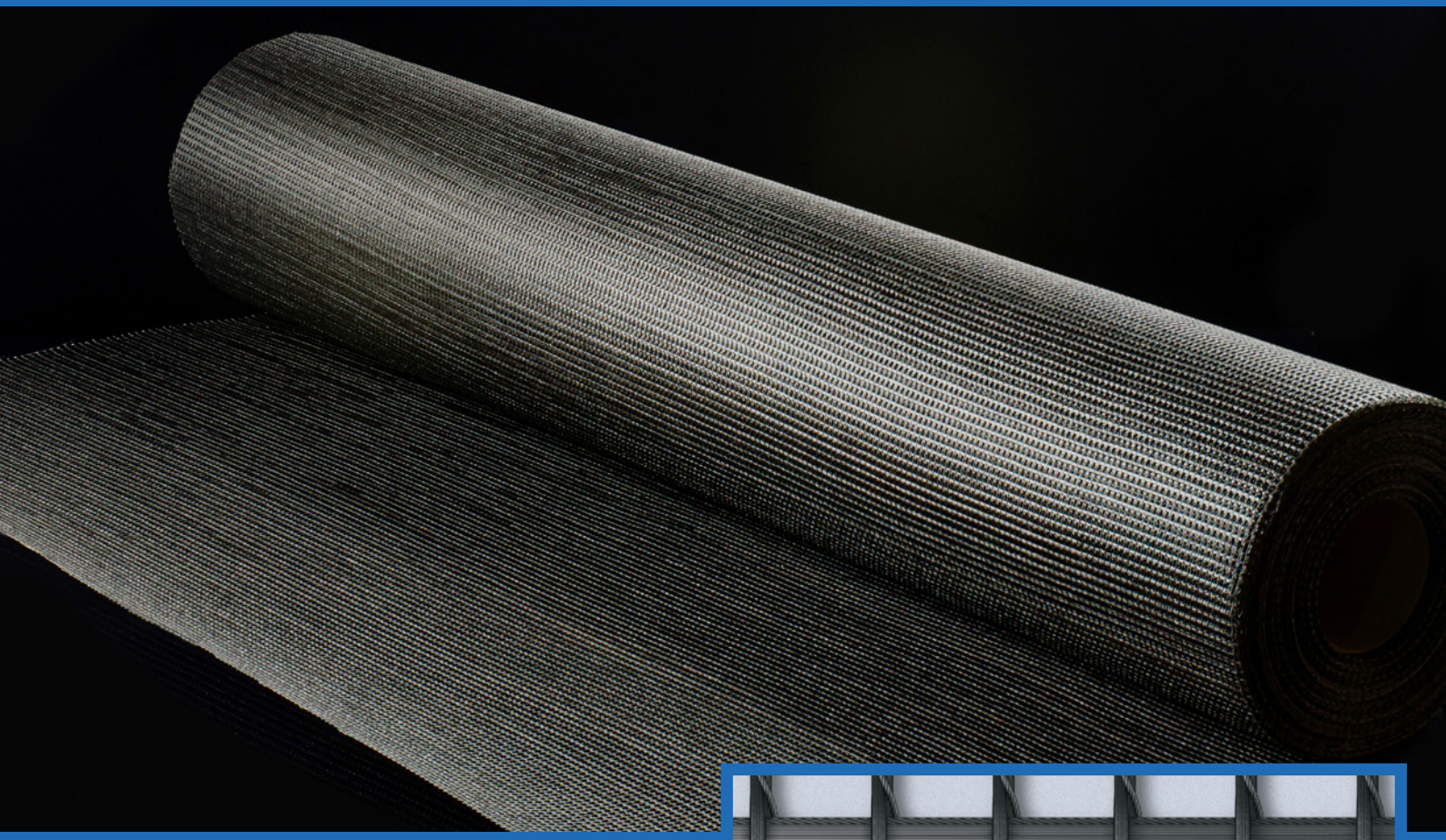
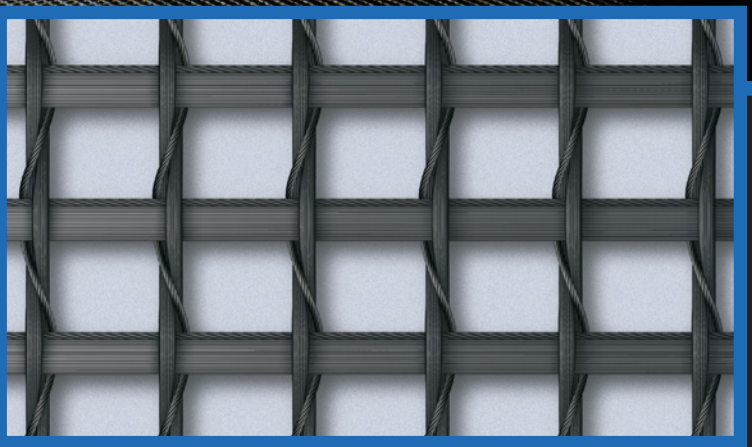
AARONIA A2000+

RF SCREENING TISSUE

20dB

Reduces RF emissions from outside, e.g. mobile phone or other communication networks





References:

- CERN, Switzerland
- University Munich, Germany
- University Hannover, Germany
- Bayer Industry, Krefeld, Germany
- EnBW, Karlsruhe, Germany

AARONIA AG
WWW.AARONIA.DE

MADE IN GERMANY

ES France - Département Tests & Mesures
127 rue de Buzenval BP 26 - 92380 Garches
Tél. 01 47 95 99 45
e-mail : tem@es-france.com
Site Web : www.es-france.com

