Binary DiSorb™

Binary DiSorb™ Diffuser - Absorber

Lightweight Absorber-Diffuser for Wall and Ceiling Installations
Decorative standard fabric facings or Designer's selection/ COM

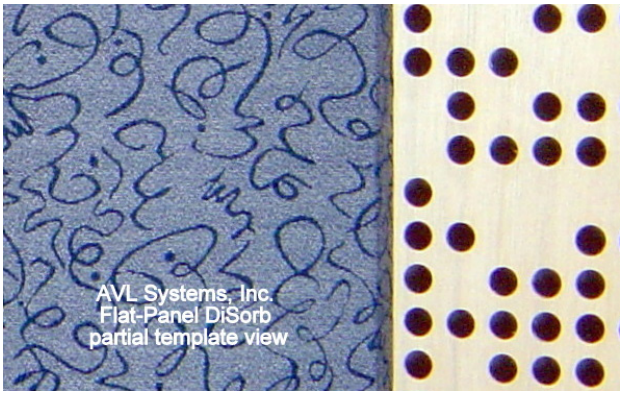
Thickness (Nominal):	1", 2", 3", 4"
Sizes (Nominal):	Any size up to 48" x 120"
Special Sizes:	Available upon request
Fire Performance Rating:	Class A
Installation fasteners:	Mechanical, Impaling, Velcro, Magnetic

Acoustical Performance (Absorption & Scattering)

Frequency (Hz)	125	250	500	1K	2K	4K	NRC
Flat-Panel DiSorb™ 1.1"	.19	.38	.92	1.04	.83	.62	.80
Flat-Panel DiSorb™ 2.1"	.47	.82	1.05	1.02	.84	.65	.95
Flat-Panel DiSorb™ 3.1"	.69	.99	1.00	1.05	.84	.64	1.00
Flat-Panel DiSorb™ 4.1"	.93	.92	1.07	1.04	.84	.63	1.00

Acoustical Performance - Diffusion

Unlike sound absorption testing (ASTM C423) and sound transmission testing (ASTM E90), a standardized test for sound diffusion does not exist in the American Society for Testing of Materials (ASTM). The Audio Engineering Society has suggested a test for diffusion characteristics that was largely developed by a manufacturer for their own products. This test (for single units only, and often performed using scale-models) is from informational document AES-4id2001 and for 10 years has not been adopted by a standards organization for industry use nor does it present a verifiable reference for the comparison of products. There is no verifiable standard for diffusion testing, or the test results, which are a product of each manufacturer's individual interpretations and application of the test procedures. AVL Systems uses AES-4id2001 for in-house product development but does not make available comparisons of non-standardized subjective data.



Description

AVL Systems Binary DiSorb™ Diffuser-Absorber is a tuned, light weight, decorative, acoustical control product for mounting to most any flat architectural surface. This product's design includes a concealed screen component of optimized, semi-random patterns of perforated holes intended to balance and promote desirable diffusive back-scattering of mid and high frequency acoustical sound energy along with frequency-discriminate sound absorption; all from one product. The complete panel core is inert, non-combustible and dimensionally stable. Finished panels are constructed of impact-resistant, thermo-molded materials to prevent resonances and resist damage. Facings are factory applied with standard or customer specified fabrics. AVL Systems Binary DiSorb™ Diffuser-Absorbers are supplied to standard sizes as specified and are ready for installation with factory-supplied attachment devices to existing walls and/or ceilings.

Applications

AVL Systems Binary DiSorb™ 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 absorption and uniform broadband diffusion in all directions 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

AVL Systems DiSorb™ family 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

A wide selection of AVL Systems' standard fabrics. Optional choices include Designer's selection and C.O.M.. See Section 7.0

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.

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