

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

Laboratory measurements of airborne sound insulation of building elements

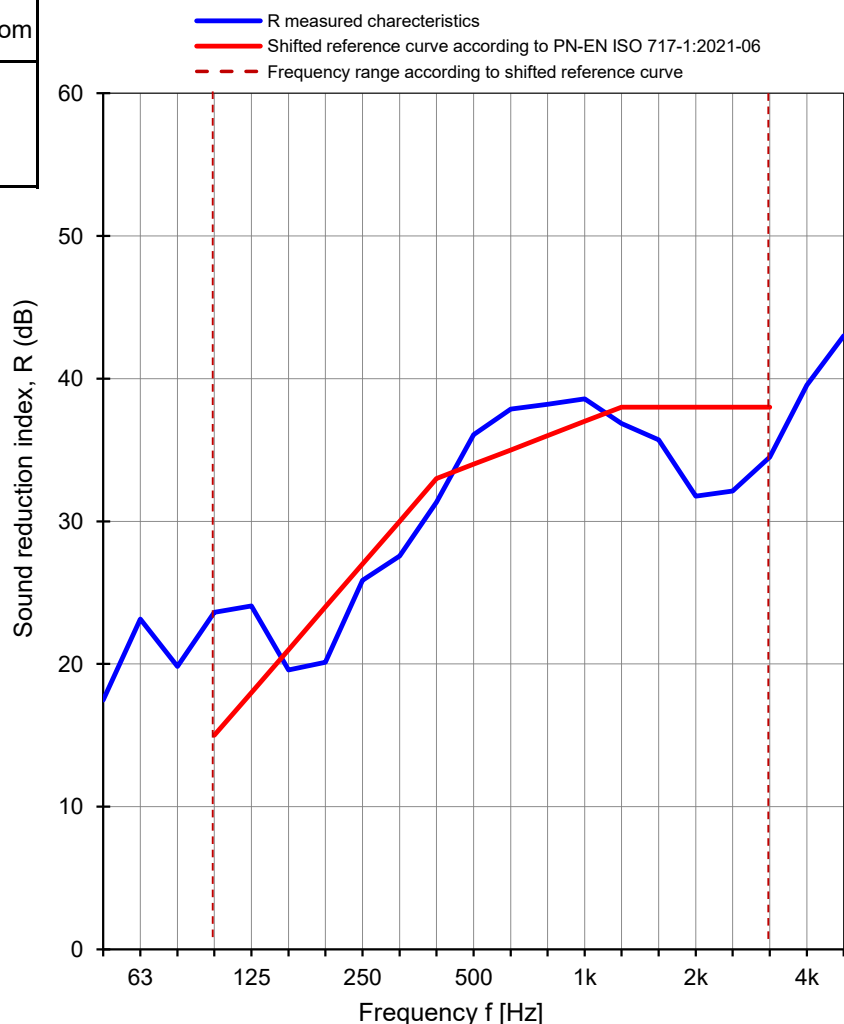
Client: **NorDan Sp. z o.o.**Measurement date: **05.11.2021**Address: **Powodowo 54, 64-200 Wolsztyn**Test specimen: **Wooden window****Pi LNR: 125****Construction: OD, ND NTech One Tilt and Turn****Frame thickness: 105 mm****Glazed by: 6 / 16 Ar / 6**

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

Size of test specimen: **1230 x 1480 mm**Test specimen mounted by: **NorDan Sp. z o.o.**The surface area of test specimen: **1,87 m<sup>2</sup>**

Parameter	Receiving room	Source room
Air temp. [°C]	21,1	20,8
Humidity [%]	57	56
Pressure [hPa]	1014	1014
Volume [m <sup>3</sup> ]	372	324

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U <sub>CR</sub> [dB]
50	* 17,5	3,0
63	* 23,2	4,0
80	19,8	2,5
100	23,6	3,0
125	24,1	2,0
160	19,6	1,7
200	20,1	2,0
250	25,9	1,1
315	27,6	1,2
400	31,3	1,1
500	36,1	0,9
630	37,9	0,7
800	38,2	0,8
1000	38,6	0,7
1250	36,9	0,7
1600	35,7	0,7
2000	31,8	0,8
2500	32,1	0,8
3150	34,5	1,0
4000	39,5	1,0
5000	43,0	1,3

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

Confidence level 95% at coverage factor, k=2

\* - L<sub>p</sub>-L<sub>p</sub><sub>background</sub> < 6 dB

Weighted sound reduction index in accordance with PN-EN ISO 717-1:2021-06

**R<sub>w</sub> (C; C<sub>tr</sub>) = 34 (-1; -4) dB**C<sub>50-3150</sub> = -1 dBC<sub>50-5000</sub> = -1 dBC<sub>100-5000</sub> = -1 dBC<sub>tr, 50-3150</sub> = -4 dBC<sub>tr, 50-5000</sub> = -4 dBC<sub>tr, 100-5000</sub> = -4 dB**R<sub>w</sub> = 34,2 dB**

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1559.48 / 21

Date: 05.11.2021

Signature: Robert Dybicz