Sound Reduction Index According to DIN EN 20 140-3

Client: Franz Nüsing GmbH + Co. KG
48163 Münster

P-BA 246/2007e

Figure 5

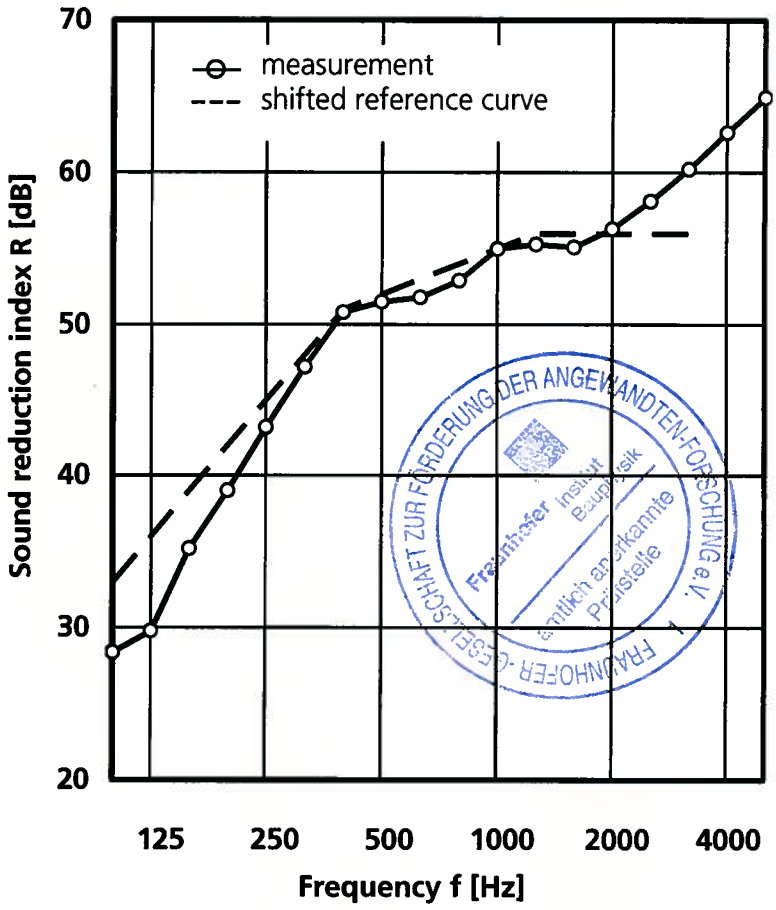
Test Specimen:

Double-leaf movable partition wall (test object S 9828-04) in timber panel design, type NW 100 Premium, covering made of 16 mm plastic-coated chipboards, 3 mm hardboard clamped to the interior on one side and 5 mm bitumen loading mat clamped to the interior on the other side, 50 mm insulating material in the element cavity. The partition consisted of 4 individual elements, 1022 mm x 2860 mm each, one of them constructed as telescopic element. The partition was in a functional state.

Additional description and technical data see test report, page 2,
as well as Table 1 and Fig. 1 to 4.

Test facility: test facility for walls and partitions P2
Room volume: V_S = 68.7 m³
V_E = 76.1 m³
Limiting insertion loss: R'_w = 89 dB
Test surface area: 12.54 m²
Exitation noise: pink noise
Relative humidity: 60 %
Temperature: 23 °C
Test date: June 20, 2007

f [Hz]	R [dB]
100	28.4
125	29.8
160	35.2
200	39.0
250	43.2
315	47.2
400	50.8
500	51.5
630	51.8
800	52.9
1000	55.0
1250	55.3
1600	55.1
2000	56.3
2500	58.1
3150	60.2
4000	62.6
5000	64.9



Weighted sound reduction index and spectrum adaptation terms according to DIN EN ISO 717 part 1
R_w (C; C_{tr}; $C_{100\text{-}5000}$; $C_{tr,100\text{-}5000}$) = 52 (-2; -8; -1; -8) dB

Fraunhofer Institut Bauphysik

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, 2008
Head of test laboratory: