

AMUCOR FARADAY CAGE

Amucor foil can be used to create a Faraday cage in an existing room or building



Amucor foil has high attenuation properties in the electrical field (up to 110 dB) as well as in the magnetic field (see shielding performance table).

It is easy to apply because the foil is provided with a very strong self-adhesive. For an extra good result, we recommend applying plasterboard before applying the film. After the application of the foil Amucor the interior can be finished with an extra finishing layer of plaster board, foam tiles or plywood.

The 48 µm thick Amucor is used to transform a regular room into a shielded room; the product has excellent shielding performance even at low frequencies. The system is easy to mount on shielded doors with clamping devices. The standard width of Amucor is 1000mm. The foil can be delivered on rolls or as ready-made sheets.

ADVANTAGES

- Cost-effective / takes up little space
- Equipped with self-adhesive allowing applying the film very easy
- Light weight / high floor load
- Can be constructed with by local contractor under supervision of Holland Shielding Systems
- Standard interior finish possible like plasterboard
- Can be delivered with 10 year guarantee
- Maintenance free
- Delivery with turnkey measurement report

OVERLAP OPTIONS

For the joints you can use a 50mm overlap. For extra high performance you can apply a 50mm wide aluminum tape over the seams.



APPLICATIONS

Amucor film is suitable for a large scale of applications where a medium performance reduction is required. Below we have made a small list of some commonly used applications.

Data security for

- Computer rooms
- Industrial espionage/ Secure room
- Intelligence agencies
- Board room shielding

RF Noiseless

- Data security for: server rooms
- Computer rooms
- Industrial espionage/ Secure room
- Intelligence agencies
- Board room shielding
- Free from Radar interference on Airports
- TEMPEST Sites
- Military EMC protection

AMUCOR WITH A REINFORCEMENT NET 4706

Amucor foil can also be produced with a strengthening reinforcement net. Because the material with the reinforcement net is so strong, it can be produced in a very large width of 3100mm. This material is designed to cover walls and floor for protection against unwanted radio frequencies (RF).

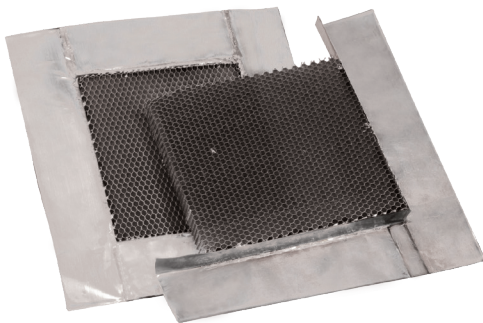
We fabricate self-adhesive Amucor foil up to 1100mm width for quick covering complete rooms. We also have a 3100mm (10ft) width version is available.



» AMUCOR FARADAY CAGE

VENTILATION

For ventilation we have developed honeycomb ventilation panels. Especially for the Amucor Faraday cages we can deliver optimized honeycomb vent panels for this type of cage. For other honeycomb ventilation panels, like rigid aluminum Framed Honeycombs, see our Honeycomb ventilation



MODIFIED RF SHIELDED DOOR

When a lower performance of e.g. 40-60 dB is acceptable, we can retrofit your existing door. The door is then equipped with gaskets at the top and sides, and with a conductive copper brush and doorstep at the bottom. Both swinging and sliding doors are suitable for being shielded this way. For heavy duty applications we can supply Faraday cage doors that offer up to 140 dB reduction.

COMPONENTS

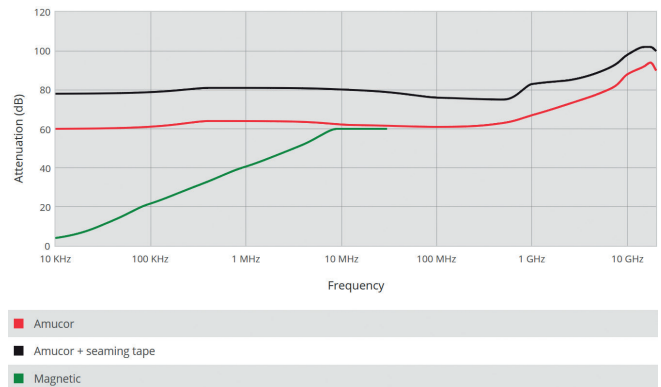
In addition to EM shielded doors and windows, the screened rooms can be equipped with the foil.

- Shielded doors
- Shielded windows
- Shielded ventilation panels
- Power and signal filters

We also offer shielding solutions for water pipes, medical gases, and ventilation when needed.



SHIELDING PERFORMANCE* AMUCOR FARADAY CAGE (DB)



SHIELDING PERFORMANCE* BASIC MATERIAL (DB)

Field	Frequency	Amucor	Amucor + seaming tape
H	200 MHz	27 dB	27 dB
H	1 MHz	63 dB	63 dB
E	10 kHz	63 dB	80 dB
E	200 kHz	63 dB	80 dB
E	1 MHz	63 dB	80 dB
E	1 GHz	63 dB	80 dB
E	2.4 GHz	75 dB	82 dB
E	5 GHz	77 dB	90 dB
E	10 GHz	88 dB	93 dB
E	20 GHz	90 dB	97 dB

Shielding performance of Amucor foil 48 µm thick

Measurements according to MIL STD 285/IEEE-299 and the following situation: Amucor foil 48 µm thick, 50 mm overlap, dimensions 10 x 6 x 4 m, 1 door 0.9 x 2.1 m, 1 waveguide, 1 power filter.

You can create a Faraday cage with high shielding performance yourself in an economic way, using local labour. This is possible in existing buildings as well as in new ones, without loss of space. Depending on the quality of the doors, vent panels, filters and/or windows used, attenuation levels up to 80-100 dB in the E-field can be realized.

ORDER EXAMPLE

You can indicate below how many square meters Amucor foil you need for covering your room. Amucor foil comes with a self-adhesive so it's easy to apply.

In order to make a more specific offer for a Amucor Faraday cage please send your drawing to info@hollandshielding.com

amucor foil (m²)

Indicate how many square meters Amucor foil you need