

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™

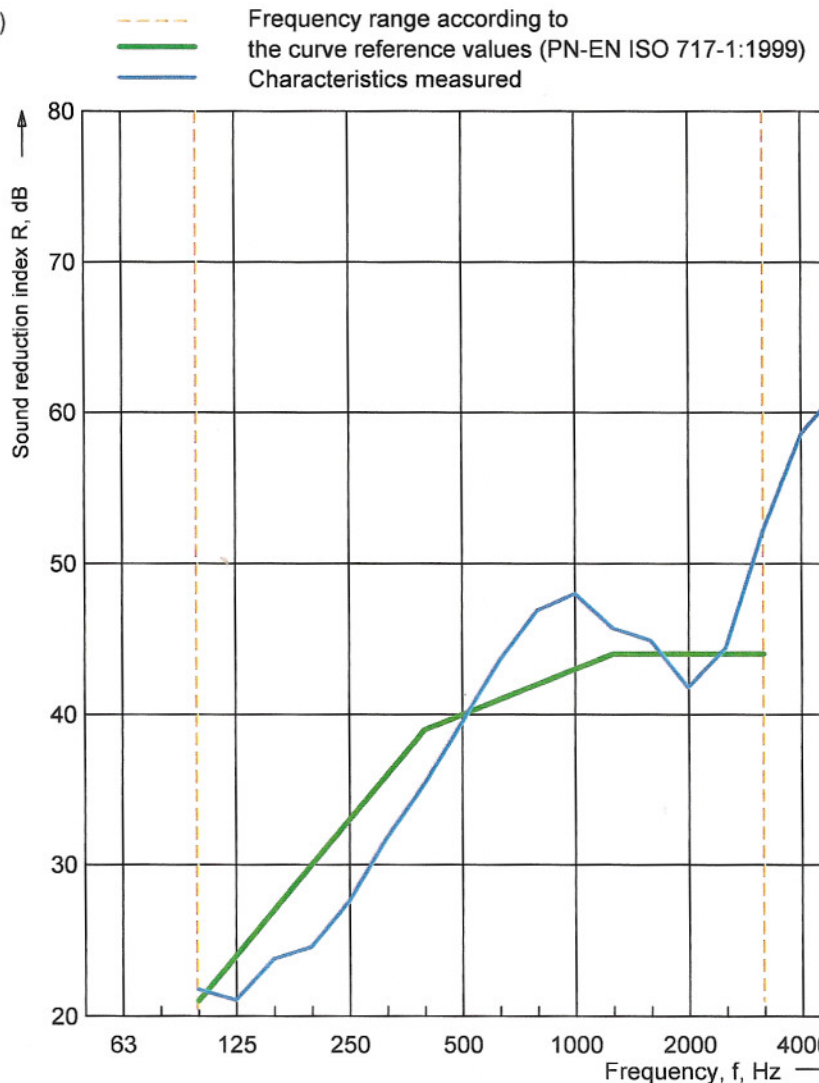
Dimensions: 1230 mm x 1480 mm

Structure: 8.4 mm (44.1) Optilam™ - 12 mm Argon 90% - 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, m ³ :	100,0	93,0
Air temperature, °C:	22,6	21,8
Air humidity, %:	28,8	27,5

Frequency f [Hz]	R 1/3 octave [dB]
50	---
63	---
80	---
100	21,8
125	21,1
160	23,8
200	24,6
250	27,6
315	31,8
400	35,4
500	39,5
630	43,6
800	46,9
1000	48,0
1250	45,7
1600	44,9
2000	41,8
2500	44,4
3150	52,3
4000	58,6
5000	61,5



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

R_w(C;C_{tr}) = 40 (-2; -6) dB

C ₅₀₋₃₁₅₀ = --- dB	C ₅₀₋₅₀₀₀ = --- dB	C ₁₀₀₋₅₀₀₀ = -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.: **160.12**

Date of analysis: **2012-02-16**

Signature: **N. Bombala**