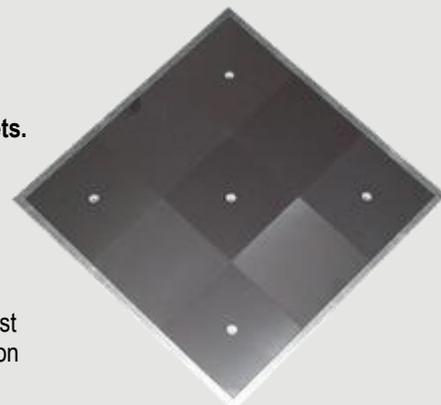


FERRITE ABSORBER LINING

FE

FE is a range of ferrite panels consisting in both tiles and steel sheets.



REFLECTIVITY PERFORMANCES

Chambers lined with ferrite tiles can meet the performances requested by the most common international EMC standards from 26 MHz up to 1 or 2 GHz depending on the size of the enclosure.

In order to extend the performances up to 18 GHz (or more), hybrid foam absorbers must be added on top of the ferrite tiles. We recommend the use of hybrids, designed for use in SIEPEL chambers. Partial or total coverage is possible according to the standard to be met (see our data sheet Hybrid Pyramidal Absorber HY and HYT).



| MINIMUM REFLECTIVITY OF FERRITES in dB for incidence angles close to the normal | | | | | | | | | | | |
|--|--------|--------|--------|---------|---------|---------|---------|----------|----------|----------|----------|
| Type | 30 MHz | 50 MHz | 80 MHz | 100 MHz | 150 MHz | 300 MHz | 500 MHz | 1000 MHz | 2000 MHz | 4000 MHz | 6000 MHz |
| Ferrite tile - (ref. 116 985) without hole - (ref. 101 114) with hole | -25 | -28 | -32 | -30 | -28 | -18 | -13 | -9 | -5 | -3 | -2 |
| Ferrite panel (ref. 116 979) | | | | | | | | | | | |

SIEPEL will help you to define the proper lining according to your requirements.

MAIN CHARACTERISTICS

| SIEPEL Reference | Thickness (mm) | Length (mm) | Width (mm) | Nb of tiles | Weight (kg) |
|------------------|----------------|-------------|------------|-------------|-------------|
| Ferrite tile | 6.7 | 100 | 100 | 1 | 0.38 |
| Ferrite panel | 8 | 300 | 300 | 9 | 3.9 |

A hole, 10 mm diameter, can be made in the centre of the tile upon request.

| | |
|-------------------|----------------------------------|
| Curie Temperature | $T_c > 90^\circ\text{C}$ |
| Density | $d < 5\text{g/cm}^3$ |
| Resistivity | $\rho > 100 \Omega\cdot\text{m}$ |

METHOD OF USE

Ferrite absorbers are installed in anechoic chambers (5 or 6 walls) thanks to horizontal metallic profiles, screwed on vertical rails assembled together with the steel framing of the chamber.

In full anechoic chambers, floor tiles are directly put on the ground plane and covered with a radio transparent protective layer.

Remark: This technical solution enables to:

- easily dismantle one or several panels anywhere,
- easily dismantle the entire chamber,
- installation cables between the ferrite panels and the wall



These data are the result of tests performed in our laboratory. They are considered to be the best of our knowledge. The use of the material and the specification of the performances are made under the whole responsibility of users who should ensure themselves that the material is suitable for their purposes.