

## 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: MINO CIRCLEACOUSTIC 1000 ceiling

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 \* MINO CIRCLEACOUSTIC 1000 ceiling (diameter of each: 937 mm, d = 24 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 there are 2 powder-coated aluminium brackets for mounting.  
Test specimen area in relation to the projected floor area:

- Distance from the floor to the lower edge of the test specimen: 30 mm.
- Test specimen area (projected surface):  $3 * 0,69 \text{ m}^2 = 2,07 \text{ m}^2$
- Construction height: d ~54 mm
- Weight per element: ~3.44 kg

Empty reverberation room:

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

Reverberation room with object

Relative humidity: 69,4 %  
Temperature: 23,8 °C  
Barometric pressure: 97,3 kPa

Surface area: 0,69 m<sup>2</sup>  
Room volume: 244,3 m<sup>3</sup>  
Total room area S<sub>r</sub>: 240,1 m<sup>2</sup>

Frequency f [Hz]	A <sub>T</sub> 1/3 octave [m <sup>2</sup> ]
50	
63	
80	
100	0,0
125	0,1
160	0,2
200	0,2
250	0,2
315	0,4
400	0,5
500	0,7
630	0,9
800	1,1
1000	1,2
1250	1,2
1600	1,1
2000	1,1
2500	1,0
3150	1,0
4000	1,0
5000	1,0

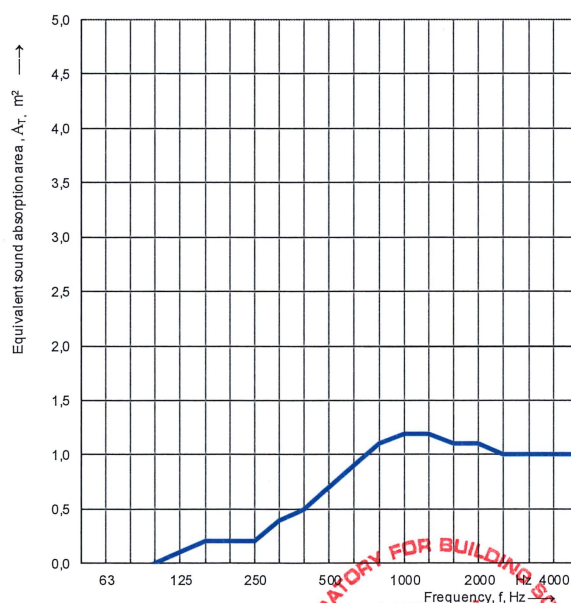


Figure 1: exemplary representation of the test specimen  
(does not correspond to the actual installation situation)

Name of test institute: Labor für Bauphysik  
No. of test report: B22-005-A17005-354a\_kaso\_Aobj

Date: 29.06.2022

Signature: DI J. Kasim