat Cut Metal Finishes

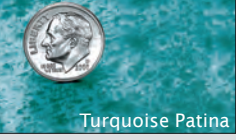
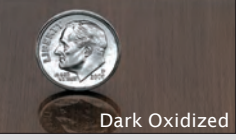
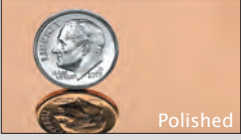
Aluminum (1/8", 1/4", 3/8", 1/2", 3/4" & 1")

**Alloy 5052:** Flat Cut Aluminum letters use Alloy #5052, which offers good cutting, welding and corrosion resistance. It is also excellent for anodizing and has a superior hardness rating of H32, which prevents surface damage.



Bronze (1/8", 1/4", 3/8" & 1/2")

**Alloy 22000:** Flat Cut Bronze uses alloy C22000, comprised of 90% copper & 10% zinc - 0% lead.



Brass (1/8", 1/4", 3/8", 1/2" & 3/4")

**Alloy C46400:** Flat Cut Brass letters use alloy C46400 Naval Brass; 60% copper, 39.25% zinc and .75% tin - 0% lead.  
**Muntz Alloy:** Muntz metal uses alloy C280 which is nearly identical to C46400 Brass. It is comprised of 60% copper & 40% zinc - 0% lead.



Stainless Steel (1/8", 1/4", 3/8" & 1/2")

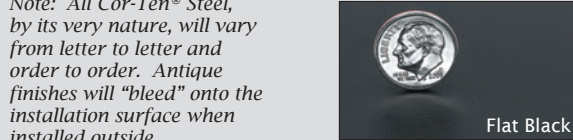
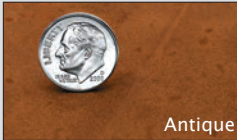
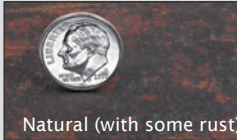
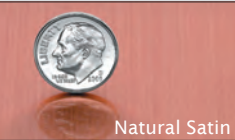
**Alloy C304:** Stainless Steel alloy C304 offers some corrosion resistance.  
**Alloy 316:** Stainless Steel alloy 316 offers better corrosion and tarnishing resistance for marine and harsh environments.



*NOTE: All stainless steel letters and logos are shipped without a clear poly-urethane coating. Alloy C304 will not tarnish under most conditions. In cases where stainless steel letters and logos will be installed in salt water environments Alloy 316 offers even better corrosion and tarnishing resistance. Using harsh chemicals may cause permanent damage to the materials surface. Gemini recommends warm soapy water to clean.*

Copper (1/8", 1/4" & 3/8")

**Alloy C11000:** Flat Cut Copper letters use alloy C11000, which offers good cutting, welding and corrosion resistance.



*Note: All Cor-Ten® Steel, by its very nature, will vary from letter to letter and order to order. Antique finishes will “bleed” onto the installation surface when installed outside.*

Cor-Ten® Steel (1/8" & 1/4")

Gemini’s Waterjet Cut Cor-Ten® Steel is the ideal material for a rustic or antique look. Exceedingly durable, you can choose between Natural (with some rust), Flat Black or Antique finishes.



Specifications Booklet  
Metal Letters & Logos

For More Information on Architectural Identification Contact:



Project:

Name:

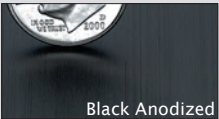




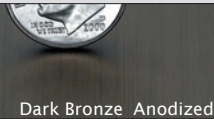
Gemini Cast Aluminum Finishes



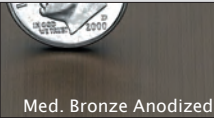
Natural Satin finish uses aluminum alloy #356. Letters are stroked vertically and receive a protective clear coat.



Painted finish uses aluminum alloy #319. Letters are oven baked after being coated with a 2-part, hardened acrylic polyurethane coating. Choose from any of the standard Gemini colors or supply us with your own custom color. Specify Gloss, Semi-Gloss, Satin or Matte



Nouveau Patina finish uses aluminum alloy #319. Letters are powder coated to provide a look of weathered copper or bronze.



Anodized finishes use aluminum alloy #514. Letters are anodized, an electro-chemical process, which imbeds the colored dye into the microscopic pores in the surface of the letter. Colored anodizing dyes available include medium bronze, dark bronze, gold or black anodic.



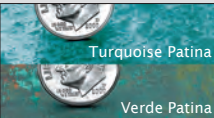
Gemini Cast Bronze Finishes



Natural Satin finish uses alloy NAVY G88-8-0-4. Letters are stroked vertically and recieve a protective clear coat. This finish allows the natural satin bronze texture to show through. US10 finish



Oxidized finish uses alloy NAVY G88-8-0-4. Letters are put in a chemical bath, turning them black. The face is then wiped with a stiff sponge to remove some of the black oxidization allowing the yellow bronze to show through. Returns are left black and the entire letter receives a protective clear coat. US10B finish.



Patina finish uses alloy NAVY G88-8-0-4. First a chemical treatment is used to oxidize them to green. Once dry, the letters are then shipped as is, or clear coated to seal the color. Left uncoated the letters will continue to patina. Note: The color produced on these letters may vary greatly from one letter to the next and will not be uniform.



