

Sound Reduction Index according to DIN EN ISO 10140-2

P-BA 109/2013e

Client: Espero BV
NL – 5145 PE Waalwijk

Fig. 3

Test Specimen:

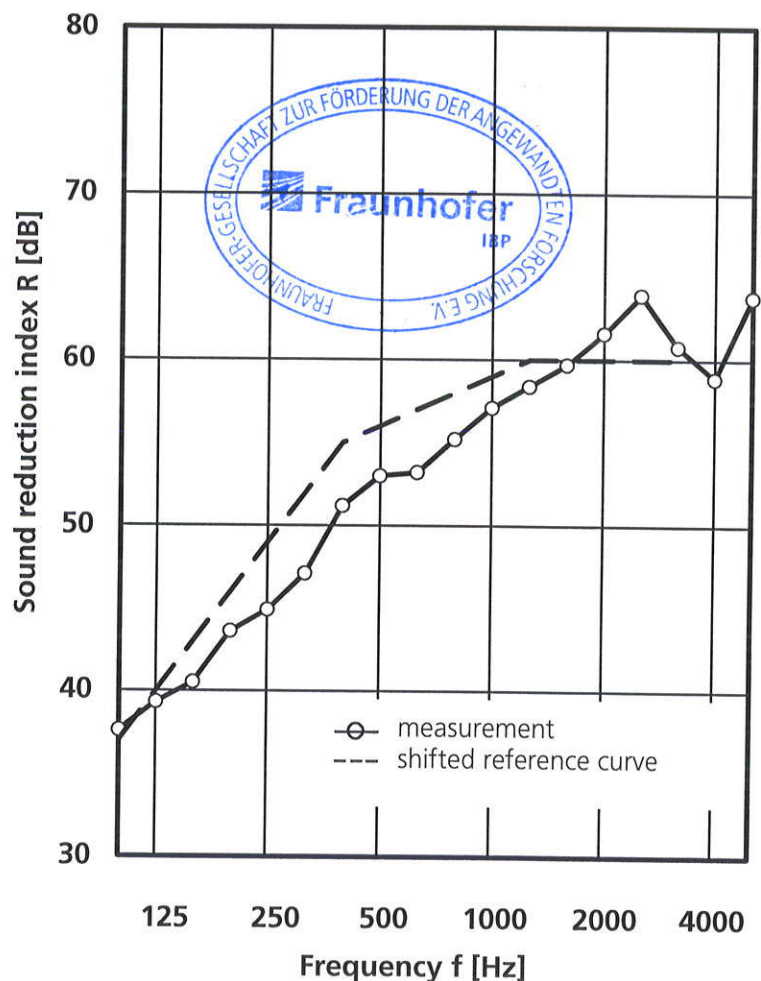
Double-leaf movable partition wall (test object S 10534-19), Type: Sonico 110-56, covering made of 18 mm plastic-coated chipboards, bitumen loading mats (mass per unit area: 12 kg/m²) clamped to the interior on both sides, with 70 mm thick mineral wool in the element cavity. At the top and bottom both sides with additional gaskets. The partition was in a functional state.

Partition thickness: 115 mm
Weight of solid wall element: 185 kg
Mass per unit area of test wall: 57.5 kg/m² (including frame and mechanics).

Additional description and technical data see page 2 and 3 of test report P-BA 109/2013e 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: R¹_{max,w} = 77 dB
Relative humidity: 40 %
Air temperature: 21 °C
Static air pressure: 982 hPa
Excitation noise: pink noise
Test date: November 6, 2012

Frequency f [Hz]	Sound reduction index R [dB]
100	37.6
125	39.3
160	40.5
200	43.6
250	44.9
315	47.1
400	51.2
500	53.0
630	53.2
800	55.2
1000	57.1
1250	58.4
1600	59.7
2000	61.6
2500	63.9
3150	60.8
4000	58.9
5000	63.8



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

$$R_w (C; C_{tr}; C_{100-5000}; C_{tr,100-5000}) = 56 \text{ dB } (-2; -6; -1; -6)$$



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: