

3027-532C Nickel/Copper

MRI "A" Fabric



Ni/Cu MRI "A" FABRIC

Laird's MRI "A" Fabric is an EMI/RFI shielding product that is manufactured using a patented, proprietary technology. The base layer is a metallized Non-woven fabric plated with highly conductive copper and nickel for corrosion resistance. This is bonded to a thin layer of solid aluminum. The resulting material is a lightweight architectural material with superior shielding effectiveness and outstanding resilience.

Specifically, this product provides superior shielding effectiveness well in excess of industry standards throughout the MRI frequency range. The product can be applied using several standard construction techniques depending upon the installation requirements or specifications. Because of the relative ease of installation with this product, construction time and therefore, the time to get the MRI facility on-line is greatly reduced.

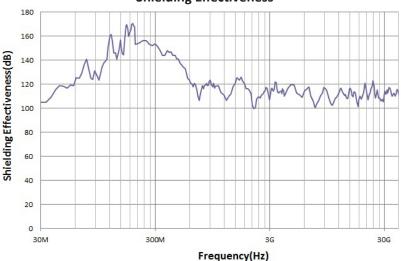
FEATURES ✓ RoHS

- · RoHS compliant
- Halogen-free per IEC-61249-2-21 standard
- Low surface resistivity of $\leq 0.07 \Omega/\Box$ provides excellent conductivity
- Shielding effectiveness of >100 dB across a wide spectrum of frequencies

MARKETS

- · Architectural Shielding
- Medical Equipment

Ni/Cu MRI "A" Fabric (3027-532C) Shielding Effectiveness



USA: +1.866.928.8181 Europe: +49.0.8031.2460.0 Asia: +86.755.2714.1166



3027-532C Nickel/Copper MRI "A" Fabric

PHYSICAL PROPERTIES

Item	Unit	Value	Advantage
Substrate		Composite Polyester Non-woven Fabric and Foil	Flexible and Light Weight
Metal		Fabric: Nickel/Copper Foil: Aluminum	Corrosion Resistant, Highly Conductive
Thickness, (ASTM D1777)	inches	0.016 +/- 0.002	Provides Excellent
	microns	406 +/- 51	Shielding
Total Weight	oz/yd²	7.5 +/- 1.3	Execellent Electrical
	g/m²	254 +/- 44	Properties
Max Short Duration Temperature	°F	194	Allows Thermal
	°C	90	Processing
Standard Roll Width	inches	51	Fewer Seams
	cm	130	Requisred

ELECTRICAL PROPERTIES

ltem	Unit	Value
Surface Resistivity (ASTM F390)	ohms/square	≤ 0.07
Shielding Effectiveness	dB	(average)
At 30 MHz – 300 MHz		143 dB
At 300 MHz – 3 GHz		121 dB
At 3 GHz – 30 GHz		112 dB

MECHANICAL PROPERTIES

Item	Unit	Value ^{fi}
Tensile Strength, CMD/MD° (ASTM D5035)	lb/in N/100mm	20/60 350/1050
Elongation, MD (ASTM D5035)		8%

[♦] Cross Machine Direction/Machine Direction

Values presented have been determined by standard test methods and are typical values not to be used for specification purposes.