

QR™

Quadratic Residue Diffuser

Acoustical Performance

Frequency (Hz)	125	250	500	1K	2K	4K	NRC
Absorption Coefficients, Type A Mounting, FRP Construction	.20	.21	.33	.22	.18	.19	.25

Frequency (Hz)	125	250	500	1K	2K	4K	MEAN
Diffusion Coefficients, AES-4id-2001, FRP Construction	.74	.74	.86	.84	.72	.60	.75

QR™ Diffuser

- Quadratic Residue Prime 7 Sequence Diffusion
- For Wall and Ceiling Installations
- Finishes include Wood, FRP, Clear & Colored Acrylics, Standard Fabric Facings, or Designer's Selection/ COM
- Thickness: Standard 9" (nominal), minimum 4"
- Sizes (Nominal): 24" x 24", 24" x 48", 48" x 48"
- Special Sizes: Available upon request
- Weight: 8 pounds per square foot (nominal)
- Fire Performance Rating: Class A
- Installation fasteners: Mechanical



Description

AVL Systems QR™ Diffuser is a computer-optimized design utilizing quadratic residue number theory and periodic reflection phase grating principles in a highly finished acoustical product that can be mounted to most architectural surfaces. These products are precisely engineered and manufactured to provide one-dimensional broadband diffusion and wide-range scattering of acoustical sound energy without resonance, high-Q reflections, or unwanted absorption. AVL Systems QR™ Quadratic Residue Diffusers are meticulously constructed to dampen unwanted resonances and resist impact and damage. Finished panels can be ordered in a variety of finishes including FRP, wood, clear or colored acrylic, custom laminates, or covered with standard or customer specified fabrics. AVL Systems QR™ Diffuser-Absorbers are supplied to standard or custom sizes as specified for walls and ceilings.

Applications

AVL Systems QR™ Diffuser-Absorbers are ideal for rooms and spaces where sound and noise control are a consideration. The design of these products allows the specifier to provide diffusion to help scatter and blend the sounds in the room for the listening enjoyment of both music and speech. These functions help performers hear themselves with others and serves to improve clarity and tonal separation for voice, music, and performances.

Interactive System Performance

The QR™ and DiSorb™ families of interactive performance products are designed to provide the acoustical engineer and specifier with a complete "toolbox" of technically compatible products for any application. These engineered products can be used individually or, as an interactive system, working together to optimally enhance the interior design, functionality, and acoustics of the architectural space. AVL Systems, Inc. is pleased to offer a full range of standard and custom architectural acoustic products for virtually every application and technical requirement.

Finishes

Finishes include Wood, FRP, Clear & Colored Acrylics, Standard Fabric Facings, or Designer's Selection/ COM

Warranty

AVL Systems *Limited Warranty* extends for TWO FULL YEARS from the original date of shipment. AVL Systems literature, presentations and published data are correct to the best of our knowledge at time of publication. AVL Systems, Inc. reserves the right to change or amend any of the products or the information presented or published without liability or notice.

Hear
The
Difference



AVL Systems, Inc.

5540 Southwest 6th Place / Ocala, Florida 34474 USA

Phone: 800-ACUSTIC / Fax: 352-854-1278

www.AVLonline.com / Email: info@AVLonline.com