

Hertz 1800 x 1200 x 40 mm (6 pieces)

SOUND ABSORPTION AREA ACCORDING TO ISO 354 AND SS 25269

Measurement of sound absorption area in a reverberation room



Report number:

18-051-M12

Date

2018-06-12

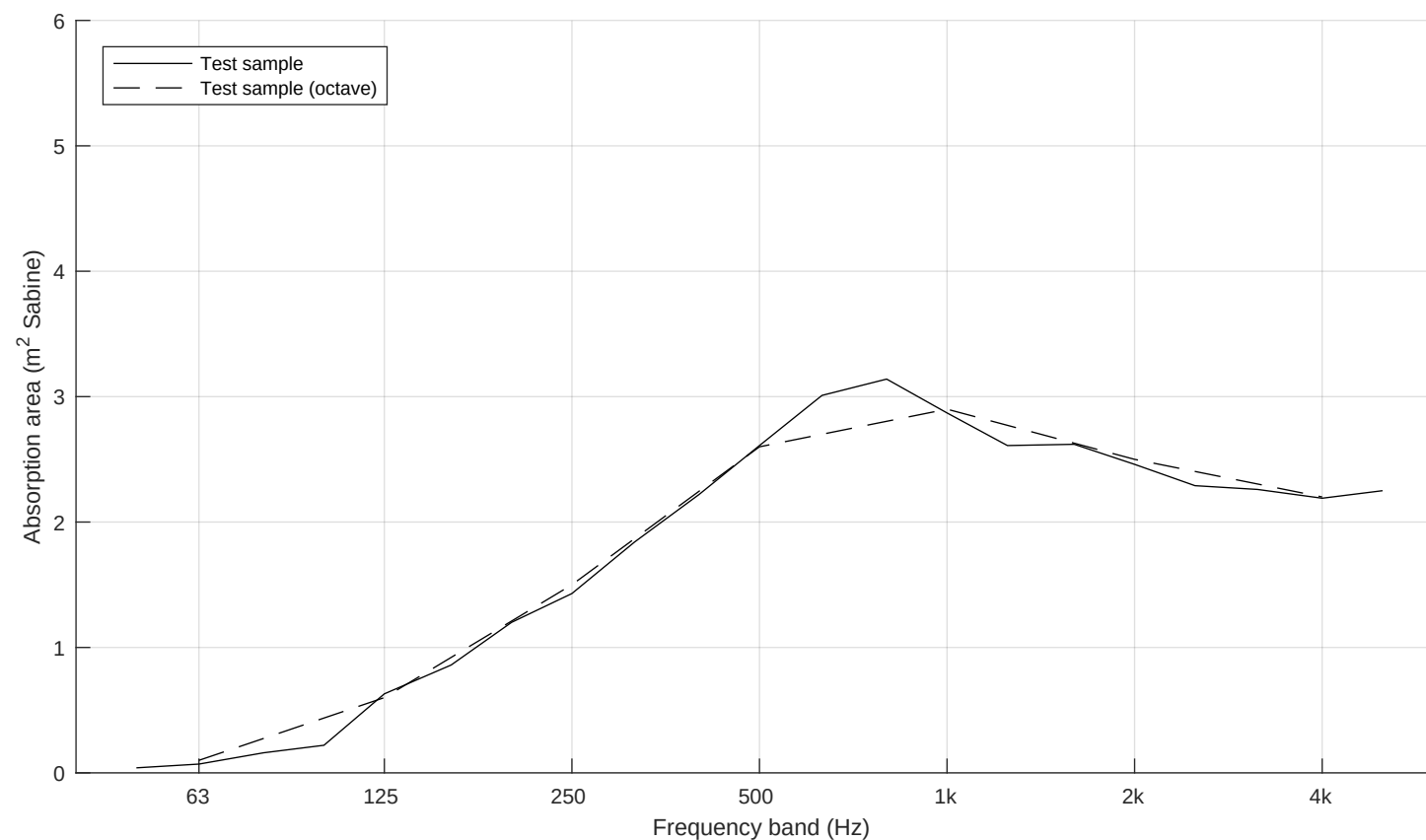
Frequency f [Hz]	Sound absorption area [m ² Sabine]	
50	0.04	
63	0.07	0.1
80	0.16	
100	0.22	
125	0.63	0.6
160	0.86	
200	1.20	
250	1.43	1.5
315	1.84	
400	2.22	
500	2.61	2.6
630	3.01	
800	3.14	
1000	2.87	2.9
1250	2.61	
1600	2.62	
2000	2.46	2.5
2500	2.29	
3150	2.26	
4000	2.19	2.2
5000	2.25	

Client: Johanson Design
Manufacturer: Johanson Design
Product identification: Hertz 1800 x 1200 x 40 mm

Description of test specimen: Wall absorbent with 40 mm mineral wool dressed in fabric.
Size (6 pcs): 1800 x 1200 x 40 mm.
Mounted directly on floor (Type A).

