AARONIA SHIELD® TF

RF SHIELDING FOIL

32dB

Optical transparent EMI shielding made from a patented high-tech shielding-foil

Provides secure RF shielding against electronic eavesdropping, data theft/hacking and also reliably protects against electrosmog.

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

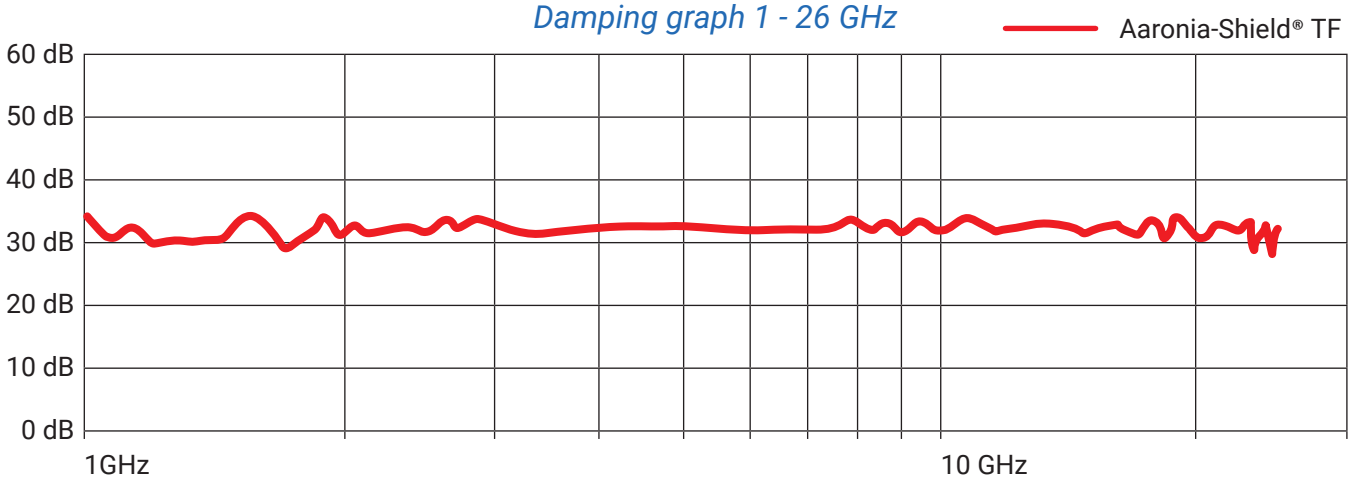
MADE IN GERMANY

Specifications

Aaronia SHIELD® TF

Length per unit	**0,93 m:** 1,1 m, 11 m, 28 m (1 m², 10 m², 25 m²) **1,83 m:** 0,55 m, 5,5 m, 28 m (1 m², 10 m², 50 m²)
Lane width	0,91 m and 1,83 m
Thickness	0,1 mm
Colour	transparent
Optical transparency	≥ 75 VLT
Weight	approx. 130 g/m²
Material	Transparent conductive film
Shielding Effectiveness	≥ 32 dB (from 10MHz up to 26 GHz)
Standards/compliance:	ASTM D4935, IEEE Std 299 (previously MIL STD 285)

Damping graph 1 - 26 GHz



Damping specifications for Aaronia SHIELD® TF shielding foil

Product	Frequency	Damping (dB)	Damping factor	Damping (%)	Application examples
Aaronia Shield® TF	10 MHz - 26 GHz	32 dB	>1000	99,93%	Complete building envelope, Private homes, Government buildings, Server rooms, Air traffic control towers, Military

Notice: when using the dB unit, an increase of 10 dB is equivalent to a 10fold increase in strength. For example, 100 dB is 10 times as strong as 90 dB, or 100 times as strong as 80 dB, etc.

Description

Transparent shielding for glazing

With more data being transmitted and shared electronically, protection from electronic eavesdropping becomes crucial. This is especially true for government organizations, businesses, architects and building owners looking for ways to design secure buildings.

Aaronia AG provides architectural shielding solutions against microwave and radio frequency radiation for existing buildings and new buildings worldwide. Aaronia SHIELD® TF conductive films are specifically designed to reduce the transmission of electromagnetic radiation, also known as EMI Shielding.

Architectural shielding materials are used to reduce the exposure of building occupants to electromagnetic radiation emanating from nearby sources of microwave and radio frequency radiation, to protect sensitive electronic equipment from interference, and to prevent data theft/hacking. Sources of electrical and magnetic energy include cell towers (4G, 5G, 6G) and many other electronic devices, including WLAN.

Keyfeatures

- **Highest quality shielding product**
- **Optical transparency** ≥75 VLT
- **Shielding Effectiveness** (SE) of ≥32 dB (frequency range from 10 MHz up to 26 GHz)
- **Effective protection against electrosmog**
- **Application:** retrofit or interlayer for laminated glazing

Example applications

- Private homes
- Government buildings
- Server rooms
- Air traffic control towers
- Military
- Network operation centers
- Ships windows
- Shielded cabinets

REFERENCES

Selected Aaronia Clients

AARONIA AG
WWW.AARONIA.DE

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 Sience (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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Aaronia AG, Gewerbegebiet Aaronia AG, DE-54597 Strickscheid, Germany
Phone: +49(0)6556-900310 | Fax: +49(0)6556-900319
Email: mail@aaronia.de | URL: www.aaronia.com

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