

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:

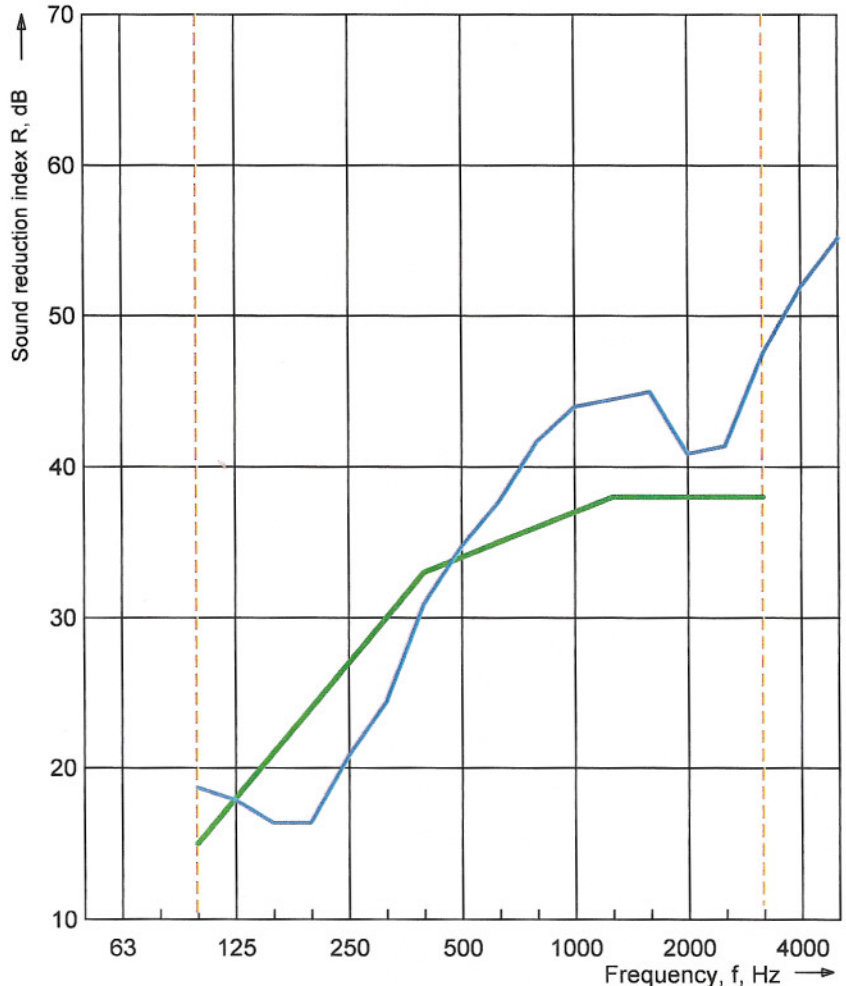
Insulating glass unit Pilkington Insulight™

Dimensions: 1230 mm x 1480 mm

Structure: 6 mm Optifloat™ - 16 mm Argon 90% - 6.4 mm (33.1) 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: **25,0 20,6**
 Air humidity, %: **22,5 27,0**

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



Frequency f [Hz]	R 1/3 octave [dB]
50	---
63	---
80	---
100	18,7
125	17,9
160	16,4
200	16,4
250	20,8
315	24,4
400	30,9
500	34,7
630	37,7
800	41,7
1000	44,0
1250	44,5
1600	45,0
2000	40,9
2500	41,4
3150	47,5
4000	51,9
5000	55,2

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

R_w(C;C_{tr}) = 34 (-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.: **130.12**

Date of analysis: **2012-02-14**

Signature: **N. Bombala**