



As society evolves, new problems arise, and these challenges must be met with new technology. For instance, sustainability is influencing the materials used in absorbers and diffusers.

Intractable problems, such as environmental noise, continue to drive innovative new solutions.

Furthermore, the general expectation of better quality design in the built environment has meant that designers have to concern themselves about the visual aesthetics of treatments alongside acoustic performance.

This second edition brings the technology of absorbers and diffusers up to date. For instance, the ubiquitous fabric-wrapped panel and acoustical ceiling tile no longer address all of the concerns of our day. Therefore, we have expanded the description of other absorber technologies, such as microperforated designs. The sound diffuser continues to evolve to

improve performance and to meet new demands for artistic shapes. Each stage in the evolution

of these technologies overcame a particular shortcoming and increased performance.

But it isn't just the absorbers and diffusers that are changing; there also have been new developments in measurement methods, standards, and prediction models. For instance, recent advances in three-dimensional solid prototyping printers greatly simplify the fabrication of diffuser test samples. To take another example, new time domain methods are being developed to predict how absorbers and diffusers interact with sound.

It is often said that new technology takes many years to be assimilated into the culture. Well, 2008 was the 25th anniversary of the founding of RPG Diffusor Systems, Inc., and it is fair to say that diffusion technology is fully integrated into every aspect of architectural acoustics. Acousticians are routinely including absorption and diffusion coefficients into design specifications and architects are embracing the innovative diffusive shapes into their projects.

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