

**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™**

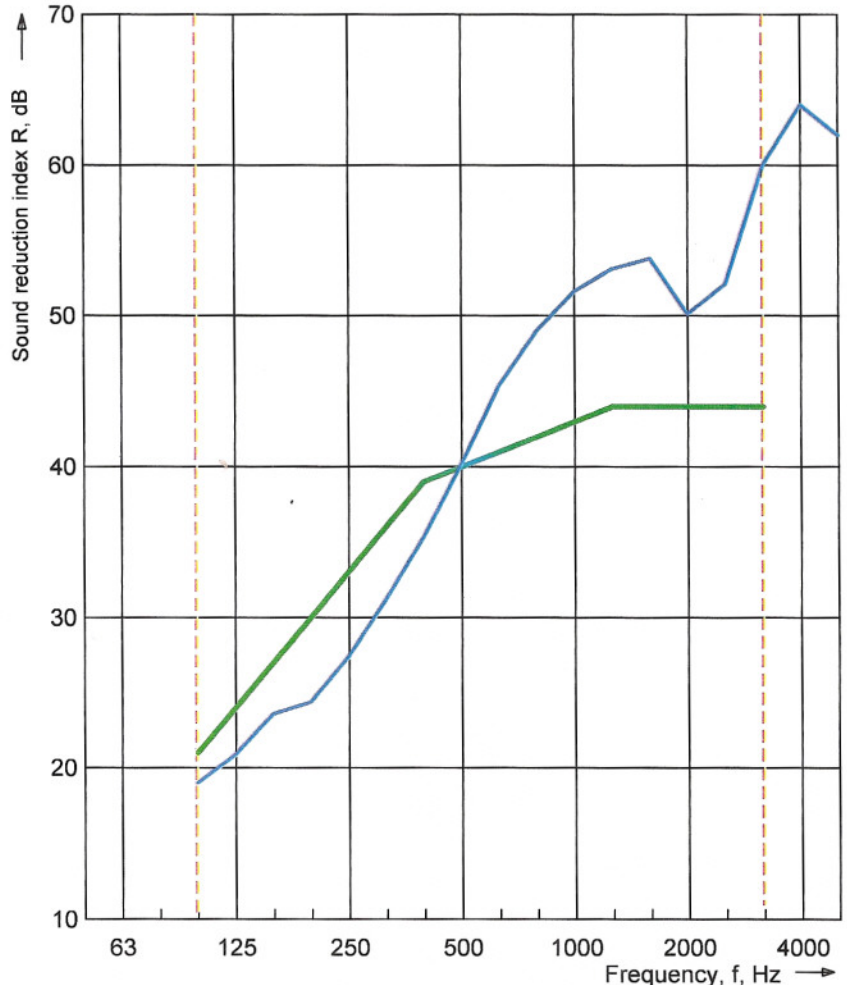
Area of test specimen: **1,88 m<sup>2</sup>**  
 Air permeability coefficient: **--- m<sup>3</sup>/(m·h·daPa<sup>2/3</sup>)**

Test room: source receive

Volume, m<sup>3</sup>: **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	<b>19,0</b>
125	<b>20,9</b>
160	<b>23,6</b>
200	<b>24,4</b>
250	<b>27,4</b>
315	<b>31,2</b>
400	<b>35,3</b>
500	<b>40,2</b>
630	<b>45,4</b>
800	<b>49,0</b>
1000	<b>51,6</b>
1250	<b>53,1</b>
1600	<b>53,8</b>
2000	<b>50,1</b>
2500	<b>52,1</b>
3150	<b>60,0</b>
4000	<b>64,0</b>
5000	<b>62,0</b>

--- 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<sub>w</sub>(C;C<sub>tr</sub>) = 40 (-2; -7) dB**

C<sub>50-3150</sub> = --- dB      C<sub>50-5000</sub> = --- dB      C<sub>100-5000</sub> = -1 dB

C<sub>tr,50-3150</sub> = --- dB      C<sub>tr,50-5000</sub> = --- dB      C<sub>tr,100-5000</sub> = -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**