

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

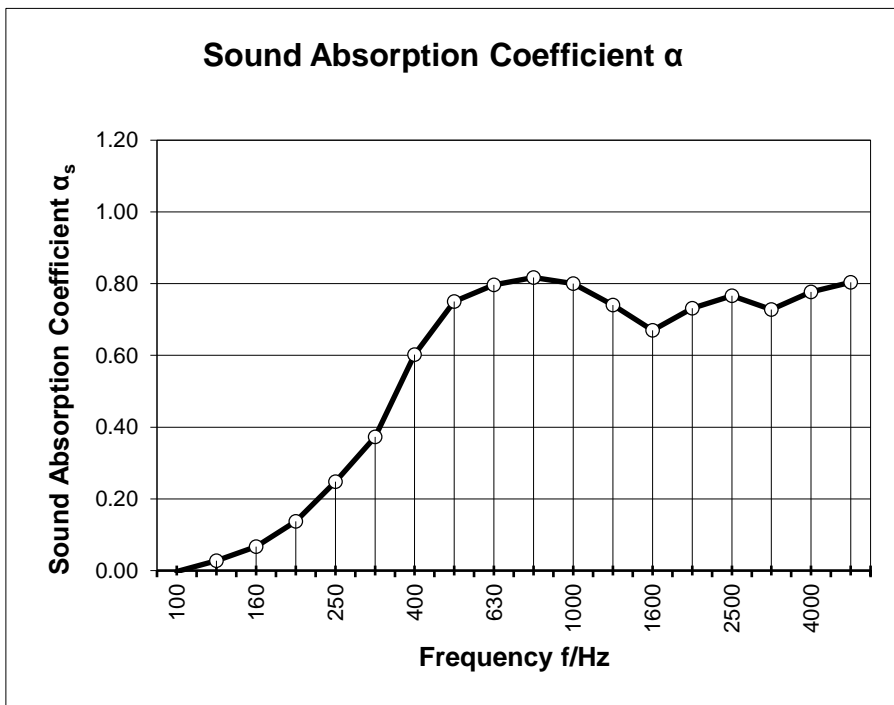
Client Kinnasand / Kvadrat
Test Specimen Curtains
 Flat
Wall mounting - 100mm distance
 One layer of textile
 Textile: Highlight from Kinnasand colour: 11
 100% Polyester FR
Test Build-Up (from top to bottom):
 1 mm Front textile
 100 mm Air gap
 Reflective wall

Mounting
 100mm distance to the wall
 Flat curtains 2 elements 1500x3000mm, 1 element
 1040mm x 3000mm with approx. 20mm overlap
 Total dimensions of the test object
 L x H = 4000mm x 3000mm

Room: Reverberation Room
 Volume: 156 m³
 Size: 12.00 m²
 Date of test 24-05-21



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.00	
125	0.03	0.05
160	0.07	
200	0.14	
250	0.25	0.25
315	0.37	
400	0.60	
500	0.75	0.70
630	0.80	
800	0.82	
1000	0.80	0.80
1260	0.74	
1600	0.67	
2000	0.73	0.70
2500	0.77	
3160	0.73	
4000	0.78	0.75
5000	0.80	



α_s Sound absorption coefficient to ISO 354
 α_p Practical sound absorption coefficient to ISO 11654

NRC:	0.60
SAA:	0.62

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.55$ (MH)

Sound absorption class: D

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kinnasand / Kwadrat

Test Specimen Curtains
Folded 100%

Wall mounting with 100mm distance
One layer of textile

Textile: Highlight from Kinnasand colour: 11
100% Polyester FR

Test Build-Up (from top to bottom):

1 mm Front textile
100 mm Air gap
Reflective wall

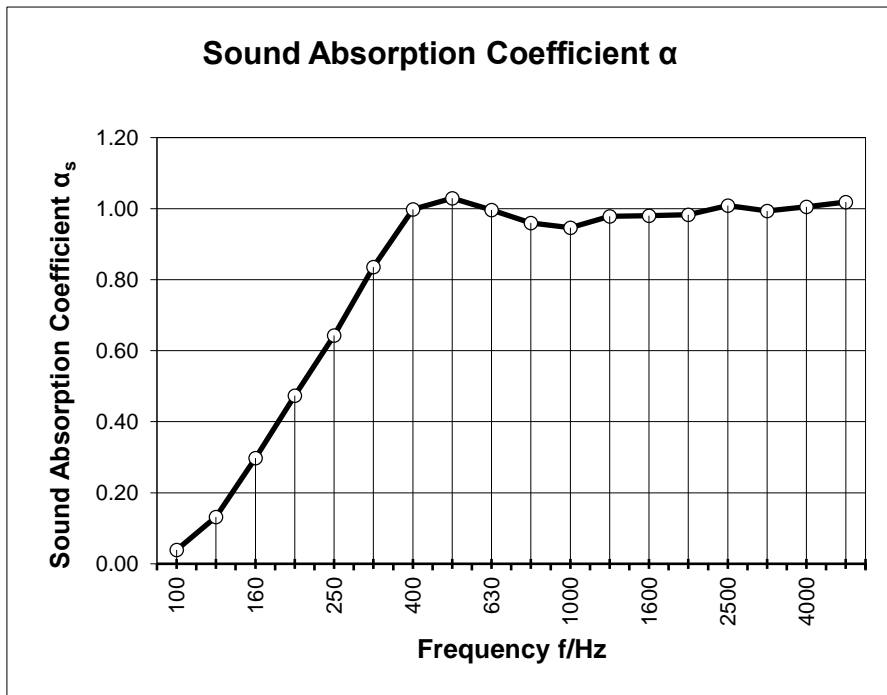
Mounting

100mm distance to the wall
1 layer of curtains, 5 elements 1500x3000mm with approx. 20mm overlap, 100% folded, 200% textile length
Total dimensions of the test object
L x H = 3710mm x 3000mm

Room: Reverberation Room
Volume: 156 m³
Size: 11.13 m²
Date of test 24-05-21



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.04	
125	0.13	0.15
160	0.30	
200	0.47	
250	0.64	0.65
315	0.84	
400	1.00	
500	1.03	1.00
630	1.00	
800	0.96	
1000	0.95	0.95
1260	0.98	
1600	0.98	
2000	0.98	1.00
2500	1.01	
3160	0.99	
4000	1.01	1.00
5000	1.02	



α_s Sound absorption coefficient to ISO 354
 α_p Practical sound absorption coefficient to ISO 11654

NRC:	0.90
SAA:	0.9

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.95$

Sound absorption class:A

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kvadrat
Test Specimen Curtains Flat

Mounting type G-150

One layer of textile
 Textile: Highlight from kinnasand / Kvadrat

Test Build-Up (from top to bottom):

0.78 mm Front textile
 150 mm Air gap
 Reflective wall

Mounting

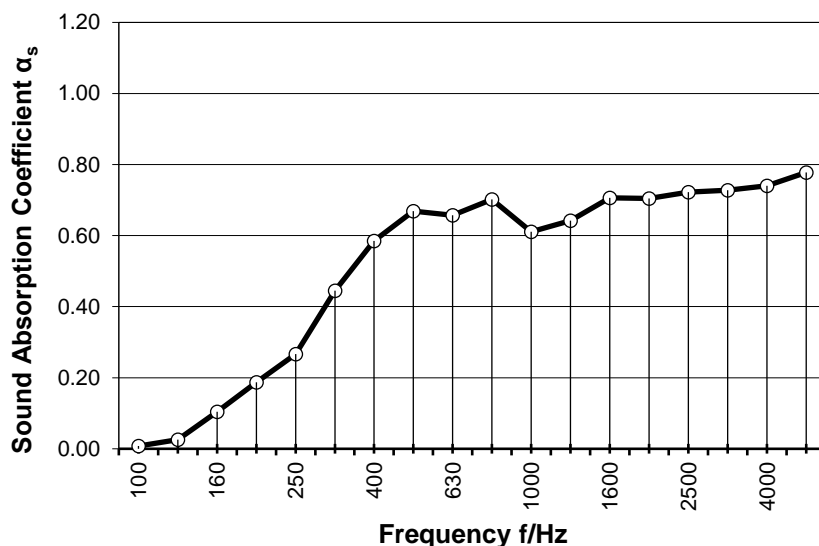
150mm distance to the wall
 Flat curtains 2 elements 1500x3010mm, 1 element 1020x3010
 Total dimensions of the test object
 L x H = 3980mm x 3010mm

Room: Reverberation Room
 Volume: 156 m³
 Size: 11.98 m²
 Date of test 07/03/2024



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.01	
125	0.03	0.05
160	0.10	
200	0.19	
250	0.27	0.30
315	0.45	
400	0.58	
500	0.67	0.65
630	0.66	
800	0.70	
1000	0.61	0.65
1260	0.64	
1600	0.71	
2000	0.70	0.70
2500	0.72	
3160	0.73	
4000	0.74	0.75
5000	0.78	

Sound Absorption Coefficient α



α_s Sound absorption coefficient to ISO 354
 α_p Practical sound absorption coefficient to ISO 11654

NRC:	0.55
SAA:	0.57

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.6$ (H)

Sound absorption class: C

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kvadrat
Test Specimen Curtains Folded 100%

Mounting type G-150

One layer of textile

Textile: Highlight from kinnasand / kvadrat

Test Build-Up (from top to bottom):

0.78 mm Front textile
 150 mm Air gap
 Reflective wall

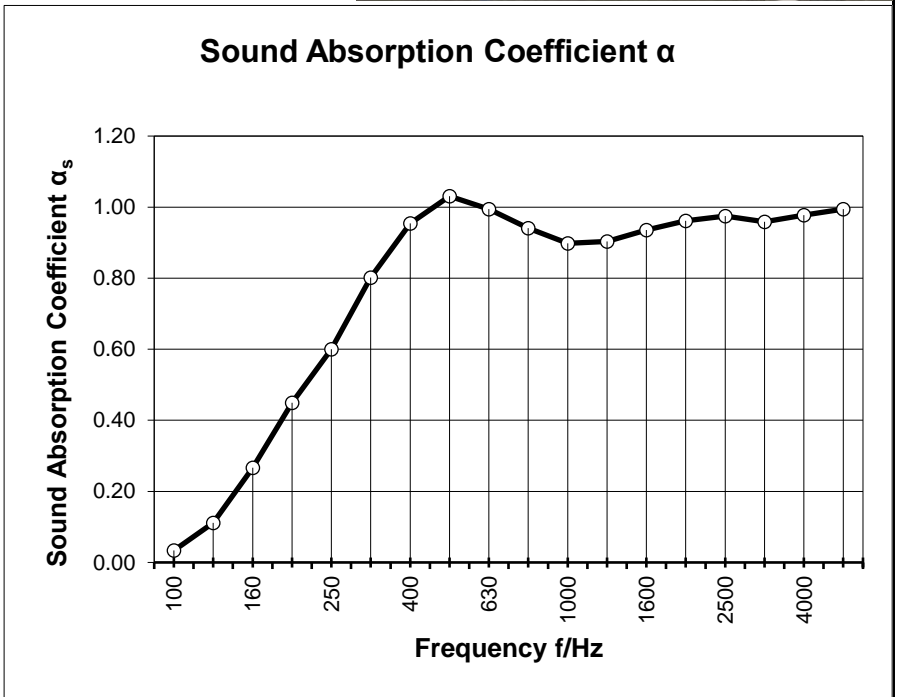
Mounting

150mm distance to the wall
 1 layer of curtains, 5 elements 1500x3010mm with approx. 20mm overlap, 100% folded, 200% textile length
 Total dimensions of the test object
 L x H = 3710mm x 3010mm



Room: Reverberation Room
 Volume: 156 m³
 Size: 11.17 m²
 Date of test 07/03/2024

Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.03	
125	0.11	0.15
160	0.27	
200	0.45	
250	0.60	0.60
315	0.80	
400	0.95	
500	1.03	1.00
630	0.99	
800	0.94	
1000	0.90	0.90
1260	0.90	
1600	0.94	
2000	0.96	0.95
2500	0.97	
3160	0.96	
4000	0.98	1.00
5000	0.99	



α_s Sound absorption coefficient to ISO 354
 α_p Practical sound absorption coefficient to ISO 11654

NRC:	0.85
SAA:	0.87

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.9$

Sound absorption class:A