

# WAVASORB® MFA

## Multilayer Flatsheet Absorber

- WAVASORB® MFA is a series of lightweight, flat, flexible, carbon-loaded urethane foam absorbers.
- Consisting of a multilayer structure with different graded layers.
- Designed and quality controlled using commercial and original simulating test techniques.
- Created to obtain a broadband reflectivity level of typically -15dB at microwave frequencies. Measured at a normal incident configuration relative to a metallic backing plate.

## Installation Methods

WAVASORB® MFA is typically bonded to metallic surfaces using WAVASORB® Adhesive.

For easy exchange, modular installation techniques are available using velcro-fasteners to achieve perfect geometry and alignment, compatible with any type of shielding.

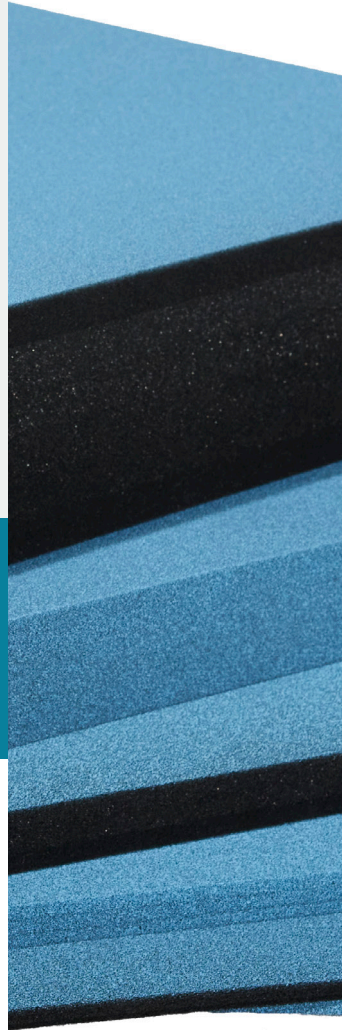
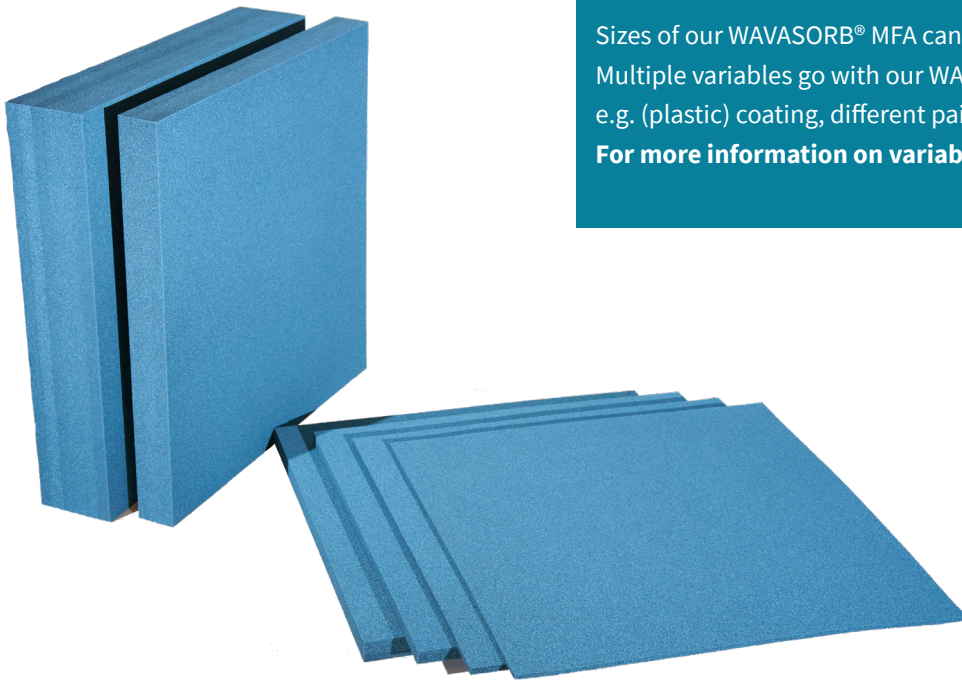
Easy to cut on a band saw, with scissors or a sharp knife.

## Applications

WAVASORB® MFA is the preferred solution for the anechoic chamber lining:

- of the inside of small test boxes, to reduce reflection;
- around antennas for reducing the crosstalk between adjacent antennas;
- to improve the antenna patterns and back- and sidelobes;
- to reduce Radar Cross Section (RCS) from masts and other metal structures.

