

Omniffusor™

2D Diffusion



*The First Two Dimensional Wood QRD®
From The Acoustical Industry's Leading Innovator*

Conventional acoustic treatments have relied on absorption for reflection control. Unfortunately, this can "dead" the room and make it unsuitable for speech or music. Diffusive surfaces are one of the most effective ways to simultaneously control room reflections and provide a natural ambiance. The Omniffusor™ uniformly scatters sound arriving from any direction into many directions, providing ideal distribution and coverage. Its unique shape creates an attractive, visually interesting acoustical surface.



The Sound of Innovation™

Problem and Solution

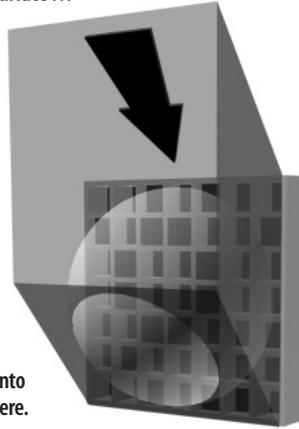
Problem

Specular reflections from flat, hard surfaces cause strong reflections that corrupt speech intelligibility and degrade music quality. Typically, fabric wrapped absorptive panels are used to control interfering reflections, with the undesirable side effect of deadening the space.

Solution

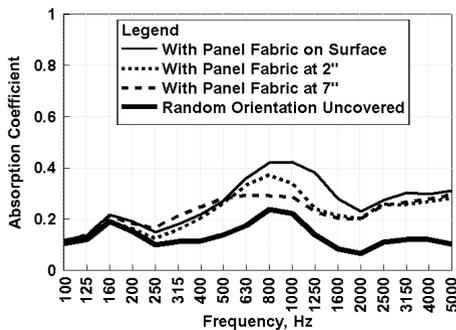
The Omniffusor™ is the first 2D QRD® sound diffuser. It offers twice the reflection attenuation of the 1D QRD® because it uniformly scatters sound into a hemisphere. The Omniffusor™ provides uniform, omnidirectional, broad bandwidth diffusion in an attractive ceiling or wall design element.

Sound strikes a two dimensional diffusing surface ...



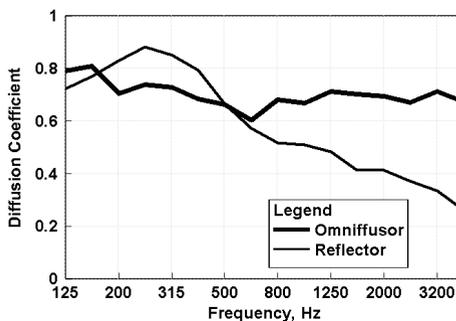
...and is uniformly scattered into a hemisphere.

Performance Specifications



Absorption

While the primary function of the Omniffusor™ is to provide broad bandwidth diffusion, it also offers minimal and beneficial amount of absorption across the frequency spectrum with a small emphasis at about 800Hz.



Diffusion

The Omniffusor™ offers significant diffusion compared to a flat reflector panel above the diffraction limit of 565 Hz, which is determined by the dimensions of the panel. Above this frequency, the graph indicates how the reference reflector becomes more and more specular as the frequency increases, whereas the Omniffusor™ provides a constant diffusivity.

Installation

Wooden Omniffusors™ can be wall or ceiling mounted or suspended in a T-bar grid. Plexiglass Omniffusors™ should be flush mounted into a framed opening. Decorative trim can be added to conceal the perimeter joint.

FEATURES

- 2D QRD® reflection phase grating
- Uniform hemispherical scattering for all angles of incidence
- Simultaneously offers diffusion and minimal mid band absorption
- 2D QRD® provides twice the diffusive specular attenuation of a 1D QRD®
- Available in furniture grade hardwoods and plexiglass
- Available in modular 2' x 2' panels

BENEFITS

- The 2D QRD® provides phase variation in two orthogonal directions for uniform, omnidirectional scattering
- Hemispherical scattering makes the Omniffusor™ ideal for ceiling applications because the incident sound is uniformly distributed throughout the room from a planar ceiling surface
- The omnidirectional diffusive attenuation, coupled with minimal mid band absorption, provides ideal reflection control without deadening the space
- The wide range of wood finishes makes the Omniffusor™ an attractive architectural addition to a space
- Modular 2' x 2' panels can be wall or ceiling mounted or suspended in a 15/16" heavy duty T-bar ceiling grid

APPLICATIONS

Mastering studios, Performing arts facilities, Post production studios, Broadcast studios, Worship spaces, Recording studios, Listening rooms, Home theaters, Conference rooms

SPECIFICATIONS

- Size: 23-5/8" (L) x 23-5/8" (W) x 4" (D)
- Standard finish is clear lacquered birch
- Custom wood species and finishes available

