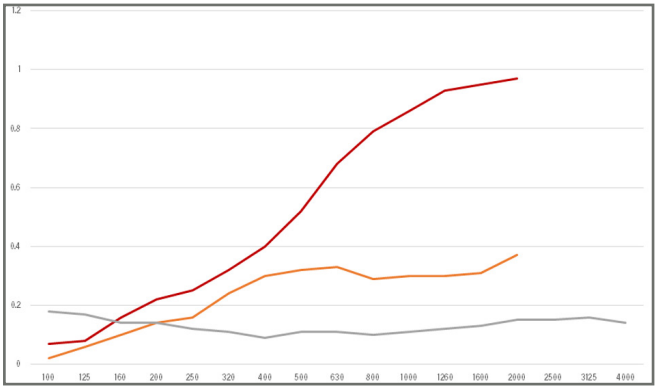
Waveform Gaussian



The Waveform Gaussian is a veneered or painted, wall or ceiling applied, 1-dimensional sound diffusor, which provides an attractive bell-shaped appearance. It is available in both 150mm and 300mm depths allowing a variety of tiling options, depending on the selection of adjacent panels. The panels are easily mounted with wall or ceiling cleats and are available in a wide variety of veneers and finishes.

The Shape Optimizer combines the power of the boundary element and multi-dimensional optimization techniques, incorporating the diffusion coefficient as the metric of optimal performance. The Waveform Spline provides optimal ensemble for musicians on stage and uniform coverage in the audience. Each canopy element has the same optimal shape for aesthetic reasons. However, each panel's tilt is independent. This insures optimal coverage on stage and in the audience forestage seating area.

Acoustic Data
The graph illustrates the random incidence diffusion, scattering and absorption coefficients. The diffusion coefficient measured according to AES-4id-2001 is a measure of how uniform the Waveform Gaussian scatters sound. The correlation scattering coefficient is less critical than the diffusion coefficient and measures the amount of sound scattered in non-specular directions to only be used in computer modelling programs. The random incidence coefficient, measure according to ISO 354 is a measure of how much sound is absorber.

Installation
Installation is simple using integral metal hair pin connectors. Simply attach suitable supplied engineered cables for dead hung installation. The image to the far right illustrates how the Spline panels can be seamlessly joined end to end forming an arc.

Frequency	Diffusion	Scattering (ISO)	Absorption
100	0.02	0.07	0.18
125	0.06	0.08	0.17
160	0.1	0.16	0.14
200	0.14	0.22	0.14
250	0.16	0.25	0.12
320	0.24	0.32	0.11
400	0.3	0.4	0.09
500	0.32	0.52	0.11
630	0.33	0.68	0.11
800	0.29	0.79	0.1
1000	0.3	0.86	0.11
1260	0.3	0.93	0.12
1600	0.31	0.95	0.13
2000	0.37	0.97	0.15
2500			0.15
3125			0.16
4000			0.14