

## **EMI-SHIELD AL20**

## Aluminum EMI Shielding Foil 4' x 8' Sheets

(Pressure Sensitive Adhesive is NOT Available)

**EMI-SHIELD AL20** is a 0.020" (20 mil) (0.5mm) thick, type 1100, 99% pure aluminum foil sheets for use as an EMI/RFI shield against electromagnetic interference. The foil sheets are easy to work with and offers good shielding effectiveness across a wide range of frequencies, shielding against unwanted signals in or out of rooms and buildings.

**EMI-SHIELD AL20** 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 AL20** were designed to be placed on the floor, usually glued directly to the waterproof sealed concrete floor or on top of a moisture barrier, between the concrete and aluminum panel. The sheets are butt jointed or overlapped and seam taped with 5 mil (AL5), 4" electrically conductive tape.

For concrete floors we recommend switching to the Xalon GS26 or GS22 (galvanized steel) panels and corner flashing, instead of the aluminum AL20 panels.

EMI-SHIELD AL20 panels can also be used in walls and ceiling applications.



AL20 TYPICAL SHIELDING EFFECTIVENESS (Insertion Loss per IEEE-299 : 2006)			
Installation	As Installed Butt Jointed & Taped with 4" EC Tape		As Installed 1" Overlap, Screwed & Taped with 4" EC Tape
Install Locations	Floor, Wall, Ceiling	Floor, Wall, Ceiling	Wall, Ceiling
Electrically Conductive Seaming Tape	1 Layer 5 mil Copper	1 Layer 5 mil Aluminum	1 Layer 5 mil Aluminum
FREQUENCY	SE (dB)	SE (dB)	SE (dB)
10 KHz, Magnetic Field	45	45	45
100 KHz, Magnetic Field	65	65	65
200 KHz, Magnetic Field	65	65	65
10 KHz, Electric Field	≥95	≥90	≥100
100 KHz, Electrical Field	≥95	≥90	≥100
200 KHz, Electrical Field	≥95	≥90	≥100
1 MHz, Electrical Field	≥95	≥90	≥100
10 MHz, Electrical Field	≥100	≥95	≥100
400 MHz, Plane Wave	≥100	≥95	≥100
1 GHz Plane Wave	≥92	≥90	≥100
10 GHz Plane Wave	≥90	≥85	≥100
18 GHz Plane Wave	≥88	≥85	≥100
40 GHz Plane Wave	≥75	≥75	≥100

**EMI-SHIELD** products typically are butt jointed, with the seams taped with 4" electrically conductive aluminum (AL5) or copper (CU14 or CU50) tape to avoid RF leakage.

**ORDERING INFORMATION EMI-SHIELD AL20** is available in the standard size of 0.020" thick by 48" wide and 96" long. Weight: 9.5 lbs per sheet.



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