

WAVASORB[®] HFX

High-Power Broadband Pyramidal Absorber **4-8-12**

- WAVASORB[®] HFX 4-8-12 is a series of pyramidal absorbers for high power applications.
- Lightweight , open-cell honeycomb rf-absorber.
- Premium performance in the operating frequency range from 800 MHz to 110 GHz, obtained by optimization of the geometry of each absorbertype.
- Excellent power-handling capability assured under continuous wave exposure.
- REACH-and RoHS-compliant, maintaining a healthy environment for operation.
- Designed and quality controlled using original test techniques.

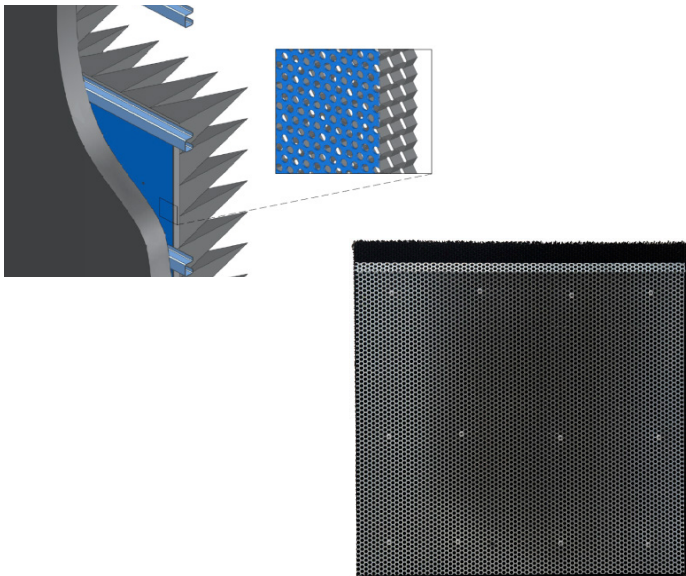
Installation Methods

WAVASORB® HFX-4-8-12 is installed by perforated Plate & Rail mountings. This mounting system ensures:

- Easy exchange and free circulation of air;
- Perfect geometry and alignment compatibility with any type of shielding.

Measurement techniques

WAVASORB® HFX 4-8-12 is manufactured in well-defined batches and their reflectivity is continuously monitored following internal ISO 9001



Applications

WAVASORB® HFX 4-8-12 is the preferred solution to partially or totally line areas in the anechoic chamber of:

- Near-Field facilities;
- Compact Antenna test ranges;
- Facilities for satellite testing.

When excellent power handling capability is needed to safely withstand an incident CW power density of up to 15 kW/m².

When forced airflow is used, WAVASORB® HFX 4-8-12 can handle higher incident powers.

The honeycomb structure of WAVASORB® HFX 4-8-12 combines high strength with fire-resistant properties, allowing ventilated air throughout the structure to withstand higher illuminating-power capacities.

For more information, contact your sales representative.



With respect for the environment



Characteristics

Handling temperature	+5°C to +35°C
Operating temperature ⁽¹⁾	+200°C
Humidity range	30% to 70%
Frequency range	800 MHz up to 110 GHz
Maximum incident power density⁽²⁾	15 kW/m ² , 9,68 W/in ² , 2378 V/m
Fire retardancy tests	Compliant with: - DIN 4102-1 Class B2
Environmental testing	According to: - IEC 60068-2-1 Test Ab - AATCC 30-IV (2004)
REACH compliant	According to EC 1907/2006
RoHS compliant	According to 2015/863/EU
Quality control	IEEE Standard 1128 ISO 9001
Product life	+25 years under controlled environment

⁽¹⁾ Depending on the environmental temperature

⁽²⁾ High-Power values are based on tests without using forced airflow. By using forced airflow, the absorber can handle higher incident power densities; for more information contact your sales representative



Physical properties

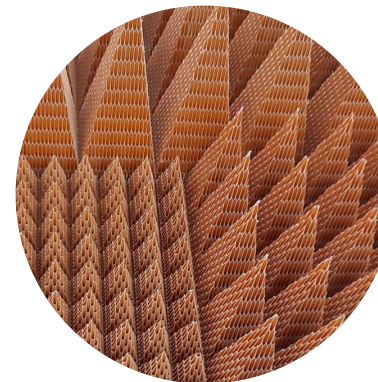
	Standard color	Standard footprint ⁽¹⁾
WAVASORB® HFX 4-8-12	Black	61 cm x 61 cm

