# Trusted where permanent identification is critical.





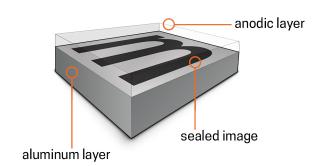


Metalphoto<sup>®</sup> is photosensitive, anodized aluminum used to make durable, high-resolution nameplates, labels, control panels, and signs.

Metalphoto's durability comes from its image – which is sealed inside of the anodized aluminum, providing resistance to corrosion, sunlight, abrasion, high temperatures and chemical exposure.

Since 1950, Metalphoto has been trusted by leading OEMs, military and government organizations for applications that require one or more of Metalphoto's unique combination of features, including:

#### **Cross Section**



# DURABLE CONSTRUCTION



Metalphoto's silver-halide based image is sealed inside of anodized aluminum, making it readable after prolonged exposure to harsh operating conditions including weather/sunlight, heat, abrasion, chemicals & salt-spray.

# VARIABLE INFORMATION CAPABILITY



Metalphoto labels and nameplates support item-unique serialize data, one-of-a-kind instructions or barcodes of any symbology that reduce data entry errors and speed asset tracking.

# PHOTOGRAPHIC RESOLUTION



Metalphoto's high image resolution makes it possible to mark small items or surfaces and provides the option of security printing features such as micro-text and watermarks.

# PROVEN PERFORMANCE



Metalphoto has proven itself again and again to major OEMs and government organizations. As a result, most major government, industrial and military organizations specify Metalphoto.

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## **Performance Characteristics:**

Condition	Result
Abrasion Resistance	No pronounced image loss, degradation or reduced readability after 7,000 cycles on an abrading wheel.
Acid Corrosion	No deterioration or image degradation after 24 hours in 3% nitric acid.
Heat Resistance	Standard Metalphoto readable up to 500°F, Image Intensified Metalphoto readable up to 800°F. Both tested for a 24-hour oven exposure. Inquire for heat resistance up to 1,000°F with Extra High Temperature (XHT) treatment.
Salt Spray Corrosion	No deleterious effect after a 720-hr salt spray (fog) test. 2,6 "Very Good" corrosion resistance after 113 days seawater exposure.
Accelerated Light and Weather Resistance	No pronounced deterioration of legibility after 400-hr carbon arc weatherometer exposure. (Estimated 20+ year outdoor life)
Accelerated Oxygen Aging	No discoloration or fading after 96-hr/300 psi/ 70°C oxygen bomb aging
Stain Resistance	No black fading when plates are exposed to tincture of iodine.
Cleaning Resistance	No deleterious effects when tested with alkaline cleaners (MILC-87937 or equivalent) for aircraft surfaces.
Low Temperature Resistance	No deleterious effect or image fade after 1 hour at -50°F. No impairment of legibility upon exposure at -67°F.
Organic Solvent Resistance	No softening, staining or noticeable fade after 24-hr exposure to: JP-4 fuel, Gasoline, Mineral Spirits, Methyl Ethyl Ketone, Turpentine, Turbine & Jet Fuel, Kerosene, Xylol, Acetone, Toluol, Heptane, Trichlorethylene, MIL-H-5606 Hydraulic Fluid and MIL-L-7808 Jet Engine Oil.
Fungus Resistance	Visual reading of "0" per ASTM-G21.
Thermal Shock	No deterioration after 3 cycles between -65°C and 125°C
Moisture Resistance	No deterioration after 10 humidity cycles per MIL-STD-202, method 106.

<sup>\*</sup>Horizons ISG does not warrant performance of its materials in any environment.

## **Specified by Government, Industrial and Military Organizations for Over 65 Years:**

- Federal Specification GGP-455B
- MIL-DTL-15024F
- MIL-STD-130
- MIL-P-19834B
- A-A-50271 Class-2 Composition C
- MIL-DTL-19834C
- MIL-P-6906B
- MIL-A-8625F
- SAE-AMS-QQ-A-250/1
- UL / REACH / RoHS Certified

## **Specified By:**



Honeywell



















For more information visit **mtlphoto.com**.



## **Product Characteristics:**

- Material: anodized aluminum (1100 alloy)
- 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.

Metalphoto\* is a registered trademark of Horizons Inc.



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