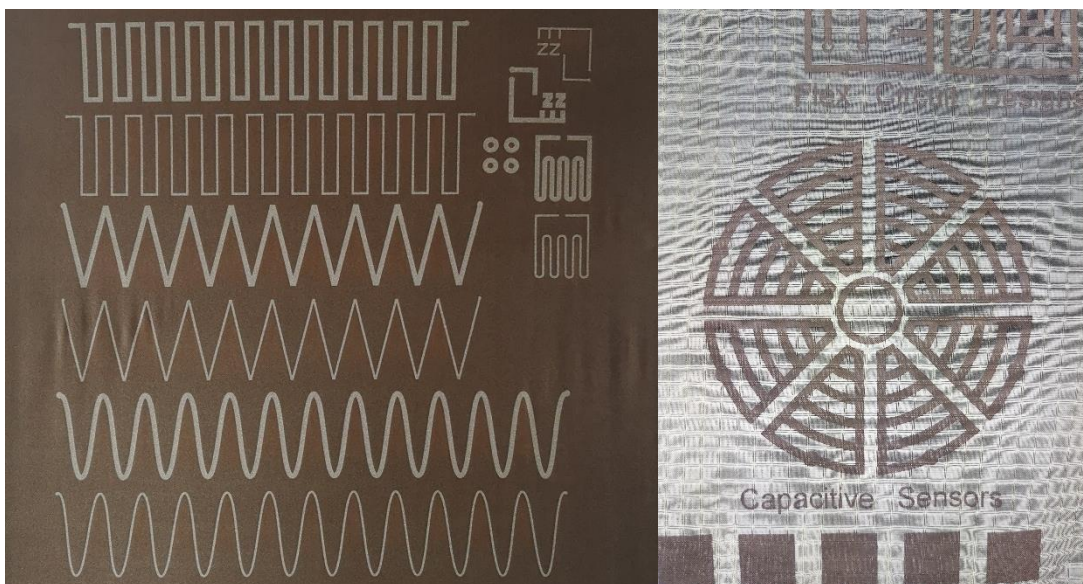


Shieldex® Textile Conducting Paths



Metallized Shieldex® textiles are very flexible, highly electrically and thermally conductive, robust, extremely lightweight, and washable. These properties make Shieldex® products ideal for technical applications where selected textile structures get metallized.

Possible Structures

- Antenna systems
- Capacitive sensors
- Heating systems
- Bus line systems

Properties

- The desired design is completely plated
- Customized specifications are possible
- Stretchable in both directions
- Non-elastic base material also possible
- Design guarantees a full functionality from both sides
- Every geometry is possible
- Up to 1.30 m wide, depending on base material
- Maximum template length: 82 cm
- Minimum trace thickness: 2 mm
- MOQ: 10 x A3 samples
- Requires a vector file (at least 2.54 mm)

Features

- Low electrical resistance
 - High durability
 - Washable
 - Stretchable
 - Fine pitch
 - Adhesive and coating options
 - VAS: sensor, die cutting, lamination, wire and LED connection
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Benefits	<ul style="list-style-type: none"> • High performance • Long term reliability • Antimicrobial • Shielding • Signal / wire pattern • Flexible / Conformable circuit • Thin and lightweight
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Specifications	Typical properties	Features	Test method
	Thickness	0.55 ± 15 %	
	Service temperature	-30 to 90 °C	
	High temperature <small>short term</small>	150 °C/20 min	
	Trace Resistance		
	Original	< 4 Ω/mm width	
	20 x 20 % stretch cycle	No change	4 points <small>trial/10 mm length</small>
	1 x 50 % stretch cycle	No change	
	Trace width	> 2 mm	
	Abrasion	> 38.000 cycles	ISO 1297-1
	Metal Adhesion	> 5	AATCC 8-2007
	Folding	> 500.000 cycles	ISO 32100:2011
	Washing	> 30 cycles	DIN 6330:2012

Markets	Wearable	<ul style="list-style-type: none"> • Low amperage flex circuit • Smart Clothing sensor
	Handset	<ul style="list-style-type: none"> • Flex circuit
	Consumer	<ul style="list-style-type: none"> • LED
	IOT	
	Automotive	<ul style="list-style-type: none"> • Sensors • LED
	Military	<ul style="list-style-type: none"> • Shielding

Aerospace

- Camouflage
- Lightweight circuit

Medical

- Sensors
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How to proceed

1. Get in touch with Statex
 2. Send the custom design to Statex as eps file with at least 150 dpi
 3. Select Shieldex® base material in personal customer service. After consultation custom polyamide base material is possible as well.
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Did we spark your interest ?

More information can be found on our detailed data sheets.
Please do not hesitate to contact us at any time.