

Sound Reduction Index according to DIN EN ISO 140-3

Client: Multiwal-Hohnholt GmbH
99195 Großbrudestedt

P-BA 43/2008e

Figure 9

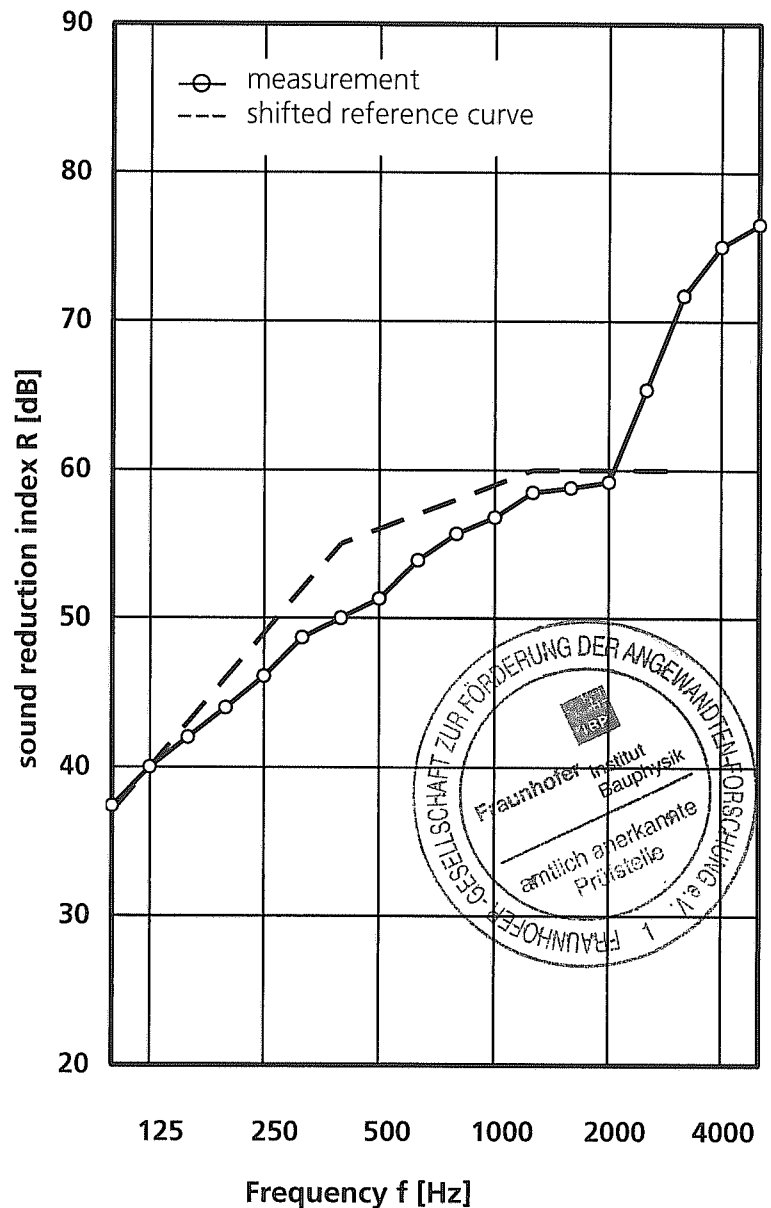
Test Specimen:

Double-leaf, moveable partition wall in timber panel design (test object S 9781-07), designation of the manufacturer: Multiwal (see figures 1 to 8). The partition wall consisted of three normal elements and one telescopic element 1073 mm x 2790 mm (width x height) each. The covering of wooden particle boards was laminated by bitumen loading mats on the internal side. The cavity between the chipboards was filled with 50 mm mineral wool. An additional sliding seal was attached at the covering sheets and additional foam rubber strips were mounted to the upper and lower clamping bar and the telescopic connection. The partition wall was in a functional state.

Additional description and technical data see test report page 2, as well as 2 to 8.

Test facility: test facility for walls and partitions P6
Room volume: $V_S = 51.1 \text{ m}^3$
 $V_E = 63.2 \text{ m}^3$
Limiting insertion loss: $R'_w = 77 \text{ dB}$
Test surface area: 10.75 m^2
Excitation noise: pink noise
Relative humidity: 36 %
Temperature: 20 °C
Test date: December 14, 2006

f [Hz]	R [dB]
100	37.4
125	40.0
160	42.0
200	44.0
250	46.1
315	48.7
400	50.0
500	51.3
630	53.9
800	55.7
1000	56.8
1250	58.5
1600	58.8
2000	59.2
2500	65.4
3150	71.7
4000	75.0
5000	76.5



Weighted sound reduction index and spectrum adaption terms according to DIN EN ISO 717 part 1
 $R_w (C; C_{tr}; C_{100-5000}; C_{tr,100-5000}) = 56 (-2; -5; 0; -5) \text{ dB}$

Fraunhofer Institut Bauphysik

The tests were 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-P2-3743.26)

Stuttgart, September 3, 2008

Head of test laboratories: