

Sound reduction index according to PN-EN 20140-3:1999

Laboratory measurements of airborne sound insulation of building elements

Client: **PILKINGTON-IGP Sp. z o.o.**

ul. Portowa 24, 27-600 Sandomierz

Test specimen mounted by: **ITBUD, 02-656 Warszawa, ul. Ksawerów 21**

Description of the test facility, test specimen and test arrangement:

Insulating glass unit Pilkington Insulight™

Dimensions: 1230mmx1480mm

Structure: 8.8 mm (44.2) Optilam™ - 12 mm Argon 90% - 4 mm Optifloat™ - 12 mm Argon 90% - 4 mm Optifloat™

Area of test specimen: **1,88 m²**
 Air permeability coefficient: **--- m³/(m²·h·daPa^{2/3})**

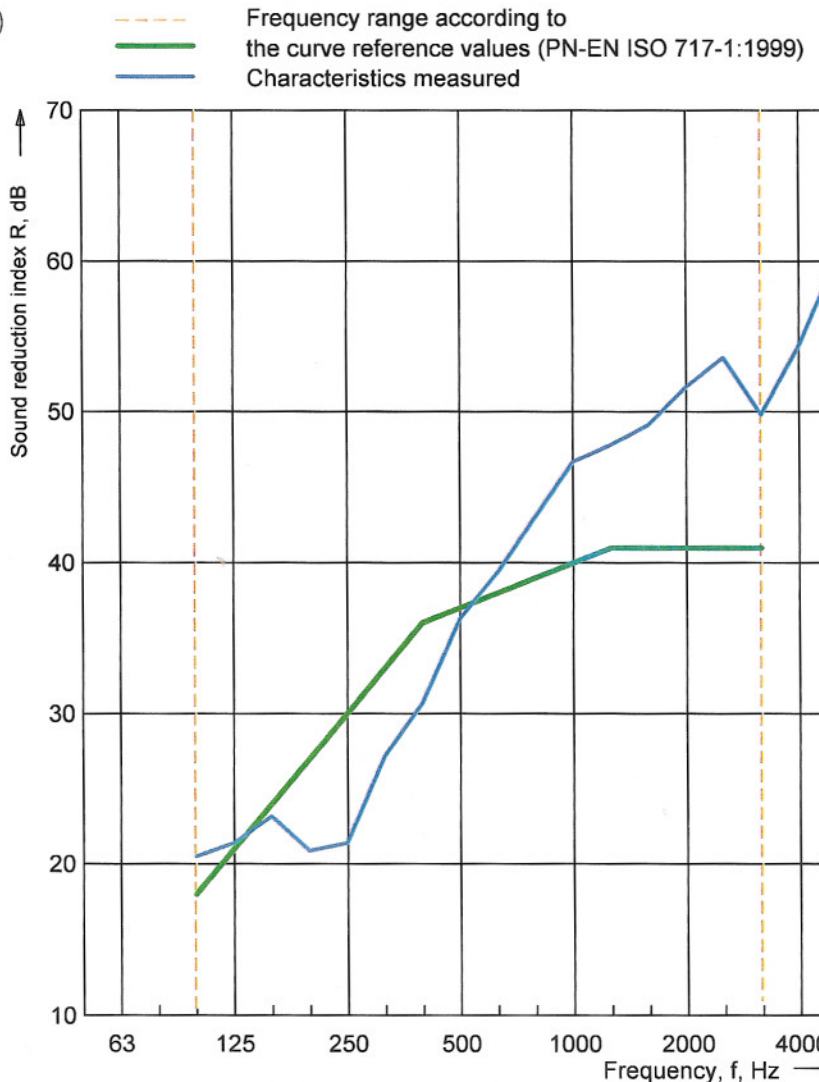
Test room: source receive

Volume, m³: **100,0 93,0**

Air temperature, °C: **22,0 19,3**

Air humidity, %: **29,1 28,4**

Frequency f [Hz]	R 1/3 octave [dB]
50	---
63	---
80	---
100	20,5
125	21,4
160	23,2
200	20,9
250	21,4
315	27,2
400	30,7
500	36,3
630	39,4
800	43,1
1000	46,7
1250	47,8
1600	49,1
2000	51,6
2500	53,6
3150	49,8
4000	54,4
5000	60,2



Rating according to PN-EN ISO 717-1:1999

R_w(C;C_{tr}) = 37 (-2; -6) dB

C₅₀₋₃₁₅₀ = --- dB C₅₀₋₅₀₀₀ = --- dB C₁₀₀₋₅₀₀₀ = -1 dB

C_{tr,50-3150} = --- dB C_{tr,50-5000} = --- dB C_{tr,100-5000} = -6 dB

Evaluation based on laboratory measurement results obtained by engineering method

Building Research Institute Group of the Testing Laboratories
 Acoustic Laboratory

Test No.: 155.12

Date of analysis: 2012-02-16

Signature: N.Bombała