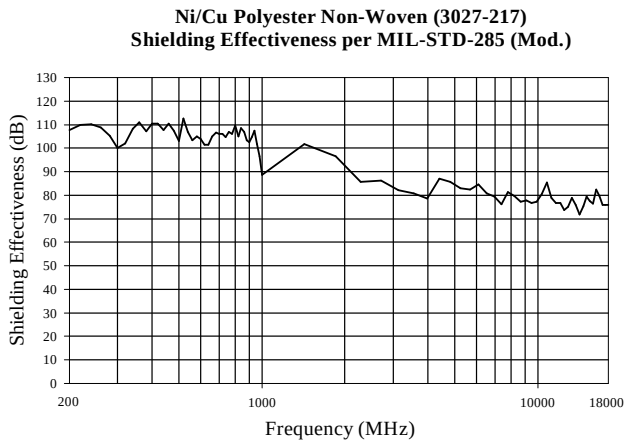
Nickel/Copper Polyester Nonwoven

Product No.: 3027-217

Flectron® Nickel/Copper Polyester Nonwoven is a unique fabric, manufactured using a patented, proprietary technology. The base layer is highly conductive copper, with an outer layer of nickel for corrosion resistance. This technology combines the properties of these metals with the lightweight, permeability and flexibility of a nonwoven. Nickel/Copper Polyester Nonwoven offers excellent surface conductivity, shielding effectiveness, and corrosion resistance for a variety of applications.



Physical Properties

Property	Units	Value	Advantage
Substrate		Polyester Nonwoven	Flexible, Breathable
Metal		Ni/Cu	Corrosion Resistant Highly Conductive
Basis Weight	oz./yd.^{2} g/m.^{2}	1.8 – 3.0 61 – 102	Light Weight
Thickness, (nominal) (ASTM D1777)	Inches microns	0.016 432	Provides excellent shielding
Metal Weight	oz./yd.^{2} g/m.^{2}	0.58 – 1.40 20 -47	Excellent Electrical Properties
Max Short Duration Temperature		210°C	Allows Thermal Processing

Electrical Properties

Property	Units	Value[fi]
Surface Resistively (ASTM F390)	ohms/square	≤ 0.07
Far-field Shielding	Effectiveness	(typical)
At 100 MHz	dB	105
At 1 GHz	dB	90

Mechanical Properties

Property	Units	Value[fi]
Tensile Strength CMD/MD◊ (ASTM D5035)	lb./in N/100mm	7.5/18.5 128/324
Elongation, MD (ASTM D5035)		9%

[fi] Typical values for greige fabric.
◊ Cross Machine Direction/Machine Direction

FLECTRON® Nickel/Copper Polyester Nonwoven can be used in many different configurations to protect against EMI/RFI and ESD for a variety of applications and environments. Typical applications include: architectural shielding, gaskets, tapes, shielding materials, and ribbon.