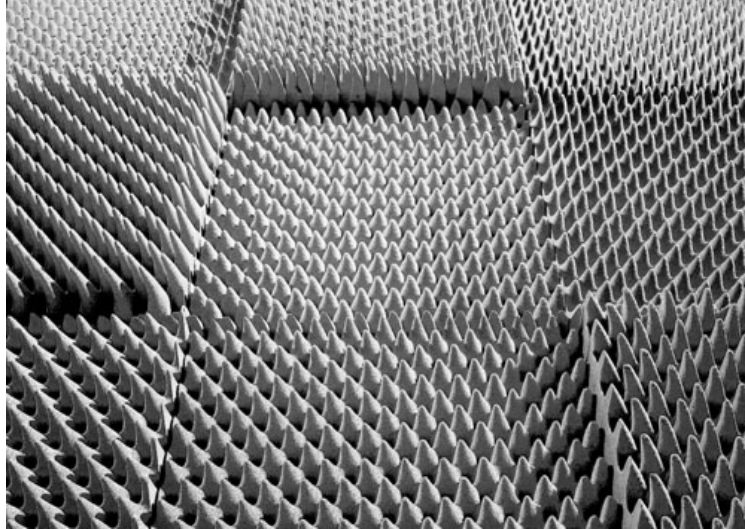


# ECCOSORB<sup>®</sup> CV

BROADBAND, CONVOLUTED, FOAM MICROWAVE ABSORBER

## Description:

Eccosorb CV is a premium quality tapered broadband microwave absorber. It is a moderately flexible urethane foam material having a front surface cut to a convoluted (egg-carton) shape. It is available in three grades, with different thicknesses, having different low frequency reflectivity limits. Because of the rounded convolutions and lack of sharp corners and points, Eccosorb CV is the preferred absorber for millimetre wave frequencies and for very wide incidence angles. There is no degradation in performance at incidence angles out to 60° off-normal.



## Application:

- Absorbing collars (shrouds) around the edges of high performance antennas.
- MM-wave applications
- Small test boxes

## Physical properties:

	ECCOSORB CV
Base size (cm)	61 x 61
Max. Service Temperature	90 °C
Power handling	1.5 kW/m <sup>2</sup>
Fire retardancy	UL-94-HBF

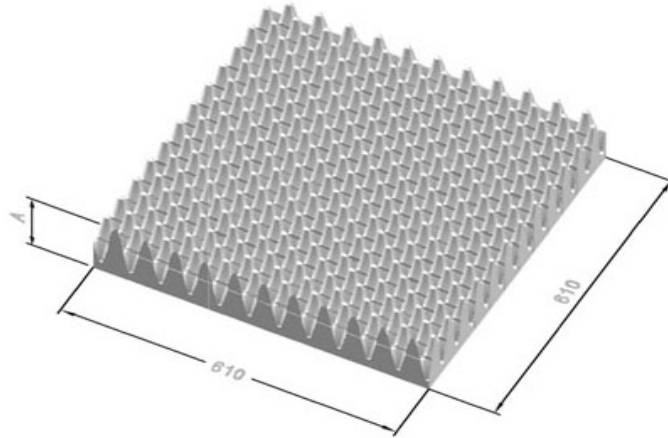
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 Tel: +32 14 56 25 00 – Fax: +33 14 56 25 01  
 Geel.Sales@lairdtech.com – www.eccosorb.eu



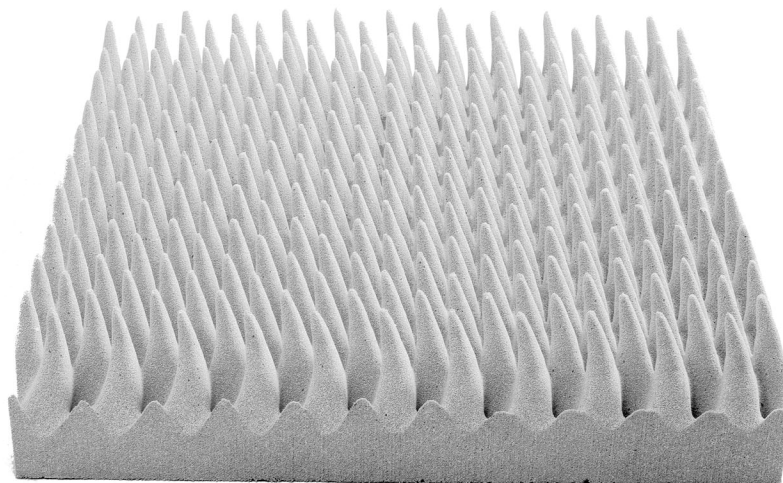
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## Nominal dimensions and weights of Eccosorb CV



