

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kinnasand
Test Specimen Curtains
 Flat

Wall mounting - 100mm distance
 One layer of textile

Textile: Estate from Kinnasand colour: 14
 47% linen 45% Polyacryl 8% Polyester

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

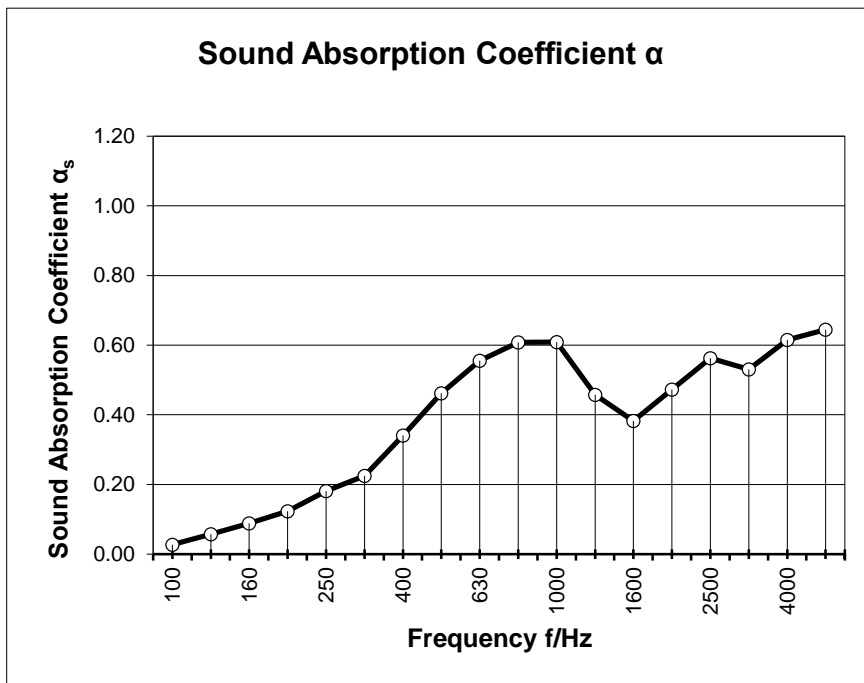
Mounting
 100mm distance to the wall

 Flat curtains 3 elements 1400x3000mm
 Total dimensions of the test object
 L x H = 4160mm x 3000mm

Room: Reverberation Room
 Volume: 156 m³
 Size: 12.48 m²
 Date of test 25-11-19



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.03	
125	0.06	0.05
160	0.09	
200	0.12	
250	0.18	0.20
315	0.22	
400	0.34	
500	0.46	0.45
630	0.56	
800	0.61	
1000	0.61	0.55
1260	0.46	
1600	0.38	
2000	0.47	0.45
2500	0.56	
3160	0.53	
4000	0.62	0.60
5000	0.64	



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

NRC:	0.40
SAA:	0.41

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.45$ (H)

Sound absorption class:D

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

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

Textile: Estate from Kinnasand colour: 14
 47% linen 45% Polyacrlyl 8% Polyester

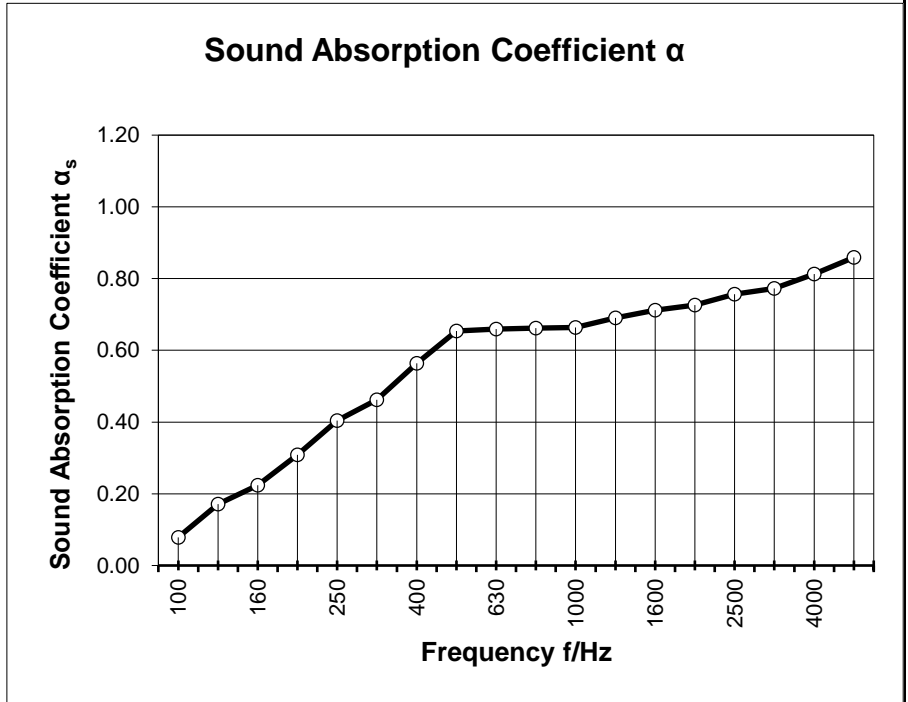
Test Build-Up (from top to bottom):
 1 mm Front textile
 100 mm Air gap
 Reflective wall

Mounting
 100mm distance to the wall
 1 layer of curtains, 5 elements 1400x3000mm with approx.
 20mm overlap, 100% folded, 200% textile length
 Total dimensions of the test object
 L x H = 3460mm x 3000mm



Room: Reverberation Room
 Volume: 156 m³
 Size: 10.38 m²
 Date of test 25-Nov-19

Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.08	
125	0.17	0.15
160	0.22	
200	0.31	
250	0.40	0.40
315	0.46	
400	0.56	
500	0.65	0.65
630	0.66	
800	0.66	
1000	0.66	0.65
1260	0.69	
1600	0.71	
2000	0.73	0.75
2500	0.76	
3160	0.77	
4000	0.81	0.80
5000	0.86	



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

NRC:	0.60
SAA:	0.61

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.65$ (H)

Sound absorption class:C