

Sound reduction test to ISO 140-3, EN 20 140-3 and DIN 52 210-3

P-BA 420/1995
Illustration 7

Applicant: Franz Nüsing GmbH & Co KG
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Test of building -
element

Test specimen:

Twin shell, movable partition wall of wood panel construction, Type NW 100 CP (see illustrations 1 to 6 and Table 2). The movable wall consisted of 4 individual panels, each 1022 mm wide x 2860 mm high, one of which was a telescopic panel and one a fully operable wicket door panel.

Panel construction (including wicket door panel):

- 16 mm outer cladding of wood particle board
- 6 mm acoustic mat (stapled to cladding), mass per unit area: 12 kg/m²
- 56 mm void filled with 4 layers of loose laid 13/10 mm mineral fibre
(Manufacturer's description: G+H, 73T 13/10)
- 6 mm acoustic mat (stapled to cladding), mass per unit area: 12 kg/m²
- 16 mm outer cladding of wood particle board

Movable wall thickness: 100 mm

Mass per unit area: 54 kg / m²

For further description,
see text on Page 2

Surface area of wall: 12.5 m²

Test rooms:

Volumes: V_S = 68.7 m³
V_R = 76.3 m³

Type: Laboratory

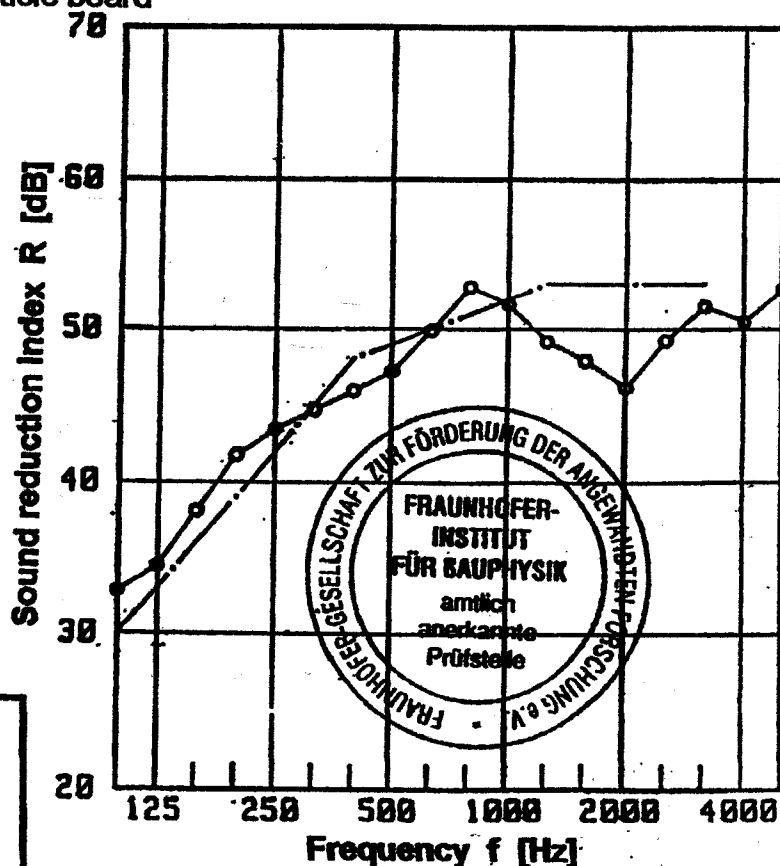
Condition: Empty

Test conditions:

Ambient air temperature: 19° C

Relative humidity of air: 48 %

Date of test: 3 May 1995



**Weighted Sound Reduction Index
and Spectrum frequency ranges**

R_w (C; C_{tr}; C₁₀₀₋₅₀₀₀; C_{tr 100-5000}) =

49 (-1; -3; -1; -3) dB

Stuttgart,
12 September 1995

Fraunhofer-Institut für Bauphysik
Test facility director.



Dr.-Engineering W Scholl