

TECH TIPS – Conductive foils and fabrics

Application Challenge

In many applications there arises a need to add some conductive material. Different requirements may include EMI shielding, grounding, ESD discharge, or adding conductive paths to existing circuitry.

Have You Thought of This?

3M [conductive fabrics and foils](#) offer the flexibility to add conductive materials any time in the design cycle from the early design phase to the product introduction phase. These materials are easily die cut and die cut pieces can be produced in tape and reel form for automatic insertion applications.

3M [conductive foils and fabrics](#) are currently being used in millions of products around the world including laptops, cell phones, routers, mobile radios, cameras, PDA's and many other electronic devices. They are also used for ground plane connections in conductive flooring and for seam sealing in conductive room applications. 3M conductive foils are also commonly used for flat wiring applications.

Below are some practical examples utilizing 3M conductive fabrics and foils.

- Conductive fabrics are often used to shield cables and flex circuits. Use half lap wrapping for effective shielding
- Fabrics and foils can be used to create and ESD bleed path to ground.
- Double adhesive sided foils and fabrics can be used as conductive gasket material.
- Use foil and fabric tapes for PCB grounding issues.
- Use foil tapes for LCD shielding applications
- Use for sealing seams in conductive shielded rooms
- Use foil tape for flat wiring applications