

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

Laboratory measurements of airborne sound insulation of building elements

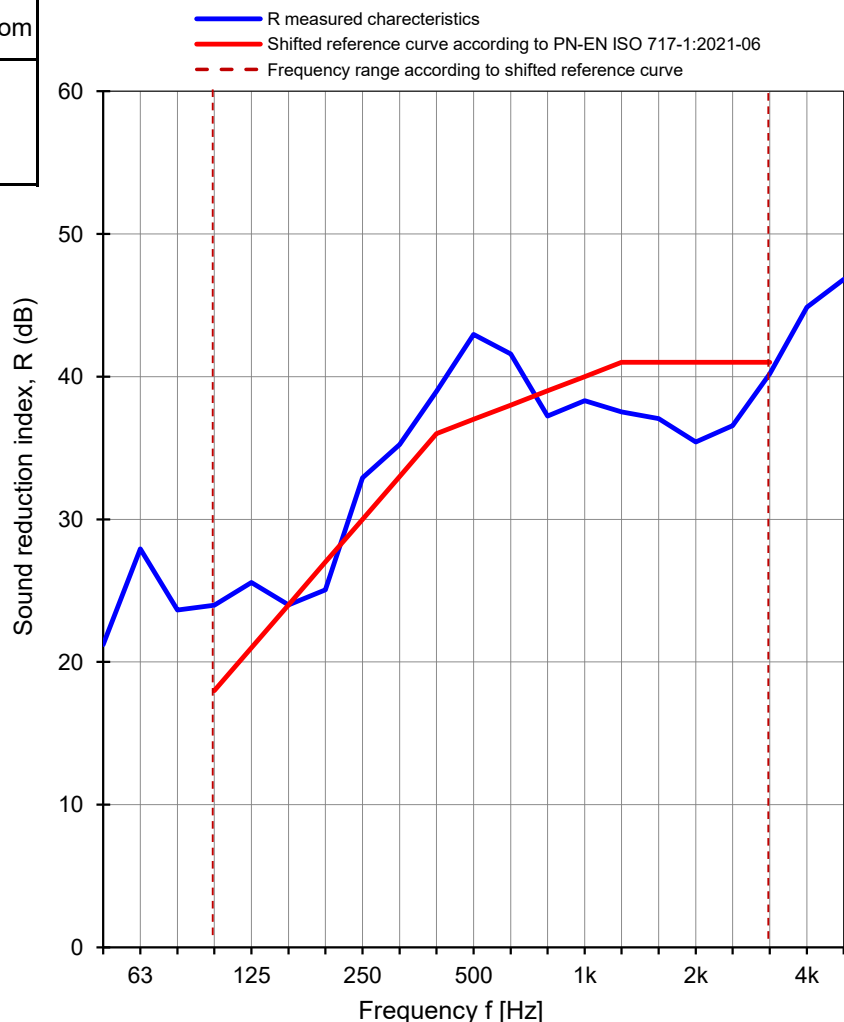
Client: **NorDan Sp. z o.o.**  
Address: **Powodowo 54, 64-200 Wolsztyn**Measurement date: **05.11.2021**Test specimen: **Wooden window**  
**Construction: OD, ND NTech One Tilt and Turn**  
**Frame thickness: 105 mm**  
**Glazed by: 6 / 20 Ar / 10****Pi LNR: 90**

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]	21,6	21,4
Humidity [%]	60	62
Pressure [hPa]	1011	1011
Volume [m <sup>3</sup> ]	372	324

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U <sub>CR</sub> [dB]
50	21,2	3,1
63	27,9	1,7
80	23,6	2,2
100	24,0	2,3
125	25,6	2,1
160	24,0	2,0
200	25,1	2,0
250	32,9	1,4
315	35,2	0,9
400	39,0	0,8
500	43,0	1,0
630	41,6	0,8
800	37,2	0,9
1000	38,3	0,8
1250	37,5	0,8
1600	37,1	0,7
2000	35,4	0,7
2500	36,6	0,8
3150	40,2	1,0
4000	44,9	1,1
5000	46,8	1,0

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 717-1:2021-06

**R<sub>w</sub> (C; C<sub>tr</sub>) = 37 (-1; -3) dB**C<sub>50-3150</sub> = -1 dBC<sub>50-5000</sub> = 0 dBC<sub>100-5000</sub> = 0 dBC<sub>tr, 50-3150</sub> = -3 dBC<sub>tr, 50-5000</sub> = -3 dBC<sub>tr, 100-5000</sub> = -3 dB**R<sub>w</sub> = 37,9 dB**

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1559.44 / 21

Date: 05.11.2021

Signature: Robert Dybicz