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50dB high-performance screening canopies made from Aaronia-Shield®

High performance RF Shielding-canopies made from a patented high-tech shielding-fibre

"..especially effective against all high-frequency radiation up to far beyond 10GHz"
"..ensures conformance with rigorous architecture-biological exposure limits.."
"..offers a 30 to 1000 fold more efficient screening than similar products on the market"
"..particularly well-suited for people with allergies!"
(KettenwirkPraxis 02/2005)

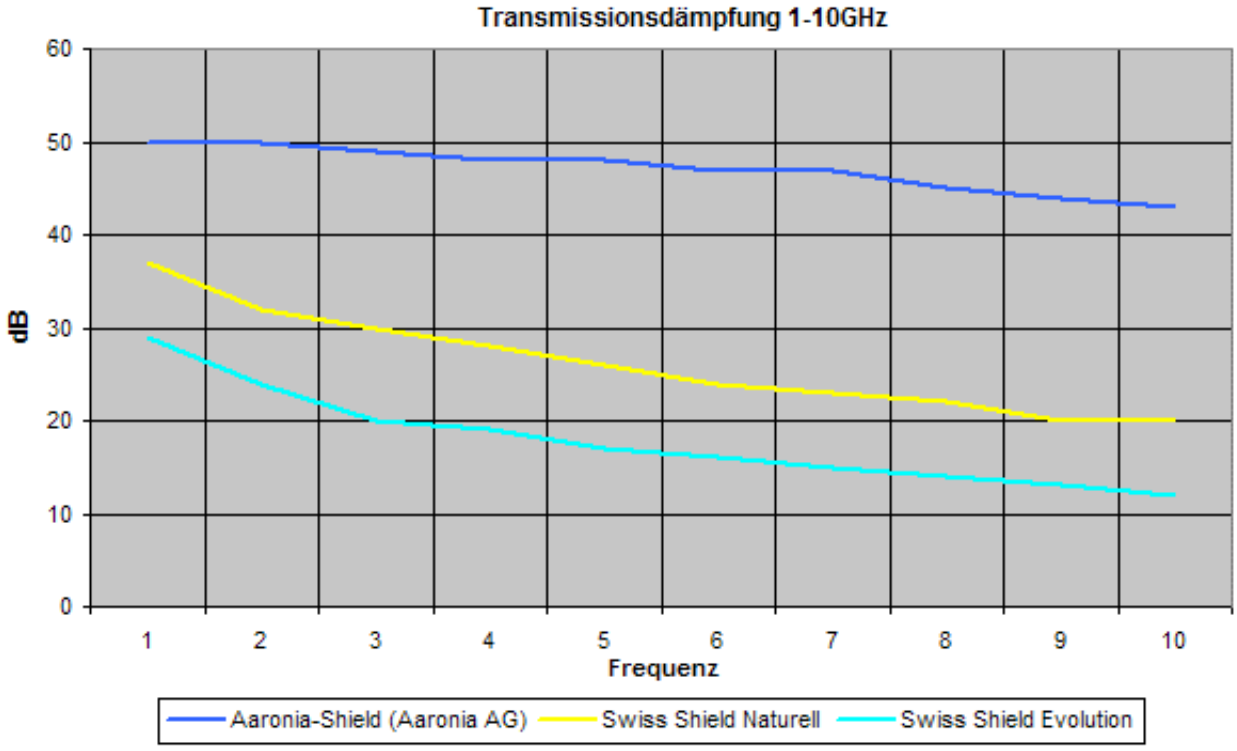
AARONIA AG
WWW.AARONIA.DE

Made in Germany

Specifications

- Extremely breathable
- Odourless
- Extremely transparent
- Anti-septic
- Anti-static
- Washable
- Foldable
- Very easy to handle even for the novice
- Thickness: 0,5mm
- Mesh size: approx. 0,5mm
- Colour: Silver
- Weight: approx. 40g/m2
- Mesh material: silver/polyamid compound
- Screening performance **static fields**: 99,99% to 99,999% (only with grounding)
- Screening performance **low-frequency, electric fields**: 99,99% to 99,999% (only with grounding)
- Screening performance **high-frequency fields**: 43dB (99,992%) at 10GHz and 50dB (99,999%) at 1GHz (even without grounding) See following chart

Transmission damping chart 1-10GHz



Tests according to MIL-STD-285 approve the superior screening performance of our canopies due to the consequent deployment of Aaronia-Shield®. The RF (high-frequency) radiation damping performance, especially in the frequency range where pulsed signals from cell towers etc. are present, is an exceptional 43dB (99,992%) to 50dB (99,999%). Compared to canopies made from the other products shown, canopies made from Aaronia-Shield® offer 30 to 1000 times better protection!
Apart from this, canopies made from Aaronia-Shield® can also be grounded and thus even protect against static and low-frequency EMF, which is generated by virtually all cables running through homes, all home appliances and also high-voltage power lines.

Description

Application / installation:

The various screening canopy systems currently available on the market are very diverse concerning their protection efficiency and affordability. Most offer hardly any protection at all in the higher GHz ranges. Mostly they are also extremely expensive and do not offer protection against low frequency EMF radiation, either. Also, the customer currently mostly needs TWO seperate screenings: One against RF and another against LF.
Consequently, Aaronia offers a very affordable alternative whose handling is particularly easy for the novice: The shielding canopy made from the "screening fabric" Aaronia-Shield®. Aaronia-Shield® offers extremely good screening performance especially in the high GHZ range. Aaronia-Shield® simultaneously protects against both RF and LF E-field radiation and is still extremely transparent. The reason behind this very good shielding efficiency is a complex textile concept based on a special kind of patented silver/polyamid fibre. Canopies made from Aaronia-Shield® can be folded without the risk of taking damage, are anti-septic and extremely breathable.
It is noteworthy that canopies made from Aaronia-Shield® do not need to be grounded for high-frequency screening! Though, we generally recommend grounding using the corresponding grounding mat, as that way, protection against LF electric fields caused by high-voltage lines, power cables, etc. will also be achieved.

Shielding canopy made from Aaronia-Shield:

Aaronia, probably as the first supplier at all, not only offers a highly transparent shielding canopy with 50dB damping, but also a complete, sophisticated shielding system around the canopy:
First, the high-grade canopy made from Aaronia-Shield® is installed. To screen the floor area as well, special screening mats made from Aaronia X-Dream® have been developed. These can simply be put under the bed. That way, a complete, integrated screening system is established, achieving complete shielding even in the floor area. Shielding the floor area is indispensable with nearly all types of floors, as RF radiation can permeate them virtually unaffected. Two seperate grounding cables are included with the screening mat: One for connection to a radiator (heating appliance), and, in case no radiator is installed, a cable for direct connection to the wall socket's integrated grounding. Connection to the grounding mat is very easy by using a so-called "alligator crimp" attached to the grounding cable. That way, you achieve an optimal screening even against LF radiation / EMF.

Shielding canopies made from Aaronia-Shield® still have further advantages:
In contrast to cotton-based canopies, canopies made from Aaronia-Shield create a very open, natural atmosphere. Because of the high proportion of silver in the material, very good heat conductivity is achieved. Thus, the heat generated by the human body can quickly and easily escape and does not accumulate under the canopy, like with other canopy systems. A very fresh and light atmosphere is the result, which you will appreciate especially on hot summer days.

Naturally, our screening canopies also offer regular protection against midges and flies.
Whenever possible, you should use a rectangular canopy if you plan to install it permanently. Even though this version will always be slightly more expensive, it offers the most space and easiest handling in daily use. As such, you can simply "put aside" a rectangular canopy and thus have free access to your bed. "Entry" and "exit" is also very comfortable, and there is no way for pieces of the canopy to get caught up in your bed.
In contrast, a pyramid canopy is particularly easy to set up and tear down, so it is very well suited for (holiday) trips, always offering optimal protection against electrosmog.

