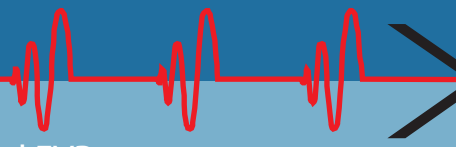


Faraday cage



Faraday cage for medical solutions

KNF & MRI rooms, shielding of EEG, EMG, ENG and EVP rooms.

Screening medical spaces against electromagnetic radiation is frequently applied in chambers where sensitive measurements/prerecordings are made (neuro-physiology and MRI rooms). Elektro magnetic radiation can disturb the outcomes of these measurements seriously. For this reason these spaces must be constructed as a cage of faraday. Our faraday cages satisfy to the requested attenuation requirements for the screening/shielding of spaces in hospital and within the health care.

Benefits

- Arranged for new construction and modernisation
- Standard medical finishing of the wall, floors and ceilings possible
- None raised or expensive epoxy floors necessary
- Optionally dismantlable ceiling
- Completely maintenance free
- Turn key produced incl. measurement report
- Customer-specific design
- 10 years guarantee



Medical mu-copper™ cage with screened windows

Why Screening/Shielding?

Disruption of electronics in the surroundings by the device himself.
Disruption of the device / the measurements by elektro magnetic radiation from the surroundings (for example mobile phones hallway or nearby transformer spaces). The manufacturer of the device can make demands that shielding is needed. Protection of medical staff against detrimental electro magnetic radiation.



MRI-room

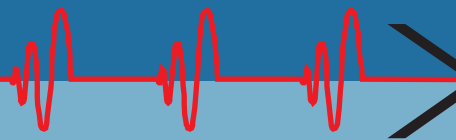


Elektro magnetically screened/shielded room

- NL Headquarters
- TEL +(31) 78-613-1366
- FAX +(31) 78-614-9585
- www.hollandshielding.com

Holland Shielding Systems BV

Faraday cage for medical solutions



Faraday cage for medical solutions

KNF & MRI rooms, shielding of EEG, EMG, ENG and EVP rooms.

Applications

- KNF-rooms (EEG/ EMG /ENG / EP)
- Electro magnetic therapy
- Hyperthermie
- Physiotherapy
- Electrons microscope
- MRI-rooms

The material

Holland Shielding Systems B.V. has developed Mu-copper™ foil. Mu-copper has very high attenuation levels both the electric fields (up to 120dB), as well as in the magnetic fields.

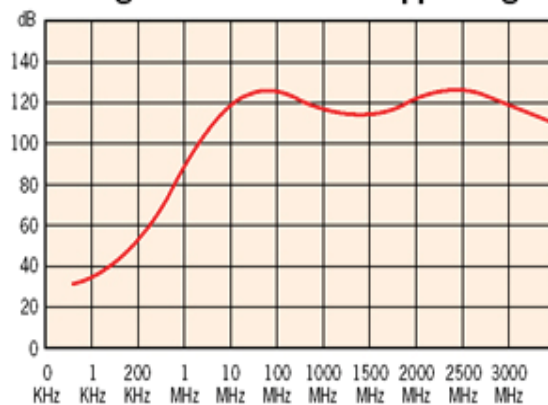
It can be placed very easily like wallpaper with a special glue for walls, ceilings and floors. The Mu-copper™ foil pieces become soldered to each other. Because of this it is possible in a very short period of time to create on economic wise a high-quality faraday cage.

Depending on the quality of the doors, ventilation panels, wire-filters and windows an attenuation level till 100 dB can be realized in an existing space, without loss of space and within a couple days



Medical mu-copper™ faraday cage

Shielding Performance Mu-copper cage



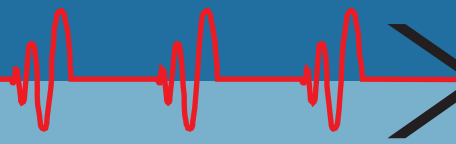
Attenuation characteristic Mu-copper™ cage*



Screened dismountable ceiling

* Measurements results strongly dependent on quality of the doors, ventilation panels, wire-filters and windows.

Faraday cages



Faraday cage for medical applications
KNF & MRI rooms, shielding of EEG, EMG, ENG and EVP rooms.

Example project

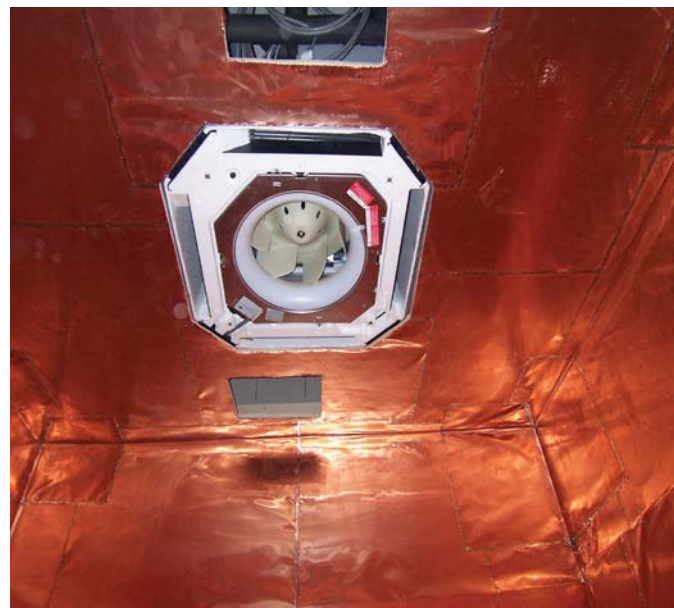
For the project mentioned below Holland Shielding Systems B.V. was approached by construction management of a hospital in which a prominent surgeon did a research with KNF measurings.

The KNF measurings van de chirurg became disturbed by electronics in the surroundings. He wanted to prevent this in the future. Requirement was that the room could be used as OC (operation chamber).

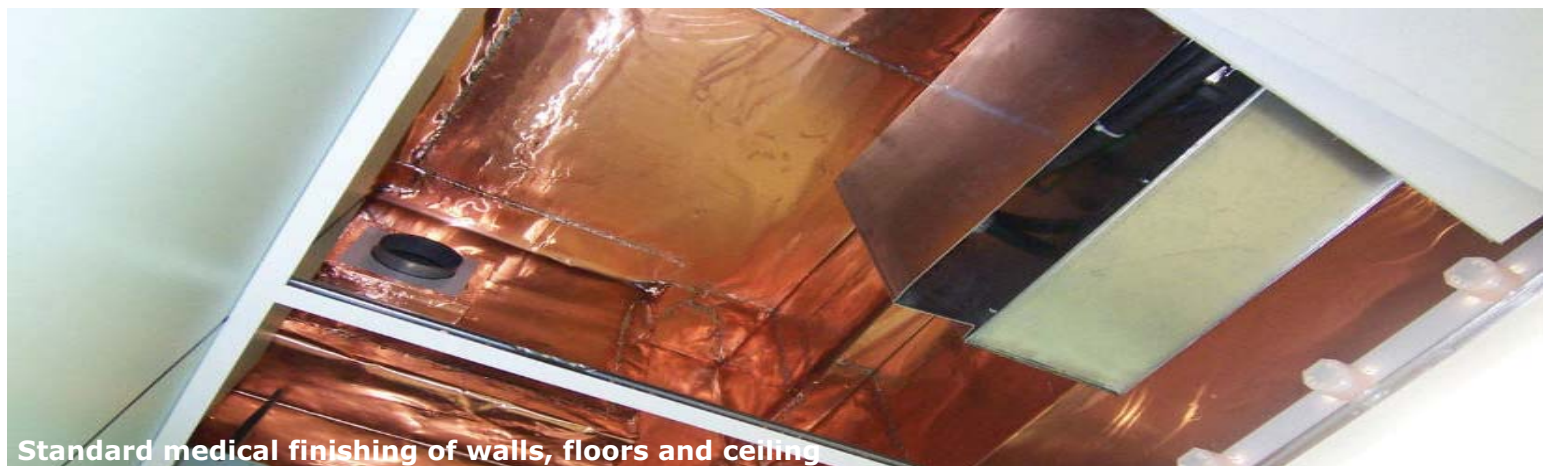
This requirement had consequences for the design of the faraday cage / the elektro magnetic screened room. Particularly in the plenum extra screening supplies had to be placed.



Screened/Shielded OC-space



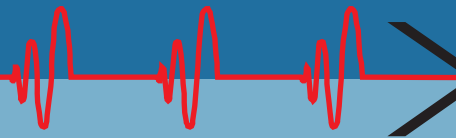
OC-plenum



Standard medical finishing of walls, floors and ceiling

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Faraday cage



Faraday cage for medical applications
KNF & MRI rooms, shielding of EEG, EMG, ENG and EVP rooms.

Components

The screened rooms can be equipped with the following components:

- Standard shielded door or slide-door.
- Screened windows in aluminium or wooden frames (plastic or metal is also possible).
- Ventilation panels in all dimensions.
- Wire- and signal-filters in 1 or 3-fase implementation (220-600 V, 1-600 A) and waveguides for optical connections.

We also offer medical solutions for water piping, medical gases and ventilation.

More than medical applications only

Beside medical applications we also offer solutions for screening transformer rooms (magnetic screening), EMC test rooms, computer rooms, medical research rooms, treatment chambers for physiotherapy, radar-screening, tempest sites, militaire EMC-screening or even screening complete buildings for example secret services.



Screened windows
for daylight accession

References: a random seizure from our customer portfolio



Max Planck Institute for Psycholinguistics

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Faraday cage for medical solutions