MU-COPPER CAGES

Mu-copper foil is used to create a Faraday cage in an existing room or building



MU-COPPER WALL COVERING SYSTEM

Mu-Copper foil has high attenuation properties in the electrical field (up to 120 dB) as well as in the magnetic field.

It is easy to apply, like wallpaper, thanks to its special adhesive for walls, ceilings and floors. The interior finish can be plaster board, foam tiles or plywood.

The 0.12mm thick Mu-Copper 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 Mu-Copper is 1000mm. The foil can be delivered on rolls or as ready-made sheets.

OVERLAP OPTIONS

For the joints you can use a 50mm overlap. For extra high performance you can fully solder the joints or use a seaming /copper tape with a conductive self-adhesive to apply over the joints.

50 mm overlap

soldered

seaming tape

VENTILATION

For ventilation we have developed honeycomb ventilation panels. Especially for the Mu-copper Faraday cages we can deliver honeycomb vent panels with a Mu-copper flap around the edges. It is easy to solder these into the Mu-copper Faraday cage.

ADVANTAGES OVER MESH

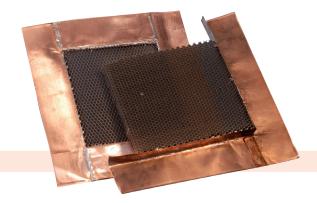
Mesh does not protect against high frequencies and it is difficult to connect all wires or the mesh in big constructions. With foil you can use the whole surface to create coupling.

ADVANTAGES

- Cost-effective / takes up little space
- Light weight / high floor load
- Can be constructed with local labour
- Standard interior finish possible like plasterboard
- Can be delivered with 10 year guarantee
- Maintenance free
- Delivery with turnkey measurement report

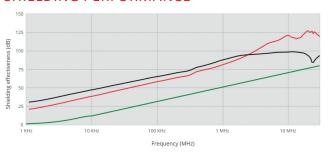
APPLICATIONS

- EMI shielded server room
- EMI shielded MRI room
- Server rooms
- EMC test rooms
- Computer rooms
- Medical examination rooms
- MRI, EEG, EMG & EVP
- Rooms for physiotherapy
- Radar protection/Airport
- TEMPEST Sites
- Military EMC protection
- Board room shielding
- Industrial espionage/ Secure room
- Buildings for intelligence agencies



» MU-COPPER CAGES

SHIELDING PERFORMANCE*



Soldered copperCopper with seaming tapeMIL-STD-188-125-1

OPTIONS

The Mu-copper Faraday cage can be equipped with the following options:

- Wave guides for data communication
- Shielded windows
- Shielded ventilation panels
- Power line filters
- Signal line filters
- Shielding solutions for water pipes and (medical) gases
- Standard interior finish is possible (like glued plasterboard, foam tiles or plywood)

CEILING

The system can be used with a detachable or fixed ceiling to separate existing ducts and cables from the shielded room.

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 following components:

- 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.

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. When more layers are applied, it is possible to achieve over 120 dB.

ORDER EXAMPLE

You can indicate below how many square meters Mu-copper foil you need for covering your room. You can also specify if you want an offer for adhesives for pasting the Mu-copper on the walls and solder for closing the seams.

In order to make a more specific offer for a Mu-copper cage please send your drawing to info@hollandshielding.com