Reverberation room volume: 200 m³
Temperature: 20.6 °C (empty: 20.6 °C)
Air humidity: 57 % (empty: 58 %)
Air pressure: 98.1 kPa (empty: 98.1 kPa)
Number of specimens: 2

Measurement date: 2018-06-11
Measured by: Carl Nyqvist



$N_{10} = 4.5$

Hertz 600 x 600 x 40 mm, 1 piece

SOUND ABSORPTION AREA ACCORDING TO ISO 354 AND SS 25269

Measurement of sound absorption area in a reverberation room



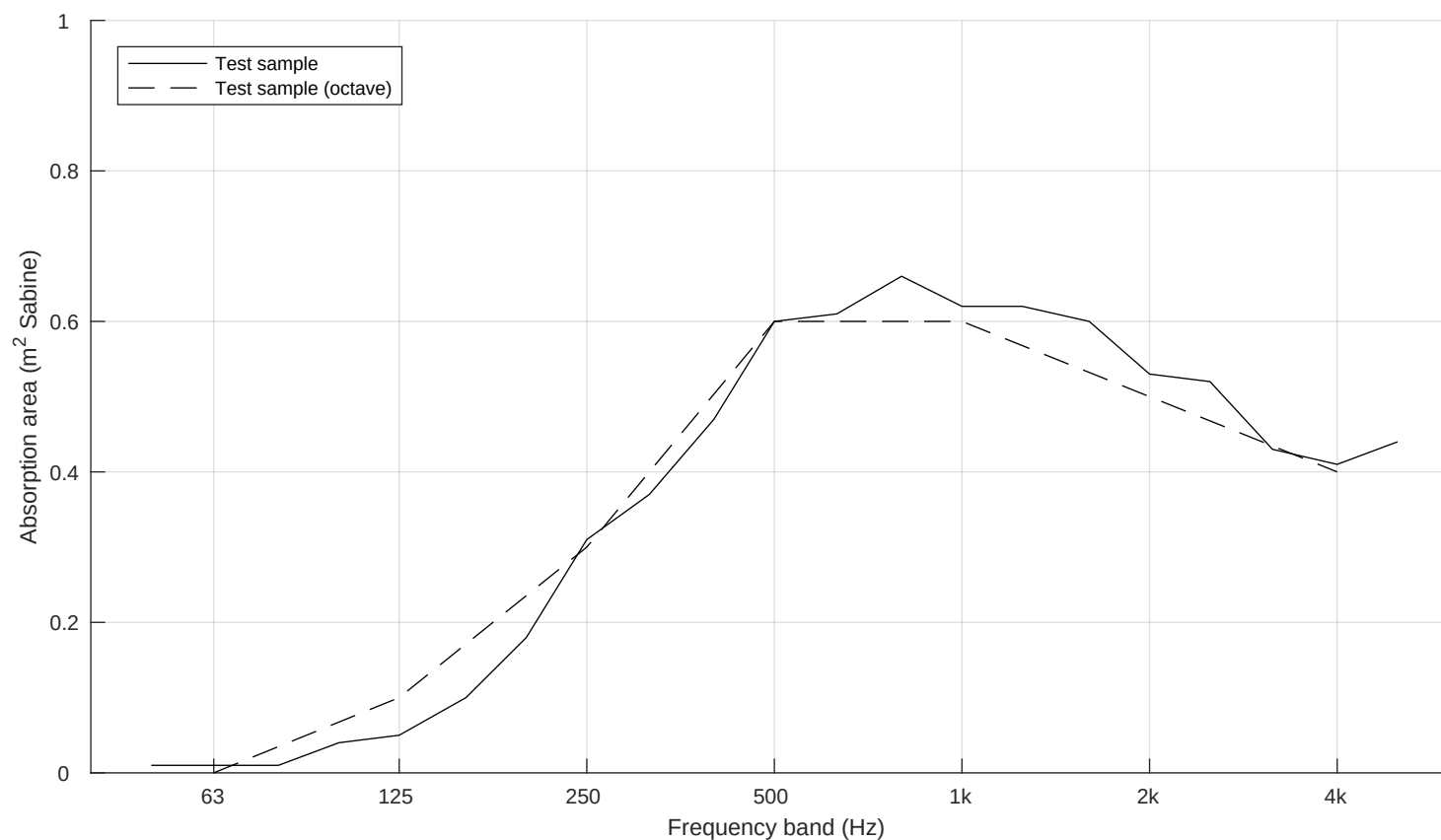
Report number:
18-051-M8
Date
2018-04-03

