



Strikegrid™ Continuous Expanded Aluminum Foil (CEAF)

**October 2005
Metric and English Units**

Description

Continuous Expanded Aluminum Foil is the industry's highest-performing lightning strike dissipation material. Phosphoric acid anodized and coated with a proprietary coating, it outperforms all other ductile materials.

Decades of operational experience have shown that bond durability between lightning strike materials and face sheets or surfacing materials is critical to long part life, and, for this, Strikegrid™ CEAF has no equal.



Independent analysis confirms the environmental performance durability of Strikegrid™ CEAF assuring a lower total life cost than with other lightning strike materials.

Strikegrid™ CEAF has unsurpassed corrosion resistance, retaining virtually all of its physical properties after being subjected to a salt spray test.

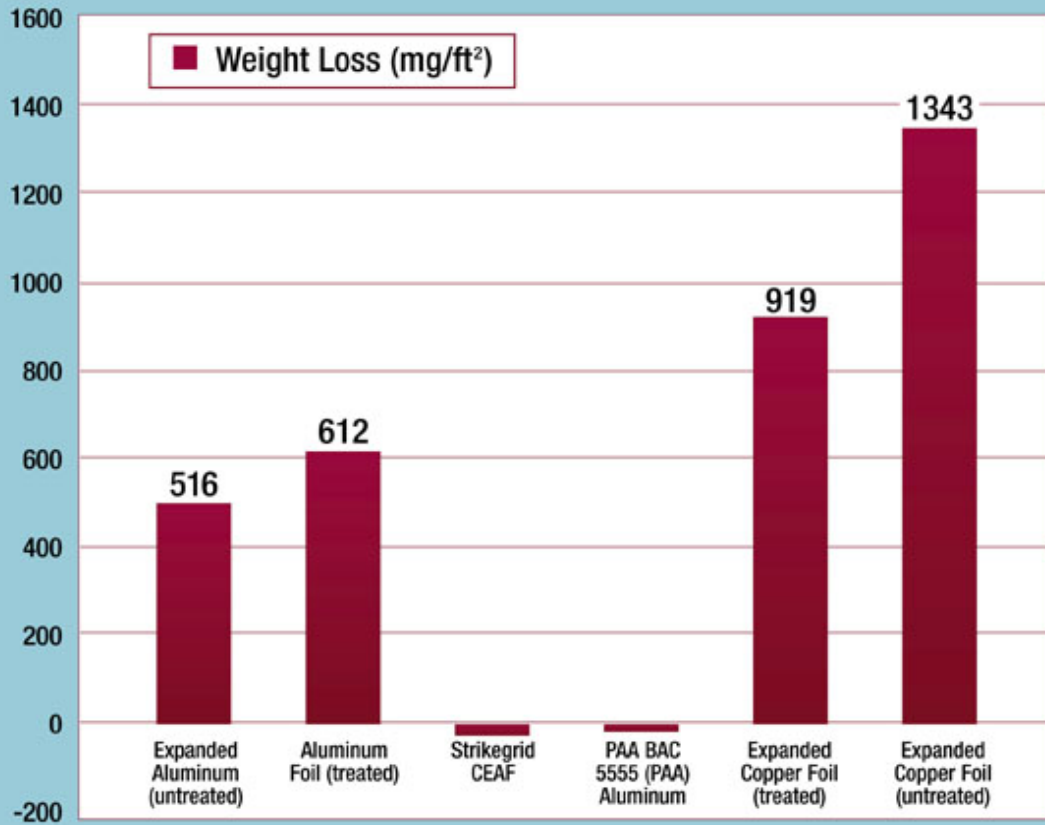
Applications

- Aircraft control surfaces
- Exposed composite surfaces
- Composite fuselage and aircraft engine nacelles
- Marine and naval panels
- High-performance composite structures
- Replacement for all other lightning strike materials
- Wind turbine blades

Features

- Unsurpassed corrosion resistance and bond durability
- Available in continuous rolls
- Elevated temperature performance to 350° F/177° C
- Fire and fungus resistant
- Eliminates need for priming
- Resistant to hostile environments
- Able to withstand lightning strikes of up to 200k Amps
- Prevents surface microcracking
- Very adaptable with ply cutting equipment when combined with surfacing films

Typical Weight Loss – PAA Treated Aluminum Performance Versus Other Materials Tested in Accordance with ASTM B-117



Qualifications

- Meets BMS8-336, Rev. B proposed requirements
- Other qualifications pending

Strikegrid™ CEAF Product Information

Product Designation	SG-2	SG-4
Grade	013	016
Aluminum Alloy	1145	1145
Width (inches)	24"	24" to 36"
Width (mm)	610	610 to 915
Weight (psf)	0.013	0.016
Weight (gsm)	63	78
Overall Thickness (inches)	0.002	0.004
Overall Thickness (mm)	0.050	0.100

Roll Width	Length (linear ft)	Area (square foot)	Length (m)	Area (square meter)
24" (610mm)	250 to 1250	500 to 2500	76.2 to 381	46.5 to 232
36" (915mm)	167 to 833	500 to 2500	51 to 254	46.5 to 232

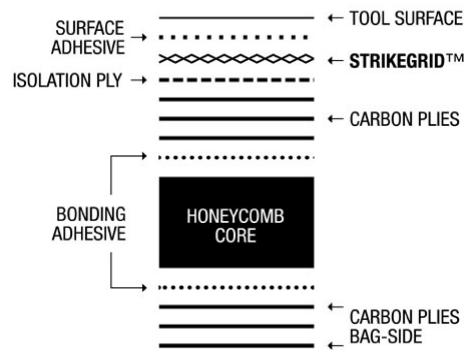
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Availability

Strikegrid™ CEAF is available in continuous rolls.

Test Panel Configuration for Lightning Strike Tests



Lightning Strike Test Results

Lightning Protection:	SG-4	016 Copper	016 Phos Bronze	None	SG-4	None
Isolation Layer:	S-2 Glass	None	None	None	S-2 Glass	None
Honeycomb:	KOREX	KOREX	KOREX	KOREX	Fiberglass	Fiberglass
Test Panel Photo						
TTU (NDI) Inspection						
NDI Damage Assessment	2" dia. mesh only	11" dia. Damage thru 2 ply layers	9" dia. thru hole	12" dia. thru hole	3" dia. mesh only	10" thru hole

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Alcore
Lakeside Business Park
1502 Quarry Drive
Edgewood, MD 21040 USA
Tel: +1 (410) 676-7100
Fax: +1 (410) 676-7200
Email: sales@alcore.com
www.alcore.com

Alcore Brigantine
Route de l'Aviation
64600 Anglet France
Tel: +33 (0)5 59 41 25 25
Fax: +33 (0)5 59 41 25 00
Email: sales@alcorebrigantine.fr
www.mcgillcorp.com/alcore_brigantine

www.mcgillcorp.com

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