

Sound insulation index to DIN EN ISO 10140-2010**P-BA 143/2016**

Applicant: DORMA Hüppe Raumtrennsysteme GmbH & Co. KG
26655 Ocholt, Germany

Results sheet 1

Subject:

Movable wall (test item S 10967-04), type Variflex 100, with two full-wall elements and one telescopic element, clad on both sides with 16 mm thick, coated chipboard sheets, each with 1 x 5 mm thick heavy-duty matting adhesive-bonded on their internal faces; element cavity filled with 40 mm thick mineral wool; with additional lip seals at the cover panels top and bottom both sides.

The movable wall (partition) was in a fully functional condition.

Element configuration:

16 mm coated chipboard sheet, mass per unit area: approx. 10.8 kg/m²
5 mm heavy-duty matting, full-face adhesive-bonded, mass per unit area: 10 kg/m²
68 mm cavity filled with 40 mm thick loosely packed mineral wool (product name Knauf Insulation Universaldämmwolle Classic D-O40 insulation wool, length-related flow resistance $r \geq 5$ kPa·s/m²; density: approx. 30 kg/m³)
5 mm heavy-duty matting, full-face adhesive-bonded, mass per unit area: 10 kg/m²
16 mm coated chipboard sheet, mass per unit area: approx. 10.8 kg/m²

Thickness of wall: 100 mm

Mass per unit area of wall: 48 kg/m², incl. frame and mechanism

For a further description of the subject and technical data, see Table 1 and also Figs. 1 and 2.

Tested surface area: 10.75 m²

Test rooms: P6

Room volumes:

Source $V_S = 51.5$ m³

Receiver $V_E = 63.2$ m³

Type: Test stand

Rel. humidity: 40% ± 2%

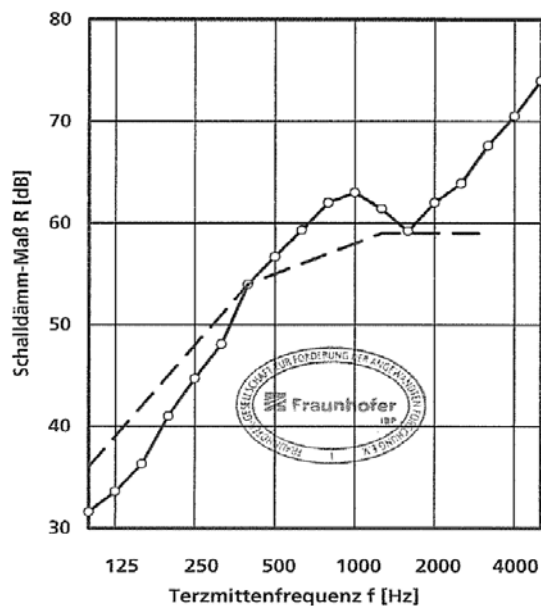
Air temperature: 20.8°C ± 0.3°C

Static air pressure: 965 hPa ± 1 hPa

Test sound: Pink noise

Date of test: 25 Nov. 2014

f [Hz]	R [dB]
50	-
63	-
80	-
100	31,6
125	33,6
160	36,3
200	41,0
250	44,7
315	48,1
400	54,0
500	56,7
630	59,3
800	62,0
1000	63,0
1250	61,4
1600	59,2
2000	62,0
2500	63,9
3150	67,6
4000	70,5
5000	74,0

**Sound
reduction
value R
[dB]**

Third-octave centre frequency f [Hz]

Weighted sound reduction index to DIN EN ISO 717-1:2013

$$R_w (C; C_{tr}; C_{100-5000}; C_{tr, 100-5000}) = 55.8 \pm 1.2 (-2; -8; -1; -8) \text{ dB}$$

**Fraunhofer
IBP**

This test was carried out in a test laboratory of the IBP, accredited to DIN EN ISO/IEC 17025:2005 by the DAP with certificate no. D-PL-11140-11-01.

Stuttgart, 22 June 2016

Test department manager: