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 "Reflex" of the company Silent Gliss Fabrics & Components GmbH
Müller-BBM sample no.: 7152

Test object:

- thickness t = 0.36 mm
- specific airflow resistance DIN EN 29 053: R_S = 70 Pa s / m
- area related mass approx. m'' = 170 g/m²
- test surface width x height = 3.50 m x 3.00 m

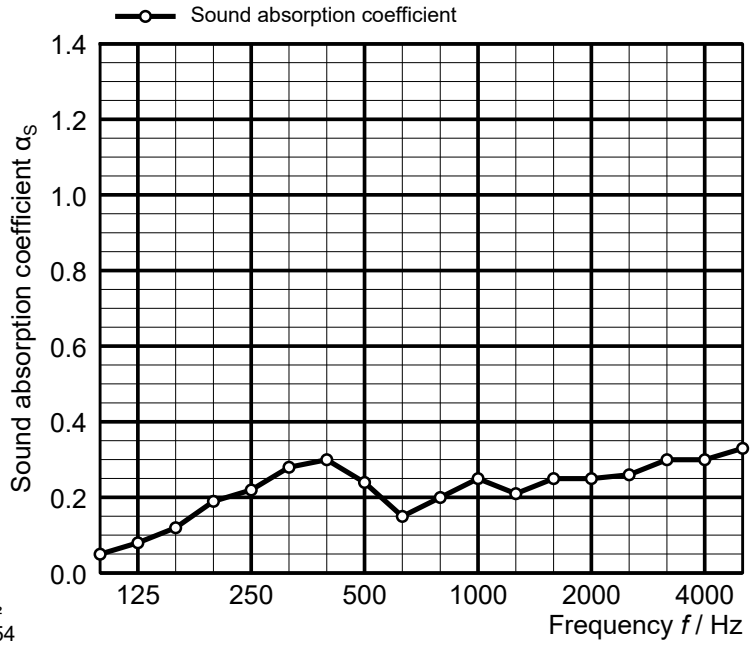
Test arrangement:

- 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 2.485 m and 3.00 m x 1.035 m
- webs hanging flat
- 200 mm distance between the webs and the wall of the reverberation room
- set-up without enclosing frame

Room: Hallraum
Volume: 199.66 m³
Size: 10.50 m²
Date of test: 2009-10-13

	θ [°C]	*r. h.* [%]	*B* [kPa]
without specimen	20.9	39.7	95.9
with specimen	20.9	40.2	95.9

Frequency [Hz]	α_S 1/3 octave	α_p octave
100	∘ 0.05	
125	∘ 0.08	0.10
160	0.12	
200	0.19	
250	0.22	0.25
315	0.28	
400	0.30	
500	0.24	0.25
630	0.15	
800	0.20	
1000	0.25	0.20
1250	0.21	
1600	0.25	
2000	0.25	0.25
2500	0.26	
3150	0.30	
4000	0.30	0.30
5000	0.33	



∘ 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 = 0.25 Sound absorption class: E	**Noise Reduction Coefficient *NRC* = 0.25** **Sound Absorption Average *SAA* = 0.23**