Testing report No 569/2011–AL8.4

Supplement 1

Sound reduction index, R , according to EN ISO 140-3
Laboratory measurements of airborne sound insulation of building elements

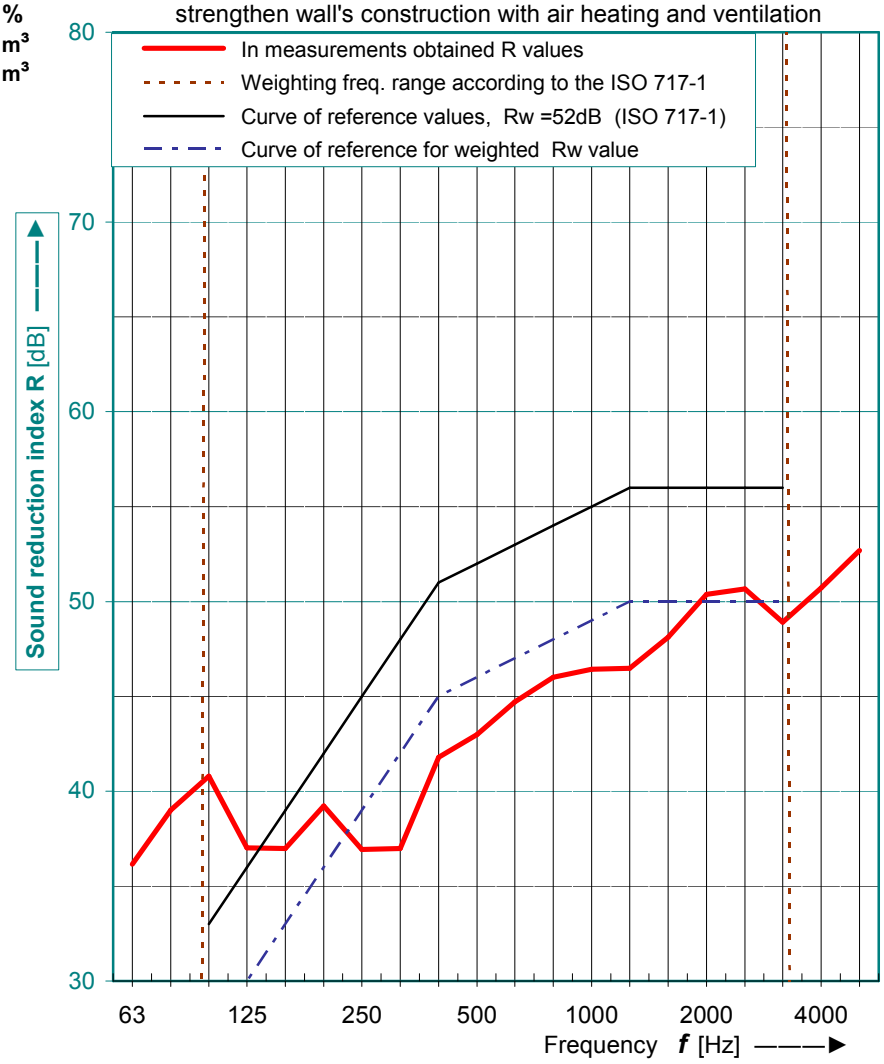
Manufacturer :	AEROC AS Estonia	**Sample identific. :**	No. 506-1
Client :	AEROC AS Estonia	**Test room identific. :**	Lab.T-282 Building acoust.chamber
Test specimen mounted by :	AEROC AS Estonia	**Date of test :**	August 03, 2011

Description of test specimen and arrangement: Dividing wall — ***1) AEROC Hard blocks 250mm***

Area ***S*** of test specimen : **9,9 m²**
Mass per unit area : **144 kg/m²**
Air temp. In the test rooms : **19,0 °C**
Air humidity in the test rooms : **72,0 %**
Source room volume : **71,0 m³**
Receiving room volume : **68,3 m³**

Measurements were performed a day after sample building and strengthen wall's construction with air heating and ventilation

Frequency ***f***	***R*** ⅓ octave
[Hz]	[dB]
50	31,9
63	36,2
80	39,0
100	40,8
125	37,0
160	37,0
200	39,2
250	36,9
315	37,0
400	41,8
500	43,0
630	44,7
800	46,0
1000	46,4
1250	46,5
1600	48,1
2000	50,4
2500	50,7
3150	48,9
4000	50,7
5000	52,7
6300	54,1
8000	55,3
10000	57,03



Weighted sound reduction index, $R_w(C;C_{tr})$, rating according to EN ISO 717-1:

$R_w(C;C_{tr})$ = 46 (-1 ; -3) dB

C 50-3150 = **-1 dB** ***C*** 50-5000 = **0 dB** ***C*** 100-5000 = **0 dB**

Evaluation based on laboratory measurement results obtained by an engineering method

***C*tr** 50-3150 = **-3 dB** ***C*tr** 50-5000 = **-3 dB** ***C*tr** 100-5000 = **-3 dB**

"R&D Akustika" Ltd Acoustics laboratory T-282

Date : 2011.08.29.

Signature :