

WAVASORB® VHY

Advanced Broadband EMC Hybrid Absorber

- WAVASORB® VHY is a series of truncated pyramidal-shaped hybrid absorbers, consisting of ferrite tiles and a truncated pyramidal part.
- Outstanding performance in the EMC frequency range, obtained by optimization of the geometry of each individual absorber.
- Certified to 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 test techniques.

Installation Methods and Chamber Validation

WAVASORB® VHY can be installed either fixed or modularly with ferrites.

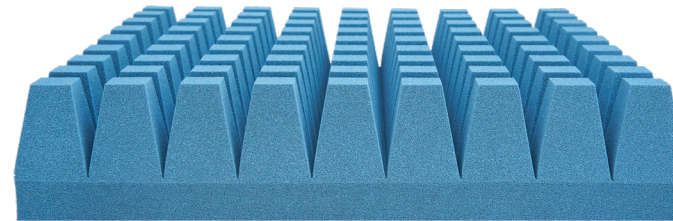
When installed:

- Fixed: gluing on site necessary;
- Modularly with ferrites: the ferrites are bolted directly to the reflective sub-construction and the pyramidal part is installed by a hook-in system with four fixation discs. The modular hook-in system provides best convenience for installation and replacement and is easy to handle; no gluing on site necessary.

E&C Anechoic Chambers and Albatross Projects are present and active in the relevant national and international standard committees. We have the expertise to perform all kinds of EMC test site validation measurements, according to the relevant commercial as well as military standards, amongst others

Applications

WAVASORB® VHY can be applied for commercial and military measurement distances from 1 meter up to 10 meter with any volume sizes.



Multiple variables go with our WAVASORB® VHY-absorbers, e.g. plastic coating, white-caps on top of the pyramidal parts and ferrites ...
For more information on variables, contact your sales representative.

Characteristics

Handling Temperature	+5°C to +35°C
Humidity Range	30% to 70%
Frequency Range	9 kHz up to 100 GHz
Maximum Incident Power Density⁽¹⁾	1,5 kW/m ² , 0,98 W/in ² , 750 V/m
Fire Retardancy Tests	Compliant with: <ul style="list-style-type: none"> - UL-94 HBF & V-0 & HF-1 - EN13501-1 Class E; ISO 11925-2 - ISO 4589-2 - DIN 4102-1 Class B2 - NRL 8093 Tests 1, 2 and 3
Environmental Testing	According to: <ul style="list-style-type: none"> - 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 duration & frequency, for more information, contact your sales representative

Physical properties

	Standard Color ⁽¹⁾	Standard footprint ⁽²⁾
WAVASORB® VHY	Light blue	60 cm x 60 cm

⁽¹⁾ Contrast colours available on request

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

	Total height ⁽¹⁾ (cm)	Nominal weight ⁽²⁾ (kg)	Number of pyramids per piece
WAVASORB® VHY-5	12,7	1,9	81
WAVASORB® VHY-10	25,4	2,5	36
WAVASORB® VHY-12	32,5	3,5	16
WAVASORB® VHY-18	45,7	5,0	9
WAVASORB® VHY-30	77,4	6,5	4

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

⁽²⁾ Without ferrite tiles / weight values are subject to changes



Typical reflectivity performance at normal incidence & measurement techniques

WAVASORB® VHY is manufactured in well-defined batches and their reflectivity and fire-retardant properties are continuously monitored following internal ISO 9001 procedure. WAVASORB® VHY is tested routinely in-house in the frequency range from 10 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 GHz 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® VHY offers favourable reflectivity properties at off normal angles of incidence with almost no reflectivity degradation up to 45 degrees.

	TYPICAL REFLECTIVITY (dB)										
	30 MHz	50 MHz	70-200 MHz	200-500 MHz	700 MHz	1 GHz	1,2 GHz	2 GHz	6 GHz	10 GHz	15-100 GHz
WAVASORB® VHY-5	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB
WAVASORB® VHY-10	-11 dB	-11 dB	-11 dB	-11 dB	-13 dB	-15 dB	-15 dB	-15 dB	-20 dB	-22 dB	-22 dB
WAVASORB® VHY-12	-13 dB	-16 dB	-18 dB	-17 dB	-16 dB	-15 dB	-13 dB	-13 dB	-15 dB	-16 dB	-20 dB
WAVASORB® VHY-18	-13 dB	-18 dB	-19 dB	-19 dB	-19 dB	-16 dB	-16 dB	-16 dB	-18 dB	-20 dB	-25 dB
WAVASORB® VHY-30	-15 dB	-19 dB	-20 dB	-19 dB	-19 dB	-20 dB	-20 dB	-20 dB	-23 dB	-25 dB	-30 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. 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.