

Sound Reduction Index according to DIN EN ISO 10140-2

P-BA 232/2013e

Client: Franz Nüsing GmbH + Co. KG
48163 Münster

Fig. 5

Test Specimen:

Double-leaf movable partition wall in timber panel design (test object S 10611-05), semi-automatic appliance, type "NW Premium Protect EASYmatic".

The partition consisted of 3 wall elements (1200 mm x 2860 mm), a wall connection profile (50 mm x 2860 mm) and a retractable wall post (100 mm x 2860 mm). The partition was in a functional state.

Element construction:

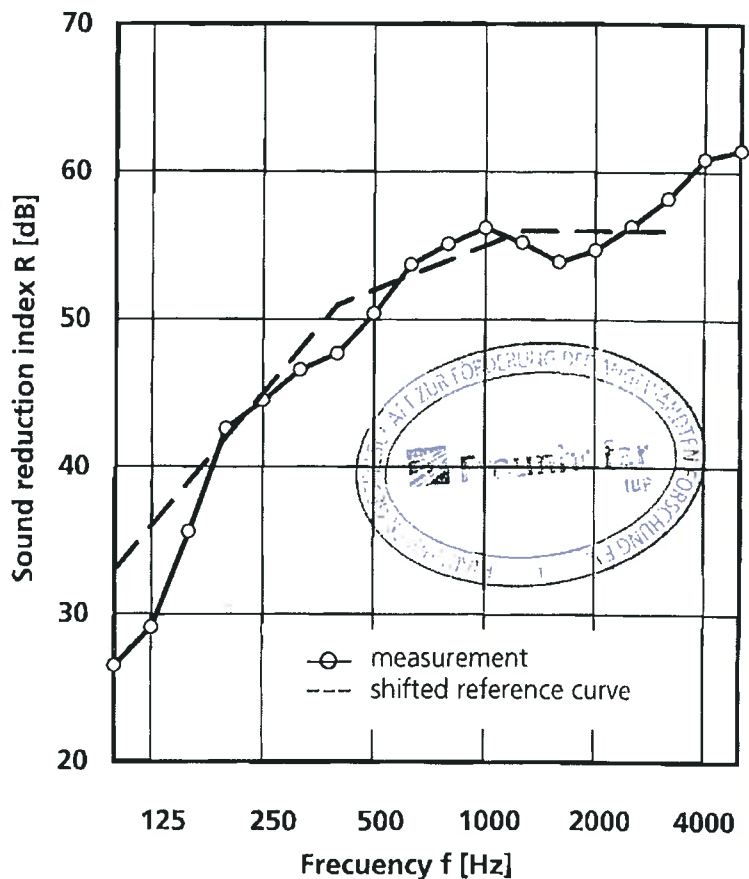
- 16 mm covering made of chipboard, mass per unit area: 10.8 kg/m²
- 3 mm hardboard (clamped to the complete surface area), mass per unit area: 3 kg/m²
- 62 mm cavity with 2 layer of 15 mm thick mineral fibre board (clamped); density: 70 kg/m³
- 3 mm hardboard (clamped to the complete surface area), mass per unit area: 3 kg/m²
- 16 mm covering made of chipboard, mass per unit area: 10.8 kg/m².

Additional description and technical data see page 2 of this test report as well as figures 1 to 4 and table 1.

Test surface area: 12.54 m²
 Test facilities: test facilities for walls P2
 Room volume: V_S = 69.0 m³
 V_E = 75.1 m³

Maximum insulation of test facility: R'_{max,w} ≥ 89 dB
 Relative humidity: 52 %
 Air temperature: 23.5 °C
 Static pressure: 965 hPa
 Excitation noise: pink noise
 Test date: September 5, 2013

Frequency f [Hz]	Sound reduction index R [dB]
100	26.5
125	29.1
160	35.6
200	42.6
250	44.5
315	46.6
400	47.7
500	50.4
630	53.7
800	55.1
1000	56.2
1250	55.2
1600	53.9
2000	54.7
2500	56.3
3150	58.2
4000	60.9
5000	61.5



Weighted sound reduction index and spectrum adaptation terms according to DIN EN ISO 717-1:2013

$$R_w (C; C_{tr}; C_{100-5000}; C_{tr,100-5000}) = 52 \text{ dB } (-3; -9; -2; -9)$$



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, January 24, 2014
 Head of the test laboratory: