



Building Acoustics

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'Building acoustics' journals are based on how design and material use in homes and buildings can improve the sound containment/ insulation and the different ways of successfully achieving this and minimizing as much sound escaping and entering individual rooms in buildings/homes as possible.

A good article that shows this is "The Refurbishment of Tonhalle St. Gallen" (Arau-Puchades, 2012) in volume 19, number 3 of "Building acoustics". In this article they develop the Centennial St. Gallen concert hall in Switzerland which previously had many faults including high levels of sound, focusing, flutter echoes and so on. To solve this they refurbished the hall by placing insulation like plastic, oakwood, upholstered wood etc to improve the levels of sound, focusing and flutter echoes of the building. But apart from those original cures to bad homes, Bosshard Vaquer Architects (in Zurich) along with the acoustic consultants of Arau Acustica (in Barcelona), they developed a unique grid diffuser (are matrix's of gold-laminated plywood plates supported by a pattern of iron squares to absorb the excess sound and diffract it to reduce flutter echoes. This proved to be successful both functionally and aesthetically to the orchestra and visitors of the hall because of the luminous quality of the finished plates.

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