

DURABLACK®

LASER MARKABLE ALUMINUM



Durable Labels, Nameplates and Signs with Any CO₂ Laser.

DuraBlack™ is CO₂ 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 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 CO₂ 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 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.

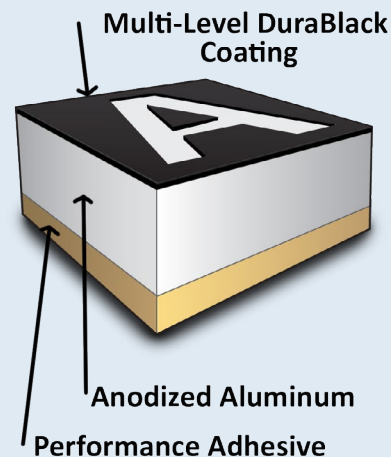
Easy Processing

- Easy to mark and produce "A" verification grade labels with any CO₂ 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



Horizons Incorporated
ISG Imaging Systems Group

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

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

Specifications

1100 Series Alloy H18 Temper

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 for more information. DuraBlack is easily marked with a CO₂ 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.

For material processing guidelines, visit: www.dura.black.

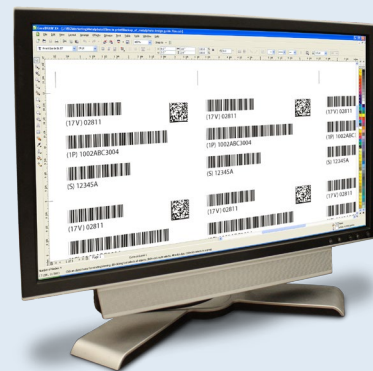


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*If color consistency is important, we recommend purchasing material from the same lot.

DuraBlack is a trademark of Horizons Inc.

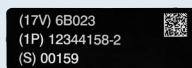
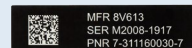
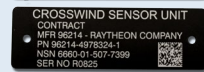
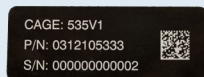
Processing DuraBlack®



1. Design your piece using appropriate software



2. Load and mark material



3. Cut and mount your DuraBlack part

