



EMI-SHIELD CU50 Copper EMI Foil Shielding With & Without PSA



EMI-SHIELD CU50 is a 0.0050" (5 mil) (0.127mm) thick copper foil for use as an EMI/RFI shield against electromagnetic interference and meets MRI requirements. The foils are easy to work with and offer good shielding effectiveness across a wide range of frequencies, shielding against unwanted signals in or out of rooms and buildings.

EMI-SHIELD CU50 may be used to form shielded enclosures of almost any size or shape, with primary use in construction with low-cost shielded rooms, shielded anechoic chambers and other shielded test rooms.

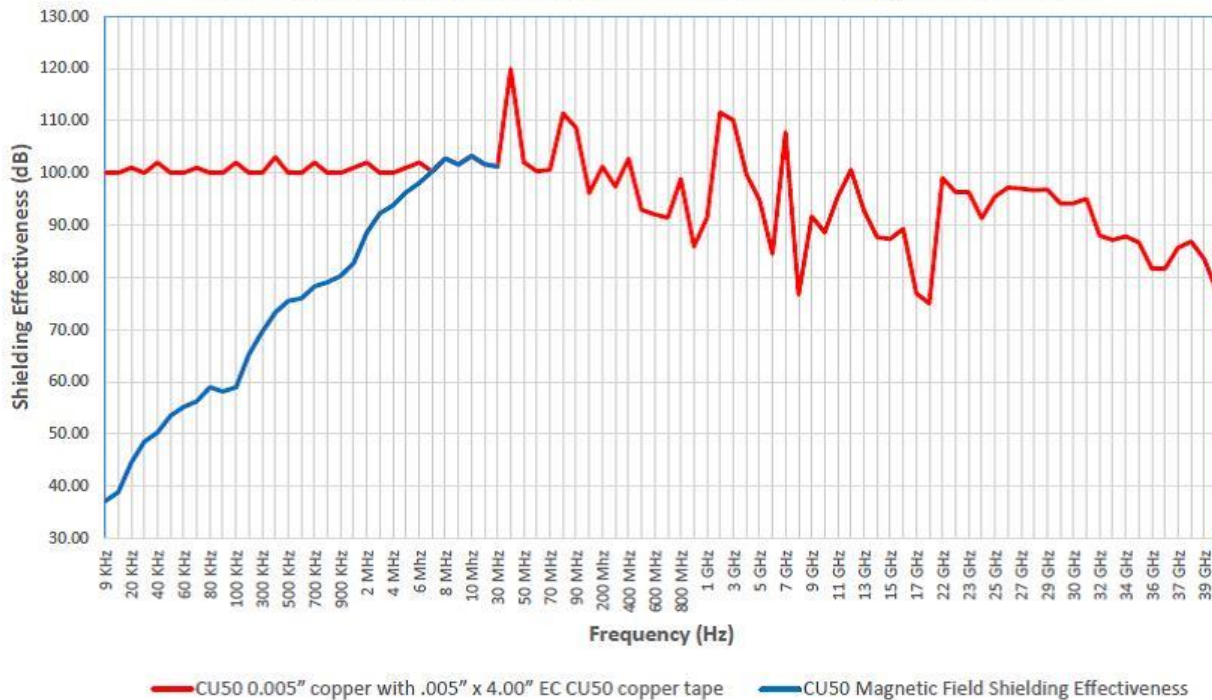
EMI-SHIELD products are unique as they come with 2 mil Pressure Sensitive Adhesive (PSA) as the bonding mechanism. PSA offers a no-mess, no odor simple method of application method for applying the E-SHIELD to substrates. E-SHIELD is also available without PSA backing (recommended).

PSA application is NOT recommended for walls or ceiling, due to the weight of the copper.

TYPICAL SHIELDING ATTENUATION PERFORMANCE (Insertion Loss per MIL STD 285)	
FREQUENCY	Attenuation (dB)
14 KHz, Magnetic Field	≥ 30
200 KHz, Magnetic Field	≥ 50
10 KHz, Electrical Field	100
200 KHz, Electrical Field	100
1 MHz, Electrical Field	100
10 MHz, Electrical Field	100
400 MHz, Plane Wave	100
1 GHz Plane Wave	100
10 GHz Plane Wave	100

CU50 SHIELDING ATTENUATION As Installed Butt Joint & 4" EC Seam Taped (Insertion Loss per IEEE-299)	
FREQUENCY	Attenuation (dB)
14 KHz, Magnetic Field	≥ 30
200 KHz, Magnetic Field	≥ 50
10 KHz, Electrical Field	100
200 KHz, Electrical Field	100
1 MHz, Electrical Field	100
10 MHz, Electrical Field	100
400 MHz, Plane Wave	100
1 GHz Plane Wave	95
10 GHz Plane Wave	90
18 GHz, Plane Wave	80
40 GHz, Plane Wave	80

CU50 Shielding Effectiveness (Butt Joint Seam Taped) Tested per IEEE-299 : 2006



CU50 SHIELDING ATTENUATION As Installed with 4" Overlap Joint & 4" EC Seam Taped (Insertion Loss per IEEE-299)	
FREQUENCY	Attenuation (dB)
14 KHz, Magnetic Field	≥ 30
200 KHz, Magnetic Field	≥ 50
10 KHz, Electrical Field	100
200 KHz, Electrical Field	100
1 MHz, Electrical Field	100
10 MHz, Electrical Field	100
400 MHz, Plane Wave	100
1 GHz Plane Wave	100
10 GHz Plane Wave	100
18 GHz, Plane Wave	90
40 GHz, Plane Wave	90

Chart Coming Soon

EMI-SHIELD CU50 is applied like wallpaper, covering all surfaces: floor, walls and ceiling. Other than normal cleanliness, and dust free, no special preparation is required. The CU50 foil is typically glued in-place. **E-SHIELD** products should be overlapped by a minimum of 4" to avoid RF leakage. For maximum effectiveness, seams should be taped with 4" wide, electrically conductive adhesive tape.

ORDERING INFORMATION

EMI-SHIELD CU50 is available in standard widths of 36" lengths of 65 ft with other dimensions available on special order. Either with or without PSA.

EMI-SHIELD CU50 Tape is also available in electrically conductive backed PSA, 4" & 6" x 75 ft rolls.



Wear correct gloves when installing the foil, the edge is like a razor blade