

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

Laboratory measurements of airborne sound insulation of building elements

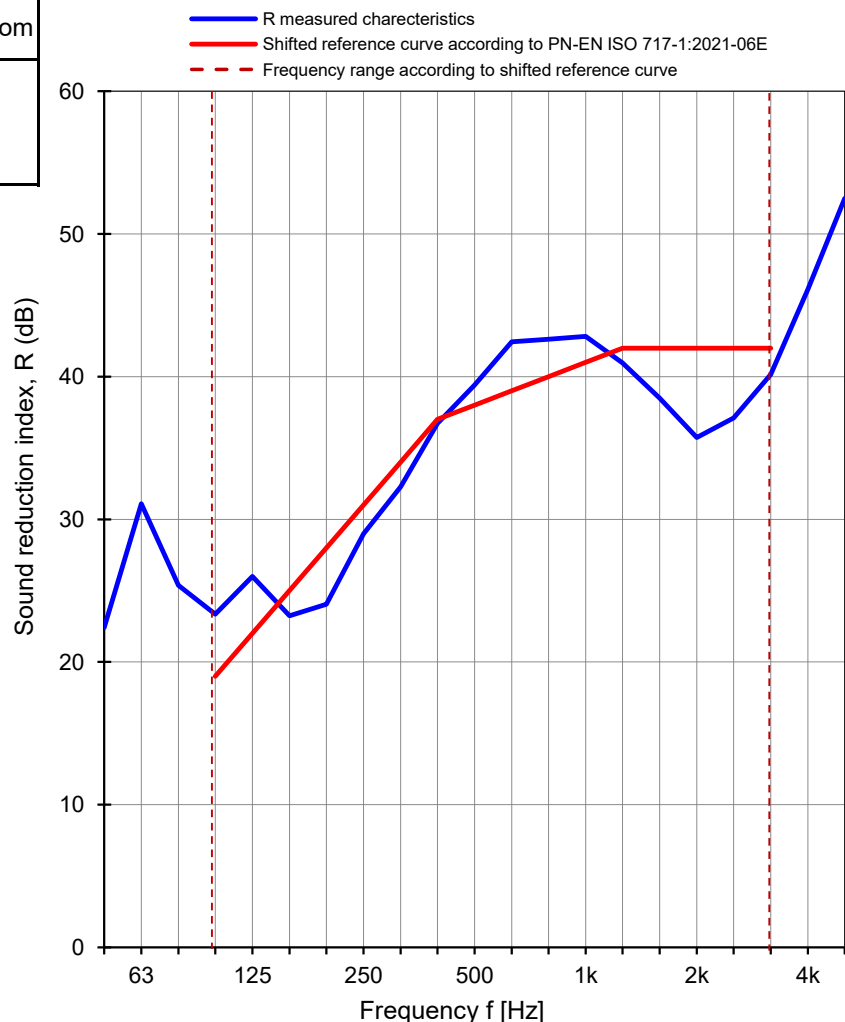
Client: **NorDan Sp. z o.o.**  
Address: **Powodowo 54, 64-200 Wolsztyn**Measurement date: **10.11.2021**Test specimen: **Wooden window**  
**Construction: TL, ND NTech Villa Fixed**  
**Frame thickness: 105 mm**  
**Glazed by: 44.2 PVB / 16 Ar / 6****Pi LNR: 20**  
**Repeated**

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	20,8
Humidity [%]	50	49
Pressure [hPa]	1025	1025
Volume [m <sup>3</sup> ]	372	324

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U <sub>CR</sub> [dB]
50	22,4	3,1
63	31,1	1,6
80	25,4	1,8
100	23,4	2,5
125	26,0	1,6
160	23,2	1,3
200	24,0	1,5
250	29,0	1,6
315	32,3	1,2
400	36,7	1,1
500	39,4	0,9
630	42,4	0,8
800	42,6	0,8
1000	42,8	0,8
1250	40,9	0,7
1600	38,5	0,8
2000	35,7	0,7
2500	37,1	0,9
3150	40,2	1,0
4000	46,1	1,0
5000	52,5	1,4

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 717-1:2021-06E

**R<sub>w</sub> (C; C<sub>tr</sub>) = 38 (-1; -4) dB**C<sub>50-3150</sub> = -1 dBC<sub>50-5000</sub> = -1 dBC<sub>100-5000</sub> = 0 dBC<sub>tr, 50-3150</sub> = -5 dBC<sub>tr, 50-5000</sub> = -5 dBC<sub>tr, 100-5000</sub> = -4 dB**R<sub>w</sub> = 38,4 dB**

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1559.60 / 21

Date: 10.11.2021

Signature: Robert Dybicz