

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kvadrat
Test Specimen Curtains
 Flat
Wall mounting - 100mm distance
 One layer of textile

Textile: Highland from Kinnasand / Kvadrat colour: 0001
 100% wool

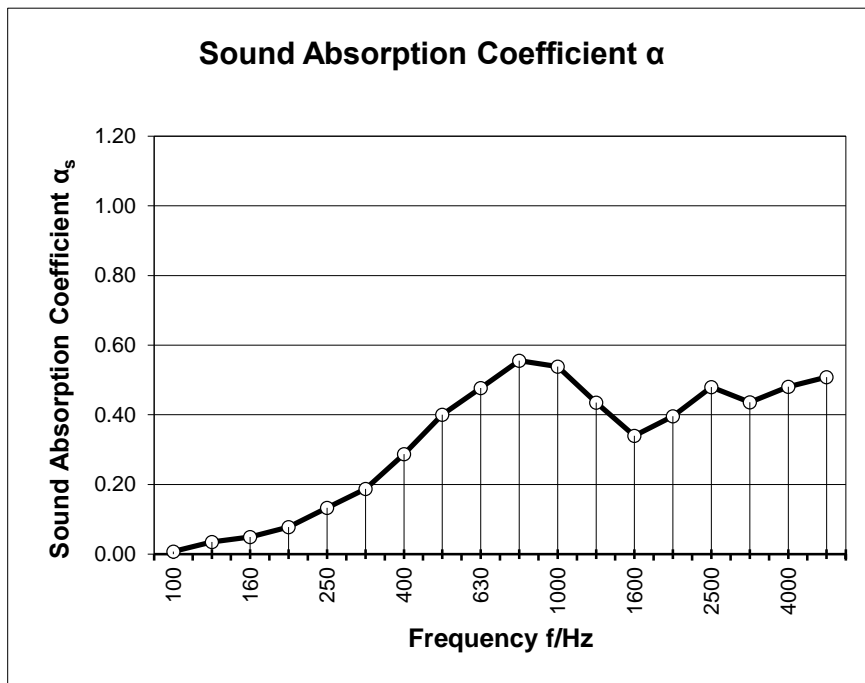
Test Build-Up (from top to bottom):
 1 mm Front textile
 100 mm Air gap
 Reflective wall

Mounting
 100mm distance to the wall
 Flat curtains 3 element 1530x2960mm with approx. 30mm overlap
 Total dimensions of the test object
 L x H = 4530mm x 2960mm



Room: Reverberation Room
 Volume: 156 m³
 Size: 13.41 m²
 Date of test 30-12-20

Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.01	
125	0.03	0.05
160	0.05	
200	0.08	
250	0.13	0.15
315	0.19	
400	0.29	
500	0.40	0.40
630	0.48	
800	0.56	
1000	0.54	0.50
1260	0.43	
1600	0.34	
2000	0.40	0.40
2500	0.48	
3160	0.44	
4000	0.48	0.45
5000	0.51	



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

NRC:	0.35
SAA:	0.36

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.4$
 Sound absorption class:D