Polished finish uses alloy NAVY G88-8-0-4. The letters are hand polished then oven baked after being sprayed with a protective clear-coat. This finish allows the reflective polished bronze to show through. US9 finish. Note: Polished letters will have slightly rounded edges.

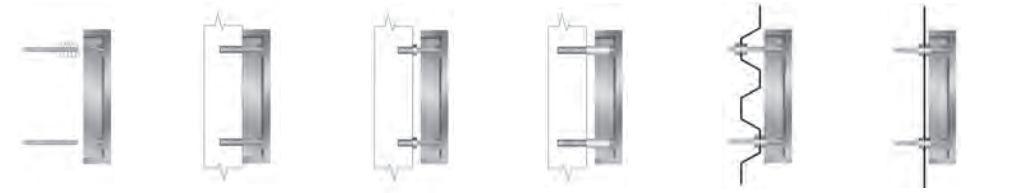
Gemini Standard Cast Styles & Sizes

AMERICANA BOLD	(2",3",4",6",8",10",12",15",18")
ARIAL BOLD	(4",6",8",10",12",15")
ARCHITECTURAL	(2",3",4",5",6",8",10",12",14",16",18",24")
AVANT EXTRA BOLD	(4",6",8",10",12",15")
AVANT GARDE MEDIUM	(4",6",8",10",12",15")
BODONI CONDENSED	(4",6",8",10",12",15")
CLARENDON FORTUNE BD.	(3",4",6",8",10",12",15",18")
CLARENDON MEDIUM	(4",6",8",10",12",15",18")
COPPERPLATE	(2",3",4",6",8",10",12")
CRAW CLARENDON CONDENSED	(2",3",4",6",8",10",12",15")
EUROSTYLE BD EXT.	(2",3",4",6",8",10",12",15")
FRIZ QUADRATA	(2",3",4",6",8",10",12",15",18")
FUTURA BOLD	(2",3",4",6",8",10",12",14",16",18")
FUTURA	(2",3",4",5",6",8",10",12",14",16",18")
FUTURA CONDENSED	(4",6",8",10",12",15",18")
GARAMOND BOLD	(2",3",4",5",6",8",10",12",15",18")
Garamond Bold Italic	(4",6",8",10",12",15",18")
GARAMOND REGULAR	(2",3",4",6",8",10",12",15")
Gil Sans Bold	(4",6",8",10",12",15",18")
Goudy Extra Bold	(4",6",8",9",10",12",15",18")
Helvetica Bold	(4",6",8",10",12",15",18",24")
HELVETICA BD. EXT.	(4",6",8",10",12",15",18")
Helvetica Medium Condensed	(4",6",8",10",12",15",18")
Helvetica Italic	(4",6",8",10",12",15",18",20",24")
HELVETICA LIGHT	(2",3",4",6",8",10",12",15",18")
Helvetica	(2",3",4",5",6",8",9",10",12",14",15",16",18",20",24")
KABEL	(2",3",4",6",8",10",12",15",18")
Lotus Bold	(4",6",8",10",12",15",18")
MICROGRAMMA EXT.	(4",6",8",10",12",15")
OPTIMA SEMI BOLD	(2",3",4",6",8",10",12",15",18")
Optima	(4",6",8",10",12",14",16",18",24")
PALATINO	(2",3",4",6",8",10",12",15",18",24")

Gemini Standard Cast Styles & Sizes

PALATINO SEMI BOLD	(2",3",4",6",8",10",12",14",16")
RIBBON	(2",3",4",6",8",10",12",15")
RIBBON DEEP	(4",5",6",8",10",12",15",18")
RIBBON CONDENSED	(3",4",6",8",10",12",15")
ROFFE	(3",4",5",6",8",10",12",14",16")
Roman	(2",3",4",6",8",10",12",15",18",24")
ROMAN ROUND	(4",6",8",10",12")
STANDARD BLOCK	(3",4",6",8",10",12",15",18")
Times Bold	(2",3",4",6",8",9",10",12",15",18",24")
Times Bold Italic	(4",6",8",10",12",15",18")
Times New Roman	(2",3",4",5",6",8",9",10",12",15",16",18",20",24")
TRAJAN BOLD	(4",6",8",10",12",15",18")
TWENTIETH CENTURY	(2",3",4",6",8",10",12",14",16",18",24")
Univers 67	(4",6",8",10",12",15",18")
UNIVERSITY ROMAN BOLD	(4",6",8",10",12",15")

Gemini Metal Letter Mounting Methods



<b>Cast Metal Letters</b> have threaded stud bosses for insertion. <b>Flat Cut Metal Letters</b> have tapped holes for stud insertion or stud welded.	<b>Flush Mounting</b> Studs are set in adhesive cement. There is no space between letter and mounting surface.	<b>Projected Jam Nut Mounting</b> Studs are set in adhesive cement. Stainless steel jamb nuts are inserted between the letter and the mounting surface.	<b>Projected Spacer Mounting</b> Studs are set in adhesive cement. Pre-cut spacers are inserted between the letter and the mounting surface.	<b>Corrugated Mounting</b> Studs are set using jam nut on front and back of corrugation.	<b>Flat Metal Wall Mounting</b> When you have access to rear of wall, washers and nuts are used on both sides of mounting surface.
--	---	--	---	---	---

Gemini Standard Painted Colors



Due to the limitations of the printing process, printed colors can vary from actual colors.