

# Sound absorption coefficient ISO 354

## Measurement of sound absorption in reverberation rooms

**Client:** Silent Gliss Fabrics & Components GmbH,  
Rheinauenstraße 8, D-79415 Bad Bellingen  
**Test specimen:** Fabric type "Multi Visio" of the company Silent Gliss Fabrics & Components GmbH,  
mounting type G-200 acc. to ISO 354

### Test object:

- thickness  $t = 0.39$  mm
- specific airflow resistance acc.to DIN EN 29 053:  $R_S = 69$  Pa s / m
- area related mass  $m'' = 198$  g/m<sup>2</sup>
- test surface width x height = 3.50 m x 3.00 m

### Test arrangement:

- mounting type G-200 acc. to DIN EN ISO 354, section 6.2.1
- 20 mm overlap between the webs
- two webs with the dimensions length x width = 3.00 m x 2.40 m and 3.00 m x 1.12 m
- webs hanging flat
- 200 mm distance between the webs and the wall of the reverberation room
- set-up without enclosing frame

Room: reverberation room

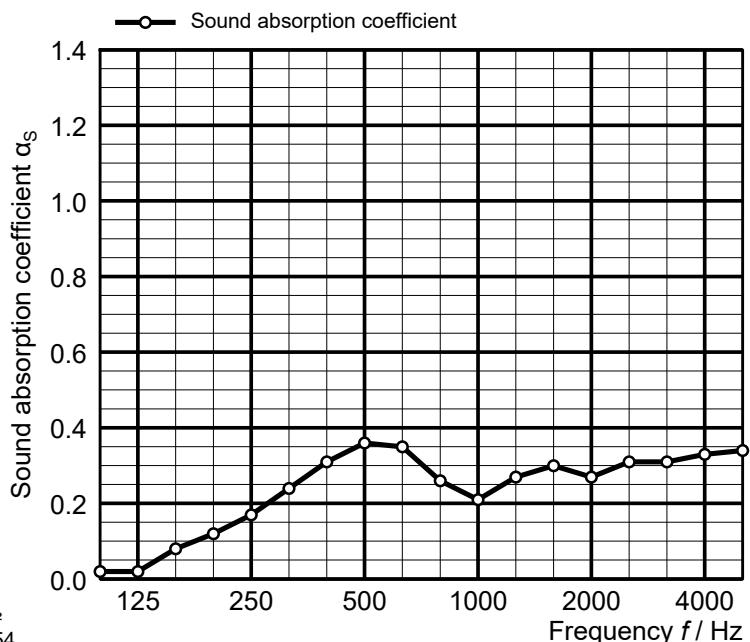
Volume: 199.60 m<sup>3</sup>

Size: 10.50 m<sup>2</sup>

Date of test: 2014-07-28

	$\theta$ [°C]	r. h. [%]	B [kPa]
without specimen	23.7	64.3	94.4
with specimen	23.7	64.3	94.4

Frequency [Hz]	$\alpha_s$ 1/3 octave	$\alpha_p$ octave
100	◦ 0.02	
125	◦ 0.02	0.05
160	◦ 0.08	
200	0.12	
250	0.17	0.20
315	0.24	
400	0.31	
500	0.36	0.35
630	0.35	
800	0.26	
1000	0.21	0.25
1250	0.27	
1600	0.30	
2000	0.27	0.30
2500	0.31	
3150	0.31	
4000	0.33	0.35
5000	0.34	



◦ Equivalent sound absorption area less than 1.0 m<sup>2</sup>

$\alpha_s$  Sound absorption coefficient according to ISO 354

$\alpha_p$  Practical sound absorption coefficient according to ISO 11654

Rating according to ISO 11654:

**Weighted sound absorption coefficient**

$$\alpha_w = 0.30$$

Sound absorption class: D

Rating according to ASTM C423:

**Noise Reduction Coefficient NRC = 0.25**

**Sound Absorption Average SAA = 0.26**

**MÜLLER-BBM**

Planegg, 2021-03-05

No. of test report M106565/5

Appendix A

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