

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

Laboratory measurements of airborne sound insulation of building elements

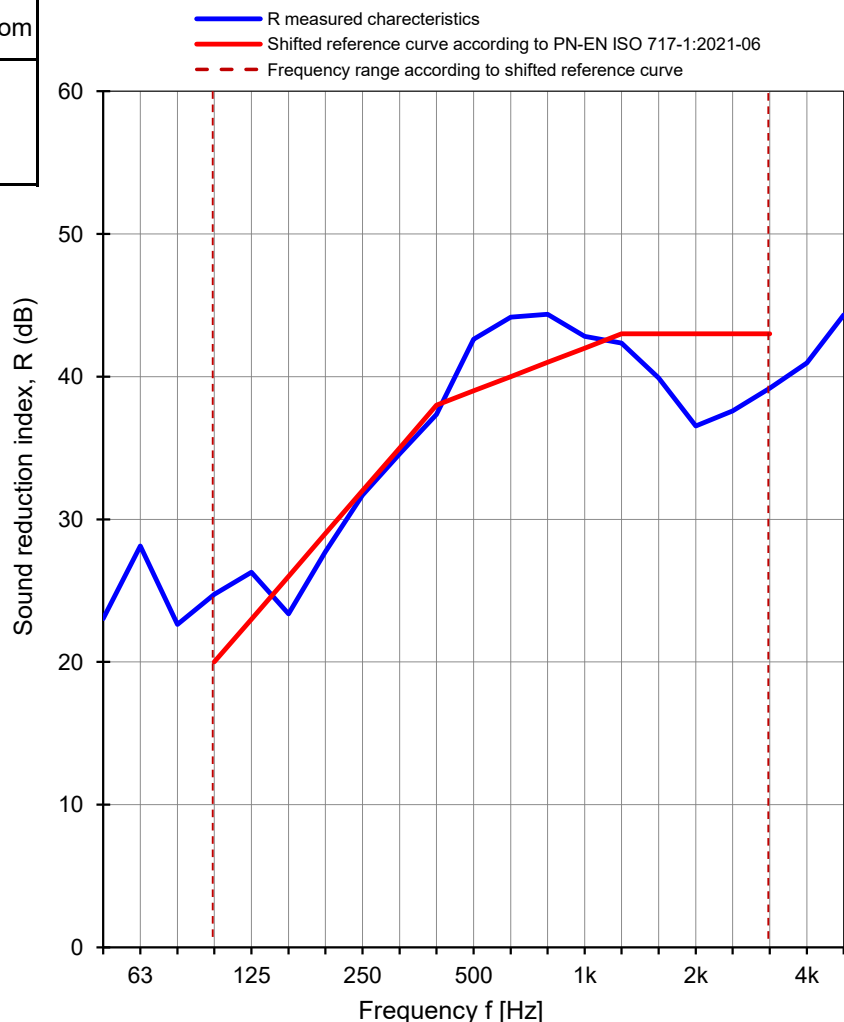
Client: **NorDan Sp. z o.o.**  
Address: **Powodowo 54, 64-200 Wolsztyn**Measurement date: **04.11.2021**Test specimen: **Wooden window**  
**Construction: TG, ND NTech Villa Topswing reversible**  
**Frame thickness: 105 mm**  
**Glazed by: 44.2 PVB / 16 Ar / 6****Pi LNR: 35**  
**Additional**

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]	21,0	21,2
Humidity [%]	57	58
Pressure [hPa]	998	998
Volume [m <sup>3</sup> ]	372	324

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U <sub>CR</sub> [dB]
50	23,0	2,9
63	28,1	2,2
80	22,6	2,4
100	24,7	2,6
125	26,3	1,5
160	23,4	1,6
200	27,7	1,3
250	31,7	1,6
315	34,6	0,9
400	37,3	1,2
500	42,6	1,0
630	44,2	1,0
800	44,4	0,9
1000	42,8	1,0
1250	42,3	0,8
1600	39,9	0,8
2000	36,5	0,7
2500	37,6	0,8
3150	39,2	0,9
4000	40,9	1,0
5000	44,3	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>) = 39 (-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> = 39,7 dB**

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1559.37 / 21

Date: 04.11.2021

Signature: Robert Dybicz