

# Sound Reduction Index according to DIN EN ISO 10140-2

P-BA 108/2013e

**Client:** Espero BV  
NL – 5145 PE Waalwijk

**Fig. 3**

## Test Specimen:

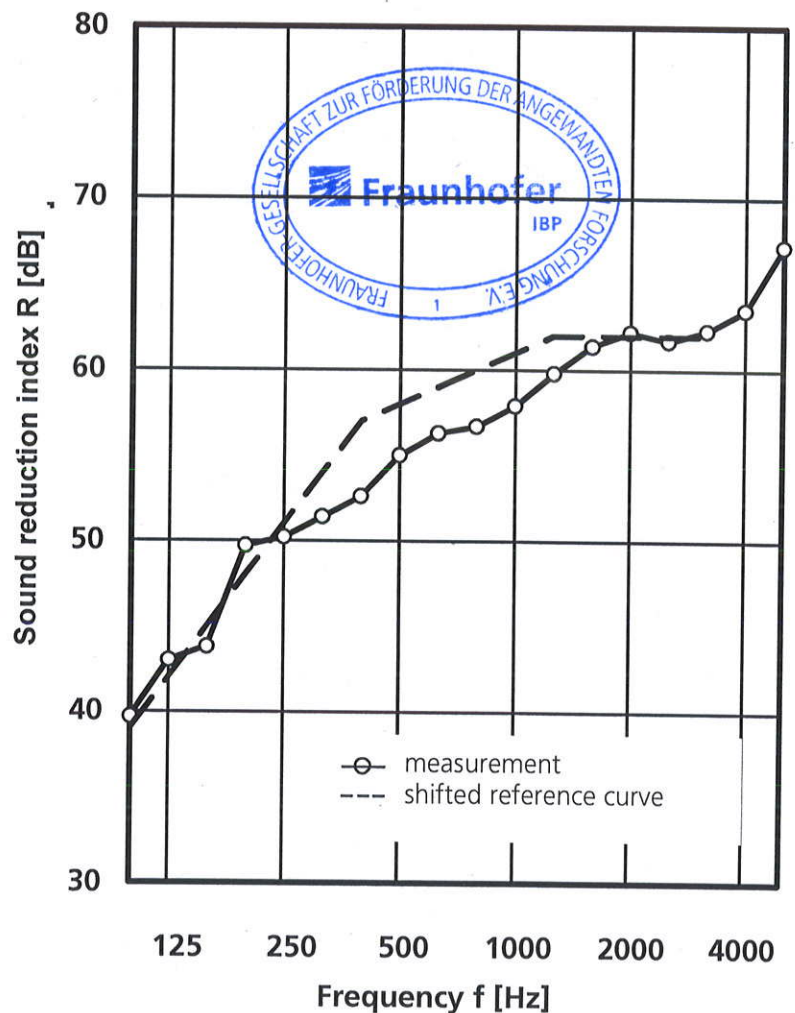
Double-leaf movable partition wall (test object S 10534-65), Type: Sonico 120-58, covering made of 13 mm plastic-coated chipboards, bitumen loading mats (mass per unit area: 14 kg/m<sup>2</sup>) clamped to the interior on both sides, with 70 mm thick mineral wool in the element cavity. At the top and bottom both sides with additional gaskets. The partition was in a functional state.

Partition thickness: 125 mm  
Weight of solid wall element: 152.2 kg  
Mass per unit area of test wall: 56.2 kg/m<sup>2</sup> (including frame and mechanics).

Additional description and technical data see page 2 and 3 of test report P-BA 108/2013e as well as Fig.1 and 2.

**Test surface area:** 10.7 m<sup>2</sup>  
**Test facilities:** test facilities for walls P6  
**Room volume:** V<sub>S</sub> = 52.8 m<sup>3</sup>  
V<sub>E</sub> = 63.2 m<sup>3</sup>  
**Maximum insulation of test facility:** R'<sub>max,w</sub> = 77 dB  
**Relative humidity:** 32 %  
**Air temperature:** 21.1 °C  
**Static air pressure:** 972 hPa  
**Excitation noise:** pink noise  
**Test date:** January 21, 2013

Frequency f [Hz]	Sound reduction index R [dB]
100	39.7
125	43.0
160	43.8
200	49.7
250	50.2
315	51.4
400	52.6
500	55.0
630	56.3
800	56.7
1000	57.9
1250	59.8
1600	61.4
2000	62.2
2500	61.7
3150	62.3
4000	63.5
5000	67.2



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

$$R_w (C; C_{tr}; C_{100-5000}; C_{tr,100-5000}) = 58 \text{ dB} (-1; -5; 0; -5)$$

**Fraunhofer**  
IBP

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: