

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™

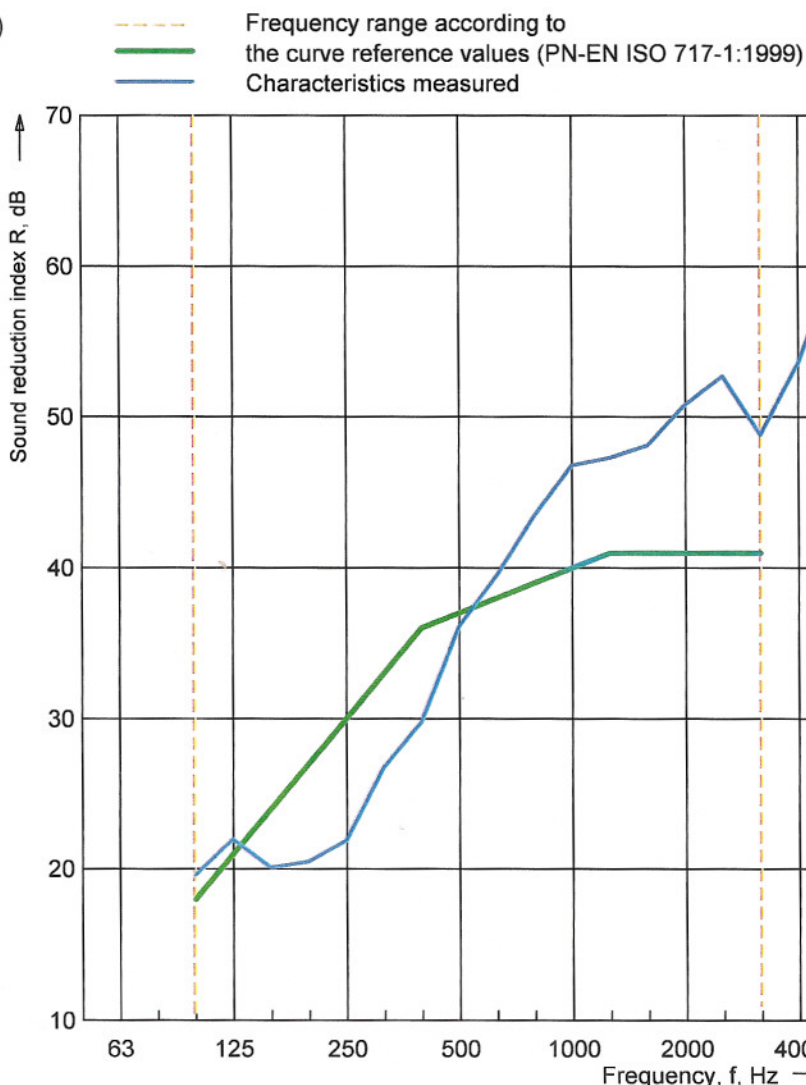
Dimensions: 1230 mm x 1480 mm

Structure: 8.4 mm (44.1) 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: **21,1 19,9**
 Air humidity, %: **26,7 25,7**

Frequency f [Hz]	R 1/3 octave [dB]
50	---
63	---
80	---
100	19,6
125	22,0
160	20,1
200	20,5
250	21,9
315	26,8
400	29,8
500	36,1
630	39,5
800	43,5
1000	46,8
1250	47,3
1600	48,1
2000	50,8
2500	52,7
3150	48,8
4000	53,6
5000	60,4



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

R_w(C;C_{tr}) = 37 (-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.: **162.12**

Date of analysis: **2012-02-17**

Signature: **N.Bombala**