KINETICS NOISE CONTROL

Tuned Absorber/Diffuser (TAD) Panel



KINETICS™ Tuned Absorber/ Diffuser (TAD) Panel combines engineered acoustics and a choice of fabric or vinyl coverings to give you an excellent design solution where more balanced sound absorption and high frequency diffusion are desirable.



Place the Tuned Absorber/Diffuser where low and mid-frequency absorption is desired in conjunction with increasing reflectivity and diffusion in higher frequencies. The outstanding acoustical performance of this panel is the result of the assembly of a sound absorptive fibrous core covered with a variable impedance laminate. Openings in the laminate are sized and spaced to optimize the absorption in low to mid frequencies while creating random higher frequency reflective surfaces between openings (variable impedance). A design program is utilized to acoustically optimize the hole pattern in the laminate while maintaining the desired overall open versus reflective area in the panel surface. For increased low frequency sound absorption, a thicker fibrous core (2 to 4 inches) can be specified. For increased high frequency absorption, the hole size can be changed to 5/8 inch diameter versus the standard 1/2 inch opening.



6300 Irelan Place www.kineticsnoise.com

Description

A versatile absorber/diffuser panel wrapped in a wide selection of fabrics or vinyls. Available with hardened shaped edges. Engineered to control room acoustics with thicknesses from 1 to 4 inches and sizes up to 4 ft. x 8 ft. Standard sizes (in feet) are 2 x 2, 2 x 4, 4 x 4, 4 x 6 and 4 x 8. Custom sizes available.

Composition

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6-7 PCF density fiberglass core • Chemically hardened edges • Perforated laminate face with randomized pattern of 1/2 inch diameter holes, 5/8 inch optional • Fabric faced with factory in-stock fabric by Guilford of Maine, or factory-approved customer-selected material

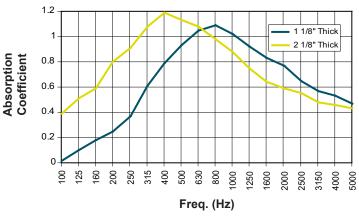
Acoustical Performance

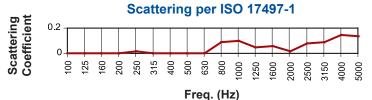
Panel Wrapped in woven polyester fabric.

1/3 Octave Center, Freq. (Hz)	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
1-1/8" Thick with 5/8" Holes*	0.01	0.10	0.18	0.25	0.37	0.61	0.79	0.93	1.05	1.09	1.08	0.92	0.83	0.77	0.65	0.57	0.53	0.47
1-1/8" Thick with 1/2" Holes*	0.04	0.26	0.31	0.33	0.40	0.63	0.82	0.94	0.95	0.96	0.91	0.79	0.73	0.63	0.51	0.51	0.42	0.35
2-1/8" Thick with 1/2" Holes*	0.39	0.51	0.59	0.80	0.91	1.08	1.19	1.13	1.08	0.98	0.88	0.75	0.64	0.59	0.55	0.48	0.46	0.43
1-1/8" Thick with 1/2" Holes**	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.11	0.12	0.06	0.07	0.02	0.10	0.11	0.18	0.17

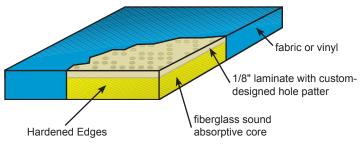
^{*}Absorption Coefficient per ASTM C423

Absorption per ASTM C423





Cross-Section of Tuned Absorber/Diffuser



Download the Specification in CSI Masterformat at www.kineticsnoise.com

Applications

- Interior surfaces where superior acoustical performance is required.
- · Conference Rooms
- · Schools/Classrooms
- Auditoriums
- · Media and Multi-Purpose Rooms
- Churches
- · Office Spaces
- · Reception Areas
- Home Theatres
- Pro Theatres

Mounting

HardSide Impaling Clips with Adhesive Rotofast Clips Z-Clips - movable Velcro - movable

Edge Options

Square





^{**}Scattering Coefficient per ISO 17497-1