Frequency f [Hz]	Sound absorption area [m ² Sabine]	
50	0.01	
63	0.01	0.0
80	0.01	
100	0.04	
125	0.05	0.1
160	0.10	
200	0.18	
250	0.31	0.3
315	0.37	
400	0.47	
500	0.60	0.6
630	0.61	
800	0.66	
1000	0.62	0.6
1250	0.62	
1600	0.60	
2000	0.53	0.5
2500	0.52	
3150	0.43	
4000	0.41	0.4
5000	0.44	

Client: Johanson Design
Manufacturer: Johanson Design
Product identification: Hertz 600 x 600 x 40 mm
Description of test specimen: Wall absorbent with 40 mm mineral wool dressed in fabric.
Size: 600 x 600 x 40 mm.
Mounted directly on floor (Type A).
The scaling of the graph deviates from ISO 354 to increase readability.

Reverberation room volume: 200 m³
Temperature: 20.0 °C (empty: 22.0 °C)
Air humidity: 30 % (empty: 30 %)
Air pressure: 100.1 kPa (empty: 100.1 kPa)
Number of specimens: 6

Measurement date: 2018-03-20
Measured by: Anders Grimmehed



$N_{10} = 25$

Hertz 40 mm, 10m²

SOUND ABSORPTION COEFFICIENT ACCORDING TO ISO 354 AND ISO 11654

Measurement of sound absorption coefficient in a reverberation room



Report number:
18-051-M3
Date
2018-04-03

Frequency f [Hz]	Sound absorption coefficient	
	α_s	α_p
50	0.01	
63	0.02	0.05
80	0.06	
100	0.11	
125	0.17	0.20
160	0.35	
200	0.52	
250	0.62	0.65
315	0.79	
400	1.03	
500	1.16	1.00
630	1.19	
800	1.21	
1000	1.16	1.00
1250	1.10	
1600	1.15	
2000	1.09	1.00
2500	1.05	
3150	1.06	
4000	1.01	1.00
5000	1.05	

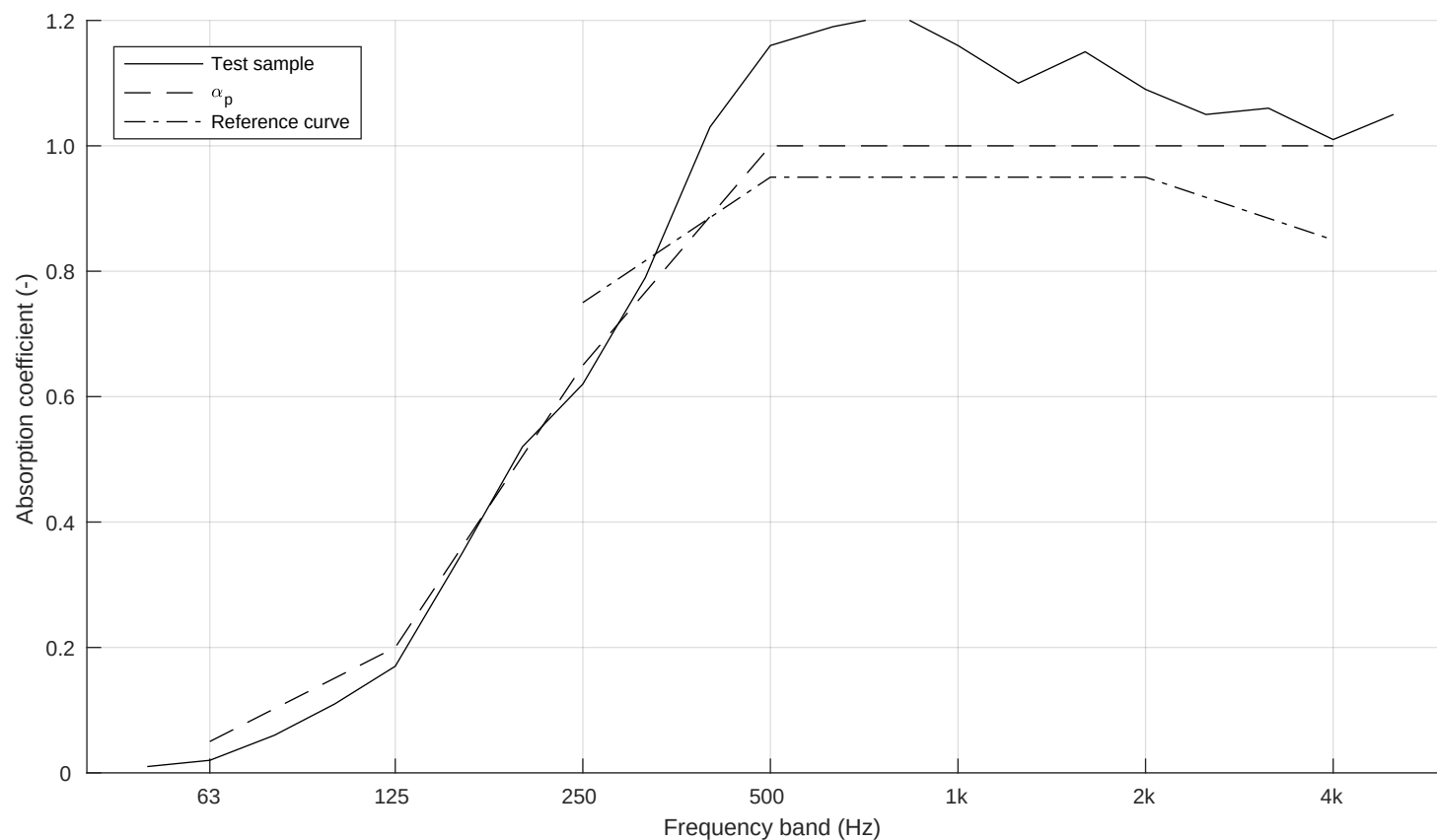
Client: Johanson Design
Manufacturer: Johanson Design

