

## Description

Limitless Shieldings metalized fabric over foam materials combine the use of highly flexible nickel over copper-plated polyester fabric over an open celled polyurethane foam core. This provides an economical, non-corrosive, highly effective, conductive pad. The bottom surface is supplied with a pressure sensitive adhesive (PSA) strip with release liner if required.

These materials close with very little pressure down to as little as 0.5mm. They have little or no compression set, even when folded.

These materials offer an EMI protection and a level of dust control only.

## Main Features

- ⚡ Good X, Y, Z conductivity
- ⚡ RoHS compliant
- ⚡ Easily cut and installed
- ⚡ Long-term stable conductivity
- ⚡ External compression limits/control not normally required
- ⚡ Extremely good wear characteristics
- ⚡ Available with adhesive backing enabling easy fitting
- ⚡ Available in a very wide range of profiles/cross-section sizes
- ⚡ Available in UL94-V0

## Applications

- ⚡ Computer and Telecommunications enclosures
- ⚡ Applications which require ESD control/grounding only
- ⚡ Connector gaskets, door seals, access panels
- ⚡ Large or small seals where cost is being considered
- ⚡ Applications which require very low closure force
- ⚡ Conductive pads or cushions

## Availability

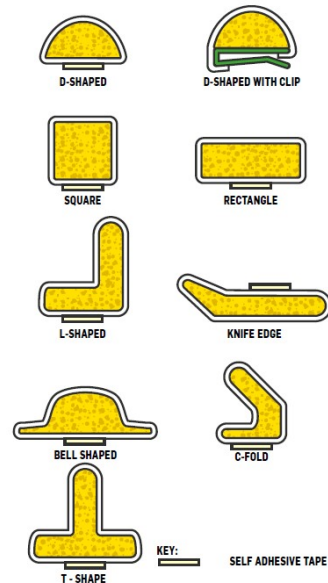
Our Fabric over Foam materials are available in strip form or as ready to fit preformed or jointed gaskets.

Standard lengths are 1m long for easy shipping, however they can be produced up to 2.1m long.

The standard materials have a self-adhesive backing and can be quickly & easily fixed in position. Corner joints can be mitred or butt-jointed depending on the cross-section with no need to bond seal the cut ends.

All our conductive fabric is 'Rip-Stop', however other versions are available for aesthetics.

A Fire retardant UL rated version is available on special request



## Tolerances

- ⚡ Linear up to 15mm ± 0.8mm
- ⚡ Linear up to 50mm ± 1.5mm
- ⚡ Linear up to 100mm ± 2.0mm
- ⚡ Hole Centres ± 0.4mm
- ⚡ Thickness ± 0.3mm

## Technical Data

Colour	Grey
Flame Retardant	UL94-V0
Resistance / cm <sup>2</sup> (5N compressive force)	<0.08Ω
PSA peel strength 180° / 25mm test width / 304 S/Steel	>8N
Compression Set	30%
Attenuation – 100MHz to 10GHz (MIL-STD 285)	70 – 110dB (typically)
Service temperature range	-25°C to +100°C

## Shielding Effectiveness

Shielding performance (attenuation) to MIL-STD 285 -	
- 100MHz	>100 dB
- 500MHz	>100 dB
- 1GHz	>80 dB

## Design Information

These materials are easily cut and assembled in place. The joints are not usually required to be bonded.

Very low closure force is required, so fixings can be fairly far apart compared to other shielding materials.

These materials offer little no liquid protection. Only EMI and dust protection.

The PSA used is very high bond. Extra fixings are very rarely required.

## Handling

These materials are rugged and difficult to damage.

The plating contains nickel, so gloves should be worn if an intolerance is of concern.

Try not to handle the PSA too much, it is easily contaminated.