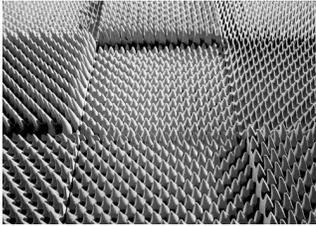


# Broadband, Convoluted, Foam Microwave Absorber

## BROADBAND CONVOLUTED FOAM ABSORBER



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. Because of the rounded convolutions and lack of sharp corners and points, Eccosorb CV is the preferred absorber for mm wave frequencies and for very wide incidence angles. There is no degradation in performance at incidence angles out to 60° off-normal.

### FEATURES AND BENEFITS

- Convoluted
- Broadband absorption due to high thickness
- High reflectivity due to geometric structure

### MARKETS

- Commercial Telecom
- Test and Measurement

### SPECIFICATIONS

TYPICAL PROPERTIES	ECCOSORB CV
Frequency Range	>1.5 GHz
Max. Service Temperature °C (°F)	90 (194)
Power Handling kW/m <sup>2</sup>	1.5
Fire Retardancy	UL-94-HBF

*Data for design engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application.*

### APPLICATIONS

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

### AVAILABILITY

- Eccosorb CV is available in standard piece sizes of 61 cm x 61 cm.
- Two grades are available, Eccosorb CV-3 and CV-4, with resp. heights of 6.7 cm and 9.8 cm. The thickness (height) determines primarily the low frequency end of performance, all grades have similar performance at millimeter 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.

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

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

### INSTRUCTIONS FOR USE

- The Eccostock® foam adhesive, 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.

