

## Protocol

### Equivalent sound absorption area according to ISO 354

Measurement of sound absorption area per object in a reverberation room

Client: XAL GmbH, Auer-Welsbach-Gasse 36, AT-8055 Graz Date of test: 23.05.2023

Description: Product name: INO 900 circle acoustic

Test according to EN ISO 354. Test performed with reduced number of speaker-microphone-combinations.

Object: Structure of the test specimen according to EN ISO 354, point 6.2.2.

Configuration consisting of a total of 3 pieces of INO 900 circle acoustic (diameter: 794 mm, d = 9 mm) randomly distributed at a distance of at least d = 200 cm from each other. Element consisting of PET felt.

Distance to the floor created with 3 adjustable feet each, consisting of threaded rods and wooden base.

- Test specimen surface per element (front and back):  $3 \times \sim 0,99 \text{ m}^2 = 2,97 \text{ m}^2$
- Distance from the floor to the lower edge of the test specimen:  $\sim 100 \text{ cm}$
- Construction height:  $\sim 1009 \text{ mm}$
- Weight per element:  $\sim 0,92 \text{ kg}$

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

Empty reverberation room:

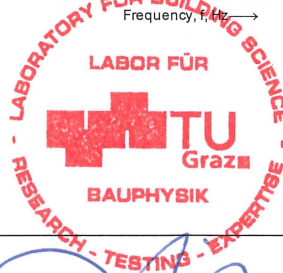
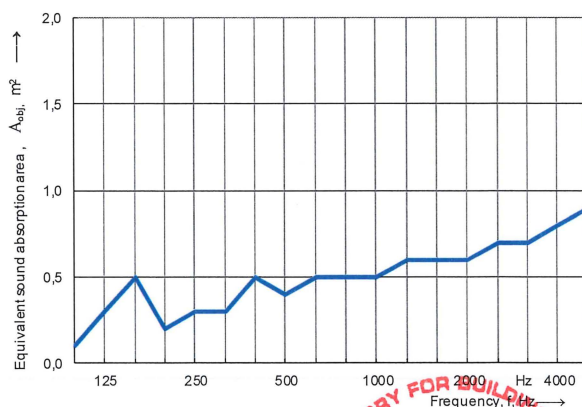
Relative humidity: 55,9 %  
 Temperature: 20,3 °C  
 Barometric pressure: 97,3 kPa

Reverberation room with object

Relative humidity: 57,6 %  
 Temperature: 20,4 °C  
 Barometric pressure: 97,2 kPa

Surface area: 2,97 m<sup>2</sup>  
 Room volume: 244,3 m<sup>3</sup>  
 Total room area  $S_t$ : 240,1 m<sup>2</sup>

Frequency f [Hz]	Aobj 1/3 octave [m <sup>2</sup> ]
100	0,1
125	0,3
160	0,5
200	0,2
250	0,3
315	0,3
400	0,5
500	0,4
630	0,5
800	0,5
1000	0,5
1250	0,6
1600	0,6
2000	0,6
2500	0,7
3150	0,7
4000	0,8
5000	0,9



Name of test institute: Laboratory for Building Science  
 No. of test report: B23-047-A17002-354a\_kaso\_Aobj

Date: 23.05.2023 Signature: DI J. Kasim

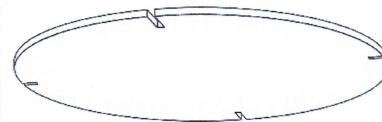


Figure 1: Exemplary representation of the test specimen  
 (does not correspond to the actual installation situation)