



Test facility for suspended ceilings P5

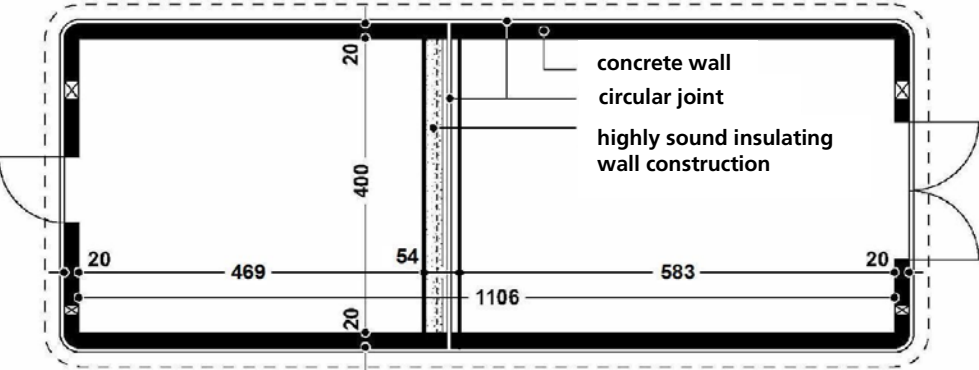
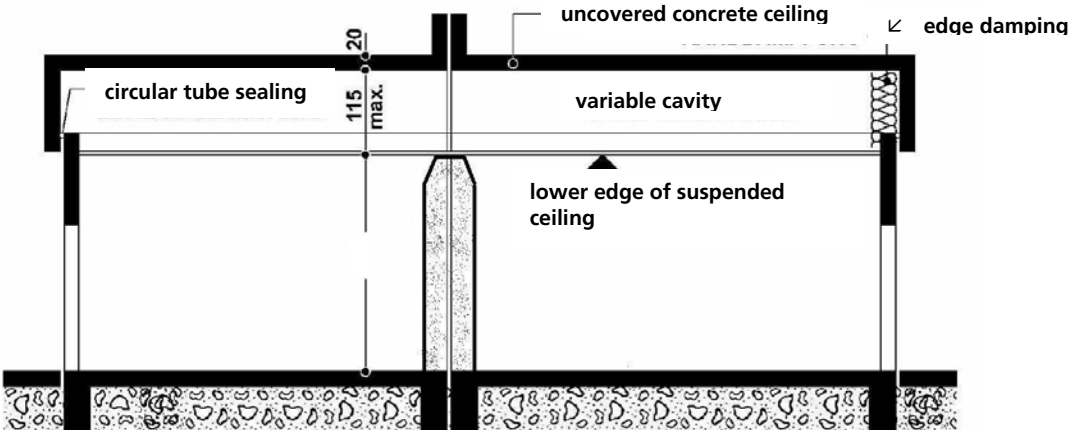
Measurement	Normalized flanking level difference
Standard	DIN EN ISO 10848
Measuring objects	Suspended board ceilings, grid ceilings, metal ceilings, ceilings systems with lights and air terminals, bulkheads (absorbent, boards), steel sections
Technical data	
Room volume (2 rooms)	55,2 and 72,7 m ³
Entrance doors (H x B)	1,84 m x 0,79 m and 1,91 m x 1,875 m
Height of the ceiling plenum	variable between 0,40 m and 1,15 m
Max. sound reduction (related to the max. size of test sample)	$R_{\max,w} = 71$ dB

More information

- Concrete uncovered floor mounted on threaded spindles of the test facility infinitely adjustable in height. In case of variations of the plenum height the tested suspended ceiling is immovable, and the massive ceiling is lifted and lowered allowing the testing of the same suspended ceiling at variable plenum heights by means of low effort.
- Acoustic insulation between the movable concrete floor of the test facility and the side walls by inflatable insulating tube.
- High-quality sound insulating lightweight partition in the source room and receiving room connected to the under-side of the tested ceiling. The kind of connection and cavity of the ceiling above the partition (open, with absorber or GKB -bulkhead etc.) is carried out according to the specifications of the client.
- Fixing of the suspended ceiling to be tested at lattice girders to allow all variations of heights specific in construction..
- Pneumatically movable loudspeaker in the source room and receiving room.
- Compressed air and electric power available.

The test facility is suited to measure suspended ceilings as well as to allow measurements of the longitudinal sound insulation or normalized flanking sound level difference at variable heights without alternations of the suspended ceiling.

Vertical and horizontal section of the test facility (dimensions in cm)



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

Details of test facility for suspended ceilings (dimensions in mm)

