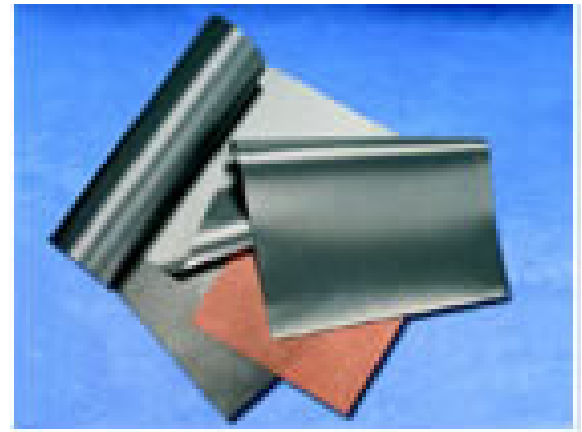


LBA Technology's **SM-10** metallized fabrics combine highly conductive metals with the flexibility and light weight of fabric to meet a diverse range of EMI/RFI shielding requirements. SM-10 is available in either copper or nickel/copper fabrics that provide outstanding shielding effectiveness and surface 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 60 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



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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, shielding effectiveness, and reflectivity 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.

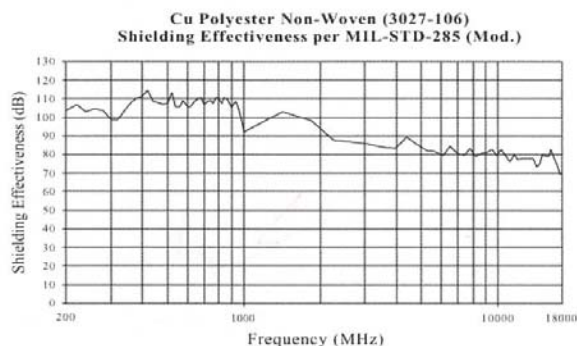
SM-10b - SM-10b is a nickel/copper nonwoven fabric that can be used for all applications except direct exposure to weather.

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. ² g/m. ² | 1.5-2.3 51-78 | Lightweight |
| Thickness, (nominal) (ASTM D1777) | inches microns | 0.016 487 | Provides excellent shielding |
| Metal Weight | oz./yd. ² | 0.28-0.70 | Excellent Electrical Properties |
| Max Short Duration Temperature | | 210°C | Allows Thermal Processing |



Electrical Properties

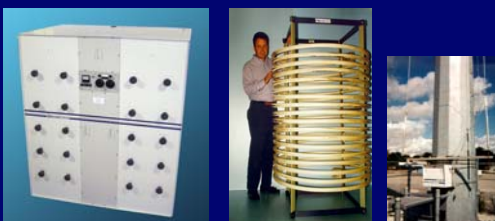
| Property | Units | Value |
|------------------------------------|---------------------|-----------------|
| Surface Resistivity (ASTM F390) | ohms/square | ≤0.1 |
| Conductivity | Ω/cm ² | ≤0.070 |
| Far-field Shielding At 100 MHz | Effectiveness dB | (typical) 80 |
| At 1 GHz | dB | 100 |

Mechanical Properties

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

[†] Typical values for greige fabric.

[‡] Cross Machine Direction/Machine Direction



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