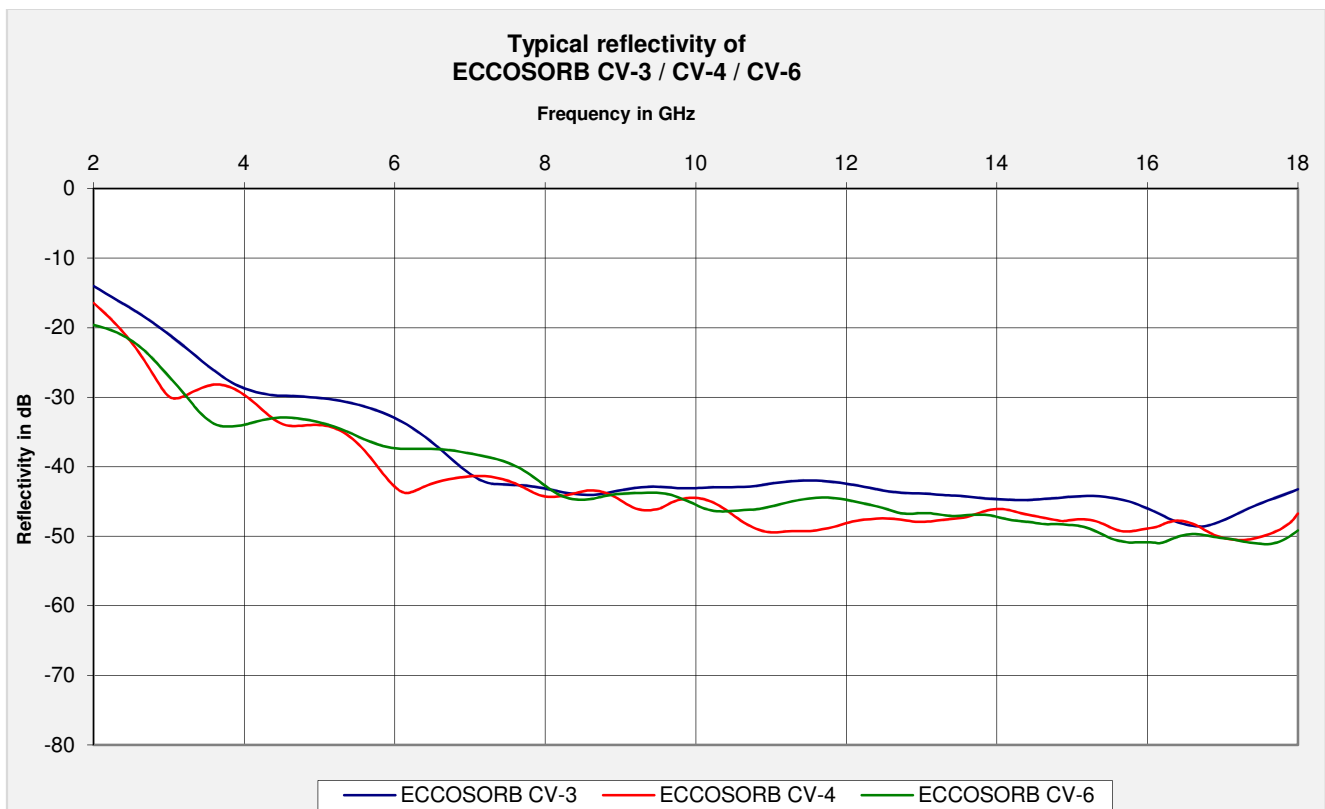
ECCOSORB CV grade	Total height A (cm)	Number of pyramids per piece	Nominal weight (kg)
ECCOSORB CV-3	6.7	251	0.9
ECCOSORB CV-4	9.8	251	1.2
ECCOSORB CV-6	15.3	242	2.0



**Electromagnetic properties:**

The table below gives the specified reflectivity values, shown the frequency at which a particular reflectivity can be expected for each grade.

FREQUENCY LIMIT (IN GHZ) FOR A GIVEN REFLECTIVITY			
Grade	-20 dB	-30 dB	-40 dB
ECCOSORB CV-3	4	7	8
ECCOSORB CV-4	4	6	8
ECCOSORB CV-6	2.5	4.5	6



# ECCOSORB<sup>®</sup> CV

## BROADBAND, CONVOLUTED, FOAM MICROWAVE ABSORBER

### Availability:

Eccosorb CV is available in standard piece sizes of 61 cm x 61 cm, in three grades having thicknesses of 7 cm, 10 cm and 15 cm. The thickness determines primarily the low frequency end of performance, all grades have similar performance at millimetre wave frequencies.

Eccosorb CV is supplied with the front surface painted white.

If the primary application is for millimeter wave frequencies, it is recommended to ask for absorber to be supplied without paint, as it can have a negative effect on the reflectivity performance.

### Instructions for use:

Eccostock ADHESIVE 13111, a contact adhesive, is recommended and will bond the absorber securely to clean surfaces of metal, wood and common plastics or plastic composites. It is brushed or sprayed onto both the back surface of the absorber and the substrate surface, allowed to become tacky in 3 to 5 minutes, and then the two surfaces are pushed together with slight pressure to form a contact adhesion. The bonded piece should be allowed to sit overnight for complete evaporation.

The curved absorber tips should be pointed in the direction of the transmit signal.



**Safety Considerations** : It is recommended to consult the EMERSON & CUMING MICROWAVE PRODUCTS product literature, including material 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.

2014/09 - V01/4

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