

ECCOSORB® HR

Lightweight Flat-Sheet Broadband Microwave Absorbers

Material Characteristics

- Lightweight, flexible, flat-sheet broadband absorber
- Reticulated (open-cell) polyurethane foam sheet with a controlled conductivity gradient carbon loading system
- Electrically conductive
- Frequency range from 5 - 40 GHz
- Back surface is marked: HR-xx BACK
- Not weatherproof

Applications

- Antenna shrouds for low side-lobe reflector antennas
- Isolation of adjacent antennas and array elements
- Various camouflaging and interference suppression applications
- Military radar absorbing blankets providing stealth
- ECCOSORB® HR has been used for moderate performance anechoic chambers and less sensitive regions of high performance chambers

Availability

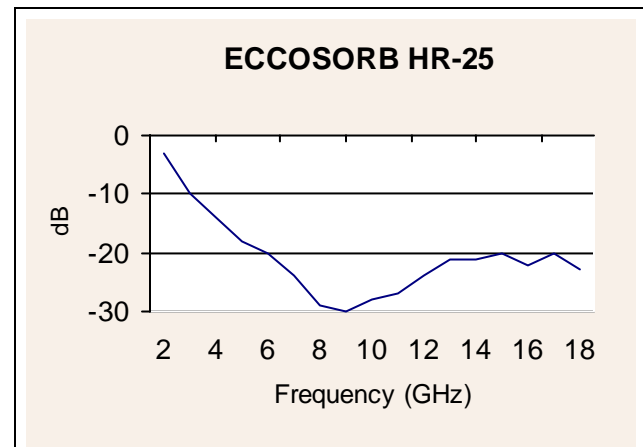
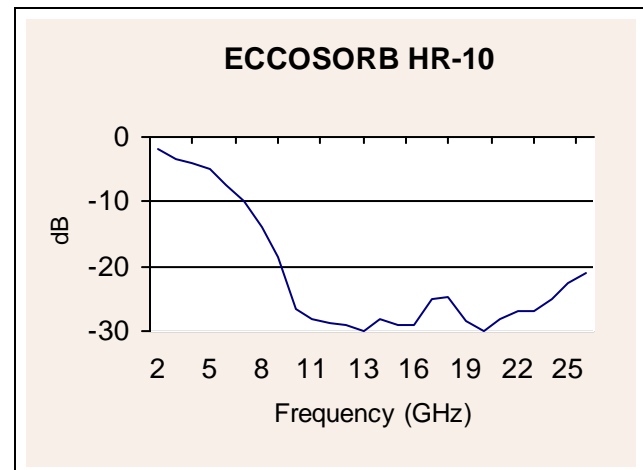
- Standard sheets are 24" x 24" (61 cm x 61 cm)
- Two standard thicknesses: ECCOSORB® HR-10 (10 mm) and ECCOSORB® HR-25 (25mm)
- ECCOSORB® HR is available in other sizes and customer specified configurations upon request

Typical Properties

	HR-10	HR-25
Density lb/ft ³ (kg/m ³)	2.8 (45)	2.8 (45)
Weight per 24" x 24" sheet, Lbs.	0.38	0.93
Tensile Strength (kPa)	70	70
Elongation (%)	170	170
Max. Service Temperature, °F (°C)	194 (90)	194 (90)
Frequency Range (GHz)	12-40	5-27
Reflectivity	>20dB	>20dB

Typical Reflectivity for ECCOSORB® HR

Results will vary depending on application.



Instructions for Use

- The front surface should face the incident electromagnetic energy for proper performance. To decipher from front and back, the back side of each panel is marked (HR-xx BACK)
- ECCOSORB® HR should be bonded to a metal surface for optimal performance. If a metal surface is not available, it can be supplied with an aluminum foil backing (ML) designated as HR-XX/ML
- ECCOSORB® HR can be bonded with the preferred adhesive ECCOSTOCK® [13-111-NF](#)