

Sound absorption coefficient ISO 354

Measurement of sound absorption in reverberation rooms

Test specimen: Calmuc Sound Absorber, Article 9774, colour 75 black

Description of the test object:

- Thickness $d = 0.4$ mm
- Specific airflow resistance according to EN 29053 $R_s = 2409$ Pa s/m
- Area specific mass $m'' = 499$ g/m²
- Testing area width x height = 3.50 m x 3.00 m

Details about the mounting conditions:

- Mounting condition G-200 according to EN ISO 354, paragraph 6.2.1
- Fabric hanging flat
- 200 mm distance between fabric and wall of the reverberation room
- Mounting without circumferential frame

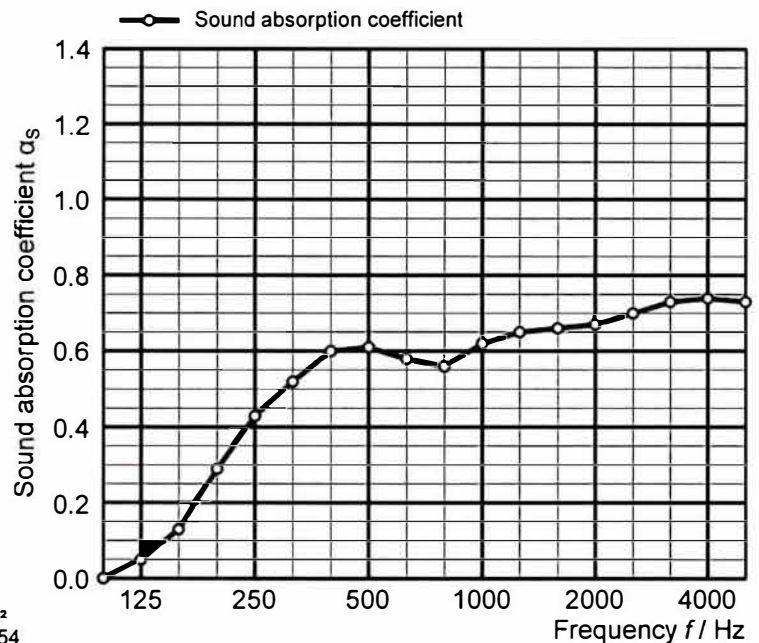
Room: E
 Volume: 199.60 m³
 Size: 10.50 m²
 Date of test: 2012-03-15

	θ [°C]	r. h. [%]	B [kPa]
without specimen	20.4	34.0	96.3
with specimen	20.5	33.9	96.3

Accredited testing laboratory according to ISO/IEC 17025



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.00	
125	0.05	0.05
160	0.13	
200	0.29	
250	0.43	0.40
315	0.52	
400	0.60	
500	0.61	0.60
630	0.58	
800	0.56	
1000	0.62	0.60
1250	0.65	
1600	0.66	
2000	0.67	0.70
2500	0.70	
3150	0.73	
4000	0.74	0.75
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 $\alpha_w = 0.60$ (H) Sound absorption class: C	Rating according to ASTM C423: Noise Reduction Coefficient NRC = 0.60 Sound Absorption Average SAA = 0.57
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