

Sound reduction index according to PN-EN 20140-3:1999

Laboratory measurements of airborne sound insulation of building elements

Client: **Sokółka Okna i Drzwi Spółka Akcyjna**

ul. Lotników Lewoniewskich 1, 16-100 Sokółka

Test specimen mounted by: **ITBUD, 02-656 Warszawa, ul. Ksawerów 21**

Description of the test facility, test specimen and test arrangement:

**Wooden window in system IV 92 (ELITE 92)
single frame, single leaf, tilting - casement**

- **dimensions w x h: 1470 mm x 1450 mm**

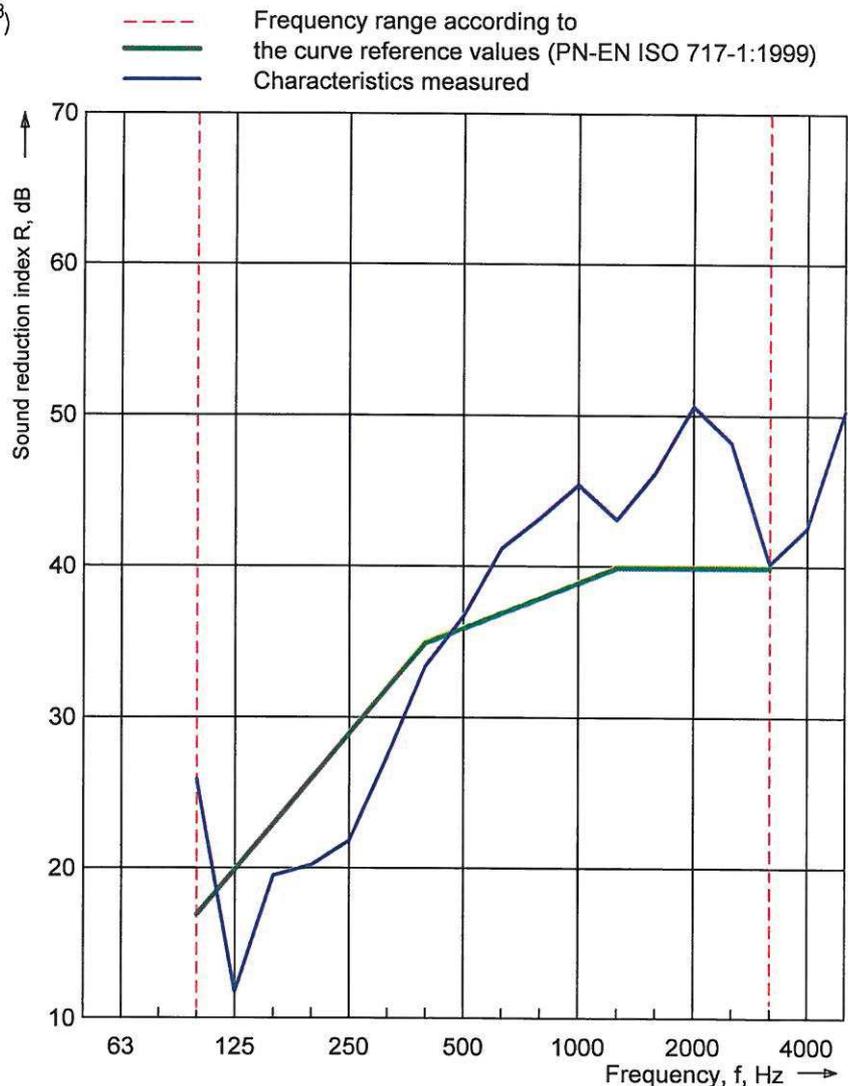
- **glazing: 4TP/18Ar/4/18Ar/4TP**

Sample no. 3/LA00 - 6016/14/R07NA

Area of test specimen: **2,20 m²**
Air permeability coefficient: **--- m³/(m²·h·daPa^{2/3})**

Test room: source receive
Volume, m³: **87,5 51,6**
Air temperature, °C: **19,9 21,1**
Air humidity, %: **76,5 73,6**

| Frequency f [Hz] | R 1/3 octave [dB] |
|------------------------|-------------------------|
| 50 | --- |
| 63 | --- |
| 80 | --- |
| 100 | 26,0 |
| 125 | 11,9 |
| 160 | 19,6 |
| 200 | 20,3 |
| 250 | 21,9 |
| 315 | 27,5 |
| 400 | 33,5 |
| 500 | 36,8 |
| 630 | 41,3 |
| 800 | 43,3 |
| 1000 | 45,5 |
| 1250 | 43,2 |
| 1600 | 46,3 |
| 2000 | 50,7 |
| 2500 | 48,3 |
| 3150 | 40,3 |
| 4000 | 42,7 |
| 5000 | 50,4 |



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

R_w(C;C_{tr}) = 36 (-3; -7) dB

C₅₀₋₃₁₅₀ = --- dB C₅₀₋₅₀₀₀ = --- dB C₁₀₀₋₅₀₀₀ = -2 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.: **610.14**

Date of analysis: **2014-06-09**

Signature: **N.Bombala**