Wooden Sound Diffusers

APPLICATIONS

Diffusers ALPHAcoustic-CITY.wood offer an excellent method to resolve complex acoustic problems in spaces with flatter echo and giving a sense of spaciousness, without “over-deadening” the space. They combine acoustic diffusion and aesthetic appearance.

Typical Applications can be on the walls of:

• Auditoriums - Concert Halls
• Home Theaters - Cinemas
• Meeting Rooms
• Recording Studios
• TV and Radio Broadcasting
• Teleconference rooms

TECHNICAL CHARACTERISTICS

Specially designed Acoustic Bi-dimensional Diffusers CITY-wood are made of solid real wood. They contribute in conserving sound energy and also help spread it around to achieve even uniform distribution of sounds in the room. They also improve the sound articulation of the room.

• Dimensions: 60 x 60 cm  Max height: 9.5 cm
• Standard finishing: Semi Gloss Polish
  (or can be painted in any color)
• Material: Real Wood
• Installation: Easy mounting on the wall due to a clever hanging system in the backside of each piece.

CITY-wood made of solid real wood offers an omnidirectional scattering with the elegance and attractiveness of wood, making it not only a powerful acoustic tool but a piece of art that can decorate any acoustic space.

With its special design of striking angled surface with different length it can diffuse sound in all directions, especially in high frequencies. It redirects and redistributes the acoustic waves all over the room, helping to eliminate “hot and dead” areas, while maintaining the “live” sound in the room.

The special design of unequal “towers” in every side, offers fragment of the reflected energy, without significant sound absorption.

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorption Coefficient ($\alpha$)</td>
<td>0.07</td>
<td>0.15</td>
<td>0.15</td>
<td>0.20</td>
<td>0.20</td>
<td>0.25</td>
</tr>
<tr>
<td>Diffusion Coefficient*</td>
<td>0.45</td>
<td>0.56</td>
<td>0.61</td>
<td>0.70</td>
<td>0.70</td>
<td>0.50</td>
</tr>
</tbody>
</table>

*Diffusion Coefficient: These values were obtained by mathematic calculations.