Shielding Solutions Reticulated Foam Absorber product series is a lightweight conductive carbon loaded sheet stock providing broadband loss at microwave frequencies. Reticulated Foam Absorbers are designed with a continuous gradient coating to exhibit high reflection loss and are intended to be applied to metal surfaces inside microwave cavities, housings, radomes, network enclosures, or antennae. Reticulated Foam Absorbers attenuate energy at normal and high angles of incidence at frequencies from 10 GHz to 100 GHz.

### Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness - mm</td>
<td>9.5 - 32</td>
</tr>
<tr>
<td>Adhesive Thickness</td>
<td>0.12mm</td>
</tr>
<tr>
<td>Operating Temperature (°C)</td>
<td>-50 to 120</td>
</tr>
<tr>
<td>Colour</td>
<td>Black</td>
</tr>
<tr>
<td>Flammability Rating</td>
<td>UL94-HF1 Available</td>
</tr>
</tbody>
</table>

### Availability

- Standard sheets are 610 x 610mm (24”x24”) with or without PSA
- Custom Sizes available
- The material can also be supplied in customized shapes
This performance plot illustrates the reflection loss performance of this material. Reflection loss is measured on an NRL arch, for more information on the NRL arch test set-up.

Application

The primary method of application for Reticulated Foam Absorbers is utilizing a Pressure Sensitive Adhesive (PSA) backing. Shielding Solutions uses 3M transfer tapes on it’s Reticulated Foam Absorbers. Contact Shielding Solutions for a datasheet on the PSA. Other liquid and paste adhesive may be recommended. Contact Shielding solutions for more information.
RAM-RF001 Reticulated Foam Absorber Material

Applications

- Antenna Pattern Performance
- Sidelobe/backlobe reduction
- Resonant Cavity Attenuation
- EMI Reduction
- Rx/Tx Antenna Isolation
- Radar Cross Section Reduction
- Dual use air filter/EMI absorber

Features and Benefits of Use

- Lightweight polyether reticulated foam
- Cost effective broadband material
- Easily applied with PSA
- Most broadband absorber material
- RoHS Compliant
- Halogen Free