

Sound insulation index to DIN EN ISO 10140-2010**P-BA 149/2016**Applicant: DORMA Hüppe Raumtrennsysteme GmbH & Co. KG
26655 Ocholt, Germany

Results sheet 1

Subject:

Movable wall (test item S 10967-14), type Variflex 88, with two full-wall elements and one telescopic element, clad on both sides with 10 mm thick, coated MDF boards, each with 1 x 5 mm and 1 x 2.5 mm thick heavy-duty matting adhesive-bonded on their internal faces; element cavity filled with 40 mm thick mineral wool.

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

Element configuration:

10 mm	coated MDF board, mass per unit area: approx. 7.4 kg/m ²
5 mm	heavy-duty matting, full-face adhesive-bonded, mass per unit area: 10 kg/m ²
2.5 mm	heavy-duty matting, full-face adhesive-bonded, mass per unit area: 5 kg/m ²
68 mm	element cavity filled with 40 mm thick loosely packed mineral wool (product name Knauf Insulation Universaldämmwolle Classic D-O40 insulation wool, length-related flow resistance $r \geq 5 \text{ kPa} \cdot \text{s/m}^2$; density: approx. 30 kg/m ³)
2.5 mm	heavy-duty matting, full-face adhesive-bonded, mass per unit area: 5 kg/m ²
5 mm	heavy-duty matting, full-face adhesive-bonded, mass per unit area: 10 kg/m ²
10 mm	coated MDF board, mass per unit area: approx. 7.4 kg/m ²

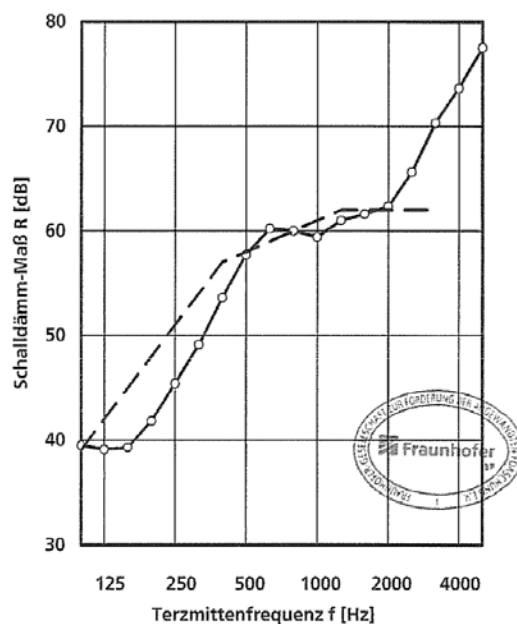
Thickness of wall: 88 mm

Mass per unit area of wall: 49 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 $V_S = 51.5 \text{ m}^3$
 Receiver $V_E = 63.2 \text{ m}^3$
Type: Test stand
Rel. humidity: 42% $\pm$ 2%
Air temperature: 21.2°C $\pm$ 0.3°C
Static air pressure: 970 hPa $\pm$ 1 hPa
Test sound: Pink noise
Date of test: 2 Dec. 2015

f [Hz]	R [dB]
50	-
63	-
80	-
100	39,5
125	39,1
160	39,3
200	41,8
250	45,4
315	49,1
400	53,6
500	57,7
630	60,2
800	60,0
1000	59,4
1250	61,0
1600	61,6
2000	62,3
2500	65,6
3150	70,3
4000	73,6
5000	77,5

**Sound
reduction
value R
[dB]****Third-octave centre frequency f [Hz]**

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

 $R_w (C; C_{tr}; C_{100-5000}; C_{tr, 100-5000}) =$ $58.0 \pm 1.2 (-3; -7; -2; -7) \text{ dB}$ **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: