Paint-Resist Metal Bar Code Nameplates Specifications

Material: .008” thick matte anodized aluminum is standard. Optional thicknesses include: .012”, .020”, .032”, and .063”.

Bar Codes: All alphanumeric bar codes are photo imaged with a human-readable equivalent. Guaranteed no skips in sequence. Code 39 with 2.7 to 9.4 characters per inch (CPI) is standard. Other bar code symbologies including Code 128, I 2 of 5 and DataMatrix as well as OCR characters and CPIs available.

Although this product is primarily marketed as a bar code product, we can produce it with human-readable numbers only or unserialized. Call Metalcraft for information on either of these options.

Label Copy: The printed label copy may include block type, stylized type, logos or other designs. All black copy is produced photographically. Colors other than black are screen printed.

Colors: Choose black only or one of our standard colors (red, blue, green or yellow) for block style type, stylized type, logos or other designs. Due to the contrast needed for the bar code scanner, all bar codes are black. Metalcraft color samples are available upon request.

BLACK BLUE RED GREEN YELLOW

Finish: All black copy and bar codes are sealed in an anodic layer to resist defacing, abrasion and environmental conditions. The fluoropolymer laminate also provides protection.

Sizes:
No. 191: 2” x 5/8”
No. 019: 2” x 1”
No. 037: 2 1/2” x 3/4”

Other sizes available upon request. Send e-mail to metalcraft@idplate.com, fax request to 641-423-8898 or call 800-437-5283 and ask for customer service.

Standard Adhesive: Pressure-sensitive acrylic adhesive (MC53LE), .0035” thick, supported by a liner. Provides an excellent bond to plastic or powder coated metal surfaces and a very good bond to bar metal surfaces. Also bonds very well to slightly oily surfaces or those plastics that may have a mold release. Will withstand temperatures from -40°C to 300°F (intermittent). Shelf life of 24 months when stored at 72°F (22°C) and 50% relative humidity.

Optional Adhesive: Pressure-sensitive acrylic adhesive (MC68), .005” thick, supported by a liner. Provides an excellent bond to unpainted metal surfaces such as aluminum and stainless steel as well as glass surfaces. Will withstand temperatures from -40°C to 400°F (intermittent). Shelf life of 24 months when stored at 72°F (22°C) and 50% relative humidity.

Optional Holes: Available upon request for mechanical fasteners. Standard hole diameters include 3/32”, 3/16”, and 1/8”. Contact Metalcraft for additional dimensions. A 1/4” quiet zone must be allowed at the beginning and end of the bar code inside the mechanical fastener area.

Packaging: Shipped in “work-out-of” cartons for convenient application. Each carton consists of one or more plastic trays containing 250 sequentially packed nameplates (can vary with metal thickness). Both cartons and trays are clearly marked to indicate serial numbers of contents. Pressure-sensitive adhesive orders are shipped with a roller, cleaner, and application instructions.

Shipment: 15 work days upon receipt of order and proof approval.

To Order: Call 1-800-437-5283 and ask for customer service.

METALcraft I.D. PLATES & LABELS
149 4th Street SW • P.O. Box 1468
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Paint-Resist Metal Bar Code Nameplates

Need an economical nameplate that can withstand multiple paint applications while sporting a color logo or design? Metalcraft’s Paint-Resist Metal Bar Code Nameplates are the solution you have been looking for. These unique labels feature a special fluoropolymer laminate that resists multiple paint applications (approximately 10-12), grease, even graffiti, and can withstand temperatures up to 350°F. After painting customers simply pick off the dried paint and are left with a clean, easy-to-scan metal bar code nameplate – a great product for work-in-process.

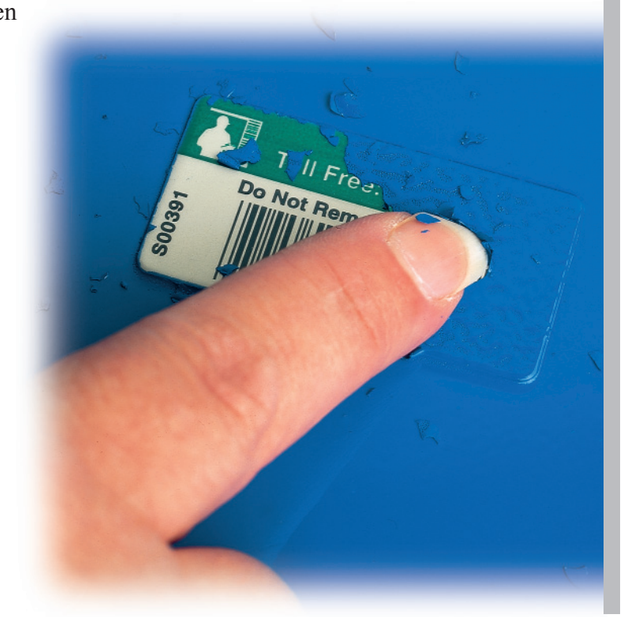
Available with or without a bar code, Paint-Resist Metal Nameplates are ideal for customers who require permanent nameplates to stand up in moderate to harsh environments. Black copy, logos, and bar codes are photographically reproduced for maximum clarity and detail and then sealed within the anodic layer of the aluminum. Color options are available for your logo, copy or design.

Paint-Resist Metal Bar Code Nameplates come with a standard adhesive that bonds extremely well to plastic or powder coated metal surfaces and also bonds well to bar metal surfaces. This product is also available with optional holes for mechanical fasteners.

Key Product Features

- Color logos or designs available in standard colors – black, red, yellow, green or blue
- Fluoropolymer laminate designed to resist up to 12 paintings and withstand continuous temperatures up to 350°F
- Anodizing process and fluoropolymer laminate protects black copy, logos, and bar codes from chemicals, abrasion and high temperatures
- Adhesives specially matched to surface for maximum adhesion or optional holes available for mechanical fasteners

Not sure what product you need?
Call our trained Experts!
800-437-5283



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Paint-Resist Metal Bar Code Nameplates Performance Information

Photo anodized aluminum bar codes are known for maintaining their readability in a wide range of environments and uses. They perform better than other types of labels and nameplates in demanding environments with the exception of those environments that chemically attack aluminum, such as highly caustic or highly acidic applications. Recommended performance is in a pH range of 5.5 to 8.5.

The chart included with this information will help determine if anodized aluminum is right for your application. Always test a sample in your exact environment to ensure performance. Tests were conducted in laboratory environments and may or may not simulate your conditions.

Temperature Tests

Product Tested	Test Conditions	Effect on Readability
Standard Photo Anodized	60 hours 375°F	Dark reflectance is reduced at these thresholds. This can affect readability.*
Image Intensified Photo Anodized	265 hours 500°F 90 hours 600°F 60 hours 700°F	

Ultraviolet Exposure Tests

Product Tested	Test Conditions	Effect on Readability
Standard Photo Anodized	Weatherometer, 5 years equivalent	Reduced overall readability after these thresholds.*
Image Intensified Photo Anodized	Weatherometer, 20 years equivalent	

Abrasion Tests

Product Tested	Test Conditions	Effect on Readability
Standard and Image Intensified Photo Anodized	Plates were brushed for 7000 cycles with a stiff nylon wheel (C-17) at a 1000 gm (16 oz.) load	Reduced overall readability after this threshold.*

Environmental, Chemical Atmosphere & Contact Tests

Characteristics	Test Conditions	Result
Acids and Bases	Ammonium Hydroxide 2 hours at 1%, 2 hours at 5%	Slight dulling of image; affects overall readability*
	Ferric Chloride, 10%, 16 hours	No effect
	Nitric Acid, 1%, 40 hours	No effect
	Phosphoric Acid, 1%, 40 hours	No effect
	Sodium Hydroxide	Affects overall readability
	Sulfuric Acid, 10%, 24 hours	No effect
Cleaning Agents	Water	No effect
	Tetra sodium pyrophosphate, 1%, 40 hours	No effect
	Trisodium Phosphate	No effect
Fungus Resistance		Visual reading of “0” per ASTM-G21
Moisture Resistance		No deterioration after 10 humidity cycles per MIL-STD-202, method 106
Low Temperature Resistance		No deleterious effect of image fade after 1 hour at -50° F. No impairment of legibility upon exposure at -67°F.
Organic Solvents	Ethyl Alcohol	No effect
	Heptane, 72 hours	No effect
	Hydraulic Fluid	No effect
	JP-4 Fuel	No effect
	Kerosene	No effect
	Methyl Ethyl Ketone	No effect
	Skydrol	No effect
	Turbine sodium pyrophosphate, 1%, 40 hours	No effect
Salt Spray Corrosion	Salt Spray, 5% at 95°F, 700 hours	No effect “Very good” resistance after 113 days seawater exposure
Stain Resistance		No black fading when plates are exposed to tincture of iodine
Thermal Shock		No deterioration after 3 cycles between -65°C and 125°C

*Bar code labels and nameplates exhibit reduced readability when they cannot be read from the same distances and/or angles as before they were degraded. In most cases the print contrast ratio has been reduced. Labels and nameplates may read, but they may require more attempts to read or may read at limited distances and/or angles.

Photo anodized bar code labels and nameplates read reliably in demanding situations. Different results may be experienced due to variances in reader type, reader distance, cleanliness of part surface or label or nameplate design. Please test a sample part for your application.