

Brief Architectural Acoustics Measuring System

In order to avoid later unpleasant disputes with owners about sound insulation, it is important for construction managers, planners, experts, etc. to examine the soundproofing of a house or apartment as early as possible during the construction phase. Using the normal standardised architectural acoustics measurements, this is only possible on a few structural elements on a random sample basis. Furthermore, the measuring equipment is very complex and expensive. Using brief architectural acoustics measurement methods it is possible to carry out far more measurements cost-effectively in the same period of time. This allows a significantly better overview of the soundproofing of a house or apartment and of possible variations in the work quality to be obtained. The development of the new pressure chamber has

now made it possible for the first time to carry out structure-borne sound measurements even during the building skeleton phase (without doors and windows) without a great deal of effort or cost. The measuring system consists of a sound level meter, pressure chamber, MIDI hammer mechanism (for footfall sound measurements) and a noise source (for air-borne sound measurements).

This measuring system allows architects, building experts, construction physics experts, architectural acoustics experts, planning offices, builders, etc. to inexpensively carry out architectural acoustics measurements independently using the Gösele brief measurement method.

The measuring system can, of course, be expanded later for standardised measurements.

Applications

- Determination of the direct insulation of solid structural elements
- Determination of the flank insulation index of solid structural elements
- Determination of the joint insulation at junction points
- Clarification of sound transmission paths in order to determine causes
- Determination of the air and footfall sound insulation of structural elements by structure-borne sound measurements
- Localisation of sound bridges

