

**Sound reduction index in accordance with PN - EN ISO 10140-2 (2011)**

Laboratory measurements of airborne sound insulation of building elements

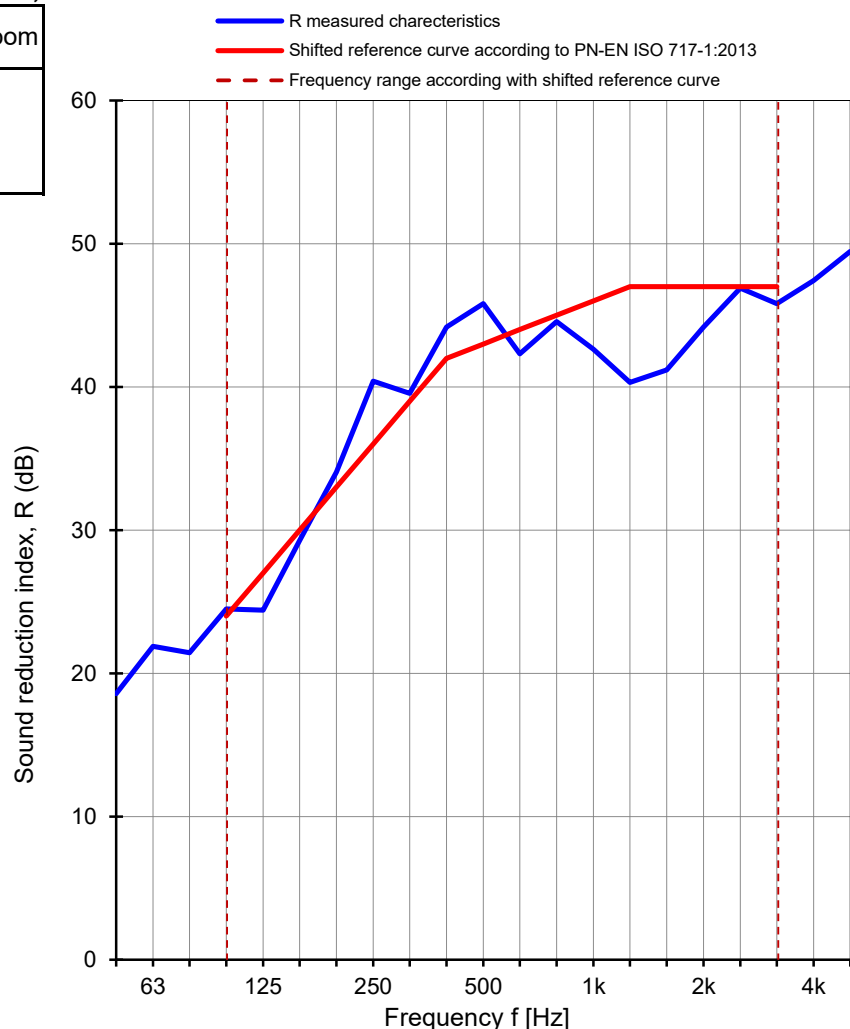
Client: **NorDan Sp. z o.o.**Measurement date: **18.06.2019**Address: **Powodowo 54, 64-200 Wolsztyn, Poland**Test specimen: **NorDan inward opening wooden window.****Frame thickness: 105 mm.****Glazing: 44.2sc / 10G / 4 / 18G / 44.2sc (49,6 mm)****44.2 Silence / 10CH.ULT7035 / FL 4 / 18CH.ULT7035 / 44.2 Silence kl.P2A Ar 48,8**

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

Size of test specimen: **1230 x 1480 mm**Test specimen mounted by: **Gryfitlab Sp. z o.o.**Mass per unit area: **kg/m<sup>2</sup>**The surface area of test specimen: **1,88 m<sup>2</sup>**

Parameter	Receiving room	Source room
Air temp. [°C]	25,3	24,9
Humidity [%]	60	59
Pressure [hPa]	1016	1016
Volume [m <sup>3</sup> ]	324	372

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U <sub>CR</sub> [dB]
50	18,6	3,5
63	21,9	3,5
80	21,4	4,2
100	24,5	2,9
125	24,4	2,6
160	29,3	2,3
200	34,0	2,1
250	40,4	2,2
315	39,6	2,1
400	44,2	2,0
500	45,8	2,0
630	42,3	2,0
800	44,6	2,0
1000	42,6	2,0
1250	40,3	1,9
1600	41,2	2,0
2000	44,2	1,9
2500	46,9	2,0
3150	45,8	2,0
4000	47,4	2,0
5000	49,5	2,2

Measurement uncertainty of sound reduction U<sub>CR</sub>

Confidence level 95% at coverage factor, k=2

Weighted sound reduction index in accordance with PN-EN ISO 717-1:2013

**R<sub>w</sub> (C; C<sub>tr</sub>) = 43 (-2; -5) dB**C<sub>50-3150</sub> = -2 dBC<sub>50-5000</sub> = -1 dBC<sub>100-5000</sub> = -1 dBC<sub>tr, 50-3150</sub> = -8 dBC<sub>tr, 50-5000</sub> = -8 dBC<sub>tr, 100-5000</sub> = -5 dB

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1450.10 / 19

Date: 18.06.2019

Signature: Robert Dybicz