

Biffusor™

1D Diffusion



*The First General Purpose Variable Diffusor
From The Acoustical Industry's Leading Innovator*

The QRD® 734 has proven to be the most popular and versatile diffuser in the RPG® product line. Its wide bandwidth, low cost, and broad selection of finishes make it a logical choice for music education facilities, recording studios, worship spaces, auditoriums, theaters, and performing arts facilities. This one dimensional diffuser is a modular, computer designed phase grating which produces a directional hemidisc polar response that can be oriented in any direction. To provide variable acoustics, the rear of the QRD is utilized to create an Abffusor, offering primarily absorption with near field scattering. The front and back surface are now both available to provide variable acoustic by simply rotating the panel. We call this variable acoustics module the Biffusor™.



The Sound of Innovation™

Problem and Solution

Problem

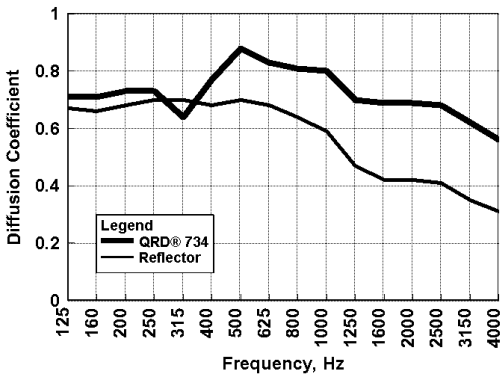
When a room is used for a variety of applications, it is useful to be able to be able to reorient the surface treatments into a variety of ways to tailor the acoustics.

Solution

In 1983, RPG® introduced the first commercial QRD® Diffusor, based on mathematical number theory. By configuring the rear surface into an abffusive configuration, interfering reflections that degrade speech intelligibility and music quality can be controlled by either absorption/diffusion (abffusion- top photo) or diffusion (bottom photo), by simply rotating the Biffusor.

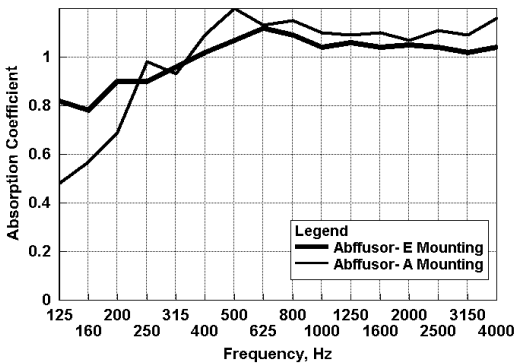


Performance Specifications



Diffusion

The diffusive side of Biffusor offers uniform diffusion. Compared to a flat reflector panel, the QRD® 734 offers significant diffusion above the diffraction limit of 565Hz. As the frequency increases above 565Hz, the graph indicates how the reference reflector becomes more and more specular, whereas the QRD® 734 provides uniform diffusivity.



Absorption

The abffusive side provides significant absorption and near field diffusion, due to the reflective dividers.

Installation

The Biffusor can be mounted to be rotated about a center pivot, provided there is sufficient cavity depth or hinged on one end to swing like a door.

FEATURES

- QRD® sound diffusion or abffusion
- Natural wood or paint finish
- Variable
- Biffusor can be rotated or hinged

BENEFITS

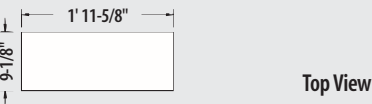
- Interfering reflections can be either diffused or absorbed, offering variable acoustics
- Natural wood or paint finish can match room decor
- Center rotation or end hinging offers many possible configurations

APPLICATIONS

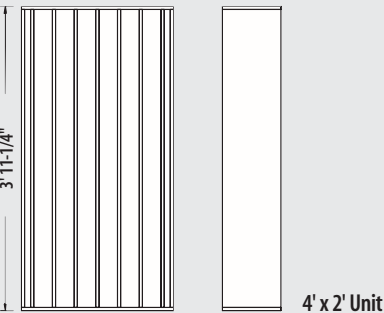
Music education facilities, Band rooms, Recording studios, Post production studios, Home theaters, Worship spaces, Auditoriums, Performing arts centers

SPECIFICATIONS

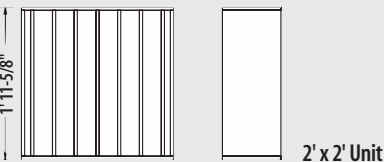
- Sizes and weights:
 - 23-5/8" (H) x 23-5/8" (W) x 9-1/8" (D): 26 lbs.
 - 47-1/4" (H) x 23-5/8" (W) x 9-1/8" (D): 50 lbs.
- Custom sizes available
- Standard finish: Uniform white birch clear coat
- Custom finishes available
- Class A fire rated



Top View



4' x 2' Unit



2' x 2' Unit