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: 30.06.2022

Description: Product name: SONIC SOUNDCAP

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

The structure consists of a total of 3 * SONIC SOUNDCAP (cylindrical shape, diameter at the bottom: 527 mm, diameter at the top ~480 mm, height of cylinder: 300 mm, d = 10 mm) mounted on 3 pieces of SONIC free standing (diameter of stand: 470 mm, diameter of the luminaire at the top: 500 mm, height: 1,840 mm) randomly distributed at a distance of at least d = 200 cm from each other. The SONIC SOUNDCAP is made of PET felt.

- distance from floor to lower edge of lampshade: 1,740 mm
- Test specimen area (lateral area of the truncated cone (SOUNDCAP)): 3 * 0.476 m² = 1.43 m²
- construction height: d ~2,040 mm
- Weight SONIC SOUNDCAP with sheet metal: ~1.10 kg
- Weight SONIC free standing: ~18.12 kg

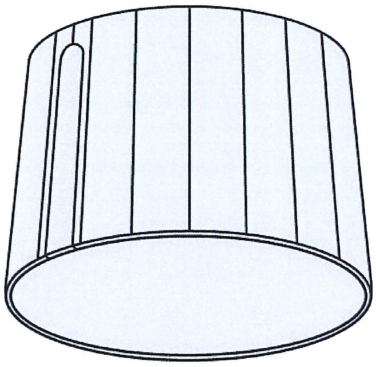
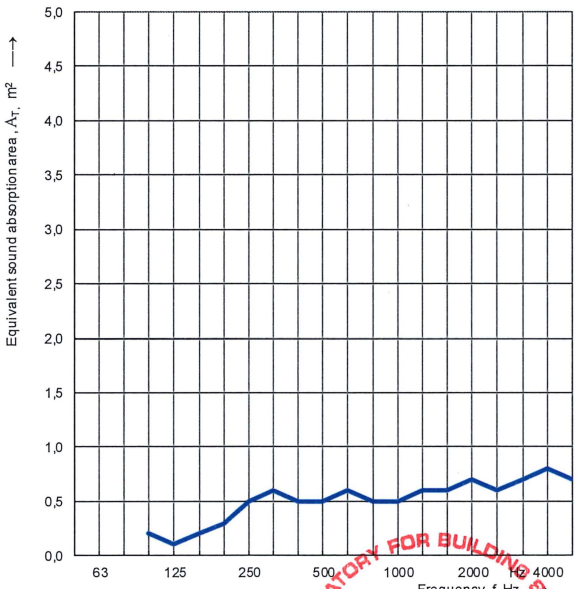


Figure 1: exemplary representation of the test specimen
(does not correspond to the actual installation situation)

Empty reverberation room:		Reverberation room with object	
Relative humidity:	68,3 %	Relative humidity:	68,4 %
Temperature:	23,8 °C	Temperature:	23,8 °C
Barometric pressure:	97,3 kPa	Barometric pressure:	97,2 kPa

Surface area:	0,48 m²
Room volume:	244,3 m³
Total room area S_t:	240,1 m²

Frequency f [Hz]	A_T 1/3 octave [m²]
50	
63	
80	
100	0,2
125	0,1
160	0,2
200	0,3
250	0,5
315	0,6
400	0,5
500	0,5
630	0,6
800	0,5
1000	0,5
1250	0,6
1600	0,6
2000	0,7
2500	0,6
3150	0,7
4000	0,8
5000	0,7



LABORATORY FOR BUILDING SCIENCE - LABOR FÜR BAUPHYSIK - RESEARCH - TESTING - EXPERTISE

Name of test institute: Labor für Bauphysik
No. of test report: B22-005-A17008-354a_kaso_Aobj

Date: 30.06.2022 Signature: DI J. Kasim