

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™

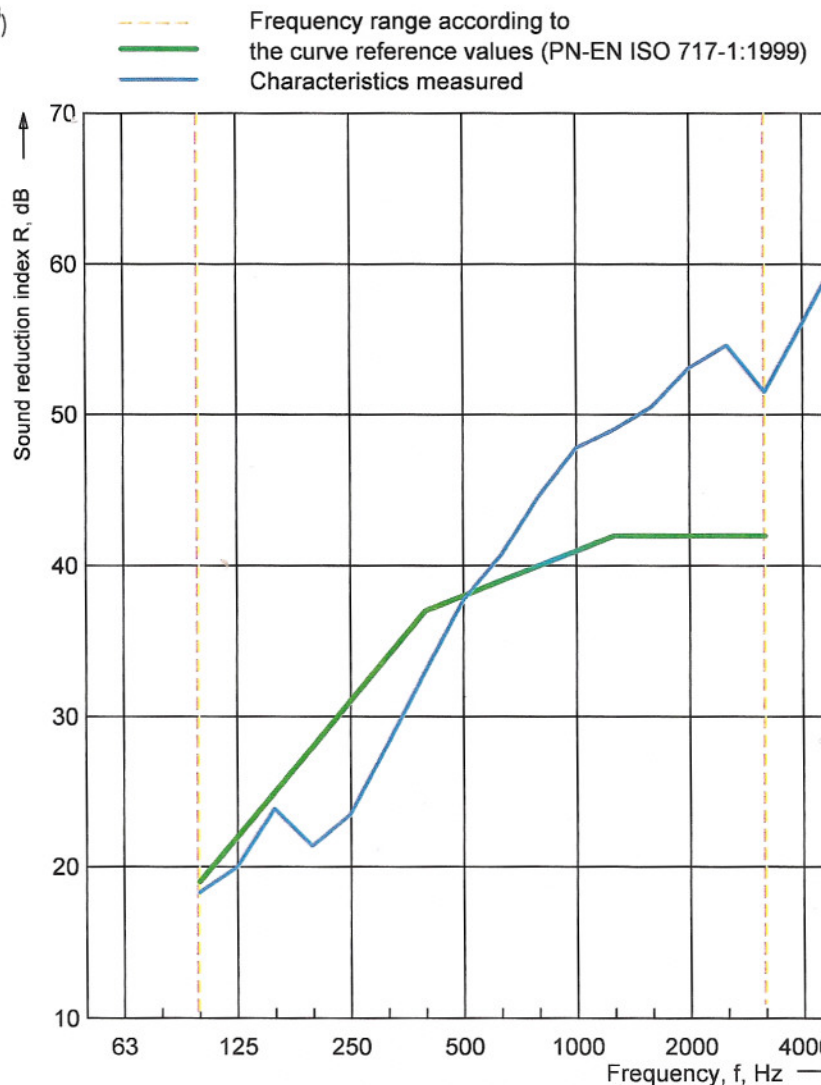
Dimensions: 123 0mm x 1480 mm

Structure: 9.5 mm (44.4) 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/((m·h·daPa^{2/3}))**

Test room: source receive
 Volume, m³: **100,0 93,0**
 Air temperature, °C: **21,7 19,4**
 Air humidity, %: **25,1 27,4**

Frequency f [Hz]	R 1/3 octave [dB]
50	---
63	---
80	---
100	18,3
125	20,0
160	23,9
200	21,4
250	23,5
315	28,2
400	33,0
500	37,7
630	40,7
800	44,6
1000	47,8
1250	49,0
1600	50,5
2000	53,1
2500	54,6
3150	51,5
4000	56,1
5000	60,8



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

R_w(C;C_{tr}) = 38 (-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.: **150.12**

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

Signature: **N.Bombala**