

Binary DiSorb™ Flat or Convex⁺ Face Diffuser-Absorber

AVL Systems' Binary DiSorb™ Diffuser-Absorber with flat face and *Convex⁺* Binary DiSorb™ with convex face are tuned, light weight, decorative, acoustical control products for mounting to most any flat architectural surface. These product's designs include a concealed screen component of optimized, semi-random patterns of perforations intended to balance and promote desirable diffusive back-scattering of mid and high frequency acoustical sound energy along with providing frequency-discriminate sound absorption; all from one product. The *Convex⁺* Binary DiSorb™ utilizes it's curved face to further increase backscattering of sound energy. Choose from a variety of factory applied facings and finishes including wood veneers, standard or customer specified fabrics, or polymers. AVL Systems' Binary DiSorb™ Diffuser-Absorbers are supplied to standard sizes, as specified, and are ready for installation with 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 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.

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.

Technical Features & Information

- Lightweight Diffuser-Absorber for Wall & Ceiling Installations
- Decorative Facings Include Wood, Fabrics or Designer Selection/ C.O.M.
- Available as Flat-Panel or Convex Shape
- 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

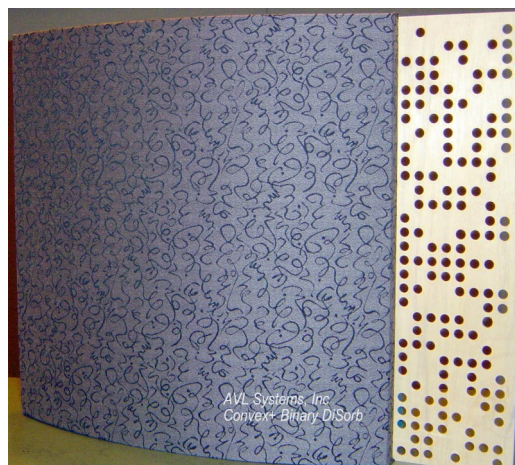
Acoustical Performance - Absorption

Frequency (Hz)	125	250	500	1K	2K	4K	NRC
DiSorb™ 1.1"	0.19	0.38	0.92	1.04	0.83	0.62	0.80
DiSorb™ 2.1"	0.47	0.82	1.05	1.02	0.84	0.65	0.95
DiSorb™ 3.1"	0.69	0.99	1.00	1.05	0.84	0.64	1.00
DiSorb™ 4.1"	0.93	0.92	1.07	1.04	0.84	0.63	1.00

Acoustical Performance - Scattering

Frequency (Hz)	125	250	500	1K	2K	4K	8K
DiSorb™ 1.1"	.00	.00	.02	.09	.03	.15	.17

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.



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