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

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

Textile: Highland from Kinnasand / Kvadrat colour: 0001
 100% wool

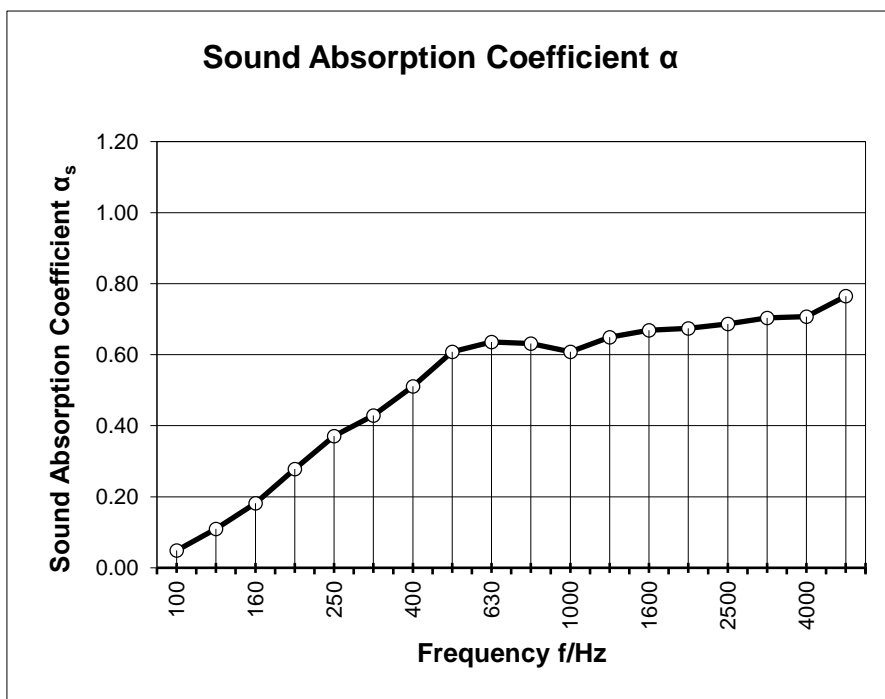
Test Build-Up (from top to bottom):
 1 mm Front textile
 100 mm Air gap
 Reflective wall

Mounting
 100mm distance to the wall
 1 layer of curtains, 5 elements 1530x2960mm with approx.
 30mm overlap, 100% folded, 200% textile length
 Total dimensions of the test object
 L x H = 3705mm x 2960mm

Room: Reverberation Room
 Volume: 156 m³
 Size: 10.97 m²
 Date of test 30-12-20



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.05	
125	0.11	0.10
160	0.18	
200	0.28	
250	0.37	0.35
315	0.43	
400	0.51	
500	0.61	0.60
630	0.64	
800	0.63	
1000	0.61	0.65
1260	0.65	
1600	0.67	
2000	0.67	0.70
2500	0.69	
3160	0.70	
4000	0.71	0.75
5000	0.76	



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

NRC:	0.55
SAA:	0.56

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 Kinnasand / Kvadrat
Test Specimen Curtains
 Flat

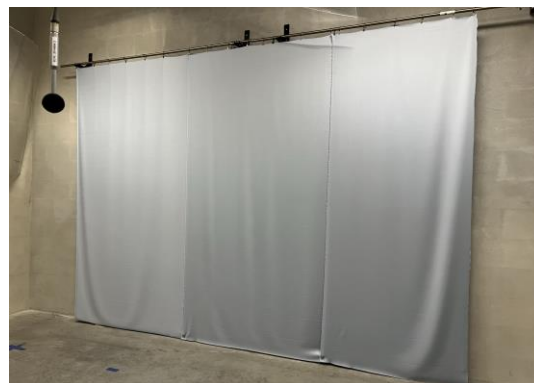
Mounting type G-150
 One layer of textile
 Textile: Highland from Kinnasand colour: 21
 100% Polyester FR

