

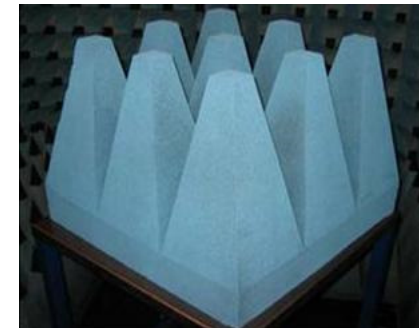
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# WAVASORB® VX

Advanced Broadband Truncated Pyramidal Absorber



- WAVASORB® VX is a series of solid, truncated, pyramidal-shaped, carbon-loaded urethane foam absorbers
- Premium performance in the operating frequency range from 80 MHz to 100 GHz, obtained by optimization
- Certified to all fire-retardancy and environmental specifications by containing an advanced chemical composition.
- Excellent power-handling capability assured under continuous wave exposure.
- REACH- and RoHS-compliant, maintaining a healthy environment for operation.
- Designed and quality controlled using commercial and original simulating and test techniques.



# WAVASORB® VX



E&C Anechoic Chambers has a fully automated manufacturing facility with CNC-controlled foam-cutting machines, computer-controlled impregnation, drying processes, and robotized painting to ensure stability of RF and fire-retardant performances.

Seventy years experience with absorber-manufacturing techniques provides consistency in chemical compositions, electrical and fire-retardant properties with uniform distribution.

E&C Anechoic Chambers can provide customized solutions to accommodate cleanroom requirements, flexible coatings and paintings to improve durability, and engineered pre-cuts and custom parts fit for equipment linings.

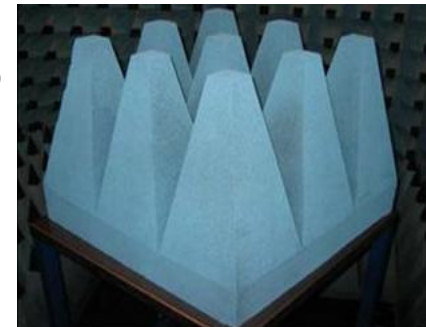
Perfectionism is our goal, with special attention to the dimensions and geometry of the individual absorber panels that enhance performance as well as optical appearance of the entire test facility.

## Measurement Techniques

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

The intrinsic material parameters are regularly measured with state-of-the-art test set ups and optimized using simulation software. WAVASORB® VX is tested routinely in the frequency range from 30MHz to 9 GHz using a set of coaxial lines, waveguides, NRL Arch even exceeding IEEE Standard 1128 in the GHz range.

WAVASORB® VX has excellent power handling capability to safely withstand an incident CW power density of up to 800 W/m<sup>2</sup>.



# WAVASORB® VX



## Installation Methods and Chamber Validation

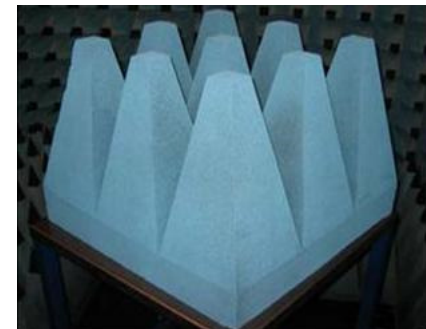
WAVASORB® VX is typically bonded to metallic surfaces using E&C Adhesive. For easy exchange, modular installation techniques are available using Plate & Rail mounting to achieve perfect geometry and alignment compatibility with any type of shielding.

Contrast colors are available in various types of paint and coating.

## Applications

WAVASORB® VX offers excellent performance starting from 80 MHz with a reduced height and is optimal for use in chambers which have to comply with MIL-STD-462.

WAVASORB® VX is preferred solution for the anechoic chamber lining of small chambers



# WAVASORB® VX



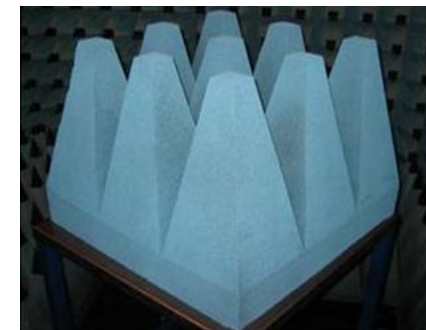
## Characteristics

Standard Color	Blue (contrast colors available on request)
Operation Temperature	+5°C to +35°C
Humidity Range	30% to 70%
Frequency Range	30 MHz - 100 GHz
Maximum Incident Power Density	800 W/m², 0.52 W/in², 550 V/m
Fire-retardancy	NRL 8093 Tests 1, 2 and 3 DIN 4102-1 Class B2 ISO 11925-2 Class E UL-94/HBF ISO 4589-2
RoHS Compliant	According to 2011/65/EU
Reach Compliant	According to EC 1907/2006
Environmental	IEC 60068-2-1 Test Ab AATCC 30-IV ( 2004 )
Quality Control	IEEE Standard 1128 // ISO 9001
Product Life	10+ Years

## Physical Properties

	Total height (cm)	Number of pyramids per piece	Nominal weight (kg)
WAVASORB® VX-1	3,3	1024	1,4
WAVASORB® VX-3	7,6	256	1,6
WAVASORB® VX-5	12,7	81	2,0
WAVASORB® VX-20	50,8	9	4,8
WAVASORB® VX-30	76,2	4	7,0

Standard Footprint: 61 x 61 cm

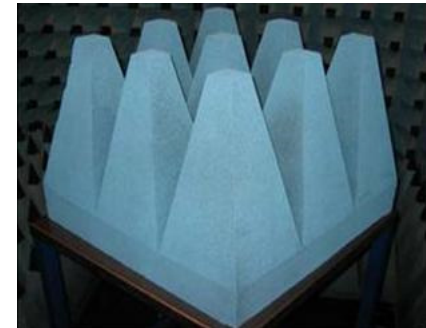


# WAVASORB® VX



## Guaranteed Reflectivity

	80 MHz	100 MHz	200-300 MHz	300 MHz	450 MHz	700 MHz	1 GHz	1.2 GHz	2 GHz	6 GHz	10 GHz	15-100 GHz
WAVASORB® VX-1									-15 dB	-17 dB	-20 dB	-25 dB
WAVASORB® VX-3							-15 dB	-17 dB	-20 dB	-25 dB	-30 dB	-30 dB
WAVASORB® VX-5				-5dB	-10 dB	-15 dB	-20 dB	-20 dB	-20 dB	-25 dB	-30 dB	-30 dB
WAVASORB® VX-20	-6 dB	-10 dB	-20 dB	-20 dB	-25 dB	-25 dB	-30 dB	-30 dB	-35 dB	-40 dB	-40 dB	-40 dB
WAVASORB® VX-30	-10 dB	-13 dB	-20 dB	-25 dB	-30 dB	-35 dB	-40 dB	-42 dB	-45 dB	-50 dB	-50 dB	-50 dB





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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.

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