

**ACOUSTIC ABSORPTION MEASUREMENT PROTOCOL (ISO 354, ISO 11654)**

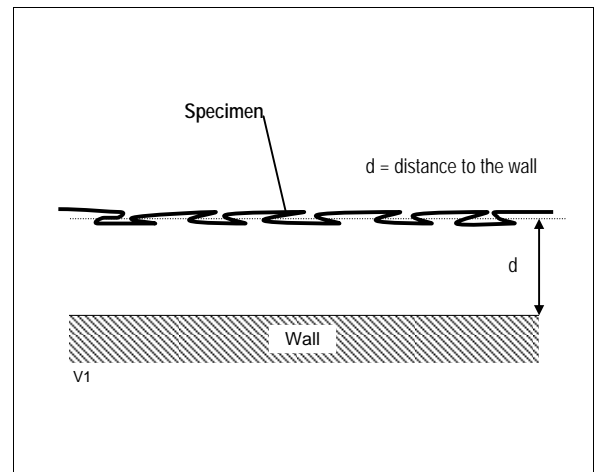
**Specifications**

Manufacturer	<b>Création Baumann - Weberei und Färberei AG - CH-4901 Langenthal (Switzerland)</b>		
Product name	<b>UMBRIA II</b>		
Remarks, configuration	Decoration fabric Measurement configuration: curtain draped by 100 %, distance to the wall d = 15 cm		
Set-up (acc. ISO 354/Amd 1:1997)	Type G-150	No. of measurements	3 each microphone
Probe area	13.5 m <sup>2</sup>	No. of used microphone	10
Temperature	19.6 °C	Used acoustic Signal	White noise
Relative Humidity	51.5 % r.H.	Empty room measurement	Interpolated values
Volume of the reverberation chamber	214.3 m <sup>3</sup>	EEC Order No.	8727
Measurement No. / Date / Time	7 / 26.05.2003 / 14h40'	Archive filename	UMBRIA01.ABS

**EUT identification**

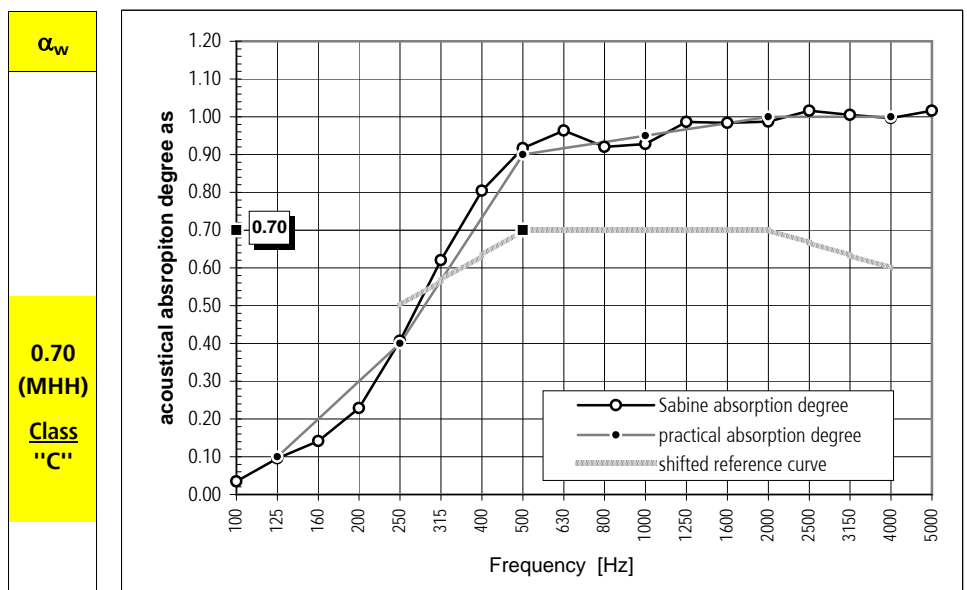


**Test set-up**



**Measurement results (acc. ISO 354, ISO 11654)**

Freq. [Hz]	T <sub>1</sub>	T <sub>2</sub>	α <sub>s</sub>	α <sub>pi</sub>	α <sub>w</sub>
100	20.23	15.88	0.03		
125	18.39	10.90	0.10	0.10	
160	15.00	8.21	0.14		
200	12.12	5.82	0.23		
250	11.04	4.01	0.41	0.40	
315	9.76	2.90	0.62		
400	8.03	2.28	0.80		
500	8.47	2.10	0.92	0.90	
630	8.09	2.00	0.96		
800	7.64	2.04	0.92		
1'000	7.00	1.98	0.93	0.95	
1'250	6.09	1.82	0.99		
1'600	5.44	1.76	0.98		
2'000	4.77	1.68	0.99	1.00	
2'500	4.24	1.58	1.02		
3'150	3.59	1.49	1.01		
4'000	2.93	1.37	1.00	1.00	
5'000	2.33	1.21	1.02		



<b>LEGEND</b>	α <sub>s</sub> = Sabine absorption degree
T <sub>1</sub> = Reverberation time of the empty room	α <sub>pi</sub> = practical absorption degree
T <sub>2</sub> = Reverberation time with the test specimen	α <sub>w</sub> = assessed absorption degree

