

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

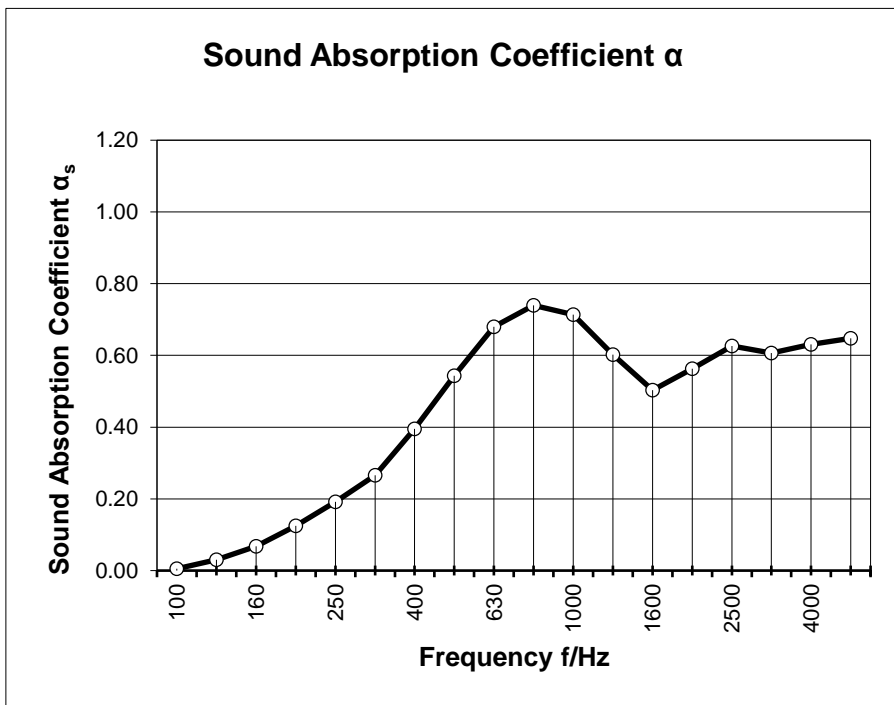
Client Kinnasand / Kvadrat
Test Specimen Curtains
 Flat
Wall mounting - 100mm distance
 One layer of textile
 Textile: Pleats from Kinnasand colour: 14
 100% Polyester FR
Test Build-Up (from top to bottom):
 1 mm Front textile
 100 mm Air gap
 Reflective wall

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	0.01	
125	0.03	0.05
160	0.07	
200	0.12	
250	0.19	0.20
315	0.27	
400	0.40	
500	0.54	0.55
630	0.68	
800	0.74	
1000	0.71	0.70
1260	0.60	
1600	0.50	
2000	0.56	0.55
2500	0.63	
3160	0.61	
4000	0.63	0.65
5000	0.65	



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

NRC:	0.50
SAA:	0.5

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.5$ (H)

Sound absorption class: D

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kinnasand / Kvadrat

Test Specimen Curtains
Folded 100%

Wall mounting with 100mm distance
One layer of textile

Textile: Pleats from Kinnasand colour: 14
100% Polyester FR

Test Build-Up (from top to bottom):

