

Sound Reduction Index according to DIN EN ISO 10140-2

P-BA 111/2013e

Client: Espero BV
NL – 5145 PE Waalwijk

Fig. 3

Test Specimen:

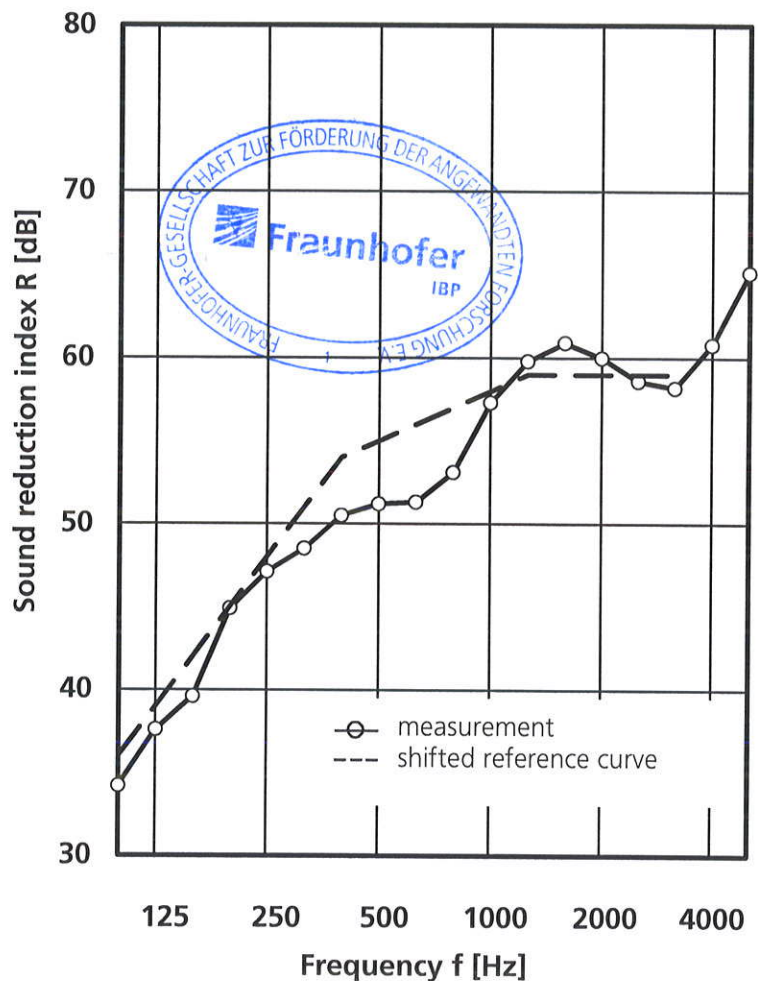
Double-leaf movable partition wall (test object S 10534-73), Type: Sonico 100-55, covering made of 13 mm plastic-coated chipboards, bitumen loading mats (mass per unit area: 12 kg/m²) clamped to the interior on both sides, with 70 mm thick mineral wool in the element cavity. At the top and bottom both sides with additional gaskets. 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 111/2013e 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	34.2
125	37.6
160	39.6
200	44.9
250	47.1
315	48.5
400	50.5
500	51.2
630	51.3
800	53.1
1000	57.3
1250	59.8
1600	60.9
2000	60.0
2500	58.6
3150	58.2
4000	60.8
5000	65.1



Weighted sound reduction index and spectrum adaptation terms according to DIN EN ISO 717-1: 2006
R_w (C; C_{tr}; C₁₀₀₋₅₀₀₀; C_{tr,100-5000}) = 55 dB (-2; -6; -1; -6)



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: