



## ECCOSORB<sup>®</sup> 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 70 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<sup>®</sup> HR has been used for moderate performance anechoic chambers and less sensitive regions of high performance chambers

#### Availability

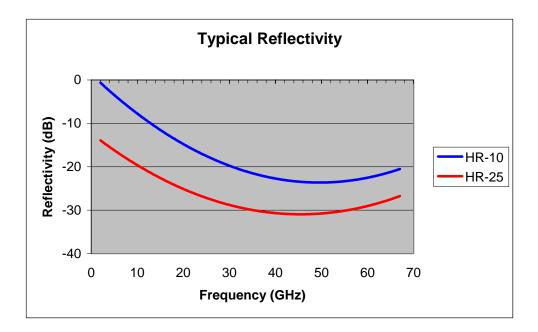
- Standard sheets are 24" x 24" (61 cm x 61 cm)
- Two standard thicknesses: ECCOSORB<sup>®</sup> HR-10 (10 mm) and ECCOSORB<sup>®</sup> HR-25 (25mm)
- ECCOSORB<sup>®</sup> HR is available in other sizes and customer specified configurations upon request

#### 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<sup>®</sup> 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<sup>®</sup> HR can be bonded with the preferred adhesive ECCOSTOCK<sup>®</sup> 13-111-NF

### **Typical Properties**

|   | HR-10    | HR-25    |
|---|----------|----------|
| Frequency Range (GHz)                           | 12-70    | 5-27     |
| Max. Service Temperature, °F (°C)               | 194 (90) | 194 (90) |
| Density lb/ft <sup>3</sup> (kg/m <sup>3</sup> ) | 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      |



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