Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kvadrat SoftCells
Test Specimen Curtains
Configuration: Flat

Wall mounting

One layer of textile

Front textile: Unix from Kinnasand

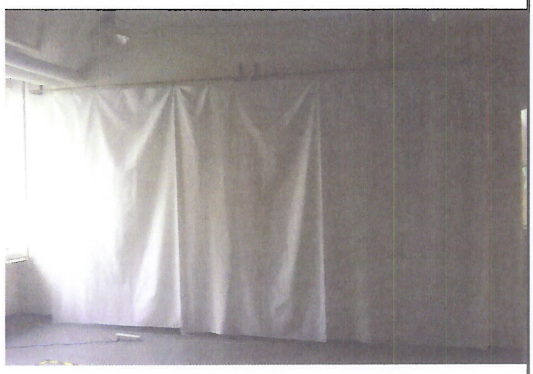
Test Build-Up (from top to bottom):

1 mm	Front textile
100 mm	Air gap
	Reflective wall

Mounting

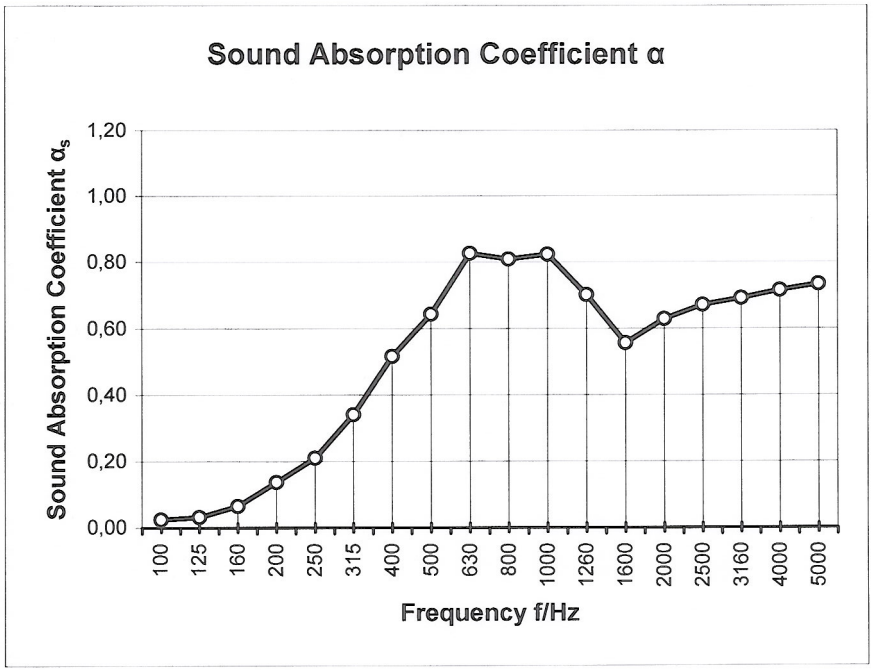
G-100

3 curtains mounted flat with approx. 20mm overlap
Total dimensions of the test object
L x H = 4530mm x 2650mm



Room: Reverberation Room
Volume: 242 m^3
Size: 12,00 m^2
Date of test 18-02-2014

Frequency [Hz]	αs 1/3 octave	αp octave
100	0,02	
125	0,03	0,05
160	0,06	
200	0,14	
250	0,21	0,25
315	0,34	
400	0,52	
500	0,64	0,65
630	0,83	
800	0,81	
1000	0,82	0,80
1260	0,70	
1600	0,56	
2000	0,63	0,60
2500	0,67	
3160	0,69	
4000	0,72	0,70
5000	0,73	



αs Sound absorption coefficient to ISO 354
αp Practical sound absorption coefficient to ISO 11654

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient α_w = 0,55

Sound absorption class:D

kvadrat soft cells

Test conducted by Kvadrat SoftCells
Lipowa 5, 62-060 Steszew

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kvadrat SoftCells
Test Specimen Curtains
Configuration: Folded 100%

Wall mounting

One layer of textile

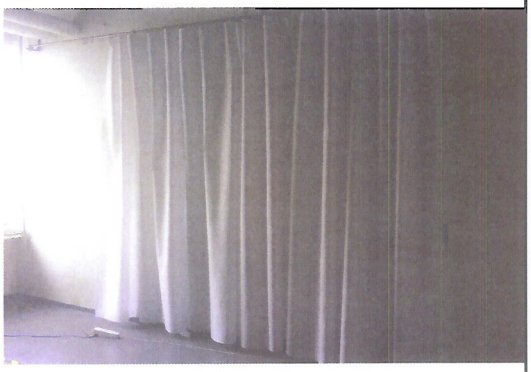
Front textile: Unix from Kinnasand

Test Build-Up (from top to bottom):

