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 Multicolour Dimout,
flat arrangement, wall distance 150 mm

Fabric:

- manufacturer Silent Gliss
- curtain fabric type "Multicolour Dimout"
- material 100 % polyester
- area specific mass app. m'' = 394 g/m²
- specific airflow resistance R_S = 2190 Pa s/m
- thickness t = 0.74 mm

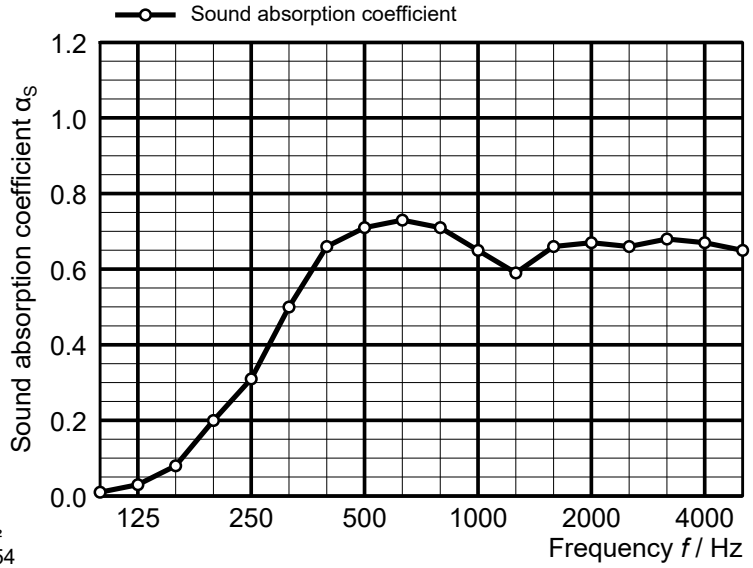
Test arragement:

- 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 x W = 2940 mm x 3500 mm

Room: E
Volume: 199.60 m³
Size: 10.29 m²
Date of test: 2019-04-23

	θ [°C]	*r. h.* [%]	*B* [kPa]
without specimen	20.2	34.4	93.6
with specimen	20.3	34.5	93.6

Frequency [Hz]	α_S 1/3 octave	α_p octave
100	∘ 0.01	
125	∘ 0.03	0.05
160	∘ 0.08	
200	0.20	
250	0.31	0.35
315	0.50	
400	0.66	
500	0.71	0.70
630	0.73	
800	0.71	
1000	0.65	0.65
1250	0.59	
1600	0.66	
2000	0.67	0.65
2500	0.66	
3150	0.68	
4000	0.67	0.65
5000	0.65	



∘ 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

Rating according to ISO 11654:	Rating according to ASTM C423:
Weighted sound absorption coefficient α_w = 0.65	**Noise Reduction Coefficient *NRC* = 0.60**
Sound absorption class: C	**Sound Absorption Average *SAA* = 0.59**