Tuned Absorber/Diffuser (TAD) Panels combine engineered acoustics and a choice of fabric or vinyl coverings to give you an excellent design solution where more balanced sound absorption and high frequency diffusion are desirable.

Place the Tuned Absorber/Diffuser where low and mid-frequency absorption is desired in conjunction with increasing reflectivity and diffusion in higher frequencies. The outstanding acoustical performance of this panel is the result of the assembly of a sound absorptive fibrous core covered with a variable impedance laminate. Openings in the laminate are sized and spaced to optimize the absorption in low to mid frequencies while creating random higher frequency reflective surfaces between openings (variable impedance). A design program is utilized to acoustically optimize the hole pattern in the laminate while maintaining the desired overall open versus reflective area in the panel surface. For increased low frequency sound absorption, a thicker fibrous core (2 to 4 inches) can be specified. For increased high frequency absorption, the hole size can be changed to 5/8 inch diameter versus the standard 1/2 inch opening.
TAD - Tuned Absorber/Diffuser Panel

DESCRIPTION
A versatile absorber/diffuser panel wrapped in a wide selection of fabrics or vinyls. Available with hardened shaped edges. Engineered to control room acoustics with thicknesses from 1 to 4 inches and sizes up to 4 ft. x 8 ft. Standard sizes (in feet) are 2 x 2, 2 x 4, 4 x 4, 4 x 6 and 4 x 8. Custom sizes available.

COMPOSITION
6-7 PCF density fiberglass core
Chemically hardened edges
Perforated laminate face with randomized pattern of 1/2 inch diameter holes, 5/8 inch optional
Wrapped in fabric from Guilford of Maine, or factory-approved, customer-selected material

ACOUSTICAL PERFORMANCE
Panel Wrapped in woven polyester fabric

<table>
<thead>
<tr>
<th>1/3 Octave Center, Freq. (Hz)</th>
<th>100</th>
<th>125</th>
<th>160</th>
<th>200</th>
<th>250</th>
<th>315</th>
<th>400</th>
<th>500</th>
<th>630</th>
<th>800</th>
<th>1000</th>
<th>1250</th>
<th>1600</th>
<th>2000</th>
<th>2500</th>
<th>3150</th>
<th>4000</th>
<th>5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/8&quot; Thick with 5/8&quot; Holes*</td>
<td>0.01</td>
<td>0.10</td>
<td>0.18</td>
<td>0.25</td>
<td>0.37</td>
<td>0.61</td>
<td>0.79</td>
<td>0.93</td>
<td>1.05</td>
<td>1.09</td>
<td>1.08</td>
<td>0.92</td>
<td>0.83</td>
<td>0.77</td>
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<td>0.57</td>
<td>0.53</td>
<td>0.47</td>
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<tr>
<td>1-1/8&quot; Thick with 1/2&quot; Holes*</td>
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<td>0.33</td>
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<td>0.63</td>
<td>0.82</td>
<td>0.94</td>
<td>0.95</td>
<td>0.96</td>
<td>0.91</td>
<td>0.79</td>
<td>0.73</td>
<td>0.63</td>
<td>0.51</td>
<td>0.51</td>
<td>0.42</td>
<td>0.35</td>
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<tr>
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<td>0.39</td>
<td>0.51</td>
<td>0.59</td>
<td>0.80</td>
<td>0.91</td>
<td>1.08</td>
<td>1.19</td>
<td>1.13</td>
<td>1.08</td>
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<td>0.88</td>
<td>0.75</td>
<td>0.64</td>
<td>0.59</td>
<td>0.55</td>
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<td>0.43</td>
</tr>
<tr>
<td>1-1/8&quot; Thick with 1/2&quot; Holes**</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.02</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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<td>0.10</td>
<td>0.11</td>
<td>0.18</td>
<td>0.17</td>
</tr>
</tbody>
</table>

*Absorption Coefficient per ASTM C423
**Scattering Coefficient per ISO 17497-1

APPLICATIONS
- Interior surfaces where superior acoustical performance is required.
- Conference Rooms
- Schools/Classrooms
- Auditoriums
- Media and Multi-Purpose Rooms
- Churches
- Office Spaces
- Reception Areas
- Home Theaters
- Pro Theaters

MOUNTING
HardSide Impaling Clips with Adhesive
Rotofast Clips for ceilings
Z-Clips - movable
Velcro - movable

EDGES OPTIONS
Square
Bevel
Radius
Pencil

CROSS-SECTION OF TUNED ABSORBER/DIFFUSER

fabric or vinyl
1/8" laminate with custom-designed hole pattern
Hardened Edges
fiberglass sound absorptive core

MADE IN USA
Kinetics Noise Control, Inc. is continually upgrading the quality of our products.
We reserve the right to make changes to this and all products without notice.