

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: Felter from Kinnasand
 100% polyester FR

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

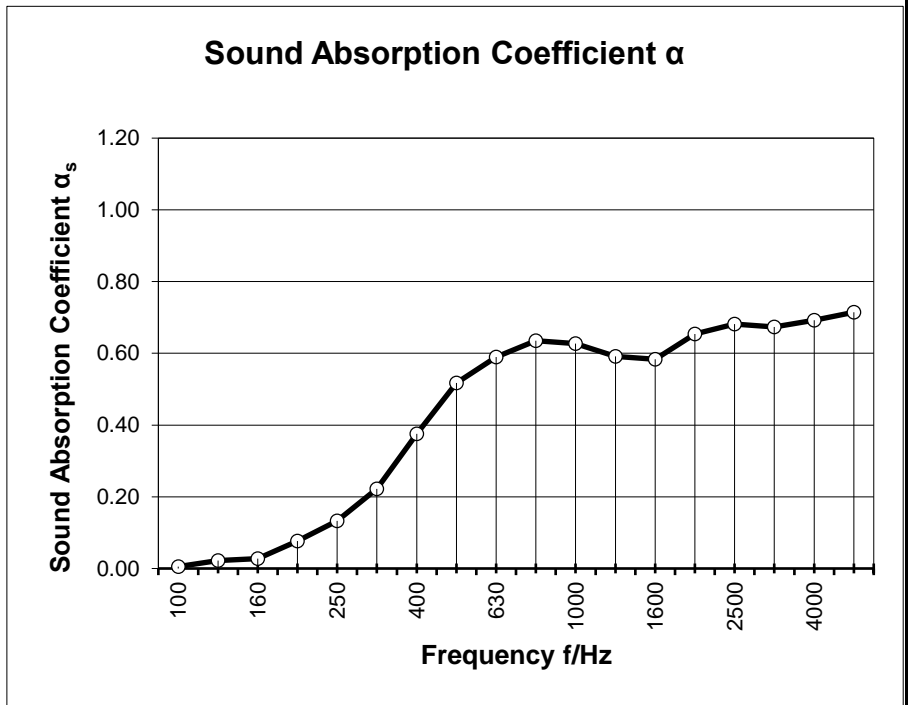
Mounting

100mm distance to the wall
 Flat curtains 3 elements 1550x3010mm with approx 20mm overlap
 Total dimensions of the test object
 x H = 4610mm x 3010mm



Room: Reverberation Room
 Volume: 156 m³
 Size: 13.88 m²
 Date of test 27-09-17

| Frequency [Hz] | α_s 1/3 octave | α_p octave |
|----------------|--------------------------|----------------------|
| 100 | 0.01 | |
| 125 | 0.02 | 0.00 |
| 160 | 0.03 | |
| 200 | 0.08 | |
| 250 | 0.13 | 0.15 |
| 315 | 0.22 | |
| 400 | 0.38 | |
| 500 | 0.52 | 0.50 |
| 630 | 0.59 | |
| 800 | 0.64 | |
| 1000 | 0.63 | 0.60 |
| 1260 | 0.59 | |
| 1600 | 0.58 | |
| 2000 | 0.65 | 0.65 |
| 2500 | 0.68 | |
| 3160 | 0.67 | |
| 4000 | 0.69 | 0.70 |
| 5000 | 0.71 | |



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

| | |
|-------------|-------------|
| NRC: | 0.45 |
| SAA: | 0.47 |

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: Felter from Kinnasand
 100% polyester FR

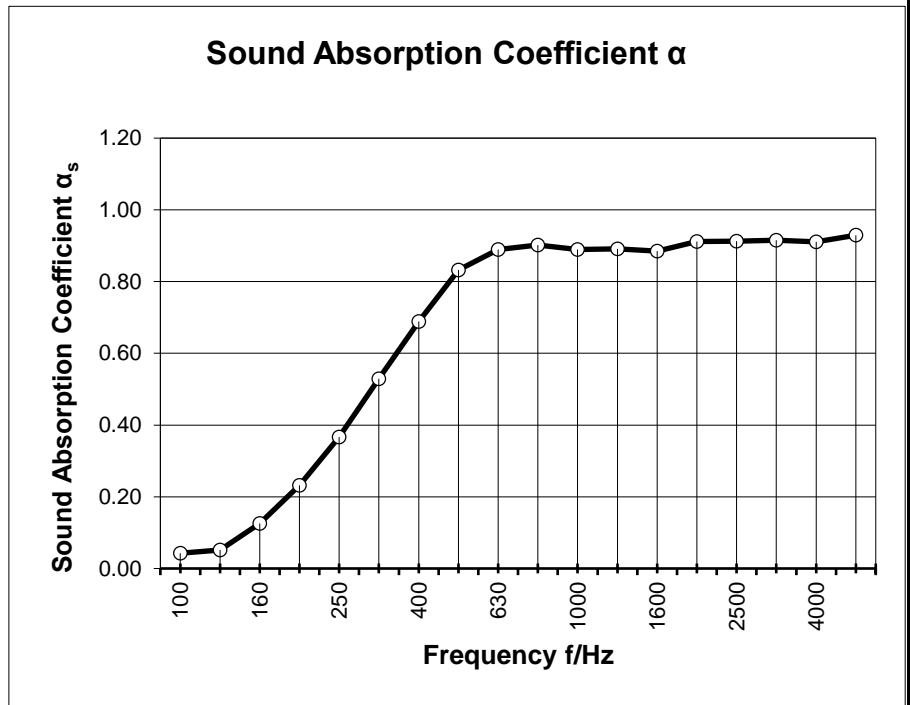
Test Build-Up (from top to bottom):
 1 mm Front textile
 100 mm Air gap
 Reflective wall

Mounting
 100mm distance to the wall
 1 layer of curtains, 5 elements 1550x3010mm with approx.
 20mm overlap, 100% folded, 200% textile length
 Total dimensions of the test object
 L x H = 3800mm x 3010mm

Room: Reverberation Room
 Volume: 156 m³
 Size: 11.44 m²
 Date of test 27-09-17



| Frequency [Hz] | α_s 1/3 octave | α_p octave |
|----------------|--------------------------|----------------------|
| 100 | 0.04 | |
| 125 | 0.05 | 0.05 |
| 160 | 0.13 | |
| 200 | 0.23 | |
| 250 | 0.37 | 0.40 |
| 315 | 0.53 | |
| 400 | 0.69 | |
| 500 | 0.83 | 0.80 |
| 630 | 0.89 | |
| 800 | 0.90 | |
| 1000 | 0.89 | 0.90 |
| 1260 | 0.89 | |
| 1600 | 0.89 | |
| 2000 | 0.91 | 0.90 |
| 2500 | 0.91 | |
| 3160 | 0.92 | |
| 4000 | 0.91 | 0.90 |
| 5000 | 0.93 | |



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

| | |
|-------------|-------------|
| NRC: | 0.75 |
| SAA: | 0.74 |

Rating according to ISO 11654:

Weighted Sound Absorption Coefficient $\alpha_w = 0.7$

Sound absorption class:C