Specifications

Aaronia A2000+

Length per unit	5 m, 10 m or 50 m
Width	1 m
Thickness	0,45 mm
Mesh size	ca. 4,0 mm
Colour	black
Weight	approx. 160 g/m²
Mesh material	Fibreglas fabric with stainless steel filaments
Quality assurance	ASTM D-4935-10 (1 MHz - 4.5 GHz) IEEE Standard 299™-2006 (1 GHz - 8 GHz)
Screening efficiency ASTM	96% - 98,8%
Screening efficiency IEEE	75% to 98,44%

- Usable in walls or concrete
- Replaces reinforcement fabric
- Frost-proof
- not rusting
- rot resistant
- Paintable
- Very easy processing even for the novice
- Foldable

Damping Bar Chart
ASTM D-4935-10

Damping Bar Chart
IEEE Standard 299™-2006

Measurements prove the good screening performance: Damping of high-frequency radiation in the frequency range particularly affected by pulsed signals, for example by cell towers, is 95% to 98%. Also, static and low-frequency electric fields like those generated by any cables or appliances in homes, or high-voltage power lines, are being damped efficiently.

ES France - Département Tests & Mesures
127 rue de Buzenval BP 26 - 92380 Garches
Tél. 01 47 95 99 45
e-mail : tem@es-france.com
Site Web : www.es-france.com

Description

Application

Aaronia offers an inexpensive and easy to handle shielding, even for the layman: The Aaronia shielding fabric A2000+. It simultaneously protects against high-frequency (HF) and low-frequency (LF) electromagnetic waves.

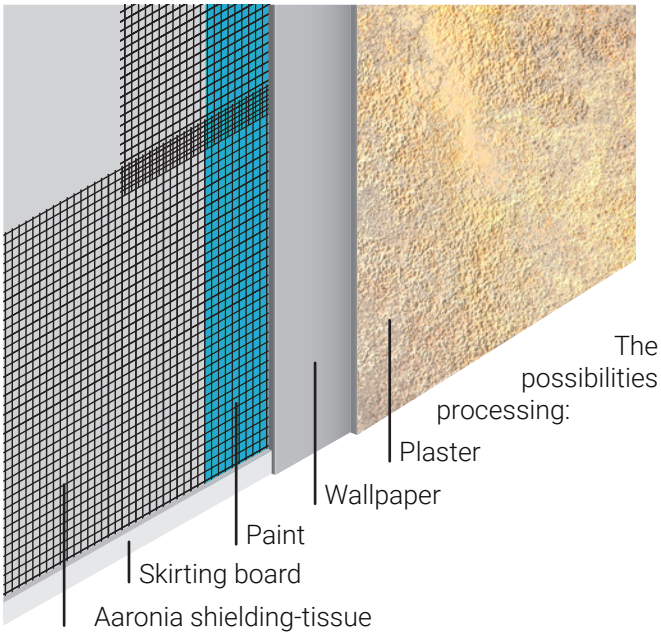
Responsible for the good shielding effect is a fabric concept based on interwoven stainless steel threads and a special conductive coating. The fabric is easy to handle and install. It can be bent or folded without damage, is tensile strength, frost-resistant, does not rot, is breathable and can even be laid in plaster or concrete. It is therefore also suitable for outdoor use and replaces the regular reinforcement fabric.

The Aaronia shielding fabric A2000+ can be used to shield single rooms or entire houses and buildings. It is laid in adjacent strips, which should overlap by approx. 15 cm to create a closed surface. For high-frequency shielding, the material does not need to be grounded! However, for safety reasons, we generally recommend grounding with our "grounding package", since the fabric is conductive due to the metals it contains. In addition, low-frequency electrical fields, such as those from power lines or high-voltage lines, are also reduced at the same time.

Shielding a house or other building

It is recommended to shield the exterior of houses and buildings in new construction. In this case, the fabric is installed in the plastering of the walls as a replacement for the reinforcement fabric. In the roof area, the fabric can be installed directly below the vapour barrier foil. In the floor area, the fabric is laid in the screed of the floor slab.

It should always be noted that for the best possible RF shielding, a closed surface, i.e. a Faraday cage, must be formed! When laying the panels in the walls, floor slab and roof area, always leave the corresponding overhangs of the fabric in order to be able to connect the panels without gaps later.



Protecting a room

To shield a room against high-frequency radiation, it must be completely lined with the fabric. If, on the other hand, a low-frequency E-field radiation source (e.g. the power distribution box or cables in the wall) is to be shielded, we recommend using our Aaronia X-Dream® or Aaronia-Shield® products.

Attention: With low-frequency shielding, the fabric must also be grounded! We recommend our Aaronia "grounding package" for this purpose. In the floor area, the fabric can be laid in the floor screed. When installing indoors, the fabric should be processed in the wall (see diagram).

When screening the interior, if the walls are made of plaster, wood or similar, the fabric can be applied with a "stapler". It can also be laid on the ceiling. Doors, on the other hand, should be covered with the shielding fleece Aaronia X-Dream®, as should the door frame. When the door is closed, this creates an almost seamless connection with the rest of the room's fabric. In the window area, for example, our shielding fabric Aaronia-Shield® or Aaronia Shield® Ultra can be used. Installation instructions are included in the delivery.

ES France - Département Tests & Mesures
127 rue de Buzenval BP 26 - 92380 Garches
Tél. 01 47 95 99 45
e-mail : tem@es-france.com
Site Web : www.es-france.com

References

Selected Aaronia Clients

AARONIA AG
WWW.AARONIA.DE

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

Gewerbegebiet Aaronia AG II Phone: +49 6556 900310