

Acoustic Test Report - Absorption

Absorption Class: A

Calculated to EN ISO 11654-1997

Fabric: Acoustic Molton
Fullness: 100%
Cavity from Wall: 100mm

J&C Joel 
Inspiration in every performance

Data Sheet 19

The Laboratory Measurement of Random Incidence Sound Absorption generally to BS EN ISO 354:2003

Client: J & C Joel Ltd

Test Date: 30/11/2020

Empty Room: **Temperature:** 16.4 °C **Humidity:** 57 %RH **Pressure:** 1016 mbar

Room with Sample: **Temperature:** 15.7 °C **Humidity:** 55 %RH **Pressure:** 1009 mbar

Sample Description: Acoustic Molton - Single Layer - 100% Fullness (Approx. Weight 500g/m²) - 100mm Cavity From Wall

Mounting Method: G - 100

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 19

Freq Hz	T1 sec	T2 sec	Absorp Coeff α _s	Practical Absorp Coeff #
50*	5.15	5.18	0.00	
63*	4.83	5.19	-0.08	n/a
80*	7.33	7.40	-0.01	
100	7.42	6.58	0.09	
125	7.17	5.33	0.26	0.20
160	6.75	4.99	0.28	
200	6.77	4.49	0.41	
250	6.80	3.99	0.56	0.60
315	6.65	3.45	0.76	
400	6.46	2.84	1.07	
500	5.63	2.72	1.03	1.00
630	5.00	2.49	1.10	
800	5.22	2.59	1.06	
1000	5.79	2.80	1.00	1.00
1250	5.75	2.82	0.98	
1600	5.33	2.73	0.97	
2000	4.93	2.60	0.98	1.00
2500	4.35	2.40	0.99	
3150	3.55	2.14	0.97	
4000	2.92	1.82	1.06	1.00
5000	2.34	1.55	1.09	
6300*	1.60	1.18	1.06	
8000*	1.30	1.00	1.04	n/a
10000*	0.93	0.76	1.01	

α_w 0.90

Class A

Calculated to EN ISO 11654:1997

NRC 0.90

Calculated to ASTM C 423-01

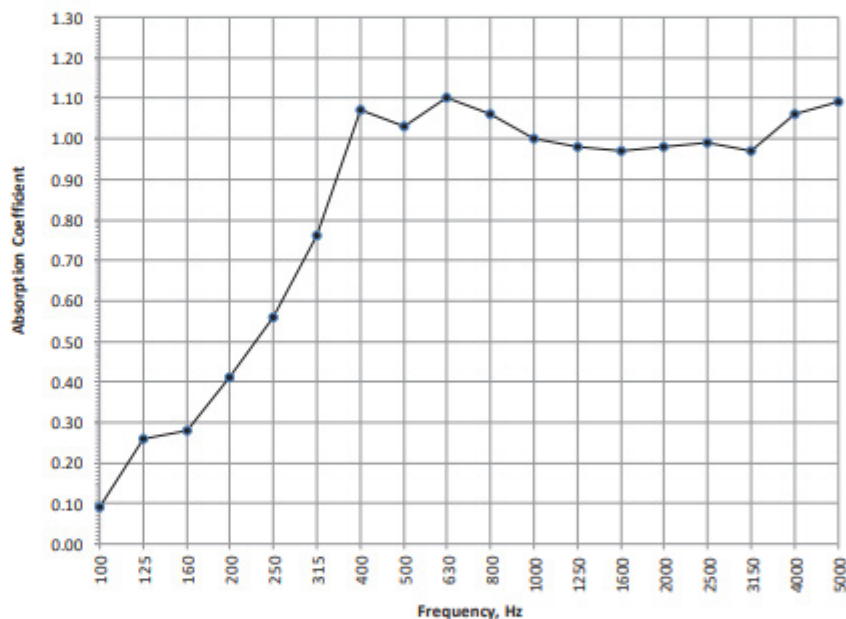
* Denotes frequencies outside the range covered

by BS EN ISO 354:2003

T1, empty room reverberation time

T2, room reverberation time with sample

Sound Absorption Coefficient



Practical absorption coefficient, BS EN ISO 11654:1997

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United Kingdom



+44 1422 833835



uksales@jcjoel.com



United Arab Emirates



+971 4 884 7801



menasales@jcjoel.com

www.jcjoel.com

Acoustic Test Report - Absorption

Absorption Class: A

Calculated to EN ISO 11654-1997

Fabric: Acoustic Molton
Fullness: 100%
Cavity from Wall: 350mm

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Data Sheet 7

The Laboratory Measurement of Random Incidence Sound Absorption generally to BS EN ISO 354:2003