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

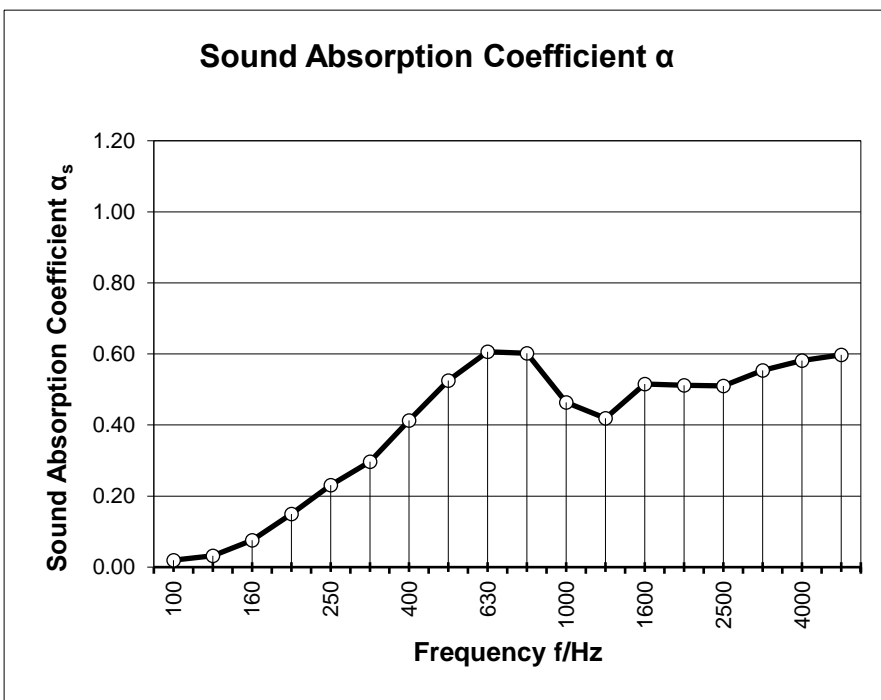
Mounting
 150mm distance to the wall

Flat curtains 1 element 4000x3000mm
 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 01/09/2023



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.02	
125	0.03	0.05
160	0.08	
200	0.15	
250	0.23	0.25
315	0.30	
400	0.41	
500	0.53	0.50
630	0.61	
800	0.60	
1000	0.46	0.50
1260	0.42	
1600	0.52	
2000	0.51	0.50
2500	0.51	
3160	0.55	
4000	0.58	0.60
5000	0.60	



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

NRC:	0.45
SAA:	0.44

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 / Kwadrat
Test Specimen Curtains
 Folded 100%

Mounting type G-150
 One layer of textile

Textile: Highland from Kinnasand colour: 21
 100% Polyester FR

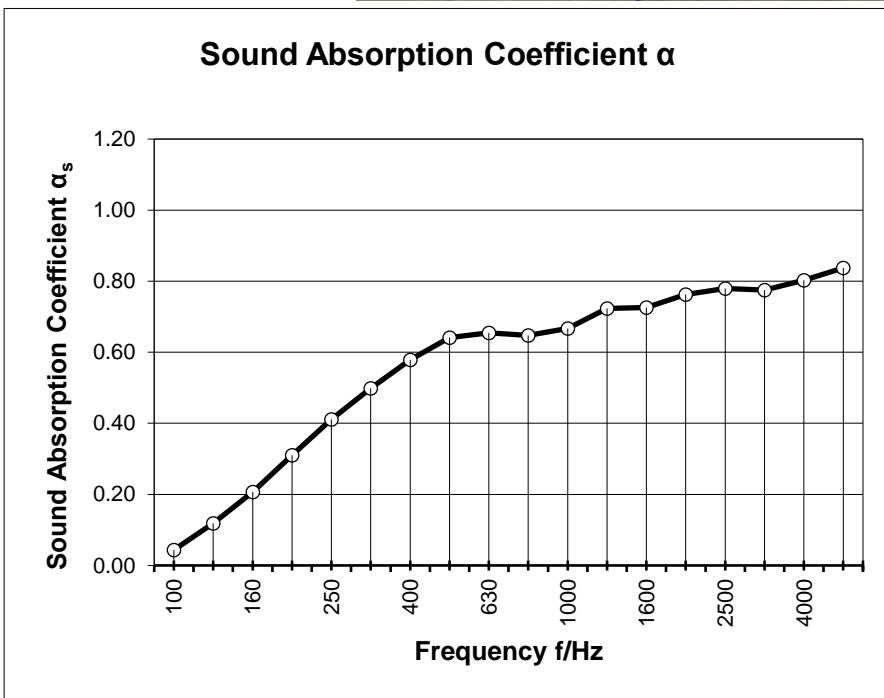
Test Build-Up (from top to bottom):
 1 mm Front textile
 150 mm Air gap
 Reflective wall

Mounting
 150mm distance to the wall
 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 = 3685mm x 3000mm

Room: Reverberation Room
 Volume: 156 m³
 Size: 11.06 m²
 Date of test 01/09/2023



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.04	
125	0.12	0.10
160	0.21	
200	0.31	
250	0.41	0.40
315	0.50	
400	0.58	
500	0.64	0.60
630	0.65	
800	0.65	
1000	0.67	0.70
1260	0.72	
1600	0.73	
2000	0.76	0.75
2500	0.78	
3160	0.78	
4000	0.80	0.80
5000	0.84	



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 $\alpha_w = 0.65$ (H)

Sound absorption class:C