

Appendix 21

**Measurement of sound absorption coefficient**

**Test** Measurement of sound absorption coefficient in a reverberation room according to EN ISO 354 and evaluation according to EN ISO 11654

**Client** Ecophon AB  
Christer Persson

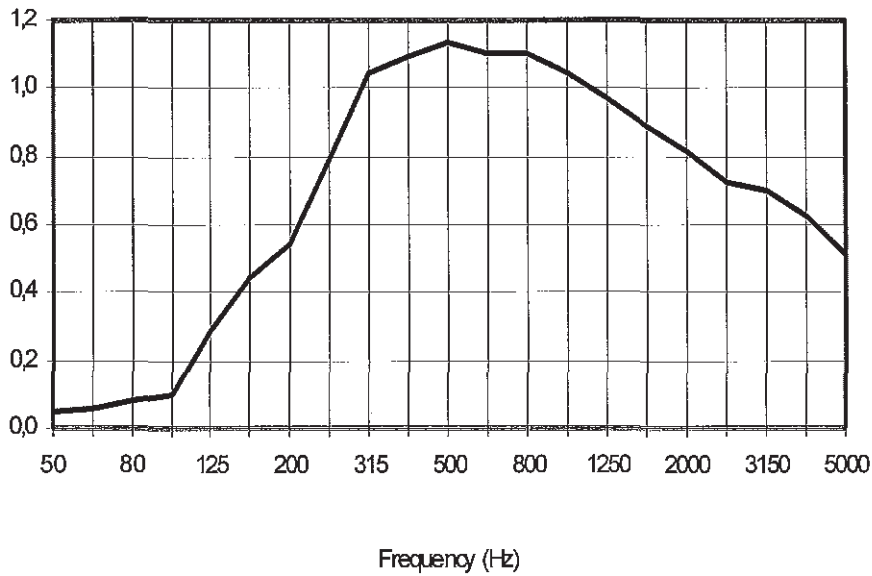
**Object** Industry AL A  
Thickness: 50 mm.  
Panel size: 1200 mm x 1200 mm.

**Date of test** December 11, 2008

**Conditions** Mounting depth: 50 mm.  
Surface area: 10,8 m<sup>2</sup>.  
Room volume: 200 m<sup>3</sup>.  
Temperature at measurement on object/in empty room: 20/ 20 °C.  
Relative humidity at measurement on object/in empty room: 86/ 86 %.

**Result** Sound absorption class **B**.  
Weighted sound absorption coefficient  $\alpha_w = 0,8$ .

Sound absorption coefficient



Frequency (Hz)	$\alpha_s$
50	0,05
63	0,06
80	0,08
100	0,10
125	0,29
160	0,44
200	0,54
250	0,79
315	1,04
400	1,09
500	1,13
630	1,10
800	1,10
1000	1,04
1250	0,97
1600	0,89
2000	0,81
2500	0,72
3150	0,70
4000	0,62
5000	0,51