

Technical Advisory

Coaxial Cables: Shielding

Cable shielding becomes necessary when radio frequency interference (RFI) and electromagnetic interference (EMI) interfere with the transmitted electronic signals or when these signals radiate from the cable and are above the emission limits of the FCC.

In general, shields require electrical mass (conductivity), and coverage to minimize these undesirable effects and can be optimized to do so.

Braided shields, with their low DC resistance, are effective against EMI where the source of interference exhibits low impedance characteristics, such as motor controls, circuits and switches that operate inductive loads.

Foil shields with their 100% coverage are typically chosen when the RFI is generated from high frequency sources such as television signals, radio transmitters, fluorescent lights or computer equipment.

Therefore, foil and braid combination shields give the combined effect of these popular shield types and provide the most cost effective general purpose shield utilized for today's electronic needs.

If questions arise concerning a particular application, call the Technical Support Group of Mohawk/CDT at (800) 422-9961.