Product identification: Hertz 40 mm

Description of test specimen: Wall absorbent with 40 mm mineral wool dressed in fabric.
Thickness 40 mm.
Mounted directly on floor (Type A).

Reverberation room volume: 200 m³
Temperature: 20.0 °C (empty: 22.0 °C)
Air humidity: 30 % (empty: 30 %)
Air pressure: 100.1 kPa (empty: 100.1 kPa)
Size of specimen: 10.08 m²

Measurement date: 2018-03-20
Measured by: Anders Grimmerhed



$\alpha_w = 0.95$

Absorption class = A

Hertz 1800 x 1200 x 60 mm (6 pieces)

SOUND ABSORPTION AREA ACCORDING TO ISO 354 AND SS 25269

Measurement of sound absorption area in a reverberation room

Report number:

18-051-M13

Date

2018-06-12

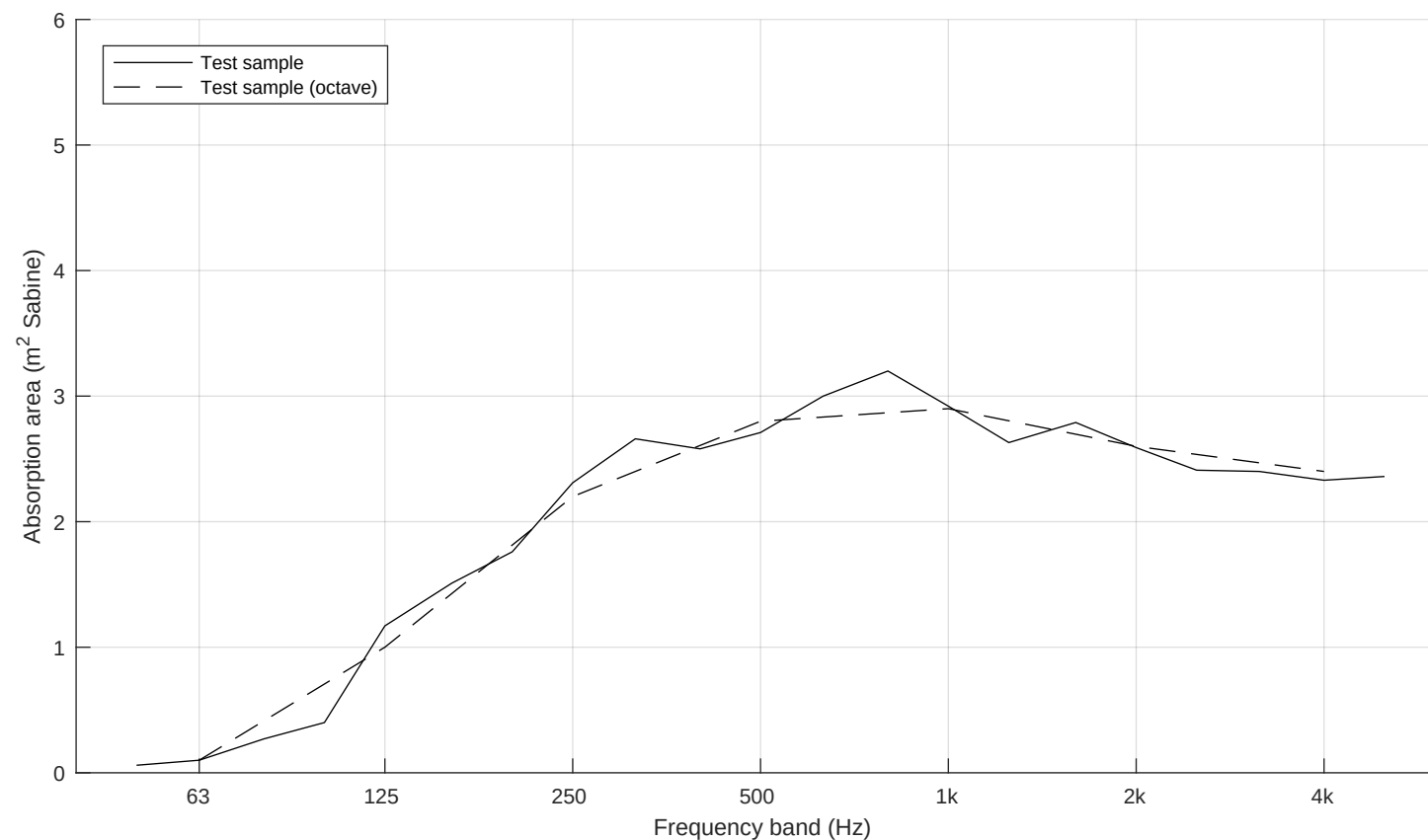
Frequency f [Hz]	Sound absorption area [m ² Sabine]	
50	0.06	
63	0.10	0.1
80	0.27	
100	0.40	
125	1.17	1.0
160	1.51	
200	1.76	
250	2.31	2.2
315	2.66	
400	2.58	
500	2.71	2.8
630	3.00	
800	3.20	
1000	2.92	2.9
1250	2.63	
1600	2.79	
2000	2.59	2.6
2500	2.41	
3150	2.40	
4000	2.33	2.4
5000	2.36	