Client: J & C Joel Ltd

Test Date: 19/01/2019

Empty Room: **Temperature:** 17.0 °C **Humidity:** 46 %RH **Pressure:** 1002 mbar

Room with Sample: **Temperature:** 15.4 °C **Humidity:** 44 %RH **Pressure:** 1001 mbar

Sample Description: Acoustic Molton - Single Layer - 100% fullness (Approx. weight 500 g/m²) 350mm cavity from wall

Mounting Method: G - 350

Sample Area: 9 m²

Chamber Volume: 300 m³

Test 8

Freq Hz	T1 sec	T2 sec	Absorp Coeff α_i	Practical Absorp Coeff #
50*	4.96	4.66	0.07	
63*	5.39	4.95	0.09	n/a
80*	7.08	6.47	0.07	
100	9.00	7.41	0.13	
125	7.30	5.44	0.26	0.30
160	6.60	4.19	0.47	
200	6.86	4.09	0.54	
250	7.22	3.73	0.71	0.70
315	6.99	3.49	0.78	
400	6.36	3.14	0.88	
500	5.64	2.90	0.92	0.95
630	5.09	2.64	1.00	
800	5.10	2.56	1.06	
1000	5.74	2.71	1.06	1.00
1250	5.63	2.69	1.05	
1600	5.18	2.53	1.08	
2000	4.76	2.39	1.10	1.00
2500	4.22	2.17	1.16	
3150	3.35	1.87	1.20	
4000	2.59	1.53	1.31	1.00
5000	2.04	1.24	1.50	
6300*	1.39	0.91	1.75	
8000*	1.14	0.78	1.77	n/a
10000*	0.80	0.58	2.04	

α_w 0.95

Class A

Calculated to EN ISO 11654:1997

NRC 0.95

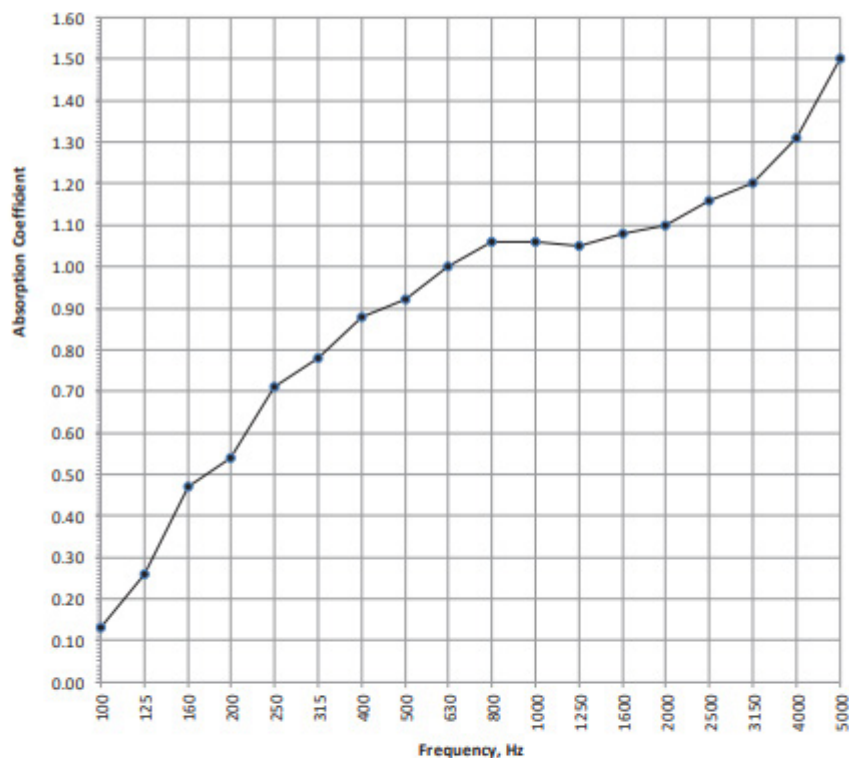
Calculated to ASTM C 423-01

* Denotes frequencies outside the range covered

by BS EN ISO 354:2003

T1, empty room reverberation time
T2, room reverberation time with sample

Sound Absorption Coefficient



Practical absorption coefficient, BS EN ISO 11654:1997

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