



THERMOFLAN

thermoFlan  
product **Sign**

# The only laser markable metal certified for outdoor use

**DURABLACK**<sup>®</sup>  
LASER MARKABLE ALUMINUM 

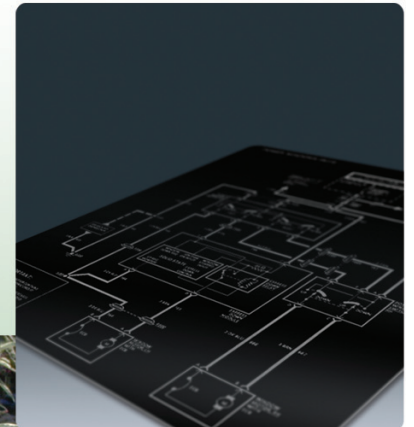
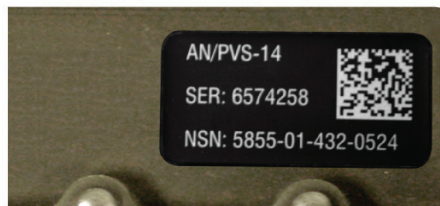
DuraBlack™ is CO2 laser markable aluminum for durable, on-demand marking for harsh operating environments

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.

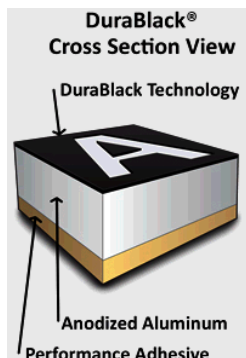
## Applications :

variable text labels and  
plates,  
UID,  
Bar codes,  
manufacturer plates,  
logistics,  
arboretums  
...



## Make signage with CO2 laser on Durablack

*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.*



	DuraBlack*	Black Anodized Aluminum	Laser Markable Acrylic Tape	Metalphoto*
Weather/UV Resistance (2,500 hours)	PASS	FAIL @ 1,500 hrs	PASS	PASS
Abrasion Resistance (4,000 cycles, 1 Kg)	PASS	FAIL @ <500 cycles	FAIL @ <500 cycles	PASS
Temperature Resistance (700°F for 1 hour)	PASS	FAIL @ 400°F	FAIL @ 550°F	PASS
Salt Spray (30 day exposure)	PASS	PASS	PASS	PASS
Fluid Resistance (96 hour submersion)	PASS	FAIL @ Ammonia & Alkaline Cleaner	FAIL @ Gasoline (48 hrs), MEK & Ethyl Acetate	PASS

## Processing DuraBlack® in a few steps



Design your piece using appropriate software



Load and mark material



Cut and mount your DuraBlack part

## ADVANTAGES

### ■ 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 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 so all you need to do is mark and apply.

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S.A.S au capital de 300000 euros  
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