

Appendix 13

Sound absorption coefficient according to EN-ISO 11654

Measurement of sound absorption coefficient in a reverberation room

Client: Saint-Gobain Ecophon AB Date of test: 2024-02-02
 Description: ODS 200 mm

Object: Baseboard 15 mm
 Base layer of type Ecophon Fade Duo Primer (sanded)
 Surface layer of type Ecophon Fade Duo Top

Empty reverberation room: Reverberation room with object:
 Relative humidity: 81,5 % Relative humidity: 79,2 %
 Temperature: 19,1 °C Temperature: 19,6 °C
 Barometric pressure: 99,0 kPa Barometric pressure: 99,0 kPa

Surface area: 10,80 m²
 Room volume: 200,0 m³
 Total room area S_r: 211,4 m²

Frequency f [Hz]	α_s 1/3 octave
50	0,08
63	0,05
80	0,15
100	0,37
125	0,27
160	0,55
200	0,57
250	0,65
315	0,64
400	0,65
500	0,63
630	0,61
800	0,56
1000	0,63
1250	0,84
1600	0,76
2000	0,74
2500	0,74
3150	0,72
4000	0,72
5000	0,73

Frequency, f, Hz →

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Frequency f [Hz]	α _p 1/1 octave
100	
125	0,40
160	
200	
250	0,60
315	
400	
500	0,65
630	
800	
1000	0,70
1250	
1600	
2000	0,75
2500	
3150	
4000	0,70
5000	

Frequency (Hz)	Practical sound absorption coefficient (α _p)
125	0.40
250	0.60
500	0.65
1000	0.70
2000	0.75
4000	0.70

Weighted sound absorption coefficient according to ISO 11654

α_w = 0,70 Classification: C