

EMC & MAGNETIC FIELD SCREENING

MAGNOSHIELD

DUR PANEL

High performance industry-grade EMC magnetic panel-shielding



AARONIA AG
WWW.AARONIA.DE



Gewerbegebiet Aaronia AG II, DE-54597 Strickscheid
Tel.: +49(0)6556-9019-355 Fax: +49(0)6556-93034
www.aaronia.com E-Mail: mail@aaronia.de



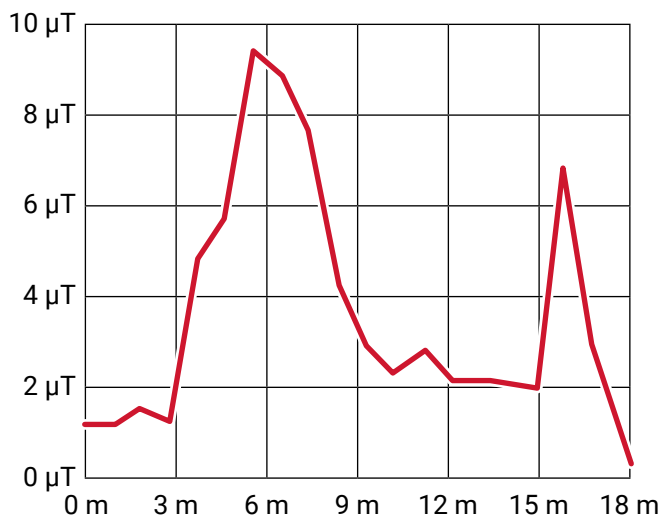
MADE IN GERMANY

Specifications

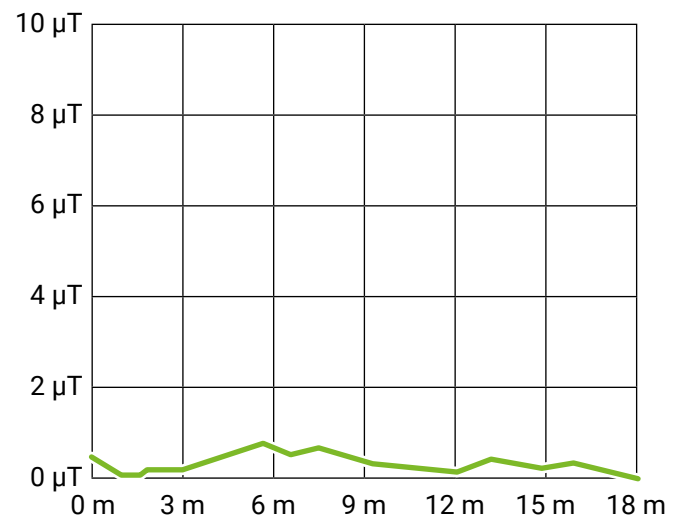
Aaronia MagnoShield DUR panel

Shielding factor	10 - 13
Saturation flux density	approx. 0,8 Tesla
Packaging unit	1,22 m ²
Width	approx. 610 mm (0,61 m)
Height	approx. 2000 mm (2 m)
Thickness	0,5 mm (1 mm with screening factor >15 on request)
Magnetically conductive Material	Nickel/iron alloy, so-called. Mu-Metal, isotrope
Colour	Dark silver
Weight	approx. 4 kg/m ²

- Nealed for maximum shielding efficiency
- Noncorrosive
- Frost proof
- Paintable
- Installable in plaster or concrete
- Very easy handling even for the novice
- Easy handling due to practical packaging unit
- ISO 9001 Quality assurance standard
- B according to EN 10204 Material verification certificate



Transmission damping curves without MagnoShield DUR panel



Transmission damping curves with MagnoShield DUR panel

Material characteristics

Aaronia offers an extremely efficient, yet very easy to handle solution for screening static and alternating magnetic fields: Aaronia MagnoShield magnetic field screening panels. Aaronia MagnoShield magnetic field screening panels offer protection against high-frequency (RF) AND low-frequency (LF) radiation and protection against low-frequency magnetic fields. Aaronia MagnoShield screening panels are easy to handle and install. They are robust, frost proof, rot proof, noncorrosive and can even be installed in plaster or concrete. Thus, they are also suitable for outdoor application.

