

Appendix 8

**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

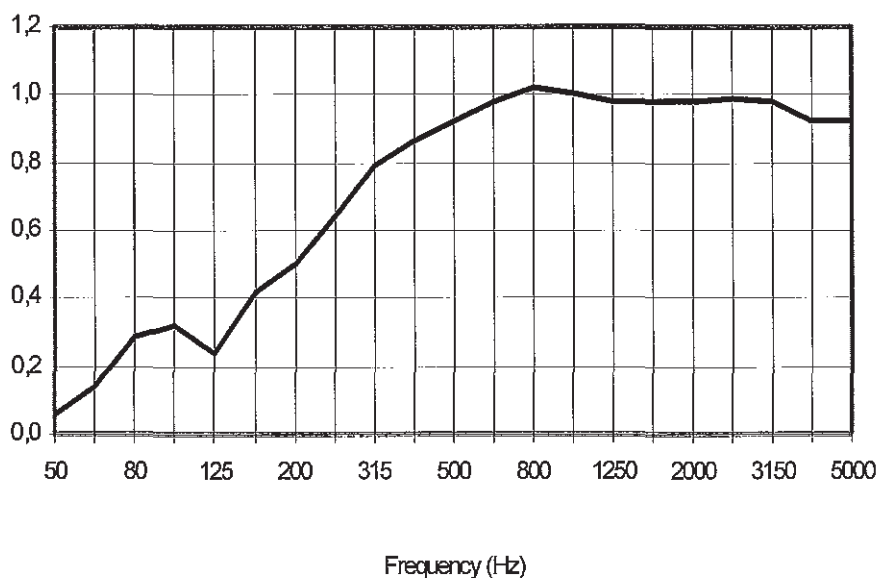
Object Combison Due A/alpha  
Thickness: 53 mm.  
Panel size: 600 mm x 600 mm.

Date of test October 27, 2008

Conditions Mounting depth: 200 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: 84/ 84 %.

Result Sound absorption class A.  
Weighted sound absorption coefficient  $\alpha_w = 0,9$ .

Sound absorption coefficient



| Frequency (Hz) | $\alpha_s$ |
|----------------|------------|
| 50             | 0,06       |
| 63             | 0,14       |
| 80             | 0,29       |
| 100            | 0,32       |
| 125            | 0,24       |
| 160            | 0,42       |
| 200            | 0,50       |
| 250            | 0,64       |
| 315            | 0,79       |
| 400            | 0,86       |
| 500            | 0,92       |
| 630            | 0,98       |
| 800            | 1,02       |
| 1000           | 1,00       |
| 1250           | 0,98       |
| 1600           | 0,98       |
| 2000           | 0,98       |
| 2500           | 0,99       |
| 3150           | 0,98       |
| 4000           | 0,92       |
| 5000           | 0,92       |