

Protokoll

Equivalent sound absorption area according to ISO 354

Measurement of sound absorption in a reverberation room

Client: XAL GmbH, Auer-Welsbach-Gasse 36, AT-8055 Graz

Date of test: 29.06.2022

Description: Product name: SONIC ABSORBER DISK suspended

Test in accordance with EN ISO 354 with reduced number of measuring points and averages.
Structure of the test specimen according to EN ISO 354, point 6.2.2.

The structure consists of a total of 3 * SONIC ABSORBER DISK suspended (diameter of each: 1,280 mm, d = 50 mm) randomly distributed at a distance of at least d = 200 cm from each other. The element is made of PET felt. On the back 3 small stainless-steel holders for threaded rods.
Distance from the floor is created by means of a wooden post construction (3 * adjustable feet made of squared timber: 50 mm * 80 mm, W * H).

- Distance from the floor to the lower edge of the test specimen: 1,000 mm.
- Test specimen area (front and back): 3 * 1,287 m² = 3,86 m²
- Construction height: d ~ 1,050 mm
- Weight per element: ~ 9,44 kg

Due to customer request, the graphical representation of the result differs with regard to the y-axis distance according to EN ISO 354, point 8.3.

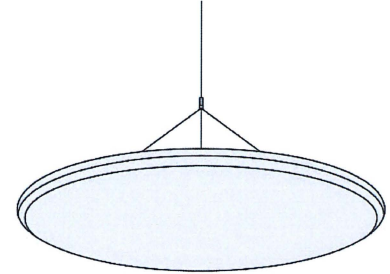


Figure 1: exemplary representation of the test specimen
(does not correspond to the actual installation situation)

Empty reverberation room:

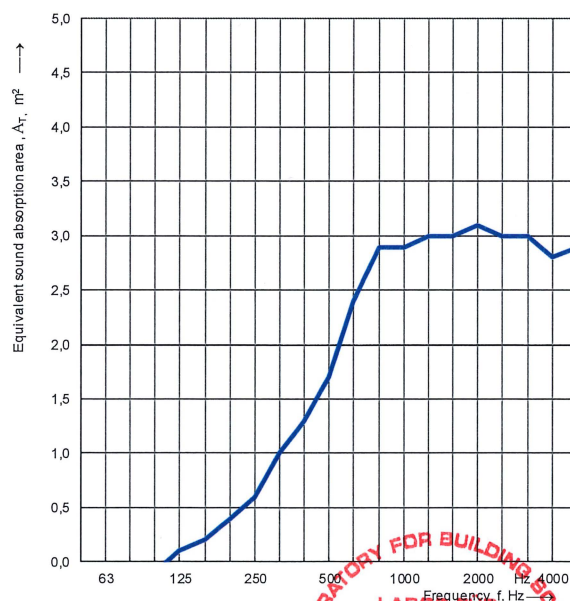
Relative humidity: 68,8 %
Temperature: 23,3 °C
Barometric pressure: 97,4 kPa

Reverberation room with object

Relative humidity: 70,0 %
Temperature: 24,0 °C
Barometric pressure: 97,1 kPa

Surface area: 1,29 m²
Room volume: 244,3 m³
Total room area S_T: 240,1 m²

Frequency f [Hz]	A _T 1/3 octave [m ²]
50	
63	
80	
100	-0,1
125	0,1
160	0,2
200	0,4
250	0,6
315	1,0
400	1,3
500	1,7
630	2,4
800	2,9
1000	2,9
1250	3,0
1600	3,0
2000	3,1
2500	3,0
3150	3,0
4000	2,8
5000	2,9



Name of test institute: Labor für Bauphysik
No. of test report: B22-005-A17007-354a_kaso_Aobj

Date: 29.06.2022

Signature: DIJ. Kasim