

EMC & MAGNETIC FIELD SCREENING

# MAGNOSHIELD

## DUR PANEL

High performance industry-grade EMC magnetic panel-shielding



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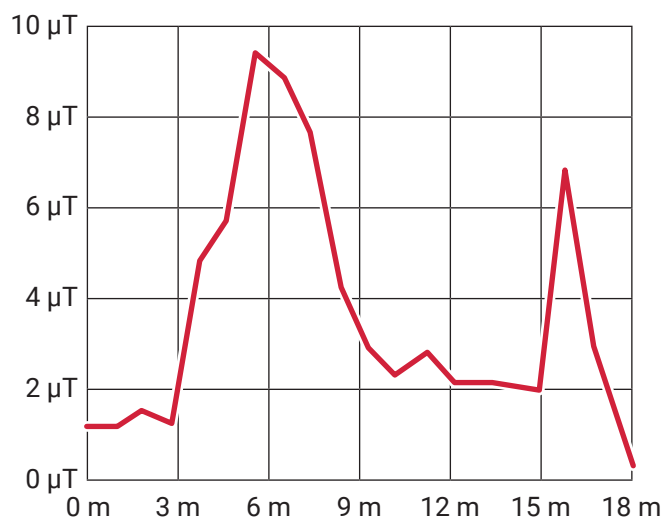


**MADE IN GERMANY**

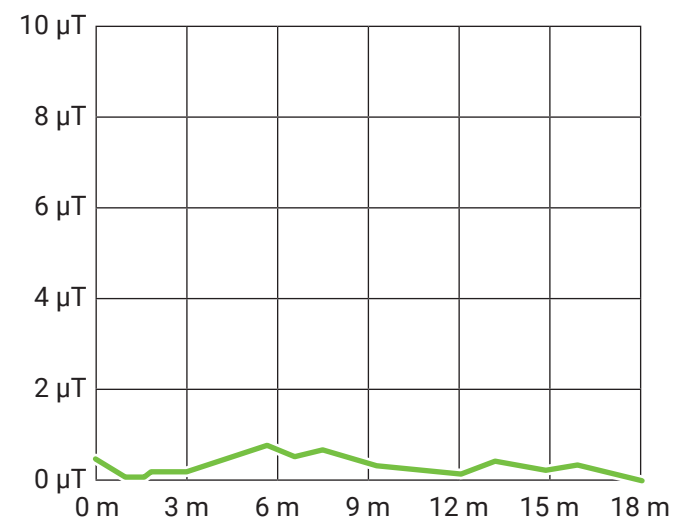
# Specifications

## Aaronia MagnoShield DUR panel

Shielding factor	10 - 13	<ul style="list-style-type: none"> <li>• Nealed for maximum shielding efficiency</li> <li>• Noncorrosive</li> <li>• Frost proof</li> <li>• Paintable</li> <li>• Installable in plaster or concrete</li> <li>• Very easy handling even for the novice</li> <li>• Easy handling due to practical packaging unit</li> <li>• ISO 9001 Quality assurance standard</li> <li>• B according to EN 10204 Material verification certificate</li> </ul>
Saturation flux density	approx. 0,8 Tesla	
Packaging unit	1,32 m <sup>2</sup>	
Width	approx. 660 mm (0,66 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 <sup>2</sup>	



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 (DoD), USA
- Department of Defence, Australia
- Airbus, Germany
- Boeing, USA
- German Armed Forces, Germany
- NASA, USA
- Lockheed Martin, USA
- Lufthansa, Germany
- German Aerospace Center (DLR), Germany
- Eurocontrol, Belgium
- EADS, Germany
- Drug Enforcement Administration (DEA), USA
- Federal Bureau of Investigation (FBI), USA
- Federal Criminal Police Office (BKA), Germany
- Federal Police, Germany
- Ministry of Defence, Netherlands

### Research/Development, Science and Universities

- MIT - Physics Department, USA
- California State University, USA
- Indonesian Institute of Science (LIPI), Indonesia
- Los Alamos National Laboratory (LANL), 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 Athen, 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 (Energie Baden-Württemberg), Germany
- CNN, USA
- Duracell, USA
- German Telekom, Germany
- Bank of Canada, Canada
- NBC News, USA
- Sony, Germany
- Anritsu, Germany
- Hewlett-Packard, Germany
- 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



  
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