

# DURABLACK®

LASER MARKABLE ALUMINUM



## Durable Labels, Nameplates and Signs with Any CO<sub>2</sub> Laser.

DuraBlack™ is CO<sub>2</sub> laser markable aluminum for durable, on-demand marking for harsh operating environments. In side-by-side tests, DuraBlack outperforms black anodized aluminum and laser markable acrylic tape in select applications. DuraBlack is resistant to sunlight (UV-radiation), abrasion, high-temperatures, salt-spray and chemical exposure. Because of its ability to perform across a range of challenging environments, DuraBlack meets several government, industrial and military specifications including MIL-STD 130N, A-A-50271 (≈MIL-P-514D) and MIL-STD-15024F, Type L.

Composed of a multi-level coating available upon 0.005" or 0.020" thick aluminum, DuraBlack can be attached to either curved or flat surfaces with adhesive, rivets or screws. It is imaged with any CO<sub>2</sub> marking laser to produce a durable, high-resolution barcode or human-readable image.

### Product Benefits:

#### Durable Performance

- Meets Item Unique Identification (UID) military bar code performance standards for many applications.
- Resistant to weather/UV, abrasion, high-temperatures, salt-spray and fluid exposure.
- Produces durable, high-resolution barcode or human-readable images.
- Integrated abrasion resistant coating reduces the need to apply a protective topcoat.
- Matte finish reduces reflection for combat situations.

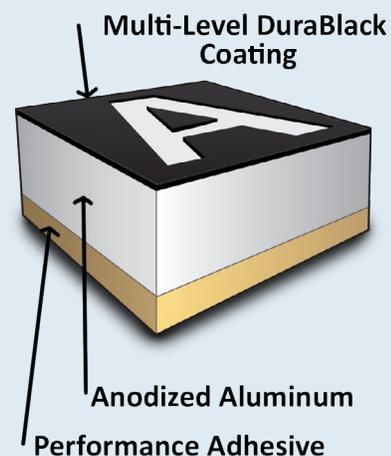
#### Easy Processing

- Easy to mark and produce "A" verification grade labels with any CO<sub>2</sub> laser.
- Aluminum backing eliminates potential damage from over-marking.

#### Flexible Attachment Options

- Attachment options include 3M 350 high-performance adhesive, rivets or screws.
- Available in 0.005" or 0.020" thicknesses for adherence to either curved or flat surfaces.
- Available in pre-cut blanks from several independent converters so all you need to do is mark and apply.

## DuraBlack® Cross Section View



HorizonsIncorporated  
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# DuraBlack® Performance

The combination of durability, flexible attachment options and ease of processing make DuraBlack the preferred material for on-demand marking for harsh operating environments.

	Application/Environment	DuraBlack Performance
<b>Durability Characteristics</b>	<b>Outdoor Exposure</b>	5,000 hrs of accelerated UV/weather with Q-Sun XE-3/HS (Estimated 8-10 years)
	<b>Abrasive Environments</b>	4,000 cycles on a Taber Abraser, CS17 with 1Kg wheel load
	<b>High-Temperature Environments</b>	700°F for one hour
	<b>Marine Environments</b>	30 days of salt fog exposure as per ASTM B117
	<b>Corrosive/Chemical Environments</b>	96 hrs in MIL-STD-810G chemicals and several others
<b>Attachment Options</b>	<b>Flexible Attachment Options</b>	3M high-performance adhesive or rivets – your choice
	<b>Flexible 0.005" Thickness</b>	Adheres to curved surfaces
	<b>Available in Pre-cut Blanks</b>	Contact an independent converter to outsource your fabrication
<b>Easy Processing</b>	<b>Forgivable Laser Settings</b>	Easy to process and produce "A" verification grade labels
	<b>Anodized Aluminum Backing</b>	Reduces damage from over-marking
	<b>Matte Finish</b>	Reduces reflection for combat situations

\*Tests were modeled after those established by the U.S. Department of Defense under MIL-STD-810G and MIL-STD-130. Chemicals tested include all MIL-STD-810G fluids and several others (see the Technical Brief for a full list). Outcomes were measured with a Siemens/Microscan verifier on 15mil 2D barcodes. A drop of more than two letter grades indicates failure – as per AIM DPM-1-2006 and MIL-STD-130N. Weather tests are on-going. For more technical information, please refer to [www.HorizonsISG.com/DuraBlack](http://www.HorizonsISG.com/DuraBlack).

Horizons ISG does not warrant performance of its materials in any environment.

## Specifications

**Sizes:** 10" x 12", 12" x 20", 20" x 24"

**Thicknesses:** .005", .020"

**Attachment Options:** 3M 350 Series High-Performance Adhesive (9675 or 9485) or Mechanical (rivets).

## How To Order

Call 1-800-482-7758 or visit [www.horizonsisg.com/DuraBlack](http://www.horizonsisg.com/DuraBlack) for more information. DuraBlack is easily marked with a CO<sub>2</sub> laser at your location – giving you complete control over where and when asset tags are created. If you prefer to purchase pre-printed labels or pre-fabricated blanks, please contact us for a list of independent converters who are expert, equipped and ready for your call. If you do not have a laser system, we can recommend the models that will best meet your needs.

## Horizons ISG - Application Focused Engineering of Durable Substrates

Horizons Imaging Systems Group (ISG) is a manufacturer of several printable aluminum technologies. Our materials help keep track of mission critical assets throughout their life cycle, no matter what part or where it is in use.

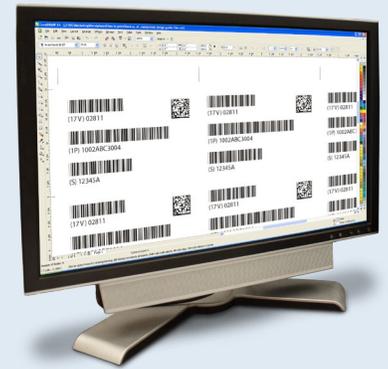


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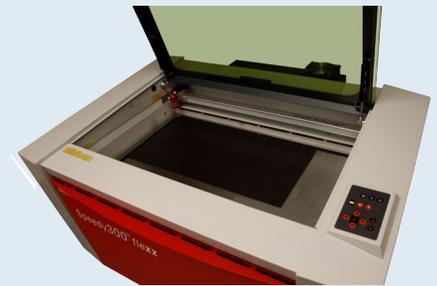
\*If color consistency is important, we recommend purchasing material from the same lot.

DuraBlack is a trademark of Horizons Inc.

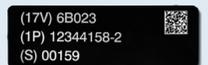
## Processing DuraBlack®



1. Design your piece using appropriate software



2. Load and mark material



3. Cut and mount your DuraBlack part

