

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

Laboratory measurements of airborne sound insulation of building elements

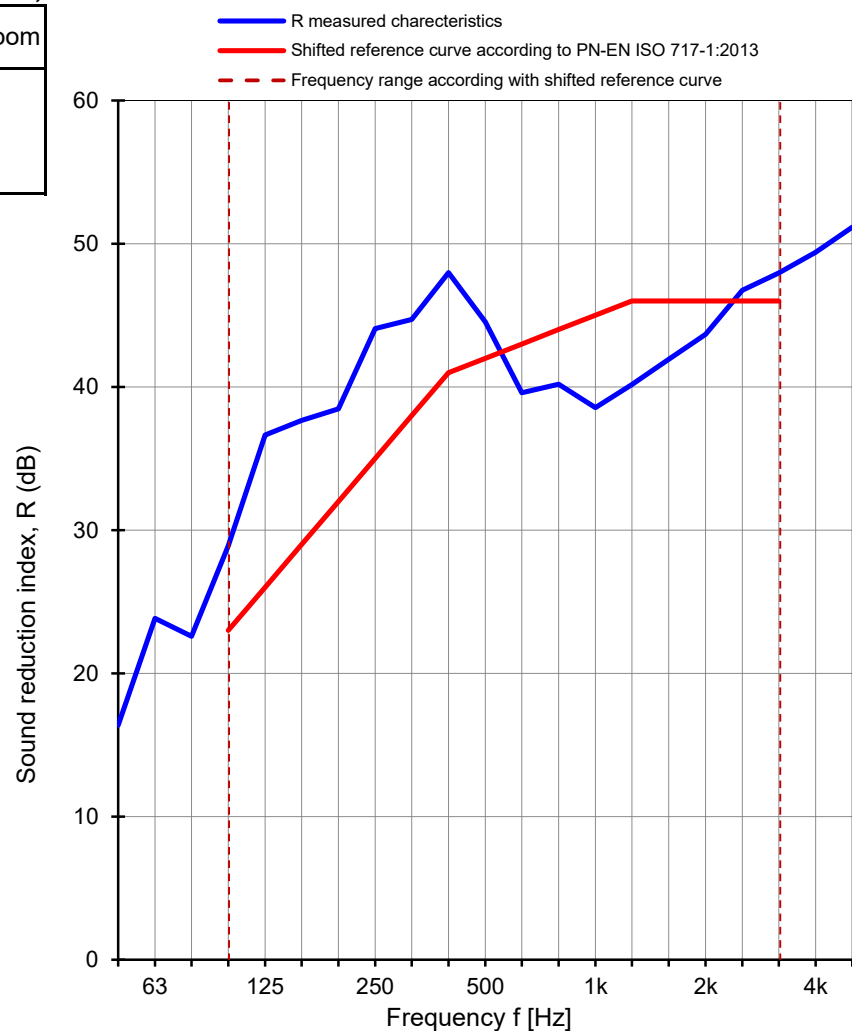
Client: **NorDan Sp. z o.o.**Measurement date: **18.06.2019**Address: **Powodowo 54, 64-200 Wolsztyn, Poland**Test specimen: **NorDan inward opening wooden window.****Frame thickness: 105 mm.****Glazing: 88.2sc / 20G / 66.2sc (49,52 mm)****VSG (FL 8/0,76 PVB SC/FL 8) kl.1B1 / 20CH.ULT7035 / VSG(FL 6/0,76 PVB SC/FL 6)****kl.1/B/1 Ar 49,6**

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]	24,8	24,7
Humidity [%]	59	59
Pressure [hPa]	1017	1017
Volume [m <sup>3</sup> ]	324	372

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U <sub>CR</sub> [dB]
50	* 16,4	4,6
63	23,8	3,1
80	22,6	3,8
100	28,9	2,8
125	36,7	2,4
160	37,7	2,8
200	38,5	2,2
250	44,1	2,2
315	44,7	2,0
400	48,0	2,0
500	44,5	2,0
630	39,6	2,0
800	40,2	2,0
1000	38,5	2,0
1250	40,2	1,9
1600	41,9	1,9
2000	43,7	1,9
2500	46,7	2,0
3150	47,9	1,9
4000	49,4	2,0
5000	51,2	2,1

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

Confidence level 95% at coverage factor, k=2

L<sub>p</sub>-L<sub>p,background</sub><6dB

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

**R<sub>w</sub> (C; C<sub>tr</sub>) = 42 (0; -2) dB**C<sub>50-3150</sub> = -1 dBC<sub>50-5000</sub> = 0 dBC<sub>100-5000</sub> = 1 dBC<sub>tr, 50-3150</sub> = -6 dBC<sub>tr, 50-5000</sub> = -6 dBC<sub>tr, 100-5000</sub> = -2 dB

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1450.8 / 19

Date: 18.06.2019

Signature: Robert Dybicz