References

User of Aaronia Antennas, Spectrum Analyzers and screening solutions (Examples)

Government, Military, aeronautic, astronautic

- NATO, Belgien
- Boeing, USA
- Airbus, Hamburg
- Bund (Bundeswehr), Leer
- Bundeswehr (Technische Aufklärung), Hof
- Lufthansa, Hamburg
- DLR (Deutsches Zentrum für Luft- und Raumfahrt, Stuttgart
- Eurocontrol (Flugüberwachung), Belgien
- Australian Government Department of Defence, Australien
- EADS (European Aeronautic Defence & Space Company) GmbH, Ulm
- Institut für Luft- und Raumfahrtmedizin, Köln
- Deutscher Wetterdienst, Tauche
- Polizeipräsidium, Bonn
- Landesamt für Umweltschutz Sachsen-Anhalt, Halle
- Zentrale Polizeitechnische Dienste, NRW
- Bundesamt für Verfassungsschutz, Köln
- BEV (Bundesamt für Eich- und Vermessungswesen)

Research/Development, Science and Universitys

- Deutsches Forschungszentrum für Künstliche Intelligenz, Kaiserslautern
- Universität Freiburg
- Indonesien Institute of Sience, Indonesien
- Max-Planck-Institut für Polymerforschung, Mainz
- Los Alamos National Labratory, USA
- University of Bahrain, Bahrain
- University of Florida, USA
- Universität Erlangen, Erlangen
- Universität Hannover, Hannover
- University of Newcastle, Großbritannien
- Universität Strasbourg, Frankreich
- Universität Frankfurt, Frankfurt
- Uni München – Fakultät für Physik, Garching
- Technische Universität Hamburg, Hamburg
- Max-Planck Institut für Radioastronomie, Bad Münstereifel
- Max-Planck-Institut für Quantenoptik, Garching
- Max-Planck-Institut für Kernphysik, Heidelberg
- Max-Planck-Institut für Eisenforschung, Düsseldorf
- Forschungszentrum Karlsruhe, Karlsruhe

Industry

- Shell Oil Company, USA
- ATI, USA
- Fedex, USA
- Walt Disney, Kalifornien, USA
- Agilent Technologies Co. Ltd., China
- Motorola, Brasilien
- IBM, Schweiz
- Audi AG, Neckarsulm
- BMW, München
- Daimler Chrysler AG, Bremen
- BASF, Ludwigshafen
- Deutsche Bahn, Berlin
- Deutsche Telekom, Weiden
- Siemens AG, Erlangen
- Rohde & Schwarz, München
- Infineon, Österreich
- Philips Technologie GmbH, Aachen
- ThyssenKrupp, Stuttgart
- EnBW, Stuttgart
- RTL Television, Köln
- Pro Sieben – SAT 1, Unterföhring
- Channel 6, Großbritannien
- WDR, Köln
- NDR, Hamburg
- SWR, Baden-Baden
- Bayerischer Rundfunk, München
- Carl-Zeiss-Jena GmbH, Jena
- Anritsu GmbH, Düsseldorf
- Hewlett Packard, Dornach
- Robert Bosch GmbH, Plochingen
- Mercedes Benz, Österreich
- EnBW Kernkraftwerk GmbH, Neckarwestheim
- AMD, Dresden
- Infineon Technologies, Regensburg
- Intel GmbH, Feldkirchen
- Philips Semiconductors, Nürnberg
- Hyundai Europe, Rüsselsheim
- Saarschmiede GmbH, Völklingen
- Wilkinson Sword, Solingen
- IBM Deutschland, Stuttgart
- Vattenfall, Berlin
- Fraport, Frankfurt

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