⁽¹⁾ The above-mentioned dimensions have a tolerance of +/-6 mm

	Total height ⁽¹⁾ (cm)	Nominal weight ⁽²⁾ (kg)
WAVASORB® HFX-4	10,2	1.0
WAVASORB® HFX-8	20,3	1.7
WAVASORB® HFX-12	30,5	2.4

⁽¹⁾ The above-mentioned dimensions have a tolerance of +/-6 mm

⁽²⁾ Weight values are subject to changes



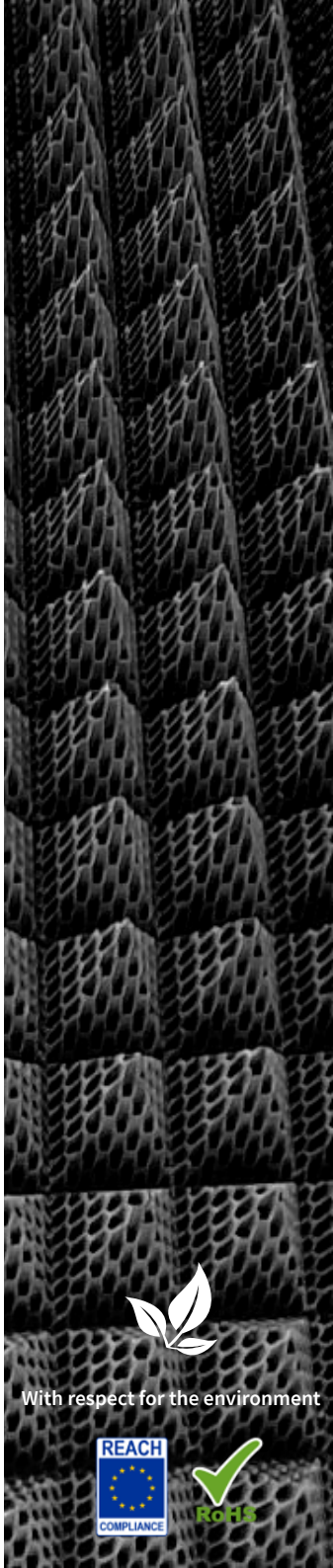
Typical reflectivity performance at normal incidence & measurement techniques

WAVASORB® HFX 4-8-12 is manufactured in well-defined batches and their reflectivity and fire-retardant properties are continuously monitored following internal ISO 9001 procedures.

WAVASORB® HFX 4-8-12 is tested routinely in-house in the frequency range from 800 MHz to 9 GHz using a set of coaxial lines, waveguides and NRL Arch in accordance with the practice recommended in IEEE Standard 1128. In the high-frequency range, measurements are performed in the frequency range of 9 GHz up to 110 GHz inside a compact range facility of an external test house. Furthermore, WAVASORB® HFX 4-8-12 offers favourable reflectivity properties at off normal angles of incidence with almost no reflectivity degradation up to 45 degrees.

TYPICAL REFLECTIVITY (dB)												
	- MHz	- MHz	- MHz	- MHz	- MHz	800 MHz	1 GHz	2 GHz	3 GHz	6 GHz	9 GHz	- GHz*
WAVASORB® HFX-4							-18 dB	-18 dB	-18 dB	-32 dB	-45 dB	
WAVASORB® HFX-8						-15 dB	-15 dB	-25 dB	-30 dB	-40dB	-45 dB	
WAVASORB® HFX-12						-20 dB	-20 dB	-25 dB	-30 dB	-40 dB	-45 dB	

* Measurements results as of 110 GHz available at request



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Specifications subject to change without notice. ECAC 07/2024

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Safety Considerations: It is recommended to consult the E&C ANECHOIC CHAMBERS product literature, including material safety data sheets, prior to use E&C ANECHOIC CHAMBERS products. These may be obtained from your local sales office.

Warranty: Values shown are based on testing of laboratory test specimens and represent data that falls within the normal range of properties of the material. These values are not intended for use in establishing maximum, minimum or ranges of values for specification purposes. Any determination of the suitability of the material or any use contemplated by the user and the manner of such use is the sole responsibility of the user who must assure that the material as subsequently processed meets the needs of this particular product or use. We hope the information given here will be helpful. It is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification but we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale INCLUDING THOSE LIMITING WARRANTIES AND REMEDIES which apply to all goods supplied by us. We assume no responsibility for the use of these statements, recommendations or suggestions nor do we intend them as a recommendation for any use which would infringe any patent or copyright.