

Post

SOUND ABSORPTION COEFFICIENT ACCORDING TO SS-EN ISO 354:2003 AND SS-EN ISO 11654:1997

Measurement of sound absorption coefficient in a reverberation room



Report number:
21-738-M1
Date
2021-10-29

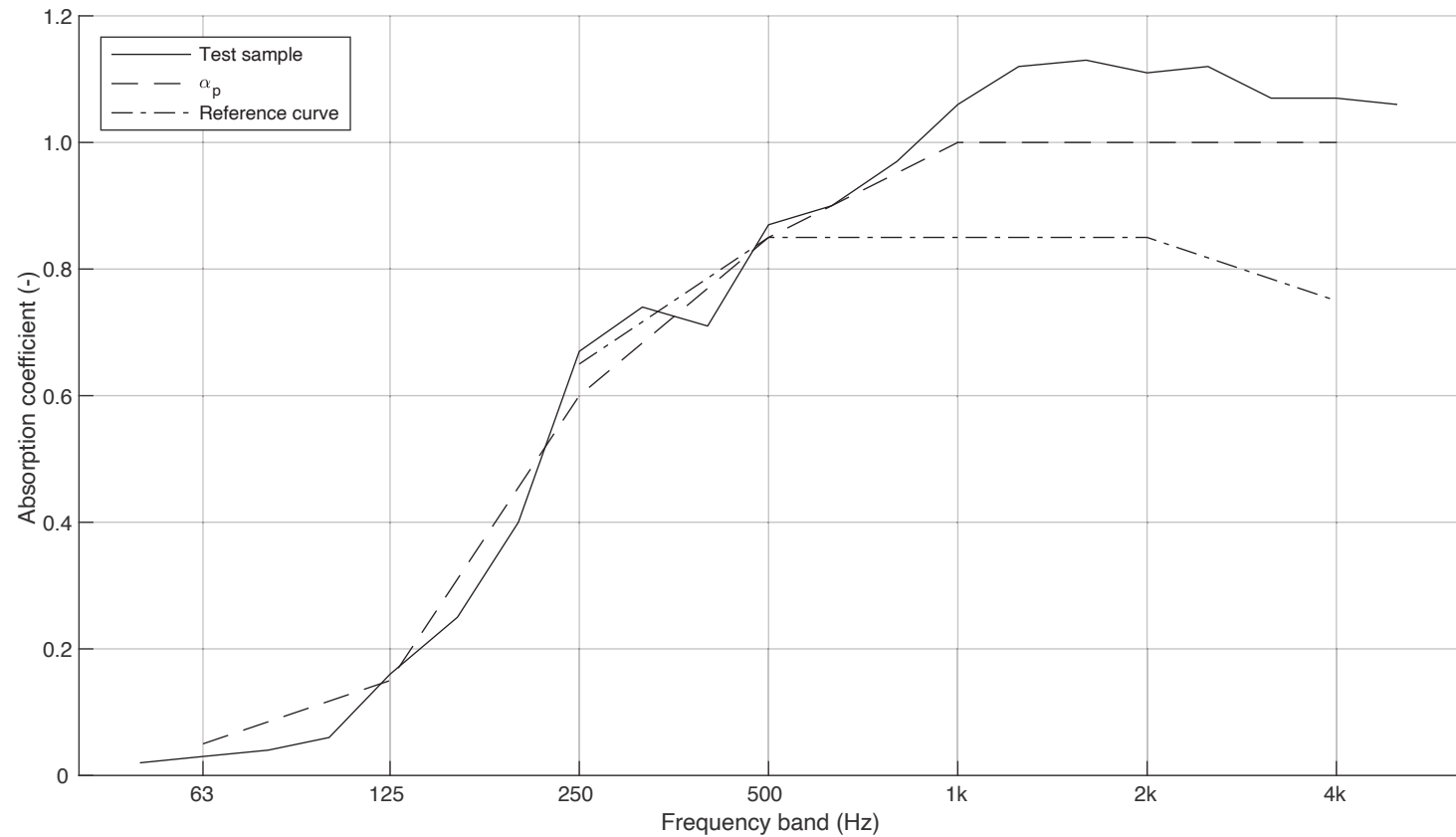
Frequency f [Hz]	Sound absorption coefficient	
	α_s	α_p
50	0.02	
63	0.03	0.05
80	0.04	
100	0.06	
125	0.16	0.15
160	0.25	
200	0.40	
250	0.67	0.60
315	0.74	
400	0.71	
500	0.87	0.85
630	0.90	
800	0.97	
1000	1.06	1.00
1250	1.12	
1600	1.13	
2000	1.11	1.00
2500	1.12	
3150	1.07	
4000	1.07	1.00
5000	1.06	

Client: Decibel by Johansson
 Manufacturer: Decibel by Johansson
 Product identification: Post

Description of test specimen: Sound absorbing panel shaped as an envelope made of an MDF base plate with glass wool filling covered with fabric. Maximum height when mounted on the wall is 65 mm. Tested directly on the floor.

Reverberation room volume: 200 m³
 Temperature: 18.1 °C (empty: 17.2 °C)
 Air humidity: 51 % (empty: 52 %)
 Air pressure: 98.7 kPa (empty: 98.8 kPa)
 Size of specimen: 10 m²

Measurement date: 2021-10-12
 Measured by: Joachim Schubert



$\alpha_w = 0.85(H)$

Absorption class = B

Post 3x2 panels

SOUND ABSORPTION AREA ACCORDING TO SS-EN ISO 354:2003, SS 25269:2013 and ISO 20189:2018

Measurement of sound absorption area in a reverberation room



Report number:
21-738-M2
Date
2021-10-29

Frequency f [Hz]	Sound absorption area per object [m ² Sabine]	
50	0.02	
63	0.06	0.06
80	0.10	
100	0.06	
125	0.35	0.30
160	0.50	
200	0.72	
250	1.39	1.3
315	1.65	
400	1.71	
500	2.18	2.0
630	2.06	
800	2.46	
1000	2.53	2.5
1250	2.52	
1600	2.59	
2000	2.52	2.6
2500	2.59	
3150	2.42	
4000	2.35	2.3
5000	2.23	

Client: Decibel by Johansson
 Manufacturer: Decibel by Johansson
 Product identification: Post 3x2 panels
 Description of test specimen: Sound absorbing panel shaped as an envelope made of an MDF base plate with glass wool filling covered with fabric. Measurement results applies to one object of 6 panels (1785 x 1190 mm). Maximum height when mounted on the wall is 65 mm. Tested directly on the floor.

Reverberation room volume: 200 m³
 Temperature: 18.3 °C (empty: 17.2 °C)
 Air humidity: 52 % (empty: 52 %)
 Air pressure: 98.7 kPa (empty: 98.8 kPa)
 Number of objects: 2
 Measurement date: 2021-10-12
 Measured by: Joachim Schubert

$N_{10} = 5$

