THE TECHNOLOGY:

UV STABLE
ABRASION RESISTANT
TEMPERATURE RESISTANT
FLUID RESISTANT
RECYCLABLE

ANODIZED LAYER
The glass-clear, sapphire-hard anodized layer resists chemicals, paint, abrasion and dirt.

SEALED IMAGE
The image is absorbed into the pores.

ALUMINUM LAYER
The rigid aluminum base won’t peel, crack or delaminate.

THE TECHNOLOGY:

EXCEPTIONALLY DURABLE.
WIDELY SPECIFIED.
ALWAYS READABLE.

For over 50 years, industrial and military engineers have specified Metalphoto photosensitive anodized aluminum for durable nameplates, barcode labels, service schematics and control panels installed in harsh operating environments. Metalphoto’s proprietary technology permanently seals a UV-stable image inside of anodized aluminum, offering the confidence of unparalleled durability, image resolution and barcode readability.

Specified by Nordic Air (HDT Global), a leading manufacturer of military-grade mobile HVAC systems, Metalphoto nameplates, service schematics and control panels are designed to withstand installation in harsh military and industrial operating environments. Many equipment manufacturers produce Metalphoto onsite for on-demand component availability. Metalphoto is also specified for mobile flightline air-conditioning, shipboard cooling systems and mobile power generation.

Metalphoto can be produced at your location where and when needed or purchased from worldwide network of approved suppliers. Contact Horizons Imaging Systems Group to get Metalphoto specified into your designs.

PRODUCT BENEFITS

EXCEPTIONALLY DURABLE:
+ UV-stable image is permanently sealed within the anodized aluminum.
+ Virtually impervious to chemicals, heat, abrasion, salt spray and sunlight.
+ Certified for 20 year plus outdoor applications.
+ Earned more top scores than any other IUID barcode label material tested by the U.S. Navy (NSWC, Corona Division, IUID Center; August 2011).

WIDELY SPECIFIED:
+ Meets a wide array of commercial, government and military specifications.
+ Notable certifications include: MIL-STD-130N, STANAG 2290, GGP-455B(3) Type I, MIL-DTL-15024F, MIL-P-19834B and A-A-50271 (several others listed on metalphoto.com).

PHOTOGRAPHIC RESOLUTION:
+ Photographic image affords extreme detail and contrast at any size.
+ Anti-counterfeit security printing is available.
**Performance Characteristics**

Because of its ability to perform across a range of challenging environments, Metalphoto meets an array of government, industrial and military specifications. Visit [www.metalphoto.com](http://www.metalphoto.com) for a list of specifications for which Metalphoto is qualified.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Result</th>
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<tbody>
<tr>
<td>Abrasion Resistance</td>
<td>No pronounced image loss, degradation or reduced readability after 7,000 cycles on an abrading wheel.</td>
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<tr>
<td>Acid Corrosion</td>
<td>No deterioration or image degradation after 24 hours in 3% nitric acid.</td>
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<tr>
<td>Heat Resistance</td>
<td>No legibility loss or degradation when subjected to 1,000°F.</td>
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<tr>
<td>Salt Spray Corrosion</td>
<td>No deleterious effect after a 720-hr salt spray (fog) test.</td>
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<tr>
<td>Accelerated Light and Weather Resistance</td>
<td>No pronounced deterioration of legibility after 400-hr carbon arc weatherometer exposure. (≈ 20+ year outdoor life)</td>
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<tr>
<td>Accelerated Oxygen Aging</td>
<td>No discoloration or fading after 96-hr/300 psi/ 70°C oxygen bomb aging</td>
</tr>
<tr>
<td>Stain Resistance</td>
<td>No black fading when plates are exposed to tincture of iodine.</td>
</tr>
<tr>
<td>Cleaning Resistance</td>
<td>No deleterious effects when tested with alkaline cleaners (MILC- 87937 or equivalent) for aircraft surfaces.</td>
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<tr>
<td>Low Temperature Resistance</td>
<td>No deleterious effect or image fade after 1 hour at -50°F. No impairment of legibility upon exposure at -67°F.</td>
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<tr>
<td>Organic Solvent Resistance</td>
<td>No softening, staining or noticeable fade after 24-hr exposure to:</td>
</tr>
<tr>
<td>Fungus Resistance</td>
<td>Visual reading of &quot;0&quot; per ASTM-G21.</td>
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<tr>
<td>Thermal Shock</td>
<td>No deterioration after 3 cycles between -65°C and 125°C.</td>
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</tbody>
</table>

**Product or Procure?**

Metalphoto can be easily produced at your location. Alternatively, finished parts may be purchased from a network of approved suppliers around the world. Contact Horizons Imaging Systems Group for an analysis of the production requirements of your application(s).

**Technical Specifications**

**Material:** Anodized Aluminum Sheets

**Sizes:** 10” x 12”, 12” x 20”, 20” x 24”, 20” x 40”, 24” x 40”

**Thicknesses:** .003”, .005”, .008”, .012”, .020”, .032”, .039”, .063”, .090”, .125”

**Finishes:**

- **Matte**
  - non-reflective with dull finish

- **Satin**
  - semi-gloss medium reflective material

- **#4**
  - brushed to resemble a stainless steel finish

- **Gloss**
  - highly reflective, mirror-like

**To Order**

Call [1-800-482-7758](tel:1-800-482-7758) or visit our website at [Metalphoto.com](http://Metalphoto.com)

*Horizons ISG does not warrant the performance of its materials in any environment. Metalphoto is a registered trademark of Horizons Incorporated.*