

Sound Reduction Index according to DIN EN ISO 10140-2

P-BA 113/2013e

Client: Espero BV
NL – 5145 PE Waalwijk

Fig. 3

Test Specimen:

Double-leaf movable partition wall (test object S 10534-75), Type: Sonico 100-53, covering made of 13 mm plastic-coated chipboards, bitumen loading mats (mass per unit area: 12 kg/m²) clamped to the interior on both sides, with 70 mm thick mineral wool in the element cavity.
The partition was in a functional state.

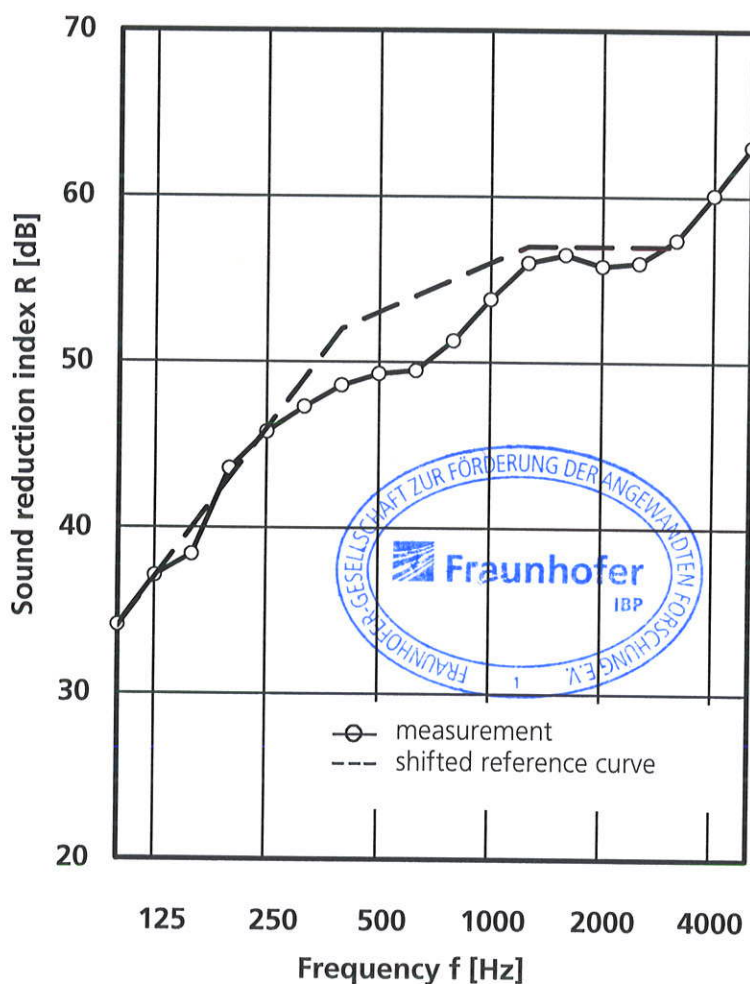
Partition thickness: 102 mm
Weight of solid wall element: 170 kg
Mass per unit area of test wall: 50.6 kg/m² (including frame and mechanics).

Additional description and technical data see page 2 and 3 of test report P-BA 113/2013e as well as Fig.1 and 2.

Test surface area: 10.7 m²
Test facilities: test facilities for walls P6
Room volume: V_S = 52.8 m³
V_E = 63.2 m³

Maximum insulation of test facility: R'_{max,w} = 77 dB
Relative humidity: 32 %
Air temperature: 21.1 °C
Static air pressure: 972 hPa
Excitation noise: pink noise
Test date: January 22, 2013

Frequency f [Hz]	Sound reduction index R [dB]
100	34.1
125	37.1
160	38.4
200	43.6
250	45.8
315	47.3
400	48.6
500	49.3
630	49.5
800	51.3
1000	53.8
1250	56.0
1600	56.5
2000	55.8
2500	56.0
3150	57.4
4000	60.1
5000	63.0



Weighted sound reduction index and spectrum adaptation terms according to DIN EN ISO 717-1: 2006

$$R_w (C; C_{tr}; C_{100-5000}; C_{tr,100-5000}) = 53 \text{ dB } (-1; -5; 0; -5)$$



The test was carried out in a test laboratory of the IBP accredited according to DIN EN ISO/IEC 17025 by the DAP (German Accreditation System for Testing), No. DAP-PL-3743.26.

Stuttgart, July 23, 2013

Head of the test laboratory: