swisscom

ACOUSTIC ABSORBTION MEASUREMENT PROTOCOL (ISO 354, ISO 11654)

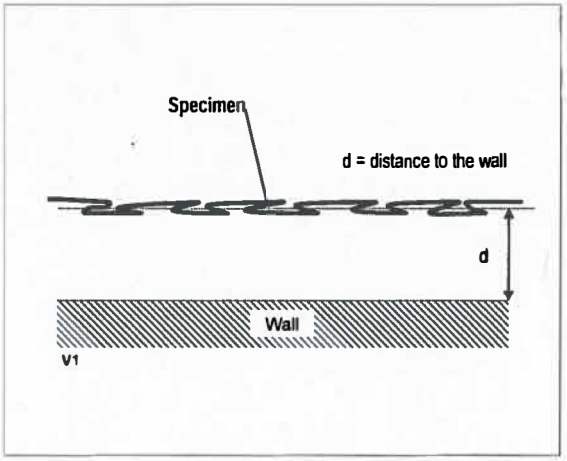
Specifications

Product name	**HANNAH**
Remarks, configuration	panels draped by 100%

Set-up (acc. ISO 354/2nd Ed.:2003)	Type G-150	No. of measurements	3 each microphon
Probe area	3.75 x 2.61 = 9.77 m^2	No. of used microphon	9
Temperature	23.6 °C	Used acoustic Signal	White noise
Relative Humidity	28.6 % r.H.	Empty room measurement	Interpolated values
Volume of the reverberation chamber	214.3 m^3		
Measurement No. / Date / Time	Nr. 07 / 01.03.2013 / 13:22		
Tested by	Martin Lengacher		

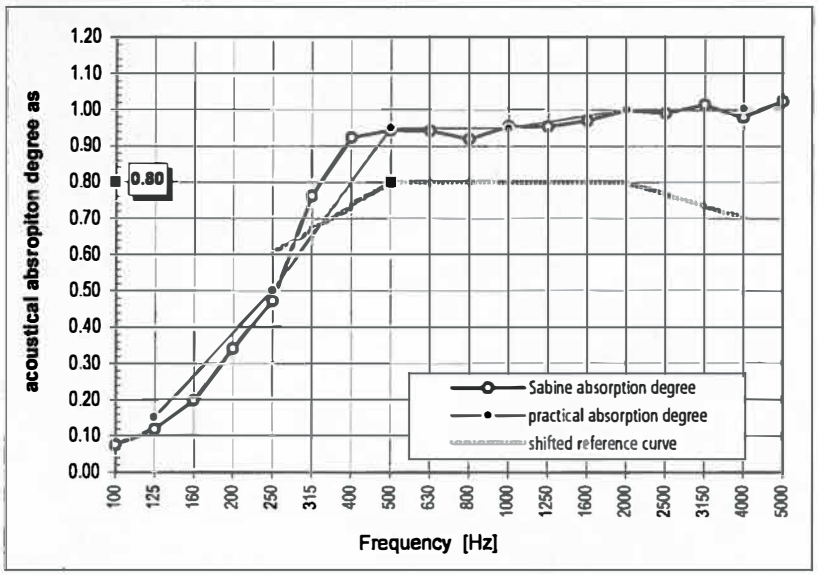
EUT identification

Test set-up



Measurement results (acc. ISO 354, ISO 11654)

Freq. [Hz]	T_1	T_2	α_s	α_{pi}	α_w
100	20.32	14.21	**0.07**		
125	17.23	10.94	**0.12**	**0.15**	
160	14.32	7.95	**0.20**		
200	11.14	5.37	**0.34**		
250	10.91	4.43	**0.47**	**0.50**	
315	9.63	3.12	**0.76**		
400	8.02	2.58	**0.92**		
500	8.41	2.58	**0.94**	**0.95**	**0.80 (H)**
630	8.16	2.56	**0.94**		Class "B"
800	7.75	2.56	**0.92**		
1'000	6.98	2.41	**0.95**	**0.95**	
1'250	5.78	2.25	**0.95**		
1'600	4.99	2.10	**0.97**		
2'000	4.33	1.94	**1.00**	**1.00**	
2'500	3.61	1.79	**0.99**		
3'150	2.94	1.59	**1.01**		
4'000	2.26	1.39	**0.97**	**1.00**	
5'000	1.70	1.14	**1.02**		



Error: 100 - 315 Hz : 4.85% 400 - 1250 Hz : 2.26% 1600 - 5000 Hz : 2.21%

LEGEND

T_1 = Reverberation time of the empty room
T_2 = Reverberation time with the test specimen
α_s = Sabine absorption degree
α_{pi} = practical absorption degree
α_w = assesed absorption degree