

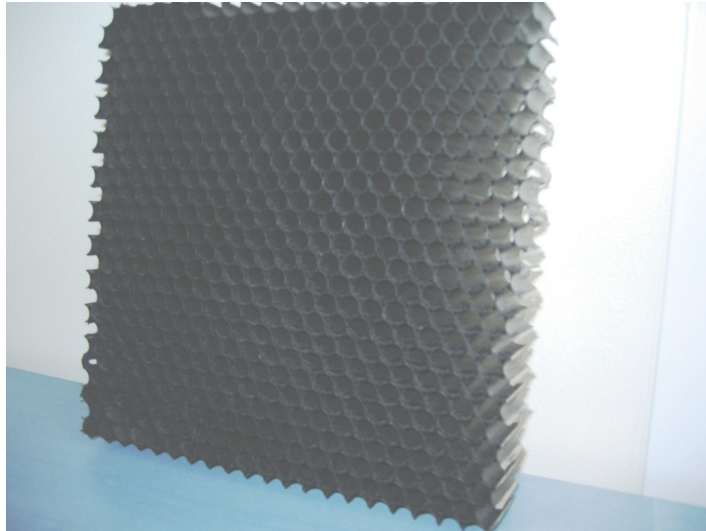
ECCOSORB® HC

LIGHTWEIGHT, HONEYCOMB BROADBAND MICROWAVE ABSORBER

Description :

Eccosorb HC is a series of lightweight flat-sheet broadband microwave absorbers which are characterised by high mechanical strength and power handling capability.

The base material is a non-conductive honeycomb structure which is coated to produce the microwave absorbing characteristics. The finished product has a tapered carbon loading, so that the front surface having the lightest loading should face the incident electromagnetic waves for proper anechoic performance.



Application :

Possible uses include: moderate performance anechoic chambers, isolation of adjacent antennas and array elements, antenna shrouds for low side-lobe reflector antennas, loads for cavity-backed antennas, absorbing walls and boxes.

Because of its honeycomb structure, Eccosorb HC is extremely useful to be integrated into multifunctional sandwich structures that need to be radar absorbing.

Physical Properties :

| | HC-0.5 | HC-1 |
|------------------------------|--------|------|
| Density (kg/m ³) | 80 | 80 |
| Thickness (mm) | 12.7 | 25.4 |
| Cell size dia (mm) | 6 | 6 |
| Service Temperature (°C) | 110 | 110 |



**ELECTRONIC
SERVICE GmbH**

Hohe Straße 3 | 61231 Bad Nauheim
T +49 (0)6032 9636-0 | F +49 (0)6032 9636-49
info@electronic-service.de | www.electronic-service.de

Bell Telephonedaan 2B – B-2440 Geel – Belgium
Tel: +32 14 56 25 00 – Fax +32 14 56 25 01
sales@eu.eccosorb.com - www.eccosorb.eu



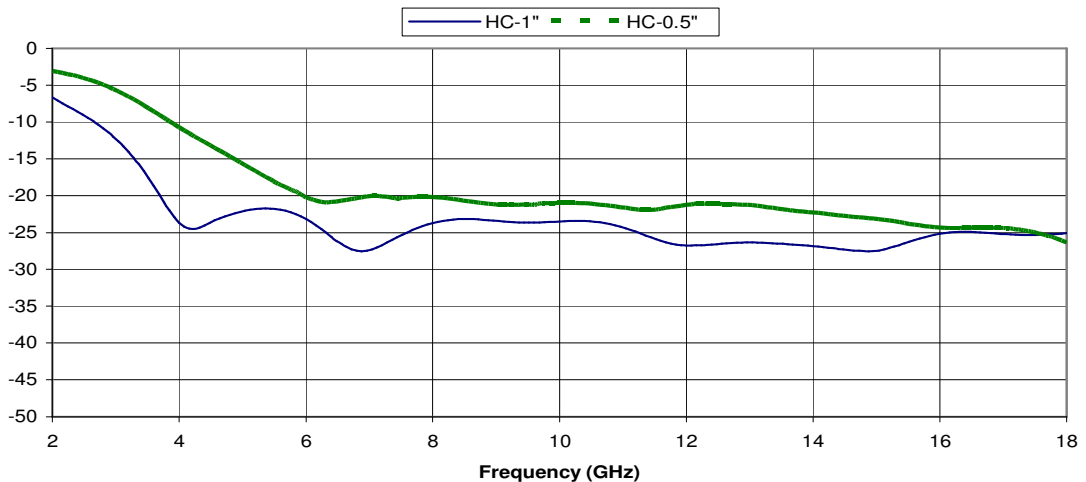
ECCOSORB® HC

FLAT SHEET, HONEYCOMB BROADBAND MICROWAVE ABSORBER

Electromagnetic Properties :

| | HC-0.5 | HC-1 |
|--------------------------------|--------|-------|
| Typical Reflectivity (> 8 GHz) | -15dB | -20dB |

Typical Reflectivity of ECCOSORB HC (Cell size 1/4")



Availability :

Eccosorb HC is presently available in two standard thicknesses: 12.7 mm and 25.4 mm with a circular cell type of 6mm diameter. Standard sheet dimensions are 305 mm x 305 mm.

It can be fabricated into special shapes but has a low flexibility.

The top surface is marked with a white spot.

The base material of standard Eccosorb HC is a polycarbonate honeycomb, other types such as rigid hexagonal-cell and flexible rectangular-cell paper honeycombs can be supplied.

For special applications the product can also be supplied in a range of non-standard thicknesses (max 30.5cm) and they can be tuned to specified frequency bands.

Instructions for use :

Eccosorb HC is designed to function directly in front of a metallic surface. If this is not the case, a metallic foil should first be bonded to the object.

As this is a gradient loaded absorber the FRONT surface is marked with a white dot and should face the incident electromagnetic waves for proper anechoic performance.



**ELECTRONIC
SERVICE GmbH**

Hohe Straße 3 | 61231 Bad Nauheim
T +49 (0)6032 9636-0 | F +49 (0)6032 9636-49
info@electronic-service.de | www.electronic-service.de



safety data sheets, prior to use EMERSON & CUMING MICROWAVE PRODUCTS 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.

Emerson & Cuming Microwave Products N.V., Bell Telephonaan 2B, B-2440 Geel, Belgium.
ECCOSORB, ECCOSTOCK, ECCOSHIELD, ECCOLENS, ECCOPAD are registered trademarks of EMERSON & CUMING MICROWAVE PRODUCTS N.V.