



## EMI-SHIELD AL5

### EMI Foil Shielding With & Without PSA



**EMI-SHIELD AL5** is a 0.005" (5 mil) (0.127mm) thick aluminum foil for use as an EMI/RFI shield against electromagnetic interference. 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 AL5** 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.

**EMI-SHIELD AL5** can be used as a single layer or double layer, see shielding performance below. Staggered or offset overlap of seams are recommended for double layer application.

TYPICAL SHIELDING EFFECTIVENESS 5 mil (Insertion Loss per MIL STD 285)	
FREQUENCY	dB
1 KHz, Magnetic Field	12
10 KHz, Magnetic Field	20
100 KHz, Magnetic Field	25
10 KHz, Electric Field	≥80
100 KHz, Electrical Field	≥80
10 MHz, Electrical Field	≥80
100 MHz, Plane Wave	≥60
400 MHz, Plane Wave	≥60
1 GHz Plane Wave	≥60
10 GHz Plane Wave	≥60



TYPICAL SHIELDING EFFECTIVENESS Two Layers of AL5 (10 mil total) (Insertion Loss per MIL STD 285)	
FREQUENCY	dB
10 KHz, Magnetic Field	≥ 25
100 KHz, Magnetic Field	≥ 45
200 KHz, Magnetic Field	≥ 50
200 KHz, Electrical Field	≥ 90
1 MHz, Electrical Field	≥ 90
10 MHz, Electrical Field	≥ 90
400 MHz, Plane Wave	≥ 80
1 GHz Plane Wave	≥ 80
10 GHz Plane Wave	≥ 80

**EMI-SHIELD AL5** is applied like wallpaper, covering all surfaces: floor, walls and ceiling. Other than normal cleanliness, and dust free, no special preparation is required. Raw sheetrock will be required to be primed if you are using the AL5 with PSA. The foil should be glued in-place or ordered with a Pressure Sensitive Adhesive (PSA).

**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 AL5** is available in standard widths of 12", 24" & 48" and lengths of 150 Ft with other dimensions available on special order. Either with or without PSA.

**EMI-SHIELD AL5 Tape** is available in 6" x 150 Ft rolls with PSA and ECPSA backing.

**EMI-SHIELD AL5 Tape** is also available in electrically conductive backing PSA, 1", 2", 3", 4" & 6" x 180 Ft rolls.



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