

Semi-anechoic chamber P19

Measurement	sound power (enveloping measurement surface), sound intensity, localization of sound sources sound pressure level (averaging and statistic distribution) directivity of sound sources, sound propagation, acoustical shielding
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Standard	DIN EN ISO 3745, DIN EN ISO 3744
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Measuring objects	Machinery and equipment, for example of ventilation and air-conditioning systems, and other noise sources Models of systems, buildings and monuments, for example noise barriers and noise reducing devices
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Technical data

Room size (L x B x W)	19,43 m x 5,25 m x 6,17 m
Room volume	629 m ³
Entrance door (H x W)	2,37 m x 1,90 m
Connection to the reverberation room	Measurement of sound insulation and sound absorption of building components between reverberation room and anechoic room
Sliding door to the reverberation room (measurement surface area)	3,8 m x 2,35 m

More information

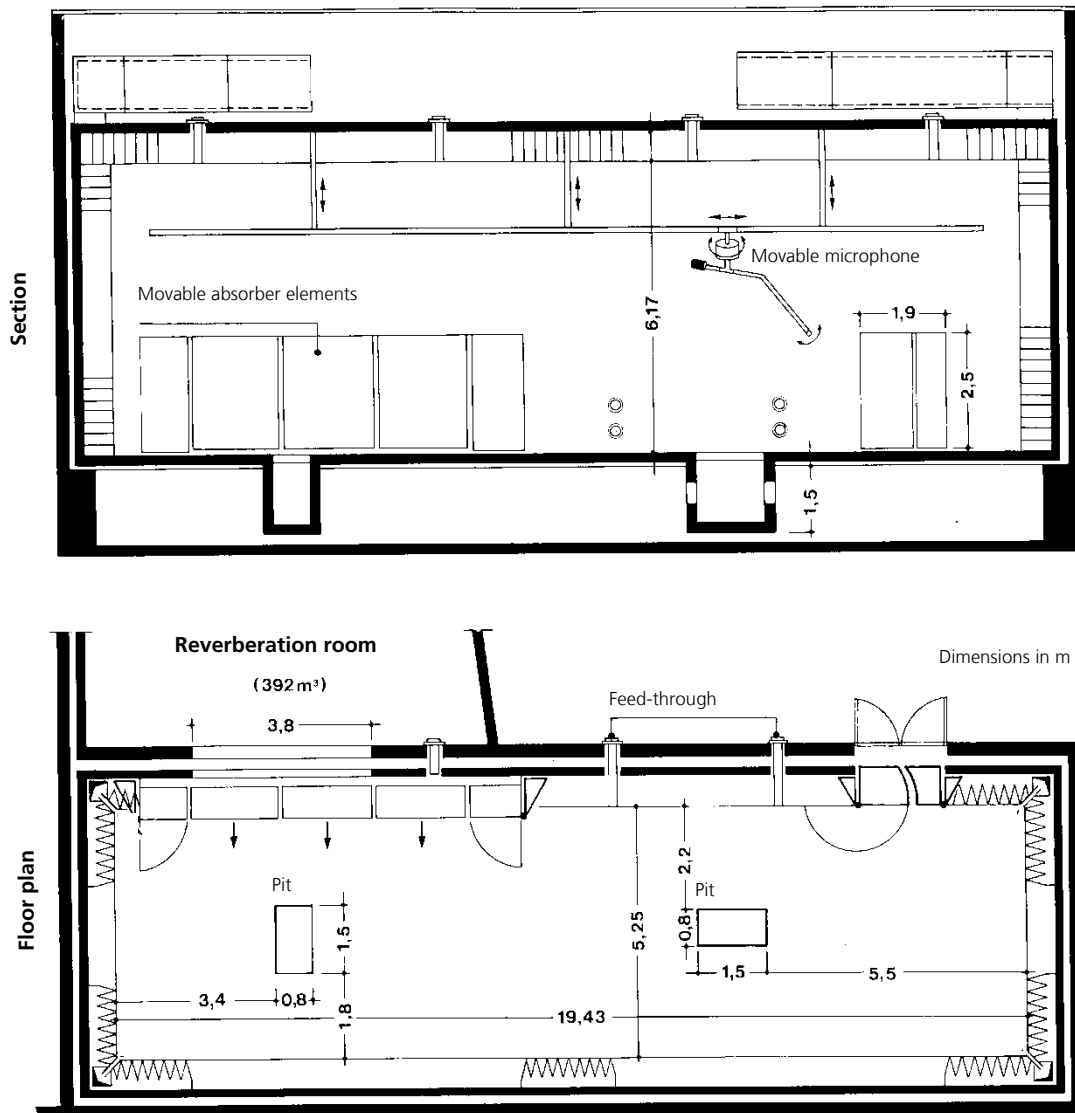
- Lower cut-off frequency 125 Hz (according to standard)
- Resilient mounting of the room for vibration isolation.
- Model measurements to a measurement scale of 1:40, model measurements of rooms
- Determination of sound propagation via railing model, for example radiation from buildings, shading by buildings, acoustical screens and noise barriers
- Ventilation systems (volume flow max. 4000 m³/h)
- Ventilation and air-conditioning system allows the simulation of wind and temperature profiles
- Test facility trafficable by forklift

The test laboratory of the Fraunhofer IBP has been granted flexible accreditation according to DIN EN ISO/IEC 17025 by Deutsche Akkreditierungsstelle GmbH (DAkkS).

- Floor level installation of sound sources possible
- Gas connection and evacuation (firing systems) available
- Measuring device to determine the impact sound performance of wall-installed equipment available
- Feed-through for measurement connections or supply lines available
- Compressed air and electric power available

With the adjacent reverberation room the Fraunhofer Institute for Building Physics offers the opportunity to install large-size machine units, to simulate systems and building complexes as well as for the transition from a free field to a diffuse field by means of a round 10 qm opening. Flanking transmission can be practically excluded.

Section and floor plan of the test facility (dimensions in m)



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