1 mm Front textile
100 mm Air gap
Reflective wall

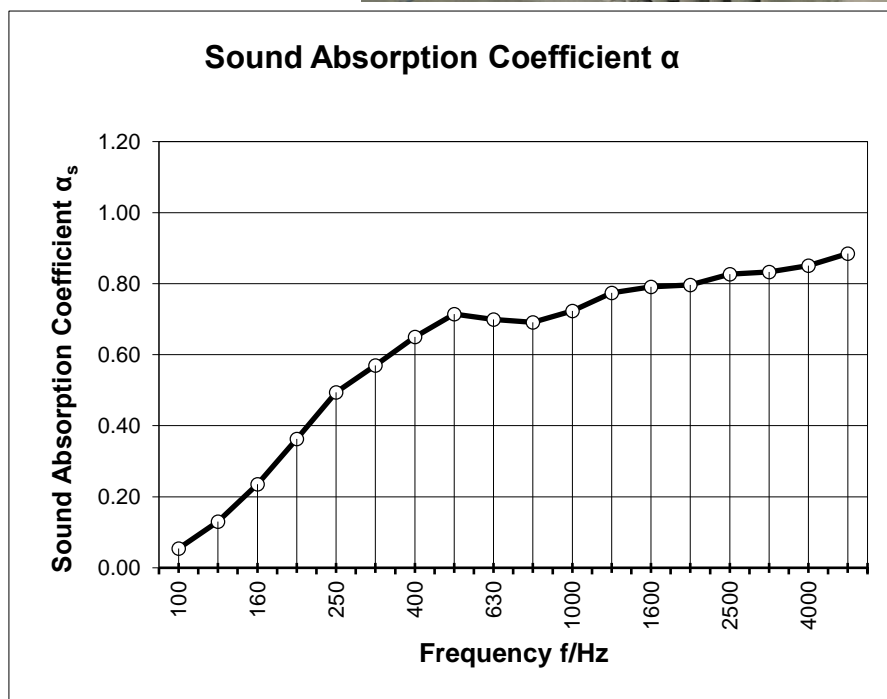
Mounting

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	0.05	
125	0.13	0.15
160	0.24	
200	0.36	
250	0.49	0.50
315	0.57	
400	0.65	
500	0.71	0.70
630	0.70	
800	0.69	
1000	0.72	0.75
1260	0.77	
1600	0.79	
2000	0.80	0.80
2500	0.83	
3160	0.83	
4000	0.85	0.85
5000	0.88	



α_s Sound absorption coefficient to ISO 354

α_p Practical sound absorption coefficient to ISO 11654

NRC:	0.65
SAA:	0.67

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.75$

Sound absorption class:C

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kinnasand / Kvadrat
Test Specimen Curtains
Flat

Mounting type G-150
One layer of textile
Textile: Pleats from Kinnasand colour: 6
100% Polyester FR

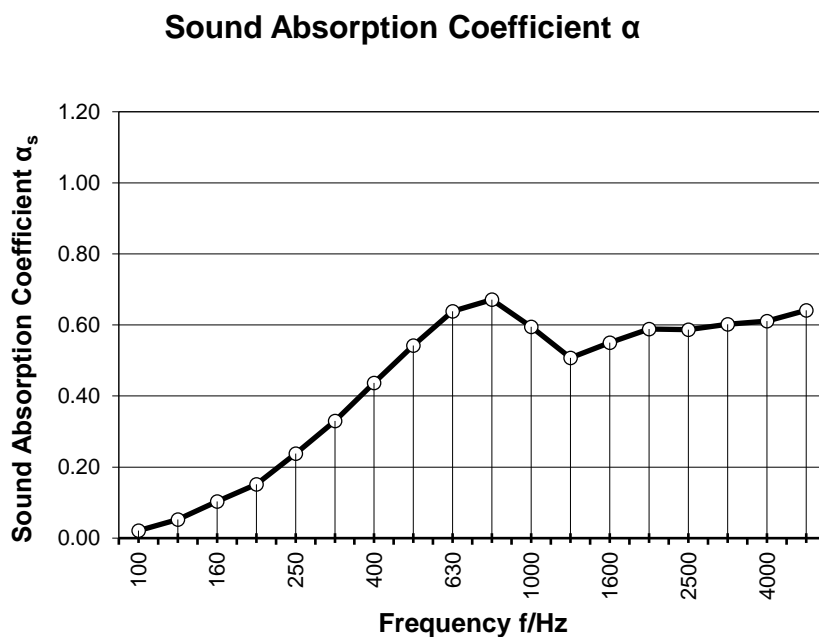
Test Build-Up (from top to bottom):
1 mm Front textile
150 mm Air gap
Reflective wall

Mounting
150mm distance to the wall
Flat curtains 3 elements 1520x3000mm with approx.
20mm overlap
Total dimensions of the test object
L x H = 4500mm x 3000mm

Room: Reverberation Room
Volume: 156 m³
Size: 13.50 m²
Date of test 22/08/2023



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.02	
125	0.05	0.05
160	0.10	
200	0.15	
250	0.24	0.25
315	0.33	
400	0.44	
500	0.54	0.55
630	0.64	
800	0.67	
1000	0.60	0.60
1260	0.51	
1600	0.55	
2000	0.59	0.60
2500	0.59	
3160	0.60	
4000	0.61	0.60
5000	0.64	



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

NRC:	0.50
SAA:	0.49

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.55$

Sound absorption class: D

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kinnasand / Kvadrat
Test Specimen Curtains
 Folded 100%

Mounting type G-150
 One layer of textile

Textile: Pleats from Kinnasand colour: 6
 100% Polyester FR

Test Build-Up (from top to bottom):

1 mm Front textile
 150 mm Air gap
 Reflective wall

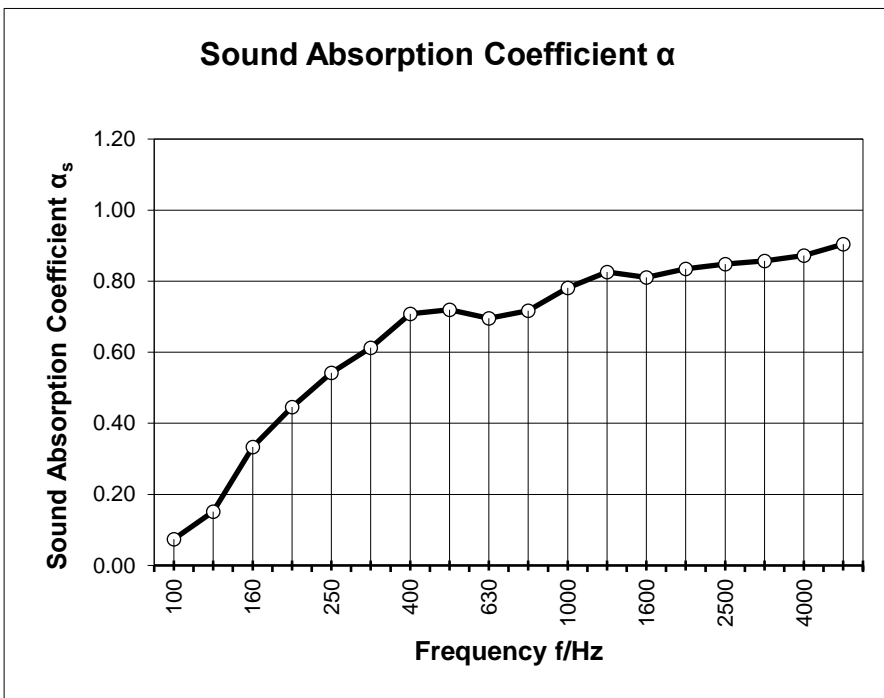
Mounting

100mm distance to the wall
 1 layer of curtains, 5 elements 1520x3000mm with approx.
 20mm overlap, 100% folded, 200% textile length
 Total dimensions of the test object
 L x H = 3760mm x 3000mm



Room: Reverberation Room
 Volume: 156 m³
 Size: 11.28 m²
 Date of test 22/08/2023

Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.07	
125	0.15	0.20
160	0.33	
200	0.45	
250	0.54	0.55
315	0.61	
400	0.71	
500	0.72	0.70
630	0.70	
800	0.72	
1000	0.78	0.75
1260	0.83	
1600	0.81	
2000	0.83	0.85
2500	0.85	
3160	0.86	
4000	0.87	0.90
5000	0.90	



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

NRC:	0.70
SAA:	0.71

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.75$ (H)

Sound absorption class:C