

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) Optiphon™ - 12 mm Argon 90% - 6 mm Optifloat™ - 12 mm Argon 90% - 6 mm Optifloat™

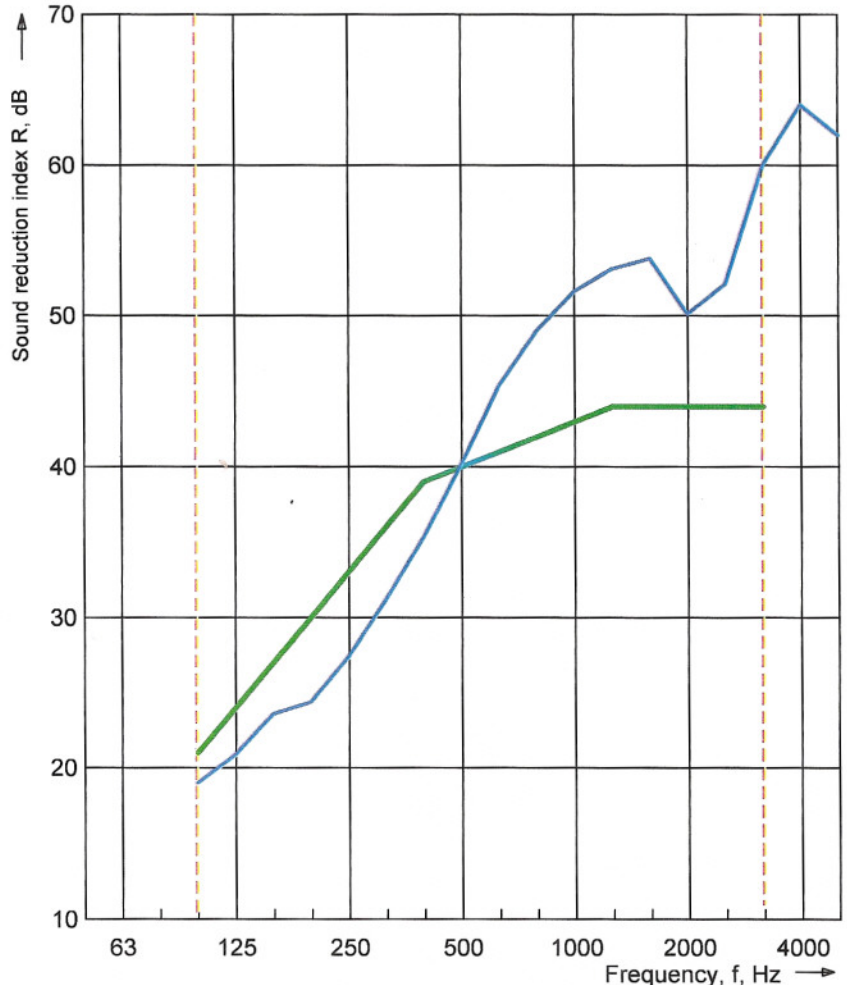
Area of test specimen: **1,88 m²**
 Air permeability coefficient: **--- m³/(m²·h·daPa^{2/3})**

Test room: source receive

Volume, m³: **100,0** **93,0**
 Air temperature, °C: **24,3** **21,5**
 Air humidity, %: **23,2** **28,1**

Frequency f [Hz]	R 1/3 octave [dB]
50	---
63	---
80	---
100	19,0
125	20,9
160	23,6
200	24,4
250	27,4
315	31,2
400	35,3
500	40,2
630	45,4
800	49,0
1000	51,6
1250	53,1
1600	53,8
2000	50,1
2500	52,1
3150	60,0
4000	64,0
5000	62,0

--- 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}) = 40 (-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.: **144.12**

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

Signature: **N. Bombala**