

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: 1230 mm x 1480 mm

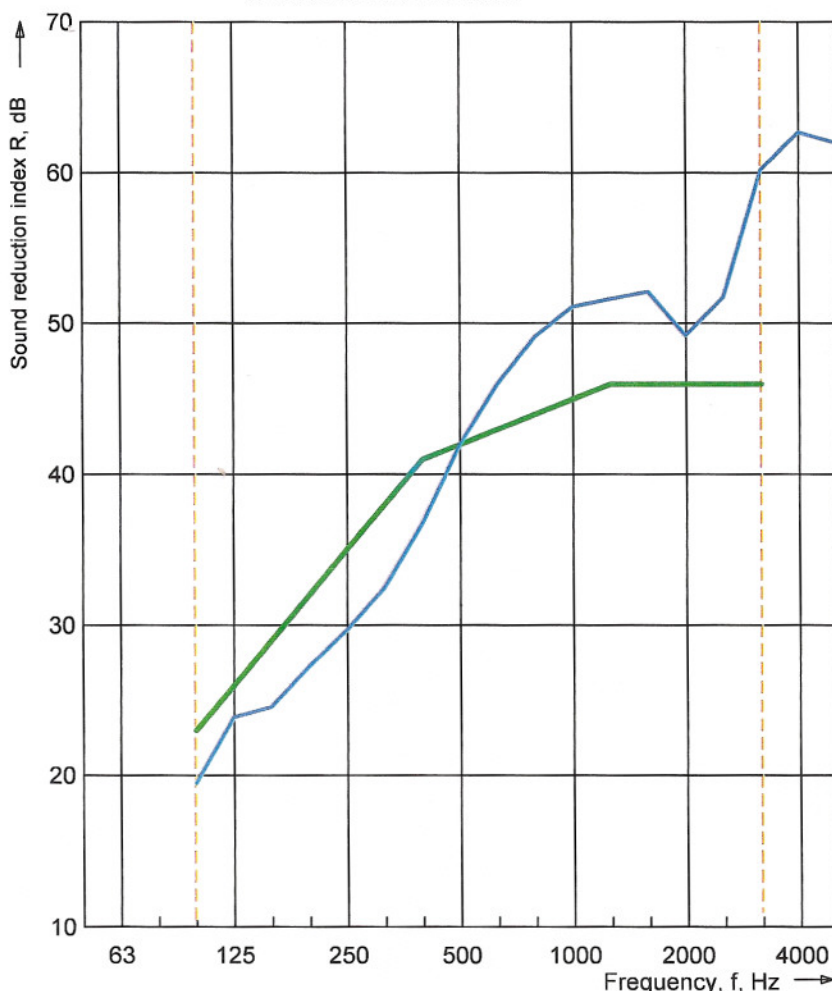
Structure: 10.8 mm (55.2) Optilam™ - 12 mm Argon 90% - 6 mm Optifloat™ - 12 mm Argon 90% - 6 mm Optifloat™

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: **25,4 20,7**
 Air humidity, %: **23,0 26,8**

--- Frequency range according to the curve reference values (PN-EN ISO 717-1:1999)
 — Characteristics measured



Frequency f [Hz]	R 1/3 octave [dB]
50	---
63	---
80	---
100	19,5
125	23,9
160	24,6
200	27,3
250	29,7
315	32,5
400	36,7
500	42,0
630	46,0
800	49,1
1000	51,1
1250	51,6
1600	52,1
2000	49,2
2500	51,7
3150	60,2
4000	62,7
5000	62,0

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

R_w(C;C_{tr}) = 42 (-2; -7) 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} = -7 dB

Evaluation based on laboratory measurement results obtained by engineering method

Building Research Institute Group of the Testing Laboratories
 Acoustic Laboratory

Test No.: 126.12

Date of analysis: 2012-02-14

Signature: N. Bombala