**ACOUSTIC ABSORPTION MEASUREMENT PROTOCOL (ISO 354, ISO 11654)**

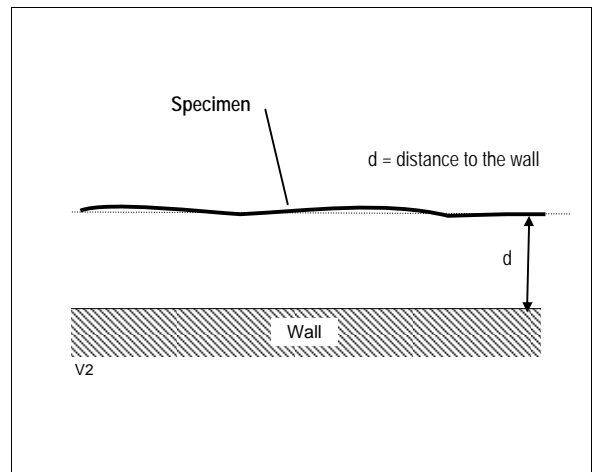
**Specifications**

Manufacturer	<b>Création Baumann - Weberei und Färberei AG - CH-4901 Langenthal (Switzerland)</b>	
Product name	<b>UMBRIA II</b>	
Remarks, configuration	Decoration fabric Measurement configuration: curtain panels, distance to the wall d = 15 cm	
Set-up (acc. ISO 354/Amd 1:1997)	Type G-150	No. of measurements 2 each microphone
Probe area	13.5 m <sup>2</sup>	No. of used microphone 10
Temperature	19.5 °C	Used acoustic Signal White noise
Relative Humidity	51.9 % r.H.	Empty room measurement Measured values
Volume of the reverberation chamber	214.3 m <sup>3</sup>	EEC Order No. 8727
Measurement No. / Date / Time	8 / 26.05.2003 / 15h50'	Archive filename UMBRIA02.ABS

**EUT identification**



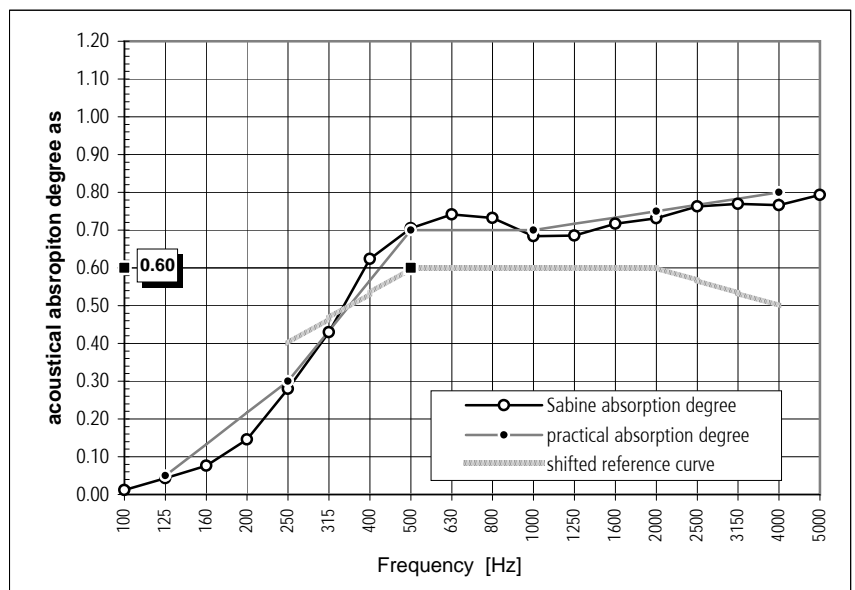
**Test set-up**



**Measurement results (acc. ISO 354, ISO 11654)**

Freq. [Hz]	T <sub>1</sub>	T <sub>2</sub>	α <sub>s</sub>	α <sub>pi</sub>	α <sub>w</sub>
100	20.24	18.45	0.01		
125	18.42	14.07	0.04	0.05	
160	15.06	10.38	0.08		
200	12.12	7.17	0.15		
250	11.06	5.01	0.28	0.30	
315	9.74	3.70	0.43		
400	8.06	2.72	0.62		
500	8.45	2.54	0.71	0.70	
630	8.08	2.42	0.74		
800	7.65	2.40	0.73		
1'000	7.00	2.44	0.68	0.70	
1'250	6.12	2.32	0.69		
1'600	5.46	2.16	0.72		
2'000	4.77	2.02	0.73	0.75	
2'500	4.27	1.88	0.76		
3'150	3.60	1.73	0.77		
4'000	2.96	1.57	0.77	0.80	
5'000	2.35	1.36	0.79		

<b>0.60 (H) Class "C"</b>
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<b>LEGEND</b>	α <sub>s</sub> = Sabine absorption degree
T <sub>1</sub> = Reverberation time of the empty room	α <sub>pi</sub> = practical absorption degree
T <sub>2</sub> = Reverberation time with the test specimen	α <sub>w</sub> = assessed absorption degree