Client: Johanson Design
Manufacturer: Johanson Design
Product identification: Hertz 1800 x 1200 x 60 mm

Description of test specimen: Wall absorbent with 60 mm mineral wool dressed in fabric.
Size (6 pcs): 1800 x 1200 x 60 mm.
Mounted directly on floor (Type A).

Reverberation room volume: 200 m³
Temperature: 20.6 °C (empty: 20.6 °C)
Air humidity: 58 % (empty: 58 %)
Air pressure: 98.1 kPa (empty: 98.1 kPa)
Number of specimens: 2

Measurement date: 2018-06-11
Measured by: Carl Nyqvist



$N_{10} = 4.2$

Hertz 1800 x 1200 x 80 mm (6 pieces)

SOUND ABSORPTION AREA ACCORDING TO ISO 354 AND SS 25269

Measurement of sound absorption area in a reverberation room



Report number:

18-051-M14

Date

2018-06-12

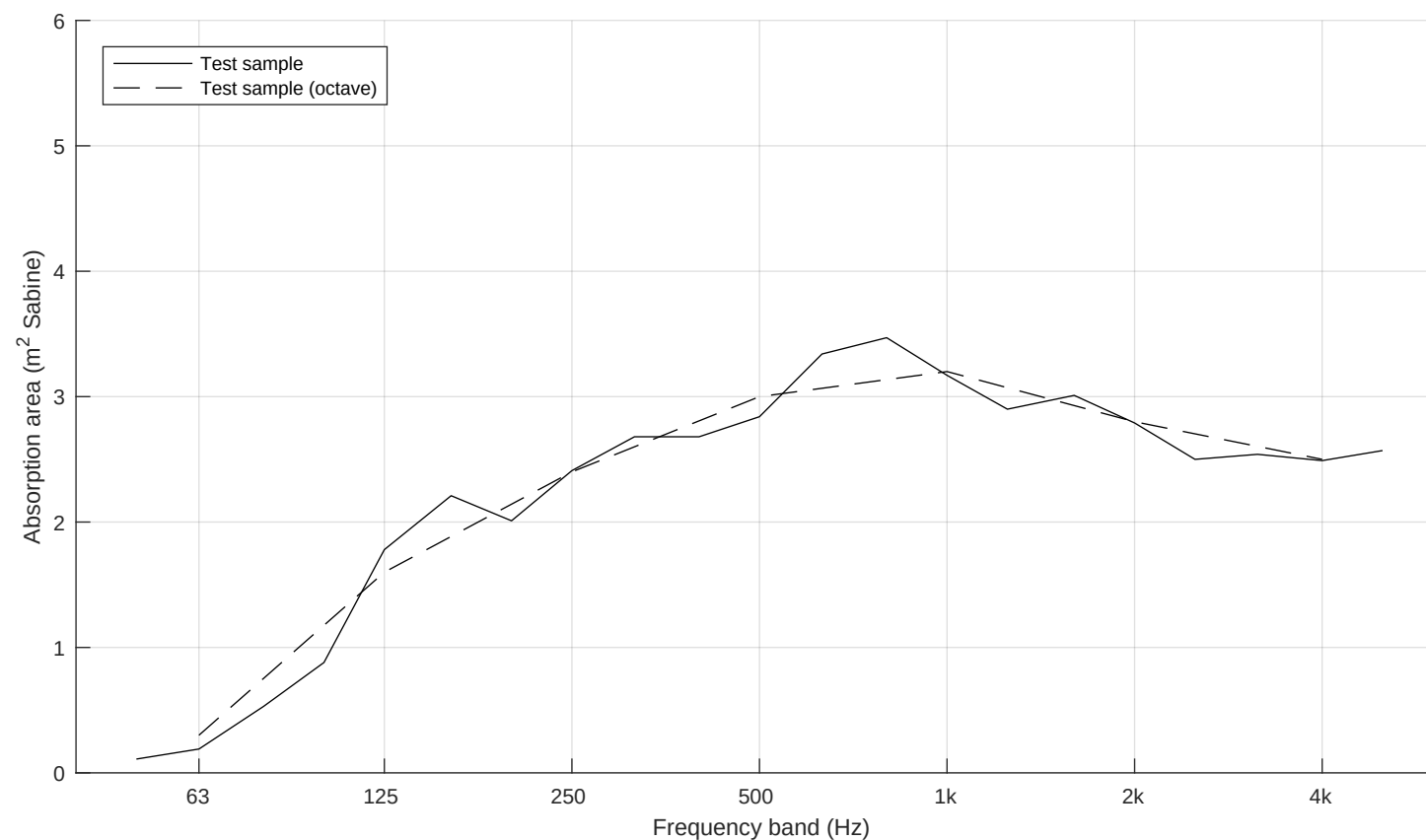
Frequency f [Hz]	Sound absorption area [m ² Sabine]	
50	0.11	
63	0.19	0.3
80	0.53	
100	0.88	
125	1.78	1.6
160	2.21	
200	2.01	
250	2.41	2.4
315	2.68	
400	2.68	
500	2.84	3.0
630	3.34	
800	3.47	
1000	3.17	3.2
1250	2.90	
1600	3.01	
2000	2.79	2.8
2500	2.50	
3150	2.54	
4000	2.49	2.5
5000	2.57	

Client: Johanson Design
Manufacturer: Johanson Design
Product identification: Hertz 1800 x 1200 x 80 mm

Description of test specimen: Wall absorbent with 80 mm mineral wool dressed in fabric.
Size (6 pcs): 1800 x 1200 x 80 mm.
Mounted directly on floor (Type A).

Reverberation room volume: 200 m³
Temperature: 20.6 °C (empty: 20.6 °C)
Air humidity: 57 % (empty: 58 %)
Air pressure: 98.1 kPa (empty: 98.1 kPa)
Number of specimens: 2

