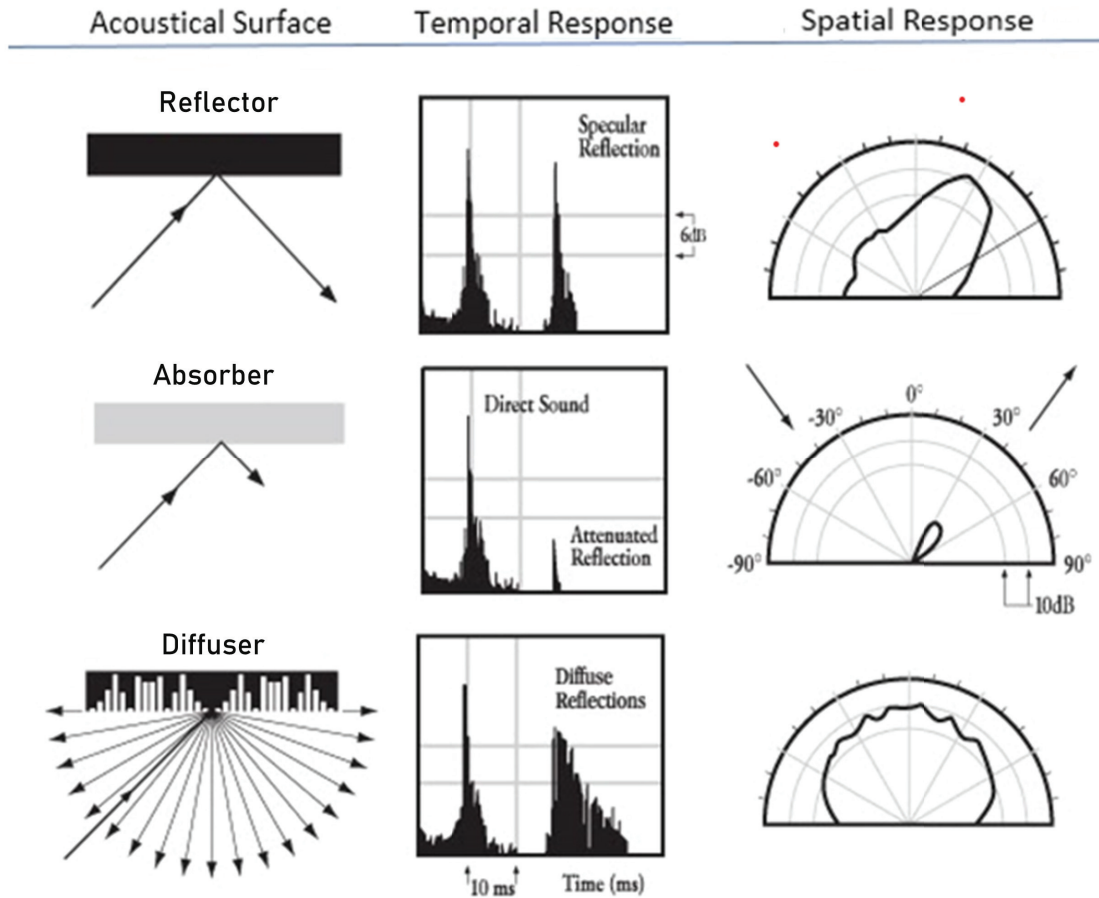


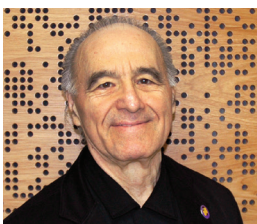
Virtual Education Lab: Welcome to the Virtual Education Lab



The Temporal Response of the Reflector is a slightly attenuated and delayed version of the direct sound, the Absorber significantly attenuates the direct sound, and the Diffuser provides a dense array of diffuse reflections covering a time related to the depth of the unit, with roughly the same energy as the direct sound.

The Spatial Response of the Reflector shows a specular mirror reflection with a width related to the ratio of the surface width and the incident sound wavelength. The Absorber specularly reflects any sound that is not absorbed, depending on its design, whereas the spatial response of the Diffuser shows uniform scattering, ideally independent of the angle of incidence, the angle of observation, and the wavelength within its operational bandwidth.

We begin the Virtual Education Lab with a discussion of the theory, design, and application of reflecting surfaces.



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