

# 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:** Curtain fabric Leviso  
flat arrangement, wall distance 250 mm

**Fabric:**

- manufacturer Silent Gliss
- curtain fabric type "Leviso"
- material 100 % polyester
- area specific mass approx.  $m'' = 450 \text{ g/m}^2$
- specific airflow resistance  $R_S = 1177 \text{ Pa s/m}$
- thickness  $t = 0.80 \text{ mm}$

**Test arrangement:**

- mounting type G-250 acc. to DIN EN ISO 354, test arrangement without enclosing frame
- flat arrangement, distance to the wall 250 mm
- factory made curtain width x height = 4400 mm x 2380 mm, circumferentially seamed
- mounted at a rail underneath the ceiling (height 50 mm)
- test surface width x height = 4400 mm x 2330 mm  
(the aspect ratio of the factory made curtain is width / height = 1.90 and thus does not comply with the specifications of ISO 354)

Room: E

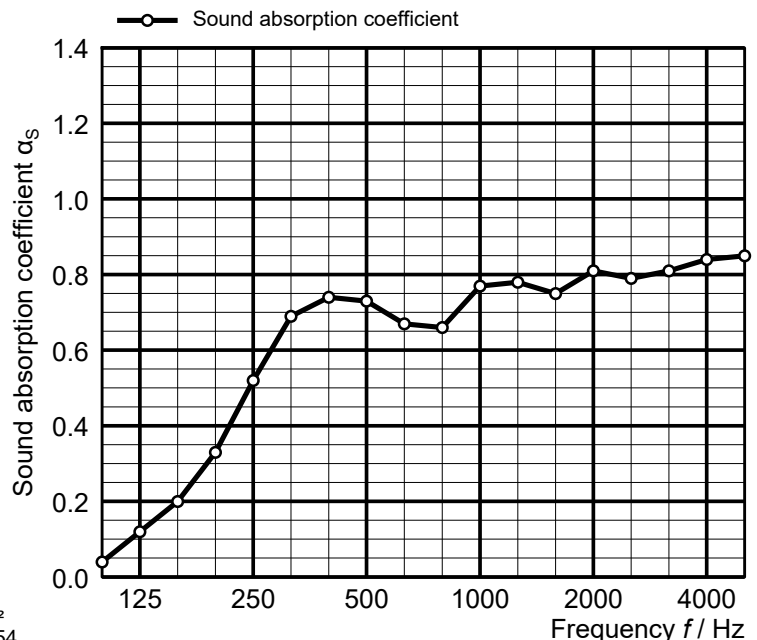
Volume: 199.60 m<sup>3</sup>

Size: 10.25 m<sup>2</sup>

Date of test: 2015-02-19

	$\theta$ [°C]	r. h. [%]	B [kPa]
without specimen	18.6	37.2	96.3
with specimen	18.9	34.0	96.3

Frequency [Hz]	$\alpha_s$ 1/3 octave	$\alpha_p$ octave
100	0.04	
125	0.12	0.10
160	0.20	
200	0.33	
250	0.52	0.50
315	0.69	
400	0.74	
500	0.73	0.70
630	0.67	
800	0.66	
1000	0.77	0.75
1250	0.78	
1600	0.75	
2000	0.81	0.80
2500	0.79	
3150	0.81	
4000	0.84	0.85
5000	0.85	



◦ 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: <b>Weighted sound absorption coefficient</b> $\alpha_w = 0.75$ Sound absorption class: C	Rating according to ASTM C423: <b>Noise Reduction Coefficient NRC = 0.70</b> <b>Sound Absorption Average SAA = 0.69</b>
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**MÜLLER-BBM**

Planegg, 2021-03-05

No. of test report M114186/3

Appendix A

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