

**NOISE LAB**  
**REPORT Number A-2019LAB-019-6-43641\_E**

**SOUND ABSORPTION COEFFICIENT**

EN ISO 354:2003  
 EN ISO 11654:1997

Acoustics - Measurement of sound absorption in a reverberation room  
 Acoustics - Sound absorbers for use in buildings - Rating of sound absorption

**Date:** 25/06/2019

**Reverberation room:** V = 296,9 m<sup>3</sup> S<sub>tot</sub> = 278,2 m<sup>2</sup>

**Temperature:** T = Empty space: 20,8 °C With testelement: 21,3 °C

**Atmospheric pressure:** p = 101,2 kPa

**Relative humidity :** h<sub>r</sub> = 75 %

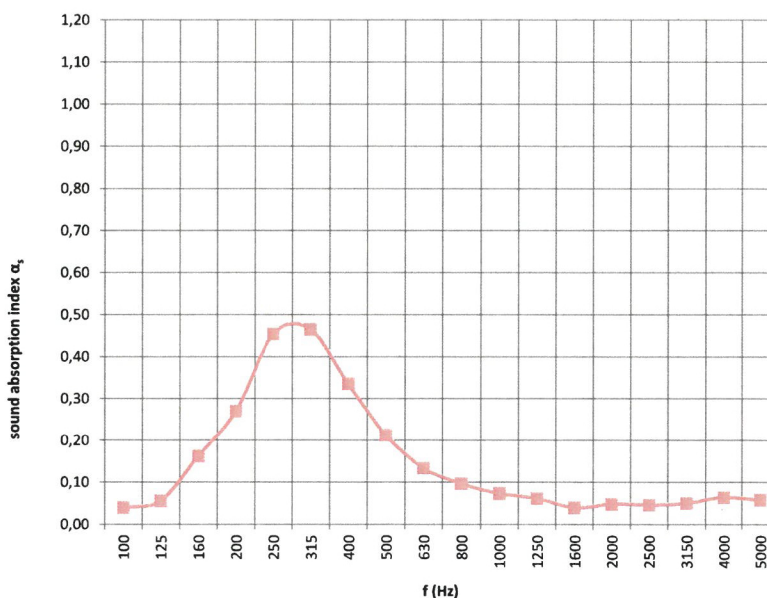
**N° test sample:** 6

**Construction characteristics:** **Type: Plane absorber**

Area of test element: 12 m<sup>2</sup> \* using baffles (Type J mounting):  
 Dimensions (L x W x H): -  
 Distance between baffle rows: -

Total thickness: - \* using discrete objects:  
 Air space: - Number of tested objects: -  
 Connection of layers: -

f(Hz)	T1 (s)	T2 (s)	α <sub>s</sub>
50			
63			
80			
100	10,95	9,85	0,04
125	9,30	8,21	0,06
160	10,21	7,20	0,16
200	10,58	6,15	0,27
250	9,77	4,62	0,45
315	9,85	4,58	0,47
400	9,03	5,13	0,34
500	8,77	5,96	0,21
630	8,94	6,87	0,13
800	8,86	7,28	0,10
1000	8,70	7,48	0,07
1250	8,12	7,20	0,06
1600	7,35	6,84	0,04
2000	6,67	6,18	0,05
2500	5,72	5,38	0,05
3150	4,87	4,62	0,05
4000	4,02	3,82	0,06
5000	3,32	3,21	0,06



f(Hz)	α <sub>p</sub>
125	0,10
250	0,40
500	0,25
1000	0,10
2000	0,05
4000	0,05

**α<sub>w</sub> = 0,10 ( L )\***  
 acoustical absorption class: Not Classified

**NRC = 0,2 \*\***  
**SAA = 0,19 \*\***

**Requested by:** ORAC NV/SA, Biekorfstraat 32, 8400 Oostende

\* It is strongly recommended to use this single-number rating in combination with the complete sound absorption coefficient curve  
 \*\* These results are not within the scope of the accreditation

Testelement: W108

Similar results for W109/W110 (deviation +/- 10%)