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: Maple from Kvadrat colour: 562

81% viscose 15% linen 4% 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 2 elements 1440x3000mm, 1 element

1160x3000mm with approx. 20mm overlap

Total dimensions of the test object

L x H = 4000 mm x 3000 mm

Room: Reverberation Room

Volume: 156 m³ Size: 12.00 m²

Date of test 11-06-21



Frequency	αs	αр	
[Hz]	1/3 octave	octave	
100	0.00		
125	0.02	0.00	
160	0.05		
200	0.14		
250	0.20	0.20	
315	0.30		
400	0.40		
500	0.44	0.45	
630	0.44	, ·	
800	0.44		
1000	0.40	0.40	
1260	0.40		
1600	0.41		
2000	0.43	0.45	
2500	0.44		
3160	0.44		
4000	0.44	0.45	
5000	0.44		
rs Sound absorption coefficient to ISO 354			

αs Sound absorption coefficient to ISO 354

Rating according to ISO 11654:

αp Practical sound absorption coefficient to ISO 11654

Sound Absorption Coefficient α

1.20
1.00
0.80
0.60
0.40
0.20
0.20
Frequency f/Hz

NRC: 0.35 SAA: 0.37

Weighted Sound Absorption Coefficient $\alpha_w = 0.45$

Sound absorption class: D

kvadrat acoustics

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: Maple

from

Kvadrat colour:

562

81% viscose 15% linen 4% 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 1440x3000mm with approx.

20mm overlap, 100% folded, 200% textile length

Total dimensions of the test object

L x H = 3560 mm x 3000 mm

Room: Reverberation Room

Volume: Size: 156 m³ 10.68 m²

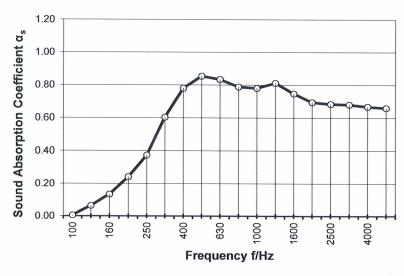
Date of test

11-06-21



Frequency	αs	αр	
[Hz]	1/3 octave	octave	
100	0.01		
125	0.06	0.05	
160	0.13		
200	0.24		
250	0.37	0.40	
315	0.60		
400	0.78		
500	0.85	0.80	
630	0.83		
800	0.79		
1000	0.78	0.80	
1260	0.81		
1600	0.75		
2000	0.70	0.70	
2500	0.68		
3160	0.68		
4000	0.67	0.65	
5000	0.66		
rs Sound absorption coefficient to ISO 354			

Sound Absorption Coefficient α



αs Sound absorption coefficient to ISO 354

αp Practical sound absorption coefficient to ISO 11654

NRC: 0.70 SAA: 0.68

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.7$

Sound absorption class:C

kvadrat acoustics

Test conducted by Kvadrat SoftCells Poznańska 3, 62-023 Gądki