ALP 10/4 Foil Damping Sheets

ALP 10/4 Foil Damping sheets are self-adhesive damping material for sound and vibration damping of thin metal and plastic panels. It consists of 10mil (0.25mm) Aluminum sheet with 4mil (0.1mm) self-adhesive viscoelastic damping layer on one side. The adhesive side is smooth allowing full contact with the underlying surface, without any air-pockets or channels.

ALP 10/4 is odorless, wear resistant, water-resistant and oil proof. The damping layer can withstand temperatures between -22ºF (-30ºC) and +302ºF (+150ºC) and high aging resistances.

The acoustic properties of all viscoelastic material are temperature and frequency dependent. Figure 1 shows the variation of the composite loss factor for a 0.040” (1mm) thick steel beam which is covered with ALP 10/4 damping sheet.

The temperature dependence of the composite loss factor at the frequency of 200Hz for some steel and aluminum structures covered with ALP 10/4 is shown in Figure 2.

Applications:

Typical applications include computer housings, appliances, transportation and construction equipment plus a wide variety of architectural applications.

ALP 10/4’s non combustible and electrical conductivity properties enables it to perform additional functions to its inherent superior acoustical properties.

ALP 10/4 is easily handled, fabricated or die-cut. It is available in a variety of thicknesses and sizes.

Delivery Form

Standard sheet sizes about 36” x 48” (915mm x 1220mm)

Specification

<table>
<thead>
<tr>
<th>Color:</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness:</td>
<td>14mil (0.36mm)</td>
</tr>
<tr>
<td>Weight:</td>
<td>0.16lbs/sq.ft (0.78Kg/m²)</td>
</tr>
<tr>
<td>Temperature resistance range:</td>
<td>-22ºF (-30ºC) to +302ºF (+150ºC)</td>
</tr>
</tbody>
</table>

Short term temperature resistance range: +446ºF (+230ºC) for 40 minutes