Absorption Systems
Solutions to echo and reverberation control

making the world a quieter place
Absorbatone™
Fabric wrapped foam absorption panels for echo and reverberation control.

Why Absorbatone?
- BB93 (UK standard) compliant
- Cost effective solution
- Attractive finish
- Quick and easy installation
- Standard and bespoke sizes available
- No fibre migration
- Lightweight

Absorbatone™ is a range of fabric covered absorber panels specifically designed to reduce and control reverberation time.

Once fitted, Absorbatone™ panels create a pleasant acoustically enhanced environment and can greatly improve speech intelligibility.

Absorbatone™ is available in the following standard sizes, in thicknesses of either 25mm or 50mm:
- 300mm x 300mm
- 600mm x 600mm
- 600mm x 1000mm
- 600mm x 1200mm
- 1200mm x 1200mm
- 1200mm x 1500mm
- 1200mm x 2400mm

Panels can also be custom manufactured in any size up to 1200mm x 2400mm.

Weight
- 25mm thick: 0.67kgs per square metre
- 50mm thick: 0.94kgs per square metre

Finish
IAC Absorbatone™ panels are wrapped using acoustically transparent, highly durable fabrics which complement the excellent sound absorbing properties of the foam interior.

A choice of colours ensures that Absorbatone panels can either be a feature or discretely blend into the background depending on the application and customers requirements.

Varitone™
A rugged perforated steel encased absorption system for harsh and industrial environments.

Varitone® rectangular, sound-absorbing modules reduce distracting echo or reverberation effects inside buildings. They create an acoustically softer, more pleasant ambience and improve speech intelligibility.

Available in standard thicknesses of 50mm and 100mm, and in lengths of up to 3660mm, the panels may be suspended from ceilings or simply attached to walls. Manufactured from rugged, abuse and fire resistant 0.76mm galvanised steel, Varitone is available in a wide range of attractive finishes - including PPC and vinyl - which are both hard wearing and easy to clean.

IAC offers a full acoustical evaluation service to determine the correct position, size and quantity of panels needed to achieve effective reverberation control in any given environment.

Construction & Panel Sizes
Sound-absorbing Varitone® modules are in standard thicknesses of 50mm and 100mm and standard widths of 450mm (50mm thick panel) and 360mm (100mm thick panel). Standard lengths range from 915mm to 3660mm. Special (non-standard) panels can be made on request.

Each module is manufactured from rugged, abuse-resistant 0.76mm perforated galvanised steel with an open area of 23%. Each module contains incombustible, inert, mildew-resistant and vermin proof acoustically absorbent infill.

IAC offer a full acoustical service to help determine the optimum solution for each project in terms of panel quantities required and location.

Acoustic Performance

<table>
<thead>
<tr>
<th>Model</th>
<th>Centre Frequency, Hz</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>NRC*</th>
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<tbody>
<tr>
<td>VT-2</td>
<td>Coefficient</td>
<td>0.35</td>
<td>0.65</td>
<td>1.20</td>
<td>1.21</td>
<td>1.07</td>
<td>0.92</td>
<td>1.00</td>
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<tr>
<td>50mm</td>
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<tr>
<td>VT-2P</td>
<td>Coefficient</td>
<td>0.41</td>
<td>0.47</td>
<td>0.64</td>
<td>0.79</td>
<td>0.85</td>
<td>0.72</td>
<td>0.70</td>
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<tr>
<td>50mm, Melinex wrapped</td>
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<tr>
<td>VT-4</td>
<td>Coefficient</td>
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<td>1.39</td>
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<td>1.29</td>
<td>1.19</td>
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<td>100mm</td>
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<tr>
<td>VT-4P</td>
<td>Coefficient</td>
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<td>0.89</td>
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<td>0.86</td>
<td>0.77</td>
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<tr>
<td>100mm, Melinex wrapped</td>
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</table>

*NRC stands for Noise Reduction Coefficient and is the average of the 250, 500, 1000 and 2000Hz coefficients. It is a single number indicator of relative absorption values. Coefficients greater than 1.0 result from diffraction effects associated with limited sample size (ASTM C423-90a - 6.69m²). For most applications, a maximum coefficient of 0.95 is recommended for noise reduction calculations.

Note: The above absorption measurements are based upon ASTM C423-90a test procedure. Certified laboratory test reports are available upon request.