Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Sahco / Kvadrat
Test Specimen Curtains
Flat
Wall mounting - 100mm distance
One layer of textile
Textile: Salon from Sahco colour: 2
100% Trevira CS
Test Build-Up (from top to bottom):
1 mm Front textile
100 mm Air gap
Reflective wall

Mounting
100mm distance to the wall

Flat curtains 1 element 4000x3000mm
Total dimensions of the test object
L x H = 4000mm x 3000mm

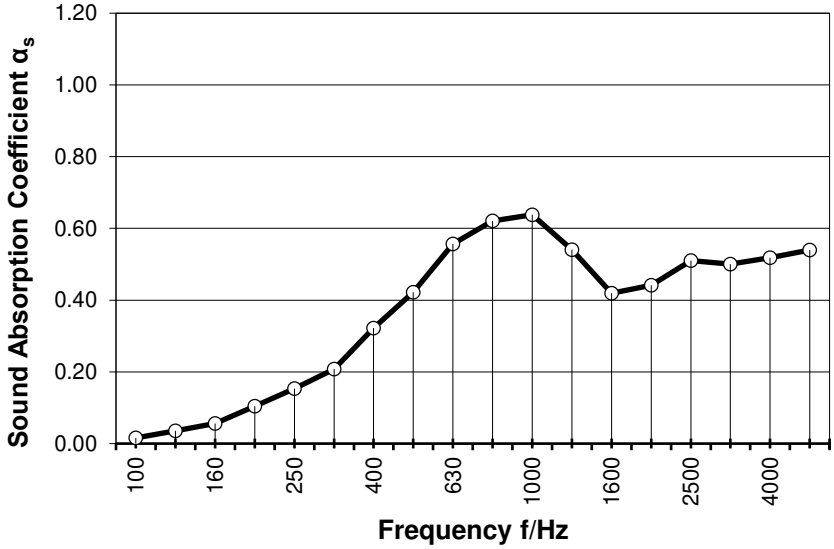


Room: Reverberation Room
Volume: 156 m^3
Size: 12.00 m^2
Date of test 29-04-21

Frequency [Hz]	αs 1/3 octave	αp octave
100	0.02	
125	0.04	0.05
160	0.06	
200	0.10	
250	0.15	0.15
315	0.21	
400	0.32	
500	0.42	0.45
630	0.56	
800	0.62	
1000	0.64	0.60
1260	0.54	
1600	0.42	
2000	0.44	0.45
2500	0.51	
3160	0.50	
4000	0.52	0.50
5000	0.54	

αs Sound absorption coefficient to ISO 354
αp Practical sound absorption coefficient to ISO 11654

Sound Absorption Coefficient α



NRC:	**0.40**
SAA:	**0.41**

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient α_w = 0.45

Sound absorption class: D

kvadrat acoustics

Test conducted by Kvadrat SoftCells
Poznańska 3, 62-023 Gądki

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Sahco / Kvadrat
Test Specimen Curtains
Folded 100%
Wall mounting with 100mm distance
One layer of textile

Textile: Salon from Sahco colour: 2
100% Trevira CS

Test Build-Up (from top to bottom):

1	mm	Front textile
100	mm	Air gap
		Reflective wall

Mounting

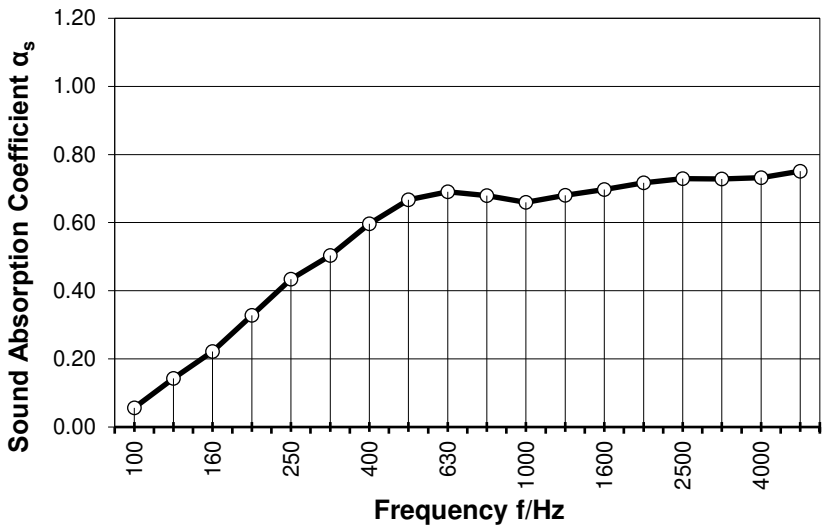
100mm distance to the wall
1 layer of curtains, 2 elements 4000x3000mm with approx. 20mm overlap, 100% folded, 200% textile length
Total dimensions of the test object
L x H = 3990mm x 3000mm



Room: Reverberation Room
Volume: 156 m^3
Size: 11.97 m^2
Date of test 29/04/2021

Frequency [Hz]	αs 1/3 octave	αp octave
100	0.06	
125	0.14	0.15
160	0.22	
200	0.33	
250	0.43	0.40
315	0.50	
400	0.60	
500	0.67	0.65
630	0.69	
800	0.68	
1000	0.66	0.65
1260	0.68	
1600	0.70	
2000	0.72	0.70
2500	0.73	
3160	0.73	
4000	0.73	0.75
5000	0.75	

Sound Absorption Coefficient α



αs Sound absorption coefficient to ISO 354
αp Practical sound absorption coefficient to ISO 11654

NRC:	**0.60**
SAA:	**0.62**

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient α_w = 0.65

Sound absorption class:C

kvadrat acoustics

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