



**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.

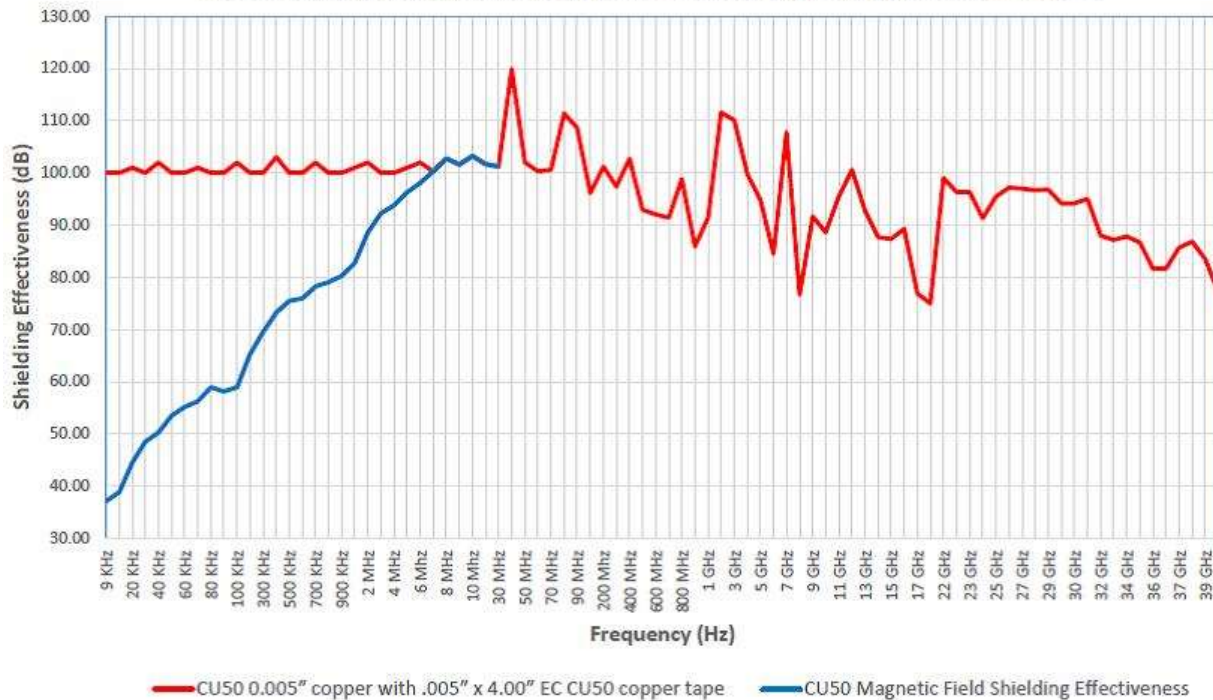
**EMI-SHIELD** products are unique as they come with 2 mil Pressure Sensitive Adhesive (PSA) as the bonding mechanism. PSA offers a no-mess, no odor simple method of application method for applying the E-SHIELD to substrates. E-SHIELD is also available without PSA backing.

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

<b>TYPICAL SHIELDING ATTENUATION PERFORMANCE (Insertion Loss per MIL STD 285)</b>	
<b>FREQUENCY</b>	<b>Attenuation (dB)</b>
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

<b>TYPICAL SHIELDING ATTENUATION</b> <b>As Installed Butt Joint &amp; 4" EC Seam Taped</b> <b>(Insertion Loss per IEEE-299)</b>	
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**





**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 may be stapled or glued in-place. **E-SHIELD** products should be overlapped by a minimum of 3" 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 100 ft rolls.



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