

## Appendix 4

**Sound absorption coefficient according to EN-ISO 11654**

Measurement of sound absorption coefficient in a reverberation room

Client: Saint-Gobain Ecophon AB  
 Object: Master Eg  
 585 x 585 mm  
 Thickness: 40 mm  
 Mass per square metre: 3,49 kg/ m<sup>2</sup>  
 ODS: 80 mm

Date of test: 2020-10-27

Empty reverberation room:

Relative humidity: 82,3 %  
 Temperature: 20,9 °C  
 Barometric pressure: 97,9 kPa

Reverberation room with object:

Relative humidity: 79,4 %  
 Temperature: 21,0 °C  
 Barometric pressure: 97,0 kPa

Surface area: 10,80 m<sup>2</sup>  
 Room volume: 200,0 m<sup>3</sup>  
 Total room area S<sub>i</sub>: 211,4 m<sup>2</sup>

| Frequency<br>f<br>[Hz] | $\alpha_s$<br>1/3 octave |
|------------------------|--------------------------|
| 50                     | 0,03                     |
| 63                     | 0,05                     |
| 80                     | 0,06                     |
| 100                    | 0,10                     |
| 125                    | 0,23                     |
| 160                    | 0,45                     |
| 200                    | 0,61                     |
| 250                    | 0,85                     |
| 315                    | 0,93                     |
| 400                    | 1,00                     |
| 500                    | 0,92                     |
| 630                    | 0,96                     |
| 800                    | 1,01                     |
| 1000                   | 0,95                     |
| 1250                   | 0,96                     |
| 1600                   | 0,99                     |
| 2000                   | 0,97                     |
| 2500                   | 0,98                     |
| 3150                   | 0,97                     |
| 4000                   | 0,93                     |
| 5000                   | 0,92                     |