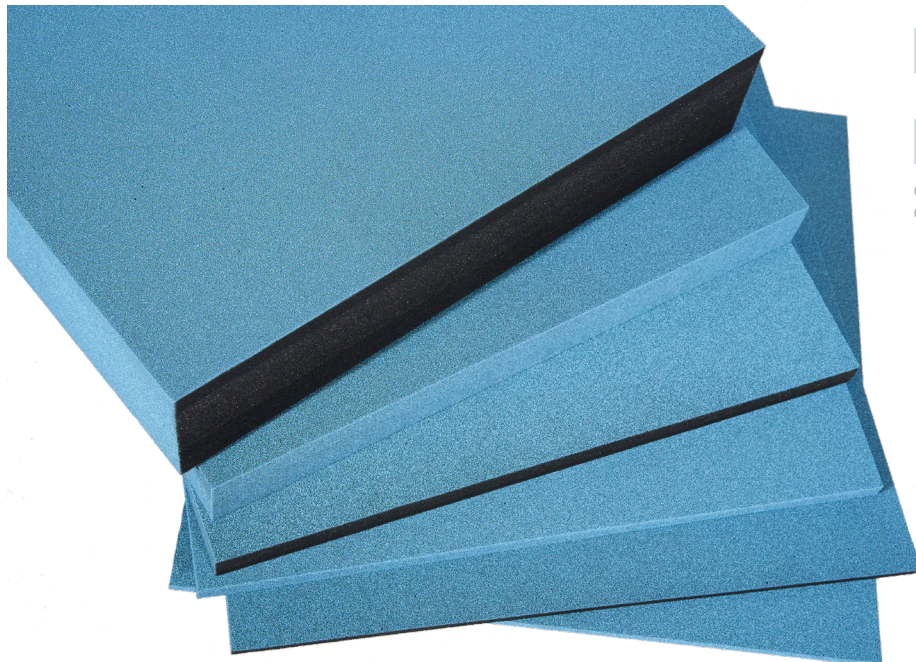
Sizes of our WAVASORB® MFA can easily be customized to fit any specific project area. Multiple variables go with our WAVASORB® MFA-absorbers, e.g. (plastic) coating, different painting/coating colours, self-adhesive tape factory-installed, ...  
**For more information on variables, contact your sales representative.**



## Characteristics

<b>Handling Temperature<sup>(1)</sup></b>	+5°C to +35°C
<b>Humidity Range</b>	30% to 70%
<b>Frequency Range</b>	800 MHz up to 40 GHz
<b>Quality control</b>	IEEE Standard 1128 ISO 9001
<b>Product life</b>	+25 years under controlled environment

<sup>(1)</sup> Depending on the application, the absorber can withstand temperatures of +90°C; for more information, contact your sales representative



## Physical properties

	Standard Color <sup>(1)</sup>	Standard footprint <sup>(2)</sup>
<b>WAVASORB® MFA</b>	Light blue	61 cm x 61 cm

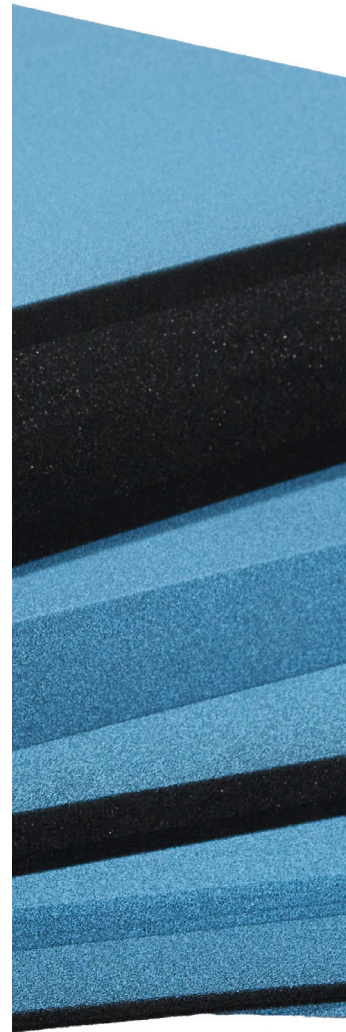
<sup>(1)</sup> Contrast colours available on request

<sup>(2)</sup> The above-mentioned dimensions have a tolerance of +/- 6 mm

	Total height <sup>(1)</sup> (cm)	Nominal weight <sup>(2)</sup> (kg)
<b>WAVASORB® MFA-07</b>	0,70	0,25
<b>WAVASORB® MFA-10</b>	1,00	0,35
<b>WAVASORB® MFA-19</b>	1,90	0,50
<b>WAVASORB® MFA-29</b>	2,90	0,50
<b>WAVASORB® MFA-59</b>	5,90	0,80
<b>WAVASORB® MFA-81</b>	11,80	1,75

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

<sup>(2)</sup> Weight values are subject to changes



## Typical reflectivity performance at normal incidence & measurement techniques

WAVASORB® MFA is manufactured in well-defined batches and their reflectivity is continuously monitored following internal ISO 9001 procedure.

Tested routinely in-house in the frequency range from 800 MHz to 18 GHz using a waveguide and NRL Arch in accordance with the practice recommended in IEEE Standard 1128.

Furthermore, WAVASORB® MFA offers favourable reflectivity properties at off normal angles of incidence with almost no reflectivity degradation up to 45 degrees.

TYPICAL REFLECTIVITY (dB)						
	800 MHz - 18 GHz	1,5 GHz - 18 GHz	3 GHz - 18 GHz	4 GHz - 18 GHz	7,5 GHz - 18 GHz	10 GHz - 40 GHz
WAVASORB® MFA-07						<-11 dB <sup>(1)</sup>
WAVASORB® MFA-10					<-15 dB <sup>(1)</sup>	
WAVASORB® MFA-19				<-15 dB <sup>(1)</sup>		
WAVASORB® MFA-29			<-15 dB <sup>(1)</sup>			
WAVASORB® MFA-59		<-15 dB <sup>(1)</sup>				
WAVASORB® MFA-81	<-15 dB <sup>(1)</sup>					

<sup>(1)</sup> Measurement results available at request



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Specifications subject to change without notice. ECAC 03/2024

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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.