1 mm	Front textile
100 mm	Air gap
	Reflective wall

Mounting

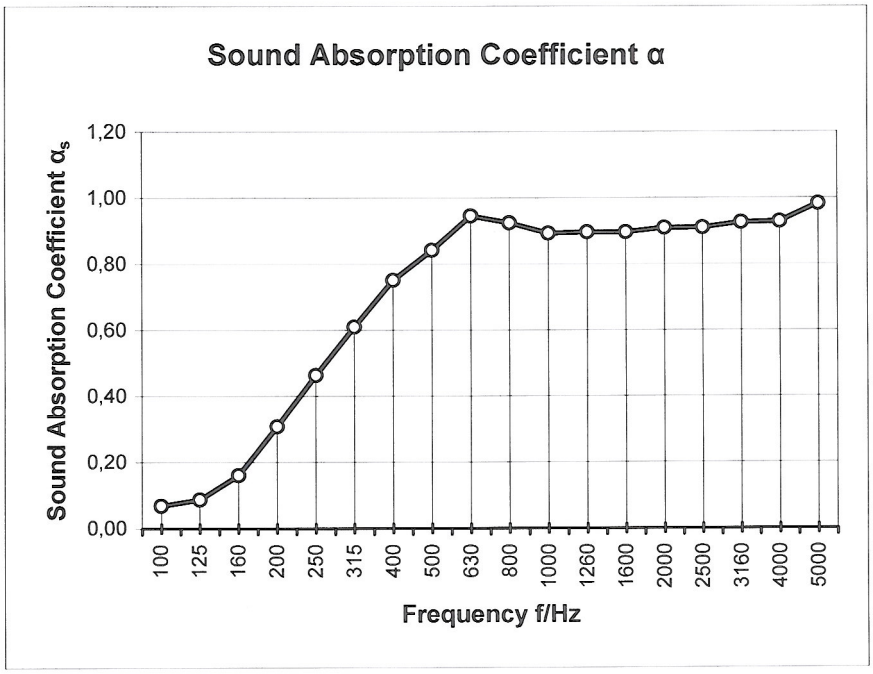
100mm distance to the wall
3 curtains 100% folded, 200% textile length, approx.
20mm overlap
Total dimensions of the test object
L x H = 3040mm x 2650mm



Room: Reverberation Room
Volume: 242 m^3
Size: 8,06 m^2
Date of test 18-02-2014

Frequency [Hz]	αs 1/3 octave	αp octave
100	0,07	
125	0,09	0,10
160	0,16	
200	0,31	
250	0,46	0,45
315	0,61	
400	0,75	
500	0,84	0,85
630	0,95	
800	0,92	
1000	0,89	0,90
1260	0,90	
1600	0,90	
2000	0,91	0,90
2500	0,91	
3160	0,93	
4000	0,93	0,95
5000	0,98	

αs Sound absorption coefficient to ISO 354
αp Practical sound absorption coefficient to ISO 11654



Rating according to ISO 11654:

Weighted Sound Absorption Coefficient α_w = 0,75 (H)

Sound absorption class:C

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Test conducted by Kvadrat SoftCells
Lipowa 5, 62-060 Steszew

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

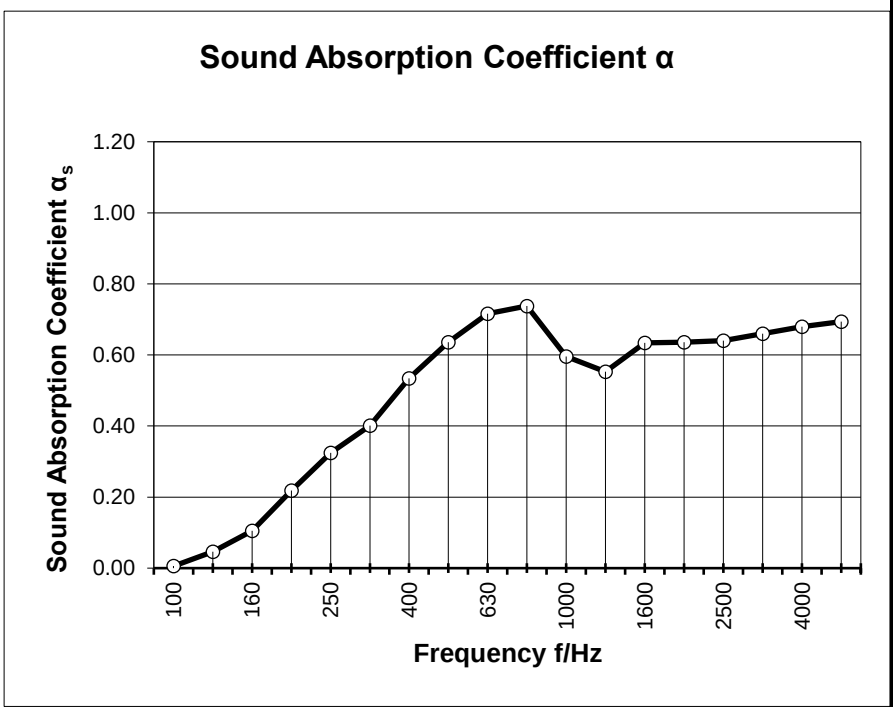
Client Kinnasand / Kvadrat
Test Specimen Curtains
Flat
Mounting type G-150
One layer of textile
Textile: Unix from Kinnasand colour: 33
100% Polyester FR
Test Build-Up (from top to bottom):
1 mm Front textile
150 mm Air gap
Reflective wall

Mounting
150mm distance to the wall

Flat curtains 2 elements 1540x3000mm 1 element 960mm
Total dimensions of the test object
L x H = 4000mm x 3000mm

Room: Reverberation Room
Volume: 156 m^3
Size: 12.00 m^2
Date of test 29/08/2023

Frequency [Hz]	αs 1/3 octave	αp octave
100	0.01	
125	0.05	0.05
160	0.10	
200	0.22	
250	0.32	0.30
315	0.40	
400	0.53	
500	0.64	0.65
630	0.72	
800	0.74	
1000	0.60	0.65
1260	0.55	
1600	0.63	
2000	0.64	0.65
2500	0.64	
3160	0.66	
4000	0.68	0.70
5000	0.69	



αs Sound absorption coefficient to ISO 354
αp Practical sound absorption coefficient to ISO 11654

NRC:	**0.55**
SAA:	**0.55**

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient α_w = 0.6

Sound absorption class: C

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

Sound Absorption Coefficient ISO 354

Measurement of absorption in reverberation rooms

Client Kinnasand / Kvadrat
Test Specimen Curtains
Folded 100%
Mounting type G-150
One layer of textile

Textile: Unix from Kinnasand colour: 33
100% Polyester FR

Test Build-Up (from top to bottom):

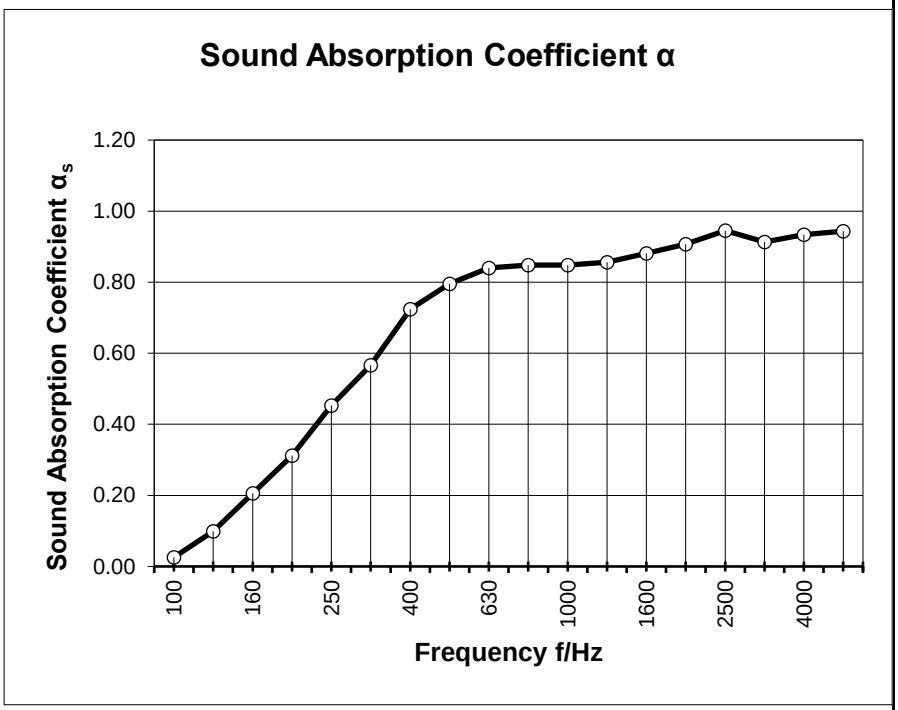
1	mm	Front textile
150	mm	Air gap
		Reflective wall

Mounting

150mm distance to the wall
1 layer of curtains, 5 elements 1540x3000mm with approx. 20mm overlap, 100% folded, 200% textile length
Total dimensions of the test object
L x H = 3810mm x 3000mm

Room: Reverberation Room
Volume: 156 m^3
Size: 11.43 m^2
Date of test 29/08/2023

Frequency [Hz]	αs 1/3 octave	αp octave
100	0.03	
125	0.10	0.10
160	0.21	
200	0.31	
250	0.45	0.45
315	0.57	
400	0.72	
500	0.80	0.80
630	0.84	
800	0.85	
1000	0.85	0.85
1260	0.86	
1600	0.88	
2000	0.91	0.90
2500	0.95	
3160	0.91	
4000	0.93	0.95
5000	0.94	



αs Sound absorption coefficient to ISO 354
αp Practical sound absorption coefficient to ISO 11654

NRC:	**0.75**
SAA:	**0.75**

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient α_w = 0.75 (H)

Sound absorption class:C

kvadrat acoustics

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