

# 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 Dimout,  
flat arrangement, wall distance 150 mm

**Fabric:**

- manufacturer Silent Gliss
- curtain fabric type "Colorama Dimout"
- material 100 % polyester
- area specific mass app.  $m'' = 362 \text{ g/m}^2$
- specific airflow resistance  $R_S = 2215 \text{ Pa s/m}$
- thickness  $t = 0.64 \text{ mm}$

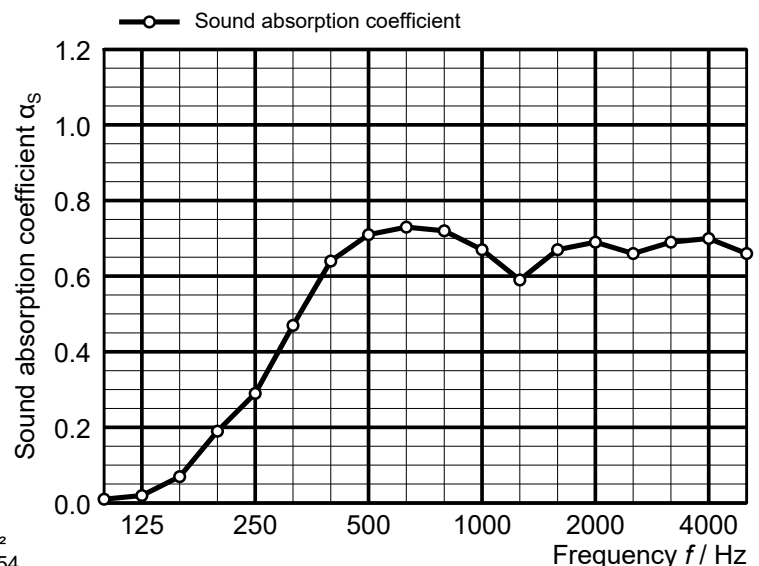
**Test arrangement:**

- 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 m<sup>3</sup>  
Size: 10.29 m<sup>2</sup>  
Date of test: 2019-04-24

	$\theta$ [°C]	$r. h.$ [%]	$B$ [kPa]
without specimen	20.3	35.7	94.0
with specimen	20.4	36.0	94.0

Frequency [Hz]	$\alpha_s$ 1/3 octave	$\alpha_p$ octave
100	0.01	
125	0.02	0.05
160	0.07	
200	0.19	
250	0.29	0.30
315	0.47	
400	0.64	
500	0.71	0.70
630	0.73	
800	0.72	
1000	0.67	0.65
1250	0.59	
1600	0.67	
2000	0.69	0.65
2500	0.66	
3150	0.69	
4000	0.70	0.70
5000	0.66	



◦ 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

<p>Rating according to ISO 11654:  <b>Weighted sound absorption coefficient</b>  <math>\alpha_w = 0.60</math>                  Sound absorption class: C</p>	<p>Rating according to ASTM C423:  <b>Noise Reduction Coefficient <math>NRC = 0.60</math></b>  <b>Sound Absorption Average <math>SAA = 0.59</math></b></p>
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**MÜLLER-BBM**

Planegg, 2021-03-05

No. of test report M114186/9

Appendix A

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