

## The reverberation radius in an enclosure with asymmetrical absorption distribution

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This paper reviews the concept of the reverberation radius from the viewpoint of the classic theories of Sabine and Eyring. These theories are only valid when the sound field is uniformly distributed, or in other words, when the energy density is constant throughout a room. Nevertheless, these theories have also been applied to any spatial sound diffusion situation. For example, they are currently used in rooms with asymmetric absorption distribution, which is generally produced wherever there are asymmetric absorption profiles within the space. This paper proposes a solution to calculate the reverberation radius in rooms with non-uniformly distributed sound absorption (rHND).

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