

# Botanic

SOUND ABSORPTION COEFFICIENT ACCORDING TO ISO 354 AND ISO 11654

Measurement of sound absorption coefficient in a reverberation room



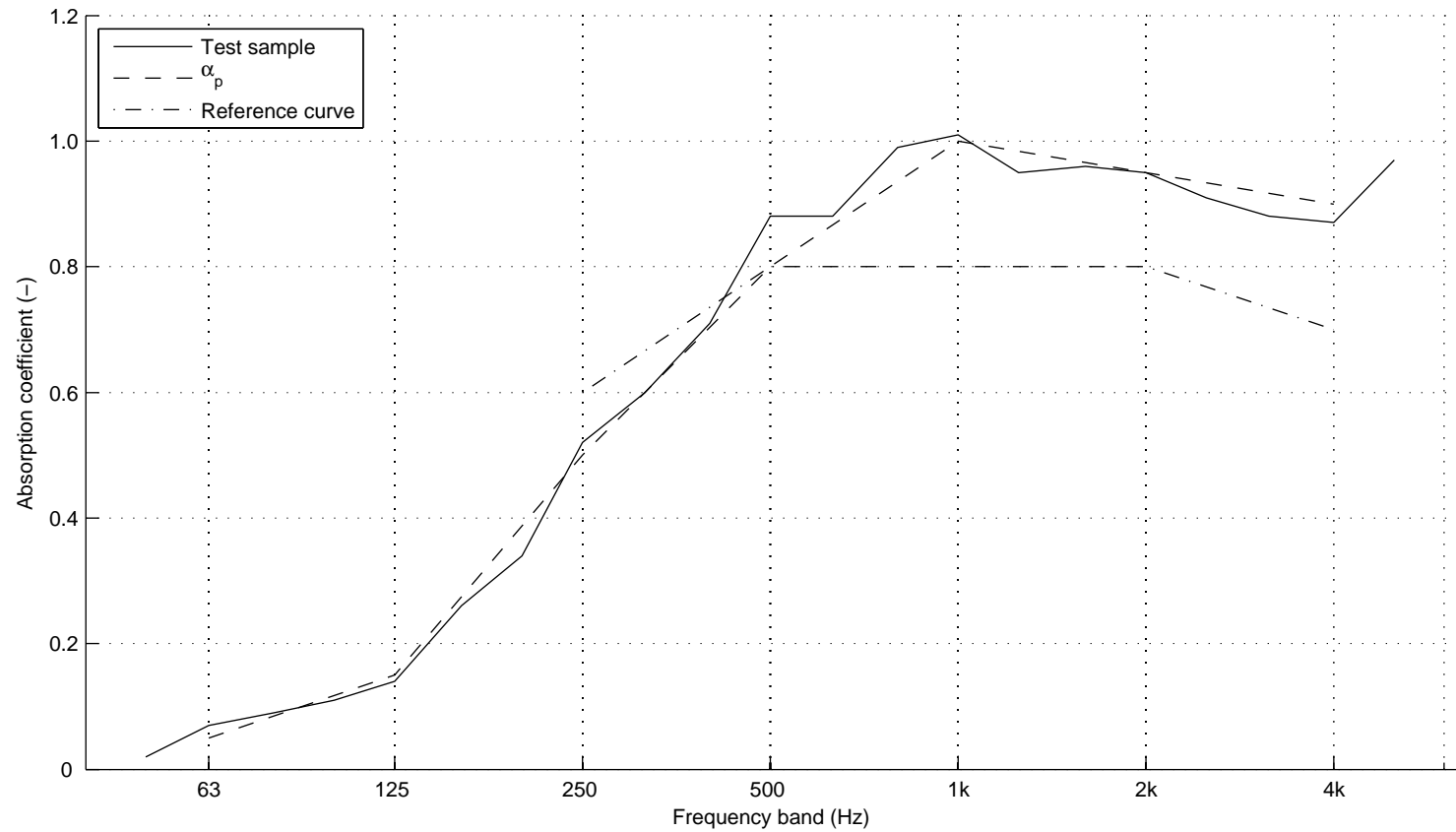
Report number:  
14-41-M2  
Date  
2014-04-01

Frequency f [Hz]	Sound absorption coefficient	
	$\alpha_s$	$\alpha_p$
50	0.02	
63	0.07	0.05
80	0.09	
100	0.11	
125	0.14	0.15
160	0.26	
200	0.34	
250	0.52	0.50
315	0.60	
400	0.71	
500	0.88	0.80
630	0.88	
800	0.99	
1000	1.01	1.00
1250	0.95	
1600	0.96	
2000	0.95	0.95
2500	0.91	
3150	0.88	
4000	0.87	0.90
5000	0.97	

Client: Effect  
 Manufacturer: Effect  
 Product identification: Botanic  
 Description of test specimen: Botanic utan fyllning, 30 paneler direkt på golv, typ A-montage.

Reverberation room volume: 200 m<sup>3</sup>  
 Temperature: 14 °C (empty: 14 °C)  
 Air humidity: 76.9% (empty: 74.6%)  
 Air pressure: 101.3 kPa (empty: 101.3 kPa)  
 Size of specimen: 10.31 m<sup>2</sup>

Measurement date: 2013-06-17  
 Measured by: Pontus Thorsson



$\alpha_w = 0.80$

Absorption class = B

# Botanic + basfill

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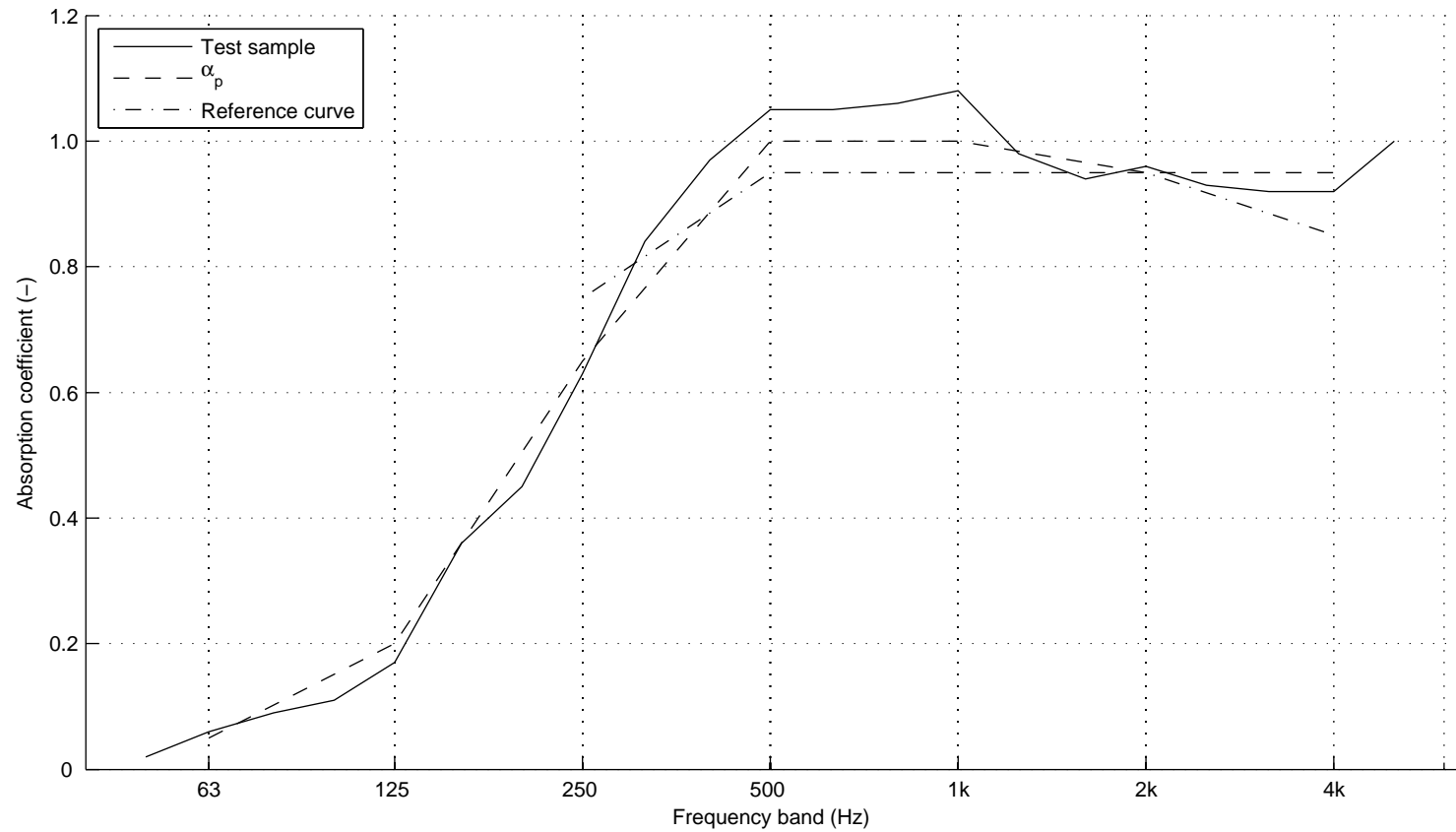
Report number:  
14-41-M1  
Date  
2014-04-01

Frequency f [Hz]	Sound absorption coefficient	
	$\alpha_s$	$\alpha_p$
50	0.02	
63	0.06	0.05
80	0.09	
100	0.11	
125	0.17	0.20
160	0.36	
200	0.45	
250	0.63	0.65
315	0.84	
400	0.97	
500	1.05	1.00
630	1.05	
800	1.06	
1000	1.08	1.00
1250	0.98	
1600	0.94	
2000	0.96	0.95
2500	0.93	
3150	0.92	
4000	0.92	0.95
5000	1.00	

Client: Effect  
 Manufacturer: Effect  
 Product identification: Botanic + basfill  
 Description of test specimen: Botanic med fyllning, 30 paneler direkt på golv, typ A-montage.

Reverberation room volume: 200 m<sup>3</sup>  
 Temperature: 14 °C (empty: 14 °C)  
 Air humidity: 75.2% (empty: 74.6%)  
 Air pressure: 101.3 kPa (empty: 101.3 kPa)  
 Size of specimen: 10.31 m<sup>2</sup>

Measurement date: 2013-06-17  
 Measured by: Pontus Thorsson



$\alpha_w = 0.95$

Absorption class = A

# Soundwave stand m fylld Botanic

SOUND ABSORPTION AREA ACCORDING TO ISO 354

Measurement of sound absorption area in a reverberation room



Report number:  
14-41-M27  
Date  
2014-06-05

Frequency f [Hz]	Sound absorption area [m <sup>2</sup> Sabine]	
50	0.01	
63	0.57	0.4
80	0.69	
100	1.04	
125	1.28	1.5
160	2.25	
200	2.74	
250	2.88	3.0
315	3.31	
400	3.99	
500	4.62	4.6
630	5.28	
800	5.36	
1000	5.51	5.4
1250	5.44	
1600	5.49	
2000	5.38	5.4
2500	5.29	
3150	5.25	
4000	5.43	5.5
5000	5.70	

Client: Effect  
 Manufacturer: Effect  
 Product identification: Soundwave Stand m fylld Botanic

Description of test specimen: Soundwave Stand Botanic med fyllning placerad stående på golvet. Ljudabsorptionsarea uppmätt som medelvärde av tre olika placeringar.

Reverberation room volume: 200 m<sup>3</sup>  
 Temperature: 15.8 °C (empty: 15.2 °C)  
 Air humidity: 83 % (empty: 77 %)  
 Air pressure: 101.3 kPa (empty: 101.3 kPa)  
 Number of specimens: 1

Measurement date: 2013-06-20  
 Measured by: Pontus Thorsson