Measurement date: 2018-06-11
Measured by: Carl Nyqvist



$N_{10} = 4$

Hertz 600 x 600 x 80 mm, 1 piece

SOUND ABSORPTION AREA ACCORDING TO ISO 354 AND SS 25269

Measurement of sound absorption area in a reverberation room



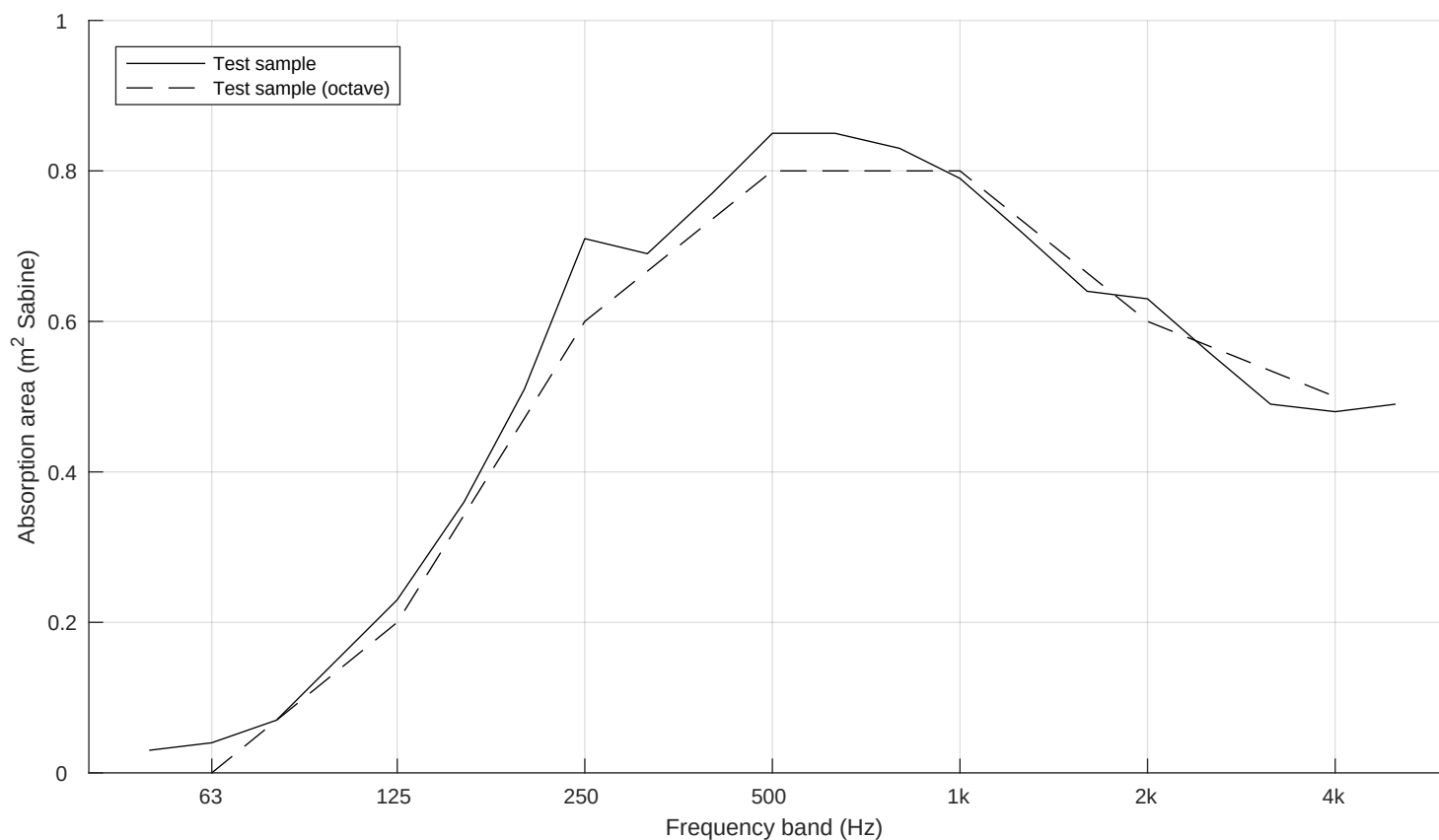
Report number:
18-051-M9
Date
2018-04-03

Frequency f [Hz]	Sound absorption area [m ² Sabine]	
50	0.03	
63	0.04	0.0
80	0.07	
100	0.15	
125	0.23	0.2
160	0.36	
200	0.51	
250	0.71	0.6
315	0.69	
400	0.77	
500	0.85	0.8
630	0.85	
800	0.83	
1000	0.79	0.8
1250	0.72	
1600	0.64	
2000	0.63	0.6
2500	0.56	
3150	0.49	
4000	0.48	0.5
5000	0.49	

Client: Enter client name
Manufacturer: Enter manufacturer name
Product identification: Hertz 600 x 600 x 80 mm.
Description of test specimen: Wall absorbent with 80 mm mineral wool dressed in fabric.
Size: 600 x 600 x 80 mm.
Mounted directly on floor (Type A).
The scaling of the graph deviates from ISO 354 to increase readability.

Reverberation room volume: 200 m³
Temperature: 19.0 °C (empty: 22.0 °C)
Air humidity: 32 % (empty: 30 %)
Air pressure: 100.1 kPa (empty: 100.1 kPa)
Number of specimens: 6

Measurement date: 2018-03-20
Measured by: Anders Grimmehed



$N_{10} = 20$

Hertz 80 mm, 10m²

SOUND ABSORPTION COEFFICIENT ACCORDING TO ISO 354 AND ISO 11654

Measurement of sound absorption coefficient in a reverberation room



Report number:
18-051-M4
Date
2018-04-03

Frequency f [Hz]	Sound absorption coefficient	
	α_s	α_p
50	0.06	
63	0.10	0.10
80	0.20	
100	0.46	
125	0.53	0.55
160	0.69	
200	0.86	
250	0.96	0.95
315	1.09	
400	1.14	
500	1.24	1.00
630	1.32	
800	1.30	
1000	1.25	1.00
1250	1.20	
1600	1.21	
2000	1.16	1.00
2500	1.16	
3150	1.10	
4000	1.07	1.00
5000	1.03	

