

BS EN ISO 354:2003

Acoustics - Measurement of absorption in a reverberation room

Client: GIK Acoustics Europe
Unit A, Perseverance Mills
Giles Street, Wibsey
BD6 3HS

Object: "Polyfusor"

Please note that the percentage relative humidity is below the required minimum of 30% as specified in BS EN ISO 354:2003, clause 6.3.2

Number of Samples: 10.94

Receiving room:

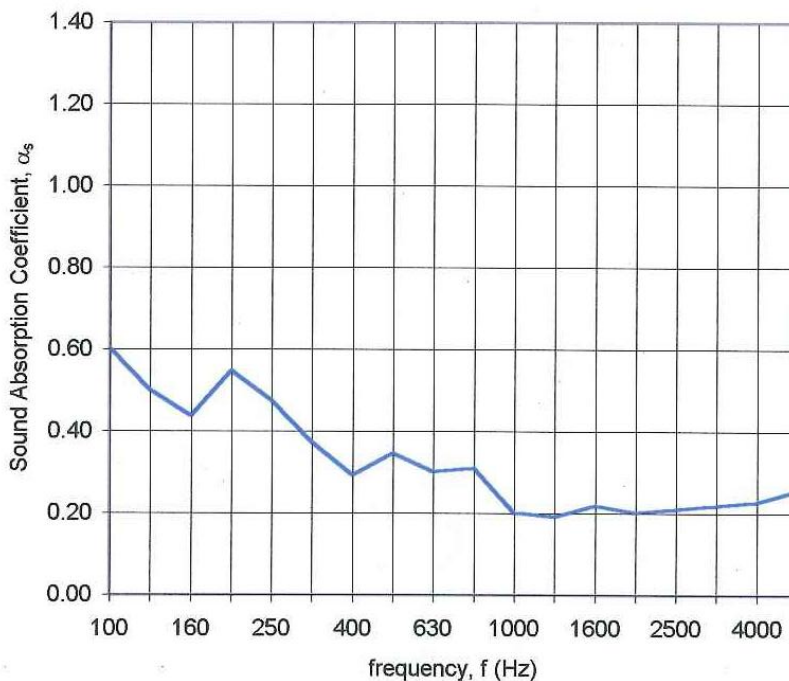
Volume: 220 m³
Condition: clean
Type: large reverberation room
Location: acoustic transmission suite

Sample out: Temperature [°C]: 23.9 Humidity [%]: 23.5

Sample in: Temperature [°C]: 22.3 Humidity [%]: 27.1

Sound Absorption Coefficient α_s

Frequency Hz	α_s
100	0.60
125	0.50
160	0.44
200	0.55
250	0.48
315	0.37
400	0.29
500	0.35
630	0.30
800	0.31
1000	0.20
1250	0.19
1600	0.22
2000	0.20
2500	0.21
3150	0.22
4000	0.23
5000	0.26



Test reference number: 1772-1889

Date: 27/04/15

Temp empty room: 23.9
 Temp sample room: 22.3
 Volume of room: 220
 Measured Length (mm) 3600
 Measured Width (mm) 3040
 Surface area of sample: 10.94

1772-1889

freq (Hz)	T ₁ empty	T ₂ sample	alpha 1	alpha 2	m1	m2	A ₁	A ₂	A _T	α _s
40	7.31	5.78	9.10E-05	8.36E-05	2.09E-05	1.93E-05	4.8	6.1	1.3	0.12
50	6.11	5.05	1.39E-04	1.28E-04	3.21E-05	2.95E-05	5.7	7.0	1.3	0.12
63	4.12	2.96	2.14E-04	1.98E-04	4.94E-05	4.56E-05	8.5	11.9	3.4	0.31
80	4.48	2.85	3.29E-04	3.05E-04	7.57E-05	7.01E-05	7.8	12.3	4.5	0.41
100	4.60	2.47	4.80E-04	4.46E-04	1.11E-04	1.03E-04	7.6	14.2	6.6	0.60
125	4.54	2.67	6.80E-04	6.36E-04	1.57E-04	1.46E-04	7.6	13.1	5.5	0.50
160	3.84	2.53	9.60E-04	9.04E-04	2.21E-04	2.08E-04	9.0	13.8	4.8	0.44
200	3.84	2.33	1.26E-03	1.19E-03	2.89E-04	2.74E-04	8.9	14.9	6.0	0.55
250	3.80	2.43	1.58E-03	1.51E-03	3.64E-04	3.47E-04	9.0	14.2	5.2	0.48
315	4.14	2.81	1.94E-03	1.86E-03	4.46E-04	4.28E-04	8.1	12.2	4.1	0.37
400	4.19	3.05	2.34E-03	2.25E-03	5.38E-04	5.18E-04	7.9	11.1	3.2	0.29
500	4.62	3.08	2.78E-03	2.67E-03	6.39E-04	6.15E-04	7.1	10.9	3.8	0.35
630	4.67	3.26	3.37E-03	3.23E-03	7.76E-04	7.44E-04	6.9	10.2	3.3	0.30
800	4.62	3.22	4.25E-03	4.05E-03	9.78E-04	9.33E-04	6.8	10.2	3.4	0.31
1000	4.32	3.44	5.48E-03	5.19E-03	1.26E-03	1.20E-03	7.0	9.2	2.2	0.20
1250	4.04	3.29	7.36E-03	6.93E-03	1.70E-03	1.60E-03	7.2	9.3	2.1	0.19
1600	3.68	2.98	1.07E-02	9.96E-03	2.45E-03	2.29E-03	7.4	9.8	2.4	0.22
2000	3.25	2.76	1.53E-02	1.43E-02	3.53E-03	3.29E-03	7.7	9.9	2.2	0.20
2500	2.76	2.40	2.26E-02	2.10E-02	5.20E-03	4.83E-03	8.2	10.5	2.3	0.21
3150	2.26	2.01	3.42E-02	3.17E-02	7.88E-03	7.31E-03	8.7	11.1	2.4	0.22
4000	1.80	1.66	5.29E-02	4.91E-02	1.22E-02	1.13E-02	8.8	11.3	2.5	0.23
5000	1.38	1.30	7.95E-02	7.38E-02	1.83E-02	1.70E-02	9.4	12.2	2.8	0.26
6300	1.16	1.12	1.20E-01	1.12E-01	2.77E-02	2.58E-02	6.0	8.8	2.8	0.26
8000	0.84	0.79	1.81E-01	1.70E-01	4.17E-02	3.91E-02	5.2	10.3	5.1	0.47
10000	0.58	0.56	2.60E-01	2.45E-01	5.98E-02	5.65E-02	8.1	13.4	5.3	0.48