FABRIC THAT SHIELDS LIKE METAL.

EMI SHIELDING AT 0.7 OZ PER SQUARE YARD.

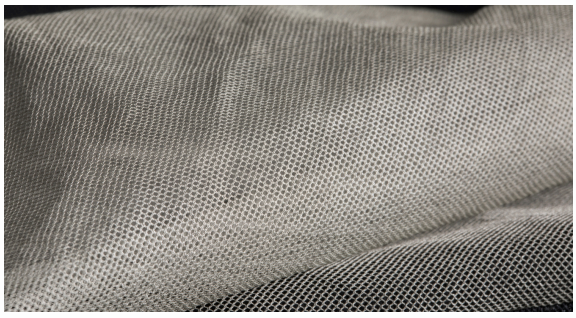
When EMI shielding has to be lighter, more flexible, more conformable, or better suited to harsh environments, rigid metal is not always the answer. STM conductive fabrics deliver shielding performance in materials that can sew, laminate, stretch, cut, and conform.

Our EnCap™ process bonds silver to every fiber, so the fabric keeps its flexibility, stretchability, drapability, and breathability. Metal conductivity in a material that sews, laminates, cuts, and conforms. Designed and manufactured in Bloomfield, CT for aerospace, defense, medical, security, and telecom programs since 1955.

SHIELDING TO 70 dB @ 1 GHz · RESISTANCE AS LOW AS 0.06 Ω/SQ · WIDTHS FROM ½" TO 100"

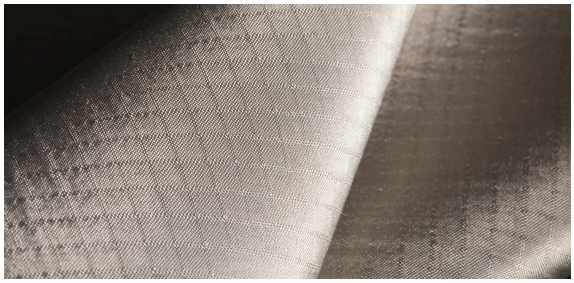
START WITH WHAT THE APPLICATION NEEDS

Three product options. The right one depends on what your application needs most.



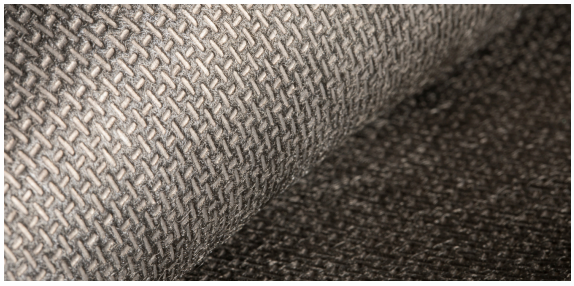
Knits: Lightweight and Breathable

- Tricot knits: 0.7-1.5 oz/yd²; continuous loop and spandex options up to 5.2 oz.
- Breathable with stretch and recovery; silver options suit skin-contact wearables.
- Ideal for lightweight, flexible applications such as wearable sensors, composite integration, and outer mold line designs.



Wovens: Strong and Tight

- Silver or nickel/silver rip stop and taffeta: 1.4-2.4 oz/yd².
- Tight construction, high tensile strength, and -65 dB shielding at 1 GHz.
- Ideal for EMI gaskets, liners, and enclosures requiring durability and dimensional control.



Non-wovens: Stable and Highest Shielding Numbers

- Thermally bonded randomized fibers: 2.0-5.0 oz/yd².
- Excellent dimensional stability with shielding down to -90 dB at 1 GHz.
- Ideal when maximum shielding performance is required, including architectural and SCIF shielding, bags, and pouches.

Built Around Your Application

STM can laminate, coat, sew, slit, bond and precision-cut conductive fabrics to your drawing. Materials can be supplied as bulk fabric, embedded into another component, or delivered as finished parts and assemblies.

Custom constructions, metal systems and finishing options are available.

METALIZING SINCE 1955 | AS9100D + ISO 9001:2015 certified| | ITAR compliant

CONDUCTIVE KNITS

Part	Construction	Weight (oz/yd²)	Resistance (Ω/sq)	Shielding
K087S	Nylon knit scrim, silver	0.7	1.0	-42 dB @ 1 GHz
K158S	Nylon knit scrim, silver	1.5	0.3	-55 dB @ 1 GHz
K252S	Spandex, silver	4.7	<1.5	-40 dB @ 1 GHz

Jersey knits and continuous loop also available, 3.7 to 5.2 oz/yd².

CONDUCTIVE WOVENS

Part	Construction	Weight (oz/yd²)	Resistance (Ω/sq)	Shielding
W077S	Nylon rip stop, silver	0.7	1.4	-65 dB @ 1 GHz
W077NS	Nylon rip stop, nickel/silver	1.5	1.7	-65 dB @ 1 GHz
W823NS	Nylon taffeta, nickel/silver	4.7	2.4	-65 dB @ 1 GHz

CONDUCTIVE NON-WOVENS

Part	Construction	Weight (oz/yd²)	Resistance (Ω/sq)	Shielding
NPB20NS	Point bonded, nickel/silver	3.0	0.1	-70 dB @ 1 GHz

Made for you

Most of what we ship is more than bulk fabric: polymer coatings, lamination, dimensional cutting, slitting, sewn assemblies, and more. Bring us your requirement, and an engineer will work with you from concept through production.

Scan and talk to an engineer