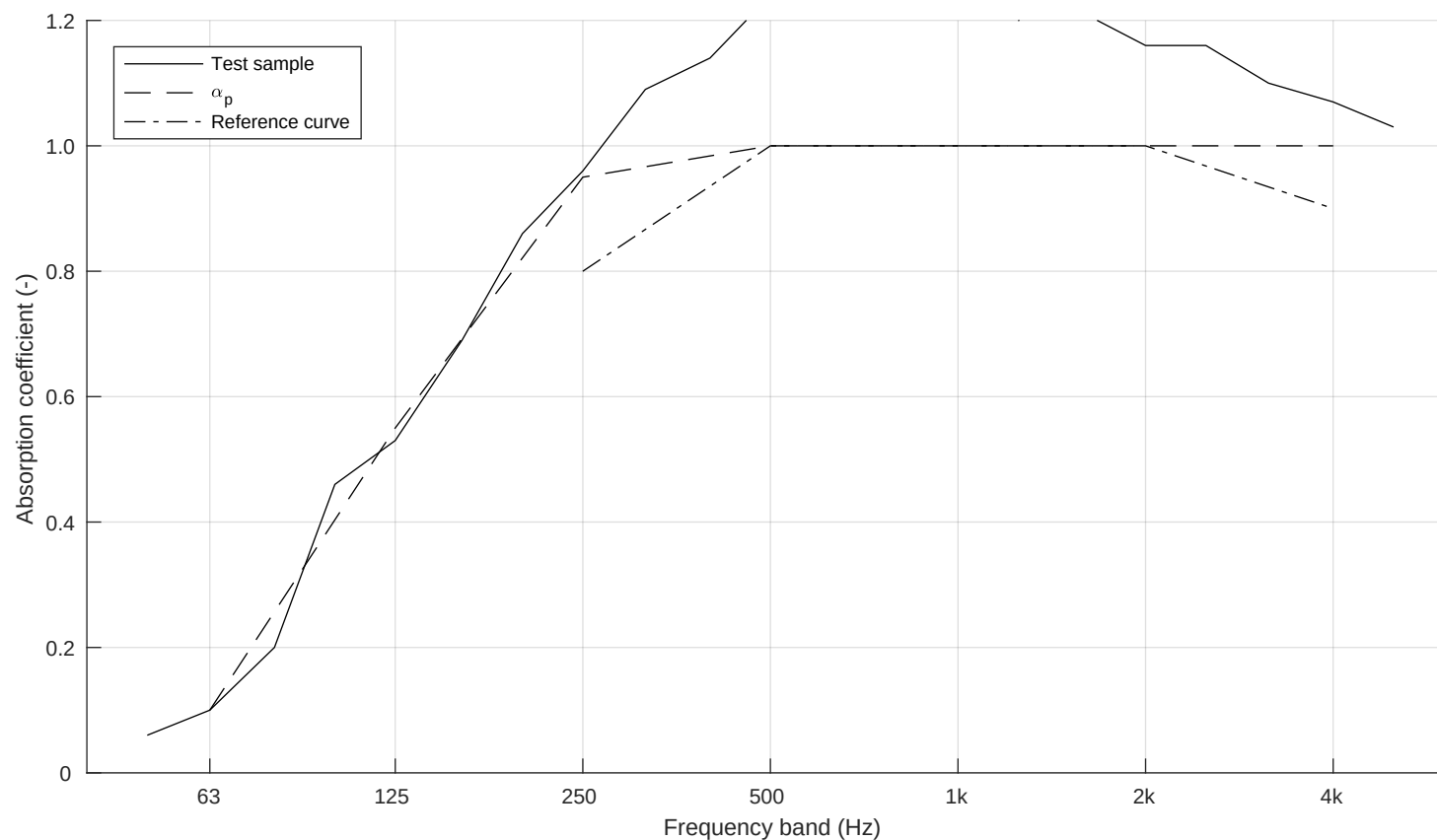
Client: Johanson Design
Manufacturer: Johanson Design

Product identification: Hertz 80 mm

Description of test specimen: Wall absorbent with 80 mm mineral wool dressed in fabric.
Thickness 80 mm.
Mounted directly on floor (Type A).

Reverberation room volume: 200 m³
Temperature: 20.0 °C (empty: 22.0 °C)
Air humidity: 31 % (empty: 30 %)
Air pressure: 100.1 kPa (empty: 100.1 kPa)
Size of specimen: 10.08 m²

Measurement date: 2018-03-20
Measured by: Anders Grimmerhed



$\alpha_w = 1.00$

Absorption class = A