

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: Tonix from Kinnasand
 100% polyester FR

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

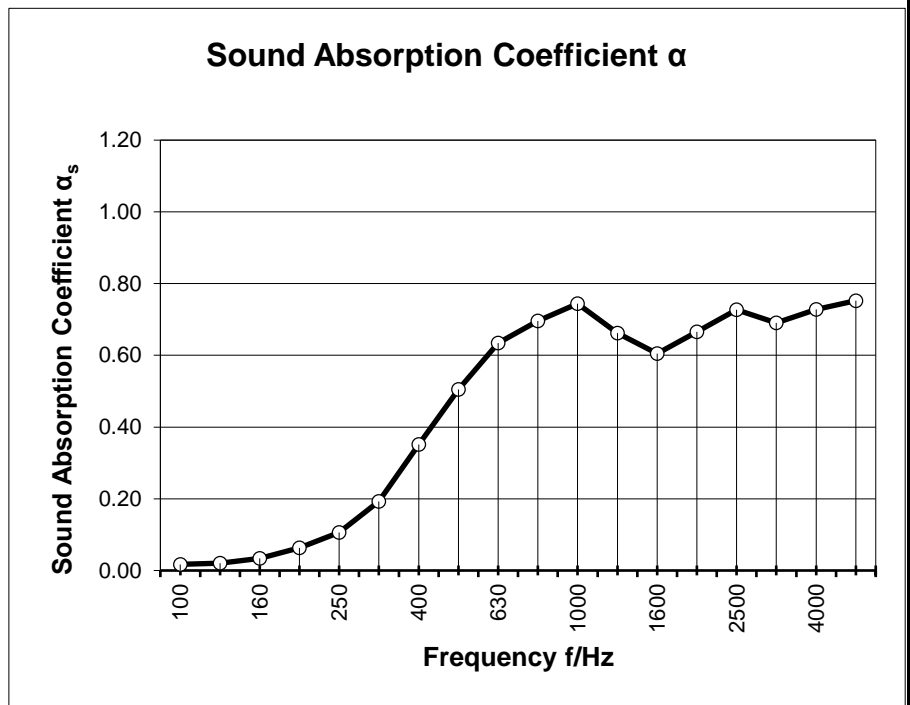
Mounting
 100mm distance to the wall

Flat curtains 1 element 4000x3010mm
 Total dimensions of the test object
 L x H = 4000mm x 3010mm

Room: Reverberation Room
 Volume: 156 m³
 Size: 12.04 m²
 Date of test 23-10-17



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.02	
125	0.02	0.00
160	0.03	
200	0.06	
250	0.11	0.10
315	0.19	
400	0.35	
500	0.50	0.50
630	0.63	
800	0.70	
1000	0.74	0.70
1260	0.66	
1600	0.60	
2000	0.67	0.65
2500	0.73	
3160	0.69	
4000	0.73	0.70
5000	0.75	



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 $\alpha_w = 0.4$ (MHH)

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: Tonix from Kinnasand
 100% polyester FR

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

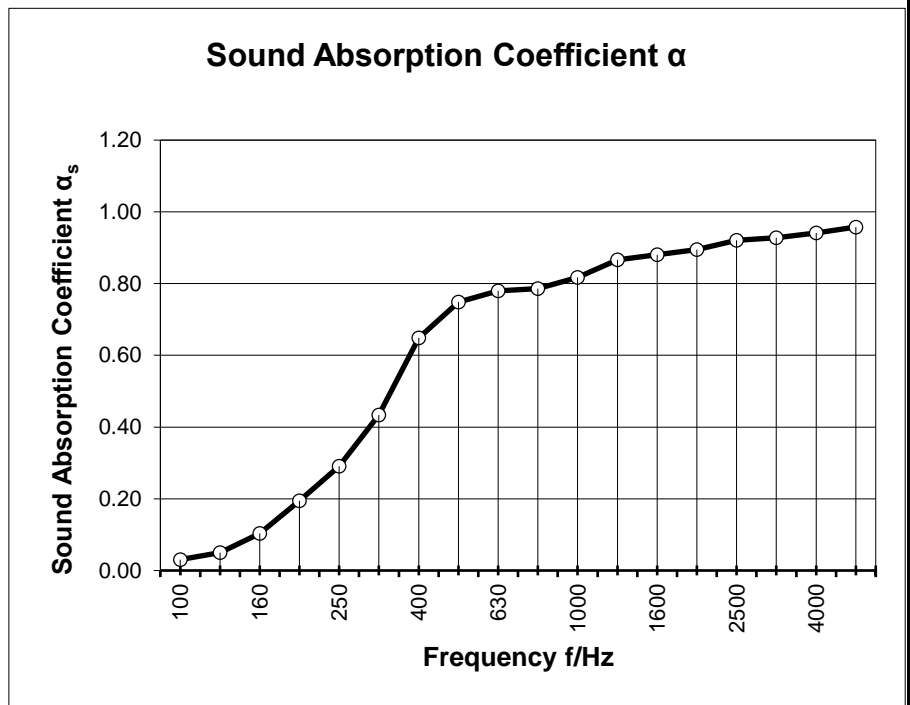
Mounting

100mm distance to the wall
 1 layer of curtains, 2 elements size: 4000x3010mm, 100%
 folded, 200% textile length, approx. 20mm overlap
 Total dimensions of the test object
 L x H = 3990mm x 3010mm

Room: Reverberation Room
 Volume: 156 m³
 Size: 12.01 m²
 Date of test 23-10-17



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.03	
125	0.05	0.05
160	0.10	
200	0.19	
250	0.29	0.30
315	0.43	
400	0.65	
500	0.75	0.75
630	0.78	
800	0.79	
1000	0.82	0.80
1260	0.87	
1600	0.88	
2000	0.89	0.90
2500	0.92	
3160	0.93	
4000	0.94	0.95
5000	0.96	



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

NRC:	0.70
SAA:	0.69

Rating according to ISO 11654:

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

Sound absorption class:C