Aaronia MagnoShield screening panels have been especially developed for screening even strong magnetic fields caused by local radiation sources like cables, transformers, generators, traction power, power distribution boxes, high-voltage lines etc. They allow screening of entire rooms, houses and other buildings, but also highly sensitive areas like distributing centres, control centres etc. against interference from magnetic fields. Installation is performed edge to edge to build a completely closed surface.

Screening a room

To screen a room against a low-frequency magnetic field, such as caused by a transformer station, the surface facing the radiation source needs to be covered completely with Aaronia MagnoShield screening panels. This is the only way to efficiently block the magnetic field (ATTENTION: If ADDITIONALLY a high-frequency radiation source like mobile communications needs to be screened against, the ENTIRE room must ADDITIONALLY be covered completely with Aaronia XDream® screening fleece). In floor areas, Aaronia MagnoShield panels can be installed invisibly under the carpet, or in new constructions, inside the floor pavement or concrete. In the case of even, sustainable walls, the panels can be mounted directly to the walls using screws or firing pins. Otherwise, a sustainable support structure needs to be created first. Installation on ceilings is performed in a similar way, though special care needs to be exercised as these panels are pretty heavy. Doors should be covered entirely with Aaronia MagnoShield. With the door closed, a gap-free connection with the rest of the panels in the room needs to be established. After installation, Aaronia MagnoShield panels can be painted or covered with plaster.

References

Selected Aaronia Clients



Government, Military, Aeronautic, Astronautic

- NATO, Belgium
- Department of Defense, USA
- Department of Defense, Australia
- Airbus, Germany
- Boeing, USA
- Bundeswehr, Germany
- NASA, USA
- Lockheed Martin, USA
- Lufthansa, Germany
- DLR, Germany
- Eurocontrol, Belgium
- EADS, Germany
- DEA, USA
- FBI, USA
- BKA, Germany
- Federal Police, Germany
- Ministry of Defense, Netherlands

Research/Development, Science and Universities

- MIT – Physics Department, USA
- California State University, USA
- Indonesian Institute of Sciences, Indonesia
- Los Alamos National Laboratory, USA
- University of Bahrain, Bahrain
- University of Florida, USA
- University of Victoria, Canada
- University of Newcastle, United Kingdom
- University of Durham, United Kingdom
- University Strasbourg, France
- University of Sydney, Australia
- University of Athens, Greece
- University of Munich, Germany
- Technical University of Hamburg, Germany
- Max Planck Inst. for Radio Astronomy, Germany
- Max Planck Inst. for Nuclear Physics, Germany
- Research Centre Karlsruhe, Germany

Industry

- IBM, Switzerland
- Intel, Germany
- Shell Oil Company, USA
- ATI, USA
- Microsoft, USA
- Motorola, Brazil
- Audi, Germany
- BMW, Germany
- Daimler, Germany
- Volkswagen, Germany
- BASF, Germany
- Siemens AG, Germany
- Rohde & Schwarz, Germany
- Infineon, Austria
- Philips, Germany
- Thyssenkrupp, Germany
- EnBW, Germany
- CNN, USA
- Duracell, USA
- German Telekom, Germany
- Bank of Canada, Canada
- NBC News, USA
- Sony, Germany
- Anritsu, Germany
- Hewlett Packard, Germany
- Robert Bosch, Germany
- Mercedes Benz, Austria
- Osram, Germany
- DEKRA, Germany
- AMD, Germany
- Keysight, China
- Infineon Technologies, Germany
- Philips Semiconductors, Germany
- Hyundai Europe, Germany
- VIAVI, Korea
- Wilkinson Sword, Germany
- IBM Deutschland, Germany
- Nokia Siemens Networks, Germany

