



AGH University of Science and Technology
Faculty of Mechanical Engineering and Robotics
Department of Mechanics and Vibroacoustics
Al. Mickiewicza 30, 30-059 Kraków
Tel/fax (4812) 617-35-17

Client:
Bejot Sp. z o.o.
ul. Wybickiego 2a, Manieczki
63-112 Brodnica k/Poznań

Measurement of sound absorption coefficient in a reverberation chamber according to PN-EN ISO 354:2005

Test date: 25.07.18

Sample:
Alberi Wall – sound absorbing panels

Producer:
Bejot Sp. z o.o.
ul. Wybickiego 2a, Manieczki
63-112 Brodnica k/Poznań

Sample description:

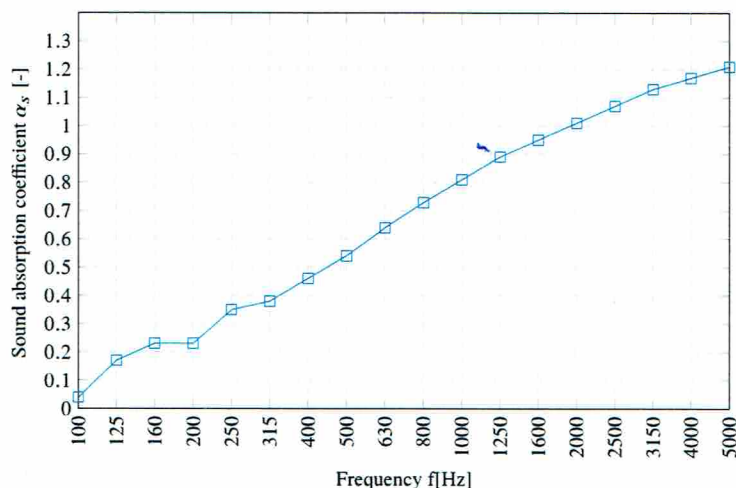
Filling:
- MDF plate 10mm,
- nonwoven 2 x 7mm,
- felt tape 3mm,
Covering: decorative felt 3mm

Conditions:
Sample size [mm]: 12
Element size [mm]:
Element number [no.]: 6 + 2
Sample area [m²]: 12,0
Mounting method: Discrete sound absorbers

Temperature with sample t [°C]: 25.4
Temperature without sample t [°C]: 24.6
rel. humidity with sample [%]: 52.05
rel. humidity without sample [%]: 44.7
Microphone positions: 6
Loudspeaker positions: 2
Diffusors number: 5
Chamber volume [m³]: 180,4
Walls area [m²]: 193,6

f [Hz]	T_1 [s]	T_2 [s]	α_s	α_p
100	11.31	9.50	0.04	0.15
125	8.01	5.15	0.17	
160	8.33	4.63	0.23	
200	9.43	4.94	0.23	0.30
250	10.17	4.13	0.35	
315	9.67	3.80	0.38	
400	9.12	3.32	0.46	0.55
500	8.09	2.88	0.54	
630	8.12	2.55	0.64	
800	7.28	2.25	0.73	0.80
1000	6.70	2.04	0.81	
1250	6.03	1.86	0.89	
1600	4.91	1.67	0.95	1.00
2000	4.45	1.55	1.01	
2500	3.94	1.44	1.07	
3150	3.49	1.34	1.13	1.00
4000	2.81	1.21	1.17	
5000	2.34	1.11	1.21	

Absorption class: D
 α_w : 0.55(MH)



α_s Sound absorbiton coefficient PN-EN ISO 354:2005

α_p Practical sound absorbiton coefficient PN-EN ISO 11654:1999

α_w Weighted sound absorbiton coefficient PN-EN ISO 11654:1999

T_1, T_2 Chamber reverberation time while empty and with sample PN-EN ISO 354:2005

Stamp:
im. Stanisława Staszica w Krakowie
Wydział Inżynierii Mechanicznej i Robotyki
Katedra Mechaniki i Vibroakustyki
30-059 Kraków, Al. Mickiewicza 30, paw. D-1
tel. 12 617-30-64 fax 12 633-23-14
NIP 6750001923

Project manager:
dr hab. inż. Tadeusz Kamiński prof. AGH
kamisins@agh.edu.pl

Technical specialist:
dr inż. Artur Flach