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: Vertical blinds Silent Gliss 2810
200 mm wall distance, slats closed (0°)

Test object:

- quality Function, color no. 3
- width of the slats127 mm, length of the slats 2970 mm
- area related mass m'' = 274 g/m²
- no preferred side shown
- airflow resistance acc. to DIN EN 29 053: R_S = 377 Pa s / m

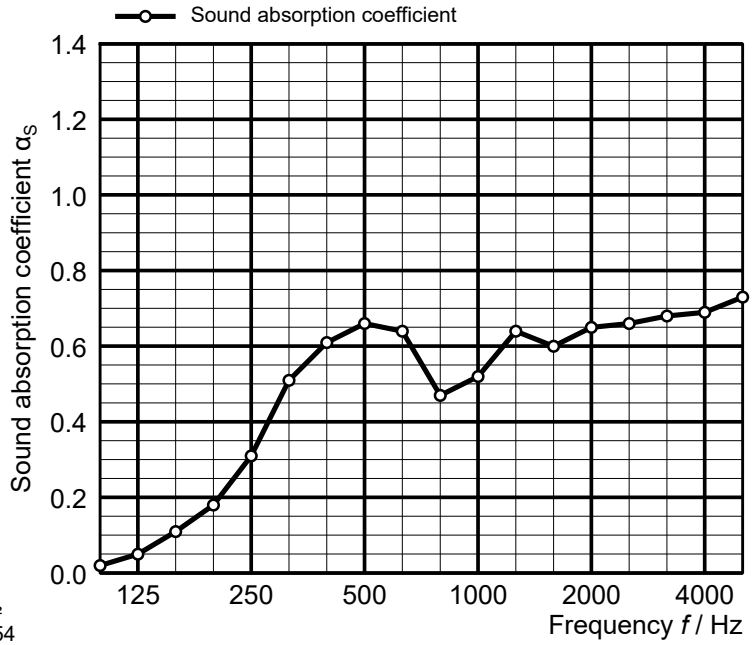
Test arrangement:

- mounting type G-200 acc. to ISO 354, test set-up without enclosing frame
- clear distance to the wall of the reverberation room of 200 mm (center system rail)
- mounting as ready-for-test slat system with ceiling rail and chain hoist (2 rails with L = 2000 mm), 40 slats in total, with weighting at the bottom
- suspension of the slats at the center of the ceiling rail (pivoted), distance of the fixing points 97 mm
- total height (incl. ceiling rail) 3000 mm
- slats closed (0°)
- test surface width x height = 3960 mm x 3000 mm

Room: E
Volume: 199.60 m³
Size: 11.88 m²
Date of test: 2010-03-10

	θ [°C]	*r. h.* [%]	*B* [kPa]
without specimen	18.5	42.5	95.1
with specimen	18.1	41.4	95.1

Frequency [Hz]	α_S 1/3 octave	α_p octave
100	∘ 0.02	
125	∘ 0.05	0.05
160	0.11	
200	0.18	
250	0.31	0.35
315	0.51	
400	0.61	
500	0.66	0.65
630	0.64	
800	0.47	
1000	0.52	0.55
1250	0.64	
1600	0.60	
2000	0.65	0.65
2500	0.66	
3150	0.68	
4000	0.69	0.70
5000	0.73	



∘ 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:

Weighted sound absorption coefficient α_w = 0.60

Sound absorption class: C

MÜLLER-BBM

Planegg, 2021-03-05
No. of test report M56 910/5