

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Sahco / Kvadrat
Test Specimen Curtains
 Flat

Wall mounting - 100mm distance
 One layer of textile
 Textile: Cabana from Sahco colour: 1
 100% Trevira CS

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

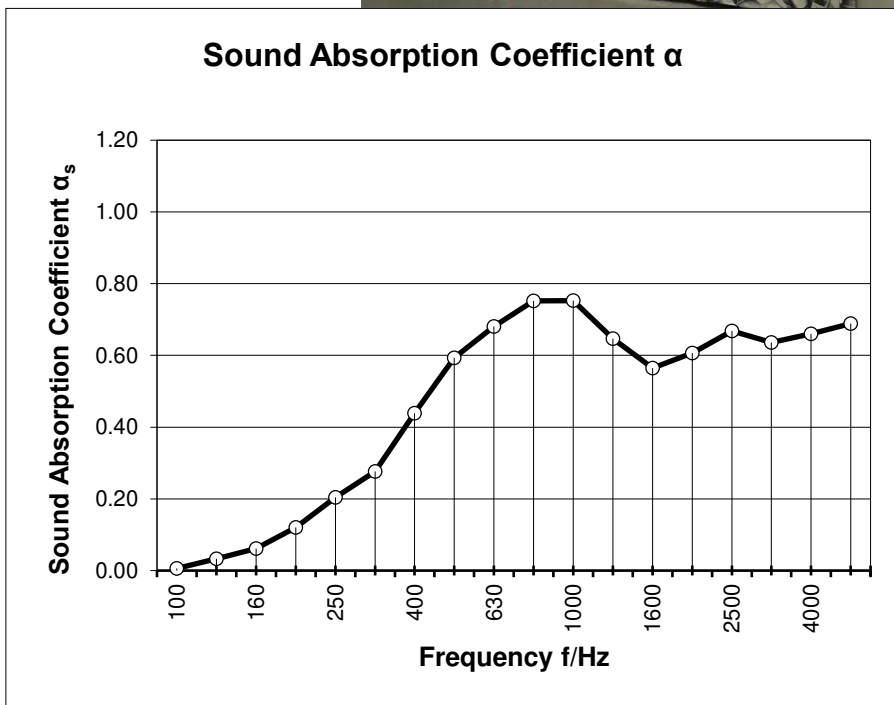
Mounting

100mm distance to the wall
 Flat curtains 3 element 1410x3000mm with approx. 20mm overlap
 Total dimensions of the test object
 L x H = 4200mm x 3000mm

Room: Reverberation Room
 Volume: 156 m³
 Size: 12.60 m²
 Date of test 16-04-21



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.01	
125	0.03	0.05
160	0.06	
200	0.12	
250	0.20	0.20
315	0.28	
400	0.44	
500	0.59	0.55
630	0.68	
800	0.75	
1000	0.75	0.70
1260	0.65	
1600	0.56	
2000	0.61	0.60
2500	0.67	
3160	0.64	
4000	0.66	0.65
5000	0.69	



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

NRC:	0.55
SAA:	0.53

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 Sahco / Kvadrat

Test Specimen Curtains
Folded 100%

Wall mounting with 100mm distance
One layer of textile

Textile: Cabana from Sahco colour: 1
100% Trevira CS

Test Build-Up (from top to bottom):

1 mm Front textile
100 mm Air gap
Reflective wall

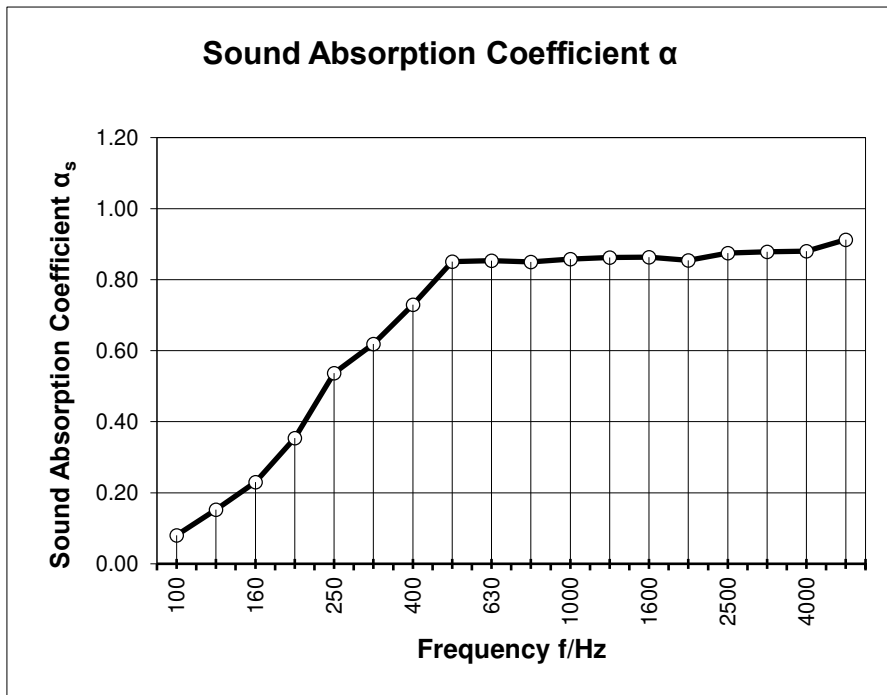
Mounting

100mm distance to the wall
1 layer of curtains, 5 elements 1410x3000mm with approx.
20mm overlap, 100% folded, 200% textile length
Total dimensions of the test object
L x H = 3445mm x 3000mm

Room: Reverberation Room
Volume: 156 m³
Size: 10.34 m²
Date of test 16-04-21



Frequency [Hz]	α_s 1/3 octave	α_p octave
100	0.08	
125	0.15	0.15
160	0.23	
200	0.35	
250	0.54	0.50
315	0.62	
400	0.73	
500	0.85	0.80
630	0.85	
800	0.85	
1000	0.86	0.85
1260	0.86	
1600	0.86	
2000	0.85	0.85
2500	0.88	
3160	0.88	
4000	0.88	0.90
5000	0.91	



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

NRC:	0.75
SAA:	0.76

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.8$ (H)

Sound absorption class:B