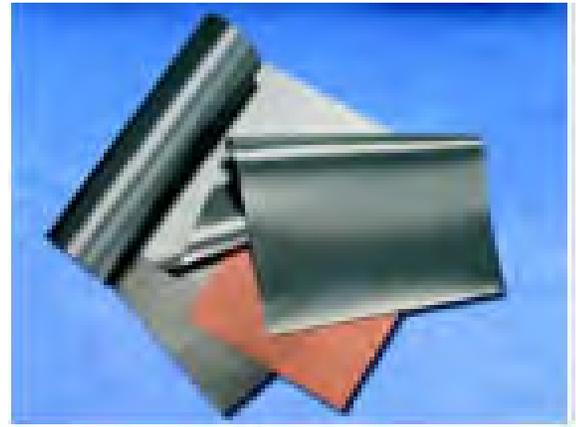


LBA Technology's **SM-10** metallized fabrics combine highly conductive metals with the flexibility and light weight of fabric to meet a diverse range of EMI/RFI shielding requirements. SM-10 is available in either copper or nickel/copper fabrics that provide outstanding shielding effectiveness and surface conductivity. SM-10 accommodates complex contours and shapes, making it ideal for diverse shielding applications.



### SM-10 As Part of A Properly Engineered Solution

Selecting **SM-10** is only one part of the total EMI/RFI shielding solution. Many factors can affect shielding effectiveness. Items such as windows, doors, cable entrances, ductwork and many other factors can have a significant effect on the final signal attenuation of your shielding project. LBA is able to engineer a *TOTAL* solution for your EMI/RFI shielding requirements.

### Non-Woven Design Provides Superior EMI/RFI Protection

**SM-10** non-woven fabrics are constructed of random formations of individual fibers with no specific mesh opening size, blended together in multiple layers. This design eliminates any open slots, preventing EMI/RFI leakage. It also ensures a tight EMI/RFI seal at seams, connections, and terminations.

SM-10 Metallized Fabrics Provide:

- EMI/RFI shielding up to 110 dB
- Exceptional resilience and conformability to a variety of surfaces
- Superior RF leak prevention



### SM-10 metallized fabric may be designed into a wide variety of EMI/RFI shielding applications, including:

- Telecommunications electronics housings
- MRI Rooms
- Industrial test/R&D labs
- Data processing centers
- Military test sites
- Secure conference rooms
- Broadcast facilities
- Communications security



## LBA Technology, Inc.

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# SM-10

**SM-10** is a unique, non-woven copper fabric manufactured using a patented technology. This technology combines a highly conductive metal with the lightweight, flexibility, and breathability of a non-woven fabric.

**SM-10** offers excellent surface conductivity, and shielding effectiveness, for the widest variety of applications.

In architectural applications, SM-10 is applied to walls, ceilings, floors, and other surfaces with a high quality vinyl wall covering adhesive.

## Available Formats

**SM-10a** - SM-10a is a copper nonwoven fabric that is best used in climate-controlled environments.

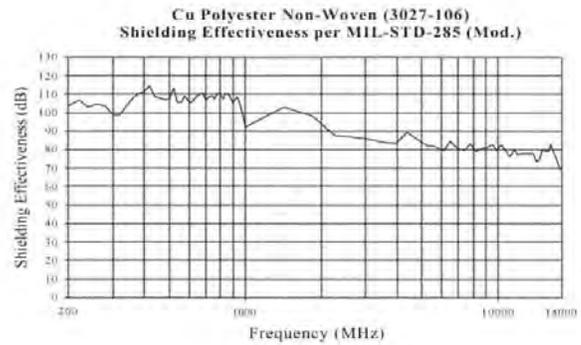
**SM-10b** - SM-10b is a nickel/copper nonwoven fabric that can be used for all applications except direct exposure to weather.

**SM-10c** - SM-10c is a nickel/copper woven fabric for specialized applications in connection with SM-10a and SM-10b materials.

## Specifications

### Physical Properties

Property	Units	Value	Advantage
Substrate		Polyester Nonwoven	Flexible, Breathable
Metal		Cu	Highly Conductive
Basis Weight	oz./yd. <sup>2</sup> g/m. <sup>2</sup>	1.5-2.3 51-78	Lightweight
Thickness, (nominal) (ASTM D1777)	inches microns	0.016 487	Provides excellent shielding
Metal Weight	oz./yd. <sup>2</sup>	0.28-0.70	Excellent Electrical Properties
Max Short Duration Temperature		210°C	Allows Thermal Processing



### Electrical Properties

Property	Units	Value
Surface Resistivity (ASTM F390)	ohms/square	≤0.1
Conductivity	Ω/cm <sup>2</sup>	≤0.070
Far-field Shielding	Effectiveness	(typical)
At 100 MHz	dB	80
At 1 GHz	dB	100
At 18 GHz	dB	75

### Mechanical Properties

Property	Units	Value <sup>†</sup>
Tensile Strength		
CMD/MD <sup>‡</sup>	lb./in	7.5/18.5
(ASTM D5035)	N/100mm.	131/324
Abrasion (ASTM)	cycles	≤1,000,000
Elongation, MD (ASTM D5035)		9%

<sup>†</sup> Typical values for greige fabric.

<sup>‡</sup> Cross Machine Direction/Machine Direction



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