

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: 8.8 mm (44.2) Optilam™ - 12 mm Argon 90% - 6 mm Optifloat™ - 12 mm Argon 90% - 8.8 mm (44.2) Optilam™

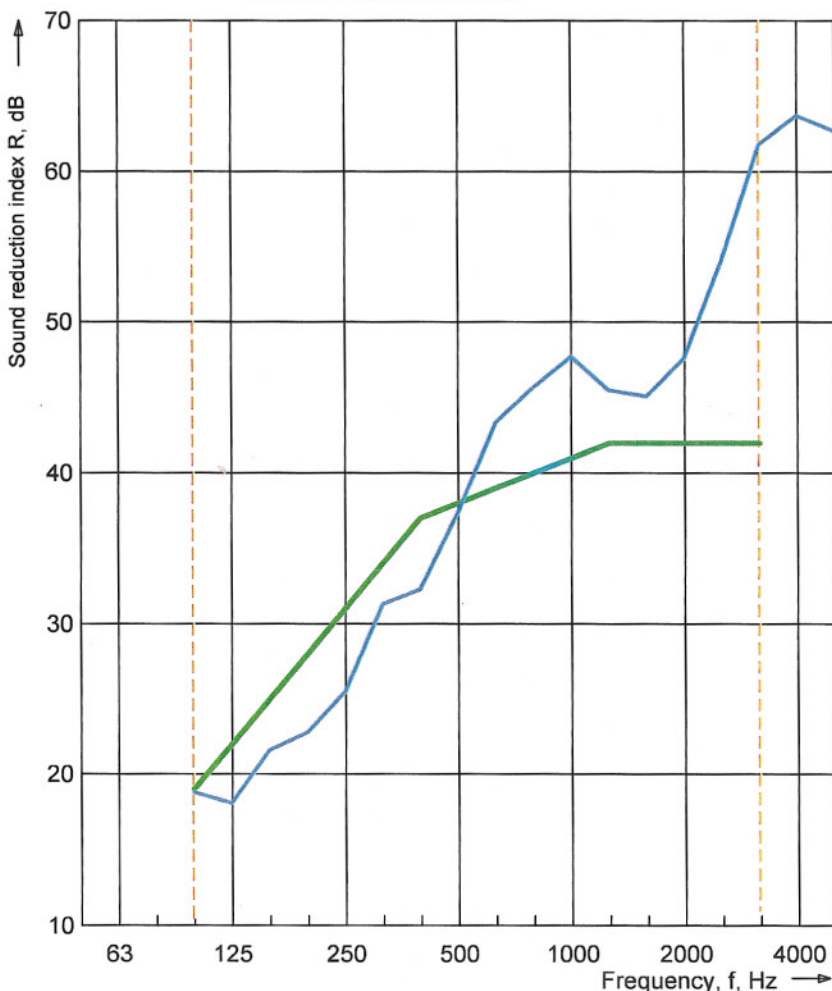
Area of test specimen: **1,88 m²**
 Air permeability coefficient: **--- m³/(m²·h·daPa^{2/3})**

Test room: source receive

Volume, m³: **100,0** **93,0**
 Air temperature, °C: **23,1** **21,3**
 Air humidity, %: **25,3** **27,2**

Frequency f [Hz]	R 1/3 octave [dB]
50	---
63	---
80	---
100	18,8
125	18,1
160	21,6
200	22,8
250	25,5
315	31,3
400	32,3
500	37,4
630	43,4
800	45,7
1000	47,7
1250	45,5
1600	45,1
2000	47,6
2500	54,1
3150	61,8
4000	63,7
5000	62,7

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



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

R_w(C;C_{tr}) = 38 (-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.: **148.12**

Date of analysis: **2012-02-15**

Signature: **N.Bombala**