

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 Colorama 1 Bioactive,
flat arrangement, wall distance 150 mm

Fabric:

- manufacturer Silent Gliss
- curtain fabric "Colorama 1 Bioactive"
- material 100 % polyester
- area specific mass app. $m'' = 136 \text{ g/m}^2$
- specific airflow resistance $R_S = 8 \text{ Pa s/m}$
- thickness $t = 0.38 \text{ mm}$

Test arrangement:

- mounting type G-150 acc. EN ISO 354, test arrangement without enclosing frame
- flat arrangement, distance to the wall 150 mm
- curtain 3500 mm x 3000 mm mounted at a rail underneath the ceiling (height of the rail 60 mm)
- test surface $H \times W = 2940 \text{ mm} \times 3500 \text{ mm}$

Room: E

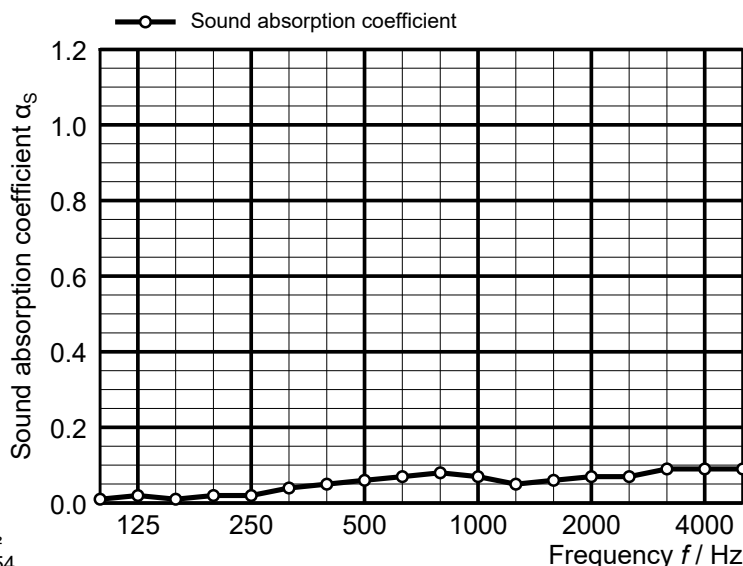
Volume: 199.60 m³

Size: 10.29 m²

Date of test: 2019-04-24

	θ [°C]	$r. h.$ [%]	B [kPa]
without specimen	20.3	35.7	94.0
with specimen	20.3	35.6	94.0

Frequency [Hz]	α_s 1/3 octave	α_p octave
100	◦ 0.01	0.00
125	◦ 0.02	
160	◦ 0.01	0.05
200	◦ 0.02	
250	◦ 0.02	
315	◦ 0.04	0.05
400	◦ 0.05	
500	◦ 0.06	
630	◦ 0.07	
800	◦ 0.08	0.05
1000	◦ 0.07	
1250	◦ 0.05	
1600	◦ 0.06	0.05
2000	◦ 0.07	
2500	◦ 0.07	
3150	◦ 0.09	
4000	◦ 0.09	0.10
5000	◦ 0.09	



◦ Equivalent sound absorption area less than 1.0 m²
 α_s Sound absorption coefficient according to ISO 354
 α_p Practical sound absorption coefficient according to ISO 11654

<p>Rating according to ISO 11654: Weighted sound absorption coefficient $\alpha_w = 0.05$ Sound absorption class: not classified</p>	<p>Rating according to ASTM C423: Noise Reduction Coefficient $NRC = 0.05$ Sound Absorption Average $SAA = 0.05$</p>
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MÜLLER-BBM

Planegg, 2021-03-05

No. of test report M114186/8

Appendix A

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